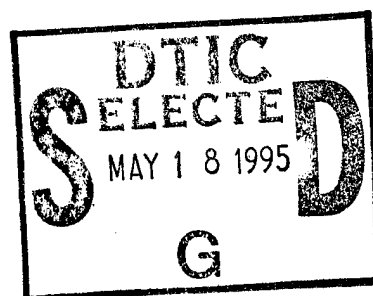


NAVAL POSTGRADUATE SCHOOL MONTEREY, CALIFORNIA



THESIS

BUDGETING FOR COUNTERPROLIFERATION

by

Kenneth D. Dunscomb

December, 1994

Principal Advisor:

Jerry McCaffery

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by

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of the requirements for the degree of

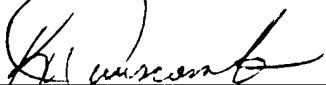
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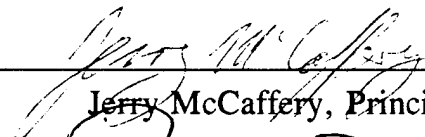
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I. INTRODUCTION

With the collapse of the Soviet Union in the fall of 1991, also went the threat that had dominated U.S. defense strategy for the previous forty five (45) years. In the Bottom-Up Review conducted in the aftermath of the Soviet collapse, the Department of Defense identified the proliferation of nuclear weapons and other weapons of mass destruction as a primary threat to the national security of the United States in the new world order. In response to this new threat, the Clinton Administration has apparently shifted emphasis in proliferation policy to include counterproliferation or protection measures as a major policy goal. This thesis will examine U.S. proliferation policy from a resource perspective. It will consist of an analysis of the apparent shift in proliferation policy emphasis in the Clinton Administration from one focused on nonproliferation through deterrence, arms control and prevention, to one focused on protection from the threat of the continued proliferation of nuclear weapons and other weapons of mass destruction. The thesis will focus on President Clinton's request in the FY 1995 Defense Budget for approximately \$30 million for policy support of the Department of Defense's (DOD's) Defense Counterproliferation Initiative.

Following a brief review of the history of the proliferation of nuclear weapons and of U.S. proliferation policy, the thesis will describe the Clinton Administration's new emphasis on counterproliferation. To assess the budgeting and resource implications of this policy change, the thesis will track the President's FY 1995 budget request through the congressional budget process, identifying and analyzing all problems and changes to the original request.

The issues surrounding the shift in policy emphasis in proliferation policy are particularly relevant in the

aftermath of the collapse of the former Soviet Union and the end of the Cold War. The shift in policy emphasis presents new challenges to the Department of Defense, and may potentially result in new missions for all of the armed services. An understanding of the budgetary and resource implications of the new emphasis on counterproliferation is essential to the successful accomplishment of these new missions.

A. OVERVIEW

The destruction of Hiroshima on August 6, 1945, and Nagasaki three (3) days later marked the beginning of the nuclear age, and alerted the world to the grim reality and the catastrophic consequences of a nuclear war. [Ref. 1] U.S. proliferation policy efforts since World War II have centered on limiting the global spread of nuclear weapons and other weapons of mass destruction. This effort to contain the spread of nuclear weapons is called nonproliferation. The former Soviet Union has been the primary focus of U.S. proliferation policy for approximately the past fifty (50) years during the period known as the Cold War. In fact, the history of proliferation during the Cold War can best be described as an adversarial relationship between the United States and the Soviet Union. [Ref. 2]

The collapse of the Soviet Union effectively ended the Cold War. This profoundly affected the international balance of power, and complicated the problem of the proliferation of nuclear weapons and other weapons of mass destruction by destabilizing control of the arsenal of the former Soviet Union. The Administration of President Clinton has recognized the potential of an increased proliferation problem as a new threat, and has shifted emphasis in proliferation policy to include counterproliferation measures such as those outlined in the Defense Counterproliferation Initiative.

One indication of this shift in emphasis was the President's FY 95 budget request for \$30 million for policy support for DOD's Defense Counterproliferation Initiative. Action taken on this budget request throughout the Congressional budget process provides information regarding the shift in emphasis in proliferation policy, and provides insight about the extent to which a consensus on this new policy exists between the executive and legislative branches, as well as the level of resources necessary to implement it.

B. SCOPE

This thesis will provide an overview of U.S. proliferation policy. It will review the history of the proliferation of nuclear weapons and other weapons of mass destruction from the development of the Atomic Bomb in the 1940's to the Defense Counterproliferation Initiative and the President's FY 95 budget request to support that initiative. The thesis will evaluate current proliferation policy and discuss the budgetary issues and resource implications involved in the implementation of this policy.

C. RESEARCH METHODOLOGY

This thesis will define U.S. proliferation policy in a historical context. President Clinton's FY 95 budget request will be used to demonstrate the shift in emphasis in proliferation policy in the wake of the collapse of the former Soviet Union. Additionally, information and data obtained by tracking the President's request through the Congressional budget process will be used to analyze Congressional support for the Defense Counterproliferation Initiative and to provide further insight into the shift in U.S. proliferation policy.

D. GOALS

The primary goal of the thesis is to satisfactorily answer the following question:

- How did Congress change or otherwise impact the President's FY 1995 defense budget request for funding in support of the Defense Counterproliferation Initiative?

In researching and answering the primary thesis question, the following subsidiary questions will be answered:

- What is meant by proliferation, nonproliferation and counterproliferation?
- What are President Clinton's priorities with regard to proliferation policy as evidenced by his FY 95 budget request?
- How do these priorities differ from past proliferation policy priorities?
- What changes were made to the President's budget request during the authorization process in both the House and the Senate?
- What changes were made to the request by the House and Senate Appropriations Committees?
- Who were the major proponents and opponents the President's budget request?
- Does the Congress support the Defense Counterproliferation Initiative and the President's new proliferation policy priorities?
- What inferences can be drawn about the future direction of U.S. proliferation policy?

While researching the above questions, the thesis will reach and discuss conclusions regarding U.S. proliferation policy and suggest possible areas for future research.

II. A HISTORY OF U.S. PROLIFERATION POLICY

A. INTRODUCTION

This chapter will provide a brief history and analysis of the proliferation of nuclear weapons and U.S. proliferation policy efforts from the dawn of the nuclear age in the 1940's through the end of the Cold War. It will look at the many proliferation policy initiatives introduced in the international arena during the past fifty (50) years and where applicable, discuss their merits, shortcomings and implications. The chapter will conclude with a summary of past proliferation policy efforts and provide some insight into how they positioned the United States to deal with the issue of the proliferation of nuclear weapons and other weapons of mass destruction in the wake of the collapse of the former Soviet Union and the end of the Cold War.

Before delving into the history and discussion of past proliferation policy, it is necessary to define exactly what is meant by the terms proliferation, nonproliferation and counterproliferation. The Clinton Administration defines proliferation, nonproliferation and counterproliferation in policy terms as follows [Ref. 3]:

Proliferation - the spread of nuclear, biological, or chemical weapons and the missiles used to deliver them.

Nonproliferation - use of the full range of political, economic and military tools to prevent proliferation, reverse it diplomatically or protect our interests against an opponent armed with weapons of mass destruction or missiles, should that prove necessary. Nonproliferation tools include: intelligence analysis, global nonproliferation norms and agreements, diplomacy, export controls, security assurances, defenses, and the application of military force.

Counterproliferation - the activities of the Department of Defense across the full range of U.S. efforts to combat proliferation, including diplomacy, arms control, export controls, and intelligence collection and analysis, with particular responsibility for assuring U.S. forces and interests can be protected should they confront an adversary armed with weapons of mass destruction or missiles.

Counterproliferation and the Defense Counterproliferation Initiative will be discussed in detail in Chapter III in the context of the Clinton Administration's shift in proliferation policy emphasis to include counterproliferation as a major policy goal.

For purposes of this thesis "proliferation policy" will refer to and include nonproliferation and counterproliferation efforts and initiatives.

B. OVERVIEW

The atomic bomb is the most terrible and devastating weapon that man has ever contrived. Because atomic energy is capable of destroying civilization, it must be controlled by international authority.

- Harry S. Truman

Hiroshima, Japan, 6 August 1945

Killed:	78,150
Injured:	37,425
Missing:	13,983
Destroyed:	68,000 buildings
	[Ref. 4]

Recognition of the potential devastating consequences associated with nuclear war gave rise to early proliferation concerns. Indeed, proliferation policy has played a prominent role in overall U.S. national security policy since the dawn of the nuclear age in the 1940's. It arose out of the

recognition of the awesome destructive capabilities of the atomic bomb, and was shaped largely through Cold War policies aimed at the Soviet Union after World War II. Both countries kept the other at bay by maintaining their own ability to destroy the other in retaliation. Thus, the peace maintained between the Soviet Union and the United States throughout the Cold War was accomplished primarily through "mutual deterrence."

C. THE SOVIET THREAT

The political picture in Europe after World War II looked very grim from the Western point of view. The Soviet Union was not honoring post-war agreements to allow free elections in Europe. Winston Churchill was not reelected for office in Great Britain and the Socialists were in control. France and Italy both had large Communist parties, and eastern Europe was under Soviet control. George Kennan, the Deputy Commandant for Foreign Affairs at the National War College, was particularly discouraged after a visit to Moscow and became convinced that the Soviet Union was totally committed to defeating and destroying capitalism. Kennan communicated this to Washington, DC in what became known as the "Long Telegram."

There was a growing consensus in the United States that the Soviet Union represented a clear and immediate threat to the security of the West. Out of recognition of this threat grew the policy of "Containment" of the spread of Communism and the beginning of the Cold War with the Soviet Union. The policy of Containment recognized the Soviet Union as the other dominant power in a bipolar world power structure. The goal of Containment in the broadest sense was to keep countries of key military-industrial interest to the United States from falling under hostile control. Immediately after the war, this referred primarily to the defense of western Europe and

Japan from the Soviet Union. The policy of Containment eventually came to include the defense of freedom and democracy wherever it was threatened in the world, e.g., Korea and Viet Nam. [Ref. 5]

The recognition of the Soviet Union as the primary, if not only, threat to the security interests of the United States naturally led to U.S. proliferation policy efforts that were primarily focused on the Soviet Union.

D. THE NUCLEAR NONPROLIFERATION REGIME

U.S. proliferation policy efforts since the end of World War II and throughout the Cold War era were primarily aimed at controlling the global spread of nuclear weapons and became known in an institutional sense as the nuclear nonproliferation regime. [Ref. 6] The table on the following page outlines the evolution of the history of the nonproliferation regime, most of which will be discussed throughout this chapter.

Table 1 [Ref. 7]

Key Events in the History of the Nonproliferation Regime

1945	U.S drops atomic bombs on Hiroshima and Nagasaki.
1946	U.S. adopts McMahon Act; proposes Baruch Plan.
1949	USSR tests a nuclear explosive.
1952	Great Britain tests a nuclear explosive.
1953	U.S. proposes Atoms for Peace.
1957	IAEA is founded.
1960	France tests a nuclear explosive.
1962	Cuban Missile Crisis.
1963	Limited Test Ban Treaty is signed.
1964	China tests a nuclear explosive.
1967	Treaty of Tlatelolco is completed.
1968	NPT is completed.
1971	Zangger Committee is formed.
1972	Antiballistic Missile Treaty; SALT 1.
1974	India tests a nuclear explosive.
1975	Nuclear Suppliers Group is created.
1978	U.S. Nuclear Non-Proliferation Act is passed.
1979	SALT II
1985	Treaty of Rarotonga is completed.
1987	Missile Technology Control Regime (MTCR)
1992	NSG adopts full scope safeguards policy, trigger list includes dual use items.
1993	North Korea threatens to withdraw from the NPT.
1994	Defense Counterproliferation Initiative.

1. Early Proliferation Concerns (1946-1953)

Early U.S. proliferation policy consisted of the 1946 Atomic Energy Act (McMahon Act) and the Baruch Plan (also drafted in 1946). The 1946 Atomic Energy Act called for government control and secrecy to help keep nuclear technology, materials, and knowhow under U.S. control. All U.S. nuclear activities were nationalized, and the export of nuclear materials, technology and knowhow was strictly outlawed. These export controls applied to everyone, even allies such as Great Britain who was denied continued collaboration regarding nuclear technology after the war ended. [Ref. 8]

The Baruch Plan, authored by Bernard Baruch, a Presidential representative to the United Nations, was a proposal to the United Nations that recommended placing the development and use of atomic energy under the control of the United Nations Security Council. [Ref. 9] It was an ambitious plan that envisioned the end of nuclear weapons development and production, and the elimination of all atomic weapon stockpiles.

The Soviet Union was wary of the Baruch Plan and distrustful of the United States. The Soviets viewed the plan as an attempt by the United States to maintain nuclear dominance by locking in its position as the only nation capable of producing a nuclear weapon. Thus, the Soviet Union rejected the plan and made a separate proposal that required the United States to destroy its weapons before any international agency was established. Eventually, the Baruch Plan was dropped and the Atomic Energy Act of 1946 remained in place as official U.S. proliferation policy.

Thus, early U.S. postwar proliferation policy can best be described as follows:

To stop the spread of nuclear weapons before it even started by maintaining tight government

control over all nuclear activity in the United States. [Ref. 10]

2. The Treaties: Atoms for Peace to START

In 1949, the Soviet Union tested its first nuclear bomb, and the arms race commenced. The United States undertook development of the Hydrogen bomb and successfully tested one in 1952. Subsequently, the Soviets successfully detonated a Hydrogen bomb in 1953. Meanwhile, both countries focused on the development of Intercontinental Ballistic Missiles (ICBM's) and long range intercontinental bombers capable of delivering nuclear weapons. By 1953 the Cold War policy of mutual deterrence was at its highest point and was epitomized in President Dwight D. Eisenhower's defense policy of massive retaliation, which proposed that any Soviet or communist aggression against the United States could result in large scale nuclear attacks against the Soviet Union.

Although Eisenhower endorsed and supported the policy known as massive retaliation, he was very concerned with the threat of nuclear war and well aware of the potential catastrophic consequences associated with such a war. In December 1953, Eisenhower presented his Atoms For Peace proposal to the General Assembly of the United Nations. The essence of the proposal was gradual nuclear disarmament and for the United States and the Soviet Union to focus on exploring the potential peaceful applications and uses of nuclear energy. The plan originally intended for the United States and the Soviet Union to reduce their nuclear stockpiles through contributions to an international agency that would use the fissile material released to promote the development of atomic energy for peaceful purposes under a system of international controls. [Ref. 11]

The proposal was received with resounding enthusiasm in the United Nations. However, to say that Atoms For Peace was unsuccessful would be an overstatement. The commitment to

disarm was very weak in both the United States and the Soviet Union. In fact, during President Eisenhower's Administration (1953-1960), U.S. nuclear weapons increased in number from 1,000 to 18,700, and the Soviet Union's nuclear arsenal grew from 50 to 1,700. [Ref. 12]

Some believe that one positive outcome of the Atoms For Peace proposal was the eventual establishment of the International Atomic Energy Agency (IAEA). The IAEA was primarily charged with assisting in the dissemination of nuclear energy for peaceful purposes, promoting nuclear safety, and administering a system of international nuclear safeguards. An opposing view holds that the Atoms For Peace plan unwittingly contributed to the proliferation of nuclear weapons by freely providing nuclear technology to non-nuclear countries. [Ref. 13]

The Cuban missile crisis (1962) was probably the strongest test of U.S. - Soviet Union relations during the Cold War. After learning that the Soviet Union was building bases capable of deploying medium range nuclear missiles in Cuba, President Kennedy put U.S. nuclear forces on alert and blockaded Cuba. This close encounter with the Soviet Union reemphasized the risks of the arms race, the dangers of the continued proliferation of nuclear weapons and the reality of the potential for nuclear war. This period of the Cold War saw the deployment of submarines capable of launching long range nuclear missiles by both the Soviet Union and the United States. Due to the massive buildup of both countries' nuclear arsenals, and thereby the Soviet Union's capability to retaliate against the United States, the defense policy of massive retaliation became less credible. Kennedy adopted a strategy of deterrence known as flexible response. This policy included a range of appropriate responses, conventional and nuclear, to all levels of aggression. [Ref. 14]

Although the arms race continued to accelerate in the

1960's, there was significant progress made in the signing of the Limited Test Ban Treaty (LTBT) in 1963. The Limited Test Ban Treaty prohibited nuclear testing on land, at sea and in the atmosphere. Underground testing was not banned. The LTBT was a significant advancement in the nonproliferation regime and was effective in stemming the spread of nuclear weapons to non-nuclear weapon states. [Ref. 15] Notable exceptions were China which successfully tested a nuclear explosive in 1964 and India which successfully tested a nuclear explosive in 1974.

Another step taken towards nonproliferation in the 1960's was the Treaty on the Proliferation of Nuclear Weapons in Latin America (Tlatelolco). This treaty established the world's first nuclear weapon free zone. The treaty forbade the acquisition or development of nuclear weapons in Latin America and prohibited their deployment there by foreign powers. [Ref. 16]

Probably the most significant step taken towards nonproliferation in the 1960's was the completion of the Nuclear Nonproliferation Treaty (NPT) in 1968. The treaty was signed by the first three nuclear powers, the United States, Soviet Union and the United Kingdom, as well as 59 non-nuclear countries. The treaty called for the non-nuclear countries not to develop nuclear weapons, and for the nuclear powers to assist them in their peaceful nuclear energy progress. Additionally, the treaty called for the nuclear powers to negotiate reductions in their nuclear arsenals. [Ref. 17]

By 1969 the Soviet Union's buildup of forces and nuclear weapons had brought them to what President Richard Nixon recognized as strategic parity. [Ref. 18] Nixon clearly recognized the Soviet Union as a formidable opponent and understood the importance of strategic (nuclear) arms control. During President Nixon's Administration there were

several achievements in nuclear nonproliferation policy efforts. These included the Antiballistic Missile Treaty (1972) which prohibited the United States and the Soviet Union from deploying more than two Antiballistic Missile Systems (systems designed to intercept the other's ballistic missiles) [Ref. 19], and the Strategic Arms Limitation Talks (1972) which froze U.S and Soviet strategic missile launchers at the number deployed at the time of the agreement. The agreement was intended to remain in place for five years, until a more detailed treaty was negotiated. [Ref. 20]

The SALT II Treaty was finally completed and signed by President Carter in 1979. As intended, the treaty was more complex and detailed than SALT I. It mandated equal limits of 2250 total land and submarine based ballistic missile launchers and long range, nuclear armed bombers. Additionally, it placed numerical limits on their strategic weapons. [Ref. 21] SALT II was never ratified by Congress, but both the United States and the Soviet Union adhered to its limitations. Thus, SALT represented the primary set of constraints on the proliferation of strategic nuclear weapons in the 1980's. Although President Ronald Reagan opposed the SALT II Treaty, feeling that the United States was falling behind the Soviet Union in the nuclear competition, he abided by its limitations throughout his Presidency. Additionally, President Reagan initiated what is known as the Strategic Arms Reductions Talks (1982). The Soviet Union rejected all initial proposals during these talks, primarily because they called for deeper cuts in the Soviet arsenal than in the U.S arsenal. Consequently, no progress was made with the Strategic Arms Reduction Talks during President Reagan's Administration.

Perhaps President Reagan's most familiar contribution to nonproliferation efforts was the Strategic Defense Initiative

(SDI) which aimed at developing space based antiballistic missile systems that would render nuclear weapons obsolete. SDI was a very controversial initiative that came under heavy criticism concerning both cost and effectiveness. Additionally, critics argued that rather than render nuclear weapons obsolete, such a defense system would contribute to proliferation by encouraging the further expansion of nuclear missile arsenals in order to maintain retaliatory capability. Other critics pointed out that SDI would violate the 1972 Antiballistic Missile Treaty which limited the number of Antiballistic Missile Systems the United States and the Soviet Union could deploy to two. [Ref. 22]

In 1987, President Reagan helped to establish the Missile Technology Control Regime (MTCR). This was primarily an export control agreement among several Western nations which arose out of the recognition that the control of missile technology was a very important part of nonproliferation policy. The MTCR agreement was designed to control the proliferation of all missile systems capable of exceeding 300km in range and 500kg in payload. The idea was to prevent third world nations' access to the technology which would allow them to attain the capability to develop missiles that exceeded the established thresholds. [Ref. 23] This was perhaps the most significant contribution to nonproliferation efforts made by the Reagan Administration.

The Strategic Arms Reduction Talks were re-initiated between President George Bush and Soviet General Secretary Gorbachev in 1989-90 and the START Treaty was signed in July 1991. The significance of the START Treaty was that it was the first arms control agreement in history to require actual reductions in strategic (nuclear) offensive forces. Additional agreements were made between Presidents Bush and Gorbachev in the area of arms reduction despite the collapse of the Soviet Union in the fall of 1991.

E. OTHER WEAPONS OF MASS DESTRUCTION

Thus far this thesis has focused solely on the proliferation of nuclear weapons. This is largely due to the fact that nuclear weapons have been the primary proliferation concern since the beginning of the nuclear age during World War II.

However, the proliferation of other types of weapons of mass destruction, namely biological and chemical weapons, has increasingly become of concern in recent years. This is due primarily to the tremendous advances being made in the field of biotechnology, as well as the increasingly worldwide availability of advanced technology in other sciences that make it more and more possible for countries to develop, store and deliver biological and chemical weapons. It is therefore appropriate to mention and briefly discuss the primary efforts in place to stop or control the proliferation of biological and chemical weapons.

1. Biological and Chemical Weapons Conventions

The Biological Weapons Convention (BWC) is officially called the Convention on the Prohibition of the Development, Production, and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on Their Destruction. The document was signed in 1972 and put into force three years later. By 1991 110 countries had signed the treaty. The essence of the BWC is rooted in the Protocol of the Use in War of Asphyxiating, Poisonous or other Gases, and of Bacteriological Methods of Warfare signed in Geneva in 1925. [Ref. 24]

The purpose of the BWC was to reaffirm the Geneva Protocol and to strengthen it by prohibiting the development, production, stockpiling and acquisition of chemical and biological agents for the purpose of producing weapons. [Ref. 25]

The Chemical Weapons Convention (CWC) was signed in 1993

and is expected to be in force by 1995. Similar to the BWC, the CWC seeks to ban the production and stockpiling of chemical agents for the purpose of producing weapons and the destruction of existing weapons and agents. [Ref. 26]

These two treaties suffer the same inherent drawback as the NPT; they do not ban or prohibit the development of most of the biological and chemical agents as long as there is some medical or scientific purpose. The burden, therefore, becomes the very difficult if not impossible task of monitoring through some form of an international agency.

F. SUMMARY

It is evident that U.S. proliferation policy over the past fifty (50) years has focused on the nonproliferation of nuclear weapons, and that the efforts were primarily aimed at the Soviet Union. The interesting thing is that for the most part nonproliferation efforts were successful in preventing the spread of nuclear weapons to non-nuclear countries (China, India, Israel, Pakistan and South Africa being the exceptions), yet largely unsuccessful in preventing the tremendous build-up of the United States' and Soviet Union's nuclear arsenals.

It appears that proliferation policy efforts over the past fifty (50) years conceptually fall into one of two categories or paradigms; the first being concerned with the prevention of non-nuclear weapon states from attaining nuclear weapon capability at all, and the second with allowing, even assisting non-nuclear weapon states to acquire nuclear technology and capability as long as there are assurances through monitoring and inspections that there is no intent to use that capability to produce weapons. Past nonproliferation efforts could then be categorized as follows under these paradigms:

Concern With Capability

1946 Atomic Energy Act
Baruch Plan
LTBT

Concern With Intent

Atoms For Peace
Creation Of IAEA
Tlatelolco
NPT, CWC, BWC

The challenge for the remainder of the 1990's and the next century in the wake of the collapse of the Soviet Union is to decide what paradigm is appropriate to operate under in the new world order. It may very well be that a combination of both paradigms is appropriate, or a that completely new and different paradigm and way of thinking is necessary to continue to successfully control the proliferation of nuclear weapons and other weapons of mass destruction in this new and very changed and unstable world.

In the next chapter, the idea of counterproliferation in addition to nonproliferation measures will be discussed.

III. COUNTERPROLIFERATION

A. OVERVIEW

This chapter will present a background of the proliferation situation as it was early on in President Clinton's Administration. It will then discuss the Administration's new concerns in the wake of the collapse of the Soviet Union and the end of the Cold War. Next, counterproliferation and the Defense Counterproliferation Initiative will be discussed in terms of a shift in emphasis in proliferation policy. Finally, a summary of the chapter will review key points and position the thesis to enter the next chapter dealing with the budget and resource implications of the Defense Counterproliferation Initiative.

B. BACKGROUND

The issue of the proliferation of nuclear weapons and other weapons of mass destruction was on the front burner very early in the Clinton Presidency. In the words of Secretary of State to be Warren Christopher:

We must work assiduously with other nations to discourage proliferation through improved intelligence, export controls, incentives, sanctions and even force when necessary.
[Ref. 27]

Following is a partial listing of important proliferation issues and events faced by President Clinton within his first year in office:

- January 7, 1993 the 22 countries of the Missile Technology Control Regime (MTCR) revised the agreement to restrict the transfer of missiles intended for the delivery of all weapons of mass destruction regardless of their range and payload. [Ref. 28]
- January 1993 the Administration proposes a cut of \$2.5 billion (\$6.3 billion to \$3.8 billion) for the

Strategic Defense Initiative. [Ref. 29]

- February 15, 1993 North Korea refused an IAEA request for a special inspection of two suspected nuclear related facilities. This refusal violates the Nuclear Nonproliferation Treaty (NPT) and raises fears that N. Korea is still pursuing a nuclear weapons program. [Ref. 30]
- March 12, 1993 North Korea threatens to withdraw from the NPT. [Ref. 31]
- March 24, 1993 South African President F.W. De Klerk revealed that South Africa had assembled six (6) nuclear weapons prior to 1990. [Ref. 32]
- April 3-4, 1993 President Clinton and Boris Yeltsin meet at the Vancouver Summit. Among other things they spoke of new agreements regarding the Safety, Security and Dismantlement (SSD) talks committing new "Nunn-Lugar" security assistance to Moscow. [Ref. 33]
- May 13, 1993 former Secretary of Defense Les Aspin announced the renaming and refocusing of the Strategic Defense Initiative (SDI). The Strategic Defense Initiative Organization was renamed the Ballistic Missile Defense Organization. The new organization will shift focus away from spaced based systems toward the development of land based missile defense systems. [Ref. 34]
- June 11, 1993 North Korea agrees to suspend its announced withdrawal from the Nuclear Nonproliferation Treaty (NPT). In doing so, N. Korea accepts routine inspections of declared facilities. [Ref. 35]
- September 1993, soon-to-be Prime Minister of Pakistan, Benazir Bhutto announces that Pakistan's nuclear program "... will be continued because Pakistan cannot allow India to have an atom bomb while we stay out of the running." [Ref. 36]
- January 14, 1994 Ukraine, Russia and the United States in a trilateral statement announce that the Ukraine has agreed to eliminate all nuclear weapons in its territory. [Ref. 37]

Although not nearly a comprehensive list of all of the proliferation/nonproliferation activity that took place during

the first year of Clinton's Administration, it is a good indicator that the continued proliferation of nuclear weapons and other weapons of mass destruction is a high profile issue which will demand much of the Administration's attention.

In fact, on September 27, 1993 President Clinton signed Presidential Decision Directive (PDD 13) reaffirming the United States' continued support for a strong and effective nonproliferation regime. In his memorandum, President Clinton emphasized and outlined the importance of utilizing all available means to accomplish the objectives of the nonproliferation regime. The specific guidance given to the Department of Defense was of particular interest:

We will give proliferation a higher profile in our intelligence collection and analysis and defense planning, and ensure that our force structure and military planning address the potential threat from weapons of mass destruction and missiles around the world. [Ref. 38]

Later that year, in a speech at the National Academy of Sciences, then Secretary of Defense Les Aspin described President Clinton's new guidance on nonproliferation as a new mission for the Department of Defense and announced the Department's Defense Counterproliferation Initiative:

To respond to the President, we have created the Defense Counterproliferation Initiative. With this initiative, we are making the essential change demanded by this increased threat. We are adding the task of protection to the task of prevention. [Ref. 39]

C. A NEW PROLIFERATION CONCERN

With the collapse of the Soviet Union and the end of the Cold War, the problem of the proliferation of nuclear weapons has become greatly complicated. With the end of the Cold War came an end to the threat that had dominated United States

defense strategy for the past fifty (50) years. No longer is the policy of "mutual deterrence" between the United States and the Soviet Union sufficient to control the global spread of nuclear weapons and other weapons of mass destruction.

The change in the global situation since the collapse of the Soviet Union prompted the Department of Defense to conduct what is called the Bottom Up Review in the summer of 1993 to assess the new threats posed to the national security of the United States in the new world order. The Bottom Up Review identified four (4) chief threats to the security of the United States. First and foremost on the list of threats was the new danger posed by the increased threat of the proliferation of nuclear weapons. Arguments used to support this assessment are as follows:

1. The existence of the former Soviet Union's nuclear arsenal.
2. The arsenal is no longer under the control of one state (the Soviet Union) but several states. Russia, Belarus, Ukraine and Kazakhstan all have possession of nuclear weapons. (See the table [Ref. 40] on the following page depicting nuclear assets in the states of the former Soviet Union).
3. The potential exists for nuclear weapons, material or technology to enter the black market.
4. Nuclear expertise (former Soviet scientists) could be available for hire.
5. The control that the former Soviet Union used to have over other countries with ambitions to obtain nuclear weapons, e.g., North Korea, is greatly diminished if not gone. [Ref. 41]

**Table 2: Nuclear Assets
of the Soviet Successor States**

	Armenia	Azerbaijan	Belarus	Estonia	Georgia	Kazakhstan	Kyrgyzstan	Latvia	Lithuania	Moldova	Russia	Tajikistan	Turkmenistan	Ukraine	Uzbekistan
Member, Nuclear Suppliers Group (NSG)											X				
Acceded to Nuclear Non-Proliferation Treaty		X		X				X	X		X				X
Nuclear Weapons			X			X					X			X	
Nuclear Power Reactor	a					X			X		X			X	
Nuclear Research Reactor			b		c	X		X			X			X	X
Nuclear Weapons Design											X				
Uranium Mining and Milling				X		X	X				X	X		X	X
Uranium Enrichment Capability											X				d
Fuel Fabrication Facility						X					X				
Plutonium Production and Handling						e					X				
Heavy Water Production	f										X	X		X	
Other NSG-Controlled Material						g					X			h	
Nuclear Research Center	X		X		X	X		X			X			X	X
Nuclear Test Site						X					X				

- a. The two Armenian reactors were shut down in 1989 for safety reasons, but the Armenian government is planning to restart them despite local and international opposition.
- b. The IRT-M Minsk research reactor was shut down in 1988.
- c. The IRT-M Tbilisi research reactor was shut down in 1990.
- d. A uranium enrichment facility, of at least an experimental nature, possibly operated at Navoi during the 1970s and 1980s.
- e. A hot cell is reportedly located at the Semipalatinsk test site.
- f. Although one report of an Armenian heavy water site has appeared in print, there has been no additional confirmation.
- g. The Ulbinsky Metallurgy Plant in Ust-Kamenogorsk produces beryllium and possibly zirconium.
- h. Zirconium, hafnium and ion exchange resins are produced in Ukraine at the Pridneprovsky Chemical Factory.

Source: William C. Potter and Ete E. Cohen, *Nuclear Assets of the Former Soviet Union*, October 1992.

The essence of the threat is best described in former Secretary of Defense Aspin's own words:

The proliferation of nuclear weapons and other weapons of mass destruction in the hands of potential adversaries is not a new problem, but with the end of the Cold War and the worldwide spread of technology, it has grown into a serious new threat to our nation's security...
[Ref. 42]

These sentiments were later echoed by present Secretary of Defense William Perry:

I know of no problem with which the Department of Defense will be confronted more important than the problem of the proliferation of weapons of mass destruction. [Ref. 43]

The threat of nuclear weapons falling into the hands of militaristic states such as North Korea, Iraq and Libya is not only a sobering one but a real one. In August 1994 in the city of Kaliningrad, Russian police interrupted the sale of a 130 pound container holding highly radioactive material. Also in 1994 there were several instances in Germany where smuggled cases of bomb grade nuclear material have been found. There are strong indications that most of this nuclear material is being smuggled out of Russia and other states of the former Soviet Union. [Ref. 44]

Secretary Aspin presented a strong case for treating proliferation as a new threat. That combined with the corroborating incidents described above suggests that the Defense Counterproliferation Initiative is perhaps a necessary and timely policy development.

D. THE DEFENSE COUNTERPROLIFERATION INITIATIVE

1. Counterproliferation and the Defense Counterproliferation Initiative

A clarification of terms is necessary at this juncture. Secretary Aspin first used the title Defense Counterproliferation Initiative in his speech to the Committee on International Security and Arms Control at the National Academy of Sciences on December 7, 1993. The relevant excerpt from that speech appears on page 21 of this thesis. In that speech he made it very clear that what the Defense Counterproliferation Initiative does is add protection from the continued proliferation of nuclear weapons and other weapons of mass destruction as a major policy goal. [Ref. 45]

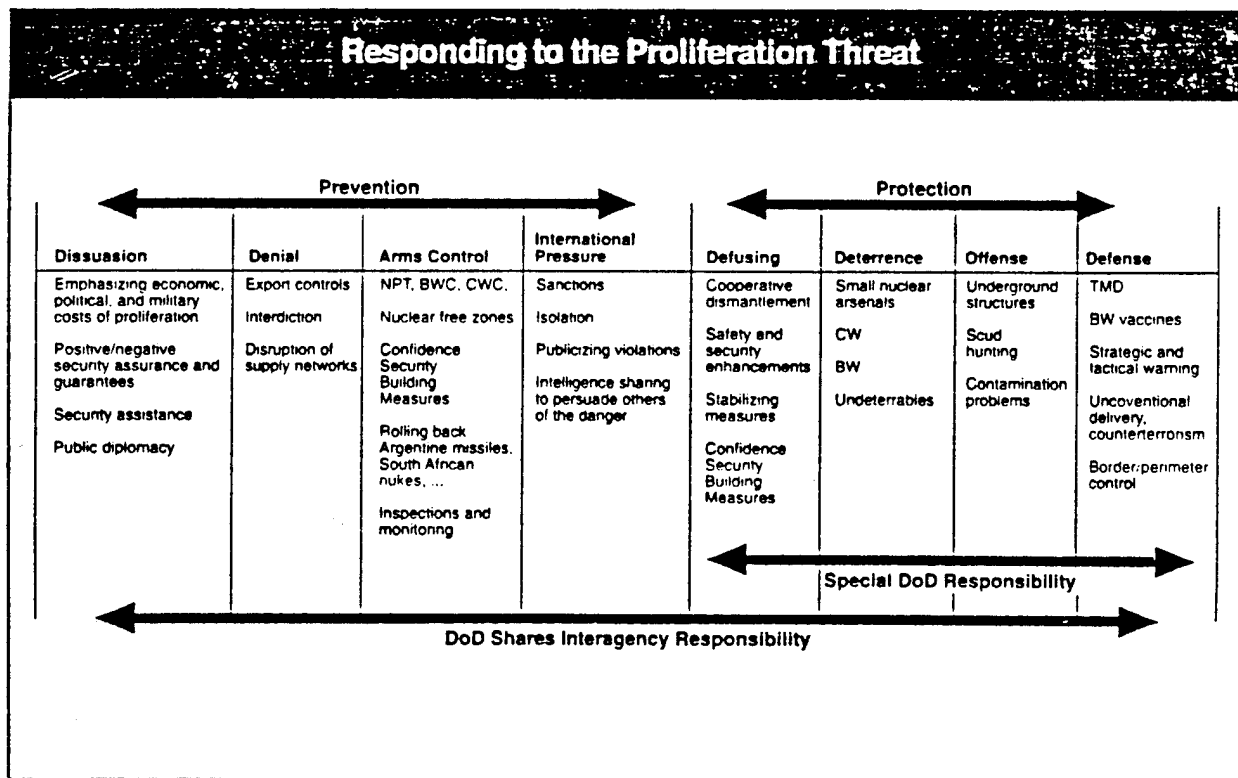
Subsequent to that speech, the generic term counterproliferation was coined and defined by the Clinton Administration to mean the following:

Counterproliferation - the activities of the Department of Defense across the full range of U.S. efforts to combat proliferation, including diplomacy, arms control, export controls, and intelligence collection and analysis, with particular responsibility for assuring U.S. forces and interests can be protected should they confront an adversary armed with weapons of mass destruction or missiles. [Ref. 46]

This definition of counterproliferation appears to encompass the definition of nonproliferation in addition to the new element of protection that Secretary Aspin describes as the goal of the Defense Counterproliferation Initiative. The Defense Counterproliferation Initiative deals only with the last part of the above definition for counterproliferation, namely those elements that deal with protection.

Explained another way, the following chart [Ref. 47] illustrates the full range of DOD's activities in the Administration's proliferation policy efforts. Taken as a whole, the chart represents the Administration's definition of counterproliferation. It is the right side of the chart, under the heading of Protection and marked as a Special DOD Responsibility that represents what Secretary Aspin described as the Defense Counterproliferation Initiative.

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Protection is defined as those strategies that:

"...seek to convince the state that its own interests are best served by not using these weapons and ideally, choosing at some point to roll back and eliminate the capability that they have acquired. [Ref. 48]

The underlying premise of this thesis was that there was a shift in proliferation policy emphasis on the part of the Clinton Administration to add counterproliferation measures as outlined in the Defense Counterproliferation Initiative. For this reason, the remainder of this thesis will concern itself exclusively with the substance and budget and resource implications of the Defense Counterproliferation Initiative, and not with the traditional nonproliferation elements included under the definition of the generic term counterproliferation.

2. The Substance of the Initiative

It should be understood from the outset that the Defense Counterproliferation Initiative in no way replaces policies or initiatives previously developed in dealing with the issue of nonproliferation. Rather, it complements and supports those efforts. The Secretary of Defense makes it very clear that:

the prevention of the spread of weapons of mass destruction remains the preeminent goal of U.S. proliferation efforts. [Ref. 49]

The underlying theme of the Defense Counterproliferation Initiative is the recognition that the proliferation of nuclear weapons and other weapons of mass destruction is likely to still occur. Thus, the addition of protection as a major policy goal is best summed up as follows:

The commitment to greatly improve capabilities to protect U.S. forces from a regional opponent with

weapons of mass destruction. [Ref. 50]

Secretary of Defense Aspin separated the Defense Counterproliferation Initiative into five elements:

1. Creation of the new mission by the President.
2. Changing what we buy to meet the new threat.
3. Planning to fight war differently.
4. Changing how we collect intelligence, and what intelligence we collect.
5. Doing all these things with our allies.
[Ref. 51]

Secretary Aspin further broke down these five elements into what appears to be the real substance of the initiative:

- Develop and procure improved non-nuclear penetrating munitions to deal with [enemy] underground installations.
- Find better ways to hunt mobile missiles such as SCUDs.
- Reorient the Strategic Defense Initiative (SDI) into the Ballistic Missile Defense Organization to concentrate on responding to theater ballistic missile threats.
- Clarify the Anti-Ballistic Missile Treaty to allow for the development and testing of theater missile defense systems to meet a real threat without undermining the treaty.
- Direct the Chairman of the Joint Chiefs of Staff and the Commanders in Chiefs to develop a military planning process for dealing with adversaries who have nuclear weapons and other weapons of mass destruction.
- Establish a new Deputy Director for Military Support in the Intelligence Community's Nonproliferation Center, and tripling the number of Department of Defense experts assigned to the Center.
- Increase alliance efforts against proliferation.
[Ref. 52]

The position of Assistant Secretary of Defense for Nuclear Security and Counterproliferation (ASD(NS&CP)) was created to assure that the issues received proper visibility. [Ref. 53]

It appears that former Secretary of Defense Aspin had a clear vision of what he perceived the Department of Defense's new mission to be regarding proliferation policy. The elements of the Defense Counterproliferation Initiative seem to be clearly focused on the idea of adding protection as a major proliferation policy goal.

E. SUMMARY

This chapter showed that the issue of the proliferation of nuclear weapons and other weapons of mass destruction remains one of extreme importance and significance to President Clinton's Administration. In fact, the Administration recognizes it as a new threat in the post Cold War era.

Although former Secretary of Defense Aspin, and present Secretary Perry seem focused on the purpose of the Defense Counterproliferation Initiative, there appears to be some ambiguity regarding the Administration's definition of the generic term counterproliferation and the Defense Counterproliferation Initiative. The thesis will not concern itself further with the "nonproliferation" elements of counterproliferation. Rather, the thesis will focus on the budget and resource implications of the Defense Counterproliferation Initiative as it was originally requested by the President in his FY 95 defense budget and how it fared as it passed through the Congressional budget process.

IV. CONGRESS AND THE DEFENSE COUNTERPROLIFERATION INITIATIVE

A. OVERVIEW

As stated earlier, the Defense Counterproliferation Initiative originated in DOD in response to the President's identification of a new mission for DOD regarding the issue of the continued proliferation of nuclear weapons and other weapons of mass destruction. Although originally termed the Defense Counterproliferation Initiative (DCI) by Secretary Aspin, funding was originally requested in the FY 95 defense budget within the defense-wide Operation and Maintenance (O&M) account under the category "Washington Headquarters Services," with \$30.3 million earmarked for "counterproliferation studies." [Ref. 54]

The analysis in this chapter will focus on congressional treatment of the request as it moved through the congressional budget process. Emphasis will be placed on the changes made to the request by the House and Senate Armed Services Committees and the House and Senate Appropriations Committees.

B. THE CONGRESSIONAL BUDGET PROCESS

It will be helpful at this point to review the congressional budget process. As required by the Congressional Budget Act of 1974, the President transmits his budget to Congress in January/February each calendar year for the next budget fiscal year which begins on October first (1st). For example, the President submitted his budget for FY 1995, which commenced 1 October 1994, to Congress on February 7, 1994. [Ref. 55]

Once submitted to Congress, the House and Senate Budget Committees each review the proposal and forward draft budget resolutions to the full House and Senate for debate. A concurrent budget resolution is then passed which provides

allocations to all committees for the budget year. The concurrent budget resolution does not indicate how dollars are to be spent, nor does it make funds available. In the case of the defense budget, the committees responsible for shaping the defense budget and actually appropriating dollars are the House and Senate Armed Services Committees and the House and Senate Defense Appropriations Subcommittees, respectively.

The House and Senate Armed Services Committees identify specific programs to be funded within the total budget for defense in the concurrent budget resolution, and authorize spending ceilings within each program. The resulting House and Senate Defense Authorization Bills are then passed by the respective chambers of Congress. Differences are resolved in conference, and the resulting agreement must then pass both the House and the Senate. The President then signs or vetoes the conference agreement on defense authorization. The Authorization Bill allows DOD to appropriate funds but does not make funds available. That happens during the appropriations process.

The House and Senate Defense Appropriations Subcommittees are responsible for developing defense spending floors based on the concurrent budget resolution and the Defense Authorization Bill. Once passed on the floors of the House and Senate, the resulting appropriations bills are taken into conference. The Defense Appropriations Conference Agreement that emerges is voted on in both the House and Senate and forwarded to the President for signature or veto. The passage of the Defense Appropriations Bill for DOD makes funds available for the next fiscal year.

It is important to understand that the authorization and appropriations committees are very powerful and influence the budget tremendously. Their actions determine how much money will be made available annually to DOD, and on what the money will be spent. In other words, these committees provide both

policy oversight and funding authority for all DOD programs.
[Ref. 56] [Ref. 57]

C. THE DEFENSE COUNTERPROLIFERATION INITIATIVE AND THE CONGRESSIONAL BUDGET PROCESS

In February, 1994 the President released his FY 1995 defense budget request. The budget proposed:

...about \$30 million for policy support to the DOD-wide Counterproliferation Initiative, to help halt and respond to the spread of nuclear weapons and other weapons of mass destruction.
[Ref. 58]

The original request was significantly changed by the defense committees of Congress. To better understand the reasons and implications of the changes to the original request it will be helpful to follow the request through each step in the Congressional budget process.

1. The Authorization Process

a. The Senate

As stated earlier, the original request was included as a \$30.3 million item in the defense-wide O&M account under Washington Headquarters Services, earmarked for counterproliferation studies. The original budget request did not contain a specific line item called the Defense Counterproliferation Initiative (DCI). However, during the authorization process the Senate Armed Services Committee (SASC) almost zeroed the amount earmarked for counterproliferation studies within the O&M Washington Headquarters Services account by recommending a \$29.3 million "counterproliferation transfer" from that account. The SASC recommended the transfer as follows: \$12.5 million to the defense-wide research and development account earmarked

specifically for the DOD Counterproliferation Initiative and \$15 million to the Advanced Research Projects Agency for two counterproliferation technology projects. The remainder was left in the O&M account. The SASC also authorized the transfer of up to an additional \$100 million for counterproliferation technology projects.

(See Tables 3 and 4.) [Ref. 59] [Ref. 60]

Table 3: Senate Authorization Action on Counterproliferation Studies
(dollars in thousands)

O&M Account	Budget Request	Committee Change	Senate Authorized	Change from Budget Request
Washington Headquarters Services (Counter-Proliferation Studies)	30,300	(29,300)	1,000	(29,300)

Table 4: Senate Authorization Action on DCI (dollars in thousands)

RDT&E Account	Budget Request	Committee Change	Senate Authorized	Change from Budget Request
Defense Counter-Proliferation Initiative (DCI)	0	12,500	12,500	+12,500

b. The House

The House Armed Services Committee (HASC) apparently did not make any changes to the original budget request for \$30.3 million in the defense-wide O&M Washington Headquarters Services account earmarked for counterproliferation studies, nor did they add any funds to defense-wide RDT&E specifically for the DOD Counterproliferation Initiative.

(See Tables 5 and 6.) [Ref. 61]

Table 5: House Authorization Action on Counterproliferation Studies
(thousands of dollars)

O&M Account	Budget Request	Committee Change	House Authorized	Change from Budget Request
Washington Headquarters Services (Counter-Proliferation Studies)	30,300	0	30,300	0

Table 6: House Authorization Action on DCI (dollars in thousands)

RDT&E Account	Budget Request	Committee Markup	House Authorized	Change from Budget Request
Defense Counter-Proliferation Initiative	0	0	0	0

c. Conference Report on National Defense Authorization

The final phase of the authorization process is the conference agreement which works out the differences between the Senate and House passed version of the National Defense Authorization Act. Interestingly, in conference the House seems to have gone along with the Senate in both decreasing the amount for counterproliferation studies in the O&M account (although the amount of the decrease was lessened to \$28.3 million), and supporting the DOD Counterproliferation Initiative in the RDT&E account. In fact, the amount for the DOD Counterproliferation Initiative was increased to \$16.5 million in the authorization conference agreement. The Conference Report stated:

The conferees agree to authorize \$16.5 million in defense-wide research and development accounts for counterproliferation activities identified by the

Joint Review Committee as defense technology gaps.
[Ref. 62]

Tables 7 and 8 illustrate the changes made in the authorization conference report. [Ref. 63]

**Table 7: Authorization Conference Action on Counterproliferation Studies
(dollars in thousands)**

O&M Account	Budget Request	Senate Authorized	House Authorized	Conference Authorized
Washington Headquarters Services (Counter-Proliferation Studies)	30,300	1,000	30,300	2,000

Table 8: Authorization Conference Action on DCI (dollars in thousands)

RDT&E Account	Budget Request	Senate Authorized	House Authorized	Conference Authorized
Defense Counter-Proliferation Initiative	0	12,500	0	16,500

2. The Appropriations Process

In the appropriations phase of the congressional budget process, the authorization bill is reviewed, changed and approved by the Senate and House Appropriations Committees - Defense Subcommittees (SAC-D and HAC-D, respectively).

a. The Senate

The SAC-D agreed with the Senate version of the authorization bill regarding counterproliferation studies, stating:

...a reduction of \$30,300,000 to the Department's request for counterproliferation studies and related programs is made. Funding for this program

is addressed in the RDT&E section of this report.
[Ref. 64]

Additionally, the SAC-D significantly increased the amount for the DOD Counterproliferation Initiative under RDT&E, approving \$80 million. Specifically, the SAC report stated:

DOD Counterproliferation Initiative - The committee provides \$80,000,000 to initiate a coordinated research and development program which adapts existing defense technologies and, where necessary, develops new technologies to provide the United States with the ability to detect, monitor, and deter the proliferation of weapons of mass destruction...The committee believes these funds can most efficiently and expeditiously be administered by ARPA. [Ref. 65]

(See Tables 9 and 10.) [Ref. 66]

Table 9: Senate Appropriations Action on Counterproliferation Studies (thousands of dollars)

O&M Account	Budget Request	Committee Change	Appropriations Act	Change from Budget Request
Washington Headquarters Services (Counter-Proliferation Studies)	30,300	(30,300)	0	(30,300)

Table 10: Senate Appropriations Action on DCI (thousands of dollars)

RDT&E Account	Budget Request	Committee Change	Appropriations Act	Change from Budget Request
Defense Counter-Proliferation Initiative (DCI)	0	80,000	80,000	+80,000

b. The House

The HAC-D agreed with the SAC-D regarding the Washington Headquarters Services O&M account earmarked for counterproliferation studies, stating very clearly that:

Within the Washington Headquarters Services request for Fiscal Year 1995 is \$30,159,000 for several counterproliferation initiatives. While the committee fully supports the counterproliferation programs of the Department of Defense, these particular programs not only appear to duplicate requests made in other accounts, the activities for which funds are requested are for research and development or procurement functions that are not appropriately financed with operation and maintenance resources. Consequently, the entire \$30,159,000 has been deleted. (emphasis added)
[Ref. 67]

Although the SAC-D and HAC-D amounts identified under Washington Headquarters Services for counterproliferation programs differ slightly (\$30.3 million and \$30.159 million, respectively), it appears that they are referring to the same pot of money (perhaps the HAC-D did not include all of the same programs under counterproliferation initiatives that the SAC-D included under counterproliferation studies). The important thing here is that both the SAC-D and HAC-D agree that O&M is not the appropriate account to fund the DOD Counterproliferation Initiative.

However, whereas the SAC-D increased the \$16.5 million authorized in the authorization conference report to \$80 million, the HAC-D did not make any appropriation under RDT&E for the DOD Counterproliferation Initiative, even after deleting the \$30,159,00 for counterproliferation studies in the O&M account. (See Tables 11 and 12.) [Ref. 68]

Table 11: House Appropriations Action on Counterproliferation Studies (dollars in thousands)

O&M Account	Budget Request	Committee Change	Appropriations Act	Change from Budget Request
Washington Headquarters Services (Counter-Proliferation Studies)	30,300	(30,159)	141	(30,159)

Table 12: House Appropriations Action on DCI (dollars in thousands)

RDT&E Account	Budget Request	Committee Change	Appropriations Act	Change from Budget Request
Defense Counter-Proliferation Initiative	0	0	0	0

c. Conference Report on Department of Defense Appropriations

The final step in the appropriations process is reconciling of differences between the Senate and House versions of the appropriations bills. This is done in conference and appears in the appropriations conference report.

As stated earlier, the SAC-D and HAC-D essentially agreed on the deletion of the almost \$30 million from the O&M Washington Headquarters Services account. In conference, they reconciled their slight difference in dollar amounts and deleted the entire \$30.3 million from the account.

However, what happened with the DOD Counterproliferation Initiative is rather interesting. The Senate increased the DOD Counterproliferation Initiative throughout the entire congressional budget process, finally

appropriating \$80 million for it under defense-wide RDT&E. On the other hand, the HASC didn't authorize funds and the HAC-D didn't appropriate any funds for the DOD Counterproliferation Initiative. In conference, the \$80 million was decreased to \$60 million. (See Tables 13 and 14.) [Ref. 69]

Table 13: Appropriations Conference Action on Counterproliferation Studies (thousands of dollars)

O&M Account	Budget Request	Senate Appropriated	House Appropriated	Conference Appropriated
Washington Headquarters Services (Counter-Proliferation Studies)	30,300	0	141	0

Table 14: Appropriations Conference Action on DCI (thousands of dollars)

RDT&E Account	Budget Request	Senate appropriated	House Appropriated	Conference Appropriated
Defense Counter-Proliferation Initiative (DCI)	0	80,000	0	60,000

D. SUMMARY

After tracking the DOD Counterproliferation Initiative through the congressional budget process, several things are evident. First, there is a lot of interest in Congress regarding the DOD Counterproliferation Initiative. This is indicated by the magnitude of some of the changes made to the budget request. Also, there appears to be some confusion or ambiguity, similar to that described in Chapter III but in a budgeting context, regarding the generic term counterproliferation and the DOD Counterproliferation

Initiative. The ambiguity is such that both houses of Congress felt that the Administration had counterproliferation inappropriately funded under O&M, and led the House to delete and not support the DOD Counterproliferation Initiative or any other counterproliferation program until the authorization and appropriations conference agreements.

The Senate, however, supported the DOD Counterproliferation Initiative from the very beginning of the budget process. Although they zeroed the O&M account for counterproliferation studies, they added back more than double that amount, \$80 million, under RDT&E.

The budgeting and resourcing implications of the DOD Counterproliferation Initiative as highlighted throughout the congressional budget process are significant. Inferences, insights and conclusions regarding the budgeting and resourcing implications of counterproliferation and the DOD Counterproliferation will be presented in the final chapter of this thesis.

V. CONCLUSIONS AND RECOMMENDATIONS

This thesis has presented an historical review of U.S. proliferation policy since the dawn of the nuclear age during World War II through the collapse of the Soviet Union and the end of the Cold War era. It also presented a substantive analysis of the Clinton Administration's Defense Counterproliferation Initiative, as well as a financial analysis of the \$30.3 million FY 1995 budget request for policy support for that initiative. The purpose of the historical review of U.S. proliferation policy was to provide the context and perspective in which proliferation policy was shaped during the bipolar Cold War period when the United States and the Soviet Union practiced the policy which came to be known as "mutual deterrence" to control the spread of nuclear weapons. The analysis of the Defense Counterproliferation Initiative was conducted to investigate a new element in proliferation policy in the post Cold War period, one focused on protection from the continued proliferation of nuclear weapons and other weapons of mass destruction. The financial analysis of the budget request provided insight to help assess the budgeting and resource implications of the Defense Counterproliferation Initiative.

A. PROBLEMS WITH PROLIFERATION POLICY

The moment Hiroshima was destroyed by an atomic bomb, the future of war fighting was changed forever. With the dawn of the nuclear age came a force so powerful that the outcome of a war could be decided by one bomb, leaving nothing but complete destruction in its wake. This strategic capability understandably caused great concern, if not panic, throughout the world as well as in the United States. The rest of the world was concerned with their vulnerability to a nuclear attack, and the United States was concerned with the

possibility of other countries, especially adversaries, attaining nuclear weapons capability. Therein lies the fundamental concern underlying the history proliferation policy.

The history of the proliferation of nuclear weapons, and nuclear proliferation policy, is best described as an adversarial relationship between the United States and the Soviet Union, perhaps best characterized by distrust and fear. Perhaps it was this bipolar balance of power structure, much more so than the negotiated treaties and agreements discussed earlier in this thesis, that helped minimize the global spread of nuclear weapons (exceptions previously noted), and create an international environment relatively "comfortable" with the status of the proliferation of nuclear weapons.

The collapse of the Soviet Union in 1991 brought an end to the bipolar international balance of power that had existed for nearly fifty (50) years, and introduced new issues and concerns regarding the proliferation of nuclear weapons and other weapons of mass destruction. President Clinton's Administration identified these new issues and concerns and added a new strategy to deal with them; this was called the Defense Counterproliferation Initiative. The new initiative emphasizes protection from the continued proliferation of nuclear weapons and other weapons of mass destruction, and identifies protection as a major policy goal.

B. PRIMARY RESEARCH QUESTION AND FINDINGS

This thesis discusses several issues regarding nonproliferation and counterproliferation as outlined in the Defense Counterproliferation Initiative. In doing so, it addresses the primary and subsidiary questions. The primary research question asked was:

- How did Congress change or otherwise impact the President's FY 1995 defense budget request for funding in support of the Defense Counterproliferation Initiative?

The level of activity and magnitude of changes to the original request indicate that counterproliferation is an issue of high visibility within both the Administration and the Congress.

However, there was some confusion and ambiguity from the very beginning of the budget process. When Secretary of Defense Aspin announced the Defense Counterproliferation Initiative back in December 1993, he clearly stated its purpose was to add protection from the continued proliferation of nuclear weapons as a major policy goal. After Aspin's speech, the generic term counterproliferation was coined by the Administration and appears to include the traditional definition of nonproliferation in addition to the new element of protection described by Secretary Aspin as the goal of the Defense Counterproliferation Initiative. There was additional confusion between the Administration and Congress regarding the level of funding and the appropriate funding account. The Administration requested approximately \$30 million for counterproliferation studies in the defense-wide O&M account. Both the House and the Senate zeroed that account indicating that they felt the O&M account was not the appropriate account to fund the DOD Counterproliferation Initiative.

What happened in Congress regarding the actual level of funding was also very interesting. The House apparently did not support the Defense Counterproliferation Initiative at all. As indicated above, they zeroed the Administration's request in the O&M account and did not add back any funds to any other accounts. On the other hand, the Senate appears to have strongly supported the new initiative. In fact, it was the Senate that added the DOD Counterproliferation Initiative as a specific line item in the budget under RDT&E. What is

interesting, is that after authorizing just \$12.5 million during the authorization process, the Senate significantly increased that amount during the appropriations process and appropriated \$80 million for the DOD Counterproliferation Initiative.

Ultimately, Congress appropriated \$60 million for the DOD Counterproliferation Initiative under RDT&E. The implication here is that Congress treated the initiative as more of a technology oriented initiative requiring RDT&E funds to develop new and improved ways to provide protection from the threat of the continued proliferation of nuclear weapons and other weapons of mass destruction.

C. CONCLUSION

This thesis provides insight into the shift in emphasis in proliferation policy from one focused primarily on deterrence, to a new concern with protection from the continued proliferation of nuclear weapons. It also identifies the role that Congress plays in shaping defense policy, specifically highlighting changes made to the Defense Counterproliferation Initiative during the congressional budget process.

Both the Administration and Congress seem to agree that the proliferation of nuclear weapons and other weapons of mass destruction represents a new threat in the post Cold War era. They also appear to agree that in dealing with this new threat, proliferation policy needs to take on a new emphasis, namely protection from the continued proliferation of nuclear weapons as outlined in DOD's Counterproliferation Initiative. The Administration's approximately \$30 million request for counterproliferation studies, and congressional approval of nearly twice this amount supports this conclusion. Additionally, the level of activity regarding the DOD Counterproliferation Initiative, both by the Administration

and Congress, indicates that the issue of the continued proliferation of nuclear weapons and other weapons of mass destruction is likely to remain a highly visible issue for the foreseeable future.

D. RECOMMENDATIONS FOR FURTHER STUDY

In researching the primary thesis question, other questions and issues were raised.

First, it would be interesting to track the flow of the \$60 million appropriated for the DOD Counterproliferation Initiative to determine precisely what the funds were spent on. It would also be helpful to determine whether the funds were utilized to satisfy the elements described by former Secretary of Defense Les Aspin when he first announced the Defense Counterproliferation Initiative back in December of 1993.

Second, it may prove insightful to research why there was such an apparent difference in the treatment of the Defense Counterproliferation Initiative between the House and the Senate throughout the congressional budget process. Differences between the House and Senate on this issue may carry implications for the future of proliferation policy and future initiatives regarding counterproliferation.

Finally, since the DOD Counterproliferation Initiative received considerable attention and budget activity throughout the congressional budget process, it would be useful to continue to follow the issue of counterproliferation throughout Fiscal Year 1995, and then do a similar analysis of any Fiscal Year 1996 budget requests for counterproliferation projects or initiatives. A comparison of outcomes could provide valuable insight into the future direction of U.S. proliferation policy.

LIST OF REFERENCES

1. Arms Control Association. Arms Control and National Security: An Introduction. Washington DC., 1989.
2. Ibid., p. 6.
3. Office of the Deputy Secretary of Defense. "Report on Nonproliferation and Counterproliferation Activities and Programs." Washington DC., May 1994.
4. Teller, Edward and Allen Brown. The Legacy of Hiroshima. Doubleday & Co., Inc. Garden City, New York., 1962.
5. Deibel, Terry L and John Lewis Gaddis. Containment: Concept and Policy. National Defense University Press. Washington DC., 1986.
6. Gardner, Gary T. Nuclear Nonproliferation: A Primer. Lynne Rienner Publishers, Inc. Boulder, CO., 1994.
7. Ibid., p. 37.
8. Ibid., p. 38.
9. Arms Control Association. Arms Control and National Security: An Introduction. Washington DC., 1989.
10. Gardner, Gary T. Nuclear Nonproliferation: A Primer. Lynne Rienner Publishers Inc. Boulder, CO., 1994.
11. Sokolski, Henry. "Atoms for Peace: A Nonproliferation Primer?" University of Chicago. Chicago, IL., 1980.
12. Fischer, David. Stopping the Spread of Nuclear Weapons: The Past and the Prospects. Routledge. New York, NY., 1992.

13. Sokolski, Henry. "Remarks Made in a Speech on Nonproliferation at the Naval Postgraduate School." Monterey, CA., Oct 12, 1994.
14. Arms Control Association. Arms Control and National Security: An Introduction. Washington DC., 1989.
15. Gardner, Gary T. Nuclear Nonproliferation: A Primer. Lynne Rienner Publishers, Inc. Boulder, CO., 1994.
16. Ibid., p. 41.
17. Arms Control Association. Arms Control and National Security: An Introduction. Washington DC., 1989.
18. Ibid., p. 27.
19. Fischer, David. Stopping the Spread of Nuclear Weapons: The Past and the Prospects. Routledge. New York, NY., 1992.
20. Arms Control Association. Arms Control and National Security: An Introduction. Washington DC., 1989.
21. Ibid., p. 31.
22. Ibid., p. 36.
23. House of Representatives. Hearing Before the Subcommittee on Arms Control, International Security and Science, and on International Economic Policy and Trade of the Committee on Foreign Affairs. "Missile Proliferation: The Need for Controls (Missile Technology Control Regime)." Washington DC., Jul 1989.
24. Haar, Barend ter. The Future of Biological Weapons. Center for Strategic and International Studies. Praeger Publishers. New York, NY., 1991.
25. Ibid., p. 116.

26. Roberts, Brad. The Chemical Weapons Convention: Implementation Issues. Center for Strategic and International Studies. Washington DC., 1992.
27. Arms Control Association. "And You Can Quote Me On That." Arms Control Today. Arms Control Association. Washington DC., Jan/Feb 1993.
28. Wolfsthal, Jon B. "MTCR Members Agree on New Export Restrictions." Arms Control Today. Arms Control Association. Washington DC., Jan/Feb 1993.
29. Lockwood, Dunbar. "Clinton Provides Outline of Defense Spending Cuts." Arms Control Today. Arms Control Association. Washington DC., Mar 1993.
30. Wolfsthal, Jon B. "IAEA Asks for Special Inspections of North Korean Sites." Arms Control Today. Arms Control Association. Washington DC., Mar 1993.
31. Wolfsthal, Jon B. "North Korea Threatens Withdrawal from Non-Proliferation Treaty." Arms Control Today. Arms Control Association. Washington DC., Apr 1993.
32. Wolfsthal, Jon B. "South Africa Reveals it had Six Nuclear Weapons Until 1990." Arms Control Today. Arms Control Association. Washington DC., Apr 1993.
33. Lockwood, Dunbar. "Clinton, Yeltzin Advance Arms Control Agenda At First Summit." Arms Control Today. Arms Control Association. Washington DC., May 1993.
34. Raikow, David. "SDIO Changes Its Letterhead To BMDO." Arms Control Today. Arms Control Association. Washington DC., June 1993.
35. Wolfsthal Jon B. "U.S.- North Korea Talks Defuse NPT Crisis For Now." Arms Control Today. Arms Control Association. Washington DC., Jul/Aug 1993.

36. Arms Control Association. "News Briefs." Arms Control Today. Arms Control Association. Washington DC., Nov 1993.
37. Lockwood, Dunbar. "U.S. Reaches Understanding With Ukraine, Russia On Denuclearization." Arms Control Today. Arms Control Association. Washington DC., Jan/Feb 1994.
38. Arms Control Association. "White House Fact Sheet On Nonproliferation And Export Controls." Arms Control Today. Arms Control Association. Washington DC., Nov 1993.
39. Office of the Secretary of Defense. "Remarks by Honorable Les Aspin to the Committee on International Security and Arms Control." National Academy of Sciences. Washington DC., Dec 1993.
40. Arms Control Association. "Nuclear Assets of the Soviet Successor States." Arms Control Today. Arms Control Association. Washington DC., Jan/Feb 1993.
41. Office of the Secretary of Defense. "Remarks by Honorable Les Aspin to the Committee on International Security and Arms Control." National Academy of Sciences. Washington DC., Dec 1993.
42. Aspin, Les. "Memorandum From The Secretary Of Defense: The Defense Counterproliferation Initiative." Washington DC., Dec 9, 1993.
43. Office of the Deputy Secretary of Defense. "Report on Nonproliferation and Counterproliferation Activities and Programs." Washington DC., May 1994.
44. Nelan, Bruce W. "Formula For Terror." Time Magazine., Aug 29, 1994.
45. Office of the Secretary of Defense. "Remarks by Honorable Les Aspin to the Committee on International Security and Arms Control." National Academy of Sciences. Washington DC., Dec 1993.
46. Office of the Deputy Secretary of Defense, "Report on Nonproliferation and Counterproliferation Activities and Programs." Washington DC., May 1994.

47. Office of the Secretary of Defense. "Report of the Secretary of Defense to the President and the Congress." Washington DC., Jan 1994.
48. Ibid., p. 39.
49. Ibid., p. 36.
50. Ibid.
51. Office of the Secretary of Defense. "Remarks by the Honorable Les Aspin to the Committee on International Security and Arms Control." National Academy of Sciences. Washington DC., Dec 1993.
52. Ibid. p. 5.
53. Office of the Secretary of Defense. "Report of the Secretary of Defense to the President and the Congress." Washington DC., Jan 1994.
54. U.S. Senate. "National Defense Authorization Act for Fiscal Year 1995, Senate Report 103-282." U.S. Government Printing Office, Washington DC., 1994.
55. Office of the Assistant Secretary of Defense (Public Affairs). News Release. "FY 1995 Defense Budget." Washington DC., Feb 7, 1994.
56. Naval Postgraduate School. "Practical Comptrollership," Naval Postgraduate School. Monterey, CA., 1993
57. Dorsett, Dolores M. "Technology Security Policy: From the Cold War to the New World Order." Naval Postgraduate School, Monterey, CA., Dec 1993.
58. Office of the Assistant Secretary of Defense (public Affairs). News Release. "FY 1995 Defense Budget." Washington DC., Feb 7, 1994.
59. U.S. Senate. "National Defense Authorization Act for Fiscal Year 1995, Senate Report No. 103-282." U.S. Government Printing Office., Washington DC., 1994.

60. U.S. Congress. "National Defense Authorization Act For FY 1995, Conference Report 103-70." U.S. Government Printing Office. Washington DC., 1994.
61. House of Representatives. "National Defense Authorization Act for Fiscal Year 1995, House Report No. 103-499." U.S. Government Printing Office. Washington DC., 1994.
62. U.S. Congress. "National Defense Authorization Act For Fiscal Year 1995, Conference Report No. 103-701." U.S. Government Printing Office. Washington DC., 1994.
63. Ibid., pp. 606, 662.
64. U.S. Senate. "Department of Defense Appropriations Bill, 1995, Senate Report 103-321." U.S. Government Printing Office. Washington DC., 1994.
65. Ibid., p. 311.
66. Ibid., pp. 26, 77, 311.
67. House of Representatives. "Department of Defense Appropriations Bill, 1995, House Report No.103-562." U.S. Government Printing Office. Washington DC., 1994.
68. U.S. Congress. "Department of Defense Appropriations Bill, 1995 Conference Report No. 103-747." U.S. Government Printing Office. Washington DC., 1994.
69. Ibid., p. 136.

BIBLIOGRAPHY

Arms Control Association. "And You Can Quote Me On That." Arms Control Today. Arms Control Association. Washington DC., Jan/Feb 1993.

Arms Control Association. Arms Control and National Security: An Introduction. Washington DC., 1989.

Arms Control Association. "News Briefs." Arms Control Today. Arms Control Association. Washington DC., Nov 1993.

Arms Control Association. "Nuclear Assets of the Soviet Successor States." Arms Control Today. Arms Control Association. Washington DC., Jan/Feb 1993.

Arms Control Association. "White House Fact Sheet On Nonproliferation And Export Controls." Arms Control Today. Arms Control Association. Washington DC., Nov 1993.

Aspin, Les. "Memorandum From The Secretary Of Defense: The Defense Counterproliferation Initiative." Washington DC., Dec 9, 1993.

Blitzinger, Richard A. "The Globalization Of The Arms Industry: The Next Proliferation Challenge." President and Fellows Of Harvard College And The Massachusetts Institute Of Technology. Massachusetts., 1994.

Brenner, Michael J. Nuclear Non-Proliferation: The Remaking Of U.S. Policy. Cambridge University Press. New York, NY., 1981.

Congressional Budget Office. The START Treaty And Beyond. U.S. Government Printing Office. Washington DC., Oct 1991.

Deibel, Terry L. and John Lewis Gaddis. Containment: Concept and Policy. National Defense University Press. Washington DC., 1986.

Dorsett, Dolores M. "Technology Security Policy: From the Cold War to the New World Order." Naval Postgraduate School, Monterey, CA., Dec 1993.

Fischer, David. Stopping the Spread of Nuclear Weapons: The Past and the Prospects. Routledge. New York, NY., 1992.

Gardner, Gary T. Nuclear Nonproliferation: A Primer. Lynne Rienner Publishers, Inc. Boulder, CO., 1994.

Green, Daniel M. "Monitoring Technology Proliferation: An Open Source Methodology For Generating Proliferation Intelligence." Naval Postgraduate School. Monterey, CA., 1993.

Haar, Barend ter. The Future of Biological Weapons. Center for Strategic and International Studies. Praeger Publishers. New York, NY., 1991.

House of Representatives. "Department of Defense Appropriations Bill, 1995, House Report No.103-562." U.S. Government Printing Office. Washington DC., 1994.

House of Representatives. Hearing Before the Subcommittee on Arms Control, International Security and Science, and on International Economic Policy and Trade of the Committee on Foreign Affairs. "Missile Proliferation: The Need for Controls (Missile Technology Control Regime)." Washington DC., Jul 1989.

House of Representatives. "National Defense Authorization Act for Fiscal Year 1995, House Report No. 103-499." U.S. Government Printing Office. Washington DC., 1994.

International Atomic Energy Agency (IAEA). A Short History Of Non-Proliferation. Karntner Ring 11. Vienna, Austria., Feb 1976.

Kuttner, Robert. "How 'National Security' Hurts National Competitiveness." Harvard Business Review. Cambridge, Massachusetts., 1991.

Lippman, Thomas W. "If Nonproliferation Fails, Pentagon Wants 'Counterproliferation' In Place." Washington Post. Washington DC., May 15, 1994.

Lockwood, Dunbar. "Clinton Provides Outline of Defense Spending Cuts." Arms Control Today. Arms Control Association. Washington DC., Mar 1993.

Lockwood, Dunbar. "Clinton, Yeltzin Advance Arms Control Agenda At First Summit." Arms Control Today. Arms Control Association. Washington DC., May 1993.

Lockwood, Dunbar. "U.S. Reaches Understanding With Ukraine, Russia On Denuclearization." Arms Control Today. Arms Control Association. Washington DC., Jan/Feb 1994.

Mataija, Steven and Lyne C. Bourque. Proliferation And International Security: Converging Roles Of Verification, Confidence Building And Peacekeeping. Centre For International And Strategic Studies. York University. Toronto, Canada., 1993.

Milhallin, Gary. "The Business Of Defense Is Defending Business." The Washington Post National Weekly Edition. Washington DC., Feb 14-20, 1994.

Nagler, Robert G. "Ballistic Missile Proliferation: An Emerging Threat." System Planning Corporation. Arlington, VA., 1992.

Naval Postgraduate School. "Practical Comptrollership." Naval Postgraduate School. Monterey, CA., 1993

Nelan, Bruce W. "Formula For Terror." Time Magazine., Aug 29, 1994.

Office of the Assistant Secretary of Defense (Public Affairs). News Release. "FY 1995 Defense Budget." Washington DC., Feb 7, 1994.

Office of Assistant Secretary of Defense (Public Affairs). News Release. "Secretary of Defense Aspin Announces Defense Counterproliferation Initiative." Washington DC., Dec 7, 1993.

Office of the Deputy Secretary of Defense. "Report on Nonproliferation and Counterproliferation Activities and Programs." Washington DC., May 1994.

Office of the Secretary of Defense. "Remarks by Honorable Les Aspin to the Committee on International Security and Arms Control." National Academy of Sciences. Washington DC., Dec 1993.

Office of the Secretary of Defense. "Report of the Secretary of Defense to the President and the Congress." Washington DC., Jan 1994.

Pine, Art. "Potential U.S. Enemies Amass High-Tech Weapons." Los Angeles Times (Washington Ed)., Sept 6, 1994.

Raikow, David. "SDIO Changes Its Letterhead To BMDO." Arms Control Today. Arms Control Association. Washington DC., June 1993.

Reiss, Mitchell and Robert S Litwak. "Nuclear Proliferation after the Cold War." Woodrow Wilson Center Press., 1994.

Roberts, Brad. The Chemical Weapons Convention: Implementation Issues. Center for Strategic and International Studies. Washington DC., 1992.

Schneider, Barry R. "Nuclear Proliferation and Counterproliferation: Policy Issues and Debates." The Mershon Center, Ohio State University. Blackwell Publishers., 1994.

Smoke, Richard. National Security and the Nuclear Dilemma: An Introduction to the American Experience in the Cold War. McGraw-Hill, Inc. New York, NY., 1993.

Sokolski, Henry. "Atoms for Peace: A Nonproliferation Primer?" University of Chicago. Chicago, IL., 1980.

Sokolski, Henry. "Remarks Made in a Speech on Nonproliferation at the Naval Postgraduate School." Monterey, CA., Oct 12, 1994.

Teller, Edward and Allen Brown. The Legacy of Hiroshima. Doubleday & Co., Inc. Garden City, New York., 1962.

The White House. "A National Security Strategy of Engagement and Enlargement." U.S. Government Printing Office. Washington DC., Jul 1994.

U.S. Congress. "Department of Defense Appropriations Bill, 1995 Conference Report No. 103-747." U.S Government Printing Office. Washington DC., 1994.

U.S. Congress. Office of Technology Assessment. "Export Controls and Nonproliferation Policy." U.S. Government Printing Office. Washington DC., May 1994.

U.S. Congress. "National Defense Authorization Act For FY 1995, Conference Report 103-70." U.S. Government Printing Office. Washington DC., 1994.

U.S. Department of State. "A Report on the International Control of Atomic Energy." U.S. Government Printing Office. Washington DC., March 16, 1946.

U.S. Senate. "Department of Defense Appropriations Bill, 1995, Senate Report 103-321." U.S. Government Printing Office. Washington DC., 1994.

U.S. Senate. "National Defense Authorization Act for Fiscal Year 1995, Senate Report 103-282." U.S. Government Printing Office, Washington DC., 1994.

Wander, Thomas W. and Eric H. Arnett. The Proliferation of Advanced Weaponry: Technology, Motivation, and Responses. American Association for the Advancement of Science. Washington DC., 1992.

Washington (AP) "U.S. Keeps Nuclear Arsenal." Monterey Herald. Monterey, CA., Sept 21, 1994.

Wilson, Heather. "Nuclear Threat-Leadership Wanted." The Wall Street Journal. New York, NY., Dec 8, 1993.

Wirtz, James J. "Allies and Theater Missile Defense: The Benefits of an ASW Approach to Counterforce." Naval Postgraduate School. Monterey, CA., 1994.

Wolfsthal, Jon B. "IAEA Asks for Special Inspections of North Korean Sites." Arms Control Today. Arms Control Association. Washington DC., Mar 1993.

Wolfsthal, Jon B. "MTCR Members Agree on New Export Restrictions." Arms Control Today. Arms Control Association. Washington DC., Jan/Feb 1993.

Wolfsthal, Jon B. "North Korea Threatens Withdrawal from Non-Proliferation Treaty." Arms Control Today. Arms Control Association. Washington DC., Apr 1993.

Wolfsthal, Jon B. "South Africa Reveals it had Six Nuclear Weapons Until 1990." Arms Control Today. Arms Control Association. Washington DC., Apr 1993.

Wolfsthal Jon B. "U.S.-North Korea Talks Defuse NPT Crisis For Now." Arms Control Today. Arms Control Association. Washington DC., Jul/Aug 1993.

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