NATO'S THEATER NUCLEAR WEAPONS
AND THE DEFENSE OF EUROPE:
PAST PATTERNS AND FUTURE PROSPECTS

THEESIS

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Captain, USAF

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THESIS

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Preface

The purpose of this research was to examine and evaluate the United States' deployment of Pershing II and Ground Launched Cruise Missiles in Europe. To place the GLCM/Pershing II program within a meaningful historical perspective, I first traced the history of the North Atlantic Treaty Organization--its origin, development, and present status.

An examination of NATO's history confirmed the theory that the GLCM/Pershing II program suffers from an absence of clearly defined program goals. In fact, the GLCM/Pershing II program exemplifies NATO's central shortcoming: lacking centrally defined organizational goals, NATO has for three decades directed its efforts solely towards reacting to the initiatives of the Soviet Union. NATO's cohesion, its military structure, and its finances have consequently suffered from this absence of purpose. Future research is needed to define more clearly NATO's goals and to develop weapon programs which are logical outgrowths of those goals.

In writing this thesis, I was fortunate to have Capt Carl L. Davis as my thesis advisor. His patience and expertise were truly invaluable. I also wish to thank Dr. Robert B. Weaver, who served as reader for my thesis, for his most helpful insights into NATO war plans of the 1950s.

Gregory L. Stephenson
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The goal of this research was to analyze and order the controversy and ambiguity surrounding the TNW modernization started by NATO in 1979. In order to place the GLCM/Pershing II deployment within its historical context, this research reviews the significant events pertaining to NATO since its inception. Three basic questions guided this study: Why did the NATO allies agree in 1979 to modernize their theater nuclear force? Why did the United States actually begin this TNW deployment in 1983? Is the TNW program accomplishing its goals?

The research itself is divided into three periods. The first section (1948-59) reviews the United States' initial deployment of TNWs into Europe, the Soviet force buildup following World War II, and the creation of NATO in 1949. Section two traces NATO's changing attitudes towards TNWs in the period 1960-74. The third section (1975-present) discusses the conventional and nuclear force balance, NATO's growing divisions during this period, and the role of the GLCM/Pershing II deployment within this environment of change for NATO.

An examination of NATO's patterns of response over the last thirty-eight years reveals that NATO has failed to develop formal organizational goals, choosing instead to react to each Soviet provocation on a case-by-case basis.
I. Introduction

The Parties to this Treaty . . . are resolved to unite their efforts for collective defence and for the preservation of peace and security.
.
.
The Parties . . . will maintain and develop their individual and collective capacity to resist armed attack.
.
.
The Parties agree that an armed attack against one . . . of them . . . shall be considered an attack against them all and . . . that, if such an attack occurs, each of them . . . will take[el] such action as it deems necessary, including the use of armed force, to restore and maintain the security of the North Atlantic area.

[15:238-239].

This portion of the North Atlantic Treaty contains perhaps the most important feature of this mutual contract: the members of the alliance pledge to take whatever steps are necessary "to resist armed attack," and they further promise to use armed force, if necessary, to protect their fellow members of the alliance. Written as the Soviet Union blockaded Berlin in 1948, the Treaty unites the United States with its fourteen North Atlantic Treaty Organization (NATO) allies in an agreement aimed at improving both the defensive capabilities and the internal stability of the European members of the Alliance.
Thirty-eight years after the Treaty's signing, the United States is now engaged in a program intended to increase the Alliance's "capacity to resist armed attack" -- the deployment to NATO bases in Europe of 572 intermediate range nuclear force (INF) missiles. 108 of these are the Army's Pershing IIs, and 464 will be the Air Force's Ground Launched Cruise Missiles (13:14). The subject of this research, the Ground Launched Cruise Missile program, has aroused heated controversy both in the United States and abroad. This controversy has been evidenced both by massive public demonstrations and by various forms of legislative reluctance on the part of the five host countries for the missiles--Belgium, Italy, West Germany, the United Kingdom, and the Netherlands (7:24).

In December, 1982, for example, approximately 35,000 "Peace Women of Britain" demonstrated at the Royal Air Force Base at Greenham Common, England, where they attempted to disrupt work on the facilities intended to house the first operational cruise missile wing. And in West Germany, demonstrators blocked the entrances to nearly sixty U.S., Canadian, and West German military bases to protest the first stages of deployment (8:14-15). Protests of this sort were typical during the early years of the deployment (1981-85). In March, 1985, approximately 100,000 anti-cruise demonstrators gathered in Brussels in an effort to prevent
approval by the Belgian Parliament of GLCM deployment in that country (26:46).

In addition to public protest, the GLCM program has also been hampered by much legislative foot-dragging on the part of the host countries' governments. Great Britain, after agreeing to the deployment on their soil, debated in Parliament for several months the question of who would control the launch of cruise missiles from British territory. A secret agreement between the United States and the Thatcher government apparently resolved this question, but even today British Parliamentarians continue to resurrect the issue. And the Netherlands' government, after reluctantly agreeing to host the GLCM at Woensdrecht Air Base, continues to place legislative obstacles in the path of operational deployment of the cruise in that country. The Netherlands' Parliament has resorted to such tactics as limiting the number of U.S. personnel who can be stationed at Woensdrecht to such a degree that operational capability remains impossible under the present manning restrictions. Even in Great Britain, presumably the staunchest supporter of the GLCM program, the cruise missile wings are restricted from operational exercise of their weapon systems in the British countryside; this limitation forces the GLCMs to remain within the confines of the host bases at Greenham Common and Molesworth, reducing considerably the effectiveness of this theoretically mobile missile (9:717-729).
Thus the Ground Launched Cruise Missile program, and the NATO nuclear force modernization of which the GLCM is a part, are at present in disarray. Nearly eight years after the unanimous NATO decision to modernize its nuclear force, uncertainty surrounds the GLCM program. Indeed, the reasons for the GLCM program have been obscured by the continuing controversy which surrounds the whole issue of the future of nuclear weapons in Europe.

The Ground Launched Cruise Missile program—even more so than domestic U.S. nuclear weapons programs such as the MX (Missile Experimental) and the SICBM (Small Intercontinental Ballistic Missile)—has been the focus of much debate during its relatively short existence. Reasons for this controversy are many: first and most obvious, the GLCM is a nuclear weapon system based on foreign soil. This combination raises many concerns, chief among these being the questions of command/control of the weapons and the perceived increased likelihood of a nuclear exchange between the major powers being limited to a European battleground. Second, the GLCM program comes at a time of increasing American concern about the national budget deficit and the impact upon the national budget of new Department of Defense expenditures, especially programs like the GLCM which require the relatively more expensive basing of U.S. personnel in Europe. Third, the NATO alliance itself has entered a period of growing indecision concerning the role
of both strategic and tactical nuclear weapons in maintaining the East-West balance of power. Recent Soviet proposals to remove all theater nuclear weapons from Europe, both those of the Alliance and those of the Warsaw Pact, have exacerbated the dissension among the Alliance members over the role which nuclear weapons should play in maintaining the security of the NATO pact members (24:1-12). Finally, the entire issue of NATO nuclear force modernization--upon which unanimity was reached with such difficulty by the Alliance in the late '70s--has been allowed to slip out of focus as the NATO members have increasingly come to debate more limited issues (24:5-10). Co-production agreements, contract offsets, and balance of trade issues have been considered at the expense of the larger, more central issue: "the collective defence . . . and the preservation of peace" (15:239).

Justification of Research

This study was undertaken to examine the broad patterns of NATO's response to Soviet aggression. Many studies exist on the issue of theater nuclear weapons in NATO's strategy, but most focus on specific details of TNW deployments or negotiations. This study looks instead at historical trends of NATO behavior in order to re-emphasize NATO's original goals.

The Research Problem

The goal of this research is to clarify the ambiguity surrounding the GLCM program and the larger nuclear force
modernization of which it is a part. To resolve this issue, this research will address three key questions:

1) Why did the NATO alliance, especially the five host countries, agree in 1979 to begin deployment of the GLCM?

2) Why did the United States begin deployment of the GLCM? (Were the United States' reasons consonant with those of other members of the Alliance?)

3) Is the GLCM program, as it is presently being carried out, accomplishing these goals?

In other words, this research will examine the goals upon which the GLCM program was founded, examine if those goals have changed since 1979, and assess to what extent the goals of the program are being met. This research is needed because the GLCM program is typical of the re-active, inefficient arms strategy which NATO has practiced since its inception. Rather than developing an overall military strategy, NATO has spent its energy solely in responding, subject always to the Soviets' initiatives.

**Scope of the Research**

In order to answer the preceding three questions, this study will first review the history of TNWs in Europe. This history falls into three time periods: 1948-1959, 1960-1974, and 1975 through the present.

The 1948-59 period includes Project Vista, the first American research effort "to investigate the potential
functions of nuclear weapons in ground warfare" (18:8). The conventional arms superiority enjoyed by the Soviet Union at that time will be traced, as will the subsequent decision by President Eisenhower to authorize the employment of nuclear weapons to counter a Soviet Union attack by its then vastly superior conventional forces. After the U.S. introduction of TNWs into Europe in 1949, and the subsequent Soviet addition of TNWs to the Warsaw Pact's arsenal, there followed a period in which both sides assessed the implications of a two-sided TNW war in Europe. This first period ended as the United States shifted from a nuclear policy of massive retaliation to one of flexible response.

The 1960-74 period is one of reassessment of the role of TNWs in defending the West. As part of its strategy of flexible response, the Kennedy Administration proposed that "TNW served to enhance the credibility of the U.S. strategic deterrent by providing a link between the possible failure of conventional defense in Europe and U.S. willingness to employ its ultimate weapons" (18:13). During this period (1960-74), both European and U.S. observers came to believe that TNWs "could not be meaningfully substituted for conventional forces" (18:14). As scientists became more skilled at assessing the effects of a TNW exchange upon Europe, and as the Warsaw Pact rapidly approached TNW parity with the West, the Alliance became less complacent about its
reliance on TNW as a substitute for conventional defenses. In brief, the realization grew in the West that a TNW exchange in Europe would produce unacceptable, even catastrophic, results. As Bernard Brodie concluded, "a people saved by us through our free use of nuclear weapons over their territories would probably be the last that would ever ask us to help them" (3:10). As this second period drew to a close, the advantage initially enjoyed by the Alliance when it was the sole owner of TNWs had disappeared; the Soviet Union retained its conventional superiority, and the use of TNWs by the West appeared unacceptable under any conditions other than total strategic nuclear war.

The third period, 1975 through the present, parallels the first in that the Soviet Union once again accelerated its conventional arms buildup. As the TNW balance in Europe approached parity, the likelihood of Alliance use of TNW—in any capacity other than as a response to a TNW attack—decreased. Stripped of its TNW advantage, the Alliance was again forced to weigh the adequacy of its conventional weapons defense of Europe. The 1979 NATO decision to modernize its nuclear arsenal as a means of responding to the Soviet Union's increasing conventional arms superiority is similar in many respects to the earlier U.S. decision to introduce TNWs in 1949. Eight years after the NATO decision, the Alliance remains at a distinct disadvantage to the Warsaw Pact in conventional weapons, and
the future of the Alliance's nuclear posture is, at best, uncertain.

Research Objectives

As noted earlier, this research will focus on the goals of the GLCM program and on the extent to which these goals have been met. The GLCM program will be examined within the context of, and as a consequence of, the entire TNW issue in Europe since 1948. As this research examines the third period (the actual time-frame of the GLCM program--1975 through the present), several questions will be addressed:

1) What military developments by the Soviet Union preceded the GLCM deployment decision? What Soviet actions followed the deployment decision?

2) What was the general political and social environment within the U.S. prior to the GLCM decision date concerning the deployment issue? How did this political/social environment change after 12 December, 1979?

3) What was the general political/social environment within the five host countries prior to the deployment decision? How did this political/social environment change after the GLCM decision?

Sequence of Presentation

Chapter 2 describes the methodology of this research, which is primarily that of historical research. This chapter reviews the limitations and procedures of the historical research methodology.
Chapter 3 consists of the historical data pertaining to the GLCM program. This history begins with the introduction of nuclear weapons into Europe in 1948-49 by the United States; the research proceeds to trace the significant events surrounding this issue through the present. Chapter 3 is divided into three sections: 1948-59, 1960-74, and 1975-present.

Chapter 4 summarizes the significant trends noted in this 39-year period. The essentially "re-active" nature of NATO military planning is the central focus of this chapter. Specific attention is focused on the relationship which exists between the Soviet Union/Warsaw Pact's military posture and the defensive strategies of the North Atlantic Treaty Organization.

Finally, Chapter 5 presents recommendations for the future. These recommendations involve ways the United States and its NATO partners might more effectively shape their future military balance with the Soviet Union. The basically inefficient balance-of-power strategy of the NATO allies is examined, and methods are proposed with which the NATO allies can regain the initiative in their defense of Europe. Chapter 5 concludes with some observations on the current Soviet proposal to ban all mid- and short-range nuclear missiles from Europe.
Definitions (18:3-7)

The following definitions and acronyms are used throughout this research effort. They are presented here to improve ease of readability:

1) **TNW**: Theater nuclear weapon.
Many conflicting definitions exist for theater nuclear weapons, tactical nuclear weapons, and strategic nuclear weapons. For the purpose of this research, TNW will encompass all weapons systems (with the primary emphasis on TNW missile systems) intended to accomplish a tactical rather than a strategic purpose within a theater conflict rather than a strategic (intercontinental) one.

2) **INF**: Intermediate-range nuclear forces.
This category includes nuclear missile systems with ranges from 311 to 3,415 miles. Weapons systems with ranges under 311 miles are considered battlefield systems.

3) **LRINF**: Long-range intermediate nuclear forces.
INF missile systems with ranges of 621 to 3,415 miles. Pershing II, the SS-20, and GLCM are included in this category.

4) **SRINF**: Short-range intermediate nuclear forces.
INF missile systems with ranges of 311 to 621 miles.

5) **Re-active**: This term is used to describe the stimulus/response pattern which characterizes NATO's typical reaction to Soviet aggression or coercion.
II. Methodology

In the Life of Reason, George Santayana makes this memorable observation: "Those who cannot remember the past are condemned to repeat it" (21:162). This research is an effort to remember the past, to discern some meaningful pattern in the past, and to suggest ways that an understanding of the past can help shape the future. In order to accomplish this goal, this study employs the methodology of "historical research, [which] is the systematic and objective location, evaluation, and synthesis of evidence in order to establish facts and draw conclusions concerning past events" (2:260).

The methodology of historical research is used to develop and support the central hypothesis of this research: that the United States and its NATO allies have engaged since World War II in a military strategy essentially re-active in nature. This re-active policy has been largely inefficient in accomplishing its primary goal, the maintenance of the security of the North Atlantic area.

Characteristics of Historical Research

Characteristics of the historical research method include the following steps: "defining the problem, gathering the data, and evaluating and synthesizing the data into an accurate account of the subject investigated" (2:261).
In defining the problem, this research begins with the understanding that the ongoing GLCM program and the larger issue of the East-West military balance are issues of universal concern and debate. This assumption appears obvious: newspaper, television, and magazine stories for the past several years have followed every detail of the United States--Soviet Union arms negotiations, paying special attention to the recent proposals by both sides to remove all tactical nuclear missiles from Europe. (To cite a typical example, the cover headline of the April 27, 1987 Newsweek proclaims, "Finally, An Arms Deal That Can Work . . . But Not Without Some Risks.")

Because historical research "usually requires the setting up of specific, testable hypotheses" (2:261) as a central step in defining the problem, this study is based upon the premise of "the essentially re-active nature" of NATO's military policy, referred to earlier. In order to determine the validity of this hypothesis, this research examines the history of the East-West arms race in Europe during the period 1948 through the present. Because this study focuses on the GLCM program in particular, 1948 was chosen as the beginning point, for in 1948 the United States began the first steps which led to the introduction of TNWs into Europe.

The second phase of historical research, gathering the data, constitutes the largest effort of this study. In this
phase, three major problems appear. First, the massive quantity of data pertaining to this rather broad topic—the East-West military balance from 1948 to present—increases the difficulty of evaluating the value of the various source documents. In fact, the sheer volume of available source data poses the primary obstacle in researching this issue, for the natural tendency is to focus on a part of the issue while failing to see the whole. A second obstacle faced in this research involves the relative scarcity of source documentation written from a Soviet perspective. Because of the difficulty involved in obtaining, translating, and, most importantly, evaluating source documents of Soviet Union origin, this research is limited primarily to sources of Western origin, that is, to those written from a Western point of view. It is hoped that the "one-sidedness" of this documentation—with its quite natural limitations of viewpoint, objectivity, and completeness—does not undermine this study's findings or recommendations. A final obstacle faced in gathering the data involves the difficulty of distinguishing primary from secondary sources. If primary sources are "those documents in which the individual observing the event being described was present" (2:263), then practically all documents pertaining to this topic could be described as primary sources. If an event is both worldwide and contemporaneous (as is the European military balance), then are not all living observers primary sources?
In spite of this difficulty, this research attempts to evaluate the worth and limitations of all sources.

Evaluating and synthesizing the data, the final step of historical research, is by far the most difficult and the most important. In his *Philosophy of History*, Georg W. Hegel observes, "Peoples and governments never have learned anything from history, or acted on principles deduced from it" (10:282-283). Yet the final step of historical research, that of evaluation and synthesis, is based upon the belief that peoples and governments can learn from the past.

**Other Research Methods**

In contrast to the broad view of historical research, other research methods, such as causal comparative, correlational analysis, and survey research, tend to be narrowly focused. These methods are most appropriate for research which is limited in scope and/or highly reliant upon quantitative analysis. Historical research, on the other hand, takes a wider view, enabling "the research worker to place each bit of information in its proper perspective and draw sound conclusions from the total picture obtained" (2:264). Because the historical research methodology facilitates the search for patterns in the "total picture," this methodology is best suited for examining both the NATO/Soviet Union arms race in Europe and the role of the GLCM program within that process.
Organization of Chapter 3

In Chapter 3, "Background," the significant military and political events of the period from 1948 to the present are summarized. The shifting military balance between the United States/NATO Alliance and the Soviet Union/Warsaw Pact nations is the primary focus of this chapter. Chapter 3 is divided into three periods:

1) the introduction of theater nuclear weapons into Europe (1948-59);
2) reassessment of the role of theater and strategic nuclear weapons in defending Western Europe (1960-74); and
3) uncertainty within the NATO Alliance (1975-present).
III. Background

The essential difference between the Soviet and the NATO view of conventional warfare in the nuclear age has been the Russian belief throughout that offense is the best form of defense [17:811].

Overview

This chapter reviews the significant military and political events of the age of tactical nuclear warfare. 1948, the year in which the United States' Project Vista first investigated the possible uses of nuclear weapons in ground warfare, is chosen as the nominal beginning point of the TNW age. This chapter is divided into three sections, which recount the origin and development of NATO's pattern of reactive defense.

The first section (1948-59) begins by examining the conventional forces superiority of the Soviet Union in the late 1940s, which resulted from the conventional arms buildup by the Soviets following World War II. The concurrent demobilization by the United States and its Western European allies is also reviewed. The introduction of theater nuclear weapons into Europe by the United States, and later by the Soviet Union, is analyzed. The first period ends with the United States and NATO relying upon a policy in which TNW superiority of the West is used to deter aggression by the vastly superior conventional military forces of the Eastern European bloc.
Period two (1960-74) is one of reassessment by the West. The efficacy of theater nuclear weapons in controlling the spread of Soviet adventurism comes into question. Increasing concerns about the use of nuclear weapons in Europe, coupled with growing doubts about the security afforded Western Europe by the United States' strategic nuclear umbrella, force the NATO allies to reassess the adequacy and balance of their conventional and nuclear forces.

The third period (1975-present) begins much like the first: the NATO alliance is outclassed in every major category by the superior conventional military forces of the Soviet bloc nations. The watershed decision by NATO in 1979 to modernize its theater nuclear forces is examined not as a new strategy to protect Western Europe, but as a continuation of the earlier strategy of 1948, which first introduced TNWs as a means of countering Soviet conventional force superiority. Within the context of this third period, a period of uncertainty and indirection for the Alliance, this research addresses the three major questions noted earlier in Chapter 1:

1) Why did the NATO allies agree in 1979 to begin the GLCM deployment?
2) What were the United States' reasons for beginning deployment of the GLCM in 1983?
3) Is the GLCM program accomplishing these goals?
The Introduction of TNWs into Europe (1948-59)

Although two wings of nuclear-capable U.S. aircraft were stationed in England in the late spring of 1952 (28:1), the deployment by the United States of nuclear missiles into Europe first occurred in October, 1953, with the arrival of the first of a number of 280-millimeter atomic cannons. The political environment which gave rise to this historic deployment decision, however, had its origins in the years immediately following World War II. Thus, this section begins with a review of the demobilization by the Western allies following World War II and the concurrent conventional forces buildup by the Soviet Union. Next, this research examines the events which led to the recognition by the West of a need for a unified defense against Soviet hegemony in Europe. The creation of the North Atlantic Treaty Organization is treated next, followed by the early years of the NATO alliance. The development of NATO's earliest defensive strategies and the contrast of these strategies with the offensive initiatives of the Soviet Union in both political and military matters conclude this first period.

Demobilization of the West. Fulfilling wartime pledges and bowing to public demand at home, the United States undertook a massive demobilization of its military forces immediately following Germany's surrender in May, 1945. Like the United States, other members of the Allied Forces
quickly withdrew their troops and prepared to phase down the bulk of their war-fighting capabilities. At the time of Germany's surrender, the Allied Forces in Europe numbered approximately five million soldiers; within a year their number had shrunk to less than 880,000 men. Figure 1 shows the magnitude of this troop withdrawal from Europe.

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<tr>
<td>United States</td>
<td>3,100,000</td>
<td>391,000</td>
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<tr>
<td>United Kingdom</td>
<td>1,321,000</td>
<td>488,000</td>
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<td>Canada</td>
<td>299,000</td>
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Figure 1. Number of Combatants Maintained in Europe (15:14)

**Soviet Conventional Forces and European Expansionism.** While the West demobilized, the Soviet Union maintained its wartime manning level of approximately four million personnel. Having lost approximately 11,000,000 combatants and 7,000,000 civilians in the War--compared to the 298,000 lives lost by the United States--the Soviet Union was unwilling in 1945 to relax its defenses. Soviet war industries, too, were maintained at levels near those at the peak of the war (15:14-15).

Many Western observers expressed concern about the military posture of the Soviet Union following the war. In a telegram to President Truman on May 12, 1945, Sir Winston
Churchill voiced his fears about the Soviet Union's growing conventional forces:

What will be the position in a year or two when the British and the American armies have melted . . . when Russia may choose to keep 200 or 300 divisions on active service? . . . an iron curtain is drawn down upon the front. We do not know what is going on behind . . . [15:14].

Churchill's concerns in 1945 about Soviet expansionism were echoed three years later by Paul-Henri Spaak, the Belgian Prime Minister, in a speech to the General Assembly of the United Nations: "There is but one Great Power that emerged from the war having conquered other territories, and that Power is the USSR" (15:15).

The Soviet Union's "Grand Strategy of cautious but continuous expansion" (23:25) was implemented in two ways—military annexation and governmental infiltration. During the War, the Soviet Union, under the leadership of Joseph Stalin, annexed an area in excess of 180,000 square miles. This area included Estonia, Latvia, Lithuania, and part of Finland in 1940; and in 1945, the USSR added to its control Poland, East Germany, and parts of Rumania, German East Prussia, and Czechoslovakia. After the War, the Soviet Union continued the process described by Manlio Brosio, Secretary General of NATO, as a "conquest without war" (15:16). Communist infiltration into the war-weakened governments, coupled with the pervasive influence of the large standing Soviet army, resulted in the fall to Communist control of Albania, Bulgaria, Hungary, and the
remainder of Rumania and Czechoslovakia. During the period of 1940-46, the Soviet Union expanded its effective control over an area in excess of 570,000 square miles with a population of over 113 million non-Russian inhabitants (15:16). The creation of the Cominform in 1947--with which Stalin intended to counter that "instrument of American imperialism," the Marshall Plan--made evident to the remaining free nations of Europe the threat posed by the Soviet Union.

The West Responds. The Soviet Union's gradual but persistent policy of expansion finally prodded the West into a series of actions culminating in the formation of the North Atlantic Treaty Organization. In a statement to Congress on March 12, 1947, President Truman formalized "the policy of the United State of America to support free peoples who are resisting attempted subjugation by armed minorities, or by outside pressure" (15:19). Shortly after this proclamation of the Truman Doctrine, as it came to be known, General George C. Marshall proposed his idea of a Program for European Recovery, an economic aid program which was offered to both the Western European and Iron Curtain nations ravaged by the War. Stalin rejected this offer to the USSR and its European satellites, creating instead the Cominform as a Soviet alternative to what he perceived as the imperialist threat posed by the Marshall Plan. The economic assistance provided by the Marshall Plan proved
instrumental over the next several years in assisting Western Europe's economic recovery (15:18-21).

The free nations of Europe, recognizing the Soviet threat to European stability, joined together in March, 1948, to ratify the Brussels Treaty. This treaty was designed to protect each of the signatories from any "armed aggression in Europe" (15:20). Intended to deter Soviet aggression, the Brussels Treaty joined Belgium, France, Luxembourg, the Netherlands, and the United Kingdom in an alliance which proved to be a forerunner of the North Atlantic Treaty. In September, 1948, the participating nations of the Brussels Treaty created the Western Union Defence Organization, an essentially military arm of the Brussels Treaty. This regional military defense organization prompted much interest in the United States and resulted in Senate ratification in June, 1948, of the Vandenberg Resolution. This resolution proposed that the United States and Canada join with the free nations of Western Europe in an international, co-operative alliance to insure "the defence of human rights and fundamental freedoms" (15:237) throughout the North Atlantic area. The alliance envisioned in the Vandenberg Resolution came into being with the signing of the North Atlantic Treaty on April 4, 1949 by the twelve original members (the United States, Canada, Belgium, Denmark, France, Iceland, Italy, Luxembourg, the Netherlands, Norway, Portugal, and the United Kingdom).
Greece and Turkey joined NATO in 1952, and the Federal Republic of Germany was added in 1955 (15: 22).

**NATO's Early Years (1949-59).** NATO's first decade was arguably its most successful in its defense against the Soviet political and military threat. During this period, NATO's policy of "collective self-defence . . . against an armed attack" (15:239) followed the Soviet action/NATO reaction pattern first established shortly after the war. In fact, the very formation of NATO itself was a reaction to the expansionist threat posed by Russia's postwar maintenance of troops in Europe. This initial re-active relationship which the NATO allies established with the Soviet bloc is reflected in and institutionalized by the Preamble to the North Atlantic Treaty, in which the Allies pledge "to unite their efforts for collective defence [italics added]" (15:238).

During this first decade, the Soviet bloc nations continued their program of expansion. According to Stanley Sloan, the outbreak of the Korean War in June, 1950, "was seen as demonstrating the global threat of communist aggression" (25:9-19). And the ratification of the Warsaw Pact on May 14, 1955, formally aligned under Soviet leadership the Communist bloc countries of Albania, Bulgaria, Czechoslovakia, East Germany, Hungary, Poland, and Rumania. The Soviet Union expanded into space as well with the launch of the first sputnik in 1957, signalling the
Soviet Union's emergence as a nuclear power with the potential of surpassing the United States' nuclear capability. Finally, the Soviet Union threatened to move into Syria, ostensibly in response to a planned Turkish invasion of that strategically vital nation, with its access to the pipeline outlet from the Iraqi oil fields (15:40-41).

While the Soviet Union threatened the West in Korea, in Europe, and in the Persian Gulf, NATO refined its strategy of containment of Communism and grappled with two basic questions: How should NATO defend itself? How should the cost of this defense be shared? In answering this second question, the NATO allies developed what they hoped, for a while at least, might be a solution to both the problems of method and cost: tactical nuclear weapons.

NATO's answer to the question—"How should NATO defend itself?"—was developed on a case-by-case basis during this first decade. Instead of developing and implementing a total European strategy, NATO responded to each incident without the benefit of standing organizational procedures. The Korean War, for example, raised grave concerns among the NATO allies about the threat of similar aggression in Europe. The NATO Security Council responded in September of 1950 by developing its still current Forward Strategy for Europe. This Forward Strategy proposed "that any aggression
must be resisted as far to the East as possible in order to ensure the defence of all of the European member countries" (15:30).

What the Security Council did not address in 1950 were the two major implications of the Forward Strategy:

1) NATO's defense of Europe would occur "as far to the East as possible," that is, in West Germany. Such a defensive strategy would require the rearming of West Germany and its admission into the NATO alliance--two developments long opposed by France and some other member countries.

2) A Forward Strategy would require the maintenance in Germany, and near the German front, of a far greater number of troops than was currently being fielded by NATO. More specifically, the United States would be required to maintain large forces in Europe, a difficult proposition for many Americans so soon after World War II. Most importantly, the maintenance of the large armed forces needed to implement this Forward Strategy would be expensive.

Thus, in answering the first question of defensive method, NATO created for itself severe limitations in the ways in which it could answer the second question--"How do we share the costs of this defense?"

While the United States and its NATO allies debated the details of their new Forward Strategy, work was being
conducted in the United States on both the theory and hardware of tactical nuclear weapons. In 1948 at the California Institute of Technology, scientists carried out the earliest investigations into the uses of nuclear weapons within ground warfare, that is, within a theater rather than a strategic conflict. In the year following this Project Vista, as it was known, Chairman of the Joint Chiefs of Staff General Omar Bradley first proposed that the United States develop and deploy TNWs "to offset Soviet conventional superiority in Europe" (18:8). In 1951, the first tests of low-yield (one-kiloton and below) nuclear weapons were conducted, and two years later, in October, 1953, President Eisenhower authorized the inclusion of TNWs in the war plans designed to counter Soviet conventional attacks in Europe. Deployment of the first TNWs into continental Europe (280-millimeter atomic cannons) began in 1953 by the United States; these were followed in 1954 by additional TNWs, the Regulus and the Honest John (18:9).

Economic considerations were instrumental in the decision to use TNWs as a substitute for large conventional forces in Europe. Indeed, as early as 1949 the NATO allies had recognized the cost implications of their as-then embryonic strategies for European defense. NATO's creation of the Defence Financial and Economic Committee on November 18, 1949, signalled the Alliance's first efforts to develop "overall financial and economic guidance for defence
programmes and to fix the limits . . . of military production" (15:29). The first force goals for NATO were set at the Lisbon Conference of 1952. These goals committed NATO to field fifty divisions of troops, 4,000 aircraft, and "strong naval forces by the end of 1952" (15:30). With the establishment of these firm force goals in 1952, the Allies formally recognized the basic conflict with which it has since struggled: how to balance defense requirements with the Allies' ability and willingness to pay for this defense.

In the United States, defense financing had been of serious concern since the end of World War II. The "successful" use of nuclear weapons over Japan to shorten the war could not fail to suggest to some observers that nuclear weapons, under certain conditions, could bring about both dollar and nondollar (that is, savings in American lives) economies. And after four years of war-enforced economic privations, the American populace was extremely reluctant to support the sort of open-ended economic commitment necessary to maintain a large peacetime army in Europe. In testimony before the Senate Armed Services Committee in 1952, Air Force Chief of Staff General Nathan Twining summarized the economic attractions of tactical nuclear weapons: "a new strategy built around the use of atomic weapons . . . (is) the only way we can provide the forces for the country within a reasonable standard of financing" (18:9).
Faced with this apparently insoluble problem of cost-sharing for a large conventional force, the United States and its NATO partners began a policy of increasing reliance upon tactical and strategic nuclear weapons. The monopoly enjoyed by the United States in both types of weapons permitted the development of a policy of "massive retaliation." Any attack in Europe by the admittedly superior conventional forces of the Soviet Union would serve to trigger a theater and strategic nuclear weapons response by NATO. Under this policy, the NATO allies relieved themselves of the necessity of maintaining a conventional armed force in Europe equal to that of the Soviets. In fact, NATO's conventional forces gradually came to fill the role of "tripwire" or target, serving only as a signal to the Alliance to warn of unacceptable Soviet aggression.

NATO's nuclear monopoly—and the massive retaliation policy based on that monopoly—ended dramatically in 1957. Although the Soviet Union began introducing TNWs into its forces early in 1957, the Soviet launch of the first sputnik on October 4, 1957, marked the real end of the NATO nuclear monopoly. With the launch of the first sputnik, the Soviet Union emerged as a nuclear equal of the United States, destroying the nuclear security blanket with which the United States had shielded Europe.

Other developments in the late 1950s also worked to undermine NATO's reliance on a predominantly nuclear
strategy. Many military theorists had come to believe that TNWs could not be meaningfully substituted for conventional forces. In 1956, General Matthew B. Ridgeway argued, "There are a number of sound and logical reasons why a field army of the atomic age may have to be bigger than its predecessors of the past" (18:12). Scientific studies on the effects of a TNW exchange in Europe also weakened NATO's nuclear strategy. English physicist P.M.S. Beckett noted that "the initiation of tactical nuclear war might either hasten defeat [for the West] or lead to the destruction of Europe" (18:10).

NATO ended its first decade faced with the same questions with which it began in 1948: How should NATO defend Europe against the superior forces of the Soviet Union? How can the Allies pay for this defense? As the decade of the 1950s closed, the assumption that tactical nuclear weapons might answer both of these questions had been severely shaken, and the Alliance entered the 1960s searching for ways to fulfill its original promise to defend Europe against armed aggression or political coercion.

Period of Reassessment (1960-1974)

1960 through 1974 was a period of reassessment for the Alliance. As this period began, the Soviet bloc nations retained a decided conventional forces advantage in Europe. If war had occurred in Europe at the beginning of this period, the Soviets would have had a three-to-two advantage
on the first day of hostilities (Day 1). This advantage would have increased after ten days of fighting (Day 10) and continued to increase after Day 10. Figure 2 shows the conventional forces edge (both manpower and equipment) enjoyed by the Soviet Union in early 1960:

<table>
<thead>
<tr>
<th>Day 1</th>
<th>Day 10</th>
<th>Day 11+</th>
</tr>
</thead>
<tbody>
<tr>
<td>3:2</td>
<td>3:1</td>
<td>4:1</td>
</tr>
</tbody>
</table>

Figure 2. Soviet Conventional Force Advantage: 1960 (22:63)

In 1960, the attention of NATO military planners, however, was focused on the United States' introduction of tactical nuclear weapons into Europe and the Soviet Union's advances in strategic nuclear capability. In *A Grand Strategy for the West*, retired German Chancellor Helmut Schmidt notes of this period, "The realization that the Soviet Union and the West had reached equilibrium in their capacity to threaten each other with nuclear weapons led to... a period of reassessment... which some might call the phase of detente" (23:10). As the world enjoyed this period of "peaceful coexistence," the NATO allies struggled to come to grips with the implications of TNWs within NATO's defensive strategy.

For the United States and its NATO allies, 1960 through 1974 was a period of reassessment without resolution. The
extension of the nuclear threat into the theater level (i.e., Europe) decoupled the strategy of the United States from that of its European allies. From 1945 until 1957—when the Soviet Union destroyed the West's strategic nuclear monopoly—the United States and its NATO partners shared a common goal and a common strategy: to prevent Soviet aggression in Europe by resorting to massive retaliation if necessary (19:7-9). With the ending of the United States' strategic and tactical nuclear monopolies, NATO lost the deterrent force previously embodied in its nuclear edge. Without a nuclear monopoly, the European NATO members—because of their conventional force weakness—had to work to deter Soviet aggression by threatening to elevate any conflict immediately to the nuclear level, thus insuring the employment of the United States' nuclear force (19:8). The United States' interests were quite naturally the opposite: the United States wished to limit any conflict to Europe, thus avoiding escalation to the strategic nuclear level. To limit a war to Europe required that NATO possess adequate conventional forces to win such a conflict. The United States' interests would thus best be served by preparing NATO to win a conventional war in Europe. The European allies, on the other hand, gained American nuclear participation in a European conflict only by remaining conventionally inferior to the Soviets (14:1-9).
As NATO adjusted to the nuclear parity achieved by the Soviet Union in the early 1960s, the United States moved from a nuclear policy of massive retaliation to one of "flexible response." As early as 1957, some writers had questioned the effectiveness of a policy of massive retaliation. In *Nuclear Weapons and Foreign Policy*, Henry Kissinger "scorned a doctrine that left no room for intermediate positions between total peace and total war and pointed out how vulnerable such a doctrine left us to the preferred form of Soviet aggression: internal subversion and limited war" (19:9). Because the validity of using TNWs as a substitute for adequate conventional forces was being increasingly questioned, the Kennedy administration proposed a new justification for TNW deployment in Europe. Under the United States' new policy of flexible response, TNWs were viewed as a way of enhancing "the credibility of the U.S. strategic deterrent by providing a link between the possible failure of conventional defense in Europe and U.S. willingness to employ its ultimate weapons" (18:13). And later, in 1967, NATO formally adopted a strategy based on "a flexible and balanced range of appropriate responses, conventional and nuclear, to all levels of aggression or threats of aggression" (15:59). This new NATO policy of flexible response relieved the NATO allies of being compelled to respond to any Soviet aggression only with the United States' strategic nuclear arsenal, but this policy
revived NATO's earlier problem—developing an adequate conventional force with which to respond to limited Soviet aggression. This new policy underscored the growing split between American and European views of what NATO's strategy should be. The United States continued to push for the buildup of conventional NATO forces, the development of which would make less likely the precipitate employment of TNWs in Europe. The European NATO members, however, "would have preferred the tt f an early first use of NATO's theater nuclear force. (19:12) because such a policy reduced the European members' obligation to field a large conventional force and because it linked the United States' fate more inextricably with that of Europe. The Europeans wished to deter through threat of an early nuclear response; the United States emphasized a defense of Europe through the building up of NATO's conventional armies. Stanley Hoffman, American historian and strategist, notes that "the 'flexible response' strategy formally adopted in 1967 was a compromise that resolved nothing" (19:12).

Besides the reservations of many military thinkers about the role of TNWs in NATO's military plans, studies conducted during the late 1950s also raised many questions about future uses of TNWs. Conducted in 1955 in Louisiana, Operation Sage Brush was one such study. In this simulated TNW wargame, 275 TNWs of from two to forty kilotons were "detonated" in a unilateral TNW employment by NATO forces in
Europe. Although this exercise was based on a very conservative, one-sided use of TNWs, the conclusion of the wargame managers was that "the destruction was so great that no such thing as limited or purely tactical nuclear war was possible in such an area" (18:10). Carte Blanche, a second TNW exercise conducted by NATO, took place in Western Europe in 1955. In this simulation, 335 TNW devices were "exploded" within a forty-eight hour period. Using the findings of this wargame, researchers concluded that direct German casualties in such an exchange would number between 1.5 and 1.7 million with an additional 3.5 million wounded. Commenting on the outcome of Carte Blanche, Deputy Blachstein of the Federal Republic of Germany noted, "The use of tactical nuclear weapons might develop into a war of annihilation that would wipe out the greater part of those living today" (22:101). Writing in 1962, Helmut Schmidt concluded, "the use of such weapons [TNWs] will not defend Europe, but destroy it" (22:101). Schmidt's comments are representative of the beliefs of a growing number of military and scientific researchers of that time.

In spite of the widespread doubts about the use of TNWs in Europe, NATO military planners in the 1960s and early 1970s continued to add to NATO's nuclear arsenal and to base NATO warplans upon the use of TNWs. NATO, as an organization, persisted in relying upon TNWs at the same time as many of NATO's individual members increasingly
doubted the value of TNWs in defending Europe. In late 1959 and early 1960, the United States deployed 150 medium-range ballistic nuclear missiles (MRBMs) to Europe: 60 Thor missiles went to England, and 45 Jupiter missiles went both to Turkey and Italy (24:68-74). By the early 1960s, Great Britain had already attained status as an independent nuclear power, and France too was rapidly developing its own nuclear capability. From 1960 through 1963, NATO debated the development of its own Multilateral Force (MLF), an independent nuclear arm of NATO which would have its own nuclear weapons and command structure, independent of U.S. control. The MLF concept ultimately failed due primarily to the resistance of France, which saw the MLF as simply another way for the United States to retain unilateral control of NATO nuclear decisions. In 1966, France withdrew its forces from the NATO integrated Military Headquarters, removing France from NATO's military structure and reserving for itself the option of responding to any Soviet aggression with immediate use of its own independent nuclear weapons.

The ongoing development of and reliance upon TNWs by the NATO members during this period of reassessment, 1960 through 1974, illustrates a basic organizational duality which developed within NATO. NATO's adoption in 1967 of the ambiguous policy of "flexible response" further emphasized NATO's inability to develop a clear-cut, unanimously approved military strategy for European defense. By the end
of this period, most NATO members agreed on the need for adequate conventional forces and the futility of using TNWs in defending Europe; paradoxically, much of NATO's efforts during this period was directed toward improving its TNW force, the utility of which was increasingly doubted (19:10-12).

The decade of the 1960s was a difficult one for the Alliance. The relative singleness of vision which the Allies had shared during the first ten years of the Alliance came to an end, replaced by a confusing, divisive multiplicity of goals and strategies. Three major conclusions can be drawn about NATO's "period of reassessment." First, the end of the United States' nuclear monopoly in 1957 ushered in a period in which the Allies could no longer achieve a unanimity of either methods or goals. Second, the Alliance split on the central issue of strategy. The United States moved towards a policy which emphasized the conventional defense of Europe, reserving under its policy of flexible response the use of nuclear weapons primarily as a last resort. The European allies, on the other hand, increasingly emphasized a policy of deterrence, which envisioned the use of TNWs as a first response to any Soviet aggression. Third, this bifurcated strategy resulted in several dangerous developments within the Alliance:

1) Because the United States and the European allies could no longer agree on a unified program of goals and
methods, they began to focus primarily on methods. The ambiguous policy of flexible response allowed the Allies to view different methods (i.e., how TNWs would be employed in Europe) as if they were in fact the same method, an organizationally condoned form of self-deception.

2) Because of NATO's growing indecision regarding military strategy, Europe was made more vulnerable to Soviet coercion. The European Allies' increasing reliance upon first use of TNWs also heightened the risk of theater nuclear conflict in Europe.

3) The much publicized period of detente between the East and West further divided the Allies. Divided on the issue of strategy and uncomfortable with the proliferation of all nuclear weapons, the European allies—led by the United States—entered a period of arms reduction with the Soviet Union, a one-for-one trading process which neither reduced the Soviet's conventional advantage in Europe nor addressed NATO's growing divisiveness.

**NATO's Age of Uncertainty (1975–present)**

The last twelve years have been the most tumultuous in NATO's history. Many observers have attempted to characterize NATO's conduct during this period. Describing the growing gulf between the United States and Western
Europe's military and political policies, William G. Hyland calls the period since 1973 "the atrophy of an Alliance" (11:23). Lawrence D. Freedman also examined NATO's indecision during this period, describing the cause of this uncertainty as "the inertia that is a natural consequence of alliance" (11:56). And in *NATO's Theater Nuclear Forces: A Coherent Strategy for the 1980s*, Jean D. Reed discusses NATO's growing division over the "nuclear weapons [which] have been an integral part of NATO's strategy . . . for over thirty years," an issue he calls "a dilemma for the Alliance" (19:1). Within this environment of atrophy, inertia, and uncertainty, NATO's momentous dual-track decision--to modernize its nuclear force while pursuing arms control with the Soviet Union--raised, and continues to raise, many questions. This decision to deploy 464 GLCMs and 108 Pershing II missiles occurred within the context of three significant, ongoing developments:

1) a conventional forces imbalance in Europe which was heavily tilted in favor of the Soviet Union,
2) the deployment by the Soviet Union of the SS-20 medium-range missile, which threatened to shift the TNW balance decidedly in the Soviet Union's favor, and
3) a growing proclivity in the West to focus on arms limitations talks to the exclusion of attention to adequate defensive measures.
Any understanding of NATO's 1979 nuclear modernization decision, and of the developments which have affected implementation of that decision, requires first an examination of the three central developments of this period: the conventional forces balance, the TNW balance, and the West's tendency towards "defense ennui."

The Conventional Forces Balance: 1975-1987. In spite of NATO's continuing efforts to bolster its conventional forces, 1975 figures showed the Soviet Union retaining its conventional forces advantage in Europe. Figure 3 details the number of air and ground personnel available in Central Europe.

<table>
<thead>
<tr>
<th>NATO</th>
<th>Warsaw Pact</th>
</tr>
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<tbody>
<tr>
<td>770,000</td>
<td>962,000</td>
</tr>
<tr>
<td>193,000</td>
<td>200,000</td>
</tr>
<tr>
<td>970,000</td>
<td>1,162,000</td>
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</tbody>
</table>

Figure 3. Manpower Balance in Central Europe: 1975 (12:122)

Most observers of the military balance in Europe acknowledge that a gap has long existed between the conventional force capability of NATO and that of the Soviet Union. General Bernard Rogers, recently retired Supreme Allied Commander in Europe, notes that "this [conventional forces] gap . . . does widen every year" (29:27). And John Keegan, defense correspondent for London's Daily Telegraph,
points out that "in tanks, the best index of raw offensive material, the Soviets have a three-to-one advantage, concentrated in a cutting wedge opposite the most tankable terrain in the central region" (16:26). Figure 4 presents recent estimates of several key elements of the conventional forces balance (1987 figures).

<table>
<thead>
<tr>
<th></th>
<th>NATO</th>
<th>Warsaw Pact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manpower</td>
<td>2,000,000</td>
<td>2,700,000</td>
</tr>
<tr>
<td>Fighter planes</td>
<td>452</td>
<td>1,075</td>
</tr>
<tr>
<td>Tanks</td>
<td>20,314</td>
<td>46,610</td>
</tr>
</tbody>
</table>

Figure 4. Conventional Forces Balance in Europe: 1987 (1:26)

**The TNW Balance and the SS-20.** Through the early decades of the Alliance, the 1950s and 1960s, NATO's members learned to live with, if not fully accept, "the massive advantages enjoyed by the Soviet Union and its satellites in military manpower and geography" (5:vii). The United States' early development and deployment of its then superior strategic and tactical nuclear weapon systems permitted the Alliance to neglect its conventional forces because of the compensating superiority in nuclear weapons enjoyed by NATO. "Nuclear weapons," notes Donald Rumsfeld, "were accepted as the 'equalizer'" (5:vii). By the mid-1970s, however, the United States had clearly lost its strategic nuclear superiority. As a result, the Alliance
was forced to examine the purpose and adequacy of its TNW arsenal, weapons which to this point had served primarily as links to the United States' strategic nuclear umbrella.

While NATO reassessed the role of TNWs in its defensive forces, the Soviet Union "was engaged in the expansion of its already massive conventional forces in Europe and rapidly building up a modernized arsenal of theater nuclear weapons" (5:viii). NATO's Nuclear Planning Group met in the fall of 1976 in an effort to come to grips with these new realities of Europe's military balance: the disappearance of the U.S. strategic nuclear monopoly, the rapid buildup of Soviet TNW capabilities, and the then noticeable absence of a cohesive NATO strategy for the use of TNWs. In his role as United States Secretary of Defense, Donald Rumsfeld suggested to the Nuclear Planning Group, "NATO's current TNF posture is basically a heritage of the 1950s . . . . A more modern TNF posture, coupled with more flexible employment plans, will maintain . . . NATO's overall military capabilities in a changing environment" (5:ix).

As the Alliance reacted—struggling to develop a coherent TNW strategy suited to the changing military balance of the mid-1970s—the Soviet Union again acted. In 1976-77, the Soviet Union began deployment of over 300 SS-20s, mobile medium-range ballistic missiles, each of which carried three reentry vehicles over a range of 3,000 miles (5:11). The deployment of the SS-20 was the proximate
catalyst of the 1979 NATO dual-track decision to modernize its theater nuclear forces while seeking to negotiate the removal of most, if not all, theater nuclear weapons in Europe. The Soviet Union had previously deployed TNWs capable of striking Western Europe—the SS-4 in 1959 and the SS-5 in 1961—but the deployment of the SS-20 signalled to most in the West "a significant shift in the theater nuclear balance to favor the Soviet Union" (19:17). Although there is an apparently infinite number of ways to count nuclear weapons, and thus to "measure" the relative nuclear balance in Europe, the Soviet Union began this period (1975-present) with a measurable TNW advantage over NATO, a theater nuclear gap which continued to widen as the period progressed (6:189). Figure 5 is representative of present estimates of the missile component of the TNW ratio.

<table>
<thead>
<tr>
<th></th>
<th>U.S./NATO</th>
<th>&quot;SSR/Warsaw Pact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of launchers</td>
<td>448</td>
<td>1,979</td>
</tr>
<tr>
<td>Number of surface-to-</td>
<td>1,556</td>
<td>4,838</td>
</tr>
<tr>
<td>surface missiles</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of warheads</td>
<td>1,556</td>
<td>6,098</td>
</tr>
<tr>
<td>Total yield (in megatons)</td>
<td>166</td>
<td>1,067</td>
</tr>
</tbody>
</table>

Figure 5. The TNW Balance in Europe: 1987 (5:15-16)

Although these estimates vary on a near daily basis—depending on the biases of the observer and the methodology
of his counting—the overriding fact remains that the Soviet Union maintains a decided advantage in the realm of TNW weapons. Even if the present GLCM deployment is completed (an unlikely development given the near-completion of the INF negotiations), the Soviet Union will retain a numerical and qualitative TNW advantage in Europe.

**The Opiate of Arms Control.** As the memory of World War II has faded in the United States and in Western Europe, a growing societal reluctance to face the hard truths of national defense has developed. As Eugene Rostow notes, "a nearly mystical faith in arms control has become the opiate of Western opinion" (16:86). Considered against the background of the conventional forces and TNW imbalances since 1975, this growing predilection to see arms reductions—even when unilateral—as a panacea is most disquieting. Commenting on this disturbing tendency in the West, George F. Will warns, "We [Europeans and Americans] are sleepwalking back to the 1950s . . . . But in the 1950s we had overwhelming strategic superiority. Today we are strategically inferior" (16:86). The European anti-nuclear peace movement, the Mutual and Balanced Force Reduction Talks (MBFR), the Strategic Arms Limitation Talks (SALT I and II), and the continuing Intermediate Range Nuclear Force Talks (INF, are symptomatic of this negotiate-at-any-cost mindset in the West (4:1-14).
The European anti-nuclear peace movement is actually a loose coalition of the various nationally based peace movements of Western Europe. Although the December 12, 1979, decision by NATO galvanized into action the peace movement, the movement itself predates the current INF controversy, having originated in the late 1950s. The peace movements of Europe have embraced various causes during the last three decades: the "Struggle against Atomic Death" in West Germany in the late 1950s, the widespread opposition to United States' participation in Vietnam in the 1960s, and the more recent opposition in Europe to deployment of the Enhanced Radiation Warhead (ERW), the neutron bomb, in the 1970s. In 1978, the anti-nuclear peace movement, loosely organized under the auspices of the Interchurch Peace Council of the Netherlands (IKV), spearheaded the effort to prevent NATO deployment of the ERW (27:508-512). On the neutron bomb issue, the IKV was able to collect more than a million Dutch signatures in opposition to the proposed storage of ERWs on European soil. With the proposed GLCM and Pershing II deployment as their most recent cause, the European peace movements have mobilized widespread public protest in the Netherlands, Belgium, the United Kingdom, and to a lesser extent, throughout the remaining NATO countries. The influence of the "European peace movement" varies from country to country and is itself subject to widely different estimates. But the ability of this coalition to organize
large public protests in opposition to NATO's TNW modernization is indicative of the widespread apprehension in Europe concerning the East-West struggle in general, and nuclear weapons in particular (14:9-19).

The negotiations on Mutual and Balanced Force Reductions (MBFR) first convened in October, 1973, and have continued intermittently since that date. These talks were originally intended to reduce the conventional forces of NATO and the Warsaw Pact in Central Europe. The MBFR talks are really an outgrowth of the problems posed by the large standing armies remaining in Europe following World War II. Faced with what is perceived to be the overwhelming numerical superiority of the Soviet troops in Europe, the NATO allies have quite naturally pressed for "asymmetric reductions to eliminate the gross disparity in active duty ground manpower in Central Europe" (12:111). The Soviet Union has characteristically responded to the many NATO proposals by questioning the data base used by NATO in estimating Soviet troop strength. In addition to the data base issue, the Soviet Union and NATO have failed to agree on limits to the standing armies to remain in Europe following any agreed upon reductions. These two differences and the fact that the MBFR talks have been periodically placed in limbo by such issues as the SALT talks and the Soviet invasion of Afghanistan have prevented little concrete progress in these negotiations.
The first Strategic Arms Limitation Agreement (SALT I) was concluded by Richard Nixon and Leonid Brezhnev in 1972 and subsequently ratified by both countries. SALT I consisted of agreed ceilings on intercontinental strategic missiles (ICBMs) and a near total ban of anti-ballistic missile systems (ABMs). Although the Soviet Union had argued "that any system capable of delivering a nuclear warhead onto Soviet territory . . . was by definition strategic" (24:204), the United States persuaded the Soviets to focus solely on ABMs, ICBMs, and SLBMs in SALT I.

When the second SALT talks began (SALT II), the Soviets resurrected the strategic/tactical issue, arguing that "the Soviet Union should be allowed an aggregate ceiling as large as the U.S. central systems [strategic nuclear] . . . and systems of U.S. allies [NATO's TNW force] combined" (24:4). Subsequent events--most notably the Soviet invasion of Afghanistan in 1979--doomed the SALT II negotiations, but the issues raised in the SALT II talks were soon to be renewed in the INF talks, which constituted one-half of the 1979 NATO dual-track modernization decision.

The current INF talks, which at present appear very close to successful completion, represent but one more example of this Western tendency towards reckless disarmament. Current proposals in the INF negotiations center around the so-called "zero-zero option." This option requires the elimination of all U.S. and Soviet INF missiles.
based in Europe. The major focus of this proposal—the elimination of the 316 Pershing II and GLCMs already deployed in exchange for Soviet destruction of roughly 333 SS-20s—represents the culmination of the arms control portion of NATO's 1979 nuclear modernization decision. Implementation of this zero-zero option could further weaken the ties between the United States and NATO, returning NATO to the position of military inferiority which gave impetus to the original modernization decision. Pointing to the continuing aggression of the Soviets during the last decade—the invasion of Afghanistan, the initiation of martial law in Poland, and the downing of the Korean airliner, for example—General Bernard Rogers warns that the removal of all medium-range missiles will serve only "to make Western Europe safe for conventional war" (29:27). "Instead of closing the 'window of vulnerability,'" concludes George F. Will, "the president may be opening the barn door of danger and encouraging attitudes that will impede compensating defense efforts" (16:86).

Status of the Pershing II/GLCM Deployment. Within this environment of uncertainty for NATO, the deployment of the GLCMs and Pershing IIs continues. At present, 316 of the U.S. missiles are already deployed in the United Kingdom, West Germany, Belgium, and Italy. Pre-deployment activities continue on schedule at the last GLCM base in the Netherlands, even as the United States and the Soviet Union
near agreement on the removal of these missiles. On one level, the current INF talks represent the fruition of NATO's dual-track decision to force serious arms negotiations by the Soviet Union through the deployment of the 572 Euromissiles. In a larger sense, however, the continuing GLCM deployment—and the arms control environment in which it takes place—have raised anew many of the questions which have troubled NATO since its inception. How should the West defend Europe? How will NATO pay for this defense? NATO's future, and the role the United States will play in Europe, will be permanently shaped by the decisions the Allies make—and the decisions they avoid—regarding the future role of theater nuclear weapons in the defense of Europe.
IV. Findings

Europe's Reasons for Deployment

Why did the NATO allies agree in 1979 to the GLCM/Pershing II deployment? As the events of Chapter Three have shown, the European allies had many reasons to agree to the modernization of their TNW force. Foremost among these were the two reasons cited in the dual-track approach: to update NATO's deterrent capability and to encourage arms control negotiations with the Soviets. The final communique from the NATO meeting on December 12, 1979, reflects these two rationales: "[The] ministers concluded that the overall interest of the Alliance would best be served by purchasing two parallel and complementary approaches to theater nuclear force modernization and arms control" (19:14). Noteworthy is the fact that the communique stresses deterrence through linkage with the U.S. strategic arsenal. NATO Secretary General Joseph Luns said that the planned deployment was needed because "Soviet superiority in theater nuclear systems could undermine the stability achieved in intercontinental systems . . . and cast doubt on the credibility of the alliance's deterrent strategy [italics added]" (19:14). Thus, for the Europeans, the TNW modernization strengthened their reliance upon the U.S. strategic guarantee implied in the policy of flexible
response, linking the fate of the United States more closely
to that of Europe.

Of course, on one level a far move obvious reason
exists for Europe's agreement to deploy: the Soviet Union's
deployment of the SS-20. The Soviet action in deploying
over 300 SS-20s--thereby gaining a decided TNW advantage--is
identified most often as the rationale for NATO's reaction.
Put simply, the SS-20 deployment was the most commonly cited
"reason" for NATO's GLCM/Pershing II deployment.

Other less central reasons exist as well for NATO's TNW
deployment decision. The relatively low costs of TNWs and
the ability of TNWs to substitute for conventional forces in
NATO's force structure have traditionally been used to
justify NATO's employment of TNWs; these reasons are
certainly valid for the GLCMs and Pershing IIs.

In summary, the European members of NATO agreed to
deployment for the following reasons:

1) to encourage arms negotiations,
2) to modernize deterrent capability,
3) as a response to the Soviets' SS-20s,
4) the relatively low cost of TNWs, and
5) as substitutes for conventional forces.

U.S. Reasons for Deployment

Like its NATO allies, the United States saw the SS-20
deployment as an act requiring a suitable response. In
agreeing to the dual-track concept embodied in the 1979 decision, the United States endorsed both the arms control and theater nuclear force modernization elements of this two-part strategy. The United States, however, viewed the TNW modernization as an improvement of defensive capability rather than as an enhancement of deterrence (20:8-9).

Unlike the European allies, the U.S. preferred to prepare for a war in Europe rather than deter war through the threat of a strategic nuclear response to any Soviet aggression. Instead of linking the United States more closely to Western Europe, the TNW modernization further separated the U.S. from any European conflict because the modernization made more likely the limiting of a nuclear exchange solely to the European continent.

The United States, then, approved the TNW modernization decision for the following reasons:

1) to encourage arms negotiations,
2) to modernize defensive capability, as opposed to deterrent capability,
3) as a response to the Soviets' SS-20s,
4) the relatively low cost, and
5) as substitutes for conventional forces.

Goals of the GLCM/Pershing II Deployment

Is the TNW modernization program accomplishing its goals? The first track--arms control negotiations--have
indeed resulted. Much controversy remains as to whether the program has increased either the deterrent or defensive capabilities of the Alliance. The deployment will in all likelihood result in the eventual reduction of the nuclear arsenal in Europe, but the Soviets will retain both a conventional and a TNW advantage in Europe. An undesired effect of the TNW modernization has also occurred. By adopting the ambiguous policy of flexible response, NATO permitted itself to assign different goals to the TNW modernization program. For the United States, a greater emphasis on defense in Europe was accepted as one of the goals for the deployment; for the European allies, a greater emphasis on deterrence through linkage with the U.S. strategic arsenal became a key goal of the deployment. The NATO alliance split on the subject of TNWs: unable to define their purpose, the Alliance permitted the simultaneous existence of two quite different goals for the same program. This uncertainty about goals resulted from the Alliance's failure to clearly define its goals prior to beginning the program. In that respect, the 1979 TNW modernization decision parallels the earlier decision in 1948 on initial deployment of TNWs to Europe: in both cases the Soviet Union acted, and the Alliance merely re-acted.
V. Conclusions and Recommendations

1. The controversy surrounding the 1979 TNW modernization program underscores many questions which the Alliance has failed to answer since its inception.

RECOMMEND: NATO needs to address how deeply committed the European members remain to the pledges embodied in the North Atlantic Treaty. The United States must also ask itself how committed it remains to the defense of Europe. To answer these questions, the Alliance must define the precise level of Soviet aggression which is unacceptable. Additionally, all NATO members must commit to a cost-sharing formula and to the specific elements of a military strategy for the Alliance. It would be better to disband NATO than to permit it to become a powerless pawn of Soviet propaganda.

2. Goals of previous NATO/U.S. weapons programs have been inadequately publicized and, oftentimes, created after the program as a sort of ex post facto justification.

RECOMMEND: That a set of specific goals be developed and publicized for each future NATO/U.S. weapons program. These goals should be finalized before initiation of the weapons program, and a timeline should be developed to measure accomplishment of incremental stages of the program.

3. The current TNW modernization program has been interrupted in spite of misgivings without the formal,
unanimous consent of all NATO members.

RECOMMEND: That a formal procedure should be developed for terminating or redirecting all programs that fail to meet their incremental goals.

4. NATO has been trapped in a re-active mindset since its inception, largely a consequence of the defensive nature of the Alliance itself. This re-active characteristic has prevented NATO from adequate goals development, has separated the United States from its European allies, and has permitted the Soviet Union to retain the initiative in the continuing East-West conflict in Europe.

RECOMMEND: The Alliance must develop ways to seize the initiative in Europe, both in the areas of technology and public relations. This initiative need not contradict the basically defensive nature of the Alliance. NATO can begin this process by first identifying goals, and then by developing programs which accomplish those goals. An imperfect example of this "goals-first strategy" might be the United States' Strategic Defense Initiative, a goals-driven program which several of the Allies have already condemned as too aggressive. Although an imperfect example of a goals-directed strategy, SDI does exhibit two positive features:

--SDI is a goals-first program; that is, the goals of the program drive the hardware development.

--SDI does seize the initiative in that it breaks the longstanding pattern of Soviet action/NATO reaction.
NATO now faces momentous decisions. The current INF negotiations may remove most intermediate-range missiles from Europe, but the Soviet threat to Europe will remain. Although this threat remains, the United States daily grows less inclined "to support free peoples resisting attempted subjugation" (15:19). Faced with the growing disassociation of the United States from Western Europe, the European allies must choose either to reaffirm NATO's ideals or to acquiesce to the persistent expansion of the Soviet Union.
Bibliography


28. Weaver, Robert B., Associate Professor, Department of Communication. Personal interview. Air Force Institute of Technology, Wright-Patterson AFB OH, 2 September 1987.

VITA

Captain Gregory L. Stephenson was born on 24 November 1948 in Portsmouth, Ohio. He graduated from Portsmouth High School in 1966 and attended Ohio State University, earning the Bachelor of Arts degree in 1971. After graduating from the University of Kentucky with the Master of Arts degree in 1976, he taught English at North Carolina State University until 1980. He received his commission in the USAF through the OTS program in 1981. From 1981 through 1986, he served as a Titan II missile launch officer at Little Rock AFB, Arkansas. In 1986 he entered the School of Systems and Logistics, Air Force Institute of Technology.

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Title: NATO'S THEATER NUCLEAR WEAPONS AND THE DEFENSE OF EUROPE: PAST PATTERNS AND FUTURE PROSPECTS

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Assistant Professor of Communication
The goal of this research was to analyze and to order the controversy and ambiguity surrounding the TNW modernization started by NATO in 1979. In order to place the GLCM/Pershing II deployment within its historical context, this research reviews the significant events pertaining to NATO since its inception. Three basic questions guided this study: Why did the NATO allies agree in 1979 to modernize their theater nuclear force? Why did the United States actually begin this TNW deployment in 1983? Is the TNW program accomplishing its goals?

The research itself is divided into three periods. The first section (1948-59) reviews the United States' initial deployment of TNWs into Europe, the Soviet force buildup following World War II, and the creation of NATO in 1949. Section two traces NATO's changing attitudes towards TNWs in the period 1960-74. The third section (1975-present) discusses the conventional and nuclear force balance, NATO's growing divisions during this period, and the role of the GLCM/Pershing II deployment within this environment of change for NATO.

An examination of NATO's patterns of response over the last thirty-eight years reveals that NATO has failed to develop formal organizational goals, choosing instead to react to each Soviet provocation on a case-by-case basis.