THE NEUTRON BOMB IN AMERICA, 1975-1981

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ABSTRACT

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Enhanced radiation warheads (ERW) are small thermonuclear devices with the properties of reduced blast and increased radiation. This study addresses President Jimmy Carter's 1978 decision to defer production of enhanced radiation warheads, so-called neutron bombs. President Carter deferred ERW production because he believed the political disadvantages outweighed the military advantages. But President Carter let contradictory ideas impede his administration's neutron warhead policy before deferring ERW production on April 7, 1978. This study relies on recently declassified documents to contest two prevailing interpretations of the president's neutron warhead deferral, Carter's moral qualms and European resistance to home-soil deployment. Despite the weight of current scholarly opinion, President Carter was not indecisive when it came to ERW, but ambivalent – his contradictory ideas impeded development of an orderly neutron warhead policy. What's more, Carter's ambivalence weakened the position of the United States within the North Atlantic Treaty Organization. This study ends with President Ronald Reagan's 1981 public approval of enhanced radiation warhead production.

CONTENTS

ILLUSTRATIONS

ACRONYMS

ABM	Anti-Ballistic Missile
AEC	Atomic Energy Commission
AFAP	Artillery-Fired Atomic Projectile
CIA	Central Intelligence Agency
DOD	Department of Defense
DOE	Department of Energy
ERDA	Energy Research and Development Administration
ERW	Enhanced Radiation Warhead
FY	Fiscal Year
FOIA	Freedom of Information Act
FRG	Federal Republic of Germany
GE	General Electric
GLCM	Ground Launched Cruise Missile
LRTNF	Long-Range Theater Nuclear Forces
MAD	Mutual Assured Destruction
NATO	North Atlantic Treaty Organization
NPG	Nuclear Planning Group
RAC	Remote Archives Capture Project
RDF	Rapid Deployment Force
SALT	Strategic Arms Limitation Talks
TNF	Theater Nuclear Force
UN	United Nations
U.S.	United States
U.S.S.R.	Union of Soviet Socialist Republics

CHAPTER 1

INTRODUCTION

I have decided to defer production of weapons with enhanced radiation effects.

~ President Carter, Statement on Enhanced Radiation Weapons (ERW), April 7, 1978[1]

I would be willing to produce & deploy [enhanced radiation weapons] if Europeans will commit to accept them.

~ President Carter to National Security Advisor Zbigniew Brzezinski, the White House, August 2, 1978.[2]

I want you to know that we are still building the neutron bomb, including tritium containers for the warheads.

~ President Carter to Minister President of Bavaria Franz Josef Strauss the Oval Office, March 13, 1980.[3]

The neutron bomb, an enhanced radiation weapon or warhead (ERW), is a

[1] Jimmy Carter: "Enhanced Radiation Weapons Statement by the President," April 7, 1978. Online by Gerhard Peters and John T. Woolley, American Presidency Project ("*APP*") http://www.presidency.ucsb.edu/ws/?pid=30630 (accessed June 20, 2014).

[2] Memorandum, August 2, 1978, Zbigniew Brzezinski Collection, "Defense – Enhanced Radiation Warhead: 3/78-8/78," Box 22, Jimmy Carter Library ("JCL").

[3] Memorandum of Conversation, Carter with Strauss, March 13, 1980, RAC NLC-128-1-9-1-8, JCL. Close to a million pages of formerly classified material has entered the presidential library system with the aid of the Central Intelligence Agency (CIA). The libraries and the CIA have joined forces in an effort called the Remote Archives Capture Project (RAC). RAC has added a cornucopia of digitally searchable documents to the Carter archive, but presently researchers still have to visit the Jimmy Carter Library in Atlanta, Georgia, to access RAC documents. That may change. In any case, documents accessed via RAC are cited by RAC number only in accordance with instructions given by the archivists at the Carter Library.

small thermonuclear device conceived by American physicists in 1958.[1] On the morning of June 6, 1977 newsstands inside the Capital Beltway alerted passersby to a new threat, a "neutron killer warhead" hidden in an obscure line-item of the federal budget.[2] Nearly three decades after American physicists conceived of the enhanced radiation warhead, the *Post's* new neutron killer took contemporary readers by surprise in a frontpage article written by Walter Pincus. According to the Assistant to the President for National Security Affairs, Zbigniew Brzezinski, the Carter administration was "quite unprepared for the political storm that hit" as the neutron killer warhead story gained traction in the press.[3] From the outset, rhetoric played a prominent role in the affair as it unfolded through the end of 1977.

This study argues that President Jimmy Carter publicly deferred production of enhanced radiation weapons in 1978 because he did not think that ERW were militarily useful. Moreover, newly declassified evidence reveals that the United States began de facto neutron warhead production under Carter between 1978 and 1980 and not, as previously believed, under President Ronald

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[1] Fred Kaplan, "the Neutron Bomb: What it is, The Way it Works," *Bulletin of the Atomic Scientists* 37, no 8, October, 1981, 6. "It [the neutron bomb] is nothing more – and nothing less – than a very small hydrogen bomb."

[2] Walter Pincus, "Neutron Killer Warhead Buried in ERDA Budget," *Washington Post*, June 6, 1977, p. A1.

[3] Vincent Auger, *The Dynamics of Foreign Policy Analysis: The Carter Administration and the Neutron Bomb*, (Lanham, MD: Rowman & Littlefield, 1996), 35-36. According to Auger, two administration officials did know of the neutron warhead, Secretary of Defense Harold Brown and Secretary of Energy James Schlesinger, but neither suspected a controversy. *See, e.g.*, James Schlesinger interview, July 19-20, 1984, "the Carter Presidency Project," interview by Charles O. Jones, et al., *University of Virginia, Miller Center of Public Affairs* (2005). The Schlesinger-Jones interview is available online at http://millercenter.org/president/carter/oralhistory/james-schlesinger (accessed January 15, 2015).

Reagan in 1981. President Carter's fear of escalation led to his loss of faith in the utility of enhanced radiation weaponry.[4] After weighing his options for ten months, Carter concluded that the political disadvantages of ERW outweighed the military advantages. Carter lacked belief in the deterrence value of the neutron warhead. For him, the risk of escalation, the progression from limited nuclear war to strategic nuclear war, outweighed the deterrence value of the neutron warhead. This study relies on recently declassified documents to contest the two prevailing interpretations of President Carter's ERW deferral, moral qualms and European resistance to home-soil deployment. As to Carter's moral rectitude, historian Gaddis Smith observes that neutron bomb deferral was unique in that "no other major decision" of Carter's presidency was made so much on "personal judgment."[5]

Smith's "personal judgment" observation was commonplace in the early 1980s, but recently declassified evidence reveals that Carter did not harbor special resentment toward the neutron warhead. President Carter quietly went ahead with neutron warhead production in 1978 while stopping short of assembling the component parts of the warhead. Carter proceeded with caution to produce the components of the weapon he believed lowered the nuclear threshold in exchange for marginal military advantages. Although President Ronald Reagan is identified

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[4] Jimmy Carter: "Yazoo City, Mississippi Remarks and a Question-and-Answer Session at a Public Meeting," July 21, 1977. Online by Gerhard Peters and John T. Woolley, *APP*, http://www.presidency.ucsb.edu/ws/?pid=7854 (accessed June 27, 2014).

[5] Gaddis Smith, *Morality, Reason, and Power: American Diplomacy in the Carter Years* (New York: Hill and Wang, 1986), 81

with neutron warhead approval in 1981, President Carter quietly went ahead with production of the controversial weapon in 1978.

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Before his election as the nation's chief executive, James Earl Carter, Jr., visited the United Nations (UN) in New York in 1976 to deliver a foreign policy address to diplomats. In his speech, Carter extolled the virtues of a survival alliance that depended on transcendent thinking. To Carter, transcendent thinking in this case implied that the future should be shaped by a fresh statecraft, one that softened the differences between regions and ideologies. The reduction of nuclear weapons figured prominently in Carter's plans for the future.

In the UN talk, Carter challenged his audience to ponder humanity's arms and energy plight, themes that anticipated his inaugural pledge. In Carter's first speech to the American people as their president, he pledged progress toward the "ultimate goal [of] the elimination of all nuclear weapons from [the] Earth." That pledge gave the impression that Carter might be more reluctant than his Cold War predecessors to fortify the county's nuclear arsenal, an impression the Soviet Union used to encourage the United States (U.S.) to forego neutron warhead production.[6] Indeed, the theme echoed Carter's nomination acceptance speech.[7]

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[6] Jimmy Carter: "Inaugural Address, January 20, 1977," *APP*, http://www.presidency.ucsb.edu/ws/index.php?pid=6575 (accessed July 19, 2013). As to the Soviet Union's leverage vis-à-vis Carter's inaugural pledge to eliminate nuclear weapons, and the effect that that pledge had on Carter's domestic audience, *see*, "Soviet Goals and Expectations in the Global Power Arena," National Intelligence Estimate 11-4-78, May 1978, National Security Archive ("*NSA*") http://www2.gwu.edu/~nsarchiv/carterbrezhnev/docs_salt_ii/IV-91%20Soviet%20Goals%20and%20Expectations%20in%20the%20Global%20Power%20Arena,%20NIE%2011-4-78,%20May%201978.pdf (accessed December 17, 2014).

But these pledges and ERW deferral were in Carter's future. The 1976 UN talk, prepared by Richard Gardner, who went on to serve in the Carter administration as the U.S. ambassador to Italy, was the candidate's first speech devoted to a single subject with broad foreign policy implications, nuclear power. The UN diplomats heard Carter propose a survival alliance predicated on world-order politics instead of balance-of-power politics. In support of his proposal, Carter invited states possessing nuclear power to guard against the dangers of proliferation. And to states possessing nuclear weapons, Carter extended an invitation to them to cease testing as a means of reigning in the arms race.[8] According to Gardner, Carter selected the topic because of an expertise in nuclear physics that he acquired in the U.S. Navy's atomic submarine program. In the submarine service, Carter had qualified as a nuclear propulsion specialist, which underscored his understanding of the intricacies and dangers of atomic power. [9]

Unbeknownst to the newly elected president – the neutron warhead controversy surfaced during Carter's fifth month in office – the U.S. Army's field artillery branch was moving ahead with a long-standing plan to modernize Lance, a short-range missile deployed in Europe to offset the Soviet Union's numerical

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[7] "We will pray for peace and we will work for peace, until we have removed from all nations for all time the threat of nuclear destruction." Jimmy Carter, "Our Nation's Past and Future," Acceptance Speech, Democratic National Convention, New York, N.Y., July 15, 1976, JCL, online at http://www.jimmycarterlibrary.gov/documents/speeches/acceptance_speech.pdf (accessed January 15, 2015).

[8] Leslie H. Gelb, "Carter's Nuclear Plan A Blend of Old and New," *New York Times*, May 14, 1976, p. 13.

[9] Lieutenant James Earl Carter, Jr., U.S.N, Naval Service. Naval History & Heritage Command, http://www.history.navy.mil/faqs/faq60-14.htm (accessed September 3, 2014). From 3 November 1952 to 1 March 1953, Lieutenant Carter served on temporary duty with the Naval Reactors Branch, U. S. Atomic Energy Commission (AEC) to assist "in the design and development of nuclear propulsion plants for naval vessels."

advantage in tanks and mechanized infantry. Lance, which carried a nuclear payload to begin with, was undergoing modification to accommodate an enhanced radiation warhead, which promised to be equally lethal but less destructive.[10]

The circuitous course that the president travelled to arrive at ERW deferral, a consequence of his ambivalence, impeded the orderly development of the administration's neutron warhead policy to the detriment of the U.S. position within the North Atlantic Treaty Organization (NATO). When the *Washington Post* published its neutron warhead exposé in June 1977 the House of Representatives was already well on its way to approving funds for the program. When news of the neutron warhead became public, plans were underway to modernize the U.S. Army's existing Lance short-range missile, which utilized a standard fission warhead. The enhanced radiation variant proposed for Lance was intended to make the missile less destructive but no less lethal, a boon to NATO field artillery units tasked with opposing a Warsaw Pact armored advance into Western Europe.

Although the Lance modernization program came as a surprise to President Carter, it had had been presented by the U.S. to NATO in 1976 as an enhancement to the alliance's theater-level nuclear forces. However, neither Carter nor his transition team or his national security adviser knew of the program to prepare for a public controversy.[11] After first learning about it in the

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[10] Other ordinance – in addition to the Lance short-range missile – was slated to accommodate ER features, such as the eight-inch artillery shell and 155mm Howitzer shell; however, in this study, the enhanced radiation warhead, unless otherwise noted, refers to Lance.

[11] "Chronology of Events Involving Enhanced Radiation Weapons (ERW)," undated, Zbigniew Brzezinski Collection, "Defense-Enhanced Radiation Warhead: 3/78-8/78, Box 22, JCL.

Washington Post, events compelled a reluctant Carter to review an ERW program that President Ford had approved, which initiated a ten-month period of policy confusion culminating in public deferral of neutron warhead production.

The neutron warhead controversy showcased President Carter's understanding of the intricacies and dangers of nuclear power and weapons, but it also left him on the horns of a dilemma. Approval of the neutron warhead – and, for all intents and purposes, Carter was leaning in that direction when the issue arose[12] – cut against the grain of his inaugural promise. But disapproval of the neutron warhead exposed Carter to claims that he was weak on defense, especially following B-1 bomber cancellation.[13] After initially warming to the neutron warhead, Carter waited ten months before deciding to defer ERW production. Carter's mixed feelings about the neutron warhead led to months of policy confusion that weakened the standing of the U.S. in NATO at a time when the Alliance's Secretary General feared that the Warsaw Pact was expanding on land, air, and sea.[14]

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[12] In July, 1977, Carter wrote a letter to Melvin Price, the chairman of the House Armed Services Committee, which expressed his belief that the neutron warhead contributed to deterrence and that he desired "to maintain the option." Letter, Jimmy Carter to Melvin Price, July 21, 1977, National Security, Defense, 7/1/77-7/31/77, Box ND-49, JCL.

[13] President Carter cancelled the B-1 bomber on June 30, 1977.

[14] Joseph Luns, NATO Final Communiqué, December, 1976, NATO On-Line Library, http://www.nato.int/docu/comm/49-95/c761209a.htm (Accessed September 9, 2014).

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Ambassador Raymond L. Garthoff observed that the late 1970s "marked a turning point in American-Soviet relations."[15] By 1976, the ongoing Strategic Arms Limitation Talks (SALT), a cornerstone of détente initiated by President Richard M. Nixon, had grown cold. Despite President Gerald Ford's gains at Vladivostok in 1974, and the hope that the two superpowers might build on the efforts begun under Nixon, the political climate that marked a thawing of the Cold War had changed. Later still, the Soviet Union's Christmas invasion of Afghanistan, and ascendant right-of-center domestic politics in the U.S., threatened to undo SALT and speed the shelving of détente.[16]

As a presidential candidate in 1976, Governor Carter, a Washington outsider, chipped away at the wall of secrecy that he believed surrounded the Capitol Beltway. As he prepared for Carter's challenge, President Ford was in the unenviable position of guarding his flanks against an internal challenge from

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[15] Raymond L. Garthoff, *Détente and Confrontation: American-Soviet Relations from Nixon to Reagan*, revised ed. (Washington, DC: The Brookings Institution, 1994), 594. Garthoff uses the expression "Détente on the Defensive, 1976" to begin his discussion of the turning point in American-Soviet relations.

[16] Carter declined to continue "business as usual" with the Soviet Union after Moscow's military action in Afghanistan. In an address to the nation on January 4, 1980, broadcast live on radio and television, Carter sought time to respond to the crisis. "I have asked the United States Senate to defer further consideration of the SALT II treaty so that the Congress and I can assess Soviet actions and intentions …." Jimmy Carter: "Address to the Nation on the Soviet Invasion of Afghanistan," January 4, 1980. Online by Gerhard Peters and John T. Woolley, *APP*, http://www.presidency.ucsb.edu/ws/?pid=32911. As to détente, *see* Robert G. Kaiser, "U.S.-Soviet Relations: Goodbye to Détente," *Foreign Affairs*, http://www.foreignaffairs.com/articles/34592/robert-g-kaiser/U.S.-soviet-relations-goodbye-to-d%C3%83%C2%A9tente (accessed December 19, 2014). Kaiser observes that "the Soviet invasion of Afghanistan, the workers' uprising in Poland and the election of Ronald Reagan to the American presidency" helped to break the momentum of détente.

former California Governor Ronald W. Reagan.[17] Reagan, whose public appeal conservative columnist William F. Buckley, Jr., described as "uncanny," came close to undoing President Ford's quest for the GOP's presidential nomination. Four years later Reagan, who ran largely in opposition to "Big Government," ended Carter's one-term presidency.[18]

Candidate Carter, like Ronald Reagan, pushed back against SALT on the campaign trail. Carter believed that the U.S. had failed to compete with the U.S.S.R. "on an equal basis" during the SALT negotiations, a liability of détente. During the second presidential debate held in San Francisco on October 6, 1976, Carter explained his disillusionment with détente to Max Frankel of the *New York Times*. "The Soviet Union knows what they want in détente, and they've been getting it," Carter said. "We have not known what we've wanted, and we've been out-traded in almost every instance." Frankel's question also addressed arms control, and Carter's response implied that SALT needed improvement.[19] But by the end of Carter's presidency, SALT had faltered in the U.S. Senate in the wake of the Soviet Union's invasion of Afghanistan. That invasion, together with the Iranian Revolution, and the ensuing hostage crisis, dogged President Carter until the end of his term. Both crises were, for Reagan, indicative of the world prestige forfeited by the U.S. under President Carter's leadership.

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[17] Kenneth E. Morris, *Jimmy Carter, American Moralist* (Athens, GA: University of Georgia Press, 1996), 223.

[18] William F. Buckley, Jr., *The Reagan I Knew* (New York, NY: Basic Books, 2008), 70.

[19] Transcript, Second Carter-Ford Presidential Debate, October 6, 1976, Commission on Presidential Debates, http://www.debates.org/index.php?page=october-6-1976-debate-transcript (accessed November 26, 2013).

Upon accepting the nomination of the Republican Party on July 17, 1980, Reagan observed that Carter had failed the American people "and the freedom fighters of Afghanistan" by inviting them to accept that the "United States has had its day in the sun."[20] In his acceptance speech, Reagan lampooned the Carter administration for living "in the world of make-believe" where 50 Americans are held captive in Iran while the Soviet Union takes advantage of America's failing will.[21] For Reagan, Carter's decision to defer neutron warhead production in the face of Soviet opposition was tantamount to appeasement.[22] In addition, high on Reagan's list of Carter's shortcomings was SALT. Although SALT moderated a costly and dangerous arms race between the two superpowers, it did not address theater-level or battlefield nuclear arms, a treaty shortfall. Two important systems, the Soviet Union's SS-20, an intermediate-range ballistic missile, and the neutron warhead, fell outside the treaty.

Weapons systems that fell outside of SALT, like the neutron warhead, were termed "grey area systems." Although the SS-20 and the neutron warhead were not covered under SALT, their existence nevertheless complicated SALT, at least to the extent that they lowered the nuclear threshold. In addition, ERW and the SS-20 were briefly linked in 1977 in an effort by Carter's advisers to bundle neutron warhead production to broader strategic arms control, which further

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[20] Ronald Reagan: "Address Accepting the Presidential Nomination at the Republican National Convention in Detroit," July 17, 1980. Online by Gerhard Peters and John T. Woolley, *APP*, http://www.presidency.ucsb.edu/ws/?pid=25970 (accessed September 3, 2014).

[21] Ibid.

[22] Ronald Reagan: "Remarks Announcing Candidacy for the Republican Presidential Nomination," November 13, 1979. Online by Gerhard Peters and John T. Woolley, *APP*, http://www.presidency.ucsb.edu/ws/?pid=7611 (accessed September 3, 2014).

complicated SALT. The direct link between SS-20 deployment and neutron warhead production fell out of favor with President Carter, however. When he decided reluctantly to defer the ERW program in 1978, Carter linked future ERW production to the general concept of Soviet restraint, not SS-20 redeployment. Later, Moscow's 1979 invasion of Afghanistan had the unintended effect of simplifying neutron warhead approval for Ronald Reagan.

Carter's responses to the crises in Iran and Afghanistan were, for critic Robert McGeehan, part of a "litany of shortcomings."[23] Both Iran and Afghanistan – like the neutron warhead affair – drew Carter away from his foreign policy core, the advancement of human rights. Moreover, the Soviet Union's invasion of Afghanistan brought out the Cold Warrior in Carter as evidenced by Presidential Directive-59, which he signed in 1980. The directive gave the president more flexibility when it came to planning and executing a nuclear war. Theater nuclear forces, among them enhanced radiation weapons, figured prominently within the context of PD-59, which suggests that the Soviet Union's 1979 invasion of Afghanistan may have changed the president's point of view of the neutron warhead.[24]

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[23] Robert McGeehan, "Carter's Crises: Iran, Afghanistan, and Presidential Politics," *The World Today* 36, no. 5 (May, 1980), 163.

[24] On March 13, 1980, two months before Carter signed PD-59, he had a meeting in the Oval Office with Minister President of Bavaria Franz Josef Strauss and Zbigniew Brzezinski. During the meeting, Carter told Strauss, "I want you to know that we are still building the neutron weapon, including tritium containers for the warheads." *See*, Memorandum of Conversation, Carter with Strauss, March 13, 1980, RAC NLC-128-1-9-1-8, JCL.

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Worldwide developments, especially in the Horn of Africa in 1977, and later in Iran and Afghanistan in 1979 and 1980, made Carter's 1976 address to UN delegates seem prescient. Two months after the neutron warhead story broke, Somalia, under Said Barre, was at war with Mengistu Haile's Ethiopia, a recent client-state of the Soviet Union.[25] The two East African countries vied for control of a barren province known as the Ogaden, but the Ogaden War had wider implications.[26] The African conflict accelerated the demise of détente, but also contributed to Carter's resolve in dealing with the Soviet Union. Carter was reluctant to appear weak in the face of Soviet initiative, which contributed to his reluctance to carry through with outright cancellation of the neutron warhead, his preferred policy position after March, 1978.

One year earlier, in March, 1977, the Carter administration withdrew its support of long-time U.S. ally Ethiopia over human rights violations while assessing Somalia's ties to the Soviet Union.[27] In response, the Brezhnev politburo strengthened its ties to that country with Cuban assistance and, at the

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[25] The U.S. had been (since the 1950s) aligned with Ethiopia. Until the Carter administration, and the Ogaden War, the U.S. had troops in Ethiopia and a listening post in Kagnew. When the Ethiopians began building a relationship with Moscow, the U.S. pulled back, which created an opening in Somalia, a one-time Soviet client. *See*, Larry C. Napper, "The Ogaden War: Some Implications for Crisis Prevention," *Managing U.S.-Soviet Rivalry*, Alexander L. George, ed. (Boulder, CO: Westview Press, 1979), 225-231.

[26] Ogaden is a plateau between Somalia and Ethiopia configured like a Rhinoceros horn, the shape that lends its name to the greater Horn of Africa. The land-locked Ogaden is bisected by the Shebeli River, which runs from the Ethiopian Highlands in the East into and through Somalia. In wet years the Shebeli flows into the Indian Ocean below Balcad.

[27] Memorandum, Brzezinski to Mondale, et al, March 17, 1977, "The Horn of Africa," JCL, http://www.jimmycarterlibrary.gov/documents/prmemorandums/prm21.pdf (accessed October 6, 2014).

same time, used human rights as a foil to discourage the United States from going forward with the neutron warhead, a weapon it characterized as a *capitalist bomb*.[28] Superpower grappling for position in Africa, and later the Iran hostage crisis and the Soviet Union's invasion of Afghanistan, drew President Carter's attention away from his domestic policy agenda and complicated his 1978 neutron warhead deferral.

President Carter's ERW compromise – deferral over outright cancellation – reflected his ambivalence toward enhanced radiation warheads. Had President Carter earlier reconciled the conflicting paths of approval versus cancellation, he might have avoided ten months of policy ambiguity. Instead, Carter opted not to follow the advice of his senior advisors, who advised approval. President Carter charted a course for deferral while ordering the production of all of the critical neutron bomb components. The president stopped just short of assembly. Carter's ambivalence recalls Shakespeare's Brutus who admonishes Cassius that it is better to be a sacrificer than a butcher, hardly a distinction with a difference.[29] President Carter's ERW policy disappointed his senior staff without clarifying the administration's long-term neutron warhead policy or, indeed, its theater-level nuclear force modernization.

For ten months in 1977 and 1978, an ambivalent Carter delayed making a decision on enhanced radiation warheads. He ended a ten-month period of robust

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[28] Bradley Lightbody, *The Cold War* (New York, NY: Routledge, 1999), 89. U.S. diplomats in Rome suggested (unsuccessfully) another name, reduced blast warhead. Rome Embassy telegram 13015, "Allied Attitudes on Neutron Bombs," 10 August 1977, *NSA* http://www2.gwu.edu/~nsarchiv/*NSA*EBB/*NSA*EBB463/docs/doc%203C%20neutron%20bomb.pdf (accessed December 30, 2014).

[29] *Julius. Caesar*, Act II, Scene 1.

speculation when he elected to defer production of a neutron warhead for Lance in April, 1978. President Carter's decision was widely seen as a reversal by administration officials, including National Security Adviser Zbigniew Brzezinski, who lobbied forcefully to convince Carter not to cancel the neutron warhead outright.[30] For Brzezinski, one of the five "crucial turning points" of President Carter's foreign policy had been bungled.[31]

Indeed, the neutron bomb challenged two presidential administrations, Jimmy Carter's and Ronald Reagan's. Of the two, Carter's suffered the weight of the neutron bomb affair to a degree not felt by Reagan's. President Reagan approved production of the controversial warhead in 1981 with barely a ripple.[32] However, by the time Reagan approved neutron warhead production, the Soviet Union had been warring in Afghanistan since December 1979. Moscow's

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[30] Memorandum, Brzezinski to Carter, "Enhanced Radiation Weapons," March 24, 1978, Zbigniew Brzezinski Materials, Enhanced Radiation Weapons and Radiological Warfare, Box 17, JCL. *See, also*, Deputy Assistant to the President for National Security Affairs David Aaron, "We cannot afford to torpedo enhanced radiation warheads because we cannot permit the Soviets to be successful with their propaganda campaign against ER." Memorandum of Conversation, "Special Coordinating Committee (SCC) Meeting on Enhanced Radiation Warheads," November 16, 1977, RAC NLC-31-139-6-1-7, JCL. *See, also*, RAC NLC-15-124-7-7-4 where a consensus arises at the November 16, 1977, SCC meeting behind ERW production: "the U.S. should produce enhanced radiation (ER) warheads." Those administration officials in attendance – and lending their support to ERW production – were from State, Cyrus. Vance, George Vest and David Gompert; from Defense, Harold Brown, Charles Duncan, and David McGiffert; from CIA, Stansfield Turner; from ACDA, Paul Warnke, and John Newhouse; from NSC, Zbigniew Brzezinski, David Aaron, Reginald Bartholomew, and Robert Hunter; from the Pentagon (JCS), George Brown and William Smith; and, from the Department of Energy, James Schlesinger and Alfred Starbird. Carter was aware of this broad consensus. Regarding the broad consensus, *cf*., James Schlesinger interview, July 19-20, 1984, "the Carter Presidency Project," interview by Charles O. Jones, et al., *University of Virginia, Miller Center of Public Affairs* (2005). Carter commented on the recommendation in the memorandum by marginalia to the effect that he was stating "OK" with ERW production, especially tied to SS-20 withdrawal. The Schlesinger-Jones interview is available online at http://millercenter.org/president/carter/oralhistory/james-schlesinger (accessed January 15, 2015).

[31] Auger, *Dynamics of Foreign Policy Analysis*, 2.

[32] Zbigniew Brzezinski, *Power and Principle* (New York, NY: Farrar, Strauss, and Giroux, 1983), 301.

military expansion into Southwest Asia facilitated – though it was not the proximate cause of – Reagan's ripple-free approval of the controversial weapon.

By the end of Carter's one-term presidency, the neutron warhead fiasco had tainted relations between the U.S. and its NATO allies, especially the Federal Republic of Germany. Carter decided to defer neutron warhead production and, according to Zbigniew Brzezinski, the president's deferral strained an already-poor relationship with West German Chancellor Helmut Schmidt, considered by Carter to be a "bully and a hypocrite."[33] In 1982, Carter recollected in an interview with Richard Neustadt that Helmut Schmidt "was preaching to anyone that would listen" that the U.S. misled the FRG when it came to neutron warhead production and deployment.[34]

Regardless of Helmut Schmidt's allegation of having been misled, recently declassified documents indicate that Carter's commitment to neutron warhead production was stronger than scholars once thought. One memorandum documenting a White House conversation between the president and an FRG official indicates that the United States produced – but did not assemble – the neutron warhead during Carter's term, before Ronald Reagan's 1981 decision

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[33] Brzezinski, *Power and Principle*, 26. *See, also*, William Woessner's recollection. Years after the neutron warhead controversy – in 1999 – Woessner, the State Department's Director of Central European Affairs, recalled that President Carter's relationship with FRG Chancellor Helmut Schmidt was "absolutely venomous." William W. Woessner, interview by Charles Stuart Kennedy, *The Association for Diplomatic Studies and Training, Foreign Affairs Oral History Project*, (November 29, 1999), http://www.adst.org/OH%20TOCs/Woessner,%20William%20M.toc.pdf (accessed March 24, 2014).

[34] Jimmy Carter Interview, Miller Center, University of Virginia, Jimmy Carter Presidential Oral History Project (COHP), November 29, 1982, http://web1.millercenter.org/poh/transcripts/ohp_1982_1129_carter.pdf (accessed March 24, 2014).

approving ERW production.[35] In August, 1981, Reagan explained that "the previous administration had authorized [neutron warhead] manufacture quite some time ago," however, the components were kept in separate places. Reagan decided to assemble the components and House the intact warhead "as a unit instead of two separate parts."[36] Although neutron bomb production is *publicly* attributed to Ronald Reagan, the evidence developed during the course of this study indicates that, for all intents and purposes, the United States began neutron bomb production under President Carter between 1978 and 1980.[37]

The neutron bomb affair, while it put to good use Carter's science and engineering background, cut against the grain of the world-order approach he espoused in New York in 1976, and the affair weakened Carter's standing within the North Atlantic Alliance. By the spring of 1978, Carter was committed to neutron warhead cancellation, but his advisers – chief among them Zbigniew Brzezinski – talked him out of cancellation. Not wanting to seem weak in the face of the Soviet Union's neutron warhead opposition, Brzezinski convinced Carter to abandon outright cancellation in favor of deferral, a choice rooted in balance-of-power politics. ERW deferral was not Brzezinski's first choice, but he preferred it over outright cancellation. The eleventh-hour turnabout in

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[35] Memorandum of Conversation, Carter with Strauss, March 13, 1980, RAC NLC-128-1-9-1-8, JCL. The memorandum contains the record of a White House conversation with Minister President of Bavaria Franz Josef Strauss (Carter to Strauss: "I want you to know that we are still building the neutron weapon, including tritium containers for the warheads"). Zbigniew Brzezinski also took part in the conversation.

[36] Ronald Reagan: "Remarks on Signing the Economic Recovery Tax Act of 1981 and the Omnibus Budget Reconciliation Act of 1981, and a Question and-Answer Session With Reporters," August 13, 1981. Online by Gerhard Peters and John T. Woolley, *APP*, http://www.presidency.ucsb.edu/ws/?pid=44161 (accessed June 20, 2014).

[37] Memorandum of Conversation, Carter with Strauss.

Washington (deferral after months of creeping approval) left leaders in Europe reluctant to publicly support *any* U.S.-conceived tactical nuclear force modernization for NATO, a grave concern of both Harold Brown and Cyrus. Vance, Carter's secretary of defense and secretary of state.[38]

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This study develops evidence of the impact of bureaucratic momentum on the neutron warhead development program.[39] Indeed, that evidence comes primarily from a post-term interview with President Carter wherein he indicts the military bureaucracy for over committing the United States to neutron warhead production. But the contemporaneous archival evidence contradicts the president's post-term recollection.[40] The argument in favor of bureaucratic momentum is a red herring. The documentary evidence does not suggest that the military bureaucracy reached an agreement to produce and deploy neutron warheads in Europe ahead of presidential prerogative. The neutron warhead program was presented by U.S. military officials to NATO in 1976 in the ordinary

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[38] Cyrus Vance and Harold Brown, Memorandum, TNF Modernization, May 9, 1979, Zbigniew Brzezinski Materials, Enhanced Radiation Weapons and Radiological Warfare, Box 20, JCL.

[39] Christopher Pain, a policy adviser to the Beltway-based group Physicians for Social Responsibility, refers to the term "bureaucratic tenacity" to describe how government officials and military personnel added fuel to the arms race for battlefield nuclear weapons modernization. In the February, 1985 edition of the *Bulletin of Atomic Scientists*, Paine describes how Senator Sam Nunn of Georgia facilitated ERW legislation in the Senate by utilizing complicated parliamentary procedures that had the effect of limiting open debate on funding for the Lance ER variant. Christopher Paine, "Senator Nunn's Shell Game," *Bulletin of the Atomic Scientists* 2, no. 6, (February, 1985), 5.

[40] Jimmy Carter Interview, Miller Center, University of Virginia, COHP, November 29, 1982, http://web1.millercenter.org/poh/transcripts/ohp_1982_1129_carter.pdf (accessed March 24, 2014).

course of business after the program had been approved by the Ford administration.[41] The neutron warhead program was not the offspring of a too fertile military bureaucracy rather it was a consequence of executive decision, and the president closest to that decision was Ford. Of the presidents associated with the neutron warhead, Carter is credited with "stopping it," Reagan with "building it," and Ford is passed over, left out of the popular imagination altogether. And of the three, Carter is credited with having taken a moral stand against neutron warheads by reigning-in the Pentagon, which suggests that, of America's Cold War presidents, Carter achieved a more delicate balance of personal morality and nuclear weapons policy.

However, the argument that President Carter's moral qualms prevented his approval of the neutron warhead program collapses under the weight of the archival evidence. Carter did have deep-seated moral qualms about nuclear weapons, but so did the other Cold War presidents, all of whom (to one extent or another) possessed similar qualms. What's more, Carter did not distinguish neutron warheads from other nuclear warheads in terms of morality; one was not wickeder than another for Carter.[42] Harry S. Truman, the first of the Cold War presidents, had perhaps the fewest misgivings about the atomic bomb, but he has

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[41] *See, e.g.*, "U.S. Report to NATO indicates new Lance and eight-inch artillery warheads will have ER feature." "Chronology of Events Involving Enhanced Radiation Weapons (ERW)," undated, Zbigniew Brzezinski Collection, "Defense-Enhanced Radiation Warhead: 3/78-8/78, Box 22, JCL.

[42] Jimmy Carter: "Yazoo City, Mississippi Remarks and a Question-and-Answer Session at a Public Meeting," July 21, 1977. Online by Gerhard Peters and John T. Woolley, *APP*, http://www.presidency.ucsb.edu/ws/?pid=7854 (accessed December 21, 2014). Carter: "I don't believe that the neutron bomb is more wicked or immoral than the present nuclear weapons we have and the Soviets have as well.

the distinction of having been the only Cold War president to use one in war. While in office and afterward, Truman regularly squashed the notion that he had any qualms about dropping the atomic bomb on Hiroshima and Nagasaki.[43] Years after those momentous days in August, 1945, Truman clung to the notion (since discredited) that the atomic bomb prevented hundreds of thousands of American casualties, his estimate for an invasion of Japan's home islands by allied forces.[44] In personal correspondence after leaving office, Truman wrote to Mrs. Hayden Klein in August, 1964 that he "never worried about the dropping of the bomb," because "the dropping of those bombs ended the war."[45]

Before he held the responsibility of chief executive, Dwight D. Eisenhower expressed "grave misgivings" over use of the atomic bomb against Japan. Asked his opinion by Secretary of War Stimson, Eisenhower expressed his belief that Japan was already defeated, making use of the bomb "completely unnecessary." Moreover, Eisenhower told Stimson that he believed America should "avoid shocking world opinion" through the use of a weapon that was no

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[43] *See, e.g.*, Harry S. Truman to Roman Bohnen, December 12, 1946. President's Secretary's File, Truman Papers, Harry S. Truman Library & Museum, ("HSTL"), http://www.trumanlibrary.org/whistlestop/study_collections/bomb/large/index.php (accessed December 21, 2014).

[44] Excerpt from Transcript of Interview with former President Truman, ca. 1955. Post-Presidential File, Truman Papers, HSTL, http://www.trumanlibrary.org/whistlestop/study_collections/bomb/large/documents/pdfs/7-3.pdf#zoom=100 (accessed December 21, 2014).

[45] Harry S. Truman to Mrs. Haydon Klein, Jr., August 4, 1964. Post-Presidential File, Truman Papers, HSTL, http://www.trumanlibrary.org/whistlestop/study_collections/bomb/large/documents/pdfs/9-16.pdf#zoom=100 (accessed December 22, 2014).

longer "mandatory as a measure to save American lives."[46] Unlike Eisenhower, Truman had a unique legacy to protect, that of the only president to use an atomic bomb in war. Truman's use of the bomb in war separates him from all other Cold War occupants of the oval office. Further, Truman used the atomic bomb at a time when the United States had a nuclear monopoly, which is significant because nuclear reprisal did not exist in fact in August 1945. Also, when Truman approved the bombing of Hiroshima and Nagasaki, America's nuclear arsenal was miniscule – fewer than five working devices. The arsenal was insufficient to destroy the world in fact.

After Truman, the technology of mass destruction leaped ahead to the point where President Kennedy warned that total war made no sense whatsoever when countries kept "relatively invulnerable nuclear forces" with individual warheads with "almost ten times the explosive force delivered by all of the allied air forces in the Second World War."[47] For Kennedy, in the nuclear age, only peace sufficed as the necessary "rational end of rational men." Kennedy's urging was commensurate with the moral qualms he held – and likewise the other Cold War presidents – over the danger inherent in the superpowers' nuclear arsenals. The width of a hair kept the world from nuclear winter in October 1962 when, in response to the Soviet Union's buildup of an offensive military posture in Cuba, Kennedy warned the American people that "nuclear weapons are so destructive

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[46] Dwight D. Eisenhower, *Mandate for Change, 1953-1956* (New York, NY: Doubleday & Company, 1963), 312-313.

[47] John F. Kennedy: "Commencement Address at American University in Washington," June 10, 1963. Online by Gerhard Peters and John T. Woolley, *APP*, http://www.presidency.ucsb.edu/ws/?pid=9266 (accessed December 21, 2014).

and ballistic missiles are so swift, that any substantially increased possibility of their use or any sudden change in their deployment may well be regarded as a definite threat to peace."[48]

Once technological advances augmented long-range bomber forces with ballistic missiles capable of reaching across oceans, the nuclear calculus changed. During President Lyndon B. Johnson's White House years America's nuclear stockpile reached its zenith (in 1967) with 31,255 warheads.[49] Throughout the Cold War, the Soviet Union endeavored to keep pace with the United States. By Richard Nixon's presidency, Moscow controlled a sizable ballistic missile arsenal with delivery vehicles capable of ranges in excess of 7,000 miles with steadily improving re-entry guidance technology.[50] The prospect of an exchange of nuclear weapons between heavily (and more or less equally) armed superpowers altered the nuclear game and raised the stakes by orders of magnitude. In an effort to stem the rising tide of the nuclear arsenals, President Gerald Ford and his Soviet counterpart, Leonid Brezhnev, agreed in 1975 to the Vladivostok Accords thereby limiting the number of strategic nuclear arms, which built on the work begun under President Nixon and Secretary of State Henry Kissinger.

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[48] John F. Kennedy: "Radio and Television Report to the American People on the Soviet Arms Buildup in Cuba," October 22, 1962. Online by Gerhard Peters and John T. Woolley, *APP*, http://www.presidency.ucsb.edu/ws/?pid=8986 (accessed December 21, 2014).

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[49] "Transparency in the U.S. Nuclear Weapons Stockpile," U.S. Department of State, Fact Sheet, April 29, 2014, http://www.state.gov/t/avc/rls/225343.htm (accessed December 22, 2014).

[50] *See*, "The Soviet Land-Based Ballistic Missile Program, 1945-1972," *National Archives, Interagency Security Classification Appeals Panel*, http://www.archives.gov/declassification/iscap/pdf/2010-005-doc2.pdf (accessed December 22, 2014).

In 1983, under Ronald Reagan's stewardship, NATO's *Able Archer* – a nuclear-release exercise – landed Washington and Moscow in the Cold War's last paroxysm.[51] According to the CIA, Soviet forces in East Germany and Poland went on high alert, and readied a nuclear response, to meet the perceived threat posed by *Able Archer*.[52] The United States and the Soviet Union were nearer to the nuclear abyss in 1983 than any time since 1962.[53] President Reagan's reaction to *Able Archer*, and his reaction to the 1983 film *The Day After*, a depiction of nuclear war and its aftermath, revealed the depth his moral qualms with nuclear weapons. According to Frank Carlucci, a Reagan-era national security adviser, Regan believed that nuclear weapons were inherently evil, a belief *The Day After* strengthened for Reagan, who was particularly susceptible to the motion picture medium.[54] To have moral qualms over nuclear weapons was the rule for the Cold War presidents; Carter was not, despite popular opinion, an exception to the rule.

This study cuts against the prevailing notion that President Carter's moral qualms over nuclear weapons were more robust than his Cold War predecessors or successors. If one accepts the prevailing view, then Carter's moral qualms over the neutron warhead caused him to defer production. But the prevailing

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[51] I credit the expression "last paroxysm" to the George Washington University's National security Archive, which uses the expression to begin one of its *Able Archer* briefing books. *See*, "The 1983 War Scare: 'The Last Paroxysm' of the Cold War," *NSA*, http://www2.gwu.edu/~nsarchiv/*NSA*EBB/*NSA*EBB426/ (accessed December 21, 2014).

[52] *See*, Benjamin B. Fischer, "The 1983 War Scare in U.S.-Soviet Relations," CIA Studies in Intelligence, undated, circa 1996, *NSA*, http://www2.gwu.edu/~nsarchiv/*NSA*EBB/*NSA*EBB426/docs/3.The%201983%20War%20Scare%20in%20U.S.%20Soviet%20Relations-circa%201996.pdf (accessed December 22, 2014).

[53] Ibid.

[54] Lou Cannon, *President Reagan: The Role of a Lifetime* (New York: Public Affairs, 2000), 250.

view falls under the weight of the evidence presented in this study. Moreover, this study topples the prevailing view of President Carter as a squeamish Cold Warrior when it came to the neutron warhead and recasts him as a pragmatic executive ready, willing, and able to order production of the controversial warhead but for his lack of belief in the weapon's military efficiency, and his unwillingness to expend political capital to secure willing deployment partners in NATO. Unlike other studies of the neutron warhead deferral decision, this one rests not morality or European resistance to home-soil deployment, but on President Carter's belief that the neutron warhead lacked military utility, an inherently unsentimental pragmatic approach.

However, Carter's pragmatism is not grounds to infer that Carter was clear in his formulation or execution of neutron warhead policy. This study confirms the prevailing view, oft expressed by James Fallows, that Carter was a micromanager.[55] Carter's executive habit of continuously gathering information bogged-down neutron warhead policy in 1977 and 1978, which supports this study's assertion of the president's ambivalence. Carter's ambivalence manifested itself in his unwillingness to rule out conflicting ERW options in a timely and efficient manner in order to achieve policy clarity. Approval versus disapproval or approval with an arms control linkage versus approval without an

[55] James Fallows, "The Passionless Presidency: The trouble with Jimmy Carter's Administration," *The Atlantic*, May, 1979, http://www.theatlantic.com/past/unbound/flashbks/pres/fallpass.htm (accessed December 22, 2014). According to Fallows, a Carter speechwriter: "Carter came into office determined to set a rational plan for his time, but soon showed in practice that he was still the detail-man used to running his own warehouse, the perfectionist accustomed to thinking that to do a job right you must do it yourself."

arms control linkage and similar policy-paths bedeviled the president between June 1977 and April 1978 and after.

The president charted an unclear course for ERW and, once his decision was made in April, 1978, deferral was widely (mis)understood to mean cancellation. Moreover, Carter's deferral went against the unanimous advice of his senior staff, circumstantial evidence often misconstrued to argue that Carter deferred ERW because of his personal morality. The documentary evidence reveals that Carter's personal morality was *not* a large factor in the decision to defer production of the neutron warhead; the president's ambivalence was not rooted in his personal morality.

President Carter deferred ERW production in 1978 because, in his estimation, the neutron warhead's political disadvantage, manifested primarily by West German reluctance to accept home-soil deployment, exceeded the weapon's military advantage. This study is the first one of its kind to concentrate extensively on President Carter's finding, which he shared with Secretary of Defense Harold Brown, that enhanced radiation warheads were not very important militarily when it came to NATO's theater-level nuclear forces.[56] Indeed, the decision to forego ERW entirely was rejected by the president's White House staff for the reason given by David Aaron, an aid to National Security Advisor Zbigniew Brzezinski. Aaron, who participated in the highest levels of the administration's ERW policymaking, advised against torpedoing enhanced

[56] Memorandum of Conversation, Special Coordinating Committee (SCC) Meeting on Enhanced Radiation Warheads, November 16, 1977, RAC NLC-31-139-6-1-7, JCL.

radiation warheads because the administration could not permit a Soviet "propaganda campaign" against them to succeed.[57]

Chapters One through Six

This study, consisting of six chapters, begins with an introduction followed by an overview of the neutron bomb in history and historiography.[58] On June 6, 1977 *The Washington Post's* Walter Pincus surprised readers with news that provisions had been made for an enhanced radiation warhead in a little-known public works bill. The news landed on the president's desk without advance warning. President Carter learned about it along with the public; likewise, his White House staff first became aware of the matter through the newspapers. The appropriation came under the auspices of the new Energy Research and Development Administration (ERDA), the Atomic Energy Commission's (AEC) replacement. Since 1975 the fledgling agency focused the government's energy research development activity, including nuclear defense, into one bureaucratic body. The funding for the modifications to the Lance short-

[57] Memorandum of Conversation, RAC NLC-31-139-6-1-7, JCL.

[58] Sherri L. Wasserman has written about ERW deferral from the perspective of North Atlantic Alliance politics. Sherri L. Wasserman, *The Neutron Bomb Controversy* (New York: Praeger, 1983). Robert A. Strong has written a relatively recent account of the ERW affair that places Carter's ERW in context with the president's larger foreign policy. Robert A. Strong, *Working in the World: Jimmy Carter and the Making of American Foreign Policy* (Baton Rouge: Louisiana State University Press, 2000). Historians Raymond L. Garthoff, Richard C. Thornton, Gaddis Smith, and Kenneth E. Morris have also weighed in on the ERW affair and their treatments receive greater coverage in the main body of the study. Garthoff, *Détente and Confrontation*; Richard C. Thornton, *The Carter Years* (New York: Paragon House, 1991); Gaddis Smith, *Morality, Reason, and Power* (New York: Hill and Wang, 1986); and, Kenneth E. Morris, *Jimmy Carter: American Moralist* (Athens, Georgia: University of Georgia Press, 1996).

range missile system – seemingly incongruous with the president's inaugural promise – was part of ERDA's FY 1978 budget.[59]

After a brief discussion beginning with President Carter's inaugural promise to eliminate all nuclear weapons, the second chapter explores the president's belief that the political disadvantages of ERW outweighed their military advantages. Although ERW were useful defensive weapons, Carter preferred cruise missiles to neutron warheads.[60] This chapter presents the principle scholarly views of President Carter's neutron bomb deferral – moral qualms and European resistance – in the mode of Vincent Auger's *Dynamics of Foreign Policy Analysis*, secrecy, opposition, morality, and modernization.[61] To

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[59] *See*, Memo, Bert Lance and Zbigniew Brzezinski to Jimmy Carter, 6/21/77, National Security Affairs, Brzezinski Material, "Enhanced Radiation Weapons and Radiological Warfare, 6-8/77," Box 16, JCL.

[60] President Ronald Reagan saw neutron weapons in the same way as purely defensive weapons. *See*, Ronald Reagan Presidential Library, "Remarks on Signing the Economic Recovery Tax Act of 1981 and the Omnibus. Budget Reconciliation Act of 1981, and a Question-and-Answer Session with Reporters," August 13, 1981, http://www.reagan.utexas.edu/search/speeches/speech_S.R.ch.html (accessed March 16, 2014).

[61] Vincent Auger's 1996 account of the neutron bomb controversy provides the best overall assessment of the differing reasons attributed to President Carter for deferring production of ERW. First, there is the claim that the military added ERW to ERDA's budget in secret. There is no credible evidence to substantiate this allegation. Second, there is claim that Congress widely opposed production of the neutron bomb. There was some energetic opposition to ERW in Congress, but there was also energetic support. Also, before the Walter Pincus.' frontpage coverage, ERDA's funding request moved through Congress unopposed. Third, there is the claim that deferral of ERW production was meant to send a signal to NATO that its theater-level nuclear forces were in need of a complete overhaul. Auger dispels this claim by finding that the president's advisers advocated for long-range theater-level force modernization as a consequence of ERW. What's more, their advocacy became more vigorous after the ERW decision was mishandled. Before ERW these same advisers "opposed the modernization of this component of NATO's nuclear forces." Auger, *Dynamics of Foreign Policy Analysis*, 2-3. However, not to be mistaken for ERW non-production advocacy, all of President Carter's top advisors opposed the president's eleventh-hour decision to defer neutron warhead production. *See*, e.g., James Schlesinger interview, July 19-20, 1984, "the Carter Presidency Project," interview by Charles O. Jones, et al., *University of Virginia, Miller Center of Public Affairs* (2005). The Schlesinger-Jones interview is available online at http://millercenter.org/president/carter/oralhistory/james-schlesinger (accessed January 15, 2015).

these four contexts, this study adds a fifth, rhetoric. Auger's scaffolding allows this study to unfold both chronologically and thematically without detriment to the presentation of the main argument, President Carter's belief that the political disadvantages of the neutron warhead outweighed the military advantages.

The second chapter concludes with a snapshot of contemporary perspectives of the neutron bomb controversy prevalent when the ERW crisis crested in the East Coast press during the spring of 1978.[62] Beginning that spring, the groundwork was laid in the press for the commonly accepted bases of President Carter's neutron bomb deferral, morality and European resistance.[63] This study contests that prevailing narrative by arguing that neither President Carter's personal morality nor West German resistance to home-soil deployment cinched the decision in favor of neutron warhead deferral.

The third chapter argues that President Carter's estimation of the neutron warhead's military usefulness paled in comparison to its risk of lowering the nuclear threshold. In short, Carter held the belief that the neutron warhead had the propensity to lower the nuclear threshold to an extent not justified by its

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[62] Martin Linsky has told the neutron bomb story in the context of the press and federal decision making. *See*, Martin Linsky, *Impact: How the Press Affects Federal Policymaking* (New York: W.W. Norton, 1986).

[63] As to morality, in the opinion of the president's National Security Adviser, Zbigniew Brzezinski, Carter found ERW morally abhorrent. Brzezinski: "I think the president personally found [the neutron bomb] morally abhorrent." Zbigniew Brzezinski, interview by *National Security Archive*, Cold War Series, Episode 17 (June 13, 1997), http://www2.gwu.edu/~nsarchiv/coldwar/interviews/episode-17/brzezinski1.html (accessed December 12, 2013). As to European resistance, Carter himself supports this view. "I had agreed to go ahead with the [development of neutron weapons] if [America's] NATO allies concurred." Carter, *Keeping Faith*, 227. Brzezinski also supports this line. Brzezinski: "The President decided to cancel the neutron bomb, I think for two reasons, though one was emphasized. First, there wasn't sufficient support in Europe for it, and there was a great deal of reluctance in Europe to it. But secondly, I think the President personally found it morally abhorrent." *See*, Brzezinski Interview, June 13, 1997.

usefulness as an anti-armor weapon. Jimmy Carter's naval service and other biographical details inform the second chapter of this study, which presents the president's depth of understanding of nuclear issues.[64]

This study also weaves events in Africa on the periphery of the Cold War East-West binary with assessments of the robust institutional forces behind nuclear power, which were (and are) allied with institutional science. As a matter of course, wartime institutional science inspired weaponeers to penetrate the secrets of cleaner, more efficient systems, which resulted in the neutron bomb and the affair that plagued President Carter in 1977. The importance of the Cold War periphery to the neutron warhead affair lies in the notion that Soviet behavior in the Horn of Africa helped to undermine détente.[65] In that sense, the proxy wars in Africa exacerbated discord between the United States and the Soviet Union, which colored neutron warhead policy.

After identifying President Carter's growing sense of the questionable military utility of the neutron bomb, Chapter 3 closes with the Carter

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[64] The following sources have been especially useful in constructing mini-biographies of the principals. Jimmy Carter, *Keeping Faith: Memoirs of a President* (New York: Bantam Books, 1982); also by Carter, *Why Not the Best?* (Nashville, TN: Broadman Press, 1975); and, *An Hour Before Daylight: Memories of a Rural Boyhood* (New York: Simon & Schuster, 2001). *See, also*, Kenneth E. Morris, Jimmy Carter, *American Moralist* (Athens, GA: University of Georgia Press, 1996); and, James T. Baker, *A Southern Baptist in the White House* (Philadelphia, PA: The Westminster Press, 1977). For Zbigniew Brzezinski, *Power and Principle: Memoirs of the National Security Adviser, 1977-1981* (New York: Farrar, Straus., Giroux, 1985). For Cyrus Vance, *Hard Choices: Critical Years in America's Foreign Policy* (New York: Simon & Schuster, 1983). For a (brief) insightful comparison of *Power and Principle* and *Hard Choices*, *see* Sumner Benson, *Public Historian* 7, no. 4 (Autumn, 1985): 92-94. For Harold Brown, *National Security: Thinking About Defense and Foreign Policy in a Dangerous. World* (New York: Westview Press, 1983); and, with Joyce Winslow, *Star Spangled Security: Applying Lessons Learned Over Six Decades Safeguarding America* (Washington, DC: The Brookings Institution, 2012).

[65] Donna R. Jackson, "The Ogaden War and the Demise of Détente," A*nnals of the American Academy of Political and Social Science* 632, Perspectives on Africa and the World (November 2010), pp. 26-40.

administration's reassessment of the strategic arms limits negotiated by President Ford at Vladivostok, which set the stage for President Carter's finding that the main risk associated with enhanced radiation warheads – a lowered nuclear threshold – outweighed the military benefits of ERW production. Chapter 3 contests the persistent myth that attributes President Carter's neutron warhead deferral to moral objections. As to both SALT and ERW, President Carter was unsatisfied with the status quo ante. For SALT, the president surmised that the U.S. could do better than the Vladivostok limits, which he believed did not go far enough toward the definitive and substantial cuts in nuclear armaments he coveted.[66] As to the enhanced radiation warhead, the president wanted time to assess the military utility of a weapon that might not be justified by the expense.

The fourth chapter of this study argues that President Carter's assessment of the military utility of neutron weapons changed from favorable to unfavorable after he won initial discretionary funding for ERW production in the Congress. The evidence shows that the president evaluated ERW in terms of NATO's theater-level nuclear force requirements and not his personal morality. More narrowly, the evidence focuses on the arms control implications (from the American perspective, negative if linked with SALT but *potentially* positive if linked with MBFR) of the neutron warhead. This study considers these matters from the point of view of America's *de facto* preeminence among North Atlantic Alliance member-states.

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[66] *Cf.*, Jimmy Carter: "Charleston, South Carolina Remarks at the 31st Annual Meeting of the Southern Legislative Conference," July 21, 1977. Online by Gerhard Peters and John T. Woolley, *APP*, http://www.presidency.ucsb.edu/ws/?pid=7852 (accessed February 20, 2015).

The forth chapter also relates that President Carter's efforts to build a consensus in favor of neutron warhead production stalled partly due to Moscow's successful linkage of the neutron warhead with SALT, an outcome that Carter consistently sought to avoid. By the spring of 1978, the Soviet Union's information campaign against the neutron warhead, European reluctance to deploy the warhead, and President Carter's ambivalence culminated in a major setback in relations between the Federal Republic of Germany and the United States.[67]

The fifth chapter of this study argues that the neutron warhead's political cost overshadowed its military utility by the close of 1977. European resistance to neutron warhead deployment hindered President Carter's plan to reorient the U.S. role within NATO to have West Germany and the other member-states take more responsibility for Alliance decisions. In short, President Carter did not want it to seem as though he unilaterally decided to produce and deploy the neutron warhead. Moreover, existing accounts of the neutron warhead affair pay scant attention to the opposition role played by New York's Theodore Weiss, a Democrat from Manhattan's tony Upper West Side. Weiss opposed the neutron warhead based on his belief that enhanced radiation weapons lowered the nuclear threshold and guaranteed escalation to all-out nuclear war.[68] This study corrects that omission in a effort to bring Weiss' efforts to the foreground.

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[67] Brzezinski, *Power and Principle*, 301.

[68] Congressional Record, Vol. 123, Part 24, 95th Congress.

In addition, Moscow used the neutron warhead to exacerbate the misgivings of European leaders over the aim of SALT, the limitation of strategic nuclear arms, parity, and the emergence of a nuclear warfighting pre-doctrine.[69] Despite Moscow's efforts, Carter endeavored to continue on the path that he declared to Southern legislators in Charleston, South Carolina, in July, 1977: "It's not a question of a "hard" policy or of a "soft" policy, but of a clear-eyed recognition of how most effectively to protect our own security" and to create a lasting international order based on bountiful human freedom.[70]

The sixth and final chapter of this study argues that emerging crises in Iran and in Afghanistan diverted attention away from the neutron warhead. Despite accurate intelligence assessments of the U.S.S.R.'s Afghan posture, U.S. intelligence did not anticipate clearly the Red Army's push into Kabul until mid-December.[71] Nevertheless, the invasion facilitated President Carter's stiffening defense posture, bringing about Presidential Directive – 59, and it simplified President Ronald Reagan's ERW approval.[72] After the hostage crisis in Iran, and

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[69] Nuclear warfighting is distinct from nuclear war. Prior to the emergence of limited nuclear options (LNO), war planners had settled on MAD – mutual assured destruction – to describe an exchange of nuclear weapons. The nuclear warfighting concept came into its own during the Regan Administration. One 1982 New York Times opinion piece by Anthony Lewis captured the essence of LNO and the nuclear warfighting concept. Lewis observed that the administration wanted an edge in nuclear weapons for "political leverage" that required "superior deterrent weapons [and] a nuclear war-fighting capacity." The administration was ready to move up the escalation ladder if need be. *See*, Anthony Lewis, "Atoms and Politics," *New York Times*, November 8, 1982, op-ed.

[70] Jimmy Carter: "Charleston, South Carolina Remarks at the 31st Annual Meeting of the Southern Legislative Conference," July 21, 1977.

[71] See, *National Security Archive*, Carter-Brezhnev Project, *et seq.*, http://nsarchive.gwu.edu/carterbrezhnev/fall_of_detente_ebb.html (accessed April 27, 2015).

[72] Reagan would not have characterized his move as ERW approval so much as ERW assembly. Reagan believed himself to be assembling the component-parts of a weapons system that his predecessor had merely shelved separately. Ronald Reagan: "Remarks on Signing the Economic

the Soviet Union's invasion of Afghanistan, domestic opposition to the neutron warhead more or less melted away. To be sure, the Iran hostage crisis and the Soviet Union's 1979 Christmas invasion of Afghanistan helped to trigger the transformation of Jimmy Carter into a Cold War pragmatist.

In President Carter's April 7, 1978, "Statement on Enhanced Radiation Weapons," he conditions future modernization of battlefield nuclear weapons on the extent to which the Soviet Union shows restraint in its "conventional and nuclear arms programs and force deployments."[73] Moscow's Christmas invasion of Kabul, the antithesis of restraint, threw open the door to easy ERW approval by Carter's Oval Office successor, but it also allowed Carter to assure Bavarian Minister Franz Josef Strauss, "[the U.S.] is still building the neutron weapon, including tritium containers for the warheads."[74]

Recovery Tax Act of 1981 and the Omnibus Budget Reconciliation Act of 1981, and a Question-and-Answer Session With Reporters," August 13, 1981. Online by Gerhard Peters and John T. Woolley, *APP*, http://www.presidency.ucsb.edu/ws/?pid=44161(accessed February 19, 2015).

[73] Jimmy Carter: "Enhanced Radiation Weapons Statement by the President. ," April 7, 1978. Online by Gerhard Peters and John T. Woolley, *APP*, http://www.presidency.ucsb.edu/ws/?pid=30630 (accessed June 5, 2014).

[74] Memorandum of Conversation, Carter with Strauss, March 13, 1980, RAC NLC-128-1-9-1-8, JCL.

CHAPTER 2

HISTORY AND HISTORIOGRAPHY

1983 – Zbigniew Brzezinski: President Carter "had a queasy feeling" about the neutron warhead. He didn't want his administration "stamped forever as the administration which introduced bombs that kill people but leave buildings intact."

~ Vincent Auger, The Dynamics of Foreign Policy Analysis[1]

1977 – On 18 November, President Carter approves Zbigniew Brzezinski's recommendation that the United States will not deploy enhanced radiation warheads if the Soviet Union does not deploy the SS-X-20.

~Memorandum, Zbigniew Brzezinski to President Carter, November 18, 1977[2]

This chapter presents the neutron bomb in history and historiography. After discussing President Carter's inaugural promise to eliminate all nuclear weapons, the chapter concludes with the president's belief that the disadvantages of enhanced radiation warheads (ERW) outweighed the advantages. The weight of the chapter, however, is carried by a discussion of the principle scholarly views of President Carter's neutron bomb deferral. The discussion follows Vincent Auger's lead by employing scaffolding constructed around the most frequently

[1] Vincent Auger, *The Dynamics of Foreign Policy Analysis: The Carter Administration and the Neutron Bomb*, (Lanham, MD: Rowman & Littlefield, 1996), 109.

[2] RAC NLC-15-124-7-7-4, Jimmy Carter Library ("JCL").

encountered neutron warhead discourses of the late 1970s – secrecy, opposition, morality, and modernization. This study adds a fifth discourse, rhetoric.

The argument presented in this study contests the prevailing view that President Carter deferred neutron bomb production in April 1978 due to his personal moral concerns and European resistance to home-soil deployment. The archival evidence developed over the course of this study shows that President Carter did not harbor moral qualms over neutron warhead production. This study asserts that President Carter deferred ERW production because, in his estimation, enhanced radiation warheads were not very important *militarily* when it came to NATO's theater-level nuclear force modernization.

Neutron Bomb In History and Historiography

"Our nation now has no understandable national purpose, no clearly defined goals, and no organizational mechanism to develop or achieve such purposes or goals."[3] Jimmy Carter wrote these words in his 1975 campaign biography, *Why Not the Best?* Afterward, he included a Bible verse: "If the trumpet give an uncertain sound, who shall prepare himself to the battle?"[4] Carter, a deeply religious man and a life-long Sunday school teacher, often quoted from the Bible. With this quote, he highlighted the danger of uncertainty. In Carter's estimation, America was adrift – uncertain in its purpose – after Vietnam and Watergate. Eager to take the helm, Carter seized the moment and in 1974

[3] Jimmy Carter, *Why Not the Best?* (Nashville, Tennessee: Broadman Press, 1975), 149.

[4] 1 Corinthians 14:8.

presented himself to Americans as an alternative to incumbent Gerald R. Ford, albeit a long-shot. Carter was intent on restoring honesty, decency, openness, fairness, and compassion in government.

The public welcomed Carter's embrace of honesty, decency, and openness after Nixon. However, when the neutron bomb affair arose, it looked suspiciously like a secret program conceived inside the Pentagon without Congressional oversight or executive approval. Carter denied knowledge of the program (July 12, 1977: "In the first place, I did not know what was in the bill") and his denial added to the erroneous impression that the neutron warhead was a secret program not subject to Congressional oversight.[5] Claims of secrecy, though erroneous, were later used as evidence by detractors in support of neutron warhead disapproval.

Upon his election, Carter began drafting an inaugural pledge aimed at tackling the "unnecessary proliferation of atomic weapons throughout the world."[6] In notes prepared for his inaugural address, Carter wrote: "To all the world we pledge patience, restraint and wisdom in our unending search for peace, with the world's armaments limited to those necessary for each nation's own domestic security, and our ultimate goal the elimination of nuclear weapons from

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[5] Jimmy Carter: "The President's News Conference," July 12, 1977. Online by Gerhard Peters and John T. Woolley, *APP*, http://www.presidency.ucsb.edu/ws/?pid=7786 (accessed December 23, 2014).

[6] Broadly, there are two types of nuclear proliferation, horizontal and vertical. Horizontal proliferation refers to the spread of nuclear technology among states or unaligned groups. It is horizontal proliferation when country A, a nuclear power, sells or gives nuclear technology to country B or a faction within country B. Vertical proliferation refers to the improvement of nuclear technology within a nuclear power. In the case of arms, it is vertical proliferation when country A, a nuclear power, improves its nuclear arsenal. Enhanced radiation weapons represent a classic case of vertical proliferation.

this earth. Success can mean life instead of death."[7] Carter's pledge underwent several refinements from one inaugural address draft to the next, but those changes represented changes in form over substance. The version Carter drafted on January 20, 1977, in Washington, DC, captured the spirit of earlier drafts.

The world is still engaged in a massive armaments race designed to insure continuing equivalent strength among potential adversaries. We pledge perseverance and wisdom in our efforts to limit the world's armaments to those necessary for each nation's own domestic safety. We will move this year a step toward our ultimate goal – the elimination of all nuclear weapons from this earth.[8]

Carter's final words differed little from the draft, but the absence of "our unending search for peace" reflects a pragmatic turn as does the addition of "we will move this year a step …." For Carter, peace and nuclear arms control went hand-in-hand and both led to an ultimate goal: the elimination of nuclear weapons from this earth. It was a clearly defined goal around which Carter hoped to build a national purpose. Even so, enhanced radiation weapons – neutron bombs – would soon intervene to thwart Carter's plans.

Jimmy Carter believed that in a democracy "no government can be stronger or wiser" than its people; neither can it be "more just."[9] Carter strove to give the American people the "good government" that they deserved by serving as their moral leader as well as chief executive. But could a moral leader with

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[7] Notes, Inaugural Speech, Jimmy Carter, undated, Office of the Staff Secretary, Handwriting File, "1976 Campaign Transition, Inaugural Speech Drafts – Notes and Suggestions [1]," Box 2, JCL.

[8] Carter, *A Government as Good as Its People*, 261-262.

[9] Ibid, 16.

deeply held Christian convictions approve enhanced radiation weapons? Yes, provided first that that leader knew or reasonably believed that enhanced radiation weapons were no more dreadful than their non-enhanced radiation counterparts, and second, that such weapons were consistent with "each nation's own domestic safety." Carter – a trained nuclear engineer – knew there was nothing extraordinary about enhanced radiation weaponry. In fact, he held a favorable opinion of the neutron bomb as a defensive weapon with limited (not nonexistent) blast compared to non-enhanced radiation weapons in the U.S. nuclear arsenal. According to Carter, "If you ever use a neutron bomb, it's much better than using a regular presently deployed projectile or Lance missile warhead." By "much better" Carter meant less destructive. [10]

For Carter the neutron warhead's political disadvantages outweighed the military advantages except as defensive weapons. Neutron warheads were purely defensive weapons with no offensive military utility, but the perception of non-destructiveness led to fanciful characterizations of the warhead as a death ray in popular media: A "doomsday weapon that kills with 'death rays.'"[11] But for Pentagon war planners, and the president, neutron weapons were "valuable only for the protection of Western Europe [and] only in the case of a Soviet

[10] Jimmy Carter, *Public Papers of the Presidents of the United States: Jimmy Carter*, 1977, Book II, June 25, 1977-December 31, 1977 (Washington, DC: GPO, 1978), 1331. Carter made the remarks in response to a question in Yazoo City, Mississippi, on the occasion of an informal question-and-answer session with members of the public. Here is the president's response in greater detail: "We now have the warheads of the Lance missile and our large gun projectiles, nuclear weapons. They destroy large areas of territory with both the bomb blast, fire from the explosion, and radiation. For the same projectile, you would have about the same radiation, much less blast or flames. This means in a way-and I think everybody agrees with it-that if you ever use a neutron bomb, it's much better than using a regular presently deployed projectile or Lance [short-range] missile warhead. I hope never to use either one."

[11] "The N-Bomb," *Newsweek*, July 4, 1977, 3.

invasion."[12] To Carter, the neutron warhead became an opportunity to fine tune America's standing within the North Atlantic Treaty Organization (NATO).

Contrary to the prevailing views, which hold that Carter deferred production of enhanced radiation weapons because of either moral qualms or West German resistance to ERW deployment, Carter deferred ERW production because he did not believe that ERW were militarily advantageous.[13] As to ERW, Carter was a pragmatist. Had he accepted arguments in favor of the neutron warhead's military utility, he would not have deferred production. Indeed, by the end of his term Carter quietly admitted to neutron warhead production just short of warhead assembly.

[12] Carter, *Keeping Faith*, 226.

[13] Carter does note in his memoirs that ER weapons "would have a major tactical advantage over the existing tactical nuclear weapons" that they would replace. *Keeping Faith*, 225. The president's Yazoo City remarks demonstrate that he favored the neutron bomb's reduced destructiveness over older designs. But there is a larger context for Carter's remarks. The president was not active in the details of the larger TNF-LRTNF question until after the neutron bomb affair wound down. According to Raymond Garthoff, Carter did not actively engage LRTNF until January, 1979, when he met with West Germany's Schmidt, France's d'Estaing, and Britain's Callaghan in Guadeloupe. There Schmidt committed the West Germans to accepting LRTNF deployments on German territory so long as they would not be the only continental European country committed to the deployment. Not long after, by the springtime, NATO's High Level Group supported the deployment of a "mix" of missiles, GLCMs and Pershing IIs. *See*, *Détente and Confrontation*, 946-948.

Principle Scholarly Views of Carter's ERW Deferral

Too few scholars have turned their attention to the neutron bomb affair. This study concurs with Vincent Auger's observation that most examinations of the Carter administration have underestimated significantly the impact of the affair on NATO and subsequent U.S. foreign policy.[14] In addition to Auger, Sherri L. Wasserman and Michael A. Aquino have weighed in with book-length accounts of the affair. Historians Gaddis Smith, Richard C. Thornton, and Robert A. Strong have addressed it within broader works, and Raymond L. Garthoff of the Brookings Institution links neutron bomb deferral to long-range theater nuclear force modernization in *Détente and Confrontation*, his landmark study of American-Soviet Cold War relations.

In *Détente* Garthoff – a former State Department delegate to the Strategic Arms Limitation Talks (SALT) and the Anti-Ballistic Missile (ABM) Treaty delegation – dedicates a few pages of his nearly 1200-page magnum opus to Carter's decision. Richard C. Thornton does likewise in *Carter Years*. Yet all of these works, from Auger to Thornton, are dated. Although there is more recent literature on détente, that literature is peripheral to President Carter's neutron warhead decision. For instance, Jussi Hanhimäki's 2013 assessment of the rise and fall of détente incorporates President Carter's turn toward human rights in the

[14] Auger, *Dynamics of Foreign Policy Analysis*, 2. Regarding the impact on subsequent U.S. foreign policy nuclear proliferation issues, *see* historian William Sweet's contention that Carter's neutron bomb policy may have curtailed his options for preventing India's continued production of nuclear explosives. William Sweet, "The U.S.-India Safeguards Dispute," *Bulletin of the Atomic Scientists*, June, 1978, 50-52.

formulation of United States foreign policy and the importance of the proxy conflicts in the Horn of Africa, which hastened the downfall of détente. But Hanhimäki's work is peripheral to neutron bomb studies.[15] Hence this study's indebtedness to the archival materials maintained at the Jimmy Carter Library and Museum in Atlanta and online by the National Security Archive. These documents necessitate that scholars look anew at President Carter's neutron bomb decision. Moreover, these documents support a new interpretation of the decision that President Carter deferred the enhance radiation warhead because he did not believe the weapon was militarily advantageous. This new interpretation cuts against the grain of the prevailing explanations for Carter's deferral, moral qualms and West German resistance to ERW deployment.

A Structural Framework For Approaching ERW Deferral

Vincent Auger's *Dynamics of Foreign Policy Analysis* provides the structural framework around which this literature review is configured. Even though it is dated, Auger's approach to the neutron bomb decision remains structurally sound, and although this study diverges from Auger's conclusions about neutron bomb deferral, it builds upon the structure he deployed in *Dynamics*. Auger wrote his 1996 analysis to dispel certain misperceptions surrounding enhanced radiation weapons. He identifies four: secrecy, opposition,

[15] Jussi M. Hanhimäki, *The Rise and Fall of Détente: American Foreign Policy and the Transformation of the Cold War* (Washington, D.C.: Potomac Books, 2013).

morality, and modernization.[16] This study employs these misperceptions differently, calling them "contexts" instead of misperceptions, and it adds to these four contexts a fifth one, rhetoric. These five contexts are treated in this study in two fashions, by chronology and theme, which allows for appropriate digressions. The contexts are discussed from secrecy first to modernization last in support of the main argument that President Carter believed that the neutron warhead's disadvantages outweighed its advantages.

The neutron warhead development program approved by President Ford at the end of FY 1975 was secret in the way that all United States nuclear weapons programs are secret – Lance modernization was not open for public scrutiny. Hardly indicative of openness, the Department of Energy possesses hundreds of millions of pages of confidential documents pertinent to nuclear weapons programs.[17] The enhanced radiation warhead program for Lance modernization was wending its way through regular channels when it was signaled out by journalist Walter Pincus. Lance modernization was not a dark program nor was it buried in the ERDA budget, an adjective and a verb that suggest sinister motives. At the time however, with Vietnam and Watergate fresh in the public's mind, the suggestion of secrecy at the Pentagon and in the oval office was sufficient to arouse and rally antinuclear forces against the neutron warhead.

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[16] Auger did not employ these labels in *Dynamics.* I employ these labels to fit the contours of my narrative.

[17] As of 1995, the U.S. Department of Energy held nearly 280 million classified pages pertinent to nuclear weapons development, deployment, storage, and maintenance. *See*, "A Review of the Department of Energy Classification Policy and Practice," Committee on Declassification of Information for the Department of Energy Environmental Remediation and Related Programs, *National Research Council*, 1995, pp. 7-8, 68.

The allegation of secrecy is undermined by plans to modernize Lance that fell directly in line with greater U.S. and NATO nuclear policy.[18] Arms control initiatives such as SALT in the nuclear arena and MBFR in the conventional arena captured the policy limelight once U.S. policymakers recognized the Soviet Union's strategic nuclear parity. But the arms race, in contrast to the race for arms control, took center stage yet again with the Soviet Union's 1979 invasion of Afghanistan. And when it came to the nuclear arms race, quantity and quality mattered. Nuclear weapons designers endeavored to create versatile systems that gave commanders more – not fewer – options. The enhanced radiation warhead, the centerpiece of the Lance modernization program, was one of several systems that aided policymakers in their "renewed efforts to develop limited nuclear options and to refine nuclear targeting."[19] Though it was a controversial weapon, the neutron warhead fit within the mainstream of the U.S. government's nuclear weapons modernization program; the public's misperception of ERW secrecy warrants further discussion.

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[18] "Ministerial Communiqué: Special Meeting of Foreign and Defense Ministers, Brussels," *German History in Documents and Images*, http://germanhistorydocs.ghi-dc.org/sub_document.*cf*m?document_id=1127 (accessed February 20, 2015). Communique: "[TNF modernization] took place against the background of increasing Soviet inter-continental capabilities and achievement of parity in inter-continental capability with the United States."

[19] U.S. Nuclear History Documentation Project, http://www2.gwu.edu/~nsarchiv/nsa/NC/nuchis.html#U.S.nhdp, *NSA*, (accessed December 23, 2014).

Secrecy

Was the government secretly planning to add ERW to the U.S. nuclear stockpile? Did Congress or NATO[20] know about the proposed Lance modernization program prior to the *Washington Post's* June 1977 frontpage coverage? There is conclusive evidence that Congress knew of the Lance modernization program. Legislators knew that the program encompassed enhanced radiation features for Lance's new warhead.[21] The perception of secrecy stems directly from a misleading *Washington Post* headline, "Neutron Killer Warhead Buried in ERDA Budget."

[20] In addition to secrecy, run-of-the-mill *funding* of the neutron warhead became a divisive issue for the North Atlantic alliance. *Cf.*, James M. Lindsay, "Why the Hill Matters," *Political Science Quarterly* 107, no. 4 (Winter, 1992-1993), 623, 607-628.

[21] Harold Brown and Chairman of the Joint Chiefs of Staff, Gen. George Brown, went before the House Armed Services Committee in March, 1977, and testified to the Army's tactical nuclear modernization plans, as Auger reports. On the Senate side, the ERW appropriation passed that May by voice vote. After that, the House Appropriations Committee ERDA's bill – ER requests included – funded-in-full. *See*, Auger, *Dynamics of Foreign Policy Analysis*, 41.

(F 1) *A popular depiction of the effects of the "neutron killer warhead*."[22]

Since ancient times, writers have known the importance of rhetoric, the means of persuasion. In the case of the *Post's* headline, the words "neutron killer" and "buried" appealed to emotion and not reason; moreover, these words created false impressions. Indeed, the newspaper's headline seized readers by the throat. Later, when the details were revealed, the *Post's* coverage was found to be overwrought and inaccurate, but by then the public had the indelible impression of the neutron bomb as a people killer *and* property saver. It is unremarkable to say that a warhead kills – that's what all warheads are designed to do. It would be

[22] *Chicago Sun Times*, 1977, *reprinted by* Mark Strauss, http://io9.com/though-it-seems-crazy-now-the-neutron-bomb-was-intende-1636604514 (accessed October 10, 2014). At the time (1977), the notion was widespread that ERW "destroys only life, not property."

remarkable, though, for a warhead to spare property, but that was a canard in the case of enhanced radiation weaponry.[23]

ERW limited property damage; it did not eliminate property damage, and the distinction between "limit" and "eliminate" goes beyond hairsplitting. Limiting a warhead's explosive force is qualitatively different than eliminating its explosive force. For instance, more than a century ago the Hague Convention of 1899 banned the use of projectiles designed to kill by gas or asphyxiation, but not by explosive force. By writing about the elimination of property damage as it did, the *Post* created the impression that the neutron warhead was tantamount to a death ray, not unlike the banned projectiles designed to kill by gas or asphyxiation.[24] The false narrative held that neutrons (like gas) killed but left property intact; this false narrative persists yet.[25]

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[23] Brezhnev viewed the neutron warhead as primarily an offensive rather than defensive weapon whose purpose was "destruction." On the day that the White House announced President Carter's ERW deferral, Brezhnev spoke about the neutron warhead to naval personnel in Vladivostok. Aboard the cruiser *Admiral Senyavin* Brezhnev advised sailors that the neutron warhead was "a nuclear offensive weapon" and that its "primary aim is destruction." Brezhnev also addressed the nuclear threshold question, advising the *Senyavin's* crew that the neutron warhead "increases the danger that a nuclear war will break out." Similarly to Brezhnev, Soviet news commentator L. S. Semeyko wrote disparagingly of the neutron warhead on 6 June 1978: "The logic of the neutron bomb is the logic of the arms race, the logic of those who rush from one type of weapon to another in the naive hope of preserving a monopoly on them and gaining onesided *(sic)* advantages 'at any cost.'" Semeyko pursued the neutron warhead story over the gaps in the Carter administration's deferral decision. As Semeyko correctly observed, "President J. Carter's decision, announced at the beginning of April this year, to 'defer production' of the neutron bomb does not signify U.S. rejection of this weapon." *See*, "U.S.A: Economics, Politics, Ideology, No. 6, June, 1978," National Technical Information Service (Government Printing Office, Washington, DC, 1978), 54-55.

[24] "Convention with Respect to the Laws and Customs of War on Land, 1899," *Organization for the Prohibition of Chemical Weapons*, http://www.opcw.org/chemical-weapons-convention/related-international-agreements/chemical-warfare-and-chemical-weapons/hague-convention-of-1899/ (accessed December 24, 2014). [The Laws and Customs of War material was provided through the Tufts University Fletcher School of Law & Diplomacy Multilaterals Project.] *See, also*, Edmund Russell's observation in *War and Nature*, his study of the co-evolution of the control of nature and the scale of war in which he argues that "the control of nature formed one root of total war." Russell observed that the United States rejected the convention's gas declaration. Russell refers to Columbia University President Seth Low's

Likewise, it is misleading to say that the funds for an enhanced radiation variant of the Lance short-range missile (designated W70, Mod. 3) were buried in ERDA's budget, which was subject to strict Congressional oversight. These funds were transparent; in fact, it would have been reckless for the Department of Defense (DOD) to upgrade Lance by sidestepping Congress. After Vietnam and Watergate, Congress was ascendant. With that in mind, it behooved the DOD to respect Congressional oversight. Yet the *Post's* headline appealed to fear over reason, and it reminded readers of the secrecy and backchannels that had recently plagued the White House under Richard Nixon. The *Post's* headline, which created the impression that the DOD was not playing by the rules, was reminiscent of the government's grand deception brought to light by the disclosure of the Pentagon Papers, which revealed that U.S. officials had, for decades, deceived the American public about the war in Vietnam. Likewise, Water Pincus' ERW exposé compared favorably to two other news interventions – Watergate and My Lai – that investigative journalists opened to the public. In

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criticism of the convention as an illustration of the arguments being offered against acceptance. Low opined that it was not clear why asphyxiating shells should be forbidden while those that do both – asphyxiate and explode – should be allowed. Edmund Russell, *War and Nature* (New York: Cambridge University Press, 2001), 4-5. Russell's reference to Low's criticism is presented here to show the importance of the distinction between *eliminate* and *limit*. The elimination of property damage is presented as an analog of the pure asphyxiation shell whereas limited property damage is presented as an analog of the shell that does both, asphyxiate and explode.

[25] *See*, for example Michael Gordon Jackson's conference paper, "The Tools of Ares: The Morality of the use of New Weapons Technologies – An Assessment of the Neutron Bomb Case of 1978 and the use of Drone Warfare Technology in the 21st Century." In "Tools of Ares" Jackson – a political scientist whose research interests include humanitarian intervention, conflict termination, law enforcement, and public policy – argues that Argues that President Carter "killed" the neutron warhead program "because of his own moral and ethical revulsion about contributing to the nuclear arms race and producing a weapon that 'killed people but spared buildings.'" Jackson presented "Tools of Ares" at the Annual Meeting of the Western Political Science Association, Seattle, Washington, April 17-19, 2014.

the case of the neutron warhead, the misimpressions created by the Pincus headline concerning the elimination of property damage and backchannel secrecy added energy to a surging anti-nuclear movement.

Misinformation led to claims that neutron warheads represented the zenith of a degenerate science dedicated to the perfection of weapons of mass destruction: a warhead that killed people while leaving property intact. That this claim was false was of no account. How else explain Carter's abrupt reversal, except to point to his moral revulsion? As Cyrus Vance put it, "the president's innermost self rebelled" when it came to the neutron bomb.[26] Similarly, Harold Brown believed that "the president's personal concern about being associated with [the neutron bomb], about being depicted as an ogre, [a word used by Carter himself] came very strongly to bear at the end."[27] When it came to the president's moral revulsion over the neutron bomb, Zbigniew Brzezinski walked in step with Vance and Brown. These are powerful observations by men close to Carter on a daily basis, but the evidence – gleaned from Carter's pen, words, and deeds – does not substantiate Carter's moral qualms. This study acknowledges the view of Vance, Brown, and Brzezinski (indeed it does so in their terms with "ogre") but it makes a different case. Carter did harbor moral reservations about *all* nuclear weapons; ERW were not treated or viewed separately by him.

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[26] Auger, *Dynamics of Foreign Policy Analysis*, 107, *citing*, Cyrus. Vance, *Hard Choices* (New York: Simon and Schuster, 1983), 69.

[27] Ibid, 108, *citing*, David Whitman, *The Press and the Neutron Bomb* (Cambridge, Massachusetts: Harvard University Press, 1983), 112.

There are other misperceptions associated with the neutron bomb that continue to lead investigators astray. For instance, author Bartlett C. Jones contends that Ambassador Andrew Young may have had a direct influence on Carter's neutron bomb deferral in *Flawed Triumphs: Andy Young at the United Nations.* [28] Jones writes: "Carter cancelled the NATO meeting at which [alliance] members were expected to give formal approval to the [ERW] compromise and implementation plans" after consulting with Young and aides Jody Powell and Hamilton Jordon.[29] Jones is not alone. Take *Commentary* journalist Carl Gershman, for example. To paraphrase Gershman, Carter halted ERW development partly due to Young's fears that the controversial program would be difficult to defend at an upcoming UN disarmament session.[30]

While evidence of Young's opposition to enhanced radiation warheads is substantial, the evidence of his influence on Carter's deferral is not supported by the existing archival record.[31] Yet the Gershman and Jones works have the

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[28] Bartlett C. Jones, *Flawed Triumphs: Andy Young at the United Nations* (Maryland: University Press of America, 1996), 43-47.

[29] Jones, *Flawed Triumphs*, 46.

[30] Carl Gershman, "The World According to Andrew Young," *Commentary*, August 1, 1978, http://www.commentarymagazine.com/article/the-world-according-to-andrew-young/ (accessed 12/13/2013). *See, also*, John Dumbrell, *The Carter Presidency: A Re-Evaluation* (New York, NY: Manchester University Press, 1993). In this favorable (revisionist) evaluation of the Carter presidency, Dumbrell asserts Ambassador Young's influence on the administration's ERW policy. *See*, *The Carter Presidency*, 102.

[31] Jones' account is balanced, however. According to him, Young believed that the neutron bomb "was a waste of money" and that a decision in favor of its production and deployment would "undermine Carter's scheduled appearance at the UN" to promote an upcoming Special Session on Disarmament. Jones is careful to state, however, that President Carter wrote to him in October, 1991, about ERW deferral. The president mentioned that he was not able to recall any attempts by Young to influence administration policy on ER warheads. Jones proceeds with caution. "We must balance the evidence that Young influenced the neutron bomb decision against the president's recollection." *See*, *Flawed Triumphs*, 46.

propensity to lead investigators astray in more or less two ways. First, Young supports the impression that he endeavored to "put the United States on the 'right side of the moral issues in this world.'"[32] And second, a continual process of document declassification opens up new information to investigators on a rolling basis. But investigators who are writing mainly about subjects other than neutron warhead deferral – that covers just about every investigator other than a few specialists such as Vincent Auger – are not looking for recently declassified documents peripherally related to their main work. If they look superficially into the subject of the neutron warhead, they are as likely to discover Gershman and Jones as they are Auger.

More importantly, however, *Flawed Triumphs* perpetuates misleading information concerning neutron warhead effects. Jones observes that ERW yields and blast radii were confined to a small area. He writes: "With twice the radiation of a conventional atomic bomb, the neutron bomb's fire and blast damage was confined to a radius of 200 to 300 yards."[33] Jones's estimation is flawed, but not uncommon. Contemporaneous print media make similar observations. The source for the Jones observation may be an April 4, 1978, *Times* article, "Neutron Bomb Designed for use in Europe." The article refers to ER warheads as weapons that restrict blast and fire damage "to a relatively small area, a radius of 200 to 300 yards" while producing "twice the radiation of a

[32] Gershman, "The World According to Andrew Young."

[33] Jones, *Flawed Triumphs,* 45.

nuclear bomb."[34] This is precisely the claim made by Jones, and it is incorrect. Moreover, careful analysis of these misperceptions is critical to the case made in this study because these misperceptions fueled opposition to ERW at home and abroad.

To say that ER warhead blast and fire damage is limited to a relatively small area is misleading without making comparison – small in relation to what? For instance, according to a specialist in nuclear medicine, Michael McCally, a 1-kiloton neutron warhead generates an overpressure of 6 psi out to about 500 yards while a 1-kiloton fission warhead generates the same overpressure out to about 550 yards. There is a difference, but it not great, and these were figures known in 1978.[35] An overpressure of 6 psi is destructive to property and devastating to life.[36] Furthermore, absent comparison – as Bartlett Jones uses the figures – statements about ERW blast effects are misleading. In addition to being known at the time the neutron warhead was in the arms pipeline, the resulting scale of the warhead's blast and fire potential animated the debate surrounding its production and deployment.[37]

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[34] "Neutron Bomb Designed for use in Europe," *New York Times*, April 4, 1978, p.4.

[35] McCally's figures are adapted from data collected by the Institute for Foreign Policy Analysis and published in 1978. *See*, "The Neutron Bomb," *PS.R. Quarterly* 1, no. 1 (March, 1991): 4-13. McCally's figures may be found at Table 1, p.5.

[36] At 5 psi, an ordinary two-story residence will experience an overpressure of more than 180 tons – horizontally – on an exterior wall; fatalities would be extensive. These effects were known by 1977. *See*, for example, Samuel Glasstone and Philip J. Dolan, *The Effects of Nuclear Weapons*, 3rd ed. (U.S. Government Printing Office, Washington, D.C., 1977).

[37] *See, e.g.*, Brezhnev's speech aboard the *Admiral Senyavin* concerning the neutron warhead's potential as an offensive weapon and its capacity for destruction in "U.S.A: Economics, Politics, Ideology, No. 6, June, 1978."

The 1-kiloton ER warhead v. the 1-kiloton fission warhead warrants further elaboration supposing uniform target area topography. This elaboration is necessary, moreover, because both the supporters and the detractors of the neutron bomb couched their arguments in the minutia of military detail. Therefore, if one centers an ERW blast at a point, 0, and assumes an air burst of 150 meters, the 6 psi border will trace a uniform circular arc extending 430 meters in all directions. That's equivalent to a circle with a radius of 430 meters. Such a circle contains an area of 580,500 square-meters.[38] For a 1-kiloton fission device, the result is 849,000 square-meters. The smaller area attributable to the neutron warhead is two-thirds that of the fission device.

Hence it is true that neutron warheads are less destructive than fission warheads of the same yield.[39] But it is misleading to say – as reporter Walter Pincus did in his *Washington Post* coverage – that the Pentagon set out to design a battlefield nuclear weapon that killed people "through the release of neutrons" instead of destroying "military installations through heat and blast."[40] Pincus created the image of the neutron warhead as exclusively a people killer. The Pincus impression never faded. Nevertheless, *Washington Post* editor Robert H. Williams approved the frontpage headline characterizing the ERW as a killer warhead. He did so presumably because he believed the content of the Pincus

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[38] (the calculation uses an approximation for pi, 3.14).

[39] Robert C. Aldridge, "Precision-Guided Munitions and the Neutron Bomb," Cato Policy Analysis No. 15, August 26, 1982, *CATO Institute*, http://www.cato.org/pubs/pas/pa015.html (accessed February 20, 2015). Aldridge is an aerospace engineer/strategic missile designer.

[40] Walter Pincus, "Neutron Killer Warhead Buried in ERDA Budget," *Washington Post*, June 6, 1977, p. A1.

exposé. Williams predicated his belief on a false claim; nevertheless, the headline and story set the tone for all of the newspaper coverage of Lance modernization until Carter deferred production in April, 1978.

Peace activists latched onto the emotional press coverage and used it to engender support for antinuclear stances. The November, 1980, Unity Statement of the Women's Pentagon Action shows the influence of the coverage. The group's manifesto indicts Pentagon officials for leading humanity toward annihilation from within the walls of their "workplace of imperial power." In support of their charge, the group highlights the iniquity of military officials who invented "the neutron bomb [that] kills people but leaves property and buildings like this one [the Pentagon] intact."[41] The *Post's* mischaracterization of neutron warhead effects became a powerful tool in the hands of peace groups like the Woman's Pentagon Action, a grassroots group that critiqued militarism, nuclear power, and the arms race from the feminist point of view.[42]

The people-killer allegation gained traction since there was a grain of truth in it. ERW had a smaller (though by no means insignificant) blast radius when compared to other nuclear weapons designed for tactical uses. But the accusation's chief success lay in its simplicity. The allegation of death without property loss was macabre. It was incomprehensible that buildings should stand while people fell. But that was what made the accusation so compelling. The

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[41] The Woman's Pentagon Action, http://www.wloe.org/WLOE-en/background/wpastatem.html (accessed November 17, 2013).

[42] Greta Gaard, "Ecofeminism Revisited: Rejecting Essentialism and Re-Placing Species in a Material Feminist Environmentalism," *Feminist Formations* 23 No. 2 (Summer, 2011), 29.

accusation gave the impression of nuclear science run amok. And more, it was pitch-perfect for a nation recently disillusioned by Vietnam and Watergate.

Journalist Walter Pincus also made it seem as if the neutron warhead was the result of Pentagon deception. Pincus stated that the money for Lance modernization was "buried" in a "public works" appropriation.[43] President Carter invested this misleading description with greater currency when he admitted to not knowing of the Lance program. In 1977, the press and the public were receptive to the idea that the government *buried* a new nuclear weapon within an obscure public works bill. Carter's denial, inartful, allowed rumors to fly. With Vietnam, Watergate, the Nixon resignation, and the Ford pardon still fresh, the press and the public were hyper-vigilant when it came to secrecy and deceit in government. Although Carter's denial was truthful, it sounded false in light of the president's inaugural pledge to eliminate all nuclear weapons. Carter's relationship with the press – strained – didn't help his case.[44]

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[43] Pincus, "Neutron Killer Warhead Buried in ERDA Budget."

[44] Describing his relationship with the press in 1982, from his own point of view, President Carter told interviewer Richard Neustadt that "There was a strong adversarial relationship that's probably inherent which, if I were God, I don't think I would want to change particularly, but which was unpleasant." Carter also told Neustadt that he thought his first realization of the press relationship came when the Bert Lance episode – that "was the first realization that our relationship with the press was not going to be harmonious, even though we thought our motives were pure. We thought our agenda was proper. We thought we were all honest and serving in a pleasant attitude, but in a self-sacrificial way in that we were dedicated to what we were doing. We were idealistic, maybe to a fault. Some have said pious and so forth to a fault. But the fact that we were distrusted was revealed in the Bert Lance episode. I think it was an attitude of the press, maybe in the aftermath of Watergate and so forth, and because I was an alien in Washington, it was inevitable." By "in the aftermath of Watergate and so forth," Carter probably intended Vietnam, though he did not himself make that particular reference in the interview. Jimmy Carter Interview, Miller Center, University of Virginia, COHP, November 29, 1982, http://web1.millercenter.org/poh/transcripts/ohp_1982_1129_carter.pdf (accessed March 24, 2014).

This study concurs with Gerald Haas' observation that Jimmy Carter didn't make much of an effort "to understand or appreciate" the press in part owing to Carter's belief that a strained relationship with the press in the immediate aftermath of Watergate and Vietnam was almost inevitable.[45] According to Haas, the candidate who ran to restore honesty and competence in government "appeared to regard himself as superior to … reporters in intellect and moral goodness." Haas relates that Carter's aloofness alienated a skeptical, doubtful, and cynical post-Vietnam, post-Watergate media wary of the presidency.[46] As for the public, impressionable high school seniors who would vote for the first time in 1976 were sophomores when Nixon resigned from office. These new voters were ready to embrace Carter's goal of restoring a government of honorable national leaders who deserved the people's trust.[47] But public opinion would actually move against President Carter as a consequence of neutron warhead deferral since the public favored neutron warhead development.[48] Consequently, Carter – by some accounts "idealistic" and "pious"

[45]Jimmy Carter Interview, Miller Center, University of Virginia, COHP, November 29, 1982.

[46] Gerald A. Haas, *Jimmy Carter and the Politics of Frustration* (New York, NY: M*c*F*a*rland and Company, 1992), 60-61.

[47] Carter, *A Government as Good as Its People*, 139. Carter captured 51 percent of voters between 18 and 29 years of age according to Nelson W. Polsby, et al., *Presidential Elections: Strategies and Structures of American Politics*, 13th ed. (Lanham, MD: Rowman and Littlefield, 2012), 31.

[48] According to Richard A. Brody, one would expect neutron bomb deferral (a potential rally point for public opinion) to result in the president picking up support, but Carter incurred an approval *drop* of 8 points after ERW deferral.

to a fault – did not get the benefit of the doubt when it came to the neutron warhead.[49]

Moreover, Carter's reputation as a micromanager worked against him in the neutron warhead affair. Jimmy Carter didn't know – despite being a micromanager – what was in ERDA's budget, even though it was vetted by his transition team, led by Jack Watson, later the White House chief of staff. Nonetheless, there is no evidence of deceit on Carter's part, not a scintilla. But, author Deborah Shapley kept the secrecy canard going by not recognizing the inaccuracies running throughout the press' ERW coverage.

In 1982 Deborah Shapley set out to answer a simple yet important question regarding the media and national security. How well do newspapers cover national security issues? She used the neutron bomb case to explore this subject because, she notes, it was "generally thought to be (an) example of good media coverage."[50] Despite being a "journalistic success" ("Pincus won the coveted Polk award") Shapley concludes that the newspaper's coverage "did little … to raise the general level of public awareness of the complexities of American defense policy."[51] However, Shapley helped to perpetuate the notion that the ERW program was shrouded in secrecy.

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[49] *See*, Jimmy Carter Interview, 1982. "We thought we were all honest and serving in a pleasant attitude, but in a self-sacrificial way in that we were dedicated to what we were doing. We were idealistic, maybe to a fault. Some have said pious. and so forth to a fault. But the fact that we were distrusted was revealed in the Bert Lance episode."

[50] Deborah Shapley, "The Media and National Security," *Daedalus* 111, no. 4 (Fall 1982): 199, 199-209.

[51] Shapley, "The Media and National Security," 204.

Lance missile modernization had, in fact, been following ordinary classification channels, with appropriate congressional oversight. By praising the press coverage of the neutron warhead, Shapley created the impression that the program was hidden when it was not. In fact, Congressional testimony by program participants gave rise to the evidence Pincus relied on in his June 1977 exposé. Subcommittee testimony by ERDA's national security specialist, Alfred D. Starbird, actually helped to precipitate the controversy. In addition to Starbird, Chairman of the Joint Chiefs of Staff, General George Brown, and the Secretary of Defense, Harold Brown, both testified before Congress in March 1977 on the Army's tactical nuclear weapons modernization program and their testimony included references to Lance.[52]

Shapley observes that newspaper coverage drew back the curtain on Lance, and from her observation one may infer that, but for the *Post's* Walter Pincus, the enhanced radiation warhead program might not have come into the open in 1977. In Shapley's estimation, the ERW story came about nearly by accident. Without Pincus' deep knowledge of tactical nuclear weapons, which he obtained earlier while working with Senator Stuart Symington to oppose such weapons for the Army, the neutron bomb might never have seen the light of day. Shapley heaps praise on Pincus. She calls him "perhaps the only reporter in Washington" who could have discovered the ERW story.[53] In Shapley's view,

[52] Auger, *Dynamics of Foreign Policy Analysis,* 41.

[53] Shapley, "The Media and National Security," 200.

only the water projects in ERDA's public works bill attracted any attention from the public or legislators before the Pincus story broke.[54]

After the 1976 elections, Carter's Democratic Party enjoyed a majority in both the Senate and the House of Representatives. Nevertheless, the president struggled to build strong Capitol Hill alliances. The flap he caused over the water projects strained his relations with Congress. Carter proudly recalls in *Keeping Faith* that he "amazed" the leadership when he moved to cut dams and other water programs that he believed would "cost billions of dollars and often do more harm than good."[55] Carter's efforts vis-à-vis the water projects tainted his chances to win ERW discretionary funding in Congress. Gerald Haas sees Carter's Congressional troubles as evidence of Carter's standoffishness. On this, Haas cites Carter speech writer James Fallows: "Where had they been … when the campaign was out of money and no one knew who Jimmy Carter was?"[56] In this case, Fallows meant the leadership of the Democratic Party.

Shapley accurately assesses the contemporary view of the public works bill before Pincus opened the Lance appropriation to public scrutiny, but she doesn't identify ambivalence in Carter's executive style. Neither does Shapley

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[54] At the time, President Carter made a lively issue out of federal water resource programs by cancelling a number of them over the objections of prominent members of Congress. Carter's aim in cancelling the projects was the elimination of waste and pork-barrel spending, but his actions caused a deep fissure to open up between him and the Democratic leadership of what should have been a friendly Congress.

[55] Carter, *Keeping Faith*, 78.

[56] James Fallows, "The Passionless Presidency," *Atlantic Monthly*, May, 1979, 46. According to Haas, Fallows is citing an opinion held by Powell, Jordan, and Carter. For a time, James Fallows was President Carter's chief speechwriter. According to Fallows, Carter lacked "the passion to convert himself from a good man into an effective one, to learn how to do the job. Carter often seemed more concerned with taking the correct position than with learning how to turn that position into results."

note the strain Carter's reversals put on Capitol Hill. Although Carter deferred neutron bomb production because he lacked faith in the military utility of ERW, his penchant for ambivalence exacerbated the flap over the neutron bomb.

The Northern Georgia Russell Dam project was one of the water projects put under the microscope by President Carter. Previously, as governor, Carter hailed the Russell project as one of the greatest in the history of Georgia, but he reversed course as president.[57] After careful study, and after leaving Georgia's congressional delegation on a knife's edge with repeated reports of his deliberations, the president decided not to fund the Russell Dam in April, 1977. Carter kept Congress on a knife-edge; likewise the neutron warhead decision. Even though the president's Party held a majority in the Congress, just three months into his term, Carter showed signs of the difficulty he would have managing White House relations with Capitol Hill. The Russell Dam matter sheds light on the troubled Capitol Hill waters Carter later navigated during the ERW affair.

Senators pushed back against Carter's water project agenda with threats to defeat the administration's proposed tax rebate, part of the president's large stimulus package. The Senate threatened to balk unless the president compromised on the water projects.[58] But on the day before the 1977 tax filing deadline, Carter abandoned his rebate proposal. He decided that the risk of

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[57] Jimmy Carter: "Water Resource Projects - Statement Announcing Administration Decisions," April 18, 1977. Online by Gerhard Peters and John T. Woolley, *APP*, http://www.presidency.ucsb.edu/ws/?pid=7364 (accessed February 20, 2015).

[58] Robert L. Williford Richard B. Russell Dam and Lake Project Files, Richard B. Russell Library for Political Research and Studies, University of Georgia Libraries, Athens, Georgia.

inflation outweighed the benefits of stimulating the economy. With a nod toward fiscal austerity, the president took the tax rebate issue off the table; in so doing, Carter created the impression that he didn't want to risk a Capitol Hill loss stemming from his opposition to the water projects. That was before the Walter Pincus story, when any interest in ERDA's FY 1978 funding could be traced to the president's handling of the Russell Dam and similar projects.[59] The neutron bomb had yet to emerge as an issue, but it too would be another instance of Carter's style of open and untidy deliberation.

On the NATO front, Deborah Shapley implies that alliance commanders had not been sufficiently briefed concerning ERW by the U.S. She writes that "the government would later claim that NATO commanders had in fact been briefed on the weapons, but as far as could be ascertained, such briefings had hardly made clear the distinction between the 'enhanced radiation warhead' and ordinary nuclear weapons." Shapley opines that the Army only decided to "bestir itself" and invent a rationale for neutron warheads after the *Post* and the Senate, led by Republican Mark Hatfield, took up the issue.[60] Shapley's opinion does not account for the broader context; namely, a move by the United States in 1974 to create a range of more robust limited nuclear response options short of MAD, mutual assured destruction.

Notwithstanding Shapley's unsupported allegation that the U.S. Army reactively "bestirred" itself to create a rationale for enhanced radiation warheads

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[59] James T. Wooten, "Inflation is Feared," *New York Times*, April 15, 1977, p.1.

[60] Shapley, "The Media and National Security," 202-204.

after ERW set off a political controversy, tactical nuclear weapons like Lance were an attractive option for the Army of the mid-1970s. At the time, Secretary of Defense James Schlesinger proposed a new targeting doctrine incorporating a range of limited nuclear weapons employment schemes. On January 17, 1974, President Richard Nixon codified the new doctrine, eponymously named for Schlesinger, in National Security Decision Memorandum (NSDM) 242. The Schlesinger Doctrine, which called for a flexible nuclear posture, took account of the U.S.S.R.'s second-strike capability following an initial and massive use of strategic nuclear weapons by the United States.[61]

Because of the U.S.S.R.'s second-strike capability, the initial and massive use of U.S. strategic nuclear forces under MAD entailed a similarly massive counterstrike against the United States. But with low yield and reduced blast, enhanced radiation weapons were tailor-made for theater-level battlefield use commensurate with the Schlesinger Doctrine, which called for the incremental use of nuclear weapons "at the lowest level of conflict feasible" consistent with controlled escalation and early war termination.[62] According to John P. Rose, an authority on the evolution of U.S. Army nuclear doctrine, ERW were practical

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[61] With respect to the initial use of nuclear weapons, NSDM 242 provides, in part, that the "United States will rely primarily on U.S. and allied conventional forces to deter conventional aggression by both nuclear and non-nuclear powers. Nevertheless, this does not preclude U.S. use of nuclear weapons in response to conventional aggression." National Security Decision Memorandum 242, January 17, 1974, Richard M. Nixon Presidential Library & Museum (RNL), http://nixon.archives.gov/virtuallibrary/documents/nsdm/nsdm_242.pdf (accessed December 25, 2014).

[62] Terry Terriff, *The Nixon Administration and the Making of U.S. Nuclear Strategy* (Ithaca, NY: Cornell University Press, 1995), 149. NSDM 242 explicitly states that "the most critical employment objective is to seek early war termination." *See*, National Security Decision Memorandum 242.

and effective battlefield nuclear weapons especially useful against counterforce targets.[63]

Furthermore, Shapley's allegation that NATO briefings failed to clarify the distinction between enhanced radiation weapons and *un*enhanced radiation weapons has the appearance of plausibility, but that is all; it is contrary to the evidence. Secretary Schlesinger's "Annual Defense Department Report" for FY 1976 and 1977 states that NATO had (by then) "made progress in developing an armory of nuclear weapons for tactical purposes." Developing this "armory" entailed considering whether existing stockpiles might be replaced "with nuclear weapons and delivery systems more appropriate to the European environment." In the argot of the Pentagon, Schlesinger's reference to weapons and systems for the European environment pointed directly to the neutron warhead for the North Atlantic Alliance.[64]

In addition, in January, 1976, President Ford's secretary of defense, Donald Rumsfeld, briefed the Alliance's Nuclear Planning Group (NPG) specifically on the enhanced radiation weapons. At about the same time, David Cotter, a DOD special assistant for atomic energy from 1973 through 1978 also briefed the NPG on enhanced radiation warhead.[65] However, awareness of the neutron warhead in NPG circles was not confined to top level officials in 1976 and 1977. For instance, David T. Jones, a mid-level official assigned to the U.S.

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[63] John P. Rose, *The Evolution of U.S. Army Nuclear Doctrine, 1945-1980 (*Boulder, CO: Westview Press, 1980).

[64] James R. Schlesinger, "Annual Defense Department Report, FY 1976 and 1977," February 5, 1975, Department of Defense (Washington: Government Printing Office, 1975), III-2.

[65] Auger, *Dynamics*, 26.

NATO NPG mission, recalled during a 1999 interview with Charles Kennedy of the Association for Diplomatic Studies and Training that U.S. officials "endlessly [sent] out teams of briefers and discussants on just about any topic under the sun." The neutron warhead was one of the topics that Jones recalled in an effort "to find ways to make our (U.S.-NATO) nuclear weapons more usable on a tactical basis. These were the enhanced radiation weapons …, things of that nature." Jones – who tells Kennedy that he was engaged in the neutron bomb issue throughout his career – observed that consultation with the Alliance occurred at every level; literally, "you could not consult with the Allies more often."[66]

Jones went into detail regarding the extensive consultations between U.S. and NATO officials over neutron weapons. Jones recounted in 1999:

> I did not recollect any demurs from my European colleagues and other NATO diplomats about the use of [neutron] weapons or necessarily other nuclear weapons. On nuclear weapons specifically, the only system about which they appeared to be unhappy was the atomic demolition munitions.[67]

In the context of the Schlesinger Doctrine, together with Vincent Auger's assessment of Rumsfeld and Cotter's NPG briefings, and Jones' recollections of mid-level action at the NPG on the neutron warhead issue, the accuracy of Shapley's conclusion that the Alliance was ignorant of enhanced radiation warheads in 1977 is doubtful. Moreover, Shapley's allegation that the Army bestirred itself in response to ERW only to invent a rationale for their use after the

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[66] David T. Jones Interview, Association for Diplomatic Studies and Training, Foreign Affairs Oral History Project, March 16, 1999, http://www.adst.org/OH%20TOCs/Jones,%20David%20T.toc.pdf (accessed December 24, 2014).

[67] Ibid.

Post's exposé is inconsistent with the broader context and the Schlesinger Doctrine's call for limited nuclear options.

Opposition

Did congressional opposition to the neutron warhead, spearheaded by Republican Senator Mark O. Hatfield of Oregon, ultimately cause President Carter to defer ERW production? In 1983 Sherri L. Wasserman – a future deputy undersecretary of defense for environmental security during the Clinton administration – published the first authoritative book-length study of Alliance politics and the neutron warhead.[68] In her study, Wasserman contends that Congress limited Carter's practical alternatives by forcing the administration to account for "domestic political constraints" that had to be satisfied before a final decision on the neutron bomb could be made.[69]

By the president's own admission, his relationship with leading congressional Democrats was "strained."[70] Although Carter's Party enjoyed control over both the upper and lower chambers of the 95th Congress, that meant more on paper than it did in practice. From Carter's perspective, fellow congressional Democrats approached him with an air of "competition rather than cooperation." After leaving office, Carter wrote, "I had not been in office a week

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[68] Sherrie L. Wasserman, *Neutron Bomb Controversy* (New York: Praeger, 1983).

[69] Ibid, 37.

[70] Jimmy Carter, *Keeping Faith: Memoirs of a President* (New York: Bantam Books, 1982), 73. *See, also*, Kenneth E. Morris, *Jimmy Carter: American Moralist* (Athens, Georgia: University of Georgia Press, 1996), 243.

before top Democratic leaders in both Houses … were complaining to the press that they were not adequately consulted."[71]

As an outsider in the White House, the president didn't fit the image of the shoulder-hugging back-slapping Southern politician. On top of that, Carter exacerbated matters by telling influential members of Congress, including Speaker Tip O'Neill, a Massachusetts Democrat, that he would take his legislative initiatives directly to the people.[72] Carter's threat of direct action is consistent with observations of Carter as a trustee-leader, one who sees himself entrusted to represent the public interest directly as a fiduciary. Carter's style did not "encourage (him) to invite input" from legislators.[73] In short, the president had a vision of the country that differed from O'Neill and other traditional Democrats.[74] But Carter biographer Kenneth E. Morris called the president's fiduciary nature "arrogant." To Morris, it looked as though Carter might be mistaking Congress for Georgia's general assembly.[75]

As Charles O. Jones observes in *The Trusteeship Presidency*, a sober look at Carter's relationship with Congress, "a president who views his background

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[71] Jimmy Carter, *Keeping Faith*, 71. Carter mentioned two leaders by name, Speaker Tip O'Neill and Majority Leader Robert Byrd.

[72] Morris, *American Moralist*, 243.

[73] Charles O. Jones, *The Trusteeship Presidency: Jimmy Carter and the United States Congress* (Baton Rouge, Louisiana: Louisiana State University Press, 1988), 2, 99.

[74] Hamilton Jordan Interview by James Sterling Young, et al., November 6, 1981, *Miller Center Foundation, Carter Presidency Project*, http://web1.millercenter.org/poh/transcripts/ohp_1981_1106_jordan.pdf (accessed February 23, 2015). Jordan recalled in 1981 that "Carter had a basically different notion about the country and its problems than did Tip O'Neill and the traditional Democrats."

[75] Morris, *American Moralist, 243*.

and electoral record as incongruent with those of legislators may be expected to establish and protect his independence."[76] Evidence of President Carter's independence comes directly from his campaign autobiography, *Why Not the Best?* "Every man is an exception," Carter wrote. Carter's exceptionalism had the propensity to exacerbate his cool relations with the press, which Gerald Haas identified and wrote about at length in *Jimmy Carter and the Politics of Frustration*, an unflattering look a Carter's one term presidency.

Moreover, the president pinned the national tragedy of Vietnam and the disgrace of Watergate to betrayal by the nation's leaders. When he accepted the Democratic presidential nomination, Carter said that Vietnam and Watergate "could have been avoided if our government had simply reflected the sound judgment and good common sense and the high moral character of the American people."[77] Here Carter oversimplified, but it was a strong indication of his belief in the power of common sense, good intentions, and fiduciary leadership. To be sure, Carter was also implying that Vietnam and Watergate would not have happened on his watch.

As the title of his campaign biography indicates, Carter presented himself to the American people as "the best," one whose purpose and conviction (in his own words) matched that of Samuel Adams, John Jay, John Adams, Patrick Henry, and George Washington.[78] Carter placed himself in good company, and

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[76] Jones, *Trusteeship Presidency*, 4.

[77] Jimmy Carter, "My Name is Jimmy Carter and I'm Running for President," *see*, Carter, *A Government as Good as Its People*, 129.

[78] Carter, *Why Not the Best?* 10-11.

that tendency sometimes alienated legislators, which Haas shows. "The president frequently dismissed members of Congress as bothersome claimants for presidential attention and resources."[79] Carter "saw" Congress from the perspective of a "former Georgia governor, age 50, politically unemployed." The president knew he had a tough row to hoe in dealing with a national legislature whose members he expected to reach "for every microphone" and struggle "for every headline."[80]

To historian Charles Jones, Carter saw himself as a trustee governing in the national interest as opposed to his own short-term electoral interest.[81] It is from Jones' view that this study's use of the term fiduciary comes. Jones compares Cater to Woodrow Wilson. In the spirit of President Wilson's search for the ethical man, Carter held himself out as someone who could be trusted to do what was right for the nation.[82] But, that spirit could alienate legislators; and it did. Moreover, Carter's belief in his role as a fiduciary led him to ask the Congress for ERW funding approval *before* he made a final production decision. In essence, Carter said to Congress, "trust me." But the fact that Carter won his party's presidential nomination without harnessing the political power of incumbent legislators later proved to be an obstacle to his administration's

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[79] Garland A. Haas, *Jimmy Carter and the Politics of Frustration* (Jefferson, North Carolina: M*cF*arland & Company, 1992), 63-67.

[80] Carter, *Why Not the Best?* 139.

[81] Jones, *Trusteeship Presidency*, 2.

[82] *Trusteeship Presidency*, 4. The link with Woodrow Wilson is attributable to Jones, who observes that Carter's view of himself was consistent with the Wilsonian notion that "someone" had to be trusted to run the government, with the implication that that someone was the president as opposed to a member of the legislative branch.

congressional liaison efforts.[83] But outside the halls of power, on the American street, Jimmy Carter's brand of honesty was in high demand in the shadow of Richard M. Nixon.

Trustworthiness captured the public imagination during the 1976 presidential campaign. Except for a slight uptick during the Ford administration, public trust in government had been in steep decline since Lyndon B. Johnson.[84] As Carter observed, the people's trust had been too often betrayed, their counsel ignored. Vietnam, Kent State, the Pentagon Papers, and Watergate, capped by President Richard M. Nixon's resignation, were all reminders of betrayal and abandonment.

In his inaugural speech, Carter called to mind these recent disappointments by asking Americans to help him create "a new national spirit of unity and trust."[85] However, as a fiduciary of the people's interest, Carter's stubbornness in pursuit of the right ("I don't know how to compromise on any principle I believe is right."[86]) made him less than charitable toward those that questioned his policies or intentions. But President Carter apprehended that his rectitude might become a source of others' criticism. "We were idealistic, maybe to a fault," was how Carter described his administration to Richard Neustadt in

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[83] Tinsley E. Yarborough, "Carter and the Congress," 165-192, *The Carter Years: The President and Policy Making*, M. Glenn Abernathy, Dilys M. Hill, and Phil Williams, ed. (New York, NY: St. Marten's Press, 1984), 174.

[84] "Public Trust in Government: 1958-2013," October 18, 2013, *Pew Research Center for the People & the Press*, http://www.people-press.org/2013/10/18/trust-in-government-interactive/ (accessed November 19, 2013).

[85] Carter, *A Government as Good as Its People*, 259-262.

[86] Carter, *Why Not the Best?* 139.

1982. Carter added that "some have said pious and so forth to a fault." Public reaction to Carter's piety – favorable and unfavorable – began as soon as the Georgian declared his intention to seek the nation's highest office. But unlike Carter, Ford did not wear his religion on his sleeve. "Ford would never talk about himself in religious terms, but Ford believed in the gospel of redemption" journalist Lou Cannon recalled to Richard Norton Smith as part of the Gerald Ford Oral History Project.[87]

In contrast to Ford, Candidate Carter "freely and willingly" discussed religion during the 1976 campaign.[88] In further contrast, Carter had no Nixon pardon to explain. Neither was Carter connected to Vietnam or Watergate; instead, he was a Washington outsider and born again Christian who might redeem the capitol from the sins of Vietnam and Watergate.[89] Carter biographer Randall Balmer observed that "[Carter's] declaration of evangelical faith resonated with voters weary of Nixon's mendacity."[90] Not surprisingly, administration insiders like William W. Woessner conveniently referred to the president's Christian faith in trying to understand his abrupt neutron bomb reversal.

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[87] Lou Cannon Interview, November 16, 2009, *Gerald Ford Oral History Project*, http://geraldrfordfoundation.org/centennial/oralhistory/wp-content/uploads/2013/05/Lou-Cannon.pdf (accessed December 26, 2014).

[88] James T. Baker, *A Southern Baptist in the White House* (Philadelphia, PA: The Westminster Press, 1977), 13.

[89] The observation and redemption motif is Edward J. Blum's, which he makes in his review of Randal Balmer's biography of Jimmy Carter, *Redeemer*. *See*, Randall Balmer, *Redeemer, The Life of Jimmy Carter* (New York: Basic Books, 2014).

[90] Balmer, Redeemer, xxi.

Two decades after the neutron warhead decision, Charles Kennedy of the Association for Diplomatic Studies and Training interviewed Woessner, a former State Department Director of Central European Affairs.[91] During the interview, Woessner described his observations of President Carter's interactions with West German Chancellor Helmut Schmidt at the height of the controversy over ERW. According to Woessner, Schmidt was difficult to get along with at best, but the chancellor had no stomach for pious politicians in the Jimmy Carter mold. For Woessner, Carter's ERW deferral was a "stunning reversal."

Woessner observed: "You know the famous story where Jimmy Carter knelt at his bedside one night, said his prayers, talked to God, and the next morning woke up and decided he couldn't do this, that it [the neutron bomb] was an immoral weapon."[92] Woessner's florid anecdote is unsubstantiated hearsay offered to show the depth of Carter's personal morality and Christian faith. Because Woessner's observation is unsubstantiated by other direct evidence from the archival record, it should be accorded little weight in determining whether Carter's personal morality or Christian faith caused him to forego neutron warhead production. Despite rich sources of evidence to the contrary, Woessner's

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[91] William W. Woessner, interview by Charles Stuart Kennedy, *The Association for Diplomatic Studies and Training, Foreign Affairs Oral History Project*, (November 29, 1999), http://www.adst.org/OH%20TOCs/Woessner,%20William%20M.toc.pdf (accessed December 14, 2013). ADST is a nonprofit organization chartered to advance the public's understanding of American diplomacy and support the training of foreign affairs personnel. Kennedy interviewed Woessner in November, 1999.

[92] Ibid. According to Woessner, the Carter administration leaned heavily on Schmidt to accept an ERW deployment. What's more, Woessner believed that Schmidt "went along" with it at a considerable cost to his domestic political standing.

observation has staying power because its fits with the consensus view that Jimmy Carter wore scruples and Christian faith on his sleeve.[93]

When he first took office, Carter used a hub-and-spoke organizational structure. The president, at the hub, received advice from his counselors who were the spokes. In this flat organizational arrangement, which differs from a hierarchical chain-of-command, each counselor – spoke – gives advice to the president more or less independently. In Carter's case, it led to competition, especially between the hawkish Zbigniew Brzezinski and the dovish Cyrus Vance. What is more, the structure led to a multitude of opinions, all seemingly credible, which irked Congress. Congressional leaders weren't accustomed to President Carter's flat decision-making style, observes John Lewis Gaddis. Carter "encouraged openness, flexibility, and divided authority, to the point of … cultivating inconsistency as a positive good." A Democratic Congress was prepared to accept a greater level of inconsistency in the Carter administration, but even so, legislators were unwilling to embrace ambivalence in a chief executive, which became apparent during the ERW affair.[94]

Divided authority led to inconsistency. As biographer Kenneth Morris points out, the "single most" entrenched criticism of the Carter administration

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[93] Communications scholar Brian T. Taylor notes, "Carter's 1976 campaign signaled a new era in presidential politics." Taylor: "Here was a former Sunday school teacher who quoted scripture. I don't think it was anything he did deliberately. He was probably just being himself. But his aides saw that it resonated with voters and encouraged him to continue doing it." "Professor Keeps Tabs on 'God Talk'," *James Madison University*, http://www.jmu.edu/jmuweb/general/news/general11854.shtml (accessed February 20, 2015).

[94] John Lewis Gaddis, "Containment: Its Past and Future," in *Neither Cold War nor Détente? Soviet-American Relations in the 1980s*, ed. Richard A. Melanson (Charlottesville, Virginia: University of Virginia Press, 1982), 22. Gaddis makes the observation of slowness in relation to President Carter's Soviet Union policy. I have extended Gaddis' observation to include all policy, including, but not limited to, legislative initiatives.

originates with the perceived ineptness of the president's dealings with Congress.[95] The Carter administration had a hard time generating and seizing the initiative when it came to the president's legislative agenda. The frayed fabric of the president's neutron bomb policy reflected the cost of divided authority and presidential ambivalence. At times, Carter ignored or insulted members of Congress, both Democrats and Republicans, which led to greater than expected levels of Congressional interference with the president's legislative agenda. Once, Carter lashed out at members of Congress. They are "a pack of ravenous wolves," Carter exhorted, after lawmakers reworked a tax-reform plan to include breaks for wealthy supporters.[96] The president undoubtedly conjuring images of false prophets, ravenous wolves disguised as sheep.[97]

In a telling statistic, Kenneth Morris points to a study of news broadcasts and frontpage stories covering the period between Inauguration Day through July, 1977. The study shows that 85 percent of the criticisms being lodged against the new administration were traceable to Democrats and not to Republicans.[98] During the neutron bomb affair, some of those criticisms were coming from the Senate Majority Leader, Robert Byrd, a West Virginia Democrat, whom the president found "slow to make commitments," ambitious, and "single-minded."[99]

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[95] Morris, *American Moralist*, 244.

[96] *See*, "American Presidents: A Reference Resource," *Miller Center*, http://millercenter.org/president/carter/essays/biography/4 (accessed 11/18/2013).

[97] Matthew 7:15.

[98] Morris, *American Moralist*, 245.

[99] Carter, *Keeping Faith*, 72-73.

Byrd demanded that the Soviet Union make a concession in exchange for neutron warhead non-production lest the United States appear to be buckling under the weight of the U.S.S.R.'s anti-ERW information campaign. In addition, Byrd and others feared that Carter's neutron bomb policy might complicate SALT. Byrd, however, was a neutron bomb supporter, unlike his Senate colleague, Frank Church.

According to prize-winning author James M. Lindsay, Senator Church helped to turn Lance modernization into a "divisive issue for the North Atlantic Alliance."[100] Although the president did eventually secure neutron bomb funding in Congress, it was a hard fought battle. Enhanced radiation weapons had staunch supporters in Congress, like Byrd, and Georgia's Senator Sam Nunn, whose favorable disposition toward neutron warheads helped to secure the initial production funding aggressively sought after by President Carter during the summer of 1977.

In contrast to Lindsay, political scientist Vincent Auger does not accept the contention that the administration's strained congressional relations and legislator discontent with neutron warheads turned Carter against the neutron bomb. This study concurs with Auger. There was opposition to ERW production and deployment in Congress, in both the upper and lower chambers, but there was

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[100] *See*, James M. Lindsay, "Congress and Foreign Policy: Why the Hill Matters," *Political Science Quaterly*107, no. 4 (Winter, 1992-1993), 623. In 2003 Linsdey was a co-recipient of the Lionel Gelber with Ivo H. Daalder for *America Unbound: The Bush Revolution in Foreign Policy*. The prize, founded in 1989 by Canadian diplomat Lionel Gelber, is awarded annually by *Foreign Policy Magazine* and the Munk School of Global Affairs at the University of Toronto for a non-fiction book (in English) on foreign affairs aimed at enriching public debate on important international issues. *See*, Munk School of Global Affairs, University of Toronto, http://munkschool.utoronto.ca/gelber/resources/downloads/Call_for_Books_2015.pdf (accessed December 26, 2014).

strong support, too. Senator Nunn was a committed ERW supporter. He feared that the Soviet Union would see a "timid and hesitant" America, unready to meet "the difficult choices ahead" if the president decided to forego ERW production. Republican Senator Charles Percy of Illinois thought that the president would be making a major error if he decided to unilaterally shelve the ER warhead because the weapon might "be enormoU.S.ly effective as a as a bargaining chip in arms negotiations with the Soviet Union."[101] To be sure, Carter's troubles with Congress played a part in the neutron bomb controversy, but not the lion's share. Once Carter secured Congressional commitments to fund enhanced radiation improvements for Lance and related systems, effective domestic political opposition emanating from Capitol Hill died back.

Morality

An ogre is a monster and Jimmy Carter, advocate for a future free of nuclear arsenals, didn't want to be seen as one when it came to the neutron bomb. Did Carter's desire to avoid being seen as an ogre cause him to halt ERW production in 1978? No, it did not, but scholars who claim that it did point to some credible evidence in support of their thesis. Hence Gaddis Smith is able to write that neutron bomb deferral was unique in that "no other major decision of his presidency was made so much on Carter's personal judgment and against the unanimous recommendation of his chief advisers."[102] True, the deferral decision

[101] Wasserman, *Neutron Bomb*, 123-124.

[102] Gaddis Smith, *Morality, Reason, and Power: American Diplomacy in the Carter Years* (New York: Hill and Wang, 1986), 81.

was made on Carter's personal judgment, but Carter's own words reveal that he would have approved ERW in 1978 if the Europeans had shown greater interest in it, or if he thought that ERW were militarily advantageous.[103]

By approaching neutron bomb deferral from the point of view of Jimmy Carter's personal morality, Gaddis and scholars such as Lawrence S. Wittner conclude that political and grass-roots opposition to weapons with enhanced radiation effects swayed Carter against production. Gaddis and Wittner overstate the effect of Europe's resurgent anti-nuclear movement on ERW production and deployment.[104] In contrast, Maynard W. Glitman, the former arms control negotiator believed that public pressure advocates misjudge Carter's reversal by attributing the move to the "soviet-influenced anti-neutron campaign in Europe." Glitman observed that Carter's personal morality, not any influence of the "anti-neutron campaign," explains the president's ERW reversal.[105] Gaddis, Wittner, and Glitman, however, do not comment on Carter's percipient opinion of the neutron warhead's military disadvantages. By eliding over the president's pragmatic approach to neutron warhead production and deployment, all three underappreciate its importance.

In Wittner's case, Carter's belief in the neutron warhead's military disadvantages goes unrecognized. Wittner was unaware of Carter's handwritten

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[103] European public opinion was consistent through Ronald Reagan's 1981 neutron bomb approval – Europeans were against it. *See, e.g.*, Philip Sonntag, "Commentary," Bulletin of the Atomic Scientists 37, no. 8 (October, 1981), 11.

[104]Ibid.

[105] Maynard W. Glitman, *The Last Battle of the Cold War* (New York: Palgrave MacMillan, 2006), 139.

notes (part of the Zbigniew Brzezinski Collection) that address the need for Lance modernization, with or without enhanced radiation warheads.[106] In addition, Wittner's work enriches the scholarly understanding of postwar efforts to ban the bomb and stop nuclear proliferation, yet his work is peripheral to the neutron warhead deferral decision. In *Toward Nuclear Abolition*, the third volume in the series *The Struggle against the Bomb*, Wittner records Zbigniew Brzezinski's observation that President Carter didn't want to be seen as an ogre for approving neutron bomb production.[107] Wittner's reliance on Brzezinski's observation colored his understanding of Carter's neutron warhead deferral too much. Had Wittner been exposed to Carter's ERW notes, he might have been persuaded that Carter intended to continue to confer with the North Atlantic Alliance, approve Lance modernization ("with or without (an) ER component"), obtain a Soviet military concession for an ERW "tradeoff," and pursue the ground launched cruise missile program."[108]

Like Wittner, Gaddis Smith's work is mainly peripheral to the neutron warhead deferral decision. Smith briefly addresses ERW deferral as part of his broader treatment of Carter administration foreign policy, *Morality, Reason, and Power*. Smith observes – based upon a thin record – Carter's alleged whole-body aversion to the neutron bomb. If Carter had to produce and deploy ERW, then he would do so only if America's European allies asked for the warhead explicitly.

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[106] Jimmy Carter, Notes, Donated Historical Materials, Zbigniew Brzezinski Collection, "Defense – Enhanced Radiation Warhead: 3/78-8/78, Box 22, JCL.

[107] Lawrence S. Wittner, *The Struggle against the Bomb*, vol. 3, *Toward Nuclear Abolition* (Stanford, California: Stanford University Press, 2003), 48.

[108] Carter, Notes, Donated Historical Materials, Zbigniew Brzezinski Collection.

That was not to be, according to Smith, who relates that the West German government equivocated when it came to ERW. As Smith relates, Carter declared: "I don't ever want to do anything as president that would be a contravention of the moral and ethical standard that I would exemplify in my own life as an individual."[109] Carter's perception of West Germany's ERW position – never better than lukewarm acceptance – coupled with Smith's observation about Carter's personal morality, constitute the orthodox interpretation of ERW deferral. However, like Wittner, Smith placed too much weight on the notion that Carter was morally hamstrung when it came to the neutron warhead.

In addition, Smith attributed great weight to West Germany's equivocation – due in part to a surging antinuclear movement – on the matter of neutron warhead production and deployment.[110] But Smith did not account for President Carter's reluctance to expend political capital convincing the West Germans to accept deployment of a weapon whose military usefulness he questioned. Furthermore, Smith misses the importance of Carter's reticence when it came to asserting American prerogative within the Alliance.[111] Not long after his election,

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[109] Smith, *Morality, Reason, and Power*, 29.

[110] Not until April, 1978, was Carter advised (tentatively) that West Germany would accept neutron warhead deployment. Carter never fully acquiesced to the tentative advise. In an April 3, 1978, memorandum for the president, Secretary of Defense Harold Brown advised Carter that although the FRG seemed prepared to ask for deployment of enhanced radiation weapons, any negative production/deployment decision by Carter would find the U.S. (and Carter personally) taking the heat for a "no" decision. Brown to Carter, Memorandum for the President, April 3, 1978, Donated Historical Materials, Zbigniew Brzezinski Collection, "Defense – Enhanced Radiation Warhead: 3/78-8/78, Box 22, JCL.

[111] Jimmy Carter: "NATO Ministerial Meeting News Conference of Henry Owen, the President's Special Representative for Summit Preparations," May 10, 1977. Online by Gerhard Peters and John T. Woolley, *APP*, http://www.presidency.ucsb.edu/ws/?pid=7493 (accessed December 26, 2014).

Carter achieved a pledge from Alliance members on defense spending, a three percent annual increase, above inflation; but Carter's achievement had an unintended consequence – a buildup of the Alliance's conventional arms encouraged the United States to decouple its nuclear forces from European defense.[112] Theater-level nuclear force modernization implied a weakening of the U.S.'s strategic – defensive – shield over Europe.[113]

Secretary of State Vance foresaw that neutron warhead nonproduction was tantamount to a reduction in the United States' nuclear stockpile in Europe. To Vance, the failure to modernize Lance could be perceived as a reduction in America's commitment to use nuclear weapons in defense of Europe. In a July 25, 1977, memorandum for the president, Vance elaborated on the issue. "Failure to modernize nuclear weapons may result in a significant reduction of the nuclear

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[112] West German Chancellor Helmut Schmidt shared the concern, and it extended to SALT. According to Schmidt: "SALT codifies the nuclear strategic balance between the Soviet Union and the United States … In Europe this [parity] magnifies the significance of the disparities between East and West in nuclear tactical and conventional weapons." Helmut Schmidt, "1977 Alastair Buchan Memorial Lecture," *International Institute for Strategic Studies*, http://www.iiss.org/en/publications/survival/sections/2008-4e2e/survival--global-politics-and-strategy-august-september-2008-7e37/50-4-18-archives-d283 (accessed October 10, 2014).

[113] This is representative of the tortured logic of nuclear weapons policy. NATO was overmatched by the Warsaw Pact in conventional arms. Prior to the Alliance's adoption of Flexible Response in 1967, a conventional attack by the Warsaw Pact would (under MAD) trigger a strategic nuclear response by the United States – America's nuclear shield over Europe. But if the Alliance's theater-level nuclear forces were modernized and improved, then the United States would have at its disposal a viable theater-level nuclear response to a Soviet conventional attack. This viable theater-level nuclear response to a conventional attack threatened (in theory) to decouple U.S. strategic nuclear forces from the defense of Europe. In short, theater-level nuclear arms allowed for a local defense. SALT exacerbated the concern because strategic parity was thought to make a U.S. strategic response to conventional aggression in Europe less, not more, likely – the Washington for Bonn problem. Thus the FRG's policy circa the mid-1970s called for *limiting* the use of theater-level nuclear weapons so that a rapid conventional success by the Warsaw Pact would trigger a U.S. strategic response. Charles N. Davidson, a Scientific Adviser to the U.S. Army Nuclear Agency during the relevant time period, addresses these and other issues for the U.S. Army War College in "Tactical Nuclear Defense – The West German View," *Parameters* IV, no. 1, 1974, p. 47-57. Davison presents a credible case in support of his view of the FRG's perspective.

stockpile over time," Lance cautioned Carter. Vance noted that such a failure might diminish the deterrent and create the impression of a diminished U.S. commitment to Europe.[114]

Carter's reserve when it came to asserting American prerogative within the Alliance is consistent with Gaddis Smith's overarching view of Carter as an American moralist in the Wilsonian mold; namely, as a president who believed in moral principle over power in foreign policy.[115] Carter's desire to limit his actions as president to those acceptable to him as an individual suggests there is a moral equivalency between actions on behalf of the self and actions on behalf of the state. The contrary view, which holds that the moral ends of the state differ from the moral ends of the self, leads to realism.

Public intellectual Reinhold Niebuhr addressed the distinction between the moral interest of the self and that of the state in *Moral Man and Immoral Society*. Niebuhr made it clear that a leader's duty lay in preserving the interest of the state, which exists to protect the interest of its citizens. In opting out of ERW

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[114] Memorandum, Vance to Carter, July 25, 1977, "European Attitudes toward the Neutron Bomb," National Security Advisor, Brzezinski Materials, ERW and RW, 6-8/77, Box 16, JCL.

[115] Ibid. Also, at page 29, Smith begins to list nine instances of Carter's campaign rhetoric that illustrate the point he is making. In one illustration, Carter points out that "Never again should our country become militarily involved in the internal affairs of another country unless there is a direct and obvious threat to the security of the United States and its people." Carter's thinking hardened as his term wore on. Witness the Carter Doctrine, where the president announced (as part of the 1980 State of the Union) that the Persian Gulf region fell within the vital interest of the United States. *See*, *Détente and Confrontation*, 1063. President George H.W. Bush would rely, in part, on the Carter Doctrine in pursuit of American objectives during the First Gulf War.

production because he found such weapons to be "not useful," Carter revealed his pragmatic cant.[116]

An ogre, however, is not easily exiled. Zbigniew Brzezinski dates Carter's use of the word ogre to an August 17, 1977, meeting. Cyrus Vance and Harold Brown were in attendance. In a 1987 interview Vance had no recollection of Carter's use of the word ogre. Vance, instead, recalls that the president was in favor of going ahead with the ERW program. Vance believed that Carter favored ERW production up until the point he was called on to sign the final production order in mid-March, 1978.[117] Vance dates Carter's reversal to the weekend of 18 March. Carter's White House Diary entry dated March 20 corroborates Vance's recollection.[118] Notably, Carter did not mention moral reservations in the diary entry. In fact, Carter's assessment was a distillation of his practical concerns over commitments, permissions, and utility.

> After we [Brzezinski, Vance, Brown, and Mondale] analyzed the [ERW] situation in a fairly combative fashion, I became more and more convinced that we ought not to deploy the neutron bomb. We've not gotten any firm commitments from a European nation to permit its deployment on their soil, which is the only place it would be deployed.[119]

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[116] Smith, *Morality, Reason, and Power*, 18-20. Smith established the links between Carter, Wilson, and Niebuhr; however, he does not assert an equivalency between failed American policy and failed American leadership.

[117] "Interview with Cyrus Vance, 1987." 01/29/1987, WGBH Media Library & Archives, http://openvault.wgbh.org/catalog/wpna-40d84c-interview-with-cyrus-vance-1987 (accessed 11/22/2013).

[118] Carter, *Keeping Faith*, 227.

[119] Ibid.

The ogre reference originated with Brzezinski, but it pops up elsewhere, from Auger's work to that of James E. Goodby, Robert A. Strong, Nina Tannenwald, and others.[120] It is possible that Carter used the word "ogre" himself, but one cannot draw that conclusion from the existing archival record. Nevertheless, that Jimmy Carter would abhor being thought of as an ogre is consistent with Arthur Schlesinger's impression of Carter as a narcissist.[121] However, the best evidence against the ogre effect is the way Carter finally decided to defer ERW production. The actual form his decision took suggests that the president was more concerned with appearances than substance. The final decision on ERW deferral came from the pen of a realist and not an idealist. Carter's decision reflected the views of an executive who remained decidedly undecided. Carter did more than leave the door open for ERW production. In fact, he ordered that Lance and its component parts be made, including the all-important tritium containers.

Though unconvincing, the moral argument persists. In a conference paper presented in Seattle, Washington, in April, 2014, political scientist Michael Gordon Jackson argued that the neutron bomb was a "bridge too far" for President Carter and that the president cancelled production "because of his own moral and ethical revulsion about contributing to the nuclear arms race and producing a

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[120] Auger, *Dynamics of Foreign Policy Analysis*, 108; James E. Goodby, *At the Borderline of Armageddon, How American Presidents Managed the Bomb* (New York: Rowman & Littlefield, 2006), 117; Robert A. Strong, *Working in the World: Jimmy Carter and the Making of American Foreign Policy* (Baton Rouge, Louisiana: Louisiana State University Press, 2000), 133; Nina Tannenwald , *The Nuclear Taboo: The United States and the Non-use of Nuclear Weapons since 1945* (New York: Cambridge University Press, 2007), 280.

[121] *See*, Douglas Brinkley, *The Unfinished Presidency: Jimmy Carter's Journey Beyond the White House* (New York: Viking, 1998), 9.

weapon that 'killed people but spared buildings.'"[122] Arguably, the claim of deferral based on behalf of morality persists because it is consistent with the notion of Jimmy Carter as a deeply religious man. It also comports with contemporaneous press opinions about the neutron bomb. Members of the press who followed Walter Pincus' initial coverage in the *Washington Post* perceived the weapon as particularly inhumane. Although Carter's favorability rating *fell* as a consequence of ERW deferral, it pleased the European anti-nuclear movement, and further strained Carter's ties with West German Chancellor Helmut Schmidt. However, the model of President Carter's neutron warhead deferral – production and deployment contingent on Soviet restraint – became the model for NATO's 1979 Dual Track decision.[123]

With ERW deferral, Carter appeared to quell an instance of vertical nuclear weapons proliferation.[124] But whether Carter's deferral in fact quelled an

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[122] Michael Gordon Jackson, "The Tools of Ares: The Morality of the use of New Weapons Technologies – An Assessment of the Neutron Bomb Case of 1978 and the use of Drone Warfare Technology in the 21st Century," Annual Meeting of the Western Political Science Association, Seattle, Washington, April 17-19, 2014. In "Tools of Ares" Jackson also observes that "for all intents and purposes, the neutron bomb program in the United States was dead." Jackson's observation of the death of the neutron bomb is another example of a persistent misunderstanding of Carter's neutron bomb deferral – cancellation versus deferment.

[123] "Ministerial Communiqué: Special Meeting of Foreign and Defense Ministers, Brussels," *German History in Documents and Images*, http://germanhistorydocs.ghi-dc.org/sub_document.*cf*m?document_id=1127 (accessed February 20, 2015). Communiqué: "[TNF modernization] took place against the background of increasing Soviet inter-continental capabilities and achievement of parity in inter-continental capability with the United States." *See also*, Ministerial Communiqué: Special Meeting of Foreign and Defense Ministers, Brussels (December 12, 1979); reproduced on the website of the *North Atlantic Treaty Organization*, www.nato.int/docu/comm/49-95/c791212a.htm.

[124] *See*, for example, Carter's May 13, 1976 address to the United Nations. After making the point that America has been unable to forgo nuclear weapons while it nevertheless asks other nations to engage in that "self-denial," Carter states: "I believe we have little right to ask others to deny themselves such weapons for the indefinite future unless we demonstrate meaningful progress toward the goal of control, then reduction, and ultimately elimination of nuclear arsenals." *See*, Carter, *A Government as Good as Its People*, 100.

instance of vertical proliferation has to be weighed against the president's March 13, 1980, Oval Office statement to Minister President of Bavaria Franz Josef Strauss. (Carter to Strauss: "I want you to know that we are still building the neutron weapon, including tritium containers for the warheads."[125]) Between neutron warhead deferral (April, 1978) and the Oval Office meeting with Strauss (March, 1980), the president's national security staff had been at work evaluating the nation's nuclear weapons targeting policy. At a meeting of the SCC on April 4, 1979, Secretary of Defense Harold Brown informed committee members of the Defense Department's examination of nuclear weapons targeting criteria in light of ongoing efforts to formulate a new or updated presidential directive (PD) on strategic policy. Present at the meeting were Brzezinski, Vance, David Aaron, CIA Director Stansfield Turner, ACDA Deputy Director Spurgeon Keeny, NSC deputy Victor Utgoff, and the Chairman of the JCS, General David Jones.

At the meeting Brown informed the committee that the DOD was actively constructing additional nuclear options to meet the threat posed by "Soviet conventional forces in Eastern Europe." Brown queried the committee for suggestions as to how the administration might inform NATO of the DOD's efforts."[126] The nuclear weapons targeting policy came together in July, 1980, as PD – 59, which incorporated the elements of a nuclear war-fighting plan redolent of claims that the United States had to employ nuclear forces together with general purpose forces in an era of strategic nuclear parity. The combination of

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[125] Memorandum of Conversation, March 13, 1980, RAC NLC-128-1-9-1-8, JCL.

[126] Special Coordination Committee Meeting, April 4, 1979, National Security Adviser, Subject File, box 35, P[residential] D]irective] 59 [8/78-4/79], JCL.

the two, nuclear forces and general purpose forces, meant that the United States had to be prepared to fight – and win – a nuclear war without a "spasmodic" all-out nuclear exchange with the Soviet Union.[127] President Carter's plan to modernize Lance – with or without ER elements – taken together with the concurrent deliberations over U.S. nuclear weapons employment policy occurring at the highest levels of the Administration, suggests that President Carter's May, 1980, statement to Strauss was intended to assuage any concerns Strauss may have had over the U.S.'s theater-level nuclear commitment to NATO and the Federal Republic.

Additionally, in a briefing that June Harold Brown informed Alliance officials of the U.S. targeting policy at a meeting of NATO's NPG. Brown advised the allies that the advent of strategic parity and new technologies necessitated plans for the battlefield use of nuclear weapons, limited use of nuclear weapons, less than all-out nuclear weapons strikes, and survivability of nuclear weapons use, all elements of a battle plan consistent with the Lance short-range missile modernization with or without enhanced radiation elements.[128] Moreover, Brown's NPG briefing was consistent with a nuclear warfighting doctrine that marshaled the energy of nuclear forces in combination with conventional forces. But such a nuclear warfighting doctrine stressed options for

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[127] William Odom and Jasper Welch's Memorandum to Brzezinski, April 17, 1980, "Draft PD on Nuclear Employment Policy," National Security Adviser, Subject File, box 35, P[residential] D]irective] 59 [3/80-4/80], JCL.

[128] Department of State cable 154183 to all NATO Capitals, "NPG: Discussion of Strategic Employment Doctrine," 11 June 1980, National Archives, Record Group 59, Department of State Papers, Subject File of Edmund S. Muskie, 1963-1981, box 2, Allied Nuclear Strategy: PD-59, *NSA* http://www2.gwu.edu/~nsarchiv/nukevault/ebb390/docs/6-12-80%20cable%20%20briefing%20at%20NPG.pdf (accessed December 27, 2014).

the limited use of nuclear weapons, not necessarily enhanced radiation weapons. Brown, like Carter, was not convinced of the enhanced radiation warhead's military utility.[129]

Furthermore, Carter's statement to Strauss has to be weighed against the specific intent of neutron warhead deferral as expressed by the president in his April 7, 1978, White House Press Office statement. Evidence of the president's intent may be gleaned from his emendations to the draft statement that preceded the final version of the "Presidential Statement on Enhanced Radiation Weapons."[130] Carter's final statement on deferral extends to the degree to which the Soviet Union shows restraint "in its conventional and nuclear arms programs and force deployments affecting the security of the United States and Western Europe."[131] Although not a direct impingement on Western Europe's geography, the Soviet Union's 1979 invasion of Afghanistan more or less ameliorated any concerns in Washington over Moscow, restraint, and force deployments.

Zbigniew Brzezinski prepared the drafts of the President's ERW statement, and – in Brzezinski's first draft dated April 5, 1978 – the future development of the neutron warhead by the U.S. is linked to the Soviet Union's nuclear arms programs and force deployments affecting the security of Western Europe. Carter himself, in his own hand, added "the United States and" preceding

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[129] Memorandum of Conversation, "Special Coordinating Committee (SCC) Meeting on Enhanced Radiation Warheads," RAC NLC-31-139-6-1-7, JCL.

[130] Jimmy Carter: "Enhanced Radiation Weapons Statement by the President," April 7, 1978. Online by Gerhard Peters and John T. Woolley, *APP* http://www.presidency.ucsb.edu/ws/?pid=30630 (accessed December 27, 2014).

[131] Ibid.

Western Europe, which broadened the scope of the "out clause" significantly.[132] The administration's concerted effort to update U.S. nuclear targeting policy to account for new technology and strategic parity, culminating in PD-59, establishes a context for understanding the importance of Carter's statement to Strauss as well as indirect evidence of the absence of any latent moral reservations on the part of the president concerning enhanced radiation warhead production and deployment.

Modernization

Did Carter defer ERW production to "shock" NATO "into realizing the necessity for long-range theater nuclear force modernization?"[133] Vincent Auger dispels this notion, which historian Richard Thornton proposes in *Carter Years* and Raymond Garthoff elaborates in *Détente and Confrontation.*

Détente and Confrontation is Garthoff's seminal work, and it addresses in detail relations between the United States and the Soviet Union from the late 1960s through Jimmy Carter.[134] Garthoff, one of the diplomats who negotiated SALT and a former U.S. ambassador to Bulgaria, divides his thorough treatment of the period into three chronological sections. The first covers the Nixon-Ford years, the second covers Carter, and the third Ronald Reagan. Garthoff's

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[132] *See*, Draft – 4/5/78 – "Presidential Statement on Enhanced Radiation Weapons," Office of the White House Press Secretary, JCL.

[133] Auger, *Dynamics of Foreign Policy Analysis*, 3.

[134] Raymond L. Garthoff, *Détente and Confrontation: American-Soviet Relations from Nixon to Reagan,* revised ed. (Washington, DC: The Brookings Institution, 1994). This study also refers to an earlier – *1985* – edition from time to time.

considerable knowledge of the Soviet Union informs his close reading of primary sources, including the memoirs of ranking U.S. officials, government documents, open Soviet sources, and press interviews.

Garthoff weaves his treatment of the neutron bomb affair into his discussion of European theater nuclear forces (TNF). According to Garthoff, two aspects of Carter's ERW deferral decision bear on the events surrounding the Alliance: one is European TNF posture; the other is European long-term defense planning. As to TNF, Garthoff's view is similar to that of Richard A. Ericson, Jr., deputy director of the State Department's Political Military Bureau. According to Ericson, strategic nuclear parity – expressed numerically for the first time in SALT II – played to West German fears that the United States might move away from its dependence on nuclear weapons for European defense.[135] To Ericson, the ERW decision, along with Carter's inaugural address and conventional force modernization, illustrate the view that America was moving away from its dependence on nuclear weapons in defense of Europe, which tested the FRG's confidence in America's Alliance leadership.[136] Garthoff proposes a similar view. "The principal effect of the neutron weapon affair was to reduce Western confidence in American leadership in the alliance, and later to lead the United States to seek to undo that effect by another new arms initiative."[137] Garthoff's

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[135] Richard A. Ericson and George Vest to Vance, Briefing Memo, August 16, 1978, SCC Meeting on PRM-38, August 23, 1978, *NSA* http://www2.gwu.edu/~nsarchiv/nukevault/ebb301/doc02.pdf (accessed December 28, 2014).

[136] Ibid.

[137] Raymond L. Garthoff, *Détente and Confrontation: American-Soviet Relations from Nixon to Reagan* (Washington, DC: The Brookings Institution, 1985), 853-859.

reference to a "new arms initiative" is to the 1979 Dual Track decision to deploy U.S. Pershing II missiles and ground launched cruise missiles (GLCM) in conjunction with a broad set of initiatives to further arms control to improve the security of Western Europe.

As to ERW and Europe's long-term defense planning (LTDP), Garthoff reflects that "the rankling effect" of the neutron weapon affair "did not quickly dissipate." Garthoff adds, however, that ERW "did not interfere with … endorsement of the [LTDP] at the May 1978 NATO summit conference."[138] Events bear out Garthoff's view. Following the summit conference, NATO reiterated two complementary approaches to Alliance readiness, strengthened defensive capability and arms control. In the arms control arena, the Alliance endorsed approximate parity in conventional arms by means of force reductions to reduce the gap between the Warsaw Pact and NATO. In the theater-level nuclear force arena, the Alliance endorsed the Nuclear Planning Group's efforts to modernizing TNF and offsetting the Soviet Union's deployment of the intermediate-range ballistic missiles capable of striking targets in Western Europe.[139]

Garthoff's "rankling effect" of neutron warhead deferral did not juxtapose an obstacle to TNF modernization by the Alliance. Continued progress in SALT, with concomitant strategic nuclear parity between the U.S. and the U.S.S.R.,

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[138] Garthoff, *Detente and Confrontation*, 939. The ellipses eliminate a portion of text that Garthoff encloses in parentheses, "and may even have rallied some compensating support for." Garthoff thus suggests that the neutron bomb affair may have resulted in "some support for" the LTDP.

[139] J. Luns, Final Communiqué, North Atlantic Council, Washington, 30th-31th May, 1978, *NATO On-Line Library*, http://www.nato.int/docu/comm/49-95/c780530a.htm (accessed December 28, 2014).

practically invited improving the West's theater-level nuclear forces lest the perceived decoupling the U.S. strategic nuclear shield from Western Europe's defense were to be assuaged.[140] From the Federal Republic's perspective, TNF modernization required a solution by the 1980s lest the Soviet Union's perception of NATO's weakness in the area diminish the credibility of the Alliance's tactical nuclear deterrent.[141] Moscow's move into Kabul late in 1979 serendipitously strengthened the Alliance's program to beef up TNF while simultaneously smoothing the way for President Reagan's 1981 neutron bomb approval.[142]

In the first instance, Garthoff alleges that Carter's deferral reduced Western confidence in America's leadership within NATO, which comports with Helmut Schmidt's view.[143] Confidence became an issue on the heels of the administration's uncertain neutron warhead policy. President Carter made it clear in his 1982 interview with Richard Neustadt that his administration *openly* rather than *privately* weighed conflicting policy choices when it came to the neutron warhead. Carter did not give Neustadt a definitive answer on the development of

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[140] Jimmy Carter, Notes, Donated Historical Materials, Zbigniew Brzezinski Collection, "Defense – Enhanced Radiation Warhead: 3/78-8/78, Box 22, JCL. (Carter circa April 5, 1978: "GLCM program will be pursed.")

[141] State Department cable 261791 to U.S. Embassy Bonn, "Bilateral with the FRG on TNF Issues, 16 October 1978, *NSA*, http://www2.gwu.edu/~nsarchiv/nukevault/ebb301/doc04.pdf (accessed December 28, 2014). *See, also*, Helmut Schmidt, "1977 Alastair Buchan Memorial Lecture," *International Institute for Strategic Studies*, http://www.iiss.org/en/publications/survival/sections/2008-4e2e/survival--global-politics-and-strategy-august-september-2008-7e37/50-4-18-archives-d283 (accessed October 10, 2014).

[142] Ronald Reagan: "Remarks on Signing the Economic Recovery Tax Act of 1981 and the Omnibus Budget Reconciliation Act of 1981, and a Question-and-Answer Session With Reporters," August 13, 1981. Online by Gerhard Peters and John T. Woolley, *APP*, http://www.presidency.ucsb.edu/ws/?pid=44161 (accessed February 21, 2015).

[143] Helmut Schmidt, *Men and Powers, A Political Retrospective* (New York: Random House, 1989), 239.

his administration's ERW policy, but he did tell Neustadt that his *final view* of the neutron warhead (unfavorable) was a departure from his *initial view* of the neutron warhead (favorable).[144] This study attributes Carter's changing view of the neutron warhead from favorable (circa June 1977) to unfavorable (circa March 1978) to Carter's lack of belief in the military utility of radiation-enhanced warheads.

President Carter's view changed more or less abruptly in mid-March when he rejected a compromise reached by Brzezinski, Vance, and Brown linking ERW production and deployment to "satisfactory progress" in a "range of arms control negotiations" and Soviet restraint in Central European tank and SS-20 deployments.[145] At the risk of over-simplification, when it came to TNF modernization for the Alliance, Carter preferred the ground launched cruise missile (GLCM) over ERW for its versatility, expense, and political profile.[146]

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From the FRG's perspective, President Carter's neutron warhead decision was unilateral.[147] The president did not coordinate the decision with America's

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[144] Jimmy Carter Interview, Miller Center, University of Virginia, COHP, November 29, 1982, http://web1.millercenter.org/poh/transcripts/ohp_1982_1129_carter.pdf (accessed March 24, 2014). (In order to give a definitive answer, Carter said, he would have to have access to all of the Brzezinski, Vance, and Brown ERW memoranda.) Emphasis added.

[145] Brzezinski to Carter, Memorandum, "Enhanced Radiation Weapons," Donated Historical Materials, Zbigniew Brzezinski Collection, "Defense – Enhanced Radiation Weapons and Radiological Warfare, 2-4/78, Box 17, JCL.

[146] Jimmy Carter, Notes, Donated Historical Materials, Zbigniew Brzezinski Collection, "Defense – Enhanced Radiation Warhead: 3/78-8/78, Box 22, JCL.

[147] Jimmy Carter Interview, 1982, COHP.

NATO allies and neither did he extract any arms control concession from the Soviet Union for neutron warhead deferral. In this regard, Carter's B-1 bomber decision serves as a forerunner of ERW deferral. What is more, in Garthoff's analysis there is a clear line from neutron bomb deferral to NATO's 1979's Dual Track decision. Garthoff alleges that, in order to undo the negative effects of ERW deferral, the Carter administration proposed a new arms initiative involving U.S. Pershing II missiles and GLCM. At this intellectual junction, Raymond Garthoff meets Richard Thornton.

Thornton argues that the Carter administration used the neutron bomb affair as a means of gaining leverage when it came to Pershing II and GLCM. Similarly, Garthoff suggests that the ERW controversy "led to" Pershing II and the cruise missile as a means of winning over those in NATO who doubted American leadership. In Thornton's view, the U.S. might link ERW production to arms control with a three-part formula. First, the Carter administration would announce a decision to go ahead with neutron bomb production. Second, the administration would offer to halt European deployment of ERW provided the U.S.S.R. agreed to halt deployment of the SS-20. Third, the Alliance would announce its intent to deploy ERW in two years in the event arms control negotiations were unsuccessful.[148] But the archival record does not squarely corroborate either Garthoff or Thornton. Then again, neither Garthoff nor Thornton had access to an archival record containing pertinent recently

[148] Richard C. Thornton, *The Carter Years* (New York: Paragon House, 1991), 67.

declassified memoranda and notes prepared by and for President Carter, some in the president's own hand.

A review of *Détente and Confrontation's* sources reveals that Garthoff did not have access to the breadth of archival material currently available. In the main, Garthoff sifts press accounts and insider memoirs to inform his discussion of Carter's neutron warhead reversal. These sources lead Garthoff to conclude that political rather than military factors were the primary factors that caused Carter to order ERW deferral.[149] Garthoff also concludes that Carter's handling of the neutron affair, which he calls a "debacle," led directly to his administration supporting the deployment of improved long-range theater nuclear forces to win over doubters within NATO who believed that the U.S. could no longer lead the Alliance. Consequently, in Garthoff's view, the U.S. emerged from the ERW affair to reassert its prominence within NATO to prove that it continued to have the capacity to lead. He writes: "The Carter administration itself felt it needed to compensate for its handling of the neutron decision" by supporting Dual Track.[150]

Unlike with Garthoff, Thornton's discussion of Carter's ERW decision in *The Carter Years: Toward a New Global Order* arises in the context of broader economic concerns coloring the administration's relations with its central North Atlantic Alliance partner, West Germany. Thornton lays the groundwork for the discussion by covering the effects of a "global recession precipitated by the oil crisis of 1973." According to him, the oil crisis had threatened to undermine the

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[149] Garthoff references works by administration insiders Carter, *Keeping Faith*, Brzezinski, *Power and Principle*, and Vance, *Hard Choices*.

[150] Garthoff, *Détente and Confrontation*, 945.

international economic system, highlighting the consequences of competition between the United States, West Germany, and Japan, the world's capitalist engines.[151]

According to Thornton, the United States during Carter's first year in office accepted trade deficits with West Germany at the same time that it asked Bonn to increase imports to help stabilize the international economy. Thornton indicates that West Germany did not cooperate with the American policy. According to West German Chancellor Helmut Schmidt, only austerity ("thrift and hard work") would lead to global recovery. At the same time, Thornton relates, America was criticized for not supporting the dollar. That would change in 1978 as the Federal Reserve began to act.[152]

For Thornton, ERW were part of an "oblique" strategy employed by the U.S. to pave the way for the deployment in Europe of U.S. Pershing II missiles and GLCM.[153] Thornton cites a strong antinuclear movement and deep opposition to the neutron bomb in West Germany's governing coalition as factors that dictated such an oblique approach. Thus in Thornton one traces neutron bomb deferral back to the European anti-nuclear movement, but not in explicit terms. To be sure, the peace movement opposed U.S. Pershing II missiles and GLCM, but neither carried the neutron bomb's baggage as an inherently inhumane weapon. Hence by not producing and deploying ERW, the U.S. looked

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[151] Thornton, *Carter Years*, 47.

[152] Ibid, 47-53.

[153] The neutron warhead's contribution to the incipient 1983 Euro Missile may have been foreshadowed by Secretary Brown. *See*, Brown to Carter, Memorandum for the President, April 3, 1978, Donated Historical Materials, Zbigniew Brzezinski Collection, "Defense – Enhanced Radiation Warhead: 3/78-8/78, Box 22, JCL.

as though it had heeded European peace activists, freed the FRG from isolation over ERW acceptance, and opened the door wider for Pershing II and the GLCM.[154]

European "disinclination to upgrade NATO's tactical battlefield capability" with neutron warheads thus aided going forward with "long-range theater nuclear" force enhancements other than neutron warheads for the Lance short-range missile – Dual Track, in Thornton's view. In other words, Dual Track became, in Thornton's ex post facto analysis, the "fundamental basis for President Carter's decision to defer production of the neutron weapon."[155] In this rendering, ERW deferral gave Carter leverage he needed to propose other favored systems – Pershing and GLCM – for NATO. This study does not accept Thornton's finding, but two factors in support of Thornton's ex post facto analysis warrant further discussion.

On the one hand, Theater-nuclear force modernization left open the possibility that Chancellor Schmidt might opt for ERW over long-range weapons as the "lesser of two evils" when it came to nuclear weapons on West German territory.[156] There is some evidence to support this contention. President Carter does keep open the possibility of ERW production through the remainder of his term in office, which suggests that he might publicly reverse his earlier deferral, if

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[154] With respect to NATO – Warsaw Pact political and psychological factors weighing in the balance, and the Federal Republic's concern over political isolation, *see*, State Department cable 261791 to U.S. Embassy Bonn, "Bilateral with the FRG on TNF Issues, 16 October 1978," Secret, Thirtieth Anniversary of NATO's Dual-Track Decision, *NSA* http://www2.gwu.edu/~nsarchiv/nukevault/ebb301/#doc4 (accessed February 20, 2015).

[155] *See*, Thornton, *Carter Years*, 65-77.

[156] Ibid.

political conditions warranted reversal. Carter's willingness to reconsider production lends credibility to Thornton's "lesser of two evils" analysis by keeping Schmidt squarely on the horns of a nuclear dilemma.

Even so, the U.S. preferred long-range theater nuclear force modernization as opposed to improving Lance because modernization met the challenge presented by the Soviet Union's SS-20. However, Lance was not intended for use against the SS-20. That point – Lance's incommensurability with the SS-20 – splits Thornton from Garthoff. In contrast to Thornton, Garthoff asserts that the U.S. did not pursue long-range TNF modernization to counter the Soviet SS-20; it did so simply to reassure NATO.[157] However, this study finds that both Garthoff and Thornton, in retrospect, are too charitable in their estimation of the administration's neutron bomb policy.

President Carter's policy was reactive from the moment Water Pincus' story surprised him and his staff in June 1977.[158] Despite the appearance of having been thoroughly though-out, the Carter administration's neutron policy was ad hoc. Carter did not pursue a consistent course when it came to the neutron warhead, which strained the his relationship with West German Chancellor Helmut Schmidt at a time when the North Atlantic Alliance needed support on the issue of theater nuclear force modernization. Had Carter earlier expressed his

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[157] Garthoff, *Détente and Confrontation*, 945.

[158] Carter to Reporters, July 12, 1977: "In the first place, I did not know what was in the [ERDA] bill." Jimmy Carter: "The President's News Conference," July 12, 1977. Online by Gerhard Peters and John T. Woolley, *APP*, http://www.presidency.ucsb.edu/ws/?pid=7786 (accessed February 20, 2015).

preference for the GLCM over the neutron warhead, he would have avoided the neutron warhead affair altogether.

Contemporary Perspectives of Journalists and Insiders

Contemporary perspectives of the neutron bomb controversy support several reasons for President Carter's decision to defer production of enhanced radiation weapons, but the president's decision is usually explained along two lines.[159] One line follows Carter's personal reservations about enhanced radiation weapons. In essence, Carter found the weapons so abhorrent that he could not bear to approve them. The president's National Security Adviser, Zbigniew Brzezinski supports this line. "I think the President personally found [the neutron bomb] morally abhorrent," recalled Zbigniew Brzezinski in a 1997 interview.[160] The other line follows the president's reaction to lukewarm European demand. Carter himself supports this view. "I had agreed to go ahead with the

[159] Vincent Auger's 1996 account of the neutron bomb controversy provides the best overall assessment of the differing reasons attributed to President Carter for deferring production of ERW. First, there is the claim that the military added ERW to ERDA's budget in secret. There is no credible evidence to substantiate this allegation. Second, some claim that Congress widely opposed production the neutron bomb. This is false. True, there was some energetic opposition to ERW in Congress, but there was also energetic support. What's more, before the Walter Pincus.' frontpage coverage, ERDA's funding request was moving through Congress without opposition. Finally, third, deferral of ERW production was meant to send a signal to NATO that its theater-level nuclear forces were in need of a complete overhaul. Auger argues that this third reason fails after one takes into account the timing of the president's advisers' advocacy for long-range theater-level force modernization. Auger points out that their advice came only after the ERW decision was mishandled; before that, these same advisers "opposed the modernization of this component of NATO's nuclear forces." Auger, *Dynamics of Foreign Policy Analysis*, 2-3.

[160] Zbigniew Brzezinski interview, Cold War Series, Episode 17 (June 13, 1997), *NSA*, http://www2.gwu.edu/~nsarchiv/coldwar/interviews/episode-17/brzezinski1.html (accessed December 12, 2013).

[development of neutron weapons] if [America's] NATO allies concurred," the president recalled in his 1982 memoirs.[161]

These two lines are borne out in the April 1978 press reports following President Carter's deferral decision. The accounts of the president's decision to defer ERW production in the *New York Times* and the *Washington Post* are representative of a broader sample. Neither line, however, focuses on the military utility – or lack thereof – of the neutron bomb. Beginning April 4, 1978, the *Times* began devoting daily coverage to the final stages of the year-long neutron bomb controversy without mentioning military utility. Initially, the coverage indicated that Carter decided against going forward with the production of enhanced radiation weapons because the weapons "ran counter to his goals of nuclear disarmament." In this iteration, the president is more than deferring production of the neutron bomb; he is cancelling the program altogether. The press coverage indicates that the president made his choice "against the advice of most of his top foreign policy advisers."[162]

The president's advisers pushed back and tried to turn Carter toward a compromise position. Brzezinski, Brown, and Vance believed that America's

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[161] Carter, *Keeping Faith*, 227. Carter elaborates: "Although some confusion was generated in the NATO alliance, under the existing circumstances my final decision not to produce neutron weapons was the proper one. Not only was it logical on its own merits and compatible with the desires of most of our European allies, but it also conformed to our general policy of restricting nuclear weaponry." Ibid, 229. Cater makes no mention of having moral reservations other than through an indirect reference to America's "general policy of restricting nuclear weaponry." Brzezinski also supports this line, as well, mixing moral abhorrence and European reluctance. "The President decided to cancel the neutron bomb, I think for two reasons, though one was emphasized. First, there wasn't sufficient support in Europe for it, and there was a great deal of reluctance in Europe to it. But secondly, I think the President personally found it morally abhorrent." *See*, Brzezinski, June 13, 1997.

[162] Richard Burt, "*Aides Report Carter Bans Neutron Bomb; Some Seek Reversal*," *New York Times*, April 4, 1978, A-1.

relations with its NATO allies might suffer harm if Carter cancelled production of the neutron bomb. Journalists had that right: senior aides pressed the president to compromise and "delay outright cancellation" by leaving open the door to future ERW production.[163] The compromise had a twofold purpose. First, although the president wanted to abandon the neutron bomb by mid-March, 1978, the weapon enjoyed broad support within the administration and the military. Second, the administration had expended considerable political capital gaining the support of House and Senate members since the neutron bomb controversy first surfaced in June 1977.

From President Carter's perspective, however, his advisers did not comprehend the extent of his resistance to enhanced radiation weapons. Recalling his feelings about ERW in his memoirs, the president writes: "The United States was now[164] in an almost absurd position – willing to proceed with the project alone, while insisting fruitlessly on the deployment of neutron weapons by our NATO allies."[165] Carter recalls telling Vice President Walter Mondale, Secretaries Vance and Brown, and Brzezinski on March 20, 1978, that he was

[163] Ibid. For corroboration of Burt's assessment by Brzezinski, *see*, Brzezinski to Carter, Memorandum, "Enhanced Radiation Weapons," Donated Historical Materials, Zbigniew Brzezinski Collection, "Defense – Enhanced Radiation Weapons and Radiological Warfare, 2-4/78, Box 17, JCL. And for Harold Brown, Memorandum for the President, April 3, 1978, Donated Historical Materials, Zbigniew Brzezinski Collection, "Defense – Enhanced Radiation Warhead: 3/78-8/78, Box 22, JCL.

[164] By "now" Carter meant March 20, 1978.

[165] Carter, *Keeping Faith*, 226.

"aggravated." The men had, according to Carter, ignored his "cautionary words" to them about the neutron bomb.[166]

By April, 1978, the neutron bomb matter sputtered to a halt after the president altered course a final time. The "statement of support" Carter wanted from West Germany never came. Carter's recollections show West German support for neutron weapons, but too little too late. "The Germans are playing footsie with U.S. on ER [enhanced radiation] weapons," Carter wrote in his diary on April 4, 1978.[167] Nearly a month earlier, the Dutch had come out vigoroU.S.ly against neutron weapons, and the trend set by the Dutch appeared to have a tone-setting effect across Europe.

The *Washington Post* parsed Carter's April deferral by teasing out the "military pluses and minuses" of neutron weapons. The reportage focused on the alleged non-destructiveness of enhanced radiation weaponry. ERW were thought to be (erroneously) controllable and clean. From this vantage, NATO was more likely to use enhanced radiation weapons (with the risk of escalation) because commanders might employ them with discrimination and proportion. Damage outside of planned target areas could be minimized while battlefield effects maximized. From another vantage, however, ERW non-destructiveness was a liability. Because neutron weapons were controllable and clean, and could be used with discrimination and proportion, detractors believed that commanders might be more likely to use them over ordinary nuclear weapons. In this way,

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[166] *Keeping Faith,* 226-227.

[167] Ibid, 227-228.

neutron bombs raised the risk of nuclear war by lowering the nuclear threshold, with the supposed consequence being a full-scale exchange of strategic weapons.

Later, after the Reagan administration approved production of enhanced radiation weapons, the CATO Institute's Robert C. Aldridge observed that "if the neutron bomb should ever be used in the surgical manner advertised by U.S. strategists, it could very easily and most likely trigger total nuclear war." Aldridge's observation piggybacked Defense Secretary Harold Brown's warning. "An initial use of nuclear weapons — however selectively they might be targeted" could lead "to a full-scale thermonuclear exchange." Brown observed: "The odds are high, whether the weapons were used against tactical or strategic targets, that control would be lost on both sides and the exchange would become unconstrained."[168]

The *Post's* editors thought that ERW minuses outweighed the pluses, but that President Carter had effectively forfeited the option of deferring production of the neutron bomb by delay after delay. By ambivalence, the president had allowed the Soviet Union to move along with the buildup of its own theater-level nuclear forces in Europe.[169] The U.S.S.R.'s unwillingness to negotiate on the

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[168] Robert C. Aldridge, "Precision-Guided Munitions and the Neutron Bomb," *Cato Institute, Policy Analysis No. 15*, August 26, 1982, http://www.cato.org/publications/policy-analysis/precisionguided-munitions-neutron-bomb (accessed December 8, 2013). Secretary Brown's observations come from his Department of Defense Report for Fiscal Year 1979, February 2, 1978, p. 53.

[169] As to the broader picture of TNF in Western and Central Europe, and its impact on Afghanistan, National Security Archive contributor William Burr observes that "NATO leaders saw the *dual-track* decision as a response to Soviet long-range forces targeting Europe and as a way ultimately to roll them back, yet the Soviet leadership saw the NATO plan as a threatening escalation of the nuclear arms race." Burr further notes that "some in Moscow saw the NATO decision as the *last drop* that made them feel they had nothing to lose by invading Afghanistan." *See*, comments to Thirtieth Anniversary of NATO's Dual-Track Decision, *NSA* http://www2.gwu.edu/~nsarchiv/nukevault/ebb301/#2 (accessed February 20, 2015).

neutron bomb issue ("the Soviets have done much to transform the international politics of the issue into a circus" charged the *Post's* editors) altered "the character of the decision" available to the president.[170] From this perspective, cancelling or deferring the neutron bomb without some concession by the Soviets gave the impression that President Carter was abandoning an asset for nothing; it reminded the president's critics of his unilateral decision to cancel the B-1 program. In the end, President Carter compromised by deferring instead of cancelling production of the neutron bomb. It was a compromise first suggested by Zbigniew Brzezinski. The president adopted it – deferral over cancellation – reluctantly in light of his belief that the political disadvantages of ERW outweighed the military advantages.[171]

[170] Editorial, "The Neutron Decision," *Washington Post*, April 6, 1978, A22.

[171] Brzezinski to Carter, Memorandum, "Enhanced Radiation Weapons," Donated Historical Materials, Zbigniew Brzezinski Collection, "Defense – Enhanced Radiation Weapons and Radiological Warfare, 2-4/78, Box 17, JCL.

CHAPTER 3

LOWER NUCLEAR THRESHOLD OUTWEIGHS PRODUCTION

Interviewer: *So you don't believe that there is a real possibility of a limited nuclear war? Once you start using these weapons, you are likely to get into an all-out war?*

Jimmy Carter: *That is my belief.*

~ *New York Times*, July 7, 1976

When it came to politics and arms control, the Strategic Arms Limitation Talks (SALT) dominated the decade of the 1970s, except for one twelve month period beginning in June, 1977, when the enhanced radiation warhead (ERW) controversy, or neutron bomb affair, took center stage. *Washington Post* reporter Walter Pincus triggered the affair with his June 6, 1977, exposé about a new "neutron killer warhead," which surprised President Jimmy Carter, a thrifty commander-in-chief willing to cut defense programs that he found either obsolescent or wasteful of "scarce military dollars."[1]

During his campaign for the presidency, Carter indicated that he hoped to take a fresh look at the ongoing SALT talks and specifically the limits agreed to by President Gerald Ford and Soviet leader Leonid Brezhnev at Vladivostok in November, 1974. In a foreign policy interview given to the *New York Times* on June 24, 1976, weeks before the Democratic Party's national convention in New

[1] Jimmy Carter: "The President's News Conference," May 12, 1977. Online by Gerhard Peters and John T. Woolley, *American Presidency Project ("APP")*. http://www.presidency.ucsb.edu/ws/?pid=7495 (accessed June 23, 2014).

York City's Madison Square Garden, Carter revealed that he intended to improve the interim agreement with the Soviet Union with "definitive and substantial reductions" in each nation's "total nuclear capability."[2] The interview was consistent with Carter's recent speech to United Nations (UN) diplomats in support of ending factionalism and ushering in an era of human rights-centered U.S. foreign policy.[3]

Carter's call to transcend factionalism echoed Arthur Compton's early postwar call for a worldwide approach to controlling atomic weapons. In Compton's introduction to *One World or None* – a 1946 tract containing the cautionary advice of atomic scientists worried about the consequences of nuclear energy – Compton wrote that "the worldwide growth of science and technology is the main line of the rapid evolution of man into a social being whose community is the world." For Compton, peace would come not through the outmoded tradition of "national self-defense," but by adjusting the "pattern of our society" on a worldwide basis. For Carter, a human rights centered foreign policy was a good beginning.[4]

This chapter argues that the Carter administration's reassessment of the SALT limits negotiated by President Ford at Vladivostok set the stage for President Carter's finding that the main risk associated with enhanced radiation warheads – a lowered nuclear threshold – outweighed the military benefits of

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[2] "Excerpts from the Interview with Carter on His Concepts in Foreign Policy," *New York Times*, July 7, 1076, p.12.

[3] Leslie H. Gelb, "Carter's Nuclear Plan: A Blend of Old and New," *New York Times*, May 14, 1976, p.13.

[4] Arthur H. Compton, From the *Introduction* to One World or None, ed. Dexter Masters and Katharine Way (New York: McGraw-Hill, 1946), Introduction.

ERW production. This chapter contests the persistent explanation that attributes President Carter's ERW deferral to moral objections; instead, it supports the view that Carter's preference for the ground-launched cruise missile (GLCM) overtook his belief in the military usefulness of the neutron warhead by mid-March, 1978.[5] As to both SALT and ERW, President Carter was unsatisfied with the *status quo ante*. For SALT, the president surmised that the U.S. could do better than the Vladivostok limits, which he believed did not go far enough toward the definitive and substantial cuts in nuclear armaments he coveted. As to the enhanced radiation warhead, the president wanted time to assess the military utility of a weapon that might not justify the funds requested in the Energy and Research Development Administration's (ERDA) fiscal year (FY) 1978 budget.

This chapter also covers two related areas: one, President Carter's service in the U.S. Navy as a submariner and nuclear engineer following graduation from Annapolis in 1946; and the other, public opinion. According to a 1984 study conducted by the Office of Technology Assessment,[6] from Earth Day in 1970 to roughly 1975, public opposition to nuclear power projects more or less held steady at one-third of all respondents surveyed.[7] In an effort to raise the public's awareness of America's dependence on foreign oil imports, President Ford

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[5] Jimmy Carter, Notes, Donated Historical Materials, Zbigniew Brzezinski Collection, "Defense – Enhanced Radiation Warhead: 3/78-8/78, Box 22, JCL.

[6] The Technology Assessment Act of 1972 prompted the creation of the Office of Technology Assessment (OTA), which served the Congress through objective analyses of major public policy issues related to science and technology. The OTA began operations in January 1974 and closed on September 29, 1995. Princeton University holds, in electronic form, the complete collection of OTA publications along with additional materials that illuminate the history and impact of the agency. *Princeton University*, https://www.princeton.edu/~ota/ (accessed December 29, 2014).

[7] *Nuclear Power in an Age of Uncertainty* (Washington, DC: U.S. Congress Office of Technology Assessment, OTA-E-216, 1984), 211.

warned the nation in May, 1975, that the U.S. imported foreign oil at a rate that made it vulnerable to embargo, a grim reminder of the energy crisis of 1973. According to Ford, the U.S. imported 37 percent of its oil in 1975 instead of aggressively pursuing alternative domestic energy sources. The president begrudgingly observed that "peaceful atomic power, which [the U.S.] pioneered, is advancing faster abroad than at home."[8] As for enhanced radiation warheads, the public seesawed between support and opposition.

In 1977, when *CBS News* sampled a cross section of 1,463 Americans on their view of nuclear power, 69 percent supported building more nuclear plants. However, two years later – after the Three Mile Island (TMI) incident – CBS News recorded a steep decline in public support for nuclear power.[9] After TMI, and the box office success of *The China Syndrome*, a popular film released in 1979, which depicted events eerily similar to TMI's near reactor melt-down, public support for nuclear power slackened to 46 percent.[10]

China Syndrome helped popularize the term "meltdown," destruction of the reactor core due to coolant failure. In the film, Jane Fonda plays a television journalist, Kimberly Wells, who visits Ventana, a fictional California nuclear power plant. Wells and her camera crew observe Ventana's control room from

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[8] Gerald R. Ford: "Address to the Nation on Energy Programs.," May 27, 1975. Online by Gerhard Peters and John T. Woolley, *APP*, http://www.presidency.ucsb.edu/ws/?pid=4942 (accessed March 31, 2014).

[9] Anthony Parisi, "Poll Finds Doubt on Energy Crisis," *New York Times*, September 1, 1977, p.1; *see, also*, M.V. Ramana, "Nuclear Power and the Public," *Bulletin of the Atomic Scientists* 67, no. 4 (July/August 2011), 43-51

[10] *See*, Ramana, "Nuclear Power and the Public." *See, also*, *The China Syndrome*, Columbia Pictures Corporation, 1979.

the safety of a glass-enclosed observation deck when the floor beneath their feet begins to shake; it's a problem with the reactor core, and catastrophe nearly strikes.[11] Jack Lemmon, Fonda's co-star, plays Jack Godell, the lead control room supervisor. While Wells pursues the story as Godell realizes that the power company pursues a cover-up. Coming side-by-side with TMI, *China Syndrome* raised public awareness of the danger inherent in nuclear power, civilian and military.

In addition, the public's support for neutron warhead development fell after President Carter announced his decision to defer production in April, 1978. But a turnabout occurred once President Reagan announced his plans to proceed with neutron warhead production in 1981,[12] which is – arguably – attributable to

[11] Wells gives permission to her camera operator, played by Michael Douglas, to film the control room as the reactor-event unfolds. The utility's manager is standing next to Wells in the observation room, but he doesn't know that she's given her cameraman clearance to film. (He was filming the event *before* he received her consent. From a legal standpoint, her consent is important because it brings the cameraman's actions within the scope of his employment, which extends liability to the television station. That's one reason why the station, KLA, may have refused to air footage of the event, which leads to Jack Godell's takeover of the control room.) Beside from the main plotline revolving around nuclear power, *China Syndrome* addresses the conflict between motion pictures and television over the control of the flow of information. The film's message is mediated between two media, television and film; the film limns the extent of the audience's response to the message, ostensibly the danger of nuclear power and the proclivity of authority to cover-up mishaps when money's at stake. For an elaboration of this thesis, *see*, Brian Rose, "Mass Mediated Images: The Force of Television in *The China Syndrome*," *Journal of Popular Film and Television* 8, no. 3 (Fall 1980):2.

[12] The public may have been swayed, in part, over Reagan's emphasis on the presence of Russian SS-20s in Central Europe. In a question-and-answer session with reports following passage of legislation, President Reagan remarked that the neutron warhead was purely a defensive weapon lest the Soviet Union overreact to production coming less than two years after its move into Kabul. Reagan then shifted discussion to Soviet intermediate –range ballistic missiles in Europe: "let's remember the SS-20's before we start worrying too much about what we're thinking about [ERW]. But remember also that our present 8-inch guns and our present Lance missiles over there are tactical nuclear weapons." Ronald Reagan: "Remarks on Signing the Economic Recovery Tax Act of 1981 and the Omnibus Budget Reconciliation Act of 1981, and a Question-and-Answer Session With Reporters," August 13, 1981. Online by Gerhard Peters and John T. Woolley, *APP*, http://www.presidency.ucsb.edu/ws/?pid=44161 (accessed February 20, 2015).

changing public sentiment in the aftermath of the Iran hostage crisis and the Soviet Union's invasion of Afghanistan. [13]

This chapter concludes with approval of ERDA's funding request for enhanced radiation improvements to the Lance short-range missile by the House Appropriations Committee on June 2, 1977, without opposition. Four days later, Walter Pincus' exposé sparked the "neutron killer warhead" controversy that changed the course of Carter's presidency. According to ERW scholar Vincent Auger, the president's decision to defer production of enhanced radiation warheads "satisfied no one and instead became a source of recrimination and friction between the administration and both its critics and supporters."[14] David Whitman, who wrote about the neutron warhead from the perspective of the press and its impact, records Carter press secretary Jody Powell's regrets over the administration's handling of ERW production and deployment in 1977 and 1978. For Powell, the neutron warhead exacerbated the appearance of presidential indecisiveness and weakness on defense.[15]

And for both Auger and Whitman, President Carter's abrupt neutron warhead reversal in April 1978 strained relations between the United States and its allies in Europe, an observation confirmed by West Germany's Chancellor Helmut Schmidt. According to Schmidt, President Carter achieved less in the

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[13] *See*, Paul Lettow, *Ronald Reagan and His Quest to Abolish Nuclear Weapons* (New York: Random House, 2006).

[14] Vincent Auger, *The Dynamics of Foreign Policy Analysis: The Carter Administration and the Neutron Bomb*, (Lanham, MD: Rowman & Littlefield, 1996), 1.

[15] David Whitman, *The Press and the Neutron Bomb* (Cambridge, Massachusetts: Harvard University Press, 1983), 150.

area of arms limitation than his predecessors in the Nixon-Ford-Kissinger era, and his ERW deferral-reversal "weakened the internal cohesion" of the North Atlantic Treaty Organization (NATO) "without meaning to and without even noticing the result."[16]

Looking in at the Vladivostok Accord

(F 2) *President Ford taking stock of a wood portrait of him presented by Soviet General Secretary Leonid Brezhnev at Okeansky Sanatorium, meeting place for the November, 1974, Vladivostok summit meeting on Arms Control.*[17] *Ford recalls thinking that "It was a marvelous work, although it didn't look much like me."*[18]

On February 9, 1977, at his first formal press conference since taking office, President Carter announced that he would consider exempting the Soviet

[16] Helmut Schmidt, *Men and Powers, A Political Retrospective* (New York: Random House, 1989), 239.

[17] Courtesy of the Gerald R. Ford Library & Museum, http://www.fordlibrarymuseum.gov/images/avproj/pop-ups/A2090-19.html (accessed March 27, 2014).

[18] Ibid.

Union's Backfire bomber and America's Sea Launched Cruise Missile (SLCM) from the arms limits agreed to by the United States and the Soviet Union at a SALT summit held in Vladivostok in November, 1974. Welcomed as a breakthrough in the ongoing arms control talks between the U.S. and the U.S.S.R., the agreement negotiated in Vladivostok by Ford and Brezhnev set mutual limits on strategic nuclear delivery vehicles, including long-range bombers and missiles. However, after Carter took the Oval Office in January, 1977, progress implementing the Vladivostok agreement slowed to a halt as soon as the newly-elected president began acting on his campaign promise to seek definitive and substantial reductions in the total number of nuclear arms held by the U.S. and the U.S.S.R. Moreover, American and Soviet arms control negotiators were unable to reconcile whether either the Backfire bomber or the cruise missile should be counted toward the limit of 2,400 long-range bombers and related delivery vehicles agreed to at Vladivostok. For its part, the Soviet Union did not want the Backfire bomber counted toward this limit whereas, on the other hand, the United States wanted the Backfire bomber counted, but SLCM exempted.[19]

Complex questions regarding SALT – questions that were not limited to either the Backfire bomber or the SLCM – promised to be intellectually daunting.[20] SALT was going to be hard to understand for most Americans, according to George Moffett, a Carter administration foreign policy adviser.

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[19] Charles Mohr, "President Outlines Proposals for Arms Pact with Soviets," *New York Times*, February 9, 1977, p.1.

[20] Jan M. Lodal, "SALT II and American Security," *Foreign Affairs* 57, no. 2, (Winter 1978/79), http://www.foreignaffairs.com/articles/30261/jan-m-lodal/salt-ii-and-american-security (accessed October 9, 2014).

Later, in an exit interview conducted on December 5, 1980, Moffett observed that too many esoteric details rendered SALT beyond the ken of all but a very few Americans who "were ever able to gain any good sense of the totality of the treaty." Moffett also expressed the opinion that the administration lacked the support it had hoped to receive on SALT even from treaty architects Gerald Ford and Henry Kissinger. In addition, President Carter knew that he had to carefully calibrate every SALT-related initiative in anticipation of the Senate's review.

As an example of politics in the Senate, Moffett pointed to Georgia Democrat Sam Nunn's desire for assurances that President Carter was committed to "long-term and rather major growth in defense spending" in exchange for supporting the administration's arms control line.[21] Senator Nunn became a dependable supporter of the ERW program, which helped the administration secure Congressional approval for enhanced radiation warhead funding in July, 1977. Thereafter, however, Nunn became an equally dependable critic of President Carter's abrupt April 1978 neutron warhead deferral.

How President Carter navigated the issues surrounding the Backfire bomber and SLCM in connection with the Vladivostok limits sheds light on his handling of neutron warhead production. With respect to both Vladivostok and the neutron warhead, the President had to fend off charges that he was too soft on the Soviet Union and prone to unilateral action – giving up *something* in exchange for *nothing* in his negotiations with the U.S.S.R. Democrat Melvin Price, Chairman of the House Armed Services Committee, joined by Nunn, criticized

[21] George Moffett, December 5, 1980, Jimmy Carter Library ("JCL"), http://www.jimmycarterlibrary.gov/library/exitInt/Moffett.pdf (accessed March 27, 2014).

the administration's neutron warhead deferral as an example of the president's unilateral action. According to Price, the neutron warhead was a "very valuable asset that should not [have been given away] without a *quid pro quo* from the Soviets."[22] Republican Senator Charles H. Percy of Illinois agreed with Price.[23] Percy added that the neutron warhead should not be arbitrarily ruled out by Carter because of its usefulness in deterring a tank assault by the Warsaw Pact in Western Europe.[24]

* * *

The Carter administration had barely settled in when the President's selection of Paul C. Warnke as the administration's chief arms control negotiator led to allegations of unilateralism and "softness," which, for critics, the ERW affair exacerbated. Warnke, however, was confident that he could win the Senate majority needed for approval to become the head of the Arms Control and Disarmament Agency (ACDA). Years later, in 1998, Warnke recalled that President Carter wanted to "leapfrog SALT" and achieve "lower nuclear weapon

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[22] "Neutron Supporters Want Tradeoff," *Ocala Star-Banner*, April 6, 1978, p.2A.

[23] *Cf.*, Robert A. Strong, *Working in the World: Jimmy Carter and the Making of American Foreign Policy* (Baton Rouge, Louisiana: Louisiana State University Press, 2000), 143. Senator Nunn was a member of the Armed Services Committee and Senator Percy was a member of the Foreign Relations Committee.

[24] "Neutron Supporters Want Tradeoff." Also, according to President Reagan, when he approved neutron warhead production in 1981, he estimated that that Warsaw Pact had a better than 4 to 1 advantage in tanks over NATO. Reagan: "This weapon [the neutron warhead] was particularly designed to offset the great superiority that the Soviet Union has on the western front against the NATO nations, a tank advantage of better than four to one." Reagan, "Remarks on Signing the Economic Recovery Tax Act of 1981 and the Omnibus Budget Reconciliation Act of 1981, and a Question-and-Answer Session With Reporters," August 13, 1981.

totals" instead of the Vladivostok limits.[25] Warnke's selection by Carter met with stiff opposition from Washington's Democratic Senator Henry M. "Scoop" Jackson, a former Carter rival. Warnke observed that Jackson was not a "believer in arms control." Despite Jackson's opposition, Warnke won Senate confirmation with the president's steadfast support.[26]

Warnke raised the ire of Cold War hawks like Jackson and the House's Samuel S. Stratton, a New York Democrat. Warnke's belief that the United States could achieve political successes against the Soviet Union without the benefit of nuclear superiority rankled critics like Paul Nitze.[27] Opposing Warnke, Stratton and Jackson cautioned that the president's ACDA appointee might advocate restraint in arms control (Ahead of the Russians, Heaven forbid!) lacking similar guarantees from the Soviet Union. In other words, to his critics, Warnke was too soft on the U.S.S.R. because he was not committed to *quid pro quo*-style arms control negotiations. Despite the challenges, President Carter stood by his nominee to head ACDA.

Carter backed Warnke's approach to arms control in a February, 1977, press conference. When asked whether the U.S. "had to be guaranteed in

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[25] Paul C. Warnke, June/July, 1998, *Historical Society of the District of Columbia Circuit*, http://dcchs.org/PaulCWarnke/warnke_appendice.pdf (accessed April 8, 2014).

[26] Ibid.

[27] Michael Krepon, "Two Spins on Arms Control à la Regan," *Bulletin of the Atomic Scientists* 46, no. 6 (July/August 1990): 41. Krepon observes that Nitze "savaged" Warnke during the 1977 Senate confirmation hearings. Later President Ronald Reagan reprised his oft expressed displeasure with SALT. In 1984 Reagan said: "As a matter of fact, the Soviet Union added almost 4,000 warheads after the two sides had signed the SALT II agreement. That's not my idea of what we really need if we're to reduce the tensions in the world." Ronald Reagan: "The President's News Conference," June 14, 1984. Online by Gerhard Peters and John T. Woolley, *APP*, http://www.presidency.ucsb.edu/ws/?pid=40049 (accessed February 20, 2015).

advance" that the Soviet Union would show equal restraint in the area of arms control, the president said, "I believe that Mr. Warnke's proposals are sound. And I have no concern about his attitude. There will be instances on nuclear weapons where each country has to take some initiative. But the overall balance of mutual restraint, cutting down on the overall dependence on nuclear weapons is what counts." Carter's statement foreshadowed his eventual ERW deferral. The president's position was consistent with his belief that the United States had a *slight* nuclear advantage over the Soviet Union. According to Carter, "The Soviet Union has more throw weight, larger missiles, larger warheads; we have more missiles, [and] a much higher degree of accuracy …."[28] Moreover, Carter's principle aim remained his effort to reduce U.S. dependence on nuclear weapons. The president sharpened his focus on reduction by reiterating his inauguration-day promise of eliminating nuclear weapons entirely. Though elimination was the president's long-range goal, Carter's first objective was stability. After stability, Carter sought "demonstrable reductions in dependence upon atomic weapons."[29]

Following his confirmation in the Senate by a narrow margin, Warnke echoed Carter when he announced that his primary objective as an arms negotiator would be strategic stability. Warnke added that strategic stability had to be predicated on verifiability since "the only way [one] can judge the sincerity

[28] Jimmy Carter: "The President's News Conference," February 8, 1977. Online by Gerhard Peters and John T. Woolley, *APP*, http://www.presidency.ucsb.edu/ws/?pid=7666 (accessed June 13, 2014).

[29] Ibid.

of representations is by the concrete actions [of the Soviet Union]."[30] When it came to neutron warheads, however, Warnke was ambivalent. The ACDA head did not believe that neutron weapons were "significant" from the point of view of arms control. Later, in November, Warnke informed National Security Advisor Zbigniew Brzezinski, Secretary of State Cyrus Vance, and Secretary of Defense Harold Brown that neutron warhead production might be linked to the U.S.S.R.'s medium-range SS-20s.[31] Warnke's advice intrigued President Carter. The president considered exchanging *ERW non-production* for *SS-20 non-deployment*. Alternatively, Warnke suggested that ERW non-production might be linked to the "hope of general progress" in SALT.[32] After leaving office, Warnke observed that SALT's limitation in addressing only ballistic missile launchers "probably" encouraged the United States to greenlight cruise missiles, Warnke's explanation of Carter's GLCM preference to Walter Pincus in 1979.[33]

President Carter eventually settled on a hybrid that corroborates Warnke's remarks to Pincus. President Carter linked ERW non-production to Soviet "restraint." However, Warnke's initial suggestion – the ERW-SS-20 non-deployment gambit – led Raymond Garthoff and Richard Thornton to speculate that Carter's neutron warhead solution set the stage for NATO's adoption of the

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[30] Bernard Weinraub, "Warnke Asserts Rights Differences Do not Bar Arms Pact with Soviet," *New York Times*, March 15, 1977, 1.

[31] November 16, 1977 meeting of the Special Coordination Committee. *See*, Memorandum, Special Coordination Committee Meeting, "Enhanced Radiation Warheads," RAC NLC-15-124-7-7-4, JCL.

[32] Memorandum of Conversation, Special Coordinating Committee (SCC) Meeting on Enhanced Radiation Warheads, November 16, 1977, RAC NLC-31-139-6-1-7, JCL.

[33] Walter Pincus, "Pass the SALT: An Interview with Paul Warnke," *The New York Review of Books*, July 14, 1979.

1979 Dual Track decision. Dual Track linked U.S. deployment of Pershing II and GLCM with simultaneous arms control negotiations. Dual Track also resembled Brzezinski's recommendation to Carter that the U.S. link ERW production and deployment to "satisfactory progress" on a "range of arms control negotiations" and Soviet restraint in Central European tank and intermediate-range missile deployments.[34]

In March, shortly after Paul Warnke's Senate confirmation, Gerald Ford visited New York City. Ford gave a talk at Manhattan's Union Club where he warned that the Soviet Union's "acceleration" of the arms race threatened the agreement that he and Secretary of State Henry Kissinger reached at Vladivostok. Ford's prepared remarks mentioned that Warnke's narrow margin of victory in the Senate signaled to the Soviet Union that its arms buildup had not escaped U.S. attention, but Ford stopped short of specifics. Omitted from Ford's speech, but included in his written remarks, was a warning to Moscow: "The United States will not accept a treaty that leaves [its] national security in jeopardy." Ford's remarks fell in line with Warnke critics Nunn, Percy, and Jackson, all of whom press reports indicate were concerned that President Carter's lead arms control spokesman might be too dovish to negotiate successfully with the Soviet Union.[35]

President Carter's assessment of U.S. technological superiority over the Soviet Union also figured in the debate. U.S. superiority was open for challenge

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[34] Brzezinski to Carter, Memorandum, "Enhanced Radiation Weapons," Donated Historical Materials, Zbigniew Brzezinski Collection, "Defense – Enhanced Radiation Weapons and Radiological Warfare, 2-4/78, Box 17, JCL. In this case, the intermediate-range missiles in Brzezinski's memo were the Soviet Union's SS-20s.

[35] *See, e.g.*, David Bird, "Ford, In City, Warns of Soviet Buildup," *New York Times*, March 24, 1977, A3.

in the sphere of terminal missile guidance – the accuracy of a warhead at the point-of-impact.[36] Moreover, this challenge had a direct effect on Carter's assessment of his neutron warhead options. Improvements in the terminal guidance of Soviet missiles – a consequence of détente-era technology transfers – unexpectedly complicated SALT and ERW for President Carter. Loosened restrictions on the transfer of multiple-use technologies led to direct improvements in the Soviet Union's intercontinental ballistic missile (ICBM) accuracy.[37] With the benefit of hindsight, Reagan administration official Sumner Benson described the consequences of the technology transfer for *Air University Review* in 1984. "Startling improvement in Soviet ICBM capabilities since the signing of the SALT… agreement in 1972 … made a successful preemptive strike against U.S. Minuteman ICBMs at least theoretically possible," wrote Benson.[38]

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[36] In his 1979 State of the Union Address, President Carter revisited the issue of U.S. technological superiority in broader terms, calling upon the Congress to take adequate anti-inflation measures. President Carter: "I call on Congress to take other anti-inflation action—to expand our exports to protect American jobs threatened by unfair trade, to conserve energy, to increase production and to speed development of solar power, and to reassess our Nation's technological superiority. American workers who enlist in the fight against inflation deserve not just our gratitude, but they deserve the protection of the real wage insurance proposal that I have already made to the Congress." Jimmy Carter: "The State of the Union Address Delivered Before a Joint Session of the Congress," January 23, 1979. Online by Gerhard Peters and John T. Woolley, *APP*, http://www.presidency.ucsb.edu/ws/?pid=32657 (accessed October 8, 2014).

[37] According Zbigniew Brzezinski's assistant, William Odom, President Carter did not seriously address technology transfers from the U.S. to the U.S.S.R. until after the Soviet Union's 1979 invasion of Afghanistan. Odom recalled in a joint interview with Brzezinski that "the real opportunity to carry the technology transfer policy through occurred with Afghanistan. Suddenly after the Afghanistan invasion, the President decided he really wanted to do something about controlling technology." *See*, Zbigniew Brzezinski interview with Madeline K. Albright, Leslie G. Denend, and William Odom, February 18, 1982, "the Carter Presidency Project," interview by Inis Claude, et al., *University of Virginia, Miller Center of Public Affairs* (2003). The Brzezinski-Odom interview is available online at http://web1.millercenter.org/poh/transcripts/ohp_1982_0218_brzezinski.pdf (accessed January 15, 2015).

[38] Sumner Benson, "The Impact of Technology Transfer on the Military Balance," Air University Review (November-December, 1984),

For its part, the United States began reassessing nuclear targeting practices to account for technological improvements. Later, in 1980, William E. Odom, a senior national security advisor, contemplated the utility of using nuclear forces "in support of general purpose force operations" in a memorandum to Zbigniew Brzezinski.[39] Odom, a Brzezinski deputy, was thinking about ways to enhance the limited nuclear options (LNO) available in time of war or crisis – options short of an all-out strategic exchange of nuclear weapons. The spirit of Odom's memorandum made its way into Presidential Directive- 59 (PD-59), Carter's July, 1980, nuclear targeting directive that added "flexibility in planning for and executing a nuclear war."[40]

The extent of improvements to the Soviet Union's terminal missile guidance was not known to President Ford when he negotiated the Vladivostok limits in 1974. However, once his successor became aware of these improvements in 1977, Carter met the challenge of Russia's newly-improved terminal guidance. As a direct consequence of this challenge, the Vladivostok limits no longer satisfied the United States. Coincidentally, the challenge presented by these improvements in Soviet ICBM terminal guidance dovetailed with Carter's desire to propose substantial reductions in the overall number of nuclear weapons – before the Soviet Union's invasion of Afghanistan all but

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http://www.airpower.maxwell.af.mil/airchronicles/aureview/1984/nov-dec/benson.html#benson (accessed December 27, 2013).

[39] Memorandum, "Draft PD on Nuclear Targeting," Odom to Brzezinski, March 22, 1980, NLJC-08-041, JCL.

[40] William Burr, "Jimmy Carter's Controversial Nuclear Targeting Directive PD-59 Declassified," *National Security Archive ("NSA")*, http://www2.gwu.edu/~nsarchiv/nukevault/ebb390/ (accessed April 8, 2014).

assured the implementation of PD-59. In pursuit of his objectives, President Carter authorized three separate counterproposals in an effort to re-work Ford's 1974 Vladivostok limits.[41]

In March, 1977, Secretary of State Vance travelled to Moscow and delivered to the Soviet leadership two proposed revisions to the Vladivostok limits. Vance's first proposal called for each nation to reduce its arsenal of strategic nuclear delivery vehicles to 1800-2000 from twenty-four hundred. The secretary of state's second proposal called for the U.S.S.R. and the U.S. to reduce their respective nuclear arsenals to a level sufficient for minimal deterrence. The State Department's Leslie Gelb, one of Vance's assistants, recalls that the U.S. proposals had no real effect on the limits reached at Vladivostok, a point on which Paul Warnke differs. In Warnke's estimation, the U.S. proposals resulted in a better treaty, which Carter and Brezhnev signed in June, 1979.[42] To be sure, six months later, the U.S.S.R.'s Afghan strike halted SALT ratification in the Senate.

After leaving office, Gelb observed that Carter desired "to go beyond what President Ford and Henry Kissinger had done" at Vladivostok by making "truly

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[41] Joel M. McKeon, "SALT TWO Ratification Issues," *National Security Affairs Monograph 78-2, March 1978* (Washington, DC: Government Printing Office, 1978), 2.

[42] According to Warnke, "What [the U.S.] did in response [to the U.S.S.R.'s refU.S.al to negotiate the limits agreed to by Ford and Brezhnev] was to put the Vladivostok totals in the draft treaty, but nonetheless provide for a subsequent reduction in the overall missile numbers and the subtotal for MIRV's (multiple independently-targetable re-entry vehicles). The subtotal would apply not only to MIRVed missiles but also to strategic bombers with long-range cruise missiles. So [the U.S.] managed to get an agreement with better, somewhat lower totals than the Vladivostok agreement. *See*, Paul C. Warnke Interview, Historical Society of the District of Columbia, Oral History Project, Interview by William W. Ross, January 23, 2003, *et seq*., http://dcchs.org/PaulCWarnke/paulcwarnke_complete.pdf (accessed February 13, 2013).

deep cuts in nuclear weapons."[43] As for the effectiveness of the Carter administration's efforts to change the Vladivostok limits, Gelb faults bureaucratic inertia within the Soviet Union and tensions over human rights. According to Gelb, Moscow's bureaucracy became comfortable with the Vladivostok limits, which made it difficult for any newly-proposed limits to gain bureaucratic traction. Warnke differs from Gelb on this point, citing the political cost to Brezhnev of renegotiation. In Warnke's opinion, the Soviets felt that they had "spilled too much blood" at Vladivostok not to conclude a treaty based on those limits.[44] Moreover, President Carter's humanitarian foreign policy complicated arms negotiation. Carter's human rights focus did not sit well with the Soviet Union's leadership especially as to events within the U.S.S.R. during the winter and spring of 1977. [45]

In an address before the United Nations (UN) on 17 March, President Carter pointed to tensions in the Horn of Africa, nuclear proliferation, and the consequences of the arms race between the United States and the Soviet Union before concluding that – despite these "complexities" – he was committing his administration to peace, arms reduction, a cooperative international economic system, and human rights.[46] Once the neutron warhead became public

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[43] Interview with Leslie H. Gelb, "Episode 19, Freeze," *NSA*, http://www2.gwu.edu/~nsarchiv/coldwar/interviews/episode-19/gelb1.html (accessed March 8, 2014).

[44] Warnke Interview, Historical Society of the District of Columbia, Oral History Project.

[45] Interview with Leslie H. Gelb, "Episode 19, Freeze," *NSA*.

[46] Jimmy Carter: "United Nations - Address Before the General Assembly.," March 17, 1977. Online by Gerhard Peters and John T. Woolley, *APP*, http://www.presidency.ucsb.edu/ws/?pid=7183 (accessed March 20, 2014).

knowledge, the U.S.S.R. used it as a sword by citing press accounts of the weapon's kill mechanism – people fall, buildings stand – as evidence of U.S. hypocrisy when it came to human rights.

Two days before the UN address, Carter received a memorandum from Zbigniew Brzezinski informing him that the Soviet Union felt the pressure of the administration's human rights policy, especially where dissidents of the U.S.S.R. were concerned. According to Brzezinski, "Washington's active commitment to human rights … increased Soviet fears" that an upcoming meeting of the Council for Security and Cooperation in Europe (CSCE) would turn into "a tribunal with the East in the dock."[47] The Central Intelligence Agency (CIA) added weight to Brzezinski's view. The Agency reported that the U.S.S.R. was vulnerable to an assault on its human rights record by the West. [48]

After neutron warheads became a public issue later in the spring, Moscow attempted to turn the tables on the administration by labeling the warhead as an *immoral* weapon of mass destruction, one that eliminated personnel while leaving buildings standing. President Carter, because of his deep concern with human rights and his commitment to eliminate all nuclear weapons, became an easy target for Moscow's robust anti-ERW policy whereas similar criticism of President Ronald Reagan in 1981 had less resonance. To be sure, Reagan, unlike

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[47] Memorandum, Brzezinski to the President, March 15, 1977, RAC NLC-1-1-2-79-1, JCL.

[48] Review of Soviet Internal Affairs, February to March, 1977, RAC NLC-12-4-1-13-9, JCL. A review completed by the CIA (based upon information obtained through that April) informed the president and Brzezinski that Brezhnev may have reached a political low point by February, 1977. The CIA report attributes Brezhnev's low point to domestic economic difficulties, food shortages, and negative publicity over CSCE, which made the Soviet Union "vulnerable to charges of violating its commitments to improved human contacts and freedom of movement." Ibid.

Carter, had the cover of the Afghan intervention when he first confronted ERW approval. According to Robert Strong, between 1977 and 1978 "an extremely pervasive Soviet propaganda campaign … outdid even the Western media in its portrayal of the neutron bomb as a wholly new and morally offensive addition to the world's nuclear arsenals."[49] The supposed moral offensiveness of the neutron warhead was complicated by Russia's Kabul putsch. Lest the moral ground admit but one side, the U.S.S.R.'s portrayal of the capitalist bomb's horror's lost traction as Red Army tanks rolled uninvited into Afghanistan in 1979.

Although the neutron warhead issue arose early in President Carter's term, by the time the issue surfaced in June, the administration was already enmeshed in an arms squabble over the U.S.S.R.'s intermediate range SS-20 missile. With a range of 2,700 miles, the SS-20 was capable of reaching targets in Western Europe, North Africa, and the Middle East from bases located along the edge of the Soviet Union.[50] Although, the SS-20 threatened Europe's city-centers, it did not threaten city-centers in the U.S. Moreover, these intermediate-range ballistic missiles (IRBM) were not included in SALT because they were not strategic weapons vis-à-vis the U.S. and the U.S.S.R. Even so, the SS-20 was a strategic weapon vis-à-vis Europe and the U.S.S.R., and that created a potential division between the U.S. and NATO member states.

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[49] Strong, *Working in the World*, 136.

[50] Smithsonian National Air & Space Museum online, http://airandspace.si.edu/exhibitions/milestones-of-flight/online/current-objects/1987.cfm (accessed February 20, 2015).

Nearly two decades after leaving office, President Carter reflected on the Soviet Union's SS-20 deployment as representing a new threat in the 1970s. "The previous negotiated nuclear arms agreement [Vladivostok] had not really referred directly to these kinds of … missiles," Carter noted in a 1999 interview for the *Cable News Network* documentary series *Cold War*.[51] The SS-20 was not covered under the terms of the Vladivostok agreement since it was not capable of striking the U.S. from the Soviet Union.[52] As for any rift between the U.S. and the Federal Republic of Germany (FRG), Carter noted that the U.S. proposed response to the SS-20 – the Pershing family of U.S. missiles – did not engender "much of an altercation" between him and Western European heads of state.[53] In contrast, however, Carter noted that he did have an altercation with the Federal Republic's chancellor, Helmut Schmidt, concerning deferral of the neutron warhead program in April, 1978. From Schmidt's perspective, Carter misled the FRG into thinking that the U.S. planned to move forward on neutron weapon production only to thwart expectations by surprising NATO with an eleventh-hour reversal in April 1978. With the benefit of nearly two decades of hindsight, Carter recollected that the requirement of expending large sums of money for neutron warhead production helped tip the scales in favor of deferral. In 1999, Carter recalled the difficulty he had had convincing European leaders to accept home-soil deployment of the neutron warhead.

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[51] Interview with Jimmy Carter, "Episode 18, Backyard," *NSA*, http://www2.gwu.edu/~nsarchiv/coldwar/interviews/episode-18/carter2.html (accessed June 13, 2014).

[52] *See*, Lodal, "SALT II and American Security."

[53] Jimmy Carter Interview, "Episode 18, Backyard," *NSA*.

> "Earlier, before I became president, a commitment had been made that the United States would proceed with the development of [an enhanced radiation variant of the Lance missile]; but when we got down to the point of expending large sums of money in developing [it], it became obvious to me that no leader in Europe was willing to agree to deploy these weapons on their territory."[54]

Between the U.S. and the FRG, weapons such as the SS-20 and the neutron warhead became known as "grey area systems" since they were not *strategic arms* in the context of SALT's bilateral talks. The SS-20 and the neutron warhead were not covered by Ford's 1974 Vladivostok limits. There were, for Carter, open and unresolved questions arising out of Vladivostok, and one rose to the top: deteriorating deterrence. Improved Soviet ICBMs and the SS-20 gave rise to concerns over the U.S.'s European-based deterrent capability; neutron warheads might oblige by ameliorating some of those concerns.[55] Hence the proposed enhanced radiation modifications to Lance involved a short-range weapon in contrast to the intermediate range SS-20, the neutron warhead crept into the SALT process because the U.S., in conjunction with the FRG, used the neutron warhead to pressure the Soviet Union on arms control.[56] The more the U.S. linked ERW to arms control and the Soviet Union's deployment of tanks and

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[54] "Episode 18, Backyard," *NSA*.

[55] Jimmy Carter: "Charleston, South Carolina Remarks at the 31st Annual Meeting of the Southern Legislative Conference," July 21, 1977. Online by Gerhard Peters and John T. Woolley, *APP*, http://www.presidency.ucsb.edu/ws/?pid=7852 (accessed February 20, 2015). Carter warned a group of Southern legislators in 1977 that "the Vladivostok negotiations of 1974 left some issues unresolved and subject to honest differences of interpretation." Ibid.

[56] Memorandum, Carter to Brzezinski, August 2, 1978, Zbigniew Brzezinski Collection, Box 22, JCL. In the memorandum, Carter writes: "All of U.S. [Schmidt, Callaghan, and Giscard) want to retain the pressure on the Soviets, recognizing that they are unlikely to fear ERW -- & only want the propaganda issue."

intermediate-range missiles in Central Europe, the more attractive GLCM became for President Carter in contrast to the ERW-enhanced Lance missile.[57]

In order to prevent these grey area systems (SS-20, GLCM, ERW-enhanced Lance, etc.) from mushrooming into a larger political issue between the U.S. and NATO, in the fall of 1977 the State Department requested that the White House consider an FRG request to hold an alliance meeting on the SS-20 and the neutron warhead. Despite the State Department's request, President Carter remained unconvinced of the FRG's willingness to allow home-soil deployment of an ERW-enhanced Lance, a requirement given Lance's military utility – it (Lance) was intended for use solely in Western Europe.[58] But Carter's affinity for the more versatile GLCM grew unabated.[59]

Concern over which systems would or would not be included in SALT, e.g., GCLM, SS-20, ERW-enhanced Lance, Backfire, etc., did not begin with the FRG's request in the fall of 1977. These concerns arose as soon as President Carter took office, which is evident in Carter's early direct correspondence with his Soviet counterpart, Leonid Brezhnev. In a letter to Brezhnev, Carter wrote in

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[57] Jimmy Carter, Notes, Donated Historical Materials, Zbigniew Brzezinski Collection, "Defense – Enhanced Radiation Warhead: 3/78-8/78, Box 22, JCL.

[58] Memorandum, November 11, 1977, RAC NLC-1-4-4-18-3, JCL.

[59] A declassified "fact sheet" states that the GLCM was a "highly mobile, reliable, precision-guided, ground-based system for delivering tactical thermonuclear warheads" at ranges to 1,500 miles. *See, Hill Air Force Base*, "U.S. Air Force Fact Sheet, BGM-109G "GRYPHON" GROUND-LAUNCHED CRUISE MISSILE," http://www.hill.af.mil/library/factsheets/factsheet_print.asp?fsID=5739 (accessed December 29, 2014). A similar declassified "fact sheet" states that the Lance missile was "capable of delivering nuclear warheads out to a range of 75 miles and conventional warheads to a range of about 45 miles." *See, U.S. Aviation & Missile Research Development & Engineering Center*, "Lance Missile (MGM-52)," http://www.amrdec.army.mil/amrdec/50th/innovation-mgm-52.html (accessed December 28, 2014).

March that questions regarding the Backfire bomber and SLCM should be postponed in the interest of obtaining the quickest agreement between the U.S. and the U.S.S.R. on strategic arms limitations. [60]

Brezhnev opposed postponing any issues regarding the GCLM or the Backfire bomber. From the Soviet point of view, the Backfire bomber was an intermediate-range airplane incapable of achieving intercontinental distances. Because of its limited range, Brezhnev thought that the Backfire bomber should be exempt from the SALT limits, which was the opposite of President Carter's position, but Brezhnev was firm on GLCM inclusion.

* * *

The SS-20 and the neutron warhead had broad implications for European security.[61] The SS-20 and the ERW-enhanced Lance short-range missile became foils in the argument over modernization of NATO's theater-level nuclear forces. For the first time since the end of World War II Europe's security was potentially decoupled from that of the U.S. In fact, neutron warhead critics feared that ERW deployment by NATO lowered the threshold for nuclear war in Europe while –

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[60] Letter, Carter to Brezhnev, March 5, 1977, *NSA*, http://www2.gwu.edu/~nsarchiv/carterbrezhnev/docs_salt_ii/V-23%20Letter%20from%20President%20Carter%20to%20Premier%20Brezhnev,%20March%205,%201977.pdf (accessed March 21, 2014).

[61] One recent view espoused by Richard Weitz, writing for an Army War College publication, suggests that the neutron warhead – SS-20 flap "To lubricate the prospects of modernizing their intermediate nuclear forces (INF) in response to a comparable Soviet INF modernization effort." *See*, Richard Weitz, "The Historical Context," 7, in *Tactical Nuclear Weapons and NATO*, Tom Nichols, Douglas Stuart, and Jeffrey D. McCausland, editors, U.S. Army War College, April, 2012, http://www.strategicstudiesinstitute.army.mil/pdffiles/PUB1103.pdf (accessed October 8, 2014).

theoretically – leaving the U.S. homeland unaffected since neutron warheads were slated for use exclusively by NATO as battlefield nuclear weapons in Western Europe. As the military disadvantages became clearer to President Carter in Mid-March, 1978, the attractiveness of another system – the GLCM – became more apparent.[62]

Production of neutron warheads necessitated the integration of enhanced radiation weapons into U.S. military strategy, which was evolving (consistent with NATO's Flexible Response) toward the limited nuclear options mindset of Presidential Directive -59. Prior to the implementation of PD-59, documents related to Presidential Directive -18 show that the Carter administration accepted the premise that the Soviet Union had achieved "military power matching that of the United States," but that the U.S. enjoyed technological superiority. However, dwindling U.S. technological superiority in the area of terminal missile guidance upon ICBM re-entry set off alarms. In the event that strategic deterrence failed, U.S. military planners anticipated employing strategic nuclear arms against the U.S.S.R. in conjunction with "general purpose and theater nuclear forces (TNF)." The neutron warhead represented a technological advance over older-generation TNF that produced higher yields and, consequently, more residual radiation or "fallout."[63]

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[62] Jimmy Carter, Notes, Donated Historical Materials, Zbigniew Brzezinski Collection, "Defense – Enhanced Radiation Warhead: 3/78-8/78, Box 22, JCL. *See, also*, Memorandum, Zbigniew Brzezinski to President Carter, "Enhanced Radiation Weapons," March 24, 1978, Zbigniew Brzezinski Materials, Enhanced Radiation Weapons and Radiological Warfare, Box 17, JCL

[63] Memorandum, Slocombe to Deputy Assistant Secretary for European and NATO Affairs, "U.S. National Strategy," August 30, 1977, *N SA,* http://www2.gwu.edu/~nsarchiv/nukevault/ebb390/docs/8-30-77%20PD%2018.pdf (accessed April 11, 2014).

During the latter half of 1977, NATO began studying allocation and distribution of TNF in conjunction with the alliance's long-term procurement and deployment plans. The enhanced radiation variant for the Lance missile became leverage for the U.S. in its talks with the U.S.S.R. over the SS-20. Secretary of Defense Harold Brown and ACDA head Paul Warnke were in agreement by mid-November that the U.S. could forego ERW in exchange for an agreement by the Soviet Union not to deploy the SS-20.[64] The president seemed to be in agreement. A broad swath of administration officials lent their voices to ERW approval in the Special Coordination Committee (SCC), from Cyrus. Vance, George Vest, David Gompert, Harold Brown, Charles Duncan, David McGiffert, Stansfield Turner, Paul Warnke, John Newhouse, Zbigniew Brzezinski, and David Aaron, to Reginald Bartholomew, James Schlesinger, Alfred Starbird, and others. Carter adopted this broad consensus.-view when he commented on the SCC's written recommendation in his own hand. Notes from the SCC meeting declassified on June 16, 2008 contain the president's marginalia to the effect that he was "OK" with ERW production, especially tied to SS-20 withdrawal.[65]

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[64] Memorandum of Conversation, "Special Coordinating Committee (SCC) Meeting on Enhanced Radiation Warheads," November 16, 1977, RAC NLC-31-139-6-1-7, JCL; *see, also*, Special Coordinating Committee Meeting, November 16, 1977, NLC-15-124-7-7-4, JCL.

[65] Ibid.

Ensign James Earl Carter, Jr., Nuclear Engineer

(F 3) *"I considered [nuclear propulsion] the finest Navy billet available to an officer of my rank – the development of the first atomic submarines." Carter's rank insignia indicates that he was an Ensign at the time the photograph was taken.*[66]

No American president beside Carter, a Navy-trained nuclear engineer, was better-positioned to deal intelligently with the complex nuclear issues surrounding neutron weapon production and deployment. As president, Carter preferred a "flat" organizational style, which allowed him to interact with his advisors in the manner of a first among equals. Carter's preference suited his desire and ability to master information down to the minutest detail, which his Navy training complemented. Carter incorporated these details into his deliberative process, which led to a ten-month long gap between the time neutron

[66] Jimmy Carter, *Why Not the Best?* (Nashville, TN: Broadman Press, 1975), 54-55.

weapons first became an issue for the administration in June, 1977, and deferral in April, 1978. Although Carter collected and weighed the opinion of his top advisers, including Brzezinski, Vance, and Brown, all of whom agreed that Carter should approve production of the neutron bomb, he followed their lead by electing to defer rather than cancel neutron warhead production.

In order to gain entry in to the nuclear Navy and the submarine service, Carter had to pass muster before a notorious taskmaster – Admiral Hyman G. Rickover.[67] The future president reports telling Rickover that he placed 59th out of his Annapolis class of 820, which put Carter near the seventh percentile.[68] Carter's class standing was evidence of his intellectual capacity, but the soon-to-be submariner graduated from Annapolis without forming close attachments with his classmates and future shipmates. As chief executive, Carter appointed his classmate Stansfield Turner to head the CIA, which at first seems to show that Carter had formed close ties with a few Annapolis classmates. However, the Turner appointment, upon closer inspection, actually shows the opposite. In remarks delivered on the occasion of Turner's nomination, Carter joked: "A long time ago at the Naval Academy, I shared the responsibility of being a midshipman with Stan Turner. I didn't know him personally; rather, I knew him but he didn't

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[67] "Rickover required phenomenal things from his officers," wrote Joel Snow, a former instructor at Knolls Atomic Power Laboratory where Lieutenant Carter studied nuclear physics. For Carter biographer Peter G. Bourne and Snow, surviving Rickover's demanding program qualified Carter as a nuclear engineer. Peter G. Bourne, *Jimmy Carter: A Comprehensive Biography from Plains to Postpresidency* (New York: Scribner, 1997). *See, also*, Nicholas Wade, "Carter as Scientist or Engineer: What Are His Credentials?" Vertical File, Carter, Jimmy, "Education Records," 20, JCL.

[68] Carter, *Why Not the Best?* 59.

know me."[69] Carter biographer Kenneth Morris observes that Carter had trouble fitting in as a midshipman. In *American Moralist* Morris writes that at Annapolis Carter was as an outsider without any close friends.[70] Historian Betty Glad likewise identifies Carter as an "outsider."[71] However, Glad reports that Carter received respectable leadership evaluations at Annapolis, evidence that Carter's peers and instructors held him in high regard.[72]

Carter biographers Mazlish and Diamond corroborate Morris and Glad by describing Carter as a solitary figure at Annapolis.[73] Mazlish and Diamond report that one of Carter's classmates thought that he was a loner, despite being very well liked in his company. Morris corroborates Mazlish and Diamond. "[Carter] did not make close intimate friendships," writes Morris, who records an unidentified classmate's recollection that Carter was snobbish. The author of *American Moralist* concludes that Carter was "liked and respected" but "genuinely close to no one," including Stansfield Turner.[74] Upon graduation,

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[69] Jimmy Carter, "Director of Central Intelligence Remarks at the Swearing In of Admiral Stansfield Turner.," March 9, 1977. Online by Gerhard Peters and John T. Woolley, *APP*, http://www.presidency.ucsb.edu/ws/?pid=7141 (accessed March 24, 2014).

[70] Kenneth E. Morris, *Jimmy Carter, American Moralist* (Athens, Georgia: The University of Georgia Press, 1996), 101. Morris does claim that Carter may have been as close to Turner as he was to anyone else at the academy, but that is not a ringing endorsement of Carter's closeness to Turner. Morris also observes that, at Annapolis, "[Carter] named no one, and no one named him, a close personal friend." Ibid.

[71] Betty Glad, *Outsider in the White House: Jimmy Carter, His Advisors, and the Making of American Foreign Policy*, (Ithaca, NY: Cornell University Press, 2009), 31.

[72] According to Glad, Midshipman Carter received a leadership score of 99 out of 822 at Annapolis, placing him at the border of the 12th percentile. *See*, Ibid, 31.

[73] Bruce Mazlish and Edwin Diamond, *Jimmy Carter, A Character Portrait* (New York: Simon and Schuster, 1979), 100 -101.

[74] Morris, *American Moralist*, 107.

Carter's first billet found him serving unhappily aboard two aging battleships, the *U.S.S Wyoming* and the *U.S.S Mississippi*.[75]

Carter's solitary nature at the Naval Academy provides insight into how, as president, Carter managed his ERW policymaking. Carter went to great lengths to allow for collaboration on neutron warhead production and deployment as soon as the *Washington Post's* frontpage story broke in June, 1977. Carter's ERW decision-making apparatus resembled a bicycle wheel with Carter as the hub linking top advisors Mondale, Brzezinski, Vance, Brown, and Warnke as the spokes. For all intents and purposes, President Carter, as the hub of the wheel, became the only point where all ERW-related information converged, which demanded that Carter convey his intentions to his top advisers with precision.

After leaving office, Carter related to interviewer Richard Neustadt in 1982 that his senior advisers had failed to guard his flanks on NATO and the neutron warhead production-deployment question; however, he quickly accepted responsibility, saying: "I think that, to be perfectly honest to my associates [Mondale, Vance, and Brown], I hadn't expressed my concern or my change in policy well enough or clear enough to them."[76] Carter reflected on his effort to reverse what he saw as the military's policy of deciding on new weapons and strategies for NATO, the intended beneficiary of the neutron warhead. The president recalled thinking that he would use ERW to reverse the habitual NATO

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[75] "Jimmy Carter's Naval Service," JCL, http://www.jimmycarterlibrary.gov/documents/jec/jcnavy.phtml (accessed December 20, 2013).

[76] Jimmy Carter Interview, Miller Center, University of Virginia, COHP, November 29, 1982, http://web1.millercenter.org/poh/transcripts/ohp_1982_1129_carter.pdf (accessed March 24, 2014).

pattern of having the U.S. take the onus for the production and deployment of unpopular weapons on European soil.[77] Carter was disappointed with the military's eagerness for ERW evident in his observation that "the primary commitment … on the neutron weapon [was] by the military commanders." These commanders Carter described as "too eager to reach agreement among themselves."[78]

President Carter's reference to overeager military commanders is reminiscent of his disillusionment with the postwar Navy. In his campaign biography, Carter wrote that he "became most disillusioned with the Navy and the military in general." In fact, had Carter not been obliged to serve in the Navy for five years following his graduation from the Naval Academy, he probably would have resigned.[79] Carter's disillusionment with the military *in general* reappears years later in his disappointment at the military's eagerness to move ahead with neutron warhead production in 1977.[80] However, in his 1982 memoirs, *Keeping Faith,* Carter also relates that his advisers failed to heed his neutron warhead warnings.

According to Carter, he made his reservations over neutron warhead production and deployment clear to his advisers, Mondale, Vance, and Brown. In

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[77] Onus in this context implies the broader meaning of moral encumbrance.

[78] Jimmy Carter Interview.

[79] Carter, "*Why Not the Best?*" 44. This citation refers to the 1996 reprint with the permission of Broadman Press.

[80] Jimmy Carter Interview, Miller Center, University of Virginia, COHP, November 29, 1982, http://web1.millercenter.org/poh/transcripts/ohp_1982_1129_carter.pdf (accessed March 24, 2014).

Keeping Faith, Carter refers to his White House diary, where he wrote on March 20, 1978, about a combative meeting with his advisers. The president recalled that he became "aggravated" by their disregard of "cautionary words" over neutron warhead production and deployment. Carter continued: "I became more and more convinced that we ought not to deploy the neutron bomb. We've not gotten any firm commitments from a European nation to permit its deployment on their soil, which is the only place it would be deployed." [81]

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Ensign Carter had mixed impressions of the Cold War-era Navy. According to Carter, the *Mississippi* (his second assignment) was no better than "the decrepit *Wyoming*," another aged ship of the line. Carter's spirits rose, however, when he entered the submarine service, which he found "exciting and challenging."[82] Carter gladly left behind *Mississippi* and *Wyoming* (Carter called dreadnaughts "seagoing experiment stations.") to serve aboard *U.S.S Pomfret* and later *U.S.S K-1*, two Electric Boat Company submarines.

In his campaign biography, Carter recalled that aboard *K-1* he became qualified to command submarines, though he never achieved sufficient rank to "have a ship of [his] own." Carter also recalled hearing aboard *K-1* of General Electric's (GE) plans to build a power plant for submarines that used liquid sodium as "the heat transfer agent" instead of water. After learning of GE's

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[81] Jimmy Carter, *Keeping Faith: Memoirs of a President* (Fayetteville, AR : University of Arkansas Press, 1995), 232.

[82] Carter, *Why not the Best*? 48-49.

plans, Carter "applied for assignment to what [he] considered the finest Navy billet available to any officer of [his] rank – the development of the first atomic submarines." After being screened and approved by Hyman Rickover, the Navy assigned Carter to the pre-commissioning crew of *U.S.S Sea Wolf*, the nation's second nuclear submarine.[83] The most pertinent *academic* training Carter received that later helped him grapple with neutron warhead production occurred during the *Sea Wolf* period. Carter took graduate-level courses in reactor technology and nuclear physics at Union College in Albany, New York. [84]

From 1952 to 1953, Carter put his nuclear training to good use with the Atomic Energy Commission (AEC) where he served in the Division of Reactor Development. Carter had the opportunity to test his mettle and nuclear training in a real-world operation at Canada's Chalk River in 1952. At Chalk River, operator error caused the Canadian riverside nuclear power reactor to malfunction. The Chalk River incident foreshadowed events at Pennsylvania's Three Mile Island in 1979. In the case of both reactors, a radiation breach of the containment facility allowed environmental contamination. According to the Nuclear Regulatory Commission, TMI's containment building held most but not all of the radiation released in the accident.[85] The Navy dispatched a team of trained personnel that

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[83] Ibid, 48 - 55. Lieutenant Carter's responsibility in the submarine service extended to "teaching the men mathematics, physics, and reactor technology." According to Carter, "we took the enlisted men from simple fractions through differential equations within a year."

[84] Carter, *Why not the Best?* 55. *See, also*, Wade, Vertical File, Carter, Jimmy, "Education Records," 20, JCL.

[85] U.S. Nuclear Regulatory Commission, "Backgrounder on the Three Mile Island Incident," http://www.nrc.gov/reading-rm/doc-collections/fact-sheets/3mile-isle.html (accessed February 20, 2015). Assessing the reactor core meltdown, the NRC observed "the core melted during the early stages of the accident. Although TMI-2 suffered a severe core meltdown, the most dangerous kind

included Lieutenant Carter to help the Canadians get the malfunctioning Chalk River reactor under control.

Carter described his role in the Chalk River incident in detail in *Why Not the Best?* "… [A] team of three of U.S. practiced several times on [a nearby] mock-up to be sure we had the correct tools and knew exactly how to use them. Finally, outfitted with white protective clothes, we descended into the reactor and worked frantically for our allotted time." Thereafter the men joked amongst themselves "about death versus sterility."[86] Carter's real world experience at Chalk River influenced his approach to civilian and military nuclear issues. As Zbigniew Brzezinski recalls, Carter relished the opportunity to explain the mystery of nuclear science to the uninitiated.[87] When Carter warned the American public of the "serious risk [that] accompanies worldwide use of nuclear power" on April 7, 1977, he spoke from personal knowledge. Lieutenant Carter's firsthand knowledge was a comfort to President Carter during the neutron warhead affair.[88]

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of nuclear power accident, consequences outside the plant were minimal. Unlike the Chernobyl and Fukushima accidents, TMI-2's containment building remained intact and held almost all of the accident's radioactive material."

[86] Carter, *Why not the Best?* 56.

[87] Zbigniew Brzezinski, *Power and Principle* (New York: Farrar, StraU.S.s, and Giroux, 1983), 22.

[88] Jimmy Carter: "Nuclear Power Policy Statement on Decisions Reached Following a Review," April 7, 1977. Online by Gerhard Peters and John T. Woolley, *APP*, http://www.presidency.ucsb.edu/ws/?pid=7316 (accessed February 22, 2014).

The Tide of Public Opinion

(F 4) *Four peace activists of the group Women Strike for Peace show their opposition to limited nuclear war, escalation, the arms race, first-strike ambiguity in front of the White House during President Gerald Ford's term.*[89]

While ERDA's neutron warhead appropriation continued smoothly moving through Congress in the spring of 1977, nuclear power divided the American public. There loomed spreading opposition to nuclear power generation in places like Seabrook, New Hampshire and Shoreham on New York's Long Island Sound, but according to one CBS News Poll, support for nuclear power generation peaked in 1977 at 69 percent. However, public support declined sharply after the Three Mile Island (TMI) incident in 1979.[90] Indeed,

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[89] Photograph by Dorothy Marder courtesy of Swarthmore College, Swarthmore College Peace Collection, http://www.swarthmore.edu/library/peace/ (accessed December 31, 2014).

[90] CBS News, CBS News Poll Database, CBS News/New York Times Poll, Jul, 1977, http://www.cbsnews.com/news/cbs-news-poll-database/ (accessed December 31, 2014). The question presented to the public in the poll was "Would you approve or disapprove...of building more nuclear power plants for generating electricity?" Of 1,463 telephone interviews, 69 percent

TMI has had a lasting effect on public support for nuclear power generation in the United States. In 2011, writing for the *Bulletin of the Atomic Scientists* about nuclear power and public opinion, Princeton's M.V. Ramana observed that "there has been practically no nuclear construction in the United States since Three Mile Island."[91] The TMI incident softened the public's support for nuclear power and strengthened the anti-nuclear movement.

The rising expectations of environmental activists contributed to the antinuclear movement's momentum. In Seabrook, New Hampshire, the Clamshell Alliance began mounting what would become an organized, sustained push to prevent construction of a seaside nuclear power plant. Governor Meldrim Thompson, Jr., called Alliance members terrorists in a gross overreaction to the group's peaceful activism. Governor Meldrim mobilized state and local law enforcement to prevent the nonviolent alliance from occupying the Seabrook site. The activists compared their struggle to the civil rights and antiwar movements, other grassroots campaigns spurred on by the spirit of rising expectations prevalent in postwar America into the 1970s. *New York Times* writer John Kifner called Clamshell's action a "symbol of the national debate over nuclear power." Supportive local residents affectionately called alliance members "Clams." The Clams met stiff opposition from local business and construction interests. These nuclear power advocates warned that the Clams were out for violence. Harvey

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of respondents approved, 21 percent disapproved, and 10 percent were either not sure or did not answer.

[91] M.V. Ramana, "Nuclear Power and the Public," *Bulletin of the Atomic Scientists* 67, no. 4 (July/August 2011), 44.

Wasserman, an alliance spokesperson, believed that opponents were intentionally creating a violent atmosphere around a peaceful protest.[92]

The Clamshell Alliance marshaled nearly 2,000 protesters at the Seabrook coastal site on 30 April. Some alliance members were brought by lobster boat while Governor Thompson, in contrast, flew in by helicopter to confer with law enforcement officials and regulators. A pending federal court action had put the brakes on the Seabrook project, prolonging a four-year-long stretch of regulatory uncertainty. The Clams were encouraged by the Environmental Protection Agency's objection to Seabrook's cooling-water disposal. Water taken from the ocean for reactor cooling was slated to be returned to the sea 38 degrees hotter, which was risky for marine life, alleged the EPA. All sides looked to the Carter administration for guidance. The activists wore buttons and carried signs. One sign, brimming with common sense, read "better active today than radioactive tomorrow."[93]

As night fell on May 2, 1977, police arrested more than a thousand activists. Earlier that day, before the arrests began, bagpipers played "We Shall Overcome" as protesters chanted, "No Nukes!" Once taken into custody, the activists were processed fifteen miles away in temporary courtrooms set up at the 197th Field Artillery Armory in Portsmouth, an impromptu temporary

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[92] John Kifner, "'Occupation' of Atomic Plant Site Scheduled Today," *New York Times*, April 30, 1977, P. 8. *See, also*, Harvey Wasserman, "High Tension in the Energy Debate: The Clamshell Reaction," May 15, 2009, *The Nation*, http://www.thenation.com/article/high-tension-energy-debate-clamshell-reaction# (accessed December 31, 2014). Wasserman's article originally appeared in *The Nation* on July 18, 1977.

[93] John Kifner, "2,000 Occupy Nuclear Plant Site in New Hampshire, Vow to Stay," *New York Times*, May 1, 1977, p.26.

courtroom.[94] As historian Henry Bedford observed in *Seabrook Station, Citizen Politics and Nuclear Power*, a suspicious national audience, haunted by memories of false claims of an ever nearing never attained "painless victory in Vietnam" and the Watergate catastrophe turned its energy against nuclear power generation, especially after TMI.[95] The public's attentiveness didn't bode well for the nuclear power generation industry, or ERW.

The *New York Times* and *CBS News* surveyed 1,447 Americans between 19 and 25 July, 1977 – the neutron warhead summer – and found that only one-third of the respondents knew enough about the neutron warhead to form an opinion. Of the respondents that did form an opinion, half were for neutron warhead production, and half were against.[96] This is evidence of a significantly divided public. For instance, in February, 2003, Secretary of State Colin Powell gave an address to the United Nations in support of using military force to dislodge weapons of mass destruction from Saddam Hussein's Iraq. Powell's presentation was widely praised and, afterward, Powell received credit for halting rising doubts over use of force in Iraq. Several public opinion polls show that

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[94] John Kifner, "Hundreds Arrested in New Hampshire Atom Protest," *New York Times*, May 2, 1977, p. 1.

[95] Henry F. Bedford, *Seabrook Station: Citizen Politics and Nuclear Power* (Amherst, MA: University of Massachusetts Press, 1990), 12-17. *See, also*, Daniel Pope, *Nuclear Implosions: The Rise and Fall of the Washington Public Power Supply System* (New York, NY: Cambridge University Press, 2008), 6. "The [WPPSS] collapse is the story of fatally flawed demand projections, incessant problems of construction management, and thorny political conflicts on the uneasy borderline between public and private sectors." See, also, Vanderbilt Television News Archive, CBS Evening News for Tuesday, May 10, 1977, Don Kladstrup and Roger Mudd reporting, record no. 251915, http://tvnews.vanderbilt.edu/program.pl?ID=251915 (accessed December 31, 2014). "What civil rights and Vietnam were to `60's, nuclear energy could be to `70's and `80's."

[96] "Public Likes Carter, Survey Finds, More for His Style Than Programs," *New York Times*, July 29, 1977, p.1.

from 50 to 60 percent of the public approved of Powell's his address.[97] Thus a 50 percent poll segment represents a substantial finding. Antinuclear groups like the Clamshell alliance were influencing the debate over nuclear power generation, and that was having an effect on public opinion and administration policy when it came to the neutron warhead.[98]

Shortly after President Carter made his decision to defer neutron warhead production on April 7, 1978, a *New York Times-CBS News* survey recorded a drop in his foreign policy approval rating. The survey found that the public's approval of the president's handling of foreign policy had slipped from 48 percent in January, 1978, to 39 percent in April. Overall the *Times-CBS* survey showed that Carter's job approval rating had fallen to 46 percent in April from 51 percent in January.[99] A majority of Americans surveyed by Harris (nearly three-quarters by August, 1981) were in agreement that neutron warheads might lower the nuclear threshold.[100]

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[97] Pew Research Center for the People & the Press, "Powell Reversed the Trend but not the Tenor of Public Opinion," February 14, 2003, http://www.people-press.org/2003/02/14/powell-reversed-the-trend-but-not-the-tenor-of-public-opinion/ (accessed December 31, 2014).

[98] Euro-centered public opinion mattered as much or more than domestic public opinion in the neutron bomb matter. *See, e.g.*, Memorandum, Vance to Carter, July 25, 1977, "European Attitudes toward the Neutron Bomb," National Security Advisor, Brzezinski Materials, ERW and RW, 6-8/77, Box 16, JCL. See, also, Richard Sobel, *The Impact of Public Opinion on U.S. Foreign Policy since Vietnam: Constraining the Colossus.* (New York, NY: Oxford University Press, 2001).

[99] "Approval of Carter Drops to 46% in Poll," *New York Times*, April 14, 1978, p.A10.

[100] Louis Harris, "Close Vote on Neutron Bomb," *Harris Survey*, August 22, 1977 (Chicago, Illinois: *Chicago Tribune*, 1977) ; Louis Harris, "Public Now Opposes Building of Neutron Bomb," *Harris Survey*, May 25, 1978 (Chicago, Illinois: *Chicago Tribune*, 1978); Louis Harris, "Varying Degrees of Support for Foreign Policy Proposals," April 27, 1981 (Chicago, Illinois: *Chicago Tribune*, 1981); and Louis Harris, "Americans Now Favor U.S. Production of the Neutron Bomb," August 31, 1981 (Chicago, Illinois: *Chicago Tribune*, 1981).

The data accumulated by Harris shows that support and opposition to neutron warhead production divided along gender lines. Men consistently showed stronger support for neutron warhead production than women who showed stronger support for non-production.[101] The results of the April, 1978, Harris survey show that 54 percent of women opposed neutron warhead production, which corroborated a similar finding by pollster George Gallup in June. In addition, results of the June, 1978, Gallup survey of "informed Americans" – *those who have heard or read about the neutron bomb and who are able to describe [its] military uses* – recorded an almost even split on the question of neutron warhead deployment by the United States. Of the Gallup respondents, 46 percent opposed U.S. deployment of the neutron warhead and 45 percent favored deployment.[102] Public opinion on production and deployment of the controversial neutron warhead was split down the middle.

The Louis Harris surveys completed in July, 1977 and April, 1978, show a shift in public opinion from a narrow margin in favor of neutron bomb production to a marginally wider margin opposed to production. The first – *favorable* – Harris survey collected data from a cross section of the public between 23 and 30 July, 1977. The poll showed that a plurality of Americans favored the neutron bomb by a margin of 44 to 37 percent. Those figures were reversed by spring, 1978, when Harris collected data from a similar cross section of Americans. The second survey, completed one to two weeks after President Carter decided to

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[101] *See*, "Close Vote on Neutron Bomb," "Public Now Opposes Building of Neutron Bomb," and "Americans Now Favor U.S. Production of the Neutron Bomb."

[102] George Gallup, "Informed Americans Sharply Divided on Neutron Bomb," *Lakeland Ledger*, June 8, 1978, p.11.

defer neutron bomb production in 1978, finds that a majority of respondents opposed neutron bomb production by a margin of 47-35 percent; a near reversal.[103] Shifting opinion presents evidence of a sharply divided public when it came to neutron warhead production and deployment.

A closer review of some of the questions presented to the respondents by Harris suggests two things troubled Americans most about the neutron warhead: the lowering of the nuclear threshold and escalation. By the time President Ronald Reagan approved ERW production in 1981, Harris found that Americans favored neutron warhead production by a measure of 54 percent to 44 percent, which may be attributed to the public's response to the U.S.S.R.'s invasion of Afghanistan in 1979.

When asked by Harris whether the neutron bomb would be too easy to use, a plurality of Americans surveyed in July (47 percent) affirmed the following statement: *Because it will be so easy to use, the neutron bomb will more likely be used by field commanders as a substitute for conventional warfare, and that is wrong.* Harris carried the same statement forward to his April, 1978 survey. By April, a narrow majority of respondents (52 percent) replied affirmatively. One may, with reason, conflate "easy to use" as a vernacular substitute for escalation, a term of art.[104] When Harris asked respondents a third and final time in 1981, a greater number of respondents (57 percent) affirmed their fear of escalation. Thus in 1981, a majority of Americans surveyed by Harris favored ERW 54 percent to

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[103] *See*, Harris, "Close vote on Neutron Bomb," *et seq*.

[104] Ibid.

42 percent despite the risk of use. Based on these results, one may say that the respondents weighed escalation less heavily than the overall benefit of having ERW in the U.S. arsenal.[105]

In addition, Harris' respondents were *overwhelmingly* concerned that any use of neutron warheads would lead eventually to total destruction. When asked by Harris whether the neutron bomb would lead to total destruction, a sizable majority of Americans surveyed in July (66 percent) affirmed the following statement: *Even though the neutron bomb is only a limited nuclear weapon, its use can lead to use of other nuclear weapons and total destruction*. Harris carried the same statement forward to his April, 1978 survey. By April, a robust majority of respondents (74 percent) replied affirmatively. Harris asked respondents a third and final time, in 1981, and the number of respondents affirming climbed even higher – to 77 percent. Regardless of their overall support of the neutron warhead, the cross section of Americans Harris surveyed between 1977 and 1981 consistently believed that ERW were too easy to use and that use would lead to strategic nuclear weapons and total destruction – doomsday.[106]

[105] Harris, "Close vote on Neutron Bomb."

[106] Ibid.

The Public and the Cognoscenti Worry About the Pros and Cons

Concern over the pros and cons of neutron warhead production and deployment was widespread from the lay pubic to deeply embedded insiders like Hamilton Jordan, whose office presented the president with a detailed count White House letter-writers, for and against ERW. By Hugh Carter's count (Hugh Carter was a White House special assistant for administration under Jordan.) letters to the president tabulated by the Staff Secretary's Office were 95 percent to 5 percent opposed to neutron bomb production. In addition, these letters often pointed to the inaugural address as B-1 Bomber cancelation in support of ERW non-production.[107]

In addition, Opponents of enhanced radiation weaponry such as Representative Theodore Weiss, a liberal Democrat from New York City, feared that an exchange of battlefield nuclear weapons would lead to an exchange of strategic nuclear weapons between the two superpowers, with disastrous results for the rest of humanity. On the other hand, proponents of battlefield nuclear weapons with enhanced radiation features such as General Alexander M. Haig, Jr., embraced these weapons as an effective offset to the U.S.S.R.'s numerical

[107] "Major Issues in Current Presidential Adult Mail, 07/15/1977," Office of Staff Secretary; Series: Presidential Files; Folder: 7/20/77 [3]; Container 3. Two weeks after deferral, in April, 1978, the numbers trended favorably for the president, though less so than in July, 1977. Letters to the president tabulated by the Staff Secretary's Office in April, 1078, were 62 percent to 38 percent opposed to neutron bomb production – strong but not 95 percent. "Major Issues in Current Presidential Adult Mail, 04/28/1978," Office of Staff Secretary; Series: Presidential Files; Folder: 4/28/78 [1]; Container 73.

advantage in armor and personnel.[108] Moreover, Haig and other ERW proponents thought that the neutron warhead's limited yield and reduced blast were less disruptive to command, control, and communication,[109] which are essential elements of successful battle management.

To neutron warhead detractors like Ted Weiss, ERW were gateway weapons that lowered the nuclear threshold – the point at which warfare pitched from the use of conventional arms to nuclear arms, referred to elsewhere in this study as "crossover." As noted, Weiss also feared that neutron warhead use would trigger the use of strategic arms. On the other side of the debate, neutron warhead supporters like Haig countered that ERW use could be managed to avoid escalation. To be sure, for Haig (then the Supreme Allied Commander in Europe) ERW fit nicely within NATO's Flexible Response doctrine, a continuum allowing the escalation of options available to member-states – from conventional to nuclear arms. Haig believed that ERW were needed to defend against a Warsaw Pact invasion of Western Europe, if such an invasion were to happen.[110]

In Haig's estimation, nuclear arms could be (at least in theory) managed by high-ranking commanders at a tactical level. The use of nuclear weapons on the battlefield did not, in Haig's view, necessitate a strategic exchange. At the

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[108] Memorandum, Vance to Carter, July 25, 1977, "European Attitudes toward the Neutron Bomb," National Security Advisor, ERW and RW, 6-8/77, Box 16, JCL

[109] C^3 is the military designation for command, control, and communications.

[110] Vance to Carter, July 25, 1977, "European Attitudes toward the Neutron Bomb." *See, also*, Jimmy Carter's 1982 Miller Center interview, as to disagreement with Haig over NATO and nuclear weapons. "I should have fired Haig," Carter told Richard Neustadt. "He [Haig] would denigrate what I was doing." Jimmy Carter Interview, Miller Center, University of Virginia, Jimmy Carter Presidential Oral History Project (COHP), November 29, 1982, http://web1.millercenter.org/poh/transcripts/ohp_1982_1129_carter.pdf (accessed March 24, 2014).

time, the U.S. Army's concept for the battlefield employment of tactical nuclear weapons focused primarily on enhanced deterrence, which embraced fighting, surviving, and winning in nuclear combat. Enhanced deterrence pointed to a more aggressive warfighting position on the Army's part, which signaled a willingness to use enhanced radiation warheads in support of conventional combat operations, provided these operations were consistent with NATO's Flexible Response doctrine.[111]

Fear of escalation and the risk of limited nuclear war emerged as two of the main inflection points in the debate over neutron warhead production in 1977 and 1978. From the outset, opponents of the neutron warhead consistently rallied support for their position by pointing out that an enhanced radiation warhead's limited yield, moderated blast, and reduced fallout made it *more* rather than *less* likely to lower the nuclear threshold and lead to a strategic exchange. However, by lowering the nuclear threshold, neutron warheads contributed to enhanced deterrence – the presence of ERW added more uncertainty into the mix, such that Warsaw Pact commanders were confronted with a "threat" that upended the all-or-nothing risk analysis of Mutual Assured Destruction.

Enhanced deterrence sprang out of the Schlesinger Doctrine, which called for U.S. counterforce[112] assets to be directed against Soviet military targets such as command, control, and communication centers, and ICBM missile silos and

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[111] John P. Rose, *The Evolution of U.S. Army Nuclear Doctrine, 1945-1980 (*Boulder, CO: Westview Press, 1980), 198.

[112] Counterforce assets are military assets earmarked to engage on opponent's military forces, not population centers.

armored columns. However, the doctrine also called for restraint, hence the desired military advantage of the enhanced radiation variant of the lance short-range missile. With selective counterforce targeting – missiles against tank columns *not* cities – the U.S. could yoke deterrence and restraint or, as Army theorist John Rose postulated that the U.S. could avail itself of extended deterrence. Extended deterrence was the concept of fighting, surviving, and winning a nuclear war with limited nuclear options short of a massive first strike or a massive retaliatory strike.[113] As might be imagined, Schlesinger's doctrine was not well received in the Soviet Union.

Thirty years after the doctrine's promulgation, the Central Intelligence Agency declassified its assessment of the Soviet Union's reaction to Schlesinger's extended deterrence. According to the CIA, Moscow's reaction was hostile. Soviet military planners feared that the U.S. was seeking "'acceptable' modes of waging nuclear" war with new counterforce weapons – the neutron warhead – that weakened détente. Nuclear planning flexibility on the U.S.'s part – the essence of LNO – irked Moscow elites who saw flexibility as a threat to U.S.-Soviet political relations broadly and arms control narrowly. But the Soviet Union's theater-level nuclear options were developing along similar lines.[114] As author Jonathon S. Lockwood observes, the doctrine came down at a particularly precarious time, shortly after the U.S. extricated itself from Vietnam and just as the U.S.S.R. was

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[113] Raymond L. Garthoff, *Détente and Confrontation: American-Soviet Relations from Nixon to Reagan*, revised ed. (Washington, DC: The Brookings Institution, 1994), 466.

[114] Director of Central Intelligence (William E. Colby) Memorandum, August 1, 1974, declassified and released, September 2004, George Washington University, *NSA*, http://www2.gwu.edu/~nsarchiv/*NSA*EBB/*NSA*EBB173/SIOP-26.pdf (accessed December 22, 2013).

considering the use of Cuban nationals in Third World conflicts such as Angola.[115]

In the long run, the insiders won. The neutron warhead came into the U.S. nuclear arsenal (complete: as an assembled warhead) under Ronald Reagan. For his part, President Carter weighed-in with his observation that "the argument against the neutron bomb is that because it is "clean," that there might be more temptation to use it. … I have a fear that once nuclear weapons are used, even the smallest ones are used, that there is a good likelihood that the nuclear war will escalate rapidly into the exchange of very heavy weapons …."[116] By "very heavy weapons" Carter meant strategic arms. To be sure, Carter was a neutron warhead *supporter* when he voiced this opinion in July 1977. However, it was precisely this fear – escalation – that caused him to abandon faith in the military utility of enhanced radiation weaponry. In the end, Carter lost faith in the military efficacy of enhanced radiation weaponry because of the inherent risk of uncheckable escalation. The risk of escalation outweighed the benefit of any military advantage gained from production and deployment of the neutron warhead.

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[115] Jonathon Samuel Lockwood, *Soviet View of U.S. Strategic Doctrine* (New York: Transaction Books, 1983), 140.

[116] Jimmy Carter: "The argument against the neutron bomb is that because it is "clean," that there might be more temptation to use it. That would not be my own attitude as long as I am President, because I have a fear that once nuclear weapons are used, even the smallest ones are used, that there is a good likelihood that the nuclear war will escalate rapidly into the exchange of very heavy weapons between the warring countries." Jimmy Carter: "Yazoo City, Mississippi Remarks and a Question-and-Answer Session at a Public Meeting.," July 21, 1977. Online by Gerhard Peters and John T. Woolley, *APP*, http://www.presidency.ucsb.edu/ws/?pid=7854 (accessed October 8, 2014).

Headline News: "Neutron Killer Warhead Buried in ERDA Budget"

Three months before *Washington Post* reporter Walter Pincus broke the neutron killer warhead story on June 6, 1977, Secretary of Defense Harold Brown told the House Armed Services Committee, chaired by Illinois Democrat Melvin Price, of U.S. plans to produce enhanced radiation weaponry. Brown appeared before Price's committee together with Chairman of the Joint Chiefs of Staff, General George S. Brown. The two Browns testified to the Army's plans to modernize its tactical nuclear capability by the inclusion of an enhanced radiation warhead for the Lance short-range missile system then deployed by NATO. The secretary and the general also informed the committee of the Army's intention to incorporate enhanced radiation features into atomic artillery shells used by the 8-inch gun and the 155mm howitzer.[117]

General Brown and Secretary Brown met with little Congressional opposition to the proposed enhanced radiation modifications to the Lance short-range missile. In fact, before the *Post's* exposé, ERDA's neutron warhead program enjoyed bipartisan support in Congress. Although enhanced radiation weaponry had its detractors in Congress once the Pincus story broke, deep Congressional support for neutron warhead production continued through President Carter's 1978 decision to defer enhanced radiation warhead production. In the Senate, Republicans Charles H. Percy of Illinois and Howard H. Baker of Tennessee numbered among the supporters of ERDA's neutron warhead program.

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[117] Vincent Auger, *The Dynamics of Foreign Policy Analysis: The Carter Administration and the Neutron Bomb*, (Lanham, MD: Rowman & Littlefield, 1996), 41.

Perry and Baker were joined Democrats Daniel Patrick Moynihan of New York and Sam Nunn of Georgia. For each of the senators, neutron warheads had the potential of being "enormously effective as a bargaining chip in arms negotiations with the Soviet Union."[118]

In April after the secretary of defense and the chairman of the Joint Chiefs of Staff testified before the House Armed Services Committee, the House erroneoU.S.ly released testimony concerning ERDA's neutron warhead development program. The erroneoU.S.ly released testimony became the basis of the secrecy claim made by Walter Pincus in his initial frontpage coverage of the neutron warhead.[119] Before the *Post* exposé, ERDA's plans to develop enhanced radiation warheads moved through Congress more or less unnoticed. Military officials on both sides of the Atlantic were aware of the Army's plans to fashion an enhanced radiation warhead for the Lance missile system, but that was the extent of the program's notoriety.

According to information developed at the Carter administration's request after news of the enhanced radiation warhead became public, NATO defense ministers had been apprised of the U.S. Army's ER plans on at least five separate occasions prior to June, 1977. Ford administration Secretary of Defense James Schlesinger raised ERW in 1974 while addressing NATO's theater-level nuclear force requirements and extended deterrence. Enhanced radiation warheads came before NATO again in June 1975, January 1976, June 1976, and November 1976

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[118] Richard Burt, "Pressure from Congress Mounts to Reverse Ban on Neutron Bomb," *New York Times*, April 6, 1978, p. A1.

[119] Auger, *Dynamics of Foreign Policy Analysis*, 41.

according to information contained in President Carter's national security advisor's White House files.[120]

One Carter-era NSC staffer, John Marcum, claims that in 1977 Soviet delegates to a Joint U.S.-U.S.S.R. Working Group on Radiological Warfare met in Geneva, Switzerland, with authority to conclude a "separate" arms control agreement on "weapons using acceleration of charged particles and high energy neutrons … [the] so-called neutron bomb." The separate agreement reference appears in Marcum's May 13, 1977 memorandum to Carter National Advisor Zbigniew Brzezinski. Moreover, Marcum's memorandum to Brzezinski predates Walter Pincus' "Neutron Killer Warhead" article by several weeks, evidence of open discussions between the U.S. and the U.S.S.R. concerning at least the prospect of enhanced radiation weaponry prior to the *Washington Post* exposed neuron bombs to public scrutiny.[121]

By mid-May, 1977, the Lance missile modernization program was making its way smoothly through the Senate, as shown in a contemporaneous Armed Services Committee report included benign references to ERDA's FY 1978 neutron warhead development plans.[122] The bill authorizing neutron warhead funding passed the Senate on 23 May by a voice vote. In the House, the Appropriations Committee reported the bill "fully funded" on 2 June. In fact,

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[120]Extracts of Information Provided to NATO, undated, National Security Affairs, Brzezinski Material, "Enhanced Radiation Weapons and Radiological Warfare, 6-8/77," 16, JCL.

[121] RAC Project Number NLC-31-181-7-9-1, JCL,

[122] *See, also*, Department of Defense Appropriations for 1978, Hearings before the Committee on Appropriations, 95th Congress, 1st Session, (Washington: U.S. Government Printing Office, 1977), 11.

there is no detectable opposition in Congress to neutron warhead funding until Walter Pincus' 6 June frontpage *Washington Post* coverage.

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Of the many sayings attributable to Benjamin Franklin, one seems especially to evoke thoughts of President Jimmy Carter from Plains: "frugality is an enriching virtue."[123] Although cost did not wholly define the parameters of the neutron warhead decision for Carter, cost was a top concern. Cost, in fact, became the first inflection point in the battle between the president and Congress over ERW production and deployment. Before opponents of the enhanced radiation warhead began targeting the nuclear threshold and escalation issues, they focused on ERW production costs. At stake was between $10 and $20 million for neutron warhead production, a fraction of the $159.2 billion defense budget for 1977.

In the Senate, ER opponent Republican Mark Hatfield targeted cost – in addition to being opposed to the neutron warhead on moral grounds – in his effort to block ERW funding. Two days after the *Washington Post* broke the "neutron killer warhead" story, Hatfield advised President Carter in a letter dated June 9, 1977, of his plan to introduce an amendment to delete neutron warhead production funding before the Senate Appropriations Committee. The committee was to meet and discuss ERW funding on June 15, 1977. Hatfield's letter asked the president to elaborate his neutron warhead position by drawing attention to

[123] Walter Isaacson, *Benjamin Franklin: An American Life* (New York: Simon and Schuster, 2003), 78.

Carter's previously stated desire to delay any enhanced radiation modifications to Lance pending further study. Hatfield's letter appealed to President Carter's reputation for caution and cost-consciousness.[124]

The White House delegated the responsibility for answering Senator Hatfield's letter of 9 June to the Department of Defense (DOD). The DOD assigned the response to William J. Perry, who later became Secretary of Defense under President Clinton. Perry, then responsible for research and engineering at the DOD, wrote Senator Hatfield on June 17, 1977. Perry's response ("on behalf of President Carter") does not touch upon cost, but explains that the president had not fully assessed the issue. Perry appealed for more time. Rather than discuss the president's position per Hatfield's request,[125] Perry's letter offers a general response focusing on the president's obligations under an upcoming nuclear weapons stockpile review.[126] The Perry letter hedged, side-stepping the cost question, but nonetheless upset the cost equation in one regard. Perry's letter amounted to a request on behalf of the president for discretionary spending authority prior to making a production or deployment decision. Cost is ever more prominent when one wants a free hand over the purse.

The day after Hatfield received Perry's letter, he discussed the matter of neutron warhead funding with the *Washington Post's* Walter Pincus. According

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[124] Letter, Hatfield to Carter, June 9, 1977, Office of Staff Secretary, Presidential Files, Folder 6/30/77 [1], Container 28, JCL.

[125] Hatfield's letter asks: "I would therefore request from you a statement of your position concerning delaying the production of the enhanced radiation warhead for the Lance missile until the matter can be given further study." Ibid.

[126] Letter, Perry to Hatfield, June 17, 1977, Office of Staff Secretary, Presidential Files, Folder 6/30/77 [1], Container 28, JCL.

to the *Post*, Hatfield complained that the president had it backward. Congress, according to Hatfield, is "supposed to respond to the president's request for funds" not give the president blanket discretion.[127] In the ordinary course of business – if there had not been a *Washington Post* exposé – neutron warhead production most likely would have proceeded. The Lance modernization program was approved by the Ford administration and, since approval, had wended its way quietly through the Congress (subject to ordinary oversight) without turmoil. Neutron warhead funding was ripe for decision in July 1977; that Carter had any decision to make at all was, in itself, a turnabout.[128] The neutron warhead would have proceeded to production in the ordinary course of business per the prior administration's approval but for President Carter's delay.

For Carter, cost mattered. But Carter's cost-consciousness conjured an unwanted side-effect – delay due to caution rooted in ambivalence. What's more, Carter's heightened caution, a reflection of his ambivalence toward ERW, exacerbated uncertainty in Europe. Secretary of State Vance addressed European opinion in a contemporaneous memorandum to the president dated 25 July 1977.[129] Vance's memorandum, however, mentions only the continued arousal of public opposition surrounding the neutron warhead in West Germany. The

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[127] "Senate Pressed for Killer Warhead," Office of Staff Secretary, Presidential Files, Folder 6/30/77 [1], Container 28, JCL.

[128] *Cf.*, James Schlesinger interview, July 19-20, 1984, "the Carter Presidency Project," interview by Charles O. Jones, et al., *University of Virginia, Miller Center of Public Affairs* (2005). The Schlesinger-Jones interview is available online at http://millercenter.org/president/carter/oralhistory/james-schlesinger (accessed January 15, 2015).

[129] Memorandum, Vance to Carter, "European Attitudes toward the 'Neutron Bomb'," July 25, 1977, Zbigniew Brzezinski Materials, ERW and RW, 6-8/77, Box 16, JCL.

memorandum is more or less quiet when it came to other NATO member-states and ERW production and deployment. Even so, public opposition lay elsewhere in Italy and other member-states.

That August (1977) the U.S. Embassy in Rome informed officials in Washington of efforts to avoid the term "neutron bomb" because of the term's "cataclysmic connotations." For the moment, cost took a backseat to rhetoric. Newly accessible cables (between Rome and Washington) reveal that diplomatic officials in Italy stressed the use of innocuous terms for the neutron warhead. One of these innocuous terms, *nuovo ordigno tattico*, new tactical ordinance, appears often in the Italian press, and U.S. officials suggested another, "reduced blast warhead," though neither alternative caught on. Both suggestions were intended to turn the public's attention away from the neutron warhead's cost and its "principle homicidal element," enhanced radiation.[130]

In the thick of fighting to ensure that he had Congressional support for ERW funding in July, 1977, Carter wrote a letter to Melvin Price, the chairman of the House Armed Services Committee. The president shared with Price his belief that tactical nuclear weapons had "strongly" contributed to deterrence, and that he desired the neutron warhead to enhance deterrence. What's more, the overall context of the letter suggests that Carter saw ERW as an integral component of NATO's Flexible Response doctrine.[131] But, by springtime, 1978, Carter's

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[130] Rome Embassy telegram 13015, "Allied Attitudes on Neutron Bombs," 10 August 1977, Secret, Exdis, STADIS, *NSA* Electronic Briefing Book No. 463, *NSA*.

[131] Letter, Jimmy Carter to Melvin Price, July 21, 1977, National Security, Defense, 7/1/77-7/31/77, Box ND-49, JCL

overall assessment of the neutron warheads merits would sour. By decision-time, Carter concluded that the main risk associated with enhanced radiation warheads – a lowered nuclear threshold – outweighed the military benefits of production.

However, in July 1977, Brzezinski advised Carter of the Soviet Union's push to intensify its campaign against the neutron warhead in the European press.[132] At the same time, Vance advised Carter that support for the neutron warhead in Europe was thin, especially in the Federal Republic.[133] And so it remained – thin – in 1981 when President Ronald Reagan approved neutron warhead assembly.[134] Although Regan is credited with ordering neutron warhead production in 1981, he actually ordered *assembly* of the neutron warhead's component-parts. President Carter ordered *production* of the component parts in October, 1978.[135] Assembled neutron warheads remained in the continental United States per Ronald Reagan.[136]

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[132] Memorandum, Brzezinski to Carter, July 21, 1977, RAC:NLC-1-3-1-3-3, JCL.

[133] Memorandum, Vance to Carter, "European Attitudes toward the Neutron Bomb," National Security Advisor, Brzezinski Material, ERW and RW, 6-8/77, Box 16, JCL.

[134] Ronald Reagan: "Remarks on Signing the Economic Recovery Tax Act of 1981 and the Omnibus Budget Reconciliation Act of 1981, and a Question-and-Answer Session with Reporters," August 13, 1981. Online by Gerhard Peters and John T. Woolley, *APP*, http://www.presidency.ucsb.edu/ws/?pid=44161 (accessed January 16, 2014).

[135] Carter's initial statement regarding ERW deferral leaves the door open to production of the component-parts. *See*, Jimmy Carter, "Enhanced Radiation Weapons Statement by the President," April 7, 1978. Online by Gerhard Peters and John T. Woolley, *APP*, http://www.presidency.ucsb.edu/ws/?pid=30630 (accessed June 20, 2014). The Associated Press reported the signing of the bill authorizing the funds for production of the ER elements of the "controversial neutron warhead." The AP article was clipped and held in the Records of the White House Press Office, Media Liaison Office, Jim Purks' Subject Files, 1977-1981, Neutron Bomb, Container 25.

[136] *See*, Ronald Reagan: "Remarks on Signing the Economic Recovery Tax Act of 1981 and the Omnibus Budget Reconciliation Act of 1981, and a Question-and-Answer Session with Reporters," August 13, 1981.

As well as can be known, Ronald Reagan never ordered enhanced radiation warheads to be deployed in the Federal Republic of Germany.

CHAPTER 4

OPPOSITION MOUNTS

(F 5) *A member of the anti-nuclear movement taken by force to an awaiting school bus for transport to jail, Seabrook, New Hampshire, May, 1977.*[1]

There was strong public opposition in the United States and Europe to military and civilian use of nuclear power in 1977. One week after *Washington Post* reporter Walter Pincus published his "neutron killer warhead" exposé, a member of the grassroots anti-nuclear movement in Seabrook, New Hampshire, posed a rhetorical question in the press. He asked: "Were American Revolutionaries justified 200 years ago in using extra-legal means in their opposition to British rule?"[2] The letter suggested the extent to which everyday

[1] Photograph by Eric A. Roth, May, 1977, http://www.marcU.S.e.org/harold/pages/seabrook.htm, Seabrook, NH, Nuclear Plant Occupation Page, by Professor Harold Marcuse, UC Santa Barbara, http://www.history.ucsb.edu/faculty/marcuse/index.html (accessed May 20, 2014).

[2] Ed Hermann, "Letters to the Editor," *New York Times*, June 12, 1977, p168.

citizens might go in resisting lawful authority in an effort to disrupt the construction of nuclear power plants or the deployment of controversial nuclear arms. Moscow's anti-neutron warhead campaign in Europe helped energize the grassroots anti-nuclear movement in the United States.

This chapter argues that President Carter's assessment of the military utility of neutron weapons changed, from favorable to unfavorable, after he won initial discretionary funding for warhead production in the Congress. Whatever moral concerns the president had about the neutron warhead were tertiary. Arms control and the U.S. push to invigorate the North Atlantic Treaty Organization (NATO) were the president's primary and secondary concerns. However, President Carter's efforts to build a consensus in favor of neutron warhead production stalled partly due to Moscow's successful linkage of the neutron warhead and arms control. By the spring of 1978, the Soviet Union's information campaign against the neutron warhead, European reluctance to deploy the warhead, and President Carter's ambivalence culminated in a major setback in relations between NATO and the United States.[3]

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In Washington, the Carter administration's domestic policy chief, Stuart Eizenstat, recommended to the president that he use the utmost caution in announcing any decision with respect to Seabrook since, whatever he decided, "a large segment of the population in New Hampshire will be disappointed." In a

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[3] Zbigniew Brzezinski, *Power and Principle* (New York: Farrar, Strauss and Giroux, 1983), 301.

memorandum to the president dated June 13, 1977, Eizenstat recommended that the Environmental Protection Agency (EPA) "take the heat" for allowing construction of the plant at Seabrook to proceed. President Carter agreed. In a marginal notation on the 13 June memorandum Carter advised EPA administrator Doug Costle to announce the Seabrook decision (adverse impact of plant discharge-water was expected to be "insignificant") later that week.[4] Costle, Eizenstat, and Carter agreed that "If blame is to be assigned to the federal government, it should fall on the agency [EPA], not on the Presidency."[5]

The controversial enhanced radiation warhead (ERW) program, part of the Energy Research and Development Administration (ERDA) budget for fiscal year (FY) 1978, aroused the ire of citizens who felt that the neutron bomb was designed to "bring the world closer to a nuclear catastrophe."[6] Public awareness of the neutron warhead mounted as newspapers across the U.S. began following coverage in the *Post* and the *New York Times*. Public concern over neutron warhead production grew side-by-side with concern over nuclear power plant construction. Would the production and deployment of the neutron warhead lower the nuclear threshold and encourage *crossover*, the transition from

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[4] Stuart Eisenstaedt, Memorandum for the President, June 13, 1977 ("Doug Costle's Memo on Seabrook"), Office of Staff Secretary, Presidential Files; Folder: 6/13/77 [2], Box 25, Jimmy Carter Library ("JCL").

[5] Ibid. EPA Administrator Costle's memorandum to the president is an attachment to the Eisenstaedt memorandum. Costle's assessment appears at page 6 of the attachment under the heading "Recommendations."

[6] Joseph C. Harsch, "Neutron Bomb: Why it Worries the Russians, *The Christian Science Monitor*, August 14, 1981, http://www.csmonitor.com/1981/0814/081436.html/%28page%29/2 (accessed June 23, 2014).

conventional war to nuclear war; and would battlefield use of the neutron warhead end in unlimited nuclear war?

In Moscow, the Soviet press assailed efforts to upgrade the Lance short-range missile, the weapon system designated for modernization with the enhanced radiation warhead. On 20 June the *Times* reported that the Soviet newspaper *Pravda* cited neutron weapons as part of a "new dangerous spiral in the arms race." The Soviet coverage addressed nuclear threshold and crossover by suggesting that ERW blurred the line between conventional and nuclear weapons. In addition, *Pravda's* coverage buttressed Moscow's skeptical view of President Carter's human rights-focused foreign policy. Moscow accused Washington of running a noisy worldwide human rights campaign as a pretext to cover up plans to move ahead with Lance modernization in conjunction with other destabilizing defense projects such as the Trident missile submarine and radiation enhanced AFAP – artillery fired atomic projectiles.[7] The Soviet Union strove to keep arms control separate from human rights while, simultaneoU.S.ly, linking arms control and the enhanced radiation warhead.

On 7 June, a source close to *Washington Post* reporter Walter Pincus (an unnamed "White House official") indicated that President Carter had "not yet approved production of the ER warhead." Pincus' report, however, suggested that the Carter administration had reviewed and approved ERDA's funding request during the transition from the Ford administration, but evidence was inconclusive since transition team officials "did not go into the specifics of the Lance neutron

[7] "Soviet Union Terms Rights Drive by U.S. Pretext for Arms Buildup," *New York Times*, June 20, 1977, p. 20.

warhead."[8] For their part, neither Secretary of Defense Harold Brown, Secretary of State Cyrus Vance, nor Zbigniew Brzezinski were prepared to address the ERW matter raised in EDRDA's budget. President Carter, who did not believe that neutron warheads lowered the nuclear threshold,[9] put the matter off until November 1977, which became the first in a series of presidential delays of the neutron warhead decision.

President Carter's ERW decision-timeline became a moving target during the summer of 1977. The pattern of delays established by the administration at the outset of the ERW affair lasted until the president's April 1978 neutron bomb deferral. All along, critics of the neutron warhead developed the principle arguments against production and development of the warhead; one argument targeted the nuclear threshold and the other escalation. Later, escalation achieved traction with Carter as the president believed that use of the neutron weapon would lead to a probable strategic exchange.

President Carter began lobbying the Congress to approve discretionary funding for the neutron warhead in June 1977. The president went to great lengths to assure representatives and senators that the neutron warhead did not lower the nuclear threshold. He reminded critics that the decision to use any nuclear weapon – regardless of that weapon's size or yield – was the gravest decision facing any president. However, Carter also went to similar lengths to

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[8] Walter Pincus., "Carter is Weighing Radiation Warhead," *Washington Post*, June 7, 1977, p. A5.

[9] Although Carter did not believe that ERW lowered the nuclear threshold, he did believe that ERW – if used – would lead to a strategic nuclear exchange. *See, e.g.*, Jimmy Carter: "Yazoo City, Mississippi Remarks and a Question-and-Answer Session at a Public Meeting.," July 21, 1977. Online by Gerhard Peters and John T. Woolley, *American Presidency Project, ("APP"),* http://www.presidency.ucsb.edu/ws/?pid=7854 (accessed October 8, 2014).

remind the Congress that he desired to center human rights at the forefront of his foreign policy regardless of the growing neutron warhead distraction.[10] President Carter argued that the neutron warhead ought to be an option for the U.S. because it gave him, as commander-in-chief, the flexibility to oppose an invasion of Western Europe by the Warsaw Pact without the necessity of relying on strategic nuclear arms.[11] Carter initially embraced the low-yield neutron warhead as a limited nuclear option (LNO), a viable option short of a strategic nuclear response to a Warsaw Pact attack.

President Carter's drive to secure funding for Lance modernization did not sit well with Congress once the neutron warhead became frontpage news. In 1977, Congress was reluctant to give the chief executive wide berth after President Richard Nixon's abuses of executive privilege. President Carter had to fight hard if he wanted a blank check for ERW production and deployment. Carter had to convince members of the House of Representatives and Senate that the neutron warhead strengthened NATO while not increasing the likelihood of all-out war with the Soviet Union.

In the Senate, Oregon Republican Mark Hatfield became a staunch opponent of neutron warhead production. According to the *Washington Post's* Walter Pincus, a high-level Department of Defense (DOD) official, Joseph Perry, advised Hatfield that the president would diligently weigh his options before

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[10] Jimmy Carter: "The President's News Conference," June 13, 1977. Online by Gerhard Peters and John T. Woolley, *APP*, http://www.presidency.ucsb.edu/ws/?pid=7670 (accessed June 26, 2014).

[11] Jimmy Carter: "The President's News Conference," July 12, 1977. Online by Gerhard Peters and John T. Woolley, *APP*, http://www.presidency.ucsb.edu/ws/?pid=7786 (accessed June 26, 2014).

proceeding with ERW production.[12] Perry indicated to Hatfield that the president would decide before FY1978 whether he would approve production of the newly-designed enhanced radiation warhead or pursue another option.[13] Perry's DOD timeline implied that President Carter's decision might come on or before 1 October, the start of the next fiscal year. Perry's letter, written on behalf of the president, established the earliest missed deadline for neutron warhead production. President Carter established the second missed deadline on July 21, 1977, when he publicly announced that he had "not yet decided whether to produce the neutron bomb or to deploy it among" American forces in Europe and other places." The president added: "I will make that decision before this summer is over."[14]

Senator Hatfield resisted the president's efforts to secure ERW funding. Hatfield claimed that President Carter was "putting the cart before the horse" by asking Congress for money before he had made the neutron warhead production decision. Hatfield queried: Why ask at all for funding if a decision to go ahead with ERW production and deployment had not been made behind the scenes? Hatfield's intimation of a behind-the-scenes decision in favor of ERW production and deployment is not substantiated by the available archival evidence. President Carter favored neutron warhead production during the summer of 1977, but he favored production *contingent upon NATO's cooperation*. For Carter, NATO had

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[12] "Senate Pressed for Killer Warhead," Office of Staff Secretary, Presidential Files, Folder 6/30/77 [1], Container 28, JCL. Perry was the Director of Defense Research and Engineering.

[13] Letter, Perry to Hatfield, June 17, 1977, Office of Staff Secretary, Presidential Files, Folder 6/30/77 [1], Container 28, JCL.

[14] Jimmy Carter: "Yazoo City, Mississippi Remarks and a Question-and-Answer Session at a Public Meeting."

to want the neutron warhead before he would order its production. NATO, on the other hand, had to be convinced that the neutron warhead would not make the likelihood of nuclear war more probable. The evidenced developed in this study indicates that the president was genuinely weighing his neutron warhead options throughout the season and into the fall; however, by asking Congress to approve ERDA's funding request, the president inadvertently caused observers in the press, the public, and the Congress to assume that he had decided go ahead with ERW production. Thus when neutron warhead deferral versus approval was announced by the White House Press Office in April, 1978, it looked like a case of ERW defenestration.

ERDA's funding request was part of a larger $10.2 billion Public Works Bill. Within that Bill, ERDA allocated between $10 and $20 million for neutron warhead production. The neutron warhead allocation was a tiny fraction of the $159.2 billion defense budget for 1977.[15] Despite the small sum allocated for the neutron warhead, it cast a wide moral shadow. On the other hand, the neutron warhead's supporters argued that ERW did not lower the nuclear threshold; instead, they argued, ERW increased the deterrence value of NATO's theater-level nuclear force; President Carter agreed. Carter early on embraced ERW for the potential to add flexibility – *a limited nuclear option* – to the European defense plan.[16] But the president's principle worry with the neutron warhead lay

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[15] *See*, U.S. Department of Commerce, http://www.bls.gov/opub/mlr/1987/08/art1full.pdf (accessed February 22, 2014).

[16] Carter: "There are arguments on both sides of the neutron bomb." And: "The neutron bomb radiation is quick-acting, and it's gone." And: "If you ever use a neutron bomb, it's much better than using a regular presently deployed projectile or Lance missile warhead." As to all three, *see*,

in the warhead's propensity to trigger escalation. In fact, Joseph Perry's letter to Senator Hatfield, which became the Carter administration's earliest official ERW position, cited the president's desire for maximum flexibility, and oft mentioned feature of the neutron warhead in press accounts, as the reason for the pre-decision funding request.[17]

The Carter administration received some encouragement when, on 14 June, the House of Representatives approved Lance's enhanced radiation warhead, designated "W-70, mod 3." The modernization program passed through the House with minor opposition.[18] Earlier, the House appropriated funds for Lance's conventional warhead, separately from the request concurrently pending in the Senate for the Lance short-range missile with ER features. Conventionally-armed Lance missiles were slated for use by the six Lance battalions then deployed in Europe, but they were not thought to add to NATO's deterrence capacity. However, according to Democratic Representative Robert Sikes, conventional variants of Lance were desirable because they raised rather than lowered the nuclear threshold.[19] For Sikes, the non-nuclear version of Lance remained an effective anti-armor weapon; it deterred the Warsaw Pact without increasing the probability of a nuclear exchange. Sikes held that, if neutron

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Jimmy Carter: "Yazoo City, Mississippi Remarks and a Question-and-Answer Session at a Public Meeting.," July 21, 1977. Online by Gerhard Peters and John T. Woolley, *APP*, http://www.presidency.ucsb.edu/ws/?pid=7854 (accessed February 1, 2015).

[17] Walter Pincus., "Senate Pressed for Killer Warhead," *The Washington Post*, June 21, 1977.

[18] Vincent Auger, *The Dynamics of Foreign Policy Analysis: The Carter Administration and the Neutron Bomb*, (Lanham, MD: Rowman & Littlefield, 1996), 42.

[19] Harold J. Logan, "House Votes Money for Lance Missiles," *The Washington Post*, June 25, 1977, p. A4.

warheads were ever used on the battlefield, it would be impossible to prevent escalation and the use of strategic nuclear weapons. Sikes' argument spoke to the impossibility of limiting nuclear exchanges to battlefield nuclear weapons, a concern shared by other ER warhead opponents such as Mark Hatfield.[20]

The nuclear threshold debate surged in Congress and in the public over the coming months as proponents and opponents of the enhanced radiation warhead debated whether the proposed modifications to Lance either raised or lowered the nuclear threshold or led to crossover and escalation. Lance's opponents claimed that low yield nuclear weapons designed to increase radiation and reduce blast lowered the theoretical line between conventional and nuclear war to unacceptable levels.[21] According to military affairs analyst Donald M. Snow,

> Reservations about the ER-Lance weapon have basically been focused on two concerns: that the existence and potential use of such weapons may contribute to lowering the nuclear threshold; and that, since little is known about the long-term effects of neutron radiation on humans … their use may be inhumane and even border on self-imposed bans on radiological weapons.[22]

Lance proponents, one the other hand, countered that ERW enhanced deterrence – they were superb counterforce weapons (effective for use against military forces, not population centers) thus lessening the likelihood of a Warsaw Pact attack on

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[20] Sikes and Carter held similar views of escalation and limited nuclear war.

[21] *Cf*., Jeffery A. Larsen, *The Politics of NATO Short-Range Nuclear Modernization 1983-1990: The Follow-on-to-Lance Missile Decisions*, PhD Dissertation, Princeton University, June, 1991, p. 106. Larsen writes, "As one of the new generation of "mini-nukes" it [ER-Lance] would blur the distinction between conventional and nuclear conflict." Ibid.

[22] Donald M. Snow, "Strategic Implications of Enhanced Radiation Weapons," *Air University Review*, http://www.airpower.maxwell.af.mil/airchronicles/aureview_toc/AUReview1979/AUReview1979Jul-Aug.htm (accessed June 13, 2013).

Western Europe.[23] Where President Carter stood on these issues was not clear by summer's end, 1977; neither was it clear where he stood on these issues by the end of the year.

EWR and B-1 Bomber Cancellation

In *Dynamics of Foreign Policy Analysis* Vincent Auger points out an early and consistent misconception arising out of the neutron bomb controversy: the claim that the administration or the military tried to add ERW to America's nuclear arsenal without congressional oversight. The claim was inaccurate; indeed, the neutron weapon affair occurred within the context of thorough Congressional oversight as did the B-1 program, which President Carter cancelled in June, 1977. The contemporary debate surrounding both programs, the B-1 and the neutron warhead, was vigorous; seldom was it hidden from public view. In both cases, the programs were subjected to rigorous Congressional oversight.

As Auger notes, the claim that ERW flew beneath the radar was not accurate. Auger shows that officials in Congress and in NATO were "fully informed throughout the mid-1970s" of ERDA's enhanced warhead development plans."[24] In addition, the *Washington Post's* contemporary coverage shows that

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[23] According to President Reagan, "The neutron warhead is a defensive weapon. It is a deterrent to a conflict." Reagan also noted, "This weapon was particularly designed to offset the great superiority that the Soviet Union has on the western front against the NATO nations, a tank advantage of better than four to one, and it is purely, as I say, a defensive weapon." Ronald Reagan: "Remarks on Signing the Economic Recovery Tax Act of 1981 and the Omnibus Budget Reconciliation Act of 1981, and a Question-and-Answer Session with Reporters," August 13, 1981. Online by Gerhard Peters and John T. Woolley, *APP*, http://www.presidency.ucsb.edu/ws/?pid=44161 (accessed January 16, 2014).

[24] Auger, *Dynamics of Foreign Policy Analysis*, 2.

Lance modernization was partly declassified during the early to mid-1970s. One ERDA official, Alfred D. Starbird, commented publicly that the Lance upgrades were actually declassified pursuant to joint DOD and ERDA guidelines. Starbird, an ERDA assistant administrator (National Safety) from May, 1975, through September, 197, was well-positioned to speak to declassification. Moreover, in 1976 ERDA the *Washington Post* reported that Republican Senator John O. Pastore of Rhode Island, then the chairman of the Joint Atomic Energy Committee, that the Agency was pipelining an enhanced radiation warhead for the Lance missile.[25] This evidence rebuts claims that either the Department of Defense or ERDA proceeded in secret with an enhanced radiation warhead development program. Although the Lance warhead program had not garnered the same level of Congressional attention as the B-1 bomber, it was subject to stringent legislative oversight.

Both B-1 and ERW were proceeding through ordinary channels in Congress. However, President Carter cashiered the B-1 on June 30, 1977, amidst concerns that Congress might balk at ending the program.[26] The president eschewed the cost of the new bomber in preference for better alternatives. Carter observed that the U.S. "should begin deployment of cruise missiles using air-launched platforms, such as our B-52's, modernized as necessary." The president added that "[the] triad concept of retaining three basic delivery systems will be

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[25] Walter Pincus., "Neutron Warhead Wouldn't Be Deployed Until '79, Hill Told," *The Washington Post*, July 8, 1977, P.A3.

[26] Jimmy Carter: "The President's News Conference," June 30, 1977. Online by Gerhard Peters and John T. Woolley, *A PP*, http://www.presidency.ucsb.edu/ws/?pid=7751 (accessed January 1, 2015).

continued with submarine-launched ballistic missiles, intercontinental ballistic missiles, and a bomber fleet, including cruise missiles as one of its armaments."[27]

Fans of the B-1 bomber tended to favor ERW production, and President Carter's 30 June B-1 cancellation left ERW advocates on tenterhooks. In July Jody Powell, the president's press secretary, indicated that Carter would make his decision on the enhanced radiation program by fall. By that time, the president's cancellation of the B-1, and the controversy it created, would have settled. Carter did not want to take two negative decisions back-to-back, and besides, his battle for discretionary Lance funds created the expectation that ERW would be approved rather than disapproved.[28] Powell told the press that President Carter had "an abhorrence of nuclear weapons," but wanted the Congress to approve funding for the ERW family of weapons as a way of keeping open his nuclear options. Walter Pincus reported that Powell had unwittingly added to the ongoing nuclear threshold debate when he claimed that neutron-based warheads were preferable to "standard types" because many fewer civilian casualties were at stake. [29]

In Congress, the movement to stop neutron warhead funding met stiff opposition once President Carter fought for discretionary funding. Senator Mark Hatfield's attempt to prohibit production of the Lance ER variant stalled in the

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[27] "The President's News Conference," June 30, 1977.

[28] Carter's abhorrence was consistent with his inaugural pledge. *See*, Jimmy Carter: "Inaugural Address," January 20, 1977. Online by Gerhard Peters and John T. Woolley, *APP*, http://www.presidency.ucsb.edu/ws/?pid=6575 (accessed March 21, 2013).

[29] Walter Pincus., "Pentagon Wanted Secrecy on Neutron Bomb Production," *The Washington Post*, June 25, 1977, p. A1.

third week of June. The Oregon senator's amendment failed to carry, going down in a 10-10 tie.[30] With that tie, the administration's argument in favor of ERW discretionary funding gained traction, but the White House had yet to provide – and the law required it – an Arms Control Impact Statement (ACIS) to the Congress. The fact that the ACIS was missing only helped the case being made by ERW critics.

Much parliamentary maneuvering sprang up around the missing ACIS, a requirement for all newly-proposed weapons systems having a potential effect on arms control. Senator Hatfield might get another chance owing to the missing ACIS. Future submission of the ACIS presented legislators with a new opportunity to line up "for" or "against" Lance. The earlier tie vote, the equivalent of a loss, rankled Hatfield since he thought that President Carter was overstepping his authority by asking for funds before an affirmative ERW production commitment. The Associated Press' Richard E. Meyer quotes Hatfield complaining that the President was "asking for a blank check."[31]

Republican Senator Claiborne Pell, not Oregon's Mark Hatfield, was first to identify the importance of the missing ACIS; Pell requested its prompt submission. Although President Carter's predecessor, Gerald Ford, approved production of the enhanced radiation version of Lance in November, 1975, his administration did not supply Congress with the legally mandated arms control impact statement. Paul C. Warnke's Arms Control and Disarmament Agency

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[30] "Panel in Senate RefU.S.es to Ban Radiation Bomb," *The New York Times*, June 23, 1977, p. 6.

[31] Richard E. Meyer, Associated Press, June 24, 1977.

(ACDA) was responsible for completing the Carter administration's ACIS, and that put Paul Warnke between a rock and a hard place.

Before coming to ACDA, Warnke testified before a Senate Foreign Relations subcommittee that low-yield tactical nuclear weapons (the family of nuclear weapons to which ERW belonged) eroded deterrence by lowering the nuclear threshold. If Warnke held that line, his position would not harmonize with that of his commander-in-chief. Carter did not believe that ERW lowered the nuclear threshold. [32] Warnke's Senate testimony buttressed ERW opponents and positioned him at odds with President Carter. Although Carter had the final say on what went into the ACIS, Warnke would have a difficult time with the impact statement in light of his earlier Senate testimony. The ACIS presented a test for Warnke, a noted wordsmith who once likened the United States and the Soviet Union to "apes on a treadmill" in pursuit of innovative nuclear arms.[33] However, Warnke sidestepped the issue by never addressing it directly in the ACIS. Instead, Warnke found that ERW had a "marginal effect" on arms control. Indeed, by the fall of 1977, Warnke reversed his earlier position and became a proponent of enhanced radiation warhead production.[34]

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[32] Carter stated on July 12, 1977, "The argument against the neutron bomb is that because it is "clean," that there might be more temptation to use it. That would not be my own attitude as long as I am President." Jimmy Carter: "Yazoo City, Mississippi Remarks and a Question-and-Answer Session at a Public Meeting," July 21, 1977. Online by Gerhard Peters and John T. Woolley, *APP*, http://www.presidency.ucsb.edu/ws/?pid=7854 (accessed June 27, 2014).

[33] Robert A. Strong, *Working in the World: Jimmy Carter and the Making of American Foreign Policy* (Baton Rouge, Louisiana: Louisiana State University Press, 2000), 23.

[34] November 16, 1977 meeting of the Special Coordination Committee. *See*, Memorandum, Special Coordination Committee Meeting, "Enhanced Radiation Warheads," RAC NLC-15-124-7-7-4, JCL.

As the summer of 1977 got underway, Carter administration officials were quiet about the nuclear threshold issue despite Jody Powell's reference to "fewer civilian casualties." President Carter's press secretary appeared to be legitimizing the neutron bomb as a "clean" weapon in the sense of fewer unintended consequences. Nevertheless President Carter found that he was knee-deep in explanations over his controversial B-1 bomber cancellation to focus too intently on the neutron warhead. In early July, the president continued to explain his B-1 reasoning to the press. As he did on 30 June, the day he decided to cancel the new bomber, the president reiterated that the "recent evolution of the cruise missile" made it a less expensive and more "effective weapon" than the B-1 when retrofitted to the aging B-52.[35] However, unlike the new bomber, which was the subject of heated campaigning during the president's run for office, Carter knew nothing of the neutron warhead program when he made his bold inaugural promise to eliminate "all nuclear weapons from [the] earth."[36]

As the summer season wore on, the president's White House staff began falling behind the ERW news cycle. *Newsweek's* John A. Conway reported on 20 June that the budget request for Lance modernization was a complete surprise to President Carter. And Conway reported that the president was expected to approve the development of the enhanced radiation warhead. Conway's reportage indicated that Carter might approve EWR production and deployment to offset the

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[35] Jimmy Carter: "The President's News Conference," June 30, 1977. Online by Gerhard Peters and John T. Woolley, *APP*, http://www.presidency.ucsb.edu/ws/?pid=7751 (accessed June 11, 2014).

[36] Jimmy Carter, "Inaugural Address."

Soviet Union's tank advantage in Central Europe. But a presidential decision had not been made as Carter was "keeping his options open" by requesting discretionary ERW funding.[37] Carter balanced the neutron warhead's deterrence value against the risk of escalation. Carter's ERW calculus did not change over the next several months, but his approach reminded his critics of the B-1 bomber cancellation, Paul Warnke's too-soft stance against the Soviet Union, and the president's foreign policy naiveté. Indeed, a least one of the President Carter's top advisors, Secretary of Energy James Schlesinger, mocked Carter for his supposed "immense" naiveté and quaint morality, both obstructions to orderly neutron warhead policy development.[38]

ER Lance v. SS-20

The Senate was poised to vote on the ERW matter on 1 July, a few days before the Independence Day holiday. Although ERW advocates such as General Alexander Haig favored neutron weapons as a means of economically correcting an imbalance in the relative strength of NATO and Warsaw Pact armored forces,

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[37] John A. Conway, "Surprise Package," *Newsweek*, June 20, 1977, p. 21.

[38] James Schlesinger interview, July 19-20, 1984, "the Carter Presidency Project," interview by Charles O. Jones, et al., *University of Virginia, Miller Center of Public Affairs* (2005). The Schlesinger-Jones interview is available online at http://millercenter.org/president/carter/oralhistory/james-schlesinger (accessed January 15, 2015). Schlesinger related that "Jimmy Carter was an immensely naïve man." He also observed that "Jimmy Carter was the instinctive moralist making judgments about Washington." Finally, the secretary, giving in to a contumacious impulse, remarked that when Carter made his ERW deferral, he was "still fairly confident that moral decisions were important on matters such as nuclear arms." The observations say more about jaded James Schlesinger than about Jimmy Carter, newcomer.

Carter initially favored them as offsets to the Soviet Union's SS-20.[39] However, the neutron warhead's value as an offset to the Soviet SS-20 had to be balanced against the political costs of pressuring NATO member-states into accepting home-soil ERW deployment. And it was a difficult case to make, ERW v. SS-20, because the two systems were not commensurate. The SS-20 was a far more powerful missile with a superior range than the radiation enhanced Lance variant then under development. What's more, Vincent Auger implies in *Dynamics of Foreign Policy Analysis*, President Carter would agree to have the U.S. bear the financial cost of the neutron warhead alone, but not the political cost.[40]

President Carter's approach the SS-20 and the enhanced radiation warhead stem in part from the recently improved accuracy of Soviet intercontinental ballistic missiles (ICBM). During the 1970s, technology advances enabled Soviet ICBMs to threaten first-strike capability against America's land-based ICBM force. Expecting the Soviet Union to deploy these more accurate ICBMs ahead of schedule, the Carter administration looked for ways to field an effective yet economical counterforce.[41] The president selected the long-range air-launched cruise missile (ALCM) as the U.S.'s most readily deployable counterforce. The ALCM was suitable for use with either a nuclear or conventional payload, which chilled opposition to it based on the nuclear threshold issue. Whereas critics of

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[39] President Carter was also open to the idea of using the neutron warhead as a bargaining chip in the ongoing mutual balance force reduction talks between NATO and the Warsaw Pact.

[40] Auger, *Dynamics of Foreign Policy Analysis*, 110.

[41] U.S. intelligence estimates anticipated improved guidance for Soviet ICBMs sometime in the mid-1980s. *See, NSA*, "PrevioU.S.ly Classified Interviews with Former Soviet Officials Reveal U.S. Strategic Intelligence Failure Over Decades," http://www2.gwu.edu/~nsarchiv/nukevault/ebb285 (accessed October 8, 2014).

the neutron bomb could effectively argue that an enhanced radiation variant of the Lance short-range missile lowered the nuclear threshold, they could not do so in the case of a non-nuclear ACLM. Similarly, neutron warhead critics could argue escalation – that that an exchange of low-yield ERW would lead inexorably to an exchange of heavy nuclear weapons.

Escalation comes into play once the nuclear threshold had been crossed. The military utility of the neutron warhead could not be separated from either the nuclear threshold or escalation issues. The evidence developed to date suggests that President Carter opted for ALCM not merely because they were less costly than the B-1 bomber, his other option, but because they were militarily effective. For Carter, conventionally-tipped ACLM neither threatened to lower the nuclear threshold or risk escalation. But, in contrast to the ACLM, an ERW-tipped Lance missile threatened both to some degree. Soon after the neutron weapon became frontpage news, President Carter clearly stated his reservations over escalation. According to Carter, "the first use of atomic weapons might very well quickly lead to a rapid and uncontrolled escalation in the use of even more powerful weapons with possibly a worldwide holocaust resulting."[42] This view of Carter's is consistent with the view he espoused during the 1976 campaign. The consequences of neutron warhead use thus troubled the president greatly. Hence, whatever efficacy the neutron warhead had for Carter was *political* rather than *military*.

[42] Jimmy Carter: "The President's News Conference," July 12, 1977. Online by Gerhard Peters and John T. Woolley, *APP*, http://www.presidency.ucsb.edu/ws/?pid=7786 (accessed June 11, 2014).

SALT and ERW - ERW cum grano salis[43]

At about the same time Carter began weighing his ERW options, he announced cancelation of the B-1 bomber, the aging B-52's replacement. Historian Laura Kalman suggests that Carter may have taken his decision to cancel the B-1 bomber to send a signal to the Soviets that he wanted to jumpstart the Strategic Arms Limitations Talks (SALT). If that is the case, then the administration's announcement that it "might" move ahead with neutron bomb development had to vex Soviet leaders, which is borne out by Moscow's reaction. The Soviet leadership more or less ignored the B-1 cancellation and criticized the Carter administration's militarism for appearing to favor the enhanced radiation warhead for the Lance missile.[44] For his part, Carter emphasized the cost of the B-1 program, which he deemed excessive, and by so doing, placed the focus less on the advantages of other systems than on the disadvantages of the B-1. Historian Richard C. Thornton observes that the president made a "logical choice" in opting for the ACLM retrofitted to the B-52 instead of the B-1, but mishandled the public explanation. According to Cyrus Vance, the B-1 cancellation became a "millstone" hanging around Carter's neck, and much the same might be said of the president's neutron bomb deferral.[45]

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[43] The phrasing "cum grano salis" comes directly from Zbigniew Brzezinski's memoirs where Brzezinski uses it in connection with SALT itself as in "SALT cum grano salis" [SALT with a grain of salt].

[44] Laura Kalman, *Right Star Rising* (New York: W.W. Norton, 2010), 284.

[45] Richard C. Thornton, *The Carter Years* (New York: Paragon House, 1991), 8-17. *See*, ibid, 60-72. The quoted portion appears on p. 70. The evidence developed in this study does not corroborate Thornton's finding.

Although cost factored prominently in his B-1 decision, President Carter hardly refers to cost in his notes concerning ERW approval or deferral. Carter cites three "variables" in his notes, which he identifies with the enhanced radiation warhead program being proposed by ERDA. First, the requirement that West Germany and one other continental European country agree to deploy the weapon. Second, the Soviet Union's cooperation in grey-area disarmament. And third, NATO had to bear some of the political cost of deployment. The president's notes lend substance to the view that Carter considered using ERW as a means of furthering his arms control agenda. Less evident – and nearly absent from the president's contemporaneous notes – is concern over the financial cost of the enhanced radiation warhead. In fact, President Carter's call to pursue a modernized version of Lance *with* or *without* an enhanced radiation warhead suggests that he had assuaged his fiscal qualms in favor of modernization.[46]

By missing the SALT, B-1, and ERW nexus historians have missed an essential element of policymaking in the context of the enhanced radiation warhead controversy. In all three cases, the bureaucratic momentum that developed around a program was redirected by President Carter. Where the B-1 was concerned, Carter shifted his focus to the ALCM. Where SALT was concerned, Carter opted to test new treaty limits with the Soviets in an effort to improve on Vladivostok. In the case of the neutron warhead, Carter showed his willingness to consider instead the ground launched cruise missile or a non-ERW variant of Lance. What's more, in all three cases, the presidential redirection

[46] Notes, Jimmy Carter, Zbigniew Brzezinski Collection, "Defense – Enhanced Radiation Warhead: 3/78-8/78," Box 22, JCL. Carter writes: "4. Lance missile modernization needed now – with or without ER component (W70 mod. 3); 5. GLCM program will be pursued."

initiated by Carter was undone by his successor, Ronald Reagan. Thus the power of bureaucratic momentum withstood presidential intervention despite the fact that, as the chief executive and commander-in-chief, Carter had the authority to make the desired changes.

Richard Thornton's perspective on ERW cancellation merits further consideration. Thornton observes that the Carter administration used the neutron bomb as a means of defusing West Germany's antinuclear opposition before going ahead with plans to deploy the Pershing II extended-range ballistic missile.[47] For Thornton, the ERW affair develops as a prelude to Pershing II. But that argument is speculative. Pershing II was significant as a commensurate response to the SS-20. The neutron warhead was a political response to the SS-20. The neutron warhead outfitted for the Lance short-range missile was incommensurate with the Soviet Union's intermediate-range ballistic missile (IRBM) force deployed in Central Europe. Although the president's notes refer to the "desirability of obtaining [a] Soviet military concession [in exchange for an ERW] tradeoff," there is no mention of what precise tradeoff or concession the president sought.[48] Carter's preferred SS-20 linkage did not make it into the administration's final ERW decision.

To be sure, the Soviet Union's improved first-strike capability against America's Minuteman alarmed administration insiders such as National Security Council staffer William E. Odom. Odom attributed the U.S.S.R.'s improved

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[47] Thornton, *Carter Years*, 70.

[48] Notes, Jimmy Carter, Zbigniew Brzezinski Collection.

missile guidance technology to détente-era civilian technology transfers. According to Odom, who served as military attaché in Moscow between 1972 and 1974, the transfers helped to modernize the Soviet military at the expense of U.S. national security. Odom claims that a U.S. firm sold the Soviets the ball bearing technology that enabled them to quicken the pace of their ICBM guidance technology program.[49]

Thornton relates that "the discovery of Moscow's breakthrough precipitated an immediate debate which would thereafter dominate the administration's policymaking focus," with Vance and Brzezinski often making "diametrically opposed policy recommendations."[50] Vance took the side of decoupling SALT from matters outside the literal sweep of proposed treaty; Brzezinski took the opposite view. In short, Vance wanted SALT, but Brzezinski wanted SALT *and* "good behavior" from the Soviets. Thornton identifies a gap between Vance and Brzezinski that is widely acknowledged. Whereas the president's national security advisor was seen as a hardliner with respect to the U.S.S.R., his secretary of state was apt to be seen as a conciliator.[51]

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[49] Zbigniew Brzezinski with Madeline K. Albright, Leslie G. Denend, and William Odom, "Carter Presidency Project," interview by Charles O. Jones, et. al., February 18, 1982, *Miller Center for Public Affairs* (2003): 38. Brzezinski's interview is available online at http://web1.millercenter.org/poh/transcripts/ohp_1982_0218_brzezinski.pdf (accessed July 17, 2013).

[50] Thornton, *Carter Years*, 8.

[51] *Cf.*, Editorial, *Chicago Tribune*, April 29, 1980, sec. 3. Also, *Cf.*, Hamilton Jordan with Landon Butler and Thomas Donilon, "Carter Presidency Project," interview by James Sterling Young, et al., November 6, 1981, *Miller Center for Public Affairs,* http://web1.millercenter.org/poh/transcripts/ohp_1981_1106_jordan.pdf (accessed February 23, 2015).

According to Thornton, [neutron bomb] deferral was designed to shock the [NATO] alliance into the realization of the necessity for theater nuclear force modernization." But Thornton's assessment does not comport with newly available archival evidence. The U.S., in conjunction with other Alliance members, was aware of the need to modernize NATO's theater-level nuclear forces by the early 1970s. Unlike the B-1 bomber, where the ALCM provided an alternative, there was no ready alternative to the neutron warhead. Thornton's allegation of "alliance shock" is not supported by the evidence.[52] Thornton writes:

> The reason privately given for backing away from the EWR compromise was that Chancellor Schmidt had refused to give explicit commitment to deployment. While it was true that Schmidt simply would not, indeed could not, take the lead in requesting deployment because of his delicate domestic position and because he clearly did not wish to be constrained by the negative implications [for West Germany's U.S.S.R. policy], the fact was that the United States had achieved its objective in gaining agreement on a deployment formula.[53]

President Carter's notes, however, and his recorded recollections of other administration officials, do not support Thornton's assessment.

From President Carter's perspective, the U.S. had no agreement on an acceptable ERW deployment formula from NATO.[54] During the last year of his

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[52] Thornton, *Carter Years*, 70.

[53] Ibid.

[54] Brown to Carter, Memorandum for the President, April 3, 1978, Donated Historical Materials, Zbigniew Brzezinski Collection, "Defense – Enhanced Radiation Warhead: 3/78-8/78, Box 22, JCL. Carter learned in April, 1978, that West Germany would accept neutron warhead deployment, but Carter never fully accept that; he treated West German acceptance as contingent. As Brown's memo makes clear, although the FRG seemed prepared to ask for deployment of

presidency, after the Soviet invasion of Afghanistan, President Carter met with Franz Joseph Strauss Minister President of Bavaria, to go over Strauss' approval and support of the U.S. position on Afghanistan. The two leaders discussed the Soviet invasion on March 13, 1980, in the Oval Office in a manner that would have been familiar to colonial of bygone days. There Carter informed Strauss of his fear that the Soviets might remain in Afghanistan and simultaneously create a "false peace initiative" that could divide the West. In language reminiscent of the Great Game, Carter advised Strauss that he wanted "détente and arms control" but there would be no "business as usual" while the Soviets remained in Afghanistan. The U.S.S.R.'s invasion of Afghanistan corroborates Odd Arne Westad's observation that Third World interventions filled the voids left by the passing away of old-style colonialism.[55]

President Carter thus adopted the "Soviet's must behave policy" espoused by hardliner Zbigniew Brzezinski. Flashing backbone for Strauss, Carter resurrected the neutron bomb affair in the context of European theater-level nuclear force (TNF) modernization. Carter told Strauss that the U.S. was, in fact, building the neutron bomb.

> Carter: Let me explain to you also that we are prepared to go ahead with TNF, and as to the neutron weapon, we would have deployed but not a single European country was prepared to permit U.S. We are still building the system, but every European country, including [West Germany] insists on someone else also permitting its deployment.

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enhanced radiation weapons, but the brunt of any negative production/deployment would be borne by Carter.

[55] *See*, Odd Arne Westad, *The Global Cold War: Third World Interventions and the Making of Our Times* (Cambridge University Press, 2007).

> Strauss: Schmidt told me that he would have accepted it but that as a consequence he stood all alone.
>
> Carter: I would have made it available and I am ready to do so in the future.
>
> Strauss: I will adopt it for [West Germany] alone if I become chancellor.[56]

The memorandum of conversation which captured the president's 13 March 1980 talk with Bavaria's Strauss was not declassified until June 2, 2008, which was more than a decade after Thornton completed his study of the Carter years.[57] The memorandum shows Carter's commitment to neutron bomb production and deployment spiked after the U.S.S.R. invaded Afghanistan. In fact, Carter assures Strauss of his commitment: "I want you to know that we are still building the neutron weapon, including tritium containers for the warheads." Carter then adds: "we are ready to deploy the neutron bomb when you are ready." The recently declassified Carter-Strauss memorandum debunks the persistent view that President Carter declined to go ahead and publicly approve neutron bomb production and deployment in April, 1978, because of his moral qualms.[58]

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[56] Memorandum of Conversation, Carter with Strauss, March 13, 1980, RAC NLC-128-1-9-1-8, JCL.

[57] Likewise, over a decade has elapsed between Auger's 1996 study and declassification.

[58] Memorandum of Conversation, President Carter and Minister President of Bavaria Franz Josef Strauss.

Nuclear Weapon Effects and Ongoing Debates for ERW Funding

(F 6) *Effects of radiation on exposed skin approximately one mile from ground zero, Hiroshima, Japan, seventy-nine days after detonation.* [59]

Senators making last minute preparations on the morning of the ERW vote could, if so inclined, read Walter Pincus' frontpage coverage of the Army's detailed documentation of the "devastating effect of neutron bomb technology on personnel." Pincus attributes to "informed sources" the claim that "a (one) kiloton neutron enhanced radiation artillery projectile or missile would deliver 8,000 rads of radiation to exposed individuals within a half mile of the explosion." The neutron warhead was designed to spread lethal radiation. Author

[59] Photograph courtesy of the University of California, Los Angeles, "Children of the Atomic Bomb," http://www.aasc.ucla.edu/cab/200708230005.html (accessed May 30, 2014).

Robert Lawrence, writing for *General Military Review* in 1971, determined that a 1-kiloton enhanced radiation weapon had the equivalent military effectiveness of a 15-kiloton fission weapon, and that was roughly the yield of the Hiroshima bomb.[60] But it was not new or exotic. In New York, the *Times* reported that the Senate debated – "in secret" – the Carter administration's request to fund the development of "an arsenal of exotic new weapons more detrimental to humans than to buildings."[61] In fact, the Manhattan Project alumni had been circling around the production of small, portable, thermonuclear devices as early as 1950.[62]

President Carter countered such descriptions of enhanced radiation weapons as exotic and new. On 22 July the president told members of the public at a town hall meeting in Yazoo City, Mississippi, that he did not believe that there were unique moral issues surrounding neutron bomb production and deployment. "I don't believe that the neutron bomb is more wicked or immoral than the present nuclear weapons we have," President Carter said. The president also added that the Soviet Union's nuclear arsenal was comparable.[63] Supporters seconded the president. In the Senate, John C. Stennis resisted negative descriptions of enhanced radiation weaponry. Stennis observed that ERW were

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[60] Robert M. Lawrence, "On Tactical Nuclear Weapons," *General Military Review*, January 1971, p.243.

[61] Martin Tolchin, "Neutron Bomb Fund Debated by Senate in a Secret Session," *New York Times*, July 2, 1977, p. 1.

[62] William R. Van Cleve and S. T. Cohen, *Tactical Nuclear Weapons, an Examination of the Issues* (New York, NY: Crane, Russak & Co., 1978), 3.

[63] Jimmy Carter, Yazoo City, Mississippi, Public Meeting, July 22, 1977, *APP*, http://www.presidency.ucsb.edu/ws/?pid=7854 (accessed December 24, 2014).

both more accurate and less destructive than the systems they were intended to replace. Stennis, a Mississippi Democrat and Chairman of the Armed Services Committee, added that ERW might be used "in a more restricted manner than [the] nuclear weapons now available." The senator may have exaggerated his affinity for the neutron weapon ("the best news I have heard in years") but he remained a reliable supporter of ERDA's production program.[64]

On 12 July President Carter informed Senator Stennis via letter that he believed that the "the enhanced radiation weapon contained in the ERDA budget [was] in [America's] security interest." The day before he wrote to Stennis, Carter received a cover note and brief ERW fact sheet prepared by David Aaron, a deputy assistant for national security affairs. Aaron's fact sheet contained a synopsis of the DOD's policy on neutron weapons. According to Defense, the neutron weapon as conceived by ERDA minimized damage to non-target areas yet promised to be highly effective against armored forces. Neutron weapons also had the potential to be employed in support of friendly ground forces since prompt radiation (in the absence of significant fallout) was expected to dissipate rapidly. Thus ERW were less of a danger to U.S. and allied forces in battlefield areas than standard fission weapons. The Pentagon held that enhanced radiation weapons deployed in Europe improved the deterrence value of NATO forces, especially against "massive armored attacks."[65]

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[64] Tolchin, "Neutron Bomb Fund."

[65] Jimmy Carter to John Stennis, July 12, 1977, National Security Affairs, Brzezinski Material, "Enhanced Radiation Weapons and Radiological Warfare, 6-8/77," 16, Jimmy Carter Library. Fact Sheet, David Aaron to Jimmy Carter, July 11, 1977, National Security Affairs, Brzezinski Material, "Enhanced Radiation Weapons and Radiological Warfare, 6-8/77," 16, JCL.

The potential for the neutron weapon's use on the battlefield helped turn public opinion against it in Europe. Would Carter be able to convince NATO member-states to permit ERW deployment on their home-soil if they believed that ERW increased the likelihood of nuclear war? No. In handwritten notes dated August 2, 1978 – four months after neutron bomb deferral – President Carter informed Zbigniew Brzezinski that West Germany's chancellor was intransigent when it came to ERW. "Schmidt states flatly that neither he nor his successors will permit deployment of ERW on German soil unless at least one other continental nation will also accept them."[66]

In 1982 President Carter explained that the Department of Defense, Harold Brown's department, had gotten ahead of him on the neutron bomb. Carter recalled that "the primary commitment had been made on the neutron weapon through the military commanders." In Carter's estimation, "they were always much more eager to reach agreement among themselves."[67] To Carter, his staff overstepped by indicating to NATO ministers that the U.S. would be moving ahead with ERW production before the Europeans had consented to deployment; it was a costly communication breakdown, but not inconsistent with the president's stated opinion at the time the ERW controversy was unfolding.

The Department of Defense (DOD) was a mammoth driver of federal funding for research and development during the Cold War, and the same could

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[66] Notes, President Carter to Zbigniew Brzezinski.

[67] Jimmy Carter Interview, Miller Center, University of Virginia, COHP, November 29, 1982, http://web1.millercenter.org/poh/transcripts/ohp_1982_1129_carter.pdf. (accessed August 13, 2013).

be said for ERDA, but to a lesser extent. Both DOD and ERDA are building blocks of a robust postwar American national security state. The power of these departments, and of the elites within them, is formidable in weapons procurement. President Carter's remarks suggest that he felt the effects of this formidable power during the ERW affair. Looking backward from Ronald Reagan's 1981 order to assemble neutron warhead components, it seems that that formidable power carried the day.[68]

* * *

In Congress, ERW opposition, led by Oregon's Mark Hatfield, continued through the summer of 1977 with Hatfield calling for a vote in the Senate to delete ERW funding from the ERDA budget. Pennsylvania Republican John Heinz sided with Hatfield. Heinz asserted that President Carter had not made a sufficient case for "repugnant" and "literally dehumanizing" neutron weapons.[69] It was Hatfield, though, who did most to oppose Mississippi's John C. Stennis and other proponents of the neutron weapon.

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[68] On the creation of the postwar national security state, *see*, Michael J. Hogan, *A Cross of Iron: Harry S. Truman and the Origins of the National Security State, 1945-1954*, (New York: Cambridge University Press, 1998). Hogan discusses the emergence of a national security state in postwar America under Truman and Eisenhower where one had not existed before. Hogan tracks the "slippery slope" to a garrison state through government actions related to military manpower, the modern-day DOD, the allocation of resources for defense and international programs, and the mobilization of science and industry behind national defense. On the contribution of organizational elites, consider Hogan's method, corporatism, which has its roots in Ellis W. Hawley's "The Discovery and Study of a 'Corporate Liberalism'." *See*, *Business History Review* 52, No. 3, Corporate Liberalism (Autumn, 1978): 309-320.

[69] Walter Pincus., "Details Emerge on Effects of Neutron Weapons," *Washington Post*, July 1, 1977, p. A1.

Stennis proposed a compromise position. As Chairman of the Public Works Appropriations Subcommittee, Stennis offered an amendment to the bill requiring President Carter to certify that ERW were in the U.S. "national interest" before actually spending any money appropriated for production. Hatfield opposed the Stennis amendment. Hatfield, who served in the Pacific during the Second World War, and witnessed the horror of Hiroshima firsthand, believed that the neutron weapon's precision – aided by its reduced blast effects – lowered the nuclear threshold. For Hatfield, because enhanced radiation weapons were more precise, the temptation to use them increased.[70] Unlike Stennis, the news of the neutron weapon was *not* the best news Hatfield had heard in years. Stennis' proposal precipitated counterproposals from Hatfield and from President Carter's fellow Democrats Sam Nunn and Edward M. Kennedy.[71]

The Senate's ERW debate stalled once the 1977 Independence Day holiday began, forcing members to adjourn and reconvene after a recess. In the interim, the Soviet Union's official news agency, *Tass*, continued fueling opposition to the neutron weapon. According to reports in the *Washington Post*, *Tass* warned that enhanced radiation weapons, which it characterized as revolting to the conscience, but delightful to "the lovers of man" in Washington, had brought about a new and "extremely dangerous round of the arms race." *Tass* writer Yuri Kornilov foresaw new difficulties for arms control as he contrasted

[70] Tolchin, "Neutron Bomb Fund."

[71] "Senate is Secret on Neutron Bomb," *Observer-Reporter*, July 5, 1977, A-5.

the neutron weapon with Carter's human rights-centered foreign policy.[72] Writer Stanley Hoffman captured the essence when he wrote that "the desire to control the strategic arms race limits the [U.S.'s] ability to push the Soviets too hard on … human rights, even though [the U.S. proclaims that] there is no linkage" between arms control and human rights.[73] Hoffman's assessment falls into line with that of Secretary of State Vance who did not want to link arms control and human rights. However, Carter was ambivalent. President Carter declared that there was no linkage between ERW and SALT (an opinion not shared by his Soviet counterpart Leonid Brezhnev) but his deferral decision did nonetheless call for Soviet restraint regarding forces and deployment, recognition of a direct linkage of arms control to the neutron weapon.

Hoffmann's recognition of a de facto linkage of ERW and SALT underscored the fact that neutron weapons complicated strategic arms control. However, the distinction between tactical and strategic weaponry disappeared in the ebb and flow of the larger ERW debate. For Hoffmann, writing in the fall of 1977, strategic nuclear parity between the U.S. and the U.S.S.R. bolstered Moscow's willingness to project power into the Third World, especially Africa. Hoffmann took Leonid Brezhnev's Angola policy to reflect a new and greater Soviet willingness to project that power at a time when the U.S. was less willing

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[72] Kevin Klose, "Soviets Denounce U.S. Neutron Project," *Washington Post*, July 10, 1977. p. A12.

[73] Stanley Hoffman, "On Power: The U.S.es of American Power," *Foreign Affairs*, October 1, 1977, http://www.foreignaffairs.com/articles/28284/stanley-hoffmann/on-power-the-U.S.es-of-american-power (accessed June 1, 2014).

to similarly project power abroad.[74] The Vietnam effect did not freeze-in-place U.S. overseas commitments, of course, but the effect was chilling.[75] One may credibly argue had the U.S. been more resolute in Iran in the years immediately prior to 1979, the hostage crisis might have been of shorter duration. Perhaps the U.S.'s schadenfreude over the U.S.S.R.'s Vietnam was repaid by Al Qaeda né Afghani Freedom Fighters operating with U.S. funds and equipment.

Enhanced radiation weaponry threatened to upset the balance of power by forcing the U.S.S.R. to keep pace with U.S. technological developments. Thus if the U.S. fielded a modernized nuclear weapon that promised to be less destructive but no less lethal, the bi-polar Cold War contest required a Soviet answer lest Moscow fall behind and be left vulnerable.[76] Moreover, even though the neutron warhead was earmarked for deployment in Europe, there is no reason to conclude that it could not have been redeployed elsewhere at a moment's notice.

On 12 July President Carter held a news conference in Washington on domestic and foreign affairs.[77] The neutron bomb controversy generated the first question the president fielded. It was a compound question with three parts. The

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[74] Hoffman, "On Power: The U.S.es of American Power."

[75] I first became aware of the term "Vietnam effect" after reading John Carlos Rowe's "The Vietnam effect in the Persian Gulf War," *Cultural Critique* 19, Autumn, 1991, pp. 121-139. A shorthand term for the effect might be "fear of quagmire."

[76] This, in any event, compares favorably with President Reagan's view. *See*, Ronald Reagan: "Remarks on Signing the Economic Recovery Tax Act of 1981 and the Omnibus. Budget Reconciliation Act of 1981, and a Question and-Answer Session with Reporters," August 13, 1981. Online by Gerhard Peters and John T. Woolley, *APP*, http://www.presidency.ucsb.edu/ws/?pid=44161 (accessed January 16, 2014).

[77] Jimmy Carter: "The President's News Conference," July 12, 1977. Online by Gerhard Peters and John T. Woolley, *APP*, http://www.presidency.ucsb.edu/ws/?pid=7786 (accessed December 23, 2014).

first part addressed Carter's inaugural pledge to eliminate all nuclear weapons, a pledge later taken up by his successor, Ronald Reagan. Before discussion his strategic defense initiative in the second inaugural in 1985, Reagan echoed Carter's inaugural promise. "We're [members of the Reagan administration are] not just discussing limits on a further increase of nuclear weapons; we seek, instead, to reduce their number. We seek the total elimination one day of nuclear weapons from the face of the Earth.[78] Carter's inaugural pledge was more or less the same: "We pledge perseverance and wisdom in our efforts to limit the world's armaments to those necessary for each nation's own domestic safety. And we will move this year a step toward our ultimate goal--the elimination of all nuclear weapons from this Earth."[79]

However, at the 12 July press conference, Carter made it clear that ERW were not inconsistent with the inaugural promise. To Carter, neutron warheads were not new nuclear weapons. The president's response is worth quoting in detail.

> President Carter said:
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> The neutron bomb has been discussed and also has been under development for 15 or 20 years. It's not a new concept at all, not a new weapon. It does not affect our SALT or strategic weapons negotiations at all. It's strictly designed as a tactical weapon.[80]

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[78] Ronald Reagan: "Inaugural Address," January 21, 1985. Online by Gerhard Peters and John T. Woolley, *APP*, http://www.presidency.ucsb.edu/ws/?pid=38688 (accessed January 15, 2015).

[79] Jimmy Carter: "Inaugural Address," January 20, 1977. Online by Gerhard Peters and John T. Woolley, *APP*, http://www.presidency.ucsb.edu/ws/?pid=6575 (accessed February 1, 2015).

[80] Jimmy Carter: "The President's News Conference," July 12, 1977. Online by Gerhard Peters and John T. Woolley, *APP*, http://www.presidency.ucsb.edu/ws/?pid=7786 (accessed March 21, 2013).

Carter's response illustrates the depth of his understanding of enhanced radiation warheads.

To Carter, ERW were not new weapons but part of ongoing U.S. efforts to modernize NATO's theater-level nuclear forces. When Carter took office in 1977, NATO's theater-level nuclear forces were deployed in accordance with the Alliance's 1967 doctrine of Flexible Response. Owing to their low yield, theater-level forces such as the neutron warhead played a tactical role opposing Warsaw Pact conventional forces, especially armor. The tactical role foreseen for the neutron warhead differed substantively from the role of the U.S. strategic nuclear triad, long-range bombers, intercontinental ballistic missiles, and submarine-launched ballistic missiles. The triad was not conceived for use against conventional Warsaw Pact forces; instead, the triad threatened *mutual assured destruction*. However, according to Secretary of State Cyrus Vance, who was not alone in this opinion, NATO's Flexible Response doctrine was "ambiguous" when it came to wartime use of tactical nuclear weapons, which raised concerns in Europe that these weapons, often called "mininukes," lowered the nuclear threshold to unacceptable levels.[81]

For Carter and other officials in the administration, ERW had deep roots in the U.S. nuclear arms research and development pipeline. The administration's previoU.S.ly secret "Chronology of Events Involving Enhanced Radiation

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[81] Memorandum, Cyrus Vance to President Carter, July 25, 1977, "European Attitudes toward the 'Neutron Bomb,'" *NSA*, Brzezinski Materials, ERW and RW, 6-8/77, Box 16, JCL.

Weapons" (declassified in 1997) notes that ERW "for battlefield applications" were developed during the early 1960s.[82] Moreover, the Ford administration announced plans to NATO's Nuclear Planning Group (NPG) in January, 1976, to modernize the Lance short-range missile and the 8-inch artillery shell using enhanced radiation components. NATO's NPG endorsed the plans.[83] The press alleged that the U.S. was attempting to field "exotic new weapons," nonetheless. *Newsweek* called the neutron warhead a "doomsday weapon … that … kills with death rays."[84] The Soviet Union assailed ERW as arms control impediments, "practically … chemical-warfare weapons."[85]

The second part of the opening question of the 12 July press conference probed why President Carter did not know that ERDA's budget contained funds for enhanced radiation weapons. To this, the president had no reply, except to say that "I did not know it was in the bill."[86] Unclear is whether the president knew of the neutron warhead, but merely did not know of its inclusion in ERDA's FY 1978 budget. The likelihood is that Carter knew of the weapon. Days after the president's inauguration, on January 24, 1977, Vice President Walter Mondale proposed to NATO an increase in conventional forces coupled with the

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[82] Chronology of Events Involving Enhanced Radiation Weapons (ERW), undated, Zbigniew Brzezinski Collection, "Defense-Enhanced Radiation warhead," 3/78-8/78, Box 22, JCL.

[83] Memorandum, Cyrus Vance to President Carter, July 25, 1977. Vance notes that there was no substantive debate of the issue in the FRG.

[84] "The N-Bomb," *Newsweek*, July 4, 1977, 3.

[85] Milton R. Benjamin and Lloyd H. Norman, "Battle over the N-Bomb," *Newsweek*, July 4, 1977, 44.

[86] Carter, "The President's News Conference, July 12, 1977."

development of an enhanced radiation bomb.[87] In light of the Mondale proposal, it is unlikely that President Carter had no contemporaneous knowledge of the neutron warhead. Nevertheless, Carter's answer left him open to the appearance of being out of his depth, naïve.[88]

The neutron warhead controversy mushroomed after the U.S. announced on 7 July that it had successfully detonated an enhanced radiation warhead at its Nevada test site.[89] The test elicited an immediate response from *Tass* as documented by the Associated Press. The Soviet news agency accused the Carter administration of "going back on [its] own election promises and acting contrary to the spirit of détente."[90]

The third and final prong of the opening question tried to elicit whether the neutron bomb would escalate the arms race. Here the president was clear. Carter did not see enhanced radiation weapons as impediments to SALT; therefore, he separated them from discussion of strategic nuclear arms. The Soviet leadership took the opposite view; namely, as *Tass* writer Kornilov

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[87] *See*, National Security Archive ("*NSA*"), Chronology of Events, I-5, http://www2.gwu.edu/~nsarchiv/carterbrezhnev/docs_salt_ii/I%20Chronology%20of%20Events%20Relating%20to%20SALT%20II.pdf, citing, Garthoff, *Détente and Confrontation*, 583 (accessed June 1, 2014).

[88] *Cf.*, Ian Q.R. Thomas, *The Promise of Alliance: NATO and the Political Imagination*, (Lanham, MD: Rowman & Littlefield, 1997), 113. Thomas observed that Carter moved U.S. foreign policy away from Nixonian realpolitik, but was later strongly criticized for his (supposed) naiveté and (supposed) ignorance of the Soviet threat. But Thomas relates that Carter stiffened after the 1979 invasion of Afghanistan by the Soviet Union by announcing trade sanction, boycotting the 1980 Moscow Olympic Games, and withdrawing SALT II from Senate consideration, where the Treaty was facing almost certain veto. *See*, ibid, 120-121. Afghanistan helped pave the way for ERW assembly by the next administration. *Cf.*, Cyrus Vance interview by Tom Brokaw, *Today*, January 11, 1980, reprinted in Department of State Bulletin 80, no. 2035, February, 1980, p. 4.

[89] Atomic Archive, http://www.atomicarchive.com/Timeline/Time1970.shtml (accessed October 1, 2014).

[90] Thomas Kent, Associated Press, July 8, 1977.

alleged, ERW and SALT could not be completely decoupled.[91] In this regard, to buttress his point about the separateness of ERW and SALT, the president pledged to have an arms control impact statement (ACIS) presented to Congress before he made his final decision on ERW production. Carter fulfilled his pledge for the most part, but he did not submit a *complete* ACIS to the Congress; instead, he submitted a *partial* one; the difference not being of consequence in light of deferral over production.

Journalists also asked the president whether he renounced first use of the neutron bomb; Carter declined to answer either affirmatively or negatively. In sum, on 12 July Carter believed that the neutron warhead gave the United States more choices consistent with NATO's 1967 Flexible Response doctrine. Two specific characteristics of the neutron weapon's design appealed to the president, low yield and reduced blast. The first characteristic – low yield – stemmed from miniaturization, and the second characteristic – reduced blast – highlighted the enhanced radiation features.[92] The impression President Carter fostered as of mid-summer 1977 was of a chief executive committed to neutron warhead approval. Carter's letter to House Arms Services Committee head Melvin Price corroborates the impression. Carter informed Price on 21 July that he believed that tactical nuclear weapons had "strongly contributed to deterrence of conflict in

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[91] The idea of decoupling comes up often during European concerns over SALT and, to a lesser extent, ERW. The U.S. promised a nuclear shield over Europe, which meant that an attack by the U.S.S.R. on Western Europe would trigger a U.S. response, a nuclear response if the U.S.S.R.'s aggression warranted one. But, with strategic parity – the result of SALT – European leaders worried that the U.S. would not risk itself for the sake of Europe. Hence the fear was that a successful implementation of SALT might effectively decouple the U.S. from its promise to defend Europe with nuclear weapons.

[92] Carter, "The President's News Conference, July 12, 1977."

Europe." Carter added, "we [the U.S.] must maintain the [tactical nuclear] option." The "tactical nuclear option" included the neutron warhead.[93]

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In Europe, during midsummer, NATO commander Alexander M. Haig, Jr., publicly weighed in in favor of including enhanced radiation warheads in the NATO arsenal. According to Haig, a former White House chief of staff who was no stranger to Oval Office politics, America's NATO partners were "enthusiastic" about ERW. Haig's assessment was inconsistent with the advice that Secretary of State Cyrus Vance gave to the president two weeks later. According to Secretary Vance, NATO's NPG "acquiesced" to the proposed enhanced radiation modernization program to avoid three unwelcome scenarios.[94] First, the NPG did not want to openly debate the issue of enhanced radiation warheads with the U.S. owing to the perception that the U.S. was "determined" to proceed with ERW production.[95] Second, the NPG feared that enhanced radiation warhead cancellation might lead to an overall reduction in NATO's theater-level nuclear stockpile.

Vance points out in his memorandum to the president that "many Americans" (none of whom are identified by Vance in the memorandum) "had been talking about reducing the European stockpile," which corroborates the

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[93] Letter. Carter to Price, 07/21/77, National Security, Defense, 07/01/77-07/31/77, Box ND-49, JCL In support of the view that Carter also took ERW as a positive contribution to NATO's Flexible Response, the president points out to Price that TNF [including ERW] are "structured to support NATO" doctrine. Ibid.

[94] Memorandum, Cyrus Vance to President Carter, July 25, 1977, "European Attitudes toward the 'Neutron Bomb,'" *NSA*, Brzezinski Materials, ERW and RW, 6-8/77, Box 16, JCL

[95] Memorandum, Cyrus Vance to President Carter, July 25, 1977; and *cf*., Memorandum, Brzezinski to Carter, July 21, 1977, July 21, 1977, RAC:NLC-1-3-1-3-3, JCL

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NPG's concern that ERW cancellation might lead to broader reductions in Europe's TNF armamentarium. Third, the NPG desired to avoid public discussion of the ERW warhead on the assumption that enhanced radiation variants of Lance and the 8-inch artillery shell could be "integrated quietly with the rest of the [Alliance's] theater nuclear posture."[96] As for General Haig, his position in favor of enhanced radiation warhead development drew support from Manfred Woerner, a spokesman for West Germany's Conservative Party, the Christian Democratic Union's opposition.

[96] Memorandum, Cyrus Vance to President Carter, July 25, 1977, "European Attitudes toward the 'Neutron Bomb,'" *NSA*, Brzezinski Materials, ERW and RW, 6-8/77, Box 16, JCL.

(F 7) All smiles: West German Foreign Minister Hans-Dietrich Genscher and Chancellor Helmut Schmidt with Secretary of State Cyrus Vance, during Schmidt's visit to Washington, DC, in June 1977.[97]

From Manfred Woerner's perspective, the enhanced radiation warhead satisfied West Germany's interest in remaining strong vis-à-vis the Soviet Union. But members of Woerner's Conservative Party were not fully committed. Secretary Vance was aware of Woerner's view, which he termed a general endorsement of the enhanced radiation warhead, but he warned the president that ERW might touch "an emotional public nerve" in the Federal Republic.

Vance, off course, was cognizant of the West German ERW opposition.[98] Alfons Pawelczyk, a spokesman for the Social Democrats, opposed the neutron warhead. He countered Woerner and objected to Haig's claim of widespread support in NATO for the proposed warhead. The Associated Press reported that West German Foreign Minister Hans-Dietrich Genscher urged his colleagues not

[97] Still Pictures Unit, National Archives and Records Administration, RG 59-SO, box 40.

[98] Memorandum, Cyrus Vance to President Carter, July 25, 1977.

to turn the debate over the neutron bomb into an anti-American screed.[99] On 25 July, Secretary Vance advised President Carter that NATO would accept the enhanced radiation warhead if pressured, but would "breathe easier" if the U.S. cancelled the program altogether. According to Vance, Europe's bias against the possibility of nuclear warfighting on its home-soil or the prospect of a lowered nuclear threshold undercut support for the neutron warhead. Nevertheless, Vance advised the president that the Europeans remained "attached" to a home-soil nuclear stockpile for deterrent purposes. "Failure to modernize nuclear weapons [with enhanced radiation components] may result in a significant reduction of the nuclear stockpile over time, Vance warned Carter."[100]

Modernization was not proceeding smoothly. Early in October, 1977, Secretary of Defense Harold Brown prepared to attend a meeting of NATO's all-important Nuclear Planning Group (NPG) in Bari, Italy. The NPG was formed in the late 1960s during Lyndon B. Johnson's White House tenure. The group gave NATO members a forum for discussion and collaboration on sensitive nuclear questions. In December, 1974, the NPG affirmed the importance of tactical nuclear weapons to NATO at the same time that then Secretary of Defense James Schlesinger warned alliance ministers against standing by while defense budgets were cut. He called for more emphasis on limited nuclear options (LNO) and modernization of NATO's battle-field nuclear weapons. According to Secretary Schlesinger, the Soviet Union was fast approaching a preponderance of power in

[99] Robert H. Reid, Associated Press, July 27, 1977.

[100] Memorandum, Cyrus Vance to President Carter, July 25, 1977.

Europe and, he warned, the balance of power might shift away from Washington in favor of Moscow.

The Soviet Union's 1979 invasion of Afghanistan confirmed fears that Moscow had the wherewithal to project force (directly and not by proxy) outside of Europe, in Afghanistan, adjacent to the Straits of Hormuz, a global oil bottleneck. As Carter made clear, Afghanistan was not part of the Soviet Union's retinue of satellite countries. Carter described the Soviet move into Afghanistan in these terms to the American people in January, 1980: "massive Soviet military forces have invaded the small, nonaligned, sovereign nation of Afghanistan, which had hitherto not been an occupied satellite of the Soviet Union."[101]

In Bari, during the fall of 1977, Secretary of Defense Brown's remarks to NATO ministers were aimed at having alliance member-states carry a larger share of Western Europe's defense burden without the "cover" of Soviet forces in Afghanistan. Although the Horn of Africa remained a hotspot in 1977, these were proxy wars unlike what awaited policymakers contemplating Moscow's direct intervention in Afghanistan. Even so, in Bari, Brown pled the administration's case that NATO member-states had to take more responsibility for the defense of Western Europe. Secretary Brown called for America's NATO allies to "share responsibility" with the United States for enhanced radiation weapons. Brown's Bari remarks rested (in part) on the belief that "outside the Alliance, it [the neutron bomb] has no utility." The sole anticipated military role for the neutron

[101] Jimmy Carter: "Address to the Nation on the Soviet Invasion of Afghanistan," January 4, 1980. Online by Gerhard Peters and John T. Woolley, *APP*, http://www.presidency.ucsb.edu/ws/?pid=32911 (accessed September 2, 2014).

bomb was limited to Europe; it did not have a part to play outside of a Warsaw Pact-NATO confrontation in Central Europe.

The neutron warhead, a test case for NATO's "willingness" to play a larger role in Western Europe's defense, was a prominent item on the NPG's Bari agenda.[102] Prior to leaving Washington for Bari, Brown voiced his public opinion in favor of enhanced radiation weapons. "I believe it [the neutron bomb] has real advantages, but there are obviously political considerations." The secretary indicated that these political considerations reached beyond U.S. domestic politics to touch Europe by acknowledging that there was deepening public opposition to the neutron bomb in Europe, reported in the New York Times.[103] But Brown's public comments on the neutron warhead differed from those he held in private. In private, f few weeks after Bari, Brown told fellow members of the president's Special Coordinating Committee that neutron warheads were not important from a military perspective.[104] Later that spring, on 3 April 1978, Brown advised President Carter that he (Carter) risked "taking the heat" for a no (ERW) decision "personally."[105]

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[102] In April, 2012, former U.S. diplomat Henry H. Gaffney wrote, "we had briefed the ambassadors about U.S. TNF modernization at the DPC perhaps a year before [Bari], including on the "enhanced radiation" 8-inch round and warheads for the Lance missile, but come the summer of 1977, FRG defense minister Leber said he had never heard of [it]." http://h-net.msu.edu/cgi-bin/logbrowse.pl?trx=vx&list=H-Diplo&month=1204&week=c&msg=1fy4JQyaz9XKp1ImDIn6DA (accessed September 2, 2014).

[103] Bernard Weinraub, "Brown Says Soviets Can Fell Satellites," *New York Times*, October 5, 1977, p. 11.

[104] Memorandum of Conversation, Special Coordinating Committee (SCC), November 16, 1977, RAC NLC-31-139-6-1-7, JCL.

[105] Memorandum for the President, Harold Brown to President Carter, April 3, 1978, RAC NLC-95-56, JCL

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In the Senate, on 13 July Mark Hatfield's efforts to cut funds for Lance and the enhanced radiation artillery projectile stalled. The Senate voted 58 to 38 against deleting enhanced radiation warhead funding from ERDA's budget. Citing a "knowledge vacuum" in the Senate, Hatfield beseeched his colleagues to delete ERW funding, but his efforts fell short. Across the aisle, Senator Sam Nunn, a Peach State Democrat like the president, emerged as a strong supporter of ERW development. Senator Nunn, a member of the Armed Services Committee, specialized in defense issues, and he had a particular attachment to NATO issues. Days after Carter took office Nunn co-authored a sobering – from Nunn's point of view – assessment of the military threat emanating from the U.S.S.R. Eponymously named the Nunn-Bartlett Report, the missive warned that "Soviet forces deployed in Eastern Europe now possess the ability to launch a potentially devastating conventional attack in Central Europe with little warning."[106] According to one defense analyst familiar with the Nunn-Bartlett Report, the senators strategy to combat the Soviet threat called for "the development of sufficient capability at the strategic nuclear, theater nuclear, and conventional levels to deter and, if necessary, defeat Soviet aggression."[107]

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[106] Senator Sam Nunn and Senator Dewey F. Bartlett *NATO and the New Soviet Threat* (Washington: U.S. Government Printing Office, 1977).

[107] Lieutenant Colonel Richard J. Stachurski, "The Nunn-Bartlett Report: A Realistic Prescription for NATO?" *Air University Review*, July/August, 1978, http://www.airpower.maxwell.af.mil/airchronicles/aureview/1978/jul-aug/stachurski.html#stachurski (accessed February 23, 2015).

In keeping with his findings, Nunn argued that the "more precise" enhanced radiation warhead allowed NATO greater flexibility. In addition, more flexibility meant more time before electing to cross the nuclear threshold, reported the *Washington Post*.[108] Nunn's opinion countered the argument that ERW dangeroU.S.ly lowered the nuclear threshold, but failed to convince ERW opponents Mark Hatfield and Senator Edward M. Kennedy. Both Hatfield and Kennedy remained wedded to the notion that enhanced radiation warheads constituted a perilous escalation of the arms race.

On 26 July, the *Washington Post* reported that the Congress retained an option jointly between the upper and lower chambers (but not severally) to override President Carter's authority to spend ERW funds within 45 days of a decision to produce ERW.[109] The override provision stemmed from an agreement between the House and Senate acting in conference. By the end of July, after Congress sent President Carter his public works bill with ERW funding intact, media outlets wrote of "President Carter's decision to produce the neutron bomb."[110] No such decision had been made, but the confusion sown by President Carter and his White House staff made it seem as if one had been made in favor of ERW production.[111]

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[108] Walter Pincus, "Senate RefU.S.es, 58-38, To Kill Neutron Bomb Funding," *Washington Post*, July 14, 1977, P. A2.

[109] "Water Projects Bill Approved by House," *The Washington Post*, July 26, 1977, p. A9.

[110] Joseph Fromm, "Behind the Furor over Future Arms," *U.S. News & World Report*, July 25, 1977, 24.

[111] The impression – *of ERW production* – held until the springtime of 1978. *See, e.g.*, James Schlesinger interview, July 19-20, 1984, "the Carter Presidency Project," interview by Charles O. Jones, et al., *University of Virginia, Miller Center of Public Affairs* (2005). The Schlesinger-Jones

Paul Warnke's much anticipated ACIS arrived mid-way through the Senate's deliberations. Although the NSC had the final say, subject to President Carter's approval, the ACIS was Warnke's work product. In it, the head of the Arms Control and Disarmament Agency opined that ERW had no discernible "arms control advantages;" instead, they [ERW] would be "marginally negative." Warnke's statement spurred others to action. Senator Hubert Humphrey, Democrat of Minnesota, wanted another pass at the ERW issue along the same line proposed by Senator Kennedy, a compromise allowing either upper of lower chamber to veto ERW production.

In a related issue, the ACIS revealed that the deployment of enhanced radiation warheads by the North Atlantic Alliance could hand the Soviet Union a bargaining chip in the Mutual Balance of Forces Reduction Talks (MBFR).[112] The Soviets might cite ERW as evidence of Washington's sleight of hand. In such a scenario, Moscow could proffer its *disadvantage* by pointing out that, even though conventional forces were being reduced by NATO, technological innovation – vertical nuclear proliferation – actually strengthened the Alliance's anti-tank capacity. If such a position gained traction, the Soviets might make a successful case in favor of revised conventional force cuts that favored the Warsaw Pact at NATO's expense. In other words, the Soviets could plausibly

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interview is available online at http://millercenter.org/president/carter/oralhistory/james-schlesinger (accessed January 15, 2015).

[112] Arms Control Impact Statement, undated, National Security Affairs, Brzezinski Material, "Enhanced Radiation Weapons and Radiological Warfare, 6-8/77," Box 16, JCL. MBFR stands for "mutual balance of forces reduction." Pincus alludes to this MBFR argument in his 14 July frontpage coverage. In making the argument, Pincus quotes from the ACIS. Although MBFR were aimed at conventional forces, ERW were brought up since the neutron warhead was designed to offset the Warsaw Pact's advantage in armor and mechanized infantry.

argue that enhanced radiation weapons were evidence that NATO forces had actually been *upgraded* despite being *reduced* numerically.

In July, 1977, West German Chancellor Helmut Schmidt visited Washington. After a cordial state dinner, Egon Bahr, the ruling secretary of Schmidt's Social Democratic Party, called the neutron bomb a "perversion." Up to that point, Chancellor Schmidt had said nothing publicly about enhanced radiation weapons. In contrast to Bahr's reported aversion to ERW, West German defense specialists saw the merits of the weapons, and they embraced the design's reduced blast. However, Bahr pointed out that the neutron bomb had tuned the world on its head. In his view, it placed the safety of property over that of people. Other ERW critics claimed that low-yield nuclear weapons such as the proposed 8-inch enhanced radiation artillery shell might confuse ground combat commanders accustomed to using conventional weapons. If these commanders had ready access to enhanced radiation artillery shells, then "stepping over the threshold into uncontrollable atomic warfare" might result by happenstance.[113]

[113] Michael Getler, "Bonn Party Chief Says U.S. Bomb a 'Perversion'," *The Washington Post*, July 18, 1977, P. A1.

(F 8) *"No Neutron Bomb"* [114]

Egon Bahr's sentiment was the same one that sparked widespread protests in favor of blocking ERW production. Posters depicting children who have vanished in a neutron warhead strike were part of the U.S.S.R.'s information campaign to turn public opinion ERW. In the representation above, the child is gone but the doll, at the foot of the outline, remains intact. The poster reads: "No Neutron Bomb," but it's the image that conveys the devastating consequences of ERW use, supposedly atomized people. The Finland-based World Peace Council, with the support of Soviet and East Bloc media, declared 6 through 13 August, 1977, as an action week against the neutron bomb. While not so prevalent in the U.S. – anti-nuclear groups like the Clamshell Alliance were focusing on nuclear power plant construction – opposition to the neutron warhead attracted significant

[114] Source, *Art and Faith, Too*, http://03varvara.wordpress.com/2012/04/21/unknown-artist-no-neutron-bomb-1980s/00-unknown-artist-no-neutron-bomb-1980s/ (accessed February 25, 2014).

support across Europe, especially in the Netherlands. The protests had the potential to be particularly effective because the Carter administration needed Bonn's open cooperation in order to deploy ERW in Europe.[115]

In the end, Carter asserted that the Europeans never wanted enhanced radiation weapons. According to the President's recently published White House diary excerpts[116] Carter decided in the spring of 1978 to "work out a way to cancel the [ERW] idea without giving an image of weakness to our European allies, who don't want it [ERW] anyhow."[117] The president's decided to defer ERW production, even though he initially thought the weapons were in America's security interest. But European reluctance does not explain the president's turnabout whereas Carter's lack of faith in the neutron warhead's military utility does, explain it. In addition, as Carter's notes show, the president instead preferred the cruise missile to the neutron warhead. Even so President Carter expended a good deal of political capital opposing Mark Hatfield's Senate opposition to ERW funding. President Carter won a political victory and secured Congress' commitment to fund the enhanced radiation warhead, but the victory was short-lived.

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[115] Michael Gelter, "Bonn Steps up Debate over Neutron Bomb," *The Washington Post*, July, 24, 1977, p. A6.

[116] President Carter's unabridged White House diary, which is currently kept at the Jimmy Carter Library in Atlanta, Georgia, was not open for research during the summer and fall of 2014. Upon information and belief, the diary has yet to be opened to researchers.

[117] Jimmy Carter, *White House Diary* (New York: Farrar, Straus & Giroux, 2010), 79.

CHAPTER 5

POLITICS ASCENDING

(F 9) *One week after neutron warhead funding approval, President Carter meets with National Security Advisor Zbigniew Brzezinski and Secretary of State Cyrus Vance, August 14, 1977.*[1]

On August 7, 1977, three months before Deputy Assistant to the President for National Security Affairs David Aaron declared production of the enhanced radiation warhead (ERW) a political gesture, President Carter signed the bill that approved funding for the warhead.[2] This chapter argues that intra-party political considerations were eclipsing the neutron warhead's military usefulness by the close of 1977, earlier than previously thought. President Carter's *political*

[1] National Archives, White House Staff Photographers, NLC-WHSP-C-02454-18A, http://research.archives.gov/search?v%3afile=viv_ku5Ib5&render.list-show=20&v:state=root|root-160-20|0& (accessed June 4, 2014).

[2] Special Coordination Committee (SCC) Meeting on Enhanced Radiation Warheads, November 16, 1977, NLC 31-139-6-1-7, Jimmy Carter Library ("JCL").

commitment to secure funding for the controversial warhead exceeded his *military* commitment to produce it and deploy it in Europe with the North Atlantic Treaty Organization (NATO), a measure of the president's ambivalence.[3] According to Zbigniew Brzezinski, the president's decision to forego neutron warhead production met with West German resistance that stifled efforts by the United States to invigorate NATO, one of the Carter administration's early objectives.[4] Although neutron warhead deferral v. cancellation originated with Brzezinski, he nevertheless lamented the political cost of deferral. Deferral was a compromise position for Brzezinski whereas outright cancellation was anathema, too great a concession to Moscow's information campaign.

In a related area, Brzezinski also found that Moscow's moves in the Horn of Africa during the spring of 1978, together with Leonid Brezhnev's sharp comments (to the effect that the neutron warhead was an impediment to détente) led to a "strategic deterioration" of superpower relations. In his memoirs, Brzezinski went so far as to describe the Soviet Union as spearheading a malignant and intense propaganda campaign against the U.S. on neutron warhead production and deployment.[5]

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[3] Zbigniew Brzezinski, *Power and Principle* (Farrar, Straus and Giroux, 1983), 302. Brzezinski speaks to the political calculus rather than the president's ambivalence.

[4] *See*, Zbigniew Brzezinski interview with Madeline K. Albright, Leslie G. Denend, and William Odom, February 18, 1982, "the Carter Presidency Project," interview by Inis Claude, et al., *University of Virginia, Miller Center of Public Affairs* (2003). The Brzezinski-Odom interview is available online at http://web1.millercenter.org/poh/transcripts/ohp_1982_0218_brzezinski.pdf (accessed January 15, 2015).

[5] Brzezinski, *Power and Principle*, Ibid, 184-185.

European resistance to neutron warhead deployment stymied President Carter's plans to reorient the U.S. role within NATO. European resistance to ERW also became a wedge in the Strategic Arms Limitation Talks (SALT) between the U.S. and the U.S.S.R. The ten-month neutron warhead affair complicated other U.S.-Soviet areas of competition such as the Horn of Africa, but – in the area of arms control – the neutron warhead remained was a straightforward lever.[6]

Indeed, David Aaron's "political gesture" (the one aimed at combating the Soviet Union's information campaign) ultimately took form once ERW were linked to arms control. Aaron's political gesture survived the ten-month neutron warhead controversy and made its way into the president's April 7, 1978, "Statement on Enhanced Radiation Weapons."[7] In that statement, President Carter conditioned future modernization of battlefield nuclear weapons on the extent to which the Soviet Union showed restraint in its "conventional and nuclear arms programs and force deployments."[8]

By linking future ERW production and deployment to Soviet action – in this case, by the term *restraint* – President Carter revealed the extent to which he

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[6] One month after his neutron warhead deferral, President Carter publicly declared that "In the strongest possible terms we have let the Soviets and the Cubans know that this [the U.S.S.R.'s activity in the Horn of Africa] is a danger to American-Soviet friendship and to the nurturing and enhancement of the principle of detente." Jimmy Carter: "Spokane, Washington Remarks and a Question-and-Answer Session at a Town Meeting," May 5, 1978. Online by Gerhard Peters and John T. Woolley, *American Presidency Project ("APP")*, http://www.presidency.ucsb.edu/ws/?pid=30757 (accessed October 3, 2014).

[7] Enhanced Radiation Weapons Statement by the President. ," April 7, 1978. Online by Gerhard Peters and John T. Woolley, *APP*, http://www.presidency.ucsb.edu/ws/?pid=30630. (accessed June 5, 2014).

[8] Ibid.

discounted the warhead's military utility. New information has come to light (following declassification of previously undisclosed documents) that shows that President Carter's initially favorable assessment of the neutron warhead's usefulness as a deterrent fell-off dramatically by the spring of 1978. More precisely, the president's position evolved as the U.S.'s NATO partners, especially the Federal Republic of Germany (FRG), resisted home-soil deployment of enhanced radiation warheads.

After Carter signed the bill authorizing ERW funding, it was re-designated the Public Works for Water and Development and Energy Research Appropriation Act of 1978 (the Public Works Act).[9] Two months elapsed since the *Washington Post* published its neutron warhead exposé and passage of the Act. During those two months, Republican Senator Mark Hatfield led a vigorous opposition to the neutron warhead, which President Carter eventually overcame by securing funds from Congress for the weapon's production. The Public Works Act included the money that Carter was seeking for modernization of the Lance short-range missile. During the mid-1970s, Lance was a mainstay of the North Atlantic Treaty Organization's theater-level nuclear force, although conventional forces yet played a strong deterrent role.[10] But the Act included a backstop – it required President Carter to certify to the Congress that enhanced radiation warhead production satisfied a national interest of the United States.

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[9] H.R. 7553, 95th Congress, "Public Works for Water and Power Development and Energy Research Appropriation Act," Public Law 95-96.

[10] *See*, Myra Struck McKitrick, "A Conventional Deterrent for NATO: An Alternative to the Nuclear Balance of Terror," *Parameters* 13, no. 1, 1983: 51-58.

Congress passed the Public Works Act with strings attached. The law gave to legislators a way of short-circuiting enhanced radiation warhead funding by means of a concurrent resolution. ERW Opponents mustered support to bring a concurrent resolution to block the president from going ahead with the neutron warhead, but they had to do so within 45 days of presidential action. If legislators failed successfully to bring such a resolution within 45 days, and the president met the national interest standard, ERW funding remained intact. In addition, the Act prohibited motions to recommit or reconsider whether the president had successfully met the standard. The prohibition on motions to recommit or reconsider ended the debate on the Hill – the winners and losers had to live with the result. The Act severely limited second bites at the apple.[11]

Domestic and foreign opposition to the neutron warhead was in full swing by the time the Public Works Act became law in August, 1977. On the domestic scene, Representative Theodore Weiss, a New York Democrat, joined Senator Hatfield to oppose ERW production and deployment. Overseas, opposition to the neutron warhead was widespread. The Soviet-backed World Peace Council (WPC) staged a neutron bomb action week in Moscow from 6 – 13 August. Elsewhere United Nations (UN) diplomats, meeting thousands of miles away in Japan, spoke out against the enhanced radiation warhead.

Addressing crowds in Hiroshima to mark the 32nd anniversary of the atomic bombing, Sri Lankan UN Ambassador Hamilton Amerashnghe called the neutron warhead an "obscenity." Amerashnghe urged nuclear scientists to show

[11] H.R. 7553, 95th Congress, "Public Works for Water and Power Development and Energy Research Appropriation Act," Public Law 95-96.

restraint when it came to neutron warhead design and production. The ambassador labeled all nuclear weapons "fiendish," an affront to human rights, and he called for their elimination.[12] Amerashnghe's remarks had the effect of stirring anti-neutron warhead sentiment in Italy where such sentiment had been previously quiet. In response to what looked like it could become a repeat of the Federal Republic of Germany, where anti-neutron warhead opposition was widespread, the U.S. Embassy in Rome informed Washington of its efforts to avoid the term "neutron bomb" because of its "cataclysmic connotations." In a host of recently declassified diplomatic cables between the U.S. embassy in Italy and Washington, U.S. officials in Rome stressed the use of innocuous terms for the neutron warhead in the Italian press, at the embassy's urging. One of these innocuous terms, *nuovo ordigno tattico*, new tactical ordinance, appears often in the Italian press. The U.S.'s Rome staff favored the circumlocution because, in their words, it took the stress off the neutron warhead's "principle homicidal element," enhanced radiation.[13]

Italy's Prime Minister Andreotti gave President Carter the benefit of the doubt when it came to neutron warhead production and deployment. On July 26, 1977, Andreotti visited Cater at the White House. The president told the prime minister that the use of neutron weapons might trigger escalation – perhaps to the use of strategic arms. Because of the risk of escalation, Carter told Andreotti that

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[12] Associated Press, August 5, 1977.

[13] Rome Embassy telegram 13015, "Allied Attitudes on Neutron Bombs," 10 August 1977, Secret, Exdis, STADIS, National Security Archive Electronic Briefing Book No. 463, National Security Archive ("*NSA*").

neutron warheads were frightening, but nevertheless he might still produce the neutron warhead and recommend its deployment with NATO.[14] Andreotti took a "wait and see" approach.

Domestic and foreign opposition had an effect on President Carter's neutron warhead calculations.[15] On the one hand, domestic ERW opposition was offset by domestic ERW support, with the result that opposition at home had little effect on President Carter's ERW policy. On the other hand, foreign opposition to ERW production and deployment took two general forms, opposition from within NATO and opposition by the Soviet Union. While ERW opposition originating from within NATO caused President Carter to shy away from production and deployment of the neutron warhead, opposition originating from within the Soviet Union had the opposite effect. As Soviet opposition to the neutron warhead grew louder, the President's senior counselors, notably Zbigniew Brzezinski, believed that the administration had to go ahead with ERW lest the world begin to view Carter as *soft*, which – from Brzezinski's vantage – had to be avoided during the SALT ratification process.[16]

But overseas opposition to the neutron warhead was not limited to the Soviet Union and left-leaning political parties within the FRG. S.R.i Lanka's Hamilton Amerashnghe echoed the World Peace Council by pointing out that

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[14] Richard N. Gardner, *Mission Italy: On the Front Lines of the Cold War*, (Lanham, Maryland: Rowman & Littlefield, 2005), 98.

[15] *See, e.g.*, Lawrence S. Wittner, *Confronting the Bomb: A Short History of the World Nuclear Disarmament Movement* (Stanford: Stanford University Press, 2009).

[16] Memorandum of Conversation, Special Coordinating Committee (SCC) Meeting on Enhanced Radiation Warheads, November 16, 1977, NLC-31-139-6-1-7, JCL.

enhanced radiation weapons were inconsistent with the Carter administration's human rights agenda. Amerashnghe's voice joined with those of WPC members who alleged that ERW intensified the arms race by creating obstacles to SALT, which coincidentally mirrored Brzezinski's concerns.

For his part, guarding against the perception that he was *soft* when it came to the U.S.S.R., President Carter made a public stand against comingling ERW and SALT. [17] President Carter could have, but did not, publicly link ERW and SALT. When asked directly by the press whether an "exotic" weapon such as the B-1 bomber should be approved, Carter made SALT considerations an integral part of his response. But in the case of the neutron warhead, the president demurred by choosing not to complicate SALT. The president, who campaigned against the B-1, said during a 13 June news conference, he had not decided whether he would go ahead with ERW production, but that he would weigh the bomber, the cruise missile, and the U.S.'s "tactical and strategic needs" in the context of SALT. However, the president did not mention the neutron warhead (the warhead was frontpage news in June 1977) at that conference.[18]

President Carter's decision not to mention the neutron warhead reflected his wish to keep the neutron warhead and SALT separate. In the area of arms control, ERW and SALT were not commensurate. One month later, at a news conference in July, President Carter mentioned ERW and SALT in the same

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[17] For concerns over public perceptions that President carter was "soft" on the U.S.S.R., *see*, Office of the Chief of Staff Files, Hamilton Jordan's Confidential Files, SALT, 1978, Container 37, JCL.

[18] Jimmy Carter: "The President's News Conference," June 13, 1977. Online by Gerhard Peters and John T. Woolley, *APP*, http://www.presidency.ucsb.edu/ws/?pid=7670 (accessed June 13, 2014).

breath, stating that the neutron warhead had no bearing on SALT. "It [the neutron warhead] does not affect our SALT or strategic weapons negotiations at all. It's strictly designed as a tactical weapon. I think that this [ERW] would give U.S. some flexibility," said Carter.[19] In addition to his unwillingness to publicly state that ERW might be linked with SALT, President Carter was equally decided that ERW did not constitute a new generation of nuclear weapons. To Carter, all nuclear weapons were "horrible," but the neutron warhead was an old concept that was neither more nor less wicked or immoral than the nuclear weapons presently in U.S. and Soviet arsenals.[20]

Within NATO, news of the enhanced radiation warhead stirred debate, but the likelihood of incorporating neutron warheads into the Alliance's arsenal grew alongside mushrooming support for the warhead's deterrence value. According to Brzezinski, EWR production or non-production rested squarely on the horns of a dilemma "cast against deep ambiguity in European attitudes toward nuclear weapons." On one side of the dilemma, Europeans held that deterrence relied on nuclear forces, but these forces were virtually all under U.S. control. To Brzezinski, "the more nuclear weapons in Europe the better." On the other side of

[19] Jimmy Carter: "The President's News Conference," July 12, 1977. Online by Gerhard Peters and John T. Woolley, *APP*, http://www.presidency.ucsb.edu/ws/?pid=7786 (accessed June 13, 2014).

[20] Jimmy Carter: "Yazoo City, Mississippi Remarks and a Question-and-Answer Session at a Public Meeting." July 21, 1977. Online by Gerhard Peters and John T. Woolley, *APP*, http://www.presidency.ucsb.edu/ws/?pid=7854 (accessed June 5, 2014).

the dilemma was the fear of nuclear warfighting, which Brzezinski described as too vexing to Europeans; nuclear warfighting was "too horrible to contemplate."[21]

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Nuclear warfighting is distinct from nuclear war. Warfighting describes an unfolding exchange of nuclear arms in the context of a war that has a beginning, middle, and end. Once hostilities are over, there will be (in theory) a winner and a loser. In the warfighting context, the nuclear exchanges are part of the overall military contest, with the tacit assumption on the part of the belligerents that one side will win. The nuclear warfighting concept supposes that the war itself will stop short of mutual assured destruction, which is how *nuclear warfighting* is distinguishable from nuclear war. Warfighting implies survival whereas nuclear war implies mutual assured destruction.[22] More than any other weapon, low-yield tactical neutron bombs stirred European fears of nuclear warfighting.

From the perspective of American theorist Daniel S. Papp, the Soviet Union held a drastically different view of the usefulness of nuclear weapons. Papp alleges that the United States abhorred the use of nuclear weapons as "ludicrous" while the Soviet Union embraced their utility. For Papp, Soviet war

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[21] Zbigniew Brzezinski to President Carter, "European Attitudes toward the 'Neutron Bomb,'" National Security Affairs, Brzezinski Material, Enhanced Radiation Weapons and Radiological Warfare, 6-8/77, Box 16, JCL.

[22] During the late 1970s, the U.S. began planning for the possibility of fighting a protracted though limited nuclear war. *See*, Corbin Fowler, "U.S. Nuclear warfighting Policy: A Critique," *Public Affairs Quarterly* 2, no 3, July 1988, 85.

planners held that nuclear warfighting in the twentieth century was winnable.[23] In support of his position, Papp cites Soviet General Major A.S. Milovidov for the proposition that nuclear war was a *viable* instrument of politics.[24] Papp, writing in 1980, failed to anticipate the growing movement within American war planning circles to fashion a nuclear warfighting doctrine for the United States.[25] What's more, in hindsight, Papp's view is circumscribed by the limitations of a bifurcated Cold War dynamic. Once the Soviet Union invaded Afghanistan in December, 1979, the United States revisited its nuclear warfighting plans to add enhanced limited nuclear options to the president's repertoire of responses to Soviet aggression.[26]

Helmut Schmidt, West Germany's chancellor, knew firsthand the extent to which Central Europe suffered during World War Two. Vast stretches of Germany, along with extensive tracts of German occupied land, were leveled in the scourge of war. Under no circumstances did Schmidt or other European leaders want to increase the likelihood of war breaking out in Europe again; therefore, if the deterrence value of the neutron warhead did not exceed its cost, it would not engender the support it needed for inclusion in NATO's theater-level nuclear arsenal. For the neutron warhead to succeed in Europe over civilian

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[23] Daniel S. Papp, "Nuclear Weapons and the Soviet World View," *Soviet Armed Forces Review Annual 1980*, ed. David R. Jones (Gulf Breeze, Florida: Academic International Press, 1980), 339.

[24] A. S. Milovidov, ed., *The Philosophical Heritage of V. I. Lenin and Problems of Contemporary War*, trans. U.S. Air Force, Soviet Military Thought Series, no. 5 (Washington, DC: Government Printing Office, 1974), 37.

[25] *See, e.g.*, Presidential Directive – 59.

[26] Ibid.

opposition, the U.S. had to establish a strong connection between ERW and deterrence.

Brzezinski counseled President Carter that NATO member-states would accept ERW "if pressed," but for "political reasons would be happy to see it cancelled."[27] Brzezinski's counsel is circumstantial evidence that the neutron weapon's political importance had eclipsed its military importance. Along with the National Security Advisor's counsel came the Special Coordinating Committee's (SCC) advice to persuade the Europeans to accept ERW either in the context of Mutual and Balanced Force Reductions (MBFR) or the Soviet Union's deployment of the controversial SS-20. By bringing ERW into either of these discussions, the SCC's advice encouraged President Carter to use ERW as an arms control lever without the risk of complicating strategic arms control talks. MBFR dealt with conventional forces while the SS-20, a grey area system like the neutron warhead, fell outside of SALT.

Helmut Schmidt was a proponent of linking ERW and MBFR.[28] Another approach favored linking ERW to the SS-20.[29] However, neither approach addressed another deep concern of Helmut Schmidt's, the extent of the U.S.'s commitment to use strategic nuclear forces in defense of Europe. SALT had brought about the strategic parity of the U.S. and the U.S.S.R. in terms of intercontinental nuclear forces, which left NATO to counter the Soviet Union's

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[27] Brzezinski to Carter, "European Attitudes toward the 'Neutron Bomb.'"

[28] Memorandum of Conversation, Special Coordinating Committee (SCC) Meeting on Enhanced Radiation Warheads, November 16, 1977, NLC-31-139-6-1-7, JCL.

[29] Special Coordinating Committee Meeting, Enhanced Radiation Warheads, November 16, 1977, NLC-15-124-7-7-4, JCL.

theater-level nuclear arsenal.[30] If an enhanced radiation variant of the Lance missile helped NATO to counter the U.S.S.R.'s theater nuclear forces, European policy makers might welcome home-soil ERW deployment.

The U.S. ambassador to NATO's North Atlantic Council (NAC), William T. Bennett, advised the White House in late July, 1977, that his fellow NAC delegates nearly all favored U.S. production of the enhanced radiation warhead.[31] Bennett's assessment captured the military view of ERW as a credible link between NATO's conventional and nuclear forces, which harmonized Schmidt's desire to link MBFR and ERW. However, Bennett cautioned that the ERW production question had given rise to significant debate in European capitals over the issue of deployment. Would NATO member-states openly agree to accept home-soil deployment of enhanced radiation warheads before the U.S. committed to producing them? The debate in Europe centered on the fear that the enhanced radiation warhead lowered the nuclear threshold by increasing the probability that low-yield battlefield nuclear weapons might actually be used for nuclear warfighting.[32] To go forward, the U.S. had to put to rest the notion that ERW lowered the nuclear threshold. As resistance grew in Europe, President Carter's initially favorable view of the enhanced radiation warhead began to dull.

Bennett believed that a public statement by the administration setting forth the positive attributes of the neutron warhead might smooth over growing

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[30] Memorandum, Christine Dodson, Staff Secretary, National Security Council, August 18, 1978, *NSA*, http://www2.gwu.edu/~nsarchiv/nukevault/ebb301/doc01.pdf (accessed June 13, 2014).

[31] Memorandum for Dr. Brzezinski, "Noon Notes," July 21, 1977, NLC-1-3-1-3-3, JCL. The memorandum written for Brzezinski was declassified and approved for release on February 21, 2005.

[32] Zbigniew Brzezinski to President Carter, "European Attitudes toward the 'Neutron Bomb.'"

concerns in European capitals over the question of home-soil deployment. For President Carter, Bennett's request was an opportunity to see whether NATO members were ready to take more responsibility when it came to the question of procuring new weapons. In this regard, the neutron warhead was a means for Carter to have NATO member-states increase their profiles within the alliance by taking more responsibility for the defense of Western Europe. However, the president's view exacerbated European concerns in the wake of SALT that the U.S. might not be sufficiently committed to using *strategic* nuclear weapons in defense of Europe, further proof of the hyper-politicization of the neutron warhead issue on the margins of mainstream politics.[33]

President Carter wanted NATO members actively, not passively, to accept ERW. In addition, the president wanted NATO members to agree in advance to accept home-soil deployment of the neutron warhead. Carter's position is consistent with his general approach to NATO. The U.S. should not take the lion's share of responsibility for NATO's defense production and procurement. President Carter set out to improve the U.S.'s production and procurement position within NATO by investigating the prospect of buying more European-made defense equipment where practicable, urging member-nations to cooperate when it came to defense procurement and production, and creating a joint

[33] The LaRouche Movement proffered its view of the delicate balancing act required to maintain the *status quo* in Europe. European Security Program director Pierre Lellouche: "European security remains dependent on U.S. protection." *See*, "Europe and Her Defense," *Foreign Affairs*, http://www.foreignaffairs.com/articles/34868/pierre-lellouche/europe-and-her-defense, (accessed October 10, 2014).

European-U.S. examination of the *status quo ante* aimed at improving defense production and procurement procedures.[34]

President Carter's resistance to passive acceptance of the neutron warhead in Europe is consistent with his general approach to NATO, not any particular aversion to enhanced radiation weaponry. Nevertheless, the neutron warhead weighed on President Carter and prompted him to confide in Zbigniew Brzezinski: "I wish I never heard of this weapon."[35] However, remarks such as this one, recorded by Brzezinski, have given rise to assertions that President Carter found the neutron warhead morally repugnant. Rarely, if ever, are these remarks considered side-by-side with the president's assertion that neutron weapons were no more "wicked or immoral" than the other nuclear weapons in the U.S. arsenal.[36]

Lawrence S. Wittner, a prominent historian of the nuclear peace movement, points out that the Soviet Union spared no expense in backing European anti-neutron warhead sentiment, including the work of the World Peace Council. Wittner, who has written extensively on the international nuclear peace movement, relates that Moscow leaned heavily on the WPC, and other Communist organizations, to back its own peace agenda as well as opposition to

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[34] Jimmy Carter: "NATO Ministerial Meeting News Conference of Henry Owen, the President's Special Representative for Summit Preparations," May 10, 1977. Online by Gerhard Peters and John T. Woolley, *APP*, http://www.presidency.ucsb.edu/ws/?pid=7493 (accessed June 13, 2014).

[35] Vincent Auger, *The Dynamics of Foreign Policy Analysis* (New York: Rowman & Littlefield, 1996), 109.

[36] Jimmy Carter: "Yazoo City, Mississippi Remarks and a Question-and-Answer Session at a Public Meeting.," July 21, 1977. Online by Gerhard Peters and John T. Woolley, *APP*, http://www.presidency.ucsb.edu/ws/?pid=7854 (accessed June 13, 2014).

the neutron bomb and the cruise missile. For Wittner, Carter's cancellation of the ERW project was the "administration's greatest concession to public pressure."[37]

President Carter did take account of European public opposition to the neutron warhead, but public pressure did not sway him. Public pressure was not the proximate cause of Carter's neutron warhead deferral. At every critical juncture of the ERW controversy, President Carter was willing to produce the neutron weapon provided two continental NATO member-states were willing to agree, in advance, to accept home-soil deployment. In addition, Carter administration officials weighed the effectiveness of a concerted effort by the Soviet Union to make ERW into a political liability. As political stresses mounted, the president began serendipitously to question the neutron warhead's deterrence value. Carter's shifting stance on deterrence reflected a change from his earlier communication with Representative Melvin Price.[38]

To the extent that ERW had a positive effect on deterrence, it was believed to be because neutron warheads gave the president options short of mutual assured destruction by strategic nuclear arms. Although President Carter, like President Ford, approved the move to develop more robust limited nuclear options (LNO), existing options when Carter took office remained few. Early in the president's term, Zbigniew Brzezinski explained to Carter that there were

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[37] Wittner, *Confronting the Bomb*, 130.

[38] Letter. Carter to Price, 07/21/77, National Security, Defense, 07/01/77-07/31/77, Box ND-49, JCL. In support of the view that Carter also took ERW as a positive contribution to NATO's Flexible Response, the president points out to Price that TNF [including ERW] are "structured to support NATO" doctrine. Deterrence was at the heart of NATO doctrine.

significant command and control issues pertinent to LNO,[39] and there were issues of scale, too: the LNO before the president in March 1977 were sure to result in catastrophic direct and collateral damage.[40] ERW might offset some of the losses due to collateral damage. The flexibility that Carter sought – the essence of LNO – was an attribute of the neutron warhead's low yield and reduced blast. But, if the neutron warhead dangeroU.S.ly lowered the nuclear threshold, then the risks associated with producing and deploying ERW would outweigh the benefits.

Wanting the president to appear strong rather than weak, Brzezinski's interim recommendation to Carter called for him to offer to refrain from deploying ERW in Europe if the Soviet Union offered to refrain from deploying the SS-20.[41] However, Brzezinski's recommendation remained contingent on the U.S. getting West Germany to agree to home-soil deployment of the neutron warhead as a precondition to U.S. production. If West Germany did not agree to accept the neutron warhead, then President Carter should not agree to produce it. Carter adopted Brzezinski's recommendation on November 16, 1977, a strong

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[39] For example, how and from where does the president conduct a limited nuclear war? These and other complexities confronted administration officials, including William Odom, who conjectured that "Limited nuclear options were patently absurd unless you were prepared to think of all the other things that must go with them for social and political cohesion under stress." *See*, *See*, Zbigniew Brzezinski interview with Madeline K. Albright, Leslie G. Denend, and William Odom, February 18, 1982, "the Carter Presidency Project," interview by Inis Claude, et al., *University of Virginia, Miller Center of Public Affairs* (2003). The Brzezinski-Odom interview is available online at http://web1.millercenter.org/poh/transcripts/ohp_1982_0218_brzezinski.pdf (accessed January 15, 2015).

[40] Memorandum, Brzezinski to Carter, "Our Nuclear War Doctrine: Limited Nuclear Options and Regional Nuclear Options," March 31, 1977, NLC-7-47-8-3-2, JCL.

[41] Special Coordination Committee meeting, "Enhanced Radiation Warheads," November 16, 1977, NLC-15-124-7-7-4, JCL. The president approved the recommendation as indicated by his handwritten marginal notation, "OK-with ER tied to SS20. Broader possible agreement (to prohibit production of *all* nuclear weapons?) would prevail." This Special Coordination Committee record was declassified on June 16, 2008.

indication that his secretariat, not public pressure, strongly influenced President Carter when it came to neutron warhead policy.[42]

In Lawrence Wittner's assessment, President Carter reacted to staunch antinuclear activism, especially in Western Europe, by deciding to cancel plans for U.S. neutron warhead production and deployment. Wittner attributes to Carter a larded internal debate: "Why should I go forward and take the onus for having produced this infamous weapon, if they're not prepared to take their fair share of the opprobrium?"[43] To be sure, the neutron bomb raised public ire in Western Europe and the Soviet Union, but in the Unites States, in the early stages of the controversy, only a third of the public had sufficient awareness of the enhanced radiation warhead to form an opinion. Of those that did form an opinion, half favored the neutron warhead.[44] Moreover, Wittner's depiction of President Carter acquiescence to public opinion does not adequately account for the president's neutron bomb deferral in the wider context of his NATO policy.

Upon taking office, President Carter began working toward shifting the responsibility for production and procurement within NATO. The neutron warhead controversy did not ignite Carter's effort, but it did hasten his effort to shift more responsibility onto the Alliance. Carter called for the Europeans to take a more active role in NATO arms procurement. Brzezinski's interim recommendation (linking ERW with the SS-20) supports Carter's efforts, and

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[42] *Cf*., Memorandum, Brzezinski to Carter, "Enhanced Radiation Weapons," March 24, 1978, Zbigniew Brzezinski Materials, Enhanced Radiation Weapons and Radiological Warfare, Box 17, JCL.

[43] Auger, *Dynamics of Foreign Policy Analysis,* 84.

[44] Wittner, *Confronting the Bomb*, 132-133.

there were strong indications that the president's NATO policy was making headway by fall, 1977.

Just before Brzezinski made his interim recommendation to the president, West German officials informed the State Department of its Security Council's position in favor of U.S. neutron warhead production. According to the State Department's records, which were declassified in 2008, the West German Security Council linked ERW production and deployment to ongoing negotiations aimed at balancing NATO-Warsaw Pact conventional forces in Europe, the previoU.S.ly mentioned MBFR talks.[45] These records show that the president's broader NATO policy was gaining traction. What's more, unlike comingling ERW and SALT, ERW and MBFR were commensurate. The main purpose of the neutron warhead was to halt a tank advance, not counter strategic arms.

The West German Security Council's position in favor of ERW production jelled with NATO's recent initiatives to strengthen its anti-armor defenses, war reserves, and reinforcements.[46] Also, Chancellor Helmut Schmidt backed linking neutron warhead production and deployment to ongoing MBFR talks between NATO and the Warsaw Pact; likewise, U.S. Ambassador Stanley Resor. Resor opposed linking the neutron warhead to the Soviet Union's SS-20, and, like Schmidt, he favored the MBFR connection. Resor believed that the Soviet Union would reject an ERW-SS-20 linkage out-of-hand since the neutron

[45] "FRG Views on the Neutron Bomb and SALT," November 11, 1977, NLC-1-4-4-18-3, JCL.

[46] J. Luns, Final Communiqué, Ottawa, 8-9 June, 1977, Defense Planning Committee, NATO *On-Line Library*, http://www.nato.int/docu/comm/49-95/c770517a.htm (accessed June 4, 2014).

warhead and the SS-20 were not commensurate weapons.[47] The SS-20 – an intermediate-range missile with multiple warheads capable of striking targets throughout Europe – reflected a widespread improvement of the Soviet Union's nuclear forces.[48] In contrast, the neutron warhead was designed for use by the Lance short-range missile; Lance did not have the SS-20's range, yield, or destructiveness. As an anti-armor weapon, Lance was slated for the tactical rather than the strategic battlefield. However, despite being inapt, the White House accepted the linkage of ERW with the SS-20.

In contrast, Chancellor Schmidt's proposal to link neutron warhead production and deployment to MBFR met with opposition from the Chairman of the Joint Chiefs of Staff, General George S. Brown. The chairman opposed linking ERW to ongoing negotiations to balance conventional forces in Europe due to his concern over the need to modernize NATO's theater-level nuclear forces, a need identified by NATO ministers at a recent Nuclear Planning Group meeting in Ottawa, Canada. General Brown believed that the Lance modernization program, along with the improved enhanced radiation 8-inch artillery shell, were at the heart of the current plans to revamp NATO's theater-level nuclear forces (TNF). For Brown, enhanced radiation weaponry was essential to TNF modernization whereas linking ERW to MBFR would weaken U.S. efforts to revamp NATO's theater-level nuclear arsenal.

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[47] Special Coordination Committee (SCC) Meeting on Enhanced Radiation Warheads, November 16, 1977, NLC 31-139-6-1-7, JCL.

[48] J. Luns, Final Communiqué, Ottawa, 8-9 June, 1977, Defense Planning Committee.

In addition, if the U.S.S.R. agreed to discuss ERW in the context of MBFR, the end result might be a conventional arms concession by the Warsaw Pact in exchange for ERW, and that would leave NATO with a continuing TNF deficit. A "frail" Leonid Brezhnev later called for Western Europe to resist neutron warhead deployment. Brezhnev's call was apropos of the divide separating Washington from Moscow. Any revival of NATO's theater-level nuclear forces by Washington intensified the arms competition. Alice Siegert's *Chicago Tribune* article captures the spirit of Brezhnev's angst over a revival of Europe's tactical nuclear arsenal: "Brezhnev to Bonn: Ban Neutron, End Arms Race."[49]

Although the Carter administration was in touch with domestic and foreign opinion concerning the neutron warhead, those opinions did not appear to weigh heavily in the ERW production and deployment decision. Of greater weight than public opinion was the appearance of being soft in response to the Soviet Union's anti-ERW information campaign, which formed the better part of the basis for Brzezinski's interim recommendation (the ERW-SS-20 linkage) to President Carter on November 16, 1977.

At the pivotal mid-November meeting of the Special Coordinating Committee, a cabinet-level committee tasked with formulating the administration's enhanced radiation warhead policy, public opinion was mentioned only once. Paul Warnke warned members of the Committee not to underestimate the extent of European opposition to the neutron warhead. Warnke

[49] Alice Siegert, "Brezhnev to Bonn: Ban Neutron, End Arms Race," *Chicago Tribune*, May 5, 1978, p. 2.

advised Committee members that he fielded more questions at press conferences in Geneva on the neutron warhead than on SALT.[50] President Carter must not look soft during the SALT ratification process, a core concern of the president's arms control advisors.

Within the White House bureaucracy, Zbigniew Brzezinski believed that the U.S. had to inform its allies that it was willing to produce ERW and then "get them to indicate that they wanted the weapons in Europe." However, in response to a query by Energy Secretary James Schlesinger, who suggested that the U.S.S.R. may have already produced and deployed ERW, Brzezinski conceded that the U.S. should not produce enhanced radiation warheads if the Europeans were not willing to deploy them on their home-soil.[51] Brzezinski's concession left prospective U.S. neutron warhead policy contingent on European acceptance of the weapons. Ever the realist, Schlesinger's suggestion implies that neutron weapons were more important politically than militarily.

After leaving office, a piqued James Schlesinger (who resigned in August, 1979, for reasons unrelated to the neutron warhead) attributed ERW deferral to Carter's fixation on personal morality, which cuts against the grain of this dissertation's the main argument. Schlesinger observed in 1984 that

> All of Carter's advisors, uniformly, were opposed to his [deferral] decision. Carter was not caught between two schools. It was early in the Carter administration, when Carter was, if somewhat disheartened by the Lance episode and all that, still fairly confident that moral decisions were important on matters such as nuclear

[50] Memorandum of Conversation, Special Coordinating Committee (SCC) Meeting on Enhanced Radiation Warheads, November 16, 1977, NLC-31-139-6-1-7, JCL.

[51] Ibid.

> arms, and he proceeded with his decision against the advice of everybody. Indeed, even Paul Warnke, who one would not have expected to be a proponent, opposed to the way Carter finally came down. That was not Carter wobbling between various factions, that was Carter exercising his moral judgment.[52]

While Schlesinger's assessment has the benefit of verisimilitude, it is clouded by bias. Schlesinger had lost faith in Carter's leadership. From overzealous scrupulosity to naiveté, the secretary's assessment of the president steadily diminished.[53] Contrary to Schlesinger's bias, the evidenced developed in this study reveals that Carter himself never suggested – definitively or otherwise – that he had moral qualms over neutron warhead production. Neither the documentary evidence nor the rhetoric supports Schlesinger's cant. Indeed, the archival record clearly contains evidence that the president eschewed moral arguments directed at neutron warhead production-nonproduction in favor of pragmatic considerations.

From the pragmatic point of view, Secretary of Defense Harold Brown thought that the U.S. should not condition ERW production or deployment on another country's response, but that a rejection would not amount to much because ERW were militarily "not that important." JCS Chairman General George S. Brown, who was present at the meeting with Secretary Brown, did not weigh in in with respect to his superior's assessment of ERW's unimportance. An

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[52] James Schlesinger interview, July 19-20, 1984, "the Carter Presidency Project," interview by Charles O. Jones, et al., *University of Virginia, Miller Center of Public Affairs* (2005), 57-59. The Schlesinger-Jones interview is available online at http://millercenter.org/president/carter/oralhistory/james-schlesinger (accessed January 15, 2015).

[53] Ibid, 12-13, and 47. Schlesinger observed "[Carter] "wasn't in control of his own administration.")

unexpected silence since General Brown thought that ERW were at the heart of NATO's TNF modernization program.[54]

David Aaron, siding with Brzezinski, highlights the extent to which the neutron weapon became the focus of a political not military tug-o-war. Aaron points out that it did not matter whether the administration linked neutron warhead production and deployment to MBFR or the SS-20 because either linkage merely served as a "political gesture" on the part of the U.S. to thwart the Soviet Union's anti-ERW campaign. To Aaron, the U.S. could not "afford to torpedo enhanced radiation warheads" since that "permit[ed] the Soviets to [succeed] with their propaganda campaign against" enhanced radiation weapons.[55]

Based on the assessments offered by the Browns, and by Aaron, ERW occupied a niche in balance-of-power politics where public opinion played a lesser role from the vantage of the secretariat than appeasing the Soviet Union. Within the Carter administration, the secretariat favored neutron warhead production consistently in the face of the robust information campaign against ERW emanating from Moscow and gaining traction with European public. But by the spring of 1978, President Carter had turned against ERW production. Once he turned against the neutron warhead, Carter looked like he might cancel the program outright. Zbigniew Brzezinski, who remained a strong proponent of the neutron warhead, successfully blocked outright cancellation of the neutron

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[54] Memorandum of Conversation, Special Coordinating Committee (SCC) Meeting on Enhanced Radiation Warheads, November 16, 1977, NLC-31-139-6-1-7, JCL.

[55] Ibid.

warhead by convincing Carter that deferral was preferable in order to maintain the impression that the Soviet Union did not sway the White House. Carter could not afford to be seen as soft on the Soviets, from Brzezinski's perspective. And in a memorandum, dated March 24, 1978, Brzezinski uses the political implications of a perceived Soviet propaganda victory to persuade President Carter not to cancel neutron warhead production outright.[56]

The Brzezinski memorandum reveals the extent of the pressure Carter was under from his White House national security staff. In a candid moment recorded in the memorandum, Brzezinski informs the president that he has been looking for options to satisfy the president's goal of ERW cancellation to show that he (Brzezinski) was "capable of being constructive in addition to being obstinate." Even so Brzezinski importuned Carter to reject out of hand the idea that the U.S. will not produce the neutron weapon without some tangible Warsaw Pact concession lest risk giving the impression of a weak administration backing down in the face of Soviet pressure. Brzezinski urged Carter not to publicly have the Europeans bear the brunt of neutron warhead cancellation. "The more the Europeans get tagged in domestic and international opinion as … fall-guys," Brzezinski wrote, "the more shattering the effect on the Alliance."[57]

After leaving office, President Carter reflected on the neutron weapon controversy in an interview with Richard Neustadt, Charles O. Jones, and James

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[56] Memorandum, Zbigniew Brzezinski to President Carter, "Enhanced Radiation Weapons," March 24, 1978, Zbigniew Brzezinski Materials, Enhanced Radiation Weapons and Radiological Warfare, 2-4/78, Box 17, JCL.

[57] Ibid. In addition, this memorandum established the source of the eventual arms control-ERW production nexus.

Sterling in 1982. Carter observed that the neutron warhead issue had "gotten away from him." In Carter's estimation, the military bureaucracy, by overcommitting the U.S. to neutron warhead production, had failed to guard his flank. The president summarized the matter for Neustadt: to paraphrase Carter, it was the military, not he, that over-committed to neutron warhead production. Carter recalled that "the primary commitment had been made on the neutron weapon through the military commanders. They were always much more eager to reach agreement among themselves." Refining the observation, Carter singled out his secretary of defense, Harold Brown. "The primary commitment was made on a military level by [Harold] Brown and to a much lesser degree Brzezinski," Carter observed. Neustadt asked the president whether the military bureaucracy had "churned away" at the neutron warhead. Carter agreed with Neustadt's assessment of the military bureaucracy's role in the neutron warhead affair and, by implication, acknowledged the influence of Brzezinski and the national security bureaucracy.[58]

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Although Zbigniew Brzezinski and the other members of the president's Special Coordinating Committee had settled on the need to appear strong in the face of Soviet opposition to the neutron warhead, Carter remained concerned that Western Europeans would not accept neutron warheads on their home-soil. As

[58] Jimmy Carter Interview, Miller Center, University of Virginia, Jimmy Carter Presidential Oral History Project (COHP), November 29, 1982, http://web1.millercenter.org/poh/transcripts/ohp_1982_1129_carter.pdf (accessed March 24, 2014).

for Americans, Carter did not think that the neutron warhead was a "particularly important" domestic issue.[59] But in Moscow, the World Peace Council (WPC) encouraged citizens to take to the streets during an action week in August 1977. Once WPC followers took to the streets, the Council urged citizens to raise voices against the "capitalist bomb." One Russian cleric, a WPC supporter, called the neutron warhead satanic. Another citizen-supporter called it "the weapon of a people that has lost any understanding of humanity." And of Carter, another citizen proclaimed that "either the president's a fool, or he's been bought by the arms manufacturers." Moscow's information campaign had gained traction in the streets of the Russian capital.[60]

The WPC's messages were precisely the ones that David Aaron feared; Brzezinski, too. For Aaron and Brzezinski, the U.S. could not afford to back down and forego production of the enhanced radiation warhead as long as the WPC's Soviet-backed perspective of the neutron warhead was ascendant, and as the Soviet view of the warhead eclipsed the American, the prospects for outright cancellation of the modernization program dimmed. The president could, however, make neutron warhead production contingent on arms control, and henceforth that became administration policy through April 1978. Both Aaron and Brzezinski advised Carter to wait until NATO agreed to home-soil deployment before announcing production.[61] David Aaron later remarked in a

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[59]Jimmy Carter Interview, COHP, November 29, 1982 .

[60] Seth Mydans, Associated Press, August 5, 1977.

[61] Memorandum of Conversation, Special Coordinating Committee (SCC) Meeting on Enhanced Radiation Warheads, November 16, 1977, NLC-31-139-6-1-7, JCL.

1986 interview that the decision over whether to produce and deploy the neutron warhead had become a fiasco.[62]

Six years after leaving office, during an interview for the series "War and Peace in the Nuclear Age," David Aaron remarked that the neutron warhead, despite being a fiasco, did not reflect indecision by President Carter. Aaron stated:

> You have to realize that the neutron bomb fiasco was not indecisiveness on Jimmy Carter's part. It was the fact that at the last moment the Germans said, "We can't be the only ones to deploy the neutron bomb in Europe." And Jimmy Carter's reaction was, "Well I'm not going to push it down your throat."[63]

President Carter agreed with Aaron's assessment of a last-moment German shift. However, as Carter explained to interviewer Richard Neustadt in 1982, West German Chancellor Helmut Schmidt required that one other continental European nation agree to deploy the neutron warhead, a sign of the limits of West German acceptance. Although President Carter did have Great Britain's agreement to deploy neutron warheads, that did not satisfy Chancellor Schmidt's continental requirement.[64] Whereas Aaron did not believe that the neutron warhead decision reflected indecision on President Carter's part, Press Secretary Jody Powell observed that Carter's handling of the ERW affair led to the appearance of

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[62] Interview, David Aaron, November 10, 1986, WGBH Media Library and Archives, http://openvault.wgbh.org/catalog/wpna-b6b301-interview-with-david-aaron-1986 (accessed June 4, 2014).

[63] Ibid.

[64] Jimmy Carter, November 29, 1982, COHP.

indecision.[65] In Carter's case, ERW advocates conflated the appearance of indecision with indecision regardless of evidence to the contrary.

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One consequence of neutron warhead deferral was a loss of confidence by NATO member-states in U.S. leadership when it came to the Soviet Union's medium-range SS-20. Indeed, David Aaron notes that "if there had not been a neutron bomb fiasco, there would have been less of a requirement by the United States to respond to the SS-20s."[66] Along this line, Gaddis Smith writes that the most identifiable policy consequence of the ERW affair was the diminishment of Western confidence in America's leadership. Helmut Schmidt arrived at a similar conclusion in his memoirs, *Men and Powers*.[67] Likewise, Secretary of Defense Harold Brown concluded that the neutron warhead affair had irrevocably altered Alliance dynamics for the foreseeable future. According to Brown, neutron warhead deferral shook European confidence in the willingness of the U.S. to defend Europe. [68]

The neutron warhead affair upset the delicate balance between human rights and arms control in President Carter's foreign policy. Carter's desire to make inroads on both human rights and SALT suffered amidst the maelstrom of

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[65] Auger, *Dynamics of Foreign Policy*, 94.

[66] Ibid.

[67] Helmut Schmidt, *Men and Powers* (New York: Random House, 1988), 239.

[68] Auger, *Dynamics of Foreign Policy*, 95.

the neutron warhead. According to historian Richard Thornton, "human rights replaced … anticommunism" in Carter's humanitarian agenda.[69] To be sure, however, ERW complicated that agenda.

Unlike his immediate predecessors in office, Carter was unblemished by either Watergate or Vietnam. And as a consequence of not having been touched by either, Georgia's former governor was a true outsider when it came to Beltway politics. Yet the press did not give Carter-the-Outsider a free pass. On the contrary, Walter Pincus' neutron warhead story is evidence of the opposite. The press in the immediate aftermath of Watergate was on a hair trigger when it came to government impropriety. Congress was ascendant following Vietnam and Watergate, and Carter's request for a "blank check" on the neutron bomb set legislators on edge.

ERW were a double-edge sword for Carter. ERW supporters noted that the neutron bomb's particular effectiveness against personnel did not distinguish it from other weapons on moral grounds. Pointing out that small arms kill while leaving property relatively unscathed, Donald G. Brennan, head of the Hudson Institute, lamented the extent of misinformation being circulated in public about enhanced radiation weapons. However, for every Brennan, there were private citizens like Dorit L. Noether who did find the neutron bomb morally repugnant. In a letter to the editor of the *New York Times*, Noether considered ER weapons akin to the First World War's chemical agents. "The difference between using lethal sub-atomic particles or lethal atomic aggregates (i.e., poison gas molecules)

[69] Richard C. Thornton, *The Carter Years* (New York: Paragon House, 1991), 6-7.

is one of size, not of kind," Noether wrote in July, 1977.[70] In either case, these debates tarnished Carter's humanitarian image and cut against the grain of his inaugural pledge.

On the same day that the *Times* published Noether's letter, Carter gave a speech in Charleston, South Carolina, to a group of Southern legislators. The president remained ever-hopeful for the success of his human rights agenda, and used the talk to reach Moscow. Carter's message to the Kremlin was that it was not the sole target of America's human rights-centered foreign policy. Carter was looking inward, as well. Carter invited the interested parties to spell the Cold War's East-West dynamic or a time. "It's not a question of a "hard" policy or of a "soft" policy, but of a clear-eyed recognition of how most effectively to protect our own security and to create the kind of international order ("A gentler, freer, and more bountiful world.") … I've just described." Carter added: "This is our goal."[71]

In his Charleston speech, Carter also highlighted his concern over Soviet offensive strategic weapons. To that concern, Carter linked the cruise missile. He would consider limiting the deployment of the cruise missile if the Soviets considered cutting back heavy missile deployments.[72] Presumably, Carter was sending a message to Moscow that its unexpected surge in missile guidance

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[70] Donald G. Brennan, letter to the editor, *New York Times*, July 21, 1977, p. 14. Dorit L. Noether, letter to the editor, *New York Times*, July 21, 1977, P. 14.

[71] Jimmy Carter: "Charleston, South Carolina Remarks at the 31st Annual Meeting of the Southern Legislative Conference," July 21, 1977. Online by Gerhard Peters and John T. Woolley, *APP*, http://www.presidency.ucsb.edu/ws/?pid=7852 (accessed February 20, 2015).

[72] "Carter Elaborates on U.S.-Soviet Ties," *Facts on File World News Digest*, July 23, 1977.

technology obviated some of the work done at Helsinki by President Ford. Carter's message: "We are trying for the first time to reach agreements that will not be overturned by the next technological breakthrough. We are trying, in a word, for genuine accommodation."[73]

The neutron bomb aided in keeping the cruise missile more or less off the frontpages. As Associated Press writer Seth Mydans related in early August, 1977, after the WPC took to the streets in Moscow, "there has been no protest week against the cruise missile, which – until the appearance of the neutron bomb – was the weapon most criticized in the Soviet press."[74] For a while, enhanced radiation weapons diverted attention away from the cruise missile. What's more, President Carter believed until the end of his term that the cruise missile, not the neutron warhead, complemented his vision for a revitalized NATO.[75]

As Robert Strong observes, by springtime, 1978, President Carter's public criticism of the Soviet Union's human rights record chipped away steadily at what remained of détente.[76] From the Kremlin's point of view, Carter's human rights stance was a cover for an arms buildup, and neutron warhead production fit squarely within that narrative frame. One of the Soviet Union's "American specialists," Georgi A. Arbatov, alleged that the United States was engaging in

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[73] Jimmy Carter: "Charleston, South Carolina Remarks at the 31st Annual Meeting of the Southern Legislative Conference," July 21, 1977.

[74] Mydans, Associated Press, August 5, 1977.

[75] Jimmy Carter: "Remarks Accepting the Presidential Nomination at the 1980 Democratic National Convention in New York," August 14, 1980. Online by Gerhard Peters and John T. Woolley, *APP,* http://www.presidency.ucsb.edu/ws/?pid=44909 (accessed January 2, 2015).

[76] Robert A. Strong, *Working in the World: Jimmy Carter and the Making of American Foreign Policy* (Baton Rouge: Louisiana State University Press, 2000), 102-103.

"one after another anti-Soviet propaganda campaign" aimed at upsetting the "internal affairs" of socialist countries. Responding to Carter's Charleston speech, Arbatov said that these efforts to undermine the U.S.S.R.'s internal affairs were taking place "under the pretext of defense of human rights." Arbatov, head of the United States and Canada Institute, elaborated by calling the Carter administration's emphasis on human rights an "unfair distortion of the ideological struggle that Moscow has said is permissible under détente." In the end, surprisingly, Arbatov's commentary ended on an upbeat note. "Détente still had a future in Soviet-American relations," he said. Arbatov's future recognized in passing that Carter was unbridled by the Trumanesque conviction that the Soviet Union and international communism were the prime catalysts of international turmoil.[77]

On 17 August the *Times* reported that Leonid Brezhnev received Carter's Charleston speech on a "positive note."[78] Even so, the Kremlin awaited Carter's ERW decision, hints of which arrived midway through August when Jody Powell, the administration's press secretary, indicated that Carter would decide the neutron bomb question in early September after consultation with America's allies in Western Europe.

Heeding Powell's timeline, Secretary of Defense Harold Brown replied to a new request by Carter for a review of the ERW issue. In his reply, Brown

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[77] Christopher S. Wren, "Soviet Aide Calls Criticism of Carter Policies Genuine," *New York Times*, August 4, 1977, p. 10. As for Truman being parochial nationalist lacking and promoting an ideology and politics of confrontation, *see* Arnold A. Offner, Another Such Victory: President Truman and the Cold War, 1945-1953 (Stanford, CA: Stanford University Press, 2002).

[78] Christopher S. Wren, "Brezhnev Depicts Carter's Overture as A Positive Move," *New York Times*, August 17, 1977, P. 1.

expressed his support for ERW in conjunction with the support of the Joint Chiefs of Staff. Secretary Brown's letter held to the August 15 decision deadline, but Carter himself (in marginalia) overrode the date. At the same time, the administration continued to make inquiries of America's European allies regarding ERW deployment, and the issue remained prominent in the press.[79]

The *New York Times* indicated that "allies who oppose the neutron bomb will have to be convinced that it has a proper role in the arsenals of the … North Atlantic Treaty Organization."[80] But months into the ERW affair the administration had yet to fashion a firm timeline for the president's much-anticipated decision. By summer's end, 30 Democrats in Congress sent President Carter a stark repudiation from within his own party: halt plans for production and deployment of enhanced radiation weapons. The reason given: the neutron warhead would shift the United States' deterrence posture close to "actual use."[81] One Republican – Oregon's Mark Hatfield – signed the telegram.[82]

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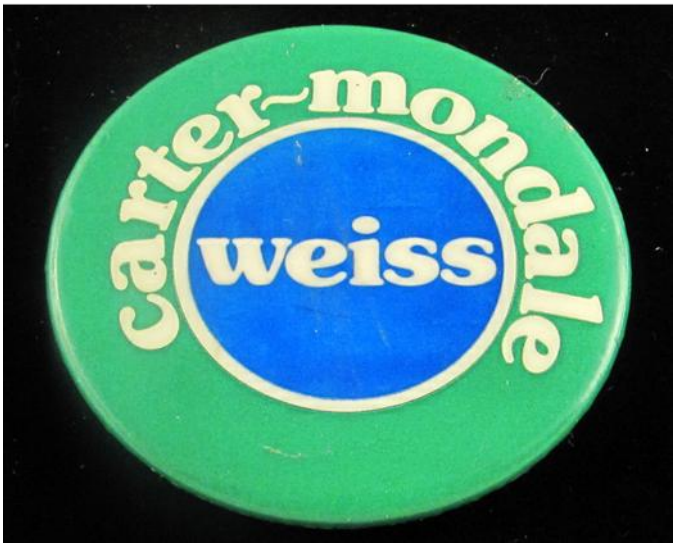
[79] Letter, Harold Brown to Jimmy Carter, August 12, 1977, National Security Affairs, Brzezinski Material, Enhanced Radiation Weapons and Radiological Warfare, 6-8/77, 16, JCL.

[80] "U.S. to Consult Allies on the Bomb," *New York Times*, August 17, 1977, p. A6.

[81] *See* attachment to Memo, Victor Utgoff to Jack Murphy, 08/31/77, Box ND-49, JCL.

[82] Ibid. The telegram received by the White House had 31 signatories. Of the 31, one was a Republican, Mark Hatfield.

Theodore Weiss and the Liklihood of Nuclear War



(F 10) *A campaign button from the 1976 general election – Representative Theodore Weiss of New York, Democrat, hopes to ride the Carter-Mondale coattails.*[83]

New York Congressman Theodore Weiss, a Democrat, fought adamantly against the neutron warhead in 1977 and 1978. Weiss, a staunch champion of progressive causes, was no stranger to party in-fighting. Indeed, Weiss cut his political teeth fighting Tammany Hall's last boss, the much maligned Democrat Carmine G. DeSapio. An ardent opponent of the neutron warhead, Weiss spearheaded the drive to deny President Carter the funds to move the neutron warhead from research and development to production. Weiss believed that enhanced radiation warheads blurred the distinction between nuclear and conventional weapons.[84] Weiss feared that neutron weapons made the nuclear

[83] Author's collection.

[84] Terence Hunt, House Neutron Weapons Vote Keeps Carter's Options Alive," *Sarasota Herald Tribune*, May 18, 1978, p. 12-A.

battlefield too practicable.[85] Carter had to overcome Weiss' opposition in order to keep ERW funding alive in the House of Representatives, a sign that intra-party political considerations were eclipsing the neutron warhead's military usefulness by the close of 1977, earlier than previously thought.

The neutron warhead tested party loyalty. President Carter looked to Congressman Samuel S. Stratton, a fellow Democrat from New York's upstate blue-dog caucus, to refute Weiss' drive to defeat ERW funding in the House. Unlike Weiss, Stratton believed that the neutron warhead, if produced and deployed, enhanced deterrence in Western Europe; moreover, Stratton did not believe that the Congress should deny the president the option of continuing ERDA's development program. Stratton's opinion of the usefulness of the neutron warhead was consistent with his overall commitment to strengthening the U.S. defense establishment.

Representative Weiss' opposition to the neutron warhead was grounded in his belief that enhanced radiation weapons lowered the nuclear threshold and guaranteed escalation to all-out nuclear war.[86] To Weiss, neutron weapons dangeroU.S.ly blurred the distinction between nuclear and conventional weapons. Presently, existing accounts of the neutron warhead affair pay scant attention to Weiss' role. This study corrects that omission by foregrounding Weiss. The definitive account of the neutron warhead affair is Vincent Auger's *Dynamics of Foreign Policy Analysis*, and Auger mentions Weiss once, briefly. Although

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[85] James Reston, "The Cloud of Danger," *New York Times*, September 4, 1977, p. 123.

[86] Congressional Record, Vol. 123, Part 24, 95th Congress.

scholars do not attribute great effect to the Weiss-led efforts to block neutron warhead funding – Stratton counted Western European efforts to block home-soil deployment of ERW more heavily – Weiss' efforts forced the Carter administration to refute the neutron warhead's principle liability, the lowering of the nuclear threshold.[87]

Weiss' move to block funding for production of the neutron warhead redoubled in mid-November 1977 when David Aaron attempted to gain adherents to the administration's developing ERW policy. In a letter to Weiss, Aaron wrote that that ERW production plans hinged on a favorable and substantial ERW consensus within NATO.[88] At the time, and thereafter, President Carter was content to proceed with ERW production if West Germany agreed to home-soil deployment. Carter did not require a substantial NATO consensus per Aaron's letter. The letter downplayed the extent to which President Carter was willing to take the lion's share of the onus for neutron warhead production.

As Vincent Auger notes, by the fall of 1977, U.S. neutron warhead policy was in disarray, and that policy disarray spread its negative impact abroad. In London, Chancellor Schmidt questioned America's nuclear commitment to NATO. For Schmidt, the U.S. under Carter had its priorities out of order, placing the success of SALT above its commitment to provide a nuclear shield over

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[87] "Nuclear Weapons Authority." In *CQ Almanac 1981*, 37th ed., 230-34. Washington, DC: *Congressional Quarterly*, 1982. http://library.cqpress.com/cqalmanac/cqal81-1172321 (accessed June 13, 2013).

[88] Auger, *Dynamics of Foreign Policy*, 71.

NATO member-states. Weiss agreed, but for different reasons predicated on a multilateral approach to the ERW production-deployment question.

At the heart of Schmidt's concern was strategic nuclear parity between the U.S. and the U.S.S.R., a consequence of SALT. Schmidt said as much in his 1977 Alastair Buchan Memorial Lecture at the International Institute for Strategic Studies in London.[89] Schmidt worried that by opening an era of superpower strategic nuclear parity, SALT left Western Europe open to intermediate-range nuclear arms – the SS-20 – that were outside the arms control agreement.[90] Schmidt pointed to the Carter administration's unwillingness to press the Soviet Union on its SS-20 plans. President Carter, to appease Schmidt, eventually agreed to Zbigniew Brzezinski's interim proposal to link ERW production and deployment to the SS-20, an arms control approach that survived (in broad terms) in Carter's final determination on the neutron warhead in the spring of 1978. Carter's acquiescence did not happen in a vacuum, but the final result pleased Weiss while displeasing Schmidt.

Weiss' robust opposition to the neutron warhead had its part to play in President Carter's acceptance of Brzezinski's interim approach to the neutron warhead and the SS-20. Although the Louis Harris surveys of public opinion

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[89] "The [International Institute for Strategic Studies] was founded in the [United Kingdom] in 1958 with a focus on nuclear deterrence and arms control." *IISS*, http://www.iiss.org/en/about-s-U.S. (accessed October 10, 2014).

[90] According to Schmidt: "SALT codifies the nuclear strategic balance between the Soviet Union and the United States. To put it another way: SALT neutralizes their strategic nuclear capabilities. In Europe this magnifies the significance of the disparities between East and West in nuclear tactical and conventional weapons." Helmut Schmidt, "1977 Alastair Buchan Memorial Lecture," *International Institute for Strategic Studies*, http://www.iiss.org/en/publications/survival/sections/2008-4e2e/survival--global-politics-and-strategy-august-september-2008-7e37/50-4-18-archives-d283 (accessed October 10, 2014).

showed a divided public in the fall of 1977, the president received a swath of letters at the White House that nearly unanimously (397 to 4) went against the neutron warhead.[91] The inconsistency between the Harris results and the White House correspondence office suggests a deeper level of domestic public opposition to neutron warhead production, which Weiss played a part in fomenting.[92]

But for Helmut Schmidt, the domestic opposition in Western Europe to the neutron warhead was overshadowed by a greater force, the threat represented by the Soviet Union's unchallenged deployment of the intermediate-range SS-20 ballistic missile. Brzezinski's interim recommendation had the propensity to allay Weiss' domestic U.S. concerns and Schmidt's domestic Western European concerns only to the extent that the proposal had a legitimate nexus to arms control. Linking neutron warhead production to the SS-20 could lead to the reduction or abolishment of both weapons, a favorable outcome for Weiss and Schmidt.

In late September, 1977, President Carter entertained Soviet Foreign Minister Gromyko in Washington while Theodore Weiss offered an amendment in the House to prohibit ERDA from spending any money on enhanced radiation weapons. Weiss' effort sought to reverse the victory achieved by Carter when he secured neutron warhead funding from Congress that July. In Europe, Schmidt

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[91] Hugh Carter to President Carter, "Weekly Mail Report," Week Ending 9/23/77, Office of Staff Secretary; Series: Presidential Files; Folder: 9/26/77 [1]; Container 43, JCL.

[92] This divide was exacerbated *after* neutron warhead deferral. Louis Harris, "Public Now Opposes Building of Neutron Bomb," *Harris Survey*, May 25, 1978 (Chicago, Illinois: *Chicago Tribune*, 1978).

continued to balk at neutron warhead deployment though not production.[93] The *Washington Post* reported on 26 September that one top aid to the chancellor voiced reservations about the timing of any ERW deployment decision. "We don't want to give an answer" before Carter decides the production question. Another Bonn official reportedly said that "we are not going to invite deployment before your president has even made [the production] decision and make political fools of ourselves."[94] If Carter approved ERW production, he had to do it without any political cover from West Germany. For these West German officials, including Schmidt, the mere existence of the neutron warhead in NATO had deterrence value. The U.S. had to go ahead and produce ERW in the first instance, but the West Germans were unwilling to make a public commitment to permit home-soil deployment of the controversial warhead. The decision was Carter's alone to make.

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The neutron warhead exacerbated fear of nuclear war in Europe. That fear also manifested itself in domestic U.S. politics. Representative Weiss was aghast over U.S. plans to use ERW as an anti-tank weapon in the event of a massive

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[93] *Deployment* rather than *production* elevated the threat of nuclear warfighting. The basic idea was well stated by United States Military Academy's Jeff McCausland: "The [Soviet Union's] belief that nuclear war is wageable and winnable, coupled with a dependence on surprise and counterforce targeting, give Soviet doctrine a decisively offensive nature." Whether the Soviet Union's warfighting doctrine was offensive is subject to argument, but the West's prevailing perception of the threat is what matters – and, in that regard, McCausland was spot on. Jeff McCausland, "The SS-20: Military and Political Threat?" Tufts University, *Fletcher Forum*, 1982, 7.

[94] Michael Gelter, "Bonn is expected to Allow Stationing of Neutron Arms," *Washington Post*, September 27, 1977, A15.

Warsaw Pact assault on Western Europe. using nuclear weapons to stop tanks was, in Weiss' opinion, overkill. The congressman reminded his colleagues in the House that 5,000 tanks had been "wiped out without the benefit of nuclear weapons" during Israel's Yom Kippur War.[95] Weiss implied that the U.S. could do in Europe what the Israelis had done in the Middle East.

Weiss also argued that the neutron warhead was not an effective deterrent. In fact, according to Weiss, enhanced radiation weapons might lead to global nuclear war. On this point, President Carter's public remarks suggest agreement with Weiss. On the one hand, the president admitted during a press conference that July to being undecided about the neutron warhead. Carter had not by then decided whether to approve the neutron warhead, but he had decided that he wanted the option available to him in future. However, in that press conference, the president surmised that "the first use of atomic weapons might very well quickly lead to a rapid and uncontrolled escalation in the use of even more powerful weapons with possibly a worldwide holocaust resulting."[96] President Carter's ambivalence reflected the strength of Weiss' argument. The neutron warhead was an option not worth having because the threat of all-out nuclear war was too great.

According to the *Congressional Record*, Weiss argued that "the President of the United States on 12 July at a press conference indicated that he guessed that

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[95] Theodore Weiss, Congressional Record, Vol. 123, Part 24, 95th Congress, 1st Session, Sept. 21, 1977 to Sept. 28, 1977, U.S. Government Printing Office, 1977, 31367.

[96] Jimmy Carter: "The President's News Conference," July 12, 1977. Online by Gerhard Peters and John T. Woolley, *APP*, http://www.presidency.ucsb.edu/ws/?pid=7786 (accessed June 17, 2014).

the use of any nuclear weapon, including a neutron weapon, would, in fact, escalate to all-out nuclear war."[97] Weiss correctly assessed Carter's fear. The president did believe that use of ERW would lead to escalation and strategic exchange, and this was the essence of the president's finding that ERW were not *militarily advantageous*. In short, Carter believed that there was nothing to be gained from stopping tanks at the risk of unleashing strategic nuclear war. Carter said that "my guess is--and no one would certainly know--that the first use of atomic weapons might very well quickly lead to a rapid and uncontrolled escalation in the use of even more powerful weapons …."[98] Weiss exchanged the president's "first use" for "use," but this study does not concede that distinction as consequential. Since the neutron warhead was designed as a tactical or battlefield anti-tank weapon, first use and use are arguably interchangeable; nevertheless, as the Arms Control Impact Statement on ERW pointed out, it had the same escalatory potential as any other nuclear weapon.[99]

Enhanced radiation weapons were designed to fill a tactical role to offset the Soviet Union's conventional arms advantage in Europe. As such, ERW occupied a particular niche in NATO's strategy for the defense of Western Europe, NATO's *raison d'être*. ERW were strictly answering weapons, consistent with the fact that the alliance had no plans to commence offensive

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[97] Congressional Record, Vol. 123, Part 24, 95th Congress.

[98] Jimmy Carter: "The President's News Conference," July 12, 1977.

[99] Arms Control Impact Statement, undated, National Security Affairs, Brzezinski Material, "Enhanced Radiation Weapons and Radiological Warfare, 6-8/77," Box 16, JCL.

operations against the Soviet Union.[100] Nonetheless, Weiss drew the conclusion that ERW would lower the nuclear threshold, and he made a credible case. In support of his position, Weiss relied on the opinion of former CIA deputy director Herbert Scoville, who believed that the neutron bomb made nuclear war more likely. To be sure, though Weiss perhaps failed to grasp some of the military subtleties of ERW, his position enjoys the benefit of logic and common sense.

In 1977, Herbert Scoville's views appeared opposite Edward Teller's in the 12 July edition of the *New York Times*.[101] Scoville was clearly belittling a defense establishment responsible for the development of enhanced radiation weapons by likening the scientists who worked on them to the children who played Musketeers on Walt Disney's television series *The Mickey Mouse Club,* which – serendipitously – was undergoing revival in 1977 alongside the arrival of the neutron warhead. By calling the scientists "weaponeers," Scoville suggests that they were childlike in their thinking about nuclear weapons.

Scoville argued strenuously against the production of enhanced radiation weapons by pointing out that such weapons were not better deterrents against Soviet aggression. In fact, according to him, those who advocated in favor of the warheads did so in part out of the belief that their limited destructiveness made first use more credible. For Scoville, a one-time deputy director of the Defense Department's Armed Forces Special Weapons Project, ERW cut against the grain

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[100] To be sure, the Alliance could seize the military initiative once the Soviet Union initiated hostilities. However, if one recalls the analysis of MC 14/3, the Alliance was prone to ceding the military initiative to the Soviet Union.

[101] Herbert Scoville, Jr., "A New Weapon to Think (and Worry) About," *New York Times*, July 12, 1977, p. 25.

of the U.S.'s real interest, which lay in making nuclear war less (not more) likely. "Our security depends on strengthening, not breaking, the barrier between nuclear and conventional conflicts."[102] He believed that the neutron bomb weakened this barrier. In this, Weiss and Scoville concurred. For both men, the neutron warhead blurred the distinction between nuclear and conventional arms. Nuclear Physicist Edward Teller disagreed with Weiss and Scoville.

Teller, who played a major role in the development of thermonuclear weapons, argued that "a proper plan to use the neutron bomb could make sure that such escalation [to all out nuclear war], as well as war itself, becomes less likely."[103] Teller supports his theory of non-escalation with a proposal. He suggests that the United States renounce the first use of nuclear weapons of any kind, including neutron bombs, "except within [friendly] territory invaded by enemy forces."[104]

However, if ERW use is warranted, then, according to Teller, advanced versions of the neutron bomb may be the optimal weapons for achieving success because they are best suited to limit suffering and damage. What's more, for the physicist instrumental in seeing the hydrogen bomb to fruition, neutron bombs meant that an "effective defense of NATO" was in sight. He believed that "the contemplated limited use of the neutron bomb would be a more effective way to

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[102] Scoville, "A New Weapon to Think (and Worry) About."

[103] Edward Teller, "A New Weapon to Think (and Worry) About," *New York Times*, July 12, 1977, p. 25. The two selections appear in the *Times* one after the other as point-counterpoint.

[104] Ibid.

deter war."[105] Teller's theory put the Europeans squarely on the horns of the dilemma identified by National Security Advisor Zbigniew Brzezinski. Western Europeans liked the neutron warhead to the extent that it had deterrence value and they did not like it to the extent that it lowered the nuclear threshold. European concerns, coupled with intra-party Democratic resistance to the neutron warhead were hastily weakening the president's view of the warhead's military utility; the price to pay was becoming too dear.

[105] Teller, "A New Weapon to Think (and Worry) About."

CHAPTER 6

PATHS TO APPROVAL

(F 11) *The Lance surface-to-surface missile had a range of 3 to 78 miles. Lance had two available payloads, either a conventional or nuclear warhead.*[1]

The House of Representatives vigorously debated funding for the enhanced radiation warhead (ERW) throughout the summer and fall of 1977 on the cusp of an emerging crisis in Iran, still under Shah Mohammed Reza Pahlavi's control, but feeling the effects of Ayatollah Ruhollah Khomeini's opposition. This chapter argues that emerging crises in Iran and in Afghanistan diverted attention away from the neutron warhead issue and eased the path to approval. As one of the consequences of this diversion, President Ronald Reagan approved

[1] President Carter identifies the Lance missile's enhanced radiation component as W70 Mod 3 in his handwritten notes on the pros and cons of neutron warhead production. Notes, Donated Historical Materials, Zbigniew Brzezinski Collection, "Defense—Enhanced Radiation Warhead: 3/78-8/78," Box 22, Jimmy Carter Library ("JCL"). Photograph courtesy of the U.S. Army Center for Defense Information.

neutron warhead assembly in August, 1981, with a fraction of the tumult encountered by Jimmy Carter in 1978. Reagan's move to assemble the still-controversial warhead, with the backing of hardliners like Richard Perle, was aided by the Carter administration's rightward pitch after Iranian students took Americans hostage in Tehran and Moscow invaded Afghanistan in 1979. Secretary of State Vance captured the Carter administration's stiffening response to Iran and Afghanistan in February, 1980. [2]

To paraphrase Secretary Vance, "America will continue to strengthen all three phases of its arsenal, conventional, strategic, and tactical nuclear." Vance's call to strengthen all three phases of the U.S. arsenal included the neutron warhead. To be sure, Vance did not cite the neutron warhead by name, but his plain reference to the "past 3 years" strengthening of theater nuclear weapons signified the neutron warhead.[3] In addition, Vance's reference dovetails with the President's Oval Office representation to Strauss that he is building the neutron warhead.[4] To be sure, available funds, and the formidable power of the Defense Department and ERDA, lent credence to Vance's words.[5] Events in Iran and Afghanistan thusly encouraged the florid expression of President Carter's pragmatic core when it came to ERW production-deployment.

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[2] Cyrus Vance interview by Tom Brokaw, *Today*, January 11, 1980, reprinted in Department of State Bulletin 80, no. 2035, February, 1980, p. 4.

[3] Ibid.

[4] Memorandum of Conversation, Carter with Strauss, March 13, 1980, NLC-128-1-9-1-8, JCL.

[5] On the scope of the science-DOD-Nuclear Weapons triad, *see* Hugh Gusterson, *Nuclear Rites* (Los Angeles: University of California Press, 1996), a 1996 anthropological study of a nuclear weapons laboratory. Gusterson points out that "a higher proportion of scientific and engineering jobs are military related in the United States than in any other Western country."

Crises Abroad

In a time of compromise versus competition,[6] the Iran hostage crisis and the Soviet Union's 1979 Christmas invasion of Afghanistan helped to trigger the transformation of Jimmy Carter into a Cold War pragmatist. Energy Secretary James Schlesinger recalled Carter-the self-confident-idealist in a 1984 interview for the University of Virginia's Miller Center:

> [Carter and I] were flying back from the Gulf Coast [July, 1977] … and he turned to me with this … moral enthusiasm that he had, and he said, 'It is my hope that in my administration I will be able to put our relations with the Soviet Union on the same basis as they are with England.'[7]

Schlesinger didn't recognize the president's tendency to exaggerate; instead, Schlesinger took him at his word. Carter biographer Kenneth Morris identified the habit of exaggeration as one of Jimmy Carter's two "most distinctive mature personality traits." The other was Carter's "ever-present grin."[8] Carter's provocative if exaggerated hope put Schlesinger on his heels.

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[6] The idea of compromise versus competition comes from the president's 1978 State of the Union address. "In areas of peaceful competition with the Soviet Union, we will continue to more than hold our own. At the same time, we are negotiating with quiet confidence, without haste, with careful determination, to ease the tensions between U.S. and to ensure greater stability and security." Jimmy Carter: "The State of the Union Address Delivered Before a Joint Session of the Congress," January 19, 1978. Online by Gerhard Peters and John T. Woolley, *APP*, http://www.presidency.ucsb.edu/ws/?pid=30856 (accessed February 25, 2014).

[7] In an effort to promote the progress of his energy legislation through Congress, the president and Schlesinger visited an offshore oil rig in the Gulf of Mexico. *See*, James Schlesinger interview, July 19-20, 1984, "the Carter Presidency Project," interview by Charles O. Jones, et al., *University of Virginia, Miller Center of Public Affairs* (2005). The Schlesinger-Jones interview is available online at http://millercenter.org/president/carter/oralhistory/james-schlesinger (accessed January 15, 2015). The president was pleased by what he saw, and he recalled his support for offshore oil exploration as Georgia's governor. "As Governor of Georgia, for instance, I joined with the Governors of North and South Carolina in laying plans for aggressive oil exploration and drilling and extraction off the coast of our Atlantic seaboard." Jimmy Carter: "New Orleans, Louisiana Question-and-Answer Session with Reporters," July 22, 1977. Online by Gerhard Peters and John T. Woolley, *APP*, http://www.presidency.ucsb.edu/ws/?pid=7856 (accessed January 3, 2014).

[8] Morris, *American Moralist*, 69.

> [Schlesinger] said, 'Well, Mr. President, that isn't likely to be possible. You've got to understand that there are political and cultural things that we share in common with the British and there are ideological rivalries that we have with the Soviet Union. There is just no possibility that you can put our relations with the Russians on the same basis as with the UK.' That, I think, in some ways, reflected the worst of the naïveté of Carter's approach to international relations.[9]

Schlesinger took the president's exaggeration at face value, and he answered as if he didn't understand Carter's intent – to shift the focus of U.S. foreign policy away from persistent East-West confrontation toward global community, which the ERW affair complicated. Schlesinger reveals his bias by ignoring the spirit of Carter's communication. If Carter approved ERW production, it would have looked like a violation of his inaugural pledge to eliminate nuclear weapons, true. But Carter expended a great deal of political capital in pursuant of ERW funding when he thought the weapons were militarily useful. Only after deciding that ERW disproportionately risked escalation, thus negating their usefulness as antitank weapons, did Carter seek other options in lieu of an ER ready Lance short-range missile.

The animating spirit of Carter's human rights-centered foreign policy was simple to grasp. In 1976, to a convention of the B'nai B'rith meeting in the nation's capital, Carter said, "We should not behave abroad in ways that violate our own laws and our own moral standards."[10] Nevertheless, despite the

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[9] James Schlesinger interview, July 19-20, 1984, "the Carter Presidency Project," interview by Charles O. Jones, et al., *University of Virginia, Miller Center of Public Affairs* (2005), 12-13. The Schlesinger-Jones interview is available online at http://millercenter.org/president/carter/oralhistory/james-schlesinger (accessed January 15, 2015).

[10] Carter, *A Government as Good as Its People*, 170.

available evidence, Schlesinger attributed Carter's remark about Britain and the Soviet Union to Carter's naiveté. To Schlesinger, a Wilsonian worldview lay at the base of that naiveté. As for Afghanistan, Schlesinger observed that the damage was done there in April, 1978, when Mohammad Daoud was overthrown in a coup set in motion by communists following the murder of leading Afghani intellectual, Mir Akbar Khber, the same month the ERW affair crested.[11]

Ambassador Raymond Garthoff points out that Daoud began running afoul of local leftists by 1974 as they were being driven from power. Daoud continued along that line through 1977; simultaneously, he quashed several attempted plots to dislodge him that originated on the right and on the left.[12] The April 1978 plot, contemporaneous with the neutron warhead decision in Washington, succeeded. Communists ascended to power. The Daoud fall and the communist rise had leaders East and West searching for causes. Garthoff writes that "both American and Soviet diplomats scrambled to find biographical backgrounds on many of the new leaders."[13] Moscow's December armed

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[11] Garthoff, *Détente and Confrontation*, 985. The reference discusses the events from the murder of Khyber to the Soviet Intervention. Daoud had come to power in 1973. (Raymond Garthoff writes: "In July 1973, while the king [Mohammed Zahir Shah] was visiting Italy, Daoud seized power in a nearly bloodless coup d'état." Ibid, 982. The dethroned king was Daoud's coU.S.in. Daoud, together with his family, was murdered and buried by Communists in a secret grave in 1978. According to the *Times* online, "forensic specialists used dental records, clothing and other clues to identify Mr. Daoud Khan; his brother; daughters, sons and their spoU.S.es; his wife and sister; and four grandchildren. They had all been buried together in a tank berm under the cover of darkness …." *See*, Abdul Waheed Wafa and Carlotta Gaul, "State Funeral for Afghan Leader Slain in '78 Coup," *New York Times*, March 17, 2009, http://www.nytimes.com/2009/03/18/world/asia/18afghan.html?_r=0 (accessed January 4, 2014). The *Times* print edition of 18 March 2009 carried only a standalone photo of part of an honor guard goose-stepping while bearing a portrait of the slain leader and flowers. *See*, *New York Times*, March 18, 2009, p. A10.

[12] Garthoff, *Détente and Confrontation*, 983.

[13] Garthoff, *Détente and Confrontation*, 988.

intervention more or less mooted concerns over the April coup. The U.S.S.R. was emboldened by Carter's ERW reversal. Once Moscow moved, American officials saw in Afghanistan a replay of Hungary and Czechoslovakia.

Despite the fact that Afghanistan was subject to the U.S.S.R.'s intervention – the U.S. had accurate intelligence assessments of the U.S.S.R.'s Afghan posture, but the U.S. did not anticipate clearly the Red Army's push into Kabul until mid-December – President Carter stayed a reluctant Cold Warrior. In a commencement address to the Notre Dame class of 1977, the president said that two guiding principles had determined U.S. overseas relations since 1945: "a belief that Soviet expansion was almost inevitable but that it must be contained, and the corresponding belief in the importance of an almost exclusive alliance among non-Communist nations on both sides of the Atlantic."[14] Before Afghanistan, Carter sought to alter those principles and position human rights at the center of U.S. overseas policy, Afghanistan changed that for the worse.

Jimmy Carter was keenly aware of the limits of United States power, an unforgettable lesson of Vietnam. Apropos of the immediate post-Vietnam era (in the words of author James Dumbrell): Carter busied himself with evolving a *democratic* rather than *Democratic* foreign policy.[15] As evidence of Carter's new

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[14] Jimmy Carter: "University of Notre Dame - Address at Commencement Exercises at the University," May 22, 1977. Online by Gerhard Peters and John T. Woolley, *APP*, http://www.presidency.ucsb.edu/ws/?pid=7552 (accessed January 4, 2014).

[15] *Cf.*, Jimmy Carter: "Charleston, South Carolina Remarks at the 31st Annual Meeting of the Southern Legislative Conference," July 21, 1977. Online by Gerhard Peters and John T. Woolley, *APP*, http://www.presidency.ucsb.edu/ws/?pid=7852 (accessed February 20, 2015).

path, Dumbrell points out that he was the first president to dismiss a sitting head of the Central Intelligence Agency (George H.W. Bush) upon assuming office.[16]

Despite his best intentions, Afghanistan brought out the Cold Warrior in Jimmy Carter. In his 1982 memoirs Carter wrote that "The Soviet Union, like Iran, had acted outrageously, and at the same time had made a tragic miscalculation. I was determined to lead the rest of the world in making it [the Soviet intervention] as costly as possible."[17] One of the things the president did was assist Afghan freedom fighters[18] in their struggle against invading Soviet forces. Gone were the days when the president wished for a U.S. foreign policy free of anxiety over the spread of Soviet influence and dominion. Moreover, one can surmise that Carter's boldness with Josef Strauss (expressed in the president's 1980 Oval Office affirmation that the U.S. was building the neutron warhead) was one of the consequences of Moscow's Afghan intervention.

Carter's description of the Afghani mujahedeen warrants further discussion. One scholar active in the field of terrorism studies, Bridgette Nacos, comments on such divergent characterizations of combatants as either terrorists or freedom fighters. She points out that such choices matter because the distinction

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[16] John Dumbrell, *American Foreign Policy: Carter to Clinton* (London: MacMillan Press, 1997), 11-13.

[17] Carter, *Keeping Faith*, 472-473.

[18] Carter's description in *Keeping Faith.* Carter's description suggests that he did not see the mujahedeen as an emergent threat to United States interests. He saw them filtered through glasses colored by the Cold War. So long as they fought the Marxist-Leninist invaders, they were friends of the United States.

is between a person who is "loathed" or "admired."[19] Like with the ERW controversy, how someone or something is labeled speaks to the relationship between power and weakness. For those in positions of power like Carter, the Afghani mujahedeen were freedom fighters because they opposed America's Cold War adversary: The enemy of my enemy is my fried. But in the case of ERW, the U.S.S.R.'s label – *the capitalist bomb* – drew only negative attention to the neutron warhead.

Carter used the freedom fighter motif often; likewise, the U.S.S.R. often used the capitalist bomb motif. In an impassioned address to the American Society of Newspaper Editors on April 10, 1980, the president beseeched his audience (and America's allies) to remember that the Soviet military presence in Afghanistan represented a violation of the standards of decency and human rights. In connection with the Mujahedeen, Carter had this to say:

> Hundreds of Afghan freedom fighters are dying every week, some in brutal mass executions. Entire villages are being wiped out. More than 800,000 people have fled the country. Terror tactics, including the use of chemical weapons, are the trademark of the ruthless attempt to crush [Muslim] resistance and to install a Soviet form of peace – a peace of brutal, armed suppression.[20]

In his "freedom-loving and patriotic" Afghani freedom fighters Carter saw a rising tide of self-determination, though he failed to take the measure of the zealotry that fed this rising tide in Afghanistan. Though not a zealot, Carter was a

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[19] Brigitte L. Nacos, "1976 Croatian Hijacker Busic: Terrorist or Freedom Fighter?" *Reflective Pundit*, http://www.reflectivepundit.com/reflectivepundit/2008/07/1976-croatian-h.html (accessed January 4, 2014).

[20] Jimmy Carter: "American Society of Newspaper Editors Remarks and a Question-and-Answer Session at the Society's Annual Convention. ," April 10, 1980. Online by Gerhard Peters and John T. Woolley, *APP*, http://www.presidency.ucsb.edu/ws/?pid=33248 (accessed January 5, 2014). In the original source, President Carter uses "Moslem," which has been changed to "Muslim."

man of deep Christian faith, and that life-view might has blinded him in matters of religion when it came to Afghanistan. What the president did see in Afghanistan was a Cold War clash between self-determination and communist expansion; he termed it an intersection of historic proportions. In language unusually bellicose for him, Carter said that the U.S.S.R.'s Kabul commitments were a brazen effort to "expand its own dominion and to satisfy its imperial objectives."[21] In no way did Carter see the Soviet Union's efforts in Afghanistan in terms of the U.S.S.R.'s national security interest or through the lens of Moscow's prevailing notions of class, ideology, or politics.[22]

Similarly, throughout the ERW affair, Carter critics cautioned that he should not give away ERW without receiving some concession from the U.S.S.R. But once ERW went from being a run-of-the-mill arms modernization program to a *cause célèbre*, Carter examined every opportunity to extract some concession from the U.S.S.R. from linking ERW to SS-20 deployments and MBFR. As for Afghanistan, Carter worried that "failure to respond convincingly [to the Soviet Union's military presence in Afghanistan] would only invite its repetition.[23]

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[21] Carter: "American Society of Newspaper Editors Remarks and a Question-and-Answer Session at the Society's Annual Convention," April 10, 1980.

[22] Georgi A. Arbatov and Willem Oltmans, *The Soviet Viewpoint* (New York: Dodd, Mead, and Company, 1981), 190. Arbatov was the director of the Institute of United States and Canadian Studies in Moscow. Arbatov discounted allegations that the Soviet Union moved in to Kabul in 1979 over fears that the establishment of an Islamic government in Afghanistan would "spark trouble among the [co-religionists] in Soviet Central Asia." Arbatov proffered that "Islam presents no political problems to the Soviet Union." Ibid, 194.

[23] John C. Danforth, "In Vienna, A Misstep," *New York Times*, May 15, 1980, p. A27. Carter saw the falling dominos made famous by his predecessor, Dwight D. Eisenhower. Dwight D. Eisenhower: "The President's News Conference," April 7, 1954. Online by Gerhard Peters and John T. Woolley, *APP*, http://www.presidency.ucsb.edu/ws/?pid=10202 (accessed January 5, 2014).

If President Carter had had his way, he would have succeeded in freeing United States foreign policy from all unwarranted anxiety about communism. But to Carter, and especially to his hawkish National Security Advisor, Zbigniew Brzezinski, Afghanistan warranted a stand. To be sure, Carter took bold stands. Two of these bold stands, the Olympic boycott and a grain embargo put pressure on the Soviets to withdraw from Afghanistan, a decade-long quagmire for the red Army. Carter took these measures despite the fact that the 1980 presidential contest neared. An argument can be made that these and other measures such as defense spending limits, energy conservation, and "patience" in coping with the Iran hostage crisis, eroded Carter's popular support. To these one should add the lingering effects of the ERW affair, especially as Three Mile Island came along to help fuel the domestic anti-nuclear movement.[24]

Unhappy with the U.S.'s Afghanistan inaction in 1978, James Schlesinger said that "there was damn little that we could do," when the U.S.S.R. rolled into Afghanistan in 1979, "but we made a great fuss because a frontier was crossed."[25] To borrow from Schlesinger, a great fuss was also made to secure the release of Americans being held captive in Iran since November 4, 1979, but it was unsuccessful. The Hostage Crisis didn't end until January 20, 1981, the day

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[24] Carter, *Keeping Faith*, 543.

[25] Schlesinger observed that Carter viewed the world as Woodrow Wilson might have, naively – an unflattering, but not surprising, assessment from a devotee of realpolitik. Hence Schlesinger's view of Wilson (and Carter): "there are national frontiers and those who cross those national frontiers are wrong." According to the secretary, this led Carter to demur helping the Somalis in the African Horn for the simple reason that Somalia invaded Ethiopia and not the other way around. The Schlesinger quote that ends the paragraph comes from the same portion of the secretary's Miller Center interview. *See*, James Schlesinger interview, July 19-20, 1984, "the Carter Presidency Project," interview by Charles O. Jones, et al., *University of Virginia, Miller Center of Public Affairs* (2005), 13. The Schlesinger-Jones interview is available online at http://millercenter.org/president/carter/oralhistory/james-schlesinger (accessed January 15, 2015).

Jimmy Carter left office. At the time, the significance of the Iranian imbroglio was not underestimated rather it was misunderstood. Gaddis Smith wrote in 1986, a few years after the crisis resolved, that the "seizure … of the American Embassy in Teheran and the holding of hostages led to Jimmy Carter's political downfall and overshadowed everything else that he had achieved or tried to do."[26] To be sure, Carter suffered the consequences of failing to secure an end to the captivity of Americans in Iran. However, Smith overly personalized the hostage crisis in the context of Carter *qua* Carter. As with the ERW affair, an ascendant post-Vietnam Congress kept a watchful eye over 1600 Pennsylvania Avenue throughout Carter's term, which exacerbated the president's ERW ambivalence.

The Iran Hostage Crisis was a short-term personal and professional tragedy for Carter, but it was the catalyst for a long-term continuous engagement between the United States and revolutionary factions in Iran, and extremist factions elsewhere in the Middle East and its hinterlands. Raymond Garthoff identified the emergent threat (in retrospect) in the context of Afghanistan and Daoud's consolidation of power. Garthoff wrote that "Beginning in 1975 … fundamentalist Muslim group(s) began an armed insurgency [against Daoud] with the assistance of the Muslim Brotherhood and Pakistan, and reportedly from Libya."[27]

As for Iran, revolution there spelled disaster for many. For feminists like Laila Abou-Saif, an Egyptian scholar, filmmaker, and dramatist, Khomeini's rise

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[26] Smith, *Morality, Reason, and Power*, 180.

[27] Garthoff, *Détente and Confrontation*, 983.

in Iran "changed everything" for Arab and Muslim women throughout [the region]. To Abou-Saif the Iranian Revolution represented a heartbreaking change-for-the-worse at time (in 1979) when "attention had just begun to focus on the needs of [Muslim] women: birth control, simple protection under the law, education and an end to the practice of female circumcision." Had Carter been able to implement his human rights centered foreign policy without the burden of ERW and the events that followed, such as the Soviet invasion of Afghanistan, Abou-Saif's claims might have received greater recognition. Saddened by these human rights abuses, and the return of the chador,[28] Abou-Saif pondered the plight of Iranian women who annulled their identity by hiding their faces. "But the [Iranian] men are wearing whatever they like," she said. "Can't revolutionaries – men and women – work as co-equals?"[29]

Nevertheless, a Cold War lens filtered the events as they were portrayed in Washington. During a visit of the Iranian Shah to Washington in 1977, President Carter approached the monarch over *his* human rights abuses. Cold War discourse colored the discussion:

> Carter to Pahlavi: "Can do anything to alleviate the harshest police practices?"
>
> Pahlavi to Carter: "No, there is nothing I can do. I must enforce the Iranian laws, which are designed to combat communism."[30]

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[28] The chador is a covering for the face and body of a woman.

[29] Barbara Crossette, "A Feminist's Trials in an Islamic Society," *New York Times*, November 19, 1979, p. B12.

[30] Carter, *Keeping Faith*, 436.

News anchor Ted Koppel's nightly running count of the days in captivity of American hostages, and images of Americans being led out of their country's embassy blindfolded, became an enduring motif of the latter part of Jimmy Carter's one-term presidency.[31] Carter never recovered from 1979, his, which began ordinarily enough with preparations for a NATO summit scheduled to be held in Guadalupe with President Valéry Giscard d'Estaing of France, Prime Minister James Callaghan of Great Britain, and Chancellor Helmut Schmidt of West Germany. Drew Middleton of the *Times* wrote – "a mood of sunny optimism" was not expected. Carter recalls in his memoirs that "A difficult conversation ensued [when I raised the issue of allied self-defense.] I pointed out that we must meet the Soviet threat on intermediate-range missiles, that the SS-20s being rapidly deployed by the Soviets were formidable weapons, but that no European leader had been willing to accept on their soil our neutron weapons, ground-launched cruise missiles, or the Pershing II medium-range missiles."[32]

The president's linkage of ERW and SS-20 is substantiated by his handwritten comments to the minutes of the Special Coordination Committee meeting of November 16, 1977, wherein he affirms the idea, which Secretary of Defense Harold Brown proffered in April, 1978.[33] These SCC minutes were not declassified prior to June 16, 2008, and they are important for shedding light on

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[31] Ali M. Ansari, *Confronting Iran: The Failure of American Foreign Policy and the Next Great Conflict in the Middle East* (New York: Basic Books, 2006), 89.

[32] Carter, *Keeping Faith*, 235.

[33] RAC NLC-15-124-7-7-4 Jimmy Carter Library.

the origins of the "restraint" language in the White House April 7, 1978, ERW deferral press release.[34]

The president found the German chancellor in a contentious mood in Guadalupe. "Schmidt would permit the deployment of additional missiles on his soil only when other European nations agreed to similar arrangements."[35] The *New York Times*' Drew Middleton covered Guadalupe. Middleton noted that most of NATO's high-ranking officers, "American as well as European," wanted ERW for the alliance. These officers were buttressed by Schmidt, who likewise wanted ERW for the alliance. According to Middleton, "Chancellor Schmidt has never accepted the wisdom of Mr. Carter's decision to shelve the neutron weapon."[36] Whatever reservations Jimmy Carter had about explicitly ordering neutron bomb production in 1978/1979, they were not moral, but pragmatic. Alas, for Carter, the neutron warhead was no "more wicked" than any other nuclear warhead in the U.S. arsenal.[37]

In hindsight, the U.S.S.R. went the way of the dodo and with it the Cold War binary. Not long after the U.S.S.R.'s collapse, the United States asserted

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[34] "I have decided to defer production of weapons with enhanced radiation effects. The ultimate decision regarding the incorporation of enhanced radiation features into our modernized battlefield weapons will be made later, and will be influenced by the degree to which the Soviet Union shows restraint in its conventional and nuclear arms programs and force deployments affecting the security of the United States and Western Europe." Jimmy Carter: "Enhanced Radiation Weapons Statement by the President. ," April 7, 1978. Online by Gerhard Peters and John T. Woolley, *APP*, http://www.presidency.ucsb.edu/ws/?pid=30630 (accessed February 25, 2014).

[35] Carter, *Keeping Faith*, 235.

[36] Drew Middleton, "Major Issue at Guadeloupe: U.S. Stand on NATO Defense," *New York Times*, January 5, 1979, p. A3.

[37] Jimmy Carter: "Yazoo City, Mississippi Remarks and a Question-and-Answer Session at a Public Meeting," July 21, 1977. Online by Gerhard Peters and John T. Woolley, *APP*, http://www.presidency.ucsb.edu/ws/?pid=7854 (accessed June 27, 2014).

itself in the Gulf. President Carter called the Soviet invasion of Afghanistan a grave threat:

> At this time [January 1980] in Iran, 50 Americans are still held captive, innocent victims of terrorism and anarchy. Also at this moment, massive Soviet troops are attempting to subjugate the fiercely independent and deeply religious people of Afghanistan. These two acts—one of international terrorism and one of military aggression-present a serious challenge to the United States of America and indeed to all the nations of the world.[38]

Fearful that Moscow's Afghan invasion threatened the free-flow of oil through the Straits of Hormuz, Carter announced the doctrine that came to bear his name:

> Let our position be absolutely clear: An attempt by any outside force to gain control of the Persian Gulf region will be regarded as an assault on the vital interests of the United States of America, and such an assault will be repelled by any means necessary, including military force.[39]

As journalists Lawrence Goldstein and Michael Makovsky pointed out in a 2010 article for the *Weekly Standard*, the Iraq wars of 1991 and 2003 implicitly occurred under the authority of the Carter Doctrine. And "today [2010] the Carter Doctrine must make a powerful and swift return: Iran's nuclear ambitions threaten the Gulf, posing perhaps the greatest immediate threat to U.S. national security."[40]

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[38] Jimmy Carter: "The State of the Union Address Delivered Before a Joint Session of the Congress," January 23, 1980. Online by Gerhard Peters and John T. Woolley, *APP*, http://www.presidency.ucsb.edu/ws/?pid=33079 (accessed February 24, 2014).

[39] Ibid.

[40] Lawrence Goldstein and Michael Makovsky, "Iran, Oil, and the Carter Doctrine," Weekly Standard, August 13, 2010.

Reagan and ERW Assembly

President Ronald Reagan approved assembly of the neutron bomb on August 9, 1981. A few days later, he was asked by the press whether the neutron warhead was an escalation of the arms race on the part of the U.S. By 1981, the Soviet Union had been in Afghanistan for nearly two years. What's more, the United States had been actively funding Afghan mujahedeen in their fight to outset America's Cold War adversary from Kabul and Greater Afghanistan. To the query over escalation, President Reagan replied, "No, not really." For the president, and for other ERW advocates, the neutron warhead was purely a defensive weapon.[41]

Moreover, President Reagan saw the ER warhead as a robust enhancement to deterrence. Reagan also saw ERW as an integral part of the nuclear balancing act, which called upon him to weigh the risk of disproportionate damage against military advantage. The tension between damage and advantage is clear when it comes to LNO and the usability of ER warheads; so too is the danger of escalation. But Reagan had the benefit of a changed international scene. With the Iranian Revolution of 1979, and the Soviet Union's invasion of Afghanistan that same year, neutron warhead approval posed less of a domestic political risk. SALT was stalled in the Senate and the Iran hostage crisis (over upon Reagan's inaugural) had a catalytic effect on Americans, inviting assertiveness abroad. Moscow's Kabul (mis)adventure provided an outlet for that assertiveness, and the

[41] Ronald Reagan: "Remarks on Signing the Economic Recovery Tax Act of 1981 and the Omnibus. Budget Reconciliation Act of 1981, and a Question-and-Answer Session with Reporters," August 13, 1981. Online by Gerhard Peters and John T. Woolley, *APP*, http://www.presidency.ucsb.edu/ws/?pid=44161 (accessed January 16, 2014).

mujahedeen fighting the Red Army were happy recipients of American funds, arms, and equipment.

Grassroots activists on both sides of the neutron warhead issue cringed when winability surfaced in connection to nuclear warfighting in the early 1980s. These activists were concerned that Reagan's Washington embraced nuclear war as an "acceptable option." To Dr. Abram Claude of the Physicians for Social Responsibility, nuclear war was the greatest medical problem facing the world in 1981.[42] Activist Kate Hudson marveled over the 300,000 people gathered in London's Hyde Park in the fall of 1981 to stop the deployment of U.S. nuclear cruise missiles in Great Britain.[43] And to Charles Krauthhammer, limited nuclear war opened the door wide to a nuclear holocaust.[44] No doubt the belief was widespread that the superpowers were inching closer to an armed exchange that might lead to civilization's eradication. U.S. support for the mujahedeen in Afghanistan exacerbated these fears.

President Reagan decided to produce ERW, but not deploy them with NATO. In lieu of deploying neutron warheads, he ordered that they be stockpiled in the United States, one way of keeping the Soviet Union on notice that the U.S. had not abandoned its effort to modernize its theater-level nuclear forces in Europe. Author Paul Lettow observed that "Reagan called for the United States

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[42] Mike Feinsilber, "Grassroots U.S. Anti-nuclear Movement," *Times-News*, December 9, 1981, p. 15.

[43] Kate Hudson, "How the Iraq War Affects the Anti-Nuclear Movement," *Bulletin of the Atomic Scientists*, August 21, 2007, http://www.thebulletin.org/rebirth-anti-nuclear-weapons-movement/how-iraq-war-affects-anti-nuclear-movement (accessed January 16, 2007).

[44] Charles Krauthhammer, "In Defense of Deterrence," in *The Apocalyptic Premise*, Ernest W. Lefever, ed. (Washington, DC: Ethics and Public Policy Center, 1982), 78.

to lead an arms race that he believed the Soviet Union could neither keep up with nor afford."[45] The president's hope was that the cost of trying to keep up with new arms and new arms advances would undermine the Soviet Union's economy and lead to its demise.

Days after he approved ERW for production, the press asked President Reagan whether he thought that U.S.-Soviet relations were at their lowest ebb in modern times. One reporter asked: "Are we now in a new Cold War, and do you fear that it may lead to an actual shooting war?" Reagan said:

> No, I don't fear the actual shooting war. And whatever they [the Soviet Union] may want to term it, "Cold War" or not, what we are in is a situation where we're being realistic about their military buildup, which has gone on unchecked in spite of all of the meetings having to do with arms control and so forth. And I can understand their anguish. They are squealing like they're sitting on a sharp nail simply because we now are showing the will that we're not going to let them get to the point of dominance, where they can someday issue to the free world an ultimatum of "surrender or die," and they don't like that.[46]

To liken the Soviet Union to a pig (dogs bark; horses neigh; pigs squeal) sitting on a nail is nothing if not frank. Detectable in the president's frankness is the fact that he is troubled over the dearth of his nuclear options. His search for options would later lead to the Strategic Defense Initiative in 1985. For Ronald Reagan, it was unacceptable to be left with surrender on the one hand and death on the other. The need for options necessitated preparing nuclear war plans. For Reagan, the

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[45] Paul Lettow, *Ronald Reagan and His Quest to Abolish Nuclear Weapons* (New York: Random House, 2006), ix.

[46] Ronald Reagan: "Remarks on Signing the Economic Recovery Tax Act of 1981 and the Omnibus. Budget Reconciliation Act of 1981, and a Question and-Answer Session With Reporters," August 13, 1981. Online by Gerhard Peters and John T. Woolley, *APP*, http://www.presidency.ucsb.edu/ws/?pid=44161 (accessed January 16, 2014).

tumult raised by the Soviet Union's Afghan adventure-quagmire provided adequate cover for neutron warhead approval. Reagan's ERW decision – assembly and warehousing – passed with few ripples.

CONCLUSION

A[3]: APPROPRIATE, APPROVE, ASSEMBLE

Although Jimmy Carter suspended production of the controversial neutron bomb, President Reagan is almost certain to approve deployment.

~ Michael T. Klare, *Mother Jones*[1]

(F 12) The Moderates *"Yes to the Neutron Bomb," 1981, Hyped 51 Records*[2]

Both *The Moderates* and Ronald Reagan said "Yes" to the neutron bomb in 1981.[3] Michael T. Klare's "Reagan's Gun Collection" predicted President

[1] Michael T. Klare, "Reagan's Gun Collection," Mother Jones IV, no. 11, Feb./Mar. 1981, p. 6.

[2]Depiction of courtesy of rateyourmusic.com, http://rateyourmusic.com/release/single/the_moderates/yes_to_the_neutron_bomb___bus_girl/ (accessed February 1, 2015). This is a depiction of the cover art from a 1981 single released in Great Britain by The Moderates.

Reagan's affirmation. In his contribution to the February-March issue of *Mother Jones*, Klare warned readers to be wary of "Regan's boondoggles." Klare cautioned that President Reagan was likely to seek funding for much more than the neutron bomb in his profligate defense budget. Reagan supposedly planned an orbital battle station armed with lasers, as well a nuclear bomb and nerve gas factory, of course – neutron bombs.[4] But Klare's unsubtle look at the neutron warhead suffers from imprecision and hyperbole. President Carter did not suspend production of the enhanced Radiation Warhead (ERW). Carter produced the warhead with all of the enhanced radiation features, except assembly. President Reagan ordered already-made ER warheads assembled and stored as a unit in August, 1981. ERW were never deployed, contrary to Klare's speculation.

When it comes to nuclear arms, the details matter. President Carter had neutron warhead details thrust on his desk a few months into his term when he had to struggle over whether to approve production of the weapon he considered no "more wicked or immoral" than any of the other nuclear weapon in the American or Soviet arsenal at the time.[5] For ERW supporters like Senators John Stennis and Sam Nunn, enhanced radiation weapons were more accurate and limited in effect than the systems that they would replace. Stennis, a Mississippi Democrat, said that ERW could be used "in a more restricted manner than nuclear weapons now available." He added that having nuclear weapons under such

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[3] A British band who had a large local following in Liverpool the late 1970s and early 1980s. "Yes to the Neutron Bomb" was a 12-inch single.

[4] Klare, "Reagan's Gun Collection."

[5] Jimmy Carter, Yazoo City, Mississippi, Public Meeting, July 22, 1977, *American Presidency Project ("APP")*, http://www.presidency.ucsb.edu/ws/?pid=7854 (accessed December 24, 2014).

control "with limited application is the best news I have heard in years."[6] In contrast, Roman Catholic Bishops denounced enhanced radiation weapons as "immoral" and "ferocious."[7] The neutron bomb – a weapon *Newsweek* called a "doomsday weapon … that … kills with death rays" – stirred the ire of the European public and cast doubt over President Carter's inaugural pledge to begin to rid the world of nuclear weapons.[8]

In 2010 President Carter published excerpts from his still-unavailable White House diary. The president's notes that he decided in March of 1978 – "on his own" – to "work out a way to cancel [ERW production and deployment] without giving an image of weakness to our European allies, who don't want [ERW] anyhow."[9] The president decided to defer ERW production, even though he initially thought ERW were in America's security interest. But European reluctance to accept ERW home-soil deployment does not explain the president's ultimate deferral decision. Though ambivalent, Carter deferred neutron warhead production because he did not think that ERW were militarily useful; in fact, Carter preferred an alternative, the ground launched cruise missile.

By late summer, 1977, in the midst of the ERW controversy, one thing was clear: President Carter had expended a good deal of political capital opposing

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[6] Jimmy Carter to John Stennis, July 12, 1977, National Security Affairs, Brzezinski Material, "Enhanced Radiation Weapons and Radiological Warfare, 6-8/77," 16, Jimmy Carter Library. Fact Sheet, David Aaron to Jimmy Carter, July 11, 1977, National Security Affairs, Brzezinski Material, "Enhanced Radiation Weapons and Radiological Warfare, 6-8/77," 16, Jimmy Carter Library ("JCL").

[7] Charles Austin, Bishops Denounce the Neutron Bomb, *New York Times*, October 18, 1981, http://www.nytimes.com/1981/10/18/nyregion/bishops-denounce-the-neutron-bomb.html (accessed February 23, 2014).

[8] "The N-Bomb," *Newsweek*, July 4, 1977, 3.

[9] Jimmy Carter, *White House Diary* (New York: Farrar, Straus & Giroux, 2010), 79.

neutron warhead critics on Capitol Hill. Carter won the discretionary funding he sought, but not before he assured members of Congress that the neutron warhead as aided deterrence and was in the best interest of the North Atlantic Treaty Organization (NATO) and the United States. President Carter won the ERW funding battle, but no one – not even the president's chief aids – predicted the endgame. A ten-month gap opened before Carter, against the advice of his chief aides, spurned the funding victory and turned away from the neutron warhead.

Unbeknownst to President Carter, in June, 1977, he headed into a season of nuclear uncertainty. At the far end, there awaited the Three Mile Island incident, but during the summer of 1977, the president's plate was full: ERW, the Trident submarine, and the cruise missile. The technology transfer issue also complicated Strategic Arms Limitation Talks (SALT). In the non-nuclear arena, President Carter had the Ogaden War to contend with, and later Iran and Afghanistan. In addition, these matters diverted attention away from Jimmy Carter's professed desire to refocus U.S. foreign policy on with human rights. Of the three, Afghanistan rekindled the Cold War most. Recall historian Robert Strong's observation that by the springtime of 1978, when Carter made his ERW deferral decision, the administration's public criticism of the Soviet Union's human rights record had chipped away steadily at what remained of détente. [10] The U.S.S.R.'s move in to Afghanistan over Christmastime, 1979, merely sealed the end of a Cold War January thaw.

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[10] Robert A. Strong, *Working in the World: Jimmy Carter and the Making of American Foreign Policy* (Baton Rouge: Louisiana State University Press, 2000), 102-103.

For the office holders in Red Square, President Carter's human rights stance was a cover for an arms buildup with the neutron warhead in the van. One of the Soviet Union's American specialists, Georgi A. Arbatov, alleged that the United States was engaging in "one after another anti-Soviet propaganda campaign" aimed at upsetting the "internal affairs" of socialist countries. Responding to remarks made by Carter in Charleston, South Carolina, in late July, 1977, Arbatov alleged that efforts were afoot to undermine the U.S.S.R.'s internal affairs "under the pretext of … human rights." The Kremlin's American specialist, head of the United States and Canada Institute, called the Carter administration's emphasis on human rights an "unfair distortion of the ideological struggle that Moscow has said is permissible under détente." [11] ERW – the capitalist bomb – was simply the latest *arme célèbre* in a long list of arms initiatives aimed at upsetting the superpower's nuclear balance, Moscow presumed.

By the fall of 1977, ERW had not been resolved either up or down by President Carter. In the Capitol, administration officials announced – shortly after the Labor Day holiday – that an ERW decision would be forthcoming before fall gave way to winter. At the time, Zbigniew Brzezinski believed that Carter was committed to ERW production.[12] The president gave his national security adviser

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[11] Christopher S. Wren, "Soviet Aide Calls Criticism of Carter Policies Genuine," *New York Times*, August 4, 1977, p. 10.

[12] Only after leaving office did the national security advisor record his belief that Carter "morally abhorred the neutron warhead." Brzezinski: "I think the president personally found [the neutron bomb] morally abhorrent." Zbigniew Brzezinski, interview by *National Security Archive*, Cold War Series, Episode 17 (June 13, 1997), http://www2.gwu.edu/~nsarchiv/coldwar/interviews/episode-17/brzezinski1.html (accessed December 12, 2013). Brzezinski's contemporaneous records tell a different story.

little reason to believe that he would eventually come down against ERW production. In this regard, Brzezinski was not alone: all of the president's top advisors thought that he was in favor of neutron warhead production.[13] Observers expected a favorable outcome owing to the president's oft stated belief that ERW did not complicate SALT or lower the nuclear threshold. Carter circled around ERW production and deployment for months. In early 1978 a decision seemed imminent, and observers keen on neutron warhead production like Sam Nunn cautioned against a repeat of the B-1 bomber program: no unilateral concessions on arms, ERW supporters urged.

But President Carter delayed his decision in the hope that America's NATO allies might publicly embrace the neutron warhead, and that acceptance never occurred to the president's satisfaction. In fact, Secretary of Defense Harold Brown warned the president that West Germany's chancellor Helmut Schmidt had positioned the Federal Republic to lay the blame at Carter's feet, personally. Brown warned the president days before ERW deferral: "FRG moves will tend to make the U.S. – and you personally – take all the heat for a 'No'."[14] Brown's assessment proved prescient as Helmut Schmidt consistently laid blame for neutron warhead non-production squarely on President Carter's shoulders.[15]

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[13] James Schlesinger interview, July 19-20, 1984, "the Carter Presidency Project," interview by Charles O. Jones, et al., *University of Virginia, Miller Center of Public Affairs* (2005). The Schlesinger-Jones interview is available online at http://millercenter.org/president/carter/oralhistory/james-schlesinger (accessed January 15, 2015).

[14] Brown to Carter, Memorandum for the President, April 3, 1978, Donated Historical Materials, Zbigniew Brzezinski Collection, "Defense – Enhanced Radiation Warhead: 3/78-8/78, Box 22, JCL.

[15] Jimmy Carter Interview, Miller Center, University of Virginia, Jimmy Carter Presidential Oral History Project (COHP), November 29, 1982,

President Carter's on again, off again approach to ERW fomented considerable ire in the U.S. and abroad. Those that opposed enhanced radiation upgrades to the Lance short-range missile were pleased with the outcome, though Carter's inconstancy cum ambivalence underscored broader concerns about the president's ability to navigate complex Oval Office shoals and eddies.[16] The ERW controversy occurred not six months into Carter's first year in office on the heels of B-1 bomber cancellation. Critics of Carter's B-1 decision worried that it was a precursor for neutron warhead cancellation.

President Carter's decision to defer production of the neutron bomb prompted conservative intellectual and inveterate sesquipedalian William F. Buckley to observe that the Soviet Union's resistance to the neutron bomb was predicated on nothing more complex than the fact that they did not have one whereas the U.S. did. NATO Supreme Commander Alexander Haig firmly believed that the Alliance stood to benefit from an improved Lance short-range missile to counterbalance the presence of intermediate-range Soviet SS-20s and superior Warsaw Pact armored forces.

In the end, President Carter did not side with ERW supporters, or his own advisors. However, Secretary of Defense Harold Brown's percipient view that Helmut Schmidt would make President Carter publicly "take the heat" for eleventh hour ERW reversal had no trouble gaining traction. One former State

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http://web1.millercenter.org/poh/transcripts/ohp_1982_1129_carter.pdf (accessed March 24, 2014).

[16] Hearken back to James Fallows' recollection: "President Carter often seemed more concerned with taking the correct position than with learning how to turn that position into results." *See*, James Fallows, "The Passionless Presidency," *Atlantic Monthly*, May, 1979.

Department official connected the president's decision to the generally accepted view of the president's deep Christian faith: "You know the famous story where Jimmy Carter knelt at his bedside one night, said his prayers, talked to God, and the next morning woke up and decided he couldn't do this, that it [the neutron bomb] was an immoral weapon."[17] In any case, President Carter's White House diary excerpts are silent on the issue of ERW and morality; however, proof of absence is not proof. Elsewhere in the record, Jimmy Carter affirmatively states that there is no moral distinction between nuclear weapons with enhanced radiation features and those without enhanced radiation features.[18]

Secretary Brown's memorandum sheds light on the factors President Carter weighed in the days immediately prior to ERW deferral. Fortuitously, the memorandum also points scholars toward additional areas warranting further study. Brown warned Carter that an ERW reversal would undermine domestic support for other foreign policy initiatives and defense programs. Brown suggested that Carter link his future decision regarding ERW to whether "the Soviets show restraint in force deployments relating to European security." [19]

Brown's "restraint in force deployments" relates to the linkage that historian Richard Thornton alleges is the precursor of NATO's November 12,

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[17] William W. Woessner, interview by Charles Stuart Kennedy, *The Association for Diplomatic Studies and Training, Foreign Affairs Oral History Project*, (November 29, 1999), http://www.adst.org/OH%20TOCs/Woessner,%20William%20M.toc.pdf (accessed December 14, 2013).

[18] Jimmy Carter: "Yazoo City, Mississippi Remarks and a Question-and-Answer Session at a Public Meeting," July 21, 1977. Online by Gerhard Peters and John T. Woolley, *APP*, http://www.presidency.ucsb.edu/ws/?pid=7854 (accessed June 27, 2014).

[19] Memo, Harold Brown to Jimmy Carter, 04/03/1977, Staff Offices, National Security, Defense, Folder 04/14/1977-04/30/1977, Box ND 50, JCL.

1979, Dual Track decision. But can this linkage be substantiated in the existing archival record? And if this linkage is substantiated, is it important? Whether or not this linkage can be substantiated depends on declassification of the pertinent documents. There remain too many redactions in the documents currently open to the public, and many are entirely closed. Indeed, it is through the recent declassification of documents containing President Carter's handwritten notes that the case for ERW deferral based on military non-utility is made.[20] Had Vincent Auger or Gaddis Smith seen these notes, their research might have taken them down different avenues. Finally, the linkage matters.

Establishing a linkage between ERW deferral and Dual Tack would reveal whether the neutron warhead affair contributed materially to the incipient 1983 Euro Missile Crisis or was merely a minor weapons procurement squabble writ large due to President Carter's ambivalence. But the gaps in the direct evidence require document declassification for answers. President Carter can take the lead by opening his entire White House diary to the public to help either dispel or confirm the two most common neutron warhead myths that moral qualms and European resistance to home-soil deployment prompted deferral.

This study showed that President Jimmy Carter publicly deferred production of enhanced radiation weapons in 1978 because he did not think that ERW were militarily useful. Moreover, newly declassified evidence – despite redactions and gaps – shows that the United States began de facto neutron warhead production under President Carter between 1978 and 1980 and not, as

[20] Notes, Jimmy Carter, Zbigniew Brzezinski Collection, "Defense – Enhanced Radiation Warhead: 3/78-8/78," Box 22, JCL.

previously believed, under President Ronald Reagan in 1981. Despite popular memory, President Carter quietly produced the neutron warhead, but did not assemble the ER components – President Regan did that in 1981.

President Carter's fear of escalation led to his loss of faith in the utility of enhanced radiation weaponry, not his personal morality or the FRG's fence-sitting. After weighing his options for ten months, Carter concluded that the political disadvantages of ERW outweighed the military advantages.[21] Carter lacked belief in the deterrence value of the neutron warhead. For him, the risk of escalation, the progression from limited nuclear war to strategic nuclear war, outweighed the deterrence value of enhanced radiation weapons.

This study intentionally eschewed theory and proceeded along strictly empirical grounds. That said, looking ahead, the impact of technological determinism on nuclear weapons policy in the late 1970s and early 1980s warrants further study; theoretical methods seem appropriate. The neutron warhead assembled by President Ronald Reagan's 1981 order represented a marked technological advancement, vertical proliferation in the *lingua franca* of arms control. The refinements that led to enhanced radiation components evolved incrementally beginning in the 1950s at a stage in the Cold War when profligate funding of nuclear weapons was *de rigueur*. Research and development received its fair share of the funding, a fractional share filtering down to the development of small thermonuclear warheads with enhanced prompt radiation effects, so-called neutron bombs. The laboratories inside U.S. research centers at Sandia and Livermore buzzed with activity as scientist-administrators traversed the

[21] "Defense – Enhanced Radiation Warhead: 3/78-8/78," Box 22, JCL .

permeable boundaries between science and technology, industry and government.[22] President Carter's Secretary of Defense, nuclear physicist Harold Brown, was a staffer at Livermore before serving under Robert McNamara as a Defense Department director of research and engineering. Brown was the President of the California Institute of Technology before Carter appointed him to head Defense. Whether the permeable boundaries between science and technology, industry and government, contributed to – or even created – deterministic nuclear weapons policy deserves closer scrutiny.

A Bird's Eye View

From a bird's eye view, industrialization made war in the twentieth-century into an existential threat. World War I, the Great War, mechanized killing. That war, the one supposed to end them all, freed the modern nation-state's War Machine. Battlefield commanders failed their soldiers, their faith in old-school tactics eclipsed by technology. World War II upped the ante. The death-toll skyrocketed as industrialized nations yoked institutional science to the War Machine. Hiroshima and Nagasaki were twin catastrophes regardless of whether or not military necessity warranted use of the atomic bombs. The enhanced radiation warhead, the so-called neutron bomb, is the intestate successor of those twin catastrophes. There is a direct deterministic link from Physicist Samuel Cohen's neutron bomb to the scientists, engineers, and bureaucrats who delivered Fat Man and Little Boy.

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[22] *See*, Michael Adas, *Machines as the Measure of Men: Science, Technology, and Ideologies of Western Dominance* (Ithaca, NY: Cornell University Press, 1989).

That was the Cold War. Postwar Americans, steeped in consumerism, yearned to preserve and grow their material well-being. Science, technology, and industry fed this hunger for material goods.[23] The same muscular science, technology, and industry drove the development of enhanced radiation warheads. To the Buckley's observation on its head: The United States didn't want the Russians to have a neutron bomb because it had one.

For a time in 1977 it seemed possible that the War Machine might slow. President Jimmy Carter deferred neutron bomb production – his preference was cancellation – against the advice of all of his top advisers, the Joint Chiefs of Staff, and General Haig. In fact, Carter left many of his advisers scrambling for answers to why he halted ERW production plans at the eleventh hour. President Carter has since declined to corroborate the influence of advisers who, like UN Ambassador Andrew Young, claimed to have moved him toward cancellation. What looked to be a *sui generis* decision was the product of a ten-month-long painstaking process steeped in pragmatic thinking but waylaid by ambivalence. The president could not make up his mind, and when he did, his conclusion was pragmatic.

President Jimmy Carter publicly deferred production of enhanced radiation weapons on April 7, 1978, because he did not think that ERW were militarily useful. President Carter's fear of escalation led to his loss of faith in the

[23] *See*, Carroll Pursell, *Technology in Postwar America: A History* (New York: Columbia University Press, 2007. The observation concerning material well-being and automobile ownership comes from chapter six, "'It's Fun to Live in America'."

utility of enhanced radiation weaponry.[24] Neither morality nor West German resistance to home-soil deployment ultimately made up Jimmy Carter's mind. Indeed, newly declassified evidence reveals that the United States began quietly producing all essential neutron warhead components at President Carter's direction in 1978. Carter stopped short of assembling the warheads, and Ronald Reagan took the last step, publicly authorizing neutron warhead assembly in August, 1981.

Lost in the rhetoric surrounding neutron bombs were the nitty-gritty details: production versus assembly versus deferral; prompt versus residual radiation; fast neutrons versus slow. The *China Syndrome* and Three Mile Island, both occurring remarkably close in time, ensured that the anti-nuclear movement had robust opportunities to refresh the public's consciousness as the neutron warhead percolated up for decision and re-decision between 1977 and 1981. The neutron bomb is still with us. An internet search (Google) circa 2014 leads to claims of property safety, the vestigial tail of seemingly all neutron bomb media ("It kills the people but leaves the buildings standing!") For instance, the Workers World Party claims that the U.S. used one in 2003 in Iraq at the Baghdad Airport. "The bombs incinerated about 2,000 elite Republican Guard troops but left the buildings and infrastructure at the airport intact."[25] The rumor is false, but persistent.

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[24] Jimmy Carter: "Yazoo City, Mississippi Remarks and a Question-and-Answer Session at a Public Meeting," July 21, 1977. Online by Gerhard Peters and John T. Woolley, APP, http://www.presidency.ucsb.edu/ws/?pid=7854 (accessed June 27, 2014).

[25] Gary Wilson, "Did U.S. use Neutron Bomb in Battle of Baghdad?" Workers World, http://www.workers.org/2007/world/neutron-bomb-0510/ (accessed February 25, 2014).

In the thick of the ERW affair, New York Congressman Theodore Weiss observed that Jimmy Carter believed that any nuclear weapon, neutron warheads included, could – if used – trigger all-out nuclear war. The archival record supports Weiss' observation. President Carter's fear of escalation was the foundation of his pragmatic assessment that the disadvantages of ERW outweighed the advantages. No other approach to the enhanced radiation warhead affair, from Smith to Wasserman, or from Garthoff to Thornton, Strong, and Auger, adequately probes President Carter's doubt in the military efficacy of the neutron warhead. All other approaches relied more or less on President Carter's personal morality and European resistance to home-soil deployment. This study has charted a new course. An ambivalent President Carter halted U.S. development of the neutron warhead after he surmised that warheads with enhanced radiation features were militarily less useful than more politically acceptable alternatives.

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