

5-1987

# NATO battlefield strategy for the conventional defense of Central Europe

Patrick Joseph Geary

Follow this and additional works at: <http://scholarship.richmond.edu/masters-theses>

---

## Recommended Citation

Geary, Patrick Joseph, "NATO battlefield strategy for the conventional defense of Central Europe" (1987). *Master's Theses*. Paper 541.

This Thesis is brought to you for free and open access by the Student Research at UR Scholarship Repository. It has been accepted for inclusion in Master's Theses by an authorized administrator of UR Scholarship Repository. For more information, please contact [scholarshiprepository@richmond.edu](mailto:scholarshiprepository@richmond.edu).

Abstract

NATO BATTLEFIELD STRATEGY FOR THE CONVENTIONAL  
DEFENSE OF CENTRAL EUROPE

Patrick Joseph Geary

Master of Arts in Political Science

University of Richmond

1987

Dr. Arthur B. Gunlicks - Thesis Director

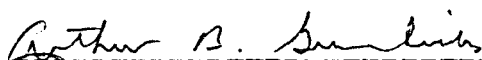
Although we live in a time in which strategies using nuclear weapons dominate the attention of most defense analysts, there are reasons why more attention should be paid to conventional defense strategy. This thesis explores NATO's strategy for defending Central Europe with conventional battlefield weapons. The discussion centers on the military and political complexities involved in the strategy of Forward Defense. Included also is a brief history of NATO, highlighting the political and military events that helped shape today's conventional defense arrangements. Particular emphasis is placed on illustrating the methods and factors involved in the implementation of Forward Defense.

NATO BATTLEFIELD STRATEGY FOR  
THE CONVENTIONAL DEFENSE OF CENTRAL EUROPE

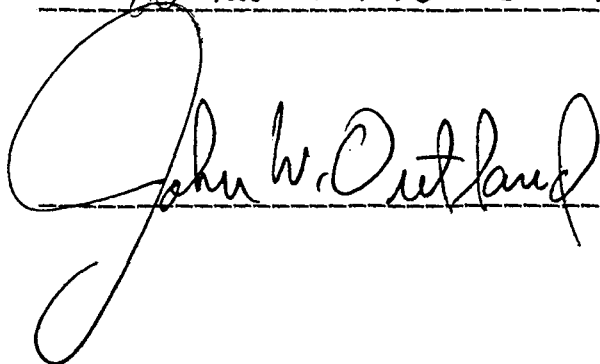
by

Patrick Joseph Geary

Approved By

  
\_\_\_\_\_

Dr. Arthur B. Gunlicks  
Thesis Director

  
\_\_\_\_\_

Dr. John W. Outland  
Thesis Committee Member

**NATO BATTLEFIELD STRATEGY FOR  
THE CONVENTIONAL DEFENSE OF CENTRAL EUROPE**

by

Patrick Joseph Geary  
B.S. Virginia Commonwealth University 1984

A Thesis  
Submitted to the Graduate Faculty  
of the University of Richmond  
in Candidacy  
for the degree of  
MASTER OF ARTS  
in  
Political Science

May, 1987  
Richmond, Virginia

**LIBRARY**  
**UNIVERSITY OF RICHMOND**  
**VIRGINIA 23173**

© Copyright by Patrick Joseph Geary, 1987.  
All rights reserved.

## ACKNOWLEDGEMENTS

A heartfelt thanks goes to my mother and father, Mary A. Geary and Dr. David P. Geary, for all their support and assistance. Without them, this thesis would have taken years longer to complete. I also wish to express my sincere gratitude to Dr. Arthur B. Gunlicks and Dr. John W. Outland for their guidance and assistance in completing this demanding but rewarding task. Finally, I would like to thank Dean John L. Gordon Jr. for his gracious help in securing financial aid for this endeavor.

This thesis was made possible in part by a grant from the University of Richmond Summer Research Program.

## TABLE OF CONTENTS

	<u>Page</u>
Acknowledgements. . . . .	iii
List of Tables and Figures. . . . .	vi
Chapter	
1. Introduction and Definition of Terms. . . . .	1
2. Brief NATO History. . . . .	14
A. Events That Led to the Treaty. . . . .	14
(1) The Marshall Plan and the Czech Coup. . . . .	17
(2) The Brussels Treaty. . . . .	20
(3) The Vandenberg Resolution. . . . .	22
(4) Different Motivations. . . . .	23
B. German Rearmament. . . . .	25
(1) The Korean War Catalyst and the European Defense Community (EDC). . . . .	25
(2) The Western European Union (WEU). . . . .	28
C. The French Withdrawal. . . . .	30
D. NATO Today. . . . .	33
3. NATO Conventional Battlefield Strategy. . . . .	36
A. Early Strategies. . . . .	38
B. Today's Strategy. . . . .	40
(1) Tactics. . . . .	44
(2) Air/Ground Interdiction. . . . .	51
4. Forward Defense Factors. . . . .	55
A. Factors Complementing Forward Defense. . . . .	55
(1) Natural Barriers (Terrain). . . . .	55
(2) Man-made Barriers. . . . .	57
(3) Force-to-Space Ratios. . . . .	60

(4) Attrition and Exchange Rates. . .	62
(5) Command Style . . . . .	64
B. Factors Affecting Forward Defense Implementation . . . . .	66
(1) Surprise Attack . . . . .	66
(2) Mobilization and Reinforcement. .	71
5. Summary and Conclusions . . . . .	76
A. Summary. . . . .	76
B. Military and Political Conclusions . .	77
Bibliography. . . . .	82



LIST OF TABLES AND FIGURES

<u>Table</u>		<u>Page</u>
1.	NATO/Warsaw Pact Conventional Battlefield Forces in Europe. . . . .	37

<u>Figures</u>		
1.	NATO's Central Front: Corps Sectors of Military Responsibility . . . . .	45
2.	Most Likely Routes of a Pact Attack Against NATO. . . . .	48

## CHAPTER ONE

### INTRODUCTION

Defending oneself against potential enemies has always been and always will be one of the most important aspects of survival. Once a threat has been recognized, failure to prepare adequately for that threat invites its worst consequences. This thesis is concerned with the defensive preparation for one of the most widely recognized threats in the world--the threat of Soviet domination of Western Europe.

Of course the threat to Western Europe is not limited to military invasion. There are many complex factors that contribute to the overall danger. Among them are political intimidation, economic suffocation and industrial/political espionage. However, these threats all originate from the military threat. It is the military threat to Western Europe that is the most apparent and would have the most immediate consequences in the region. The scope of the thesis will therefore be limited to the military threat to Western Europe.

The military threat, however, is also very complex. In pondering defensive preparation to meet the military threat, some of the questions that readily come to mind are: What might cause the outbreak of hostilities? If armed conflict

were to begin, what tactics should be used on the battlefield? What role should nuclear, biological or chemical weapons play and what naval strategy should be used? Since each of these questions could be the subject of a separate study, this thesis will focus on conventional battlefield strategy.

Although we live in a time in which strategies using nuclear weapons dominate the attention of most defense analysts, there is an increasing number of reasons why more attention should be paid to conventional defense strategy. These include:

- 1) the need to improve NATO conventional forces, which has been labeled as moral and practical by virtually every reputable commission, study or authority in recent years;<sup>1</sup>
- 2) the suspicion that the Soviets have been planning for potential nonnuclear (conventional) armed conflict in Europe since the early 1970's;<sup>2</sup>
- 3) the fact that NATO policy makers are now giving serious consideration to the possibility of

---

<sup>1</sup> Robert B. Killebrew, Conventional Defense and Total Deterrence: Assessing NATO's Strategic Options (Wilmington, Delaware: Scholarly Resources, 1986), p. 7.

<sup>2</sup> Graham D. Vernon, Soviet Options for War in Europe: Nuclear or Conventional? (Washington, D.C.: National Defense University, 1979), pp. 14-15.

fighting battles similar to those of World War II which were entirely conventional in nature;<sup>3</sup>

- 4) the desire to maintain a conventional strategy so as to offer an alternative to the possibility of a nuclear stalemate or nuclear holocaust;
- 5) the concern that, since the Soviets have achieved parity or superiority vis-a-vis the U.S. in virtually every category of nuclear weapon, the threat to escalate to nuclear weapons as a deterrent in armed conflict is much less credible today;<sup>4</sup>
- 6) the recognition that, as public abhorrence for the use of nuclear weapons increases, the importance of conventional weapon strategy as part of the

---

<sup>3</sup> Ibid.

<sup>4</sup> Waldo D. Freeman, NATO Central Region Forward Defense: Correcting the Strategy/Force Mismatch (Washington, D.C.: National Defense University, 1981), p. 1; Killebrew, op. cit., p. 1.

overall deterrent strategy has also increased significantly;<sup>5</sup>

- 7) the belief that the Soviets know that conventional superiority would allow them to intimidate Western Europe politically;<sup>6</sup> and
- 8) the expectation that if the Soviets did achieve overwhelming conventional superiority, war would become much more likely since war is most likely to occur when one side believes a quick victory is possible.<sup>7</sup>

These reasons reveal the importance of writing on conventional battlefield strategy.

The intent of the strategy discussed here, if it is perceived by a potential adversary to be effective and capable of inflicting unacceptable losses, is to deter that adversary from initiating armed conflict. The question that remains for defense planners is: What is the most effective

---

<sup>5</sup> Phillip R. Lindner, "Consideration of a Conventional Defense of Central Europe," in Conventional Deterrence: Alternatives for European Defense, James R. Golden, Asa A. Clark, Bruce E. Arlinghaus, eds. (Lexington, Mass.: Lexington Books, 1984), p. 109; Vernon, op. cit., pp. 15-16; Helmut Schmidt, The 1977 Alastair Buchan Memorial Lecture Survival, 20 (Jan.-Feb. 1978), 2-10; see also the annual Posture Statements of the secretaries of defense of the United States since the early 1960's as noted in John J. Mearsheimer, Conventional Deterrence (Ithaca, New York: Cornell University Press, 1983), p. 213.

<sup>6</sup> Killebrew, op. cit., pp. 1-2.

<sup>7</sup> Mearsheimer, op. cit., p. 24.

strategy for maintaining deterrence and, failing that, what is the most effective strategy to ensure victory if hostilities commence? The purpose of this thesis is thus to identify and examine NATO battlefield strategy so that the reader can be in a position to evaluate it. This is significant because the lives of every citizen of the free world, as well as the lives of others, are affected either directly or indirectly by the ability of NATO to defend its members.

Having identified the purpose of this study, it is now necessary to outline what will be accomplished by the time the thesis is completed. The introductory chapter illustrates the organization of the thesis and defines some of the pertinent terms to be used. The second chapter briefly discusses the history of NATO. This chapter is arranged into four main sections. The first of these describes the events leading up to the formation of the NATO alliance. The second section focuses on the early issue of German rearmament and is divided into two subsections: 1) the Korean War as a catalyst and the European Defense Community, and 2) the formation of the Western European Union as an alternative to the European Defense Community. The third section in this chapter discusses the French withdrawal from the integrated military command structure of NATO in the 1960's, the reasons for the withdrawal and the

effect it had on the overall NATO defensive strategy. The final section in this chapter illuminates some of the present day features of NATO. Specifics in this section will examine the organizational structure of NATO and the methods used for resolving political and military conflict.

The third chapter of the thesis examines NATO battlefield strategy. The first section within this chapter reviews the history of NATO conventional battlefield strategy. The two main NATO battlefield strategies that predated today's forward defense strategy are discussed. The second section within this chapter explores the current strategy. This section has a subsection on NATO battlefield tactics, and a subsection on NATO air/ground interdiction. The subsection on air/ground interdiction outlines the concept of Follow-on Forces Attack and how it relates to the overall implementation of Forward Defense.

The fourth chapter illuminates major factors in Forward Defense. The first section examines factors that complement the strategy. There are six subsections in this section. They include: 1) terrain (natural barriers), 2) man-made barriers, 3) force-to-space ratios, 4) attrition and exchange rates, and 5) command style. The second section of this chapter examines factors that affect the implementation of Forward Defense. The discussion here includes a subsection on the scenario of a surprise attack and a subsection on the NATO decision on mobilization and

reinforcement. The final chapter summarizes the work and provides some military and political conclusions.

Before proceeding with the main body of this work, it is necessary to define some of the terms that will be used.

ACE-- Allied Command Europe. The ACE jurisdiction includes the area from the North Cape of Norway to the Mediterranean Sea and from the eastern border of Turkey to the Atlantic Ocean excluding the United Kingdom and Portugal. ACE includes five subordinate commands: AFCENT, AFNORTH, AFSOUTH, UKAIR, and AMF. ACE is one of three major regional commands within NATO.<sup>8</sup>

AFCENT-- Allied Forces of Central Europe. The countries that assign forces to AFCENT are: Belgium, Canada, Luxembourg, the Netherlands, the United Kingdom, the United States and West Germany. The AFCENT

---

<sup>8</sup> North Atlantic Treaty Organization, NATO Handbook (Brussels: NATO Information Service, 1985), p. 37; Gregory R. Copley and Clifford M. Weiss, eds., Defense and Foreign Affairs Handbook, 1985 ed. (Washington, D.C.: Perth Corporation, 1985), p. 837.



command is responsible for defending the NATO area between the Elbe River in northern West Germany to the Austrian and Swiss borders. AFCENT has two subdivisions: NORTHAG and CENTAG and is headquartered at Brunssum, Netherlands.<sup>9</sup> The thesis is mainly concerned with this geographical area.

AFNORTH--

Allied Forces of Northern Europe. The AFNORTH command is responsible for defending Norway, Denmark, West Germany north of the Elbe River and the approaches to the Baltic Sea. AFNORTH is headquartered in Kolsaas, Norway.<sup>10</sup>

AFSOUTH--

Allied Forces of Southern Europe. The AFSOUTH command is responsible for defending Italy, Greece and Turkey. In addition, the United States Sixth Fleet, which falls under the AFSOUTH command, is also

---

<sup>9</sup> Copley, loc. cit., p. 837.

<sup>10</sup> Ibid.

responsible for defending the communications and supply lines in the Mediterranean Sea and the Black Sea territorial waters of Turkey. AFSOUTH is headquartered in Bagnoli, Italy.<sup>11</sup>

AMF--

ACE Mobile Force. AMF is a relatively small multinational force designed for operations primarily in the northern and southern NATO flanks. The AMF is highly mobile and can be deployed rapidly in any area of ACE. It is headquartered in Sechenheim, West Germany.<sup>12</sup>

Battlefield--

John Mearsheimer, a renowned defense analyst, defined this term as an area "on which two large armies directly face each other and, if war breaks out, directly engage each other in a relatively

---

11 Ibid.

12 Ibid.; NATO Handbook, loc. cit.

large amount of space."<sup>13</sup> In this thesis, the term refers to the modern battlefield in which armored vehicles such as tanks dominate the scene. It excludes armed conflict in which guerrilla warfare or naval and air warfare dominate. Air warfare is included as a part of the battlefield strategy but does not dominate it.<sup>14</sup>

CENTAG--

Central Army Group. One of two subdivisions of AFCENT.

Conventional Weapons--

Any weapon that is not nuclear, biological, chemical or space based.

Deterrence--

Mearsheimer defines this as "persuading an opponent not to initiate a specific action because the perceived benefits do not justify the estimated costs and risks."<sup>15</sup> In this thesis it applies to persuading a potential

---

<sup>13</sup> Mearsheimer, op. cit., p. 15.

<sup>14</sup> Ibid.

<sup>15</sup> Ibid., p. 14.

adversary not to initiate armed conflict with NATO members because the costs of doing so would outweigh the benefits.

Doctrine--

According to Ted Schroeder, a noted military author, doctrine is "a series of simple universal principles of warfare embodied in a set of human beliefs."<sup>16</sup> Unlike strategy, with which it is often confused, doctrine only describes behavior, it does not urge people how to act.<sup>17</sup>

NATO--

North Atlantic Treaty Organization.

NORTHAG--

Northern Army Group. One of two subdivisions of AFCENT.

SACEUR--

Supreme Allied Commander of Europe. The current SACEUR is General Bernard W. Rogers.<sup>18</sup> The SACEUR is always an American officer. He commands ACE. The commanders-in-

---

<sup>16</sup> Ted Schroeder, "Doctrine and Strategy: The Misunderstood Basics," Military Review, 66 (May 1986), p. 13.

<sup>17</sup> Ibid., p. 14.

<sup>18</sup> NATO Handbook, op. cit., p. 9.

chief of all five ACE sub-commands (AFNORTH, AFCENT, AFSOUTH, UKAIR, and AMF) report directly to the SACEUR. In addition, the SACEUR commands the Allied Tactical Air Forces and the integrated NATO staff at SHAPE.<sup>19</sup>

SHAPE--

Supreme Headquarters of the Allied Powers of Europe. SHAPE is the headquarters of ACE and is located at Casteau, Belgium.<sup>20</sup>

Strategy--

Strategy as it applies to this thesis is the plan of action for large scale combat operations. According to Schroeder, "strategy is a set of interconnected statements" about deployment and employment of military forces.<sup>21</sup>

UKAIR--

The United Kingdom Air Forces. UKAIR is always commanded by a British Air Officer and is

---

19 Copley, loc. cit.

20 Ibid.

21 Schroeder, op. cit., pp. 15-16.

headquartered at High Wycombe, UK. Its responsibilities include: long and short range air support, maritime support, conventional attack, reconnaissance, air defense, and nuclear strike.<sup>22</sup>

---

<sup>22</sup> Copley, loc. cit.

CHAPTER TWO  
BRIEF NATO HISTORY

Events That Led To The Treaty

Europe was economically, politically, and militarily dependent on the United States after World War II. The uneasy alliance between the Western allies and the Soviet Union had begun to deteriorate only a few months after the end of the war. Hostility and suspicion towards the Soviets were steadily increasing. The Soviets had begun taking advantage of a power vacuum in Europe that had been created at the conclusion of the war as a result of the rapidly decreasing American presence and the tremendous political and economic instability that had developed. Soviet military, political and economic pressure on territories it had occupied in the final stages of the war spawned widespread concern over the looming threat of Soviet dominance over all of Europe.<sup>23</sup>

Ironically, one of the first persons to recognize the Soviet threat to democratic countries after World War II was the ever-optimistic Winston Churchill. Churchill, the British Prime Minister during the war, identified the

---

<sup>23</sup> Michael Howard, "Reassurance and Deterrence: Western Defense in the 1980's," Foreign Affairs 61 (1983), 310.

impending menace of Soviet military superiority over Europe in a telegram to President Truman on May 12, 1945.

I am profoundly concerned about the European situation.... Our armies ... [are] likely to undergo a marked reduction....

What will be the position in a year or two when the British and American Armies have melted and the French have not yet been formed ... and when Russia may choose to keep 200-300 divisions on active service?<sup>24</sup>

Churchill's fears were realized when the allies began to disarm at an alarming rate. On May 7, 1945, the day Germany surrendered to the allies, the United States had 3,100,000 men under arms in Europe. Great Britain had 1,321,000 and Canada had 299,000. Within one year, the American armed strength in Europe had eroded to 391,000, British numbers had declined to 488,000 and the Canadians had departed completely. At the same time, the Soviets kept their armed forces at full strength (about 4-1/2 million men) and maintained their war materiel production at full capacity.<sup>25</sup>

Fear and anxiety were also enhanced among democratic countries after the Soviets annexed large amounts of European territory. These annexations represented the

---

<sup>24</sup> Lord Ismay, NATO: The First Five Years 1949-1954 (Utrecht, Netherlands: Bosch, 1954), pp.3-4, citing Sir Winston Churchill, Triumph and Tragedy (n.d: n.p., n.d.) n. pag.

<sup>25</sup> Lord Ismay, op. cit., pp. 4 and 7.



subjugation of nearly 25 million people and 200,632 square miles of land. Whole countries such as Lithuania, Latvia and Estonia were annexed in their entirety. The Soviets also annexed the Czechoslovakian region of Subcarpathia, Romania's Bessarabian region and part of Bukovina, Finland's Petsamo district and part of the Karelian isthmus, part of East Prussia, and eastern Poland.<sup>26</sup>

Another factor contributing to the extreme anxiety of western European countries at the time was the total dominance that the Soviets were able to establish over all of eastern Europe. The Soviets used the continuing presence of their massive armed forces to intimidate and coerce the governments of Albania, Bulgaria, Czechoslovakia, Eastern Germany, Hungary, Poland and Romania. This "conquest without war" represented the suppression of an additional 87 million non-Russian people with incomes totaling nearly half of the entire national income of the Soviet Union. It also meant that approximately 392,439 more square miles of land were under Soviet control.<sup>27</sup>

More than fear of a direct military attack, the major concern was that economic and political collapse would soon make a Soviet military attack unnecessary. In the wake of

---

<sup>26</sup> Walter Lacquer, Europe Since Hitler: The Rebirth of Europe, 2d rev. ed. (Harrisonburg, Virginia: R.R. Donnelley and Sons, 1982), p. 22; *Ibid.*, p. 5.

<sup>27</sup> Lord Ismay, *loc. cit.*

World War II, widespread economic distress had taken place and the Soviets were moving to exploit the situation. By penetrating coalition governments in this environment, the Soviets were able to gain control over a large part of Europe.<sup>28</sup> It became obvious that unless Europe received tremendous economic and military aid, it would be increasingly susceptible to political collapse and Soviet domination.<sup>29</sup> The American economic effort to prevent such a collapse was called the European Recovery Program, otherwise known as the Marshall Plan.

#### The Marshall Plan and the Czech Coup

The European Recovery Program was launched in a speech by Secretary of State and General of the Army, George C. Marshall, on June 5, 1947.<sup>30</sup> The Marshall Plan was a four-year program in which billions of dollars were granted to Europe for the purpose of facilitating its economic recovery

---

28 Sir Nicholas Henderson, The Birth of NATO (London: Wiedenfeld and Nicolson, 1980), xi; Michael Howard, loc. cit.

29 Phil Williams, "The United States' Commitment to Western Europe: Strategic Ambiguity and Political Disintegration," International Affairs 59 (Spring 1983), 200.

30 Ismay, op. cit., p. 6.

from the war.<sup>31</sup> It was open to all European countries including the Soviet Union and the countries under its control. Two countries under Soviet control, Poland and Czechoslovakia, actually sought aid from the Marshall Plan. However, the Soviets forbade all countries under their domain from accepting any aid from the Plan. Instead of accepting the American offer, they set up the Communist Information Bureau (COMINFORM) to organize opposition to the Plan.<sup>32</sup>

The Soviet reaction to the Marshall Plan is perceived by many observers as the turning point in the American, British and French governments' policies toward the Soviet Union. The personal reactions of Soviet officials were so contemptuous and abusive that Ernest Bevin, the British Foreign Secretary, and Georges Bidault, the French Foreign Minister, were led to believe that any future cooperation with the Soviet Union would be impossible.<sup>33</sup> Not long after this, when the Council of Foreign Ministers (a series of meetings of the foreign ministers of the four major victors

---

31 Ernst H. Van Der Beugel, From Marshall Aid to Atlantic Partnership (New York: Elsevier, 1966), pp. 18, 107-108, 166.

32 William Park, Defending the West: A History of NATO (Boulder, Colorado: Westview, 1986), p. 5; Sir Nicholas Henderson, loc. cit.; NATO Handbook, op. cit., p. 70.

33 Baron Robert Rothschild, "Belgium and the Longest Lasting Alliance," NATO Review, 30 (Feb. 1982), 20.

of World War II [the United States, Great Britain, France and the Soviet Union] that was designed to resolve differences on the fate of Germany)<sup>34</sup> broke up for the last time in December of 1947, Bevin was moved to say to Marshall,

I am convinced that the Soviet Union will not deal with the West on any reasonable terms in the foreseeable future and that the salvation of the West depends upon the formation of some form of union formal or informal in character in Western Europe, backed by the United States and the Dominions, such a mobilization of moral and material forces as will inspire confidence and energy within, and respect elsewhere.<sup>35</sup>

This breakdown of the Council of Ministers came to represent the end of cooperation between the West and the Soviet Union.<sup>36</sup>

Bevin's desire for a union within Western Europe spread convincingly among more and more European leaders but some were still hesitant. The events of February 25, 1948, helped persuade remaining doubters about the need for a union. On that date, the Soviet Union instigated a coup d'etat in Czechoslovakia. The Communist Party there

---

34 Cees Wiebes and Bert Zeeman, "The Pentagon Negotiations March 1948: The Launching of the North Atlantic Treaty," International Affairs 59 (Summer 1983), 352.

35 Theodore C. Achilles, "US Role in Negotiations that Led to Atlantic Alliance: Part I," NATO Review 27 (Aug. 1979), 11.

36 Ismay, op. cit., p. 5.

overthrew the government and installed a regime that was a puppet of the Soviet Union. Soon after the takeover, one of Czechoslovakia's most respected figures, Foreign Minister Jan Masaryk, jumped--some say was thrown--from a high-story building window to his death.<sup>37</sup> The impact of these events on world opinion was thunderous. The feeling of the time was that if the Soviets would do this once, what would prevent them from doing it again? Many felt there was little a democracy could do to prevent a duplication of those events in lieu of armed military strength.<sup>38</sup>

### The Brussels Treaty

The first step in the evolution of the solution to this threat came with the signing of the Brussels Treaty on March 17, 1948. Many people feel that if it were not for the signing of the Brussels Treaty, the North Atlantic Treaty would never have been created. American policy makers were reluctant to entangle the United States into any kind of alliance unless the Europeans first indicated their own willingness to cooperate among themselves.<sup>39</sup> The Brussels

---

<sup>37</sup> Josef Korbel, The Communist Subversion of Czechoslovakia 1938-1948: The Failure of Coexistence (Princeton: Princeton University Press, 1959), p. 156.

<sup>38</sup> Lord Gladwyn, The Memoirs of Lord Gladwyn (London: Weidenfeld and Nicolson, 1972), p. 213.

<sup>39</sup> Rothschild, op. cit., p. 22; NATO Handbook, loc. cit.

Treaty provided that evidence. It represented the first real evidence of West European interest in postwar cooperation.<sup>40</sup>

The most significant part of the Brussels Treaty is the original Article IV which states:

If any of the High Contracting Parties should be the object of an armed attack in Europe, the other High Contracting Parties will, in accordance with the provisions of Article 51 of the Charter of the United Nations, afford the Party so attacked all the military and other aid and assistance in their power.<sup>41</sup>

To the United States, the treaty represented the five signatories' (Great Britain, France, Belgium, The Netherlands and Luxembourg) willingness to commit themselves to a consortium of collective defense and internal stability.<sup>42</sup> President Truman emphasized its importance to Congress on the very day the treaty was signed:

I am confident that the United States will, by appropriate means, extend to the free nations the support which the situation requires. I am sure that the determination of the free countries of Europe to protect themselves will be matched by an

---

40 Stanley R. Sloan, NATO's Future: Toward a New Transatlantic Bargain (Washington, D.C.: National Defense University Press, 1985), p. 3.

41 Ibid., p. 207; Van der Beugel, op. cit., p. 123. Article IV became Article V with the Protocol amendments of 1954.

42 Sloan, op. cit., pp. 3-4.

equal determination on our part to help them to protect themselves.<sup>43</sup>

The stage was set for the United States' response to the European overture.

### The Vandenberg Resolution

Probably the most important step in the process of including the United States in an alliance with West European countries was the United States Senate's adoption of Senate Resolution No. 239 on June 11, 1948. Otherwise known as the Vandenberg Resolution, it was named after its principal author, Senator Arthur H. Vandenberg of Michigan, who was also the chairman of the Senate Committee on Foreign Relations at the time. The resolution marked a significant change in the foreign policy of the United States during peacetime.<sup>44</sup> For the first time, the United States Senate was recommending that the Administration pursue "regional and other collective arrangements for individual and collective self defense," and the "association of the United States, by constitutional process with such regional and other collective arrangements as are based on continuous and

---

<sup>43</sup> Harry S. Truman, Years of Trial and Hope: 1946-1952 (New York: Doubleday, 1965), p. 279.

<sup>44</sup> Alan K. Henrikson, "The Creation of the North Atlantic Alliance," Naval War College Review 33 (May/June 1980), 16-17; Ismay, *op. cit.*, pp. 9-10.

effective self-help and mutual aid."<sup>45</sup> Even though the resolution was carefully vague, it paved the way for negotiators to form an Atlantic alliance under the provisions of the United Nations' Charter.<sup>46</sup>

At this point, negotiations to form an Atlantic alliance began in earnest between the Brussels Treaty powers, the United States, and Canada. Later, Denmark, Iceland, Italy, Norway, and Portugal were formally invited to join the alliance.<sup>47</sup> As negotiations on the wording of the treaty progressed, it became evident the reasons for creating the alliance were diverse.

#### Different Motivations

For the Americans, the alliance was seen as an opportunity to enhance their strategic capabilities while simultaneously preventing the vast resources of Europe from falling under Soviet control. They realized that a strong and secure Europe would 1) be a tremendous hedge against Soviet expansionism and 2) continue to serve as an important market for American goods.<sup>48</sup> Americans also saw aid to

---

<sup>45</sup> North Atlantic Treaty Organization, NATO Facts and Figures (Brussels: NATO Information Service, 1981), p. 7.

<sup>46</sup> Henrikson, op. cit., p. 17; Ismay, op. cit., p. 9.

<sup>47</sup> Ismay, op. cit., pp. 10-11.

<sup>48</sup> Williams, loc. cit.



Europe as only temporary. The U.S. hoped that the aid would allow Europe to regain its former strength and stature so that eventually Europe would be able to fend for itself with an absolute minimum of U.S. help.<sup>49</sup>

The Europeans saw it differently. They viewed the alliance not as a temporary solution but as a means to ensure American commitment to the region. Europeans were particularly interested in securing the "umbrella" of American strategic nuclear weapons for protection against the Soviet military threat.<sup>50</sup> They wanted the alliance more as a measure of confidence to offset their own collective inability to manage any new crisis more than as protection against a military attack. NATO to them was a security blanket upon which they could rebuild their shattered economies. Europeans felt American presence in particular was needed to stabilize the region.<sup>51</sup>

Despite their differences, both Europeans and Americans recognized the mutual benefits of forming an alliance and did so officially by signing the North Atlantic Treaty on April 4, 1949, in Washington, D.C.<sup>52</sup> However, differences

---

49 Simon Lunn, Burden-sharing in NATO (London: Routledge and Kegan Paul, 1983), p. 8.

50 Ibid., p. 9.

51 Howard, loc. cit.; Lunn, op. cit., pp. 9-10.

52 NATO Handbook, op. cit., p. 71.

still existed between the U.S. and the Europeans. One of the most prominent was the question of how West Germany would fit into the new alliance. This will be discussed under the German Rearmament section.

### German Rearmament

#### The Korean War Catalyst and the European Defense Community (EDC)

The outbreak of the Korean War in June of 1950 heightened fears that Western Europe might be the object of a Soviet invasion. NATO in general and the U.S. in particular realized that conventional forces in Europe were inadequate to repel such an attack. President Truman decided to deploy a significant number of American troops in Europe in September 1950.<sup>53</sup> However, the U.S. had a major military commitment in Korea and was still leery of getting over-committed in Europe. So, the Americans began to insist that Europeans increase their share of the defense burden in NATO. The U.S. believed the best way to accomplish this was through the rearmament of West Germany.<sup>54</sup> To back up their demands, they linked the rearmament of Germany to the continued American economic aid that Europeans still

---

<sup>53</sup> Stephen George, Politics and Policy in the European Community (Oxford: Clarendon Press, 1985), p. 18; Sloan, *op. cit.*, pp. 10-11.

<sup>54</sup> George, *loc. cit.*

desperately needed. Secretary of State Dulles also strongly hinted that if the Europeans did not contribute more to their own defense, the U.S. might withdraw some of its troops from Europe.<sup>55</sup>

Many Europeans, especially the French, could not bear the thought of a rearmed Germany. The French were particularly sensitive not only because of the long history they had had as mortal enemies with Germany but also because of their common border. The U.S., however, was persistent in its demands because it saw a German contribution as essential to the defense of Europe against Communist forays from the east.<sup>56</sup>

The French responded by proposing the Plevin Plan, named after its author, French Prime Minister René Plevin. The Plevin Plan called for a European army to be directed under a supranational structure including a European minister of defense responsible to a European assembly. The European army was to include West German participation but without allowing a West German national army.<sup>57</sup> The Plevin

---

<sup>55</sup> Ibid.; U.S. Department of State, Foreign Relations of the United States: Western Europe, Vol. 3 (1950), p. 498.

<sup>56</sup> George, loc. cit.

<sup>57</sup> Geoffrey Warner, "The United States and the Rearmament of Western Germany, 1950-4," International Affairs, 61 (1985), 281; Josef Joffe, "Europe's American Pacifier," Foreign Policy (Spring, 1984), 70; George, op. cit., pp. 18-19.

Plan also called for all West German troops to be subject to the direction of the European army while the other European countries would have to commit only a portion of their forces.<sup>58</sup> The proposal was widely opposed even in France. The U.S. and West Germany encouraged its approval, however, and after the NATO ministerial meeting in Lisbon in February of 1952, considerable progress had been made towards its approval.<sup>59</sup> Subsequent to a few changes, the plan was renamed the European Defense Community (EDC), and was signed by Belgium, France, West Germany, Italy, Luxembourg, and the Netherlands, on May 27, 1952.<sup>60</sup> Ratification, though, was another story.

More than a year and a half passed before a single country ratified the treaty. It was especially in trouble in France. The French were highly suspicious, possibly with good reason, that under the EDC as it stood then the U.S. and Great Britain would lose interest in keeping their troops stationed on the continent. They feared that French forces would be left virtually alone to defend against a rearmed bigger, stronger German army.<sup>61</sup> Pressure from the

---

58 George, op. cit., p. 18.

59 Ibid., p. 19; Sloan, op. cit., p. 16.

60 Joffe, loc. cit.; Warner, op. cit., p. 283.

61 Sloan, op. cit., pp. 21-22.

U.S. to ratify the treaty persisted, but support for it continued to erode and it was defeated by the French National Assembly by almost 2 to 1 in August of 1954.<sup>62</sup> It appeared that until there was some sort of British association with the EDC and a commitment by the U.S. to keep its troops in Europe, there could be no solution to the problem of how to integrate West Germany into the Western family.<sup>63</sup>

#### The Western European Union (WEU)

British Foreign Secretary Anthony Eden saw the Brussels Treaty as a possible solution to the dilemma facing Europe. A conference was called to meet at London to discuss the problem of German rearmament; it was later moved to Paris. At the conclusion of this conference, an agreement had been reached between all concerned parties regarding West German sovereignty and rearmament.<sup>64</sup> These London and Paris agreements, which were concluded in October of 1954, became the basis for the WEU. Under the agreements, the Federal Republic of Germany was granted its sovereignty and the British, French and U.S. occupation of Germany was ended. In exchange West Germany agreed to allow foreign military

---

62 Ibid., pp. 22-25.

63 Warner, loc. cit.

64 Warner, op. cit., pp. 285-286.

forces to be stationed on its territory without reducing their size. The Western Union Defense Organization, which was created by the Defense Ministers of the Brussels Treaty, became the Western European Union while West Germany and Italy were invited to join the Brussels Treaty as part of the agreements. It was also agreed that West Germany would become a member of NATO but its military would be under the scrutiny of the WEU. The final part of the agreements stated that the U.S. and the United Kingdom would commit military troops on the continent of Europe for as long as their allies desired.<sup>65</sup> The agreements forming the WEU were signed in Paris on October 23, 1954, and were ratified by all seven members (Belgium, France, the Federal Republic of Germany, Italy, Luxembourg, the Netherlands, and the United Kingdom) by May 6, 1955, when it went into effect.<sup>66</sup> It marked the foundation of the strong European defense that exists today.

The new terms of the WEU provided the French with the guarantees that were the stumbling block to previous attempts to solve the defense problem. All members of the WEU are bound by treaty to automatic military and other aid

---

<sup>65</sup> Stanley R. Sloan, "European Co-operation and the Future of NATO," Survival, 26 (1984), 245; Ismay, op. cit., p. 9.

<sup>66</sup> NATO Facts and Figures, op. cit., p. 16.

if any member is attacked.<sup>67</sup> That has allayed fears of a resurgent West Germany enough to allow it to become what the U.S. insisted on--a key part of the NATO deterrence effort for all of Europe.

The main responsibility of the WEU was originally to oversee the German rearmament. In recent years, however, that responsibility has steadily eroded to the point now where it is almost non-existent. Controls against German production of different types of conventional arms have gradually been removed. The last restrictions against German production of conventional arms were removed in a WEU Council meeting in June of 1984.<sup>68</sup>

#### The French Withdrawal

The final major event in the evolution of NATO was the French withdrawal from the integrated military command. On February 21, 1966, French President Charles de Gaulle announced at a press conference that all French forces in Germany and all French personnel assigned to Allied commands would be withdrawn from Allied command on July 1, 1966. NATO was also asked to remove its headquarters (SHAPE), and all NATO forces and facilities from French territory by April 1, 1967. In addition, the French wanted all U.S. and

---

67 Joffe, op. cit., p. 71.

68 Sloan, NATO's Future, op. cit., pp. 173-174.

Canadian installations on French soil to be closed or their commands transferred to France by the same date. De Gaulle did, however, make it clear that France was not withdrawing from NATO entirely--just from the integrated military command. Indeed, he promised that France would continue to abide by treaty obligations and continue to participate in the political aspects of NATO.<sup>69</sup>

Even though the announcement was greeted with alarm from several Allied capitals, the French attitude was known for quite some time.<sup>70</sup> In the 1950's, France became disillusioned with the Alliance, especially with the U.S., when the NATO allies expressed their support for the French role in Indochina but then refused to provide critical military assistance to French forces when they were under siege at Dien Bien Phu (now part of northern Vietnam). The French became further exasperated when the U.S. did not support France in their military struggle in Algeria and again when the U.S. actively opposed France and Great Britain in the Suez Canal crisis of 1956. From these events and others, France came to resent American leadership in the Alliance and longed for a much more independent role in

---

<sup>69</sup> James A. Huston, One for All: NATO Strategy and Logistics through the Formative Period (1949-1969) (Newark, N.J.: University of Delaware Press, 1984), pp. 143-144; Sloan, NATO's Future, op. cit., p. 37.

<sup>70</sup> Huston, op. cit., p. 143.



global affairs.<sup>71</sup> The decision to end its relationship with NATO's integrated military command was a consequence of these feelings.

The Alliance suffered some important political costs as a result of the French move. The political balance within the Alliance was substantially altered--forcing even more dependence on American leadership because of the reduced French influence. More significant to this thesis, however, the French move also had some detrimental effects on NATO's military capabilities--mainly in communication and supply lines. The loss of France in the integrated military command of NATO meant not only that the allies could no longer rely on French troops joining any future battle for the defense of Europe, but that allied efforts to bring in reinforcements and new supplies would be much more vulnerable to enemy attacks since they would be forced to use seaports much closer to probable front lines of battle.<sup>72</sup>

Fortunately, the Allies were up to the challenge that the French withdrawal posed. Instead of allowing themselves an emotional outburst when the French announced their decision, they all maintained their restraint and went about

---

<sup>71</sup> Sloan, NATO's Future, op. cit., pp. 34-35.

<sup>72</sup> Ibid., pp. 37-38.

trying to solve the new problems with efficiency. According to Harlan Cleveland, then the U.S. Ambassador to NATO, even "President Johnson, whose private references to General de Gaulle stretched his considerable talent for colorful language, imposed an icy correctness on those who had reason to discuss French policy in public."<sup>73</sup> The Allies succeeded in reestablishing all necessary NATO institutions in new locations outside of France without much delay.<sup>74</sup>

#### NATO Today

The 12 original member countries were: Belgium, Canada, Denmark, France, Iceland, Italy, Luxembourg, the Netherlands, Norway, Portugal, the United Kingdom, and the United States. Greece and Turkey joined NATO in 1952. West Germany joined in 1955 and Spain joined in 1982.<sup>75</sup> NATO's 16 nations are organized into a framework of political and military consultation that meets on a regular basis to discuss pertinent issues. It is designed to provide security for its members through a two-track approach of deterrence and dialogue. Since the alliance is not a supranational organization, each member country remains

---

<sup>73</sup> Harlan Cleveland, NATO: The Transatlantic Bargain (New York: Harper and Row, 1970), p. 106.

<sup>74</sup> Sloan, NATO's Future, op. cit., p. 37.

<sup>75</sup> NATO Handbook, op. cit., pp. 71-97.

sovereign with equal status. Therefore, all NATO decisions must be reached by a consensus of its members. This makes for a cumbersome decision-making process that must allow for the different viewpoints of each member.<sup>76</sup>

The forum within NATO for political decision-making and consultation is called the North Atlantic Council. The Council is NATO's highest authority. The Council meets every week at the ambassador level (permanent representatives), twice a year at the ministerial level (member country foreign ministers) and occasionally at the heads of state level. Because of the French withdrawal from the defense structure, the Council must meet in another form for military decision-making and consultation. This forum is called the Defense Planning Committee (DPC). In defense matters, the DPC has the same authority as the Council. The ambassador or permanent representative level here also meets at least once a week, but membership in this unit is composed of representatives from countries who are members of NATO's integrated military command. The DPC ministerial level also meets twice a year, but the ministers here are the defense ministers of each member country. Both the DPC

---

<sup>76</sup> NATO Handbook, op. cit., pp. 21-22 and 33; Lunn, op. cit., p. 10.

and the Council are chaired by the Secretary General of NATO who is currently Lord Carrington of Great Britain.<sup>77</sup>

The foundation of the study has now been completed. NATO's history has been discussed and the organization's structure examined. At this point, the reader should have a good basic understanding of the complexities of NATO. The stage is now set to explore the main subject of this study-- NATO conventional defense.

---

77 NATO Handbook, op. cit., pp. 7 and 33; NATO Facts and Figures, op. cit., p. 56; Thomas J. Kennedy, NATO Politico-Military Consultation (Washington, D.C.: National Defense University Press, 1984), p. 14.

## CHAPTER 3

## NATO CONVENTIONAL BATTLEFIELD STRATEGY

At the time of this writing the historic mini-summit at Reykjavik, Iceland, was recently concluded. At that meeting between President Reagan and General Secretary Gorbachev of the Soviet Union, it was proposed for the first time in the history of arms control talks that all nuclear weapons be gradually phased out. Although an agreement on that proposal has yet to be achieved, the fact that the possibility of its realization does exist accentuates the importance of conventional defense.<sup>78</sup> Without nuclear weapons NATO defense in general and Central European defense in particular will ultimately fall back on conventional, chemical or biological weapons. The use of chemical and/or biological weapons is a real possibility, but their consideration is beyond the scope of this study.

Currently, the Soviets and their Warsaw Pact allies have numerical superiority over the NATO allies in almost every category of conventional weaponry. Table 1 on page 37 shows the striking differences between NATO and Warsaw Pact forces.

---

<sup>78</sup> Secretary George Schultz, U.S. Dept. of State, Bureau of Public Affairs, Reykjavik: A Watershed in U.S.-Soviet Relations, Current Policy No. 883 (Washington, D.C.: GPO, 1986), 1.

Table 1. NATO/WARSAW PACT CONVENTIONAL BATTLEFIELD FORCES  
IN EUROPE

Category	NATO <sup>1</sup>	Pact <sup>2</sup>
<u>Ground Forces</u>		
Division Equivalents <sup>3</sup>	90	133
Main Battle Tanks	19,600	32,000
Artillery, Mortar, & Multiple Rocket Launchers	14,200	23,000
Anti-tank Guns and Missile Launchers	13,370	18,000
Anti-aircraft Guns and Missile Launchers	6,900	12,800
Armored Personnel Carriers and Infantry Fighting Vehicles	32,850	38,000
<u>Aircraft</u>		
Armed Helicopters	1,430	1,410
Land Attack Aircraft <sup>4</sup>	2,360	3,200
Fighter/Interceptors	900	2,700 <sup>5</sup>

Source: Adapted from Andrew Hamilton, "Redressing the Conventional Balance," International Security 10 (Summer 1985), 114; U.S. Department of Defense, Soviet Military Power 1987 (Washington, D.C.: GPO, 1987), pp. 92-93.

1 U.S. Estimate of 1986 NATO data; excludes France and Spain; in place in Europe and rapidly deployable forces.

2 In place in Europe and rapidly deployable forces.

3 Warsaw Pact divisions normally consist of fewer personnel than many NATO divisions but contain more tanks and artillery, thereby obtaining similar combat power.

4 Includes reconnaissance aircraft.

5 Excludes Soviet strategic (long-range) interceptors.

Numbers alone however, do not tell the entire story. Other factors that contribute to the ability of the U.S. and its NATO allies to defend Central Europe with conventional weapons include the following: the quality of the weapons, the quality of the troops and their training, the morale of the troops, the skill of the field commanders and their command style, the efficiency of communications, the accuracy and quantity of intelligence, and the deployment and employment of an effective battlefield strategy (for the advantages of the defense see Chapter 4).

Although it is beyond the scope of this thesis to examine all of these topics, the discussion of this chapter and the remainder of the thesis will center on NATO conventional battlefield strategies. The debate over the acceptability of the current battlefield strategy is ongoing, but it is felt that the current NATO conventional battlefield strategy has some advantages that are commonly overlooked when examining the NATO defense posture. These advantages will be examined in chapter 4 after the following discussion on NATO strategy itself.

### Early Strategies

The evolution of today's NATO battlefield strategy for the defense of Central Europe began in the early days of NATO when the balance of forces in Europe was significantly more in favor of the Warsaw Pact (Pact), the military and

political alliance of eastern European countries which is dominated by the Soviet Union and opposed to NATO. Phillip Karber, a distinguished defense analyst, says that in the 1950's, NATO had to defend 900 km of front with only 35 brigades (a brigade is about 2,500-5,000 men), while the Soviets and their allies had over three times as many troops stationed in or near Central Europe.<sup>79</sup>

With their forces outnumbered three-to-one, NATO was forced to adopt a "Fallback" strategy. This strategy used the Rhine River in West Germany as the anchor for a prepared defense. In the event of an attack by opposing forces, NATO troops were to retreat behind the river while conducting a series of mobile screening actions to cover the retreat. These screening actions together with heavy American bombing of the Soviet Union would combine to delay and weaken the attack. Using the river as a formidable barrier, the NATO forces would regroup on its western bank and halt the enemy advance.<sup>80</sup>

NATO's introduction of approximately 7,000 tactical nuclear weapons (TNW's) and the buildup of the West German

---

<sup>79</sup> Phillip A. Karber, "The Strategy: In Defense of Forward Defense," Armed Forces Journal International 121 (May 1984), 28; Copley, *op. cit.*, p. 842; William P. Mako, U.S. Ground Forces and the Defense of Central Europe (Washington, D.C.: Brookings Institution, 1983), p. 113.

<sup>80</sup> Karber, *loc. cit.*



Army allowed the modification of conventional battlefield strategy in the 1960's. The TNW's gave NATO firepower and the ability to counter any Pact attempt to concentrate conventional forces for a breakthrough in NATO defense lines. The new weapons also gave NATO depth by providing the ability to extend the delaying zone of battle well into Eastern Europe. Nuclear interdiction strikes could now target the second echelon of Pact reinforcements, as well as lines of communication and air bases. This "Trip Wire" strategy called for NATO's conventional forces to act merely as a triggering device for the TNW's. In the face of any type of aggression, NATO's commanders were authorized to use the TNW's to prevent an enemy breakthrough.<sup>81</sup>

#### Today's Strategy

German rearmament after World War II made Forward Defense both militarily and politically necessary. First, the rearmament of West Germany added three full corps to NATO forces in Central Europe. This enabled the entire front to be covered by NATO forces because the density of brigades available for the defense line was doubled by the German contribution. The German contribution also reduced the Pact's quantitative superiority ratio to a very manageable 1.5:1. Second, mindful that any sacrifice of

---

<sup>81</sup> Ibid.; Park, op. cit., p. 30.

territory could become permanent, the German people regard any such strategy as unacceptable so they insist on a forward based strategy. If NATO battlefield strategy had continued to call for a rapid fallback to the Rhine River, sacrificing a tremendous amount of German territory in exchange for gaining time for reinforcements to arrive, the West German's would have had nothing to gain by remaining in NATO and contributing forces for the common defense.<sup>82</sup>

The doctrine for today's NATO battlefield strategy originated with the official adoption of NATO's Military Committee document 14/3 (MC 14/3) in March of 1967. It is called Flexible Response and remains in effect today. NATO's doctrine of flexible response developed as a result of Soviet advances in strategic nuclear weapons and TNW's. The Soviet advances that impelled the adoption of NATO's defense doctrine also made NATO's "Trip Wire" or "Massive Retaliation" strategy invalid. When the Soviet Union acquired virtually the same nuclear capability as the United States, NATO's previous strategy of threatening escalation to nuclear weapons lost its credibility because doing so would mean mutual destruction since both sides had acquired the ability to carry out a second strike with strategic

---

<sup>82</sup> Karber, op. cit., p. 28; Roger L.L. Facer, Conventional Forces and the NATO Strategy of Flexible Response: Issues and Approaches (Santa Monica, California: Rand Corp., 1985), p. 15; Park, op. cit., p. 177.

forces from only one country, but there are five different countries with forces assigned to the front. It is believed that using forces from five different countries adds to deterrence by making it more apparent that any attack against NATO territory would be an attack against several countries not just one.<sup>88</sup> Figure 1 shows which countries have military responsibility for which corps sectors on NATO's central front. The length of these corps sectors varies from 35 kilometers for the Belgian corps sector to 200 kilometers for the II West German corps sector. During peacetime, each corps is stationed in barracks at different distances from the front. In the event of an imminent Warsaw Pact attack, however, each corps will be deployed at its battle positions on or very near the central front. The objective in the strategy is to defeat any Pact attack right at the border.<sup>89</sup> The following two subsections describe the method that would be employed to achieve the objective.

### Tactics

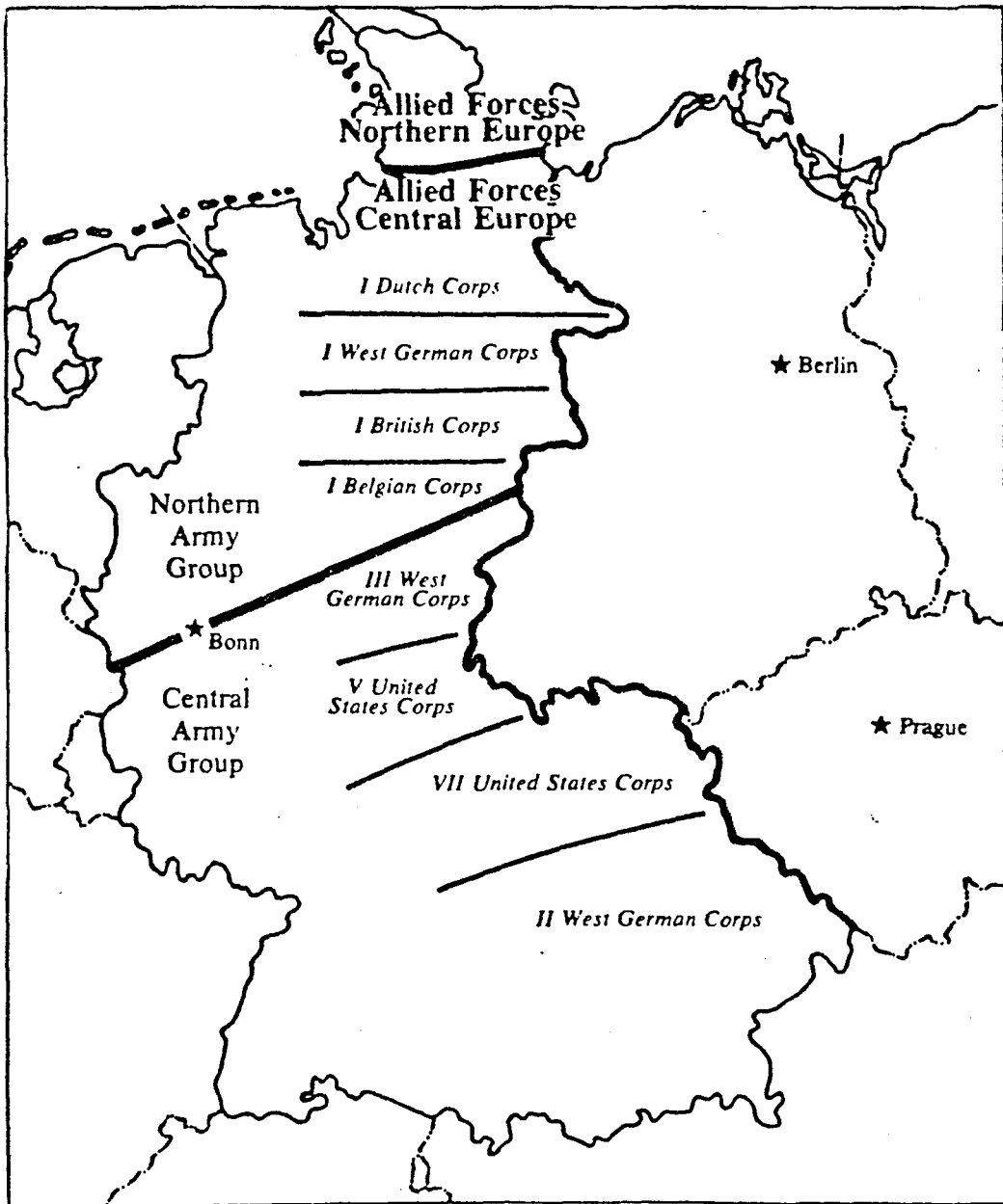
Over the years, divergent political and military interests among the various NATO countries have contributed to the tendency of each national army having a different

---

<sup>88</sup> Mearsheimer, op. cit., p. 169; Mako, op. cit., p. 33.

<sup>89</sup> Facer, op. cit., p. 16.

Figure 1. NATO's Central Front: Corps Sectors of Military Responsibility



Source: William P. Mako, U.S. Ground Forces and the Defense of Central Europe (Washington, D.C.: Brookings Institution, 1983), p. 33.

preference for the tactics to be used. In the mid 1970's however, the NATO countries that provide forces for the defense of Central Europe agreed to use the tactic called "Active Defense" to carry out the overall strategy of Forward Defense. Active Defense is a combination of established battlefield tactics. It has three elements, the covering force, the defense in sector, and the counterattack. Probably the best source for discussion on NATO's battlefield tactics is Karber's article, "The Strategy: In Defense of Forward Defense." The following passage is based on that article.<sup>90</sup>

The first element of Active Defense, the covering force, engages the enemy as soon as the border is breached by invading forces. The object of the covering force is the same as the traditional tactic of "Delay/Screening" (a form of antitank guerrilla warfare) which is to harass and ambush the leading elements of the invading force. Under Active Defense however, the covering force is heavily reinforced with mechanized infantry and tank units. The heavier concentration of men and armour allows the covering force to ensure that no forward units penetrate the main defense line at high speed. The intense resistance provided by the covering force significantly reduces the rate of advance by forcing the invaders to regroup into an assault formation

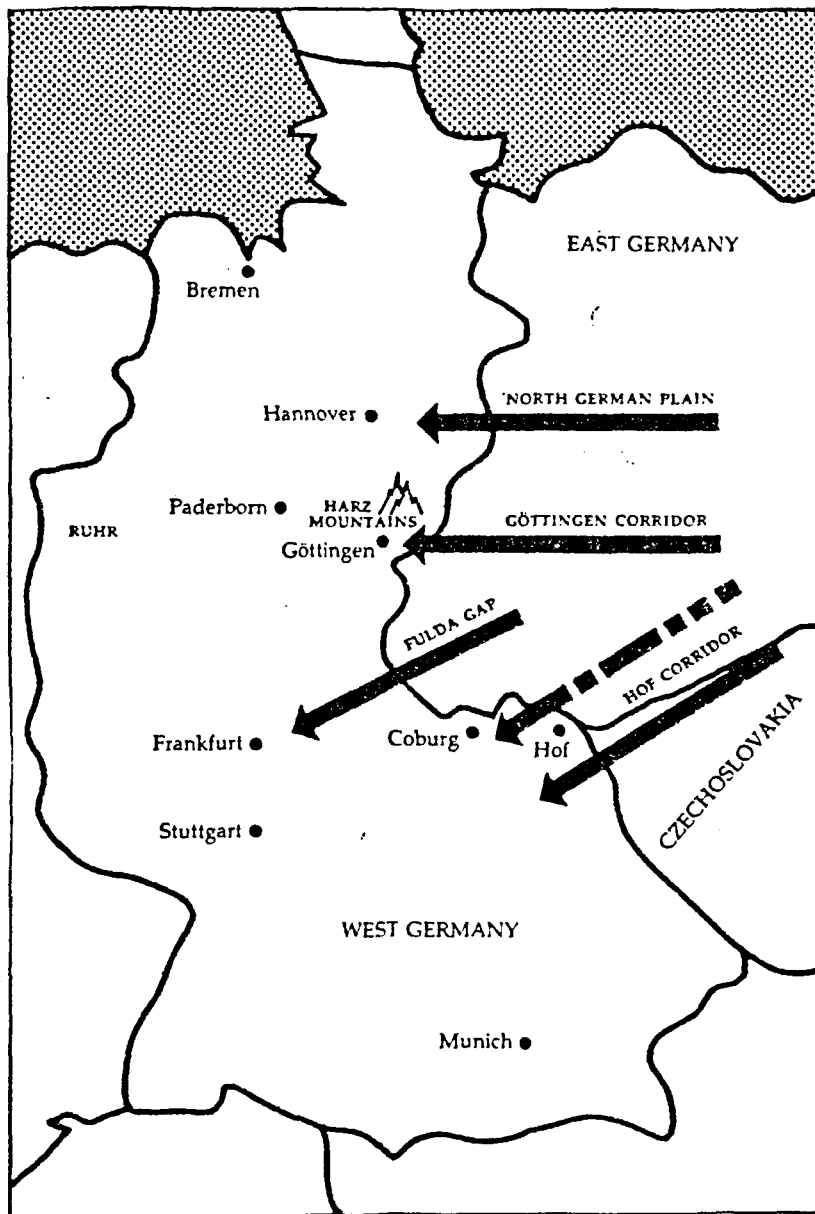
---

<sup>90</sup> Karber, op. cit., p. 42 and pp. 45-46.

instead of a march column. Reducing the speed of the attacking forces provides the main body of the defense with critical time to assemble and complete the fortification of the chief defensive positions 20 to 30 kilometers behind the initial point of engagement. This heavily entrenched section allows the covering force to commit itself to more intense combat by providing an area behind which the covering force can regroup if necessary. Even though the covering force does not engage in decisive battles, it has enough resources and firepower to inflict heavy damage upon an invading force in every likely avenue of attack against NATO territory in Central Europe. Figure 2 shows the most likely axes of advance in a Pact attack on NATO. In order of most danger to NATO, these axes are the Fulda Gap, the North German Plain, the Hof Corridor (primary and secondary routes) and the Gottingen Corridor. These axes are determined by the suitability of the terrain for large armored forces and the location of the most desirable targets inside NATO territory.

As the battle continues, the covering force will begin to withdraw behind the main body of the defense. This main body of defense forms the second element of Active Defense. It is called the "Defense-in-Sector" and refers to the sectors of military responsibility mentioned earlier. The primary object of Defense-in-Sector is similar to the

Figure 2. Most Likely Routes of a Pact Attack Against NATO



Source: John J. Mearsheimer, Conventional Deterrence (Ithaca, New York: Cornell University Press, 1983), p. 177.

traditional tactic of "Positional Defense" which is to make maximum use of prepared or fortified terrain (mines and barriers) and natural obstacles with dense dug-in infantry and prepositioned armored forces to stop or greatly inhibit the forward momentum of an invading force. Defense-in-Sector differs from Positional Defense however, in that it is designed to be somewhat elastic. Although the tactic seeks to provide enough density of forces to channel the advance and prevent rapid enemy maneuver through uncovered gaps, it also allows a degree of flexibility in the defensive line to prevent being overrun by a massed echeloned Pact attack. In the face of a concentrated heavy attack on a relatively small area (breakthrough attempt) the front-line NATO commanders have the authority to let the defensive line bend or flex. As the defensive line bends in the face of a breakthrough attempt, the area of greatest enemy threat is identified and commanders can commit tactical reserves to the battle along with battalion task forces and uncommitted units from dormant areas of the front. Here, the momentum of the attack is greatly slowed or stopped. Because of a high degree of attrition and the greater amount of territory the advancing force must cover, the enemy's density of force is tremendously reduced. Also, the bulging defense line has exposed the flanks of the invading force and allowed its lead elements to become overextended with weakened lines of supply and



communication. At this point, the third and final element of Active Defense, the counterattack, is initiated.

The object of the counterattack is most like the traditional tactic of "Mobile Defense," which is to take advantage of the vulnerable flank areas of an invading force by maneuvering to attack those positions eventually encircling its forward units and cutting them off from their supply and communication lines. Other short-term goals in this tactic include slicing deep into the enemy's rear area and destroying vital air defense systems, artillery support and supply depots. Under Active Defense, the counterattack may also take the form of a frontal assault on depleted units of the first echelon of a Pact attack with the aim of rendering them ineffective or destroying them completely before the second Pact echelon arrives. In either case, the aim of the counterattack is to regain control of lost territory.

It is important to realize that the three sequences of the Active Defense tactic are not set in concrete. They may have to be repeated a number of times and in the event one or more of the three phases cannot be carried out, adjustments can be made on the battlefield. For instance, if the Pact attack comes perilously close to achieving a breakthrough, instead of preparing for a counterattack, tactical reserve units and other less-threatened nearby

battalions and cross-attached companies would form a covering force while the main body of the defense would withdraw 10-20 kilometers and set up a new main defensive belt. From there the sequence would start over.

### Air/Ground Interdiction

An integral part of the overall scheme of NATO conventional battlefield strategy is the joint air/ground interdiction of invading Pact forces. The name that Supreme Headquarters of Allied Powers Europe (SHAPE) has given this concept is Follow-On Forces Attack (FOFA). FOFA is not a new concept but it does represent a shift in emphasis for NATO conventional battlefield strategy.<sup>91</sup>

There has always been a direct connection between ground and air forces on the battlefield. From the inception of the forward defense strategy, NATO's air assets were relied upon to provide heavy close air support for friendly ground forces in an effort to hold off any Pact breakthrough attempt. But the last ten years saw a tremendous improvement in 1) the ability of Pact air forces to conduct offensive air attacks on NATO territory, and 2) the effectiveness of air defense units in mobile Pact ground

---

<sup>91</sup> Bernard W. Rogers, "Follow-On Forces Attack (FOFA): Myths and Realities," NATO Review 32 (Dec. 1984), 1; Thomas A. Cardwell III, "Follow-On Forces Attack: Joint Interdiction by Another Name," Military Review 66 (Feb. 1986), 9.

forces. The improvements were so dramatic that airspace protection began to draw an increasingly large amount of NATO air-force resources. So, on November 9, 1984, the NATO DPC approved the integration of FOFA into official NATO conventional battlefield strategy. FOFA is an attempt to make ground-force interdiction combine with air-force interdiction to become more decisive and potent. What made FOFA possible was an influx of technological innovation. NATO commanders had always sought the same objectives that FOFA called for but lacked the technological capability to achieve those objectives. Advances in mobile-target acquisition systems and the ability to destroy or delay Pact second echelon assets with air/ground interdiction well to the rear of the point of contact with NATO defense forces, have given NATO a significantly improved ability to deny success to any Pact breakthrough attempt.<sup>92</sup>

In the words of General Rogers, the NATO SACEUR, FOFA is designed to attack "those enemy forces which stretch from just behind the troops in contact to as far into the enemy's rear as our target acquisition and conventional weapons systems will permit."<sup>93</sup> The objective of FOFA is to reduce

---

<sup>92</sup> Karber, op. cit., p. 46; Rogers, op. cit., pp. 103; Boyd D. Sutton et al., "Deep Attack Concepts and the Defence of Central Europe," Survival 26 (March/April 1984), 51.

<sup>93</sup> Rogers, op. cit., p. 2.

to a controllable level the number of Pact forces coming in contact with the NATO main defense body by attacking the overall Pact military potential before it can engage the defenders. The concept was developed with the knowledge that invading Pact forces would be deployed in a series of succeeding echelons and operational maneuver groups (OMG's) designed to maneuver quickly to exploit any weakness that may develop in NATO defense lines. FOFA was also developed with the assumption that NATO and Warsaw Pact forces would be relatively evenly matched in the first echelon but that the NATO defense could hold only if succeeding Pact echelons could be kept out of the forward battle until it was most advantageous to the NATO defenders.<sup>94</sup>

NATO forces will seek to accomplish the goal of disrupting, delaying, or destroying Pact second echelon forces and OMG's (follow-on forces) by joint interdiction. Joint interdiction is the use of conventional air attacks and other conventional long-range weapon systems controlled by ground forces to strike targets beyond the immediate contact zone of battle. These targets include not only military forces but also their supply depots, supply routes including bridges and choke points, the means of transporting the supplies, airfields, and command and

---

<sup>94</sup> Ibid., pp. 1-2; Cardwell, op. cit., p. 6; Sutton, loc. cit.

control communication centers. While NATO policy forbids land incursions outside of its borders, gaining depth to the battlefield by FOFA is fully consistent with the NATO battlefield strategy of Forward Defense. Even if FOFA succeeds only in slowing down the Pact momentum of combat operations and inflicting minor attrition, it is expected to have a major impact on the successful defense of NATO territory.<sup>95</sup>

---

<sup>95</sup> Rogers, *op. cit.*, pp. 5-7; Cardwell, *loc. cit.*; Karber, *loc. cit.*

## CHAPTER 4

## FORWARD DEFENSE FACTORS

Factors Complementing Forward DefenseNatural Barriers (Terrain)

One of the most important advantages that a defender has against an attacker is familiarity of terrain. This has been repeatedly proven in armed conflict from Ancient China through World War II to present-day Afghanistan. The willingness and ability to go where the enemy cannot, or thinks you cannot, is a limitless value. Terrain can be used to conceal forces or protect them from hostile firepower. It can also inhibit the ability of an attacker to maneuver, forcing him to channel his forces and thereby allowing the defender to concentrate his resources where he needs them the most. The terrain along the IGB is considered to be the best terrain in Central Europe for defending against an attack.<sup>96</sup>

CENTAG. In the CENTAG sectors of Central Europe, the terrain is generally very obstacle-ridden, with many major

---

<sup>96</sup> U.S. Army, Operations: FM 100-5 (Washington, D.C.: Department of the Army, 1982), pp. 3/4-3/5; Karber, op. cit., p. 33; John J. Mearsheimer, "Maneuver, Mobile Defense, and the NATO Central Front," International Security 6 (Winter 1981-82), 116; Richard E. Simpkin, Race to the Swift: Thoughts on Twenty First Century Warfare (London: Brassey's Defense Publishers, 1985), p. 73.

natural barriers to armored maneuver. They include 1) the Fichtel and Rhon Mountains, 2) the Bavarian, Bohemian and Franconian Forests, and 3) the Fulda, Leine, Main, Werra, and Weser Rivers. These natural barriers would drastically reduce the speed of a Pact advance, thus allowing NATO extra time to maneuver and reinforce its defenses. Consequently there are only a few axes of ingress in the CENTAG area that would facilitate the kind of rapid advance that Pact offensive strategy calls for. Each of these likely axes of attack (see Figure 2) is well defended by NATO forces.<sup>97</sup>

NORTHAG. The NORTHAG area of Central Europe is widely thought to be more vulnerable to invasion than CENTAG because it is dominated by open terrain ideal for the movement of massive armored forces. However, NORTHAG is not the achilles heel of NATO that some may think it to be. There are two terrain factors that are bases for optimism. First, the NORTHAG area covers territory that is less than half the size of CENTAG, which means that a greater density of defenders can be achieved with fewer forces. Second, the NORTHAG area is not obstacle free. Significant natural impediments to armored forces in the NORTHAG district include 1) the Harz Mountains in the Belgian sector, 2) the

---

<sup>97</sup> John J. Mearsheimer, "Why the Soviets Can't Win Quickly in Europe," International Security 7 (Summer 1982), 20 and 22; Facer, *op. cit.*, p. 16; "Germany South," The Times Atlas of the World, 1985 ed.; Sutton, *loc. cit.*

Luneburger Heath in the German sector, 3) the Elbe River in the Dutch sector, and 4) a number of smaller rivers, bogs and canals scattered throughout the area.<sup>98</sup>

The NATO advantage of using existing natural barriers to inhibit a Pact attack would be forfeited if the defensive forces were deployed anywhere except as far forward as possible. The reason for this is that although there are significant numbers of strategically important terrain obstacles along the IGB, the value of these obstacles noticeably decreases beyond 50 kilometers inside NATO territory. Beyond 50 kilometers, the avenues of attack become wider and easier to maneuver large numbers of armored forces. Pact forces in this type of terrain would find it much easier to achieve their military objectives rapidly, thus denying NATO the opportunity to reinforce its defenses with the vast resources of its North American members.<sup>99</sup>

#### Man-made Barriers

Another important factor that complements NATO's forward defense strategy is the opportunity to use man-made barriers to slow or defeat an attack. Man-made barriers have two categories: 1) prepared obstacles and

---

<sup>98</sup> Mearsheimer, "Why the Soviets Can't Win," op. cit., pp. 24-26.

<sup>99</sup> Karber, op. cit., p. 34.



fortifications, and 2) built-up areas. Both types can be a tremendous hindrance to a Pact invasion force because they negate Pact advantages of surprise, initiative and speed.

Prepared Obstacles and Fortifications. Fortifications can add to the defender's effectiveness by concealing and protecting supplies and communication centers thereby allowing more efficient targeting of the invading forces. Obstacles can also increase an attacker's vulnerability to the defender's firepower by slowing or stopping his rate of advance. The slower the rate of advance, the easier it becomes to fire accurately on the attacker, thus increasing his casualties. A study by James F. Digby, a defense analyst for the Rand Corporation, showed that an attacker's casualties will be increased by 60 percent if the defender can reduce the rate of advance to a third of its original speed.<sup>100</sup>

Some barriers, obstacles and defensive works can be developed in peacetime without inordinate intrusion on civilian interests. Others however, are much more obtrusive and dangerous and therefore cannot be prepared until the outbreak of hostilities becomes imminent. These barriers include 1) bridge demolition and 2) mines deployed by ground forces or scattered by artillery and aviation units.<sup>101</sup>

---

<sup>100</sup> Freeman, op. cit., pp. 11-12.

<sup>101</sup> Ibid., p. 12; U.S. Army, op. cit., p. 3/7.

Built-Up Areas. The second type of man-made barriers that complement Forward Defense is urban areas. Much of Central Europe either is now or is becoming dominated by cities. An invading force from Eastern Europe would encounter some type of city, town or village an average of every six kilometers. Sixty percent of the terrain in Central Europe is covered by either dense forests or urban areas.<sup>102</sup>

Built-up or urban areas offer the defender good protection and concealment as well as very good points of observation and fields of fire. Famous battles for Tobruk, Stalingrad, Hue, and most recently Beirut among others have shown that over-running urban areas: 1) consumes a disproportionate amount of resources, 2) restricts the ability to maneuver, 3) dramatically slows down the momentum of an offensive, and 4) takes a tremendous amount of time. The Soviets appear to be well aware of the defensive advantages of built-up areas since their official policy seems to call for bypassing them. Yet, doing so also plays into the hands of NATO defenders, because, like other obstacles, it would force the invaders to channel their

---

<sup>102</sup> Freeman, *op. cit.*, p. 14; Karber, *loc. cit.*; Paul Bracken, "Urban Sprawl and NATO Defense," Survival 18 (Nov./Dec. 1976) 255.

forces into areas that will be well prepared for just such an occurrence.<sup>103</sup>

### Force-to-Space Ratios

The density of the defense or the ratio of the number of forces present to the amount of space available is another important factor that complements NATO's Forward Defense strategy. On the European central front there is a finite amount of space that NATO forces must defend (225 km in NORTHAG and 500 km in CENTAG). When the density of defenders in that space (force to space ratio) reaches a certain amount, it becomes very difficult for an attacker to move through that space regardless of his numerical superiority. The defender in this situation should be able to hold off the attack long enough to bring up reinforcements or even initiate counterattacks.<sup>104</sup>

When a Pact invasion force advances, it must concentrate its forces in axes of attack in order to achieve the overwhelming numerical superiority necessary to achieve a breakthrough. However, space is a factor here as well. The factors discussed above, the terrain and man-made barriers, will force the attacker to channel his forces in a

---

<sup>103</sup> Karber, loc. cit.; U.S. Army, op. cit., p. 3/8; Bracken, op. cit., p. 15.

<sup>104</sup> Mearsheimer, "Why the Soviets Can't Win," op. cit., pp. 27-28; Mako, op. cit., p. 36.

limited space. Therefore, the number of forces that NATO defenders will be up against at any given time during an attack will be only those that the given space allows. The remainder of the Pact forces will not be at the actual point of attack but in the rear areas as secondary echelons where they have a minimal impact on the outcome of the battle. This means that the force to space ratio does not include the overall balance of forces but only those forces that are actually at the point of engagement.<sup>105</sup>

Another aspect of force to space ratios that is advantageous to Forward Defense is the length of the defensive line. The shorter the length of the defense line, the greater the density of defenders. By defending forward, NATO shortens the defense line and thus creates a greater density of defenders with the same number of forces. If NATO set up its main body of defense 120 km from the IGB instead of within 50 km where it is under the Forward Defense strategy, it would require 50% more forces to acquire the same density of defenders, because the line of defense would be lengthened by a third.<sup>106</sup>

---

105 Park, op. cit., p. 181; Mearsheimer, op. cit., p. 27.

106 Karber, op. cit., pp. 33-34.

## Attrition and Exchange Rates

The next two factors that complement NATO defense strategy are attrition rates and exchange rates. Attrition is the total casualties resulting from engagement in a battle. It includes not only personnel losses but also material losses. The outcome of a battle is partly determined by a belligerent inflicting a higher attrition rate on his opponent. In armed conflict, the offense usually suffers a higher rate of attrition. In other words, the total percent loss of force during combat is usually greater for the attacking force. That is one of the reasons why both NATO and the Soviets believe that Pact forces must outnumber NATO forces by at least 3:1 to be successful.<sup>107</sup> As the battle continues over a period of hours or days, the attrition rate would affect the total force ratio on both sides. The NATO advantages discussed earlier, and the lethality of modern NATO anti-tank weapons, will progressively reduce the Pact numerical superiority as the battle continues. The question then becomes, what kind of

---

<sup>107</sup> Barry R. Posen, "Measuring the European Conventional Balance," International Security, 9 (Winter 1984-85) 56 and 78-79; Simpkin, *op. cit.*, p. 20; Mearsheimer, "Conventional Deterrence," *op. cit.*, p. 34; Killebrew, *op. cit.*, p. 108.

attrition rate can Pact forces endure before they are rendered incapable of achieving their objectives.<sup>108</sup>

Contrary to what some may believe, armored fighting divisions do not fight to the finish. In real combat, commanders of an attacking force will withdraw their forces for recuperation when they have been reduced to 50% or less of their original strength. Some relatively recent examples of armored warfare indicate that in intense combat similar to what can be expected in breakthrough sectors of a Pact invasion, a daily attrition rate of 10% has been sustained. After suffering a sustained daily attrition rate of 10%, it is easy to see how whole Pact divisions would be rendered ineffective after only a few days.<sup>109</sup>

Attrition rates are closely paralleled by exchange rates. Exchange rates are the number of losses incurred by a belligerent compared to the number of losses incurred by his opponent during the battle. If the defender loses one armored vehicle for every two that the attacker loses, the exchange rate is 2:1. Many defense analysts today believe that NATO should be able to achieve an exchange rate of 2:1.

---

<sup>108</sup> Michael L. Brown and Thomas J. Leney, "Conventional Defense: Technology, Doctrine, and Force Structure," in Golden, op. cit. pp. 166-169; Posen, op. cit., pp. 78-79. For a discussion on the effectiveness of NATO anti-tank weapons see Brown, loc. cit. and John J. Mearsheimer, "Precision Guided Munitions and Conventional Deterrence," Survival, 20 (March-April 1979), 68-77.

<sup>109</sup> Posen, op. cit., pp. 55-56 and 60.

However, as displayed in table 4.1, there is ample reason to conclude that the exchange rate in a NATO/Pact conflict could exceed 2:1 in NATO's favor. Both of these two factors will complement NATO's defensive strategy by significantly reducing the Pact's numerical superiority during the course of battle.<sup>110</sup>

### Command Style

The final complementary factor to be discussed here is the style in which NATO forces are commanded. NATO uses a style of mission-oriented orders otherwise known as "Auftragstaktik." Mission-oriented orders are characterized by very general instructions with an absolute minimum of detail. Orders of this type usually include only an objective, the reason for the objective, and the general area of operation. This type of command style allows for the greatest amount of independence and initiative on the part of all subordinate commanders. It allows NATO field commanders the maximum amount of leeway in interpreting and

---

<sup>110</sup> Ibid., pp. 56 and 80-81.

executing those orders, according to the rapidly changing situations and opportunities of the battle.<sup>111</sup>

The Warsaw Pact on the other hand, uses a style of detail-oriented orders otherwise known as "Befehlstaktik." Detail-oriented orders stress constant absolute control from the highest down to the lowest level of command. Orders of this type include the most minute details with intricate planning. This command style demands absolute centralized control and coordination of action down to the smallest unit on the battlefield and as such, requires large liaison elements as part of the command structure. Soviet division commanders for example each have fourteen subordinate officers directly under their command. Each of these officers also has his own staff, making coordination of staff activities very cumbersome.<sup>112</sup>

With this type of expanded span-of-control, Pact forces will most assuredly have a very difficult time responding to rapidly changing battlefield situations especially in the face of the kind of surprise major counterattacks that NATO tactics call for. Faced with NATO-style counterattacks in

---

<sup>111</sup> F.W. von Mellenthin and R.H.S. Stolfi with E. Sobik, NATO Under Attack: Why the Western Alliance Can Fight Outnumbered and Win in Central Europe Without Nuclear Weapons (Durham, North Carolina: Duke University Press, 1984), p. 133; Killebrew, op. cit., p. 49; U.S. Army, op. cit., p. 2/7.

<sup>112</sup> Von Mellenthin, op. cit., pp. 134-135 and 143.



World War II, under the same type of command style, Soviet forces often panicked and rapidly disintegrated. Under intense battle conditions, with disrupted communications and massive confusion, the command style most capable of reacting to rapidly changing situations will create a tremendous advantage on the battlefield.<sup>113</sup>

### Factors Affecting Forward Defense Implementation

#### Surprise Attack

A surprise attack could have a devastating effect on the implementation of NATO's forward defense strategy. This is especially obvious when one considers the fact that during peace time, less than 25% of NATO's active brigades are stationed within 50 km of their main defensive positions.<sup>114</sup> The scattered reconnaissance units stationed on the border would be virtually alone in trying to stop the first wave of a surprise attack. Invading forces could even accept inferiority in numbers and still be militarily successful because NATO forces would not be deployed to resist the attack.<sup>115</sup>

---

<sup>113</sup> Ibid., p. 134; Killebrew, op. cit., p. 50.

<sup>114</sup> Park, op. cit., p. 184.

<sup>115</sup> Killebrew, op. cit., p. 91.

The most effective results for such an attack would probably be achieved by launching the attack from a standing-start on a dark stormy holiday evening with no advance warning. Some defense analysts believe that the Soviets now have that capability. The attacking forces would seek to penetrate deeply into NATO's rear by drilling and splitting the defenses and their reinforcements before they had a chance to take their designated wartime positions. As they advanced, these forces would continue to cause confusion and disorganization in the NATO ranks by capturing or destroying command, control, communication and intelligence (C<sup>3</sup>I) posts while attacking prime targets such as nuclear missile sites, conventional weapons depots, and airfields. The tactic would most likely achieve considerable military success at least in the early stages of battle. However, there are also ample reasons for optimism toward NATO's defense against a surprise attack.<sup>116</sup>

If a surprise attack becomes the method chosen for invading NATO territory, the forward-based Soviet units are likely to be the only forces used for the attack. There are two reasons for this. First, the most valuable commodity in a surprise attack is the element of surprise. The Soviets and many western analysts question the ability of East

---

<sup>116</sup> Von Mellenthin, *op. cit.*, p. 122; Park, *op. cit.*, p. 183; Killebrew, *loc. cit.*

European members of the Warsaw Pact to maintain that element of surprise. With that in mind, the Soviets would be very leery of involving other Pact countries in a surprise attack for fear that some East European source might aid NATO in discovering the impending attack. Second, the larger the scale of preparations for an attack, the greater the likelihood of being discovered and losing the element of surprise. Large-scale preparations for attack would be relatively easy to detect.<sup>117</sup> As noted by Richard K. Betts in his book, Surprise Attack, there are many indicators that could tip off an impending Pact attack:

- Intensified enemy reconnaissance in the battle area.
- Logistics vectors. How are military infrastructure and support trails being reoriented? Are supplies and fuel being moved forward? Are field hospitals being established?
- Dispersal of nuclear weapons from peacetime storage sites.
- Are troops leaving caserns moving into areas different from normal maneuver zones? If being deployed to quell internal unrest rather than to attack NATO territory, they will probably move in all directions, not just toward the border.
- Positioning of artillery, which is usually different if optimized for attack rather than defense.
- Forward movement of air defense units.
- Repositioning of headquarters and administrative staff.
- Coverage of flanks.
- Ammunition loading patterns. (One problem is that in an exercise, no immediate intelligence

---

<sup>117</sup> Richard K. Betts, Surprise Attack (Washington, D.C.: Brookings, 1982), p. 197; Park, op. cit., p. 182; Von Mellenthin, loc. cit.

- is available on whether the troops are loading live ammunition or blanks.)
- Mobilization of the rear and political preparation of the civilian population. Are factories being converted from two- to three-shift production? Are other Warsaw Pact countries mobilizing?
  - A surge in reconnaissance satellites placed into orbit.
  - Movement of additional aircraft to forward bases.
  - Grounding of aircraft and cancellation of training exercises, for maintenance and readiness for coordinated mass operations.
  - Sudden growth in naval deployments.
  - Change in the volume of radio traffic, especially in command channels.
  - The appearance of special words in dispatches.<sup>118</sup>

The above means that in order to maintain the element of surprise, the attackers would have to limit the number of forces involved and limit the actual preparation for the attack. The Soviet forces stationed near the IGB are capable of carrying out such an attack particularly since they have been organized into an effective and autonomous fighting force, but they would have to attack alone and without reinforcements. Doing so would mean an unfavorable force-ratio for the invaders. In addition, the chances of achieving absolute surprise are very remote, so NATO's forward defenses will more than likely move to at least the minimum level of alert by the time the invasion actually begins.<sup>119</sup>

---

<sup>118</sup> Betts, op. cit., pp. 191-192.

<sup>119</sup> Killebrew, op. cit., p. 92; Park, loc. cit.; Betts, op. cit., p. 207.

Notwithstanding any major errors in judgment on the part of NATO commanders, the surprise attack would more than likely fail before achieving a significant breakthrough. As NATO forces organized themselves, the attacking forces would come under tremendous pressure from air and ground interdiction. For the reasons explained earlier, the Soviets would still be largely unmobilized and unable to either replace their forward units or provide reinforcements. The entire attack would become vulnerable to envelopement from a NATO counterattack. Also, if the attack is initiated at nighttime, Soviet close air support would have difficulty being effective, and by daylight hours the NATO counter-air campaign would be in full operation.<sup>120</sup>

The Soviet military is undoubtedly well aware of these and other weaknesses in the surprise attack tactic. It seems logical to conclude that with all the known weaknesses of a standing-start surprise attack, the Soviet Union and the other Warsaw Pact countries are very unlikely to try it.<sup>121</sup> Surprise attack does, however, have some very attractive qualities, and what is more likely to happen is a modified version of a surprise attack where Pact countries fully mobilize and attempt to get such a head start on NATO

---

<sup>120</sup> Killebrew, *op. cit.*, pp. 92-93.

<sup>121</sup> *Ibid.*, pp. 93-94.

that nearly insurmountable advantages will be gained by the attackers. The next obvious question then becomes: what might lead to a Pact mobilization and, when it occurs, how fast can and will NATO react to it?

### Mobilization and Reinforcement

There are many circumstances that could motivate the Soviet Union or the entire group of Pact countries to attempt an invasion of NATO territory. Most would not be enough by themselves to motivate a Pact invasion. Nevertheless, a combination of these circumstances (which is not unimaginable), occurring at relatively the same time, could make the Soviets feel that the only course of action to preserve their disintegrating empire would be to initiate a preemptive strike at NATO.<sup>122</sup> According to Richard Betts, examples of events or circumstances that could lead to such a strike include:

- A change in personnel in the Soviet oligarchy.
- The political collapse of NATO and/or the economic collapse of Pact countries.
- A worsening of relations or war with China.
- A crisis in the Middle East involving both American and Soviet forces.
- Accidental naval engagement between American and Soviet fleets.
- The formation of a formal alliance between China, Japan and the U.S.
- The neutralization of any NATO or Warsaw Pact country or group of countries.

---

<sup>122</sup> Betts, op. cit., pp. 157-159.

--Civil war or anarchy in any country in East or West Europe.<sup>123</sup>

These preludes to a Pact attack would not happen overnight and may develop over a period of weeks or even months. The existence of nuclear weapons will continue to deter the use of force, but if a Pact conventional attack does occur it will most likely be the product of a simultaneous combination of crises like those mentioned above. In short, a conventional attack on NATO is most likely to have some advance warning.<sup>124</sup> How fast NATO prepares for the impending invasion (mobilizes) will have a major impact on NATO's ability to implement Forward Defense.

The implementation of Forward Defense is also heavily dependent on actually acquiring the advance warning of a Pact attack. With the recent advances in satellite reconnaissance, electronic sensors, and listening posts, NATO has vastly improved its ability to detect and track Pact mobilization measures. These improvements, however, encourage reliance on advance warning and increase the vulnerability to deception tactics. In World War II, for example, the Germans, knowing their internal communications were likely to be monitored by the allies, disguised their intent to attack in the Battle of the Bulge by transmitting

---

<sup>123</sup> Ibid., pp. 159-161.

<sup>124</sup> Ibid., pp. 155 and 158; Killebrew, op. cit., p. 94.

commands to concentrate forces in the area to prepare for expected allied attacks across the Ruhr River.<sup>125</sup>

Even with plenty of advance warning, the real danger lies in the political decision to mobilize and reinforce. All the advance warning possible cannot authorize a response. NATO leaders would probably find warning of a Pact attack very hard to believe because of the knowledge that the dangers for both sides are so tremendous. Disbelief or skepticism on the part of NATO decision makers need only delay the decision to mobilize and the successful implementation of Forward Defense could be seriously jeopardized. A prime example of this would be if NATO leaders decided to delay mobilization in an effort to allow Soviet "doves" extra time to deescalate the situation.<sup>126</sup>

For NATO decision makers to initiate mobilization and reinforcement, a Soviet or Pact mobilization would probably have to be too obvious to ignore. Some NATO leaders would undoubtedly fear provoking the Soviets unnecessarily until the actual intent of Soviet actions is known. Fortunately, however, a military response to a Pact threat is not limited to an all-or-nothing mobilization. Each country with forces on the IGB is free to mobilize separately and senior NATO field commanders have some authority to declare an alert

---

<sup>125</sup> Betts, *op. cit.*, pp. 192 and 198-199.

<sup>126</sup> *Ibid.*, pp. 157, 197, 199.



status for their forces. Nevertheless, beyond military vigilance, the lowest level of alert, an upgrade to higher stages of alert, must have the approval of the NATO DPC. The levels of alert that are necessary for mobilization and reinforcement (simple, reinforced and general alert) must all be approved by the politicians of the DPC. This means that full preparedness for a Pact invasion is immensely dependent on the declaration of maximum alert by the NATO political leaders.<sup>127</sup>

The timing of mobilization and reinforcement is absolutely critical. The longer it takes to decide when to mobilize in the face of a Pact mobilization, the less time NATO forces will have to prepare for the onslaught and the more likely that the defense of Central Europe will not succeed. A recent study on the subject concluded that it would take close to a full week after commencement of mobilization for NATO forces to make adequate preparations. This is the amount of time that would be necessary to place charges on bridges, lay mines, crater roads, erect obstacles, cut down trees, and prepare the terrain. The time needed for preparations stresses the importance of an early decision to mobilize and reinforce. If NATO decision makers fail to invoke mobilization and reinforcement orders

---

<sup>127</sup> Ibid., p. 173; Killebrew, op. cit., pp. 94-95.

soon after Pact mobilization begins, a Soviet or Pact attack would have many of the advantages of a bolt-from-the-blue surprise attack--even if NATO began mobilization before the attack. The critical issue is how much of a head start will Pact forces have in their own mobilization process. If too much time elapses, if NATO members are unable to agree to mobilize, or even if some NATO countries mobilize immediately and others do not, NATO probably will not be able to recover in time to restore force ratios to an acceptable number.<sup>128</sup>

The successful implementation of mobilization is extremely dependent on a complex series of movements of men and materiel from the United States to Central Europe. Without the benefit of reinforcement from the continental United States, it is unlikely that NATO forces will be adequate to prevent enemy breakthroughs for more than a short period of time. The problem is that although the manpower can be raised within a few days, it takes much longer to supply the necessary materiel.<sup>129</sup> Unless they are properly equipped, manpower is virtually useless on today's modern battlefield.

---

<sup>128</sup> Betts, op. cit., pp. 173-174.

<sup>129</sup> Ibid., p. 184; James A. Huston, One for All (Newark, N.J.: Univ. of Delaware Press, 1984), p. 289.

CHAPTER FIVE  
SUMMARY AND CONCLUSIONS

Summary

The reader should now be in a better position to evaluate the NATO conventional battlefield strategy for Central Europe. The strategy has been identified and examined. In order to reinforce the preceding discussion, the following section will summarize the entire study.

In the first chapter, the purpose of the thesis was discussed including the several reasons why conventional defense is extremely important. In addition, some of the most significant terms used in the study were identified and defined. Chapter two discussed the evolution of NATO, giving the reader some perspective on its origins and the diversity of its members. Chapter two is important because it helps the reader conceptualize the political divergence that has been apparent in the alliance since its inception.

Chapter three opened with a recent example of why conventional defense is increasing in significance. The chapter continued with an examination of the early NATO battlefield strategies and the reasons for their demise. The second major section of chapter three discussed the main subject of this thesis--today's NATO battlefield strategy. Forward Defense was considered in terms of its place in NATO's doctrine of Flexible Response followed by an

extensive elaboration on the methods that will be used to carry out the strategy.

Chapter four was important because it explored the factors that make Forward Defense a very viable strategy. The first section of the chapter examined geographical, physical and combat factors that add to the advantages of employing Forward Defense as the strategy for defending Central Europe. The final section discussed significant factors that could conceivably hinder or impede the successful implementation of Forward Defense.

#### Military and Political Conclusions

The central problem for NATO or any alliance for that matter is and always has been to find a strategy that is both politically acceptable to the allies and yet militarily credible to the opponent. Any alliance strategy must meet that test. When speaking of the conventional defense of Central Europe, the strategy of Forward Defense appears to fulfill both requirements for NATO. Nevertheless, a careful examination of the facts reveals both strong and weak points of NATO's current conventional battlefield strategy. The first conclusion that comes to mind concerns the rationale for basing the strategy on Forward Defense.

The West Germans are entirely justified in insisting on Forward Defense for the NATO battlefield strategy. Within

100 kilometers of the IGB lies: 1) almost a third of West Germany's total population, 2) 25 percent of the West German industrial capacity (one of the most important in the world), and 3) the city of Frankfurt, which is one of the most vital NATO communication links and military depots.<sup>130</sup> The German people could hardly be expected to support any strategy that would call for giving up that 100 km of territory for the sake of gaining some time--hoping that North American reinforcements will arrive soon. The Germans must also realize all too well that any sacrifice of territory is likely to become permanent. Since West Germany is absolutely essential to the success of the alliance, any strategy contrary to West German interests would be politically impossible to adopt. In addition, military considerations such as the terrain at the IGB, force-to-space ratios, attrition rates and other factors all combine to make NATO's defensive strategy very viable. Therefore, one can conclude that the rationale for adopting Forward Defense is both militarily and politically justified.

Although the rationale for Forward Defense is sound, the strategy does have some significant weaknesses. These include problems with logistics during mobilization and reinforcement, and the tremendous dependence the strategy

---

<sup>130</sup> Mako, *op. cit.*, p. 32.

places on prompt political decision-making. Either of these weaknesses could be enough to defeat the strategy.

It is difficult to imagine a successful conventional defense of Central Europe without the benefit of reinforcements from North America. At the same time, the logistics of transporting massive amounts of men and materiel across the Atlantic is one of the most difficult and complicated tasks that can be undertaken. The reinforcement process in war-time conditions would be vulnerable to many different hazards ranging from enemy naval and air interdiction to civilian sabotage as well as simple scheduling foul-ups. Even without enemy interference the task would be difficult, especially on a tight time schedule. The key to successful defense is the amount of time given for the mobilization process before hostilities actually commence. The amount of time, however, is also subject to a second major weakness--the political decision-making process.

The political decision-making process is handicapped by the necessity to accommodate the perceptions of 16 different countries--a relatively large number for any decision-making exercise. Since NATO decisions must emerge from a consensus of all its members, and since many of the members would be expected to have different perceptions of the best course of action to take in the face of an increasingly serious Pact threat, it is reasonable to conclude that in all likelihood

the decision to mobilize will be delayed considerably. The longer it takes for NATO to decide to mobilize in the face of a Pact invasion, the less likely it will be able to thwart the attack. Unless mobilization is initiated shortly after Pact mobilization is indicated, the defense of Central Europe will fail.

The weaknesses of Forward Defense are significant, but it appears that the strengths outweigh them. If it is true that no other strategy is politically acceptable, then the critics of Forward Defense are wasting their time. This fact is particularly born out when one considers all of the factors that make the strategy the most likely to succeed militarily. That is not to say that improvements cannot be made. One of the most obvious, for example, would be to make better use of the current time of peace to construct more and better barriers and obstacles near the IGB. If political approval could be achieved, this suggestion should prove to be relatively inexpensive and extremely beneficial to the successful implementation of Forward Defense. The main obstacle to this suggestion is the German hope and belief that the two Germanies will eventually be reunited. Construction of barriers and/or obstacles is seen by the Germans as a permanent sign of acceptance of the two separate German countries.

Undoubtedly there are many more improvements to be realized. If the critics of Forward Defense were to turn their attention toward finding more ways to improve the implementation of the strategy rather than trying to find an alternative to it, overall deterrence would most assuredly be enhanced. That is the purpose of a viable and strong conventional defense in the first place--to be strong enough to deter an aggressor from even attempting a military attack.

Understanding the complexities of an issue facilitates informed debate and a more thorough examination of the facts. It is hoped that this study will make it easier for the reader to comprehend the complexities of the NATO alliance and especially the NATO conventional battlefield strategy. In addition to promoting a better understanding of NATO conventional defense, it is also hoped that this study will stimulate future research and thinking about this important and rapidly changing subject.



## BIBLIOGRAPHY

- Achilles, Theodore C. "U.S. Role in Negotiations that Led to Atlantic Alliance: Part 1." NATO Review, 27 (Aug. 1979), 11-14.
- Achilles, Theodore C. "U.S. Role in Negotiations that Led to Atlantic Alliance: Part 2." NATO Review, 27 (Oct. 1979), 16-19.
- Alford, Jonathan. NATO's Conventional Forces and the Soviet Mobilization Potential." NATO Review, 28 (June 1980), 18-22.
- Betit, Eugene D. "Soviet Tactical Doctrine and Capabilities and NATO's Strategic Defense." Strategic Review, 4 (No. 4, Fall 1976), 95-107.
- Betts, Richard K. Surprise Attack: Lessons for Defense Planning. Washington: Brookings Institution, 1982.
- Betts, Richard K. "Surprise Attack: NATO's Political Vulnerability." International Security, 5 (Spring 1981), 117-149.
- Bracken, Paul. "Urban Sprawl and NATO Defence." Survival, 18 (Nov.-Dec. 1976), 254-260.
- Brown, Neville. "Air Power in Central Europe." World Today, 39 (Oct. 1983), 378-384.
- Buckingham, William A., Jr., ed. Defense Planning for the 1990's. Washington, D.C.: National Defense University Press, 1984.
- Canby, Steven L. "NATO Strategy: Political-Military Problems of Divergent Interests and Operational Concept." Military Review, 59 (April 1979), 50-58.
- Cardwell, Thomas A., III. "Follow-On Forces Attack: Joint Interdiction by Another Name." Military Review, 64 (Feb. 1984), 4-11.
- Carver, Richard Michael Power. "Conventional Defense of Europe." RUSI Journal of the Royal United Services Institute for Defense Studies, 128 (June 1983), 7-11.
- Cleveland, Harlan. NATO: The Transatlantic Bargain. New York: Harper and Row, 1970.

- Copley, Gregory R., and Clifford M. Weiss, eds. Defense and Foreign Affairs Handbook. 1985 ed. Washington, D.C.: Perth Corporation, 1985.
- Cordesman, Anthony J. "The NATO Central Region and the Balance of Uncertainty." Armed Forces Journal International, 120 (July 1983), 63-68.
- de Czege, Huba Wass, and Holder, L.D. "The New FM 100-5." Military Review, 62 (No. 7, July 1982), 53-70.
- Delmas, Claude. "France and the Creation of the Atlantic Alliance." NATO Review, 28 (Aug. 1980), 1-5.
- de Rose, Francois. "Inflexible Response." Foreign Affairs, 61 (Fall 1982), 136-150.
- de Rose, Francois. "NATO's Perils - And Opportunities." Strategic Review, 11 (Fall 1983), 19-26.
- Dunn, Keith A. and William O. Staudenmaier, "The Retaliatory Offensive and Operational Realities in NATO." Survival, 27 (May/June 1985), 108-118.
- Essays on Strategy: Selections from the 1983 Joint Chiefs of Staff Essay Competition. Washington, D.C.: National Defense University Press, 1984.
- European Security Study. Strengthening Conventional Deterrence in Europe: Proposals for the 1980s. New York: St. Martin's Press, 1983.
- Even-Tov, Ori. "The NATO Conventional Defense: Back to Reality." Orbis, 23 (Spring 1979), 35-49.
- Facer, Roger L.L. Conventional Forces and the NATO Strategy of Flexible Response: Issues and Approaches. Santa Monica, California: Rand Corp., 1984.
- Foster, Charles R. "Political-Military Factors in the Atlantic Relationship." Atlantic Community Quarterly, 19 (Fall 1981), 304-311.
- Freeman, Waldo D., Jr. NATO Central Region Forward Defense: Correcting the Strategy/Force Mismatch. Washington, D.C.: National Defense University Press, 1981.
- Geneste, Marc E. "The City Walls: A Credible Defense Doctrine for the West." Orbis, 35 (Summer, 1975), 477-496.

- George, Stephen. Politics and Policy in the European Community. Oxford: Clarendon Press, 1985.
- "Germany North" and "Germany South." The Times Atlas of the World. 1985 ed.
- Gladwyn, Lord. The Memoirs of Lord Gladwyn. London: Wiedenfeld and Nicolson, 1972.
- Glanz, Meinhard. "Defeating Enemy Armour." NATO Sixteen Countries, 28 (No. 1, 1983), 42-49.
- Golden, James R., Asa A. Clark, and Bruce E. Arlinghaus, eds. Conventional Deterrence: Alternatives for European Defense. Lexington, Massachusetts: Lexington Books, 1984.
- Hamilton, Andrew. "Redressing the Conventional Balance." International Security, 10 (Summer 1985), 111-135.
- Henderson, Sir Nicholas. The Birth of NATO. London: Wiedenfeld and Nicolson, 1980.
- Henrikson, Alan K. "The Creation of the North Atlantic Alliance." Naval War College Review, 33 (May/June 1980), 4-39.
- Howard, Michael. "Reassurance and Deterrence." Foreign Affairs 61 (Winter 1982, 1983), 309-324.
- Huntington, Samuel P. "Conventional Deterrence and Conventional Retaliation in Europe." International Security, 8 (Winter 1983, 1984), 32-56.
- Huston, James A. One for All: NATO Strategy and Logistics Through the Formative Period. Newark, N.J.: University of Delaware Press, 1984.
- Ismay, Lord. NATO: The First Five Years 1949-1954. Utrecht, Netherlands: Bosch, 1954.
- Joffe, Josef. "Europe's American Pacifier." Foreign Policy, 38 (Spring, 1984), 64-82.
- Karanowski, Stanley M. The German Army and NATO Strategy. Washington, D.C.: National Defense University Press, 1982.

- Karber, Phillip A. "The Strategy: In Defense of Forward Defense." Armed Forces Journal International, 121 (May 1984), 27-28, 32-34, 36-37, 40-42, 45-50.
- Kennedy, Thomas J., Jr. NATO Politico-Military Consultation: Shaping Alliance Decisions. Washington, D.C.: National Defense University Press, 1984.
- Killebrew, Robert B. Conventional Defense and Total Deterrence: Assessing NATO's Strategic Options. Wilmington, Delaware: Scholarly Resources, 1986.
- Komer, Robert. "Is Conventional Defense of Europe Feasible?" Naval War College Review, 35 (Sept.-Oct. 1982), 80-91.
- Korbel, Josef. The Communist Subversion of Czechoslovakia 1938-1948: The Failure of Coexistence. Princeton: Princeton University Press, 1959.
- Lacquer, Walter. Europe Since Hitler: The Rebirth of Europe. 2d rev. ed. Harrisonburg, Virginia: R.R. Donnelley and Sons, 1982.
- Lebow, Richard Ned. "The Soviet Offensive in Europe." International Security, 9 (Spring 1985), 44-78.
- Lunn, Simon. Burden-sharing in NATO. London: Routledge and Kegan Paul, 1983.
- Mako, William P. U.S. Ground Forces and the Defense of Central Europe. Washington, D.C.: Brookings Institution, 1983.
- Malone, Daniel K. "A Realistic Conventional Deterrent." National Defense, 67 (July-Aug. 1982), 51-53.
- Maurer, John H. "Surprise Attack and Conventional Defense in Europe." Orbis, 27 (Spring 1983), 107-126.
- Mearsheimer, John J. Conventional Deterrence. Ithaca, New York: Cornell University Press, 1983.
- Mearsheimer, John J. "Maneuver, Mobile Defense, and the NATO Central Front." International Security, 6 (Winter 1981-1982), 104-122.
- Mearsheimer, John J. "Precision Guided Munitions and Conventional Deterrence." Survival, 20 (March-April 1979), 68-77.

- Mearsheimer, John J. "Why the Soviets Can't Win Quickly in Central Europe." International Security, 7 (Summer 1982), 3-39.
- Middleton, Drew. "U.S., Bonn May Clash Over NATO Strategies." Air Force Times, 45 (24 Dec. 1984), 2-5.
- "NATO's Air Forces." NATO's Sixteen Nations, 29 (No. 4, 1984), Supplement.
- North Atlantic Treaty Organization. NATO Facts and Figures. Brussels: NATO Information Service, 1981.
- North Atlantic Treaty Organization. NATO Handbook. Brussels: NATO Information Service, 1985.
- Nunn, Sam. "Improving NATO's Conventional Defenses." USA Today, 113 (May 1985), 21-25.
- Park, William. Defending the West: A History of NATO. Boulder, Colorado: Westview, 1986.
- Posen, Barry R. "Measuring the European Conventional Balance: Coping with Complexity in Threat Assessment." International Security, 9 (Winter 1984-85), 47-88.
- Ravenal, Earl C. "Counterforce and Alliance." International Security, 6 (Spring 1982), 26-43.
- Record, Jeffrey. "NATO's Forward Defense and Striking Deep." Armed Forces Journal International, 121 (Nov. 1983), 42-48.
- Reid, Escott. "The Miraculous Birth of the North Atlantic Alliance." NATO Review, 28 (Dec. 1980), 12-18.
- Rendel, Alexander. "The Alliance's Anxious Birth." NATO Review, 27 (June 1979), 15-20.
- Rogers, Bernard W. "Follow-On Forces Attack (FOFA): Myths and Realities." NATO Review, 32 (No. 6, Dec. 1984), 1-8.
- Sarkin, V. Ye. The Basic Principles of Operational Art and Tactics. Washington, D.C.: GPO, 1974.
- Schemmer, Benjamin F. "NATO's New Strategy: Defend Forward, But Strik Deep." Armed Forces Journal International, 120 (Nov. 1982), 50-51+.

- Schmidt, Helmut. "Constraints and Consensus in the Alliance." NATO's Sixteen Nations, 29 (Feb.-March 1984), 50-51.
- Schmidt, Helmut. "The 1977 Alastair Buchan Memorial Lecture." Survival, 20 (Jan.-Feb. 1978), 2-10.
- Schroeder, Ted. "Doctrine and Strategy: The Misunderstood Basics." Military Review, 66 (May 1986), 13.
- Secretary George Schultz, U.S. Department of State, Bureau of Public Affairs. Reykjavik: A Watershed in U.S.-Soviet Relations. Current Policy No. 883 [Washington, D.C.: Government Printing Office, 1986].
- Sidorenko, A.A. The Offensive. Washington, D.C.: GPO, 1976.
- Simpkin, Richard E. Race to the Swift: Thoughts on Twenty-First Century Warfare. London: Brassey's Defense Publishers, 1985.
- Sloan, Stanley R. "European Co-operation and the Future of NATO." Survival, 26 (1984), 242-261.
- Sloan, Stanley R. NATO's Future: Toward a New Transatlantic Bargain. Washington, D.C.: National Defense University Press, 1985.
- Steinhoff, Johannes. "NATO's Strategy and Credibility." NATO's Fifteen Nations, 27 (Oct.-Nov. 1982), 34-35.
- Sutton, Boyd D. et al., "Deep Attack Concepts and the Defense of Central Europe." Survival, 26 (No. 2, March-April 1984), 50-70.
- "The 1980's: Decade of Confrontation?" The Eighth National Security Affairs Conference, 1981 Proceedings. Washington, D.C.: National Defense University Press, 1981.
- Tillson, John G.F., IV. "The Forward Defense of Europe." Military Review, 61 (May 1981), 66-76.
- Timmons, Richard F. "Lessons from the Past for NATO." Parameters, 14 (Autumn 1984), 3-11.
- Truman, Harry S. Years of Trial and Hope: 1946-1952. New York: Doubleday, 1965.

- U.S. Army. Operations: FM 100-5. Washington, D.C.: Department of the Army, 1982.
- U.S. Cong. House. Subcommittee on Europe and the Middle East. Political and Military Issues in the Atlantic Alliance. Hearing, 98th Cong., 2nd sess., 1 Aug., 1 Oct. 1984. Washington, D.C.: GPO, 1985.
- U.S. Cong. Senate. Committee on Foreign Relations. NATO Today: The Alliance in Evolution; A Report, April 1982. 97th Cong., 2nd sess. Washington, D.C.: GPO, 1982.
- U.S. Department of Defense. Soviet Military Power. [Washington, D.C.: GPO, 1987].
- U.S. Department of State. Foreign Relations of the United States: Western Europe. Vol. 3. [Washington, D.C.: Government Printing Office, 1950].
- Van Der Beugal, Ernst H. From Marshall Aid to Atlantic Partnership. New York: Elsevier, 1966.
- Van Mellenthin, F.W., R.H.S. Stolfi, with E. Sobik. NATO Under Attack: Why the Western Alliance Can Fight Outnumbered and Win in Central Europe Without Nuclear Weapons. Durham, North Carolina: Duke University Press, 1984.
- Vernon, Graham D. Soviet Options for War in Europe: Nuclear or Conventional? Washington, D.C.: National Defense University Press, 1979.
- Warner, Geoffrey. "The United States and the Rearmament of West Germany, 1950-4." International Affairs, 61 (1985), 279-286.
- West German Minister of Defense. White Paper 1979: The Security of the Federal Republic of Germany and the Development of the Federal Armed Forces. Bonn: Federal Ministry of Defense, 1979.
- Western Defense: The European Role in NATO. Brussels, Belgium: Eurogroup, 1985.
- Wickham, John A., Jr. "Reinforcing and Strengthening the Conventional Defense." NATO's Sixteen Nations, 28 (No. 1, 1983), 92-95, 97-98.

Wiebes, Cees and Bert Zeeman. "The Pentagon Negotiations March 1948: The Launching of the North Atlantic Treaty." International Affairs, 59 (1983), 351-63.

Williams, Phil. "The United States Commitment to Western Europe: Strategic Ambiguity and Political Disintegration." International Affairs, 59 (1983), 195-209.



Patrick J. Geary is a Technical Publications Writer for the U.S. Department of Defense Security Institute. While completing his graduate work at the University of Richmond his academic honors included receiving an Albright Graduate Fellowship, being named to the National Political Science Honor Society, Pi Sigma Alpha, and receiving a Graduate Research Grant in 1985 and 1986. As an undergraduate at Virginia Commonwealth University, his academic honors included being named to the National Criminal Justice Honor Society, Alpha Phi Sigma and the Dean's List. Mr. Geary has also been very active in community service and leadership training especially with the Jaycees organization. At the age of 24, he was named a winner of the Charles Kulp Memorial Award (outstanding chapter president in the nation) by the United States Jaycees. In 1983, at the age of 26, Jaycees International bestowed upon him their highest honor, the title of J.C.I. Senator. He was named an Outstanding Young Man of America in 1981 and again in 1983. He is a native of Milwaukee, Wisconsin, and currently resides in Richmond, Virginia.