On July 9–11, 2024, at its summit meeting in Washington, D.C., the North Atlantic Treaty Organization (NATO) will celebrate the 75th anniversary of the signing of the North Atlantic Treaty, which committed the United States, Canada, and their ten Western European allies to “unite their efforts for collective defence and for the preservation of peace and security.”1 Today, the Alliance counts 32 countries among its members, a testament of its enduring relevance and power of attraction. Member governments value the treaty’s consultative and collective defense commitments as central to safeguarding their freedom and security.

The Washington Summit comes at a pivotal moment in NATO’s history as the Alliance continues its transformation politically and militarily for a very different strategic era. Russia’s invasion of Ukraine shattered the post–Cold War vision of Europe as “whole, free and at peace” articulated by Presidents George H. W. Bush and Clinton.2 Russia’s aggressive policies and military buildup are again perceived as a potential threat to the sovereignty and territorial integrity of European allies and wider transatlantic security. Amid the resurgence of great-power competition, the rapid pace of technological change, and pervasive instability and recurrent shocks in the broader security environment, NATO is facing formidable challenges.3

NATO’s milestone anniversary provides an opportunity for stock-taking about the state of the transatlantic Alliance; for looking back to its beginnings, transformation, and adaptations since; and for reflecting about the path ahead.

Over the past seven decades, RAND has been at the forefront of analytical efforts to rethink the issues, options, and trade-offs the Alliance has confronted.4 As NATO underwent far-reaching changes in the decades that followed its creation, RAND researchers produced more than 500 reports and memorandums to inform policymakers and broader audiences on NATO’s evolution, achievements, and challenges. Four key themes emerge from this significant body of research, reflecting a series of strategic challenges the Alliance has grappled with throughout its history: the need to provide effective deterrence and defense, the evolving transatlantic bargain between the United States and Europe on sharing the burdens of defense, expansion of NATO membership, and adaptation of NATO’s strategy and structures to meet changes in the security environment. All four are underpinned by the fundamental challenge of maintaining political cohesion and internal solidarity across the Alliance. The extensive volume of RAND research on these matters illustrates the
extent of NATO’s role as a key geopolitical actor and its contribution to addressing some of the most complex and consequential national and global security challenges that the United States and its allies have faced over the past 75 years.

In this report, we do not attempt to offer a comprehensive history of RAND research on NATO or depict the full depth and complexity of events that have shaped the Alliance. Rather, we examine several strands of seminal analysis on issues of continuing relevance to the Alliance, each of which will feature prominently in the NATO Washington Summit. The report consists of four main sections addressing the Alliance’s core strategic challenges, as identified in our broader review of RAND’s research on NATO over the past seven decades. The first section presents a brief history of RAND’s role in the development of NATO’s deterrence and defense strategy. The second provides an overview of RAND research on defense economics and the transatlantic bargain. The third section discusses RAND analysis that had substantial influence on the debate in the United States and Europe during the 1990s over NATO enlargement. The fourth section describes NATO’s adaptation to a changed geostrategic environment and new threats by developing new missions, capabilities, and partnerships.

In an annex to this report, available at www.rand.org/t/RRA3235-1, an annotated bibliography presents notable, publicly available reports over seven decades that were supported by a wide variety of sponsors. Taken together, our findings provide insights that underscore the importance of the Alliance in advancing collective security interests and countering enduring, as well as emerging, challenges and threats, all told through the lens of RAND’s research over the years.

**KEY TAKEAWAYS**

- **Deterrence and defense:** As the Alliance redoubles efforts to ensure the security of the NATO treaty area in light of Russia’s war on Ukraine and the prospect of a wider, high-intensity conflict, RAND’s analyses underscore the centrality of reinforcing NATO’s deterrence and defense posture. Improving force generation, readiness, firepower, and logistics is vital in implementing NATO’s new Concept for Deterrence and Defense of the Euro-Atlantic Area and requires adequate resources and seamless integration of strategic, domain, and regional defense plans.

- **The transatlantic bargain:** RAND research has consistently highlighted the need for reciprocal commitments to collective defense on both sides of the Atlantic. It also illustrates the importance of candid political consultations among allies on the evolving international environment and risk-sharing to ensure cohesion on the goals, means, costs, and benefits of collective NATO activities.

- **NATO expansion:** NATO’s collective security guarantee remains the most reliable and effective way to ensure a country’s sovereignty and security. RAND’s early research on NATO expansion suggests that the allies would benefit from offering Ukraine clarity at the Washington Summit on the conditions for its future NATO membership and undertaking an assessment of the military requirements and costs of such a commitment.

- **NATO adaptation:** RAND’s analysis of NATO adaptation to changing security environments, during and after the Cold War, particularly on the value of partnerships, presents important lessons relevant to addressing threats from emerging and disruptive technologies and other challenges in the era of great-power competition, including the threats posed by China, to shared Alliance interests.
The Challenge of Building Credible Deterrence and Defense

It is a simple document, but if it had existed in 1914 and in 1939, supported by the nations who are represented here today, I believe it would have prevented the acts of aggression which led to two world wars. . . . In this pact, we hope to create a shield against aggression and the fear of aggression—a bulwark which will permit us to get on with the real business of government and society, the business of achieving a fuller and happier life for all our citizens.”

Twelve European and North American countries signed the North Atlantic Treaty on April 4, 1949, to preserve peace and prosperity in the transatlantic community and establish a counterweight to Soviet expansionism. This treaty would lay the core foundation for the security architecture in the Euro-Atlantic area for the decades to come. Article 5, the centerpiece provision of the treaty underpinning the collective security framework of the new Alliance, stated that the parties agreed “that an armed attack against one or more of them in Europe or North America shall be considered an attack against them all.” In an event of such an attack, each party would “assist the Party or Parties so attacked by taking forthwith, individually and in concert with the other Parties, such action as it deems necessary, including the use of armed force, to restore and maintain the security of the North Atlantic area.” Yet at the time of the signing of the treaty, the only significant military strength in Western Europe consisted of the allied occupation forces in Germany and Austria.

U.S. leadership of the Alliance prompted Project RAND—which was established in 1946 as a trusted partnership with the U.S. Air Force to provide independent analysis on national security policy and strategy and connect military planning with research and development decisions—to place a high priority on studying the development of NATO’s political and military elements and their implications, in addition to evaluating Soviet military strategy and intentions. In 1952, Project RAND established its first European office in Wiesbaden, Germany, to examine political trends, military capabilities, and elite attitudes in NATO countries.

RAND’s inaugural project that was fully dedicated to NATO was led by Raymond Garthoff and investigated Western European attitudes toward NATO and toward the measures required to make NATO effective against Soviet pressure. This work was considered by U.S. Air Force sponsors as key to identifying how much the United States could rely on other NATO countries to field the sizable conventional forces for defense of the continent that were agreed to at the 1952 Lisbon meeting of the North Atlantic Council. Similarly, this work assessed the importance of controlling the Soviet advance to prevent a collapse of the European will to do their part, as well as how NATO countries might react to Soviet nuclear blackmail.

RAND’s early NATO-related research agenda explored “apparent incongruities between the political objectives and the military arrangements of the alliance” and the conditions critical to NATO’s survival as a viable defensive alliance. It largely focused on force planning and operational doctrine required to give substance and credibility to the pledge of collective defense. RAND research was also instrumental in assisting U.S. Air Forces in Europe and Supreme Headquarters Allied Powers
Europe (SHAPE) in helping NATO determine adequate allied force goals to fulfill the Alliance’s military objectives of mounting a credible deterrence and defense posture. In 1953, RAND researchers Ansoff and Snow argued that the analytic approach to generating NATO force requirements should be restated in more realistic terms, taking into account political and economic considerations that would “play [a] great, if not greater, role in selection of the final force goals.” Their work underscored that it is the capability and political will of NATO member states to support collective defense that ultimately determine the Alliance’s ability to achieve its goals, beyond just the military planning requirements.

The first successful Soviet nuclear test in August 1949, four months after the signing of the North Atlantic Treaty, prompted allies to agree in January 1950 on the Strategic Concept for the Defence of the North Atlantic Area. The principal objectives of the defensive concept were to coordinate the military and economic strength necessary to “creating a powerful deterrent to any nation or group of nations threatening the peace, independence and stability of the North Atlantic family of nations” and to develop plans providing for the combined employment of the allied military forces and the territorial defense of the North Atlantic Treaty area. This led to the emergence of deterrence and an increasing emphasis on forward defense as two central features of the Alliance defense policy and strategy. Since the 1950s, RAND has devoted significant effort to the study of both.

Concerns over the Soviet Union’s growing nuclear capability spawned important studies on NATO’s vulnerability that sought to identify alternative approaches for the defense of Europe. As allies debated the dependence of their future security on nuclear weapons and, in 1956, endorsed the Military Committee Document 14/2, which codified the doctrine of massive retaliation, RAND scholars began to explore the implications of this doctrine. The new doctrine became known as a tripwire strategy, limiting the role of NATO conventional forces to the prevention of surprise attacks or the containment of a large-scale conventional attack “until a decision was reached on the use of nuclear weapons.” This emphasis on nuclear deterrence contributed to an increasing reliance on U.S. nuclear weapons deployed in Europe and on long-range bombers based in the United States, but left NATO’s conventional defenses dangerously weak. RAND researchers’ findings challenging the effectiveness of this nuclear-centric, tripwire strategy were not well received by allied representatives. In fact, when the RAND research team traveled to Europe to present their findings at SHAPE headquarters in Rocquencourt outside Paris, the team was “stranded’ in Paris with nothing to do for a week—until the Supreme Allied Commander, Europe reluctantly allowed them to present the results in the theater.”

RAND researchers also sought to better understand the Cold War great-power competition with the Soviet Union through pioneering the development of wargaming in the early 1950s, which would later help inform the Alliance’s understanding of deterrence. Wargaming, largely manual, initially played an important role in RAND’s methodological approach to analyzing NATO deterrence and defense challenges through designing hypothetical political-military scenarios. In 1954, RAND’s Project TANGO outlined the first requirements to conduct a wargame that applied to NATO and Soviet Union forces. In 1961, RAND analysts developed a strategic planning game called SAFE (Strategy and Force Evaluation), together with a proposal that this type of gaming

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should be applied to NATO’s weapon procurement planning process. Later projects often included simulation and gaming experiments as part of a broader policy analysis that identified crucial variables focused on theater parity affecting stability in NATO’s Central Region.

RAND studies influenced important stages in the evolution of NATO’s conventional posture. For example, in the 1960s, RAND research on deterrence had a profound impact on U.S. government policy and helped alter NATO’s military strategy toward flexible response and stronger conventional forces in Central Europe, which ultimately resulted in the adoption of the forward defense and flexibility in response strategy in 1967. While flexible response aimed to strengthen the credibility of deterrence by bolstering NATO’s conventional defenses, numerous RAND studies through the 1970s and beyond highlighted that the collective posture of the allies remained insufficient and poorly designed to provide NATO with adequate deterrence of Warsaw Pact nonnuclear aggression or intimidation.

As hopes for a thaw in the Cold War emerged following changes in Soviet policies in the late 1960s, RAND devoted significant research efforts to the shifting emphasis from nuclear to conventional defense and to the ways to advance the recommendations of the 1967 Harmel Report, which called for broadening NATO’s political role from maintaining allied cohesion to fostering détente in East-West relations and exploring disarmament and arms control measures. However, as the détente unraveled in the 1970s, following the Warsaw Pact’s 1968 invasion of Czechoslovakia and amid growing concerns over the buildup of Soviet strategic and theater nuclear capabilities and significant improvements in conventional forces, the progress on arms control stalled. These developments led to major reassessments of the Alliance’s abilities to deal with shifts in East-West relations and the military balance with the Warsaw Pact.

During the 1970s, the United States had pressed for ways to bolster NATO’s nonnuclear capabilities by seeking improvements in key areas of readiness, reinforcement, combat logistics, and firepower capabilities. RAND’s prominent work on NATO between 1973 and 1976 had a substantial impact on the incoming Carter administration’s efforts to revitalize NATO and advance policies to reverse the erosion of the conventional balance with the Warsaw Pact. In a series of studies, RAND researchers found that NATO’s inability to allocate resources in support of mounting credible conventional defenses rendered it weaker and more vulnerable. Robert Komer, then RAND’s senior analyst and manager of the defense studies program who later served as Under Secretary of Defense for Policy, succinctly pointed out in his 1973 report that “the trouble with NATO is that its posture doesn’t fit its policy.” Komer later promoted practical ways to overhaul NATO’s conventional forces and capabilities, building on the seminal article “NATO Muscle: More Shadow Than Substance,” written by another RAND scholar, Steven Canby. The thesis advanced by Canby was that “NATO’s inferiority springs largely from its own failure to optimize its defense posture.” Komer’s suggestions included restructuring NATO’s posture to “give highest priority to fielding sufficient ground and air forces” while freeing up the resources by cutting back on marginal activities, as well as renewing the focus on better integrating forces and standardizing weapons across the Alliance. Another study evaluated options for “large-scale rationalization of NATO’s defense posture as the only viable answer to the defense resource bind created by the
As the Cold War drew to a close, RAND analyzed the momentous changes taking place in Eastern Europe and implications for Western security arrangements, as well as U.S. European strategy.

rising cost of modern forces in a period of severely constrained defense budgets and manpower.38 These studies provided a framework for the Long-Term Defence Programme (LTDP), an initiative proposed by then–Secretary of Defense Brown and adopted by NATO Heads of State and Government at the Washington Summit in May 1978. The LTDP had been developed by defense ministers over the previous year and identified ten priorities to modernize and strengthen NATO’s military capabilities—nine in conventional forces and one in theater nuclear forces.39 For conventional forces, the LTDP aimed at achieving—among other goals—greater readiness, rapid reinforcements, stronger European reserve forces, coordinated logistics, and enhanced war reserves.40 In the late 1970s, RAND was deeply involved in evaluating the efforts to develop a new generation of weapons and platforms needed to bolster conventional capabilities and restore the Alliance’s eroding deterrent posture.41 These efforts, which later became known as the United States’ Second Offset Initiative, led to, for example, the development of deep-strike capabilities and equipping NATO with the Boeing E-3 Sentry airborne warning and control system and collectively challenging Soviet concepts for operations against NATO.42

RAND work during this period also featured important findings on the role of strategic nuclear weapons in deterrence, as well as doctrinal developments concerning the role of Soviet theater nuclear weapons, which informed the 1979 decision by the Alliance’s foreign and defense ministers to modernize NATO’s long-range theater nuclear forces (LRTNF).43 As LRTNF modernization was placed at the forefront of NATO’s force improvements, RAND researchers stressed again the need for strong conventional forces, mitigating strains on the cohesion of West European NATO members and the critical importance of restoring West European confidence in the U.S. nuclear guarantee.44

RAND research also drew attention to critical issues that defense planners faced in relation to the future of NATO’s nuclear deterrence.45 In the 1970s and 1980s, NATO’s increasingly antiquated force structure, insufficient allied efforts to rectify shifts in the conventional military balance favoring the Warsaw Pact, and the need to develop new concepts for deterring Soviet military actions all influenced NATO leaders to reassess the Alliance’s nuclear deterrence requirements. RAND researchers explored the implications of prospective caps or reductions of nuclear arsenals negotiated in the Strategic Arms Limitation Talks agreements, the Intermediate-Range Nuclear Forces Treaty, and, later, the Strategic Arms Reduction Treaties.46 The possibility of major near-term reductions in theater- and intercontinental-range nuclear forces put into sharper relief the need to address the imbalance of conventional military capabilities between the East and West. Given the improbability of NATO countries substantially increasing the resources that they were devoting to conventional defense, arms control was seen by RAND analysts and U.S. officials as a critical pillar of this realignment.47

As the Cold War drew to a close, RAND analyzed the momentous changes taking place in Eastern Europe and their implications for Western security arrangements, as well as U.S. European strategy.48 These efforts reflected a variety of views within RAND on possible models for European security order at a time of “radical change and high uncertainty.”49 After the Soviet Union disintegrated and the Warsaw Pact was dissolved, RAND undertook a series of conceptual analyses of the military and political elements of NATO’s Cold War...
legacy and the Alliance’s future role in building a stable security architecture in Europe. This work emphasized the need for the United States to remain involved in NATO and in European security affairs more broadly, even as the Soviet military threat to the Alliance was vastly diminished. RAND scholar Richard Kugler’s 1993 book *Commitment to Purpose: How Alliance Partnership Won the Cold War* was one of the first comprehensive studies analyzing NATO’s decisive role in winning the Cold War. It examined, in particular, how NATO achieved its goals of protecting Western Europe’s security in the face of a serious external threat, successfully maintaining the Alliance’s internal solidarity and prosperity and thereby undermining the legitimacy of communism and Soviet rule in Eastern Europe. Kugler’s analysis found that NATO’s central defense and deterrence functions alongside coalition planning were critical to the Alliance prevailing in the Cold War.

While many of the RAND analyses in the 1990s and 2000s focused on NATO enlargement and adaptation, which are discussed in the following sections, one paper stands out in particular in analyzing the changed security environment. In *Defending Europe After the Soviets Have Gone*, published in 1990, various RAND researchers examined the conditions for formulating a sound military strategy for a post–Cold War NATO. Their analysis highlighted the need to address the underlying assumptions that defined potential threats to NATO members’ interests, given the uncertainties that underpinned the security environment in Europe in the wake of the Soviet collapse. The researchers contended that formulating a new military strategy for the post–Cold War era required focusing on the most decisive factors likely to determine and stabilize the military balance under crisis conditions, identifying NATO’s force requirements for defending against a reconstituted Soviet military threat, and identifying the implications of those requirements for the United States. Their paper foresaw that the Soviet Union (and later, Russia) would continue to deploy large and capable military forces, posing a security problem that should be balanced with NATO military capabilities. NATO’s ability to deter would therefore be predicated on its capability to defeat—by conventional means—any attempt at territorial aggression against its members. This paper deemed maintaining a collective defense mechanism, with U.S. participation, as critical to deterring potential Soviet aggression in the future.

In the early 1990s, the Alliance discontinued the concept of forward defense and flexible response and adopted an expeditionary operations strategic approach to respond to new threats in a changing security landscape. As NATO shifted to such operations outside the North Atlantic Treaty area following the end of the Cold War, efforts to maintain effective deterrence and defense took a back seat to other issues, and analysis on such matters no longer dominated RAND’s research on NATO. Attempts to develop a dialogue and practical cooperation with Russia between 1991 and 2013, including through the NATO-Russia Council, made Russia no longer the predominant factor in U.S. or NATO defense planning. Since Russia’s illegal annexation of Crimea in 2014, followed by its full-scale invasion of Ukraine in 2022, the imperative of collective deterrence and territorial defense of the Euro-Atlantic area has assumed new salience. RAND research during this period returned to the issues of rethinking Russia’s threat to NATO, enhancing deterrence against a variety of hybrid and conventional military threats, strengthening NATO’s military posture on its eastern flank, and developing a Western strategy in the Black Sea region.

Russia’s seizure of Crimea in early 2014 and instigation of the insurgency in the Donbass region of Ukraine later that year prompted RAND researchers to reexamine NATO’s preparedness for war through
assessing the Alliance’s posture to defend the territory of its most vulnerable members on the eastern flank. This work exposing critical deficiencies in the capabilities, posture, and capacity of allied forces rapidly generated policy-relevant findings and spurred the launch of the United States’ European Reassurance Initiative (later renamed the European Deterrence Initiative), which enabled significant enhancements to U.S. posture in Europe. RAND Arroyo Center’s influential series of wargames conducted in 2014 shaped renewed debate over the Alliance’s potential to respond to possible Russian conventional aggression against the three Baltic member states of NATO. The RAND team argued that NATO’s posture was “woefully inadequate” to defend the Baltic states. Nevertheless, their analysis showed that “relatively modest investments” in an improved posture could allow NATO to significantly enhance deterrence.54

In mid-2022, a group of RAND researchers conducted an internal series of discussions to examine the recent events of the Russia-Ukraine war and specifically sought to revisit RAND’s prior wargames focused on the threat to the Alliance from a conventional Russian invasion. The researchers noted that while the design and execution of such games had mostly centered on the challenges facing NATO defense of the Baltic states, they offered a set of recommendations for guiding future wargaming and analysis of potential conflicts involving Russia going forward, along with other major power adversaries.55

RAND’s 2023 report Inflection Point: How to Reverse the Erosion of U.S. and Allied Military Power and Influence, based on a study led by David Ochmanek, explored, among other questions, “how and to what extent the evolving defense strategies, force structures, capabilities, readiness, posture, and operational concepts of key NATO allies and partners can meet the demands of U.S. and allied strategy for the defense of Europe.”56 In addition, this research noted how Russia’s 2014 and 2022 aggressions against Ukraine helped awaken Europe to the distinct possibility of war on NATO member state territory. This realization has helped create a strong consensus among NATO allies that increased defense preparedness is called for and that the focus of NATO nations’ force planning must return to ensuring the security and territorial integrity of the NATO treaty area.57

The study concluded that “Russia will, at some point, reconstitute its forces and again present a threat to NATO and to peace and stability in the Euro-Atlantic region. Thus, because of the long lead times associated with building new capabilities and because the sense of urgency that Russia’s most recent aggression has sparked may be fleeting, the time to build a robust deterrent posture on the Alliance’s eastern flank is now.”58 Additionally, Russia’s persistent threats about possible use of nuclear weapons during the war in Ukraine have made it even more urgent for allies to emphasize the nuclear dimension of deterrence. This includes highlighting the linkages of U.S. strategic forces, as well as the independent nuclear forces of the United Kingdom and France, to NATO’s conventional forces in maintaining deterrence. RAND researchers have also examined steps that have been or should be taken to modernize and enhance the nuclear dimension of deterrence. This includes highlighting the linkages of U.S. strategic forces, as well as the independent nuclear forces of the United Kingdom and France, to NATO’s conventional forces in maintaining deterrence. RAND researchers have also examined steps that have been or should be taken to modernize and enhance the nuclear dimension of deterrence. This includes highlighting the linkages of U.S. strategic forces, as well as the independent nuclear forces of the United Kingdom and France, to NATO’s conventional forces in maintaining deterrence. RAND researchers have also examined steps that have been or should be taken to modernize and enhance the nuclear dimension of deterrence. This includes highlighting the linkages of U.S. strategic forces, as well as the independent nuclear forces of the United Kingdom and France, to NATO’s conventional forces in maintaining deterrence. RAND researchers have also examined steps that have been or should be taken to modernize and enhance the nuclear dimension of deterrence. This includes highlighting the linkages of U.S. strategic forces, as well as the independent nuclear forces of the United Kingdom and France, to NATO’s conventional forces in maintaining deterrence.

The Challenge of the Transatlantic Bargain

The distribution of burdens and responsibilities within the Alliance has been a contentious issue since NATO’s formation. The historic “transatlantic bargain” was intended to balance U.S. commitment to the Alliance with European contributions in the early 1950s to generate military requirements for the defense of Europe commensurate with the economic and military capabilities of NATO’s members.60 It was thus first seen as a reciprocal commitment underpinned by “unity of purpose” to ensure security of the North Atlantic area.61 This notion of a transatlantic bargain was also recognized in NATO’s first strategic concept, which envisioned an “alliance based on national specialization rather than a uniform distribution of military missions” and called for “a division of labor” aimed at employing “NATO’s limited assets to maximum advantage.”62 This initial approach emphasized a deepening commitment to collective
defense and coalition planning that helped solidify the Alliance in the first decade of its existence.63

However, growing arguments that the transatlantic relationship between the United States and its European allies rested on a somewhat transactional “bargain,” brought to the fore by Harlan Cleveland, U.S. ambassador to NATO from 1965 to 1969, strained that relationship. The perception that the United States’ commitment to collective defense was contingent on the efforts of European allies subsequently led to fundamental disagreements on how to measure the defense effort.64

RAND’s early research agenda contributed to addressing these questions, as it spearheaded the development of defense economics as an important tool in defense planning analysis. The pivotal 1960 report *Economics of Defense in the Nuclear Age* articulated that “military problems are, in one important aspect, economic problems in the efficient allocation and use of resources.”65 The authors highlighted the need among allies to “realize economies of specialization in forces, in production, or both; various arrangements for burden sharing; and adjustments of domestic policies in the [sic] light of the constraints and opportunities presented by alliances.”66 However, finding efficient solutions would prove complicated by allies’ often-divergent national priorities.

In 1965, RAND researcher Andrew Marshall, who later became the first director of the U.S. Department of Defense’s Office of Net Assessment, noted increasing concern over the size and balance of the military effort contributed to NATO by America’s European allies since the late 1950s, stating that “Allies are not carrying their share of the load of defending Europe.”67 In his examination of political and economic factors that kept Western Europe militarily weak despite the spending of almost $20 billion per year on defense, Marshall identified a variety of factors driving this imbalance, including diversion of resources to national rather than Alliance use, diseconomies of scale, the high production cost of weapons, and underinvestment in new equipment. Marshall suggested the regional pooling of supply, logistics, and support operations and the encouragement of ad hoc coalitions of Alliance members that have a genuine common interest in specific ventures as potential improvements.68

The "transatlantic bargain" was intended to balance U.S. commitment with European contributions commensurate with the economic and military capabilities of NATO’s members.

A 1981 workshop held at RAND’s Washington office brought together a small group of strategists from both sides of the Atlantic “for a candid exchange of views on the problems likely to face the alliance” during the coming years, including the level of defense expenditure necessary to ensure NATO security.69 In the proceedings, RAND analyst and workshop rapporteur Rose Gottemoeller, who later was the first woman to serve as NATO’s Deputy Secretary General from 2016 to 2020, emphasized that the “real question is not about money, but about each ally’s ability to share the risk and pull its load.”70 The report noted that the adoption (on the United States’ urging) of a 3-percent annual increase in real terms in defense budgets for the 1979–1986 period signaled allied determination to match Warsaw Pact modernization.71 However, it was seen as a rather symbolic commitment that most European allies failed to fulfill. It further stressed that the 3-percent indicator was neither adequate to measure operational readiness nor able to show the actual contribution of each ally to the overall NATO defense effort. To better benchmark national performance, the report recommended a focus on outputs rather than inputs—e.g., force levels, divisions, tactical aircraft, ships, modernization rates, and ground force firepower.
A 1989 RAND report noted that the “allocation of burdens and responsibilities within NATO has been a contentious issue since the formation of the alliance,” often brought to the front burner of American politics by the belief that “U.S. economic problems result from or are exacerbated by the spending burden assumed by the United States for the defense of Western Europe.” It stressed that the continuing dispute over NATO burden-sharing often stems from “differences in interests and perceptions about the goals, means, costs, and benefits of activities undertaken by NATO collectively.” The authors articulated two conceptual approaches to the analysis of burden-sharing: a Fundamentalist approach, driven by concerns over the allocation of “fair shares” and expressed through defense spending relative to gross domestic product; and an Atlanticist approach, focused on the provision of military inputs in support of NATO’s collective defense objectives while emphasizing Alliance unity.

In 1990, RAND researcher Benjamin Zycher articulated another distinctive approach to the analysis of the distribution and equity of Alliance burdens. He argued that while debate over the transatlantic bargain had focused largely on the distribution of military burdens across the Alliance, other activities and dimensions of Alliance cooperation, such as foreign economic assistance, are important components of the overall division of responsibilities among allies.

The political debate on transatlantic burden-sharing became more pronounced in the years following the 2008 financial crisis. In 2013, the RAND report NATO and the Challenges of Austerity underscored that since the Cold War, the share of NATO’s security burden borne by the European members of the Alliance had dropped to 21 percent. The authors drew the conclusion that financial and economic constraints would redefine NATO’s ability to provide security in the coming decade. They further noted that “[w]hile the fact that the European members of NATO face pressures to make serious defense cuts is widely recognized in Alliance capitals, the discussion to date has tended to underestimate the magnitude of the cuts on NATO capabilities and their long-term strategic impact.”

Russia’s aggression against Ukraine, first in 2014 and, to greater effect, in 2022, brought a new sense of urgency to address the shortfalls created by decades of declining defense budgets across Europe. RAND analysis called attention to “a pressing need to ensure that allies deliver on political statements and commitments to invest more in their own defense.” It further proposed that NATO develop adequate defense spending targets to ensure the Alliance’s military readiness while emphasizing allies’ unprecedented military, financial, and humanitarian assistance provided to Ukraine as an important element of burden-sharing.

**The Challenge of NATO Expansion**

RAND analysis had substantial influence on the debate in the United States and Europe on the adaptation and enlargement of NATO during the 1990s and also provided insights that would guide the Alliance’s further development and enlargement over the next two decades. Building on numerous studies on NATO’s defense strategy and posture over the pre-
vious four decades, described in the earlier section on deterrence, RAND analysts Ronald D. Asmus, F. Stephen Larrabee, and Richard L. Kugler wrote a series of articles and briefings outlining the strategic rationale for adapting the Alliance to deal with emerging security challenges emanating from outside the Euro-Atlantic region, as well as the need to integrate several of the young democracies of Central and Eastern Europe into NATO in the early 1990s.

In 1992, the Army and Air Force commissioned Asmus, a specialist on Germany and Central Europe, and Larrabee, an authority on Eastern Europe and Russia, to produce an unpublished report on the future of Europe in the post–Cold War era. Asmus and Larrabee argued that instability along an eastern arc, stretching from Central Europe through the Balkans, Russia, the Caucasus, and Turkey, and a southern arc, ranging from North Africa and the Mediterranean to the Middle East and Southwest Asia, required NATO to adapt in order to deal with potential crises in these regions rather than focusing on defense of only Alliance territory.78 As part of a new transatlantic bargain, the authors contended, allies needed to extend NATO’s collective defense and security commitments to the countries along NATO’s eastern and southern borders where the seeds of further conflict were germinating. This recommendation of enlarging NATO as part of a reform strategy was reportedly greeted with considerable skepticism by its Department of Defense sponsors but found a more receptive audience in other parts of the U.S. government, particularly at the Department of State and the National Security Council.79 Asmus and Kugler also participated in an advisory group that prepared policy papers for the Clinton presidential campaign during 1992, but they found little support among members of Clinton’s foreign policy transition team for their proposals for NATO reform and expansion.80

Asmus and Larrabee engaged Kugler, a former senior Pentagon official, to collaborate on the drafting of a version of their unpublished 1992 report for publication. The resulting article, “Building a New NATO,” was published in October 1993 and received considerable attention in the policymaking community.81 The core arguments of this article were that it was essential to begin the process of integration of Central and Eastern European countries into NATO and the European Community as they fulfilled certain criteria. The trio contended that if democratic governance and international stability failed to take root in the nations formerly dominated by the Soviet Union, nationalism would almost certainly lead to an eruption of competition among these countries and growing instability that would spill over into Western Europe. Unless this security vacuum in Central and Eastern Europe were filled, they foresaw the revival of historical competition between Germany and Russia, with grave geopolitical consequences. They argued further that NATO should transform from “an alliance based on collective defense against a specific threat into an alliance committed to projecting democracy, stability and crisis management in a broader strategic sense.”82 At the same time, the authors argued that the West should support the fragile democratic transformation in Russia, and they set out some basic principles that could govern a new, cooperative relationship between NATO and the European Community on the one hand and Russia on the other. Such a charter, they proposed, “would be designed to reassure Russia that it will be included in efforts to build a new European security order.”83 As the RAND team was drafting their paper, the debate within the U.S. government over NATO’s...
adaptation and enlargement was intensifying in summer and fall 1993. As with its predecessor, the Clinton administration decided initially to defer a decision on expanding NATO, despite growing appeals from Central and Eastern European leaders. Rather, the Clinton administration focused on making the North Atlantic Cooperation Council, created in 1991 to promote dialogue and limited cooperation with the Soviet Union and other former Warsaw Pact countries, more operational. In fall 1993, the administration proposed the creation of the Partnership for Peace (PfP) program. The program called for the Alliance to develop bilateral, military-to-military partnerships with former Warsaw Pact members and neutral and nonaligned European countries focused on interoperability and defense reform that would enable NATO and partners to undertake combined peacekeeping and other missions to deal with regional instability.

The Clinton administration argued that PfP would support training and exercises with partners that would allow for combined operations, and these activities would assist those countries seeking NATO membership to become credible candidates by helping them meet NATO’s standards while contributing to overall Alliance security.

However, others in the U.S. government favored taking further steps to define criteria and a timetable for NATO enlargement. Under Secretary of State for Arms Control and International Security Affairs Lynn Davis, who had previously served as vice president and director of the RAND Arroyo Center, invited Asmus, Kugler, and Larrabee to brief her on their proposals about NATO enlargement in August 1993, before the publication of their Foreign Affairs article. Davis was receptive to these ideas, which were aligned with internal policy papers that she had been receiving from Stephen Flanagan, a member of the State Department Policy Planning Staff and later a RAND senior fellow. Davis and Flanagan subsequently presented then-Secretary of State Warren Christopher with a plan for an incremental approach that would develop operational cooperation with Central and Eastern European countries, Russia, and the former Soviet republics but also would include a commitment to consider countries that could meet clearly defined criteria and prove their capability to contribute to overall Alliance security to become NATO members.

Throughout fall 1993, the internal debate within the Clinton administration intensified and was joined by growing calls from prominent members of Congress and the attentive public to adapt and enlarge NATO. Most prominently, Senator Richard Lugar, the ranking Republican on the Foreign Relations Committee, who had also been pondering NATO’s future, read a draft of “Building a New NATO” and found its central recommendations compelling. Lugar gave an influential speech in June 1993 citing the RAND team’s analysis of the challenges posed by the twin arcs of crisis and its recommendations that NATO needed to develop the capabilities and relationships to go “out of area” or go “out of business.” Lugar called boldly for NATO to have a “new mission and new membership.”

In response to growing criticism that PfP was insufficient to address the security vacuum in Central and Eastern Europe and the aspirations of many of those governments to join NATO, President Clinton announced at the Brussels Summit in January 1994 that while PfP did not offer membership in the Alliance, it “enables us to prepare and to work toward the enlargement of NATO when other countries are capable of fulfilling their NATO responsibilities.” Clinton said further that it “was no longer a question of whether NATO will take on new members but when and how.”

The impact of RAND’s analysis extended beyond the United States. Vice Admiral Ulrich Weisser, the head of the policy planning staff at the German Ministry of Defense, came to know this RAND trio of analysts while he was on a sabbatical at the RAND Santa Monica office in 1989. Weisser reconnected with his former RAND colleagues in 1993 when he became aware of their analysis, explaining that the German defense minister, Volker Rühe, had also embraced the strategic logic of NATO enlargement. Rühe ultimately commissioned RAND to undertake some further analysis for the German government. The RAND team subsequently prepared a series of briefings in 1994 in which they presented to Rühe a framework for examining the political, economic, and military trade-offs of NATO enlargement. During this period, Asmus, Kugler, and Larrabee also conducted analysis for the Polish Ministry of National Defense.
Another stream of analysis by this same trio of analysts, conducted within the RAND National Security Research Division, explored the costs to allied governments of various options to defend additional member states, which they estimated would range from $10 billion to $110 billion over the next ten to 15 years. This analysis was not well received by the Office of the Secretary of Defense, which undertook its own in-house analysis and reached a lower cost estimate.

RAND continued research for the U.S. government and several European governments during the 1990s, assessing the political and military challenges of integrating the countries of Central and Eastern Europe into NATO and the capabilities of prospective members to contribute to Alliance security. As the process of enlargement continued following NATO’s 1997 decision to invite the Czech Republic, Hungary, and Poland to begin accession negotiations, Asmus and Larrabee wrote an influential article that articulated a strategy for reassuring those countries in Central and Eastern Europe that were aspiring to NATO membership but not offered an invitation in 1997. They recommended providing those countries with well-defined steps and tangible benefits from cooperation with NATO to keep them on the right track.

RAND researchers during the 1990s argued that NATO’s decisions to invite additional countries to join the Alliance should be based on clear principles grounded in the North Atlantic Treaty. The principles (later enshrined as the “Perry Principles” after Secretary of Defense William Perry and agreed to by allies in the 1995 NATO Study on Enlargement) said that prospective members should be judged ready for membership based on their commitment to democratic governance, free market economics, and the rule of law and should demonstrate their ability to defend their own territory and contribute to collective defense and other Alliance military missions. These principles have enduring relevance today.

Allied governments made a commitment to Ukraine and Georgia at the Bucharest Summit in 2008 that they would one day join NATO. Realization of this commitment remains problematic while the war in Ukraine continues and both countries have territorial disputes with Russia. That said, Alliance leaders agreed at their 2022 Vilnius Summit that Ukraine is making progress on reforms, increasing military interoperability and political integration with NATO, and that they would be prepared to extend Kyiv an invitation “to join the Alliance when Allies agree and conditions are met.” Consistent with the principles that guided earlier rounds of enlargement, NATO could offer Ukraine clarity at the Washington Summit in July 2024 as to the expected conditions required for its eventual membership.

The Challenge of NATO Adaptation

Beyond enlargement, NATO faced broader questions in the post–Cold War context about the relevance of its mission and its overall future. It embarked on a thorough effort to adapt its mission and scope to address the emerging security challenges of this new era. RAND research has provided geopolitical assessments of the new strategic landscape in Europe and Russia, contributed to the unfolding debate over the future of the Alliance, and offered implications for future U.S. national security policy and the

RAND research provided geopolitical assessments of the strategic landscape in Europe and Russia, contributed to the debate over the Alliance’s future, and offered implications for U.S. and collective security.
United States’ role in European collective security. Already in 1992, RAND senior researcher Marten van Heuven was asking, “How will NATO adjust in the coming decade?” citing the radically different geopolitical environment in which it was finding itself after the demise of the Soviet Union.98 The 2002 Prague Summit opened accession talks to seven more countries and raised new perspectives in terms of NATO capabilities and partnerships required for the modern security environment, bringing this question to the fore once again.99 As Larrabee noted in a 2003 report on NATO’s Eastern agenda, “The key question in the post-Prague period concerns NATO’s broader transformation and strategic purpose—that is, ‘What is NATO for?’ What should be its main missions and strategic rationale in the future?”100

While NATO members appeared less vulnerable to the conventional attacks and territorial aggressions that had prompted the creation of the Alliance in 1949, new security challenges emerged in the post–Cold War order—from civil conflicts in Europe to terrorism after the attacks of September 11, 2001, and an increasing concern about how to respond to hybrid threats, including cyber and information operations, from coercive state actors below the threshold required to invoke collective defense under Article 5. For each of these new security challenges, NATO has had to assess whether it was ready to address them and what might be needed to improve its ability to do so. RAND research contributed to these assessments as new threats were identified. An early post–Cold War challenge to the security of Europe was the breakdown of the former Yugoslavia and the wars in the Balkans that ensued. A 1993 RAND report by van Heuven examined NATO’s role in this regard, finding it—at the time—too small.101 Subsequent decades saw the emergence of other challenges. In 2003, Nora Bensahel highlighted the limits of NATO’s ability to contribute to the U.S. counterterrorism campaign.102 In 2019, a RAND report identified several ways in which NATO could better address cyber threats, including “developing an effective cyber I&W [indications and warning] capability that can provide advance warning of malicious cyberactivity and detect civilian or military observation of NATO operations.”103 In the area of hybrid warfare, Andrew Radin discussed potentially beneficial actions that NATO might take in the Baltics, while warning of what could be counterproductive moves.104

Addressing these challenges required NATO to engage in partnerships with other organizations, in other regions, and with countries that do not seek a path toward membership but cooperate with NATO on themes of common interest. This remains a key issue for NATO, as “out-partnering” was outlined in the recent NATO Warfighting Capstone Concept as one of “the 6 Outs” of its Functional Design 2040, noting that “the future Alliance MIoP [Military Instrument of Power] must be able to foster and exploit mutually supportive and habitual relationships and partnership opportunities.”105 Such common interests included, after September 11, 2001, counterterrorism, with Larrabee recommending that NATO engage with countries in Central Asia and the Caucasus through PfP, given “the strategic importance of both regions” in that domain.106 Beyond fostering regional cooperation, it was hoped that “NATO-sponsored activities designed to encourage greater democratic practices, responsible budgeting, and civilian control of the military can help to foster political change over the long run.”107 Similarly, engagement with the Mediterranean region presented an opportunity to help address key security challenges for NATO, including drug trafficking, terrorism, and the proliferation of weapons of mass destruction.108 Through partnerships, NATO is responding to the needs of its members but is also, in many cases, addressing an outside demand for more collaboration. RAND researcher Jeffrey W. Hornung convincingly showed, for instance, how in the case of Japan-NATO relations, Japan is largely the driver of their closer relationship.109

Equally relevant, however, is the question of what the limits of NATO’s adaptation should be. At a time when NATO is debating expanding its activities in the Indo-Pacific,110 and risks to European territorial defense are resurging, is NATO at risk of overextending itself, or is it merely adapting to the needs of its members to address the security challenges of the day? And what capabilities does it need to address this broader mission? The out-of-area debate precedes the end of the Cold War and was already being discussed by RAND in 1985.111 In 1990, James Winnefeld examined the capabilities that NATO would
need if it “were to decide that its interests would be served by a larger Alliance role in resolving out-of-area crises.” Such capabilities include peacekeeping forces or observers, as well as “more substantial ‘presence’ forces to convince crisis adversaries of the Alliance’s interests and its willingness to intervene if those interests were threatened.” Kugler went further in describing what these changes should look like, citing an upgrade of NATO’s rapid-reaction forces and “pursuit of meaningful force improvement programs.” A test case in that regard was the war in Afghanistan, which was the most consequential example of a mission distant from Europe in which NATO allies fought an irregular war along with non-NATO and non-European partners and that required a coordinated civilian and military effort. A 2010 RAND study on this topic highlighted the tension between some of the Alliance’s ambitions and a reluctance to send more funding and troops, questioning its staying power and ability to succeed in this military intervention.

In addition to the risk of overextension is the risk of competition or overlap: Is NATO getting involved in domains that might be better served by other organizations, or is it extending into geographic areas where it might not be welcome? The issue of Russia’s reaction and response to NATO’s geographic and functional adaptation has been a recurring feature of RAND’s post–Cold War research. Shortly after the creation of the NATO-Russia Council, a series of expert conferences organized by RAND and the Institute for U.S. and Canadian Studies of the Russian Academy of Sciences examined “the opening of the 21st century security agenda beyond Europe (especially as defined functionally by terrorism and weapons of mass destruction and geographically as the region between the Mediterranean and Central Asia)” and how this might affect future NATO-Russia relations. The group found that “NATO’s engagement in Asian territories bordering on Russia is not detrimental to Russia’s security interests, and there is an urgent need for NATO-Russian cooperation and even potential joint action in and around these territories.” It also recommended NATO-Russia cooperation on “Afghanistan, Iraq, and other parts of the Middle East (including the zone of Arab-Israeli conflict).”

Twenty years later, Russia’s track record of aggressions in neighboring countries leads to a very different assessment, with a RAND report offering recommendations for “continued partnership activities with Georgia and Moldova . . . [to] help both countries to strengthen their sovereignty and security in the context of Russia’s enduring intimidation.” This same report further highlighted how “NATO’s Kosovo Force Mission and continued engagement with Bosnia and Herzegovina through the Partnership for Peace and its support for EU [European Union] Mission Althea remain important contributions to peace, stability, and countering Russia’s malign influence in the West Balkans.”

Regarding risks of overlap, then-Secretary of State Madeleine Albright expressed concern in 1998 about what she called “the three Ds”—decoupling, duplication, and discrimination—that appears to have been overtaken by an improving NATO-EU partnership in an increasing number of domains. In 2004, Larrabee highlighted how “the U.S. needs to accept that Europe needs to have some autonomous operational planning capacity outside of NATO,” and in the specific area of nation-building missions, James Dobbins also highlighted how “[t]he European Union, NATO and the United Nations each has particular strengths and weaknesses.” Earlier in 1994, Kugler noted that the biggest risk was not a duplication between NATO and European military capabilities but rather European countries disarming too much, too fast—leaving them unable to take care of their own defense or to participate in out-of-area missions. He concluded that “[u]nless the United States is prepared to carry an even larger portion of the alliance defense burden than in the past, it needs to focus policy efforts on encouraging its allies to continue doing enough in the defense arena.”

Meanwhile, a 2002 RAND report on this topic noted that “Secretary Albright’s injunction ‘to avoid duplicating existing efforts’ was simply a U.S. plea for the Europeans, in crafting ESDI [European Security and Defense Identity], not to spend scarce resources on trying to create a second set of capabilities that they could just as easily obtain from NATO.” Seven years later, as the U.S. military was busy with the Iraq War, Larrabee noted that the United States might not be willing to intervene in some contingencies.
of importance to Europe, suggesting that in those instances, “the Europeans need the capacity to act on their own.”125 This need was reemphasized in a 2021 report examining various EU defense scenarios, which highlighted the benefits (and implementation challenges) of a complementary approach.126 The report, which relied on expert interviews, also pointed to the “benefits of a strong European pillar not only for NATO and the EU, but also outweighing the challenges that may emerge in the process.”127 Russia’s war in Ukraine has put into sharper focus the necessity to strengthen NATO-EU cooperation as an “essential element of enhancing unity of effort on transatlantic security and defense.”128

**Conclusion**

The structure of the Atlantic Alliance is far more difficult to rebuild than it is to dismantle. Few are willing to bet that the mechanisms of collective defense—NATO’s integrated command structure and the American military presence in Europe, to name two—could be quickly resurrected in a future crisis should we divest ourselves of these assets in the interim.129 The commitment enshrined in the North Atlantic Treaty to promote security in the North Atlantic area, safeguard freedom and democracy, and unite efforts for collective defense has sustained the transatlantic Alliance throughout the past 75 years. Today, NATO remains the bulwark of common security.130 It reinforces and amplifies allies’ ability to meet the challenges that the radically altered security environment present and to attain collective defense and security goals far beyond what otherwise would be possible.

Seventy-five years of RAND insights on NATO strategic challenges provide an opportunity for deriving enduring lessons from the history of the Alliance and its continuing adaptation as it faces the following demands of a changed and changing world:

- **Deterrence and defense**: As the Alliance redoubles efforts to ensure the security and territorial integrity of the NATO treaty area in light of Russia’s war on Ukraine and the prospect of a wider, high-intensity conflict, RAND’s past and more recent studies on enhancing deterrence and defense offer timely insights. RAND’s analysis on improving NATO’s conventional defenses in the 1970s underscored the importance of readiness, firepower, and logistics; exploiting new technologies; and adopting new operational concepts. More recent analysis has highlighted similar priorities as Alliance leaders work to implement NATO’s new Concept for Deterrence and Defense of the Euro-Atlantic Area, a new associated force model that seeks to provide Supreme Allied Commander Europe with a much larger and rapid force-generation capability, as well as a new set of strategic, domain, and regional plans. Advancing and integrating these measures, along with reviving national resilience plans, mobilizing people, and augmenting defense industrial capacity, are essential to bolstering NATO’s conventional defenses over the coming decade.

- **The transatlantic bargain**: RAND research on the transatlantic bargain has consistently demonstrated the need for reciprocal commitment to collective defense on both sides of the Atlantic and efforts to ensure that allies remain able and willing to make meaningful contributions to common security challenges. It has also demonstrated the importance of candid consultations among allies on the evolving international environment to ensure political cohesion on the goals, means, costs, and benefits of collective NATO activities.

- **NATO expansion**: RAND’s work on NATO expansion in the 1990s advanced a set of principles that helped guide the process of expansion and emphasized the critical role that the Alliance could continue to play in the post–Cold War era in extending the circle of security, stability, and prosperity across Europe. The decisions by Finland and Sweden to seek NATO membership in the wake of Russia’s invasion of Ukraine underscore that NATO’s collective security guarantee remains the most reliable and effective way to ensure a member country’s sovereignty and security. The accession of these two countries to NATO was the culmination of deepening coopera-
tion with the Alliance that began when they both joined PfP in 1995. Ukraine and Georgia have also deepened their cooperation with NATO over the past 30 years, although Georgia’s future engagement with the Alliance is now uncertain. Ukraine is actively seeking membership. Allies have affirmed their willingness to extend Kyiv an invitation to join NATO when “conditions are met.” RAND’s early research on NATO expansion suggests that the allies would benefit from offering Ukraine clarity at the Washington Summit on these conditions, in a manner consistent with the principles that guided earlier decisions on NATO enlargement, and launching an assessment of the military requirements and costs of such a commitment.

• **NATO adaptation**: RAND’s analysis of NATO adaptation during and since the end of the Cold War examined a wide variety of challenges facing the Alliance over the past several decades. Research on NATO adaptation to the demands and conditions of a changing modern security environment presents important approaches relevant for the Alliance’s current debate on addressing threats from emerging and disruptive technologies and other complex challenges in the era of great-power competition, including the threats posed by China to shared Alliance interests.

This body of RAND research shows that while these strategic challenges have been considerably distinct and evolving throughout the history of the Alliance, confronting each of them depends on the ability to generate a greater sense of political cohesion and unity of purpose among all NATO allies. Sustaining this cohesion will certainly require continued U.S. leadership as we look ahead to the future of the Alliance. As Asmus and former U.S. Ambassador to the United Nations Richard Holbrook observed in 2006, “NATO worked better than critics anticipated during the Cold War because a generic consensus emerged on the nature of the Soviet threat and how to deal with it. That consensus did not emerge automatically but came to fruition through leadership and consultation across the Atlantic.”

As the Alliance today binds 32 allies together, it is a vivid reminder that unity among allies is the cornerstone of each nation’s commitment to collective defense and the Alliance’s core values.

Unity and cohesiveness during the Cold War played an instrumental role in deterring the Soviet Union. Lord Ismay, NATO’s first Secretary General, described the symbolism behind the NATO emblem and flag as “a four-pointed star representing the compass that keeps us on the right road, the path of peace, and a circle representing the unity that binds together the 14 countries of NATO.” As the Alliance today binds 32 allies together, it is a vivid reminder that unity among allies is the cornerstone of each nation’s commitment to collective defense and the Alliance’s core values and remains critical to tackling new threats and shared challenges presented by the return of great-power competition.

NATO remains the premier vehicle for America’s involvement in European security and amplifies the United States’ ability to protect its vital interests in the region. Moreover, deepening collaboration with allies and partners, including through NATO, is likely to prove pivotal to the United States’ ability to address emerging security challenges in the coming years, including the systemic challenges posed by China.

Although Russia’s invasion of Ukraine has united the Alliance in the face of a common threat and prompted European allies to strengthen their defenses and assume larger responsibilities, it has
also exposed serious vulnerabilities that, if left unaddressed, will leave NATO members vulnerable to aggression and intimidation by a hostile Russia.133 The chief goals of the United States and its allies at the Washington Summit, therefore, should be to reinforce deterrence and defense; agree to share the risks and burdens of collective defense and security more equitably; offer Ukraine assurances of long-term security assistance and a clear path to NATO membership; and continue adaptation to meet new threats and the pace of technological advancement.

Finally, the changing strategic environment highlights areas where additional research would produce valuable insights for sustaining NATO into the future. These include improving resilience; incorporating rapidly changing military technology into how NATO fights; understanding and quantifying the increasing cost of allied security; addressing challenges that can adversely affect NATO members’ ability to meet the threat of a reconstituted Russia in the future, including the lack of defense industrial base preparedness for a wartime environment; and strengthening dialogue and cooperation with NATO partners in the Indo-Pacific region. These areas—and more—stand to represent the next generation of RAND contributions to the Alliance going forward.

Abbreviations

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<tr>
<th>Acronym</th>
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<tr>
<td>EU</td>
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<td>LRTNF</td>
<td>long-range theater nuclear forces</td>
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<td>LTDP</td>
<td>Long-Term Defence Programme</td>
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<td>NATO</td>
<td>North Atlantic Treaty Organization</td>
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<td>PfP</td>
<td>Partnership for Peace</td>
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<td>SHAPE</td>
<td>Supreme Headquarters Allied Powers Europe</td>
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Notes

1 North Atlantic Treaty, preamble.
2 See Bush, "A Whole Europe, a Free Europe." President Clinton later added "and at peace" to this vision and advanced plans to implement it (quoted in Hunter, "A 'Europe Whole and Free and at Peace").
3 NATO, NATO 2022 Strategic Concept.
4 While this report draws on unclassified RAND work, over the years, RAND has conducted a vast amount of classified research and analysis on NATO.
5 Truman, "Address on the Occasion of the Signing of the North Atlantic Treaty."
6 Truman, "Address on the Occasion of the Signing of the North Atlantic Treaty."
7 North Atlantic Treaty, Article 5.
8 North Atlantic Treaty, Article 5.
9 Legge, Theater Nuclear Weapons and the NATO Strategy of Flexible Response.
10 RAND Corporation, Project RAND Sixth Annual Report, p. 2.
11 RAND Corporation, "Coming Operations in Europe."
12 At the Lisbon meeting of defense, foreign, and finance ministers, allied agreed to very ambitious goals for ground, air, and maritime forces, including 50 army divisions and 4,000 aircraft by the end of 1952 and even larger forces by 1954. Although these goals were never realized, NATO's strength at least doubled in nearly every category of ground and air power between 1948 and 1954. See Kugler, Laying the Foundations, pp. 56–59.
13 DeWeerd, Trends and Problems in NATO.
14 Ansoff and Snow, Comments on a SHAPE Requirements Study.
17 Kugler, Laying the Foundations, p. 112.
18 See, for instance, Hoag, NATO Deterrent vs. Shield; Speier, Soviet Atomic Blackmail and the North Atlantic Alliance; and Hoag, Nuclear Strategic Options and European Force Participation.
20 Kugler, Commitment to Purpose, p. 7.
22 Long, Deterrence—From Cold War to Long War.
23 Paxson, Project TANGO.
24 Helmer-Hirschberg, Gaming the Strategic Planning Process.
25 See, for example, Wild, Howe, and Davis, Simulated Central Region Conflicts at Nominal Parity and Low Force Levels.
26 Long, Deterrence—From Cold War to Long War, pp. 2–3.
27 RAND Corporation, "RAND Turns 75."
28 See, for instance, Canby, NATO Military Policy: The Constraints Imposed by an Inappropriate Military Structure; Canby, NATO Military Policy: Obtaining Conventional Comparability with the Warsaw Pact; and Komar, Treating NATO's Self-Inflicted Wound.
29 Canby, NATO Military Policy: Obtaining Conventional Comparability with the Warsaw Pact; NATO, The Future Tasks of the Alliance (known as the Harmel Report).
30 Gelman, The Rise and Fall of Détente.
33 See Komar, Treating NATO's Self-Inflicted Wound; Komar et al., Rationalizing NATO's Defense Posture; and Komar, "Needed: Preparation for Coalition War."
34 Canby, "NATO Muscle."
35 Komar, Treating NATO's Self-Inflicted Wound.
36 Komar, Treating NATO's Self-Inflicted Wound, p. 3.
38 Komar et al., Rationalizing NATO's Defense Posture.
41 See, for instance, Digby, The Technology of Precision Guidance; Lambeth, The Political Potential of Equivalence; Digby, Modern Weapons for Non-NATO Contingencies; and Sterling, Soviet Reactions to NATO's Emerging Technologies for Deep Attack.
43 McNaugher and Parker, Modernizing NATO's Long-Range Theater Nuclear Forces.
44 See, for instance, Builder, Military Criteria for NATO TNF Options for the 1980s; Thomson, Planning for NATO's Nuclear Deterrent in the 1980s and 1990s; and Weiner, Analyzing Alternative Concepts for the Defense of NATO.
45 For example, Hoag, Nuclear Strategic Options and European Force Participation; Speier, Soviet Atomic Blackmail and the North Atlantic Alliance; and Thomson, Planning for NATO's Nuclear Deterrent in the 1980s and 1990s.
46 For example, Hoag, Forward-Based Nuclear Systems in NATO in Historical Perspective; Builder, Military Criteria for NATO TNF Options for the 1980s; Klinger, Strategic Nuclear Weapons, Arms Control, and the NATO Alliance; and Thomson, The Arms Control Challenge to the Alliance.
47 Thomson, The Arms Control Challenge to the Alliance.
for Security of North Atlantic Area.

Frederick et al., Rethinking Russia’s Threat to NATO; Shlapak and Johnson, A Comprehensive Strategy for Russia


Gone in Ukraine

Ukraine War


Toward a Stable Transition in Europe Ochmanek, Rethinking Security Arrangements in Europe; and Levine and Ochmanek, Toward a Stable Transition in Europe.

See, for instance, Oliker, McNerney, and Davis, NATO Needs a Comprehensive Strategy for Russia; Shlapak and Johnson, Rethinking Russia’s Threat to NATO; Frederick et al., Assessing Russian Reactions to U.S. and NATO Posture Enhancements; Flanagan et al., Deterring Russian Aggression in the Baltic States Through Resilience and Resistance; and Flanagan et al., Russia, NATO, and Black Sea Security.

Shlapak and Johnson, Reinforcing Deterrence on NATO’s Eastern Flank.

Gentile et al., Revisiting RAND’s Russia Wargames After the Invasion of Ukraine.

Ochmanek et al., Inflection Point, p. 96.

Ochmanek et al., Inflection Point, pp. xv–xvii.

Ochmanek et al., Inflection Point, p. xv.

Ochmanek et al., Inflection Point, pp. 157–159; Frederick et al., Pathways to Russian Escalation Against NATO from the Ukraine War; Frederick, Cozad, and Stark, Escalation in the War in Ukraine.


Supreme Allied Commander, Europe, Unity of Purpose Urged for Security of North Atlantic Area.

Kugler, Laying the Foundations, p. 43.

Kugler, Laying the Foundations.

Ruiz Palmer, The Bargain That Wasn’t and the ‘Compact’ That Was, p. 43.


Hitch and McKean, The Economics of Defense in the Nuclear Age, p. x.


Thomson and Gottemoeller, NATO, p. iii.

Thomson and Gottemoeller, NATO, pp. 73.

Thomson and Gottemoeller, NATO, pp. 73–76.

Cooper and Zycher, Perceptions of NATO Burden-Sharing, p. v.

Cooper and Zycher, Perceptions of NATO Burden-Sharing, p. v.


Larrabee et al., NATO and the Challenges of Austerity.

Larrabee et al., NATO and the Challenges of Austerity, p. iii.

Ochmanek et al., Inflection Point, p. 161.

Goldgeier, Not Whether but When, pp. 32–33.

Goldgeier, Not Whether but When, pp. 33–34.


Asmus, Kugler, and Larrabee, “Building a New NATO.”


Lippman, “Christopher Talks ‘Partnership’ in East.”

Goldgeier, Not Whether but When, pp. 29–33.


Goldgeier, Not Whether but When, p. 35; Lugar, “NATO.”


Clinton, “The President’s News Conference with Visegrad Leaders in Prague,” pp. 41–42.


Former Office of the Secretary of Defense official, written exchange with the authors, April 30, 2024.

See, for example, Asmus, Kugler, and Larrabee, “NATO Expansion.”

Asmus and Larrabee, “NATO and the Have-Not’s.”

NATO, Study on NATO Enlargement.

NATO, “Vilnius Summit Communiqué,” paragraph 11.


NATO, “Prague Summit 21–22 November 2002.”

Larrabee, NATO’s Eastern Agenda in a New Strategic Era, p. xvii.

van Heuven, Yugoslavia, What Issues? What Policies?

Bensahel, The Counterterror Coalitions, p. 22.

Ablon et al., Operationalizing Cyberspace as a Military Domain, p. 31.

Radin, Hybrid Warfare in the Baltics, pp. 32–36.

NATO, NATO Allied Command Transformation, p. 11.

Larrabee, NATO’s Eastern Agenda in a New Strategic Era, p. xvii.
107 Larrabee, NATO’s Eastern Agenda in a New Strategic Era, p. xvii.
108 Larrabee et al., NATO’s Mediterranean Initiative, p. 89. On this topic, see also Lesser, Mediterranean Security.
109 Hornung, Allies Growing Closer, p. 92.
110 See, for instance, NATO, “NATO Launches New Cooperation Initiative with Experts from Partners in the Indo-Pacific Region.”
112 Winnefeld, Crisis De-Escalation, p. 15.
114 Hoehn and Harting, Risking NATO, pp. 61–62.
115 See, for instance, van Heuven, Partnership for Peace, which discusses how to manage Russia’s strong reservations regarding NATO enlargement.
116 Hunter and Rogov, Engaging Russia as Partner and Participant, p. iv.
117 Hunter and Rogov, Engaging Russia as Partner and Participant, pp. 17–18.
118 Ochmanek et al., Inflection Point, pp. 162–163.
119 Albright, “The Right Balance Will Secure NATO’s Future.”
120 Ochmanek et al., Inflection Point, p. 163.
121 Larrabee, “ESDP and NATO,” p. 69.
122 Dobbins, “NATO’s Role in Nation-Building.” For more detail on some of these NATO-led missions, see Dobbins et al., America’s Role in Nation-Building.
126 Retter et al., European Strategic Autonomy in Defence, pp. 37–39.
127 Retter et al., European Strategic Autonomy in Defence, pp. 37–38.
128 Ochmanek et al., Inflection Point, p. 163.
129 Winnefeld et al., Defending Europe After the Soviets Have Gone, p. 2.
131 Asmus and Holbrooke, “Re-Reinventing NATO.”
132 NATO, “A Star is Born.”
133 Ochmanek et al., Inflection Point.
References


Acknowledgments

We would like to thank RAND’s International Security and Defense Policy Program, particularly Heather Williams for her encouragement to pursue this project. Very special thanks are due to Cara McCormick, manager of RAND Archives and Classified Library, for her invaluable help with archival material; Anita Szafran from Library Research Services for putting together a bibliography of RAND research on NATO; and Orlando Penetrante from Knowledge Services and Amy Majczyk from Customer Service for tirelessly helping track down and provide relevant documents. We are also very grateful to Amy Nicoletti for expertly editing this report and the annotated bibliography for publication and to Kristen Meadows for designing the timeline of 75 years of RAND insights of NATO. Eric Robinson, David Ochmanek, and Jim Townsend provided thoughtful reviews that improved the quality of this report.
About This Report

Since the beginnings of the North Atlantic Treaty Organization (NATO), RAND has contributed extensive research and recommendations that informed historic decisions guiding the Alliance's adaptation and transformation. This report provides a historical analysis and overview taking stock of RAND's most seminal work on NATO, covering the key evolutions of the Alliance's political and military dimensions from the Cold War to its expansion and shift to cooperative security and out-of-area operations and to the renewed focus on territorial defense of the Euro-Atlantic area in the face of Russia's invasion of Ukraine. This report highlights RAND's contributions to addressing some of the most critical questions that NATO has faced over the course of its existence, as well as specific research findings, insights, and recommendations that either remain relevant today or have become relevant again, given the new challenges that the Alliance faces.

The research reported here was completed in May 2024 and underwent security review with the sponsor and the Defense Office of Prepublication and Security Review before public release.

RAND National Security Research Division

This research was conducted within the International Security and Defense Policy Program of the RAND National Security Research Division (NSRD), which operates the National Defense Research Institute (NDRI), a federally funded research and development center (FFRDC) sponsored by the Office of the Secretary of Defense, the Joint Staff, the Unified Combatant Commands, the Navy, the Marine Corps, the defense agencies, and the defense intelligence enterprise. This research was made possible by NDRI exploratory research funding that was provided through the FFRDC contract and approved by NDRI's primary sponsor.

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