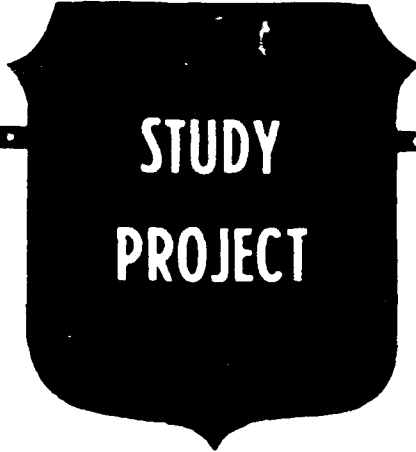


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A COMPASS HEADING FOR UNITED STATES ARMY
AIR DEFENSE FORCES IN EUROPE

BY

LIEUTENANT COLONEL EVANS C. SPICELAND
United States Army

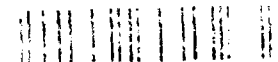
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and intentions. While this measure of the threat is still valid, the new dimensions of uncertainty and instability make defensive posturing more complex. These volatile additions have created a unique and challenging military climate in which to design future air defenses in NATO. The position proposed in this paper is that the threat, and specifically the air threat, in Europe has actually increased since the decline of the bi-polar world order. A new emphasis on flank security and an increased reliance on reserve forces, multinational organizations and pre-positioned equipment is proposed. A reassessment of air defense requirements, in light of impending U.S. force reductions, leads into a proposal that emphasizes defensive force alignment versus conventional reductions that maintain a reliance on maneuver forces. This paper concludes that continued U.S. participation in an integrated NATO air defense structure should be a prominent pillar of our future European defense strategy.

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A COMPASS HEADING FOR UNITED STATES
ARMY AIR DEFENSE FORCES IN EUROPE

An Individual Study Project

by

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DISTRIBUTION STATEMENT A: Approved for public release; distribution is unlimited.

U.S. Army War College
Carlisle Barracks, Pennsylvania 17013
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ABSTRACT

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The purpose of this paper is to examine the changing European threat environment and to propose a concept for future U.S. Army HIMAD Air Defense Artillery employment that is compatible with current political and economic realities and consistent with the new threat situation in Europe. The implications of the altered threat environment for air defense forces in Europe is significant. Future requirements for air defense must be predicated on a combination of conventional concepts of threat assessment as well as a recognition of the new threat dimensions established by the evolving European change. Traditionally the threat has been defined as a Soviet sponsored potential for intrusion into the affairs of the NATO member states and quantified as a combination of capabilities and intentions. While this measure of the threat is still valid, the new dimensions of uncertainty and instability make defensive posturing more complex. These volatile additions have created a unique and challenging military climate in which to design future air defenses in NATO. The position proposed in this paper is that the threat, and specifically the air threat, in Europe has actually increased since the decline of the bi-polar world order. A new emphasis on flank security and an increased reliance on reserve forces, multinational organizations and pre-positioned equipment is proposed. A reassessment of air defense requirements, in light of impending U.S. force reductions, leads into a proposal that emphasizes defensive force alignment versus conventional reductions that maintain a reliance on maneuver forces. This paper concludes that continued U.S. participation in an integrated NATO air defense structure should be a prominent pillar of our future European defense strategy.

INTRODUCTION

The United States (U.S.) is currently transitioning from a strategy of containment and a military doctrine of forward deployment to a security concept calling for reduced European presence. This shift in strategy is based upon a perceived reduction in external threats to European security brought about by the changing European military, economic and political environment. With this change and shift in strategy have come increased discussion and debate concerning the future relevance of the North Atlantic Treaty Organization (NATO). Part of this review centers on the need for a continued U.S. commitment to NATO's integrated air defense (NATINAD). The purpose of this paper is to examine future air defense requirements based upon a changing European threat scenario and to propose future force alignments that address the present and future threat. This assessment is made within an environment of instability and uncertainty that currently exists in the European theater, adding greatly to the challenge of determining the parameters of the new threat to Europe.

Today the world is witnessing revolutionary change within the former domain of our traditional adversary, the Soviet Union. This change is universal in its impact, with

implications that span the globe in every facet of political, economic and military relationships between nations. While former Soviet satellites clamor for independence from communist rule and Soviet allies attempt to reposition their relationships among nations, the Soviet Union grapples with its own concerns about the future. Internally the Soviets are besieged with proposals and concepts for change. Many of these proposals have rapidly become policy, replacing ideological dogma and challenging former paradigms. This period of transition has been heralded by former adversaries and allies alike as the vanguard of a progressive future, built upon mutual trust and peaceful coexistence. Validation of this projection remains to be seen, but what is apparent is that a new world order is emerging. These historic changes and the emerging new world order will guide the direction of future force levels and defense planning but caution must be exercised if we are to meet the new threat. As the United States Air Force has concluded in its recent white paper on global security, "Changes in Europe and the Soviet Union do not promise a tranquil world nor an end to threats to American interests around the globe . . . Soviet policy declarations reflect changes in Soviet intentions, but the ultimate direction of Soviet change is far from clear."²

As this new world order ushers in new relationships, it also creates elements of uncertainty and instability. It is perhaps ironic that the fundamental changes being created lend instability to the old bi-polar alignments. An example and perhaps more significant change has been the disintegration of the Warsaw Treaty Organization (WTO). For over 35 years this formidable military alliance stood as the cornerstone of Soviet political-military strategy in Europe and represented the focal point of both U.S. and NATO threat assessment and strategic planning. With the dismantling of the WTO comes a growing perception that the threat to European security no longer exists and concurrently that the need for continued U.S. deterrence is no longer justified. Today NATO faces its greatest challenge in over 40 years: to redefine its charter and to chart its course for the future. We have lost the magnetic pole to which our compass was attracted. Therefore, we must reorient ourselves to the realities of a greatly changed and still changing threat. A compass heading, especially for NATO's integrated air defense system, is needed.

Within the volatile environment we find ourselves, predictions are difficult at best. It is therefore essential that assumptions be clearly defined. These assumptions

include:

- U.S. European security alliances will continue to have relevance into the foreseeable future.
- Coalition warfare will remain central to U.S. military strategy.
- The future global environment will be characterized by multi-polar regional powers.
- The United States Army will maintain European reinforcing forces, capable of full and rapid mobilization and deployment.
- The Army will maintain its military links to the integrated defense of Europe.
- Future Soviet military and political intentions will remain unclear.
- An integrated air defense network for Europe is, and will continue to be, a central component of European defense.
- NATO members will continue to lack consensus on burdensharing issues.

While several of these assumptions are subjective, most represent trends, qualified predictions and facts. These planning assumptions are by no means all inclusive, but do represent the major tenets upon which the assessment in this paper is based.³

THE CHANGING NATO ENVIRONMENT

The viability of NATO in the 1990's and beyond has come under scrutiny from many factions. It has been proclaimed that NATO has outlived its purpose. The main issue confronting NATO today, however, is not whether the alliance has a future, but more how that future should be defined and what roles it will retain. "Perhaps the greatest challenge facing NATO is the question of where we want to be once the fundamental changes we now see occurring in Europe are substantially complete."⁴

While this on-going debate continues it becomes even more important to understand the issues involved and the functions performed by this venerable organization. It goes far beyond the scope of this paper to develop all NATO's functions and the consequences of changes to its charter; nevertheless a cursory review of its beginning and the evolution of its integrated air defense system is an essential aid in understanding the future U.S. Army air defense role in Europe.

The agreement establishing the North Atlantic Treaty Organization (NATO) was signed in 1949, in response to the collapse of four-power control in occupied Germany, marking the end of the post-war allied alliance and the beginning of

the Cold-War alignment. The Warsaw Treaty Organization (WTO) followed in 1956 as a Soviet response to the admission of the Federal Republic of Germany (FRG) into the western alliance. The evolution of Europe's bi-polar order was above all a function of real or perceived Soviet expansionism and mutual distrust between the two dominant super powers. The hostile environment created by the Cold-War was intensified by the close proximity of the opposing alliances in the heartland of Europe. Buttressed as they were along a contiguous line, reaction time and early warning became major defensive concerns for both alliances.

The NATO alliance implemented a strategy of mutual defense and containment in response to the Soviet policy of forward deployment of forces and an expanding military capability. Each alliance developed security strategies that were, in large part, based upon their experiences during the Second World War and the immediate post-war period. Air power and the use of strategic surprise became a basic tenet of Soviet doctrine. While the lessons of air power projection were not lost on the U.S. and its allies, they initially lagged behind the Soviets in developing an adequate counter measure to the expanding Soviet air arsenal. Even with major emphasis in response to the surging Soviet threat, it took

over 10 years for the allies to create an adequate air defense.

With the ever increasing air capability of the Soviet bloc, NATO made a concerted effort to secure its own airspace with the creation of a NATO Integrated Air Defense (NATINAD). Originally, this was a loosely watched barrier consisting of a thin network of fighter aircraft and a technically emerging ground based missile defense system. In 1960 this collective air defense network formally became an integrated defense provided by a complex system which enables aircraft and missiles to be detected, tracked, and intercepted either by surface to air missile systems or by interceptor aircraft.

Today the United States Army contributions to this integrated air defense are organized into functional commands under the peace time command of United States Army Europe (USAREUR), but with operational control given to NATO through Allied Air Forces Central Europe (AAFCE). While other air defense units are deployed in Europe, the majority are organic to AAFCE. Unlike our allies, U.S. High-Altitude Missile Air Defense (HIMAD) contributions to NATO are U.S. Army components. These assets currently consist of four composite units consisting of both HAWK and Patriot air defense systems, supplemented by command and control units and limited Short-Range Air Defense (SHORAD) systems. All of these units are

integrated into the NATO system and operate in NATO's Central Region located in the former Federal Republic of German (FRG).

Ground based air defense systems have played a prominent role in air defenses since the beginning of combat aviation. After WWII it became evident that anti-aircraft guns alone could not meet the modern air threat consisting of both high-performance aircraft and missiles. The NIKE-AJAX missile system, introduced into the NATO structure in the late 1950's, marked the beginning of a new era in air defense. For the first time, NATO was provided with a complementary air defense mix of both gun and missile systems. Defenses were established along a contiguous line, or belt, in what was postulated as the likely air avenue of approach, to be employed by the Soviet block in any military aggression along the FRG's eastern border. As this defensive concept evolved, NIKE-HERCULES and HAWK missile systems were introduced. These systems greatly improved the defense and created a reinforced belt. U.S. Army Air Defense (ADA) units were positioned in the 4th Allied Tactical Air Force (4ATAF) area in Central Europe both in belt and vital area defensive positions.

Significant financial and manpower investments were made in order to maintain a high status of readiness within the defense. This allowed NATO to use its surface-to-air (SAM)

forces to demonstrate constant preparedness against the Soviet air threat during the periodic confrontations that occurred during the Cold-War period. The integration of this U.S. defense with other NATO allies made it difficult for an aggressor to single out any particular nation for attack. HIMAD units acted as the first line of both detection and defense for NATO, a function that they still perform today.

The NIKE-HERCULES system was phased out in the 1980's and replaced by composite air defense units, consisting of improved HAWK and Patriot missile systems. Restructuring of vital area defenses during this period provided added air defense protection to Major Operating Bases (MOB's) in Western Germany and eventually led to the concept of air defense cluster defenses, replacing the belt concept.

The events in Europe over the last eighteen months have radically changed the situation in NATO. What seemed to be a stable and solid integrated air defense system no longer exists. Troop reductions and the unwillingness of allies to continue paying for the high cost of continuous air defense coverage have driven many recent changes. Readiness level requirements have also been relaxed, while several Alliance units in the integrated system have even been eliminated. In the central region the former territory of the German

Democratic Republic (GDR) has now become a part of a reunified Germany and therefore a unique aspect of NATO defense considerations. Essentially the consequences are more area, more time and fewer forces to provide NATO with a protective shield. With the exception of German Territorial Forces, force stationing limitations in the former GDR territory place a significant restriction of the positioning of NATO air defense forces. This limits their flexibility to defend Major Operating Bases in Western Europe and restricts their positioning to areas along and behind the former NATO defensive lines.

With the rapid changes being seen in NATO today comes yet another bellwether future event. Change will eventually be about both strategy and alliance shifts.

"The existing military alliances are, of course fundamentally structured by the antagonism between the industrial democracies and the Soviet Union. Whether or not some changes in these existing military alliances take place, the future security environment will probably become more complex. --- whereas the United States has been accustomed to playing the lead role in its alliance relations, its participation in alliances or coalition may take more varied forms in the future; for example, its role may be that of 'First among equals', rather than Chairman of the Board."⁵

Many other changes and initiatives are having an impact on the NATO structure. The Conference on Security and Cooperation

in Europe (CSCE) discussions and the reemergence of the Western European Union (WEU) create an environment which will also have a direct impact on the future structure of the NATO Integrated Air Defense System. NATO will most likely remain, but the structure and organization of its integrated air defense system is currently undergoing its most dramatic change in over 40 years. United States Army forces in NATO are being restructured as this paper is being written.

NEW THREAT DIMENSIONS

IN EUROPE

Security is a multi-faceted subject and multi-dimensional in concept, making threat analysis, at best, an inexact science. The concept of threat ranges from military through political, economic and ideological dimensions with often times no clear cut method to neatly separate these elements. Direct threats to security are more easily identified than their counterpart indirect threats. Threats that may culminate in military actions are more difficult to comprehend and counter; this is what makes the current threat situation in Europe so challenging. An analysis of enemy capabilities and intent is no longer sufficient in determining the threat. While these two factors remain highly significant, the added dimensions of instability and uncertainty greatly exacerbate the problem.

To quantify the current threat, and specifically the potential air threat, a yardstick that goes well beyond numerical assessments of enemy aircraft is required. Traditional measures have normally included an evaluation of capabilities along with an assessment of intent based upon levels of competition and tension between the U.S. and the

Soviet Union. This model is no longer valid without the addition of factors presented by current world instability and uncertainty. As Dr. Larry Korb, former Assistant Secretary of Defense has said, "perhaps, the enemy is no longer communism, it is chaos."⁶ As the nature of the threat changes, it becomes essential that discussions on threat deterrence consider the complicated relationships between factors affecting the threat and the reality that actions may be intentional or unintentional and that aggressive actions may be orchestrated from a centralized coordinated enemy or from a factional group or region.

While the role of military forces in meeting the threat remains essentially the same, emphasis on deterrence has increased.

"Specifically, military forces have roles that go beyond fighting large wars. First, they influence the long-term deterrence environment by their deployment and doctrine, preventing certain developments and encouraging others. U.S. military forces and doctrine can influence the size and scope of European nuclear forces, the consolidation of European defense efforts, and the rate at which intra-European bilateral security cooperation advances. All of these clearly have an important effect on stability and deterrence in Europe. Second, the role of military forces in crisis management, and especially in preventing forces withdrawn from Central Europe from coming back, increases."

The intentions of individual states within the formerly homogeneous Warsaw Pact as well as the Soviet Union are difficult to project without a clear chart of the future environment. If, as some have stated, the WTO is no longer a viable military organization, then the Soviet threat of expansionism in Western Europe comes into question. Facts do not, however, all support a thesis of a reduced threat, and especially a reduced air threat in Europe.

"It would seem highly unlikely that even a Soviet Union committed to internal reform would suddenly abandon foreign policy goals rooted in centuries of Russian history. It would be a tragic irony if unwarranted euphoria were now to result in what unwarranted pessimism was unable to bring about at the start of the 1980's, namely, NATO's premature demise."

For the purposes of this analysis the threat is addressed in three categories: the first two components, capability and intent are amplified by the third component which is the uncertainty of the future threat due to the destabilizing environment currently facing us. As previously stated, threat capabilities are relatively simple to calculate. The willingness of a potential adversary to use these capabilities is far more difficult to assess. Separating these two elements is also difficult.

The Soviet Union has "an impressive and modernizing military"⁹ that, while reduced in presence and numerically down sizing, is by some measures a more potent force than before. With this in mind it is highly conceivable that ". . . the Soviets' real objective is to rebuild a devastated economy, which has been kept on a war footing for 50 years and reenter the world scene as an active and much stronger player after the year 2000."¹⁰

Theoretically at least, the Soviets, even with proposed force reductions considered, could mount an offensive air campaign comparable to existing capabilities.¹¹ This significant factor is based on systems modernization efforts currently in progress. While numerically reduced, land-based missile and aircraft capabilities have been significantly upgraded in range, ordnance delivery capability and avionic technology. The U.S. and NATO can not ignore 1,572 Soviet long and medium-range bombers, 2,655 ground attack fighters or the helicopter threat posed by 1,500 gunships. Soviet writings already reflect the belief that precision-guided munitions reduce the need for large numbers of strike aircraft.¹²

The air threat must include not only manned aircraft but also Tactical Ballistic Missiles (TBM) and Remotely Piloted

Vehicles (RPV) along with their wide spectrum of capabilities. The 1,380 post-INF Treaty (Intermediate-range Nuclear Forces) Tactical Ballistic Missile launchers (TBMS) are a formidable threat in and of themselves.¹³ "The TBM threat is increasingly worrisome because of a reduction in circular error probability and the possibility introduction of fuel air explosive (FAE) warheads that have the destruction potential of low-yield nuclear weapons."¹⁴ Assessments based upon weapon platforms alone, while highly significant, must be viewed concurrently with other related factors. This observation, coupled with the counting and verification ambiguities being experienced with current Conventional Forces in Europe (CFE) negotiations, limits the argument for a reduced European threat scenario. This new threat is further amplified by current weapons production trends in the Soviet Union.

"During the first four years of Mr. Gorbachev's leadership of the Soviet Union, military production continue unabated . . . in the last nine months, production has gone down, yet remains at almost double the rate of the west. Modern aircraft like the Flanker, Fulcrum and Blackjack . . . and strategic missiles . . . continue to be produced."¹⁵

Yet another critical aspect of the new threat is that of operational and strategic surprise. Anticipated changes in

threat will not reduce our reliance on an effective warning system and the capability to confront enemy aspirations. Recent action in the Persian Gulf War attest to the effectiveness of both TBM's and RPV's. The success achieved by air defense systems in this war clearly demonstrate their military and political deterrent importance.¹⁶ Added to the threat equation is the possibility of military-technological surprise. "Surprise may take the form not only of unexpected technological innovations, but of expected innovations made operational earlier than had been expected -- for example, Soviet deployment of low-observable or high-energy weapon systems."¹⁷

Capabilities represent only one aspect of threat analysis. The focal point of threat determination and the most serious threat to security is based upon intentions. The uncertainty created by the elimination of centralized Soviet command and control authority adds a new dimension to the threat equation. The U.S. and NATO can no longer count on a collective decision making apparatus, which was far more predictable than the current situation in Europe. The possibility of dissident military groups, terrorists, separatist or other radical factions gaining control of aerial threat weapons is far more plausible now than in previous

times. In this respect the political implications are as important as the military. Political blackmail using the threat of nuclear, chemical or biological weapons by factional groups or nations is not a far-fetched scenario to consider. As ethnic nationalism spreads throughout the Soviet Union, the possibility of dissident groups gaining control of offensive air systems has greatly increased.

Another aspect of intent that blends into the equation concerns the Soviet view of the future. If the original strategic aim of the Soviet Union, as many have surmised, was the elimination of NATO, then one can effectively argue that their current policies may prove highly successful. Surely the Soviets' new direction has had an impact by bringing into question the very need for a collective security arrangement in Europe. Is the new Soviet policy of cooperation a brilliant strategic move or a position of necessity? Whatever the answer, the element of risk has surely increased.

"... those in military circles can discuss ad nauseam the continuance of a Soviet threat that despite Gorbachev's rhetoric there has been no reduction of military expenditures in the Soviet Union, or that despite his initiatives the Soviet system and Marxist ideology remains largely the same. In the popular mind, however he has reduced the threat of war."¹⁸

This perception of a reduced threat fosters continued pressure to reduce preparedness. While pundits from all sides of this argument make earnest, if not always valid points, the inevitable result will be reduced military forces in Europe.

The challenges of this new threat are having a major impact on military force planning and air defense concepts for Europe. "The crucial task . . . is to get from where we are now to our desired destination with acceptable risk at reasonable cost."¹⁹ Regardless of the risk level, threat analysis or any other factors considered . . . "The first threat that NATO would probably face in the event of war would be air attacks on its air bases and other targets in its rear areas."²⁰ Future roles and missions of air defense forces, under this likely scenario become even more critical.

In summary, the true threat may be the perception that there is no threat, or that the threat is undefinable. As Robert E. Hunter stated ". . . despite experience during the past 40 years, will it never be easy to define a threat."²¹ Hunter goes on to say that "even during the Cold War it could not be stated firmly that there was a military threat from the East." How much more difficult it will be, Hunter adds, "to define threats to security, much less mobilize efforts to counter them . . ."²² As has been shown, Soviet potential to

mount a continued and serious threat to European security remains: the uncertain element is in the intent for its use. Whereas intent under centralized control may have a diminishing effect on the European threat, the potential for uncontrolled, or less coordinated actions has in fact increased.

NATO MILITARY FORCES IN TRANSITION

The inability of the NATO alliance to gain consensus on defining the new European threat, and to develop a strategy to meet it, has kindled increased debate by member nations on financial and military force contributions. The continuing issue of burden sharing has been cast in a new light as allies opt for reduced participation, further straining an already delicate alliance issue.²³ Faced with increasing political and economic pressures, each nation has sought to obtain its own peace dividend. Some nations have elected to reduce their participation in NATO's integrated air defense structure through elimination of units offered for inclusion into the Allied Forces Central Europe Order of Battle (ACE ORBAT), reduced presence and/or relaxed readiness postures. Belgium, for example, has already begun a withdrawal of its ADA forces from Central Europe and has no contingency plan to retain a NATO air defense mission. The Netherlands, along with the Federal Republic of Germany and the U.S. have elected to reduce ADA readiness levels in response to the changing threat.

The danger is not so much in force restructuring or in reduced readiness levels, but more in unilateral reductions. Each NATO member is continuing to develop military force

structure designed to meet its own perception of need.²⁴ This inability to maintain a unanimous view is alarming to many. A basic principle upon which NATO was founded is the willingness of member nations to stand together in common defense. "Only through the active participation of all member nations can the alliance reflect the strength of unity and the warning that any aggression will inevitably involve all member nations."²⁵ Reluctance on the part of any member to fully support the collective defense weakens the very fiber of the alliance.²⁶

Military force reductions in Europe are inevitable. As the U.S. and its allies pursue CFE, INF and SALT agreements, a balance between national and collective concerns must be reached. What this future military structure will look like is unclear but, what is clear is the need to adjust to the changing environment in a well planned and coordinated manner. Force reduction decisions must place greater emphasis on defensive systems as offensive capability is withdrawn. As Edward Feege notes: "Deterrence, verification and initial air defense will most probably dominate the force structure of NATO."²⁷ Today this position is only a proposal, but one that should govern U.S. Army force reductions and complement the overall NATO concept.

Until now a functional analysis approach to U.S. force reduction has seen limited use. The method being used appears to be more a prorated reduction among functional areas than one based on threat driven requirements. The U.S. and NATO are in need of a new threat model. Professor Henry C. Bartless, on the faculty at the Naval War College, has described a model with potential merit. Professor Bartlett's model, called the Hedging Model, focuses on force planning driven by uncertainty. In this model readiness and sustainability are balanced to compensate for the unknown aspects of the threat, the intent of potential adversaries, technological surprise, and invalid threat assumptions.²⁸ This model ideally fits the present European situation, whereas current force planning factors are based more on percentage reductions with a lesser emphasis on defensive requirements. As Charles W. Taylor has noted: "All too often, planning is based against a single, unique, and surprise free scenario that has been derived from a consensus view of a continuation of current trends. In general, a single view of the future tends to be shortsighted and can not be relied upon."²⁹ It is for precisely this reason that a balanced model for force development must be used; a model that is best capable of confronting uncertainty in the future threat. This model

leads to an increased reliance on defensive systems. For air defense planners the type of force reduction model used is a critical issue.

Air Defense Artillery has been the traditional force structure bill payer during austere times. These forces become early targets for reduction due to a perception that they have high maintenance costs and manpower intense system requirements.³⁰ As LTC Jeffrey Gault noted in his study on European Air Defense Forces:

"A number of precedents have been established whereby air defense forces have been eliminated or cut as a cost saving measure during times of austerity. For example, despite the existence of a not insignificant Soviet/Cuban air fleet in Cuba, the 31st ADA Brigade in Miami/Key West was eliminated in the late 1970s as a part of the continuing post-Vietnam drawdowns and reduced defense budgets of the Carter years. A more telling and appropriate example was the inactivation in 1980 of the 38th ADA Brigade in Korea, with the closure of some units and the wholesale transfer of equipment and missions to the South Koreans. This reorganization was a response to President Carter's efforts to reduce the U.S. presence in that country. Wide ranging debate over administration plans to withdraw U.S. ground forces led to intense scrutiny and publicity over the substantial threat, both land and air, posed by the North Koreans. This potential threat and the levels of tension in the area led to reassessment of this decision; however, the withdrawal of air defense forces was accomplished."³¹

Perhaps more valid, however is the view that ADA systems do not fit neatly into the traditional Army structure. The current Army build-down concept for Europe may include elements of each bias. Present estimates of residual forces

remaining in Europe after reductions are between 70-120,000 soldiers organized into a single U.S. corps. U.S. ADA forces in NATO are expected to be reduced from four composite brigades to one brigade incorporated in the corps. While the inclusion of an organic ADA at corps level is long overdue, it represents only one aspect of the total Air Defense requirement. Remaining corps Air Defense elements alone cannot fulfill the total NATO air defense mission. No U.S. theater level forces are planned for retention in the NATO structure. While retention of organizations is not the issue, the significant role they play in the military as well as political side of the integrated NATO system is. Without a dedicated ADA structure the U.S. voice in NATO's airspace command and control structure will be severely weakened. This reduced commitment may place in jeopardy the adequate defense of U.S. MOB's, C2 facilities and other strategic assets, that remain during and after force reduction measures are implemented. This is especially true of the rear combat zone, making reentry into Europe far more difficult. Defense of transport facilities is critical to any reentry plan.

This issue of theater defense needs becomes even more important when the complexity and cost of reestablishing the system is considered. The integrated system in place today

has evolved over many years. Interoperability and standardization are not problems that can be overcome immediately. Plans for rapid reentry into the theater system may very well prove unworkable unless presence is maintained.³² Influence within the NATO structure is therefore critical. At present the final configuration of NATO Air Defense assets remaining is unclear. Indications are that reductions and a return to home stationing will continue. This trend makes continued U.S. Air Defense participation even more essential to our national security strategy.

AN ALTERNATIVE APPROACH

The search for the optimum U.S. Army European air defense strategy is keyed to both a redefined threat as well as a broadened perspective on the part of force planners towards nontraditional concepts. A rethinking of defense is required where two-dimensional linear battlefields are replaced by an appreciation for an incorporation of the third dimension, air space, into future planning. Branch parochialism and bias must be overcome by a honestly brokered strategy that dictates functional force balance predicated on requirements and not tradition.

Central Europe by definition will continue to be the hub of NATO's defense planning but a shift towards a more balanced approach is warranted under the conditions created by the new threat. This approach would spread the concentrated air defense assets in Central Europe to cover the comparatively vulnerable flanks in Norway and Turkey. Concern for the northern and southern flanks of NATO is not a new, but it is today a larger issue than ever before. A new NATO strategy that places greater emphasis on flank defense has been endorsed by NATO Secretary-General Manfred Woerner. As Secretary-General Woerner has put it---"while Central Europeans have rejoiced in the expected withdrawal of the

Soviets from their region, this perception has not been shared by Norway and Turkey where the Soviet Army still looms large on their border."³³ This concern for European flank security is shared by the Deputy Supreme Allied Commander in Europe, General Sir Brian Kenny. As General Kenny has noted--- "everybody is well aware on the NATO side that there is perhaps a perception that the flanks, in relative terms are not quite so well off as the Central Region."³⁴ The concern is for a very vulnerable norther flank and the concern, as expressed by a Norwegian Ministry of Defense official, that reduced conventional forces in Europe could lead to a build-up on the flanks.³⁵

With the recent shifting of Soviet aircraft from bases in Hungary to the Kola Peninsula, the direct threat to Norway has actually increased. "The main task of these planes is to attack targets from the rear, and their range makes it possible for them to reach targets through-out Norway from (their) bases."³⁶ Norway is a strategic part of NATO's defensive containment concept for several reasons. These reasons are based primarily on the important Soviet Naval facilities in the Baltic and the strategic waterways within the area. Equally important is the continued anxiety within NATO caused by the fragile security and vulnerability of the

Northern Cape region.³⁷

Adding further concern to NATO and Norway is the unabated Soviet Naval modernization effort and the uncertainty created by social and political unrest in Estonia, Latvia and Lithuania. Although Norway's national policies preclude the permanent stationing of foreign military forces in Norwegian territory, they do not preclude temporary presence for joint NATO training nor do these policies restrict the introduction of Prepositioned Material Configured to Unit Sets (POMCUS)³⁸ contingency stocks. Norway adheres to a national defense strategy that relies heavily on allied reinforcements.³⁹ Presently, Norway possesses an air defense force that is fully integrated into the NATO system. This air defense system, while modern and capable in many respects, is limited in size. No NATO ground based air defense systems are currently dedicated to reinforce Norway's defense.

Norway shares a unique commonality with its southern flank ally Turkey: both nations are the only NATO countries that share a common frontier with the Soviet Union. As is the case with Norway, Turkey faces not only a direct threat but also a threat exacerbated by the added dimensions of social, political and ethnic unrest in the bordering Soviet Republics of as well as the increased uncertainty of Soviet military

intentions in the region. Turkey is the historic bridge between Europe and the Middle East, "with anchors in each region."⁴⁰ Its strategic importance is due to a combination of its geographical location and changes currently occurring on the international scene. Recent events in the Persian Gulf region are a "stark reminder that NATO's new reality may require just such a member (as Turkey), an eastern flank against instability in the oil fields on which Europe and the rest of the west are heavily dependent."⁴¹

Turkey provides the ideal cornerstone for U.S. defense strategy in the region, but unlike its northern allied, to include Norway, it does not possess a modern integrated air defense structure. The need for rapid correction of this defense deficiency is evidenced by the deployment of Patriot missile systems to Turkey in response to the Iraqi invasion of Kuwait. The need to retain this defensive cover over critical Major Operating Bases such as NATO's Incirlik Air Force Base, is self-evident. Turkey is, and will remain, an ideal assembly point for future out of sector NATO, or U.S., missions if the need for this type operation is required. Dedicated NATO ADA forces for such a continuing mission, however, are not currently programmed. Out of sector missions, in particular, are being viewed more and

more as a future NATO task. The Persian Gulf War has added emphasis to what was already an issue with NATO's political and military planners. Building up Turkey's defense capabilities, particularly those for air defense, would cast a strong shadow over any Soviet planning for operations in the Gulf region⁴² and would provide an ideal initial defense for any NATO reinforcements should the requirement arise.

The case for developing increased air defense flank security in NATO must address a means of accomplishing this mission under austere conditions. Not only the new threat, but also budgetary limitations, regional politics, NATO force reductions and realities of a concurrent but separate U.S. Army build-down concept, must be considered. To do this adequately requires a look beyond conventional concepts. The end result will most likely be a compromise that limits risk but also reduces some aspects of national flexibility. For instance, the issue of reduced troop levels can be compensated by a combination of multi-national forces integrated with national reserve components complemented by an organizational structure geared toward a rapidly expandable cadre organization. With this concept in mind and without a needless journey into a debate on hollow forces, a new proposal for NATO air defense can be made. This proposal

calls for three composite air defense brigades that complement the currently planned U.S. Army corp brigade in Europe.

The prepositioning of U.S. Army air defense systems in Norway is the most feasible approach available. This prepositioning of equipment greatly facilitates any future contingency while making minimal demands on U.S. force structure. A composite Patriot/Hawk brigade equipment set would require only nominal maintenance and caretaker personnel, provided by host-nation support and complemented by minimal technical representatives and military liaison personnel. Currently available U.S. Army Reserve component units could be given a revised wartime mission of manning these systems. These reserve elements are currently assigned a European reinforcement mission and already possess much of the systems technology and tactical expertise required to perform this mission. The use of reserve component forces would have no impact on CFE TROOP CEILINGS. POMCUS equipment would also not be an issue in that ADA systems are not covered by either CFE I accords or CFE II proposals. Politically this northern flank solution is supported by current precedents and acts as a harmonizing proposal that directly addresses national security concerns. As General Sir Brian Kenny put it---"the harmonization proposals really are aimed at trying

to make sure the flanks are strengthened as much as possible, in terms of encouraging some of the nations to take on slightly more modern equipment."⁴³

This same rationale applies to the southern flank held down by Turkey, but with a much different approach. Turkey is unique in that U.S. and NATO forces are already stationed in the country. As emphasis within bordering regions increases, the demand for increased aid and support will expand. One major means of providing this increased assistance and demonstrate commitment is to position air defense units in the country. The establishment of a modern integrated air defense structure could very well start with the basing of a multi-national force in Turkey. This force consisting of active and reserve components could be manned on a rotational basis from facilities in Central Europe. Permanent stationing is not necessary except for a limited number of technicians and command and control elements. Personnel rotation from other regions would significantly reduce the need for increased NATO infrastructure expenditure and would minimize the cultural impact of increased foreign presence. Military dependents would remain housed in existing host nation facilities or nation of origin, in Germany and other NATO nations. By structuring alert readiness

requirements to match reduced manning levels, operating costs could be optimized.

Thus far this proposal has emphasized air defense for the NATO flank regions. The central region cannot, however, be ignored. While the direct threat to the region has shifted, it has not been eliminated. Retention of an air defense force as an organic part of the NATO integrated air defense structure is essential. Just as the proposed ADA brigade assigned to the U.S. Army Corps in Europe is critical, so is the need for a general support, theater ADA brigade. The protection of MOB's, port facilities and strategic lines of communications are vital to our forward presence doctrine. While the Corps ADA would be integrated into the NATO system, its mission would be contingent upon Corps priorities and not necessarily include vital assets to be defended in the rear area of operations. The outfitting and manning of an additional theater ADA would require personnel above the levels currently planned. How to support this increased requirement will call for a relook at down-sizing methods. Instead of the traditional fair-share approach, or as is the historical case with ADA units, the most vulnerable approach to reductions, a fresh, mission-oriented model must be developed. This functional approach would support defensive

systems over many offensive capabilities but realistically it will not be adopted. This leaves ADA force planners in the position of increased reliance on reserve component elements and a multi-national brigade organization. This would minimize any increased personnel requirements while retaining U.S. command and control authority. The Authorized Level of Organization (ALO) together with its assigned level of readiness would dictate the total U.S. personnel commitment.

The creation of dedicated U.S. Army Air Defense brigades in NATO is not a novel idea. This is obviously the structure in existence today. What is unique, however, is the component configuration of these proposed brigades and their placement. The equipment and real estate to support this concept is essentially in place today. The greatest challenge to NATO would be the adaptation of its integrated command and control structure to this multi-national configuration but, even this is less difficult than most assume. Multi-national ADA forces have been in existence for some time. The antiquated missile belt defense has been replaced by AD clusters consisting of multi-national units. Additionally, common doctrine, tactics and procedures this both a logical and plausible future AD strategy. By providing a balanced defense that stresses deterrent systems, U.S. Army Air Defense Artillery may very

well become the focal point of future U.S. participation in European security.

SUMMARY

The draw-down of U.S. Army forces in Europe is a certainty. Answers to the questions how many soldiers will remain and where they will be stationed are at a final proposed stage now, but it is not too late to rethink this issue, especially in light of the lessons learned in the Persian Gulf War. Our inevitable reduction in forward European presence should and must be made with a bend towards defensive systems. Air Defense systems are ideally suited for this role. They would provide forward presence in both a military and political sense which is reassuring to our allies and also critical to rapid reentry into the European theater, if required. These highly flexible systems could provide both point and area defense. With retention of adequate systems they could also provide general support and reinforcing fires to the Allied Corp defenses.

The criticality of maintaining interoperability and continuing as a full partner in NATO's standardization efforts can not be overemphasized. The skills associated with interoperability are quickly perishable. They can not be maintained without close coordination and relationships. As Thomas Durell-Young has made quite clear: "Both during and following the current period of strategy reorientation, a

prime consideration in NATO strategy and operational doctrine must be to stress retaining alliance members' interoperability."⁴⁴ The development of multi-national subordinate units within the proposed U.S. theater Air Defense force structures and the heavy reliance on Reserve Component filler personnel would enhance this effort. This would also complement U.S. force reduction initiatives while maintaining key links to the NATO C3I structure. There are obvious compromises in this proposal but considering the realities we, the U.S. Army, are faced with, this proposal meets the defensive requirements of the new threat in an affordable fashion. It also fits the requirements of our new national security strategy. As President George Bush has so astutely stated:

"The United States would be ill-served by forces that represent nothing more than a scaled-back or a shrunken-down version of the ones that we possess. Forces that we possess right now. If we simply prorate our reductions-cut equally across the board-we could easily end up with more than we need for contingencies that are no longer likely, and less than we must have to meet emerging challenges. What we need are not merely reductions, but restructuring."⁴⁵

President Bush, in his address at the Aspen Institute on 2 August 1990 went on to say

"---I am convinced that a defensive-and I reemphasize the word- a defensive strategic deterrent makes more sense in the 90's than ever before. What better means of defense than a system that destroys only missiles launched against us-without threatening one single human life."⁴⁶

The new national security strategy outlined by President Bush has been incorporated in Secretary of Defense Dick Cheney's Annual Report to the President and the Congress. This report emphasizes the "continued importance of maintaining our robust defensive capabilities"⁴⁷ and our continued strong support of NATO and our European allies. The key to our future defensive strategy in Europe is the maintenance of a strong responsive and viable flank defense. This approach answers the ongoing Soviet shift in military assets to northern flank areas and acknowledges the major interests NATO has in stability on its southern flank, the maintenance of a credible defense should be in response to the erratic Soviet compliance with the already signed treaty for reducing Conventional Forces in Europe (CFE) as well as the lagging pace of talks on START give rise to questions concerning Soviet intent.⁴⁸ This uncertain situation coupled with Soviet Military unrest and even a report of mutiny on a Soviet Strategic Missile site give ample cause for alarm.⁴⁹

Air Defense Artillery systems provide an ideal means of

maintaining a much needed forward presence and strengthening our defensive posture in Europe at a time when offensive systems are being reduced, defensive systems become more critical. Air Defense provides deterrence by limiting the effectiveness of any offensive threat thereby making this type of action a high risk option for any potential adversary. It is not too late to review our force reduction program and retain an integrated U.S. Army Air Defense presence within the new NATO integrated system. The new threat dictates changes but not reductions in our Air Defense participation within NATO.

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