Assessing the Conventional Balance in Europe, 1945–1975

Richard A. Bitzinger

May 1989
The research described in this report was supported by Grant 840-0289A from The Ford Foundation, and by The RAND Corporation using its own research funds.
Assessing the Conventional Balance in Europe, 1945–1975

Richard A. Bitzinger

May 1989

Prepared for
The Ford Foundation
PREFACE

After years of languishing in the background, conventional arms control—and in conjunction, the state of the NATO-Warsaw Pact conventional balance—has lately become a topical policy issue. The growing attention being paid to the state of the conventional balance in Europe makes this an opportune time to examine past assessments of the balance. This Note provides a historical perspective on the state of the balance and examines how such assessments were arrived at. It should furnish the reader with background to understanding the current debate over the conventional balance.

There are particular reasons for ending this Note roughly around 1975. By the mid-1970s and the opening of the Mutual Balanced Force Reduction (MBFR) talks, all the major "actors"—the various analyses, assessments, and arguments—to be found in the current debate over the conventional balance had largely been introduced. Although the debate has continued and even become more sophisticated, it has largely stabilized since that time.

This is also a companion piece to another RAND Note on the state of the conventional balance in Europe recently prepared by James A. Thomson. His N-2842-FF/RC examines the current debate over the balance, and takes up where this material leaves off.

Research on this Note was performed under a grant on International Security from The Ford Foundation. The project is entitled "The Conventional Balance in Europe."
SUMMARY

As the apparent success of nuclear arms control raises the value of nonnuclear arms to the defense of the West, the state of the NATO-Warsaw Pact conventional balance (or imbalance) in Europe has also become more critical. In laying out a historical perspective on the state of this balance, this Note has three purposes: (1) to examine the state of the East-West conventional balance as it was perceived at the time, between 1945 and 1975; (2) to describe the types of analyses used to arrive at these assessments; and (3) to discuss and assess contemporary elite perceptions of the balance.

The debate over the conventional balance during this 30-year period can be divided into three distinct phases. The first phase (1945–61) was marked by extremely pessimistic assessments of overwhelming Soviet conventional strength. The NATO-Warsaw Pact conventional balance sheet throughout this period was seen as continually grim for the West, and despite the alliance's best efforts to enhance its nonnuclear defenses, the gap never narrowed very much. These conclusions relied almost exclusively on static assessments of the balance—"bean counts"—much of which later turned out to be based on rather dubious statistics; and there is little indication of the use of more quantifiable or qualitative analysis. In addition, these assessments were often influenced by Cold War perceptions of communism and the Soviets. In general, however, despite these pessimistic interpretations the state of the conventional balance was not of particularly great concern to Western leaders at the time, given their preoccupation with nuclear issues and the fact that U.S. nuclear superiority (embodied in the doctrine of massive retaliation) counterbalanced any nonnuclear deficiencies.

During the second phase (1961–69), the Kennedy administration ushered in an era of new thinking about the conventional balance. More sophisticated methods for assessing the balance, due to improved intelligence and based on more quantifiable and qualitative analyses, first appeared during this period. Findings based on these types of approaches showed a balance that was not nearly so lopsided as had previously been thought. Earlier estimates of Soviet conventional strength were felt to have been exaggerated, and it also appeared that the West had some distinct advantages of its own in regard to nonnuclear capabilities. Many came to believe during this time that NATO could, at a minimum, hold its own conventionally. This, in turn, buttressed Kennedy's push for NATO's adopting flexible response.
The third phase (1969–75) revealed the continued and expanding use (and increasing sophistication) of the types of approaches to assessing the balance that were developed during the previous phase. However, perceptions of the balance again began to change. A tremendous Soviet quantitative buildup was detected, which by the mid-1970s resulted in an undeniable Eastern numerical superiority in conventional armaments. The West was still believed to hold a qualitative edge, but some believed even this to be eroding. Overall, this period was marked by the full emergence of mixed and often contending assessments of the conventional balance, characterized by both "optimistic" and "pessimistic" schools of thought.

In conclusion, one can see a tremendous evolution in the approaches toward assessing and interpreting the state of the conventional balance in Europe, particularly the expanding analysis used in looking at the balance and its growing sophistication and development. One is also struck by the way in which the "conventional wisdom" concerning the nonnuclear balance has varied so widely throughout the first 30 years of the postwar period, ultimately ending up in a state of conflicting assessments and confusion—which brings us up to the current debate. Finally, what is especially noteworthy is the apparent influence that strategic thought, particularly nuclear doctrine, had upon these assessments of the conventional balance. During the first two phases, for example, the official embrace of massive retaliation doctrine or of flexible response often appeared to drive perceptions of the balance, while during the final phase, the growing confusion in the West over nuclear strategy was at least partly reflected in the mixed interpretations of the conventional balance and NATO's nonnuclear capabilities.
ACKNOWLEDGMENTS

This Note was supported with funds from the Ford Foundation and The RAND Corporation. Simon Webb of the British Ministry of Defense dug out some obscure facts and RAND colleagues James Thomson and Nanette Gantz provided insightful comments and suggestions.
CONTENTS

PREFACE ............................................................... iii

SUMMARY .............................................................. v

ACKNOWLEDGMENTS .................................................... vii

Section
   I.  INTRODUCTION .................................................... 1
   V.   CONCLUSIONS ..................................................... 33

BIBLIOGRAPHY .......................................................... 37
I. INTRODUCTION

It is no great revelation to state that the INF Treaty's wake has greatly increased the importance of nonnuclear forces to the defense of the West. Certainly, the promise (or threat) of drastic cuts in U.S. and Soviet strategic and theater nuclear arsenals, found in the arms control initiatives of recent years, has raised the value of conventional arms in Western eyes. Reliance on nuclear weapons as the ultimate guarantor of Western security is the rock upon which NATO defense strategy is built. The West has come to depend on its nuclear forces to compensate for weaknesses in its conventional force structure. Yet the current emphasis on nuclear arms control means that conventional arms will be called upon to make a larger contribution to NATO's overall deterrent. This, in turn, has raised new questions about the NATO-Warsaw Pact balance of conventional forces in Europe.

Concerns over the state of the East-West conventional balance and over the linkage between nuclear and nonnuclear forces are, of course, nothing new. Yet in light of current events, it may be opportune to review how Western analysts and policymakers earlier on—particularly during the first 30 years after World War II—perceived this balance, how they reacted to their findings, and how these perceptions and reactions changed over the years.

This Note has three purposes in mind: (1) to examine the state of the balance of conventional forces between NATO and the Warsaw Pact between 1945 and 1975 as it was perceived at the time, relying as much as possible on contemporary sources and first-hand impressions; (2) to describe the methodology used to arrive at these conclusions; and (3) to discuss and assess contemporary perceptions on the part of both defense analysts and Western public officials as to this balance. In so doing, this Note will address several particular questions: What kind of analytical approaches were used in reaching particular conclusions as to the state of the balance? How "subjective" was this analysis? How have interpretations of the balance changed over the years? How much did geopolitical perceptions, ideological predisposition, and even bureaucratic politics affect this debate?

Finally, and perhaps most critical, it is important to keep in mind just how much nuclear weapons and Western strategic doctrine influenced the way we looked at the
efficacy of conventional forces. The role of nuclear weapons in the defense of the West, coupled with perceptions as to the state of the nuclear balance, has generally remained uppermost in the minds of defense analysts and military strategists throughout the entire postwar period, and there has been a tendency to perceive the role of nonnuclear forces and the conventional balance through this prism. To what extent nuclear strategy drove Western conventional forces and force balance interpretations will therefore be an important component of this study.

Furthermore, this Note identifies three phases in the immediate postwar history of the conventional balance in Europe: 1945–61, 1961–69, and 1969–75. This is not to suggest that any particular watersheds strictly delineate these three periods, but taken as a whole, each period reveals a distinct strand of perception and analysis when it comes to the conventional balance. This Note is intended to provide a picture of how contemporary Western analysts and decisionmakers perceived (or misperceived) the balance in nonnuclear forces in Europe.
II. FIRST PHASE, 1945–1961: THE OLD PESSIMISM

Two points stand out in an examination of the contemporary literature addressing the state of the East-West conventional balance immediately following World War II. The first is how little appears to have actually been written on the subject of conventional forces, particularly on Soviet and Warsaw Pact forces. This is especially true in a comparison with the volumes of material produced on the nuclear balance in the 1950s. Few scholarly works (and no book-length examinations) devoted primarily or exclusively to the conventional balance in Europe could be found dating from that time.

It was nuclear strategy and the role of nuclear weapons in Western defense that commanded the interests of the Atlantic alliance. NATO security policy and defense strategy were viewed almost exclusively in nuclear terms. Nuclear weapons—and, in conjunction, the West’s overwhelming nuclear superiority—constituted the bulwark of NATO defense. At the same time, Soviet nuclear developments particularly occupied the attention and concerns of the West.¹ By the mid-1950s, for example, most Western leaders and analysts were worried that the Soviets might soon catch up with and perhaps even surpass the United States in the development of nuclear weapons and long-range delivery systems.² The Gaither Report, for instance, surmised that by 1959 the Soviets might be able to launch a debilitating nuclear attack on the United States, against which it would be unable to retaliate.³ In the light of the West’s reliance on nuclear weapons and its preoccupation with nuclear force issues, therefore, it is not surprising that conventional force structures should get short shrift.

The second point, closely related to the first, is the dearth of hard information to be gleaned from these few contemporary sources on the state of the conventional balance, especially relating to the exact size and strength of the Soviet armed forces. One might be tempted to attribute this to the possibility that detailed information regarding Eastern forces was available but classified by the United States and other

Western governments. However, an examination of some secret documents central to
the formulation of U.S. security policy in the 1940s and 1950s—in particular, NSC-68
and the Gaither Report (both of which were declassified in the 1970s)—add surprisingly
little to the contemporary analysis. Furthermore, official NATO public information
releases were shown by later research to be so far off the mark when it came to actual
Soviet force structures that they raise doubts regarding the credibility of Western analysis
of this period. Either little Western intelligence was ever gathered on the state of the
conventional balance or the Soviets were extremely successful in keeping information
secret concerning their nonnuclear forces. Of course, when one recalls just how
primitive Western intelligence-gathering was—no surveillance satellites, no deep-
penetrating spyplanes until the U-2 was deployed in the late 1950s—and just how closed
Soviet society was (particularly during the Stalin era), then the paucity of hard and fast
information concerning Soviet conventional capabilities becomes easier to understand.

The picture that does emerge from a reading of the literature of this period is of a
conventional balance in Europe overwhelmingly skewed in favor of the Soviet Union
and the Warsaw Pact. Time and time again, the figure of 175 active Soviet divisions was
put forth as the definitive number for the size of the Soviet army; furthermore, these
divisions were perceived to be fully manned, fully armed, and combat-ready. All in all,
the Soviet armed forces were estimated to have around 5.5 million men under arms in the
mid-1950s, ground forces approximately 2.5 to 2.8 million troops.

Of these, "an appreciable number" were supposedly "at immediate readiness in the
Soviet zone of Germany." To be precise, a total of 26 divisions, comprising roughly a
half million soldiers, were forward deployed in Eastern Europe: 20 in the German
Democratic Republic (10 tank and 10 motorized), two in Poland, and (after 1956) four in
Hungary. In addition, approximately 75 more divisions, including nine airborne
divisions totalling 100,000 troops, were based in European Russia and available to
reinforce Soviet forces in Eastern Europe. A further 40 to 125 reserve divisions, it was
believed, could be mobilized and sent westward in 30 days. Finally, the Soviets were

---

4Royal Institute for International Affairs, 1950, p. 66; Osgood, 1962, pp. 29, 68–69,
118; Baldwin, 1958, pp. 34–37; Mulley, 1962, p. 123; O’Ballance, 1961, p. 74; Gaither
Report, p. 5.

5British Minister of Defense Shinwell, quoted in RIIA, 1950, p. 66.
seen to have "almost endless manpower." Some Western estimates of Soviet armed strength in ground forces alone ran as high as 400 available divisions.

Soviet ground forces, it was estimated, could field 35,000 tanks, of which 20,000 were considered "front-line" tanks (mainly T-54s and T-10s) and 15,000 "second-line" (mainly T-34s and JS-3s). In the GDR alone, 6000 Soviet tanks were deployed. Moreover, the USSR was seen to have anywhere from 10,000 to 19,000 aircraft, "including jet aircraft of the latest design." Finally, the Soviet Union could draw upon the armed strength of its Eastern satellites. Including Albania, non-Soviet Warsaw Pact (NSWP) forces in the 1950s were estimated to be around 60 divisions totalling 800,000 troops. The National Volksarmee of the GDR consisted of six divisions; the Poles and the Czechs fielded 14 and 12 additional divisions, respectively. In addition, NSWP forces contributed another 2,900 aircraft to East bloc airpower.

Compared with in-place NATO forces at the time, the conventional balance during the 1940s and 1950s—on paper, at least—looked grim for the Atlantic alliance. Most of the overall force imbalance was attributed to the extensive demobilization of Western armies immediately after World War II. Between 1945 and 1946, the number of American men under arms fell from 3.1 million to 391,000, while British armed strength dropped from over 1.32 million to 488,000. At the same time, Soviet force figures remained at just over 4 million and continued to grow throughout the 1950s, while the USSR "kept its war industries going at full blast." Therefore, by the time of the creation of NATO, in 1949, the Western nations could draw upon only a handful of "ill-equipped and uncoordinated" divisions in central Europe, along with perhaps 400 aircraft. According to Dean Acheson (secretary of state during the latter years of the Truman administration), this included at most three and one-half U.S. divisions, two and one-half British divisions, and less than six French divisions, all told. Belgium and the

---

6Acheson, 1974, p. 376.
7Osgood, 1962, pp. 118.
8The Military Balance, 1960, p. 4. In 1950, the Royal Institute of International Affairs quoted both Winston Churchill and then British Minister of Defense Shinwell as insisting that the Soviets possessed 40,000 and 25,000 tanks, respectively (RIIA, 1950, p. 66).
9Shinwell, quoted in RIIA, 1950, p. 66.
10NATO Information Service, 1962, p. 4.
Netherlands together "could, perhaps, assemble as many more [as France]."

In addition, the Western alliance at the time possessed few organized reserves. Finally, those troops in Europe that were available to NATO were mainly devoted to occupation duties inside West Germany and hence were not deployed or outfitted for a defense of the West against a Soviet invasion. In 1950, the military situation for the alliance was regarded to be so poor that Acheson could argue that "the total available [number of Western troops] on the central front in Europe fell far short of any candid military view of an adequate defense."^12

Obviously, the incentive to increase Western conventional defenses in Europe was high. So, too, however, was the cost. One estimate for bringing U.S. and Western conventional defenses up to the point where they could reasonably halt a Soviet offensive was $30–40 billion, not including annual operating costs—this at a time when the annual U.S. defense budget was around $13 billion!^13 It was not until the Korean War broke out that the Atlantic alliance began to take serious steps toward correcting this conventional imbalance in Europe. In 1950, NATO adopted conventional force goals envisioning 18 active and 16 reserve divisions, for a total of 34 ready divisions. Accordingly, during the early 1950s, the United States raised its total number of divisions deployed in Europe to four; it also began to stockpile large quantities of military equipment and supplies in Europe to facilitate rapid reinforcement, should the need ever arise. This conventional rearmament program reached its zenith in February 1952, when the alliance agreed in Lisbon, Portugal, to the most impressive nonnuclear force goals ever in its history: the creation of 50 active and 46 reserve divisions by 1954—34 of which were to be deployed along the central front—along with 9,000 aircraft to back up this greatly enlarged ground army.^14

Admittedly, the Atlantic alliance never came close to reaching the extremely optimistic forces objectives laid down at Lisbon. Indeed, many in the West, even at the

---

^11Acheson, 1969, p. 308. Others put the U.S. contribution even lower; Robert Osgood, writing in 1962, placed U.S. strength in Europe in the late 1940s at little more than two divisions; even then, some mobilization was necessary to bring these divisions up to full strength (Osgood, 1962, p. 29).


^13Acheson, 1969, p. 308; Acheson further stated that to implement all the recommendations laid out in NSC-68 would cost somewhere in the neighborhood of $50 billion annually (pp. 376–377).

time of the agreement, dismissed the Lisbon force goals as basically an "academic exercise" or a demonstration of NATO unity and resolve.\textsuperscript{15} Even so, during the early 1950s Western forces in central Europe grew to 16 to 20 divisions; and by 1955, NATO was able to field 25 active and 25 reserve divisions in Europe.

Despite this dramatic rearmament program, however, during the 1950s the West appears never to have come close to seriously closing the perceived gap in conventional forces with the Warsaw Pact. The Warsaw Pact was still seen to have a 10:1 superiority in standing divisions—an overwhelming advantage that only increased if one included the USSR’s supposedly better-trained and more quickly mobilizable reserves.\textsuperscript{16} Twenty-five active NATO divisions in Europe (a number, incidentally, that soon declined, due to British and French troop cuts in the late 1950s) compared with over 150 readily available Warsaw Pact divisions made for a nonnuclear balance that overwhelmingly favored the East in nearly every category of manpower and conventional weaponry. Furthermore, NATO regarded the Warsaw Pact to have a numerical edge over the West in aircraft, tanks, field artillery, and mortars.\textsuperscript{17} Throughout the immediate postwar period, conventional wisdom generally held that the Pact could overwhelm NATO’s nonnuclear forces in a surprise attack with 100 divisions.\textsuperscript{18}

It should be noted that nearly all contemporary assessments of the state of the conventional balance in the 1940s and 1950s were based on straightforward static analysis—that is, on "bean counts." In addition, most of the studies produced during this period lacked detailed, quantifiable analysis—not surprising considering the lack of hard information concerning Eastern military capabilities. As it later turned out, in fact, the United States and NATO consistently overestimated the size and strength of the USSR’s ground forces. In actuality, a good deal of the Soviet force structure in the 1940s and 1950s consisted of paper divisions, manned at extremely low strengths and states of readiness—including, it was later determined, even some forward deployed Soviet forces in eastern Germany. Most East European armies were maintained at even lower levels of readiness. In addition, NATO had no agreed-upon figures regarding the size and strength of a Soviet division. One Western study might state that a Soviet division was much

\textsuperscript{15}Mulley, 1962, p. 122.
\textsuperscript{16}Osgood, 1962, p. 38.
\textsuperscript{17}Baldwin, 1958, pp. 20–22, 70–71.
\textsuperscript{18}RIIA, 1950, p. 66; McNamara, 1968b, p. 40.
smaller than a U.S. one (which later turned out to be true), but another would argue that it was roughly the same size as its American counterpart—between 13,000 and 15,000 soldiers. Moreover, many Western leaders and defense analysts tended to either ignore or belittle major Soviet troops cuts instituted by Khrushchev during the late 1950s and early 1960s.

This analysis also generally lacked qualitative comparisons of manpower and weapons systems. Little effort appears to have been expended in accounting for the capability of Soviet and East European troops and equipment, particularly compared with NATO forces. For instance, were Soviet tanks and aircraft "better" than NATO's? Was their logistical support superior or inferior to that of the West? Whose soldiers were better trained, better equipped, better fed, and even better led, and therefore would perform better on the field?

On the basis of such little concrete information, therefore, how did the Western alliance come to consistently overestimate the size and strength of Soviet conventional forces? If not based on substantive evidence of Warsaw Pact attack capabilities, then how did the West come to see a Soviet military threat?

Part of the answer can be found in the nature of the Cold War, which had reached its zenith during the late 1940s and 1950s. The Soviet geopolitical and ideological threat per se was rarely a subject for deep debate, and the perception of an aggressive, expansionist USSR permeated the Western leadership. The Soviets, President Truman

19 Acheson, 1974, p. 376; Baldwin, 1958, p. 36.
20 Khrushchev was committed to reducing the size of the Soviet land forces. In 1955, he announced that the USSR would cut the Soviet Army by 640,000 troops. The next year, Prime Minister Bulganin stated that the Soviets would demobilize an additional 1.2 million troops, as well as withdrawing 300,000 soldiers from the GDR. By 1960, total Soviet armed forces had dropped by over 2 million men to 3.6 million; and that same year, Khrushchev revealed his intention to reduce the armed forces by yet another 1.2 million troops (this was suspended the following year, however, after initial cuts of 600,000 soldiers).

At the same time, some Western decisionmakers and policy analysts remained deeply suspicious of Soviet motives. The Soviets, they argued, still had more men under arms than did the United States (although NATO as a whole had more troops than the Warsaw Pact) (Baldwin, 1958, pp. 37–38). Dulles, for his part, dismissed the troop cuts as just a device to release more funds for nuclear weapons (Alexander, 1975, p. 204).

21 What little qualitative analysis one does find suggests either a broad parity in nonnuclear forces at the time (e.g., the Soviets lead in certain areas of ground forces equipment, while the West dominates in aircraft and elsewhere) or else an overwhelming overall Western military superiority (especially when one factored in U.S. nuclear forces, as many were prone to do at the time) (Baldwin, 1958, pp. 11–43).
once wrote, were "hell-bent for communizing and dominating the world on a rule-or-ruin basis."\(^{22}\) Eisenhower shared his predecessor’s distrust of the Soviets and repugnance for communism; and in his writings and speeches, he painted a picture, similar to Truman’s, of a monolithic communist threat stretching from Berlin to the Barents:

First, the United States and the entire free world are confronted by the military might of the Soviet Union, Communist China, and their satellites. These nations of the Communist Bloc now maintain well-equipped standing armies totaling more than 6,500,000 men formed in some 400 divisions. They are deployed along the border of our allies and friends from the northern shores of Europe to the Mediterranean Sea, around through the Middle East and Far East to Korea. These forces are backed by an air fleet of 25,000 planes in operational units, and many more not in such units. They, in turn, are supported by nuclear weapons and missiles. On the seas around this land mass is a large navy with several hundred submarines.\(^{23}\)

At the center of this "fanatic conspiracy [of] International Communism," was "Soviet Russia," which had "by the grimmest determination and harshest of means raised itself to be the second military and economic power the world."\(^{24}\) In addition, most other Western officials—such as Acheson, George Marshall (Truman’s secretary of state from 1948 to 1950), Winston Churchill, Ernest Bevin (British foreign minister under the 1945–51 Labour government) and, above all, Eisenhower’s secretary of state, John Foster Dulles—held this same stark vision of the communist threat.\(^{25}\)

Such impressions surfaced in official government documents, including those that were to become the building blocks of U.S. postwar security policy. When NSC-68, for example, referred to "fundamental design of the Kremlin," this was construed to mean nothing less than

---

\(^{22}\)Truman, 1956, p. 215.


\(^{25}\)One of the few highly ranking dissenting voices in the United States was Henry Wallace, former vice president in the third Roosevelt administration and secretary of agriculture under Truman. He argued that the West must share the blame for the postwar division of the world between two hostile camps and in the late 1940s prophetically called for East-West detente. His reward was condemnation and political obscurity.
the complete subversion or forcible destruction of the machinery of government and structure of society in the countries of the non-Soviet world and their replacement by an apparatus and structure subservient to and controlled from the Kremlin. . . . The United States, as the principal center of power in the non-Soviet world and the bulwark of opposition to Soviet expansion, is the principal enemy whose integrity and vitality must be subverted or destroyed by one means or another if the Kremlin is to achieve its fundamental design.  

To this end, therefore, the study added, "The Soviet Union is developing the military capacity to support its design for world domination." For its part, the Gaither Report, written in 1957, argued that "we have found no evidence in Russian foreign and military policy since 1945 to refute the conclusion that USSR intentions are expansionist." This "singleness of purpose," furthermore, drove the Soviets' acquisition of conventional and nuclear weaponry.

Of course, much of this apprehension is understandable in light of contemporary events. It is not difficult to chronicle a long list of Soviet expansionist activities during the first 15 years of the postwar era: the extension of Soviet control over Eastern Europe; the 1948 Czech coup; the Berlin blockade; the Greek civil war; Soviet pressures on Finland, Turkey, and Iran; the fall of the Kuomintang government and the establishment of the People's Republic of China; the Korean War; the invasion of Hungary; etc. Acts such as these could not help but frighten and anger the West, and they strongly influenced the perceptions of both its publics and its officials in regards to global Soviet designs.

In the minds of much of the Western leadership and security policymaking elite of the time, this assessment of the USSR and the Soviet threat made a more detailed analysis of the conventional balance of forces unnecessary or irrelevant. The combination of a political/ideological Soviet threat and a fairly unsophisticated analysis of the nonnuclear forces in Europe was generally sufficient for most people in the West—including its leaders and analysts—to "leap-frog" over the particulars of the conventional balance to arrive at the conclusion of an overwhelming Warsaw Pact conventional superiority in Europe.

---

26 NSC-68, p. 54.
27 NSC-68, p. 64.
At the same time, however, the nuclear dimension of the East-West balance ultimately made the state of the conventional force balance largely irrelevant, at least in the minds of most Western leaders and defense analysts at the time. If the nonnuclear balance appeared overwhelmingly favorable to the Warsaw Pact, and if efforts to redress this imbalance appeared insurmountable, the overall military balance was seen as far less drastic in the light of the West's lead in nuclear forces. From before the birth of NATO, the West regarded nuclear weapons to be its great "equalizer," compensating for the alliance's weaknesses in nonnuclear forces. In the 1940s (before the first Soviet atomic test), the West saw the U.S. nuclear monopoly as its ace-in-the-hole, obviating the need for large, expensive conventional forces. Even after the Soviets got "the bomb," and despite some pessimistic assertions about Soviet nuclear weapon development, if one factored nuclear weapons into the overall balance of forces, most Western analysts and public officials in the 1950s were confident that they enjoyed a decisive military edge over the USSR. The U.S. quantitative and qualitative lead at the time in long-range strategic bombers and in strategic and tactical nuclear weapons more than offset, at least for the moment, any supposed inferiority in conventional forces. In fact, it was argued that it would be "misapprehensive" or even "defeatist" ever to assume that the Soviets were ahead in the East-West arms race, simply because the USSR and Warsaw Pact possessed larger nonnuclear forces.29

This overwhelming nuclear superiority, of course, was the fundamental premise behind Eisenhower's "new look" of massive retaliation, adopted by NATO in 1957. Massive retaliation made large, well-equipped (and costly) conventional ground forces unnecessary. This, in turn, permitted cuts in the U.S. defense budget and reductions in U.S. armed forces, both overall and in Europe. Under Eisenhower's "new look," Western conventional forces would serve mainly as a "tripwire" triggering a U.S. nuclear response to a Soviet invasion of Western Europe, as well as a "delaying factor" to prevent Western Europe from being entirely overrun before the effect of the U.S. nuclear attack on the Soviet homeland was fully felt.30 This reduced priority placed by NATO

30Actually, this shift in Western strategy from conventional and/or nuclear warfighting to nuclear deterrence predates Eisenhower. Despite the 1952 Lisbon agreement, NATO always relied primarily on nuclear weapons to ultimately halt a Soviet offensive, while conventional land forces would only serve to slow the attack until the nuclear response was readied (see Acheson, 1974, pp. 308–309). The difference between Truman/Acheson and Eisenhower/Dulles was probably more one of style than of substance.
upon conventional defense capabilities by the end of the 1950s was reflected by the alliance’s approval of MC-70 in 1957, which replaced the Lisbon force goals of 96 divisions with the drastically scaled-back objective of 30 active divisions along the central front by the mid-1960s. In fact, by way of compensating for the "loss" of these extra conventional forces, Supreme Allied Commander, Europe (SACEUR) was informed that he would receive nuclear release authority early on in a conflict. With MC-70 and NATO’s embrace of massive retaliation, the relegation of nonnuclear defenses to second-class status was complete.
III. SECOND PHASE, 1961–1969: AN EMERGING OPTIMISM

John F. Kennedy came to power in 1961 with the promise of being a "new broom." The effects of this broom were certainly to be felt in the area of U.S. and NATO security and foreign policy. The early 1960s, for instance, was a period of considerable Western reassessment of the Soviets. For one thing, Western perceptions of the Soviet threat, while never retreating entirely, slowly began to change. The open Sino-Soviet split and Castro's early dalliances in an independent foreign policy softened the image of the "communist monolith." Khrushchev's calls for "peaceful coexistence" further contributed to a gradual receding of the Cold War and a warming of East-West relations. Finally, the apparent success of the West's system of interlocking alliances (e.g., NATO, Southeast Asian Treaty Organization (SEATO), Australia-New Zealand-United States Defense Pact (ANZUS), bilateral defense pacts with Japan, Korea, Taiwan, etc.) in containing the expansionist tendencies of the USSR led many in the West to feel that the Soviet threat had definitely lessened.\(^1\)

The "Kennedy broom" was also felt in regard to Western defense strategy and the role of conventional arms. Several events in the years just before Kennedy's election, such as Sputnik and the first Berlin crisis, had begun to challenge the common wisdom about what would deter the Soviets. It became evident that the United States was no longer invulnerable to Soviet nuclear attack and that massive retaliation was not a credible deterrent. Thus, NATO needed to drastically reevaluate its basic defense strategy.

Kennedy came into office determined to reduce U.S. and NATO reliance on nuclear weapons. He especially favored a more "balanced" approach to defense, and his administration reemphasized the importance and value of nonnuclear forces. Massive retaliation doctrine was deemed to be particularly insufficient in bridging the gap between nuclear policy and the role of conventional forces in the defense of NATO. Two former Kennedy Defense Department officials, writing in the late 1960s, summed up the prevailing frustration within the administration with massive retaliation and its relation to nonnuclear forces:

\(^1\)McNamara, 1968b, pp. 3–11.
Most of the nuclear strategies proposed for NATO [during the 1950s] were based on the fundamental assumption that we did not have a chance using conventional forces.

These "facts" provided an easy escape from the difficult problem of maintaining strong conventional forces in NATO.

A conventional option was automatically assumed to require major increases in defense budgets, which politicians on both sides of the Atlantic were unwilling to make, particularly since nuclear weapons were assumed to be a substitute for manpower and therefore a viable alternative.\(^2\)

For perhaps the first time during the postwar period, the West began to pay close attention to its own conventional force structure, and this emphasis on the "nonnuclear option"—that is, on the initial reliance on conventional forces to halt or slow a Soviet attack in order to avoid an early (irreversibly devastating, and, hence, incredible) resort to nuclear weapons—came to be embodied in the new doctrine of flexible response. This, in turn, focused greater attention on the state of the nonnuclear balance in Europe.

Also about this time, the rather unsophisticated and superficial analysis that had previously sustained perceptions of the nonnuclear balance of forces was beginning to wear thin. Signs of this dissatisfaction, in fact, predated the Kennedy administration; Gen. Maxwell Taylor's book, The Uncertain Trumpet, published in 1959, was one of the first to question the conventional wisdom as to the Soviet's overwhelming superiority in conventional military power.\(^3\) The 1960s, however, witnessed an explosion in more quantifiable and, in particular, qualitative analysis of the conventional balance in Europe—in part because of the increasing sophistication of Western intelligence-gathering of information concerning Warsaw Pact forces. In London, the Institute for Strategic Studies (which later added "International" to its name) began to publish its annual survey The Military Balance, which gradually developed into a meticulous study and comparison of NATO and Warsaw Pact forces. In addition, more scholarly research began to be paid to the state of conventional forces in Europe.\(^4\) However, some of the most important and more critical analysis of nonnuclear forces and of the conventional balance came from inside the U.S. Department of Defense, under the secretariaship of Robert S. McNamara, particularly from within the Defense Department's Office of Systems Analysis.

---

\(^2\)Entrooven and Smith, 1971, pp. 157–158.
\(^3\)Taylor, 1959, pp. 135–139; see also Entrooven and Smith, 1971, p. 133.
"Systems analysis" was an integral part of McNamara's Planning-Programming-Budgeting System (PPBS). For its own part, PPBS was designed to aid defense policy decisionmaking on the basis of (1) "explicit criteria of national interest in defense programs," (2) cost-benefit considerations, and (3) due consideration of alternatives and dissenting opinions. PPBS tools included the Five-Year Defense Plan (FYDP), draft presidential memoranda (essentially, internal Defense Department program directives), and various research integrating national security policy, weapon programs, and the defense budget. It was in regard to this last item that McNamara established the Office of Systems Analysis early in his tenure as Secretary of Defense to provide analytical input regarding force requirements and weapon systems. Systems analysis tended to be broadly defined. It was generally conducted by mission (tactical airpower, antisubmarine warfare, etc.), rather than by service. Such analysis relied on a variety of approaches, both scientific and "social," in an eclectic, synergistic manner, to reach broad, objective conclusions, especially in regard to costs versus benefits. As Enthoven and Smith (two defense analysts who worked in the Office of Systems Analysis under McNamara) put it, this was not so much to find out what was "best," as to determine what was "better."6

Early in the Kennedy administration, McNamara turned the attentions of his civilian systems analysts to the issue of the conventional balance in Europe. Some of the first studies made by the Office of Systems Analysis looked at Soviet capacities for supporting large standing armed forces. On the basis of this early research, the Department of Defense determined that, because of the large percentage of the Soviet population required to work in agriculture to maintain food production (roughly half the country's workforce at that time) and a variety of other demographic, educational and economic factors, the Soviet Union should find it much harder than NATO to raise and maintain an army of 175 divisions.7 In fact, in statements to the Congress, McNamara repeatedly returned to this theme of Soviet economic difficulties and its perceived effect on Soviet military capabilities.8

The Defense Department then went on to look at two "paradoxes" of Soviet conventional might. The first concerned manpower. At the time, aggregate figures for

5The techniques of systems analysis, it should be noted, were first developed at The RAND Corporation.
7Enthoven and Smith, 1971, pp. 133–135.
8See McNamara, 1964; 1967; 1968.
the Atlantic alliance and the Warsaw Pact showed the West actually to have more men under arms than did the East (about six million troops for NATO versus four and one-half million for the Warsaw Pact); how was it, therefore, that the alliance could assemble only a fraction of the number of divisions as the Pact countries? This "population paradox" could also be seen in comparing U.S. and Soviet ground forces alone. In 1961, according to Enthoven and Smith, the U.S. Army totalled 960,000 troops in 16 divisions, while the Soviet Army numbered around 2 million in 175 divisions; this raised an important question: How could the Soviets, with only slightly more than twice as many ground troops as the United States, have over 10 times as many divisions?

The second was the so-called "PEMA paradox" (PEMA being short for "Procurement of Equipment and Missiles, Army"). PEMA-based analysis attempted to quantify a country's ability to outfit its standing military forces at a level comparable to that of the United States. The PEMA paradox argued that if the Soviets tried to fill out each of its 175 divisions at roughly the same level (and expense) of a U.S. division, the cost (in terms of its drain on the country's wealth) would be so burdensome as to be inconceivable (although, admittedly, not necessarily impossible).  

These findings immediately threw suspicion on both the size and overall readiness of Soviet ground forces. Upon closer analysis, it quickly became apparent the figure of 175 active, fully armed Soviet divisions was much too large, and, indeed, Western analysts soon began to lower that number. Furthermore, it not only turned out that Soviet divisions were much smaller than a U.S. division, but many of the studies coming out of the Defense Department asserted that a large percentage of Soviet divisions were maintained at less than full—and sometimes very low—levels of manpower and readiness. In fact, some analysts came to the conclusion that only those

---

9Enthoven and Smith, 1971, pp. 134–135; see also McNamara, 1963b, p. 115.
10In the 1962–63 edition of The Military Balance, the ISS put the number of Soviet divisions at 160; by the 1964–65 edition, this number had dropped to 140, with no corresponding reduction in the number of Soviet ground troops. It dropped further, to 136, by the 1967–68 edition. Of these, about 25–26 divisions were deployed in Eastern Europe and perhaps another 60 in European Russia (The Military Balance, 1962–1963, p. 5; The Military Balance, 1964–1965, pp. 4–5; Record, 1975, p. 12 (table); Heilbrunn, 1965, pp. 12–13).
11About 11,000 troops in a Soviet motorized division and 9,000 in a tank division, versus roughly 16,000 to 18,000 in a U.S. division.
12One estimate was that about half the Soviet divisions at the time were at near-full (70–85 percent) strength, including all Soviet forces in Eastern Europe, while the rest
22 Soviet divisions stationed in Poland and the GDR, plus a handful in European Russia, were truly combat-ready.\textsuperscript{13} It was further felt that it would take weeks, rather than days, to reinforce them in any military action. Finally, there was a tendency on the part of the West to doubt the reliability, contribution, or effect of non-Soviet Warsaw Pact (NSWP) forces, especially in the event of a Soviet short-warning attack.\textsuperscript{14} Therefore, taking these factors into account (even including probable NSWP forces), some analysts argued that the most the Warsaw Pact could immediately draw on in an attack on the West would be perhaps 40 to 45 divisions. In fact, it was estimated that if one counted Warsaw Pact divisional strength the same as the alliance did, then immediately available Pact forces in the central region would actually number only about 30 NATO-sized divisions.\textsuperscript{15}

In addition, it appeared that both manpower and the number of tanks in individual full-strength Soviet divisions was declining steadily throughout the 1960s. In 1965, for example, a Soviet motorized rifle division was determined to have 11,000 troops and 210 main battle tanks; by 1970, this same division now contained only 10,000 soldiers and 180 tanks. Strength figures for a Soviet tank (or armored) division fell even more dramatically over this same period, from 9,000 troops to 8,300 and from 375 tanks to 325.\textsuperscript{16}

The picture that began to emerge, especially within the Kennedy Defense Department, was of a conventional Warsaw Pact military threat that was much more modest than previously supposed. In 1965, in fact, McNamara acknowledged that the

\begin{itemize}
\item were at 25–35 percent strength (Brown, 1964, p. 154). For their part, Enthoven and Smith argue that fully half of all Soviet divisions, because of their low strength levels—about 10 percent, or cadre level—should be struck from the conventional balance sheet (Enthoven and Smith, 1971, p. 136).
\item McNamara, 1968b, pp. 41–42; Brown, 1964, p. 154; Enthoven and Smith, 1971, p. 136. This number of 20 Soviet divisions in the GDR and two in Poland (plus four in Hungary) remained constant throughout the first 30 years of the postwar period, and the number of Soviet divisions in central Europe only increased with the permanent stationing of an additional five divisions in Czechoslovakia following the 1968 invasion.
\item McNamara, 1968b, p. 42; Stanley, 1965, pp. 247–248. Some in the West believed that the political unreliability of the Soviets' allies reduced the number of Soviet divisions available for any offensive, as some were necessary to police and control Eastern Europe.
\item Stanley, 1965, p. 269.
\item Record, 1975, p. 13 (table).
\end{itemize}
West had "for some time" been overestimating the size and capability of communist bloc ground forces.\textsuperscript{17} In particular, the threat of a Pact surprise attack had begun to recede.

At the same time, the Atlantic alliance was making substantial strides in shoring up its own nonnuclear defenses in the central region. A significant development, for instance, was the addition of the West German army to NATO’s conventional force structure. By the mid-1960s, the bulk of the new 12-division Bundeswehr had largely come on line along the central front, greatly buttressing defenses in Western Europe. For its own part, the United States, beginning with the Kennedy administration, began to expand its ground forces from 11 to 16 active divisions, and, after the Berlin Wall crisis, the United States deployed an additional two army divisions in the Federal Republic. In addition, the U.S. Army reorganized its divisions, dropping its nuclear-oriented pentomic structure in favor of the ROAD (Reorganization Army Division) concept, with a corresponding increase in emphasis on conventional firepower, tactical mobility, and decentralized command and control. All in all, the total number of combat-assigned army, Marine, and reserve forces grew by 66 percent during the Kennedy-Johnson years, while the number of active and reserve army mechanized infantry and tank units increased by 110 percent.\textsuperscript{18}

By the mid-1960s, therefore, NATO could field roughly 27 divisions along its central front against a Warsaw Pact force in central Europe of 40-odd divisions.\textsuperscript{19} In addition, 33 more divisions were available to Allied Command Europe (ACE), for a total of 60 (plus 30 reserve divisions).\textsuperscript{20}

However, simple divisional comparisons still did not provide a clear indication of arrayed manpower and aggregated armed strength. Some defense analysis, for example, argued that in terms of men under arms (such as overall active armed strength, ground forces manpower in Europe, or forces along the central European frontier), NATO, throughout the 1960s, generally equalled or even outnumbered the Warsaw Pact.\textsuperscript{21}

\textsuperscript{17}McNamara, 1964, p. 112.
\textsuperscript{18}McNamara, 1968a, pp. 164–165. Of course, McNamara does not say how many of these ground units were sent to Vietnam instead of being assigned to NATO.
\textsuperscript{19}Eleven West German, six U.S., three British, two French, five Benelux/Canadian. The two assigned French divisions were lost in 1966 when France withdrew from NATO’s integrated military command.
\textsuperscript{20}Including five French divisions.
\textsuperscript{21}The Military Balance, various years; Brown estimates NATO and Warsaw Pact active manpower along the central front in 1964 to be 975,000 and 665,000, respectively (Brown, 1964, pp. 170–71).
McNamara, in fact, repeatedly asserted that the Western alliance, *even without France*, had more troops deployed along the central front than did the Pact.\(^{22}\) Moreover, some Western analysts began to feel that the Warsaw Pact's numerical superiority in weaponry had, in fact, been exaggerated, and they eventually came to regard NATO, at least along the central front, to be quantitatively inferior only in tanks, whereas in nearly all other categories of weapons (antitank weapons, armored personnel carriers, logistic lift, etc.) the alliance was deemed to have more.\(^{23}\)

In addition, if *qualitatively* judged, the McNamara Defense Department believed that NATO nonnuclear forces were vastly superior to those of the Warsaw Pact and more than compensated for any Eastern numerical advantage. Despite possessing perhaps half as many tanks along the central front as the Warsaw Pact, for example, NATO tanks were generally seen to be much more capable, with greater accuracy (especially at longer ranges), faster rates of fire, and larger ammunition magazines, as well as being equipped with better armor protection. This translated into a higher kill potential than Pact tanks.\(^{24}\) Also, not only did NATO have a 50 percent advantage in antitank weapons, its technological lead in antitank guided munitions (ATGMs) greatly enhanced Western antitank defenses. Finally, although the two sides were roughly equal in the number of artillery and mortar tubes, the better ammunition, accuracy, and firing rates of NATO guns increased Western firepower dramatically. Enthoven and Smith, in fact, revealed that studies by the Office of Systems Analysis showed that one U.S. division could produce 1.7 times as much firepower as a Soviet division. Overall, a Soviet division was considered to be one-third as "effective" as its U.S. counterpart, because of the better training, morale, and support structure of U.S. ground forces and their overall ability to generate more "staying power."\(^{25}\)

Moreover, NATO tactical airpower was considered to be vastly superior to that of the Warsaw Pact "by nearly every measure." Western aircraft at the time tended to be much more technologically advanced, greatly enhancing their effectiveness. In terms of


\(^{23}\)Enthoven and Smith, 1971, p. 148 (table).

\(^{24}\)The mainstay of the Soviet tank division throughout the 1960s was the T-54-55, and its replacement by the T-62 and T-64 was gradual, continuing on well into the 1970s. Main NATO tanks included the M-48, the M-60, the German Leopard, and the British Chieftain. The M-48A2 was regarded by some to be superior to the T-54, while the M-60, Leopard, and Chieftain outperformed the T-62 (Brown, 1964, p. 163; Record, 1975, pp. 24–25).

\(^{25}\)Enthoven and Smith, 1976, pp. 136–141, 149; McNamara, 1963b, p. 115.
range, payload, loiter time, missions flyable each day, and ordnance, NATO aircraft outshone their Pact counterparts.\textsuperscript{26} In addition, NATO possessed many more multirole aircraft than the Warsaw Pact countries, which, along with its better trained crews, greatly expanded the variety of combat roles and missions each plane could fly. In contrast, Warsaw Pact crews tended to be trained in a single mission, resulting in much less flexibility for Pact wings. In 1968, McNamara asserted that:

\begin{quote}
NATO M-day air forces deployed in central Europe would have significantly more offensive capability than the pact forces.\textsuperscript{27}
\end{quote}

All in all, the Atlantic alliance relied heavily upon the qualitative advantage it derived from its airpower.\textsuperscript{28}

As a result of this new, more quantifiable and qualitatively based analysis, by the end of the 1960s many in the West now came to hold a much more optimistic assessment of the balance than had existed during the 1950s. For one thing, Soviet and East European ground forces had been revealed to be much less than had once been believed. At the same time, Western conventional forces were seen to have dramatically improved throughout the 1960s, particularly in terms of adding more divisions, more and better armor, and more modern aircraft to the central region. All in all, a substantial downsizing of the Soviet conventional threat and an enhanced Western conventional force capability made the idea of an increased reliance on nonnuclear defenses—as embodied in flexible response—all the more credible and conceivable.\textsuperscript{29}

Nowhere was this optimism more prevailing than in the U.S. Department of Defense under McNamara’s secretaryship. At the very least, NATO conventional forces along the central front were regarded by McNamara and his civilian advisers as roughly the equal of the Warsaw Pact. As early as 1963, McNamara could argue that:

\begin{quote}
\end{quote}

\begin{footnotes}
\textsuperscript{26}NATO tactical air forces generally had two to three times the payload capability and up to five times the loiter time of Pact air forces (Enthoven and Smith, 1971, p. 155 [table]).
\textsuperscript{27}McNamara, 1968a, p. 161.
\textsuperscript{28}Enthoven and Smith, 1971, pp. 142–147; McNamara, 1968b, pp. 81, 83; Brown, 1964, pp. 172–173.
\textsuperscript{29}Brown, 1964, p. 176; McNamara, 1968b, p. 42; Enthoven and Smith, 1971, p. 156.
\end{footnotes}
Although we are still a long way from achieving the nonnuclear capabilities we hope to create in Europe, we are much better off in this regard than we were 2 years ago. Today the NATO forces could deal with a wider range of enemy actions without resorting to the use of nuclear weapons.\textsuperscript{30}

And by 1967, McNamara could boast to Congress that:

\begin{quote}
I believe that our present conventional forces are large enough to implement the strategy [flexible response] which we—and increasingly our Allies—recognize as an indispensable element of a sound overall NATO posture.\textsuperscript{31}
\end{quote}

In addition, Enthoven argued in 1965 that "where four years earlier it had appeared that a conventional option was impossible, it now began to appear that perhaps NATO could have had one all along."\textsuperscript{32} Obviously, such positive interpretations of the balance in Europe further buttressed McNamara's support for an effective conventional warfighting capability and advanced his arguments in favor of flexible response.

Not that everyone, of course, shared McNamara's optimism about the West's nonnuclear defense capacities. These skeptics included large numbers of West Europeans and, in particular, much of the uniformed military leadership in McNamara's own Defense Department (except some U.S. Army officers who supported the defense secretary's call for stronger conventional forces). Many Europeans were still very pessimistic about the state of the NATO-Warsaw Pact conventional balance and did not believe that the Atlantic alliance could ever hope to match the nonnuclear strength of the Warsaw Pact "at a reasonable cost." They were often dubious, therefore, of the studies coming out of the United States that argued that a credible conventional defense capability was in their grasp.\textsuperscript{33} Furthermore, and more important, many Europeans remained very uncomfortable with the flexible response doctrine. In their minds, the incredulity of nuclear deterrence was basically a matter of resolve. Therefore, they generally desired a defense strategy that unequivocally guaranteed a nuclear response, rather than one that attempted to delay or avoid it.

\textsuperscript{30}McNamara, 1963a, p. 15 (emphasis added).
\textsuperscript{31}McNamara, 1967, pp. 78–79.
\textsuperscript{32}Quoted in Stromseth, 1988, p. 51.
\textsuperscript{33}Stromseth, 1988, pp. 128–129, 135, 191. Stromseth also argues that "a long-standing belief in NATO conventional inferiority" had "all the characteristics of a self-fulfilling prophecy," and "contributed to a sense of futility regarding the possibility of creating a strong conventional defense" (p. 191).
For their part, dissension within the the U.S. military from official views on the balance could be at least partially traced back to tensions within the Pentagon between military officers and McNamara's civilian advisers. In turn, military officers sometimes attempted to make common cause with their fellow skeptics across the Atlantic.  

Some critics pointed to the relative "thinness" of NATO's forward nonnuclear defenses; each division, for instance, was theoretically responsible for guarding approximately 30 miles of front. This problem was complicated by a variety of other factors: the severe maldeployment of some alliance forces (the bulk of French, Dutch, and Belgian ground forces, for example, were located well to the rear of the central front, in some cases behind their own frontiers); the withdrawal of France in 1966 from NATO's integrated military command; the lack of standardization in equipment and weaponry;  

the overcentralization of NATO logistical support and hence its vulnerability to surgical attack;  

and the relative weakness of the Northern Army Group (NORTHAG) compared with the Central Army Group (CENTAG).

In the late 1960s the United States actually had fewer troops in Europe than it did in the late 1950s, at the height of the "massive retaliation" doctrine. McNamara himself admitted that, despite "great progress," the West lacked "well-balanced conventional forces," and that the European allies suffered "qualitative deficiencies in training, equipment and supplies."  

In addition, the belief in an overwhelming Warsaw Pact superiority in ground forces persisted even up to the late 1960s. The balance (at least on paper) of 160-odd Soviet divisions versus roughly 60 NATO divisions and of a near 3:1 overall advantage in tanks and a 2:1 advantage in tactical aircraft was a difficult image to shake. It was theoretically possible for the Warsaw Pact to concentrate its forces in certain vital locations to attain 5:1 local superiorities, sufficient to achieve breakthroughs along the central front. Moreover, it was felt, in a lengthy war, the Soviets might have sufficient

---

34 Stromseth points out that military officers within McNamara's Pentagon resented the defense secretary's heavy reliance on civilian analysts and advisers—in particular those in the Office of Systems Analysis—to the detriment of the views of the armed services. They also felt that McNa\n
35 Brown, 1964, p. 171.


37 McNamara, 1968b, pp. 40, 42.
time to fill out many of their low-readiness divisions and move them westward, perhaps giving them the quantitative edge to overwhelm alliance defenses. (Indeed, even McNamara acknowledged that the USSR's capacity to create military forces outstripped that of the United States.) Finally, some felt it was too naïve to dismiss out of hand the potential augmentation of NSWP forces—with its approximately 60 divisions, 1 million troops, and 10,000 tanks—to any Soviet aggression.

To these critics, the revisionists in the McNamara Defense Department and elsewhere were looking at the nonnuclear balance through rose-colored glasses, and many in the West continued to share the view of the British magazine, The Economist, when it argued in 1968 that "come fair political weather or foul, Russia has maintained its superiority in conventional forces." Furthermore, they remained skeptical that improvements in NATO conventional forces would have any great effect on Western defense efforts, as the next major European war would probably soon "go nuclear."

It cannot be denied that a certain sense of optimism regarding the conventional balance had come to predominate perceptions and analysis in the West, particularly in the United States. The gap in nonnuclear forces between the Warsaw Pact and the alliance was by no means as wide as it was once thought to be. Furthermore, NATO conventional defenses were now regarded to be much more capable than they were earlier. And although he admitted that there were some gaps in the alliance's nonnuclear force structure, McNamara continued to argue that "relatively modest additional expenditures" could easily correct any existing deficiencies in NATO conventional defenses.

All in all, therefore, while there were still no easy assurances of successfully repelling a Soviet attack, by the end of the 1960s a fully credible strategy of flexible response was felt by many to be well within reach of the Atlantic alliance.

---

38McNamara, 1963a, p. 35.
40Stanley argued in 1965—the same year that Enthoven made his assertion that a conventional defense was well within the alliance's grasp—that "all in all, it appears extremely unlikely that present NATO strength could cope satisfactorily with even the surprise 45-division assault without early resort to nuclear weapons" (Stanley, 1965, p. 270).
41McNamara, 1968b, p. 40.
42For example, by the mid-1960s, the British appeared to have come around to McNamara's way of thinking and in their annual defence reviews asserted that NATO conventional forces, and particularly its ground troops, were "sufficient" for flexible response, although they called for greater improvements in such areas as equipment, training, and air support (Ministry of Defence, 1966, 1970).
IV. THIRD PHASE, 1969–1975: CONTENDING ASSESSMENTS

The third phase revealed several important points regarding interpretations and perceptions of the conventional balance in Europe. First of all, this was increasingly a period of strategic parity. As the Soviets continued to expand and modernize their strategic nuclear arsenal—including the initial development and deployment of multiple, independently targetable warheads (MIRVs) and an antiballistic missile (ABM) system—Western nuclear predominance, if not strategic superiority, began to dissolve. No longer did NATO retain near-absolute control over the escalating use of nuclear weapons ("escalation dominance"). In the minds of many, the U.S. nuclear guarantee had been severely weakened. This only exacerbated the nuclear/conventional debate with regard to flexible response that began during the previous phase.

Second, there was a continued and expanding reliance on the types of analytical approaches to assessing the balance that were first developed during the previous phase—in particular, on more qualitatively based analysis. Moreover, this type of approach was becoming increasingly sophisticated. Most yardsticks for quantifiably measuring firepower (such as equivalent divisions—EDs), for determining levels of readiness (such as Categories I, II, and III criteria for Soviet divisions) and for factoring in certain "intangibles" (terrain, geography, surprise, etc.) appeared around this time and began to be heavily used in comparisons of NATO and Warsaw Pact nonnuclear military capabilities. Finally, as the growth in research and intelligence-collection surrounding the state of the nonnuclear balance continued, simply more information concerning Soviet conventional developments and capabilities became available to the West.

One striking result of this analysis was the detection of a dramatic quantitative buildup in Soviet forces largely as the result of a major Soviet rearmament program begun in the late 1960s. This growth in nonnuclear forces in particular reflected a return to the traditional emphasis on large ground forces on the part of the Brezhnev regime; and by the early 1970s, the effects of this buildup were easily noticeable. The number of Soviet men under arms rose from 3.15 million in the mid-1960s to 3.9 million by 1975.\footnote{The Military Balance, various years; NATO Information Service, 1976, p. 88.} The number of Soviet army divisions also began to increase, slowly creeping back up...
from a low of 136 divisions in 1967 to 170 divisions in 1975. Most of this increase was
due to a rise in the number of Soviet motorized rifle divisions (from 86 to 110), while the
number of Soviet tank divisions remained more or less constant at around 50.² This new
figure of 170 divisions was very close to the almost mystical figure of 175 Soviet
divisions used by the West during the 1940s and 1950s.

The size and strength of an individual Soviet division also appeared to increase
during this period. In 1969, a full-strength Soviet motorized rifle division fielded, on
average, roughly 10,500 troops and 180 tanks and a tank division of about 8,500 troops
and 319 tanks. By 1974, this had risen to 12,000 troops and 188 tanks for a motorized
rifle division and 9,500 troops and 325 tanks for a tank division.³

In Eastern Europe, Soviet divisional figures remained the same as in 1968: 20
divisions in the GDR, two in Poland, five in Czechoslovakia and four in Hungary, for a
total of 31.⁴ At the same time, however, the strength of these forces—especially the
Group of Soviet Forces in Germany (GSFG)—grew dramatically. From the mid-1960s
to the mid-1970s, for example, the GSFG experienced a 20 percent increase in
manpower, a 40 percent increase in the number of tanks in its motorized rifle divisions,
and a 100 percent increase in artillery assets.⁵ In addition, 12 of these GSFG divisions
were determined to be elite "Guards" units—essentially the crème de la crème of the
Soviet Army.⁶

By the mid-1970s, the number of Soviet troops in Eastern Europe stood at around
600,000; total Pact strength in the central region was around 900,000.⁷ Finally, all 31 of
these stationed Soviet divisions were judged to be Category I divisions (essentially at or
near full combat-readiness), backed up by 12 Category I divisions in European Russia.⁸
An additional 30 Category II and 21 Category III divisions were located in European

²The Military Balance, various years; NATO Information Service, 1976, p. 89.
³The Military Balance, various years.
⁴However, because they would take at least a week to redeploy to the central front, the
divisions stationed in Hungary were not usually included in balance figures for the
central region.
⁶Record, 1975, p. 20.
argue that there were only 400,000 Soviet troops in its East European divisions.
Russia. All in all, the Soviet Union in the mid-1970s contributed 60 percent of all Warsaw Pact ready divisions, 70 percent of all Pact troops, 63 percent of all Pact tanks, and 80 percent of all Pact tactical aircraft. It was argued that roughly half the Soviet Army was "clearly positioned" for war in Europe.

In addition, the Soviet forces during this phase experienced a tremendous growth in its inventory of weaponry, as its production of tanks, armored personnel carriers (APCs), artillery, etc. continuously outstripped the West's. By 1974, Soviet ground forces fielded over 30,000 assigned tanks (with another 10,000 in storage), 30,000 APCs, 12,000 artillery tubes, 5,000 antitank guns, 4,000 rocket launchers, and 1,000 antiaircraft guns. In addition, the tactical air arm of Soviet airpower grew from approximately 3,400 aircraft in 1964 to 4,600 in 1976.

As a result, if there was some debate or uncertainty in the 1960s as to which side was quantitatively superior in armaments, by the mid-1970s this was no longer in doubt: The Warsaw Pact now undeniably outnumbered the West in nearly every category of conventional weaponry. By 1975, the Pact had further widened their gap in central and northern Europe in both main battle tanks (19,000 to NATO's 7,000) and tactical aircraft (4,000 to NATO's 2,100). In the central region alone, the Pact had 13,800 tanks to the West's 6,700. The East led as well in artillery pieces, APCs, and surface-to-surface missiles. Overall, this accounted for a tremendously lopsided numerical balance in central Europe, to NATO's detriment.

Moreover, closer attention began to be paid to NSWP countries, which contributed about 60 divisions to the European balance overall, about the same as in previous years, although troop levels had dropped slightly (to about 760,000–800,000 men under arms).

---

9 Category II divisions are defined to be at 75 percent of their full-strength manpower and with 100 percent of their equipment. Category III divisions are at 25 percent manpower and 50 percent equipment.
10 Lawrence and Record, 1974, p. 13.
12 For example, between 1970 and 1976, the USSR alone built 17,000 tanks, while the West as a whole produced only around 4,000 (Blechman, 1971, pp. 26–27). In addition, Soviet production rates of tanks, APCs, and artillery pieces for the period 1972–74 outpaced the United States by 6.5:1, 5:1, and 7:1, respectively (Record, 1975, p. 27).
13 Record, 1975, p. 27.
16 Lawrence and Record, 1974, p. 40.
In the central region, NSWP forces comprised six East German, 15 Polish (up slightly from the 1960s), and 10 Czech (down slightly) divisions, with a total of about 300,000 troops, 7,500 tanks, and 1,600 tactical aircraft. While Western analysts in general continued to doubt the political reliability of the Soviets' allies and the level of readiness of NSWP forces—and hence their potential contribution to a Soviet attack on Western Europe—most (especially those in the defense establishment) admitted that one could not afford to exclude these forces from balance figures. In the mid-1970s NATO officially conceded that the forces of the GDR were at least as combat ready as those of the GSGF.

The upshot of this decade-long Soviet buildup was a relative weakening of NATO with regard to the Warsaw Pact. During this same period, the numerical strength of NATO forces in the central region remained fairly static. By the mid-1970s, the alliance had about 23 divisions deployed along the central front, plus two French divisions stationed in Germany but not integrated into Allied Command Europe, and the equivalent of two divisions in Denmark and Schleswig-Holstein. In addition, the United States now had prepositioned in West Germany stockpiles of equipment for three U.S.-based divisions, aiding rapid reinforcement in times of crisis. Yet in terms of active forces on line along the central front, NATO actually suffered a slight decline from the mid-1960s.

To be fair, it should be pointed out that the increase in the number of Soviet divisions occurred mainly in the Far East. During the late 1960s and early 1970s, the USSR, responding to a growing threat from the Chinese, greatly beefed up its defenses along the Sino-Soviet border. (It could be argued that the overall growth in Soviet forces was ominous in itself, especially if one kept in mind that this military buildup in the Far East entailed no decrease of Soviet armed strength in East Europe or European Russia.) In addition, despite some growth in manpower and armament per division, the strength of individual Warsaw Pact units compared with their NATO counterparts did not increase dramatically. Soviet and East European divisions, for example, were still much smaller.

---

19For its part, the United States had not yet fully replaced all the troops it had withdrawn from Germany during the Vietnam War; and by the mid-1970s, the U.S. ground forces in Europe were down to 4-1/3 divisions.
than most NATO divisions, and Soviet tank and motorized rifle divisions still deployed much fewer tanks per division than in the mid-1960s.

Moreover, most NATO weaponry was still largely regarded to be qualitatively superior to that of the Warsaw Pact. Certainly, one could not ignore the substantial efforts of the alliance during this period to improve the firepower and military capabilities of its ground and air forces. The then-backbone of the Warsaw Pact’s tank force, the T-55, T-62, and T-64, was still regarded as inferior to NATO’s main battle tanks. The Atlantic alliance, in addition, retained an extensive qualitative edge in tactical airpower, because of continually improving payload factors and more sophisticated avionics, fire-control and guidance systems, and munitions. Particularly in the area of precision-guided munitions (PGMs), such as antitank guided weapons (ATGWs), the West held a substantial technological and quantitative lead.  

However, the early 1970s also witnessed many cases where the Soviets made great strides in narrowing the technology gap with the West. The Atlantic alliance’s qualitative edge, for example, was sometimes less apparent in the area of ground forces armaments. Soviet developments in the area of artillery and APCs were now being seen by some as far outstripping anything the West possessed. Pact artillery, besides outnumbering those in NATO, could outgun and outrange its Western counterparts as well; the Soviets were also expanding their inventory of self-propelled guns. The BMP infantry fighting vehicle was regarded as far superior to any NATO APC.  

The T-72 tank, first detected in the early 1970s, was considered by some to be at least the equal of NATO’s best front-line armor at the time. In the area of air defense, the Warsaw Pact had gone much further than the West in developing its surface-to-air missile system, freeing up tactical aircraft for offensive operations. Finally, the Soviets appeared to be very adept at quickly applying technological developments to its armaments, allowing for more rapid progress in weapon development. All in all, qualitative advantages or disadvantages were becoming much harder to assess.

Ultimately, despite (or perhaps because of) the growing sophistication of analysis and the greater availability of qualitative data, one gets the impression of increasing confusion when it came to evaluating the state of the conventional balance in Europe.

---

With regard to Western conventional defense capacities, by the middle of the 1970s, both "optimistic" and "pessimistic" schools of thought had fully emerged and began to contend for predominance.

Basically, the optimistic school, while recognizing both quantitative and qualitative Soviet advances, argued that NATO still maintained clearly sufficient nonnuclear forces in Europe to be able to deter or repel a Soviet attack without immediate resort to nuclear weapons. Western qualitative and/or quantitative advantages,23 in the mind of this school, were capable of offsetting most of the Pact’s numerical superiority. The conventional balance remained such that, should war break out and should certain reasonable-to-assume conditions be in effect (such as sufficient warning time), the Soviets could never be confident of a favorable outcome. As one contemporary report put it:

Present NATO conventional forces would have a good chance of conducting a forward conventional defense if an attack occurred after some period of tension and mobilization on both sides or if the Soviet Union received less than full cooperation from its Eastern European allies.24

This view was shared by both analysts and government officials alike. A 1974 Brookings Institution study argued that, despite some problems and weaknesses, "the numerical balance of military forces in the Central Region is not unfavorable to the Atlantic Alliance."25 The report concluded:

A forward nonnuclear defense of Western Europe is not only feasible but also well within the capability of the conventional forces that are currently available to NATO.26

Perhaps no public official during the period in question better encapsulated this optimistic school of thought than James Schlesinger, the U.S. Secretary of Defense between 1973 and 1975. Schlesinger strongly believed that a conventional defense was both desirable and feasible. He argued that in an era of strategic nuclear parity, which was clearly evident by the mid-1970s, nuclear weapons no longer carried "the same

23The Atlantic alliance still maintained a decisive numerical (as well as technological) lead in antitank defenses.
25Lawrence and Record, 1974, p. 45 (originally in italics).
26Lawrence and Record, 1974, p. 3 (originally in italics).
dominant weight in the balance of deterrence that they did” before, when the United States “enjoyed a clear superiority in nuclear forces”; thus, “a strong conventional capability is more than ever necessary.”27 Furthermore, he insisted, a robust Western nonnuclear defense was well within the means of the alliance:

There is no inherent reason why the Pact should have conventional superiority over NATO. Nor is there any reason to believe that such advantages as the Pact presently poses are insurmountable. We already program most of what is required to counter the Pact. What is at issue is the relatively small remaining margin.28

In fact, Schlesinger asserted, a rough parity existed between NATO and the Warsaw Pact, mainly because of the qualitative/quantitative arguments already laid out:

[T]here is an approximate balance between the immediately available forces of NATO and the Warsaw Pact in the Center Region. The Pact has an advantage over NATO in the number of men in ground forces. The Pact also has a large numerical superiority in tanks (about 15,500 to 6,000 for NATO). But NATO possesses important quantitative or qualitative advantages in tank destroyers, antitank weapons, trucks, logistic support, and—most important of all—modern fighter aircraft.29

Schlesinger went as far as to state that not only was there an approximate conventional balance at M-day but even after several weeks of mobilization:

This situation of rough parity at M-Day does not change significantly even if Pact mobilization begins a week before that of NATO and what we consider the full Pact threat is deployed to the Central Region. We estimate that on that date (NATO M-Plus-23) the Pact could muster ground forces totaling about 1.3 million men in 90 division forces, along with about 23,000 tanks and 3,700 aircraft, of which a large percentage would consist of short-range, low-payload interceptors. By M-Plus-23, NATO could deploy ground forces of 1.8 million men in 36 division and 30 brigade forces (including 6 French divisions), as well as 7,900 tanks (with more in storage) and about 3,600 aircraft containing a preponderance of fighter bombers.

---

27 Schlesinger, 1974, pp. 7–8.
29 Schlesinger, 1974, p. 88 (emphasis added).
After M-Plus-23 the strength of the Alliance would increase still further relative to the Pact as additional reinforcements and supplies arrived from the United States.  

The pessimistic school stood in marked contrast to the rather upbeat assessments on the part of Schlesinger and the other optimists. This school included U.S. military personnel (including the Joint Chiefs of Staff), White House officials, members of Congress, NATO military and intelligence officers, and West European allies. Adherents of this school writing at the time generally saw the combination of the Warsaw Pact's overwhelming numerical superiority and NATO's narrowing technological lead as adding up to a conventional balance in Europe that was increasingly negative for the West. Consequently, it was now that much easier for the Soviets to offset any Western qualitative advantages by the sheer force of mass, particularly in the event of a Pact surprise attack. Furthermore, when this conventional inferiority was coupled with the emerging parity in strategic forces, it created perhaps the worst scenario possible for flexible response doctrine. Where, these critics wondered, was the deterrent?

NATO and allied evaluations of the balance were sharply at odds with those of Schlesinger, for instance. A 1973 NATO intelligence estimate calculated that the Warsaw Pact had at its disposal 100 Soviet and 60 non-Soviet divisions (plus a further 30 divisions in the Soviet strategic reserve) for an attack on Western Europe. (No mention was made, however, of the fact that these Pact divisions were much smaller than NATO divisions and that the bulk of these Soviet and East European divisions were at Category II or III strength or of the difficulties in mobilizing, transporting, and supplying many of these more far-flung forces.) Other NATO and allied studies took issue with Schlesinger's assessments. The Defense Secretary, they argued, had "cooked the books," by including French and Danish forces in his order of battle for the central front, while excluding forces stationed in Hungary (including four Soviet divisions) and Soviet forces beyond the USSR's three westernmost military districts. Schlesinger's analysis, they added, also failed to take into account Pact advantages accruing from a higher degree of standardization and a longer period of conscription. Moreover, they questioned whether NATO's heavier divisions actually meant additional combat capability. (Again,

---

however, these studies made no distinction between the effectiveness of Category I and lower-readiness Soviet and East European forces.\textsuperscript{33}

The Joint Chiefs were also less sanguine about NATO's ability to conduct a credible nonnuclear defense of Europe. In a series of \textit{U.S. Military Posture} statements presented to Congress, Adm. Thomas Moorer (chairman of the Joint Chiefs of Staff during the early 1970s) presented a generally neutral but also extremely precarious overview of the conventional balance in Europe:

\begin{quote}
O\verb|ver|all, the military balance in Europe, particularly in the Central Region, is very tenuous as far as NATO is concerned. It is extremely important, therefore, that any force reduction in Europe be not only mutual, but also balanced, in the sense that NATO's relative position, with or without prior mobilization, is not worsened thereby.\textsuperscript{34}
\end{quote}

Others in the United States echoed these worries about the state of Western conventional forces in Europe. In 1975–76, Senators Sam Nunn and Dewey Bartlett, based on their own travels and on a secret report by Lt. Gen. James Hollingsworth, expressed their concern as to whether the alliance could successfully withstand a Soviet surprise attack without quickly resorting to nuclear weapons, especially since, in Nunn's opinion, the Soviets had achieved "technological parity" with the West in conventional weapons.\textsuperscript{35} Even National Security Adviser (and later Secretary of State) Henry Kissinger was pessimistic about NATO's nonnuclear defense capability, arguing that the alliance's conventional defenses were "too large to be a tripwire, too small to resist an all-out Soviet onslaught."\textsuperscript{36}

All in all, the assessments concerning the state of the conventional balance in Europe that came out during this phase appear much more contentious and conflicting than in previous periods. So too were the conclusions reached regarding Soviet invasion capabilities and the West's nonnuclear defenses. Ironically, although the early 1970s witnessed the opening of the first East-West negotiations ever on conventional forces—the Mutual and Balanced Force Reductions (MBFR) talks—the end of this third phase was marked by a growing confusion in the West as to any kind of standard perception of this nonnuclear balance. This situation of mixed assessments concerning the conventional force structure seems to be just as applicable to the late 1980s as to the early to mid-1970s.

\begin{flushright}
\textsuperscript{33}Baldauf, 1987, pp. 16–18.
\textsuperscript{34}Moorer, 1973, p. 58; see also Moorer, 1972 and 1974.
\textsuperscript{35}Nunn and Bartlett, 1977; Finney, 1976.
\textsuperscript{36}Kissinger, 1979, p. 83.
\end{flushright}
V. CONCLUSIONS

The prevailing assessment of each period regarding the conventional balance in Europe can be summed up rather straightforwardly: largely pessimistic (1945–61); largely optimistic (1961–69); and increasingly conflicting and confused (1969–75). From a period of near-overwhelming despair on the part of the Western alliance as to NATO’s ever hoping to match the Soviets and the Warsaw Pact in nonnuclear forces, within a few years these perceptions had swung to an almost heady optimism concerning Western conventional defense capabilities. This was then followed by a period of more cautious, yet also more contentious, assessments of the balance.

By the end of the first 30 years of the postwar era, one can see a tremendous evolution in the approach toward assessing and interpreting the state of the conventional balance in Europe. The development and continuing sophistication of new methodologies is particularly striking. What is also interesting is the way in which the "conventional wisdom" concerning the nonnuclear balance has tended to vary so widely at particular times throughout this 30-year period. Ironically, despite the increasing sophistication of analysis, one ultimately arrives by the mid-1970s at a state of mixed and conflicting interpretations—a situation that would appear to bring us up to the current debate concerning the conventional balance. Indeed, since that time, although the debate over the conventional balance has continued unabated, it seems to have largely stabilized around a few by now very familiar analyses, arguments, and perceptions.

It has often appeared that NATO nuclear strategy and nuclear force requirements, at least in part, drove conventional strategy and conventional force requirements. This, in turn, greatly affected perceptions and interpretations of the conventional balance. For example, with regard to the first phase (1945 to 1961), one can justifiably ask whether the alliance’s overwhelming reliance on nuclear weapons did not also color Western perceptions of the conventional imbalance. For example, in their desire to shore up support for his “new look,” did Eisenhower and his military advisers over dramatize the Warsaw Pact superiority in nonnuclear forces to such an extent that no amount of reasonable increase in Western conventional capabilities could be sufficient to bridge this tremendous gap, and therefore made massive retaliation doctrine appear to be the only recourse to a successful Western defense? Eisenhower, for example, once wrote that
"[t]wo more divisions or ten more divisions, on our side, would not make very much difference against this Soviet ground force [of 175 divisions]," and that therefore only the "interposition of nuclear forces" could make up for Western conventional inferiorities.\(^1\) Ultimately, one is justified in asking how much the United States and NATO were simply responding (with nuclear weapons) to an unfortunate and insurmountable conventional disparity and how much did this turn out to be self-fulfilling (and perhaps even self-deluding) prophecy?

At the same time, one cannot help but wonder whether those "conventional balance revisionists"—e.g., McNamara, Enthoven, and Smith, and, to a lesser extent, Schlesinger—had not simply repeated many of the same procedural mistakes the adherents of massive retaliation doctrine had made—that is, of letting their embrace of a particular strategic doctrine ultimately influence their perceptions of the role of nonnuclear forces and the state of the balance? Certainly, the analyses that emerged during the 1960s regarding the state of the conventional balance in Europe greatly buttressed arguments for the adoption of flexible response doctrine. If one accepted these revisionist studies, one could easily come to the conclusion that the alliance’s overriding reliance on nuclear weapons could be greatly reduced and that the idea of a nonnuclear defense of Western Europe, at least in the initial stages of a conflict, was certainly more credible. Yet in their effort to reinforce the credibility of flexible response, did this not also lead some to become overly optimistic concerning NATO’s nonnuclear defense capability?

Finally, during the third phase (1969 to 1975), developments in the area of nuclear weapons and strategic doctrine again came into play with regard to perceptions and interpretations of the conventional balance. For example, this period marked the end of U.S. nuclear superiority and the beginning of strategic parity. Moreover, about this time the Soviets actually took a decisive lead in theater nuclear forces. This loss of Western nuclear predominance made flexible response—which, despite its emphasis on nonnuclear defenses, still ultimately relied on nuclear dissuasion—increasingly more difficult to defend in the minds of many Western analysts. If NATO had neither a nuclear nor a conventional edge, especially at the theater level, then what effective defense strategy existed, save a quasi-return to massive retaliation doctrine (which, of course, had its own detractors)? This growing uncertainty over the efficacy of Western

---

\(^1\)Eisenhower, 1963, p. 453.
nuclear strategy—and in particular of flexible response—was, in turn, reflected in the emerging confusion as to NATO's nonnuclear capabilities and the role of conventional forces in alliance security policy.

It should now be apparent that assessing the conventional balance has never been an easy task. A broad range of factors must come into play. In addition, in examinations of nonnuclear force requirements and making NATO-Warsaw Pact conventional comparisons, much is open to subjective interpretations. Finally, it is important not to lose sight of how much these issues are bound up (and sometimes lost) in other concerns about doctrine and strategy. As we enter a new phase in East-West conventional force negotiations, it might be helpful to reflect upon the lessons of the past.
BIBLIOGRAPHY


