NATO Airpower
Organizing for Uncertainty

Willard E. Naslund
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SUMMARY

In the future NATO will have to adapt to the realities of decreasing defense budgets and to changing and expanding the areas of responsibility brought on by German unification and the growing linkages with the former Warsaw Pact nations. NATO will need to have forces ready to manifest its new strategy of reaction to uncertainty. This new requirement for rapid reaction will greatly impact the nature of future NATO military organizations, especially those that will be needed to plan, deploy, and employ air forces across its regions—and beyond. This research is focused on the concepts for these future organizations.

To provide a basis for this work, we examined two major scenarios that would stress NATO to the extreme: (1) an attack by Russia on Poland, which would be out of NATO's treaty area, and (2) a Syria-Iraqi attack on Turkey, which would require NATO forces to deploy out of NATO’s central region. From the scenarios, concepts of operations were developed for the employment of air forces that included basing, command, control, and communications (C3), and logistics. Requirements for air organization were derived from these and were used as a basis for alternative organization concepts.

REQUIREMENTS FOR NATO AIR ORGANIZATIONS

The results of the scenario analysis indicate that an effective air organization must be deployable; it must be able to physically move to the action area. Its forces will need to be tailored and trained to meet a broad range of conflict contingencies. Some of these forces will have to be assigned in peacetime; and all will have to be trained periodically even if they're not assigned full time. This training will have to include deployments and exercises across the regions as well as developing capabilities for out-of-area deployment and employment. Logistics support integral to the organization, primarily that of airlift, will also be required. Reconnaissance, command and control, and air defense also will have to be integrated within the organization to perform rapid reaction functions.
The command structure will have to be able to perform many different kinds of operations, including forward or independent air operations away from ground force operations. It will need to be able to prepare and provide regional supplementary forces or support facilities and personnel to regional command and control structures. And it will have to be able to plug its resources quickly into static command and control facilities, such as the fixed air control centers that are being planned for future NATO air command and control systems. In this regard, the command functions of the deploying forces probably will have to be established ahead of the warfighting elements. Thus, a first principle should be to have a targeting/tasking capability in place to effectively apply offensive fire power.

The headquarters and the staffs will need to function in peacetime to train and plan for contingencies. These functions will need to be appropriate to the operational command level of the force itself. The headquarters and staffs will need to plan for the employment of forces at the level at which they will be employed, such as the regions or subregions, rather than at high theater levels. In wartime, these planning staffs and operators would be available for deployment and employment of the air reaction forces as the situation demanded. Finally, the air reaction force organization will need a clear and unfragmented operational authority arrangement over the forces that are assigned to prosecute air reaction missions. While this authority may be delegated from regional commands, it nonetheless must be clearly defined.

In sum, future NATO air commands will have to be able to respond to a large spectrum of threats, capable of manifesting many different kinds of organizations and having adaptable command arrangements. This is to be a unique—even a radical—new kind of structure.

**AN ALTERNATIVE ORGANIZATION FOR NATO AIR FORCES**

Using current NATO operational authority doctrine as a basis, an alternative for future air organization was developed that incorporated the requirements established in the organizational analysis. Major features of this concept include:
1. A staff element that would provide the interface between NATO and extra-NATO military organizations
2. Operational authority for air reaction force planning and training delegated to a regional air commander (COMAIRCENT)
3. Establishment of a Commander Reaction Forces Air (COMRFAIR) who would have responsibility for reaction force planning and coordination, as well as for the capabilities for tactical command or control of air reaction forces
4. Establishing air reaction force cadre elements within NATO’s regions to provide the standing components of the reaction force.

The kinds of air resources and support resources that would be required to perform a relatively sophisticated air reaction force operation include assets such as overhead satellite capabilities for both reconnaissance and communications, bomber aircraft of certain kinds, extensive airlift and air refueling support, and large amounts of command and control and communications capability. Currently most of these assets are owned only by the U.S. Air Force. These enabling resources are expensive; if the NATO nations (or the European Community/Western European Union) want to obtain a Europe-only air reaction capability, they will have to pay dearly. An implication for the United States is that these special capabilities should become the core candidates for the force structure that the United States considers for Europe in the near term.

CONCLUSIONS

This analysis concludes that:

1. A peacetime NATO air reaction force command and control organization is required.
2. Air reaction forces should be prepared for operations independent from ground forces and existing command structures.
3. Responsibility for air reaction functions should be assigned to an established, functioning command rather than to staffs.

4. The implementing component of NATO air reaction should be at the regional level.

5. Future changes in NATO high-level organization or charter will stimulate requirements for substantial air organization changes.

6. Air reaction forces could play a unique and important role in future conflicts, including major contributions in peacemaking missions.

7. Future (near term) viability of NATO air and ground reaction forces depends primarily on U.S. contributions.
ACKNOWLEDGMENTS

This project needed the cooperation and contributions of many people working on the issues of the functions and fit of the U.S. Air Force within the security structures of future Europe. A working group was established at Headquarters United States Air Forces Europe (USAFE) to assist in this effort. Major contributors from this group were Lieutenant Colonels Dave Ruddick, Gary Endersby, and J.C. Charles of USAFE, and Lieutenant Colonel Chuck Marshall, Major Barbara Pawlowski, and Wing Commander Ian Pryor of Allied Air Forces Central Europe. General James B. Davis, Chief of Staff, Supreme Headquarters Allied Powers Europe, provided thoughtful insights on the work. His Special Assistant, Brigadier General Roger Carleton, provided support and commentary throughout. Colonel Bob Chapin, Director of Plans for USAFE, carefully reviewed and updated this paper, and spent many hours of his time discussing the issues of airpower organization.

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**GLOSSARY**

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
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<tbody>
<tr>
<td>AAFCE</td>
<td>Allied Air Forces Central Europe</td>
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<tr>
<td>ABCCC</td>
<td>Airborne Command, Control, and Communications Center</td>
</tr>
<tr>
<td>ACCS</td>
<td>Air Command and Control System. A plan to build a NATO air control system with improved capability. It is presently under review because of major changes in the threat and fiscal climate, and probably will be dramatically changed/reduced</td>
</tr>
<tr>
<td>ACE</td>
<td>Allied Command Europe</td>
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<tr>
<td>AD</td>
<td>Air Defense</td>
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<tr>
<td>Administrative Control</td>
<td>(DOD, NATO). Direction or exercise of authority over subordinate or other organizations in respect to administrative matters such as personnel management, supply, services, and other matters not included in the operational missions of the subordinate or other organizations¹</td>
</tr>
<tr>
<td>AFCENT</td>
<td>Allied Forces Central Region. A major NATO subordinate command</td>
</tr>
<tr>
<td>AIRCENT</td>
<td>Air Forces Central Region. The air counterpart to LANDCENT; replaced AAFCE</td>
</tr>
<tr>
<td>AMF</td>
<td>ACE Mobile Force. A small NATO ground/air force structured for a rapid show of force and demonstrating political solidarity</td>
</tr>
<tr>
<td>AOCC</td>
<td>Air Operations Control Center. An air control facility that manages offensive and defensive air missions. The model for the CAOC.</td>
</tr>
<tr>
<td>AOR</td>
<td>Area of Responsibility</td>
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<tr>
<td>ARFPS</td>
<td>ACE Reaction Force Planning Staff. A SHAPE concept that will have a staff agency planning for NATO reaction force operations, directly responsive to SACEUR</td>
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¹Department of Defense Dictionary of Military and Associated Terms, Incorporating the NATO Glossary of Terms and Definitions, Joint Pub 1-02 (formerly JCS Pub 1), The Joint Chiefs of Staff, Washington, D.C., 1 December 1989, p. 5.
ARRC  ACE Rapid Reaction Corps
ASOC  Air Support Operations Center
ASRT  Air Surveillance Radar Team. A radar control facility
ATOC  Allied Tactical Operations Center. An air control center for offensive air missions
ATAF  Allied Tactical Air Force. A NATO principal subordinate command-under a Major Subordinate Command (MSC) commanding a region or portion of a region's airpower.
AWACS  Airborne Warning and Control System. A U.S. airborne air control facility primarily used to vector aircraft and to conduct aerial intercepts
C2  Command and Control
C3  Command, Control, and Communications
C3I  Command, Control, Communications, Intelligence
CAOC  Combined Air Operations Center. An air mission control facility that will replace the ATOC and the Sector Operations Center (SOC), integrating both offensive and defensive air mission control
CINCENT  Commander Allied Forces Central Region. The central region MSC
COCC  Combined Operations Control Center
COCOM  Combatant Command
COMAIRCENT  Commander Air Forces Central Europe. A NATO principal subordinate commander for air under AFCENT
COMRAIR  Commander Reaction Forces Air. A commander (in concept) who would be subordinate to AIRCENT, but who would have functional responsibility for planning and deploying air reaction forces across NATO. He would have a dedicated staff assigned in peacetime to plan for a range of contingencies
Coordinating Authority (NATO). The authority granted to a commander or
individual assigned responsibility for
coordinating specific functions or activities
involving forces of two or more countries or
commands, two or more services, or two or more
forces of the same service. He has the authority
to require consultation between the agencies
involved or their representatives but does not
have the power to compel agreement. In case of
disagreement between the agencies involved, he
should attempt to obtain essential agreement by
discussion. In the event he cannot obtain
essential agreement, he shall refer the matter to
appropriate authority²

CRC
The highest level radar control facility

CRP
The radar control facility subordinate to the CRC

CSCE
Conference on Security for Central Europe

DAC
Deployable Air Command and Control Component. An
ACCS air control facility that will have certain
capabilities to control offensive and defensive
air forces; a smaller DCAOC

DCA
Defensive Counter Air; air defense

DCAOC
Deployable Combined Air Operations Center. A
moveable facility used for overall control of an
air operation. Also called a mobile CAOC

DOB
Deployment Operating Base

DPC
Defense Planning Committee. NATO's highest military
authority, comprised of senior representatives
from each NATO nation

EC
European Community

ELINT
Electronic Intelligence

EW
Electronic Warfare

FACP
Forward Air Control Post. A forward deployed radar
control facility

FOB
Forward Operating Base

²Joint Pub 1-02, op. cit., p. 91.
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<th>Abbreviation</th>
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<tbody>
<tr>
<td>FS</td>
<td>Fighter Squadron</td>
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<tr>
<td>GLO</td>
<td>Ground Liaison Officer. The ground force element that provides interfacing between ground and air units</td>
</tr>
<tr>
<td>ICAOC</td>
<td>Interim Combined Air Operation Center</td>
</tr>
<tr>
<td>IRF</td>
<td>Immediate Reaction Force. A small air or ground force (or both) deployed quickly as a show of force or deterrent. Naval forces such as STANFORMED and STANFORLANT could qualify in some scenarios as a de facto IRF (maritime)</td>
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<tr>
<td>JSTARS</td>
<td>Joint Strategic Target Attack Radar System. An airborne radar platform that locates ground targets for attack.</td>
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<tr>
<td>JTF</td>
<td>Joint Task Force. A U.S. term for a military force comprised of two or more services</td>
</tr>
<tr>
<td>LANDCENT</td>
<td>Land Forces Central Region. A principal subordinate command under CINCCENT responsible for land forces in the central region</td>
</tr>
<tr>
<td>LCC</td>
<td>Logistics Coordination Center</td>
</tr>
<tr>
<td>MCE</td>
<td>Modular Control Equipment. U.S. air control equipment with radar used to control air defense and airspace control operations. Replaces CRP, CRC, and FACP. Also called Tactical Air Operations Module</td>
</tr>
<tr>
<td>MNC</td>
<td>Major NATO Command. The highest military command level in NATO</td>
</tr>
<tr>
<td>MOB</td>
<td>Main Operating Base</td>
</tr>
<tr>
<td>MSC</td>
<td>Major Subordinate Command. Operational commands under major NATO commands. AFNorthWest, AFCent, and AFSouth are subordinate to SACEUR</td>
</tr>
<tr>
<td>MSE</td>
<td>Modular Support Elements</td>
</tr>
<tr>
<td>NAC</td>
<td>North Atlantic Council. The highest political level in NATO. Includes France</td>
</tr>
<tr>
<td>NAEW</td>
<td>NATO Airborne Early Warning. A NATO AWACS that is role limited to early warning but which has similar capabilities to AWACS</td>
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NATO

North Atlantic Treaty Organization

OAS

Offensive Air Support

OCA

Offensive Counter Air

OPCOM

Operational Command (NATO). The authority granted to a commander to assign missions or tasks to subordinate commanders, to deploy units, to reassign forces, and to retain or delegate operational or tactical control as may be deemed necessary. It does not of itself include responsibility for administration or logistics. It may also be used to denote the forces assigned to a commander. **As NATO's highest operational authority it does not include national command over forces; it is an employment-warfighting-authority.**

OPCON

Operational Control (NATO). The authority delegated to a commander to direct forces so that the commander may accomplish missions or tasks that usually are limited by function, time, or location; to deploy units concerned, and to retain or assign tactical control of these units. It does not include authority to assign separate employment of the units concerned. Neither does it, of itself, include administrative or logistic control.

POL

Petroleum, oil, and lubricants

PROVEN FORCE

A U.S. joint task force deployed to Incirlik, Turkey, to conduct air operations over Northern Iraq during the Gulf War

PSC

Principal Subordinate Commander. An operational command subordinate to an MSC

ROE

Rules of Engagement

RRC

Rapid Reaction Corps. A deployable NATO corps with assigned and earmarked forces under UK 3-star command

RRF

Rapid Reaction Force. A reaction force, deployed a bit slower than the IRF, with greater firepower, and offensive capabilities

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3Joint Pub 1-02, op. cit., p. 262.
4Joint Pub 1-02, op. cit., p. 263.
SA
Staff Assistance. Part of the reaction force concept that would have SHAPE staff assisting subordinate commands in reaction force planning and operations.

SC
Subordinate Commander. An operational command subordinate to a PSC.

SACEUR
Supreme Allied Commander Europe. One of two major NATO commanders (MNCs); the other is Commander in Chief Atlantic.

SC
Subordinate Commander.

SHAPE
Supreme Headquarters, Allied Powers Europe.

SHORAD
Short Range Air Defense.

SLE
Staff Liaison Element. An additional SHAPE staff element provided to reaction forces to assist in reaction force planning and operations.

SOC
Sector Operations Center. An air control facility that controls airspace in a particular area, doing air defense and airspace control operations.

TACF
Tactical Air Control Party.

TACS
Tactical Air Control System. The collection of facilities that manages air operations and interfacing with the ground forces to provide air support.

Tactical Command (NATO)
The authority delegated to a commander to assign tasks to forces under his command to accomplish the mission assigned by higher authority.

Tactical Control (NATO)
The detailed and, usually, local direction and control of movements or maneuvers necessary to accomplish missions or tasks assigned.

TAOM
Tactical Air Operations Module.

TASMO
Tactical Air Support to Maritime Operations.

TOA
Transfer of Operational Authority. An agreement whereby nations transfer their authority to operational, combatant commanders at a specified time and under specified conditions.

TTW
Transition to War.
UKAF  United Kingdom Air Forces Europe

USAFE  United States Air Forces Europe

WLO  Western Economic Union/European Community (WEU/EC) Liaison Office. A conceptual organization element proposed for interaction between SACEUR and the WEU comprised of senior national officers assigned to SHAPE

WOC  Wing Operations Center. A facility used by an air wing to dispatch air missions
1. INTRODUCTION

The dramatic cascade of political changes in eastern Europe and the former Soviet Union has resulted in large measure from the 45-year political and military investment by the nations of western Europe in the North Atlantic Treaty Organization (NATO). But now, this success has brought questions of NATO's relevance. In this regard, Richard Nixon observed:

Alliances are held together by fear, not by love. When fear of a common threat fades, allies tend to drift apart. Today, NATO must adapt or risk irrelevance. To survive, the alliance must redefine its missions and sense of purpose. . . . No alliance has ever survived for long after security ceased to be its core function. No political substitute exists for the bonds of collective defense. Moreover, in the hardheaded world of power politics, no diplomatic or political initiative can succeed unless backed by credible military capabilities. . . . A political function for NATO is useful and even essential. But it cannot replace mutual security as the glue that keeps the alliance together.¹

This quote is worth some study. Nixon clearly focuses on NATO's relevance in the context of new mission requirements, and he reminds us that the integrity of any alliance is guaranteed only by its military potential.

NATO will have to adapt to the realities that an old threat--almost like an old friend--has gone away; that defense budgets are the primary reservoir for peace dividends. NATO will have to adjust to its changing and expanding areas of responsibility (such as those brought on by German unification), and the necessity to have forces ready to manifest a new strategy of responding quickly to uncertainty. This new requirement of rapid reaction will have the greatest impact on the nature of future NATO forces and the organizations set up to manage them. Since airpower will be the quick sword of these new kinds of

military operations, special urgency will exist to organize air forces ahead of the events of an uncertain future.

NATO military strategy is currently evolving in this direction. Its present form maintains security across the spectrum of peace, crisis, and conflict:

1. In peacetime, ground forces will police borders and defend against terrorism. Air forces will provide air surveillance, defend the airspace, and support arms control verification.

2. In crisis, rapid reaction forces will deter and counter threats by deploying and establishing a presence proximate to the threat, thereby providing conditions and time for decisionmakers to deal with the crisis.

3. In conflict, forces will provide timely and measured response to threats and aggression, establish counter-concentrations of forces, and defeat or deny the objectives of the instigator of the conflict.

NATO continues to consider ways to deploy its forces, to make its military instrument mobile across its three regions. Within NATO, there is agreement that mobile forces are necessary, but how to achieve this is not yet decided—especially as regards air reaction forces. Further, mobility and multinationality are beginning to be seen as expensive operational modes. Nonetheless, reaction forces have been agreed on in concept. In all of this, NATO will have to implement its new strategy with considerably fewer forces than it had facing the Warsaw Pact during the Cold War.

All of these concepts have been, until recently, focused on the capabilities to defend the requirements of NATO—within its borders. Now it is becoming more apparent that a capability to extend military

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2A separate RAND analysis projected the cost of an independent European projection force would range from 18 to 40 billion U.S. dollars, depending on scenario. These costs did not include the additional amounts required for command and control capabilities. See M. B. Berman, et al., The Independent European Force: Cost of Independence, RAND, MR-178-AF/A/OSD, May 1993.
capability beyond NATO, in either peacekeeping or peacemaking roles, will be necessary for the survival of the alliance.

The objective of the work reported here is to analyze air organization concepts in the context of potential future NATO environments, especially those requiring rapid reaction, and to propose alternative organizations for NATO as these are suggested by the analysis. To achieve this goal, we explore how potential threats to NATO—or its national members—might evolve in certain scenarios. Then, we derive alternative ways to think about how air forces could be employed in these scenarios. These provide the basis for the suggestions made regarding alternative air structures than NATO might adopt.

The basic assumption of this work is that no radical changes will be made to the current NATO regional structure; the major regional commanders (Northwest, Central, and South) will continue to command the land areas of western Europe and thus comprise the core of NATO’s military organization. Given the dramatic changes in the European scene of the last few years, this view is, of course, conservative.

First this report presents two scenarios that would stress new NATO air organizations. Analysis of these provides a set of organizational implications and criteria that can be applied to organizations from the theater down to the unit or wing level. NATO’s emerging concepts for ground and air organization are outlined to provide a basis for an alternative structure that incorporates the concepts obtained from the analysis. The report concludes with summary observations.
2. SCENARIOS AND CONCEPTS OF AIR OPERATIONS

Concepts of air operations using scenarios as a basis are developed in this section. The objective is to derive a set of organizational principles that would provide a foundation for alternative NATO organizations that would fit these principles.¹

RAND's scenario analysis indicates that future conflicts will run a spectrum from low to high intensity, they will be diverse, they could be potentially numerous, and they would likely arise with relatively short warning.² There will be no methods to anticipate the specific direction and strength of these future threats. In sum, they will be characterized primarily by their uncertain nature.³

To focus this analysis on organization, the characteristics of scenarios and potential future threats need to be considered in the context of their probable responses. A threat exists when it is perceived to be a threat; but recognition is not reaction, and both deliberation and indecision contribute to reaction time. Indeed, a review of crisis over time suggests that a failure to respond to warning is the rule, rather than the exception. A simple model of reaction time might, therefore, look like:

\[ \text{recognition of warning} + \text{decision time} = \text{reaction time} \]

¹This analysis does not suggest that any scenario is probable. It uses scenarios as a vehicle for defining future environments for organizations to operate in. In this approach, arguments about the appropriateness of scenarios can focus on the concepts and principles of the organizations derived from scenario analysis, rather than on the scenarios themselves.

²A considerable body of scenario analysis recently has been developed by RAND. Especially useful for this work is James A. Winnifeld's Performance During Peace-to-Crisis-to-War Transitions: The Key Test for Force Structure, Command Arrangements, and Decision Support Systems in USEUCOM, N-3333-EUCOM, RAND, April 1991.

³In discussing the utility of scenario application to strategy, Winnifeld (op. cit., p. 4) quotes Johan Jorgen Holst, then Norway's Minister of Defense: "The essence of a national security strategy is to prepare for the wide range of plausible contingencies, not just the immediate crisis of today. (See Johan Jorgen Holst, Exploring Europe's Future: Trends and Prospects Relating to Security, RAND, N-3185-CC, September 1990, pp.48-50.)
This model is especially important as it applies to the requirements of rapid reaction and how to organize decision structures and forces to manifest such concepts.

To establish the basis for this work, we selected two scenarios that would stress NATO to the greatest extent. The first is a major emergency for the nations of NATO—an attack by Russia on Poland—which would be out of NATO's treaty area. The second is a Syria-Iraqi attack on Turkey, which would require NATO forces to deploy out of NATO's central region. The concepts of air deployment and employment were similar in both the Poland and Turkey simulations. The Poland scenario (out-of-area) was the most stressing and, therefore, was used as the primary basis for analyzing the air concepts that in turn drive the development of the alternative air organization.

**SCENARIO: RUSSIAN ATTACK ON POLAND**

It is 1997, and Poland has become increasingly oriented toward the West. Reactionary elements within Russia have taken power and incorporated the Ukraine. Russian leadership has presented an ultimatum to Poland to halt interactions with the West. The Poles refuse, and Russia mobilizes. The Poles in turn mobilize, and they request NATO or European help. NATO also mobilizes. D-day occurs 14 days after NATO mobilization: Russia attacks across the Polish eastern border with 20

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4These scenarios were presented in a RAND briefing by Fred Frostic, Ted Warner, and Richard Kugler, entitled NATO Campaign Analysis, 1995-2000, May 1991. This work reported on simulations that showed how various force levels would affect the outcome of such conflicts. One significant change to the Frostic/Warner/Kugler Polish scenario put forth in this work is that NATO as an organization does not participate beyond the Oder-Neisse; it conducts defense of its treaty area and airspace, while coordinating operations with the multinational coalition that does enter Polish areas. Other differences were (1) NATO national in-place forces that participated had to deploy to get to the fight instead of establishing static defenses (2) surface LOCs and transportation were used to move air and ground force assets forward, and (3) the threats were smaller than those faced in the cold war era. These differences collectively serve to dictate requirements for alternative forces and command arrangements. Also see William Simons, Speculating on the Performance of NATO's Command Arrangements During Peace-to-Crisis-to-War Transitions: Selected Scenarios, RAND, N-2837-USDP, July 1989, pp. 119-134.
divisions, with an objective of capturing Warsaw and being prepared to continue further west. Russian air forces conduct an initial "air operation" designed to suppress the Polish air forces (and any other forces seeking to operate out of eastern and central Poland) and to maintain air coverage over Russian forces advancing into Poland.

On D-day+2, Russian forces conduct amphibious operations on the Baltic coast, establishing lodgments for subsequent attacks to the south to further isolate Warsaw. Also on D-day+2, NATO declares its intention to protect its treaty areas (west of the Polish border).

Germany, the UK, and the United States form a coalition and begin to deploy forces into Poland in support of the Polish military forces, and this coalition commences air and ground operations in concert with the Poles. NATO defends its own air and ground space rather than participating as part of this coalition. The forces deployed on both sides are depicted in Figure 1.

The results of the simulation conducted on this scenario show that (given U.S. ground and air force reinforcements) the conflict stalemates in the center of Poland some time after the hostilities begin.

The following analysis expands on the simulation previously presented—developing outline concepts for how coalition air forces might be deployed and employed in this scenario.

**Air Objectives**

Coalition air forces will have the following overall objectives for their air campaign:

1. In concert with Polish land and air forces, delay Russian land force movement through Poland

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5While this scenario is not explicitly a NATO out-of-area operation, it stresses its organization, its infrastructure, and the combat capabilities of several of its members. The rearward (over East Germany territory) operations, however, would exercise NATO's air defense and command and control capabilities.
Figure 1—Force Postures, Poland Scenario

2. Support mobilization and forward movement of allied forces during delay
3. Deny Russia use of Polish airspace and hinder Russian air operations in western Russia and over adjacent water/land areas as they contribute to Russian operations in Poland
4. Counter-concentrate at Russian axes of attack in Poland
5. Cause Russian withdrawal over time.

Air Operations Concepts

Main operating bases in the eastern portions of Germany would be used by coalition forces to stage forward. These bases would also be used by NATO air defense forces to maintain air superiority and air control over NATO areas. Poland would have eight forward main operating bases established to support these deployed air operations, and forward
operating locations would be established further to the east, as the battle situation and the air situation allowed.

Coalition air forces would deploy from eastern German bases to air bases in western Poland as soon as possible. NATO reinforcements would then fill in to East/West Germany bases, deploying forward as Polish bases became available.

Figure 2 shows the staging concepts that could be used in the Poland scenario.

As the battle situation and logistics support allowed, the coalition air forces would be staged forward to take advantage of forward basing, minimizing the transit time to the targets. This scheme would make best use of resources, especially those used in support of the ground operations of the Polish and coalition ground forces. A

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Figure 2—Staging Concepts: Poland Scenario
typical mission profile could include a launch from a main operating base (MOB) in Germany; a recovery for refueling and rearming at a Polish/eastern German base; launch and fly another mission, finally recovering at an MOB. Air refueling resources would support long range missions and air defense combat air patrols. In addition, strategic and ship-based assets could be brought to bear on specific static targets as these were allocated to the operation.6

The major missions that would be conducted in this air operation include:

1. Interdict Russian main axes of attack, lines of communications
2. Conduct offensive air support (OAS) as control and coordination are established with Polish forces
3. Establish local air superiority over Polish ground force operations and over coalition ground forces moving to contact
4. Conduct offensive counter air (OCA) against forward Russian offensive air bases, as range and political constraints allow
5. Defend NATO bases outside the Polish area of responsibility (AOR) from air attack (NATO mission)
6. Conduct air operations to secure the Baltic approaches to Poland and Germany
7. Conduct tactical air support to maritime operations (TASMO) originating from Germany, UK, or Denmark against amphibious operations originating in the Kaliningrad area
8. Attack port facilities
9. Conduct counter air/defensive air operations to deny use of Baltic airspace to Russian air operations/air refueling
10. Provide airlift to move ground forces, supplies, airbase, and command and control facilities forward
11. Conduct tactical reconnaissance over Poland, the Baltic approaches, and western Russia as approved.

6The figure does not show the specific bases and locations selected for this scenario. The locations shown do, however, represent functioning bases available for this simulation (and real-world contingencies).
Air C3 Concepts

While the coalition force would depend greatly on existing NATO C3 facilities, the nature of forward operations would require extensive forward movement of C3 elements to support local Polish operations.

Figure 3 shows a notional deployment of communications assets that would be required to move forward into Poland to support their air operations.

In addition to the combined operations center, there would be air operations coordination centers (presently called air support operations centers), one per corps. Eight wing operation centers would be required, one for each main operating base in western Poland. Twelve Tactical Air Operations Modules (TAOMs) also would be deployed into Poland to extend the radar and control coverage of both the NATO and the coalition systems, and 20 additional radars would provide the inputs to

Figure 3—Communications Deployment: Poland Scenario

the TAOMs. A deployed air operation center would be established in eastern Germany, or it could be installed at one of the forward main operating bases if conditions allowed such deployment. This deployable control element would provide the decentralized control for the
coalition forces and linkups with the static facilities of NATO. The overall command and control concept would include the following aspects:

1. Deploy satellite communications and troposcatter links promptly to provide basic communications between deployed forces, Polish ground/air forces, and NATO C2 systems
2. Deploy radar and communications facilities and tie-ins forward to extend range and view of radars/communications, establish local air traffic control/air defense
3. Link NATO CAOCs (or SOCs/ATOCS), NAEW, CRCs/CRFs, ASOCs, WOCs with forward deployed forces to provide deconfliction between NATO (rear) and forward airspace control operations
4. Establish a tailored air command and control system to provide planning and execution functions through both the NATO and coalition areas of operations
5. Centrally plan and control the air campaign from forward C2 facilities and execute offensive air support/interdiction from bases and C2 facilities forward deployed to expedite and enhance force employment in this Polish AOR
6. Establish a master and an alternate CAOC, with one managing the air campaign and the other (NATO) managing air defense and airspace control in rear areas
7. Extend and provide flexibility to the control of air assets using airborne/mobile facilities such as ABCCC, AWACS, JSTARS, ACCS mobile elements, and TAOM (forward deployed CRC).

Forward Air Component C3 Concept

The management of air operations in this scenario will require control of air resources in Poland by a single air commander—the air

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7 This facility would/could be a deployable ACCS component, a mobile COCC, or a mobile AOCC, all depending on where NATO finally settles regarding future air command and control systems.
8 The presentation commencing here includes a (considerable) listing of acronyms necessary to the concepts developed for this analysis. See the listing of NATO terms on p. xv for definitions of any unfamiliar terms.
component commander. His operational authority will be administered through a collection of facilities and communications, and he will have certain resources assigned directly to his command. The coalition air forces deployed to Poland will have the following C3 aspects:

1. An organization responsible for forward operations, self-sustaining command and control
2. Tactical air control elements that allow for offensive as well as defensive air operations
3. Assigned area of operations/responsibility under overall CAOC control to perform DCA, OAS, and limited interdiction operations
4. Integrated offensive air support/interdiction operations with Polish/forward deployed coalition forces operating through CAOC, Combined Air Ops Centers, ASOC/TACP collocated with ground forces, ABCCC airborne
5. Local air defense operational control with Patriot/SHORAD assets assigned for base/point defense
6. Area air defense with air defense fighter aircraft teamed with AWACS under FACP/CRP or TAOM control
7. High value air assets rearward based (airlift, tankers, ELINT, AWACS/ABCCC)
8. More mobile/survivable assets forward based (tactical airlift, rescue, air defense and offensive fighters, mobile tactical air control system facilities such as FACP, ASRT, ASOC, or ACCS facilities such as ACC, ACU).

Logistics Concepts

In this scenario, logistics will be required to support highly mobile, diverse air combat units deployed across great distances. Considerations for support of these operations include:

1. Potential use of Polish and East German POL and transportation infrastructures; linking of German and Polish fuel lines and storage
2. Use of civil transport and management services during the transition to war
3. Massive military airlift during initial stages of conflict; support of surface transportation as it becomes available
4. Prepositioning of stocks forward before the conflict
5. Supply and maintenance of operations out of dispersed and forward operating bases (DOBs and FOBs).

Table 1 shows possible requirements to support one squadron for 21 days assuming bare bases.9

<table>
<thead>
<tr>
<th>Logistics Support For One Squadron, Bare Base Operations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fighter aircraft</td>
</tr>
<tr>
<td>Personnel</td>
</tr>
<tr>
<td>Vehicles</td>
</tr>
<tr>
<td>Tons of munitions</td>
</tr>
<tr>
<td>Gallons of gas</td>
</tr>
<tr>
<td>Tons miscellaneous cargo</td>
</tr>
<tr>
<td>C-5s and C-141s</td>
</tr>
</tbody>
</table>

This notional support arrangement (drawn from experience during the Gulf War) shows that a large number of heavy lift aircraft would be required for just this one squadron. The implication is that air reaction and deployment in this kind of scenario will require extensive logistics and supporting airlift. This situation is mitigated somewhat because some of this material could be transported over land. Further, many of the bases selected are not "bare bases" because they have some existing facilities.

Since forward basing provides unique challenges to logistics support management, unique logistics concepts are required. A concept of logistics support developed for this scenario includes the following aspects:

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9Data provided by USAFE/DOJ.
1. Establish multinational, national, or NATO-controlled logistics support organizations by functional area
   a. Supply
   b. Transportation
   c. Maintenance
2. Establish Logistics Coordination Centers (LCCs) for regions/commands to
   a. Coordinate tactical air transport
   b. Plan for contingencies
   c. Control dedicated transportation assets
   d. Manage and coordinate command infrastructure maintenance
3. LCC organization and functions:
   a. Chaired by Commander's logistics representative
   b. NATO, national, host nation representatives
   c. Monitor and assess logistics situation
   d. Coordinate and control entirety of logistics support to the command
   e. Deploy logistics assets forward under OPCON of local commander.

The logic for this concept is based primarily on the realities of the conflict situation envisaged: one that develops quickly, requires rapid deployment of prepackaged support, and demands massive amounts of air and ground transportation, all under the operational control of the commander charged with the responsibility for this task.\textsuperscript{10}

\textbf{SCENARIO: SYRIA-IRAQ INVASION OF TURKEY}

Having developed an out-of-area scenario, we now turn to one within the NATO treaty area. This scenario requires deployments across its regions.

It is 1997, and Syria and Iraq have been supporting Kurd separatists in Turkey for some time. The Syrians have continued to claim the Iskenderun Region of Turkey and have taken umbrage with

\textsuperscript{10} This concept, of course, is foreign to current NATO logistics arrangements that have national logistics authority as their basis.
Turkish control of the water resources in the headwaters of the Tigres and Euphrates Rivers. Both Syria and Iraq have voiced their anger over continuing control of the trans-Syria oil pipeline maintained by Turkey. Their objective is to hold a scimitar to Turkey's throat to force a more equitable controlling arrangement over both the oil pipeline and water resources. Syria and Iraq mobilize; they conduct exercises. The Turks in response increase their readiness and redeploy forces to the southern and eastern portions of Turkey. The United States deploys two carrier battle groups to the Eastern Mediterranean. The Syrians then attack with the Iraqis in the south central and southeast areas of Turkey, conducting air operations against the Turkish airbases in these areas. The NATO immediate reaction force is deployed, and the Rapid Reaction Rapid Corps begins to organize for deployment. The force requirements for this scenario are shown in Figure 4.

Figure 4—Force Postures, Turkey Scenario
This scenario has some unique aspects that distinguish it from the Polish scenario and those planned for in the past: (1) Turkish ground forces are sizable and even alone could mount a credible defense; (2) it is very difficult to deploy a sizable ground force to eastern Turkey, particularly a heavy one; (3) seaports are located in western Turkey, and only one railroad runs from the ports to the area of operation in the scenario; and (4) the region, like the Arabian Peninsula, is endowed with enough militarily suitable airfields. However, the location of the conflict (in Eastern Turkey) has limited bases and C3I facilities available to support coalition operations. Thus the deploying forces must use some “bare base” configurations and also find ways to overcome the shortage of “plug-in” C3I facilities.

**Air Objectives**

Coalition air forces will have the following overall objectives for their air campaign:

1. In concert with Turkish land and air forces, disrupt and delay enemy land forces moving through Turkey
2. Support forward movement of allied forces
3. Deny enemy use of Turkish airspace and hinder enemy air operations in Iran and Iraq and over adjacent water/land areas as they contribute to enemy air and surface operations
4. Counter-concentrate on enemy axes of attack in Turkey
5. In concert with Turkish forces, cause enemy withdrawal over time.

**Air Operations Concepts**

NATO forces would deploy from central and northwest regions to western Turkey operating bases, filling in to eastern Turkey bases as they became available through the conflict. Air defense fighter aircraft would have priority use of available eastern Turkey air bases to maintain air superiority and air control over the eastern operating areas. As the battle situation and the air situation allowed, forward operating locations would be established in eastern Turkey, primarily
for aircraft providing ground support of engaged Turkish forces (and later arriving NATO reinforcements).

The major missions that would be conducted in this air operation include:

1. Interdiction of Iraq and Syrian main axes of attack and lines of communications
2. Conduct OAS as control and coordination are established with Turkish forces
3. Establish local air superiority over Turkish ground force operations and over NATO reinforcements moving to contact
4. Conduct OCA against forward Iraqi and Syrian offensive air bases
5. Defend NATO bases from air attack
6. Conduct naval and air force air operations to secure the maritime approaches to Turkey and attack Syrian port facilities
7. Conduct counter air/defensive air operations to deny use of Iraqi and Syrian airspace to enemy air operations/air refueling
8. Provide airlift to move ground forces, supplies, airbase, and command and control facilities into the theater and to forward operating locations.

Air C3 Concepts

The overall command and control concept for the Turkey contingency would include the following major elements:

1. Deploy satellite communications and tropospheric links promptly to provide basic communications between deployed forces, Turkish ground/air forces, and NATO C2 systems
2. Deploy radar and communications facilities and tie-ins forward to enhance and extend range and view of radars/communications; establish local air traffic control/air defense
3. Link NATO CAOCs (or SOCs/ATOCS), NAEW, CRCs/CRPs, ASOCs, WOCs with forward deployed forces
4. Establish a tailored air command and control system to provide planning and execution functions throughout the eastern Turkey area of operations, linking with Southern region static facilities and command structure as determined by the region commander.

5. Plan and control the air campaign from C2 facilities and execute offensive air support/interdiction from bases and C2 facilities deployed to the eastern Turkey AOR; as provided in regional delegation of operational authority.

6. Establish a master and an alternate CAOC with the eastern CAOC managing the air campaign and the other managing overall region air defense and airspace control in the rear areas.

7. Deploy airborne and mobile control facilities to extend and provide flexibility to the control of air assets such as ABCCC, AWACS, JSTARS, ACCS mobile facilities, and TAOM (forward deployed CRC).

8. Integrate offensive air support/interdiction operations with Turkish/forward deployed NATO forces operating through CAOC, ASOC/TACPS collocated with ground forces, and ABCCC airborne.

9. Organize local air defense under operational control of air component commander with Patriot/SHORAD assets assigned to base/point defense.

10. Establish area air defense with air defense fighter aircraft teamed with AWACS under FACP/CRP or TAOM control.

11. Base high value air assets rearward based (airlift, tankers, E-LINT, AWACS/ABCCC).

12. Forward base more mobile/survivable assets (tactical airlift, rescue, air defense and offensive fighters, mobile tactical air control system facilities such as FACP, ASRT, ASOC, or ACCS facilities such as ACC, ACU).

**Logistics Concepts**

In this scenario, logistics will be required to support highly mobile, diverse air combat units from all of NATO's regions deployed across great distances. As in the Poland scenario, a concept of
logistics support developed for this scenario includes the following elements:

1. Establish multinational, national, or NATO-controlled logistics support organizations by functional area
   a. Supply
   b. Transportation
   c. Maintenance

2. Establish LCCs in the assigned operating areas to:
   a. Coordinate tactical air transport
   b. Plan for contingencies
   c. Control dedicated transportation assets
   d. Manage and coordinate command infrastructure maintenance

3. Establish LCC organization and functions
   a. Chaired by region Commander's logistics representative
   b. NATO, national, and Turkish representatives
   c. Monitor and assess the logistics situation
   d. Coordinate and control all logistics support to the command
   e. Deploy logistics assets forward under OPCON of local commander.

Of major interest in this scenario (and the simulation that was conducted in its support) is that the air forces deployed in support of the Turkish ground forces would be sufficient throughout the initial stages of conflict to halt the incursions of the Syrians and the Iraqis. The ground reinforcements that arrive from NATO and other nations would be used for mopping up operations. Thus this scenario demonstrates the utility of rapid reaction air forces more than it does that of ground forces in the same "rapid reaction" context.

The operational detail presented in these two scenarios focuses on what air and supporting forces might have to do to support contingencies such as these. They provide a basis for considering how air organizations should be configured to manage such activities in future contingencies.
3. REQUIREMENTS FOR FUTURE AIR ORGANIZATION

Current perspectives regarding organization for airpower center on the concept that air is flexible, that it can be plugged into command and control structures simply wherever it is sent (to Turkey, for example). The concept here is that NATO airpower can be given to the control of the local (region) air commander, who will then begin to write air campaign plans, air task orders, and employ the collected air forces as they arrive. In light of experiences in Desert Shield and Desert Storm, and the NATO deployment of the air portion of the ACE Mobile Force to Turkey, however, such future deployments may well be more involved and be very difficult to carry off, even if many months of planning are allowed before hostilities—the case in Desert Storm. The NATO deployment to Turkey during Desert Storm was a defensive show of force deployment rather than one with true offensive capability—and deterrent potential.

In the Poland scenario previously presented, additional complications include: (1) time and distance from control and planning facilities and (2) the problems inherent in conducting a massive mobility operation in the midst of conflict. Both scenarios demonstrate that extensive planning for out-of-region or area operations, and forward thinking about the kind of organization required to employ forces within these, should be done before the threat arrives. In exploring this assertion, this section will consider more fully how the simulations and the concepts of operations for the preceding scenarios analysis lead to requirements for future air organizations.

Table 2 summarizes the criteria for evaluating air organization alternatives derived from the scenario exercises.

Short warning added to the reaction time at all levels will complicate planning for an adequate response. Planning for such contingencies and for rapid responses, therefore, will need to be flexible and done as much as possible before the fact.

Rapid movement of air forces, facilities, and supporting command, control, and communications and intelligence will be necessary.
<table>
<thead>
<tr>
<th>Criteria for Evaluating Organization Alternatives</th>
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<tbody>
<tr>
<td><strong>Responsiveness</strong></td>
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<td><strong>Flexibility</strong></td>
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<td><strong>Availability</strong></td>
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<tr>
<td><strong>Staffing</strong></td>
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<tr>
<td><strong>Planning</strong></td>
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<tr>
<td><strong>Mobility</strong></td>
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<tr>
<td></td>
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<tr>
<td><strong>Support</strong></td>
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<tr>
<td><strong>Air Employment</strong></td>
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</table>

Supporting elements will have to be deployed from existing structures to areas beyond the theater, from overseas bases into a theater of operations, or within a theater of operations.

Support of the forces will be required, once they are deployed, including bare base operations support as operations continue.

Once the force is in place and is supported, it will have to be commanded and controlled by an air operations entity. Extensive
facilities will be required to get command and control focused in the area of operations, and specialized equipment and facilities will have to be moved forward.

In sum, the implications are that peacetime air organizations will be required to plan, deploy, support, and control air operations in the uncertain environments envisaged for future Europe. Further, all four activities will be substantially different from the static operations of the past.

AIR REACTION FORCE ORGANIZATION REQUIREMENTS

Air reaction force requirements drawn from the scenarios and from the organization criteria are summarized in Table 3.

The air organization itself must be deployable; it must be able to physically move to the action area. Its forces should be dedicated to the broad range of contingencies. Some of these forces will have to be assigned in peacetime; and all will have to be trained periodically even if they are not assigned full time. The importance of training in peacetime within the framework of the C3I system used in crisis must be emphasized. This situation was reflected during Desert Storm, where within the ad-hoc coalition, many interoperability issues had been solved through years of planning and training under the NATO system. Future forces will have to be tailored to respond to the entire spectrum

Table 3

<table>
<thead>
<tr>
<th>Major Air Reaction Force Organization Requirements</th>
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<tbody>
<tr>
<td>• A deployable air organization</td>
</tr>
<tr>
<td>• Dedicated, (standing) assigned, trained and tailored forces to respond to threat</td>
</tr>
<tr>
<td>• Integrated logistics (airlift), reconnaissance, C3I, air defense</td>
</tr>
<tr>
<td>• Command structure capable of</td>
</tr>
<tr>
<td>1. Conducting forward/independent air operations</td>
</tr>
<tr>
<td>2. Being a regional supplementary force</td>
</tr>
<tr>
<td>3. &quot;Plugging in&quot; to static C2 facilities</td>
</tr>
<tr>
<td>• Headquarters/staffs: function in peacetime to tailor, train, and plan appropriate to opcom level; in wartime to deploy and employ mobile air forces</td>
</tr>
<tr>
<td>• Clear, unfragmented operational authority over forces</td>
</tr>
</tbody>
</table>
of threat. Logistics support integral and assigned to the organization, primarily the airlift, also will be required.

Reconnaissance, command, control, and air defense also will need to be integrated within the organization to perform rapid reaction functions. The command structure will have to be able to perform many different kinds of operations. It would be required to perform forward or independent air operations away from ground force operations—as demonstrated in the Poland scenario, especially in its early stages. The command structure also will need to become a regional supplementary force, providing additional support to regional command and control facilities and whatever forces are assigned. The air reaction force command structure certainly would need to be able to plug its resources into current or future static command and control facilities, such as the CAOCs that are being planned under the ACCS program for NATO’s future air command and control system. Alternatively, the organization will need to make up shortcomings in regional C2 structures.

The headquarters and the staffs would need to function in peacetime to tailor, train, and plan for contingencies. These functions should be appropriate to the operational command level of the force itself. The headquarters and staffs should be planning for employment of forces at the level at which they will be employed, such as the regions or subregions, rather than at the highest theater levels. In wartime these planning staffs and operators would be available to deploy and employ the air reaction forces as the situation demanded. Finally, the air reaction force organization should have clear and unfragmented operational authority over the forces assigned to prosecute air reaction missions. This feature is especially important and would help minimize the inherent delays in the political decision processes that lead to force employment. An organization and planned response capability are implied to be imbedded at all levels of the structure—including its uppermost echelons.¹

¹The highest levels (the North Atlantic Council, the Defense Planning Committee, and the Military Committee) are collectively the environment in which consultation and indecision will increase the reaction time significantly in responding to crisis. Emphasis on
In sum, these air command structures will have to range across a large spectrum of threats and will have to be capable of being many different kinds of organizations, with adaptable command arrangements. This organizational structure must be very flexible, a structure unique—perhaps radically—to military organizations.

Preplanning and delegation of authority needs to be done here as much as possible before crisis and conflict.
4. CURRENT NATO AIR ORGANIZATION PERSPECTIVES

This section summarizes the current NATO rapid reaction concepts for ground and air forces in the context of NATO doctrine and provides a basis for comparing the alternatives derived from the scenario analysis.

NATO DOCTRINE AS A BASIS FOR ORGANIZATION

The assignment of NATO doctrine operational authority and how it works within the NATO structure are shown in Table 4.

The authority functions of NATO commence at the operational command level and decrease in level of authority through operational control and tactical command to the bottom level, that of tactical control. These authorities also match appropriate levels of the NATO commands. The major NATO commander (MNC) or major subordinate commander (MSC) is assigned the highest authority of operational command together with the very broad commensurate functions. As the level decreases through MSC, subordinate commander, and down to facility level, the functions become more precise and more detailed, and the missions and functions become

<table>
<thead>
<tr>
<th>Authority</th>
<th>Level</th>
<th>Functions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operational</td>
<td>MNC/MSC</td>
<td>Assigns missions/tasks; deploys, reassigns forces, retains or delegates operational authority</td>
</tr>
<tr>
<td>Command</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Operational</td>
<td>SC/PSC</td>
<td>Directs forces to accomplish missions</td>
</tr>
<tr>
<td>Control</td>
<td></td>
<td>Control limited in time, function, location; deploys units, assigns TACOM or TACON</td>
</tr>
<tr>
<td>Tactical</td>
<td>Subordinate</td>
<td>Assigns tasks to forces under his command</td>
</tr>
<tr>
<td>Command</td>
<td>Commander (SC)</td>
<td>Command to accomplish missions assigned by higher authority</td>
</tr>
<tr>
<td>Tactical</td>
<td>C2 facility</td>
<td>Detailed, local direction and control of movements or maneuvers to accomplish assigned missions</td>
</tr>
<tr>
<td>Control</td>
<td>(delegated from SC)</td>
<td></td>
</tr>
</tbody>
</table>
more specific. Lesser number of forces are also managed as the level of command decreases.\(^1\)

This philosophy of operational authority has served NATO well over many years and is a useful framework for analyzing proposals for organizing its forces to meet the requirements of the future, especially those that may require military operations beyond NATO's treaty area.

**ACE LAND FORCE REACTION CONCEPTS**

An ACE Rapid Reaction Corps (ARRC) will be the primary manifestation of the ground force portion of the new strategy. The ARRC will be commanded by a British three-star general. The ARRC will coordinate with major subordinate commanders, the nations, and other reaction forces in peacetime. Other peacetime functions include contingency and exercise planning, conduct of exercises, and evaluation of the capabilities of these forces.

The commander, ARRC, will be under the peacetime operational command of SACEUR and will have this authority delegated to a regional (MSC) command in war. He would deploy and operate alongside other NATO forces—a function that presumes independent operational capability. Finally, he would coordinate air/land operations within the ARRC AOR through a dedicated ASOC.

This ARRC charter thus provides two unique capabilities that presently do not exist within NATO. First, peacetime functions are to include not only the evaluation of forces but also a peacetime operational authority (under SACEUR), which is, by definition, a wartime function—that of OPCOM. This function previously was reserved for

\(^1\)The NATO doctrine of organization is derived from U.S. military doctrine, which has similar hierarchical levels but lacks the specific delegation of authority NATO doctrine has. The U.S. unified command structure now has combatant command (COCOM) as its highest level, replacing operational command. Operational control can be assigned at any level below COCOM; there is no authority called tactical command; while there is an authority titled tactical control, it is not delegated. Therefore, the U.S. unified command structure has no match to the NATO system (depicted in Table 4) where operational authority is delegated from high to low, matching superior to subordinate command levels. (See JCS Pub 1-02, op. cit.)
national commanders. Second, the commander, ARRC (COMARRC) will have a force conceived for independent operations, even though his charter presumes that only in-area operations will be conducted. In sum, the current concepts of NATO land reaction forces include peacetime assignment of some forces, authority to prepare for conflict (including unstated capabilities for out-of-area operations), and force structures capable of independent operations.

AIR REACTION FORCE CONCEPTS

The current SHAPE concepts for air reaction forces have a fundamental thesis: air resources are flexible, they may be quickly deployed and employed without peacetime structures to prepare them.

There will be two forms of air reaction forces: immediate (responding in hours to days) and rapid (responding in days to weeks). These multinational forces will be selected from a pool of 15 to 25 squadrons of various kinds of aircraft and will have command and control assets assigned; also air defense, electronic combat, air refueling, and airlift capabilities would be assigned by the nations at certain times during a crisis. No peacetime command headquarters will be responsible for planning and/or employment of these aircraft; rather, they will be "plugged-in" to whatever region command and control capability is resident.²

The rules of engagement, the missions, and the composition of the air forces themselves will be decided (and the commander also) after consideration by the Defense Planning Committee. No commander will be designated before the crisis in these concepts.³

A Reaction Force Air Planning Staff, headed by a German lieutenant general, will plan for reaction forces (both ground and air). This planning staff reports to the ACE Reaction Force Planning Staff (ARFPS)

²The military principle of organizing in peace as you operate in war is denied here.
³These aspects of deciding force structure, commander, rules of engagement, and composition of a force probably would hinder the capability for rapid reaction. Imagine, for example, the debate within NATO councils about which nation should provide the air commander for a particular contingency—and the length of time that could be needed for such consultations.
at Supreme Headquarters, Allied Powers Europe (SHAPE). The ARFPS, separate from other staff functions at this high level, will write plans and coordinate with region commands and, in war, will augment these commands to assist in reaction force employment. Also of interest is that the ARFPS will integrate within the SHAPE staff in war.

The general in charge of the Reaction Force Air Staff also commands a central region mobile air command and control facility, currently the Interim Combined Air Operations Center (ICAOC) at Kalkar in the central region. He would perform overall planning and employment planning for air reaction forces in peacetime and, in concept, could deploy with a deployable CAOC and with air forces and control elements in crisis or conflict.

The air forces available for such operations would be earmarked for SACEUR and designated for regions. But they would not be assigned in peacetime to any Reaction Force Commander, including the head of the RF Air Staff (who is not also a commander).

The current concepts for air reaction forces thus: (1) establish separate air packages (immediate and rapid) that could fragment the pool of available air resources, (2) provide for no assigned forces and no operational command responsibility for peacetime planning or wartime employment—these are to be primarily staff functions, and (3) constrain rapid response in crisis by continuing to hold decision processes at the highest level. In sum, while there is progress in creating some means of organizing NATO air power for rapid response, the organization, the forces, and the authority arrangements necessary for such capabilities are not yet available to NATO.

ISSUES OF MOBILITY AND OUT-OF-AREA OPERATIONS

While the issues of force structure for rapid reaction are being decided, the central core of NATO’s new strategy is still a requirement for movement of forces to the location of the threat. This method is a radical change from the static force positioning adopted by NATO in its first 45 years but is explicitly a strategy for reaction to threats within the treaty area of NATO. It does not make provision for action against threats to NATO or its member nations outside this area, even on
its periphery. In this regard, questions exist as to whether NATO or the individual members of the Alliance could or would respond to threats that are outside its defined borders.\footnote{A token NATO force was deployed to Turkey during the recent Persian Gulf conflict (within the NATO area). Alliance forces that saw their national interests threatened by Iraq–and sympathetic to the combined command objectives of the coalition forces led by the United States–could meet this threat only through bilateral mechanisms outside the consultative processes of NATO. There were also national reservations to NATO action ascribed to constitutional prohibitions on the part of Germany. Richard Nixon sums up the current lack of European capability to project a security policy beyond NATO by saying, “In the Persian Gulf crisis, our European allies scattered like a flock of quail. A few, particularly Britain and France, fought side by side, with our troops in the Kuwaiti deserts. But most, especially Germany, stuck their heads in the sand.” (Nixon, op. cit., p. 126).} Conjecture is that without some movement toward this out-of-area capability, NATO will become an alliance without purpose and will in time wither away. Recent events in Yugoslavia have stimulated considerable discussion within European forums about how NATO might inch toward such an out-of-area charter. Concepts in this regard include integration with other security systems for peacekeeping operations, using the well-developed military mechanisms (and force) available to NATO. Indeed, the intermittent movements by NATO toward and then away from a commitment to attack Serbian targets in the Bosnian conflict have demonstrated NATO’s unease about conducting military operations outside its area. Since the United Nations has demanded that it authorize actions in this conflict, NATO initiatives have been inhibited further for any actions in this conflict. There will likely be further movement toward a change in NATO charter that will specifically allow for out-of-area operations as the nations of Europe attempt to sort out the tensions between reducing conflicts treading on national sovereignty, and finding the appropriate coalition system to accomplish those ends.

The two alternative structural means for responding to European conflicts are (1) the Conference on Security for Central Europe (CSCE) and (2) the Western Economic Union (WEU).

The CSCE encompasses many nations beyond western Europe (including those of the former Soviet Union) but does not have a military
instrument to enforce its decisions regarding member security. There are no qualified majorities, no means of deciding how to settle issues, including those caused by member nations. Because of its wide national membership across Europe and beyond, the CSCE could provide a coalescing means for international actions to respond to security threats; this alternative to the UN could provide an international forum for peacekeeping (or peacemaking) actions to be conducted by other alliances or coalitions.

The WEU, as a potential security arm of the EC, does have (and has demonstrated) certain capabilities for operations exterior to NATO's current limited area charter. The WEU was a "technical coordinator" of naval operations in the Gulf War. Five European nations contributed to the coalition under this arrangement, providing some evidence that the WEU could become an organization of convenience for NATO nations (such as France) that were hobbled by lack of full NATO consultative support in a particular contingency. The WEU, however, is not organized for military operations as NATO is. Also as long as France remains outside the military organization of NATO, insisting on European leadership roles in conflict rather than by a U.S. led NATO, the difficulties in getting the nations of Europe to agree on how to manage conflicts like those in Bosnia will remain extreme.

Thus NATO, in the milieu of these changing security structures, is attempting to design its new strategy to respond to uncertainty and properly is attempting to configure its forces for a mobility role, especially outside of its chartered area. More thinking is needed about how these forces will be employed; in particular, how they will be...

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5Richard Nixon's comments in this regard are instructive: "Collective security through the CSCE is a nonstarter....Its rules requiring unanimity for action create insurmountable hurdles for collective defense. It would recreate the days of the League of Nations, when aggressors could veto collective actions designed to stop them. Moreover, the Conference on Security and Cooperation in Europe is just that: a conference, a diplomatic process, not a real bricks-and-mortar institution. It cannot provide tangible security arrangements, such as the integrated military structure of NATO." (Nixon, op. cit., p. 128).

organized for the best effect under the new conditions of rapid movement to meet a threat. In the next section, we propose an alternative air organization that could provide for such rapid response, suggesting improvements to the current structure.
5. ALTERNATIVE AIR ORGANIZATION OPTIONS

Using the current NATO operational authority doctrine as a basis, an alternative for future air organization was developed that incorporated the organizational requirements established in the previous analysis. Its overall structure is shown in Figure 5.

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Figure 5—Air Reaction Force Organization Concept
SHAPE LEVEL ORGANIZATION

The top of Figure 5 shows the SHAPE staff interfacing with a WEU/EC liaison office (WLO). This office would be staffed by the senior national officers assigned to SHAPE, providing SACEUR and NATO direct national interfacing on military matters, as well as coordination with the EC and WEU (and potentially other organizations such as the United Nations).

The SHAPE staff also would be responsible for reaction force planning and coordination, but this function would be exercised through the region commands (the MSCs), rather than through (and among) all the levels of the NATO structure. This approach would minimize the conflict between the operational responsibilities of the regional commanders and the staff at SHAPE level. Further, instead of separating a reaction force planning staff from the SHAPE staff, reaction force planning would be a function integral to the total SHAPE staff. Thus, both in peace and in conflict, the SHAPE staff would function as a whole, and the MSCs and region air commanders would participate directly in such planning.

REGION LEVEL ORGANIZATIONS

The three region commands, Northwest, Central, and South, together with their subordinate air and land commanders are at the next level. Air reaction organization would be focused in COMAIRCENT, who would be the operational commander responsive to both AFCENT and to SACEUR for air reaction force matters. He would be the executive agent for these activities.

The commander of the reaction forces-air (COMRFAIR) would be below AIRCENT in the operational chain of command. He would be either a dual-hatted commander as AIRCENT’s deputy or a commander with sole functions as COMRFAIR. A mobile CAOC or a tactical control facility of some kind would be subordinate to the commander reaction force-air. Also it would be the air operations coordination center in peacetime, collocated either electronically or physically with the ACE Rapid Reaction Corps (ARRC).

The functions of the commander reaction forces-air would be tactical command or tactical control of the mobile CAOC, in addition to
being the coordinating authority for reaction force air matters—the line running down to NATO subordinate commanders in the regions. This alternative authority would depend on the nature of the particular crisis or conflict, on whether the nations, the MSCs, or the SACEUR himself decided that a certain kind of authority should be assigned to the COMRAF, and on whether the air reaction resources (radars, communications, or people) should be assigned, in part or whole, on a regional basis.

**CADRE LEVEL ORGANIZATIONS**

The military potential of this concept is manifested at the lowest level where commanders of air reaction forces within the regions would be established. These would be one-star national wing commanders who would also be dual-hatted as NATO subordinate commanders. They would have (under their NATO hats) NATO forces assigned in peacetime to their tactical command and/or tactical control. Also, within the operational chain, they would be subordinate to each of their regional air commanders (COMAIRCENT, in the central region, for example), because these commanders would be providing the forces and would be responsible for operations within their regions. On the national side, the wing commanders would have national forces assigned through their national chains. Further, these commanders would have the capability to be air commanders within another alliance organization such as the WEU, the CSCE, or the United Nations.

The air reaction force concept presented thus far would provide a capability for decentralizing operational authority to the level where contingencies are met. It would provide a capability for flexible force employment, responding to uncertainty. We continue with a more detailed look at the functions and authorities at these different levels.

**AIR REACTION FORCE FUNCTIONS AT THE THEATER AND REGIONAL LEVEL**

COMAIRCENT, acting through his reaction force air commander COMRAF, would be the interface with the nations for air reaction force support. He would be SACEUR’s executive agent for this function. Through COMRAF, he would have coordinating authority, operational control, and tactical command or support in war, depending on what the
situation requires. COMRAFAIR should be collocated with the command elements of the ACE rapid reaction corps in peace and war to obtain the benefits provided by face-to-face interactions. The mobile CAOC or control element could also be the interface with the Army forces (and be called the air operations coordination center). Finally, the elements of the air reaction forces would deploy as required or tasked by a particular situation or by requests from regional commanders or from the nations; the commander of the air reaction forces would be deployed as required or tasked by national and military authorities. These alternative authority constructs would provide the flexibility desired for this air organization at the region level. Table 5 summarizes these specific organization relationships from SHAPE through the region levels.

Table 6 shows the AIRCENT RF-Air peacetime functions. Of importance here is that coordination will be conducted in peacetime and administrative control authority will also be provided as required to this commander. Of interest also are the training activities of these peacetime functions. There will be a transfer of operational authority (TOA) for both training and exercises. This unique authority is necessary to perform peacetime preparations for a rapid reaction to a crisis. Additionally, the reaction force will have tactical command of a facility that will have control resources to support whatever force is packaged from the pool of resources provided to the air reaction force.

**Table 5**

**Theater and Region Air Reaction Force Relationships**

- SHAPE staff functions through regions and is WEU interface
- COMAIRCENT is PSC under CINCCENT
  - Responds to SHAPE and AFCENT opcom of RF-Air
  - Interfaces with nations for RF-Air support
  - Interfaces with LANDCENT as air counterpart
  - Has coordinating authority for RF-Air in peacetime (through COMRAFAIR); opcon, tacom or support in war
- COMRAFAIR interfaces with command elements of ARRC; mobile CAOC is also the peacetime AOCC
  - Deploys RF-Air personnel, elements, and facilities as tasked
  - COMRAFAIR deploys as required or tasked
Table 6
AIRCENT Reaction Force (Air) Peacetime Functions

- Air reaction force coordinating authority (through COMRAIR)
- Planning for air reaction force deployment and employment
- Coordinating force assignment/support with nations
- Administrative control of other assigned assets
- Exercising assigned forces in concert with MSCs and the SHAPE staff through regional RF(A) commanders
- Training the RF(A) in coordination with SHAPE, MSCs, and national agencies (TOA for training)
- Tactical evaluation of forces and support elements designated as air reaction forces (TOA for exercises)
- Tactical command (TACOM) of a deployable ACCS component (DAC) or mobile/deployable CAOC or mobile TACC

Thus the capabilities can respond with all or part of the forces, depending on the situation.

Table 7 shows functions of air reaction forces as they would transition to war. We are establishing here a very flexible range of operational authority for this command since, as previously described, future threats and war fighting will require different kinds of commitments—and thus a very flexible kind of force. There is a range of functions here, from supporting different commands and continuing administrative control of whatever forces or elements are authorized, to assuming full operational authority to command forces, should this be necessary.

Table 7
AIRCENT Reaction Force (Air) Transition to War Functions

- COMRAIR becomes a supporting commander to regions
- Deploys air reaction forces as required by the contingency
- Exercises administrative control of deployed forces
- "Plugs in" appropriate elements to region(s) C2 as needed
- Ensures the overall support of deployed elements
- Exceptionally becomes an "operational command" (with TACOM)
  - As an enhancing, subordinate facility within a region
  - At the direction of SACEUR, MSC, nation
  - If region C2 is degraded or if NATO structures do not operate
AIR REACTION FORCE FUNCTIONS AT THE TACTICAL LEVEL

The functions of the air reaction force at the tactical level are shown in Table 8.

Table 8
Air Reaction Force Organization at the Tactical Level

<table>
<thead>
<tr>
<th>Preparation of Forces</th>
<th>Deployable, trained, multinational, tailored, mobile forces with assigned aircraft, integral systems, logistics, (ground and air) C2 support</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mission</td>
<td>Prepare to deploy as deterrent, defensive, or offensive air force to regions/areas of NATO/European interest; carry out air operations as directed</td>
</tr>
<tr>
<td>Authority</td>
<td>Transition to war/wartime transfer of opcon; retention of support functions (or opcon/tacom) as directed by SACEUR/MSC/nations; Regional cadre elements, forces, staffs under opcon of regions; coordinating authority of COMFAIR; Cadre liaison with regional air commands, local ARRC elements, nations, extra-NATO organizations; Cadre commanders triple-hatted as national/NATO subordinate/WEU commanders (for out-of-area operations)</td>
</tr>
</tbody>
</table>

The characteristics of this force are listed here, and its mission described as one that allows for both out-of-region and out-of-area operations. As previously stated, based on the situation, the level of operational authority will be decided by military commanders or nations concerned.

The final three functions listed indicate how the air reaction forces are manifested at the lowest tactical level. Cadre elements will be the local experts for air reaction; in peace and conflict the core of deployable and employable forces will respond to regional, theater, or out-of-area contingencies.

Figure 6 shows a reaction force air cadre organization established notionally for the central region.

In Figure 6, we show the national and NATO chains of authority and the potential extra-NATO security arrangements that are possible with
this kind of flexible organization. On the right side, a national command line comes to a commander of a fighter wing who has, under his national command, U.S. fighter squadrons and other national resources to support those squadrons. NATO operational authority comes down from COMAIRCENT either directly or alternatively through the Commander Reaction Forces-Air to this subordinate cadre level. The left side of the figure shows the resources (AWACS, NAEW, etc.) that would be assigned for training and exercises; operational authority for training and exercises would be given to this NATO subordinate commander during the periods these resources were deployed. Periodic cycling of these forces for exercises would create the peacetime capability required for the range of rapid response missions assigned to this NATO/national commander.
Also shown are the other nations' assets that would be assigned to his operational authority. In this example, German and Canadian fighter squadrons are assigned. Support elements are shown on the right of the figure. These would include command and control, intelligence support, a deployable ACCS component or some form of air control facility, tactical control support, communications, engineering resources, weapons and forces (both ground and air) with which to defend an airbase or area of responsibility, a logistics element (to include some airlift owned by the commander), ground force liaison elements, and medical support. Of great importance would be a planning staff that would assist the air commander in preparing for a wide range of operations.

Although not detailed here, a smaller organization could be formed from the wing such as a single squadron with tailored support that could be applied to minor operations. It would be modeled on the wing structure proposed here, and likely would be tied to it for administrative and logistics support, while being under the operational authority of another command while deployed.

In sum, the cadre organization would be the mechanism used to make NATO's air reaction forces come alive. These elements would be dedicated in peacetime to prepare for uncertain contingencies and would provide the pool of resources that could be deployed and employed within or across NATO's regions, as well as outside NATO's treaty area.

AIR REACTION FORCE NATIONAL CONTRIBUTIONS

Figure 7 is a notional presentation of the kinds of air resources and support resources that would be required to perform a relatively sophisticated air reaction force operation.

The white blocks show the kinds of resources (shown in aircraft squadron elements) tentatively identified by NATO's nations for air reaction commitments. Based on the scenarios previously presented, the shaded blocks show the kinds of technically sophisticated resources that would be required to flesh out and make a true air reaction force capability completely operative. These include offensive/counter air aircraft, electronic combat aircraft, sophisticated reconnaissance such as overhead satellite capabilities for both reconnaissance and
### Figure 7—Notional Air Reaction Force National Contributions

<table>
<thead>
<tr>
<th>OAS/INT</th>
<th>COA</th>
<th>EC</th>
<th>AIR DEFENSE</th>
<th>RECON</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 F-16</td>
<td>6 Tornado</td>
<td>1 Tornado</td>
<td>2 F-4</td>
<td>1 RF-4F</td>
</tr>
<tr>
<td>2 Jaguar</td>
<td>2 F-15E</td>
<td>1 TBD</td>
<td>1 EFA</td>
<td>2 F-16</td>
</tr>
<tr>
<td>3 AMX</td>
<td>F-111</td>
<td>F-4G</td>
<td>1 F-15</td>
<td>1 Jaguar</td>
</tr>
<tr>
<td>1 Harrier</td>
<td>F-117A</td>
<td>EF-111</td>
<td>6 F-16</td>
<td>3 Tornado</td>
</tr>
<tr>
<td>1</td>
<td></td>
<td>1 Mirage</td>
<td>1 F-18</td>
<td>1 TBD</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>BOMBER</th>
<th>AIRLIFT</th>
<th>AIR REFUEL</th>
<th>GROUND AD</th>
<th>C3</th>
</tr>
</thead>
<tbody>
<tr>
<td>B-1</td>
<td>C-130</td>
<td>KC-135</td>
<td>8 PATRIOT</td>
<td>1 SAMOC</td>
</tr>
<tr>
<td>B-52</td>
<td>C-130</td>
<td>KC-135</td>
<td>9 HAWK</td>
<td>1 DAC</td>
</tr>
<tr>
<td>B-2</td>
<td>C-141</td>
<td>C-5</td>
<td>1 ROLAND</td>
<td>AWACS</td>
</tr>
<tr>
<td></td>
<td>F-117</td>
<td></td>
<td>1 SPADA</td>
<td>STARS</td>
</tr>
</tbody>
</table>

Communications, bomber aircraft of certain kinds, extensive airlift and air refueling support, and large amounts of command and control and communications support. This entire range of systems might not be required for all operations, but some, especially airlift and command and control assets, would be essential for the entire range of uncertain future conflicts previously discussed.

Most of the additional resources required are currently owned only by the U.S. Air Force. These enabling resources are expensive; if the NATO nations (or the EC/WEU) want to obtain a Europe-only air reaction capability, they will have to pay dearly. There is an important implication for the United States here: These special capabilities should provide a strong rationale for the kind of force assignments the United States makes to Europe in the near term. Without a U.S. commitment of these special resources to NATO, other European nations would have to obtain them—an expensive undertaking—or fail in establishing an effective air reaction force capability.

This section has presented an air organization alternative that could manifest NATO’s new rapid reaction strategy. A similar organization will need to be formed if NATO is serious about developing
forces to carry out its new rapid reaction strategy. In the near term, a rapid reaction air organization will require major U.S. Air Force contributions if it is to be an effective force.
6. CONCLUSIONS AND OBSERVATIONS

This analysis focused on exploring the issues involved in preparing NATO's air forces for an uncertain future. Its overall conclusions are that (1) while NATO's present concepts and plans are evolving in a direction that could respond to uncertainty, they will not provide a near-term organizational structure adequate to implement the new NATO strategy of rapid reaction, especially one applied out of NATO's defensive areas; and (2) some alternatives could move NATO more quickly to such a capability. This analysis suggests an alternative organization for air forces.

NATO's current concepts for employment of air reaction forces in future NATO contingencies are based on the principle that firepower is flexible and responsive enough not to require a peacetime command or headquarters to plan for its employment. The analysis described in this report concludes instead that future contingencies facing the nations of Europe, both inside and outside NATO's treaty area, will require an in-being force, a command with planning capability to prepare air forces to react to the broad range of uncertainty that is now NATO's environment. To highlight this conclusion a comparison of the current NATO concepts and the alternative presented in this analysis (Table 2) is shown in Table 9.

The major findings of this analysis are given next:

Air Reaction Forces Should be Prepared for Operations Independent From Ground Forces and Existing Command Structures

The uncertain futures facing the NATO nations provide many potential situations where firepower could operate independently of ground forces: these might or might not arrive later. Also some potential contingencies could be dealt with solely by firepower.

We conclude also that the deployment of firepower resources to the regions of NATO, plugging them into existing command and control facilities and structures, will be problematic. The many factors affecting this situation include the degradation of such static facilities caused by conflict, the necessity to operate some facilities
Table 9

Comparison of ACE Air Organization and Alternative Proposals

<table>
<thead>
<tr>
<th></th>
<th>ACE Concepts</th>
<th>Alternative</th>
</tr>
</thead>
<tbody>
<tr>
<td>Responsiveness</td>
<td>Organized primarily for major conflict; minimal capability to respond to out-of-area, rapidly developing threats</td>
<td>All levels planned for response; tailored and assigned forces under responsible operational authority</td>
</tr>
<tr>
<td>Flexibility</td>
<td>Organized for in-area operations, within regions</td>
<td>Tailored, packaged forces configured for multiple contingencies</td>
</tr>
<tr>
<td>Availability</td>
<td>Forces earmarked, not assigned or trained except in region</td>
<td>Assigned and trained forces and support</td>
</tr>
<tr>
<td>Staffing</td>
<td>At highest levels</td>
<td>At region/cadre level</td>
</tr>
<tr>
<td>Planning</td>
<td>Staff functions rather than command planning</td>
<td>Concentrated at employment levels</td>
</tr>
<tr>
<td>Mobility</td>
<td>Major limitations in logistics capability; national logistics responsibility</td>
<td>Assigned, &quot;organic&quot; logistics ready for movement</td>
</tr>
<tr>
<td>Support</td>
<td>Limited bare-base capability, static facilities</td>
<td>Deployable stocks, organic supply, maintenance, defense, intelligence; mobile-survivable facilities</td>
</tr>
<tr>
<td>Air Employment</td>
<td>Fixed control system, oriented to region control; limited capability to extend it outside regions, area</td>
<td>Flexible, deployable control system; flexible span of control; organic offensive/defensive assets</td>
</tr>
</tbody>
</table>

forward or away from the existing structures, the refusal of some nations to participate in the contingency operation, and even decisions by concerned nations or the military leadership to employ air forces in command structures different from the existing (peacetime) region organizations. In sum, even if firepower is flexible, mobile, and responsive, plugging it in will require an appropriate receptacle. Further, although politically NATO is not yet ready to declare its
intentions to employ forces outside of its treaty area, it is moving rapidly in this direction. Alternatively, participation of NATO or national forces under other organization arrangements is both a possibility and a viable arrangement. All of these potential kinds of operations will demand a planning and preparation capability that can only be obtained from a dedicated, in-place command headquarters charged with preparing for a broad range of operations.

**Future (Near Term) Viability of Nato Air and Ground Reaction Forces Depends Primarily on U.S. Contributions**

The major feature of the new NATO strategy for rapid reaction is its requirement for mobility of forces—rapid movement to the location of a threat. This requirement is beyond the current capability of the nations of NATO excepting the United States. The United States has most of the sophisticated resources that could make an air reaction force effective. These include airlift, air refueling, electronic combat, reconnaissance, and especially command and control capabilities—both ground and air based. Although a near term condition, it will prevail in the long term unless the European members of NATO—perhaps under the auspices of the EC and WEU—decide to make major financial commitments to obtain such expensive resources. For the present, the United States will be the enabling nation for implementing NATO’s new strategy.

**Responsibility for Air Reaction Functions Should be Assigned to an Operational Command**

The current assignment of planning functions to a staff activity within SHAPE puts a command function within a staff, at a level where overall theater war planning, not detailed operational employment of forces, is done. This is further exemplified in the assignment of air reaction force employment planning at a region level to a staff, rather than a command function. Regardless of whether NATO employs reaction forces within its area or without, the functions of reaction forces will remain war fighting—command—functions, rather than staff functions. We conclude that a regional air commander (COMAIRCENT), who already has operational command authority, should be the air reaction force agent
for NATO and for SACEUR. He should have an airman, a commander, under his authority (Commander, Reaction Forces-Air) who will have peacetime capabilities to plan for employment of whatever forces are assigned for air reaction missions. He should have a command and control and support capability to deploy and employ these forces, and he should be given a range of possible command or support authorities that can match the range of options he would be charged to prepare for.

**The Implementing Component of Air Reaction Should be at the Region Level**

This analysis proposes that organizations at the regional level should be established to become the basis for air reaction force capability. These air commanders would become the regional interface with the nations, other region air and ground reaction forces, and COMRFAIR (who would provide support for air reaction force matters). They would be charged with the planning, training, and deployment of the forces assigned for air reaction missions. They would provide the tailored, self-contained multinational force that could deploy within a region, to other regions, or outside NATO’s area. This cadre organization (or something like it) will be required to put military substance on the bare bones of the emerging NATO concepts, creating a real capability to implement NATO’s new strategy.

**Implementation of Air Reaction Force Organization Faces Many Problems, Some Manifested in Budget Limitations, Others in Planning Concepts**

Air reaction force planning has not gone much beyond concept. The alternatives suggested here are conceptual outlines for what will need to be done. Once decisions are made regarding the broad organization charter, much work will need to be done on specifics. For example, the functions of each level will need to be established as they support the operational tasks assigned. Tactical level resource assignments will have to be made and supported by the nations. The issues of the forms multinational participation and support will take will have to be faced, especially those of logistics. The identity and fit of national force commitments will have to be examined. For example, how will the USAF composite or objective wing fit into this NATO scheme? How will it (and
other nations' squadrons) be integrated on a base or within a region? Further, how will air reaction forces (and commanders) from the several regions be prepared and trained for employment across other regions and outside NATO's areas?

While the concept of rapid reaction is to be the centerpiece of the new NATO strategy, much remains to be done, even in concept formulation, to integrate the air reaction forces with the ground rapid reaction forces—especially the ACE Rapid Reaction Corps. The current ARRC concept presumes an interface for air support that presently does not exist. Given the concept that air resources can "plug-in" to region command and control wherever they are deployed, it is appropriate that the interfacing for integration with ground combat forces should be established in peacetime so that a "plug-in" can occur rapidly in conflict. Finally, the current ACCS plan still favors static command and control facilities to control airpower rather than mobile resources that could deploy and operate not only in other NATO regions but outside the NATO area as well. This emphasis on static facilities, therefore, will inhibit a backup or replacement region air command and control capability and deny NATO the capability to conduct an air campaign at long range.

Future Changes in NATO High-Level Organization or Charter Will Drive Requirements for Substantial Air Organization Changes

We based this work on an assumption that the current structure of NATO would not substantially change. But if it does, if there are radical changes in the regional commands, if force employment functions are elevated to MNC level, for example, then there would be even more reason to create an air organization like the one put forth in this analysis. If NATO or some of its nations accept the necessity to provide a capability to apply military forces beyond treaty boundaries, they will need to have organizations prepared to operate beyond the range of the existing (and planned) static structures and facilities of the regions. These military operations may well be independent air operations, some without NATO ground forces. They will be, in sum, operations unique to the current organization concepts of NATO. And, if these are not prepared for, they might fail.