The NATO Response Force 2002–2006

Innovation by the Atlantic Alliance

Case Studies in National Security Transformation
Number 1
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December 2006

Sponsored by the Office of the Deputy Assistant Secretary of Defense
Forces Transformation and Resources

Prepared by the Center for Technology and National Security Policy

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Introduction

Is the North Atlantic Treaty Organization (NATO) capable of transforming so that it can be an effective military alliance in the early 21st century? Critics often deride the Atlantic Alliance as incapable of transformational innovations because of its political, military, technological, and budgetary constraints. Yet NATO's often cumbersome track record contains at least one recent departure that, most critics would concede, is an important innovation because it promises to strengthen the Alliance's capacity to perform new missions outside Europe. This departure is the creation of the NATO Response Force (NRF), a wholly new NATO force for expeditionary operations that was proposed in late 2002 and came into being in the relatively short span of four years; it is scheduled to reach full operational capability (FOC) in late 2006.

The NRF is planned to be a small but potent force of about 25,000 distributed among a balanced combination of ground, air, and naval units. It is to be a joint force with the advantages of modern information networks and other assets that enable it to operate with high effectiveness. It is intended to perform a wide spectrum of demanding missions, to be interoperable with technologically sophisticated U.S. forces, and to help stimulate overall defense transformation within NATO. This case study examines the NRF, including the strategic circumstances that gave rise to its birth, the design concept behind it, its evolution during 2002–2006, and its problems and prospects. As the following pages show, the NRF is important not only in its own right, but also because it helps illuminate the conditions under which NATO transformational innovation can occur, the leadership strategies that can help bring it about, and the process of implementing it.

This case study illustrates that, thus far, the NRF has been a success in the sense that it is now becoming operational and a usable option at NATO's disposal. Yet, as of 2006, it remains a work in progress because it has not yet acquired all of the information-era capabilities needed to fulfill its ambitious vision. Building the NRF to full maturity—the next goal of NATO's agenda for the NRF—likely will take several years and will require equipping it with modern, deployable, information networks as well as other transformational capabilities. As NATO pursues the twin tasks of keeping the NRF at high readiness and transforming it with new capabilities, it will need to meet several challenges that are discussed below. While the NRF has performed satisfactorily in exercises to date, the real test will come when it is employed for demanding missions, including combat and crisis response.

NATO's Slow Military Progress, 1990–2001

The origin of the NRF traces back to the frustrations that NATO endured throughout the 1990's because of the inability of European members to project military power beyond the continent. Unlike the United States, which has had a global perspective since the 1950's, the Europeans spent the Cold War mostly focused on defending their homeland borders against the Warsaw Pact threat. When the Cold War ended in 1990, the Europeans were left with large, well-armed forces—over three million troops—that

lacked the strategic mobility and power projection assets to deploy to distant areas, including the Middle East and the Persian Gulf. Their inability to respond to crises outside Europe became manifest in 1990–1991, when the United States led a large international coalition to eject Iraq from Kuwait. Only Britain and France were able to commit meaningful forces—a division apiece—to Operation *Desert Storm*. Other European countries contributed only token forces and were left frustrated by their inability to participate in defense of their own interests in distant areas.

Nevertheless, throughout the 1990's the Europeans did little to rectify their military shortcomings. The end of the Cold War allowed most European countries to reduce their defense spending and force postures by about 25 percent. Intent on gaining a peace dividend, few of them invested savings in power-projection assets for new missions outside Europe. NATO civilian and military leaders did their best to reconfigure the alliance's defense strategy and make its force posture more flexible by taking several steps. They streamlined the NATO military command structure, created two Combined Joint Task Force (CJTF) headquarters, and organized NATO's forces into four categories: Immediate Reaction Forces, Reaction Forces, Main Defense Forces, and Augmentation Forces. NATO's Reaction Forces, led by the Allied Rapid Reaction Corps (ARRC) and composed of a sizable pool of 10 divisions, 600 combat aircraft, and 100 naval combatants, provided a large posture for responding to crises. These forces, however, continued to lack the mobility assets; readiness; deployable command, control, communications, computers, intelligence, surveillance, and reconnaissance (C4ISR) systems; long-distance logistic support; and other features needed for power-projection and expeditionary missions. Little tangible progress was made toward acquiring usable capabilities in these and other critical areas because member countries did little to alter their military postures, weapons, and C4ISR systems for new missions outside Europe. Britain and France were partial exceptions, but even they labored under budgetary constraints and lack of public interest in defense modernization and innovation. Throughout the 1990's, the Europeans as a whole were capable of swiftly deploying forces only about one-tenth the size of comparable U.S. forces. Moreover, the large transatlantic gap in military capabilities was widening late in the 1990's as the U.S. military began acquiring smart munitions, advanced C4ISR assets, and modern information networks—areas where the Europeans were making little progress.

In political terms, NATO was making progress by expanding its reach into Eastern Europe and undertaking to quell ethnic warfare in the Balkans. The Europeans were able to support the peacekeeping missions in Bosnia that became necessary after the Dayton Accord was signed in late 1995. But the Kosovo War that erupted in early 1999 was another matter. In its military campaign to pressure the Serbian Army to withdraw from Kosovo, NATO relied entirely upon air power. Although Serbia and Kosovo were within range of NATO air bases, U.S. air and naval forces were compelled to fly the preponderance of air strike missions. The Europeans contributed only about 25 percent of air sorties because they lacked capabilities in such critical areas as all-weather and day-night operations, smart munitions, and secure communications. After the war ended, NATO sent ground forces into Kosovo for pacification, and the Europeans contributed

importantly to this mission. But their failure to contribute more importantly to the air war was commonly seen as deeply embarrassing to European militaries.

At its Washington Summit of 1999, NATO tried to start rectifying this situation by adopting a new strategic concept and the Defense Capability Initiative (DCI). The new strategic concept called for NATO to become better prepared for newly emerging strategic missions, including crisis interventions outside Europe. The DCI called for an alliance-wide effort to upgrade European militaries in such critical areas as strategic mobility, long-distance logistic support, information-era C4ISR systems, modern weapons, smart munitions, air defenses, and other relevant areas. Some countries responded to the call for a DCI. Britain, for example, adopted a new defense plan with a focus on expeditionary missions. France reacted similarly. But for the most part, lack of investment funds and political indifference resulted in the Europeans and NATO making little progress during 1999–2001. Even though the DCI was designed to be modest and focused, it was often criticized for being too demanding and sweeping because even its limited demands exceeded the resources and political willpower of most European countries.

The terrorist strikes of September 11, 2001, suddenly created the need for a new strategic mindset. NATO declared an Article 5 emergency and offered to lend military support to the United States. Shortly afterward, the United States invaded Afghanistan. Several European countries offered to help, but they were stunned when the U.S. military refused the offers for the reason that most European militaries lacked the sophisticated capabilities to contribute to the new-era operations of precision strikes U.S. forces were waging. Some European countries contributed modestly in such areas as special forces and airlift support, but for the most part, the war against al Qaeda and the Taliban in Afghanistan was waged by U.S. forces in cooperation with friendly Afghan forces from the Northern Alliance. Once again, the Europeans were left on the sidelines and embarrassed by their lack of capabilities for new-era missions and wars.

The frustrations of Kosovo and Afghanistan made clear that, if NATO was to become relevant to new-era missions, it would need to improve its forces significantly. But what exactly was to be done? A wholesale defense buildup was not feasible, because European countries were not willing to fund the requisite increased military budgets. Overall, their defense budgets averaged only about 2 percent of gross domestic product (GDP), and only about 20–25 percent of defense funds were available for investments. The DCI had been intended to work with existing defense budgets, but it had largely fallen flat because its efforts were scattered in too many different directions with decisive impact in few of them. Something different was needed. The NRF grew out of efforts to address this thorny issue by crafting a highly focused solution that would work because it was both politically feasible and militarily capable.

Birth of the NRF Concept—Prague Summit of 2002

The NRF owes its existence partly to the worried atmosphere that settled over NATO in the aftermath of the successful U.S. invasion of Afghanistan and the growing awareness

of the need to create a viable defense initiative for the upcoming Prague Summit in November 2002, but also to a specific organizational and political process of innovation advocacy that unfolded from January 2002 to the Prague Summit. The NRF was not an idea that bubbled upward from within the NATO bureaucracy, nor did it originate in Europe. Rather, it originated in the United States, where it was crafted by senior leaders, with the help of outside analysts, and then sold by American leaders to the Europeans.

Originally, U.S. senior officials were not thinking in terms of a concrete force proposal, such as the NRF. Instead they were listening to advice from Brussels that called for replacing the DCI with a smaller version of a generic capability-enhancement effort. This idea took shape as the Prague Capability Commitment (PCC) and ultimately was adopted at the Prague Summit. But in January 2002, National Security Council (NSC) advisors to President Bush decided that they also wanted a bolder, more appealing and strategically meaningful initiative to accompany the PCC. They asked Hans Binnendijk and Richard Kugler of the Center for Technology and National Security Policy (CTNSP) at the National Defense University (NDU) to produce useful ideas. Binnendijk and Kugler wrote a short paper calling for the Prague Summit to focus on defense transformation and create a spearhead joint strike force of about 20,000–25,000 troops that could deploy swiftly to crisis zones and operate closely with U.S. forces.[1] In their view, this was to be a real-life force with a C4ISR structure and assigned combat units, not merely a disorganized troop list that would be pulled together when the need arose to use it.

Essentially, Binnendijk and Kugler envisioned the type of NATO strike force that could have deployed to Afghanistan and worked closely with U.S. forces there. Labeling it a "Spearhead Response Force," they called for a force that would be large enough to be militarily meaningful yet small enough to be affordable and politically attractive to NATO's members. Their proposed force was to include a headquarters staff, a ground brigade, a composite air wing, a naval strike force, and appropriate logistic support and mobility units. Such a force, they argued, would not only make military and strategic sense, but also provide NATO defense planners with a concrete focus and a set of distinct priorities, thereby avoiding the temptation of scattering scarce defense resources in different directions and losing their effectiveness. Whereas the DCI had not been focused on any specific component of NATO's military posture, the Spearhead Response Force would compel intense focus on a small posture, thereby enhancing prospects for success.

Binnendijk and Kugler proposed that this force would be kept at high readiness (able to deploy within a week or so) and would have about 30 days of independent staying power, once deployed. They further recommended that it should be configured as a rotating force. That is, during any six-month period, one Spearhead Response Force would be on active duty, a second would be training for future duty, and a third would be standing down from recently completed duty. Basically this is the same practice the U.S. Navy follows in aircraft carrier rotations. Binnendijk and Kugler emphasized that this force should be multinational, with membership open to any NATO member wishing to

[1] For details, see Hans Binnendijk and Richard Kugler, "Transforming NATO's Forces," *Survival* (London: International Institute for Strategic Studies, fall 2002).

participate and able to meet proper readiness standards. They called for the force to be mainly European, but for the United States to participate constructively, especially by providing critical enablers in such areas as C4ISR systems and mobility until the Europeans had acquired the necessary assets. They argued that this new force not only would provide NATO with a viable option for crisis response, but also help assure interoperability with U.S. forces while facilitating defense transformation across NATO's entire military posture.

The idea of creating this NATO joint strike force was consistent with emerging trends in U.S. military doctrine as envisioned in the Department of Defense (DOD) *Quadrennial Defense Review* (QDR) of 2001, but it was a revolutionary departure for NATO and the Europeans. Most European countries had not been thinking in terms of either joint operations or expeditionary missions outside Europe. The idea of joint operations meant that the Europeans would need to fuse their ground, air, and naval forces to fight as a single entity, with all components working closely with each other on behalf of common plans. The idea of expeditionary missions meant that European forces must be able not only to deploy swiftly outside Europe, but also to wage war effectively in austere environments and a wide spectrum of unfamiliar conditions.

In the United States, NSC Advisor on European/NATO Affairs Ambassador Dan Fried liked the idea of a Spearhead Response Force and urged Binnendijk and Kugler to take their idea to DOD. At the Pentagon, Binnendijk and Kugler received a warm reception from two critical staffs: the NATO bureau of the Office of the Assistant Secretary of Defense for International Security Affairs (OSD/ISA), headed by Ian Brzezinski, and the J-5 of the Joint Staff, headed by Army Major General George Casey. Their support was garnered by March 2002, as was support from the Office of Force Transformation headed by retired Navy Admiral Art Cebrowski. At this juncture, momentum for the idea slowed when Secretary of Defense Donald Rumsfeld and some of his top aides wanted it to be investigated thoroughly to ensure its feasibility, affordability, and military effectiveness. Once these issues were resolved, Rumsfeld embraced the idea, and presented it to NATO Defense Ministers in September 2002. With NATO Secretary General Lord Robertson backing the idea, it quickly gained acceptance throughout the alliance. The goal of creating this force, renamed the NATO Response Force, was unveiled at the Prague Summit and treated as a co-equal part of a major defense agenda that also included the PCC and creation of a new Allied Transformation Command. Following several months of study and evaluation, the NRF was officially approved by the NATO Defense Ministers in spring 2003.

What stands out from this historical experience is the successful manner in which the NRF was adopted at a time of mounting political tensions within the Alliance over Middle East policy. Fall 2002 was a period in which the United States and Britain were beginning to quarrel publicly with Germany and France over whether to invade Iraq in the near future. The effect of this growing quarrel was to split the alliance into two hostile factions. Notwithstanding this tense atmosphere, the NRF moved through the NATO consensus-building process and emerged with the support of the entire Alliance. The NRF design concept endorsed at Prague was virtually the same as the concept originally

tabled by the U.S. government, and indeed, by Binnendijk and Kugler. Several reasons account for this successful outcome.

A main reason was that the United States strongly supported the NRF and acted skillfully in urging the Europeans to support it. Throughout its history, NATO has best succeeded at military innovation when the United States, the Alliance's strongest power and political leader, has favored the idea. In this case, the Bush Administration embraced the NRF concept because it made political and military sense, was a good vehicle for showcasing U.S. leadership, was affordable and feasible, offered the promise of creating a European force that would be interoperable with U.S. forces, and provided a vehicle to accelerate NATO transformation. During fall 2002, the Bush Administration made clear its support for the NRF and pursued a wide-ranging diplomatic campaign aimed at garnering support in NATO civilian and military headquarters and European capitals. While much of this diplomacy was conducted behind the scenes, it also had an important public component in the form of speeches, briefings, newspaper articles, and journal articles directed at public opinion in both the United States and Europe.

While the Bush Administration did a good job of packaging and selling the NRF to make it appealing, the Europeans favored the NRF for their own reasons. Multiple countries welcomed the idea of acquiring a high-tech military force that would enhance NATO's relevance and allow it to participate in expeditionary operations outside Europe. Numerous members also welcomed the idea that creation of the NRF would help give them access to the modern doctrines, information networks, weapons and munitions, and organizational structures emanating from U.S. military transformation. Because of its small size, the NRF was affordable and would not upset other high-priority European defense programs. It also provided a vehicle for signaling European political willingness to participate in crisis missions in distant areas without necessarily supporting the United States in Iraq. Also important, the NRF posed no major threat to the European Union's efforts to pursue European Security and Defense Policy (ESDP) and to create a European Rapid Reaction Force (ERRF) for Petersburg tasks, such as, peacekeeping.

The bottom line is that the NRF was adopted with fanfare at the Prague Summit because it was a good idea whose time had come, and because both the United States and key European countries strongly supported it. Among the Europeans, not only did Britain and Germany support the idea, but so did France, a traditional naysayer to U.S. leadership. In this case, the NRF squared with France's notions of power projection, expeditionary missions, and transformation. Support from these three big powers provided a framework that permitted smaller countries, including old and new members, to join the enterprise with confidence that it would succeed and serve their interests. Across Europe, support for the NRF was especially strong among professional militaries, and it did not face serious opposition from foreign ministries, finance ministries, or parliaments. Had the United States not sponsored the NRF, it likely would not have been adopted, even if some European countries had favored the idea. Likewise, the NRF would not have been adopted, even though the United States favored it, if a strong coalition of European countries had opposed it. In this case, strong support on both sides of the Atlantic made this innovation a viable idea on which to mobilize widespread consensus.

Fielding the NRF—From IOC to FOC, 2003–2006

NATO defense innovation requires more than mobilizing political support for a new idea. It also requires a sustained effort to implement the idea. Historically, other attractive ideas have fizzled within NATO because of weak implementation, so successful fielding of the NRF was not guaranteed. The Prague Summit envisioned concrete steps immediately followed by steady progress aimed at fully fielding the NRF over a period of 4–5 years. Although some problems were encountered, this effort proved generally successful. Two reasons account for this success. NATO's civilian leaders, including the new Secretary General, Jaap de Hoop Scheffer, continued to support the NRF despite the raging debates over Iraq during 2003–2006. They grasped NATO's need for enhanced deployable forces for multiple future missions, and many political leaders came to view progress on the NRF as a way to keep NATO together despite the debates over Iraq. Equally important, the NRF enjoyed strong support from Supreme Allied Commander Europe (SACEUR), U.S. General James Jones, USMC, and his subordinate officers in NATO's new Allied Command Operations (ACO). In his long career in the U.S. Marines, General Jones had developed a keen appreciation for the importance of joint operations and expeditionary missions. He made successful implementation of the NRF a key priority of his tenure, and his strong leadership efforts played a major role in the events that unfolded. NATO's new Allied Command Transformation (ACT), led by U.S. Admiral Edmund Giambastiani, USN, showed interest in helping the NRF adopt transformation concepts. The combination of the two NATO commands working together on the NRF facilitated its progress, which proved faster than most observers originally predicted.

Even so, a great deal of hard work was required by NATO. The relatively small size of the NRF made the enterprise easier to launch than a bigger force would have been. Still, at any single time, three NRFs were required: one in training, one on duty, and one standing down. This necessitated full-time commitment of 60,000–75,000 troops, plus creation of an entirely new NRF every six months, a continuously challenging task. Adding to the challenge was the multinational nature of the NRF, which required mixing multinational units at lower command echelons than previously had been the case. This required a careful blending of forces from numerous countries to ensure their interoperability. Equipping the NRF also was demanding. Participating European forces typically possessed adequately modern weapon systems and munitions, but the NRF required specialized capabilities in multiple areas, including modern C4ISR networks. Acquisition of these capabilities moved slowly in several areas, and had not yet been fully accomplished as of August 2006.

Beyond this, NRF units require a high degree of readiness. When on duty, they are expected to be deployable after only five days of preparation. By comparison, other active duty forces often are granted a full month to prepare to deploy. This means that a full training regimen must be accomplished before an NRF begins its six-month duty cycle, not during the cycle. ACO and ACT devoted considerable time to guiding the certification of readiness for each NRF through careful planning, training, and exercises. Indeed, they steadily increased the standards for certification as each new rotational NRF

began its training cycle. This intensive activity took place mostly behind the scenes, and in this critical arena, NATO's military commands performed well at accomplishing these demanding tasks, thus making the NRF a viable entity in a relatively short time.

Progress on the NRF began to emerge in mid-June 2003, when the NATO Defense Ministers formally approved its speedy creation. In July, NATO's military leaders held a force-generation conference for the NRF and called for an initial NRF to be fielded during fall 2003. In mid-October, NATO officially launched the NRF, created an NRF headquarters in Italy, and placed it under the command of the NATO Joint Force Command in Brunssum, Netherlands. They also designated the first two rotational forces (NRF 1 and 2) to be prototype units that would test and develop concepts and practices for the NRF.[2]

Table 1 shows the composition of NRF 1, which included personnel from 15 nations. Of the 9,500 personnel, about 8,500 were airmen and sailors, and only 1,000 were ground troops. Its land component included a French paratroop battalion, a Greek airmobile company, and a Belgian commando company—enough troops for only about one-half a brigade. Lack of ground forces was a problem that continued affecting follow-on NRFs during 2003–2006.

Table 1. Force Contributions—NRF 1

Country	Troops	Main Assets/Capabilities
Spain	2,200	Ships, aircraft, helicopters
France	1,700	Army battalion, ships, aircraft
Britain	1,200	Ships, aircraft
Germany	1,200	Ships, aircraft
Turkey	600	Ships, aircraft
Italy	600	Military police, ships, aircraft
Greece	300	Army company, two ships
United States	300	Ship, aircraft
Belgium	250	Commando company, ship, aircraft
Netherlands	200	Ship
Norway	150	Ships, aircraft
Denmark	100	Ships, helicopters
Czech Republic	80	Nuclear, Biological and Chemical (NBC) equipment
Poland	20	Explosive Ordinance Disposal (EOD) unit
NATO	700	AWACS and Headquarters personnel
Total	9,500	

[2] For more details of NATO's actions in fielding the NRF, see the official NATO website, http//www.nato.int including the "NATO Updates" section, which provides monthly and daily commentary on NATO activities.

NATO military leaders emphasized that the NRF could be used not only for major combat missions, but also for non-combat evacuation, humanitarian aid, peacekeeping, and crisis response, including counter-terrorism and embargoes. They further said that the NRF's IOC was targeted for fall 2004, and FOC was expected in fall 2006.

Upon launching of the NRF in October 2003, General Jones said:

> Today marks one of the most important changes in the North Atlantic Alliance since the signing of the Washington Treaty over 50 years ago…. For the first time in its history, the Alliance will have a joint multinational force of air, land, sea, and special forces under a single commander and maintained as a standing rotation force.[3]

In that same month, another important event occurred: NATO's Defense Ministers and military leaders met in Colorado Springs, Colorado, to hold *Dynamic Response '07*, a crisis management study seminar for examining how NATO could handle future challenges. The seminar pointed to such new threats as terrorism and the spread of weapons of mass destruction (WMD) and the need for flexible and rapid NATO decision procedures. It also highlighted the important role that the NRF could play in providing usable military capabilities. In late November, NATO held its first NRF exercise at Doganbrey, Turkey. Conducting this exercise was NRF 1, which included the NATO Rapid Deployable Corps-Turkey, the Spanish maritime high readiness forces, Allied Air Forces North Europe, and forces from 11 countries, including Britain, Germany, and France. The exercise was a success, but NATO officials acknowledged that it also unveiled critical shortages in such areas as strategic airlift, deployable communications, logistics support, and life-support systems.

In January 2004, NATO senior commanders took part in *Allied Reach '04*, a special seminar designed to test the concepts behind the NRF. In May, Exercise *Allied Action* tested the activation of a Deployed Joint Task Force Headquarters for handling NRF operations in distant areas. In late June, operational responsibility for the NRF passed from Joint Force Command (JFC) Brunssum to JFC Naples, thus starting a process of rotating the NRF among NATO's three principal joint commands. In early October, the NRF participated in Exercise *Destined Glory '04*, a live-fire training and maritime exercise off Sardinia. In mid-October, Secretary General Scheffer and General Jones announced that the NRF had reached IOC, with a force of 17,000 troops. They emphasized that the NRF could be used for multiple missions, such as collective defense, consequence management, and initial entry into crisis zones. During 2004, elements of the NRF were deployed to help protect the Summer Olympics in Athens, Greece, and to help support the Afghanistan presidential elections. For these reasons, the NRF's first year was judged successful by most observers. Similar to NRF 1, NRF 2 included forces from a variety of members, thereby signaling the growing popularity of the NRF among European militaries.

[3] Speech delivered October 15, 2003, at AFNORTH HQ, Brunssum, Netherlands, upon presentation of the NRF colors to General Sir Jack Deverell, Commander in Chief AFNORTH.

The year 2005 witnessed an intensified exercise program for NRFs 3 and 4, coupled with use of the NRF for disaster relief operations. In early February, NATO military commanders met in Exercise *Allied Reach '05* to conduct a seminar workshop on NRG plans, operations, and capabilities. In March, Exercise *Noble Javelin* resulted in the NRF deploying 3,000 troops to the Canary Islands to test long-distance force deployment and amphibious operations. In April, Exercise *Loyal Mariner '05* was held in the North Sea to test NRF maritime capabilities. Nineteen countries committed 85 ships and 30 aircraft to the exercise. During May, the NRF conducted naval exercises off Crete. In late June, command of the NRF was transferred from JFC Naples to Joint Command Lisbon. In September, the NRF helped provide disaster relief by airlifting supplies in response to Hurricane Katrina. In early October, Exercise *Destined Glory '05* (*Loyal Midas*) was conducted in the Tyrrhenian Sea to test complex NRF sea operations. The forces from 10 countries included 8,500 personnel, 37 ships, and 57 aircraft. From late October 2005 to February 2006, the NRF headquarters was employed to guide NATO relief efforts in response to the earthquake in Pakistan. It commanded a diverse force of cargo aircraft, helicopters, engineers, supply troops, medical personnel, and other assets that were specially tailored for the relief effort.

In February 2006, NATO Defense Ministers met to discuss the steps needed for the NRF to achieve FOC by year-end. From March 24–April 6, Exercise *Brilliant Mariner* was held to test the readiness of the NRF naval component: 80 ships from 18 nations participated. During May 1–10, Exercise *Steadfast Jackpot*, a computer-assisted test of NATO's ability to command the NRF, was conducted. It was quickly followed in June by Exercise *Steadfast Jaguar*. *Steadfast Jaguar*, held in the Cape Verde Islands, was especially important, because it was intended to evaluate NRF capability to become fully operational. It was the first exercise to employ simultaneously all three NRF components—ground, naval, and air. Over 7,000 troops carried out a variety of simulated operations: disaster relief, amphibious landing, precision fighter jet bombing, special forces assaults, and naval bombardment. Afterward, a NATO spokesman said that during this exercise, "the NRF passed its last test before it is due to become fully operational in October." Celebrating the achievement, Secretary General Scheffer said:

> You see here the new NATO, a NATO which has the possibility to be expeditionary, to project stability. The NRF is the most important tool to show in which way and how NATO has transformed and is transforming.[4]

Toward a Fully Mature NRF—Acquiring Transformational Capabilities

During 2003–2006, NATO focused on moving NRFs 1–6 from IOC to FOC. Future NRFs are intended to be granted FOC status and to be available for full-scale use in missions. Future NRF units will fully meet operational goals, however, only if manpower quotas are adequately met. As of spring 2006, SACEUR General Jones was publicly expressing concern that not enough troops, especially ground troops, were being assigned

[4] Speech by NATO Secretary General, Jaap de Hoop Scheffer at the Media Day of NRF Exercise *Steadfast Jaguar 2006*, Cape Verde, June 22, 2006. Available online at <http://www.nato.int/docu/speech/2006/s060623b.htm.>

to meet NRF requirements. Assuming that manpower requirements are met, NATO documents state that when the NRF reaches its full size of 25,000 troops, it will be composed of the following main combat forces:

- A reinforced brigade combat team (2,500–3,000 troops) that will include three light infantry battalions (motorized or air mobile), plus one or more light armored battalions along with artillery, special operations, engineer, NBC defense, and logistic support elements.

- A rapidly deployable composite air group of about 40 combat aircraft, support aircraft, and helicopters capable of flying 200 sorties per day.

- A naval task force composed of a carrier battle group, an amphibious task group, and a surface action group, totaling 10–12 ships or more.

This force composition, NATO authorities point out, is a general model for future NRFs, not a rigid blueprint. The NRF, they say, is to be a flexible creation that can be adjusted to meet changing circumstances. As a result, its size can be adjusted upward or downward, and its composition can change, too.

NATO documents further state that the NRF is driven by the principle of "first force in, first force out," and that it can be used whole or in part in the following ways:

- Deploy as a stand-alone force for Article 5 missions (collective defense) or non-Article 5 missions.

- Deploy as an initial entry force facilitating arrival of larger follow-up forces.

- Deploy as a demonstration force to show NATO's determination and solidarity in a crisis.

Although achieving FOC status is an important benchmark for attaining NATO's first goal of creating an expeditionary strike force, it merely means that the NRF is operational and ready to perform missions, if called upon. It does not mean that the NRF has completed the task of acquiring all of its requisite capabilities and solved all other problems facing it. Considerable effort will be required to ensure that a fully mature NRF eventually emerges. In the future, NATO will need to address its second goal: turning the NRF into a transformed force with the associated information networks and other information-age capabilities. Achieving this goal promises to be time consuming, because improvements likely will come gradually as NATO and the Europeans slowly acquire these assets.

An especially important task will be ensuring that the NRF is equipped with the information networks needed to make it a properly transformed force. Modern information networks include the following: networks for basic command, control, and communications, for intelligence, surveillance, and reconnaissance (ISR), for force

operations, and for logistic support. When these networks exist and are integrated, they provide shared situational awareness, a common operational picture, and other benefits that allow forces at all echelons to operate with far greater effectiveness and efficiency than before, and to pursue modern doctrines as well as effects-based operations. Deployable networks are especially important to expeditionary forces, which must operate at long distances from the established information infrastructure of their home countries. The NRF will need sophisticated, deployable information networks to:

- achieve interoperability with U.S. forces based on a "plug and play" philosophy;
- facilitate its capability to operate as a joint, multinational force and to work closely with other NATO forces;
- magnify its own combat power, thereby using high quality to substitute for its relatively small size; and
- carry out modern doctrines and operational concepts that blend precision strikes and speedy maneuvers to defeat enemy forces.

U.S. military transformation is substantially animated by the principle of network-centric warfare (NCW), which holds that networks, not weapons platforms or munitions, are the centerpiece of modern force operations. By contrast, NATO force planning embraces the principle of network-enabled capability (NEC), which holds that networks, while important, are enablers of weapons and munitions, not the centerpiece of force structures and operations. NEC also implies a set of multiple, separate networks that are linked together, rather than a single, overarching design philosophy, such as the U.S. Global Information Grid (GIG). Currently, NATO and European militaries are several years behind the U.S. military in creating modern information networks and using them. Yet, the past few years have seen encouraging progress in several areas. Britain and France, in particular, have been building networks for modern force operations, including such communications systems as SOCRATE and Skynet, plus growing access to satellites for military purposes. Germany, the Netherlands, and Italy are also active in this arena, as is Sweden, which is not a member of NATO but could participate in future missions. Other countries vary, and a few seem unenthused about networking or unable to generate the investment funds needed to acquire networks.[5]

NATO has been pursuing force networking and has been making progress slowly in recent years. NATO has developed a substantial command, control, and communications capability for military operations for use by senior military and political authorities. NATO hardware and software encompasses the entire NATO territory and can connect

[5] For an appraisal of the U.S. military approach to NCW, see Office of Force Transformation, *The Implementation of Network-Centric Warfare* (Washington, DC: Department of Defense, January, 2005). For additional analysis of NATO and European developments in this arena, see Gordon Adams, et. al., Defense and Technology Paper 5, *Bridging the Gap: European C4ISR Capabilities and Transatlantic Interoperability* (Washington DC: Center for Technology and National Security Policy, November, 2004).

forces from all components to senior decision makers through voice, data, messaging, and video teleconferences. NATO employs wireless networks, land lines, optical fiber, and digital radios, and relies upon the Internet as well as commercial satellites. NATO's goal is to create a C4ISR architecture into which member nations can plug their own command, control, and communications (C3) networks. The current system is criticized for being stove-piped and not facilitating horizontal communications between forces and governments. Even so, it entails such assets as the Automated Command and Control Information System (ACCIS), the NATO General Purpose Communications System (NGCS), a SATCOM system to provide global, broad-band transmissions, and CRONOS, a secure information transmission system. NATO is also pursuing several improvement programs in this arena, including upgraded SATCOM, an Alliance Ground Surveillance (AGS) system, and CAESAR, a development program aimed at linking together national ISR systems from a variety of platforms.

The AGS system is an example of NATO development activities in applied networking and associated force development. The AGS is intended to provide an "eye in the sky," thereby enabling NATO forces to gather real-time intelligence of events on the ground. It is to be composed of manned Airbus aircraft, Global Hawk Unmanned Aerial Vehicles (UAVs), a TCAR radar, and ground control stations. It is viewed as potentially a critical enabler for the NRF. The AGS system is to be produced by a transatlantic industrial consortium; NATO signed a study contract with this consortium in 2005. The AGS system is scheduled to reach IOC in 2010 and FOC a few years later. The NRF will not benefit from it for several years, but when it arrives, it will strengthen NRF combat capabilities significantly.

A principle NATO weakness has been lack of mobile, deployable C4ISR systems and information networks. Obviously this deficiency is an impediment to the NRF. NATO plans on employing Deployable Combined Joint Task Force (DCJTF) Headquarters for command and control of the NRF when it is performing an expeditionary mission outside Europe. Equipping these headquarters with a full C4ISR architecture and information networks will help significantly by providing a plug-and-play capacity for multinational forces assigned to the NRF. Yet, the forces themselves also must have appropriate C4ISR systems and networks that can be plugged into the DCJTF Headquarters. Thus, deploying British and French forces as part of the NRF might pose no C4ISR and networking problems, but deploying forces from less-endowed countries could raise difficulties. Providing NRF units with such practical assets as Blue Force Tracker, Predator UAVs, and better tactical radios could make an important contribution. NATO and European countries expect to make progress in this arena, but several years may pass before the NRF becomes fully networked.[6]

A similar judgment applies to NRF capacity to employ other critical, new-era capabilities for expeditionary warfare. Many European militaries possess adequately modern weapon

[6] For additional analysis, see Jeffrey P. Bialos and Stuart L. Koehl, Defense and Technology Paper 18, *The NATO Response Forces: Facilitating Coalition Warfare through Technology Transfer and Information Sharing* (Washington, DC: Center for Technology and National Security Policy, September, 2005).

systems, for example, fighter aircraft, but they often lack combat enablers in several areas. This includes precision strike systems, such as Joint Direct Attack Munitions (JDAMs), tactical standoff missiles, and stealth fighters; close combat systems, such as light tanks and other light armored vehicles; force protection, such as NBC equipment and body armor, as well as theater missile defense; tactical mobility; and logistic sustainability, such as deployable trucks and utility helicopters; and strategic mobility, including long-range air transports, aerial refueling tankers, and amphibious assault ships. Many of these assets are present in ample quantities within the U.S. military, but less so for most European militaries. Acquiring these assets is proving slow, because European investment budgets are small and other priorities consume many funds; whereas the United States spends about $150 billion annually for research, development, testing, and evaluation (RDT&E), and procurement, the Europeans spend only about $30 billion.

The implication is that the NRF quest for full force maturity is likely to take several years. Evidently, many NATO and European officials envision a phased NRF transformation program for acquiring these capabilities. The initial phase, covering the period 2006–2012, will focus on creating improved interoperability and will continue relying heavily upon the United States for such enablers as JSTARS, UAVs, ELINT aircraft, satellite reconnaissance, broad-band communications, and stealth aircraft. The long term, from 2013–2020, will focus on enhancing NRF joint force capabilities and attaining European self-sufficiency in a number of areas. If this timeline proves accurate, it suggests that the NRF will be undergoing a lengthy evolution that could take another 15 years or so. While surface appearances suggest that this is a long time, the U.S. military's transformation program has a similarly long timeline to build information networks and acquire such new weapons as the F-35 fighter, as well as destroyers, cruisers, and aircraft carriers.

The pace at which the NRF acquires new systems and capabilities will partly depend upon European and NATO acquisition programs. But it also will depend upon the willingness of the United States to release new military technologies to the Europeans. In theory, technology transfer can help serve U.S. national interests by fostering capable allied militaries. Yet, the process of gaining legal authorization to export sensitive military technologies is complex and laden with formidable barriers. In the past, even America's closest allies have had difficulty gaining access to sensitive U.S. defense technologies. If anything, U.S. export control laws and procedures have tightened in recent years. To an important degree, the NRF's future will depend upon U.S. willingness to expedite the technology transfer process for the Europeans.

Meeting Other Challenges

In addition to endowing the NRF with deployable information networks and other technologies that will create a fully transformed force, NATO will need to address other challenges as it presides over the NRF's further maturation. One challenge is that of ensuring adequate funding for the NRF. For the most part, the NRF is not funded through common NATO accounts. Instead it is funded nationally by the countries that participate in each rotational NRF, with each country having to commit money in proportion to the

forces provided. The effect has been to place a high financial burden on countries making major contributions, to free non-participants from any financial requirements, and to make it hard for countries with small defense budgets to participate. It also exposes the NRF to funding shortfalls, including when crisis response options must be launched. Common funding of a greater portion of the NRF, including a flexible contingency budget, would help alleviate these problems, while ensuring that each NRF has sufficient funds to accomplish its goals and missions. This issue is now being examined by senior NATO officials. The reality is that NATO members will need to consistently ensure that their defense budgets fully fund all NRF requirements, including the purchase of new equipment. Unless this is the case, NRF funds will continue to be at risk for being victimized by low European defense budgets and other priorities, including EU military departures.

A second challenge will be ensuring that NRF units consistently meet their demanding training and readiness requirements. The NRF is intended to operate much like a U.S. Marine Expeditionary Brigade (MEB), as a joint force that integrates air, ground, and naval components to provide expeditionary strike capabilities. And like an MEB, the NRF will need advanced training and exercises to attain its full capability As suggested by Exercise *Steadfast Jaguar*, future NRF exercises likely will focus increasingly on joint operations rather than operations by individual components, such as naval forces. Such exercises will be critical to NRF future maturation, because they will have a major bearing on whether NRF units can operate jointly, as well as carry out new doctrines and operational concepts that emerge from the transformation process. Indeed, NRF joint exercises likely will become a test-bed for NATO's testing and experimenting with new doctrines and concepts to see whether they can be applied elsewhere to NATO and European force postures. Robust training and exercise programs will have a major impact on whether the NRF emerges as a highly effective force and retains that status in future years.

A third challenge is that of determining a proper role for U.S. forces in the NRF. The original theory was that the NRF would be a primarily European force, and that U.S. contributions would be limited to such enabling support assets as airlift, JSTARS, Global Hawk, satellite surveillance, broad-band satellite communications, and theater missile defense. This U.S. stance helped place pressure on the Europeans to take main responsibility for fielding the NRF's combat forces during 2003–2006. But to some Europeans, it suggested a lack of firm U.S. commitment to building and using the NRF, and a lessening of incentives for the United States to do so. Recently, the United States has been considering options for committing significant combat units to the NRF, and it likely will do so in future years. Beyond this, there is an imperative need for independent U.S. forces (those not assigned to the NRF) to train and exercise with the NRF to help encourage interoperability for expeditionary missions in which both American and NRF units will be participating. The U.S. military presence in Europe can be used for this purpose.

A fourth challenge is that of determining what missions the NRF is to become capable of performing. An early design concept was to focus the NRF on high-tech, expeditionary,

combat missions of the sort performed in the early stages of the U.S. interventions in Afghanistan and Iraq. NATO spokespersons continue to endorse these missions and capabilities for the NRF, but they also speak of using it for a wide variety of other missions, including disaster relief, humanitarian interventions, and peacekeeping. Such non-combat missions are important and would ensure that the NRF is used regularly, thereby reducing its vulnerability to a "use or lose" philosophy. Yet, no single, small military force can be an asset for all seasons, that is, capable of performing nearly every mission imaginable. If such a force tries to be trained and ready for the entire spectrum of possible missions, it will run the risk of losing its prowess for its main purpose—in this case, being prepared for demanding combat missions. If the events of 2003–2006 are an indicator, NATO will face a continuing challenge of striking a proper balance between these two imperatives while ensuring that the NRF is always fully capable of major combat operations. Configuring other NATO forces for expeditionary missions, such as High Readiness Forces (HRF) and stabilization and reconstruction forces, is a viable way to ensure that the NRF does not lose its focus on its main purpose. Over the long term, NATO might want to create a second NRF, thus providing a capacity for two contingencies or greater staying power for a single contingency, if the necessary resources are available.

A fifth challenge is political: ensuring that NATO's decision procedures are sufficiently flexible and responsive so that the NRF actually can be used when appropriate circumstances arise. Achieving widespread North Atlantic Council (NAC) consensus to employ the NRF for Article 5 missions, for example, defense of NATO's borders, is unlikely to be difficult, but a different situation could emerge when the need arises to use the NRF outside NATO borders for non-Article 5 missions. The risk is that NATO's traditional practice of striving for unanimous decisions could result in a few countries paralyzing NATO's ability to employ the NRF. The solution to this problem is for NATO to forge a strong consensus on situations in which the NRF could be employed and to build greater flexibility and speed into its decision procedures so that action cannot readily be blocked by small minorities or delayed by cumbersome procedures.

A sixth challenge is ensuring that the NRF has access to the strategic lift assets needed to deploy it swiftly over long distances. Although the United States has sizable strategic lift forces, European countries mostly have not sought to acquire the lift assets needed to move sizable forces abroad, and NATO is not officially assigned any strategic mobility forces. Fortunately, the NRF is a relatively small and light force that does not require large lift assets. Its ships and aircraft can move on their own, and its ground combat brigade is composed mainly of light-weight units. Even so, deploying the NRF could necessitate the moving of about 50,000 tons or more of equipment and supplies. This amount could require commitment of, for example, 3–6 Ro/Ro cargo ships, plus 100 or more sorties of heavy air cargo transports. Although the United States in theory could provide the requisite lift, the NRF will not be a truly independent force until NATO and the Europeans can provide it. A few years ago, NATO signed a multinational agreement with several members that provides it access to commercial ships in a crisis. Likewise, NATO has signed a multinational agreement with Russia and Ukraine to gain access to several AN 124-100 air cargo transports. Thus far, NATO's long-term solution has been

acquisition of the A-400M transport by European countries, but it will not begin arriving until 2010–2012, and it is a tactical, not strategic, transport. Indications that Britain and some other European countries might buy a few C-17's in the coming years provide hope for a partial solution. Regardless, the United States likely will need to continue providing airlift support to the NRF for some time.

Conclusion

The first four years of the NRF experience, highlighted by a series of exercises that demonstrated NATO's seriousness, have produced a force that is now operational but lacks important transformational capabilities for expeditionary operations and networked warfare. In this sense, the NRF glass is only one-half full. Yet the NRF is a real-life force that already has important assets that can be called upon for use in crisis response or other missions. If today's NRF had been available in 2001–2002, it perhaps could have been deployed along with U.S. forces to Afghanistan and made a valuable contribution there. This capacity to participate with U.S. forces in expeditionary missions would be useful to NATO in the event a similar crisis occurs.

The NRF is a product of a successful NATO innovation that began in 2002, accelerated during 2003–2006, and continues today. Future success will depend upon how much effort NATO, the Europeans, and the United States invest in bringing this force to full capability and life.

Instructor's Guide to NATO Response Force Case Study

The NRF is an important subject in itself, but this case also provides opportunity for a broader discussion of the role of allies in defense transformation and their ability to pursue innovation in this arena. This case study can be taught with the following objectives in mind:

Objective 1: Provide an assessment of the strategic importance of allies and alliances pursuing transformation of their forces.

Objective 2: Show why transforming allied forces is different from transforming U.S. forces.

Objective 3: Assess defense goals and strategic concepts that should be pursued in encouraging allies to undergo transformation.

Objective 4: Identify the main elements that must take shape for allied transformational innovation to succeed.

Objective 5: Illuminate the challenges that must be overcome for an innovation such as the NRF to succeed.

Objective 6: Analyze the implications for U.S. leadership strategies in encouraging allies to pursue transformation.

Question for Objective 1: *Why is it important that allies and alliances pursue military transformation?* One reason is for them to create improved military forces for defending their security and interests, thereby taking pressure off the United States to defend them with its forces. Another reason is to create military partners that can perform new-era expeditionary missions in partnership with U.S. forces and are interoperable with them. The reality is that, in Afghanistan and Iraq, as well as most other force operations since the Cold War ended, U.S. forces have been committed alongside allied forces, especially European/NATO forces. Today's problem is that most allied forces lack the assets that would allow them to perform expeditionary operations at long distances. As U.S. forces pursue transformation, moreover, the risk is that the capability gap between them and allied forces will widen, thereby damaging their capacity to perform missions together. These problems can be solved only if allies take military transformation seriously. This applies not only to NATO and Europe, but also to U.S. allies in Asia and elsewhere. The NRF experience suggests that encouraging allies to pursue transformation is a feasible endeavor, if it is handled properly.

Question for Objective 2: Why is transforming allied forces different from transforming U.S. forces? One major reason is that, whereas U.S. forces already are prepared for power projection and expeditionary missions at long distances, most allies' forces lack the requisite assets, because they are designed primarily for local, border defense operations. Also, U.S. forces typically have greater experience in joint operations, while

most allies still think in terms of separate components. Additionally, most allies lack the infrastructure of satellites and other contributors to information networks that the United States already possessed when it began accelerated force transformation a few years ago. A main implication is that transforming allied forces must focus on strategic basics in these areas, rather than solely on the advanced networks, smart munitions, and new platforms that animate U.S. transformation plans. Fielding the NRF has required attention to these strategic basics.

Question 3: What defense goals and strategic concepts should allies be encouraged to pursue in undergoing transformation? Because allied budgets and resources are generally limited, a focus on a single transformation endeavor (or a few endeavors) makes better sense than sweeping endeavors that include many plans and programs. NATO originally began its force improvement effort with the DCI, which called for a widespread upgrading of the entire European military posture, rather than a focus on specific forces. This effort failed because it was too diffuse. By contrast, the NRF strategic concept enabled the Europeans to focus on a single force with a specific mission and to set priorities accordingly. This narrow focus on a single force and the set of capabilities needed to bring it to life, rather than a multitude of forces and capabilities, is a principal reason why the NRF has been successful to date.

Question 4: What are the main ingredients for allied transformational innovation to succeed? The NRF experience suggests that when innovation requires the creation of a new allied force in NATO, a well-managed sequential process can produce positive results:

> Step 1: Create a viable idea and associated strategic concept for the force.
> Step 2: Forge a political consensus among the United States and its allies that is strong enough to gain adoption of the force at the NAC.
> Step 3: In the near term, field the force in enough strength to achieve IOC.
> Step 4: Over a period of 3–4 years, conduct a robust series of training and exercises to achieve FOC.
> Step 5: Gradually add new information networks and other technologies to increase the force's capability and achieve full maturity over a period of several years.

The key point is that the act of creating a new force is not achieved in a single big-bang of transformational innovation. It is a complex and lengthy process of multiple steps that requires careful management and can take years to succeed. Thus far, the NRF experience shows that when this process is carefully followed, it can be successful.

Question 5: What challenges must be overcome for transformational innovation to succeed? The NRF experience suggests that several challenges must be overcome. Now that the NRF has been fielded, the next main item on NATO's agenda will be equipping it with modern information networks and other transformational capabilities. This process likely will take several years and require European and American cooperation. Additional challenges include securing adequate funding; meeting manpower, training, and readiness

requirements; determining roles for U.S. and allied forces; retaining focus on principal missions; and gaining access to strategic lift assets. The key point is that all such challenges must be addressed and successfully resolved. This adds further complexity to the process of transformational innovation, but such challenges often can be handled with effective political effort and strong management.

Question 6: What U.S. leadership strategies are necessary for persuading allies to pursue transformation innovation? Beyond question, a strong and effective U.S. leadership strategy anchored in multilateralism is needed when the allies are not sufficiently motivated to pursue transformation on their own. The U.S. leadership strategy for the NRF was successful because it embraced an appealing strategic idea, proactively sought to build widespread support for it, made use of NATO's political-military machinery, made clear that the NRF would be welcome to cooperate with U.S. forces in expeditionary missions, and offered U.S. military support in areas of critical enabling capabilities. Similarly complex, sophisticated strategies are likely to be needed when other allied transformational innovations are pursued in the future.

Bottom-Line: Thus far, the NRF experience shows that NATO can be motivated to pursue important transformational innovations. Similar successes are not guaranteed in other future endeavors, but the NRF suggests that when a good idea is present, the conditions are right, and the United States works closely and skillfully with its European allies and NATO officials, important goals can be pursued and accomplished: if not perfectly, then well enough to make a useful contribution to common security goals and interests.