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2017 INDEX OF U.S. Military Strength

Assessing America's Ability to Provide for the Common Defense



DAVIS INSTITUTE FOR
NATIONAL SECURITY
AND FOREIGN POLICY

Edited by
Dakota L. Wood

2017 INDEX OF **U.S. Military Strength**

Assessing America's Ability to Provide for the Common Defense

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Washington, DC 20002
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Cover Photo:

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Printed in the United States of America.

ISBN: 978-0-89195-292-3

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The *2017 Index of U.S. Military Strength* is dedicated to the memory of Richard M. Scaife.

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Contributors

Heritage Experts

Dakota L. Wood is Senior Research Fellow for Defense Programs in the Center for National Defense, of the Kathryn and Shelby Cullom Davis Institute for National Security and Foreign Policy, at The Heritage Foundation. He served for two decades as an officer in the U.S. Marine Corps, including service as a strategic analyst for the Commandant of the Marine Corps and the Secretary of Defense's Director of Net Assessment.

James Jay Carafano, PhD, is Vice President for the Davis Institute and E. W. Richardson Fellow at The Heritage Foundation. He served for 25 years as a U.S. Army officer and taught at a number of universities, including the National Defense University.

Dean Cheng is a Senior Research Fellow in the Asian Studies Center of the Davis Institute. He specializes in China's military and foreign policy.

Luke Coffey is Director of the Douglas and Sarah Allison Center for Foreign Policy of the Davis Institute. He joined Heritage after service as Senior Special Advisor to the Secretary of State for Defence of the United Kingdom.

Lisa Curtis is a Senior Research Fellow in the Asian Studies Center. She has served with the Central Intelligence Agency, the U.S. Foreign Service, and the staff of the Senate Committee on Foreign Relations.

Helle Dale is a Senior Fellow for Public Diplomacy in the Margaret Thatcher Center for Freedom of the Davis Institute. She focuses on U.S. government institutions and programs for strategic outreach to the public of foreign countries, as well as more traditional diplomacy, and on the war of ideas against violent extremism.

Michaela Dodge is Senior Policy Analyst for Defense and Strategic Policy in the Center for National Defense. She specializes in missile defense, nuclear weapons modernization, and arms control.

Nile Gardiner, PhD, is Director of the Margaret Thatcher Center for Freedom. He served as foreign policy researcher in the Private Office of former Prime Minister Margaret Thatcher of the United Kingdom.

Justin T. Johnson is Senior Policy Analyst for Defense Budgeting Policy in the Center for National Defense.

Bruce D. Klingner is Senior Research Fellow for Northeast Asia in the Asian Studies Center. He served for two decades at the Central Intelligence Agency and the Defense Intelligence Agency.

Daniel Kochis is a Policy Analyst in European Affairs in the Margaret Thatcher Center for Freedom.

Walter Lohman is Director of the Asian Studies Center. He has served on the staff of the Senate Committee on Foreign Relations, in the Office of Senator John McCain, and as Executive Director of the U.S.-ASEAN Business Council.

Bridgett Mudd is a former Research Assistant in the Davis Institute.

James Phillips is Senior Research Fellow for Middle Eastern Affairs in the Allison Center. He has also served at the Congressional Research Service and at the East-West Center.

Brian Slattery is Policy Analyst for Defense and Security Studies in the Center for National Defense.

John Venable is Senior Research Fellow for Defense Policy in the Center for National Defense.

Rachel Zissimos is a Research Assistant in the Center for National Defense.

External Reviewers and Expert Contributors

Dr. Patrick M. Cronin is a Senior Advisor and Senior Director of the Asia-Pacific Security Program at the Center for a New American Security (CNAS).

Antulio Echevarria II, PhD, is Editor of the U.S. Army War College quarterly journal Parameters.

Brad Glosserman is Executive Director of the Pacific Forum at the Center for Strategic and International Studies.

David Isby is a Washington-based defense analyst and consultant.

Adam Lowther is Director of the School of Advanced Nuclear Deterrence Studies at Kirtland Air Force Base.

Martin N. Murphy, PhD, is a Senior Research Fellow in the Centre of Foreign Policy Studies at Dalhousie University.

Mackubin T. Owens is Dean of Academic Affairs and a professor at the Institute of World Politics.

Paul Rosenzweig is the founder of Red Branch Consulting PLLC, a homeland security consulting company, and a Senior Adviser to The Chertoff Group.

Jeff M. Smith is Director of Asian Security Programs and Kraemer Strategy Fellow at the American Foreign Policy Council.

Douglas E. Streusand, PhD, is a Professor of International Relations at the U.S. Marine Corps Command and Staff College.

Dr. Phillip Saunders

Larry M. Wortzel, PhD, is Adjunct Research Professor at the U.S. Army War College.

Any views presented in or reflecting the results of any prepublication review of this document by an officer or employee of the United States are rendered in his or her individual capacity and do not necessarily represent the views of the United States or any agency thereof.

Acknowledgments

While no publication of this type is possible without the contributions of a great many people, there are usually a few special contributors whose talents, work ethic, and willingness to go the extra mile make it something quite special.

Policy Analyst for Defense and Security Studies Brian Slattery sustained the additional responsibilities of project management, working with the team of authors, editors, and graphics and production professionals that made this *Index* a reality, both in print and on the Web. He was assisted admirably by Rachel Zissimos, Research Assistant in the Center for National Defense, who contributed to specialized research, writing, and fact-checking and also took on production management duties as needed.

Senior Copy Editor William T. Poole was instrumental in not only maintaining a consistent tone throughout this multi-author document—a challenging feat all its own—but also checking every reference to ensure accuracy in reporting and coherence throughout the *Index*. Manager of Data Graphics John Fleming expertly managed the transition of all graphics to a revised format size without compromising the important information they convey. Director of Digital Strategy Ory Rinat and Creative Director Melissa Bluey, assisted by the detailed efforts of Jay Simon, Assistant Art Director, and Maria Sousa, Manager for Web and Digital Media, ensured that the presentation of *Index* materials was tuned to account for changes in content delivery as our world becomes increasingly digital, portable, and driven by social media.

We believe this *Index* helps to provide a better informed understanding and wider appreciation of America’s ability to “provide for the common defence” that undergirds The Heritage Foundation’s vision of “an America where freedom, opportunity, prosperity, and civil society flourish.” Judging by reception of the *Index* during this past year—some 300,000 unique visitors to the 2016 *Index* website alone—we are encouraged that so many Americans are similarly concerned about the state of affairs in and the multitude of factors affecting our country.

The Heritage Foundation seeks a better life for Americans, which requires a stronger economy, a stronger society, and a stronger defense. To help measure the state of the economy, our Institute for Economic Freedom and Opportunity publishes annually the *Index of Economic Freedom*. To help measure the state of society, our Institute for Family, Community, and Opportunity publishes annually the *Index of Culture and Opportunity*. Now, to help Americans everywhere more fully understand the state of our defenses, our Davis Institute for National Security and Foreign Policy publishes this third edition of the annual *Index of U.S. Military Strength*.

Finally, in addition to acknowledging all of those who helped to prepare the 2017 *Index of U.S. Military Strength*, The Heritage Foundation expresses its profound appreciation to the members of the U.S. armed forces who continue to protect the liberty of the American people in a dangerous world.

Preface

Jim DeMint

During the past year, well over a quarter-million Americans sought a more informed understanding of the condition of our military and its ability to protect our country and its critical national security interests, according to web-traffic statistics for our *2016 Index of U.S. Military Strength*. It is clear to us that Americans are intensely interested in this topic, concerned by the worrisome stories they are hearing about the rising number of terrorist attacks at home and abroad; the aggressive and destabilizing actions of major countries like Russia and China in Europe, the Middle East, and Asia; and efforts by Iran and North Korea to acquire or improve nuclear weapon capabilities.

Here at Heritage, we understand the profound relationship that exists between a strong economy, a strong military, and a civic framework that maximizes individual freedom, liberty, and privacy. Each supports and amplifies the other, and when balanced and working in concert, they create a powerful context that enables America to be “that shining city on a hill.”

All the more reason, then, for us to be so committed to sharing with the American public our assessment of conditions and trends in the world as they pertain to challenges to our country’s most important security interests and the ability of our military to defend those interests both at home and abroad.

Unfortunately, our work for this year’s *Index* reveals that the trends identified in our 2015 and 2016 editions continue in a negative

direction. Our competitors continue to be more aggressive and are investing greater efforts to be more capable of imposing their will on their neighbors. In fact, our score for the “threat environment” was raised a notch to “High,” the second highest category on our scale.

As a consequence of moribund economies, ill-advised national fiscal policies, and short-sighted foreign policies, our friends and allies have on average less ability and in some cases less willingness to contribute not only to their own security, but also to collective arrangements that would benefit both their local regions and U.S. interests more broadly. Our own military still struggles under the effects of historically low levels of funding imposed by the Budget Control Act of 2011 while sustaining a high tempo of operations with a shrinking, aging, and less ready force.

This combination of conditions threatens to unbalance the strategic triad of critical enablers—economy, military, and civil liberties—upon which America’s greatness depends.

It continues to be our aim to inform Congress, the executive branch, and the American people about these issues so that better decisions can be made and resources commensurate with national security demands can be invested to keep our country safe, prosperous, and free.

Jim DeMint, President
The Heritage Foundation
October 2016

Introduction

The United States maintains a military force primarily to protect the homeland from attack and to protect its interests abroad. There are secondary uses for the military—such as assisting civil authorities in times of emergency or deterring enemies—that amplify other elements of national power such as diplomacy or economic initiatives; but above all else, America’s armed forces exist so that the U.S. can physically impose its will on an enemy and change the conditions of a threatening situation by force or the threat of force.

This Heritage Foundation *Index of U.S. Military Strength* gauges the ability of the U.S. military to perform its missions in today’s world, and each subsequent edition will provide the basis for measuring the improvement or weakening of that ability.

The United States prefers to lead through “soft” elements of national power: diplomacy, economic incentives, and cultural exchanges. When soft approaches such as diplomacy work, that success often owes much to the knowledge of all involved that U.S. “hard power” stands silently in the diplomatic background. Soft approaches cost less in manpower and treasure than military action costs and do not carry the same risk of damage and loss of life; but when confronted by physical threats to U.S. national security interests, soft power cannot substitute for raw military power. In fact, an absence of military power or the perception that one’s hard power is insufficient to protect one’s interests often invites challenges that “soft power” is ill-equipped to address. Thus, hard power

and soft power are complementary and mutually reinforcing.

The continuing decline of America’s military hard power is thoroughly documented and quantified in this report. More difficult to quantify, however, are the growing threats to the U.S. and its allies that are engendered by the perception of American weakness abroad and doubts about America’s resolve to act when its interests are threatened. The anecdotal evidence is consistent with direct conversations between Heritage scholars and high-level diplomatic and military officials from countries around the world: The perception of American weakness is destabilizing many parts of the world. For decades, the perception of American strength and resolve has served as a deterrent to adventurous bad actors and tyrannical dictators. Unfortunately, the deterrent of American strength is fast disappearing, and the result is an increasingly dangerous world threatening a significantly weaker America.

Consequently, it is critical to understand the condition of the United States military with respect to America’s vital national security interests, threats to those interests, and the context within which the U.S. might have to use hard power. It is likewise important to know how these three areas—operating environments, threats, and the posture of the U.S. military—change over time given that such changes can have substantial implications for defense policies and investments.

In the opening paragraph of the U.S. Constitution, “We the People” stated that among their handful of purposes in establishing the

Constitution was to “provide for the common defence.” The enumeration of limited powers for the federal government in the Constitution includes the powers of Congress “To declare War,” “To raise and support Armies,” “To provide and maintain a Navy,” “To provide for calling forth the Militia,” and “To provide for organizing, arming, and disciplining, the Militia” and the power of the President as “Commander in Chief of the Army and Navy of the United States, and of the Militia of the several States, when called into the actual Service of the United States.” With such constitutional priority given to defense of the nation and its vital interests, one might expect the federal government to produce a standardized, consistent reference work on the state of the nation’s security. Yet no such single volume exists, especially in the public domain, to allow comparisons from year to year. Thus, the American people and even the government itself are prevented from understanding whether investments made in defense are achieving desired results.

What is needed is a publicly accessible reference document that uses a consistent, methodical, repeatable approach to assessing defense requirements and capabilities. The Heritage Foundation has filled this void with the *Index of U.S. Military Strength*, an annual assessment of the state of America’s hard power, the geographical and functional environments relevant to the United States’ vital national interests, and threats that rise to a level that put or have the strong potential to put those interests at risk.

From the outset, it was clear that any assessment of the adequacy of military power would require two primary reference points: a clear statement of U.S. vital security interests and an objective requirement for the military’s capacity for operations that would serve as a benchmark against which to measure current capacity. A review of relevant top-level national security documents issued by a long string of presidential Administrations makes clear that three interests are consistently stated:

- Defense of the homeland;
- Successful conclusion of a major war that has the potential to destabilize a region of critical interest to the U.S.; and
- Preservation of freedom of movement within the global commons: the sea, air, outer-space, and cyberspace domains through which the world conducts business.

Every President has recognized that one of the fundamental purposes of the U.S. military is to protect America from attack. While going to war has always been controversial, the decision to do so has been based consistently on the conclusion that one or more vital U.S. interests are at stake.

This *Index* embraces the “two-war requirement”—the ability to handle two major wars or two major regional contingencies (MRCs) successfully at the same time or in closely overlapping time frames—as the most compelling rationale for sizing U.S. military forces. In the *2015 Index*, Dr. Daniel Gouré provided a detailed defense of this approach in his essay, “Building the Right Military for a New Era: The Need for an Enduring Analytic Framework,” which is further elaborated upon in the military capabilities assessment section. The basic argument, however, is this: The nation should have the ability to engage and defeat one opponent and still have the ability to do the same with another to preclude someone’s exploiting the perceived opportunity to move against U.S. interests while America is engaged elsewhere.

The *Index* is descriptive, not prescriptive, reviewing the current condition of its subjects within the assessed year and describing how conditions have changed from the previous year, informed by the baseline condition established by the inaugural *2015 Index*. In short, the *Index* answers the question, “Have conditions improved or worsened during the assessed year?”

This study also assesses the U.S. military against the two-war benchmark and various

metrics explained further in the military capabilities section. Importantly, this study measures the hard power needed to win conventional wars rather than the general utility of the military relative to the breadth of tasks it might be (and usually is) assigned to advance U.S. interests short of war.

Assessing the World and the Need for Hard Power

The assessment portion of the *Index* is composed of three major sections that address the aforementioned areas of primary interest: America's military power, the operating environments within or through which it must operate, and threats to U.S. vital national interests. For each of these areas, this publication provides context, explaining why a given topic is addressed and how it relates to understanding the nature of America's hard-power requirements.

The authors of this study used a five-category scoring system that ranged from "very poor" to "excellent" or "very weak" to "very strong" as appropriate to each topic. This particular approach was selected so as to capture meaningful gradations while avoiding the appearance that a high level of precision was possible given the nature of the issues and the information that was publicly available.

Some factors are quantitative and lend themselves to discrete measurement; others are very qualitative in nature and can be assessed only through an informed understanding of the material that leads to an informed judgment call.

Purely quantitative measures alone tell only a part of the story when it comes to the relevance, utility, and effectiveness of hard power. Assessing military power or the nature of an operating environment using only quantitative metrics can lead to misinformed conclusions. For example, the mere existence of a large fleet of very modern tanks has little to do with the effectiveness of the armored force in actual battle if the employment concept is irrelevant to modern armored warfare (imagine, for example, a battle in rugged

mountains). Also, experience and demonstrated proficiency are often decisive factors in war—so much so that numerically smaller or qualitatively inferior but well-trained and experienced forces can defeat a larger or qualitatively superior adversary.

However digital and quantitative the world has become thanks to the explosion of advanced technologies, it is still very much a qualitative place, and judgment calls have to be made in the absence of certainty. We strive to be as objective and evenhanded as possible in our approach and transparent in our methodology and sources of information so that readers can understand why we came to the conclusions we reached and perhaps reach their own. The end result will be a more informed debate about what the United States needs in military capabilities to deal with the world as it is. A detailed discussion of scoring is provided in each assessment section.

In our assessment, we begin with the operating environment because it provides the geostrategic stage upon which the U.S. sees to its interests: the various states that would play significant roles in any regional contingency; the terrain that enables or restricts military operations; the infrastructure—ports, airfields, roads, and rail networks (or lack thereof)—on which U.S. forces would depend; and the types of linkages and relationships the U.S. has with a region and major actors within it that cause the U.S. to have interests in the area or that facilitate effective operations. Major actors within each region are identified, described, and assessed in terms of alliances, political stability, the presence of U.S. military forces and relationships, and the maturity of critical infrastructure.

Our assessment focuses on three key regions—Europe, the Middle East, and Asia—because of their importance relative to U.S. vital security interests. This does not mean that Latin America and Africa are unimportant. Rather, the security challenges within these regions do not currently rise to the level of direct threats to America's vital security interests as we have defined them. We addressed

their current condition in the *2015 Index* and will provide an updated assessment when it is warranted.

Next is a discussion of threats to U.S. vital interests. Here we identify the countries that pose the greatest current or potential threats to U.S. vital interests based on two overarching factors: their behavior and their capability. We accept the classic definition of “threat” as a combination of intent and capability, but while capability has attributes that can be quantified, intent is difficult to measure. We concluded that “observed behavior” serves as a reasonable surrogate for intent because it is the clearest manifestation of intent.

We based our selection of threat countries and non-state actors on their historical behavior and explicit policies or formal statements vis-à-vis U.S. interests, scoring them in two areas: the degree of provocative behavior they exhibited during the year and their ability to pose a credible threat to U.S. interests irrespective of intent. For example, a state full of bluster but with only a moderate ability to act accordingly poses a lesser threat, while a state that has great capabilities and a pattern of bellicose behavior opposed to U.S. interests still warrants attention even if it is relatively quiet in a given year.

Finally, we address the status of U.S. military power in three areas: capability (or modernity), capacity, and readiness. Do U.S. forces possess operational capabilities that are relevant to modern warfare? Can they defeat the military forces of an opposing country? Do they have a sufficient amount of such capabilities? Is the force sufficiently trained and its equipment materially ready to win in combat? All of these are fundamental to success even if they are not de facto determinants of success (something we explain further in the section). We also address the condition of the United States’ nuclear weapons capability, assessing it in areas that are unique to this military component and critical to understanding its real-world viability and effectiveness as a strategic deterrent.

Topical Essays

The four topical essays in this *2017 Index* continue the themes established in the 2015 edition: top-level strategic issues that provide context for defense, major regional issues that drive defense planning, and functional or component topics that are important to understand if one is to understand the larger story of U.S. military power.

- Professor Mackubin T. Owens’s essay, “On Strategy and Strategic Planning: Repairing America’s Strategic ‘Black Hole,’” begins this year’s *Index* with a concise discussion of strategy: what it is, what it has become in the national security community, and what U.S. national leadership must do to correct a glaring deficiency in our national security planning process. “Strategy and strategy-making are complex phenomena, not reducible to a simplistic mechanical process,” writes Dr. Owens, “and the making of strategy deserves more study than it often receives. In many respects, U.S. strategic planning has been rendered nearly useless because the processes have become routinized and thereby trivialized.”
- In “Alliances and U.S. National Security,” Dr. Martin N. Murphy makes the historical case for the value of alliances, addressing the tension between the burden they represent and their importance in securing national interests. Dr. Murphy presents 10 reasons why alliances have proven to be America’s great strategic advantage for more than two centuries and reminds us of Winston Churchill’s view that “[t]here is only one thing worse than fighting with allies, and that is fighting without them.”
- Paul Rosenzweig goes well beyond the standard discussion of cyber warfare, which usually describes types of malware and the importance of protecting one’s systems from attack. In “The Reality of

Cyber Conflict: Warfare in the Modern Age,” he characterizes cyber conflict as waged between various combinations of combatants (state vs. state, state vs. non-state, etc.); outlines key factors that should guide thinking about strategy for cyber warfare; and discusses how America should organize for this evolving form of conflict.

- Antulio Echevarria II closes our collection of essays with a superb primer on “Operational Concepts and Military Strength.” Noting that such concepts “provide the conceptual basis for operational planning and influence the design and employment of military forces,” Echevarria succinctly highlights the mixed track record for these key guiding documents over the past few decades, explaining why some were very successful and others failed miserably and how the military services should think about them today given the rapid evolution of modern technologies and the opportunities and challenges they make possible.

Scoring U.S. Military Strength Relative to Vital National Interests

The purpose of this *Index* is to make the national debate about defense capabilities better informed by assessing the ability of the U.S. military to defend against current threats to U.S. vital national interests within the context of the world as it is. Each of the elements can change from year to year: the stability of regions and access to them by America’s military forces; the various threats as they improve or lose capabilities and change their behavior; and the United States’ armed forces themselves as they adjust to evolving fiscal realities and attempt to balance readiness, capacity (size and quantity), and capability (how modern they are) in ways that enable them to carry out their assigned missions successfully.

Each region of the world has its own set of characteristics that include terrain; man-made infrastructure (roads, rail lines, ports,

airfields, power grids, etc.); and states with which the United States has relationships. These traits combine to create an environment that is either favorable or problematic when it comes to U.S. forces operating against threats in each respective region.

Various states and non-state actors within these regions possess the ability to threaten, and have consistently behaved in ways that threaten, America’s interests. Fortunately for the U.S., these major threat actors are currently few in number and continue to be confined to three regions—Europe, the Middle East, and Asia—thus enabling the U.S. (if it will do so) to focus its resources and efforts accordingly.

As for the condition of America’s military services, they continue to be beset by aging equipment, shrinking numbers, and rising costs: three factors that have accelerated over the past year at a time when threats to U.S. interests continue to rise.

These three elements interact with each other in ways that are difficult to measure in concrete terms and impossible to forecast with any certainty. Nevertheless, the exercise of describing them and characterizing their general condition is worthwhile because it informs debates about defense policies and the allocation of resources that are necessary for the U.S. military to carry out its assigned duties. Further, as seen in this *2017 Index*, noting how conditions have changed from the preceding year helps to shed light on the effect that policies, decisions, and actions have on security affairs involving the interests of the United States, its allies and friends, and its enemies.

It should be borne in mind that each annual *Index* assesses conditions as they are for the assessed year. This *2017 Index of U.S. Military Strength* builds on the baseline condition of 2014 as described in the *2015 Index* and assesses changes that have occurred in the years since then.

Assessments for U.S. Military Power, Global Operating Environment, and Threats to Vital U.S. Interests are shown below. Factors

that would push things toward “bad” (the left side of the scales) tend to move more quickly than those that improve one’s situation, especially when it comes to the material condition of the U.S. military.

Of the three areas measured—U.S. Military Power, Global Operating Environment, and Threats to Vital U.S. Interests—the U.S. can directly control only one: its own military. The condition of the U.S. military can influence the other two because a weakened America arguably emboldens challenges to its interests and loses potential allies, while a militarily strong America deters opportunism and draws partners to its side from across the globe.

Conclusion

During the decades since the end of the Second World War, the United States has underwritten and taken the lead in maintaining a global order that has benefited more people in more ways than at any other period in history. Now, however, that American-led

order is under stress, and some have wondered whether it will break apart entirely. Fiscal and economic burdens continue to plague nations; violent, extremist ideologies threaten the stability of entire regions; state and non-state opportunists seek to exploit upheavals; and major states compete to establish dominant positions in their respective regions.

America’s leadership role remains in question, perhaps more so than at any other time since the end of the Cold War, and its security interests are under significant pressure. Challenges are growing, old allies are not what they once were, and the U.S. is increasingly bedeviled by debt that constrains its ability to sustain its forces commensurately with its interests.

Informed deliberations on the status of the United States’ military power are therefore needed today more than at any other time since the end of the Cold War. This *Index of U.S. Military Strength* can help to inform the debate.

Executive Summary

The United States maintains a military force primarily to protect the homeland from attack and to protect its interests abroad. There are secondary uses—for example, to assist civil authorities in times of disaster or to deter opponents from threatening America’s interests—but this force’s primary purpose is to make it possible for the U.S. to physically impose its will on an enemy when necessary.

Consequently, it is critical that the condition of the United States military with respect to America’s vital national security interests, threats to those interests, and the context within which the U.S. might have to use “hard power” be understood. Knowing how these three areas—operating environments, threats, and the posture of the U.S. military—change over time, given that such changes can have substantial implications for defense policies and investment, is likewise important.

Each year, The Heritage Foundation’s *Index of U.S. Military Strength* employs a standardized, consistent set of criteria, accessible both to government officials and to the American public, to gauge the ability of the U.S. military to perform its missions in today’s world. The inaugural 2015 edition established a baseline assessment on which this and future annual editions will build, with each edition assessing the state of affairs for its respective year and measuring how key factors have changed from the previous year.

What the *Index* Assesses

The *Index of U.S. Military Strength* assesses the ease or difficulty of operating in key regions based on existing alliances, regional

political stability, the presence of U. S. military forces, and the condition of key infrastructure. Threats are assessed based on the behavior and physical capabilities of actors that pose challenges to U.S. vital national interests. The condition of America’s military power is measured in terms of its capability or modernity, capacity for operations, and readiness to handle assigned missions successfully. This framework provides a single-source reference for policymakers and other Americans who seek to know whether our military power is up to the task of defending our national interests.

Any discussion of the aggregate capacity and breadth of the military power needed to address threats to U.S. security interests requires a clear understanding of precisely what interests must be defended. Three vital interests have been stated consistently in various ways by a string of Administrations over the past few decades:

- **Defense** of the homeland;
- **Successful conclusion** of a major war that has the potential to destabilize a region of critical interest to the U.S.; and
- **Preservation** of freedom of movement within the global commons (the sea, air, outer-space, and cyberspace domains) through which the world conducts its business.

To defend these interests effectively on a global scale, the United States needs a military

force of sufficient size, or what is known in the Pentagon as “capacity.” Due to the many factors involved, determining how big the military should be is a complex exercise. However, successive Administrations, Congresses, and Department of Defense staffs have managed to arrive at a surprisingly consistent force-sizing rationale: an ability to handle two major wars or “major regional contingencies” (MRCs) simultaneously or in closely overlapping time frames. This “two-war” or “two-MRC” requirement is embraced in this *Index*.

At the core of this requirement is the conviction that the United States should have the ability to engage and decisively defeat one major opponent and simultaneously have the wherewithal to do the same with another to preclude opportunistic exploitation by any competitor. Since World War II, the U.S. has found itself involved in a major “hot” war every 15–20 years while simultaneously maintaining substantial combat forces in Europe and several other regions. The size of the total force roughly approximated the two-MRC model. Accordingly, our assessment of the adequacy of today’s U.S. military is based on the ability of America’s armed forces to engage and defeat two major competitors at roughly the same time.

This *Index*’s benchmark for a two-MRC force is derived from a review of the forces used for each major war that the U.S. has undertaken since World War II and the major defense studies completed by the federal government over the past 30 years. We concluded that a standing (i.e., Active Duty component) two-MRC-capable Joint Force would consist of:

- **Army:** 50 brigade combat teams (BCTs);
- **Navy:** 346 surface combatants and 624 strike aircraft;
- **Air Force:** 1,200 fighter/ground-attack aircraft; and
- **Marine Corps:** 36 battalions.

This force does not account for homeland defense missions that would accompany a period of major conflict and are generally handled by Reserve and National Guard forces. Nor does this recommended force constitute the totality of the Joint Force, which includes the array of supporting and combat-enabling functions essential to the conduct of any military operation: logistics; transportation (land, sea, and air); health services; communications and data handling; and force generation (recruiting, training, and education), to name a very few. Rather, these are combat forces that are the most recognizable elements of America’s hard power but that also can be viewed as surrogate measures for the size and capability of the larger Joint Force.

The Global Operating Environment

Looking at the world as an environment in which U.S. forces would operate to protect America’s interests, the *Index* focused on three regions—Europe, the Middle East, and Asia—because of the intersection of our vital interests and actors able to challenge them.

Europe. For the most part, Europe is a stable, mature, and friendly environment, home to America’s oldest and closest allies. The U.S. is tied to it by treaty, robust economic bonds, and deeply rooted cultural linkages. In general, America’s partners in the region are politically stable; possess mature (if increasingly debt-laden) economies; and have fairly modern (though shrinking) militaries. America’s longtime presence in the region, Europe’s well-established basing and support infrastructure, and the framework for coordinated action provided by NATO make the region quite favorable for military operations.

The Middle East. In contrast, the Middle East is a deeply troubled area that continues to be riven with conflict, ruled by authoritarian regimes, and populated by an increasing number of terrorist and other destabilizing entities. Though the United States does enjoy a few strong partnerships in the region, its interests are beset by security and political

Operating Environment: Europe

	VERY POOR	UNFAVORABLE	MODERATE	FAVORABLE	EXCELLENT
Alliances				✓	
Political Stability				✓	
U.S. Military Posture			✓		
Infrastructure				✓	
OVERALL				✓	

Operating Environment: Middle East

	VERY POOR	UNFAVORABLE	MODERATE	FAVORABLE	EXCELLENT
Alliances			✓		
Political Stability	✓				
U.S. Military Posture			✓		
Infrastructure			✓		
OVERALL			✓		

Operating Environment: Asia

	VERY POOR	UNFAVORABLE	MODERATE	FAVORABLE	EXCELLENT
Alliances					✓
Political Stability				✓	
U.S. Military Posture				✓	
Infrastructure				✓	
OVERALL				✓	

Global Operating Environment

	VERY POOR	UNFAVORABLE	MODERATE	FAVORABLE	EXCELLENT
Europe				✓	
Middle East			✓		
Asia				✓	
OVERALL				✓	

Global Operating Environment

VERY POOR	UNFAVORABLE	MODERATE	FAVORABLE	EXCELLENT
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challenges, expanding transnational terrorism, and the maturing threat of a nuclear Iran. Offsetting these challenges to some extent are the U.S. military's experience in the region and the basing infrastructure that it has developed and leveraged for nearly 25 years, although these positive elements are decaying as a consequence of America's withdrawal from Iraq, its reduced presence in neighboring countries, and the increasingly problematic political environment in countries that historically have hosted U.S. forces.

Asia. Asia's defining characteristic is its expanse, covering 30 percent of the globe's land area. Though the region includes longstanding allies of the U.S. that are stable and possess advanced economies, the tyranny of distance makes U.S. military operations in the region difficult in terms of the time and sealift and airlift that are required, a challenge that is only exacerbated as the size of the U.S. military continues to shrink.

Summarizing the condition of each region enables us to get a sense of how they compare in terms of the challenge the U.S. would have in projecting military power and sustaining combat operations in each one.

As a whole, the global operating environment currently rates a score of "favorable," meaning that the United States should be able to project military power anywhere in the world as necessary to defend its interests without substantial opposition or high levels of risk, although conditions in the Middle East (and perhaps Europe) could easily tip this aggregate score into the "moderate" category if conditions continue to degrade in 2017.

Threats to U.S. Interests

Our selection of threat actors discounted troublesome states and non-state entities that lacked the physical ability to pose a meaningful threat to the vital security interests of the U.S. This reduced the population of all potential threats to a half-dozen that possessed both the means to threaten U.S. vital interests and a pattern of provocative behavior that should draw the focus of U.S. defense

planning. This *Index* characterizes their behavior and military capabilities on five-point, descending scales.

Each of the six threat actors continued to be particularly aggressive during 2016, with a not altogether surprising correlation of physical capability and state robustness or coherence. Our scoring resulted in the individual marks depicted below.

Combining the assessments of behavior and capability led to a general characterization of each threat, ranging from "severe" to "low." Worryingly, all six noted threat actors now rank "high" on the scale of threats to U.S. interests, although the threat from North Korea dropped one category from "severe" to "high."

While all six threats have been quite problematic in their behavior and in their impact on their respective regions, Russia and China continue to be the most worrisome, both because of the investments they are making in the modernization and expansion of their offensive military capabilities and because of the more enduring effect they are having within their respective regions. Russia has maintained its active involvement in the conflict in Ukraine and has inserted itself into the Syrian conflict, and China's provocative behavior has expanded to include militarization of islands that it has built in highly disputed international waters in the South China Sea. China has also adopted aggressive naval tactics to intimidate such neighboring countries as Japan and the Philippines.

North Korea warrants sustained attention. It has reportedly developed a nuclear-capable ballistic missile with sufficient range to reach the United States and continues to invest heavily in developing a submarine-launched ballistic missile, an effort that has generated heightened concerns among U.S. allies in the region.

Terrorism based in Afghanistan and Pakistan continues to hold a strong potential to spark a large-scale conflict between Pakistan and India (two nuclear powers) or even to pose a nuclear threat to others should

Threat Categories

Behavior	HOSTILE	AGGRESSIVE	TESTING	ASSERTIVE	BENIGN
Capability	FORMIDABLE	GATHERING	CAPABLE	ASPIRATIONAL	MARGINAL

Behavior of Threats

	HOSTILE	AGGRESSIVE	TESTING	ASSERTIVE	BENIGN
Russia		✓			
Iran		✓			
Middle East Terrorism	✓				
Af-Pak Terrorism			✓		
China		✓			
North Korea		✓			
OVERALL		✓			

Capability of Threats

	FORMIDABLE	GATHERING	CAPABLE	ASPIRATIONAL	MARGINAL
Russia	✓				
Iran		✓			
Middle East Terrorism			✓		
Af-Pak Terrorism		✓			
China		✓			
North Korea		✓			
OVERALL		✓			

Threats to U.S. Vital Interests

	SEVERE	HIGH	ELEVATED	GUARDED	LOW
Russia		✓			
Iran		✓			
Middle East Terrorism		✓			
Af-Pak Terrorism		✓			
China		✓			
North Korea		✓			
OVERALL		✓			

Threats to U.S. Vital Interests

SEVERE	HIGH	ELEVATED	GUARDED	LOW
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radicalized Islamists gain control of Pakistan’s nuclear arsenal or destabilize Pakistan’s government, which would result in the loss of positive control of Pakistan’s inventory of nuclear weapons.

In addition, Iran and the various terrorist groups operating in the Middle East would be a greater threat to U.S. security interests than they currently are if they possessed a greater physical ability to project military power outside of their immediate areas. Such a concern was amplified during 2016 when the U.S. Administration finalized an international agreement pertaining to Iran’s nuclear aspirations that effectively enables Iran to maintain its nuclear research and development infrastructure and associated ballistic missile capabilities even if placed under moratorium for the next decade.

With these threats taken together, the globalized threat to U.S. vital national interests as a whole during 2016 rose one level to “high.”

The Status of U.S. Military Power

Finally, we assessed the military power of the United States in three areas: capability, capacity, and readiness. We approached this assessment by military service as the clearest way to link military force size; modernization programs; unit readiness; and (in general terms) the functional combat power (land, sea, and air) largely represented by each service. We treated the United States’ nuclear capability as a separate entity given the truly unique elements that make it possible, from the weapons themselves to the supporting infrastructure that is fundamentally different from that which supports conventional capabilities.

These three areas of assessment (capability, capacity, and readiness) are central to the overarching questions of whether the U.S. has

a sufficient quantity of appropriately modern military power and whether military units are able to conduct military operations on demand and effectively.

As reported in the *2016 Index*, the common theme across the services and the U.S. nuclear enterprise is one of force degradation resulting from many years of underinvestment, poor execution of modernization programs, and the negative effects of budget sequestration (cuts in funding) on readiness and capacity. While the military has been heavily engaged in operations, primarily in the Middle East but elsewhere as well, since September 11, 2001, experience is both ephemeral and context-sensitive. Valuable combat experience is lost over time as the servicemembers who individually gained experience leave the force, and it maintains direct relevance only for future operations of a similar type (e.g., counterinsurgency operations in Iraq are fundamentally different from major conventional operations against a state like Iran or China).

Thus, although the current Joint Force is experienced in some types of operations, it is still aged and shrinking in its capacity for operations.

We characterized the services and the nuclear enterprise on a five-category scale ranging from “very weak” to “very strong,” benchmarked against criteria elaborated in the full report. These characterizations should not be construed as reflecting the competence of individual servicemembers or the professionalism of the services or Joint Force as a whole; nor do they speak to the U.S. military’s strength relative to other militaries around the world. Rather, they are assessments of the institutional, programmatic, and material health or viability of America’s hard military power.

In aggregate, the United States' military posture is rated as **"Marginal"** and is trending toward **"Weak,"** a condition unchanged from the *2016 Index*.

Overall, the *2017 Index* concludes that the current U.S. military force is capable of meeting the demands of a single major regional conflict while also attending to various presence and engagement activities—something it is doing now and has done for the past two decades—but that it would be very hard-pressed to do more and certainly would be ill-equipped to handle two nearly simultaneous major regional contingencies. The consistent decline in funding and the consequent shrinking of the force over the past few years have placed it under significant pressure. Essential maintenance continues to be deferred; the availability of fewer units for operational deployments increases the frequency and length of deployments; and old equipment is being extended while programmed replacements are either delayed or beset by developmental difficulties.

The military services have continued to prioritize readiness for current operations by shifting funding to deployed or soon-to-deploy units at the expense of keeping units that are not deployed in "ready" condition; delaying, reducing, extending, or canceling modernization programs; and sustaining the reduction in size and number of military units. These choices and their resulting condition, driven by the lack of funding dedicated to defense, hazard America's ability to secure its interests now and erode America's ability to shape conditions to its advantage by assuring allies and deterring competitors.

As currently postured, the U.S. military is only marginally able to meet the demands of defending America's vital national interests.

Our analysis concluded with these assessments:

- **Army as "Weak."** The Army's score remained "weak" for reasons similar to those cited in the *2016 Index*. The Army has continued to trade end strength and modernization for improved readiness for current operations. However, accepting risks in these areas has enabled the Army to keep only one-third of its force at acceptable levels of readiness, and even for units deployed abroad, the Army has had to increase its reliance on contracted support to meet maintenance requirements. Budget cuts have affected combat units disproportionately: A 16 percent reduction in total end strength has led to a 32 percent reduction in the number of brigade combat teams and similar reductions in the number of combat aviation brigades. In summary, the Army is smaller, older, and weaker, a condition that is unlikely to change in the near future.
- **Navy as "Marginal."** The Navy's readiness score increased from *2016 Index*'s "marginal" to "strong," but only by sacrificing long-term readiness to meet current operational demands. While the Navy is maintaining a moderate global presence, it has little ability to surge to meet wartime demands. Deferred maintenance has kept ships at sea but is also beginning to affect the Navy's ability to deploy. With scores of "weak" in capability (due largely to old platforms and troubled modernization programs) and "marginal" in capacity, the Navy is currently just able to meet operational requirements. Continuing budget shortfalls in its shipbuilding account will hinder the Navy's ability to improve its situation, both materially and quantitatively, for the next several years.
- **Air Force as "Marginal."** While its overall score remains the same as last year's, the US-AF's accumulating shortage of pilots (700) and maintenance personnel (4,000) has begun to affect its ability to generate combat power. The Air Force possesses 1,159 tactical fighter aircraft, which normally would support a score of "very strong" for capacity, but the lack

of ability to fly and maintain them, especially in a high-tempo/threat combat environment, means that its usable inventory of such aircraft is actually much smaller. This reduced ability is a result of funding deficiencies that also result in a lack of spare parts, fewer flying hours, and compromised modernization programs.

- Marine Corps as “Marginal.”** The Corps continues to deal with readiness challenges driven by the combined effects of high operational tempo and low levels of funding. At times during 2016, less than one-third of its F/A-18s, a little more than a quarter of its heavy-lift helicopters, and only 43 percent of its overall aviation fleet were available for operational employment. Pilots not already in a deployed status were getting less than half of needed flight hours. The Corps’ modernization programs are generally in good shape, but it will take several years for the new equipment to be produced and fielded. As was the case in preceding years, the *Index* assesses that the Corps has only two-thirds of the combat units that it actually needs, especially when accounting for expanded requirements that include cyber units and more crisis-response forces.
- Nuclear Capabilities as “Marginal.”** Modernization, testing, and investment in intellectual and talent underpinnings continue to be the chief problems facing America’s nuclear enterprise. Delivery platforms are good, but the force depends on a very limited set of weapons (in number of designs) and models that are quite old, in stark contrast to the aggressive programs of competitor states. Of growing concern is the “marginal” score for “Allied Assurance” at a time when Russia has rattled its nuclear saber in a number of recent provocative exercises; China has been more aggressive in militarily pressing its claims to the South and East China Seas; North Korea is heavily investing in a submarine-launched ballistic missile capability; and Iran has achieved a nuclear deal with the West that effectively preserves its nuclear capabilities development program for the foreseeable future.

U.S. Military Power

	VERY WEAK	WEAK	MARGINAL	STRONG	VERY STRONG
Army		✓			
Navy			✓		
Air Force			✓		
Marine Corps			✓		
Nuclear			✓		
OVERALL			✓		

U.S. Military Power: Army

	VERY WEAK	WEAK	MARGINAL	STRONG	VERY STRONG
Capacity		✓			
Capability			✓		
Readiness		✓			
OVERALL		✓			

U.S. Military Power: Navy

	VERY WEAK	WEAK	MARGINAL	STRONG	VERY STRONG
Capacity			✓		
Capability		✓			
Readiness				✓	
OVERALL			✓		

U.S. Military Power: Air Force

	VERY WEAK	WEAK	MARGINAL	STRONG	VERY STRONG
Capacity				✓	
Capability			✓		
Readiness			✓		
OVERALL			✓		

U.S. Military Power: Marine Corps

	VERY WEAK	WEAK	MARGINAL	STRONG	VERY STRONG
Capacity		✓			
Capability			✓		
Readiness			✓		
OVERALL			✓		

U.S. Military Power: Nuclear

	VERY WEAK	WEAK	MARGINAL	STRONG	VERY STRONG
Warhead Surety				✓	
Delivery Platform Reliability				✓	
Warhead Modernization		✓			
Delivery Systems Modernization			✓		
Nuclear Weapons Complex		✓			
National Labs Talent			✓		
Force Readiness			✓		
Allied Assurance			✓		
Nuclear Test Readiness		✓			
OVERALL			✓		

The Importance of Alliances for U.S. Security

Martin Murphy

“No man is an island, entire of itself,” wrote the English poet John Donne in 1624.¹ The same is true of nations.

The United States now sits at the apex of an international network of alliances brought together during the Cold War, but this has not always been America’s situation. In earlier times, especially at its inception, the U.S. benefited from alliances, generally as the junior partner. Success in the Revolutionary War was helped by a crucial alliance with France, a country that the infant U.S. shortly thereafter fought in the undeclared Quasi-War (1798–1800).²

It is true that George Washington, in his Farewell Address of 1796, warned his countrymen that they should not “entangle our peace and prosperity in the toils of European ambition,” an admonition that has come to be viewed as a warning against “foreign entanglements.”³ But while he urged Americans to take advantage of their country’s geographical isolation from the world’s troubles, he was not advancing an argument for political isolationism.⁴ If anything, he was anticipating (and sharing) the sentiment of British Prime Minister Lord Palmerston, who, speaking in the House of Commons on March 1, 1848, avowed that “We have no eternal allies, and we have no perpetual enemies. Our interests are eternal and perpetual, and those interests it is our duty to follow.”⁵

Washington’s argument, like Palmerston’s, was that no nation, especially a nation

as influential at various times as the United States or Great Britain, can disengage from the world. Such a nation must instead be free to choose when to engage and when not to engage—and, most momentously, when to go to war and when to walk away.

Wisdom and Utility of Alliances

An equally spirited debate about the wisdom and utility of alliances continues today. Repeatedly, alliances are referred to as burdens, an elastic term that can be stretched to include everything from moral hazard to free riding.

The burden of moral hazard is that states, including states of roughly equivalent weights, may feel emboldened to pursue riskier foreign policies because their allies are obligated to come to their rescue. Perhaps the most famous example of what is also referred to as “entrapment” was Germany’s alliance with Austria–Hungary before World War I. Emboldened by this alliance and German encouragement, Austria–Hungary felt that it could safely make humiliating demands of Serbia even though Serbia was allied to Russia.⁶ It was wrong: Russia failed to restrain Serbia and initiated military preparations of its own, the chain gang of alliance obligations snapped into place, and Europe found itself on the way to war.⁷

The reciprocal of entanglement is abandonment. The U.S., for example, is at risk of

being pulled both ways in its relationship with allies in Asia, a concern that Beijing is evidently attempting to use to its own advantage.⁸

Concerns about free riding, “that America’s allies, especially the smaller ones, have simply been unfair in not bearing large shares of the common burdens,” has bedeviled America’s relations with its allies—especially its NATO allies—for many years.⁹ In straightforward economic terms, the U.S. does make a greater contribution to alliance resources than other members, and there is a risk that this could become unsustainable during a period when America’s economic power is in relative decline. However, the costs of alliances, including the sometimes disproportionate cost of alliance leadership, must not be weighed against cash savings but rather against the cost of possible conflict in blood as well as treasure without them.¹⁰

America’s treaty with France committed it to joining France in war if it was attacked by Great Britain. Since 1792, France had been engaged in its own revolutionary war with its neighbors, including Britain, and the political grouping led by Thomas Jefferson and James Madison was arguing strongly that the United States should fulfill its treaty obligations. Washington, who issued his 1793 Proclamation of Neutrality (subsequently the Neutrality Act of 1794) to avoid this obligation, wrote his address in part to deflect their criticism of his actions.¹¹

The Royal Navy was now much stronger than it had been when it was defeated by the French at the Battle of the Virginia Capes in 1781, the action that had precipitated Cornwallis’s surrender at Yorktown, thus ending the War of Independence. Washington, well aware of Britain’s renewed naval strength, refused to see American trade ravaged and U.S. ports set ablaze.

Unlike Madison, who when President launched the War of 1812 that saw the White House burned and, as the naval historian Alfred Thayer Mahan memorably recorded, grass grow in the streets of Boston as a consequence of the British blockade, America’s

first President had no intention of exposing his country to such peril.¹² He recognized that the young republic lacked the military wherewithal to deliver on its treaty promise even if it wanted to and assessed that the costs of joining France in a protracted conflict with Great Britain far outweighed any potential benefit for America. The gap in capabilities between the young United States and Britain and the geographic distance separating America from France were simply too great.

The United States and Great Britain concluded no formal military alliance during the 19th century. There were several disagreements, some severe enough on occasion for both sides to contemplate war prior to what historians have called “The Great Rapprochement” between the two beginning in the 1890s,¹³ but even before that, there was also complementarity in their actions that accorded with the principle of eternal interests rather than eternal allies. For example, the Monroe Doctrine, set forth by President James Monroe in 1823 to prevent European nations from colonizing territory or threatening states in North or South America, might have been largely impossible to implement given the Royal Navy’s ability to intervene when and where it chose.¹⁴ Britain, however, elected not to challenge the Monroe’s policy because it accorded with Britain’s interest in ensuring that the disintegrating Spanish empire in the Americas did not fall piece by piece into the hands of its imperial rivals.¹⁵

Clearly, America has chosen to engage in or refuse alliance depending on its interests. So what are the benefits of military alliances if, on occasion and between some powers at least, solemn agreements can be ignored, while in other situations, so much can apparently be achieved in their absence?

Alliance Typology

Alliances have been a fact of international political life since antiquity.¹⁶ They perform a number of different functions for states, often at the same time, which makes categorization difficult. Nonetheless, their primary function

is military, and the three primary classifications used in the academic literature bear this out:

- **Defense pacts**, by which signatories are obliged to intervene militarily on the side of any treaty partner that is attacked militarily;
- **Neutrality and non-aggression pacts**, which obligate signatories to remain militarily neutral if any co-signatory is attacked (neutrality pacts are usually more specific than non-aggression pacts); and
- **Ententes**, by which signatories agree to consult with one another and potentially cooperate in a crisis, including one involving an armed attack.¹⁷

The common features shared by all three types of alliances lead to a definition like the one proposed by Stephen Walt: that alliances are formal or informal commitments for security cooperation between two or more states. “Although the precise arrangements embodied in different alliances vary enormously,” Walt argues, “the defining feature of any alliance is a commitment for mutual military support against some external actor(s) in some specified set of circumstances.”¹⁸

Viewed in this loose way, alliances can be either formal, written treaties or informal, unwritten agreements based on anything from tacit understandings to verbal assurances. These, however, may be good enough. Formal agreements have often said little about actual commitment. The Franco-American treaty sidestepped by George Washington, for example, provided more assurance that support would be forthcoming than turned out to be the case. The French sense of betrayal was one of the factors that contributed to the Quasi-War. On the other hand, America’s alliance with Britain before Pearl Harbor was largely tacit, even secret, but nonetheless very real.

Alliances exist to advance their members’ collective interests by combining their

capabilities—which can be industrial and financial as well as military—to achieve military and political success. How these are combined can vary, as the academic classifications suggest.

The degrees to which alliances are institutionalized also differ. Most alliances throughout history have been loose, often ad hoc arrangements and subject to the vagaries of fortune and commitment. Most European alliances, such as the various coalitions that Great Britain assembled to defeat Napoleon, were of this type.¹⁹ The French emperor was defeated only when the coalition participants finally realized that if they were to free themselves from endless conflict, they had to stand together rather than cut deals for short-term advantage.

Ad hoc alliances often contain strange bedfellows. Britain, a constitutional monarchy with laws passed by Parliament, established common cause with autocratic Russia to defeat Napoleon. Similarly, in World War II, the Anglo-American democracies found it necessary, if they were to defeat Nazi Germany, to join forces with Stalin’s totalitarian state, which had been their enemy and would be again. Throughout the conflict, each side was suspicious that the other might cut a separate deal with the German dictator, and the desire to ensure that neither side did so sustained the alliance as much as military capability did. In fact, as Robert Osgood argues, “next to accretion, the most prominent function of alliances has been to restrain and control allies.”²⁰

Most alliances are, to some degree at least, asymmetrical. When it comes to commitments, one signatory may expect less of the other militarily. For example, the 1839 Treaty of London in which Britain guaranteed Belgium’s neutrality, while not a military alliance, was necessarily a one-sided commitment by Britain to come to Belgium’s aid if it was invaded, a commitment that Britain honored in 1914.²¹

When it comes to capabilities, alliance members can likewise make very different

contributions. Britain's input to the defeat of Napoleon was primarily financial and naval; apart from Arthur Wellesley's campaign in Spain and victory at Waterloo, few British troops were involved.²² In fact, it was a classic demonstration of how maritime powers achieve their victories.

In World War II, despite the ferocity of the fighting on the Eastern Front and the beaches of Normandy, the war in Europe was won by Anglo-American air and sea power, which crushed Germany's ability to prosecute the war.²³ Arguably, the Red Army would not have prevailed over the *Wehrmacht* absent the combined bomber offensive and the British convoys that fought to deliver American war matériel to Archangel and Murmansk. Despite Stalin's bombast and demands for a second front, he was probably aware of this truth.

Cold War Alliances

When the United States considered how the post-World War II world should be organized, it thought first of collective security institutionalized in the United Nations.²⁴ This accorded with its core value of democracy and the liberal ideal that international organizations were a way to transcend national differences and antagonisms. However, in geopolitical terms, the U.N. turned out to be a concert of the great powers that sit on its Security Council, each one of which holds a veto over its decisions. With the sole exception of the Korean War, when a U.N. force under U.S. leadership repelled the North's invasion of the South in the absence of a Soviet veto, the United Nations was quickly shown to be an inadequate bulwark against Soviet expansion.

Realizing this, the U.S. sought an alternative way to respond to Soviet adventurism, adopting a policy of containing the Soviet Union politically and militarily. This was enunciated in the 1947 Truman Doctrine and formalized in alliance terms with the foundation of the North Atlantic Treaty Organization (NATO), often referred to simply as "the alliance," in 1949.²⁵

NATO started with relatively modest ambitions that accorded with America's historical antipathy to entanglements. The initial strategy was for an integrated defense of the North Atlantic area in which the Europeans would contribute the land forces while the American contribution would be confined largely to naval force and strategic bombing.²⁶ However, post-Korea, the alliance rapidly became more complex as the Cold War with the Soviet Union evolved. Maturing into a "highly institutionalized alliance with elaborate decision-making procedures and an extensive supporting bureaucracy" with its own military command structure, it gained the solidity to outlast the defeat of the Soviet Union, its original antagonist, and retain just enough of its military and organizational capability and capacity to oppose that antagonist when it shed its Communist ideology and rediscovered Russian nationalism.²⁷

The arguments for NATO's creation were several. Perhaps most important, it made clear that a free Europe was a vital American interest and made manifest America's commitment to Europe's defense. If Europe had been overrun by Soviet forces, this would have compromised two of America's eternal interests: retention of its continental integrity by undermining control of the sea and air approaches to America's eastern seaboard and preventing the Eurasian landmass from being dominated by a single power.²⁸

The arguments against NATO arose out of American ideals:

- Alliance membership, and especially the commitment to Article Five, allegedly compromised the nation's freedom of action contrary to the U.S. Constitution in that "an armed attack" against any signatory would "be considered an attack against them all" requiring the provision of all necessary assistance, including the use of armed force.²⁹
- It also allegedly undermined the United Nations and the principle of collective

security by accepting the validity of military alliances and what internationalists regarded as the discredited notion of power balancing.³⁰

Between 1948 and 2014, the United States accumulated some 66 defense commitments,³¹ including commitments to NATO members (the Washington Treaty of 1949) and adherence to a second, multilateral treaty, the Rio Treaty of 1947,³² which took in most countries in Latin America. The U.S. is also linked in formal alliances to South Korea (with which, like NATO, it shares a military command structure) and Japan, Thailand, the Philippines, Australia, Liberia, and some small Pacific island states that previously were U.S. territories.³³

In the 1980s, the U.S. created a new category of alliance called “major non-NATO allies” (MNNA), primarily to ease arms transfers and facilitate military cooperation.³⁴ States in this category include Afghanistan, Argentina, Bahrain, Egypt, Israel, Jordan, Kuwait, Morocco, New Zealand, and Pakistan. In 2015, President Barack Obama announced his intention to designate Tunisia an MNNA. Meanwhile, Congress proposed that Georgia, Moldova, and Ukraine should be extended MNNA status following Russia’s 2014 invasion of Crimea, and President Obama similarly proposed, following a 2015 meeting with the Gulf Cooperation Council, that the same offer should be made to Oman, Qatar, Saudi Arabia, and the United Arab Emirates, presumably to soften the blow of the upcoming nuclear *détente* with Iran that was signed later that same year.

While it is conceivable that U.S. protection might be extended to some countries on this list if they were attacked, there is no guarantee that any military measures would be forthcoming. The standing of some is particularly problematic: Pakistan, for example, which is still linked to the U.S. by the 1954 Mutual Defense Assistance Agreement but has moved closer to China (while the U.S. has moved closer to Pakistan’s rival, India), and

Saudi Arabia, with which the U.S. has close ties but no formal alliance.

The most problematic relationship of all is with Taiwan. U.S. government intentions toward Taiwan have been mired in uncertainty ever since diplomatic recognition was switched from the Republic of China (ROC) to the People’s Republic of China (PRC) on January 1, 1979. Even though this ambiguity has persisted through successive Administrations, the U.S. Congress has always maintained a keen interest in the continuation of contacts and preservation of Taiwan’s status consistent with the will of its people. The Taiwan Relations Act came into force in 1979 to govern unofficial relations between the two states. Official military relations, however, were essentially ended on January 1, 1980, when the U.S. terminated the U.S.–ROC Mutual Defense Treaty.

Post-Cold War Changes

Two trends characterize the period since the fall of the Soviet Union:

- NATO’s enlargement and search for a new *raison d’être* and
- The preference for “coalitions of the willing.”

The fall of the Berlin Wall in 1989 triggered a wave of popular uprisings that drove Communist regimes from power across Central and Eastern Europe, culminating in the dissolution of the Soviet Union itself in December 1991. Even before the final collapse occurred, NATO’s counterpart in the East, the Warsaw Pact, had disbanded itself at a ministerial meeting held in Budapest in February 1991.

Historically, when a threat disappears, the military alliance assembled to confront it folds its tent and leaves. Instead, and almost instinctively, all of NATO’s member governments felt that the alliance should continue without, as Stanley Sloan put it, being “fully agreed as to why.”³⁵ Some officials argued that it was more than a military alliance: It was a

community of values transcending any specific military threat. Others were more specific, suggesting that although the Soviet Union was going through its death throes and the Russia that was reemerging appeared to be moving closer to the West, this could change, and Russia could adopt a threatening posture in the future. Finally, and most broadly, NATO was a source of stability. The investment that had been made in physical infrastructure and the pooling of organizational and cooperative experience was too good an insurance policy against future threats to European security to let go.

However, events in the 1990s unsettled alliance relations.

- The first event was NATO's initial post-Cold War Strategic Concept. Issued in 1991, it emphasized a broader approach to security. In effect, the alliance now needed to manage not one but two core missions: collective defense and "out of area" security tasks ranging from crisis response to military-to-military engagement, which together were more complex militarily and diverse politically than its previously singular Cold War purpose.³⁶
- The second, enlargement of the alliance by the admission of previously Warsaw Pact powers, was a source of contention from the very beginning. While it removed the stain of Yalta, the U.S. was concerned that it would strengthen nationalist factions in Russia that were already suspicious of Western intentions.³⁷ These reservations were to be borne out when Russia invaded Crimea and the Ukraine in 2014. In addition, the populations of Central and Eastern Europe that had direct experience of Communist and Russian rule were adamantly opposed to the idea that Russia was entitled to absorb them into a sphere of influence simply to appease its own historic sense of insecurity and great-power entitlement.

- The third was the wars in Bosnia and Kosovo that gave the world the term "ethnic cleansing" as Croats and particularly Serbs used violence to disaggregate ethnically mixed communities with the aim of creating ethnically homogeneous and contiguous areas. Although both conflicts were precisely the type that NATO's new strategy was intended to defuse, failures in the alliance's performance on the ground—particularly its inability to prevent the genocide committed at Srebrenica in 1995—pushed America to implement a bombing campaign that drove the warring factions to sign the Dayton Accords by the year's end.³⁸

Differences between Europeans and Americans, particularly over the Balkan wars, became so acute that, Lawrence Kaplan suggests, the sides drew as far apart as they had been during the Suez–Hungarian Uprising crises of 1956.³⁹ All that held them together was their representation on the Contact Group, a diplomatic device quite separate from NATO that had been created originally to give a voice to Russia in recognition of its traditional role as Serbia's ally.⁴⁰ These divisions effectively paved the way for America's adoption of so-called coalitions of the willing in the early years of the 21st century.

Alliance Management

All great powers that have entered into alliances have encountered problems that have required sometimes enormous diplomatic skills to overcome. An overwhelming external threat often concentrates allied minds, but not always: The British assembled five coalitions against revolutionary France and Napoleon before the sixth defeated him not once but twice. The difference was political maturity. As Richard Hart Sinnreich has written:

The cohesion of any coalition depends on each participating nation's self-restraint, above all that of the most powerful.... That self-restraint is the more necessary the closer the coalition

comes to achieving its military objectives, when the proximity of victory tempts the stronger power or powers to go it alone rather than accommodate the inconvenient preferences of weaker partners.... In repeatedly subordinating the desirable to the attainable without forfeiting the central aim of a Europe free of domination by a single untrammelled will, the authors of the Sixth Coalition revealed statesmanship of a high order.⁴¹

The United States managed its Cold War alliances, for the most part, with great skill, but it was helped by the fact that it faced a great threat:

As long as the Soviet arsenal of nuclear weapons and superior manpower on the ground remained in place NATO's solidarity was assured.... Notwithstanding mutual displays of annoyance, Europeans regarded the American commitment to the Alliance for almost two generations as a guarantee of stability in the West.⁴²

That sense of overwhelming danger was not strong enough in Asia to prevent the Southeast Asia Treaty Organization (SEATO) from dissolving itself in 1977. It had also dissipated in much of Europe by 1992 when the Balkan Wars broke out, leading to a reawakening of the belief that collective security was preferable to collective defense. For some states, including at that point the United States, Operation Desert Storm in 1991 was a powerful reassertion of the importance of the U.N. and a model for what could be achieved in a world that elevated collective security above narrow state interests. There was even a sense that, potentially, the door was now open for the U.N. Security Council to reassert the military role that the antagonism between the great powers (with one opportunistic exception) had rendered impossible for 45 years.

By 1998, the United States was exploring how, under certain circumstances, the alliance could extend its mandate beyond collective defense in the absence of a U.N. mandate. The 1991 Gulf War, for example, had been mandated by the U.N., but the main players involved in the fighting had been NATO

powers, and while the coalition formed specifically for the war was an ad hoc creation, the whole campaign had given the impression of a NATO operation.

These discussions, which took place in the context of a planned revision of NATO's Strategic Concept, were caught up in the controversy over NATO's role in the Kosovo War. Although in the end, and in the face of the threatened Russian and Chinese vetoes, the operation went ahead without U.N. approval, France insisted that NATO continue to acknowledge the primacy of the Security Council and, in the European context, the "essential role" of the Organization for Security Cooperation in Europe (OSCE), which had been established to monitor compliance with the 1975 Helsinki Accords. Despite this, the door was left open for the allies to operate without a U.N. mandate in the future.⁴³ Thus, America's membership in NATO has given it options to act with partners even in cases where broader consent or support vis-à-vis the U.N. is problematic.

The September 11, 2001, terrorist attacks on the United States triggered a powerful reaction from the international community and among America's alliance partners.

- The U.N. Security Council passed two separate resolutions condemning terrorism;
- NATO invoked Article Five (an attack on one is an attack on all) for the first time in its history;
- The NATO–Russia Permanent Joint Council condemned the attacks and promised to cooperate;
- Australia invoked the Australia–New Zealand–United States (ANZUS) Pact and instructed Australian personnel to deploy with U.S. forces as necessary;
- The Organization of American States (OAS) invoked the Rio Treaty; and

- Japan departed from post–World War II practice by authorizing its self-defense forces to assist U.S. forces, albeit in a limited number of non-combatant roles.

America's efforts over many years to foster wide-ranging alliances in various forms and with a multitude of partners resulted in an outpouring of support from friends around the world. The U.S. declined most of these offers of support, and this rebuff went down especially poorly with several NATO partners in Europe. The reasons were certainly not straightforward. *The Washington Times* reported that, "according to Undersecretary of Defense Douglas Feith, the United States was so busy developing its war plans in the early stage of the conflict that it did not have time to focus on coordinating Europe's military role."⁴⁴ In the same article, NATO expert Stanley Sloan was quoted as saying that Washington "may have been wrong about the potential utility of at least making a nod in the direction of the NATO offer and using it as a platform for future construction of a more relevant role for the alliance."⁴⁵

The real reason may have been that, scared by their experiences working with NATO in the Balkans, U.S. officials were reluctant to be drawn into a ponderous and consensual decision-making process, while the political leadership viewed NATO's offer as a thinly veiled attempt to gain some sort of institutional control over its response to the attacks.⁴⁶ However, the U.S. did make immediate use of NATO E-3 surveillance planes to monitor American domestic air space and in 2003 gave NATO command of the (by then United Nations-mandated) International Security Assistance Force (ISAF) in Afghanistan.⁴⁷

Coalitions of the Willing

It has always been necessary to measure the cost of alliances against their advantages. By the first decade of the 21st century, the United States appeared to view the costs of formal alliances as too high. The gulf that emerged in the 1990s between America's

technological capabilities and those of every one of its allies was in some cases so big as to be unbridgeable. U.S. forces struggled to be able to work with some of them. On top of that, some allies no longer valued a U.S. connection as highly as they once did because the threats they faced appeared to them to be less serious.

To long-standing American complaints of allied free riding—letting the U.S. pay for their defense so that they could spend money on social welfare or economic projects—was added a new complaint: If alliance memberships do not help to ensure that allies do not actively oppose U.S. policy decisions, what are they good for?⁴⁸ Arguments with European allies over Bosnia and Kosovo, for example, or U.S. withdrawal from the Philippines in the years following the fall of Ferdinand Marcos, or the continuing opposition to the U.S. base footprint on Okinawa all left question marks in American minds about the value of formal alliances.

Alliances are inseparable from their contexts. The world was changing. The context was no longer the Fulda Gap but events in far-off places that, while they concerned the world's sole surviving superpower, could be of little relevance to other members of the alliance or, for that matter, any static, geographically specific grouping of states. The fear that a spark in some distant brushfire war could ignite a global conflagration had gone. But America could not be so sanguine, and when attention switched to the Middle East, what it needed was not battle tanks but basing rights everywhere from Saudi Arabia to Uzbekistan.⁴⁹

In November 2002, President George W. Bush announced at a NATO summit that the United States would lead a "coalition of the willing" if Iraqi President Saddam Hussein refused to surrender his weapons of mass destruction (WMD).⁵⁰ The model was akin to the sheriff's calling for a posse: It was the mission that decided the coalition, not the coalition that decided the mission. If NATO could not be persuaded to support U.S. foreign policy objectives in Iraq *en bloc*, then individual

members could band together in a coalition whose legitimacy in this case derived from the fact it was made up of free, democratic states. However, that was not essential: All that was required was a common interest or perception of the threat perception and a willingness to do something about it.

Another coalition of the willing but not a military alliance is the Proliferation Security Initiative (PSI), also initiated in 2002. It has now been endorsed by 105 countries interested in preventing the spread of WMD.⁵¹

Such coalitions, military or otherwise, are “limited associations of convenience [that leave] countries free to pick and choose specific issues, locations and moments for cooperation based on their individual calculations of the national interest” without requiring them to subscribe to any set of common values or political philosophy.⁵² They put *Realpolitik* at the service of America’s predominant liberal internationalism, reinforcing the point that states do not have eternal allies, only eternal interests.

What coalitions of the willing do not do, as Kurt Campbell has pointed out, is institutionalize and encourage habits of cooperation and deep engagement, characteristics that embodied NATO’s operating style during the Cold War and America’s formal alliances like those with Japan and South Korea.⁵³ Relying exclusively on global coalitions of the willing may give the United States maximum flexibility, but it will be in exchange for an increased share of the military burden.⁵⁴ In Europe and perhaps in Asia, where political and military burdens can and should be shared, it may therefore be premature to call time on alliances, which for nearly three-quarters of a century have been among America’s greatest strategic assets.

Alliances: America’s Great Strategic Advantage

Since 1941, “alliances have proven to be a crucial and enduring source of advantage for the United States.”⁵⁵ How so?

- **Alliances prevent war.** Not every war, of course, but by driving up the cost of aggression, defensive alliances have an effective record of deterring revanchist states from using violence as a means of settling disputes or gambling on a quick military thrust to achieve relatively risk-free advantage. History suggests strongly that states with allies are less at risk of attack than those without them, an observation borne out by the success of U.S. alliances during the Cold War.

This does not mean that aggressors will refrain from using other means to achieve their objectives; in fact, they already are doing so, and campaigns designed deliberately to remain below the level of violent confrontation are likely to become more common. General Valery Gerasimov, chief of the Russian General Staff, has observed that in recent conflicts, non-violent measures occurred at a rate of four to one over military operations and that objectives previously viewed as attainable by direct military action alone could now be achieved by combining organized military violence with a greater emphasis on economic, political, and diplomatic activity.⁵⁶ Defensive alliances will therefore need to extend the breadth of their activities to avoid being outflanked by opponents that use unconventional means to acquire political advantage.

- **Alliances control rivals.** The United States is first and foremost an air and naval power. It wins its wars by retaining control of its own movement and access to supply and denying similar freedom to its adversary. To do that successfully requires a global network of bases and the ability to control the world’s key chokepoints. Geography and the current U.S. basing structure mean that China, Iran, and Russia are likely to be bottled up in any future conflict—although China’s recent island-building activity in the South China Sea

reveals a determination to secure its trade routes to the south and west and overcome what has been termed its “Malacca dilemma,”⁵⁷ and using non-military means has enabled it to confuse and blunt an effective U.S. and allied response to this expansion.

- **Alliances control allies.** Entrapment is a concern for any dominant alliance partner. Germany failed to restrain Austria–Hungary in 1914—indeed, encouraged it to act quickly to win what it expected would be a short war. This risk makes management of alliance relations essential, something at which the U.S. has proved to be remarkably adept. Conversely, the U.S. has felt constrained on occasion by its alliance partners, but mostly when they were being asked to operate in ways that were removed from the alliance’s primary task.
- **Alliances enable balancing.** When regional states attempt to disrupt the status quo, smaller regional states will either balance against it in an effort to retain their independence or join it (“bandwagon”) in an attempt to curry favor and, by being seen as friends, retain sufficient influence over its actions to limit damage to their own interests. A core of U.S. allies in each region can act as a center of attraction around which balancing can be built, as is occurring now in East Asia. Without them, the sole option for regional powers may be to bandwagon with the regional aggressor.
- **Alliances prevent alliance formation by others.** Most of the world’s military powers are members of U.S. alliances. If these alliances did not exist or were abandoned, states would almost inevitably be drawn closer to China, Russia, and Iran and possibly into alliances in active opposition to the United States.
- **Alliances control the bulk of the world’s military power.** The nations that are allied with the U.S. spend around \$1 trillion on defense (about 62 percent of global military expenditure) and have 6 million people (31 percent of their populations) under arms. China, Iran, and Russia collectively spend roughly 17 percent of global defense expenditure and are able to draw upon around 19 percent of global military manpower (roughly 3.7 million people under arms).⁵⁸
- **Alliances can hold the line.** In a multipolar world in which a reduced U.S. defense establishment might have to face multiple threats, strong and confident allies can hold the line even if they may not be able to roll back the aggression by themselves. This allows the U.S. time to prioritize threats and respond when it is able to do so.
- **Alliances facilitate global power projection.** The United States is isolated geographically behind two great oceans. To be able to exert power in Asia, the homeland of revanchist power, it requires bases in Europe, the Middle East, and East Asia. From these bases, it can exert influence and power where and when it needs to do so and in small packets early on to deter and prevent challenges from arising that later could be defeated only by the application of overwhelming force. The notion that the United States could mount a campaign using long-range U.S.-based air power or the concept of prompt global strike alone is based on a misunderstanding of what both capabilities are designed to achieve.⁵⁹
- **Alliances are the cost-effective option.** Preserving peace and sustaining the global political and economic system’s current U.S. orientation can be achieved most cost-effectively with allied support. The alternatives would call for either the maintenance of a huge U.S. military presence overseas far in excess of what is

being maintained now or the holding of substantial forces in readiness at home in case the need arose to fight their way back into Europe or Asia to confront trouble in support of what is called “offshore balancing.”⁶⁰

- **Alliances enhance international legitimacy.** They mean that the United States never has to walk alone. When it resists aggression, it is able to do so with the moral authority of the free world.

The U.S., Allies, and a Free World

The free world: a phrase that unfortunately has dropped out of fashion since the end of the Cold War yet is as relevant as ever. China, Iran, and Russia are revanchist powers. All three aim to revise the existing order in their respective regions unilaterally and at the least possible political and military cost to themselves. America is the leader of the free world, and revanchist powers know that if they are to

succeed, they must diminish U.S. power globally and undermine the tenets of the current, American-led global order.

Each successful step they take along that path diminishes U.S. security and the security of U.S. partners and allies who accept the current global order as one that serves their own political and economic interests as much as it serves those of the U.S. To achieve their aims, the leaders of China, Iran, and Russia are suppressing individual liberty in their own countries, isolating their populations from information that undermines their control, and concentrating power in their own hands. America has seen the world darken this way before and knows that a darker world is one in which conflict is more likely.

That conflict is arguably underway already: China, Iran, and Russia all act as if it is. In such circumstances, as Winston Churchill put it memorably in 1945, “There is only one thing worse than fighting with allies, and that is fighting without them.”⁶¹

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The Reality of Cyber Conflict: Warfare in the Modern Age

Paul Rosenzweig

Consider a fairly typical incident from 2014. In March of that year, *The New York Times* reported a persistent cyber threat, known by the code name “Snake,” that had infiltrated the cyber systems operated by the Ukrainian government. The program gave its operators full remote access to the compromised systems, which allowed the attackers to steal information as well as insert additional malware to create further harm. Citing confidential U.S. government sources, the newspaper attributed Snake to Russian actors and connected the deployment of the Snake virus to Russian intelligence collection and disruption of Ukrainian command-and-control systems.¹

At the same time, of course, Russian troops were on the ground in Crimea, and the potential for kinetic conflict between Ukrainian and Russian military forces loomed. Russia formally annexed Crimea just a few weeks later and since then has rather brazenly supported “separatists” in the Eastern Ukraine.

That single episode captures the new reality of military operations in the cyber domain in many ways. At a minimum, cyber conflict will be part of combined operations against physical opponents. Cyber tools will partake of the character of both espionage activities and traditional military activities. At times, the effect of cyber tools may be equivalent to kinetic weapons; at other times, they will be used in a more limited manner to degrade,

disrupt, or destroy data and information. In some cases, the origin and source of the tools used in a cyber conflict will be difficult, if not impossible, to discern, rendering attribution of responsibility for an attack problematic; in others, the origins are likely to be crystal clear but the long-term effects of the tool obscured. And all of this will occur at a time when legal norms about appropriate conduct in cyberspace are in a state of flux, without settled definition.

Perhaps even more confusingly, the nature of the conflict in the cyber domain may diverge from settled patterns of military conflict. We will, of course, likely see conflict between nation-states, but we will also see nation-states in conflict with non-state actors and, oddest of all, can also anticipate conflicts in the cyber domain between two non-state parties. How these conflicts will manifest themselves and the nature of the American military response to them will vary significantly in each context.

State vs. State

In a state-vs.-state conflict, we are likely to see cyber activity coupled with conventional operations. For example, since 2014, the cyber-enabled nature of the Russian-Ukrainian conflict has morphed even further. A partial list of cyber activities associated in open-source media with the conflict between Russia and Ukraine over Crimea and Eastern Ukraine would include:

- Russian pre-attack cyber espionage and network mapping of Ukrainian systems;
- Degradation of Ukrainian telecommunications links to Crimea during the Russian invasion, followed by the severing of cross-border telecommunications connections;
- Russian social network sites blocking sites and pages with pro-Ukrainian messages;
- Russia Today (the Russian English-language website) being hacked with the word “Nazi” prominently inserted into headlines to describe Russian actors;
- An IP-telephonic attack on the mobile phones of Ukrainian parliamentarians;
- Russian forces jamming cell phones, severing Internet connections with Ukraine, and seizing telecommunications facilities in Crimea;
- Multiple hacking operations under the #OpRussia and #OpUkraine hashtags including recruitment operations among local cyber-capable actors;
- A large-scale DDoS attack on Russian websites including the Kremlin and the Russian central bank;
- Similar DDoS attacks on Ukrainian news sites, most noticeably during the Crimean “independence” vote, using the DirtJumper botnet; and
- Noticeable activity by hackers of Turkish, Tunisian, Albanian, and Palestinian origin, more commonly attacking Russian sites in support of Ukraine.

One aspect of the conflict worthy of commentary is the evident restraint by both parties. It appears, for example, that no efforts have been made to have a kinetic, destructive

effect on critical infrastructure on either side of the border.

But that does not mean that the critical infrastructure is immune. To the contrary, Russia has been strongly implicated in an attack that took six Ukrainian power companies offline. The power outage was caused by a sophisticated attack using destructive malware known as BlackEnergy, which wrecked computers and wiped out sensitive control systems for parts of the Ukrainian power grid. The attack was so severe that it knocked out internal systems intended to help the power companies restore power. While the power generation systems themselves were not attacked, controlling computers were destroyed, and even the call centers used to report outages were knocked out.²

State vs. Non-State

Sometimes a state may be confronted by actions by a non-state actor (or perhaps a putative non-state actor whose activity cannot be convincingly attributed to a nation). Consider the recent late 2014 intrusion at Sony, which provides an instructive case both for testing the limits of our understanding of the legal definition of war and for demonstrating that the laws of armed conflict are not the only means of addressing cyber intrusions.³

The intrusion, conducted by a group identified as the “Guardians of Peace,” exfiltrated terabytes of data from Sony. Some of the data involved unreleased films; other data included embarrassing internal e-mails and proprietary information. Additionally, the hackers demanded that Sony withhold from release *The Interview*, a movie depicting the assassination of North Korean leader Kim Jong-Un. After delaying the release for several days, Sony eventually made the movie available through several alternate outlets. The FBI (relying in part on information provided by the National Security Agency) attributed the intrusion to North Korean government agents.⁴ Sony is not saying how great the damage to its financial interests is, but estimates range upward of \$50 million.

Here we have a state actor, North Korea, or its non-state affiliates using cyber means to degrade the economic interests of the citizens of another nation, the U.S. How shall we characterize this action? It had no kinetic effects, nor did it significantly affect the American economy. No matter how we view it, Sony is not “critical infrastructure” of the United States (though, oddly enough, the Department of Homeland Security does characterize it as such), so this is not an “armed attack” triggering the laws of armed conflict. Nor is it even an act of espionage. But calling this a state-sponsored criminal act seems to trivialize its geopolitical context.

In the end, the Sony intrusion and Russia’s disruption of the Ukrainian power grid seem to reflect a new category of conflict: a quasi-instrumental action by a nation-state or its surrogates that has significant but non-kinetic effects on a target nation. Such “attacks” are not a “use of force” or an “armed attack,” but they are likely to generate reciprocal responses from the target state that involve a wide array of state powers. The United States, for example, has publicly announced financial sanctions against North Korea⁵ and may very well have taken other, non-public actions in response.

Individual vs. State

Then we have the case of a well-placed or technically proficient individual “attacking” a state, often from inside an organization in much the same way a mole would operate to conduct espionage for a foreign intelligence service. In many ways, this insider threat is the most challenging for a nation because it takes advantage of asymmetric attack capabilities that are especially pronounced in the cyber domain.

Consider the following question: What or who has been the most significant cause of damage to the national security of the U.S. through cyber means in recent years? By any absolute measure, the most likely answer is Edward Snowden—a single individual who, through his own activities or perhaps with a

small cadre of a few fellow travelers, caused immense damage to American national security interests. The consequences of Snowden’s actions in 2013 include:

- Major damage to formal diplomatic relations between the U.S. and numerous countries identified as targets of U.S. surveillance or “cyber snooping”;
- Popular outrage among U.S. allies and friends in Europe over what they perceive as egregious American spying against their own national security interests (even though people generally accept that spying occurs even among friends, it becomes a different matter when it is revealed so publicly); and
- Opportunities for countries like China and Russia to create a perception of false equivalence between the nature of what they are doing (rampant economic espionage) and what the United States has been doing (more traditional national security intelligence activities).

Even worse, Snowden disclosed intelligence sources and methods to the detriment of the United States. As a result, terrorist groups and other governments have changed their communication activities so that the U.S. cannot as readily intercept their communications and understand their plans. China, for example, was alerted to a particularly significant penetration of one of their cyber systems—a penetration that, presumably, has since been terminated.

The scope of the damage caused by Snowden is nearly incalculable, and he did it as an independent actor rather than as an agent of a foreign government, which in past times would have been critical to his ability to operate at this level. Advances in the cyber domain have made it possible for individuals or small groups operating unaffiliated with any nation-state to cause profound, national-level damage that would have been unthinkable in

previous eras. And as non-state entities, they have no sovereign interest that might be leveraged as would be the case in a conflict between states.

Therefore, when we look at cyber conflict and threats to national security, we should not focus exclusively on other national opponents. Rather, our cyber conflict strategy needs to account for the “democratization” of conflict in and extending through the cyber domain, by which we mean simply that the tools and weapons of attack are now widely available and that the use of force—and in the context of modern societies, information is very much a tool of force—is no longer the exclusive province of nation-states.

Non-State vs. Non-State

In this light, the U.S. is in the midst of what scientist-philosopher Thomas Kuhn would call a paradigm shift.⁶ It is a shift that is empowering individuals to act with force in ways that were beyond our conception a few short years ago. To see one example of how that paradigm shift operates in practice, reflect on what we might call the “WikiLeaks War” from 2010—a conflict exclusively between non-state actors—and what role (if any) a national government might have in such a conflict.

With the disclosure of classified information from American sources like Chelsea (née Bradley) Manning, WikiLeaks appeared to be launching an assault on state authority and, more particularly, that of the United States, though other governments were also identified. Interestingly, the most aggressive and decisive response came not from government, but from the institutions of traditional commerce. There is no evidence that any of the governments ordered any actions, but the combination of governmental displeasure and clear public disdain for WikiLeaks Editor-in-Chief Julian Assange soon led a number of major Western corporations (MasterCard, PayPal, and Amazon, to name three) to withhold services from WikiLeaks. Amazon reclaimed rented server space that WikiLeaks had used, and the two financial

institutions stopped processing donations made to WikiLeaks.

What followed might well be described as the first cyber battle between non-state actors. Supporters of WikiLeaks, loosely organized in a group under the name Anonymous, began a series of distributed denial-of-service (DDoS) attacks on the websites of the major corporations that they thought had taken an anti-WikiLeaks stand, flooding the websites with “hits” to prevent legitimate access to them. The website of the Swedish prosecuting authority, who is seeking Assange’s extradition to Sweden to face criminal charges, was also hacked.

Some of the coordination for the DDoS attacks was done through social media, such as Facebook or Twitter. Meanwhile, other supporters created hundreds of mirror sites, replicating WikiLeaks content, so that WikiLeaks could not be effectively shut down. The hackers even adopted a military-style nomenclature, dubbing their efforts “Operation Payback.”

When Anonymous attacked, the other side fought back. The major sites used defensive cyber protocols to oppose Anonymous, rendering attacks relatively unsuccessful. The announced attack on Amazon, for example, was abandoned shortly after it began because the assault was ineffective. Perhaps even more tellingly, someone (no group has publicly claimed credit) began an offensive cyber operation against Anonymous itself. Anonymous ran its operations through a website, AnonOps.net, and that website was subject to DDoS counterattacks that took it offline for a number of hours.

In short, a conflict readily recognizable as a battle between competing forces took place in cyberspace, waged almost exclusively between non-state actors.

Anonymous’s failure to target corporate websites effectively and its relative vulnerability to counterattack are likely only temporary circumstances. Anonymous and its opponents will learn from this battle and approach the next one with a greater degree of skill and

a better perspective on how to achieve their ends. Many of their more recent attacks, such as the effort to shut down the Vatican's website, have already shown a great deal more sophistication and effectiveness.

Moreover, Anonymous has demonstrated that even with its limited capacity, it can inflict significant damage on individuals and companies. When Aaron Barr, corporate head of the security firm HB Gary, announced that his firm was investigating the identity of Anonymous participants, Anonymous retaliated by hacking the HB Gary network (itself a significantly embarrassing development for a cybersecurity company) and taking possession of internal e-mails that suggested that HB Gary was engaged in some questionable business practices. As a result, Barr was forced to resign his post.

More to the point, Anonymous has made quite clear that it intends to continue to prosecute its cyber war against the United States, among others. "It's a guerrilla cyberwar—that's what I call it," says Barrett Brown, 29, a self-described senior strategist and "propagandist" for Anonymous. "It's sort of an unconventional asymmetrical act of warfare that we're involved in, and we didn't necessarily start it. I mean, this fire has been burning."⁷

Or consider the manifesto posted by Anonymous, declaring cyberspace independence from world governments: "I declare the global social space we are building together to be naturally independent of the tyrannies and injustices you seek to impose on us. You have no moral right to rule us nor do you possess any real methods of enforcement we have true reason to fear."⁸ In February 2012, Anonymous went further by formally declaring "war" against the United States and calling on its citizens to rise and revolt.

In many ways, Anonymous conducts itself much as an opposing military organization might conduct itself. In February 2012, for example, it was disclosed that Anonymous had hacked into a telephone conversation between the FBI and Scotland Yard, the subject of which was the development of a

prosecution case against Anonymous. That sort of tactic—intercepting the enemy's communications—is exactly the type of tactic any government or insurgent force might use, and by disclosing the capability, Anonymous successfully created uncertainty about how much else it might be intercepting.

In advancing their agenda, the members of Anonymous look somewhat like the anarchists who led movements in the late 19th and early 20th centuries, albeit anarchists with a vastly greater network and far more ability to advance their nihilistic agenda through individual action. And like the anarchists of old, they have their own internal disputes, thus making comprehensive or singular analysis of objectives, methods, and potential points of leverage quite difficult. In 2011, for example, another group called Black Hat effectively declared war on Anonymous because it disagreed with the Anonymous agenda.

Even more important, however, Anonymous and its imitators look like the non-state insurgencies that the U.S. has faced in Iraq and Afghanistan: small groups of non-state actors using asymmetric means of warfare to destabilize and disrupt existing political authority.

A Strategy for Cyber Warfare

What are the implications of this paradigm shift for cyber/military strategy? They appear to be profound.

From Russia and China, we can expect some form of rationality in action. We can understand their motivations. We know why the Chinese are stealing intellectual properties to jumpstart their economy. We can make some judgments about what would and would not annoy them. In the end, they are rational actors just as the Russians were during the Cold War.

In the cyber domain, by contrast, the motivations of the actors are as diverse as the number of people who are there, and the closer you look, the more unclear things become. There are indeed many actors with many different motivations. They are often characterized as irrational chaotic actors. Perhaps it is a little

unfair to call them chaotic, but what seems to unify them is disrespect for authority, for hierarchy, for structure, a dislike of it and an effort to work outside of it. In this structure, they look much more like insurgents than national military forces.

Given this evolving shift from primary state actors to the n-player world of cyber warfare, a compelling case can be made for a new strategy that is relevant to the changed security environment.⁹ There are three factors that should guide thinking about a new cyber strategy—factors that are remarkably similar to those that shape counterinsurgency strategies.

- Cyber warfare favors asymmetries. Non-state actors with power nearly equal to the power of governmental actors are going to be the rule, not the exception. They can serve as proxies for state actors, as the Russian “patriotic hackers” do, but they are not nation-states themselves and thus exploit extraordinary flexibility in adapting to evolving conflicts.
- The capabilities of non-state actors are currently rather limited. They cannot take down the electric grid in the United States, for example, but that will change. We have five or perhaps even 10 years at the outside before the capabilities of non-state actors become almost equivalent to those of nation-state actors. Thus, the window of opportunity to get our strategy right is limited, and the U.S. must take advantage of the time while it can.
- The hardest part of the game is attribution. Knowing who the other side is and what their motivations are is the most difficult challenge of all. How does the U.S. deal with that? Who are these people? What are their true motivations? That is not something that can be fixed technologically. In the end, the U.S. must get better at it, but it is not something for which the same confidence in identifying the enemy

can be obtained that is often found in the kinetic world.

The military often talks about “whole of government” approaches to winning wars when “winning” is more than just the battlefield victory over an enemy’s military force. When it comes to cyber warfare, “whole of government” is the only approach that will work against the array of potential adversaries that are exploiting the cyber domain to accomplish their objectives. Integrating military and civilian activities, collecting intelligence, and building a host nation’s security capabilities are all critical elements when combating both state and non-state entities. The full suite of military, intelligence, diplomatic, law enforcement, information, financial, and economic tools will come into play in the new age of cyber warfare.

Organizing for Cyber Warfare

A strategy implies proper organizations and capabilities for fighting a war, but the current manifestations of both are in need of substantial review and investment. During the past several years, many cyber analysts—this author among them¹⁰—thought the best approach for the U.S. government in dealing with growing cyber threats was to maximize federal government control. What was needed, so the argument went, was a strong cyber czar who had budgetary and directive authority over as much of the government’s cyber capabilities and responsibilities as possible in order to centralize planning for and response to cyber attacks.

Unfortunately, this was precisely the wrong approach to take in dealing with cyber warfare as it has evolved over time. Cyberspace is the world’s most distributive dynamic domain. More than 3.5 billion people and more than a trillion things are connected to the network across the globe. It changes on a daily, even hourly, basis. The advanced, persistent threats that are intruding on Department of Defense (DOD) .mil computers today did not exist six months ago. They are newly

and purposefully built for that enterprise. A centralized hierarchy seems a poor fit for conflict with a diverse, multifaceted, morphing opponent in a battle space that changes every day.

The “big military” complex does a lot of things well, but one of the things it does *not* do well is turn quickly. The military’s conceptual turning radius is like that of an aircraft carrier, not a Corvette. The military’s major component in dealing with the cyber threat is U.S. Cyber Command (CYBERCOM), a sub-unified command that reports to U.S. Strategic Command. Though it was established only seven years ago in 2009, proposals are already being made to turn it into an independent command.

Given a lengthy pattern of behavior within the Pentagon, it is reasonable to expect that in spite of best efforts to the contrary, CYBERCOM is likely to feature many of the defining characteristics of very large military organizations: lots of rules; lengthy, hierarchical reporting chains; stifling acquisition rules; and a battalion of staff judge advocates (lawyers) who will oversee cyber activities down to the lowest levels of the organization. In this conflict space, however, a model based on “big military” design is the wrong model to pick. Rather, the cyber force needs to be much more akin to special operations: lean, quick to react, and flexible, with a flat administrative structure and possessing the tactical equivalent of a small operational detachment that has top-tier skills and broad authorities to conduct “special mission operations.”¹¹

Consider the cyber aspects of some of the recent conflicts America has faced. President Obama continues to consider physical action in Syria or Iraq to confront ISIS. What will ISIS’s cyber response be? What might Syria’s be? The Syrian Electronic Army has already told us that it is going to counterattack if American troops ever go to Syria, and ISIS has threatened to disrupt the American economy. The complexities of conflict are compounded by tactical interdependences and a lack of actionable intelligence.

- What do we know about their capabilities? On the public record, very little—though, to be fair, this may reflect less a gap in our understanding than the existence of capabilities that have not been publicly disclosed. As far as can be seen from the public sources, we do not have anybody on the inside of many of these non-hierarchical organizations.
- What are their likely targets? We may not know, because we do not have any sense of what their capabilities are or any intelligence on their targeting methodologies or what they think are our soft points.
- Do we have targeted weapons that can find the ISIS or Syrian Electronic Army command-and-control servers and take them out without taking offline the entire Syrian and Iraqi electric grids? I suspect that whatever such weapons we have are limited.
- Do we want to take down the entire Syrian and Iraqi electric grid? No, because that is both what the anti-ISIS militia and the Iraqi government are using for their command and control and what the civilians are using to ameliorate the horrible effects of the warfare they are undergoing.

When it comes to the zeroes and ones of DOD efforts to wage cyber warfare, DOD’s organization for battle in cyberspace is typical: offense, defense, functionally focused teams, specified and rigidly envisioned command authorities. DOD speaks of its awareness that “talent” is critical to acquire but hard to find, yet it operates largely within the conventional military model—recruit, train, assign, rotate, and promote—rather than finding and leveraging raw “organic” talent that is optimally suited for this sort of warfare but is very likely not to be found in a conventional military mold.

CYBERCOM has to work trans-domain and trans-COCOM (combatant command), accounting for the nature of the weapons

being used, the diversity and character of actors involved, and the combination of actor interactions. Yet CYBERCOM does not control most of the resources and lacks the authority to dictate to the broad range of largely non-government, private-sector entities that are of critical importance to cyber warfare.

A Separate Command for a Distinct Domain?

One final note: U.S. cyber organization reflects a relatively controversial decision to characterize cyber as a distinct domain. Often, cyber conflict is thought of as a component of information operations (using the cyber domain and related tools to shape perceptions and understanding) or as a subset of electromagnetic warfare (leveraging the same to cause effects on an opponent's physical ability to conduct operations).¹² Both characterizations are plausible, the first looking at the target area of a conflict (particularly the people in the battle zone) and the latter looking at the cognate physical domain (the assets the people are using to wage war). For this reason, many think that cyber weapons, as a tool of warfare, should be no different from other tools that are incorporated directly into the operational planning of geographic combatant commanders.

The counterargument is that it is useful to characterize the cyber domain as a separate domain, if only because its characteristics are sufficiently different in degree from those of warfare in the kinetic realm that they tend over time to become differences in kind. Under this construct, CYBERCOM is seen as akin to SOCOM (Special Operations Command), managing and employing a unique, highly valued capability that is not defined by region and can be used both for strategic effect and to support conventional military operations of the geographic COCOMs.

Whatever the merits of the debate, the U.S. government has chosen its course. For better or worse, we have characterized the domain based principally on the type of tool (or weapon, if you will) that is used.

But that characterization as a separate command resonates with even greater adverse consequences than a mere category mistake. It seems on reflection to be emblematic of a fundamental misperception of the nature of cyber conflict. To be sure, senior officials often speak of the newness of cyber warfare and acknowledge that new ways of thinking are required, but seven years on, most of the military response to cyber vulnerability reflects, to this author, an inability to reconceptualize military organization and response in light of the domain's unique characteristics. For example:

- The principal tenet of U.S. legal policy in the domain was a successful effort to adopt existing laws of armed conflict for cyberspace.
- Each of the military services has created within the service a cyber-focused military organization modelled on the fleet/air force model that governs the organization of kinetic military platforms.
- Similarly, CYBERCOM has organized itself along traditional lines with 13 teams, known as Cyber National Mission Teams, responsible for responding to an attack on U.S. critical infrastructure, accompanied by Cyber Combat Mission Teams. To address a lack of training, CYBERCOM has instituted a training system to create "common and strict operating standards" for U.S. cyber operators.¹³

Perhaps this is the right course. To be fair, the Mission Team approach does look somewhat like a special operations approach of the sort this author has advocated. Looking back 10 years from now, we may conclude that these more or less traditional military approaches to conflict in the cyber domain were the right ones.

Nevertheless, one may be skeptical. Considering how cyber capabilities are morphing into a hybrid form of conflict, some of this

seems misguided. Traditional military law, training, procurement, and organization are insufficiently nimble to be responsive to the democratization of conflict in cyberspace. We are seeing a sea-change in the capability of non-state actors, ad hoc groups, and even individuals that allows them to compete on an almost level playing field with nation-states and do significant damage to our national security interests. If we do not reconceptualize how we are thinking about cyber security, cyber policy, and cyber conflict, we are going to miss the boat.

Conclusion

We are facing a new world that is replete with new challenges and rapidly evolving requirements for new ways to respond to those challenges. Anonymous and its ilk are a harbinger: Power and force are being democratized, and we are not ready for it. We are in

the midst of a Kuhnian paradigm shift from a time when nation-states had a monopoly on the use of significant force to a time when destructive potential in cyberspace is increasingly available to anyone with the technical skills to employ it anywhere in the world from anywhere in the world irrespective of borders, authorities, or affiliations.

If this is the case, then our current military strategy for operations in cyberspace is focused on the wrong enemy at the wrong time, using the wrong tools and with the wrong hierarchy. This almost certainly means that we are setting ourselves up for catastrophic failure that will lead to nearly unimaginable consequences. Crafting a relevant and effective set of capabilities and response options is therefore a matter of increasing urgency.

The U.S. must get its cyber act together soon: Time is running out.

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Operational Concepts and Military Strength

Antulio J. Echevarria II

What are operational concepts, and how do they contribute to military strength? Essentially, operational concepts are generic schemes of maneuver. They provide the conceptual basis for operational planning and influence the design and employment of military forces. We can think of a military force as a specific slice of military strength. A party's military strength is, in other words, the aggregate of its military forces. Operational concepts provide a way to convert military strength into military power: the ability to employ military force where and when we want to employ it.

Military power is, of course, relative; it depends as much on our own capabilities as it does on those of our rivals. An Air Force that cannot penetrate an opponent's air defenses, for example, does not offer much in the way of genuine military power. Operational concepts can tilt the balance (or imbalance) in our favor by creating a functional or employment advantage, and the magnitude of that advantage can mean the difference between success and failure. Operational concepts can be tacit or explicit, planned or emergent. As generic schemes of maneuver, they link "ends" to "means" in military strategy and generally serve as the glue that holds it together.

At the same time, operational concepts have significant downsides. Specifically:

- They usually are poorly defined in military doctrine or shrouded in jargon, which in turn leads to confusion.
- The process by which they are developed is decidedly subjective. Despite many and varied efforts to make that process more objective, it invariably reflects service biases and preferences. That influence can be a virtue or a vice; often, it is a combination of both.
- While operational concepts clearly enable the exercise of military power, they also surely hinder it. This is true mainly because turning an operational concept into doctrine requires a broad and sustained commitment or buy-in, which in turn means opportunity costs in the form of exploring other ideas. This is especially the case with successful concepts such as AirLand Battle, which can breed complacency.

Operational Concepts in Joint Doctrine

The U.S. military's definition of an operational concept can be found in the Joint Chiefs of Staff's Joint Publication 1 (JP-1), the current version of which states:

Joint concepts examine military problems and propose solutions describing how the joint force, using military art and science, may

operate to achieve strategic goals within the anticipated future security environment. Joint concepts lead to military capabilities, both non-materiel and materiel, that significantly improve the ability of the joint force to overcome future challenges.¹

Unfortunately, this definition tells us what an operational concept does, not what it is. The failure to define something occurs frequently in U.S. military doctrine and stems from the dogmatic overuse of the active voice and a misplaced aversion to the verb “to be.” It amounts to a failure to communicate that undermines the chief purpose of doctrine, which is to establish a baseline for how the U.S. military operates. Such an understanding benefits not only all of the services, but also our allies and strategic partners. Achieving that purpose requires defining what things are, not just what they do.

Despite these definitional shortcomings, JP-1 does provide useful information about how the U.S. military develops its operational concepts. The purpose of such concepts is to propose “solutions to compelling, real-world challenges both current and envisioned.”² Operational concepts must offer “clear alternative[s]” to existing doctrine or capabilities and “demonstrate evidence of significant operational value relative to the challenges under consideration.” They are to be “idea-focused” and thus not “constrained by existing policies, treaties, laws, or technology.”³ Each concept is to be developed “collaboratively” with the participation of all U.S. military services and evaluated “rigorously” in war games, workshops, and other forums to identify its strengths and weaknesses and to ensure that it actually solves the specified problem.⁴

The evaluation process (Joint Concept Development Process) consists of five phases or steps: prospectus development, concept research and writing, concept evaluation, coordination and approval, and implementation.⁵ Once an operational concept is approved, which can take between 18 and 24 months, it is then fed into the “Joint Force Development Life Cycle.”⁶ The purpose of this cycle is to

identify any changes in military doctrine, professional education and training, and equipment required by the new concept. Once operational concepts have passed through the joint development life cycle, they become the overarching “ways” that link “ends” and “means” within the framework of contemporary military strategy.

Today, military strategy is typically thought of in terms of four critical variables: ends or objectives (what we want to achieve); ways or courses of action (how we propose to achieve it); means or resources (what we can reasonably make available); and risk (our assessment of the probability of success).⁷ As generic ways to influence force structure and design, operational concepts can also affect the level of risk, both favorably and unfavorably.

However, there are notable pitfalls in this process. For instance, stripping away political constraints may allow for maximum intellectual creativity, but it also creates an artificial environment wherein policies can be set aside, which in turn leads to operational approaches divorced from the most important kind of real-world challenges: policy constraints. This particular pitfall seems all the more egregious given how the U.S. military’s experiences in Afghanistan and Iraq have revealed the necessity for greater interagency coordination, or a “Whole of Government Approach.”⁸ Would it not be better to acknowledge political realities, perhaps as both constraints and opportunities, at the outset and then develop an operational concept within them and with full interagency participation?

Moreover, while operational concepts can pinpoint the need for new military hardware, they can also be reverse-engineered to justify developing or retaining preferred pieces of equipment or force structure. Because operational concepts influence force structure and military strategy, the stakes are high for each service, which in turn makes cross-service collaboration and objective evaluation that much more difficult. As a consequence, the process of concept development can devolve into a form of horse-trading, with one service

supporting another in return for an endorsement of its own concept later. The result might be a concept that simply avoids making the hard choices.

An example of a concept that avoided hard choices was *Joint Vision 2010*⁹ and its successor *Joint Vision 2020*.¹⁰ It essentially permitted each of the services to continue to develop its own suite of capabilities under the umbrella concept of Full Spectrum Operations. These capabilities—Dominant Maneuver, Precision Engagement, Focused Logistics, Full-Dimensional Protection—put a “mark on the wall” but ultimately meant business as usual for each of the services.¹¹

Operational Concepts in Practice

Given the vulnerabilities in the Joint Concept Development Process, it should not be surprising that our track record has been mixed. Some concepts, like AirLand Battle,¹² have proved successful; others, such as Effects-Based Operations,¹³ have failed; and still others, such as Air-Sea Battle,¹⁴ are under development.

AirLand Battle. AirLand Battle, one of the most prominent examples of a successful operational concept, was true to most of the criteria specified in joint doctrine. In 1982, AirLand Battle became the foundation for U.S. military doctrine.¹⁵ It also served as one of the principal “ways” in the West’s military strategy of deterrence during the Cold War, which in turn supported its grand strategy of containment. Although it was never tested against the Warsaw Pact, it was the basis for the operational plan that defeated the Iraqi army in Operation Desert Storm in 1991. AirLand Battle provided a blueprint, a generic scheme of maneuver, for how air and ground forces should operate to stop and ultimately destroy a Soviet-style attack in Central Europe.¹⁶

The compelling, real-world problem that the concept addressed was how to defeat a numerically superior foe while avoiding a costly war of attrition in a highly lethal environment, particularly one that might include nuclear and chemical weapons.

The answer was to put a premium on quality: highly trained troops with better morale, armed with superior weapons, and able to shoot, move, and communicate more efficiently than their foes. Maintaining mobility and a high tempo of operations was essential, as was striking at vital elements beyond the first echelon of the enemy force. Armored and mechanized formations were to block and channel the first echelon of an enemy’s advance, while attack helicopters and fixed wing aircraft were to strike along the enemy’s flanks and concentrate on destroying the command-and-control elements in its second and third echelons.

The key methodological innovation, therefore, was attacking in a synchronized manner throughout the depth of the “extended battlefield.”¹⁷ That, in turn, meant tying the distance between each echelon to the time available to act, all of which was based on a doctrinal template of how the Soviets should attack. Had the Warsaw Pact been able to deviate from that template in any significant way, which was considered highly unlikely, AirLand Battle would have become unhinged, though it might not necessarily have failed outright.

AirLand Battle profoundly influenced the Army’s operational doctrine. It propelled the operational level of war from a matter of debate to an item of doctrine, and it converted Clausewitz’s theory of “center of gravity”¹⁸ and the concentration of superior combat power against it.¹⁹ It also reinforced the need for new land-power requirements: the M1 Abrams Tank, Bradley Fighting Vehicle, Patriot Antiaircraft System, Apache Attack Helicopter, and Blackhawk Utility Helicopter, which became known as the “Big Five.”²⁰ These systems, it bears noting, were still outnumbered by the Soviets’ “Big 7” (T-72 Tank, BMP Amphibious Assault Vehicle, ZSU-23/4 Anti-Aircraft System, Hind-D Helicopter, 152mm SP Gun, 122mm SP Gun, and SA-3 Surface-to-Air Weapon) but were considered more than a match qualitatively.²¹

AirLand Battle also had the advantage of replacing an unpopular, short-lived, and

perhaps dubious concept called Active Defense.²² This concept embraced rather than eschewed attrition—withdrawing just ahead of the Soviet advance, forcing it to deploy, attriting it while it did so, and withdrawing again before becoming decisively engaged. It was less about trading space for time than it was about achieving favorable exchange ratios (better than 3:1) on a relentless basis. As its critics noted, however, it aimed more at avoiding defeat than winning in a manner that might give political leaders something to bargain with at the negotiating table.

Collaboration between the U.S. Army and U.S. Air Force in the development of AirLand Battle was extensive, if fraught with friction.²³ The U.S. Navy was involved only tangentially, since it already had a major mission, detailed in the 1986 *Maritime Strategy*: to protect sea lines of communication and supply across the Atlantic Ocean and the Mediterranean Sea, to provide supporting air cover where possible over Western and Central Europe, and to maintain the ability of its submarine fleets and carrier battle groups to strike targets inside the Soviet Union.²⁴ The Navy's mission clearly supported deterrence in Western Europe and containment, and because its service equities were not threatened, it had no reason to obstruct the development of AirLand Battle.²⁵

AirLand Battle was not without its opportunity costs. Those came in the form of “military operations other than war” (MOOTW, or missions ranging from shows of force to humanitarian assistance), which were treated as “lesser included.”²⁶ However, not all such operations could be treated as miniature AirLand Battles. Some examples were the interventions in El Salvador (1979–1991) and Colombia (1978–2011); the aborted rescue operation in Iran (1980); the interventions in Grenada (1983) and Panama (1989); and the humanitarian assistance operation in Somalia (1992–1994). From this sample, the United States might claim four “wins” and two “losses,” or a 66 percent success rate—simply not good enough.²⁷

Effects-Based Operations. In contrast to AirLand Battle, Effects-Based Operations (EBO) did threaten service equities: specifically, those of the Army and Marine Corps. EBO was officially defined as a “process for obtaining a desired strategic outcome or ‘effect’ on the enemy through the synergistic, multiplicative, and cumulative application of the full range of military and other national capabilities at the tactical, operational, and strategic levels.”²⁸ In short, it was to afford policymakers a menu of “effects” from which they might choose the one they desired.

EBO belonged to an umbrella concept referred to as Network-Centric Warfare, credit for which belongs chiefly to the late Admiral Arthur K. Cebrowski of the U.S. Office of Force Transformation.²⁹ It did not respond to a specific real-world challenge, but rather attempted to leverage information technology in a manner that would make warfare more precise, less costly, and ultimately more useful as an instrument of policy.

Coalition forces attempted a version of EBO during the Kosovo conflict in 1999 and in the early stages of the campaigns in Afghanistan and Iraq. While destruction of matériel and disruption of infrastructure and communications were readily accomplished, effects beyond these accomplishments remained elusive. In 2008, the U.S. Joint Forces Commander, U.S. Marine Corps General James Mattis, shelved the concept for being inimical to war's unpredictable nature.³⁰ By then, however, EBO and NATO's counterpart EBAO (Effects-Based Approach to Operations) were already integrated into several nations' operational doctrines.

As happened with AirLand Battle, the West's experiments with EBO led to significant opportunity costs in terms of exploring other concepts. In theory, EBO could be employed broadly across the diplomatic, informational, military, and economic (DIME) dimensions of national power; in practice, it was applied only to a narrow segment of the spectrum of operations, a segment in which the U.S. military already excelled. The other

agencies within the U.S. government failed to embrace it.

Consequently, EBO amounted to a refinement of military operations in a single portion of the spectrum of conflict; not unlike AirLand Battle, it proved ill-suited to humanitarian assistance or similar operations requiring physical control and human presence and interaction: in other words, shoes as well as boots on the ground.³¹ Put differently, if the post-Cold War security environment was really characterized by unprecedented uncertainty, as many claimed, it would have been wiser to develop a broad array of capabilities and ways of thinking to avoid what historian Sir Michael Howard famously referred to as “being too badly wrong.”³²

Air-Sea Battle. Although EBO was shelved, it was by no means dead. Its principles resurfaced in the concept of Air-Sea Battle, which was unveiled (perhaps prematurely) in 2010. Air-Sea Battle generated controversy almost immediately, but it did respond to a specific real-world challenge. The version unveiled in 2010 was a “point-of-departure” concept designed to address China’s growing anti-access/area-denial (A2/AD) capabilities along the Pacific Rim. As its authors explained:

These capabilities threaten to make US power projection increasingly risky and, in some cases and contexts, prohibitively costly. If this occurs, the United States will find itself effectively locked out of an area that has been declared a vital strategic interest by every administration for the last sixty years.³³

The U.S. military already had a doctrine for conducting “forcible entry” operations, which was barely two years old, but it applied mainly to the kinetic use of force in time of war.³⁴ It did not address the larger strategic goal of maintaining a “favorable conventional military balance throughout the Western Pacific region” with the ability to “deter China from acts of aggression or coercion in the region.”³⁵ Thus, the problem posed by the People’s Liberation Army’s growing A2/AD capabilities was (and remains) a compelling real-world challenge

worthy of a revised operational concept—provided that concept also addresses how to augment military capabilities with other forms of power in order to gain more deterrence value. The unclassified versions of Air-Sea Battle have not yet addressed this issue.

In addition, several failures related to insular thinking and timing undercut Air-Sea Battle. The concept’s authors did not adequately incorporate Army and Marine Corps equities into its development. That *faux pas* was later corrected, at least partially, when Air-Sea Battle was subordinated to the Joint Operational Access Concept (JOAC), which took a more service-integrated approach to solving the access problem.³⁶ Nonetheless, it was an egregious error of omission at a time when rumors of significant downsizing across the Department of Defense (DOD) were gaining momentum.

The lack of full cross-service integration led senior Army and Marine Corps leaders to believe that their services were to be the “bill-payers” for the “Pacific Rebalance” and for implementing Air-Sea Battle. It is little wonder, then, that the concept was greeted with such hostility.

Second, although its authors took pains to explain that Air-Sea Battle was not about “containing” or “rolling back” China, but rather about “offsetting the PLA’s unprovoked and unwarranted military buildup,” it did not play that way in the media.³⁷ Critics reacted sharply, claiming that Air-Sea Battle was a poor substitute for a military strategy (which, however, it was not intended to be) and that it would likely provoke China precisely when the United States wanted to avoid doing so. As official documents tried to make clear, Air-Sea Battle was not intended to function in isolation, but to be combined with “security assistance programs, and other whole-of-government efforts.”³⁸ It signaled a commitment by the United States to maintain an “escalation advantage” in conflict while sustaining “security and prosperity” in peacetime.³⁹

The central idea of Air-Sea Battle in its unclassified form is “to develop networked,

integrated forces capable of attack-in-depth to disrupt, destroy, and defeat adversary forces.”⁴⁰ In this regard, it shows the influence of network-centric operations, a concept first advanced in the 1990s as part of a DOD-wide effort to capitalize on the revolution in military affairs (RMA).

- A “networked” force is one in which command and control can be exercised instantaneously across service-specific barriers or protocols not only through technological means, but also through “habitual relationships across service, component, and domain lines.”⁴¹
- The notion of an “integrated” force goes beyond the traditional idea of task-organizing for a mission; instead, units are to be “pre-integrated” with regard to joint and combined training and procedures well before arriving in theater and, ideally, in terms of material management, thereby ensuring interoperability and minimal redundancy.
- The ability to “attack-in-depth” refers to the use of kinetic and non-kinetic means in the form of offensive and defensive fire and movement to accomplish one of three outcomes or some combination of them: disrupting an adversary’s “effects chains” (the opponent’s process of finding, fixing, tracking, targeting, engaging, and assessing) by impeding command and control and the flow of information; destroying A2/AD platforms and systems; and defeating weapons and formations “post-launch.”⁴² Attack-in-depth thus reflects the influence of the ideas that underpinned EBO, though the term itself is avoided.

In fairness, Air-Sea Battle was exactly what it claimed to be: a single answer to a specific operational challenge. While that challenge is not new, the relentless advance of technology is making it more difficult. The concept placed

a very high, perhaps idealistic “mark on the wall” with regard to the level of capabilities and competencies necessary to execute it. It is still under development as part of the Joint Operational Access Implementation Plan.⁴³

In the interim, the JOAC serves as the doctrinal concept for the U.S. military’s working solution to the contemporary A2/AD challenge. In brief, the JOAC says we can project force in an A2/AD environment by using “cross-domain synergy” to achieve superiority in specific domains, which will then lead to a certain amount of “freedom of action.”⁴⁴ Interestingly, the tone is reminiscent of the optimism that characterized military theory on the eve of World War I, which proposed using firepower superiority to overcome the anticipated strength of the defense.

Emergent Concepts

Some operational concepts are emergent. These concepts develop not in anticipation of future problems, but as responses to challenges that arise during a conflict.

An example occurred most recently in the campaigns in Iraq and Afghanistan with the emergence of U.S. counterinsurgency doctrine. The doctrine was not new; rather, it was a rediscovery of previously accepted principles. Both the Army and Marine Corps already had a substantial number of official publications addressing guerrilla warfare and insurgencies,⁴⁵ but that doctrine had all but faded from institutional memory, partly because of the residual influence of AirLand Battle and partly because of the enthusiasm with which the Office of the Secretary of Defense pushed its technology-based transformation program in the 1990s. It thus had to be rediscovered and updated.

When enemy fighters shifted to insurgent techniques, therefore, many Coalition formations had to adapt without the benefit of either explicit or tacit operational concepts. Nonetheless, some American units were employing counterinsurgency techniques by 2004 and 2005, well before official U.S. counterinsurgency doctrine appeared.⁴⁶ Several

scholars described this adaptation as a revolution from the top down, while others portrayed it as coming from the “bottom-up.”⁴⁷

In truth, it was neither. The emergence of counterinsurgency techniques came into play more or less from a “sideways” direction, or laterally, through mid-level officers and noncommissioned officers who exercised reach-back capabilities and consulted with civilian experts and with each other to exchange information and share knowledge about what worked and what did not. Many counterinsurgency principles and practices (as well as healthy criticism of them) emerged through sheer trial and error and through the common sense (or experienced judgment) of brigade and battalion commanders.

Official U.S. counterinsurgency doctrine, when it did appear, helped to codify and standardize—that is, render explicit—many of the procedures that were already in play, albeit unevenly and perhaps even poorly in some cases, and augmented them with others. It also situated such practices within a generic scheme of maneuver, which in turn rationalized them. The various stances in the counterinsurgency debate are well known and need not be addressed here.⁴⁸

The U.S. military’s rediscovery of counterinsurgency techniques was part of the process of adaptation that occurs relentlessly in wartime. Adaptation is simply how we cope with a situation or an adversary; in contrast, innovation is how we overcome one or the other—or, in some instances, both.⁴⁹

Conclusion

As we have seen, operational concepts are integral to military strength. They help to convert potential military strength into military power, an unquestionably essential function. However, they also have significant downsides. In part, these downsides stem from the processes by which operational concepts are developed. As JP-1 revealed,

operational concepts are to be developed in a manner that affords a maximum amount of intellectual creativity. Paradoxically, this approach is also what makes operational concepts—whether AirLand Battle, Effects-Based Operations, Air-Sea Battle, or counterinsurgency doctrine—vulnerable.

In theory, each service should know best what it needs to be able to operate in the future security environment. In practice, however, what the services know is sometimes exquisitely irrelevant to the needs of policymakers. Armed conflict can have the effect of forcing policymakers and military professionals outside of their comfort zones. That, in short, is what led to the emergence of counterinsurgency as an operational concept; it was an answer of sorts, however flawed, to a situation that the concept development process, and all of its attendant evaluation and war-gaming, ought to have anticipated and yet did not.

The evaluation part of the process ought to force political and military leaders outside of their comfort zones long before the fighting starts. Otherwise, we are engaging in a tautology in which our operational concepts are designed to fight the abstract battles we like instead of the real wars we do not like. The bitter irony is that sometimes the tautology works. Operation Iraqi Freedom was the real war that suited the abstract battle. We would do well to remember, though, that such victories will offer little comfort when the opportunity costs of our tautology come due.

What about the future? Events in Eastern Europe and East Asia suggest that there is a need for an operational concept capable of exerting better deterrent and coercive leverage. Might we see some form of an intellectual blend—a maneuver-oriented concept that can coerce, married to an A2/AD concept that can deter? Certainly, the real-world challenge is there.

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On Strategy and Strategic Planning: Repairing America's Strategic "Black Hole"

Mackubin Thomas Owens

Strategy has long been the subject of scholarly study and policy analysis. Historians and social scientists alike have written widely about strategic thought, process, and practice. Scholars continue to dissect the meaning of strategy.¹ War colleges teach courses on the subject, as do civilian colleges. Yale University, for instance, has a well-regarded program on grand strategy, and other universities have followed suit.

Strategy and strategy-making are complex phenomena, not reducible to a simplistic mechanical process, and the making of strategy deserves more study than it often receives. In many respects, U.S. strategic planning has been rendered nearly useless because the processes have become routinized and thereby trivialized. Legislatively required documents such as the National Security Strategy and the Quadrennial Defense Review (QDR) initially may have been useful but now are merely periodic bureaucratic exercises.

The result is what Colin Gray calls "a black hole where American strategy ought to reside."² What the United States needs is a return to the long-range strategic planning process that it implemented during the Cold War.

On Strategy and Policy

When all is said and done, strategy is ultimately best understood as the interaction of three things, all within the context of risk assessment:

- **Ends** (the goals or objectives that the strategic actor seeks to achieve);
- **Means** (the resources available to the strategic actor); and
- **Ways** (the strategic actor's plan of action for utilizing the means available).

In essence, any strategy worth the name should articulate a clear set of achievable goals; identify concrete threats to those goals; and then, given available resources, recommend the employment of specific instruments to meet and overcome those threats.

A good strategy also seeks to minimize risk by, to the extent possible, avoiding mismatches between strategy and related factors. For instance, strategy must be appropriate to the ends as established by policy. Strategy also requires the appropriate tactical instrument to implement it. Finally, the forces required to implement a strategy must be funded, or else it must be revised. If the risk generated by such policy/strategy, strategy/force, and force/budget mismatches cannot be managed, the variables must be brought into better alignment.

History clearly teaches that the development of a coherent strategy is absolutely essential to national security in times of both war and peace. In the absence of a coherent strategy, non-strategic factors such as bureaucratic and organizational imperatives and the

vicissitudes of domestic politics will fill the void to the detriment of national security.

Modern strategic studies can be said to begin with the division of the art of war into the theory of “the use of engagements for the object of the war” (strategy) and “the use of armed forces in the engagement” (tactics) by the great interpreters of Napoleonic warfare, Baron Antoine Henri de Jomini and Carl von Clausewitz.³ As the latter wrote:

Strategy is the use of the engagement for the purpose of the war. The strategist must therefore define an aim for the entire operational side of the war that will be in accordance with its purpose. In other words, he will draft the plan of the war, and the aim will determine the series of actions intended to achieve it: in fact, shape the individual campaign and, within these, decide on the individual engagements.⁴

These 19th century writers originated the modern conception of strategy as the art of assembling and employing military forces in time and space to achieve the goals of a war.⁵ While such writers normally limited their use of “strategy” to mean the application of military forces to fulfill the ends of policy, it is increasingly the practice today to employ the term more broadly so that one can speak of levels of strategy during both peace *and* war.⁶ Accordingly, more often than not, strategy now refers not only to the direct application of military force in wartime, but also to the use of all aspects of national power during peacetime to deter war and, if deterrence fails, win the resulting conflict.

This more expansive usage of strategy inevitably overlaps with the common meaning of “policy,” which is defined as the general overall goals and acceptable procedures that a nation might follow and the course of action selected from among alternatives in light of given conditions. In their military history of the United States, Allan Millett and Peter Maslowski define defense policy as “the sum of the assumptions, plans, programs, and actions taken by the citizens of the United States, principally through governmental action, to ensure the

physical security of their lives, property, and way of life from external military attack and domestic insurrection.”⁷ For our purposes, “policy” refers primarily to such broad national goals as interests and objectives, and “strategy” to the alternative courses of actions designed to achieve those goals, within the constraints set by material factors and geography.

In general, strategy provides a conceptual link between national ends and scarce resources, both the transformation of those resources into means during peacetime and the application of those means during war. As such, it serves three purposes.⁸

- Strategy relates ends or the goals of policy (interests and objectives) to the limited means available to achieve them. Both strategy and economics are concerned with the application of scarce means to achieve certain goals, but strategy implies an adversary who actively opposes the achievement of the ends.
- Strategy contributes to clarification of the ends of policy by helping to establish priorities in the light of constrained resources. In the absence of established priorities among competing ends, all interests and all threats will appear equal. In the absence of strategy, planners will find themselves in the situation described by Frederick the Great: “He who attempts to defend too much defends nothing.”
- Strategy conceptualizes resources as a means in support of policy. Resources are not means until strategy provides some understanding of how they will be organized and employed. Defense budgets and manpower are resources. Strategy organizes these resources into divisions, wings, and fleets and then employs them to deter war or to prevail should deterrence fail.

The first two functions make it clear that a broad national strategy must shape strategies for various regions and theaters by

prioritizing them. In terms of warfighting, the national strategy establishes the desired goals in a theater, linking operational considerations to the requirements established by national authorities. Based on guidance from higher authorities, the theater commander determines the desired outcome within his area of responsibility. The staff then develops war plans based on an array of plausible scenarios. Using various force planning models and war games to determine force size and mix, the theater commander's staff then derives the force necessary at the outset of a campaign to achieve the desired outcome.

In addition to determining the required force, staffs at all levels also determine the schedule for deploying forces from out of the theater. Part of this determination is establishment of the Time-Phased Force Deployment Line, designating in a detailed manner the timeline for forces to be deployed to the theater. The higher-level strategies also establish priorities among the various theaters, indicating which will be the site of the main effort and which might be designated "economy of force" in the event that crises occur in more than one theater simultaneously.

National strategy thus guides "force apportionment," the distribution of existing forces among the various theaters. During World War II, national strategy dictated a policy of "Europe first." During the Cold War, U.S. strategy dictated a focus on Europe followed by the Asia-Pacific and finally by the Greater Middle East.

Of course, warfighting and war planning are only part of the theater commander's job. He is also responsible for shaping the theater in hopes of advancing U.S. interests without recourse to war, engaging the governments within the region and developing the necessary security infrastructure to maintain a favorable state of affairs. In this regard, the theater commander employs such tools as security assistance, military exercises, and humanitarian support. The theater commander's actions are not strictly military in nature; diplomacy and interagency operations play a

major role in the development and implementation of each geographic command's Theater Security Co-operation Plan.

The final function of strategy is to serve as a guide to force planning. In theory, the strategy-force planning process is logical. The planner first identifies national interests and the objectives required to achieve those interests. The planner then conducts a net assessment in order to determine the ability of adversaries to threaten those interests or to interfere with the achievement of national objectives. These represent the "operational challenges" that U.S. forces must surmount in order to implement the strategy. Next, the planner forges a strategy to overcome operational challenges and a budget to fund the capabilities and operational concepts that are needed to implement the strategy.

The execution of any chosen strategy requires the fulfillment of certain strategic requirements. These requirements determine the necessary military capabilities and operational concepts, which in turn drive the acquisition of forces and equipment. Thus, if there is a strategic requirement for a particular capability, the forces or equipment needed to provide that capability presumably should be obtained. To overcome these operational challenges and confront plausible future areas of military competition, the United States must develop new operational concepts.⁹

Although strategy can be described as the conceptual link between ends and means, it cannot be reduced to a mere mechanical exercise. Instead, it is "a process, a constant adaptation to shifting conditions and circumstances in a world where chance, uncertainty, and ambiguity dominate."¹⁰ It is a mistake to attempt to reduce strategy to a single aspect, although it is not unusual for writers on strategy to try.¹¹ Clausewitz dismissed as simplistic the reduction of strategy to "principles, rules, or even systems" because, on the contrary, strategy "involves human passions, values, and beliefs, few of which are quantifiable."¹²

Strategy, properly understood, is a complex phenomenon comprising a number of

elements. Among the most important of these are geography; history; the nature of the political regime, including such elements as religion, ideology, culture, and political and military institutions; and economic and technological factors.¹³ Accordingly, strategy can be said to constitute a continual dialogue between policy on the one hand and these various factors on the other.¹⁴

Strategy as a Dialogue Between Policy and National Power

To be successful, strategy-making must be an interactive process that takes account of the interplay of all relevant factors. An inflexible strategy may be worse than no strategy at all, as the Germans discovered in 1914 and the French found in 1940. To paraphrase Gray, strategy is the product of the dialogue between policy and national power in the context of the overall international security environment.¹⁵

Real strategy must take account of such factors as technology, the availability of resources, and geopolitical realities. The strategy of a state is not self-correcting. If conditions change, policymakers must be able to discern these changes and modify the nation's strategy and strategic goals accordingly.¹⁶ For instance, while the U.S. policy to contain the Soviet Union remained essentially constant during the Cold War, certain factors changed. Accordingly, it is possible to identify three distinct strategic periods during the Cold War, all of which had operational and force-structure implications.¹⁷

When strategy-makers do not adapt to changing conditions, serious problems can result. Jakub Grygiel shows how a failure to adapt strategy to geopolitical change led to the decline of Venice (1000–1600); the Ottoman Empire (1300–1699); and Ming China (1364–1644).¹⁸ Each actor faced changing circumstances but made wrong strategic choices. These cases are cautionary for the United States, since it has faced substantial geopolitical changes of great magnitude since the end of the Cold War: the decline and then

reassertion of Russian power, the expansion of terrorist organizations, the rise of China, disorder in the Greater Middle East, and the new geopolitics of energy.

Strategic Culture

Another important aspect of strategy-making is the “strategic culture” of a state or nation. By applying the notion of strategic culture, analysts attempt to explain continuity and change in national security policies, thereby creating a framework that can explain why certain policy options are pursued by states that share a given strategic culture.¹⁹

For instance, historians have noted that the strategic culture of sea powers tends to differ from the strategic culture of land powers. Thus, one sees similarities between the strategic approaches of Athens, Great Britain, and the United States on the one hand as opposed to the strategic approaches of Sparta, Germany, and Russia on the other. China seems to possess a discernible strategic culture traceable to Sun Tzu and other Chinese military thinkers.²⁰ The same holds for Islamic states.²¹

According to Kerry Longhurst:

[A] strategic culture is a distinctive body of beliefs, attitudes and practices regarding the use of force, which are held by a collective and arise gradually over time, through a unique protracted historical process. A strategic culture is persistent over time, tending to outlast the era of its original inception, although it is not a permanent or static feature. It is shaped and influenced by formative periods and can alter, either fundamentally or piecemeal, at critical junctures in that collective's experiences.²²

For Carnes Lord, strategic culture constitutes the traditional practices and habits of thought by which military force is organized and employed by a society in the service of its political goals.²³

One of the charges often brought against American strategic culture is that it confuses technological superiority with strategy itself. For instance, critics of the efforts to

“transform” the U.S. military in the early years of the 21st century claimed that America tends to seek technological fixes for strategic problems in an attempt to remove itself from the sharp end of war.²⁴

Strategy vs. Nonstrategic Factors

In any case, strategy is an indispensable element of national security. Without it, something else will fill the void. For example, in wartime, service doctrines will dominate the conduct of operations if strategy is absent. This state of affairs is captured by Andrew Krepinevich in his characterization of the Vietnam War as “a strategy of tactics.”²⁵

In peacetime, defense planning is usually dominated by domestic policy considerations such as organizational imperatives and congressional politics. In his 1961 book *The Common Defense*, Samuel Huntington observed that military policy exists in two worlds: the world of international politics and the world of domestic politics. The first world is shaped by such factors as balance of power, wars and alliances, and the use of force and diplomacy to influence the actions of other states in the international arena. The principal “currency” of this arena is “power,” primarily military power. The second world is shaped by interest groups, corporate interest groups, political parties, social classes, and the like. The currency here is the resources provided by society, personnel, money, and matériel.

Military decisions influence and are influenced by both worlds, and a decision in one currency is payable in the other. Huntington called the decisions in the currency of international politics *strategic* in character. Decisions in the currency of domestic politics are *structural*. Unless there is a strong and coherent strategic vision to guide defense decisions even during peacetime, defense decision-making is likely to be dominated by structural decisions.²⁶

Levels of Strategy

War and conflict can be divided into several levels. As noted, Clausewitz distinguished

between tactics, “the use of armed forces in the engagement,” and strategy, “the use of engagements for the object of war.” It is now common to speak of an intermediate level between strategy and tactics: the “operational level of war,” a realm concerned with the planning and conduct of campaigns to achieve strategic goals within a theater of war.²⁷ The central focus of this essay is the strategic level of war and conflict, which in itself is subject to further subdivision.²⁸

In its broadest sense, strategy is grand strategy. In the words of Edward Mead Earle:

[S]trategy is the art of controlling and utilizing the resources of a nation—or a coalition of nations—including its armed forces, to the end that its vital interests shall be effectively promoted and secured against enemies, actual, potential, or merely presumed. The highest type of strategy—sometimes called grand strategy—is that which so integrates the policies and armaments of the nation that resort to war is either rendered unnecessary or is undertaken with the maximum chance of victory.²⁹

Thus, grand strategy is intimately linked to national policy in that it is designed to bring to bear all the elements of national power—military, economic, and diplomatic—in order to secure the nation’s interests and objectives. Grand strategy can also refer to a nation’s overarching approach to international affairs: isolationism or disengagement, cooperative or collective security, selective engagement, and primacy.³⁰

Finally, grand strategy can allude to a geopolitical orientation: “continental” or “maritime.”³¹ Whichever meaning is emphasized, the choice of a grand strategy has a major impact on the other levels of strategy and force structure.

Military power is one instrument of grand strategy. How military power is employed in both war and peace is the province of military strategy. In peacetime, military strategy provides a guide to what Samuel Huntington calls “program decisions” and “posturing.” Program decisions involve the strength of military

forces, their composition and readiness, and the number, type, and rate of development of weapons. Posturing is defined by how military forces are deployed during peacetime to deter war (Clausewitz's "preparation for war"). In wartime, military strategy guides the employment of military force in pursuit of victory (Clausewitz's "war proper").³²

U.S. Strategic Planning and the Strategic "Black Hole"

Given the relatively secure position of the United States at least after the War of 1812, the early American national security apparatus—the State Department, War Department, and Navy Department—remained small and primitive compared to those of the European states. Nonetheless, the United States in fact pursued a consistent grand strategy from the Founding until the outbreak of World War II. The objective of this grand strategy—often mistaken for isolationism—was to maintain the security of the United States by means of skillful diplomacy combined with preemption and unilateralism.³³

With the outbreak of World War II, the requirements of fighting a global conflict in conjunction with allies impelled the United States to develop the sort of national security apparatus we see today, but it was not until the Cold War, the National Security Act of 1947, and subsequent amendments that this structure came of age.³⁴

The problem today is that the documents that supposedly inform U.S. strategy do no such thing. They are, at best, pro forma bureaucratic exercises. For instance, the National Security Strategy (NSS), required by the Goldwater–Nichols Act of 1986, presumably serves as the U.S. grand strategy document, defining U.S. security interests, objectives, and goals and providing guidance to those who are charged with executing that strategy. But while there have been some excellent examples in the past, the NSS has lately become little more than a list of aspirations with no real strategic plan for achieving its stated goals.

Other documents intended to supplement the NSS—the National Defense Strategy, National Military Strategy, and Quadrennial Defense Review—have served only to confuse strategic planning. This is especially true of the QDR, which has long been little more than a bureaucratic budgetary exercise that the services "game" in order to protect or expand their shares of the defense budget. In addition, the QDR has recently been required to address the latest fashionable issues of the day, such as "climate change."

In short, the United States has failed to provide useful strategic guidance for translating national policy into theater strategy and force employment, shaping force structure, and integrating and synchronizing the planning and activities of the Joint Staff, combatant commands, the services, and combat support agencies. As Michele Flournoy and Shawn Brimley have observed:

The U.S. government currently lacks both the incentives and the capacity to support strategic thinking and long range planning in the national security arena. While individuals on the National Security Council (NSC) staff may develop planning documents for their respective issues, the NSC staff lacks adequate capacity to conduct integrated long-range planning for the president. While some capacity for strategic planning exists in the Department of Defense (DOD), no other department devotes substantial resources to planning for the long-term future. Although the State Department's policy planning office develops a "big picture" approach in specific policy areas, such as North Atlantic Treaty Organization enlargement or relations with China, it tends (with some exceptions) to focus on issues already on the policy agenda rather than challenges that might loom over the horizon. Nor does it address the types of capabilities the United States should seek to develop to deal with future challenges.³⁵

The result is Colin Gray's strategic "black hole."

A Return to Strategic Planning

Colin Dueck has offered a useful critique of what currently passes for strategic planning.

In particular, he criticizes the centralization of foreign policy planning in the White House under President Obama. He offers six suggestions to correct the problem:

- Develop and execute a meaningful national security strategy early on.
- Restore a proper balance of responsibilities between the NSC and line departments and agencies.
- Appoint a strong national security advisor to play the role of genuine honest broker, policy entrepreneur, and presidential agent.
- Appoint and empower a strategic planning directorate on the NSC staff.
- Create an effective strategic planning board.
- Learn from private[-]sector experience.³⁶

It would also be useful to revisit the U.S. strategic planning approach during the Cold War. Two of the most important documents shaping early Cold War policy and strategy were NSC-20/4, “U.S. Objectives with Respect to the USSR to Counter Soviet Threats to U.S. Security,” signed by President Harry Truman in 1948, and NSC-68, “United States Objectives and Programs for National Security,” signed by President Truman in 1950. Both documents argued for a policy of “containment” against the Soviet Union, the purpose of which was to prevent Soviet expansionism and guarantee the security of America and its allies.³⁷ NSC-68 in particular served as the foundation of the U.S. approach to the Soviet Union until its collapse in the late 1980s.

However, the cost associated with NSC-68 was high: It called for a tripling of the defense budget to build up U.S. conventional forces and to develop a thermonuclear weapon. Concerned about the high cost of defense, President Dwight Eisenhower sought a way

to examine existing American containment policy and compare alternative policy options. He settled on a systematic policy exercise to review U.S. foreign policy objectives and recommend a course of action. The exercise, called “Project Solarium,”³⁸ pitted three teams against each other.

- Team A would make the best possible argument for the existing policy of containment, seeking to prevent Soviet expansion in Europe while minimizing the risk of general war.
- Team B would accept containment as a viable policy but be less tentative about its implementation. It would assert that any Soviet or Soviet-sponsored aggression would lead to general war and threaten massive U.S. and allied retaliation using any means necessary.
- Team C would argue for “rollback,” meaning a policy to halt and then reverse Soviet efforts to hold territory by the presence of the Red Army.³⁹

Five weeks later, the teams reconvened and presented their findings to the President.

- Team A argued that the U.S. should develop and implement a more dynamic campaign of political and psychological action against the Soviets. The group rejected any strategy that based its arguments on the acceptance of a risk of general war and recommended “waging peace” with U.S. power by emphasizing the importance of negotiations. It also sought to prevent the use of an active military threat from driving national security strategy even though it gave the concept of force an important role to play—primarily the role of augmenting diplomatic, economic, and political initiatives.
- Team B warned about the rigid nature of “drawing a line,” implying that it could actually increase the risk of war through

inflexibility, but argued that a preponderant show of U.S. force combined with a definitive geographical boundary line could lead to a change in Soviet policy and/or a mellowing of the overall regime. Team B further explained that the allies would not readily accept where to draw the line and that this strategy would be extremely expensive. However, it made the case that the external threat to the U.S. ultimately outweighed the threat to domestic economic stability.

- Team C argued that mere containment was flawed because it had no endgame and let the Soviets read American inaction as fear and acquiescence. It acknowledged that the benefits of “rollback” were speculative but claimed that political and military actions short of general war (for example, covert operations and economic pressure) would be an effective way to take back regions from the Soviet area of control until, ultimately, the Soviet Union changed. Therefore, the U.S. must first put indirect pressure on the Soviet Union by engaging its satellite states and then direct pressure on the Soviet Union itself.⁴⁰

After listening to the presentations, President Eisenhower summarized the arguments of the three teams and opted for the course of action recommended by Team A, which served as the foundation of NSC-162/2, “Basic National Security Policy,” signed by Eisenhower on October 30, 1953. As one commentator notes:

While NSC 162/2 did not represent a radical shift in policy, just as NSC-68 was not a radical departure from NSC 20/04, the exercise itself forced policymakers to justify a number of key assumptions about Soviet objectives and American capabilities. This not only strengthened the intellectual basis for containment as a long-term policy, but conferred legitimacy on the President’s ultimate decision to follow the basic recommendations of Team A. The substance of the policy, in other words, had benefited from the process used to design it.⁴¹

As Eisenhower observed, “The plans are nothing, but the planning is everything.”⁴²

Conclusion

Strategy is designed to secure national interests and to attain the objectives of national policy by the application of force or threat of force. Strategy is dynamic, changing as the factors that influence it change. Strategic requirements continue to evolve.

The evolution of strategy over the past 50 years illuminates the interrelationship of ends, means, and the security environment. Potential mismatches between ends and means create risks. If the risks resulting from an ends-means mismatch cannot be managed, ends must be reevaluated and scaled back, means must be increased, or the strategy must be adjusted.

Strategy-making is a central component of defense policy. Without a coherent, rational strategy to guide the development and employment of forces, structural factors such as bureaucratic and organizational imperatives will dominate the allocation of resources for defense, leading to a suboptimal result.

Good strategy requires an effective strategic planning process. Unfortunately, U.S. strategic planning is defective. As a result, U.S. actions against China, Iran, Russia, ISIS, and the like are uncoordinated and incoherent. To advance its national interests in a dangerous and uncertain world, the United States must restore strategic planning and the idea of strategy as a guide to action to a central role.

Strategic planning must look beyond the next budget cycle in order to address the wide array of international challenges the United States faces and advance long-term U.S. interests. The best strategic planning process incorporates both constructive competition and creative cooperation in order to reconcile diverging perspectives. Otherwise, the U.S. strategic black hole will persist.

Endnotes:

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3. Carl Von Clausewitz, *On War*, trans. and ed. Michael Howard and Peter Paret (Princeton, NJ: Princeton University Press, 1976), p. 128.
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5. For an excellent treatment of the origins of modern strategic thinking, see Azar Gat, *The Origins of Military Thought: From the Enlightenment to Clausewitz* (New York: Oxford University Press, 1989). Cf. John Shy, “Jomini,” Chapter 6, and Peter Paret, “Clausewitz,” Chapter 7, in *Makers of Modern Strategy*, ed. Peter Paret (Princeton, N.J.: Princeton University Press, 1986).
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13. Murray and Grimsley, “Introduction: On Strategy,” pp. 7–20.
14. Clausewitz, *On War*, pp. 183, 131–132; Michael Howard, “The Forgotten Dimensions of Strategy,” *Foreign Affairs*, Vol. 57, No. 5 (Summer 1979); and Colin S. Gray, *Modern Strategy* (New York: Oxford University Press, 1999), pp. 23–44.
15. Colin S. Gray, “Inescapable Geography,” *Journal of Strategic Studies*, Vol. 22, Nos. 2/3 (June/September 1999), p. 169.
16. Jakub J. Grygiel, *Great Powers and Geopolitical Change* (Baltimore: Johns Hopkins University Press, 2006).
17. John Lewis Gaddis, *Strategies of Containment: A Critical Appraisal of Postwar American National Security Policy* (Oxford: Oxford University Press, 1982). Cf. Owens, “Force Planning,” pp. 421–427. The three strategic periods were the “New Look” strategy of the Eisenhower Administration; the “Flexible Response” approach of John F. Kennedy; and “détente,” which is most closely linked to Richard Nixon’s presidency. “New Look,” a term adopted by Eisenhower’s first defense budget, balanced military commitments with federal budget realities and sought to deter the Soviet threat with large investments in nuclear weapons. Kennedy, seeking alternatives to what he viewed as an excessively limiting strategy of massive nuclear retaliation or nothing at all, had his advisers develop scalable options for responding to challenges to U.S. security interests. Nixon strove to ease or relax tensions with the Soviet Union, initiating a number of communications channels, summits, and treaty negotiations.
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23. Lord, “American Strategic Culture,” pp. 269–293.

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28. See, for instance, Luttwak, *Strategy*, pp. 69–189.
29. Edward Mead Earle, *Makers of Modern Strategy* (Princeton, NJ: Princeton University Press, 1943), p. viii.
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38. Named for the room in the White House where the President issued the directive for the study.
39. Tyler Nottberg, “Once and Future Policy Planning: Solarium for Today,” Gettysburg College, Eisenhower Institute, http://www.eisenhowerinstitute.org/about/living_history/solarium_for_today.dot (accessed June 7, 2016).
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Global Operating Environment

Assessing the Global Operating Environment

Measurement of the “strength” of a military force—the extent to which that force can accomplish missions—requires examination of the environments in which the force operates. Aspects of one environment may facilitate military operations, but aspects of another may work against them. A favorable operating environment presents the U.S. military with obvious advantages; an unfavorable operating environment may limit the effect of U.S. military power. The capabilities and assets of U.S. allies, the strength of foes, the geopolitical environment of the region, and the availability of forward facilities and logistics infrastructure all factor into whether an operating environment is supportive of U.S. military operations.

When assessing an operating environment, particular attention must be paid to any treaty obligations the United States has with countries in the region. A treaty defense obligation ensures that the legal framework is in place for the U.S. to maintain and operate a military presence in a particular country. In addition, a treaty partner usually yields regular training exercises and interoperability as well as political and economic ties.

Additional factors—including the military capabilities of allies that might be useful to U.S. military operations; the degree to which the U.S. and allied militaries in the region are

interoperable (e.g., can use common means of command, communication, and other systems); and whether the U.S. maintains key bilateral alliances with nations in the region—also affect the operating environment. Likewise, nations where the U.S. has already stationed assets or permanent bases and countries from which the U.S. has launched military operations in the past may provide needed support to future U.S. military operations. The relationships and knowledge gained through any of these factors would undoubtedly ease future U.S. military operations in a region and contribute greatly to a positive operating environment.

In addition to U.S. defense relations within a region, additional criteria—including the quality of the local infrastructure, the political stability of the area, whether or not a country is embroiled in any conflicts, and the degree to which a nation is economically free—should also be considered.

Each of these factors contributes to the judgment as to whether a particular operating environment is favorable or unfavorable toward future U.S. military operations. The operating environment assessment is meant to add critical context to complement the threat environment assessment and U.S. military assessment detailed in subsequent sections of the *Index*.

This Index will refer to all disputed territories by the name employed by the United States Department of State and should not be seen as reflecting a position on any of these disputes.

Europe

The resurgence of Russia, brought into starkest relief in Ukraine, and the rise of the Islamic State in Iraq, Syria, and Libya have brought Europe back into the top tier of U.S. international interests with some force after a decade of attempted disengagement. It is clear why the region matters to the U.S. The 51 countries in the U.S. European Command (EUCOM) area of responsibility include approximately one-fifth of the world's population, 10.7 million square miles of land, and 13 million square miles of ocean. EUCOM's area has physical borders with Russia, the Arctic, Iran, Asia Minor, the Caspian Sea, and North Africa. Most of these areas have long histories of instability and a potential for future instability that could directly affect the security interests and economic well-being of the United States.

Some of America's oldest (France) and closest (the United Kingdom) allies are found in Europe. The U.S. and Europe share a strong commitment to the rule of law, human rights, free markets, and democracy. Many of these ideas, the foundations upon which America was built, were brought over by the millions of immigrants from Europe in the 17th, 18th, and 19th centuries. U.S. sacrifice for Europe has been dear. During the course of the 20th century, millions of Americans fought for a free and secure Europe, and hundreds of thousands died.

America's economic ties to the region are important as well. A stable, secure, and economically viable Europe is in America's economic interest. Regional security means economic viability and prosperity for both

Europe and the U.S. For more than 70 years, the U.S. military presence in Europe has contributed to European stability, economically benefiting both Europeans and Americans. The economies of the 28 (soon to be 27¹) member states of the European Union (EU), along with the United States, account for approximately half of the global economy. The U.S. and the members of the EU are each other's principal trading partners.

Geographical Proximity. Europe is important to the U.S. because of its geographical proximity to some of the world's most dangerous and contested regions. From the eastern Atlantic Ocean to the Middle East and up to the Caucasus through Russia and into the Arctic, an arc of instability is increasingly unsettled by demographic pressures, rising commodity prices, interstate and intrastate conflict, tribal politics, competition over water and other natural resources, religious tension, revolutionary tendencies, terrorism, nuclear proliferation, and "frozen conflicts" (i.e., conflicts in which active combat has ended but no real effort is made to resolve the conflict). The European region also has some of the world's most vital shipping lanes, energy resources, and trade choke points.

The basing of U.S. forces in Europe generates benefits outside of Europe. Recent instability in North Africa, most notably ISIS operations in Libya, has shown the utility of basing robust U.S. military capabilities near potential global hot spots. For example, when ordered to intervene in Libya against Muammar Qadhafi, U.S. commanders in Europe were able to act effectively and promptly because of

the well-established and mature U.S. military footprint in southern Europe.

The same can be said of the Baltic region. Soon after Russia annexed Crimea and invaded eastern Ukraine, the U.S. quickly deployed 600 U.S. soldiers to the Baltics and Poland from U.S. bases in Italy. The F-15s and F-16s (including their crews, maintenance staff, fuel, spare parts, etc.) that the U.S. Air Force initially sent to the region after the invasion of Ukraine were deployed to Eastern Europe from U.S. air bases in the United Kingdom and Italy, respectively. Without this forward presence in Europe, these deployments would have been costlier and slower.

The Arctic. The *2016 Index of U.S. Military Strength* identified the Arctic as an important operating environment in Europe. This has not changed in the 2017 edition. If anything, tension continues to increase as a result of Russian activity.

The Arctic region encompasses the lands and territorial waters of eight countries (Canada, Denmark, Finland, Iceland, Norway, Russia, Sweden, and the United States) spread across three continents. The region is home to some of the world's roughest terrain and waters and some of its harshest weather. The Arctic region is rich in minerals, wildlife, fish, and other natural resources and, according to some estimates, contains up to 13 percent of the world's undiscovered oil reserves and almost one-third of its undiscovered natural gas reserves.

The region represents one of the world's least populated areas, with sparse nomadic communities and very few large cities and towns. Although official population figures are nonexistent, the Nordic Council of Ministers estimates that the figure in 2013 was slightly in excess of 4 million,² making the Arctic's population slightly bigger than Oregon's and slightly smaller than Kentucky's. Approximately half of the Arctic population lives in Russia, which is ranked 153rd out of 178 countries in the *2016 Index of Economic Freedom*.³

The melting of Arctic ice during the summer months presents challenges for the U.S.

in terms of Arctic security, but it also provides new opportunities for economic development. Less ice will mean new shipping lanes, increased tourism, and further exploration for natural resources. Many of the shipping lanes currently used in the Arctic are a considerable distance from search and rescue facilities, and natural resource exploration that would be considered routine in other locations in the world is complex, costly, and dangerous in the Arctic.

The economic incentives for exploiting these shipping lanes are substantial and will drive Arctic nations to press their interests in the region. For example, using the Northern Sea Route (NSR) along the Russian coast cuts the distance between Rotterdam and Shanghai by 22 percent and saves hundreds of thousands of dollars in fuel costs per ship. Unlike in the Gulf of Aden, no pirates are currently operating in the Arctic, and piracy is unlikely to be a problem in the future. But there is still a long way to go before the NSR becomes a viable option. In 2015, a total of 18 ships⁴ made the journey over the top of Russia (compared with the more than 17,000 that transited the Suez Canal) and carried only 39,586 tons of cargo.⁵ By comparison, in 2013, 71 vessels carrying a total of 1,355,000 tons of cargo shipped along the route, indicating the unpredictability of future shipping trends in the Arctic.⁶

In June 2015, Russia adopted an Integrated Development Plan for the Northern Sea Route 2015–2030. The plan outlines expectations that NSR shipping volume will reach 80 million tons by 2030.⁷ However, the current reality casts doubt on these projections.

Of course, the U.S. has an interest in stability and security in the Arctic because the U.S. is one of the eight Arctic nations. The American commitment to NATO is also relevant because four of the five Arctic littoral powers are in NATO.⁸

Threats to Internal Stability. In recent years, Europe has faced turmoil and instability brought about by economic uncertainty, epitomized by the ongoing sovereign debt crisis in Europe's southern countries. Recently,

a large influx of migrants and the continued threat from terrorism have added more instability points to Europe.

Economically, the eurozone's overall economic freedom is seriously undermined by the excessive government spending required to support elaborate welfare states. Economic policies being pursued by many eurozone countries hinder productivity growth and job creation, causing economic stagnation and rapidly increasing levels of public debt. Underperforming countries have not made the structural reforms needed for long-term adjustment.

Cyprus, Greece, Ireland, Portugal, and Spain have received multibillion-euro aid packages financed by their eurozone partners and the International Monetary Fund (IMF). European leaders are desperately seeking a way to keep the eurozone together without addressing the root causes of the crisis. Recipient countries have adopted stringent austerity measures in exchange for aid, but their populations oppose any spending cuts.

Many among Europe's political elite believe that deeper European integration, not prudent economic policies, is the answer to Europe's problem. However, there has been a public backlash against deeper political and economic integration across much of Europe. In a June 2016 referendum on EU membership, the United Kingdom voted to leave the European Union. In April 2016, Dutch voters voted against approving an EU-Ukraine Association agreement in a countrywide referendum, largely seen as a protest vote against the EU. Dissatisfaction with the EU affects France and Germany as well. According to a 2016 Pew Poll, only 38 percent of people in France have a favorable view of the EU; in 2004, 69 percent did. In Germany, only half of Germans have a favorable view of the EU.⁹

In 2015, the Eurozone grew by 1.7 percent,¹⁰ only a marginal improvement over 2014 growth rates. Relatively meager economic growth translated into small job gains, but unemployment remains an albatross around the neck of many European nations.

Unemployment across the 19-country bloc stands at 10.1 percent, the lowest rate since July 2011 but still stubbornly high.¹¹ At 23.3 percent, Greece has the highest unemployment rate in the EU; Spain has an unemployment rate of 19.9 percent.¹² Youth unemployment in the eurozone is 20.8 percent but reaches 47.4 percent in Greece, 45.8 percent in Spain, 36.5 percent in Italy, and 30.1 percent in Croatia.¹³

The potential impact of this crisis on the U.S. makes European economic stability more important than ever. The eurozone crisis could turn into a security crisis. For example, political instability in Greece, made worse by a large influx of migrants, could spill over to other places in southeastern Europe—already one of Europe's most unstable regions. American banks hold some eurozone debt and would take a hit in the event of any default, but the deepest effects would likely be felt through the interconnected global financial system. In a lagging European economy, for example, U.S. exports to European markets would start to fall off and continue to decline.

The economic situation also illustrates the importance of the greater European region to energy security and the free flow of trade. Some of the most important energy security and trade corridors are on the periphery of Europe—as are some of the world's most dangerous and unstable regions. European economies depend on oil and gas transported through the volatile Caucasus and several maritime choke points.

On top of these difficulties, Europe has been trying to deal with a large-scale migrant crisis. Conflicts in Syria and Iraq, as well as open-door policies adopted by several European nations—importantly, Germany and Sweden in 2015—have led large numbers of refugees from across Africa, Asia, and the Middle East to travel to Europe in search of safety, economic opportunity, and a better life in Europe's most generous welfare states.

The European Union's Frontex border agency documented 1,820,000 detections of illegal border crossings along the external

borders of the EU in 2015.¹⁴ The real number is far higher. The migrant crisis and the response of European governments have led in part to some increased instability, have buoyed fringe political parties in some European nations, and already have imposed financial, security, and societal costs on the continent.

For example, one study found that the cost in Germany to house, provide benefits for, and work to assimilate migrants will equal €50 billion by 2017.¹⁵ Greece expects to spend €600 million, 0.3 percent of its GDP, on the migrant crisis in 2016.¹⁶ In April 2016, Sweden's Finance Ministry announced projections that the migrant crisis will cost the nation €6.1 billion yearly until 2020.¹⁷ In an era of fiscal austerity and tight budgets, the unexpected and generational cost of this migrant crisis will affect European budgets for decades.

The migrant crisis has had a direct impact on NATO resources as well. In February 2016, Germany, Greece, and Turkey requested NATO assistance against illegal trafficking and illegal migration in the Aegean Sea.¹⁸ That month, NATO's Standing Maritime Group 2 deployed to the Aegean to conduct surveillance, monitoring, and reconnaissance of smuggling activities, and the intelligence gathered was sent on to Greek and Turkish coast guards and to Frontex.¹⁹ In February 2016, former Supreme Allied Commander, Europe, General Philip Breedlove accused Russia of using migrants as a weapon against Europe.²⁰

Finally, Europe has suffered a string of terrorist attacks, many of them Islamist inspired, including attacks in Belgium, France, Germany, and Turkey during the past year alone. While terrorist attacks do not pose an existential threat to Europe, they do affect security by increasing instability, and forcing nations to spend more manpower and financial resources on counterterrorism activities.

Following attacks on the offices of satirical magazine *Charlie Hebdo* in January 2015, for example, France launched Operation Sentinelle, utilizing French soldiers to guard 682

sensitive tourist attractions, schools, and religious institutions.²¹ Following multiple terrorist attacks in Paris in November 2015, President Francois Hollande increased the number of troops taking part in Operation Sentinelle to 10,000.²² Of the French military deployed for military operations, half have been deployed domestically to guard against terrorist attacks.²³ The deployment is reportedly having a deleterious impact both on morale among soldiers and on readiness.²⁴ In addition to manpower strains, Operation Sentinelle costs France \$1.06 million a day,²⁵ and early estimates from the French Treasury suggest that terrorism will ultimately cost the French economy \$2.1 billion.²⁶

In addition, Belgium deployed over 500 soldiers to its streets to guard against terrorist attacks following the November attacks in Paris.²⁷ In February 2015, Italy deployed 4,800 soldiers domestically to guard against terrorist attacks.²⁸ There has even been a discussion in Germany of allowing for greater deployment of the German Bundeswehr to guard against terrorist attacks. Under the current German constitution, the army can be deployed domestically only "in cases of national emergency."²⁹

The migrant crisis in Europe has exacerbated the threat from terrorism. General Breedlove testified in March 2016 that "what we have seen growing in the past months and year is that in that flow of refugees we see criminality, terrorism and foreign fighters."³⁰ James Clapper, U.S. Director of National Intelligence, testified similarly in February 2016 that ISIS is "taking advantage of the torrent of migrants to insert operatives into that flow. As well, they also have available to them and are pretty skilled at phony passports so they can travel ostensibly as legitimate travelers as well."³¹

While terrorism in Europe may undermine U.S. allies by siphoning financial and military resources toward counterterrorism operations, it also can jeopardize the safety of U.S. servicemembers, their families, and U.S. facilities overseas. In April 2016, for example,

an ISIS sympathizer was convicted in the U.K. of planning to carry out terrorist attacks on U.S. military personnel stationed in the U.K.³²

The South Caucasus

One of the most important energy corridors for Europe is through Turkey and the South Caucasus. Fortunately, Europe has a very strong partner in the South Caucasus. The Republic of Georgia sits at a crucial geographical and cultural crossroads that for centuries has proven to be strategically important, both militarily and economically; today, its strategic location is also important to the U.S. and Europe. Georgia is modernizing key airports and port facilities, and a major railway project from Azerbaijan to Turkey through Georgia opened in 2015.

The transit route through Georgia provides one of the shortest and potentially most cost-effective routes to Central Asia. This is particularly important in meeting the need to bring alternative sources of oil and natural gas to the European market. In view of Russia's willingness to use energy resources as a tool of foreign policy, this could not come at a more important time for Europe.

In 2015, construction began on two key natural gas pipelines: the Trans-Anatolian Natural Gas Pipeline (TANAP) and the Trans-Adriatic Pipeline (TAP). The TANAP will run 1,150 miles through the Caucasus and Turkey; the TAP will run from the Turkish-Greek border to Italy via Albania and the Adriatic Sea. It is expected that both will be completed by 2018. When constructed, both pipelines will link up with the existing South Caucasus Pipeline, which connects Turkey to the Azerbaijani gas fields in the Caspian Sea through Georgia. Together, all three pipelines will form the so-called Southern Gas Corridor.³³

In July 2015, Russia took de facto control of a 1.6-kilometer section of the British Petroleum-operated Baku-Supsa pipeline when it moved border markers from Russian-controlled South Ossetia 300 meters (980 feet) further south. Russia's creeping annexation in Georgia has expanded its territorial control

in the nation and placed border markers within close range of Georgia's main highway linking Azerbaijan and the Black Sea.³⁴

Georgia has been a strong partner of NATO and the U.S. It retains 861 troops in Afghanistan as part of NATO's Resolute Support Mission, the third-largest contribution after the U.S. and Germany,³⁵ and also trains with NATO nations. In May 2016, 650 U.S. soldiers, 150 from the U.K., and 500 Georgians took part in training exercise Noble Partner in Georgia.³⁶ Georgian Defense Minister Tina Khidasheli described Noble Partner as "one of the biggest exercises that our country has ever hosted...the biggest number of troops on the ground, and the largest concentration of military equipment."³⁷

Important Alliances and Bilateral Relations in Europe

The United States has a number of important multilateral and bilateral relationships in Europe. First and foremost is NATO, the world's most important and arguably most successful defense alliance. Other relationships, however, also have a strong impact on the U.S.'s ability to operate in and through the European region.

The North Atlantic Treaty Organization. NATO is an intergovernmental, multilateral security organization originally designed to defend Western Europe from the Soviet Union. It is the organization that anchored the U.S. firmly in Europe, solidified Western resolve during the Cold War, and rallied European support following the terrorist attacks on 9/11.

During the Cold War, the threat from the Soviet Union meant that the alliance had a clearly defined mission. Today, NATO is still trying to determine its precise role in the post-Cold War world. In the 1990s, NATO launched security and peacekeeping operations in the Balkans when the EU was unable to act. Since 2002, it has been engaged in Afghanistan, counterpiracy operations off the Horn of Africa, an intervention in Libya that led to the toppling of Muammar Qadhafi, and

(most recently) efforts to stop illicit trafficking in people, drugs, weapons, and other contraband in the Mediterranean.

Since its creation in 1949, NATO has remained the bedrock of transatlantic security cooperation, and it is likely to remain so for the foreseeable future. With the NATO-led combat mission in Afghanistan finished and with an increasingly bellicose Russia on Europe's doorstep, there is a growing recognition that NATO must return to its *raison d'être*: collective defense.

Today, many NATO countries view Moscow as a threat. In a way that seemed inconceivable to Western Europeans before Russia's invasion of Ukraine and annexation of Crimea, it is now clear that NATO's Eastern European members face legitimate security concerns: For those NATO members that lived under the iron fist of the Warsaw Pact or that were absorbed into the Soviet Union after World War II, Russia's bellicose behavior is seen as a threat to their existence.

The broad threat that Russia poses to Europe's common interests makes military-to-military cooperation, interoperability, and overall preparedness for joint warfighting especially important in Europe, yet they are not uniformly implemented. For example, day-to-day interaction between U.S. and allied officer corps and joint preparedness exercises were more regular with Western European militaries than with frontier allies in Central Europe, although the crisis in Ukraine has led to new exercises with eastern NATO nations. In the event of a national security crisis in Europe, first contact with an adversary might still expose America's lack of familiarity with allied warfighting capabilities, doctrines, and operational methods.

Following the 2014 Wales summit, NATO announced its intent to create a Very High Readiness Joint Task Force (VJTF), "a new Allied joint force that will be able to deploy within a few days to respond to challenges that arise, particularly at the periphery of NATO's territory."³⁸ However, mustering the 5,000-strong force has proven to be difficult.³⁹ In addition,

NATO reportedly believes the VJTF would be too vulnerable during its deployment phase to be utilized in Poland or the Baltics.⁴⁰ At the Warsaw summit in July 2016, NATO agreed to an enhanced forward presence of one rotational battalion in each of the Baltic States and Poland, beginning in 2017. Canada, Germany, the U.S., and the UK have promised to serve as framework nations for the battalions.

For its part, in June 2014, the U.S. announced a \$1 billion European Reassurance Initiative (ERI) meant to bolster transatlantic security. For fiscal year (FY) 2017, the U.S. proposed an increase in ERI funding to \$3.4 billion. A portion of the funding was set aside to "increase exercises, training, and rotational presence across Europe but especially on the territory of our newer allies."⁴¹ Additional funding for training exercises constituted \$40.6 million of ERI funding in FY 2015, increased to \$108.4 million in FY 2016, and is anticipated to increase to \$163 million in FY 2017.⁴² While the additional funding is a step in the right direction, it is not a long-term solution; the need to sufficiently fund training programs remains unresolved. Funding for this initiative was included in the Overseas Contingency Operation (OCO) budget, generally considered to be a budget for temporary priorities—a fact that did not escape the attention of NATO allies, with the Poles dismissing it as "insufficient."⁴³

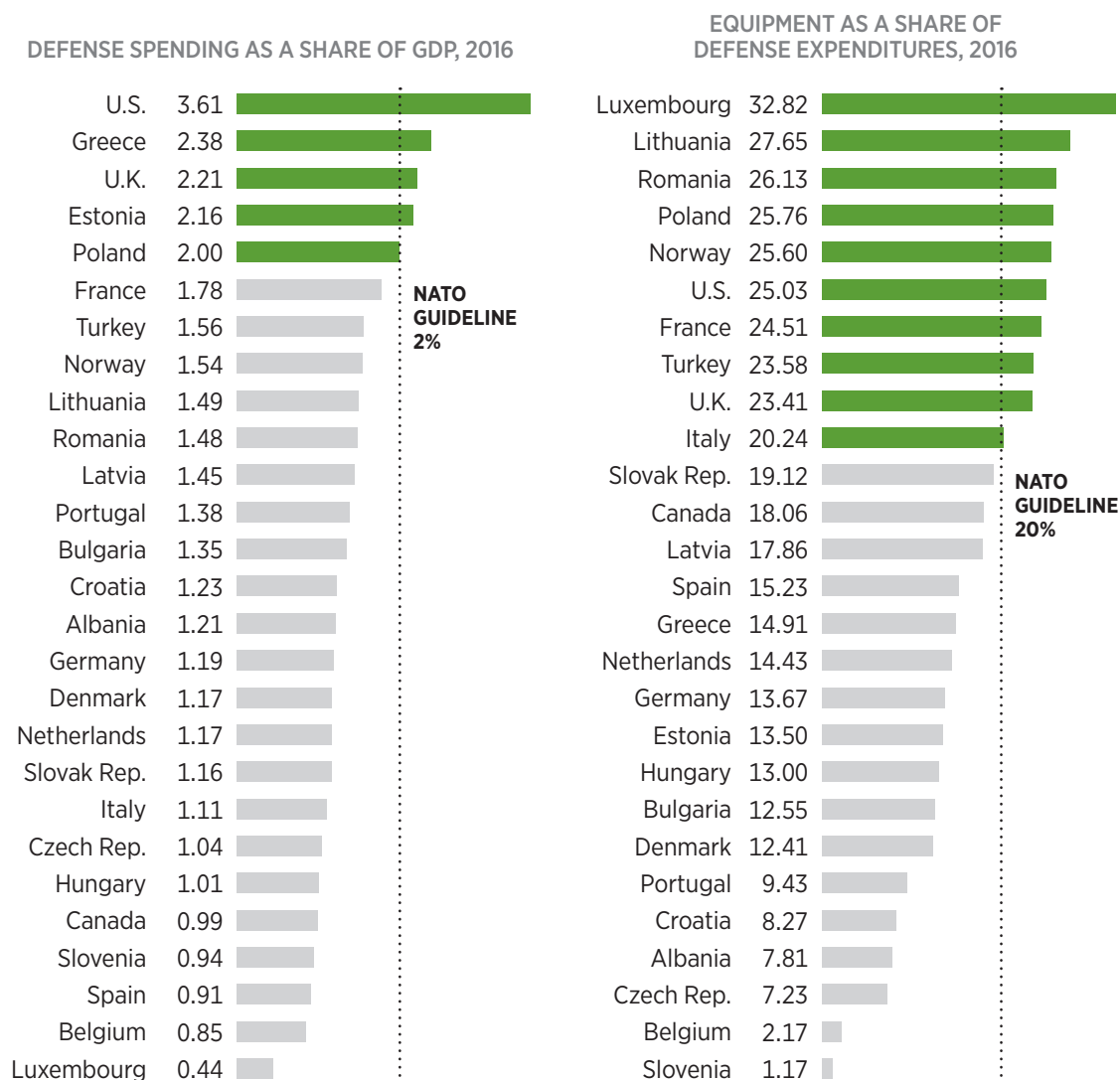
There also are non-military threats to the territorial integrity of NATO countries that the alliance has only recently begun to find ways to address. The most likely threat to the Baltic States, for example, may come not from Russian tanks rolling into a country but from Russian money, propaganda, and establishment of pro-Russia NGOs and other advocacy groups—all of which can be leveraged to undermine the state. Russia's aggressive actions in Ukraine have proven how effective these asymmetrical methods can be in creating instability, especially when coupled with conventional power projection.

The combat training center at Hohenfels, Germany, is one of a very few located

CHART 1

Few NATO Members Follow Defense Spending Guidelines

NATO members are expected to spend at least 2 percent of their GDP on defense, and at least 20 percent of their defense spending is supposed to go to equipment. Only three of the 28 countries—the U.S., the U.K., and Poland—do both.



NOTES: Figures are estimates for 2016 based on 2010 prices and exchange rates. Iceland is not listed because it has no military.

SOURCE: NATO, "Defence Expenditures of NATO Countries (2009–2016)," July 4, 2016, p. 2, http://www.nato.int/nato_static_fl2014/assets/pdf/pdf_2016_07/20160704_160704-pr2016-116.pdf (accessed August 26, 2016)

outside of the continental United States, and more than 60,000 U.S. and allied personnel train there annually. U.S.–European training exercises further advance U.S. interests by developing links between America’s allies in Europe and National Guard units back in the U.S. In a time when most American servicemembers do not recall World War II or the Cold War, cementing bonds with allies in Europe becomes a vital task. Currently, 22 nations in Europe have a state partner in the U.S. National Guard.⁴⁴

General Breedlove has described NATO forces as being “at a pinnacle of interoperability.” But he also has cautioned that if NATO is to sustain these levels of interoperability, “We need to continue to build the capabilities and capacities to be a credible and effective Alliance and we need to sustain our interoperability through rigorous and sustained training, education, and exercises.”⁴⁵

In 2014, the U.S. launched Operation Atlantic Resolve, a series of continuous exercises meant to reassure U.S. allies in Europe, particularly those bordering Russia. Operation Atlantic Resolve included among other initiatives 150 troops temporarily deployed to the Baltic States and Poland for training exercises.⁴⁶ The troops were members of the Army’s 173rd Airborne Brigade, based in Italy and Germany.⁴⁷ There have been some reports that U.S. soldiers stationed in the Baltics have been on the receiving end of “intimidatory approaches” from Russian intelligence officers.⁴⁸ In March 2015, a U.S. convoy of 600 soldiers and 120 vehicles, including Strykers, took part in a 1,100-mile “Dragoon Ride” across the Czech Republic, Estonia, Latvia, Lithuania, and Poland before returning to base in Vilseck, Germany.⁴⁹

The naval component of Operation Atlantic Resolve has consisted in part of increased deployments of U.S. ships to the Baltic and Black Seas. Additionally, the Navy has taken part in bilateral and NATO exercises. For example, BALTOPS 2015 was a 15-day exercise across the Baltic Sea region that involved 5,600 troops from Belgium, Canada,

Denmark, Estonia, Finland, France, Germany, Georgia, Latvia, Lithuania, the Netherlands, Norway, Poland, Sweden, Turkey, the United Kingdom, and the United States.⁵⁰

In addition to training with fellow NATO member states, the U.S., in conjunction with Canada, Lithuania, and the United Kingdom,⁵¹ has undertaken a program to train five Ukrainian army battalions and an additional battalion of special operations forces⁵² at the Joint International Peacekeeping Security Center near Yavoriv, Ukraine. U.S. training for Ukrainian forces began with border and national guards but has expanded to include regular army units.⁵³ Ukraine has received additional training from NATO members that includes counter-IED training, flight safety, military police, and medical training.⁵⁴ In September 2015, the U.S. and Ukraine cohosted the multinational maritime exercise Sea Breeze 2015 in the Black Sea.⁵⁵

Quality of Armed Forces in the Region

When it comes to effective international combined operations, it is clear that Europe is not pulling its weight. Investment in defense across Europe has declined since the end of the Cold War. For most EU countries, the political will to deploy troops into harm’s way when doing so is in the national interest has all but evaporated. During the Libya operation, for example, European countries were running out of munitions.⁵⁶ More recently, munition stocks in the Netherlands are reported to have only five days’ worth of ammunition on hand.⁵⁷

As an intergovernmental security alliance, NATO is only as strong as its member states. Of NATO’s 28 members, 26 are European. European countries collectively have more than 2 million men and women in uniform, yet by some estimates, only 100,000 of them—a mere 5 percent—have the capability to deploy beyond their national borders.⁵⁸

Article 3 of the 1949 North Atlantic Treaty, NATO’s founding document, states that members, at a minimum, will “maintain and develop their individual and collective capacity

to resist armed attack.”⁵⁹ Only a handful of NATO members can say that they are living up to their Article 3 commitment. In 2015, only five of 28 NATO member states (Estonia, Greece, Poland, the U.S., and the U.K.) spent the required 2 percent of gross domestic product (GDP) on defense. Recently, NATO total defense expenditures have moved in an upward direction. In 2016, the annual real change in defense outlays for Canada and European NATO members is estimated at 1.5 percent, a \$3 billion increase.⁶⁰ When cuts have occurred, they have been significantly less than in recent years. In 2015, 19 NATO members stopped cuts in defense spending, and 16 of those 19 also increased their defense spending in real terms.⁶¹

Nevertheless, the lack of overall investment in substantial amounts has caused even smaller campaigns like the 2011 operation in Libya to flounder. What began as a military operation inspired by France and Britain had to be absorbed quickly into a NATO operation because the Europeans had neither the political will nor the military capability (without the U.S.) to complete the mission. Former Secretary of Defense Robert Gates summed up Europe’s contribution to the Libya operation:

[W]hile every alliance member voted for the Libya mission, less than half have participated at all, and fewer than a third have been willing to participate in the strike mission. Frankly, many of those allies sitting on the sidelines do so not because they do not want to participate, but simply because they can’t. The military capabilities simply aren’t there.⁶²

The lack of defense investment by Europeans has also had a direct impact on recent overseas operations. At the height of the combat operations in Afghanistan, many European NATO members were having difficulty deploying just dozens of troops at a time. The Europeans’ contribution to the air campaign against the Islamic State has been meager considering the size of their air forces. When Europeans do send troops, many are often restricted by numerous nationally imposed

limitations on their activities (commonly called “caveats”). In Afghanistan, examples included no flying at night or no combat patrols beyond a certain distance from a base that limits their usefulness to the NATO commander.⁶³ In the campaign against the Islamic State, the few European countries that are conducting air strikes will do so only in Iraq even though the terrorist group is very active (and has its headquarters) in Syria. Lack of naval investment is also problematic. Jamie Shea, NATO’s Deputy Assistant Secretary General for Emerging Security Challenges, stated in May 2016 that a “lack of ships” is a growing problem for the alliance.⁶⁴ This lack of capability is mainly the result of a decrease in defense investment by the members of NATO since the end of the Cold War and a lack of political will to use military capability when and where it is needed.

Germany. In 2015, Germany announced plans to increase defense spending by 6.2 percent over five years.⁶⁵ In 2016, its defense budget increased by €1.2 billion.⁶⁶ The planned increase will raise the overall defense budget from €34.3 billion in 2016 to €39.2 billion by 2020.⁶⁷ However, at 1.2 percent of GDP in 2015, German defense spending is still well below the NATO benchmark of 2 percent of GDP.⁶⁸ Germany reportedly will focus increased defense euros “on cyber defense and naval capabilities as well as aerial surveillance.”⁶⁹

The German military struggles with equipment that is in disrepair or short supply. In 2015, Germany spent only 13.3 percent of its defense budget on equipment,⁷⁰ well below the 25 percent, 23.4 percent, and 26.1 percent spent by France, the U.K., and the U.S., respectively. The results of this underinvestment are evident. According to news descriptions of a Bundestag report, for example, only seven of 43 German naval helicopters are flightworthy, only one of four German submarines is operational, and only 70 of 80 GTK Boxer Armored Vehicles are fit for deployment.⁷¹

The air force faces similar challenges. In 2014, according to a parliamentary report, less than half of Germany’s fighter jets were

ready for use,⁷² and in December 2015, a defense ministry report revealed that the situation had further deteriorated to the point where only 29 of 66 German Tornados were airworthy.⁷³ Worse still, the Tornados currently flying surveillance missions over Iraq and Syria cannot “fly night missions because of a glare problem involving cockpit displays and pilots’ goggles.”⁷⁴ Germany continues to utilize a 50-year-old transport plane because of a five-year delay in delivery of new Airbus A400M transports.⁷⁵

In September 2015, the German government announced plans to phase out the army’s standard G36 rifle starting in 2019 after embarrassing reports that the G36 loses accuracy when sustaining fire in hot temperatures.⁷⁶ Funding for equipment for the army, however, was increased by 8.4 percent in 2015.⁷⁷

The German forces participating in a NATO training exercise in Norway substituted broomsticks for machine guns that they did not have.⁷⁸ The units involved are assigned to the Spearhead force, which was created at the Wales summit as a key element in NATO’s response to Russian aggression against Ukraine.⁷⁹ German Defense Minister Ursula von der Leyen has admitted that Germany is currently unable to meet NATO’s readiness targets.⁸⁰ In an especially embarrassing episode, German soldiers taking part in the Cold Response 2016 exercise in Norway in February and March 2016 had to leave early after 12 days because they had exceeded their overtime limits.⁸¹

The German army, buoyed by conscription, was 585,000 strong in 1990 at the end of the Cold War.⁸² Today, the Bundeswehr has only 177,000 members.⁸³ Germany will add 7,000 new positions by 2023.⁸⁴ The decision marks the first time since the end of the Cold War that the German army has added troops to its ranks. Additionally, civilian personnel in the army will rise from the current 56,000 to 60,400, an addition of 4,400 civilians on top of the 7,000 increase in soldiers.⁸⁵ In May 2016, the German Defense Minister announced that the government would seek parliamentary

approval to remove the 185,000-person cap for the Bundeswehr.⁸⁶

Germany will spend 240 million euros to keep dual-capable Tornado aircraft, an important piece of NATO’s nuclear deterrent, flying until 2024.⁸⁷ However, it is also cutting procurement and decommissioning certain specific capabilities, a burden that will fall primarily on its army and air force. Germany has announced procurement of 18 Sea Lion-variant helicopters and 82 tactical transport helicopters from Airbus, reportedly to compensate for cancelled and reduced procurement elsewhere.⁸⁸

At the United Nations in September 2014, German Foreign Minister Frank-Walter Steinmeier called for greater German engagement in the world, but he focused principally on diplomatic rather than military engagement.⁸⁹ Germany has supplied weapons to Kurdish troops fighting ISIS in Iraq, including rifles and MILAN anti-tank guided missiles and Panzerfaust 3 rockets.⁹⁰ In 2016, it also increased the number of trainers it has on the ground in Iraq, but they are not allowed to engage in offensive operations.⁹¹

Overall, Germany has been increasing its military participation abroad. As of December 2015, 2,696 German soldiers were deployed overseas.⁹² Included in this number are contributions to NATO’s KFOR peacekeeping mission in Kosovo and NATO’s Operation Active Fence in Turkey.⁹³ In early 2016, Germany also increased its troop contribution to NATO’s Resolute Support Mission in Afghanistan to 980 soldiers, the second-largest contribution after the U.S.⁹⁴ Germany participates in the EU Training Mission in Mali and in 2016 sent an additional 500 soldiers to support the U.N. Multidimensional Integrated Stabilization Mission in Mali.⁹⁵ Germany has elected not to participate in the air campaign to bomb ISIS targets, although in 2016 it did send six Tornados to fly reconnaissance missions over Iraq and Syria, as well as a frigate to assist in protecting the French aircraft carrier *Charles de Gaulle*.⁹⁶ From September 2015–January 2016, Germany contributed four

Typhoons to Baltic Air Policing. It also has pledged 1,000 troops for the Very High Readiness Joint Task Force (VJTF), the spearhead force created after the NATO Wales summit.⁹⁷

Despite increased engagement overseas, however, Germany has pushed back against NATO efforts to base troops and heavy weapons permanently in Eastern Europe.⁹⁸ Germany is hemmed in by a largely historical legacy of public reluctance to support stronger military engagement beyond its borders. A Bertelsmann Foundation poll in April 2016 found that only 31 percent of Germans would support sending German troops to defend the Baltic States or Poland from Russian attack.⁹⁹ As a result, German military contributions to NATO remain limited. Budget increases are still modest, and with much more time and money needed to build real defense capabilities, Germany will continue to be an economic powerhouse with mismatched military capabilities.

France. Although France rejoined NATO's Integrated Command Structure in 2009, it remains outside the alliance's nuclear planning group. France spent 1.8 percent of GDP on defense in 2015, spending a quarter of its defense budget on equipment (only Luxembourg, Poland, Turkey, and the U.S. spend a higher percentage on equipment).¹⁰⁰ France had a defense budget of €31.4 billion in 2015; by 2019, the budget is expected to total €34 billion.¹⁰¹ While the country kept a NATO Wales summit commitment to protect defense from further budget cuts, its defense spending remains well below 2 percent of GDP. François Heisbourg has likened French defense spending under President Hollande and his predecessor Nicolas Sarkozy to "slow erosion, rather than severe cuts."¹⁰²

Despite this erosion, France maintains a competent, professional military with robust capabilities. France has a 209,000-strong active military force¹⁰³ that includes 200 tanks; one aircraft carrier; 10 submarines, four of which are ballistic missile submarines; 202 combat aircraft; and 80 transport aircraft.¹⁰⁴ France also remains politically and militarily

dedicated to retaining an independent nuclear deterrent. Approximately one-fourth of France's defense acquisition budget is spent on the nation's nuclear deterrent.¹⁰⁵ In February 2015, President Hollande reiterated the French commitment to maintaining this deterrent: "The international context does not allow for any weakness.... [T]he era of nuclear deterrence is therefore not over."¹⁰⁶

France withdrew the last of its troops in Afghanistan at the end of 2014, although all French combat troops had left in 2012. All told, France lost 89 soldiers and 700 wounded in Afghanistan.¹⁰⁷ In September 2014, France launched Operation Chammal, its contribution to the air campaign against the Islamic State in Iraq. In February 2015, the aircraft carrier *Charles de Gaulle* joined the operation, halving the flying time needed for French fighters to strike targets in Iraq. Previously, all of France's fighters had flown from bases in the United Arab Emirates or Jordan.¹⁰⁸ The *Charles de Gaulle* left the Persian Gulf in April 2015 but returned to the eastern Mediterranean in late November 2015 to strike targets in Syria.¹⁰⁹ In September 2015, a year after the commencement of Operation Chammal, France launched its first air strikes against targets in Syria.¹¹⁰

France has 1,000 soldiers,¹¹¹ one frigate, eight Mirage and six Rafale fighter jets, one air-to-air refueling plane, one AWACS, and one maritime patrol aircraft,¹¹² in addition to the approximately 26 aircraft on the *Charles De Gaulle*, involved in operations against ISIS.¹¹³ In December 2015, a French commander aboard the *Charles de Gaulle* took command of U.S. Naval Forces Central Command's Task Force 50, overseeing naval strike operations against ISIS.¹¹⁴ It was the first time a French officer had ever commanded a U.S. Navy task force.¹¹⁵

The French military is also active in Africa, particularly in countries where France maintains cultural and historical ties. France has over 3,000 troops, 17 helicopters, 200 tanks, and six fighter jets involved in anti-terrorism operations in Burkina Faso, Chad, Mali,

Mauritania, and Niger as part of Operation Barkhane.¹¹⁶ In 2016, France will end Operation Sangaris in the Central African Republic (CAR), begun in 2013, but 300 of France's 900 troops currently in the CAR will remain as part of the U.N. Peacekeeping mission and EU training mission there.¹¹⁷ France also continues to take part in the EU's ATALANTA anti-piracy mission off the coast of Somalia and its own anti-piracy mission in the Gulf of Guinea¹¹⁸ in addition to a host of smaller U.N. and EU peacekeeping and training missions in Africa and Lebanon.¹¹⁹

The French economy continues to sputter along, growing by 0.5 percent in the first quarter of 2016;¹²⁰ an enormous debt hampers an economy in need of structural reforms. Many analysts believe that under the current reality, "it is unlikely that France will be able to return to sustained economic growth and thus broaden its budget base."¹²¹ The lagging economy has put further pressure on investments in defense. However, in November, in the wake of terrorist attacks in Paris, President Hollande announced that planned cuts in defense personnel will be deferred through 2019.¹²²

The political and economic importance of the defense industry in France impedes deep defense cuts but does not prevent them altogether. The defense industry is so important, both in terms of cash flow to France's coffers and to its prestige as a significant supplier of arms and advanced equipment, that the government waited months following Russia's invasion of Ukraine to suspend indefinitely its delivery to Russia of two Mistral warships. The sale was finally cancelled in August 2015,¹²³ and France sold the mistrals to Egypt.¹²⁴ (The Egyptian navy is slated to take delivery of the mistrals by September 2016,¹²⁵ and France is reported to have paid Russia \$1.1 billion for cancellation of the sale.¹²⁶) In February 2015, France signed a deal with Egypt to export 24 Rafale fighter jets, the first foreign order for the planes.¹²⁷ In March 2016, Qatar and France signed a \$7.5 billion deal for 24 Rafale jets and an undisclosed number of MBDA missiles, including training for 36 pilots and

100 mechanics.¹²⁸ In April 2016, the French group DCNS won a contract from Australia to build 12 submarines worth an estimated €34 billion.¹²⁹ According to the French defense industry group GIFAS, orders were 2.3 percent higher in 2015 than in 2014.¹³⁰

The United Kingdom. America's most important bilateral relationship in Europe is the Special Relationship with the United Kingdom. Culturally, both countries value liberal democracy, a free-market economy, and human rights at a time when many other nations around the world are rejecting those values. The U.S. and the U.K. also face the same global security challenges: a resurgent Russia, the rise of the Islamic State, increasing cyber attacks, and nuclear proliferation in Iran.

In his famous 1946 "Sinews of Peace" speech—now better known as his "Iron Curtain" speech—Winston Churchill described the Anglo-American relationship as one that is based, first and foremost, on defense and military cooperation. From the sharing of intelligence to the transfer of nuclear technology, a high degree of military cooperation has helped to make the Special Relationship between the U.S. and the U.K. unique. Then-U.K. Prime Minister Margaret Thatcher made clear the essence of the Special Relationship between the U.K. and the U.S. when she first met then-U.S.S.R. President Mikhail Gorbachev in 1984: "I am an ally of the United States. We believe the same things, we believe passionately in the same battle of ideas, we will defend them to the hilt. Never try to separate me from them."¹³¹

Since the 9/11 terrorist attacks, the United Kingdom has proven itself to be America's number one military partner. For example, Britain provided 46,000 troops for the 2003 invasion of Iraq. At the height of this commitment, the U.K. also deployed 10,000 troops to one of the deadliest parts of Afghanistan—an area that at its peak accounted for 20 percent of the country's total violence—while many other NATO allies operated in the relative safety of the North.

In 2015, the U.K. conducted a defense review, the results of which have driven a modest increase in defense spending and an effort to reverse some of the cuts that had been implemented pursuant to the previous review in 2010. Though its military is small in comparison to the militaries of France and Germany, the U.K. maintains the most effective armed forces in European NATO. In recent years, it has increased funding for its highly respected Special Forces. By 2020, the Royal Air Force (RAF) will operate a fleet of F-35 and Typhoon fighter aircraft, the latter being upgraded to carry out ground attacks. The RAF recently brought into service a new fleet of air-to-air refuelers, which is particularly noteworthy because of the severe shortage of this capability in Europe. With the U.K., the U.S. produced and has jointly operated an intelligence-gathering platform, the RC-135 Rivet Joint aircraft, which has already seen service in Mali, Nigeria, and Iraq and is now part of the RAF fleet.

The U.K. operates seven C-17 cargo planes and has started to bring the European A400M cargo aircraft into service after years of delays. The 2015 defense review recommended keeping 14 C-130Js in service even though they initially were going to be removed from the force structure. The Sentinel R1, an airborne battlefield and ground surveillance aircraft, originally was due to be removed from the force structure in 2015, but its service is being extended to at least 2025, and the U.K. will soon start operating the P-8 Poseidon maritime patrol aircraft. The U.S. and U.K. are in discussions with regard to filling the U.K.'s antisubmarine gap until the new P-8s come into service in 2019.¹³² In November 2015, a French maritime patrol aircraft had to assist the Royal Navy in searching for a Russian submarine off the coast of Scotland.¹³³

The Royal Navy's surface fleet is based on the new Type-45 Destroyer and the older Type-23 Frigate. The latter will be replaced by the Type-26 Global Combat Ship sometime in the 2020s. In total, the U.K. operates only 19 frigates and destroyers, which most

experts agree is dangerously low for the commitment asked of the Royal Navy. Nevertheless, the Royal Navy still delivers a formidable capability.

The U.K. will not have an aircraft carrier in service until around 2020 when the first *Queen Elizabeth*-class carrier enters service. This will be the largest carrier operated in Europe. Two of her class will be built, and both will enter service. Additionally, the Royal Navy is introducing seven *Astute*-class attack submarines as it phases out its older *Trafalgar*-class. Crucially, the U.K. maintains a fleet of 13 Mine Counter Measure Vessels (MCMVs) that deliver world-leading capability and play an important role in Persian Gulf security contingency planning.

Perhaps the Royal Navy's most important contribution is its continuous-at-sea, submarine-based nuclear deterrent based on the *Vanguard*-class ballistic missile submarine and the Trident missile. In July 2016, the House of Commons voted to renew Trident, approving the manufacture of four replacement submarines. However, the replacement submarines are not expected to enter service until 2028 at the earliest.¹³⁴

Turkey. Turkey has been an important U.S. ally since the closing days of World War II. During the Korean War, it deployed a total of 15,000 troops and suffered 721 killed in action and more than 2,000 wounded. Turkey joined NATO in 1952, one of only two NATO members (the other was Norway) that had a land border with the Soviet Union. Today, it continues to play an active role in the alliance, but not without challenges. A significant low point in U.S.-Turkish relations came in 2003 when the Turkish parliament voted by a small margin (264 to 250) to deny the U.S. access to its territory for an invasion of Iraq. Under the leadership of President Recep Tayyip Erdogan, Turkey has been a challenging partner for the West, but it remains an important partner and NATO member.

Turkey is vitally important to Europe's energy security. It is the gateway to the resource-rich Caucasus and Caspian Basin and

controls the Bosphorus, one of the most important shipping straits in the world. Several major gas and oil pipelines run through Turkey. As new oilfields are developed in the Central Asian states, and given Europe's dependence on Russian oil and gas, Turkey can be expected to play an increasingly important role in Europe's energy security.

On July 15, 2016, elements of the Turkish armed forces attempted a coup d'état against the increasingly Islamist-leaning leadership of President Erdogan. This was the fourth coup since 1960 (the fifth if one counts the so-called post-modern coup in 1997). In each previous case, the military had been successful, and democracy was returned to the people; in this case, however, Erdogan immediately enforced a state of emergency and cracked down on many aspects of government, the military, and civil society. Tens of thousands of civil servants, judges, and academics have been arrested, dismissed, or banned from international travel. Approximately one-third of all general officers in the Turkish military have been dismissed. Although all opposition parties condemned the coup attempt, the failed plot has enabled Erdogan to consolidate more power. His response to the coup has further eroded Turkey's democracy, once considered a model for the region. Senior government officials' erratic and at times hyperbolic statements alleging U.S. involvement in the coup, combined with Erdogan's rapprochement with Russian President Vladimir Putin, have brought U.S.–Turkish relations to an all-time low.

Notwithstanding the fallout from the coup, U.S. security interests in the region lend considerable importance to America's relationship with Turkey. Turkey is home to Incirlik Air Base, a major U.S. and NATO air base. After an initial period of vacillation in dealing with the threat from the Islamic State, a spate of ISIS attacks that rocked the country has led Turkey to play a bigger role in attacking the terrorist group, and Turkey's military contribution to international security operations still sets it apart from many of the

nations of Western Europe. The Turks have deployed thousands of troops to Afghanistan and have commanded the International Security Assistance Force (ISAF) twice since 2002. Turkey continues to maintain more than 500 troops in Afghanistan as part of NATO's Resolute Support mission, making it the fifth-largest troop contributor out of 40 nations. The Turks also have contributed to a number of peacekeeping missions in the Balkans, still maintain almost 400 troops in Kosovo, and have participated in counterpiracy and counterterrorism missions off the Horn of Africa. They also deployed planes, frigates, and submarines during the NATO-led operation in Libya.

Turkey's 510,600-strong active-duty military is NATO's second-largest after that of the United States. A number of major procurement programs in the works include up to 250 new Altay main battle tanks, 350 T-155 Firtina 155mm self-propelled howitzers, six Type-214 submarines, and more than 50 T-129 attack helicopters.¹³⁵

With respect to procurement, the biggest area of contention between Turkey and NATO is Turkey's selection of a missile defense system. In September 2013, Turkey selected China Precision Machinery Import-Export Corporation (CPMIEC) for a \$3.44 billion deal to provide the system. NATO has said that no Chinese-built system could be integrated into any NATO or American missile defense system. U.S. officials also have warned that any Turkish company that acts as a local subcontractor in the program would face serious U.S. sanctions because CPMIEC has been sanctioned under the Iran, North Korea, and Syria Nonproliferation Act.¹³⁶ After increased pressure from NATO allies, Ankara opened parallel talks with Eurosam, the European maker of the Aster 30, and Raytheon/Lockheed Martin, the U.S. company offering the Patriot system. As of October 9, 2015, a final decision had not been made.

The challenge for U.S. and NATO policymakers will be to determine whether the aftermath of the coup represents a long-term

shift in Turkey's foreign policy or whether Erdogan's leadership of Turkey is simply an anomaly in an otherwise constructive and fruitful security relationship that has lasted for decades.

The Baltic States. The U.S. has a long history of championing the sovereignty and territorial integrity of the Baltic States that dates back to the interwar period of the 1920s. Since regaining their independence from Russia in the early 1990s, the Baltic States have been staunch supporters of the transatlantic relationship. Although small in absolute terms, the three countries contribute significantly to NATO in relative terms.

Estonia. Estonia has been a leader in the Baltics in terms of defense spending and is one of five NATO members to meet the 2 percent of GDP spending benchmark.¹³⁷ Although the Estonian armed forces total only 5,750 active duty service personnel (including the army, navy, and air force),¹³⁸ they are held in high regard by their NATO partners and punch well above their weight inside the alliance. Since 1996, almost 1,500 Estonian soldiers have served in the Balkans. Between 2003 and 2011, 455 served in Iraq. Perhaps Estonia's most impressive deployment has been to Afghanistan: more than 2,000 troops deployed between 2003 and 2014 and the second-highest number of deaths per capita among all 28 NATO members. In 2015, Estonia reintroduced conscription for men ages 18–27, who must serve eight or 11 months before being added to the reserve rolls.¹³⁹

Estonia has demonstrated that it takes defense and security policy seriously, focusing its defense policy on improving defensive capabilities at home while maintaining the ability to be a strategic actor abroad. Over the next few years, Estonia will increase from one to two the number of brigades in the order of battle. The goal is to see 50 percent of all land forces with the capability to deploy beyond national borders. Mindful of NATO's benchmark that each member should spend 2 percent of GDP on defense, there is a planning assumption inside the Estonian Ministry

of Defense that up to 10 percent of the armed forces will always be deployed overseas. Estonia is also making efforts to increase the size of its rapid reaction reserve force from 18,000 to 21,000 troops by 2022. This increase and modernization includes the recently created Cyber Defence League, a reserve force that relies heavily on expertise found in the civilian sector.

Latvia. Latvia's recent military experience has also been centered on operations in Iraq and Afghanistan alongside NATO and U.S. forces. Latvia has deployed more than 3,000 troops to Afghanistan, and between 2003 and 2008, it deployed 1,165 troops to Iraq. In addition, Latvia has contributed to a number of other international peacekeeping and military missions. These are significant numbers considering that only 5,310 of Latvia's troops are full-time servicemembers; the remainder are reserves.¹⁴⁰

Latvia's 2012 Defense Concept is an ambitious document that charts a path to a bright future for the Latvian National Armed Forces if followed closely and resourced properly. Latvia plans that a minimum of 8 percent of its professional armed forces will be deployed at any one time but will train to ensure that no less than 50 percent will be combat-ready to deploy overseas if required. The government has stated that the NATO benchmark of 2 percent of GDP in defense spending will be met by 2018,¹⁴¹ and spending will be increasing steadily until then. Each year, no less than 20 percent of the Latvian defense budget will be allocated to modernizing and procuring new military equipment. Latvian Special Forces are well respected by their American counterparts. Latvia has continued to upgrade its ground-based air defense system, ordering seven new Sentinel radars from the U.S. in 2015.¹⁴²

Lithuania. Lithuania is the largest of the three Baltic States, and its armed forces total 16,400 active duty troops, an increase of 50 percent from the previous year.¹⁴³ Lithuania has also shown steadfast commitment to international peacekeeping and military

operations. Between 1994 and 2010, more than 1,700 Lithuanian troops were deployed to the Balkans as part of NATO missions in Bosnia, Croatia, and Kosovo. Between 2003 and 2011, Lithuania sent 930 troops to Iraq. Since 2002, just under 3,000 Lithuanian troops have served in Afghanistan, a notable contribution divided between a special operations mission alongside U.S. and Latvian Special Forces and command of a Provisional Reconstruction Team (PRT) in Ghor Province, making Lithuania one of only a handful of NATO members to have commanded a PRT.

Although Lithuania does not meet the NATO goal of 2 percent of GDP spent on defense, like Latvia, it has pledged to do so by 2018.¹⁴⁴ In 2017, Lithuania plans to spend €725 million on defense, approximately 1.8 percent of GDP.¹⁴⁵ In addition, Lithuania's decision to build a liquefied natural gas import facility at Klaipėda has begun to pay dividends, breaking Russia's natural gas monopoly in the region. In 2016, Norway will overtake Russia as the top exporter of natural gas to Lithuania.¹⁴⁶

Poland. Situated in the center of Europe, Poland shares a border with four NATO allies, a long border with Belarus and Ukraine, and a 144-mile border with Russia alongside the Kaliningrad Oblast. Poland also has a 65-mile border with Lithuania, making it the only NATO member state that borders any of the Baltic States, and NATO's contingency plans for liberating the Baltic States in the event of a Russian invasion are reported to rely heavily on Polish troops and ports.¹⁴⁷ Poland has an active military force of almost 100,000,¹⁴⁸ including a 48,000-strong army with 971 main battle tanks.¹⁴⁹ Poland's Defense Minister has declared that "we envisage a fundamental increase in the army, by at least 50 percent over the coming years, including the creation of three brigades for the territorial defense of the country on the eastern flank."¹⁵⁰

While Poland's main focus is territorial defense, the country has 198 troops deployed in Afghanistan as part of NATO's Resolute Support Mission.¹⁵¹ Additionally, Poland has discussed the possibility of sending F-16s to

Syria to fly reconnaissance missions.¹⁵² Poland's air force has taken part in Baltic Air Policing six times since 2006 and most recently in the first half of 2015. In April 2016, Poland and the remaining three Visegrád Group nations announced plans, starting in 2017, to begin rotating units of 150 soldiers to the Baltics for three months.¹⁵³

Current U.S. Military Presence in Europe

Former head of U.S. European Command General Philip Breedlove has aptly described the role of U.S. basing in Europe:

The mature network of U.S. operated bases in the EUCOM AOR provides superb training and power projection facilities in support of steady state operations and contingencies in Europe, Eurasia, Africa, and the Middle East. This footprint is essential to TRANSCOM's global distribution mission and also provides critical basing support for intelligence, surveillance, and reconnaissance assets flying sorties in support of AFRICOM, CENTCOM, EUCOM, U.S. Special Operations Command, and NATO operations.¹⁵⁴

At its peak in 1953, because of the Soviet threat to Western Europe, the U.S. had approximately 450,000 troops in Europe operating across 1,200 sites. During the early 1990s, both in response to a perceived reduction in the threat from Russia and as part of the so-called peace dividend following the end of the Cold War, U.S. troop numbers in Europe were slashed. Between 1990 and 1993, the number of U.S. soldiers in Europe decreased from 213,000 to 122,000. Their use, however, actually increased; during that same period, the U.S. Army in Europe supported 42 deployments that required 95,579 personnel.

Until 2013, the U.S. Army had two heavy brigade combat teams in Europe, the 170th and 172nd BCTs in Germany; one airborne Infantry BCT, the 173rd Airborne Brigade in Italy; and one Stryker BCT, the 2nd Armored Cavalry Regiment in Germany, permanently based in Europe. Deactivation of the 170th BCT in October 2012—slightly earlier than

the planned date of 2013—marked the end of a 50-year period during which U.S. combat soldiers had been stationed in Baumholder, Germany. Deactivation of the 172nd BCT took place in October 2013. In all, this meant that more than 10,000 soldiers were removed from Europe. Moreover, because these two heavy brigades constituted Europe’s primary armored force, their deactivation left a significant capability gap not only in the U.S. ground forces committed to Europe, but also in NATO’s capabilities, a concern noted by the 2005 Overseas Basing Commission, which warned against removing a heavy BCT from Europe.

When the decision was announced in 2012 to bring two BCTs home, the Obama Administration said that the reduction in capability would be offset with a U.S.-based BCT that, when necessary, would rotate forces, normally at the battalion level, to Europe for training missions. This decision unsettled America’s allies because, in the words of General Breedlove, “[p]ermanently stationed forces are a force multiplier that rotational deployments can never match.”¹⁵⁵ Today, with only 65,000 U.S. troops permanently based in Europe,¹⁵⁶ “[t]he challenge EUCOM faces is ensuring it is able to meet its strategic obligations while primarily relying on rotational forces from the continental United States.”¹⁵⁷

The U.S. is on pace to have only 17 main operating bases left on the continent,¹⁵⁸ primarily in Germany, Italy, the United Kingdom, Turkey, and Spain. The number of U.S. installations in Europe has declined steadily since the Cold War when, for example, in 1990, the U.S. Army alone had more than 850 sites in Europe. Today, the total number for all services is approximately 350. In January 2015, the Department of Defense announced the outcome of its European Infrastructure Consolidation review, under which 15 minor sites across Europe will be closed.¹⁵⁹

The U.S. has three different types of military installations in the European Command’s area of responsibility:

- **Main operating bases** are the large U.S. military installations with a relatively large number of permanently based troops and well-established infrastructure.
- **Forward operating sites** are intended for rotational forces rather than permanently based forces. These installations tend to be scalable and adaptable depending on the circumstances.
- **Cooperative security locations** have little or no permanent U.S. military presence and are usually maintained by contractor or host-nation support.

EUCOM’s stated mission is to conduct military operations, international military partnering, and interagency partnering to enhance transatlantic security and defend the United States as part of a forward defensive posture. EUCOM is supported by four service component commands and one subordinate unified command: U.S. Naval Forces Europe (NAVEUR); U.S. Army Europe (USAREUR); U.S. Air Forces in Europe (USAFE); U.S. Marine Forces Europe (MARFOREUR); and U.S. Special Operations Command Europe (SOCEUR).

U.S. Naval Forces Europe. NAVEUR is responsible for providing overall command, operational control, and coordination for maritime assets in the EUCOM and Africa Command (AFRICOM) areas of responsibility. This includes more than 20 million square nautical miles of ocean and more than 67 percent of the Earth’s coastline.

This command is currently provided by the U.S. Sixth Fleet based in Naples and brings critical U.S. maritime combat capability to an important region of the world. Some of the more notable U.S. naval bases in Europe include the Naval Air Station in Sigonella, Italy; the Naval Support Activity Base in Souda Bay, Greece; and the Naval Station at Rota, Spain. Naval Station Rota is home to four capable Aegis-equipped destroyers.¹⁶⁰ In addition, the USS *Mount Whitney*, a *Blue Ridge*-class

command ship, is permanently based in the region. This ship provides a key command-and-control platform that was employed successfully during the early days of the recent Libyan operation.

In 2016, the Navy requested funds to upgrade facilities at Keflavik Air Station in Iceland to enable operations of P-8 Poseidon aircraft in the region. The P-8, with a combat radius of 1,200 nautical miles, is capable of flying missions over the entirety of the GIUK (Greenland, Iceland, and United Kingdom) gap, which has seen an increase in Russian submarine activity.

The U.S. Navy also keeps a number of submarines in the area that contribute to EUCOM's intelligence, surveillance, and reconnaissance (ISR) capacities. The British Overseas Territory of Gibraltar, for example, frequently hosts U.S. nuclear-powered submarines. Docking U.S. nuclear-powered submarines in Spain is problematic and bureaucratic, making access to Gibraltar's Z berths vital. Gibraltar is the best place in the Mediterranean to carry out repair work. Strong U.S.-U.K. military cooperation helps the U.S. to keep submarine assets integrated into the European theater. The U.S. Navy also has a fleet of P-3 Maritime Patrol Aircraft and EP-3 Reconnaissance Aircraft operating from U.S. bases in Italy, Greece, Spain, and Turkey. They complement the ISR capabilities of U.S. submarines.

U.S. Army Europe. USAREUR was established in 1952. Then as today, the U.S. Army formed the bulk of U.S. forces in Europe. At the height of the Cold War, 277,000 soldiers and thousands of tanks, armored personnel carriers, and tactical nuclear weapons were positioned at the Army's European bases. USAREUR also contributed to U.S. operations in the broader region, such as the U.S. intervention in Lebanon in 1985, when it deployed 8,000 soldiers for four months from bases in Europe. In the 1990s, after the fall of the Berlin Wall, USAREUR continued to play a vital role in promoting U.S. interests in the region, especially in the Balkans.

USAREUR is headquartered in Wiesbaden, Germany. The core of USAREUR is formed around two BCTs and an aviation brigade located in Germany and Italy. In addition, the U.S. Army's 21st Theater Sustainment Command has helped the U.S. military presence in Europe to become an important logistics hub in support of Central Command.

In June 2015, the U.S. announced the re-introduction into Europe of vehicles and equipment for one armored BCT. In December 2015, U.S. Army Europe and Army Materiel Command began to store the European Activity Set (EAS) in prepositioned sites in Bulgaria, Lithuania, and Romania.¹⁶¹ The EAS equipment will remain in Europe; after it is upgraded and repaired, it will be transitioned into the core of the static Army Prepositioned Stocks (APS), first announced in February 2016.¹⁶² The APS will be stored in Belgium, Germany, and the Netherlands.¹⁶³ According to General Breedlove, while the U.S. plans to utilize preexisting locations for APS upgrades and storage, "new locations...may be needed given the 80% reduction of European infrastructure over the past 25 years and NATO's expansion along its eastern boundary."¹⁶⁴

The U.S. plans continuous troop rotations of U.S.-based armored brigade combat teams (ABCTs) to Europe. The additional rotational BCT in Europe will be in place by February 2017.¹⁶⁵ The ABCTs will be on nine-month rotations and will travel with their assigned equipment to Europe to demonstrate an ability to deploy troops and equipment from the U.S. to Europe.¹⁶⁶

U.S. Air Forces in Europe. USAFE provides a forward-based air capability that can support a wide range of contingency operations ranging from direct combat operations in Afghanistan and Libya to humanitarian assistance in Tunisia and Israel. USAFE originated as the 8th Air Force in 1942 and flew strategic bombing missions over the European continent during World War II. In August 1945, the 8th Air Force was redesignated USAFE with 17,000 airplanes and 450,000 personnel.

Today, USAFE has seven main operating bases along with 114 geographically separated locations.¹⁶⁷ The main operating bases are the RAF bases at Lakenheath and Mildenhall in the U.K., Ramstein and Spangdahlem Air Bases in Germany, Lajes Field in the Azores, Incirlik Air Base in Turkey, and Aviano Air Base in Italy. As part of the European Infrastructure Consolidation process, RAF Mildenhall, which houses KC-135 Stratotankers and 3,900 American military personnel, is expected to close in the next few years. By 2020, RAF Lakenheath will be home to two squadrons of F-35s, making it the first location in Europe for the USAF's new fighter jets.¹⁶⁸ Approximately 39,000 active-duty, reserve, and civilian personnel are assigned to USAFE.¹⁶⁹

As part of ERI, in August 2015, the United States temporarily deployed F-22 Raptors to Europe for the first time, as four were deployed to Spangdahlem Air base¹⁷⁰ in Germany for training exercises. The planes flew direct from Tyndall Air Force Base FL to Germany to showcase an ability to quickly reintroduce air power to Europe.¹⁷¹ In August 2015, two F-22s¹⁷² flew briefly to Poland and Estonia as a test of ability to get in and out of airbases in eastern member states.¹⁷³ The planes returned to the U.S. in mid-September 2015.¹⁷⁴

In April and May 2016, 12 F-22s from Tyndall AFB were deployed to RAF Lakenheath for additional exercises.¹⁷⁵ In April 2016, Romania's Mihail Kogalniceanu Airport hosted two F-22s briefly for a NATO training exercise. The exercise to showcase rapid deployments to forward operating bases marked the first time F-22s had landed in Romania.¹⁷⁶ Two F-22s also deployed briefly from Lakenheath to Šiauliai Air Base in Lithuania.¹⁷⁷ General Frank Gorenc, commander of U.S. Air Forces in Europe and U.S. Air Forces in Africa, said that the deployment was conducted to "test our infrastructure, aircraft capabilities and the talented Airmen and allies who will host these aircraft in Europe."¹⁷⁸

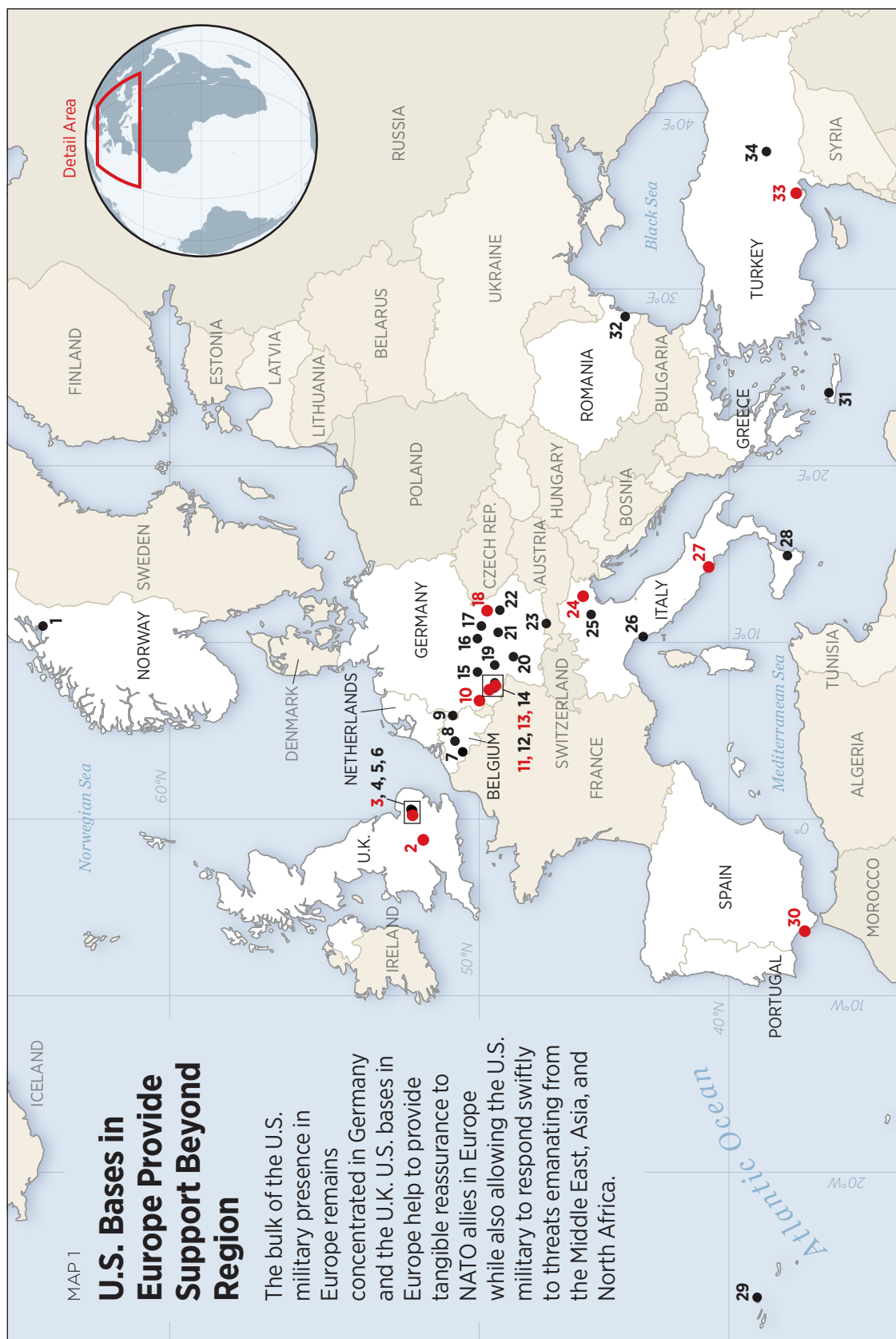
Additionally, in 2015, the U.S. sent three Theater Security Packages (TSPs) to Europe. The first consisted of 12 A-10C Thunderbolts

from Arizona, deployed for six months from Spangdahlem, RAF Lakenheath, and Poland from February–August 2015.¹⁷⁹ In April 2015, the second TSP, consisting of 12 F-15C fighters from Florida and Oregon, was deployed to Leeuwarden airbase in the Netherlands before being deployed to Bulgaria.¹⁸⁰ Nine of the F-15Cs returned to the U.S. at the end of June 2015.¹⁸¹ In September 2015, a third TSP, consisting of 12 A-10s from Georgia, was deployed for six months to Amari Air Base in Estonia for training exercises.¹⁸²

In April 2016, the U.S. deployed a fourth TSP, consisting of 12 F-15C Eagles, to Europe for six months. Six F-15s were deployed to Leeuwarden in the Netherlands and took part in Exercise Frisian Flag. The remaining six F-15s deployed to Keflavik, Iceland, to take part in NATO's Air Policing mission there.¹⁸³ The F-15s will forward deploy temporarily to Bulgaria, Estonia, and Romania¹⁸⁴ and remain in Europe until September 2016.¹⁸⁵ Six F-15s and 100 members of Oregon's National Guard deployed to Finland in May 2016.¹⁸⁶

U.S. Marine Forces Europe. MARFOREUR was established in 1980. It was originally a "designate" component command, meaning that it was only a shell during peacetime but could bolster its forces during wartime. Its initial staff was 40 personnel based in London. By 1989, it had more than 180 Marines in 45 separate locations in 19 countries throughout the European theater. Today, the command is based in Boeblingen, Germany, and has approximately 1,500 Marines assigned to support EUCOM, NATO, and other operations, such as Operation Enduring Freedom.¹⁸⁷ It was also dual-hatted as the Marine Corps Forces, Africa (MARFORAF) under Africa Command in 2008.

In the past, MARFOREUR has supported U.S. Marine units deployed in the Balkans and the Middle East. MARFOREUR also supports the Norway Air Landed Marine Air Ground Task Force, the Marine Corps' only land-based prepositioned stock. The Marine Corps has enough prepositioned stock in Norway to support a force of 13,000 Marines for 30 days, and the



U.S. Bases in Europe

Major base

CA—Closure announced

PC—Partially closed

X—Closed

Host Country	Base Name	Military Branch	Closure Notes	Mission
Norway	Marine Corps Prepositioning, Trendheim	Other		Provides forward-deployed equipment and supplies
U.K.	RAF Croughton	Air Force		422nd Air Base Group (communications, information weapons)
U.K.	RAF Lakenheath	Air Force		Combat fighter wing provides air power, support, and services
U.K.	RAF Mildenhall	Air Force	CA	Air refueling, combat support, and expeditionary forces
U.K.	RAF Alconbury	Air Force	CA	Sustains, trains, and equips U.K.-based air groups
U.K.	RAF Molesworth	Air Force	CA	Supports key NATO intelligence and information-sharing functions
Belgium	Benelux	Army		Supports joint military and interagency operations in Northern Europe
Belgium	Brussels	Army	CA	Provides base operations support and quality of life services
Netherlands	Schinnen	Army	CA	Army base operations and community support
Germany	Spangdahlem Air Base	Air Force		52nd Fighter Wing and radar systems supporting NATO air control
Germany	Baumholder	Army		Supports deployment, redeployment, and force-protection operations
Germany	Kaiserslautern	Army	PC	21st Theater Sustainment Command and supports joint missile defense
Germany	Ramstein Air Base	Air Force		86th Airlift Wing (combat airlift and aeromedical evacuation support)
Germany	Landstuhl Regional Medical Center	Other	CA	Medical care to military members, family members, and veterans
Germany	Wiesbaden	Army	PC	Installation capabilities and services support for expeditionary operations
Germany	Schweinfurt	Army	X	
Germany	Bamberg	Army	X	
Germany	Grafenwoehr	Army		2nd Cavalry Regiment and rotational unit readiness/training facility
Germany	Baden-Württemberg	Army	X	
Germany	Stuttgart	Army	PC	Command, control, communications, and base operations
Germany	Ansbach	Army	PC	12th Combat Aviation Brigade (restructured as a HQ element)
Germany	Hohenfels	Army		Combat Maneuver Training Center (training in force-on-force exercises)
Germany	Garmisch	Army	PC	Marshall European Center for Security Studies and NATO School
Italy	Aviano Air Base	Air Force		31st Fighter Wing (two F-16 squadrons and one air control squadron)
Italy	Vicenza	Army		Headquarters of USAFRICOM and 173rd Airborne Brigade
Italy	Livorno	Army	PC	Logistical support for combat deployments
Italy	Naval Support Activity Naples	Navy		Supports U.S. and NATO naval activities
Italy	Naval Air Station Sigonella	Navy	PC	Routing point for military personnel and cargo-rotational support
Portugal	Lajes Field (Azores)	Air Force		65th Air Base Wing (transit support for aviation assets)
Spain	Rota Naval Station	Navy		Air Force Mobility command and supports 6th Fleet
Greece	U.S. Naval Support Activity, Souda Bay	Navy		Logistical support and services for U.S. and allied ships and aircraft
Romania	Mihail Kogălniceanu Airbase	Other		Provides staging and transit for rotational support
Turkey	Incirlik Air Base	Air Force		39th Air Base Wing (provides global reach and regional stability)
Turkey	U.S. X-band radar missile defense, Kurecik	Other		Provides advanced tracking to assist in interception and defense

SOURCE: Heritage Foundation research.

Norwegian government covers half of the costs of the prepositioned storage. The prepositioned stock's proximity to the Arctic region makes it of particular geostrategic importance.

Crucially, MARFOREUR provides the U.S. with rapid reaction capability to protect U.S. embassies in North Africa. The Special-Purpose Marine Air-Ground Task Force–Crisis Response–Africa (SPMAGTF) is currently located in Spain, Italy, and Romania and provides a response force of 1,550 Marines.¹⁸⁸ In July 2015, Spain and the United States signed the Third Protocol of Amendment to the U.S.–Spanish Agreement for Defense and Cooperation, which allows the U.S. Marine Corps to station up to 2,200 military personnel, 21 aircraft, and 500 non-military employees permanently at Morón Air Base.¹⁸⁹ The Defense Department states that “a surge capability was included in the amendment of another 800 dedicated military crisis-response task force personnel and 14 aircraft at Moron, for a total of 3,500 U.S. military and civilian personnel and 35 aircraft.”¹⁹⁰ This has been particularly important since the tragic events of September 2013, when the U.S. ambassador to Libya and three others were killed in Benghazi, and the rise of the Islamic State, both in Libya as a result of the power vacuum left in the overthrow of the Qadhafi regime and elsewhere in North Africa. The Defense Department also states that the Morón Air Base deployments have led in part to a 50 percent increase in joint training exercises over the past two years.¹⁹¹

The Marine Corps also maintains a Black Sea Rotational Force (BSRF) composed of rotational units sent to the Black Sea region to conduct training events with regional partners. In FY 2017, the BSRF is expected to receive \$18 million to “increase the volume and scope of engagements with NATO Allies and partners conducted from Mihail Kogălniceanu (MK) Air Base, Romania and Novo Selo, Bulgaria.”¹⁹²

U.S. Special Operations Command Europe. SOCEUR is the only subordinate unified command under EUCOM. Its origins are

in the Support Operations Command Europe, and it was initially based in Paris. This headquarters provided peacetime planning and operational control of special operations forces during unconventional warfare in EUCOM's area of responsibility. In 1955, the headquarters was reconfigured as a joint task force and was renamed Support Operations Task Force Europe (SOTFE) and later Special Operations Task Force Europe. When French President Charles de Gaulle forced American troops out of France in 1966, SOTFE relocated to its current headquarters in Panzer Kaserne near Stuttgart, Germany, in 1967. It also operates out of RAF Mildenhall. In 1982, it was redesignated for a fourth time as U.S. Special Operations Command Europe.

Due to the sensitive nature of special operations, publicly available information is scarce. However, it has been documented that SOCEUR elements participated in various capacity-building missions and civilian evacuation operations in Africa; took an active role in the Balkans in the mid-1990s and in combat operations in the Iraq and Afghanistan wars; and most recently supported AFRICOM's Operation Odyssey Dawn in Libya. SOCEUR also plays an important role in joint training with European allies; since June 2014, it has maintained an almost continuous presence in the Baltic States and Poland in order to train special operations forces in those countries.¹⁹³ SOCEUR is expected to receive an additional \$25 million in FY 2017 for an increased presence in Eastern Europe. The initiative will help allies to “counter malign influence” while expanding partnerships between U.S. National Guard units and European allies' special operations forces.¹⁹⁴

EUCOM has played an important role in supporting other combatant commands, such as CENTCOM and AFRICOM. Out of the 65,000 U.S. troops based in Europe, almost 10,000 are there to support other combatant commands. The facilities available in EUCOM allowed the U.S. to play a leading role in combating Ebola in western Africa during the 2014 outbreak.

In addition to CENTCOM and AFRICOM, U.S. troops in Europe have worked closely with U.S. Cyber Command (CYBERCOM) to implement Department of Defense cyber policy in Europe and to bolster the cyber defense capabilities of America's European partners. This work has included hosting a number of cyber-related conferences and joint exercises with European partners.

In the past year, there have been significant advancements in improving cyber security in Europe. EUCOM's first Cyber Combat Mission Team (CMT) and Cyber Protection Team (CPT) recently reached initial operational capability. These teams will provide the U.S. with new capabilities to protect systems, information, and infrastructure.¹⁹⁵ EUCOM has also supported CYBERCOM's work inside NATO by becoming a full member of the NATO Cooperative Cyber Defense Center of Excellence in Tallinn, Estonia.

U.S. Nuclear Weapons in Europe

In addition to the French and British nuclear capabilities, the U.S. maintains tactical nuclear weapons in Europe. It is believed that until the end of the Cold War, the U.S. maintained approximately 2,500 nuclear warheads in Europe. Unofficial estimates put the current figure at between 150 and 200 warheads based in Italy, Turkey, Germany, Belgium, and the Netherlands.¹⁹⁶ All of these weapons are free-fall gravity bombs designed for use with U.S. and allied dual-capable aircraft. The bombs are undergoing a Life Extension Program that it is anticipated will add at least 20 years to the weapons' life span.¹⁹⁷

While some in NATO have suggested that American tactical nuclear weapons in Europe are a Cold War anachronism and should be removed from the continent, NATO's 2012 Deterrence and Defense Posture Review (DDPR) affirmed that "nuclear weapons are a core component of NATO's overall capabilities for deterrence and defence alongside conventional and missile defence forces."¹⁹⁸ As if to underscore NATO's continued concern about sustaining a nuclear deterrent capability,

Russia has acted in ways that highlight its status as a potent nuclear weapons power with an extensive nuclear weapons modernization program. Further, it has repeatedly violated a host of arms control agreements, including the Intermediate-Range Nuclear Forces Treaty, which is particularly relevant for the European allies.

Key Infrastructure and Warfighting Capabilities

Perhaps one of the major advantages of having U.S. forces in Europe is the access it provides to logistical infrastructure. For example, EUCOM supports the U.S. Transportation Command (TRANSCOM) with its array of airbases and access to ports throughout Europe.

EUCOM supported TRANSCOM with work on the Northern Distribution Network (NDN), which supplied U.S. troops in Afghanistan during major combat operations there. For example, in 2011, when the security situation in Pakistan did not allow passage for NATO supplies, EUCOM's Deployment and Distribution Operations Center moved 21,574 containers and 32,206 tons of equipment through Europe to Afghanistan over the NDN. EUCOM could not support these TRANSCOM initiatives without the infrastructure and relationships established by the permanent U.S. military presence in Europe.

Europe is a mature and advanced operating environment. America's decades-long presence there means that the U.S. has tried and tested systems that involve moving large numbers of matériel and personnel into, inside, and out of the continent. This offers an operating environment second to none in terms of logistical capability. For example, there are more than 166,000 miles of rail line in Europe (not including Russia), and an estimated 90 percent of roads in Europe are paved. The U.S. enjoys access to a wide array of airfields and ports across the continent. Major European ports used by the U.S. military include Rotterdam, the Netherlands; Bremerhaven, Germany; and Livorno,

Italy. The Rhine River also offers access to the heartland of Europe. General Gorenc has described plans to use additional funds from the ERI to further develop airfields in Eastern Europe, citing the Baltics, Poland, Romania, and Bulgaria as potential projects.¹⁹⁹ Such airfield infrastructure projects could help to make airfields in Eastern Europe “an easier place to go to accomplish what I call high-volume/high velocity kind of operations.”²⁰⁰

More often than not, the security interests of the United States will coincide with those of its European allies. This means that access to bases and logistical infrastructure is usually guaranteed. However, there have been times when certain European countries have not allowed access to their territory for U.S. military operations.

In 1986, U.S. intelligence connected the terrorist bombing of a nightclub in West Germany to the Libyan government and responded with an air strike. On April 15, 1986, the U.S. Air Force in Europe struck a number of Libyan military assets in retaliation. Because France, Spain, and Italy prohibited use of their airspace due to domestic political concerns, the U.S. aircraft flew around the Iberian Peninsula, which required multiple in-flight refuelings.²⁰¹

In 2003, on the eve of the U.S. invasion of Iraq, the Turkish Parliament voted to prevent the U.S. from using Turkish territory to open a northern front. Thankfully, the U.S. had access to excellent logistical infrastructure in Italy. The 173rd Airborne Brigade had moved all of its equipment by rail to the port of Livorno for movement to Kuwait by sea. Despite the Turkish decision to refuse use of its country for offensive operations, the brigade was still able to move it all back rapidly by rail to Aviano Air Base so that it could be parachuted into Northern Iraq.

Some of the world’s most important shipping lanes are also in the European region. In fact, the world’s busiest shipping lane is the English Channel, through which 500 ships a day transit, not including small boats and pleasure craft. Approximately 90 percent of the world’s trade travels by sea. Given the high

volume of maritime traffic in the European region, no U.S. or NATO military operation can be undertaken without consideration of how these shipping lanes offer opportunity—and risk—to America and her allies. In addition to the English Channel, other important shipping routes in Europe include the Strait of Gibraltar; the Turkish Straits (including the Dardanelles and the Bosphorus); the Northern Sea Route; and the Danish Straits.

Strait of Gibraltar. The Strait of Gibraltar connects the Mediterranean Sea with the Atlantic Ocean and separates North Africa from Gibraltar and Spain on the southernmost point of the Iberian Peninsula. The strait is about 40 miles long and approximately eight miles wide at its narrowest point. More than 200 cargo vessels pass through the Strait of Gibraltar every day, carrying cargoes to Asia, Europe, Africa, and the Americas.

The strait’s proximity to North Africa, combined with its narrowness, has presented security challenges for U.S. and allied warships. In 2002, Moroccan security forces foiled an al-Qaeda plot to attack U.S. and U.K. naval ships in the Strait of Gibraltar using the same tactics that had been used in the USS *Cole* attack. A 2014 article in the al-Qaeda English-language publication *Resurgence* urged attacks on oil tankers and cargo ships crossing the Strait of Gibraltar as a way to cause “phenomenal” damage to the world economy.²⁰² The Spanish enclave of Ceuta off the coast of North Africa is less than 18 miles across the strait from Gibraltar. This past year, Ceuta has seen several arrests of ISIS recruiters and suppliers of bomb-making equipment and weapons. In April 2015, Spanish officials claimed to have uncovered Europe’s first all-female jihadi ring in Ceuta.²⁰³ Ceuta is frequently utilized by the Russian Navy as a stop-over and resupply point. Since 2011, over 50 Russian Navy vessels have stopped there.²⁰⁴

The Turkish Straits (Including the Dardanelles and the Bosphorus). These straits are long and narrow: 40 and 16 miles long, respectively, with the narrowest point in the Bosphorus, which connects the Black Sea with the

Sea of Marmara, only 765 yards wide. Approximately 46,000 ships each year transit the strait, including more than 5,600 tankers.²⁰⁵

The 1936 Montreux Convention gave Turkey control of the Bosphorus and placed limitations on the number, transit time, and tonnage of naval ships from non-Black Sea countries that can use the strait and operate in the Black Sea.²⁰⁶ This places limitations on U.S. Navy operation in the Black Sea. However, even with these limitations, the U.S. Navy had a presence on the Black Sea for 207 days in 2014.²⁰⁷

The Northern Sea Route. As ice dissipates during the summer months, new shipping lanes offer additional trade opportunities in the Arctic. The Northern Sea Route along the Russian coast reduces a trip from Hamburg to Shanghai by almost 4,000 miles, cuts a week off delivery times, and saves approximately \$650,000 in fuel costs per ship. However, realization of the NSR's full potential lies far in the future. In 2015, only 18 ships made the journey.²⁰⁸

GIUK Gap. This North Atlantic naval corridor between Greenland, Iceland, and the United Kingdom is strategically vital. During the Cold War, Soviet submarines, bombers, and reconnaissance aircraft traversed the GIUK Gap frequently to gain access to the Atlantic Ocean from the Northern Russian coast. Recent increased Russian activity through and near the GIUK Gap has led the U.S. to return military assets to Keflavik in southwest Iceland.

The Danish Straits. Consisting of three channels connecting the Baltic Sea to the North Sea via the Kattegat and Skagerrak seas, the Danish Straits are particularly important to the Baltic Sea nations as a way to import and export goods. This is especially true for Russia, which increasingly has been shifting its crude oil exports to Europe through its Baltic ports.²⁰⁹ More than 125,000 ships per year transit these straits.²¹⁰

Geostrategic Islands in the Baltic Sea. Three other critically important locations are the Åland Islands (Finnish); Gotland Island (Swedish); and Bornholm Island. The Åland

Islands have been demilitarized since the 1856 Treaty of Paris ending the Crimean War and have always been considered the most important geostrategic piece of real estate in the Baltic Sea. Gotland Island is strategically located halfway between Sweden and Latvia in the middle of the Baltic Sea. Sweden maintained a permanent military garrison on the island for hundreds of years until 2005. At the height of the Cold War, 15,000–20,000 Swedish military personnel were stationed on Gotland.²¹¹ Today, Sweden is standing up a 300-strong Battle Group Gotland, to be fully established on the island by 2018.²¹² The military facilities will need to be reconstituted, as most were sold off for civilian use after 2005. Bornholm Island is strategically located at the mouth of the Baltic Sea.

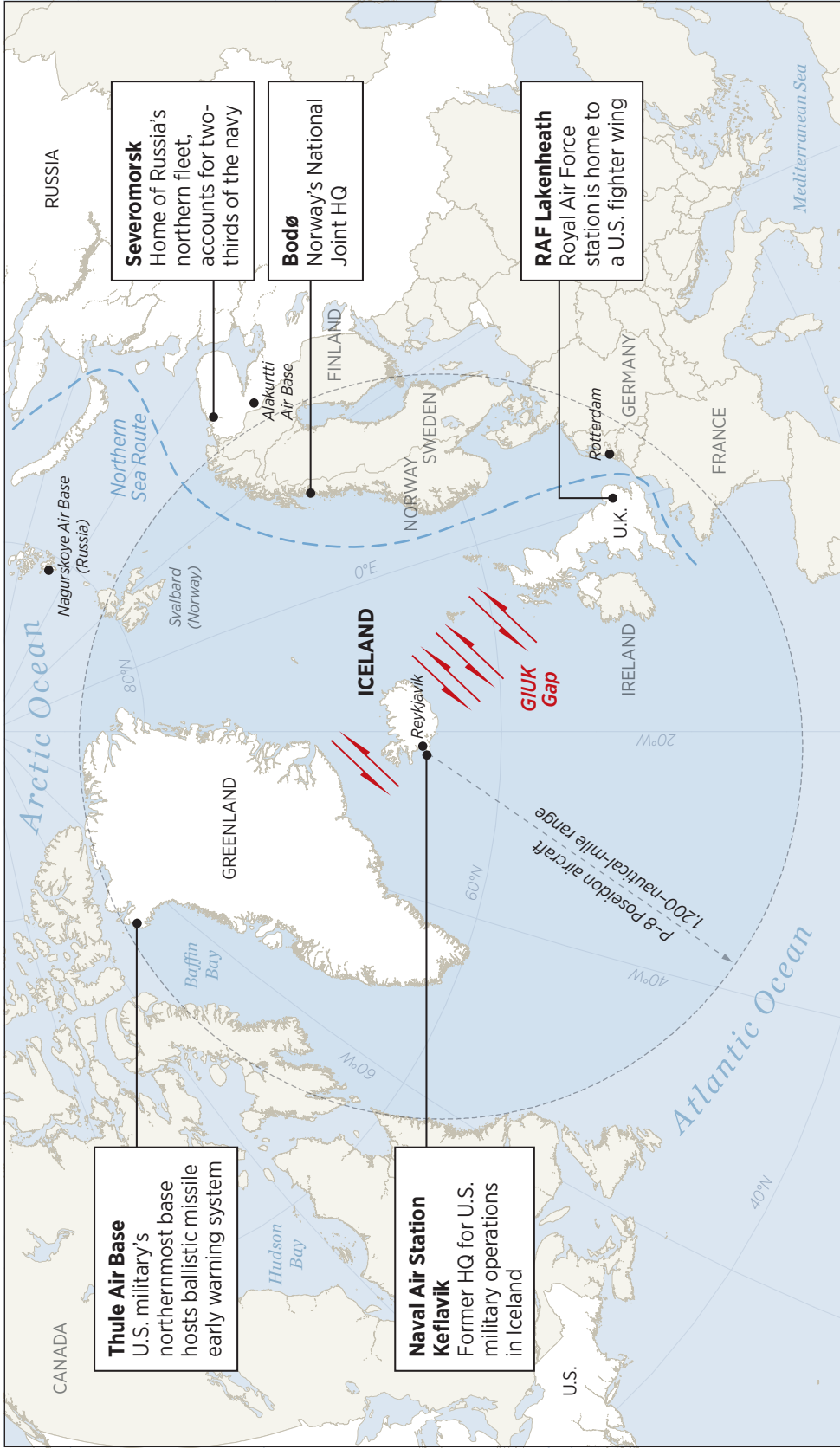
In March 2015, Russia carried out a large-scale training exercise with up to 33,000 soldiers, which included the capture of these three islands as part of its scenario. Reinforcing the Baltic region would be nearly impossible without control of these islands.

The biggest danger to infrastructure assets in Europe pertains to any potential NATO conflict with Russia in one or more of NATO's eastern states. In such a scenario, infrastructure would be heavily targeted in order to deny or delay the alliance's ability to move the significant numbers of manpower, matériel, and equipment that would be needed to retake any territory lost during an initial attack. In such a scenario, the shortcomings of NATO's force posture would become obvious.

Conclusion

Overall, the European region remains a stable, mature, and friendly operating environment. Russia remains the preeminent threat to the region, both conventionally and non-conventionally, and the ongoing migrant crisis, continued economic sluggishness, and consistent threat from terrorism increase the potential for internal instability. The threats emanating from the previously noted arc of instability that stretches from the eastern Atlantic Ocean to the Middle East and up to the

Iceland's Strategic Location in the North Atlantic



SOURCE: Heritage Foundation research.

Caucasus through Russia and into the Arctic have spilled over into Europe itself in the form of terrorism and migrants arriving on the continent's shores.

The United States, however, begun to reverse some of its recent disengagement from Europe, reintroducing troops and equipment to the continent, albeit not permanently. The U.S. has also increased the number and consistency of exercises, especially with NATO partners, in large part through funding made available in the ERI, and defense spending by many European NATO members has finally begun to move incrementally in an upward direction.

America's closest and oldest allies are located in Europe. The region is incredibly important to the U.S. for economic, military, and political reasons. Perhaps most important, the U.S. has treaty obligations through NATO to defend the European members of

that alliance. This is especially important as Russia becomes more assertive in Central and Eastern Europe, increasingly utilizing economic, political, and diplomatic means in addition to military power to assert itself. If the U.S. needs to act in the European region or nearby, there is a history of interoperability with allies and access to key logistical infrastructure that makes the operating environment in Europe more favorable than the environment in other regions in which U.S. forces might have to operate.

However, the European nations' diminished military forces and lack of political will to take on a greater portion of the security burden pose a substantial threat to all of this. NATO is only as strong as its member states, and while some have taken steps to increase defense spending, the situation remains a source of concern, especially in light of U.S. defense cuts.

Scoring the European Operating Environment

As noted at the beginning of this section, there are various considerations that must be taken into account in assessing the regions within which the U.S. may have to conduct military operations to defend its vital national interests against threats. Our assessment of the operating environment utilized a five-point scale, ranging from "very poor" to "excellent" conditions and covering four regional characteristics of greatest relevance to the conduct of military operations:

1. **Very Poor.** Significant hurdles exist for military operations. Physical infrastructure is insufficient or nonexistent, and the region is politically unstable. The U.S. military is poorly placed or absent, and alliances are nonexistent or diffuse.
2. **Unfavorable.** A challenging operating environment for military operations is marked by inadequate infrastructure, weak alliances, and recurring political

instability. The U.S. military is inadequately placed in the region.

3. **Moderate.** A neutral to moderately favorable operating environment is characterized by adequate infrastructure, a moderate alliance structure, and acceptable levels of regional political stability. The U.S. military is adequately placed.
4. **Favorable.** A favorable operating environment includes good infrastructure, strong alliances, and a stable political environment. The U.S. military is well placed in the region for future operations.
5. **Excellent.** An extremely favorable operating environment includes well-established and well-maintained infrastructure, strong capable allies, and a stable political environment. The U.S. military is exceptionally well placed to defend U.S. interests.

The key regional characteristics consisted of:

- a. **Alliances.** Alliances are important for interoperability and collective defense, as allies would be more likely to lend support to U.S. military operations. Various indicators provide insight into the strength or health of an alliance. These include whether the U.S. trains regularly with countries in the region, has good interoperability with the forces of an ally, and shares intelligence with nations in the region.
- b. **Political Stability.** Political stability brings predictability for military planners when considering such things as transit, basing, and overflight rights for U.S. military operations. The overall degree of political stability indicates whether U.S. military actions would be hindered or enabled and considers, for example, whether transfers of power in the region are generally peaceful and whether there have been any recent instances of political instability in the region.
- c. **U.S. Military Positioning.** Having military forces based or equipment and supplies staged in a region greatly facilitates the United States' ability to respond to crises and, presumably, more quickly achieve successes in critical "first battles." Being routinely present in a region also assists in maintaining familiarity with its characteristics and the various actors that might try to assist or thwart U.S. actions.

With this in mind, we assessed whether or not the U.S. military was well-positioned in the region. Again, indicators included bases, troop presence, prepositioned equipment, and recent examples of military operations (including training and humanitarian) launched from the region.

- d. **Infrastructure.** Modern, reliable, and suitable infrastructure is essential to military operations. Airfields, ports, rail lines, canals, and paved roads enable the U.S. to stage, launch operations from, and logistically sustain combat operations. We combined expert knowledge of regions with publicly available information on critical infrastructure to arrive at our overall assessment of this metric.²¹³

For Europe, scores this year moved in a positive direction largely as a result of increases in the alliance score and U.S. military positioning score. Scores for political stability in Europe turned slightly downward. However, none of these changes was large enough to affect the overall average scores in the *2017 Index*:

- Alliances: **4—Favorable**
- Political Stability: **4—Favorable**
- U.S. Military Positioning: **3—Moderate**
- Infrastructure: **4—Favorable**

Leading to a regional score of: **Favorable**

Operating Environment: Europe

	VERY POOR	UNFAVORABLE	MODERATE	FAVORABLE	EXCELLENT
Alliances				✓	
Political Stability				✓	
U.S. Military Posture			✓		
Infrastructure				✓	
OVERALL				✓	

Endnotes:

1. On June 23, 2016, Great Britain voted by popular referendum to leave the European Union. Its exact departure date has yet to be determined.
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Middle East

Strategically situated at the intersection of Europe, Asia, and Africa, the Middle East has long been an important focus of U.S. foreign policy. U.S. security relationships in the region are built on pragmatism, shared security concerns, and economic interests, including large sales of U.S. arms to countries in the region that are seeking to defend themselves. The U.S. also maintains a long-term interest in the Middle East that is related to the region's economic importance as the world's primary source of oil and gas.

The region is home to a wide array of cultures, religions, and ethnic groups, including Arabs, Jews, Kurds, Persians, and Turks, among others. It also is home to the three Abrahamic religions of Judaism, Christianity, and Islam, in addition to many smaller religions like the Bahá'í, Druze, Yazidi, and Zoroastrian faiths. The region contains many predominantly Muslim countries as well as the world's only Jewish state.

The Middle East is deeply sectarian, and these long-standing divisions, exacerbated by religious extremists vying for power, are central to many of the challenges that the region faces today. In some cases, these sectarian divides go back centuries. Contemporary conflicts, however, have less to do with these histories than they do with modern extremist ideologies and the fact that modern-day borders often do not reflect the region's cultural, ethnic, or religious realities. Today's borders are often the results of decisions taken by the British, French, and other powers during and soon after World War I as they dismantled the Ottoman Empire.¹

In a way not understood by many in the West, religion remains a prominent fact of daily life in the modern Middle East. At the heart of many of the region's conflicts is the friction within Islam between Sunnis and Shias. This friction dates back to the death of the Prophet Muhammad in 632 AD.² Sunni Muslims, who form the majority of the world's Muslim population, hold power in most of the Arab countries in the Middle East.

But viewing the current instability in the Middle East through the lens of a Sunni–Shia conflict does not show the full picture. The cultural and historical division between Persians and Arabs has reinforced the Sunni–Shia split. The mutual distrust of many Arab/Sunni powers and the Persian/Shia power (Iran), compounded by clashing national and ideological interests, has fueled instability, including in Bahrain, Iraq, Lebanon, Syria, and Yemen. Sunni extremist organizations such as al-Qaeda and the Islamic State have exploited sectarian and ethnic tensions to gain support by posing as champions of Sunni Arabs against Iran, Syria's Alawite-dominated regime, and other non-Sunni governments and movements.

Current regional demographic trends also are destabilizing factors. The Middle East contains one of the world's youngest and fastest-growing populations. In most of the West, this would be viewed as an advantage, but not in the Middle East. Known as “youth bulges,” these demographic tsunamis have overwhelmed the inadequate political, economic, and educational infrastructures in many countries, and the lack of access to education,

jobs, and meaningful political participation fuels discontent. Because more than 60 percent of regional inhabitants are less than 30 years old, this demographic bulge will continue to have a substantial effect on political stability across the region.

The Middle East contains more than half of the world's oil reserves and is the world's chief oil-exporting region. As the world's biggest oil consumer, the U.S. has a vested interest in maintaining the free flow of oil and gas from the region. This is true even though the U.S. actually imports relatively little of its oil from the Middle East.³ Oil is a fungible commodity, and the U.S. economy remains vulnerable to sudden spikes in world oil prices.

Because many U.S. allies depend on Middle East oil and gas, there is also a second-order effect for the U.S. if supply from the Middle East is reduced or compromised. For example, Japan (the world's third largest economy) is the world's largest liquefied natural gas (LNG) importer, accounting for 37 percent of the global market share of LNG demand.⁴ Qatar is the second largest supplier of LNG to Japan. In 2016, another U.S. ally in Asia—South Korea, the world's 15th largest economy⁵—depended on the Middle East for 84 percent of its imports of crude oil.⁶ The U.S. might not be dependent on Middle East oil or LNG, but the economic consequences arising from a major disruption of supplies would ripple across the globe.

Financial and logistics hubs are also growing along some of the world's busiest transcontinental trade routes. One of the region's economic bright spots in terms of trade and commerce is found in the Persian Gulf. The emirates of Dubai and Abu Dhabi in the United Arab Emirates (UAE), along with Qatar, are competing to become the region's top financial center. Although many oil-exporting countries recovered from the 2008 financial crisis and subsequent recession, they have since experienced the deepest economic downturn since the 1990s as a result of falling oil prices.⁷ Various factors such as weak demand, OPEC infighting, and increased U.S.

domestic oil production have contributed to these plunging oil prices.⁸

Nevertheless, the Middle East is full of economic extremes. For example:

- Qatar is the world's wealthiest country in terms of gross domestic product (GDP) per capita, while Yemen, a mere 700 miles away, ranks 194th.⁹
- Saudi Arabia has 265 billion barrels of proven oil reserves. It shares a nearly 500-mile border with Jordan, which has just 1 million barrels of proven oil reserves.
- According to the *2016 Index of Economic Freedom*, published by The Heritage Foundation and *The Wall Street Journal*, Bahrain ranks 18th in the world in terms of economic freedom, and Iran ranks 171st.¹⁰

These disparities are worsened by government corruption across most of the region, which not only squanders economic and human resources, but also restricts economic competition and hinders the development of free enterprise.

The economic situation, in part, drives the Middle East's political environment. The lack of economic freedom was an important factor leading to the Arab Spring uprisings, which disrupted economic activity, depressed foreign and domestic investment, and slowed economic growth.

The political environment has a direct bearing on how easily the U.S. military can operate in a region. In many Middle Eastern countries, the political situation remains fraught with uncertainty. The Arab Spring uprisings that began in early 2011 formed a regional sandstorm that eroded the foundations of many authoritarian regimes, erased borders, and destabilized many countries in the region. Even so, the popular uprisings in Tunisia, Libya, Egypt, Bahrain, Syria, and Yemen did not usher in a new era of democracy and liberal rule, as many in the West

were hoping. At best, these uprisings made slow progress toward democratic reform. At worst, they added to political instability, exacerbated economic problems, and contributed to the rise of Islamist extremists. Five years later, economic and political outlooks remain bleak.¹¹

There is no shortage of security challenges for the U.S. and its allies in this region. Iran has exacerbated Shia–Sunni tensions to increase its influence over embattled regimes and undermine adversaries in Sunni-led states. Tehran attempts to run an unconventional empire by exerting great influence over sub-state entities like Hamas (Palestinian territories); Hezbollah (Lebanon); the Mahdi movement (Iraq); and the Houthi insurgents (Yemen). In Afghanistan, Tehran exerts influence over some Shiite groups. Iran also provided arms to the Taliban after it was ousted from power by a U.S.-led coalition¹² and has long considered the Afghan city of Herat, near the Iranian border, to be part of its sphere of influence.

The Iran nuclear agreement has strengthened Tehran’s ability to establish regional hegemony. Tehran has recovered approximately \$100 billion in frozen assets that will boost its economy and enhance its strategic position, military capabilities, and support for surrogate networks and terrorist groups.¹³ The economic transfusion will enable Tehran to further tilt the regional balance of power in its favor.

Iran already looms large over weak and divided Arab rivals. Iraq and Syria have been destabilized by insurgencies and may never fully recover. Egypt is distracted by its own internal problems, economic imbalances, and the Islamist extremist insurgency in the Sinai Peninsula. Jordan has been inundated with a flood of Syrian refugees and is threatened by the spillover of Islamist extremist groups from Syria. Meanwhile, Tehran has continued to build up its missile arsenal (now the largest in the Middle East) and has increased its naval provocations in the Persian Gulf, intervened to prop up the Assad regime in Syria,

and reinforced Shiite Islamist revolutionaries in Yemen and Bahrain.¹⁴ In Syria, the Assad regime’s brutal repression of peaceful demonstrations in early 2011 ignited a fierce civil war that has led to the deaths of more than 470,000 people¹⁵ and displaced about 4.5 million refugees in Turkey, Lebanon, Jordan, Iraq and Egypt.¹⁶ More than 7.6 million people “are internally displaced within Syria.”¹⁷ The destabilizing spillover effects of this civil war include the creation of large refugee populations that could become a reservoir of potential recruits for extremist groups. In Jordan, where King Abdullah’s regime has been buffeted by Arab Spring protests and adverse economic trends, Syrian refugees now account for more than 10 percent of the population. This has placed even more strain on Jordan’s small economy, scarce water resources, and limited social services, creating rising resentment among the local population.

In 2015, more than 1 million Syrian migrants and refugees crossed into Europe, the largest numbers of migrating people that Europe has seen since World War II.¹⁸ This has sparked a crisis as countries struggle to cope with the massive influx and its social, economic, and political ramifications.

Thanks to the power vacuum created by the ongoing civil war in Syria, Islamist extremist groups, including the al-Qaeda-affiliated al-Nusra Front and the self-styled Islamic State (IS), formerly known as ISIS or ISIL and before that as al-Qaeda in Iraq, have carved out extensive sanctuaries where they are building proto-states and training militants from a wide variety of other Arab countries, Europe, Australia, and the United States. With a sophisticated Internet and social media presence, and by capitalizing on the civil war in Syria and sectarian divisions in Iraq, ISIS has been able to recruit over 25,000 fighters from outside the region to join its ranks in Iraq and Syria. These foreign fighters include over 4,500 citizens from Western nations, including approximately 250 U.S. citizens.¹⁹

In late 2013, the IS exploited the Shia-dominated Iraqi government’s heavy-handed

alienation, marginalization, and repression of the Sunni Arab minority in Iraq to reinvigorate its insurgency and seize territory in Iraq. In the summer of 2014, the IS spearheaded a broad Sunni uprising against Baghdad. The assault was incredibly effective, and by the end of the year, the IS controlled one-third of Iraq and one-third of Syria—a land mass roughly equal to the area of Great Britain—where the extremist group ruled upward of 9 million people. However, since then, the self-proclaimed caliphate has lost approximately 40 percent of the territory it once controlled in Iraq and 10 percent–20 percent of the territory it controlled in Syria.²⁰ The Peshmerga militia of the Kurdistan Regional Government, an autonomous area in northeastern Iraq, took advantage of the chaos caused by the collapse of the Iraqi security forces and occupied the city of Kirkuk, long considered by Kurds to be rightfully theirs—a claim rejected by the central government in Baghdad. The IS continues to attack the Shia-dominated government in Baghdad, massacre Shia civilians and Sunnis who disagree with it, and terrorize religious and ethnic minorities in northern Iraq including the Christian community, Kurds, Turkmen, and Yazidis. In early 2016, Iraq's military and militia forces, backed by air power from the U.S.-led coalition and by Peshmerga forces, launched an offensive to retake Mosul, but at the time of publication, only limited progress has been made.²¹

In April 2016, the Obama Administration announced that it was sending an additional 250 U.S. special operations forces to Syria.²² In Iraq, approximately 3,500 U.S. personnel were on the ground, although the numbers sometimes surpassed 5,000 due to rotations and temporary deployments.²³ The U.S. led a coalition air campaign in Iraq and Syria with the help of Australia, Bahrain, France, Jordan, Saudi Arabia, Turkey, the United Arab Emirates, and the United Kingdom (U.K.).²⁴ In early 2016, the IS experienced difficulty replenishing its foreign fighters as it struggled to pay fighters and recruit new ones to replace those who have deserted, defected, or died.²⁵

The recruitment problem was compounded by a string of major battlefield defeats, including the Iraqi military's liberation of Ramadi,²⁶ which contributed to their loss of substantial territory in Iraq and Syria.²⁷ In May 2016, Iraq launched an offensive to retake the ISIS-controlled city of Fallujah,²⁸ which it managed to do in June.

Arab-Israeli tensions are another source of instability in the Middle East region. The repeated breakdown of Israeli-Palestinian peace negotiations and the rise of the Hamas regime in Gaza in a 2007 coup have created an even more antagonistic situation. Hamas, the Palestinian branch of the Muslim Brotherhood, seeks to transform the conflict from a national struggle over sovereignty and territory into a religious conflict in which compromise is denounced as blasphemy. Hamas invokes jihad in its struggle against Israel and seeks to destroy the Jewish state and replace it with an Islamic state.

Although elected to power with only 44 percent of the vote in the 2006 elections, Hamas has since forced its radical agenda on the people of Gaza. This has led in turn to diminished public support and a high degree of needless suffering. Hamas has provoked wars with Israel in 2008, 2009, 2012, and 2014. It continues to pose threats to Israel and to Arab leaders who have signed peace agreements with Israel (representatives of Egypt, Jordan, and the Palestinian Authority). As long as Hamas remains imbued with its Islamist extremist ideology, which advocates the destruction of Israel, and retains a stranglehold over Gaza, achieving a sustainable Israeli-Palestinian peace agreement appears impossible.²⁹

Important Alliances and Bilateral Relations in the Middle East

The U.S. has strong military, security, intelligence, and diplomatic ties with several Middle Eastern nations, including Israel, Egypt, Jordan, and the members of the Gulf Cooperation Council (GCC).³⁰ Since the historical and political circumstances that led to the creation of NATO have largely been

absent in the Middle East, the region lacks a similarly strong collective security organization. Middle Eastern countries traditionally have preferred to maintain bilateral relationships with the U.S. and generally have shunned multilateral arrangements because of the lack of trust between Arab states.

Often, bilateral relationships between Arab Middle Eastern countries and Western countries, including the U.S., are secretive. The opaqueness of these relationships sometimes creates problems for the U.S. when trying to coordinate defense and security cooperation with European allies active in the region (mainly the U.K. and France).

Military training is an important part of these relationships. The main motivation behind these exercises is to ensure close and effective coordination with key partners in the region, demonstrate an enduring U.S. security commitment to regional allies, and train Arab armed forces so that they can assume a larger share of responsibility for regional security. In April 2016, the U.S. Naval Forces Central Command launched the world's largest maritime exercise across the Middle East to demonstrate global resolve in maintaining freedom of navigation and the free flow of maritime commerce.³¹

Kuwait, Bahrain, the UAE, Saudi Arabia, and Qatar have participated in Combined Task Force-152, formed in 2004 to maintain maritime security in the Persian Gulf, with Bahrain commanding the task force on two separate occasions.³² The commander of the U.S. Central Command (CENTCOM) noted that Middle Eastern partners have begun to take more seriously the threat from transnational Islamist extremist groups as ISIS has gained momentum, increased in strength, and expanded its international influence.³³ Middle Eastern countries have also participated further afield in Afghanistan; since 2001, Jordan, Egypt, Bahrain, and the UAE have supplied troops to the U.S.-led mission there. During the 2011 NATO-led operation in Libya, U.S. allies Qatar, Jordan, and the UAE participated to varying degrees.

In addition to military training, U.S. defense relations are underpinned by huge defense equipment deals. U.S. military hardware (and, to a lesser extent, British and French hardware) is preferred across the region because of its effectiveness and symbolic value as a sign of a close security relationship, and much of it has been combat tested. For example, Kuwait, the UAE, Jordan, and Saudi Arabia have over 400 F-15, F-16, and F/A-18 jet fighter aircraft combined. Following the Iran nuclear deal, threatened Arab states undertook military buildups and a flood of arms purchases. The U.S. approved \$33 billion worth of weapons sales to its Gulf Cooperation Council allies between May 2015 and March 2016. The six GCC countries received weapons that included ballistic missile defense systems, attack helicopters, advanced frigates, and anti-armor missiles.³⁴ The use of U.S.-made hardware helps with interoperability and lays the foundation for longer-term engagement and cooperation in the region.

Iran continues to incite violence against Israel by providing thousands of increasingly long-range rockets to Hamas, Palestine Islamic Jihad, and Hezbollah—all of which are committed to destroying Israel. Additionally, Iran has escalated its threats against Arab neighbors in the Persian Gulf by funding, training, equipping, and supporting anti-government militant groups in an attempt to undermine various Arab regimes. Saudi Arabia, in particular, has responded negatively to the 2015 Iran nuclear agreement by distancing itself from Washington and adopting more aggressive policies to push back against Iran and its allies in Syria, Yemen, and Lebanon.³⁵

Israel. America's most important bilateral relationship in the Middle East is with Israel. Both countries are democracies, value free-market economies, and believe in human rights at a time when many countries in the Middle East reject those values. Israel has been designated as a Major Non-NATO ally (MNNA)³⁶ because of its close ties to the U.S. With support from the United States, Israel has developed one of the world's most

sophisticated air and missile defense networks.³⁷ No significant progress on peace negotiations with the Palestinians or on stabilizing Israel's volatile neighborhood is possible without a strong and effective Israeli–American partnership.³⁸

In March 2015, incumbent Prime Minister Benjamin Netanyahu soundly defeated his chief rival faction, the center-left Zionist Union. Netanyahu's reelection enabled him to criticize the July 2015 nuclear agreement with Iran from a position of strength and further strained political relations with the Obama Administration, but bilateral security cooperation with the United States remained strong.

Saudi Arabia. After Israel, the U.S. military relationship is deepest with the Gulf states, including Saudi Arabia, which serves as *de facto* leader of the GCC. The United States started to play a more active role in the Persian Gulf after the U.K. completed the withdrawal of its military presence from bases “east of Suez” in 1971. The U.S. is also the largest provider of arms to Saudi Arabia and in November 2015 approved a \$1.3 billion sale to restock munitions stockpiles depleted by fighting in Yemen.³⁹

America's relationship with Saudi Arabia is based on pragmatism and is important for both security and economic reasons. The Saudis enjoy huge influence across the Muslim world. Roughly 2 million Muslims participate in the annual Hajj pilgrimage to the holy city of Mecca. Saudi Arabia owns the world's largest oil reserves and is the world's foremost oil exporter. The uninterrupted flow of Saudi oil exports is crucial for fueling the global economy.

Riyadh has been a key partner in efforts to counterbalance Iran, safeguard the security of its GCC allies, remove Syria's Assad regime from power, and stabilize Egypt and Yemen. Saudi Arabia also has played a growing role in countering the al-Qaeda terrorist network. Until 2003, Riyadh was in denial about Saudi connections to the 9/11 attacks. However, after Saudi Arabia was targeted by

al-Qaeda terrorist attacks on its own soil, the government began to cooperate more closely in combating al-Qaeda.⁴⁰ After the death of King Abdullah, his half-brother, Crown Prince Salman, ascended to the throne in late January 2015. The new Saudi leadership has taken a more assertive military role in the Middle East as a result of an emboldened Iran and a retreating United States. In early 2015, Saudi Arabia led a coalition of Arab states to intervene in Yemen's civil war after Yemen's government was ousted by Houthi rebels.

Gulf Cooperation Council. The countries of the GCC (Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, and the UAE) are located close to the Arab–Persian fault line, making them strategically important to the U.S.⁴¹ The root of the Arab–Iranian tensions in the Gulf is Tehran's ideological drive to export its Islamist revolution and overthrow the traditional rulers of the Arab kingdoms. This ideological clash has further amplified long-standing sectarian tensions between Shia and Sunni Islam. Tehran has sought to radicalize Shia Arab minority groups to undermine Sunni Arab regimes in Saudi Arabia, Kuwait, Lebanon, Libya, and Yemen. It also sought to incite revolts by the Shia majorities in Iraq against Saddam Hussein's regime and in Bahrain against the Sunni al-Khalifa dynasty.

Culturally, many Iranians look down on the Gulf states, many of which they see as artificial states carved out of the former Persian Empire and propped up by Western powers. Long-standing Iranian territorial claims in the Gulf add to Arab–Persian tensions.⁴² For example, Iran has long considered Bahrain to be part of its territory, a claim that has strained bilateral relations and contributed to Bahrain's decision to break diplomatic ties after the attack on the Saudi embassy in Tehran in early 2016.⁴³ Iran also occupies the small but strategically important islands of Abu Musa, Greater Tunb, and Lesser Tunb (also claimed by the UAE) near the Strait of Hormuz.

The GCC often has problems agreeing on a common policy on matters of security. This reflects the organization's intergovernmental

nature and the desire of its members to place national interests above those of the GCC. Perhaps this is best demonstrated in the debates over Iran. On one end of the spectrum, Saudi Arabia, Bahrain, and the UAE take a hawkish view of the threat from Iran. Oman and Qatar, both of which share natural gas fields with Iran, view Iran's activities in the region as less of a threat and maintain good relations with Tehran. Kuwait tends to fall somewhere in the middle. Inter-GCC relations also can be problematic. The UAE, Bahrain, and Saudi Arabia have been at odds with Qatar over Qatar's support for the Muslim Brotherhood, which they see as a threat to internal security, and Qatar has recently decreased its overt support for the organization in order to strengthen relations with its GCC partners.

Apart from Bahrain, the GCC countries have weathered the political turbulence of the Arab Spring relatively well. Many of their citizens enjoy a high standard of living (made possible by millions of foreign workers and the export of oil and gas), which makes it easier for them to tolerate authoritarian rule. Of the six GCC states, Bahrain fared the worst during the 2011 popular uprisings due to persistent Sunni-Shia sectarian tensions worsened by Iranian antagonism and the increased willingness of Shiite youths to protest what they see as discrimination by the al-Khalifa monarchy.

Egypt. Egypt is also an important U.S. military ally. As one of only two Arab countries (the other being Jordan) that have diplomatic relations with Israel, Egypt is closely enmeshed in the Israeli-Palestinian conflict and remains a leading political, diplomatic, and military power in the region.

Relations between the U.S. and Egypt have been problematic since the 2011 downfall of President Hosni Mubarak after 30 years of rule. The Muslim Brotherhood's Mohamed Morsi was elected president in 2012 and used the Islamist-dominated parliament to pass a constitution that advanced an Islamist agenda. Morsi's authoritarian rule, combined with rising popular dissatisfaction with falling

living standards, rampant crime, and high unemployment, led to a massive wave of protests in June 2013 that prompted a military coup in July. The leader of the coup, Field Marshal Abdel Fattah al-Sisi, pledged to restore democracy and was elected president in 2014. His government faces major political, economic, and security challenges. Egypt's limping economy has been badly damaged by more than five years of political turbulence and violence that has reduced tourism revenues, deterred foreign investment, and raised the national debt. The new regime also faces an emboldened ISIS that launched waves of attacks in North Sinai in mid-2015, including the destruction of a Russian airliner over the Sinai Peninsula in October 2015.⁴⁴

The July 2013 coup against the Muslim Brotherhood-backed Morsi regime strained relations with the Obama Administration and resulted in a temporary hold on U.S. military assistance to Egypt. Cairo demonstrated its displeasure by buying Russian arms financed by Saudi Arabia in late 2013, but bilateral relations with the U.S. improved after Egypt's military made good on its promises to hold elections. In April 2015, the Obama Administration released its hold on the annual \$1.3 billion military aid package for Egypt.⁴⁵

Lebanon and Yemen. The United States has developed cooperative defense arrangements with Lebanon and Yemen, two states that face substantial threats from Iranian-supported terrorist groups as well as al-Qaeda and the Islamic State. The United States has provided arms, equipment, and training for the Lebanese Armed Forces (LAF), which has found itself increasingly challenged by Sunni Islamist extremist groups, including the IS, in addition to the long-term threat posed by Hezbollah. Hezbollah has emerged as Lebanon's most powerful military force, adding to GCC fears about growing Iranian influence in Lebanon. In early 2016, Saudi Arabia cut off its funding for \$4 billion worth of military aid to Lebanon because the country did not condemn attacks on Saudi diplomatic missions in Iran, thereby intensifying the proxy war with Iran.⁴⁶

Washington's security relationship with Yemen has grown since the 9/11 attacks. Yemen, Osama bin Laden's ancestral homeland, faces major security threats from al-Qaeda in the Arabian Peninsula (AQAP), one of the most dangerous al-Qaeda affiliates.

The overall political and security situation in Yemen deteriorated further in 2014–2016. In January 2015, the Houthis, a militant Shiite group based in northern Yemen and backed by Iran,⁴⁷ overran the capital city of Sana'a and forced the internationally recognized government led by President Abd Rabbu Mansour Hadi to resign. The Houthis solidified their control throughout the North and West of Yemen, and President Hadi fled to Riyadh. Backed by the U.S., the U.K., and France, Saudi Arabia formed a coalition of 10 Sunni countries and led an air campaign against Houthi forces that began in March 2015. The coalition has rolled back the Houthis but is no closer to reinstating the internationally recognized government in Sana'a.

The Yemeni conflict has become a proxy war between Saudi Arabia and Iran. Riyadh supports the Yemeni government, and Iran has provided money, arms, and training to the Houthi rebels, who belong to the Zaidi sect of Shia Islam. The unstable political situation in Yemen caused the United States to evacuate its embassy and withdraw its special operations forces, severely undermining U.S. counterterrorism and intelligence capabilities in Yemen. The growing chaos enabled AQAP to expand its presence and establish a "mini-state" spanning more than 350 miles of coastline.⁴⁸ IS entered Yemen in March 2015; however, estimates suggest that the number of IS personnel in Yemen is in the hundreds, while al-Qaeda numbers in the thousands.⁴⁹

Quality of Armed Forces in the Middle East

The quality and capabilities of the armed forces in the region are mixed. Some countries spend billions of dollars each year on advanced Western military hardware, and others spend very little. Defense spending in the Middle East overall increased by 4.1 percent

in 2015. Saudi Arabia was by far the region's largest military spender, with an estimated \$87.2 billion. Iraq had the region's (and the world's) largest increase in defense spending between 2006 and 2015: Its military spending in 2015 was \$31.1 billion, up 35 percent from 2014 and up 536 percent from 2006. Iran's military expenditure is expected to rise with the lifting of European Union and U.S. sanctions. Historically, defense spending figures for the Middle East have been very unreliable, but the lack of data has worsened; for 2015, there were no available data for Kuwait, Qatar, Syria, the United Arab Emirates, and Yemen according to a report by the Stockholm International Peace Research Institute.⁵⁰

Different security factors drive the degree to which Middle Eastern countries fund, train, and arm their militaries. For Israel, which defeated Arab coalitions in wars in 1948, 1956, 1967, 1973, and 1982, the chief potential threats to its existence are now posed by an Iranian regime that has called for Israel to be "wiped from the map."⁵¹ As a result of Israel's military dominance, states and non-state actors in the region have invested in asymmetric and unconventional capabilities to offset Israel's military superiority.⁵² For the Gulf states, the main driver of defense policy is the Iranian military threat combined with internal security challenges. For Iraq, the internal threat posed by insurgents and terrorists drives defense policy.

The Israel Defense Forces (IDF) are widely considered the most capable military force in the Middle East. On a conventional level, the IDF consistently surpasses other regional military forces.⁵³ Other countries, such as Iran, have developed asymmetric tactics and have built up the military capabilities of proxy groups to close the gap in recent years,⁵⁴ but the IDF's quality and effectiveness remain unparalleled with regard to both technical capacity and personnel.⁵⁵ This was demonstrated by Israel's 2014 military operations against Hamas in the Gaza Strip: After weeks of conflict, the IDF mobilized over 80,000 reservists, demonstrating the depth and flexibility of the Israeli armed forces.⁵⁶

Israel heavily funds its military sector and has a strong national industrial capacity, supported by significant funding from the U.S. Combined, these factors give Israel a regional advantage despite limitations of manpower and size.⁵⁷ In particular, the IDF has focused on maintaining its superiority in missile defense, intelligence collection, precision weapons, and cyber technologies.⁵⁸ The Israelis regard their cyber capabilities as especially important. In early 2016, the IDF unveiled a new five-year plan, worth roughly \$78.6 billion, to enhance cyber-protected and networked combat capabilities in order to augment the IDF's capacity to fight in multiple theaters.⁵⁹ Cyber technologies are used for a number of purposes, including defending Israeli cyberspace, gathering intelligence, and carrying out attacks.⁶⁰ Israel maintains its qualitative superiority in medium- and long-range missile capabilities.⁶¹ It also fields effective missile defense systems, including Iron Dome and Arrow, both of which the U.S. helped to finance.⁶² U.S. spending on Israel's air and missile defense has soared in the past decade, from \$133 million in 2006 to \$619 million in 2015.⁶³

Israel also has a nuclear weapons capability (which it does not publicly acknowledge) that increases its strength relative to other powers in the region. Israel's nuclear weapons capability has helped to deter adversaries as the gap in conventional capabilities has been reduced.⁶⁴

After Israel, the most technologically advanced and best-equipped armed forces are found in the Gulf Cooperation Council. Previously, the export of oil and gas meant that there was no shortage of resources to devote to defense spending, but the collapse of crude oil prices may force oil-exporting countries to adjust their defense spending patterns. At present, however, GCC nations still have the best-funded, although not necessarily the most effective, Arab armed forces in the region.

The GCC established a joint expeditionary force called the Peninsula Shield Force (PSF), which has had only modest operational

success and has never met its stated ambition of deploying tens of thousands of soldiers. Created in 1984, its main purpose today is to counter Iran's military buildup and help maintain internal security. The PSF first deployed a modest force of 3,000 troops to help liberate Kuwait during the first Gulf War. Its most recent deployment was to Bahrain in 2011 to help restore order after Iranian-backed Shiite protests brought the country to a standstill and threatened the monarchy.⁶⁵ Internal divisions inside the GCC, especially among Qatar, UAE, and Saudi Arabia, have prevented the PSF from playing a more active role in the region.

All GCC members boast advanced defense hardware with a preference for U.S., U.K., and French equipment. Saudi Arabia maintains the most capable military force in the GCC. It has an army of 75,000 soldiers and a National Guard of 100,000 personnel reporting directly to the king. The army operates 730 main battle tanks including 200 U.S.-made M1A1s. Its air force is built around American and British-built aircraft and consists of more than 325 combat-capable aircraft including F-15s, Tornados, and Typhoons.⁶⁶ These aircraft flew missions over Yemen against Houthi rebels in 2009–2010, during Operation Decisive Storm in Yemen beginning in March 2015, and most recently over Syria as part of the U.S.-led fight against ISIS.⁶⁷ Both Saudi Arabia⁶⁸ and the UAE⁶⁹ have hundreds of Storm Shadow air-launched cruise missiles (known as Black Shaheen in the UAE) in their inventories. These weapons proved highly effective when the British and French used them during the air campaign over Libya in 2011.

In fact, air power is the strong suit of most GCC members. Oman operates F-16s and has purchased 12 Typhoons, to be delivered in 2017. According to *Defense Industry Daily*, "The UAE operates the F-16E/F Desert Falcon, which holds more advanced avionics than any F-16 variant in the US inventory."⁷⁰ Qatar operates French-made Mirage fighters. The UAE and Qatar deployed fighters to participate in NATO-led operations over Libya

in 2011 (although they did not participate in strike operations). Beginning in early fall 2014, all six GCC members joined the U.S.-led anti-ISIS coalition, with the UAE contributing the most in terms of air power.⁷¹ The navies of the GCC members rarely deploy beyond their Exclusive Economic Zones, but all members, other than Oman, have participated in regional combined task forces led by the U.S.⁷² In 2016, Oman and Britain launched a multimillion-dollar joint venture to develop Duqm as a strategic Middle Eastern port in the Indian Ocean to improve defense security and prosperity agendas.⁷³

Even with the billions of dollars invested each year by members of the GCC, most see security ties with the United States as crucial for their security. As former U.S. Defense Secretary Robert Gates once noted, the Saudis will “fight the Iranians to the last American.”⁷⁴

Egypt has the largest Arab military force in the Middle East, with 438,500 active personnel and 479,000 reserve personnel in its armed forces.⁷⁵ It possesses a fully operational military with an army, air force, air defense, navy, and special operations forces. Until 1979, when the U.S. began to supply Egypt with military equipment, Cairo relied primarily on less capable Soviet military technology.⁷⁶ Since then, its army and air force have been significantly upgraded with U.S. military weapons, equipment, and warplanes.

Egypt substantially increased troop deployments and military operations in 2015 following the onslaught of Islamist and insurgent activity at its borders. It has also sought closer security cooperation with other North African states to improve border and internal security.⁷⁷

The most visible expression of U.S. influence in Cairo is military aid, which was withheld in some areas after the 2013 military coup.⁷⁸ This indefinite hold applied to Apache attack helicopters, F-16s, Harpoon ship-to-ship missile systems, and M1A1 tank kits.⁷⁹ Since Egypt relies on U.S. assistance to combat Islamist militants and terrorists, the ability of its military to contain Islamist threats

was undermined.⁸⁰ Washington’s withholding of some U.S. military assistance in 2013 prompted Cairo to diversify its sources of arms. In February 2014, Egypt signed a deal to purchase weapons from Russia, including attack helicopters and air-defense systems,⁸¹ but after President Obama lifted the hold on U.S. military aid to Egypt in March 2015, Egypt was slated to receive 12 Lockheed Martin F-16 aircraft, 20 Boeing Harpoon missiles, and up to 125 M1A1 Abrams tanks.⁸²

Egypt has struggled with increased terrorist activity in the Sinai Peninsula, including attacks on Egyptian soldiers, attacks on foreign tourists, and the October 2015 bombing of a Russian airliner departing from the Sinai, for all of which the Islamic State’s “Sinai Province” terrorist group has claimed responsibility. The government response to the uptick of violence has been severe: arrests of thousands of suspected Islamist extremists and restrictive measures such as a law criminalizing media reporting that contradicts official reports.⁸³

Jordan is a close U.S. ally with small but effective military forces. Its principal security threats include ISIS, turbulence in Syria and Iraq, and the resulting flow of refugees. Jordan is currently home to more than 1.4 million Syrians. In January 2016, King Abdullah announced that Jordan had reached the saturation point in its ability to make more Syrian refugees.⁸⁴ While Jordan faces few conventional threats from its neighbors, its internal security is threatened by Islamist extremists returning from fighting in the region who have been emboldened by the growing influence of al-Qaeda and other Islamist militants. As a result, Jordan’s highly professional armed forces have been focused in recent years on border and internal security. Nevertheless, Jordan’s conventional capability is significant considering its size.

Jordan’s ground forces total 74,000 soldiers and include 390 British-made Challenger 1 tanks. The backbone of its air force is comprised of 44 F-16 Fighting Falcons.⁸⁵ Jordan’s special operations forces are highly capable, having benefitted from extensive

U.S. and U.K. training. Jordanian forces have served in Afghanistan and in numerous U.N.-led peacekeeping operations. Jordan became more deeply involved in coalition air operations against the Islamic State in February 2015 when the IS burned alive a Jordanian pilot who was captured in December 2014 after his plane crashed in Syria during a mission. Since then, Jordan has stepped up its air strikes in Syria.⁸⁶

Iraq has fielded one of the region's most dysfunctional military forces. After the 2011 withdrawal of U.S. troops, Iraq's government selected and promoted military leaders according to political criteria. Shiite army officers were favored over their Sunni, Christian, and Kurdish counterparts. Then-Prime Minister Nouri al-Maliki chose top officers according to their political loyalties. The politicization of the armed forces also exacerbated corruption within many units, with some commanders siphoning off funds allocated for "ghost soldiers" who never existed or had been separated from the army for various reasons.

The promotion of incompetent military leaders, poor logistical support due to corruption and other problems, limited operational mobility, and weaknesses in intelligence, reconnaissance, medical support, and air force capabilities have combined to weaken the effectiveness of the Iraqi armed forces. In June 2014, up to four divisions collapsed and were routed by vastly smaller numbers of Islamic State fighters. Although the Iraqi army, backed by U.S. air support, Kurdish militias, and Shiite militias, including some controlled by Iran, has recovered some territory lost to the IS, it remains a work in progress that requires further reform, training, and support. The Iraqi Air Force has become increasingly involved in operations against IS since the end of 2014, following the delivery of Su-25s from Russia and Iran, while its intelligence, surveillance, and reconnaissance (ISR) capability has been enhanced by the acquisition of CH-4 unmanned aerial vehicles (UAVs) from China.⁸⁷ In July 2015, four F-16IQ Viper fighter aircraft were delivered to Iraq, the first

of 30 Iraq has ordered in addition to six twin seat trainers.⁸⁸

Current U.S. Military Presence in the Middle East

The United States maintained a limited military presence in the Middle East before 1980, chiefly a small naval force based at Bahrain since 1958. The U.S. "twin pillar" strategy relied on prerevolutionary Iran and Saudi Arabia to take the lead in defending the Persian Gulf from the Soviet Union and its client regimes in Iraq, Syria, and South Yemen,⁸⁹ but the 1979 Iranian revolution demolished one pillar, and the December 1979 Soviet invasion of Afghanistan increased the Soviet threat to the Gulf. President Jimmy Carter proclaimed in January 1980 that the United States would take military action to defend oil-rich Persian Gulf states from external aggression, a commitment known as the Carter Doctrine. In 1980, he ordered the creation of the Rapid Deployment Joint Task Force (RDJTF), the precursor to USCENTCOM, established in January 1983.⁹⁰

Up until the late 1980s, a possible Soviet invasion of Iran was considered to be the most significant threat facing the U.S. in the Middle East.⁹¹ After the collapse of the Soviet Union, Saddam Hussein's Iraqi regime became the chief threat to regional stability. Iraq invaded Kuwait in August 1990, and the United States responded in January 1991 by leading an international coalition of more than 30 nations to expel Iraqi forces from Kuwait. CENTCOM commanded the U.S. contribution of more than 532,000 military personnel to the coalition armed forces, which totaled at least 737,000.⁹² This marked the peak U.S. force deployment in the Middle East.

Confrontations with Iraq continued throughout the 1990s as a result of Iraqi violations of the 1991 Gulf War cease-fire. Baghdad's failure to cooperate with U.N. arms inspectors to verify the destruction of its weapons of mass destruction and its links to terrorism led to the U.S. invasion of Iraq in 2003. During the initial invasion, U.S. forces

reached nearly 150,000, joined by military personnel from coalition forces. Apart from the “surge” in 2007, when President George W. Bush deployed an additional 30,000 personnel, American combat forces in Iraq fluctuated between 100,000 and 150,000.⁹³ In December 2011, the U.S. officially completed its withdrawal of troops, leaving only 150 personnel attached to the U.S. embassy in Iraq.⁹⁴

Since the withdrawal from Iraq, the U.S. has continued to maintain a limited number of forces in the Middle East. The bulk of these personnel are based in GCC countries. As of October 2015, approximately 35,000 U.S. military personnel were operating in the Middle East. Their exact disposition is not made public because of political sensitivities in the region,⁹⁵ but information gleaned from open sources reveals the following:

- **Kuwait.** Approximately 15,000 U.S. personnel are based in Kuwait.⁹⁶ These forces are spread among Camp Arifjan, Ahmed Al Jaber Air Base, and Ali Al Salem Air Base. A squadron of fighters and Patriot missile systems are normally deployed to Kuwait.
- **UAE.** According to UAE and U.S. officials, about 5,000 U.S. personnel, mainly from the U.S. Air Force, are stationed at Al Dhafra Air Base. Their main mission in the UAE is to operate fighters, UAVs, refueling aircraft, and surveillance aircraft. The United States also has regularly deployed F-22 Raptor combat aircraft to Al Dhafra.⁹⁷ Patriot missile systems are deployed for air and missile defense.
- **Oman.** Since 2004, Omani facilities reportedly have not been used for air support operations in either Afghanistan or Iraq, and the number of U.S. military personnel in Oman has fallen to about 200, mostly from the U.S. Air Force. The United States reportedly can use—with advance notice and for specified purposes—Oman’s military airfields in Muscat
- (the capital), Thumrait, and Masirah Island.⁹⁸
- **Bahrain.** The oldest U.S. military presence in the Middle East is found in Bahrain. Today, some 7,000 U.S. military personnel are based there. Bahrain is home to the Naval Support Activity Bahrain and the U.S. Fifth Fleet, so most U.S. military personnel there belong to the U.S. Navy. The U.S. recently signed on to a \$580 million military construction program to improve the Al Salman Pier, to be completed in 2017.⁹⁹ A significant number of U.S. Air Force personnel operate out of Shaykh Isa Air Base, where F-16s, F/A-18s, and P-3 surveillance aircraft are stationed.¹⁰⁰ U.S. Patriot missile systems also are deployed to Bahrain. The deep-water port of Khalifa bin Salman is one of the few facilities in the Gulf that can accommodate U.S. aircraft carriers.
- **Saudi Arabia.** The U.S. withdrew the bulk of its forces from Saudi Arabia in 2003. Little information on the number of U.S. military personnel currently based there is available. However, elements of the U.S. 379th Air Expeditionary Wing, along with the six-decade-old United States Military Training Mission to the Kingdom of Saudi Arabia, the four-decade-old Office of the Program Manager of the Saudi Arabian National Guard Modernization Program, and the Office of the Program Manager—Facilities Security Force, are based in Eskan Village Air Base, approximately 13 miles south of the capital city of Riyadh.¹⁰¹
- **Qatar.** Thousands of U.S. personnel are deployed in Qatar, mainly from the U.S. Air Force. The U.S. operates its Combined Air Operations Center at Al Udeid Air Base, which is one of the most important U.S. air bases in the world. Heavy bombers, tankers, transports, and ISR aircraft operate from there. Al Udeid Air Base also serves as the forward headquarters of

CENTCOM. In addition, the base houses prepositioned U.S. military equipment. It is defended by U.S. Patriot missile systems.

- **Jordan.** Although there are no U.S. military bases in Jordan, the U.S. has a long history of conducting training exercises in the country. Due to recent events in neighboring Syria, 1,500 American soldiers, a squadron of F-16s, a Patriot missile battery, and M142 High Mobility Artillery Rocket Systems¹⁰² have been deployed in Jordan.¹⁰³
- **Iraq.** In December 2011, the number of U.S. troops in Iraq was reduced to 150 personnel to protect the U.S. embassy. However, since the invasion of northwestern Iraq by the Islamic State, U.S. troop numbers in the country have gradually been increasing. As of March 2016, approximately 5,000 U.S. personnel were deployed on a temporary basis in Iraq, although the number of officially assigned forces remained below a cap of 3,870.¹⁰⁴ In February 2015, the U.S. reportedly moved combat search-and-rescue teams to northern Iraq to support possible rescue missions in Syria.¹⁰⁵

In addition, there have been media reports that the U.S. government operates a secret UAV base in Saudi Arabia from which drone attacks against militants in Yemen are launched.¹⁰⁶ There also are reports of an American base on Yemen's Socotra Island, which is located near the coast of Somalia, being used for counterterrorism operations off the Horn of Africa and Yemen.¹⁰⁷

CENTCOM's stated mission is to promote cooperation among nations, respond to crises, deter or defeat state and non-state aggression, support economic development, and, when necessary, perform reconstruction in order to establish the conditions for regional security, stability, and prosperity. This mission statement is supported by several focus area objectives. According to the 2016 CENTCOM

posture statement submitted to Congress, the 10 focus areas are:¹⁰⁸

- Dismantle and ultimately defeat ISIL in order to prevent further trans-regional spread of sectarian-fueled radical extremism and to mitigate the continuing Iraq–Syria crisis.
- Continue support to Afghanistan, in partnership with NATO, to assist Afghanistan as it establishes itself as a regionally integrated, secure, stable, and developing country; continue planning and coordination for the enduring U.S. and NATO partnerships in Afghanistan beyond the end of 2016.
- Defeat Al Qaeda, deny violent extremists safe havens and freedom of movement, and limit the reach of terrorists, to enhance protection of the U.S. homeland and allies and partner nation homelands.
- Counter the Iranian Threat Network's malign activities in the region, to include the impacts of surrogates and proxies.
- Support a whole of government approach to developments in Yemen, preventing Yemen from growing as an ungoverned space for AQ/VEOs [violent extremist organizations]; and supporting regional stability efforts that retain U.S. CT [counterterrorism] capacity in the region.
- Maintain a credible deterrent posture against Iran's evolving conventional and strategic military capabilities.
- Prevent, and if required, counter the proliferation of weapons of mass destruction; disrupt their development and prevent their use.
- Protect lines of communication, ensure free use of the shared spaces (including the cyber commons), and

secure unimpeded global access for legal commerce.

- Shape, support, incentivize, and maintain ready, flexible regional Coalitions and partners, as well as cross-CCMD and interagency U.S. whole-of-government teams, to support crisis response; optimize military resources.
- Develop and execute security cooperation programs, improving bilateral and multilateral partnerships, building partnered “capacities,” and improving information sharing, security, and stability.

CENTCOM is supported by four service component commands and one subordinate unified command: U.S. Naval Forces Middle East (USNAVCENT); U.S. Army Forces Middle East (USARCENT); U.S. Air Forces Middle East (USAFCENT); U.S. Marine Forces Middle East (MARCENT); and U.S. Special Operations Command Middle East (SOCCENT).

- **U.S. Naval Forces Central Command.** USNAVCENT is the maritime component of USCENTCOM. With its forward headquarters in Bahrain, it is responsible for commanding the afloat units that rotationally deploy or surge from the United States, in addition to other ships that are based in the Gulf for longer periods. USNAVCENT conducts persistent maritime operations to advance U.S. interests, deter and counter disruptive countries, defeat violent extremism, and strengthen partner nations’ maritime capabilities in order to promote a secure maritime environment in an area encompassing about 2.5 million square miles of water.
- **U.S. Army Forces Central Command.** USARCENT is the land component of USCENTCOM. Based in Kuwait, it is responsible for land operations in an area encompassing 4.6 million square miles

(1.5 times larger than the continental United States).

- **U.S. Air Forces Central Command.** USAFCENT is the air component of USCENTCOM. Based in Qatar, it is responsible for air operations and working with the air forces of partner countries in the region. Additionally, USAFCENT manages an extensive supply and equipment prepositioning program at several regional sites.
- **U.S. Marine Forces Central Command.** USMARCENT is the designated Marine Corps service component for USCENTCOM. Based in Bahrain, it is responsible for all Marine Corps forces in the region.
- **U.S. Special Operations Command Central.** SOCCENT is a subordinate USCENTCOM unified command. Based in Qatar, it is responsible for planning special operations throughout the USCENTCOM region, planning and conducting peacetime joint/combined special operations training exercises, and orchestrating command and control of peacetime and wartime special operations.

In addition to the American military presence in the region, two U.S. allies—the United Kingdom and France—play an important role that should not be overlooked.

The U.K.’s presence in the Middle East is a legacy of British imperial rule. The U.K. has maintained close ties with many countries over which it once ruled and has conducted military operations in the region for decades. Approximately 1,200 British service personnel are based throughout the Gulf. The British presence in the region is dominated by the Royal Navy. In terms of permanently based naval assets, there are four mine hunters and one Royal Fleet Auxiliary supply ship. Generally, there are two frigates or destroyers in the Gulf or Arabian Sea performing maritime security duties. Although such matters are not the subject of public discussion, U.K.

attack submarines also operate in the area. As a sign of its long-term maritime presence in the region, the U.K. recently broke ground on an \$11 million new headquarters for its Maritime Component Command at Bahrain's Salman Naval Base.¹⁰⁹

The U.K. also has a sizeable Royal Air Force (RAF) presence in the region, mainly in the UAE and Oman. A short drive from Dubai, Al-Minhad Air Base is home to a small contingent of U.K. personnel. An Expeditionary Air Wing recently stood up to support air transport links between the U.K. and forces deployed in the region and to provide logistical support to RAF assets visiting the region.¹¹⁰ The U.K. also operates small RAF detachments in Oman that support U.K. and coalition operations in the region. Although considered to be in Europe, the U.K.'s Sovereign Base Areas of Akrotiri and Dhekelia in Cyprus have supported U.S. military and intelligence operations in the past and will continue to do so in the future.

The British presence in the region extends beyond soldiers, ships, and planes. A British-run staff college recently opened in Qatar, and Kuwait recently chose the U.K. to help run its own equivalent of the Royal Military Academy at Sandhurst.¹¹¹ The U.K. also plays a very active role in training the Saudi Arabian and Jordanian militaries.

The French presence in the Gulf is smaller than the U.K.'s but is still significant. France opened its first military base in the Gulf in 2009 in Abu Dhabi in the UAE. This was the first foreign military installation built by the French in 50 years.¹¹² In total, the French have 700 personnel based in the country along with six Rafale fighter jets.¹¹³ French ships have access to the Zayed Port, which is big enough to handle every ship in the French Navy except the aircraft carrier *Charles De Gaulle*. In the wake of the Iran nuclear deal, Gulf states have increasingly looked to France to buy arms, partly to signal their discontent with U.S.–Iran policy. France secured billions in regional defense contracts in 2015, raising French arms exports to the highest level in 15 years.¹¹⁴

Key Infrastructure and Warfighting Capabilities

The Middle East is geographically situated in a critical location. Two-thirds of the world's population lives within an eight-hour flight from the Gulf region, making it accessible from most of the globe. The Middle East also contains some of the world's most critical maritime choke points, such as the Suez Canal and the Strait of Hormuz.

While infrastructure is not as developed in the Middle East as it is in North America or Europe, a decades-long presence means that the U.S. has tried and tested systems that involve moving large numbers of matériel and personnel into and out of the region. For example, according to the Department of Defense, at the height of U.S. combat operations in Iraq in the second Gulf War, there were 165,000 servicemembers and 505 bases. Moving personnel and equipment out of the country was an enormous undertaking—"the largest logistical drawdown since World War II"¹¹⁵—and included the redeployment of "the 60,000 troops who remained in Iraq at the time and more than 1 million pieces of equipment ahead of their deadline."¹¹⁶

As of 2014, 60 percent of roads in the Middle East region were paved, but wide variation exists between countries. For example, 100 percent of the roads in Israel, Jordan, and the UAE are paved. Other nations, such as Oman (46 percent), Saudi Arabia (21.5 percent), and Yemen (8.7 percent), have poor paved road coverage.¹¹⁷ Rail coverage is also poor. For instance, Saudi Arabia has only 700 miles of railroads. By comparison, Maryland, which is roughly 1.5 percent the size of Saudi Arabia, has about the same amount.¹¹⁸ In Syria, five years of civil war has wreaked havoc on the rail system.¹¹⁹

Though only 45 percent of runways of the region's 1,135 airports are paved, air traffic is set to grow and eventually to outpace world growth statistics. In an attempt to diversify their economies, some nations in the region have been upgrading their air transportation infrastructure to take advantage of their

location for connecting flights, thus opening up a competition. Qatar opened a new \$15 billion airport in May 2014;¹²⁰ Abu Dhabi International Airport is undergoing an expansion program that is expected to be completed in 2017; and Dubai International Airport, the world's seventh busiest airport, is undergoing a \$7.8 billion expansion project to boost capacity.¹²¹

The U.S. has access to several airfields in the region. The primary air hub for U.S. forces in the region is at Al Udeid Air Base in Qatar. Other airfields include Ali Al Salem Air Base, Kuwait; Al Dhafra, UAE; Al Minhad, UAE; Isa, Bahrain; Eskan Village Air Base, Saudi Arabia; Muscat, Oman; Thumrait, Oman; Masirah Island, Oman; and use of the commercial airport at Seeb, Oman. In the past, the U.S. has used major airfields in Iraq, including Baghdad International Airport and Balad Air Base, as well as Prince Sultan Air Base in Saudi Arabia. Just because the U.S. has access to a particular air base today does not mean that it will be made available for a particular operation in the future. For example, it is highly likely that Qatar and Oman would not allow the U.S. to use air bases in their territory for strikes against Iran.

The U.S. has access to ports in the region, perhaps most importantly in Bahrain. The Naval Support Activity Bahrain has undertaken a \$260 million expansion project that will enable the homeporting of littoral combat ships by 2018 in one of the world's busiest waterways.¹²² The U.S. also has access to a deep-water port, Khalifa bin Salman, in Bahrain and naval facilities at Fujairah, UAE.¹²³ The UAE's commercial port of Jebel Ali is open for visits from U.S. warships and prepositioning of equipment for operations in the theater.¹²⁴

Approximately 90 percent of the world's trade travels by sea, and some of the busiest and most important shipping lanes are located in the Middle East. For example, the Strait of Hormuz and the Bab el-Mandeb Strait combined have over 65,000 cargo ships travelling through them each year.¹²⁵ Given the high volume of maritime traffic in the Middle East region, no U.S. military operation can

be undertaken without consideration of how these shipping lanes offer opportunity and risk to America and her allies. The major shipping routes include:

- **The Suez Canal.** In 2015, 998.7 million tons of cargo transited the canal, averaging 47.9 ships each day.¹²⁶ Considering that the canal itself is 120 miles long but only 670 feet wide, this is an impressive amount of traffic. The Suez Canal is important for Europe in terms of oil transportation. The canal also serves as an important strategic asset, as it is routinely used by the U.S. Navy to move surface combatants between the Mediterranean Sea and the Red Sea.
- **Strait of Hormuz.** The Strait of Hormuz is a critical oil-supply bottleneck and the world's busiest passageway for oil tankers. The strait links the Persian Gulf with the Arabian Sea and the Gulf of Oman. Nearly 17 million barrels of oil per day, "about 30% of all seaborne-traded oil," pass through the strait for an annual total of more than 6 billion barrels of oil. Most of these crude oil exports go to Asian markets, particularly Japan, India, South Korea, and China.¹²⁸

Thanks to a bilateral arrangement between Egypt and the United States, the U.S. Navy enjoys priority access to the canal. However, the journey through the narrow waterway is no easy task for large surface combatants. The canal was not constructed with the aim of accommodating 90,000-ton aircraft carriers and therefore exposes a larger ship to attack. For this reason, a variety of security protocols are followed, including the provision of air support by the Egyptian military.¹²⁷

The shipping routes through the Strait of Hormuz are particularly vulnerable to disruption, given the extremely narrow passage and its proximity to Iran. Tehran

has repeatedly threatened to close the strategic strait if it is attacked. While attacking shipping in the strait would drive up oil prices, Iran would also lose, both because it depends on the Strait of Hormuz to export its own crude oil and because it would undermine Tehran's relations with such oil importers as China, Japan, and India. Tehran also would pay a heavy military price if it provoked a U.S. military response.

- **Bab el-Mandeb Strait.** The Bab el-Mandeb strait is a strategic waterway located between the Horn of Africa and Yemen that links the Red Sea to the Indian Ocean. Exports from the Persian Gulf and Asia destined for Western markets must pass through the strait en route to the Suez Canal. Oil tankers transport approximately 4.7 million barrels of oil per day through the strait.¹²⁹ The Bab el-Mandeb Strait is 18 miles wide at its narrowest point, limiting passage to two channels for inbound and outbound shipments.¹³⁰

Over the past decade, piracy off the coast of Somalia has dominated the focus of international maritime security efforts. Recently, however, the frequency of pirate attacks in the region has dropped off, reaching the lowest point since 2006, according to the International Maritime Bureau's global piracy report. Pirate activity, however, continues to threaten international trade and the safety of the international commons.¹³¹

Maritime Prepositioning of Equipment and Supplies. The U.S. military has deployed non-combatant maritime prepositioning ships (MPS), containing large amounts of military equipment and supplies, in strategic locations from which they can reach areas of conflict relatively quickly as associated U.S. Army or Marine Corps units located elsewhere arrive in the areas. The British Indian Ocean Territory of Diego Garcia, an island

atoll, hosts the U.S. Naval Support Facility Diego Garcia, which supports prepositioning ships that can supply Army or Marine Corps units deployed for contingency operations in the Middle East.

Conclusion

For the foreseeable future, the Middle East region will remain a key focus for U.S. military planners. An area that was once considered relatively stable, mainly due to the ironfisted rule of authoritarian regimes, is now highly unstable and a breeding ground for terrorism. Overall security in the region has deteriorated in recent years. Conflicts in Iraq, Libya, Syria, and Yemen have worsened, with Islamic State or al-Qaeda fighters playing major roles. The Russian and Iranian interventions in Syria have greatly complicated the fighting there. Egypt faces a growing insurgency in the Sinai that is gradually spreading. Iraq has managed to stem the advance and push back the Islamic State but needs substantial help to defeat it.

Many of the borders created after World War I are disappearing. In countries like Iraq, Libya, Syria, and Yemen, the supremacy of the nation-state is being challenged by non-state actors that wield influence, power, and resources comparable to those of small states. The main security and political challenges in the region are inextricably linked to the unrealized aspirations of the Arab Spring, surging transnational terrorism, and the potential threat of Iran. These challenges are made more difficult by the Arab-Israeli conflict, Sunni-Shia sectarian divides, the rise of Iran's Islamist revolutionary nationalism, and the proliferation of Sunni Islamist revolutionary groups.

Thanks to decades of U.S. military operations in the Middle East, the U.S. has tried and tested procedures for operating in the region. Bases and infrastructure are well established. The logistical processes for maintaining a large force forward deployed thousands of miles away from the homeland are well in place. Unlike in Europe, all of these processes have recently been tested in combat. The

personal links between allied armed forces are also present. Joint training exercises improve interoperability, and U.S. military educational courses, which officers (and often royals) from the Middle East regularly attend, allow the U.S. to influence some of the region's future leaders.

America's relationships in the region are pragmatically based on shared security and economic concerns. As long as these issues remain relevant to both sides, the U.S. is likely to have an open door to operate in the Middle East when its national interests require it to do so.

Scoring the Middle East Operating Environment

As noted at the beginning of this section, various aspects of the region facilitate or inhibit the ability of the U.S. to conduct military operations to defend its vital national interests against threats. Our assessment of the operating environment utilizes a five-point scale, ranging from "very poor" to "excellent" conditions and covering four regional characteristics of greatest relevance to the conduct of military operations:

- 1. Very Poor.** Significant hurdles exist for military operations. Physical infrastructure is insufficient or nonexistent, and the region is politically unstable. In addition, the U.S. military is poorly placed or absent, and alliances are nonexistent or diffuse.
- 2. Unfavorable.** A challenging operating environment for military operations is marked by inadequate infrastructure, weak alliances, and recurring political instability. The U.S. military is inadequately placed in the region.
- 3. Moderate.** A neutral to moderately favorable operating environment is characterized by adequate infrastructure, a moderate alliance structure, and acceptable levels of regional political stability. The U.S. military is adequately placed.
- 4. Favorable.** A favorable operating environment includes good infrastructure, strong alliances, and a stable political environment. The U.S. military is well placed in the region for future operations.

- 5. Excellent.** An extremely favorable operating environment includes well-established and well-maintained infrastructure, strong and capable allies, and a stable political environment. The U.S. military is exceptionally well placed to defend U.S. interests.

The key regional characteristics consist of:

- a. Alliances.** Alliances are important for interoperability and collective defense, as allies would be more likely to lend support to U.S. military operations. Various indicators provide insight into the strength or health of an alliance. These include whether the U.S. trains regularly with countries in the region, has good interoperability with the forces of an ally, and shares intelligence with nations in the region.
- b. Political Stability.** Political stability brings predictability for military planners when considering such things as transit, basing, and overflight rights for U.S. military operations. The overall degree of political stability indicates whether U.S. military actions would be hindered or enabled and considers, for example, whether transfers of power in the region are generally peaceful and whether there been any recent instances of political instability.
- c. U.S. Military Positioning.** Having military forces based or equipment and supplies staged in a region greatly facilitates

the ability if the United States to respond to crises and, presumably, achieve success in critical “first battles” more quickly. Being routinely present in a region also assists in maintaining familiarity with its characteristics and the various actors who might assist or thwart U.S. actions. With this in mind, we assessed whether or not the U.S. military was well positioned in the region. Again, indicators included bases, troop presence, prepositioned equipment, and recent examples of military operations (including training and humanitarian) launched from the region.

d. Infrastructure. Modern, reliable, and suitable infrastructure is essential to military operations. Airfields, ports, rail lines, canals, and paved roads enable the U.S. to stage, launch operations from, and logistically sustain combat operations. We combined expert knowledge of regions with publicly available information on critical infrastructure to arrive at our overall assessment of this metric.¹³²

In summary, the U.S. has developed an extensive network of bases in the region and has acquired substantial operational experience in combatting regional threats, but many of its allies are hobbled by political instability, economic problems, internal security threats, and mushrooming transnational threats. Although the overall score remains “moderate,” as it was last year, it has fallen lower and is on the edge of dipping to “poor” because of increasing political instability and growing bilateral tensions with allies over the security implications of the nuclear agreement with Iran and how best to fight the Islamic State.

With this in mind, we arrived at these average scores for the Middle East (rounded to the nearest whole number):

- Alliances: **3—Moderate**
- Political Stability: **1—Very Poor**
- U.S. Military Positioning: **3—Moderate**
- Infrastructure: **3—Moderate**

Leading to a regional score of: **Moderate**

Operating Environment: Middle East

	VERY POOR	UNFAVORABLE	MODERATE	FAVORABLE	EXCELLENT
Alliances			✓		
Political Stability	✓				
U.S. Military Posture			✓		
Infrastructure			✓		
OVERALL			✓		

Endnotes:

1. For example, Sir Mark Sykes, Britain's lead negotiator with the French on carving up the Ottoman Empire in the Middle East, during a 1916 meeting in Downing Street pointed to the map and told the Prime Minister that for Britain's sphere of influence in the Middle East, "I should like to draw a line from the *e* in Acre [modern-day Israel] to the last *k* in Kirkuk [modern-day Iraq]." See James Barr, *A Line in the Sand: Britain, France, and the Struggle That Shaped the Middle East* (London: Simon & Schuster U.K., 2011), pp. 7–20. See also Margaret McMillan, *Paris 1919: Six Months That Changed the World* (New York: Random House, 2003).
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Asia

Since the founding of the American republic, Asia has been a key area of interest for the United States for both economic and security reasons. One of the first ships to sail under an American flag was the aptly named *Empress of China*, inaugurating the American role in the lucrative China trade in 1784. In the subsequent more than 200 years, the United States has worked under the strategic assumption that it was inimical to American interests to allow any single nation to dominate Asia. Asia constituted too important a market and was too great a source of key resources for the United States to be denied access. Thus, beginning with U.S. Secretary of State John Hay's "Open Door" policy toward China in the 19th century, the United States has worked to prevent the rise of a regional hegemon, whether it was imperial Japan in Asia or the Soviet Union in Europe.

In the 21st century, the importance of Asia to the United States will continue to grow. Already, Asian markets absorb over a quarter of American exports in goods and services and, combined, support one-third of all American export-related jobs.¹ This number is likely to grow.

Not only is Asia still a major market with two of the world's most populous countries, but it is also a key source of vital natural resources and such goods as electronic components. Over 40 percent of the world's hard drives, for example, are made in Thailand. The March 2011 earthquake that devastated Japan had global repercussions as supply chains for a variety of products from cars to computers were disrupted worldwide.

Asia is a matter of more than just economic concern, however. Several of the world's largest militaries are in Asia, including those of China, India, North and South Korea, Pakistan, Russia, and Vietnam. The United States also maintains a network of treaty alliances and security partnerships, as well as a significant military presence, in Asia. Five Asian states (China, North Korea, India, Pakistan, and Russia) possess nuclear weapons.

The region is a focus of American security concerns both because of the presence of substantial military forces and because of the legacy of conflict. The two major "hot" wars the United States fought during the Cold War were both in Asia—Korea and Vietnam. Moreover, the Asian security environment is unstable. For one thing, the Cold War has not ended in Asia. Of the four states divided between Communism and democracy by the Cold War, three (China, Korea, and Vietnam) were in Asia. Neither the Korean nor the China–Taiwan situation was resolved despite the fall of the Berlin Wall and the collapse of the Soviet Union.

The Cold War itself was an ideological conflict layered atop long-standing—and still lingering—historical animosities. Asia is home to several major territorial disputes, among them:

- Northern Territories/Southern Kuriles (Japan and Russia);
- Senkakus/Diaoyutai/Diaoyu Dao (Japan, China, and Taiwan);

- Dok-do/Takeshima (Korea and Japan);
- Paracels/Xisha Islands (Vietnam, China, and Taiwan);
- Spratlys/Nansha Islands (China, Taiwan, Vietnam, Brunei, Malaysia, and the Philippines);
- Kashmir (India and Pakistan); and
- Aksai Chin and parts of the Indian state of Arunachal Pradesh (India and China).

Even the various names applied to the disputed territories reflect the fundamental differences in point of view, as each state refers to the disputed areas under a different name. Similarly, different names are applied to the various major bodies of water: for example, “East Sea” or “Sea of Japan” and “Yellow Sea” or “West Sea.”

These disputes over names also reflect the broader tensions rooted in historical animosities—enmities that still scar the region. Most notably, Japan’s actions in World War II remain a major source of controversy, particularly in China and South Korea, where debates over issues such as what is incorporated in textbooks and governmental statements prevent old wounds from completely healing. Similarly, a Chinese claim that much of the Korean peninsula was once Chinese territory aroused reactions in both Koreas. The end of the Cold War did little to resolve any of these underlying disagreements.

It is in this light that one should consider the lack of a political–security architecture, or even much of an economic one, undergirding East Asia. Despite substantial trade and expanding value chains among the various Asian states, as well as with the rest of the world, formal economic integration is limited. There is no counterpart to the European Union or even to the European Economic Community, just as there is no parallel to the European Coal and Steel Community, the precursor to European economic integration.

The Association of Southeast Asian Nations (ASEAN) is a far looser agglomeration of disparate states, although they have succeeded in expanding economic linkages among themselves over the past 49 years. Less important to regional stability has been the South Asia Association of Regional Cooperation (SAARC), which includes Afghanistan, Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan, and Sri Lanka. The SAARC is largely ineffective, both because of the lack of regional economic integration and because of the historical rivalry between India and Pakistan. Also, despite attempts, there is still no Asia-wide free trade agreement (although the Trans-Pacific Partnership, if passed, and the Regional Comprehensive Economic Partnership would help to remedy this gap to some extent).

Similarly, there is no equivalent of NATO, despite an ultimately failed mid-20th century effort to forge a parallel multilateral security architecture through the Southeast Asia Treaty Organization (SEATO). Regional security entities such as the Five Power Defence Arrangement (involving the United Kingdom, Australia, New Zealand, Malaysia, and Singapore in an “arrangement,” not an alliance) or discussion forums such as the ASEAN Regional Forum and the ASEAN Defence Ministers-Plus Meeting have been far weaker. Nor did an Asian equivalent of the Warsaw Pact arise. Instead, Asian security has been marked by a combination of bilateral alliances, mostly centered on the United States, and individual nations’ efforts to maintain their own security.

Important Alliances and Bilateral Relations in Asia

For the United States, the keys to its position in the Western Pacific are its alliances with Japan, the Republic of Korea, the Philippines, Thailand, and Australia. These five alliances are supplemented by very close security relationships with New Zealand, Afghanistan, Pakistan, and Singapore and evolving relationships with other nations in the region like

India, Vietnam, Malaysia, and Indonesia. The U.S. also has a robust unofficial relationship with Taiwan.

The United States enjoys the benefit of sharing common weapons and systems with many of its allies, which facilitates interoperability. Many nations, for example, have equipped their infantries with M-16/M-4-based infantry weapons (and share the 5.56mm caliber); F-15 and F-16 combat aircraft; and LINK-16 data links. Consequently, in the event of conflict, the various air, naval, and even land forces will be capable of sharing information in such key areas as air defense and maritime domain awareness. This advantage is further expanded by the constant ongoing range of both bilateral and multilateral exercises, which acclimates various forces to operating together and familiarizes both American and local commanders with each other's standard operating procedures (SOPs), as well as training and tactics.

Japan. The U.S.–Japan defense relationship is a critical centerpiece in the American network of relations in the Western Pacific. The U.S.–Japan Treaty of Mutual Cooperation and Security, signed in 1960, provided for a deep alliance between two of the world's largest economies and most sophisticated military establishments, and changes in Japanese defense policies are now enabling an even greater level of cooperation on security issues between the two allies and others in the region.

Since the end of World War II, Japan's defense policy has been distinguished by Article 9 of its constitution. This article, which states in part that “the Japanese people forever renounce war as a sovereign right of the nation and the threat or use of force as means of settling international disputes,”² in effect prohibits the use of force by Japan's governments as an instrument of national policy. It also has led to several other associated policies.

One such policy is a prohibition on “collective self-defense.” Japan recognized that nations have a right to employ their armed forces to help other states defend themselves (i.e.,

to engage in collective defensive operations) but rejected that policy for itself: Japan would employ its forces only in defense of Japan. In 2015, this changed. The U.S. and Japan revised their defense cooperation guidelines, and the Japanese passed necessary legislation to allow Japan to exercise collective self-defense in cases involving threats to the U.S. and multilateral peacekeeping operations.

A similar policy decision was made regarding Japanese arms exports. For a variety of economic and political reasons, Tokyo has chosen to rely on domestic production to meet most of its military requirements. At the same time, until very recently, it chose to limit arms exports, banning them entirely to:

- Communist bloc countries;
- Countries that are placed by the U.N. Security Council under arms exports embargoes; and
- Countries that are involved in or likely to be involved in international conflicts.³

The relaxation of these export rules in 2014 enabled Japan, among other things, to pursue (ultimately unsuccessfully) an opportunity to build new state-of-the-art submarines in Australia, for Australia, and possible sales of amphibious search and rescue aircraft to the Indian navy. Japan has also sold multiple patrol vessels to the Philippine and Vietnamese Coast Guards.

Tokyo relies heavily on the United States for its security. In particular, it depends on the United States to deter nuclear attacks on the home islands. The combination of the pacifist constitution and Japan's past (i.e., the atomic bombings of Hiroshima and Nagasaki) has forestalled much public interest in obtaining an independent nuclear deterrent. Similarly, throughout the Cold War, Japan relied on the American conventional and nuclear commitment to deter Soviet (and Chinese) aggression.

As part of its relationship with Japan, the United States maintains some 54,000

military personnel and another 8,000 Department of Defense civilian employees in Japan under the rubric of U.S. Forces Japan (USFJ).⁴ These forces include a forward-deployed carrier battle group (centered on the USS *Ronald Reagan*); a submarine tender; an amphibious assault ship at Yokosuka; and the bulk of the Third Marine Expeditionary Force (III MEF) on Okinawa. U.S. forces exercise regularly with their Japanese counterparts; in recent years, this collaboration has expanded from air and naval exercises to practicing amphibious operations together.

Supporting the American presence is a substantial American defense infrastructure established throughout Japan, including Okinawa. The array of major bases provides key logistical and communications support for U.S. operations throughout the Western Pacific, cutting travel time substantially compared with deployments from Hawaii or the American West Coast. They also provide key listening posts on Russian, Chinese, and North Korean military operations. This is likely to be supplemented by Japan's growing array of space systems, including new reconnaissance satellites.

The Japanese government defrays a substantial portion of the cost of the American presence. At present, the government of Japan provides some \$2 billion annually to support the cost of USFJ.⁵ These funds cover a variety of expenses, including utility and labor costs at U.S. bases, improvements to U.S. facilities in Japan, and the cost of relocating training exercises away from populated areas in Japan.

U.S.–Japanese defense cooperation is undergirded not only by the mutual security treaty, but also by the new 2015 U.S.–Japan Defense Guidelines. The guidelines allow both the geographic scope and the nature of Japan's security contributions to include operations “involving the use of force to respond to situations where an armed attack against a foreign country that is in a close relationship with Japan occurs.”⁶ The revisions make Japan a fuller partner in the alliance.

At least since the 1990 Gulf War, the United States had sought to obtain expanded Japanese participation in international security affairs. This effort had generally been resisted by Japan's political system, based on the view that Japan's constitution, legal decisions, and popular attitudes all forbid such a shift. Attempts to expand Japan's range of defense activities, especially away from the home islands, have often been met by vehement opposition from Japan's neighbors, especially China and South Korea, due to unresolved differences on issues ranging from territorial claims and boundaries to historical grievances and Japanese visits to the Yasukuni Shrine. Even with the changes, these issues will doubtless continue to constrain Japan's contributions to the alliance.

These issues have been sufficient to torpedo efforts to improve defense cooperation between Seoul and Tokyo, a fact highlighted in 2012 by South Korea's last-minute decision not to sign an agreement to share sensitive military data, including details about the North Korean threat to both countries.⁷ In December 2014, the U.S., South Korea, and Japan signed a minimalist military data-sharing agreement limited only to information on the North Korean military threat and requiring both allies to pass information through the United States military. Similar controversies, rooted in history as well as in contemporary politics, have also affected Sino–Japanese relations and, to a lesser extent, Japanese ties to some Southeast Asian states.

Nonetheless, Prime Minister Shinzō Abe has pushed through a reinterpretation of the legality of Japanese participation in “collective self-defense” situations, as well as a loosening of restrictions on arms sales. The combination of reforms provides the legal foundation for much greater Japanese interaction with other states in defense arenas, including joint production of weapons and components and the potential for interaction with foreign military forces.⁸

Republic of Korea. The United States and the Republic of Korea (ROK) signed the

Mutual Defense Treaty in 1953. That treaty codified the relationship that had grown from the Korean War, when the United States dispatched troops to help South Korea defend itself against invasion by Communist North Korea. Since then, the two states have forged an enduring alliance that supplements a substantial trade and economic relationship that includes a free trade agreement.

The United States currently maintains some 28,500 troops in Korea, the largest concentration of American forces on the Asian mainland. This is centered mainly on the U.S. 2nd Infantry Division and a significant number of combat aircraft.

The U.S.–ROK defense relationship involves one of the more integrated and complex command-and-control structures. A United Nations Command (UNC) established in 1950 was the basis for the American intervention, and it remained in place after the armistice was signed in 1953. UNC has access to a number of bases in Japan in order to support U.N. forces in Korea. In concrete terms, however, it only oversaw South Korean and American forces as other nations' contributions were gradually withdrawn or reduced to token elements.

In 1978, operational control of frontline South Korean and American military forces transitioned from UNC to Combined Forces Command (CFC). Headed by an American officer (who is also the Commander, U.N. Command), CFC reflects an unparalleled degree of U.S.–South Korean military integration. Similarly, the system of Korean Augmentees to the United States Army (KATUSA), which places South Korean soldiers into American units assigned to Korea, allows for a degree of tactical-level integration and cooperation that is atypical.

Current command arrangements for the U.S. and ROK militaries are for CFC to exercise operational control (OPCON) of all forces on the peninsula in time of war, while peacetime control rests with respective national authorities (although the U.S. exercises peacetime OPCON over non-U.S., non-ROK

forces located on the peninsula). In 2003, South Korean president Roh Moo-hyun, as agreed with the U.S., began the process of transferring wartime operational control from CFC to South Korean commanders, thereby establishing the ROK military as fully independent of the United States. This decision engendered significant opposition within South Korea, however, and raised serious military questions about the impact on unity of command. Coupled with various North Korean provocations (including a spate of missile tests as well as attacks on South Korean military forces and territory in 2010), Washington and Seoul agreed in late 2014 to postpone wartime OPCON transfer.⁹

The domestic political constraints under which South Korea's military operates are less stringent than those that govern the operations of the Japanese military. Thus, South Korea rotated several divisions to fight alongside Americans in Vietnam. In the first Gulf War, the Iraq War, and Afghanistan, South Korea limited its contributions to non-combatant forces and monetary aid. The focus of South Korean defense planning remains on North Korea, however, especially as Pyongyang has deployed its forces in ways that optimize a southward advance. Concerns about North Korea have been heightened in recent years in the wake of the sinking of the South Korean frigate *Cheonan* and the shelling of Yongpyeong-do, perhaps the most serious incident in decades. Moreover, in the past several conflicts (e.g., Operation Iraqi Freedom), Seoul has not provided combat forces, preferring instead to send humanitarian and non-combatant assistance.

Over the past several decades, the American presence on the peninsula has slowly declined. In the early 1970s, President Richard Nixon withdrew the 7th Infantry Division, leaving only the 2nd Infantry Division on the peninsula. Those forces have been positioned farther back so that there are few Americans deployed on the Demilitarized Zone (DMZ).

Washington has agreed to maintain 28,500 troops in the ROK. These forces regularly

engage in major exercises with their ROK counterparts, including the Key Resolve and Foal Eagle series. Both of these series involve the actual deployment of a substantial number of forces and are partly intended to deter Pyongyang, as well as to give U.S. and ROK forces a chance to practice operating together.

The ROK government also provides substantial resources to defray the costs of U.S. Forces–Korea. It provides some \$900 million annually in either direct funding or in-kind support, covering cost-sharing for labor, logistics, and improvements in facilities.¹⁰

The Philippines. America's oldest defense relationship in Asia is with the Philippines. The United States seized the Philippines from the Spanish over a century ago as a result of the Spanish–American War and a subsequent conflict with Philippine indigenous forces. But the U.S., unlike other colonial states, also put in place a mechanism for the Philippines to gain its independence, transitioning through a period as a commonwealth until the archipelago was granted independence in 1946. Just as important, substantial numbers of Filipinos fought alongside the United States against Japan in World War II, establishing a bond between the two peoples. Following World War II and after assisting the newly independent Filipino government against the Communist Hukbalahap movement in the 1940s, the United States and the Philippines signed a mutual security treaty.

For much of the period between 1898 and the end of the Cold War, the largest American bases in the Pacific were in the Philippines, centered around the U.S. Navy base in Subic Bay and the complex of airfields that developed around Clark Field (later Clark Air Base). While the Philippines have never had the ability to provide substantial financial support for the American presence, the base infrastructure was unparalleled, providing replenishment and repair facilities and substantially extending deployment periods throughout the East Asian littoral.

These bases were often centers of controversy, however, as they were reminders of the

colonial era. In 1991, a successor to the Military Bases Agreement between the U.S. and the Philippines was submitted to the Philippine Senate for ratification. The Philippines, after a lengthy debate, rejected the treaty, compelling American withdrawal from Philippine bases. Coupled with the effects of the 1991 eruption of Mount Pinatubo (which devastated Clark Air Base and damaged many Subic Bay facilities) and the end of the Cold War, closure of the bases was not seen as fundamentally damaging to America's posture in the region.

Moreover, despite the closing of the American bases and consequent slashing of American military assistance, U.S.–Philippine military relations remained close, and assistance began to increase again after 9/11 as U.S. forces assisted the Philippines in countering Islamic terrorist groups, including Abu Sayyaf, in the south of the archipelago. From 2002–2015, the U.S. rotated 500–600 special operations forces regularly through the Philippines to assist in counterterrorism operations. That operation, Joint Special Operations Task Force–Philippines (JSOTF-P), closed in the first part of 2015, but the U.S. presence in Mindanao continues at reduced levels. Another 6,000 participate in combined exercises with Philippine troops.¹¹

In 2014, the United States and the Philippines announced a new Enhanced Defense Cooperation Agreement (EDCA), which allows for an expanded American presence in the archipelago,¹² and in early 2016, they agreed on five specific bases subject to the agreement. Under the EDCA, U.S. forces will rotate through these locations on an expanded basis, allowing for a more regular presence (but not new, permanent bases) in the islands, and will engage in more joint training with AFP forces. The agreement also facilitates the provision of humanitarian assistance and disaster relief (HA/DR). The United States also agreed to improve the facilities it uses and to transfer and sell more military equipment to the AFP to help it modernize. This is an important step, as the Philippine military has

long been one of the weakest in the region, despite the need to defend an incredibly large expanse of ocean, shoreline, and territory.

One long-standing difference between the U.S. and the Philippines has been the application of the U.S.–Philippine Mutual Defense Treaty to disputed islands in the South China Sea. While the U.S. has long maintained that the treaty does not extend American obligations to disputed areas and territories, Filipino officials occasionally have held otherwise.¹³ The EDCA does not settle this question, but the growing tensions in the South China Sea, including in recent years at Scarborough Shoal, have highlighted Manila’s need for greater support from and cooperation with Washington. Moreover, the U.S. government has long been explicit that any attack on Philippine government ships or aircraft, or on the Philippine armed forces, would be covered under the Treaty, “thus separating the issue of territorial sovereignty from attack on Philippine military and public vessels.”¹⁴

In 2016, the Philippines elected a new, very unconventional President, Rodrigo Duterte, to a six-year term. His rhetorical challenges to current priorities in the U.S.–Philippines alliance raise questions about the trajectory of the alliance and the sustainability of new initiatives that are important to it.

Thailand. The U.S.–Thai security relationship is built on the 1954 Manila Pact, which established the now-defunct Southeast Asia Treaty Organization, and the 1962 Thanat–Rusk agreement. These were supplemented by the 2012 Joint Vision statement for U.S.–Thai relations. In 2003, Thailand was designated a “major, non-NATO ally,” giving it improved access to American arms sales.

Thailand’s central location has made it an important component of the network of U.S. alliances in Asia. During the Vietnam War, a variety of American aircraft were based in Thailand, ranging from fighter-bombers and B-52s to reconnaissance aircraft. In the first Gulf War and again in the Iraq War, some of those same air bases were essential for the rapid deployment of American forces to the Persian Gulf.

U.S. and Thai forces regularly exercise together, most notably in the annual Cobra Gold exercises, first begun in 1982. This builds on a partnership that began with the dispatch of Thai forces to the Korean War, where over 1,200 Thai troops died (out of some 6,000 deployed). The Cobra Gold exercises are among the world’s largest multilateral military exercises.

U.S.–Thai relations have been strained in recent years as a result of domestic unrest and two coups in Thailand. This strife has limited the extent of U.S.–Thai military cooperation, as U.S. law prohibits U.S. funding for many kinds of assistance to a foreign country in which a military coup deposes a duly elected head of government. Nonetheless, the two states continue to cooperate, including in joint military exercises and in the area of counterterrorism. The Counter Terrorism Information Center (CTIC) continues to allow the two states to share vital information about terrorist activities in Asia. CTIC is alleged to have played a key role in the capture of the leader of Jemaah Islamiyah, Hambali, in 2003.¹⁵

Thailand has also been drawing closer to the People’s Republic of China (PRC). This process has been underway since the end of the Vietnam War but is accelerating due to expanding economic relations between the two states. Between 2005 and 2010, the value of trade between the two states doubled. Today, China is Thailand’s leading trading partner.¹⁶

The Thai and Chinese militaries also have improved relations over the years. Intelligence officers began formal meetings in 1988. Thai and Chinese military forces have engaged in joint counterterrorism exercises since 2007, and the two nations’ marines have exercised jointly since 2010.¹⁷ Thai–Chinese military relations may have accelerated as a result of the U.S. restrictions imposed in the wake of Thai political instability.

Australia. Australia is one of the most important American allies in the Asia-Pacific. U.S.–Australia security ties date back to World War I, when U.S. forces fought under

Australian command on the Western Front. These ties deepened during World War II when, after Japan commenced hostilities in the Western Pacific, Australian forces committed to the North Africa campaign were not returned to defend the continent—despite British promises to do so. As Japanese forces attacked the East Indies and secured Singapore, Australia turned to the United States to bolster its defenses, and American and Australian forces subsequently cooperated closely in the Pacific War. Those ties and America's role as the main external supporter for Australian security were codified in the Australia–New Zealand–U.S. (ANZUS) pact of 1951.

A key part of the Obama Administration's "Asia pivot" was to rotate additional United States Air Force units and Marines through Northern Australia.¹⁸ Eventually expected to total some 2,500 troops, the initial contingents of Marine forces are based near the northern city of Darwin. The two sides continue to negotiate the terms of the full deployment, which it is now estimated will be complete by 2020.¹⁹ Meanwhile, the two nations engage in a variety of security cooperation efforts, including joint space surveillance activities. These were codified in 2014 with an agreement that allows sharing of space information data among the U.S., Australia, the U.K., and Canada.²⁰

The two nations' chief defense and foreign policy officials meet annually in the Australia–United States Ministerial (AUSMIN) process to address such issues of mutual concern as security developments in the Asia–Pacific region, global security and development concerns, and bilateral security cooperation.²¹ Australia has also granted the United States access to a number of joint facilities, including space surveillance facilities at Pine Gap and naval communications facilities on the North West Cape of Australia.²²

Australia and the United Kingdom are two of America's closest partners in the defense industrial sector. In 2010, the United States approved Defense Trade Cooperation Treaties with Australia and the U.K. These treaties

allow for the expedited and simplified export or transfer of certain defense services and items between the U.S. and its two key partners without the need for export licenses or other approvals under the International Traffic in Arms Regulations. This also allows for much greater integration among the American, Australian, and British defense industrial establishments.²³

Singapore. Although Singapore is not a security treaty ally of the United States, it is a key security partner in the region. In 2005, the close defense relationship was formalized with the Strategic Framework Agreement (SFA), and in 2015, it was expanded with the U.S.–Singapore Defense Cooperation Agreement (DCA).

The 2005 SFA was the first agreement of its kind since the end of the Cold War.²⁴ It built on the 1990 Memorandum of Understanding Regarding United States Use of Facilities in Singapore, as amended, which allows for U.S. access to Singaporean military facilities.²⁵ The 2015 DCA establishes "high-level dialogues between the countries' defense establishments" and a "broad framework for defense cooperation in five key areas, namely in the military, policy, strategic and technology spheres, as well as cooperation against non-conventional security challenges, such as piracy and transnational terrorism."²⁶

New Zealand. For much of the Cold War, U.S. defense ties with New Zealand were similar to those between America and Australia. As a result of controversies over U.S. Navy employment of nuclear power and the possibility of deployment of U.S. naval vessels with nuclear weapons, the U.S. suspend its obligations to New Zealand under the 1951 ANZUS Treaty. Defense relations improved, however, in the early 21st century as New Zealand committed forces to Afghanistan and also dispatched an engineering detachment to Iraq. The 2010 Wellington Declaration and the 2012 Washington Declaration, while not restoring full security ties, allowed the two nations to resume high-level defense dialogues. In 2013, U.S. Secretary of Defense

Chuck Hagel and New Zealand Defense Minister Jonathan Coleman announced the resumption of military-to-military cooperation,²⁷ and in July 2016, the U.S. accepted an invitation from New Zealand to make a single port call, reportedly with no change in U.S. policy to confirm or deny the presence of nuclear weapons on board.²⁸ This may portend a longer-term solution to the nuclear impasse between the two nations.

Taiwan. When the United States shifted its recognition of the government of China from the Republic of China (on Taiwan) to the People's Republic of China (the mainland), it declared certain commitments concerning the security of Taiwan. These commitments are embodied in the Taiwan Relations Act (TRA) and the subsequent "Six Assurances."

The TRA is an American law and not a treaty. Under the TRA, the United States maintains programs, transactions, and other relations with Taiwan through the American Institute in Taiwan (AIT). Except for the U.S.–China Mutual Defense Treaty, which had governed U.S. security relations with Taiwan, all other treaties and international agreements made between the Republic of China and the United States remain in force. (The Sino–U.S. Mutual Defense Treaty was terminated by President Jimmy Carter following the shift in recognition to the PRC.)

Under the TRA, it is the policy of the United States "to provide Taiwan with arms of a defensive character." The TRA also states that the U.S. will "make available to Taiwan such defense articles and services in such quantity as may be necessary to enable Taiwan to maintain a sufficient self-defense capability." The U.S. has implemented these provisions of the TRA through sales of weapons to Taiwan.

The TRA states that it is U.S. policy to "consider any effort to determine the future of Taiwan by other than peaceful means, including by boycotts or embargoes, a threat to the peace and security of the Western Pacific area and of grave concern to the United States."²⁹ It also states that it is U.S. policy to "maintain the capacity of the United States to resist any

resort to force or other forms of coercion that would jeopardize the security, or the social or economic system, of the people on Taiwan."³⁰

The TRA requires the President to inform Congress promptly of "any threat to the security or the social or economic system of the people on Taiwan and any danger to the interests of the United States arising therefrom." The TRA then states: "The President and the Congress shall determine, in accordance with constitutional processes, appropriate action by the United States in response to any such danger."

Supplementing the TRA are the "Six Assurances" issued by President Ronald Reagan in a secret July 1982 memo, subsequently publicly released and the subject of a Senate hearing. These six assurances were intended to moderate the third Sino–American communique, itself generally seen as one of the "Three Communiques" that form the foundation of U.S.–PRC relations. These assurances of July 14, 1982, were as follows:

1. In negotiating the third Joint Communique with the PRC, the United States:
2. has not agreed to set a date for ending arms sales to Taiwan;
3. has not agreed to hold prior consultations with the PRC on arms sales to Taiwan;
4. will not play any mediation role between Taipei and Beijing;
5. has not agreed to revise the Taiwan Relations Act;
6. has not altered its position regarding sovereignty over Taiwan;
7. will not exert pressure on Taiwan to negotiate with the PRC.³¹

Although the United States sells Taiwan a variety of military equipment, it does not engage in joint exercises with the Taiwan armed

forces. Some Taiwan military officers, however, do receive training in the United States, attending American professional military education institutions. There also are regular high-level meetings between senior U.S. and Taiwan defense officials, both uniformed and civilian. The United States does not maintain any bases in Taiwan or its territories.

Vietnam, Malaysia, and Indonesia. The U.S. has security relationships with several key Southeast Asian countries, none of them as extensive and formal as its relationship with Singapore and its treaty allies but all still of growing significance. The U.S. “rebalance” to the Pacific has incorporated a policy of “rebalance within the rebalance” that has included efforts to expand relations with this second tier of American security partners.

Since shortly after the normalization of diplomatic relations between the two countries in 1995, the U.S. and Vietnam also have normalized their defense relationship, albeit very slowly. The relationship was codified in 2011 with a Memorandum of Understanding “advancing bilateral defense cooperation” that covers five areas of operations, including maritime security. The most significant development in security ties over the past several years has been the relaxation of the ban on sales of arms to Vietnam. In the fall of 2014, the U.S. lifted the embargo on maritime security-related equipment, and then on President Barack Obama’s visit to Hanoi in 2016, it lifted the ban completely. This full embargo had long served as a psychological obstacle to Vietnamese cooperation on security issues. Lifting it does not necessarily change the nature of the articles likely to be sold, and no transfers, including P-3 maritime patrol aircraft, discussed since the relaxation of the embargo two years ago, have been made. Lifting the embargo does, however, expand the potential of the relationship and better positions the U.S. to compete with Chinese and Russian positions there. The Joint Statement from President Obama’s visit also memorialized a number of other improvements in the U.S.–Vietnam relationship, including the Cooperative Humanitarian and

Medical Storage Initiative (CHAMSI), which will advance cooperation on humanitarian assistance and disaster relief by, among other things, prepositioning related American equipment in Danang, Vietnam.³²

There remain significant limits on the U.S.–Vietnam security relationship, including a Vietnamese defense establishment that is very cautious in its selection of defense partners, party-to-party ties between the Communist parties of Vietnam and China, and a foreign policy that seeks to balance relationships with all major powers. The U.S. remains, like others among Vietnam’s security partners, officially limited to one port call a year and has not docked a warship at Cam Ranh Bay since the end of the Vietnam War. This may change with the inauguration of a new international port there this year,³³ but the benefits of that access will be shared among all capable Vietnamese partners, not just the U.S. Navy.

The U.S. and Malaysia have maintained a “steady level” of defense cooperation since the 1990s, despite occasional political differences. Each year, they now participate jointly in dozens of bilateral and multilateral exercises to promote effective cooperation across a range of missions.³⁴ The U.S. has specifically discussed with Malaysia arrangements for rotating maritime patrol aircraft through Malaysian bases in Borneo.

The U.S.–Indonesia defense relationship revived in 2005 following a period of estrangement over American human rights concerns. It now includes regular joint exercises, port calls, and sale of weaponry. The U.S. is also working closely with Indonesia’s defense establishment to institute reforms in Indonesia’s strategic defense planning processes.

The U.S. is working across the board at modest levels of investment to help build Southeast Asia’s maritime security capacity.³⁵ Most notable in this regard is the Maritime Security Initiative (MSI) announced by Secretary of Defense Ashton Carter in 2015.³⁶

Afghanistan. On October 7, 2001, U.S. forces invaded Afghanistan in response to the September 11, 2001, attacks on the United

States, marking the beginning of Operation Enduring Freedom to combat al-Qaeda and its Taliban supporters. The U.S., in alliance with the U.K. and the anti-Taliban Afghan Northern Alliance forces, ousted the Taliban from power in December 2001. Most Taliban and al-Qaeda leaders fled across the border into Pakistan's Federally Administered Tribal Areas (FATA), where they regrouped and started an insurgency in Afghanistan in 2003.

In August 2003, NATO joined the war in Afghanistan and assumed control of the International Security Assistance Force (ISAF). At the height of the war in 2011, there were 50 troop-contributing nations and a total of nearly 150,000 NATO and U.S. forces on the ground in Afghanistan.

On December 28, 2014, NATO formally ended combat operations and handed responsibility to the Afghan security forces, currently numbering around 326,000 (including army and police).³⁷ After Afghan President Ashraf Ghani signed a bilateral security agreement with the U.S. and a Status of Forces Agreement with NATO, the international coalition launched Operation Resolute Support to train and support Afghan security forces. As of June 2016, approximately 13,200 U.S. and NATO forces were stationed in Afghanistan. Most U.S. and NATO forces are stationed at bases in Kabul and Bagram, with tactical advise-and-assist teams located in Mazar-i-Sharif, Herat, Kandahar, Jalalabad, and Gamberi.

In 2014, President Obama pledged to cut U.S. force levels to around 5,500 by the end of 2015 and then to zero by the end of 2016, but he reversed himself last fall, announcing that the U.S. instead would maintain this force level when he departs office. He revised plans again in 2016 to say that he would keep 8,400 in place, leaving any further reductions up to his successor.

Pakistan. During the war in Afghanistan, the U.S. and NATO relied heavily on logistical supply lines running through Pakistan to resupply coalition forces in Afghanistan. Supplies and fuel were carried on transportation

routes from the port at Karachi to Afghan-Pakistani border crossing points at Torkham in the Khyber Pass and Chaman in Baluchistan province. During the initial years of the Afghan war, about 80 percent of U.S. and NATO supplies traveled through Pakistani territory. This amount decreased to around 50 percent–60 percent as the U.S. shifted to northern routes and when U.S.–Pakistan relations significantly deteriorated over U.S. drone strikes, continued Pakistani support to Taliban militants, and the fallout surrounding the U.S. raid on Osama bin Laden's hideout in Abbottabad on May 2, 2011.

From October 2001 until December 2011, the U.S. leased Pakistan's Shamsi airfield southwest of Quetta in Pakistan's Baluchistan province and used it as a base from which to conduct surveillance and drone operations against terrorist targets in Pakistan's tribal border areas. Pakistan ordered the U.S. to vacate the base shortly after NATO forces attacked Pakistani positions along the Afghanistan border, killing 24 Pakistani soldiers, on November 26, 2011.

Escalation of the U.S. drone strike campaign in Pakistan's border areas from 2009–2012 led to the significant degradation of al-Qaeda's ability to plot, plan, and train for terrorist attacks. The U.S. began to curtail drone strikes in 2013, largely as a result of Pakistan's growing complaints that the drone campaign infringed on its sovereignty and criticism from international human rights organizations about the number of civilian casualties resulting from the attacks. All told, there have been over 400 drone strikes since January 2008, including the strike that killed Taliban leader Mullah Akhtar Mansour in Baluchistan province in May 2016.

The U.S. provides significant amounts of military aid to Pakistan and "reimbursements" in the form of coalition support funds (CSF) for Pakistan's military deployments and operations along the border with Afghanistan. Pakistan has some 150,000 troops stationed in regions bordering Afghanistan and recently conducted a robust military

campaign against Pakistani militants in North Waziristan. Since FY 2002, the U.S. has provided almost \$8 billion in security-related assistance and more than \$14 billion in CSF funds to Pakistan.³⁸ While \$1 billion in CSF reimbursements was authorized for Pakistan in 2015, the U.S. withheld \$300 million of this funding because of Pakistan's failure to crack down on the Haqqani network. Reflecting a trend of growing congressional resistance to military assistance for Pakistan, in 2016, Congress blocked funds for the provision of eight F-16s to Pakistan.

India. During the Cold War, U.S.–Indian military cooperation was minimal, except for a brief period during the Sino–Indian border war in 1962 when the U.S. sided with India and supplied it with arms and ammunition. The rapprochement was short-lived, however, and mutual suspicion continued to mark the Indo–U.S. relationship due to India's robust relationship with Russia and the U.S. provision of military aid to Pakistan, especially during the 1970s under the Nixon Administration. America's ties with India hit a nadir during the 1971 Indo–Pakistani war when the U.S. deployed the aircraft carrier USS *Enterprise* toward the Bay of Bengal in a show of support for Pakistani forces.

Military ties between the U.S. and India have improved significantly over the past decade as the two sides have moved toward establishment of a strategic partnership based on their mutual concern over rising Chinese military and economic influence and converging interests in countering regional terrorism. The U.S. and India have completed contracts worth nearly \$14 billion for the supply of U.S. military equipment to India, including C-130J and C-17 transport aircraft and P-8 maritime surveillance aircraft.

Defense ties between the two countries are poised to expand further as India moves forward with an ambitious military modernization program and following three successful summit-level meetings between President Obama and Indian Prime Minister Narendra Modi. During President Obama's

January 2015 visit to India, the two sides agreed to renew and upgrade their 10-year Defense Framework Agreement. Under the Defense Trade and Technology Initiative (DTTI) launched in 2012, the U.S. and India are cooperating on development of six very specific “pathfinder” technology projects.³⁹ During Prime Minister Modi's visit to the U.S. in June 2016, the two sides welcomed finalization of the text of a logistics-sharing agreement that would allow each country to access the other's military supplies and refueling capabilities through ports and military bases. The signing of the logistics agreement, formally called the Logistics Exchange Memorandum of Agreement (LEMOA), marks a milestone in the Indo–U.S. defense partnership. New Delhi and Washington regularly hold joint exercises across all services, including an annual naval exercise in which Japan will now participate on an annual basis and in which Australia and Singapore have also participated in the past.

Quality of Allied Armed Forces in Asia

Because of the lack of an integrated, regional security architecture along the lines of NATO, the United States partners with most of the nations in the region on a bilateral basis. This means that there is no single standard to which all of the local militaries aspire; instead, there is a wide range of capabilities that are influenced by local threat perceptions, institutional interests, physical conditions, historical factors, and budgetary considerations. Moreover, the lack of recent major conflicts in the region makes assessing the quality of Asian armed forces difficult. Most Asian militaries have limited combat experience; some (e.g., Malaysia) have never fought an external war since gaining independence in the mid-20th century. The Indochina wars, the most recent high-intensity conflicts, are now 30 years in the past. It is therefore unclear how well Asian militaries have trained for future warfare and whether their doctrine will meet the exigencies of wartime realities. In particular, no Asian militaries have engaged

The Tyranny of Distance

Steam times are in parentheses.



SOURCE: Heritage Foundation estimates based on data from Shirley A. Kan, “Guam: U.S. Defense Deployments,” Congressional Research Service, April 29, 2014, Table 1, <https://www.hsdl.org/?view&did=752725> (accessed January 13, 2015).

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in high-intensity air or naval combat, so the quality of their personnel, training, or equipment is likewise unclear.

Based on examinations of equipment, however, it is assessed that several Asian allies and friends have substantial military capabilities supported by robust defense industries and significant defense spending. Japan’s, South

Korea’s, and Australia’s defense budgets are estimated to be among the 15 largest in the world. Each of their military forces fields some of the world’s most advanced weapons, including F-15s in the Japan Air Self Defense Force and ROK Air Force; airborne early warning (AEW) platforms; AEGIS-capable surface combatants and modern diesel-electric

submarines; and third-generation main battle tanks. All three nations are currently committed to purchasing F-35 fighters.

At this point, both the Japanese and Korean militaries are arguably more capable than most European militaries, at least in terms of conventional forces. Japan's Self Defense Forces, for example, field more tanks, principal surface combatants, and fighter/ground attack aircraft (777, 47, and 340, respectively) than their British opposite numbers (227, 18, and 230, respectively).⁴⁰ Similarly, South Korea fields a larger military of tanks, principal surface combatants, submarines, and fighter/ground attack aircraft (more than 1,000, 28, 23, and 468, respectively) than their German counterparts (322, 19, four, and 209, respectively).⁴¹

Both the ROK and Japan are also increasingly interested in developing missile defense capabilities. Although South Korea and the United States agreed in 2016 (after much negotiation and indecision) to deploy America's Terminal High-Altitude Area Defense (THAAD) missile defense system on the peninsula, South Korea also continues to pursue an indigenous missile defense capability.

Singapore's small population and physical borders limit the size of its military and therefore its defense budget, but in terms of equipment and training, it nonetheless fields some of the highest-quality forces in the region. For example, Singapore's ground forces can deploy third-generation Leopard II main battle tanks; its fleet includes five conventional submarines (including one with air-independent propulsion systems), six frigates, and six missile-armed corvettes; and the Singapore air force not only has F-15E Strike Eagles and F-16s, but also has one of Southeast Asia's largest fleets of airborne early warning and control aircraft (six G550 aircraft) and a tanker fleet of KC-130s that can help extend range or time on station.

At the other extreme, the Armed Forces of the Philippines (AFP) are among the region's weakest military forces. Having long focused on waging counterinsurgency campaigns

while relying on the United States for its external security, the AFP has one of the lowest budgets in the region—and one of the most extensive coastlines to defend. With a defense budget of only \$2.5 billion and confronted with a number of insurgencies, including the Islamist Abu Sayyaf and New People's Army, Philippine defense resources have long been stretched thin. The last squadron of fighter aircraft (1960s-vintage F-5 fighters) was retired several years ago; the Philippine Air Force (PAF) has had to employ its S-211 trainers as fighters and ground attack aircraft. The most modern ships in the Philippine navy are two former U.S. *Hamilton*-class Coast Guard cutters; its other main combatant is a World War II destroyer escort, one of the world's oldest serving warships.

Current U.S. Presence in Asia

The U.S. Pacific Command (PACOM) is the oldest and largest of American unified commands. Established on January 1, 1947, PACOM, "together with other U.S. government agencies, protects and defends the United States, its territories, allies, and interests"⁴² To this end, the U.S. seeks to preserve a "geographically distributed, operationally resilient, and politically sustainable" regional force posture within the PACOM area of responsibility that can effectively deter any potential adversaries.⁴³

PACOM's area of responsibility includes not only the expanses of the Pacific, but also Alaska and portions of the Arctic, South Asia, and the Indian Ocean. It includes 36 nations holding more than 50 percent of the world's population, two of the three largest economies, and nine of the 10 smallest; the most populous nation (China); the largest democracy (India); the largest Muslim-majority nation (Indonesia); and the world's smallest republic (Nauru). The region is a vital driver of the global economy and includes the world's busiest international sea-lanes and nine of its 10 largest ports. By any meaningful measure, the Asia-Pacific is also the most militarized region in the world, with seven of its 10 largest

standing militaries and five of its declared nuclear nations.⁴⁴

Under PACOM are a number of component commands, including:

- **U.S. Army Pacific.** USARPAC is the Army's component command in the Pacific. It is comprised of 80,000 soldiers and supplies Army forces as necessary for various global contingencies. Among others, it administers the 25th Infantry Division headquartered in Hawaii, the U.S. Army Japan, and U.S. Army Alaska.⁴⁵
- **U.S. Pacific Air Force.** PACAF is responsible for planning and conducting defensive and offensive air operations in the Asia-Pacific region. It has three numbered air forces under its command: 5th Air Force (in Japan); 7th Air Force (in Korea); and 11th Air Force (headquartered in Alaska). These field two squadrons of F-15s, two squadrons of F-22s, five squadrons of F-16s, and a single squadron of A-10 ground attack aircraft, as well as two squadrons of E-3 early-warning aircraft, tankers, and transports.⁴⁶ Other forces that regularly come under PACAF command include B-52, B-1, and B-2 bombers.
- **U.S. Pacific Fleet.** PACFLT normally controls all U.S. naval forces committed to the Pacific, which usually represents 60 percent of the Navy's fleet. It is organized into Seventh Fleet, headquartered in Japan, and Third Fleet, headquartered in California. Seventh Fleet comprises the forward-deployed element of PACFLT and includes the only American carrier strike group (CTF-70) and amphibious group (CTF-76) home-ported abroad, ported at Yokosuka and Sasebo, Japan, respectively. The Third Fleet's area of responsibility (AOR) spans the West Coast of the United States to the International Date Line and includes the Alaskan coastline and parts of the Arctic. There is some discussion about whether to erase the western border of Third Fleet's AOR⁴⁷ to involve its five carrier strike groups⁴⁸ more routinely in the Western Pacific.
- **U.S. Marine Forces Pacific.** MARFORPAC controls elements of the U.S. Marine Corps operating in the Asia-Pacific region. Its headquarters are in Hawaii. Because of its extensive responsibilities and physical span, MARFORPAC controls two-thirds of Marine Corps forces: the I Marine Expeditionary Force (MEF), centered on the 1st Marine Division, 3rd Marine Air Wing, and 1st Marine Logistics Group, and the III Marine Expeditionary Force, centered on the 3rd Marine Division, 1st Marine Air Wing, and 3rd Marine Logistics Group.⁴⁹ The I MEF is headquartered at Camp Pendleton, California, and the III MEF is headquartered on Okinawa, although each has various subordinate elements deployed at any time throughout the Pacific on exercises, maintaining presence, or engaged in other activities. MARFORPAC is responsible for supporting three different commands: It is the U.S. Marine Corps component to PACOM, provides the Fleet Marine Forces to PACFLT, and provides Marine forces for U.S. Forces Korea (USFK).⁵⁰

Since the announcement of the "Asia pivot," it has been reported that the United States will shift more Navy and Air Force assets to the Pacific. It is expected that eventually, some 60 percent of U.S. Navy assets will be deployed to the Pacific (although it remains unclear whether they will be permanently based there). That percentage, however, will be drawn from a fleet that is shrinking in overall size, so the net effect may actually be fewer forces deployed than before. Over the past year, the conduct of Freedom of Navigations Operations (FONOPS) that challenge excessive maritime claims, a part of the Navy's mission since 1979, has assumed a very high profile as a result of three well-publicized operations in the South China Sea.

- **U.S. Special Operations Command Pacific.** SOCPAC has operational control of various special operations forces, including Navy SEALs; Naval Special Warfare units; Army Special Forces (Green Berets); and Special Operations Aviation units in the Pacific region, including elements in Japan and South Korea. It supports the Pacific Command's Theater Security Cooperation Program as well as other plans and contingency responses. Until 2015, this included Joint Special Operations Task Force–Philippines (JSOTF-P), 500–600 soldiers assisting Manila in combating Islamist insurgencies in the southern Philippines such as Abu Sayyaf. SOCPAC forces also support various operations in the region other than warfighting, such as counterdrug operations, counterterrorism training, humanitarian assistance, and de-mining activities.
- **U.S. Forces Korea and U.S. Eighth Army.** Because of the unique situation on the Korean peninsula, two subcomponents of PACOM, U.S. Forces Korea (USFK) and U.S. Eighth Army, are based in Korea. USFK, a joint headquarters led by a four-star U.S. general, is in charge of the various U.S. military elements on the Korean peninsula. U.S. Eighth Army operates in conjunction with USFK as well as with the United Nations presence in the form of United Nations Command.
- Resolute Support Mission, including U.S. Forces Afghanistan.⁵¹
- Special Operations Joint Task Force—Afghanistan. This includes a Special Forces battalion, based out of Bagram Airfield, and additional allied special operations forces at Kabul.
- 9th Air and Space Expeditionary Task Force. This includes the 155th Air Expeditionary Wing, providing air support from Bagram airfield; the 451st Air Expeditionary Group and 455th Expeditionary Operations Group, operating from Kandahar and Bagram airfields, respectively, providing air support and surveillance operations over various parts of Afghanistan; and the 421st Expeditionary Fighter Squadron, providing close air support from Bagram airfield.
- Combined Joint Task Force 10/10th Mountain Division, centered on Bagram airfield. This is the main U.S. national support element. It includes seven battalions of infantry, air defense artillery for counter-artillery missions, and explosive ordnance disposal across Afghanistan. It also includes three Army aviation battalions, a combat aviation brigade headquarters, and two additional joint task forces to provide nationwide surveillance support.⁵²

Other forces, including space capabilities, cyber capabilities, air and sealift assets, and additional combat forces, may be made available to PACOM depending on requirements and availability.

U.S. Central Command—Afghanistan. Unlike the U.S. forces deployed in Japan and South Korea, there is not a permanent force structure committed to Afghanistan; instead, forces rotate through the theater under the direction of PACOM's counterpart in that region of the world, U.S. Central Command (CENTCOM). As of May 2016, these forces included:

- Five Train, Advise, Assist Commands in Afghanistan, each of which is a multinational force tasked with improving local capabilities to conduct operations.⁵³

Key Infrastructure That Enables Expeditionary Warfighting Capabilities

Any planning for operations in the Pacific will be dominated by the “tyranny of distance.” Because of the extensive distances that must be traversed in order to deploy forces, even Air Force units will take one or more days to deploy, while ships measure steaming time in

weeks. For instance, a ship sailing at 20 knots requires nearly five days to get from San Diego to Hawaii. From there, it takes a further seven days to get to Guam, seven days to Yokosuka, Japan, and eight days to Okinawa—if ships encounter no interference along the journey.⁵⁴

China's growing anti-access/area denial (A2/AD) capabilities, ranging from an expanding fleet of modern submarines to anti-ship ballistic and cruise missiles, increase the operational risk for deployment of U.S. forces in the event of conflict. China's capabilities not only jeopardize American combat forces that would flow into the theater for initial combat, but also would continue to threaten the logistical support needed to sustain American combat power for the subsequent days, weeks, and months.

American basing structure in the Indo-Pacific region, including access to key allied facilities, is therefore both necessary and increasingly at risk.

American Facilities

Much as in the 20th century, Hawaii remains the linchpin of America's ability to support its position in the Western Pacific. If the United States cannot preserve its facilities in Hawaii, then both combat power and sustainability become moot. The United States maintains air and naval bases, communications infrastructure, and logistical support on Oahu and elsewhere in the Hawaiian Islands. Hawaii is also a key site for undersea cables that carry much of the world's communications and data, as well as satellite ground stations.

The American territory of Guam is located 4,600 miles farther west. Obtained from Spain as a result of the Spanish–American War, Guam became a key coaling station for U.S. Navy ships. Seized by Japan in World War II, it was liberated by U.S. forces in 1944 and after the war became an unincorporated, organized territory of the United States. Key U.S. military facilities on Guam include U.S. Naval Base Guam, which houses several attack submarines and may add an aircraft carrier berth,

and Andersen Air Force Base, one of a handful of facilities that can house B-2 bombers. U.S. task forces, meanwhile, can stage out of Apra Harbor, drawing weapons from the Ordnance Annex in the island's South Central Highlands. There is also a communications and data relay facility on the island.

Over the past 20 years, Guam's facilities have steadily improved. B-2 bombers, for example, began operating from Andersen Air Force Base in 2005.⁵⁵ These improvements have been accelerated and expanded even as China's A2/AD capabilities have raised doubts about the ability to sustain operations in the Asian littoral. The concentration of air and naval assets as well as logistical infrastructure, however, makes the island an attractive potential target in the event of conflict.

The U.S. military has non-combatant maritime prepositioning ships (MPS), which contain large amounts of military equipment and supplies, in strategic locations from which they can reach areas of conflict relatively quickly as associated U.S. Army or Marine Corps units located elsewhere arrive in the areas. The U.S. Navy has units on Guam and in Saipan, Commonwealth of the Northern Marianas, which support prepositioning ships that can supply Army or Marine Corps units deployed for contingency operations in Asia.

Allied and Friendly Facilities

For the United States, access to bases in Asia has long been a prerequisite for supporting any American military operations in the region. Even with the extensive aerial refueling and underway replenishment skills of the U.S. Air Force and U.S. Navy, it is still essential for the United States to retain access to resupply and replenishment facilities, at least in peacetime. The ability of those facilities not only to survive, but also to function will directly influence the course of any conflict in the Western Pacific region. Moreover, a variety of support functions, including communications, intelligence, and space support, cannot be accomplished without facilities in the region.

At the present time, it would be extraordinarily difficult to maintain maritime domain awareness or space situational awareness without access to facilities in the Asia-Pacific region. The American alliance network, outlined previously, is therefore a matter both of political partnership and also of access to key facilities on allied soil.

Japan. In Japan, the United States has access to over 100 different facilities, including communications stations, military and dependent housing, fuel and ammunition depots, and weapons and training ranges. This access comes in addition to major bases such as air bases at Misawa, Yokota, and Kadena and naval facilities at Yokosuka, Atsugi, and Sasebo. The naval facilities support the USS *Ronald Reagan* carrier strike group (CSG), which is home-ported in Yokosuka, as well as a Marine Expeditionary Strike Group (ESG) centered on the USS *Bonhomme Richard*, home-ported at Sasebo. Additionally, the skilled work force at places like Yokosuka is an integral part of maintaining American forces and repairing equipment in time of conflict. Replacing them would take years. This combination of facilities and work force, in addition to physical location and political support, makes Japan an essential part of any American military response to contingencies in the Western Pacific. Japanese financial support for the American presence also makes these facilities some of the most cost-effective in the world.

The status of one critical U.S. base has been a matter of public debate in Japan for many years. The U.S. Marine Corps' Third Marine Expeditionary Force, based on Okinawa, is the U.S.'s rapid reaction force in the Pacific. The Marine Air-Ground Task Force, comprised of air, ground, and logistics elements, enables quick and effective response to crisis or humanitarian disasters. In response to local protests, the Marines are reducing their footprint by relocating some units to Guam as well as to less-populated areas of Okinawa. The latter includes moving a helicopter unit from Futenma to a new facility in a more remote location in northeastern Okinawa.

Because of local resistance, construction of the Futenma Replacement Facility at Camp Schwab will not be complete until 2025, but the U.S. and Japanese governments have affirmed their support for the project.

South Korea. The United States also maintains an array of facilities in South Korea, with a larger Army footprint than in Japan, as the United States and South Korea remain focused on deterring North Korean aggression and preparing for any possible North Korean contingencies. The Army maintains four major facilities (which in turn control a number of smaller sites) at Daegu, Yongsan in Seoul, and Camps Red Cloud/Casey and Humphreys. These facilities support the U.S. 2nd Infantry Division, which is based in South Korea. Other key facilities include air bases at Osan and Kunsan as well as a naval facility at Chinhae near Pusan.

The Philippines. In 1992, The United States ended nearly a century-long presence in the Philippines when it withdrew from its base in Subic Bay as its lease there ended. Clark Air Base had been closed earlier due to the eruption of Mount Pinatubo; the costs of repairing the facility were deemed too high to be worthwhile. In 2014, however, with the growing Chinese assertiveness in the South China Sea, including against Philippine claims such as Mischief Reef and Scarborough Shoal, the U.S. and the Philippines negotiated the EDCA, which will allow for the rotation of American forces through Philippine military bases.

In 2016, the two sides agreed on an initial list of five bases in the Philippines that will be involved. Geographically distributed across the country, they are Antonio Bautista Air Base (in Palawan closest to the Spratlys); Basa Air Base (on the main island of Luzon and closest to the hotly contested Scarborough Shoal); Fort Magsaysay (also on Luzon and the only facility on the list that is not an air base); Lumbia Air Base (in Mindanao where Manila remains in low-intensity combat with Islamist insurgents); and Mactan-Benito Ebuen Air Base (central Philippines).⁵⁶

It remains unclear precisely which forces would be rotated through the Philippines as a part of this agreement, which in turn affects the kinds of facilities that would be most needed. However, outside the context of the EDCA, the U.S. deployed E/A-18G Growler electronic attack, A-10 Warthog close air support aircraft, and Pavement helicopters to the Philippines in 2016.⁵⁷ The base upgrades and deployments pursuant to the EDCA are part of a broader expansion of U.S.–Philippine defense ties, which most recently included the U.S. leaving behind men and matériel at Clark Air Base following annual exercises,⁵⁸ as well as joint naval patrols and increased levels of assistance under the Maritime Security Initiative (MSI). The Philippines is receiving the bulk of assistance in the first year of this five-year \$425 million program.

Singapore. The United States does not have bases in Singapore but is allowed access to several key facilities that are essential for supporting American forward presence. Since the closure of its facilities at Subic Bay, the United States has been allowed to operate the principal logistics command for the Seventh Fleet out of the Port of Singapore Authority’s (PSA) Sembawang Terminal. The U.S. Navy also has access to Changi Naval Base, one of the few docks in the world that can handle a 100,000-ton American aircraft carrier. In addition, a small U.S. Air Force contingent operates out of Paya Lebar Air Base to support U.S. Air Force combat units visiting Singapore and Southeast Asia, and Singapore hosts two new Littoral Combat Ships (LCS) (with the option of hosting two more) and a rotating squadron of F-16 fighter aircraft.⁵⁹

Australia. A much-discussed element of the “Asia pivot” has been the 2011 agreement to deploy U.S. Marines to Darwin in northern Australia. While planned to amount to 2,500 Marines, the rotations fluctuate and have not yet reached that number. “In its mature state, the Marine Rotational Force–Darwin (MRF-D) will be a Marine Air–Ground Task Force...with a variety of aircraft, vehicles and

equipment.”⁶⁰ The Marines do not constitute a permanent presence in Australia, in keeping with Australian sensitivities about permanent American bases on Australian soil.⁶¹ Similarly, the United States jointly staffs the Joint Defence Facility Pine Gap and the Joint Geological and Geophysical Research Station at Alice Springs and has access to the Harold E. Holt Naval Communication Station in Western Australia, including the space surveillance radar system there.⁶²

Finally, the United States is granted access to a number of facilities in Asian states on a contingency or crisis basis. Thus, U.S. Air Force units transited Thailand’s U-Tapao Air Base and Sattahip Naval Base during the first Gulf War and in the Iraq War, but they do not maintain a permanent presence there. Additionally, the U.S. Navy conducts hundreds of port calls throughout the region.

Diego Garcia. Essential to U.S. operations in the Indian Ocean and Afghanistan and providing essential support to both the Middle East and East Asia are the American facilities on the British territory of Diego Garcia. The island is home to the 12 ships of Maritime Prepositioning Squadron (MPS)-2, which can support a Marine brigade and associated Navy elements for 30 days. There are also several elements of the U.S. global space surveillance and communications infrastructure on the island, as well as basing facilities for the B-2 bomber.

Conclusion

The Asian strategic environment is extremely expansive, as it spans half the globe, with a variety of political relationships among states that have wildly varying capabilities. The region includes long-standing American allies with relationships dating back to the beginning of the Cold War as well as recently established states and some long-standing adversaries such as North Korea.

American conceptions of the region must therefore start from the physical limitations imposed by the tyranny of distance. Moving forces within the region, never mind to it, will take time and require extensive strategic

lift assets as well as sufficient infrastructure (such as sea and aerial ports of debarkation that can handle American strategic lift assets) and political support. At the same time, the complicated nature of intra-Asian relations,

especially unresolved historical and territorial issues, means that, unlike Europe, the United States cannot necessarily count on support from all of its regional allies in event of any given contingency.

Scoring the Asia Operating Environment

As with the operating environments of Europe and the Middle East, we assessed the characteristics of Asia as they would pertain to supporting U.S. military operations. Various aspects of the region facilitate or inhibit America's ability to conduct military operations to defend its vital national interests against threats. Our assessment of the operating environment utilized a five-point scale, ranging from "very poor" to "excellent" conditions and covering four regional characteristics of greatest relevance to the conduct of military operations:

1. **Very Poor.** Significant hurdles exist for military operations. Physical infrastructure is insufficient or nonexistent, and the region is politically unstable. The U.S. military is poorly placed or absent, and alliances are nonexistent or diffuse.
2. **Unfavorable.** A challenging operating environment for military operations is marked by inadequate infrastructure, weak alliances, and recurring political instability. The U.S. military is inadequately placed in the region.
3. **Moderate.** A neutral to moderately favorable operating environment is characterized by adequate infrastructure, a moderate alliance structure, and acceptable levels of regional political stability. The U.S. military is adequately placed.
4. **Favorable.** A favorable operating environment includes good infrastructure, strong alliances, and a stable political

environment. The U.S. military is well placed in the region for future operations.

5. **Excellent.** An extremely favorable operating environment includes well-established and well-maintained infrastructure, strong capable allies, and a stable political environment. The U.S. military is exceptionally well placed to defend U.S. interests.

The key regional characteristics consisted of:

- a. **Alliances.** Alliances are important for interoperability and collective defense as allies would be more likely to lend support to U.S. military operations. Various indicators provide insight into the strength or health of an alliance. These include whether the U.S. trains regularly with countries in the region, has good interoperability with the forces of an ally, and shares intelligence with nations in the region.
- b. **Political Stability.** Political stability brings predictability for military planners when considering such things as transit, basing, and overflight rights for U.S. military operations. The overall degree of political stability indicates whether U.S. military actions would be hindered or enabled and considers, for example, whether transfers of power in the region are generally peaceful and whether there have been any recent instances of political instability in the region.

- c.

U.S. Military Positioning. Having military forces based or equipment and supplies staged in a region greatly facilitates the ability of the United States to respond to crises and, presumably, more quickly achieve successes in critical “first battles.” Being routinely present in a region also assists in maintaining familiarity with its characteristics and the various actors who might act to assist or thwart U.S. actions. With this in mind, we assessed whether or not the U.S. military was well-positioned in the region. Again, indicators included bases, troop presence, prepositioned equipment, and recent examples of military operations (including training and humanitarian) launched from the region.

d.

Infrastructure. Modern, reliable, and suitable infrastructure is essential to military operations. Airfields, ports, rail
- lines, canals, and paved roads enable the U.S. to stage, launch operations from, and logistically sustain combat operations. We combined expert knowledge of regions with publicly available information on critical infrastructure to arrive at our overall assessment of this metric.⁶³

For Asia, we arrived at these average scores:

 - Alliances: **5—Excellent**
 - Political Stability: **4—Favorable**
 - U.S. Military Positioning: **4—Favorable**
 - Infrastructure: **4—Favorable**

Aggregating to a regional score of: **Favorable**

Operating Environment: Asia

	VERY POOR	UNFAVORABLE	MODERATE	FAVORABLE	EXCELLENT
Alliances					✓
Political Stability				✓	
U.S. Military Posture				✓	
Infrastructure				✓	
OVERALL				✓	

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Conclusion: Scoring the Global Operating Environment

The U.S. is a global power. Its security interests are global, and threats to those interests could emerge from any region. Consequently, the U.S. military must be ready to operate in any region when called upon to do so, and it must account for the range of conditions it might encounter when planning for potential military operations. This informs its decisions on the type and amount of

equipment it purchases (especially to transport and sustain the force); where it might operate from; and how easy (or not) it will be to project and sustain combat power when engaged with the enemy.

Aggregating the three regional scores provides a Global Operating Environment score.

Global Operating Environment:
FAVORABLE

Global Operating Environment

	VERY POOR	UNFAVORABLE	MODERATE	FAVORABLE	EXCELLENT
Europe				✓	
Middle East			✓		
Asia				✓	
OVERALL				✓	

The *2017 Index of U.S. Military Strength* saw a slight decline in scoring the overall Global Security Environment. Though the aggregate

score remained the same, it dropped lower in the range established for “favorable,” chiefly as a result of troubles in the Middle East.

Global Operating Environment



The Middle East Operating Environment remained “moderate,” but just barely. As noted earlier in this chapter, the region is plagued by instability, substantial internal security challenges, and spreading, extremely violent transnational threats.

The Europe Operating Environment did not see categorical changes in any of its scores, remaining “favorable,” but its military posture increased slightly with the return of some U.S. forces to Europe, while political stability in the region experienced some

setbacks resulting from challenges posed by mass migration from the Middle East, terrorist attacks, and the turmoil in Turkey generated by an attempted coup.

Similarly, the Asia Operating Environment saw few changes from last year’s assessment, remaining “favorable” for U.S. operations, although it remains to be seen how China’s increasingly aggressive behavior in the region affects the policies of long-standing allies of the U.S. with respect to working with and hosting U.S. military forces.

Threats to U.S. Vital Interests

Assessing Threats to U.S. Vital Interests

The United States is a global power with global interests. Scaling its military power to threats requires judgments with regard to the importance and priority of those interests, whether the use of force is the most appropriate and effective means of addressing the threats to those interests, and how much and what types of force are needed to defeat such threats.

This *Index* focuses on three fundamental, vital national interests:

- Defense of the homeland;
- Successful conclusion of a major war that has the potential to destabilize a region of critical interest to the U.S.; and
- Preservation of freedom of movement within the global commons: the sea, air, and outer space domains through which the world conducts business.

The geographical focus of the threats in these areas is further divided into three broad regions: Asia, Europe, and the Middle East.

This is not to say that these are America's only interests. Among many others, the U.S. has an interest in the growth of economic freedom in trade and investment, the observance of internationally recognized human rights, and the alleviation of human suffering beyond our borders. None of these interests, however, can be addressed principally and effectively by the use of military force, nor would threats to these interests result in material damage to the foregoing vital national interests. These additional American

interests, however important they may be, therefore will not be used in this assessment of the adequacy of current U.S. military power.

We reference two public sources throughout this *Index* as a mechanism to check our work against that of other recognized professional organizations in the field of threat analysis: the International Institute for Strategic Studies' annual *The Military Balance*¹ and the annual *Worldwide Threat Assessment of the US Intelligence Community* (WWTA).² The latter serves as a reference point produced by the U.S. government against which each threat assessment in this *Index* was compared. We note any differences between assessments in this *Index* and the work of the two primary references in summary comments.

The juxtaposition of our detailed, reviewed analysis against both *The Military Balance* and the WWTA revealed two stark limitations in these external sources.

- *First*, *The Military Balance* is an excellent, widely consulted source, but it is only a count of military hardware without context in terms of equipment capability, maintenance and readiness, training, manpower, integration of services, doctrine, or the behavior of competitors (those that threaten the national interests) of the U.S. as defined in this *Index*.
- *Second*, the WWTA omits many threats and is bare in its analysis of those it does address. Moreover, it does not reference underlying strategic dynamics that are key to the evaluation of threats and that may

Threat Categories

Behavior	HOSTILE	AGGRESSIVE	TESTING	ASSERTIVE	BENIGN
Capability	FORMIDABLE	GATHERING	CAPABLE	ASPIRATIONAL	MARGINAL

be more predictive of future threats than a simple extrapolation of current events.

We suspect this is a consequence of the U.S. intelligence community’s withholding its very sensitive assessments derived from classified sources from public view. While such a policy is understandable given the need to avoid compromising sources and methods of collection, it does mean that the WWTa’s views on threats are of limited value to policymakers, the public, and analysts working outside of the government. Surprisingly, The Heritage Foundation’s *Index of U.S. Military Strength* may actually serve as a useful correction to the systemic deficiencies we found in these open sources.

Measuring or categorizing a threat is problematic since there is no absolute reference that assists in assigning a quantitative score. There are two fundamental aspects of threats that are germane to this *Index*: the desire or intent of the threatening entity to achieve its objective and its physical ability to do so. Physical ability is the easier of the two to assess, while intent is quite hard. A useful surrogate for intent is observed behavior since this is where we see intent become manifest through action. Thus, a provocative, belligerent pattern of behavior that seriously threatens U.S. vital interests would be very worrisome. Similarly, a comprehensive ability to accomplish objectives even in the face of U.S. military power would cause serious concern for U.S. policymakers, while weak or very limited abilities would lessen U.S. concerns even if an entity behaved provocatively vis-à-vis U.S. interests. Each categorization used is meant to convey a word picture of how troubling a threat’s behavior and set of capabilities have been during the assessed year.

The five ascending categories for observed behavior are:

- Benign,
- Assertive,
- Testing,
- Aggressive, and
- Hostile.

The five ascending categories for physical capability are:

- Marginal,
- Aspirational,
- Capable,
- Gathering, and
- Formidable.

These characterizations—behavior and capability—form two halves of an overall assessment of the threats to U.S. vital interests.

As noted, the following assessments are arranged by region (Europe, Middle East, and Asia) to correspond with the flow of the chapter on operating environments and then by U.S. vital interest (threat posed by an actor to the U.S. homeland, potential for regional war, and freedom of global commons) within each region. Each actor is then discussed in terms of how and to what extent its behavior and physical capabilities have posed a challenge to U.S. interests in the assessed year.

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Europe

The transatlantic alliance—the North Atlantic Treaty Organization (NATO)—has been the linchpin of America’s security since the end of the Second World War. In many cases, the United States and its European allies have helped to create the conditions for prosperity and peace across large areas of the world.

However, despite the centrality of the transatlantic relationship, challenges on both sides of the Atlantic threaten to undermine its strength. Sluggish economic growth, terrorism, and millions of migrants seeking entry to the West are all issues that will need to be confronted. Defense cuts in the U.S. have stung, and the fact remains that many European NATO members no longer possess the military capability or political will to contribute to the alliance in a meaningful way.

At the same time, threats to the region have not disappeared and in many cases have grown. The resurgence of an aggressive, belligerent Russia has thrown conventional post-Cold War thinking into the waste bin. While policies pursued by the U.S. and our allies vis-à-vis Russia have given Russia space to expand its regional influence, Russian President Vladimir Putin’s decision to invade Ukraine and annex Crimea has changed post-Cold War norms. From the Arctic to the Baltics, Ukraine, and the South Caucasus, Russia has proven to be the source of much instability in Europe.

Threats to the Homeland

Russia is the only state adversary in the region that possesses the capability, with both conventional and non-conventional means,

to threaten the U.S. homeland. Although there is no indication that Russia plans to use its capabilities against the United States absent a broader conflict involving America’s NATO allies, the plausible potential for such a scenario serves to sustain their strategic importance. Russia’s explicitly belligerent behavior during the past year¹ further adds to the need for the U.S. to give due consideration to Russia’s ability to place the security of the U.S. at risk.

Russia’s National Security Strategy released in December 2015 describes NATO as a threat to the national security of the Russian Federation:

The buildup of the military potential of the North Atlantic Treaty Organization (NATO) and the endowment of it with global functions pursued in violation of the norms of international law, the galvanization of the bloc countries’ military activity, the further expansion of the alliance, and the location of its military infrastructure closer to Russian borders are creating a threat to national security.²

The document also clearly states that Russia will use every means at its disposal to achieve its strategic goals: “Interrelated political, military, military-technical, diplomatic, economic, informational, and other measures are being developed and implemented in order to ensure strategic deterrence and the prevention of armed conflicts.”

In December 2014, Putin signed a new version of Russia’s military doctrine, emphasizing the claimed threat of NATO and global strike systems to Russia.³ Russia spent 5.4 percent of

GDP on defense in 2015, up 7.5 percent from 2014⁴ but still less than intended. Russia's defense budget is reported to have been cut by 5 percent in 2015, the largest cut since 2012 when Putin took power. The state armaments program, however, was shielded from these cuts; the 10-year, \$680 billion program, announced in 2010, was intended "to increase the share of modern armaments held by the armed forces from 15 per cent in 2010 to 30 per cent in 2015 and 70 per cent in 2020."⁵

Russian Strategic Nuclear Threat. Russia possesses the largest arsenal of nuclear weapons among the nuclear powers (when short-range nuclear weapons are included). It is one of the few nations with the capability to destroy many targets in the U.S. homeland and in U.S.-allied nations and to threaten and prevent free access to the commons by other nations. Russia has both intercontinental-range and short-range ballistic missiles and a varied nuclear weapons arsenal that can be delivered by sea, land, and air. It also is investing significant resources in modernizing its arsenal and maintaining the skills of its workforce.

Russia is currently relying on its nuclear arsenal to ensure its invincibility against any enemy, intimidate European powers, and deter counters to its predatory behavior in its "near abroad," primarily in Ukraine but also concerning the Baltic States.⁶ The arsenal provides Russia with a protective umbrella under which it can modernize its conventional forces at a deliberate pace. While its nuclear deterrent protects Russia from a large-scale attack, Russia also needs a modern and flexible military to fight local wars such as those against Georgia in 2008 and Ukraine in 2014. Under Russian military doctrine, the use of nuclear weapons in conventional local and regional wars is seen as de-escalatory because it would cause an enemy to concede defeat.

Particularly worrisome are Moscow's plans for rail-based nuclear-armed missiles that are very difficult to detect. Russia is planning to deploy 38 new strategic missiles, one strategic submarine, and seven modified strategic bombers in addition to seven air defense

systems and three Yars missile regiments.⁷ The Defense Ministry states that the new structure of the armed forces is being created with the goal of increased flexibility, mobility, and readiness for combat in limited-scale conflicts. Strategic Rocket Forces are the first line of defense (and offense) against Russia's great-power counterparts.⁸

Russia has two strategies for nuclear deterrence. The first is based on a threat of massive launch-on-warning and retaliatory strikes to deter a nuclear attack; the second is based on a threat of limited demonstration and "de-escalation" nuclear strikes to deter or terminate a large-scale conventional war.⁹ Russia's reliance on nuclear weapons is based partly on their small cost relative to conventional weapons (especially in terms of their effect) and on Russia's inability to attract sufficient numbers of high-quality servicemembers. Thus, Russia sees its nuclear weapons as a way to offset the lower quantity and quality of its conventional forces.

Moscow has repeatedly threatened U.S. allies in Europe with nuclear deployments and even pre-emptive nuclear strikes.¹⁰ The Russians justify their aggressive behavior by pointing to deployments of U.S. missile defense systems in Europe even though these systems are not scaled or postured to mitigate Russia's advantage in ballistic missiles and nuclear weapons to any significant degree. In March 2015, Russia's ambassador to Denmark threatened that Danish ships taking part in NATO's missile defense have made themselves targets for a nuclear attack.¹¹ Russia continues to violate the Intermediate-Range Nuclear Forces (INF) Treaty, which bans the testing, production, and possession of intermediate-range missiles.¹² According to Keith Payne and Mark Schneider, "These Russian actions demonstrate the importance the Kremlin attaches to its new nuclear-strike capabilities. They also show how little importance the Putin regime attaches to complying with agreements that interfere with those capabilities."¹³

WWTA: The 2016 WWTA states that "Russia has developed a ground-launched cruise

missile that the United States has declared is in violation of the Intermediate-Range Nuclear Forces (INF) Treaty.”¹⁴

Summary: The sizable Russian nuclear arsenal remains the only threat to the existence of the U.S. homeland emanating from Europe and Eurasia. While the potential for use of this arsenal remains low, the fact that Russia continues to threaten Europe with nuclear attack demonstrates that it will continue to play a central strategic role in shaping both Russia’s military and political thinking and its level of aggressive behavior beyond its borders.

Threat of Regional War

To many U.S. allies, Russia does pose a threat. At times, this threat is of a military nature. At other times, Russia uses less conventional tactics such as cyber attacks, utilization of energy resources, and propaganda. Norway’s Intelligence Service describes Russia’s actions as an “increased willingness and ability to use a wide range of instruments to achieve its political goals” and warns that “the modernization of its military powers enhances the ability to influence, also in the high north.”¹⁵

Today as in Imperial times, Russia’s influence is exerted by both the pen and the sword. Organizations like the Collective Security Treaty Organization (CSTO) or Eurasia Economic Union attempt to bind regional capitals to Moscow through a series of agreements and treaties.

Espionage is another tool that Russia uses in ways that are damaging to U.S. interests. In 2015, non-NATO members Finland and Sweden noted increases in foreign intelligence activity. Also in 2015, Sweden’s Security Service Säpo described Russian espionage activities as “extensive,” claiming that “[a]bout every third Russian diplomat is an intelligence officer.”¹⁶ Russian spying is active on U.S. soil as well. In May 2016, a Russian spy was sentenced to prison for gathering intelligence for the Russian SVR intelligence agency while working as a banker in New York. The spy specifically transmitted intelligence on “potential

U.S. sanctions against Russian banks and the United States’ efforts to develop alternative energy resources.”¹⁷ In May 2016, a senior intelligence official from Portugal working for the Portuguese Security Intelligence Service was arrested for passing secrets to the Russian Federation, especially classified NATO intelligence and material.

There are four areas of critical interest to the U.S. in the European region where Russia poses a direct threat: Central and Eastern Europe, the Arctic or High North, the Balkans, and the South Caucasus.

Russian Pressure on Central and Eastern Europe. Moscow poses a security challenge to members of NATO that border Russia. Although the likelihood of a conventional Russian attack against the Baltic States is low, primarily because it would trigger a NATO response, Russia has used non-conventional means to apply pressure to and sow discord among these states. The Baltic States continue to view Russia as a significant threat.

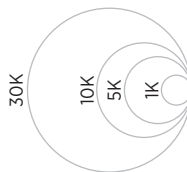
After World War I, the three Baltic nations of Estonia, Latvia, and Lithuania proclaimed their independence, and by 1923, the U.S. had granted full recognition to all three. In June 1940, as part of the Molotov–Ribbentrop Pact between Nazi Germany and Stalinist Russia, Soviet troops entered and occupied the three Baltic countries. A month later, acting U.S. Secretary of State Sumner Welles issued what was later to be known as the Welles Declaration, condemning Russia’s occupation and stating America’s refusal to recognize the legitimacy of Soviet control of these three states. The three states regained their independence with the end of the Cold War.

Due to decades of Russian domination, the Baltic States factor Russia into their military planning and foreign policy formulation in a way that is simply unimaginable in many Western European countries and North America. Estonia and Latvia have sizable ethnic Russian populations, and there is concern that Russia might exploit the situation as a pretext for aggression. This view is not without merit, considering Moscow’s irredentist

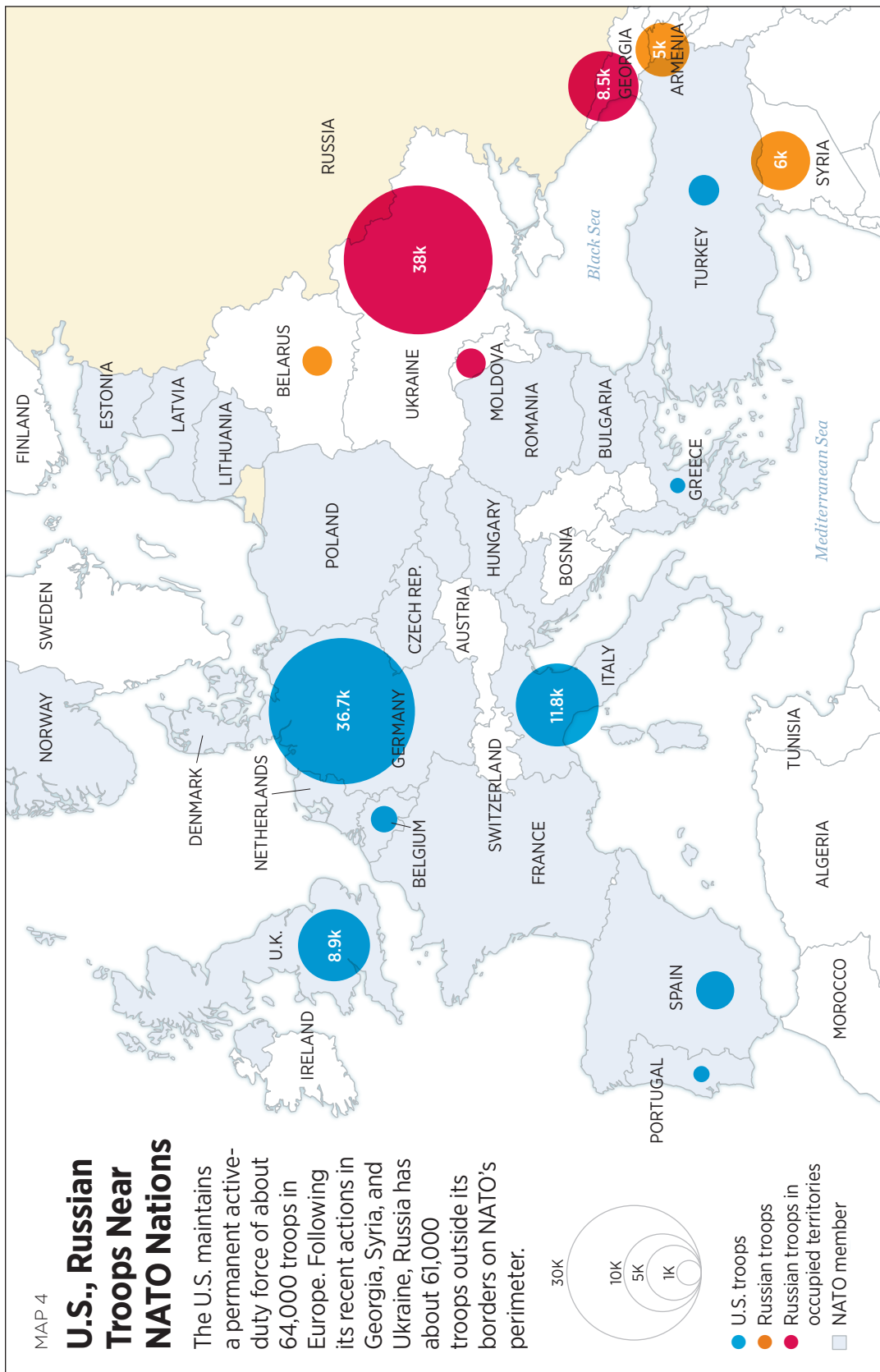
MAP 4

U.S., Russian Troops Near NATO Nations

The U.S. maintains a permanent active-duty force of about 64,000 troops in Europe. Following its recent actions in Georgia, Syria, and Ukraine, Russia has about 61,000 troops outside its borders on NATO's perimeter.



- U.S. troops
- Russian troops
- Russian troops in occupied territories
- NATO member



SOURCES: U.S. Department of Defense, Defense Manpower Data Center, September 2015, and Heritage Foundation research.

rhetoric and Russia's use of this technique to annex Crimea.

Russia has also demonstrated a willingness to use military force to change the borders of modern Europe. When Kremlin-backed Ukrainian President Viktor Yanukovich failed to sign an Association Agreement with the European Union (EU) in 2013, months of street demonstrations led to his ouster early in 2014. Russia responded by violating Ukraine's territorial integrity, sending troops, aided by pro-Russian local militia, to occupy the Crimean Peninsula under the pretext of "protecting Russian people." This led to Russia's eventual annexation of Crimea, the first such forcible annexation of territory in Europe since the Second World War.¹⁸

Russia's annexation of Crimea has de facto halved Ukraine's coastline, and Russia has claimed rights to underwater resources off the Crimean Peninsula.¹⁹ Russia currently can supply Crimea only by air and sea and is planning a \$3.2 billion bridge project to connect the Crimean Peninsula with Russia by road and rail, though there are significant doubts about the project's economic viability and timeline to completion.²⁰ Russia has deployed 28,000 troops to Crimea²¹ and has embarked on a major program to build housing and restore airfields.²² In addition, control of Crimea has allowed Russia to use the Black Sea as a platform to launch and support naval operations in the Gulf of Aden and the Eastern Mediterranean.²³ Russia has allocated \$1 billion to modernize the Black Sea fleet by 2020²⁴ and has stationed additional warships there including two equipped with Caliber-NK long-range cruise missiles.²⁵ Caliber cruise missiles have a range of at least 2,500km,²⁶ placing cities from Rome to Vilnius within range of Black Sea-based cruise missiles.²⁷

In eastern Ukraine, Russia has helped to foment and sustain a separatist movement. Backed, armed, and trained by Russia, separatist leaders in eastern Ukraine have declared the so-called Lugansk People's Republic and Donetsk People's Republic. Russia

has backed separatist factions in the Donbas region of eastern Ukraine with advanced weapons, technical and financial assistance, and Russian conventional and special operations forces. September 2014 and February 2015 cease-fire agreements, known respectively as Minsk I and Minsk II, have routinely been violated by Russian-supplied separatists, leading U.S. General Philip Breedlove to describe Minsk II as "a cease-fire in name only."²⁸ Lamberto Zannier, Secretary-General of the Organization for Security and Cooperation in Europe (OSCE), which is charged with overseeing the cease-fire, has cited systematic cease-fire violations and poor access for OSCE monitors to areas held by Russian-backed separatists, with no access to the border between Ukraine and Russia where weapons and matériel enter the country, as serious problems.²⁹

These cease-fire agreements have resulted in the de facto partition of Ukraine and have created the region's newest frozen conflict—a conflict that remains both deadly and advantageous for Russia. "Describing the prolonged conflicts in states around the Russian periphery as 'frozen,'" according to General Breedlove in EUCOM's 2016 posture statement, "belies the fact that these are on-going and deadly affairs often manufactured by Russia to provide pretext for military intervention and ensures the Kremlin maintains levels of influence in the sovereign matters of other states."³⁰

Russia is also employing espionage and misinformation to derail Ukraine. In February 2015, for example, Germany's BfV domestic intelligence agency noted "clear activities" by Russia with regard to influencing Western responses to Russia's invasion of Ukraine.³¹ Moscow's poor track record in implementing cease-fires should raise doubts among those who expected that Russia would not use its influence to control the separatists in eastern Ukraine.

Russia is still in violation of the 2008 peace agreement signed to end the war against Georgia. Russian troops are still based in

areas where they are not supposed to be, and Moscow continues to prevent international observers from crossing into South Ossetia and Abkhazia even though they patrol freely in the rest of Georgia.

In Moldova, Russia supports the break-away enclave of Transnistria, where yet another frozen conflict festers to Moscow's liking. According to EUCOM's 2016 posture statement:

Russian forces have conducted "stability operations" since 1992 to contain what is described as a separatist conflict in Transnistria. Moldova remains disappointed with Russia's continued political, economic, and informational support to the separatist regime. Most upsetting to Moldova is Russia's military presence (1,500 troops) on Moldovan territory, which is aimed at maintaining the status quo in the region.³²

Whether in Georgia, eastern Ukraine, or Moldova, it is in Russia's interests to keep these conflicts frozen. Russia derives much of its regional influence from these conflicts. Bringing them to a peaceful conclusion would decrease Russia's influence in the region.

The other countries in Central and Eastern Europe also see Russia as a threat, although to varying degrees. Most tend to rely almost completely on Russia for their energy resources, some have felt the sharp end of Russian aggression in the past, and all were once in the Warsaw Pact and fear being forced back into a similar situation. Such historical experiences inevitably have shaped Russia's image throughout Central and Eastern Europe.

More recently, Russia has deployed advanced mobile air defense systems and mobile short-range ballistic missile systems that include Iskander missiles in the Kaliningrad Oblast exclave,³³ and there have been reports that it has deployed tactical nuclear weapons in Kaliningrad.³⁴ Russia also has outfitted a Missile Brigade in Luga, Russia, a mere 74 miles from the Estonian city of Narva, with Iskander missiles.³⁵ In January, Commander in Chief of Russian Ground Forces General Oleg Salyukov announced that four new ground

divisions would be formed in 2016, three of which would be based in the Western Military District, allegedly in response to "intensified exercises of NATO countries."³⁶

In addition, Russia has dedicated resources to major training exercises involving tens of thousands of troops that many in Eastern Europe fear are directed at them. In March 2015, without warning,³⁷ Russia staged a five-day exercise involving 45,000 troops, 3,000 vehicles, 110 aircraft, 15 submarines, and 40 surface vessels.³⁸ As part of the exercise, the Russian Northern Fleet was brought to full combat readiness.³⁹ The scale of the snap exercise and the fact that it was held simultaneously with NATO's long-planned, 5,000-troop Joint Viking exercise⁴⁰ in northern Norway were meant as a signal of Russian strength. "Conducting this single exercise in the area stretching from Norway to the Baltics through Poland and into Crimea," Stratfor has reported, "is clearly angled toward NATO and its Eastern European members."⁴¹

In February 2016, Russia held a snap exercise involving 8,500 troops, dozens of ships, and aircraft in the Southern Military District in a region (Rostov) that borders the Lugansk and Donetsk regions of Ukraine.⁴² In March 2016, 30,000 troops and over 100 aircraft took part in "snap inspections" by Russian Airborne Forces.⁴³ In April 2016, Russian and Belarusian troops exercised in Belarus near the border with Poland⁴⁴ and, immediately before a meeting of the NATO–Russia Council, used the Black Sea Fleet and regional air power in an exercise on blocking the Black Sea straits.⁴⁵ More worrisome still, Russian exercises at times have included a nuclear element, such as in 2009, when a Russian exercise scenario included a nuclear attack on Warsaw.⁴⁶

WWTA: The WWTA states that Russia will use its position in Syria to promote its "Great Power status and end its international isolation."⁴⁷ Russia will continue its efforts to stymie Ukraine's integration into Western institutions and will continue to pressure neighboring states to join the Eurasian Economic Union as a way to achieve greater

regional influence. By utilizing a growing relationship with China and multilateral forums, Russia also continues to work to dilute U.S. influence in Europe. Military modernization will continue to be prioritized despite Russia's poor economic condition.

Summary: NATO members in Eastern and Central Europe view Russia as a threat, a fear that is not unfounded considering Russian aggression against Ukraine and Georgia. The threat of conventional attack against a NATO member by Russia remains low but cannot be entirely ruled out. Russia's grasp and use of unconventional warfare against neighboring countries should remain a top issue for U.S. and NATO planners.

Militarization of the High North. The Arctic region is home to some of the roughest terrain and harshest weather found anywhere in the world. Increasingly, Arctic ice is melting during the summer months, causing new challenges for the U.S. in terms of Arctic security. Many of the shipping lanes currently used in the Arctic are a considerable distance from search and rescue (SAR) facilities, and natural resource exploration that would be considered routine in other locations is complex, costly, and dangerous in the Arctic.

The U.S. is one of five littoral Arctic powers and one of only eight countries with territory located above the Arctic Circle, the area just north of 66° north latitude that includes portions of Norway, Sweden, Finland, Russia, Canada, Greenland, Iceland, and the United States.

Arctic actors take different approaches to military activity in the region. Although the security challenges currently faced in the Arctic are not yet military in nature, there is still a requirement for military capability in the region that can support civilian authorities. For example, civilian SAR and response to natural disasters in such an unforgiving environment can be augmented by the military.

Russia has taken steps to militarize its presence in the region. The Northern Fleet, which is based in the Arctic, accounts for two-thirds of the Russian Navy. A new Arctic command

was established in 2015 to coordinate all Russian military activities in the Arctic region.⁴⁸ Over the next few years, two new Arctic brigades will be permanently based in the Arctic, and Russian Special Forces have been training in the region. Old Soviet-era facilities have been reopened; for example, the airfield on Kotelny Island has been put into use for the first time in almost 30 years.⁴⁹ In fact, air power in the Arctic is increasingly important to Russia. By 2018, Russia is expected to have nine airfields operational in the region.⁵⁰ The 45th Air Force and Air Defense Army of the Northern Fleet was formed in December 2015,⁵¹ and Russia reportedly has placed radar and S-300 missiles on the Arctic bases at Franz Joseph Land, New Siberian Islands, Novaya Zemlya, and Severnaya Zemlya.⁵²

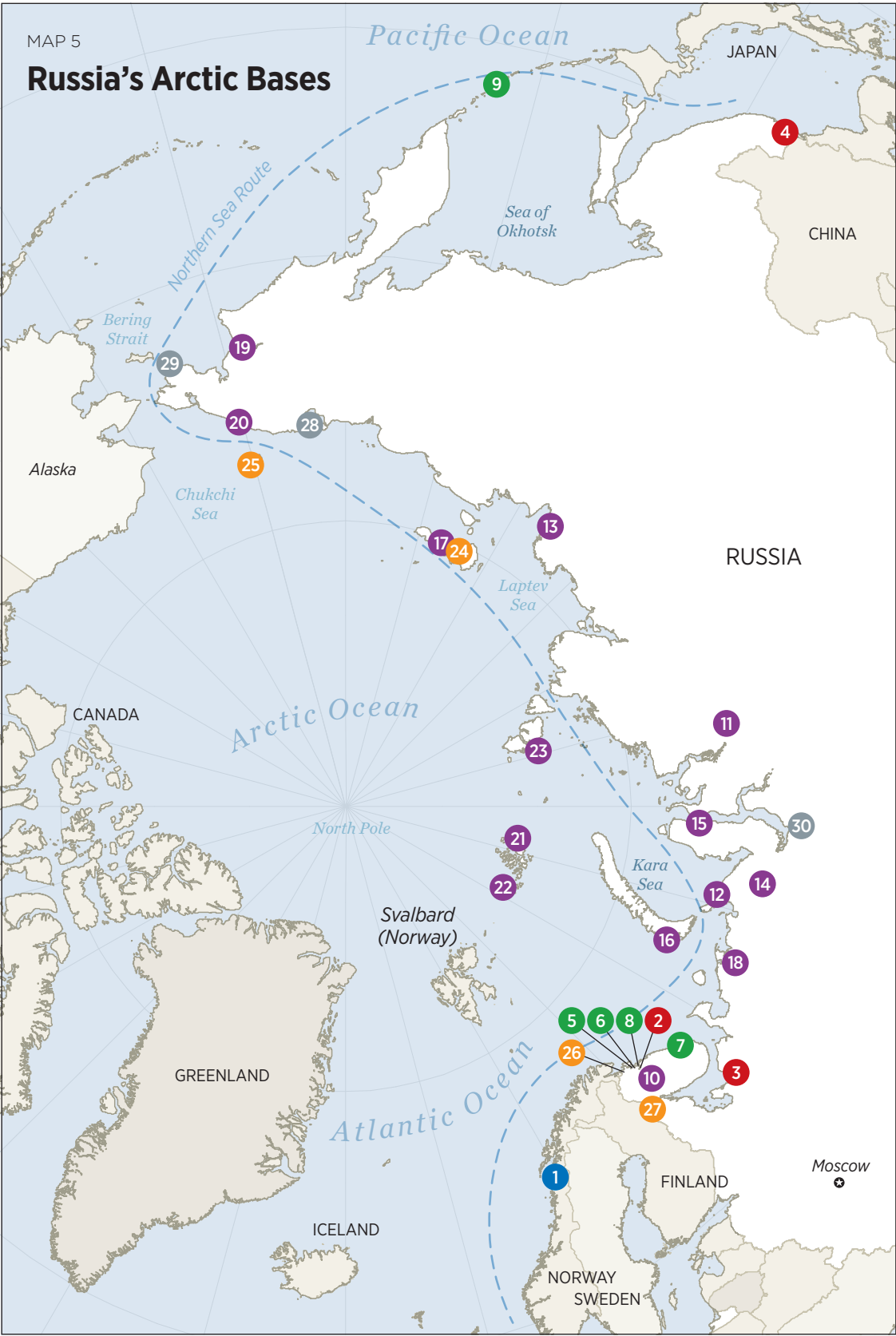
Russia's ultimate goal is to have a combined Russian armed force deployed in the Arctic by 2020, and it appears that Moscow is on track to accomplish this.⁵³ Russia is also developing equipment optimized for Arctic conditions like the Mi-38 helicopter,⁵⁴ and in June, it unveiled the naval icebreaker the *Ilya Muromets*, which is slated to join the Northern Fleet in 2017.⁵⁵

Russia's Maritime Doctrine of Russian Federation 2020, adopted in July 2015, lists the Arctic as one of two focal points along with the Atlantic, a point emphasized by Deputy Prime Minister Dmitry Rogozin.⁵⁶ In April 2016, a Russian Severodvinsk submarine participated in Arctic exercises that involved 20 vessels and fired a Kalibr cruise missile that reportedly hit a target on land.⁵⁷

In April 2016, Russian and Chechen paratroopers took part in separate military exercises in the Arctic. It was not the first time that these exercises have taken place. In 2014, 90 paratroopers landed on Barneo ice camp in the Arctic; in 2015, 100 paratroopers from Russia, Belarus, and Tajikistan took part in exercises on Barneo.⁵⁸ In advance of the exercises in April, personnel and equipment were transferred through Longyearbyen airport on Svalbard, over which Norway has sovereignty. The use of the airport likely violated

MAP 5

Russia's Arctic Bases



● NATO

- 1 Bodø—Norway's National Joint Headquarters

● RUSSIAN HEADQUARTERS

- 2 Severomorsk—Home of Russia's Northern Fleet
- 3 Arkhangelsk—Home of North Arctic Command
- 4 Vladivostok—Home of Russia's Pacific Fleet

● RUSSIAN NAVAL BASES

- 5 Zapadnaya Litsa
- 6 Vidyayevo
- 7 Gremikha
- 8 Gadzhiyevo—Main submarine base for Russia's northern fleet
- 9 Matua, Kuril Islands

● RUSSIAN AIR BASES

- 10 Olenya
- 11 Alykel
- 12 Amderma
- 13 Tiksi
- 14 Vorkuta
- 15 Yamal-Sabetta
- 16 Rogachevo-Novaya Zemlya
- 17 Boiler-New Siberian Islands
- 18 Naryan-Mar
- 19 Anadyr-Ugolny
- 20 Mys Shmidt
- 21 Graham Bell Island
- 22 Nagurskoye
- 23 Sredny Ostrov

● RUSSIAN JOINT BASES

- 24 Severny Klever-Kotelny Island
- 25 Temp-Wrangell Island
- 26 Sputnik Base, Pechenga
- 27 Alakurtti

● RUSSIAN CIVILIAN/MILITARY RESCUE CENTERS

- 28 Pevek
- 29 Provideniya
- 30 Nadym

SOURCE: Heritage Foundation research.

 [heritage.org](https://www.heritage.org)

the Svalbard Treaty, which demilitarized the islands.⁵⁹ According to EUCOM Commander General Philip Breedlove:

Russia's behavior in the Arctic is increasingly troubling. Their increase in stationing military forces, building and reopening bases, and creating an Arctic military district—all to counter an imagined threat to their internationally undisputed territories—stands in stark contrast to the conduct of the seven other Arctic nations.

Russia's improvements to Arctic settlements are ostensibly to support increased shipping traffic through the Northern Sea Route. However, many of these activities are purely military in nature and follow a recent pattern of increasingly aggressive global posturing....⁶⁰

Debate has continued with respect to what role, if any, NATO should play in the Arctic,⁶¹ although the organization itself has not yet raised the debate to any formal level. NATO

once again missed an opportunity to address the Arctic at the 2016 Warsaw Summit. Both the declaration and the summit communiqué coming out of Warsaw fail to mention the word “Arctic” even once, as was the case for the 2014 Wales NATO Summit declaration.

WWTA: The WWTA states that “Russia will almost certainly continue to bolster its military presence along its northern coastline to improve its perimeter defense and control over its exclusive economic zone (EEZ)” and “might become more willing to disavow established international processes or organizations concerning Arctic governance and act unilaterally to protect these interests if Russian–Western relations deteriorate further.”⁶²

Summary: While NATO has been slow to turn its attention to the Arctic, Russia continues to develop and increase its military capabilities in the region. The likelihood of armed conflict remains low, but physical changes in the region mean that the posture

of players in the Arctic will continue to evolve. It is clear that Russia intends to exert a dominant influence.

Threat from Russian Propaganda. Russia has consistently used propaganda to garner support for its foreign policies. The 2013 Concept of the Foreign Policy of the Russian Federation makes clear the Russian government's aims in using mass media to further its foreign policy objectives:

In its public diplomacy, Russia will seek to ensure its objective perception in the world, develop its own effective means of information influence on public opinion abroad, strengthen the role of Russian mass media in the international information environment providing them with essential state support, as well as actively participate in international information cooperation, and take necessary measures to counteract information threats to its sovereignty and security. Possibilities offered by new information and communications technologies will be widely used in these activities. Russia will seek to develop a set of legal and ethical norms for the safe use of such technologies.⁶³

Russian media are hardly independent. In 2016, Russia ranked 148th out of 180 countries in Reporters Without Borders' *World Press Freedom Index*, the same as its ranking in 2012, 2013, and 2014 and down from 152nd in 2015.⁶⁴ Specifically:

What with draconian laws and website blocking, the pressure on independent media has grown steadily since Vladimir Putin's return to the Kremlin in 2012. Leading independent news outlets have either been brought under control or throttled out of existence. While TV channels continue to inundate viewers with propaganda, the climate has become very oppressive for those who question the new patriotic and neo-conservative discourse or just try to maintain quality journalism. The leading human rights NGOs have been declared "foreign agents."⁶⁵

While much of its propaganda is meant for a domestic Russian audience, Russia is working actively to influence audiences abroad as well. In 2015, RT, a Russian television news

station that broadcasts in Arabic, English, French, German, Russian, and Spanish, received \$400 million in state funding.⁶⁶ Rossiya Segodnya, a radio and wire service crafted from RIA Novosti and the Voice of Russia, received \$170 million in state funds for 2015.⁶⁷ Russian propaganda efforts also include newspaper supplements⁶⁸ and the hiring of Western public relations firms. In 2013, for instance, Ketchum, a U.S.-based public relations firm, helped to place an op-ed in *The New York Times* written by Vladimir Putin criticizing American exceptionalism.⁶⁹

Russia's plans have met with some success abroad. In December 2014, RT claimed that its combined YouTube channels made it the first news channel to hit 2 billion views.⁷⁰ In September 2014, "the Russian Duma passed a law restricting foreign ownership of media companies to 20 percent" that "effectively forces foreign owners to relinquish control over independent outlets, further consolidating the government's control over the media."⁷¹ Companies have until February 1, 2017, to come into compliance with the new law.⁷²

In EUCOM's 2016 posture statement, General Breedlove describes how Russian propaganda works: "Russia overwhelms the information space with a barrage of lies that must be addressed by the United States more aggressively in both public and private sectors to effectively expose the false narratives pushed daily by Russian-owned media outlets and their proxies."⁷³ This approach was abundantly evident during the country's invasion of Ukraine and subsequent annexation of Crimea and its continued stealth invasion of eastern Ukraine. General Breedlove has described the importance of propaganda in Russian military operations:

Russia has employed "hybrid warfare" (which includes regular, irregular, and cyber forms of war as well as political and economic intimidations) to illegally seize Crimea, foment separatist fever in several sovereign nations, and maintain frozen conflicts within its so-called "sphere of influence" or "near abroad."

Undergirding all of these direct approaches is the pervasive presence of the Russia propaganda machine, which inserts itself into media outlets globally and attempts to exploit potential sympathetic or aggrieved populations.⁷⁴

Russian media, for example, have promoted the false claims that Russia is simply defending ethnic Russians in Ukraine from far-right thugs, that the government in Kyiv is to blame for the violence that has enveloped parts of the country, and that the U.S. has instigated unrest in Ukraine.⁷⁵ After a civilian airliner was shot down by Russian-backed separatists, Russian propaganda spun stories alleging that the plane was shot down by the Ukrainian government.⁷⁶

Nor are Russian propaganda efforts limited to TV channels. There are widespread reports that the Russian government has paid people to post comments to Internet articles that parrot the government's propaganda.⁷⁷ People working in so-called troll factories with English-language skills are reported to be paid more.⁷⁸ Twitter has been used in Ukraine to disseminate false or exaggerated Russian government claims. Russia is also widely suspected of funding political parties in Europe, and in January 2016, Congress asked U.S. Director of National Intelligence James Clapper to conduct a major review of such Russian clandestine funding over the past decade.⁷⁹

Russian propaganda poses the greatest threat to NATO allies that have a significant ethnic Russian population: the Baltic States, especially Estonia and Latvia. Many ethnic Russians in these countries get their news through Russian-language media (especially TV channels) that parrot the official Russian state line, often interspersed with entertainment shows, making it more appealing to viewers. In 2014, Lithuania and Latvia temporarily banned certain Russian TV stations such as RTR Rossiya in light of Russian aggression in Ukraine,⁸⁰ and in March 2016, Latvia banned the Russian "news agency" and propaganda website Sputnik from operating in the country.⁸¹

The inability to reach ethnic Russians in their vernacular remains a glaring vulnerability for planners when thinking about Baltic security. In an effort to provide an independent alternative Russian-language media outlet, Estonia, Latvia, and Lithuania are in various stages of planning and creating their own programming for Russian-language TV channels to counter Russian propaganda efforts.⁸² A similar effort was undertaken by Radio Free Europe/Radio Liberty with the daily news program "Current Time," which began airing in 2014 in Russian to countries on Russia's periphery.⁸³

WWTA: The WWTA states that "Russia continues to take information warfare to a new level, working to fan anti-US and anti-Western sentiment both within Russia and globally," and that "Moscow will continue to publish false and misleading information in an effort to discredit the West, confuse or distort events that threaten Russia's image, undercut consensus on Russia, and defend Russia's role as a responsible and indispensable global power."⁸⁴

Summary: Russia has used propaganda consistently and aggressively to advance its foreign policy aims. This is likely to remain an essential element of Russian aggression and planning. The potential for its use to stir up agitation in the Baltic States and to expose fissures between Western states makes Russian propaganda a continued threat to regional stability and a possible threat to the NATO alliance.

Russian Destabilization in the South Caucasus. The South Caucasus sits at a crucial geographical and cultural crossroads and has proven to be strategically important, both militarily and economically, for centuries. Although the countries in the region (Armenia, Georgia, and Azerbaijan) are not part of NATO and therefore do not receive a security guarantee from the U.S., they have participated to varying degrees in NATO and U.S.-led operations. This is especially true of Georgia, which has aspirations to join NATO.

Russia views the South Caucasus as part of its natural sphere of influence and stands

ready to exert its influence in the region by force if necessary. In August 2008, Russia invaded Georgia, coming as close as 15 miles to the capital city of Tbilisi. Seven years later, several thousand Russian troops occupied the two Georgian provinces of South Ossetia and Abkhazia.

In 2015, Russia signed so-called integration treaties with South Ossetia and Abkhazia. Among other things, these treaties call for a coordinated foreign policy, creation of a common security and defense space, and implementation of a streamlined process for Abkhazians and South Ossetians to receive Russian citizenship.⁸⁵ The Georgian Foreign Ministry criticized the treaties as a step toward “annexation of Georgia’s occupied territories,”⁸⁶ both of which are still internationally recognized as part of Georgia. In April 2016, the separatist leader of South Ossetia announced that the region would hold a constitutional referendum on joining the Russian Federation by the end of the year.⁸⁷ This deadline was subsequently pushed back to 2017.⁸⁸ Russia has based 4,500 soldiers in South Ossetia⁸⁹ and is regularly expanding its “creeping occupation” in Georgia. In July 2015, Russian troops expanded the border of the occupied territories to include a piece of the Baku–Supsa pipeline, which carries oil from Azerbaijan to Supsa, Georgia, with a capacity of 100,000 barrels a day and is owned by British Petroleum.⁹⁰

Today, Moscow continues to take advantage of ethnic divisions and tensions in the South Caucasus to advance pro-Russian policies that are often at odds with America’s or NATO’s goals in the region. However, Russia’s influence is not restricted to soft power. In the South Caucasus, the coin of the realm is military might. It is a rough neighborhood surrounded by instability and insecurity reflected in terrorism, religious fanaticism, centuries-old sectarian divides, and competition for natural resources.

Russia maintains a sizable military presence in Armenia based on an agreement giving Moscow access to bases in that country for

49 years.⁹¹ The bulk of Russia’s forces, consisting of approximately 5,000 soldiers and dozens of fighter planes and attack helicopters, are based around the 102nd Military Base.⁹² In December 2015, Russia sent an additional two deployments of attack helicopters to its bases in Armenia.⁹³ Also late last year, Russia and Armenia signed a Combined Regional Air Defense System agreement. In February 2016, Russia deployed an additional four MiG-29 jets, a MiG bomber, and transport helicopter to Erebuni airport, which is only 25 miles from the Armenian–Turkish border.⁹⁴

Russia has long had difficulty supplying these forces, especially since a transit right through Georgian airspace has been closed and Turkey refuses transit. This has left reliance on Iran, which for obvious reasons is not ideal for Russia. These policies breed animosity and form a perfect storm that could easily be exploited by Russia.

Another source of regional instability is the Nagorno–Karabakh conflict, which began in 1988 when Armenia made territorial claims to Azerbaijan’s Nagorno–Karabakh Autonomous Oblast.⁹⁵ By 1992, Armenian forces and Armenian-backed militias occupied 20 percent of Azerbaijan, including the Nagorno–Karabakh region and seven surrounding districts. A cease-fire agreement was signed in 1994, and the conflict has been described as “frozen” since then. Since August 2014, violence has increased noticeably along the Line of Contact between Armenian and Azerbaijani forces. In early April 2016, four days of fighting claimed the lives of a combined 112 soldiers and civilians.⁹⁶ In addition, Azerbaijani forces recaptured some of the territory lost to Armenia in the early 1990s, the first changes in the Line of Contact since 1994.⁹⁷

This conflict offers another opportunity for Russia to exert malign influence and consolidate power in the region. While its sympathies lie with Armenia, Russia is the largest supplier of weapons to both Armenia and Azerbaijan.⁹⁸ As noted by the late Dr. Alexandros Petersen, a highly respected expert on Eurasian security, it is no secret “that

the Nagorno–Karabakh dispute is a Russian proxy conflict, maintained in simmering stasis by Russian arms sales to both sides so that Moscow can sustain leverage over Armenia, Azerbaijan and by its geographic proximity Georgia.”⁹⁹

Following the outbreak of fighting, Russia expanded its influence in the region by brokering a shaky cease-fire that has largely held. By the time the Organization for Security and Cooperation in Europe Minsk Group, created in 1995 to find a peaceful solution to the Nagorno–Karabakh conflict, met, the Russian-brokered cease-fire was already in place.¹⁰⁰

The South Caucasus might seem distant to many American policymakers, but the spill-over effect of ongoing conflict in the region can have a direct impact on both U.S. interests and the security of America’s partners, as well as on Turkey and other countries that are dependent on oil and gas transiting the region.

WWTA: The WWTA projects that tensions between Russia and Georgia will remain high, with continued pressure for Georgia to abandon further moves to integrate into NATO or the EU. Economic challenges combined with “increasingly effective Russian propaganda” complicate Georgia’s moves to integrate. The simmering conflict and occasional violence between Armenia and Azerbaijan continues, and a peaceful resolution is unlikely in the foreseeable future.¹⁰¹

Summary: Russia views the South Caucasus as a vital theater and uses a multitude of tools that include military aggression, economic pressure, and the stoking of ethnic tensions to exert influence and control, usually to promote outcomes that are at odds with U.S. interests.

Russia’s Actions in Syria. While Russia has had a military presence in Syria for decades, in September 2015, it became the decisive actor in Syria’s ongoing civil war, having saved Bashar al-Assad from being overthrown and having strengthened his hand militarily, thus enabling government forces to retake territory lost during the war. Russia maintains a naval facility at Tartus, its only naval base on the

Mediterranean, and the Hmeymim air base at Latakia; it deployed the S-400 anti-aircraft missile system to Hmeymim in late 2015.¹⁰² Despite Vladimir Putin’s announcement of a withdrawal of forces in March, Russia retains substantial forces in Syria. The drawdown was largely rhetorical; although some fixed-wing aircraft left Syria, they were replaced by new deployments of attack helicopters.¹⁰³

Russia’s actions in Syria provide a useful propaganda tool. In May 2016, for example, one hundred journalists toured Palmyra, a city that Russia had helped Assad’s forces retake with air strikes and Special Forces troops.¹⁰⁴ In addition, Russia is using Syria as a testing ground for new weapons systems while obtaining valuable combat experience for its troops.

Russia’s actions in Syria have allowed Assad to stay in power and have made achievement of a peaceful political settlement with rebel groups nearly impossible. They also have undermined American policy in the Middle East, including by frequently targeting forces backed by the U.S. On June 16, 2016, for example, two Russian air strikes targeting the al-Tanf base near the Syrian border with Jordan and Iraq killed members of the U.S.-backed New Syria Army. Al-Tanf is also used by U.S. and U.K. Special Forces, and 20 British Special Forces reportedly had left the base only 24 hours before the June 16 air strikes.¹⁰⁵ The Putin regime will likely seek to link cooperation in Syria with a softening of U.S. policy in Europe, especially with regard to economic sanctions. General Breedlove warned of such a scenario in February: “We must not allow Russian actions in Syria to serve as a strategic distraction that leads the international community to give tacit acceptance to the situation in Ukraine as the ‘new normal.’”¹⁰⁶

WWTA: The WWTA assesses that “Putin will continue to try to use the Syrian conflict and calls for cooperation against ISIL to promote Russia’s Great Power status and end its international isolation.”¹⁰⁷

Summary: While not an existential threat to the U.S., Russia’s intervention in Syria

ensures that any future settlement will be run through Moscow and will include terms amenable to Russian strategic interests. Russia's intervention in Syria has helped to keep Assad in power, has further entrenched Russia's military position in the region, and has greatly degraded the impact of U.S. policy in Syria, often seeking to counteract U.S. actions and targeting U.S.-backed forces on the ground.

The Balkans. Although security has improved dramatically in the Balkans since the 1990s, violence based on religious and ethnic differences remains an ongoing possibility. These tensions are exacerbated by sluggish economies, high unemployment, and political corruption. In 2014, Bosnia and Herzegovina experienced some of the most violent anti-government riots in 20 years.

On a positive note, Montenegro joined NATO at the 2015 Warsaw Summit, joining Albania and Croatia as NATO member states in the Balkans. Macedonia and Bosnia and Herzegovina are official aspirant countries. Macedonia has made great progress toward joining the alliance but has been blocked by Greece because of a name dispute. The situation in the region with Kosovo remains fragile, but an EU-led rapprochement between Kosovo and Serbia has shown signs of modest success.

There has been an increase in Russian activity in the region. Serbia in particular has long served as Russia's foothold in the Balkans. Both Russia and Serbia are Orthodox countries, and Russia wields huge political influence in Serbia. Moscow backed Serbian opposition to Kosovo's independence in 2008 and continues to use Kosovo's independence to justify its own actions in Crimea, South Ossetia, and Abkhazia. Russian media are active in the country, broadcasting in Serbian.¹⁰⁸

Serbia and Russia have signed a strategic partnership agreement focused on economic issues. Russia's inward investment is focused on the transport and energy sectors. Except for those in the Commonwealth of Independent States, Serbia is the only country in Europe that has a free trade deal with Russia. It

therefore seemed odd when Russia decided to scrap the South Stream gas pipeline, which came as a huge blow to Serbia, likely costing Serbia billions of euros of inward investment and thousands of local jobs. Even with the negative impact of the South Stream cancellation, however, Serbia will likely continue to consider Russia its closest ally. As evidence of this, in July 2015, Russia vetoed a U.N. resolution opposed by Serbia that would have labeled the 1995 Srebrenica massacre a genocide. Serbian President Tomislav Nikolić said in a statement "that Russia had 'prevented an attempt of smearing the entire Serbian nation as genocidal' and proven itself as a true and honest friend."¹⁰⁹

The Russian-Serbian military relationship is similarly close. Russia signed an agreement with Serbia to allow Russian soldiers to be based at Niš airport, which Serbia has used to meddle in northern Kosovo.¹¹⁰ Serbia has observer status in the Collective Security Treaty Organization, Russia's answer to NATO, and has signed a 15-year military cooperation agreement with Russia that includes the sharing of intelligence, military officer exchanges, and joint military exercises. The situation in Ukraine has not changed Serbian attitudes regarding military cooperation with Russia. During a state visit in October 2014, Putin was honored with the largest Serbian military parade since the days of Yugoslavia.¹¹¹ The two countries have also carried out military training exercises, and Serbia has inquired about obtaining Russia's S-300 surface-to-air missile system.¹¹²

However, pro-Russian political parties in Serbia suffered a poor showing in parliamentary elections in April.¹¹³ Like Russia, Serbia is a member of NATO's Partnership for Peace program. Additionally, Serbia has been part of the U.S. National Guard's State Partnership Program, partnering with the State of Ohio since 2006.

Russia is also active in Bosnia and Herzegovina—specifically, the ethnically Serb region, Republika Srpska, one of two sub-state entities inside Bosnia and Herzegovina that

emerged from that country's civil war in the 1990s.

Bosnia and Herzegovina is on the path to joining the transatlantic community but has a long way to go. It negotiated a Stabilization and Association Agreement with the EU, but the agreement is not in force because key economic and political reforms have not been implemented. In 2010, NATO offered Bosnia and Herzegovina a Membership Action Plan, but progress on full membership has been stalled because immovable defense properties are still not under the control of the Ministry of Defense. Moscow knows that exploiting internal ethnic and religious divisions among the Serb, Bosniak, and Croat populations is the easiest way to prevent Bosnia and Herzegovina from entering the transatlantic community.

Republika Srpska's leader, Milorad Dodik, has long been an advocate of independence for the region and has enjoyed a very close relationship with the Kremlin. Recent events in Ukraine, especially the annexation of Crimea, have inspired more separatist rhetoric in Republika Srpska. In many ways, Russia's relationship with Republika Srpska looks like a relationship with another sovereign state and not with a semi-autonomous region inside Bosnia and Herzegovina—akin to Russia's direct relationship with Georgia's South Ossetia and Abkhazia autonomous regions. When Putin visited Serbia in October 2014, Dodik was treated like a head of state and was invited to Belgrade to meet with him.

Russia has also thrown the future of the European-led peacekeeping operation in Bosnia and Herzegovina into doubt. Russia, which holds veto power in the U.N. Security Council, abstained in November 2015 during the annual vote extending the peacekeeping mission.¹¹⁴ This was the first time in 14 years that Russia failed to vote for this resolution. Russia also requested that a sentence mentioning “the Euro-Atlantic perspective of Bosnia-Herzegovina” be omitted from the annual Security Council resolution.¹¹⁵

Montenegro is another focus of Moscow's diplomacy. Russia and Montenegro have had

close relations for three centuries; in 2014, for example, Russians accounted for 30 percent of overnight stays in Montenegro.¹¹⁶ However, Montenegro's fine line between keeping its close ties with Russia and strengthening its ties to the West has become more complex, and its accession to NATO infuriated Russia. The head of the committee of defense and security in the upper house of the Russian Duma claimed that “Montenegro is becoming a potential participant in a threat to the security of our country.”¹¹⁷ Russia is also suspected helping to fuel anti-government protests in Montenegro, principally in October 2015 and January 2016.¹¹⁸

After Russia annexed Crimea, the Montenegrin government backed European sanctions against Moscow and even implemented its own sanctions. Nevertheless, Russia has significant economic influence in Montenegro and is the country's largest inward investor. Up to one-third of all enterprises are owned by Russian companies,¹¹⁹ and 7,000 Russians are registered as permanent residents in Montenegro.¹²⁰

Russia had made prior attempts to insert itself into the security sphere in Montenegro. In 2013, for example, Moscow requested access for the Russian navy to use Montenegrin ports for refueling and maintenance. This request was turned down because of concerns that such an agreement with Russia might negatively affect Montenegro's prospects for NATO membership.

Another challenge for the region is the increasing presence of the Islamic State and the rise of extremism. Thankfully, the region has not yet suffered an attack from ISIS, but it has served as a fertile recruiting ground for the Islamic State. Several hundred fighters from the Balkans are in Iraq and Syria.¹²¹ Most of these foreign fighters, who have formed a so-called Balkans Battalion for Islamic State, have come from Kosovo, but others can be traced back to Albania, Bosnia, and the Republic of Macedonia.

The region is also important to ISIS for reasons beyond recruitment. The Balkans

are becoming an important transit route for ISIS fighters traveling between Western Europe and the Middle East. This is especially true for Greece and Croatia with their long coastlines.¹²² Some of the terrorists who perpetrated attacks in Paris in November 2015 and Brussels in 2016 are known to have transited through the Balkan Peninsula. U.S. Director of National Intelligence James Clapper testified in February 2016 that ISIS is “taking advantage of the torrent of migrants to insert operatives into that flow.... [T]hey also have available to them and are pretty skilled at phony passports so they can travel ostensibly as legitimate travelers as well.”¹²³

The U.S. has invested heavily in the Balkans since the end of the Cold War. Tens of thousands of U.S. servicemembers have served in the Balkans, and billions of dollars in aid has been spent there, all in the hope of creating a secure and prosperous region that will someday be part of the transatlantic community.

WWTA: The WWTA notes the continued threats to stability in the region stemming from inefficient bureaucracy, unemployment and lack of economic growth, and lingering ethnic and religious tensions. It also notes the threat posed by radicalization of Muslims.¹²⁴

Summary: The Balkans are being squeezed from three sides: by increased Russian involvement in internal affairs, ISIS using the region as a transit and recruiting ground, and the potential political and economic spillover from Greece. The U.S. and NATO would be wise not to dismiss the region as “mission accomplished.”

Threats to the Commons

Other than cyberspace and (to some extent) airspace, the commons are relatively secure in the European region. Despite periodic Russian aggressive maneuvers near U.S. and NATO vessels, this remains largely true with respect to the security of and free passage through shipping lanes in the region. The maritime domain is heavily patrolled by the navies and coast guards of NATO and NATO partner countries; except in remote

areas in the Arctic Sea, search and rescue capabilities are readily available; maritime-launched terrorism is not a significant problem; and piracy is virtually nonexistent in the European region. Nevertheless, recent events indicate that this relative security may be in jeopardy.

Sea. On April 11, 2015, two Russian SU-24 jets made numerous low-altitude passes over the American destroyer USS *Donald Cook*, which was training with Polish helicopters in the Baltic Sea, leading to a temporary suspension of landing drills. The next day, a Russian KA-27 helicopter made seven low-altitude circles around the *Cook*. Additionally, two SU-24 jets made 11 close-range low-altitude passes in a simulated attack profile,¹²⁵ flying within 30 feet of the ship.¹²⁶ A Russian frigate and auxiliary ship also trailed the *Cook* during the exercises.¹²⁷ Based out of Rota, Spain, the USS *Donald Cook* is equipped with the Aegis radar system and SM-3 missiles¹²⁸ and is an important component of the U.S. ballistic missile defense capability in Europe. Also in April 2015, a Russian SU-24 plane made a dozen passes over the *Cook*, which was operating at that time in the Black Sea.¹²⁹

On May 30, 2015, two Russian Su-24 jets buzzed the destroyer USS *Ross*, which was operating in international waters in the Black Sea, coming within 500 meters of the *Ross* at an altitude of 200 feet.¹³⁰ The USS *Ross* is an *Arleigh Burke*-class guided missile destroyer. In October 2015, two Russian Tu-142 Bear bombers flew within one nautical mile of the USS *Ronald Reagan* aircraft carrier, which was sailing in international waters off the coast of Korea during scheduled maneuvers with South Korean Navy vessels. The *Ronald Reagan* scrambled four F/A-18 Hornets to escort the Russian bombers, which had been flying as low as 500 feet, away from the aircraft carrier.¹³¹

In December 2015, a Russian destroyer, the *Smetlivy*, fired warning shots at a Turkish fishing boat near the Greek island of Lemnos in the Aegean Sea,¹³² claiming that the shots were needed to avoid a collision.¹³³

Russian threats to the maritime theater are not limited to surface vessels. In October 2015, news reports of Russian vessels operating aggressively near undersea communications cables¹³⁴ raised concerns that Russia might be laying the groundwork for severing the cables in the event of a future conflict.¹³⁵ A senior European diplomat described the Russian activity as “comparable to what we saw in the Cold War.”¹³⁶

In the fall of 2015, NATO retasked naval assets away from exercises to track five Russian attack submarines that had been deployed in the North Atlantic. The Russian submarines are thought to have been a response to NATO’s Trident Juncture exercise in October and November of 2015. Canada’s Commander of Maritime Forces Atlantic, Rear Admiral John Newton, described the deployment as “historically significant.”¹³⁷

According to Vice Admiral Clive Johnstone, Commander of NATO’s Allied Maritime Command, Russian submarine activity, specifically in the North Atlantic, has reached levels not seen since the Cold War.¹³⁸ Russian submarines today, however, are more capable than they were in Cold War times, thus making the increased activity all the more worrisome. Admiral Mark Ferguson, Commander, U.S. Naval Forces Europe, has said that “[t]he submarines that we’re seeing are much more stealthy.” In addition, the Russians “have more advanced weapons systems, missile systems that can attack land at long ranges, and... their operating proficiency is getting better as they range farther from home waters.”¹³⁹ Ferguson characterizes Russian submarines as an “existential threat to U.S. carrier groups.”¹⁴⁰ Russia’s investments in its navy, including large frigates, denote a desire to reconstitute a true deep-ocean navy. Currently, only a quarter of Russia’s fleet is “blue water” capable.¹⁴¹

Airspace. Russia has continued its provocative military flights near the airspace of the U.S. and Europe over the past year. On July 4, 2015, two Russian bombers flew within tens of miles of the U.S. coast off of California.¹⁴² In

January 2016, a U.S. RU-135U reconnaissance plane flying in international airspace over the Black Sea was intercepted by a Russian Su-27 fighter jet in an “unsafe and unprofessional manner.”¹⁴³ The Russian Su-27 flew within 20 feet of the U.S. RU-135U, drew close, and then turned away quickly so as to hit the U.S. reconnaissance flight with a destabilizing jet engine blast.¹⁴⁴

In the most serious incident in years, in November 2015, a Russian Su-24 bomber that violated Turkish airspace was shot down by two Turkish F-16s.¹⁴⁵ The Russian jet was warned 10 times by Turkish pilots before being shot down.¹⁴⁶ The airspace violation occurred over Turkey’s Hatay province, which has long been disputed by Syria. Russian flights near the border help to fuel tension between Turkey and Syria.¹⁴⁷

Overall, incidents of Russian military aircraft flying near the airspace of American allies in Europe have increased in recent years. NATO jets had to be scrambled over 400 times in 2015,¹⁴⁸ a slight uptick from the 400 times NATO planes were scrambled in 2014.¹⁴⁹ In 2015, NATO planes patrolling Baltic airspace as part of the air policing mission it has conducted since 2004 were scrambled 160 times, a 14 percent increase over 2014 when planes were scrambled 140 times.¹⁵⁰ The Russian planes were neither transmitting recognized identification codes nor communicating with ground air traffic control.¹⁵¹ Estonian Minister of Defense Hannes Hanso described Russia’s behavior in Estonian airspace as “incredibly reckless.”¹⁵²

Starting in early 2014, NATO has doubled the number of aircraft patrolling the Baltic skies from four to eight as a reassurance measure for Baltic member states.¹⁵³ but the number of air incursions by Russia has still been on the rise since Moscow’s annexation of Crimea. For example, in May 2016, Royal Air Force (RAF) Typhoons taking part in a Baltic Air Policing mission intercepted 17 Russian planes during one nine-day period.¹⁵⁴

That the provocative and hazardous behavior of the Russian armed forces or groups

sponsored by Russia poses a threat to civilian aircraft in Europe was demonstrated by the downing of Malaysia Airlines Flight MH17, killing all 283 passengers and 15 crew, over the skies of southeastern Ukraine. In addition, there have been several incidents of Russian military aircraft flying in Europe without using their transponders: In February 2015, for example, civilian aircraft in Ireland had to be diverted or were prevented from taking off when Russian bombers flying with their transponders turned off flew across civilian air lanes.¹⁵⁵ Similarly, in March 2014, an SAS plane almost collided with a Russian signals intelligence (SIGINT) plane, the two coming within 90 meters of each other.¹⁵⁶ In a December 2014 incident, a Cimber Airlines flight from Copenhagen to Poznan nearly collided with a Russian intelligence plane that was flying with its transponder turned off.¹⁵⁷

The RAF also responds regularly to Russian aircraft closer to home off the coast of Great Britain. In February 2016, British Typhoons and French Rafale and Mirage fighter jets were scrambled to escort two Russian TU-160 bombers flying near British and French airspace.¹⁵⁸ In October and November of 2015, RAF aircraft were scrambled when Russian Tu-169 Blackjack bombers flew near U.K. airspace.¹⁵⁹ From November 2014–November 2015, RAF planes were scrambled 20 times to intercept Russian planes. In July 2016, Bulgarian Defense Minister Nikolay Nenchev stated that Russian military planes had violated Bulgarian airspace four times in one month, all with their transponders switched off, while Russian passenger planes violated Bulgarian airspace six times during that period.¹⁶⁰

Non-NATO members have been the target of aggressive Russian aerial activity as well. In March 2013, two Russian bombers and four fighter jets took off from St. Petersburg and carried out a mock strike on targets in the Stockholm region. Swedish experts have assessed that this mock attack in fact simulated a nuclear strike against two targets in Sweden.¹⁶¹ The Swedish air force did not react, as

it was on low alert during the Easter break. Instead, NATO scrambled two Danish jets from a base in Lithuania to intercept the Russian planes.¹⁶²

WWTA: The WWTA foresees continued geopolitical and security competition around the periphery of Russia, to include major sea lanes.¹⁶³

Summary: Russia's aerial activity has increased the threat to civilian aircraft flying in European airspace. Russia's violation of the sovereign airspace of NATO member states is a probing and antagonistic policy that is designed both to test the defense of the alliance and to practice for potential future conflicts.

Space. Admiral Cecil Haney, head of U.S. Strategic Command, said in March 2015 that "[t]he threat in space, I fundamentally believe, is a real one."¹⁶⁴ Russia's space capabilities are robust, but Moscow "has not recently demonstrated intent to direct malicious and destabilizing actions toward U.S. space assets."¹⁶⁵ However, Admiral Haney also testified in March 2015 that "Russian leaders openly maintain that they possess anti-satellite weapons and conduct anti-satellite research."¹⁶⁶

Air Force Lieutenant General John "Jay" Raymond, commander of the Joint Functional Component Command for Space, has testified that Russia's anti-satellite capabilities have progressed such that "we are quickly approaching the point where every satellite in every orbit can be threatened."¹⁶⁷

WWTA: According to the WWTA, Russia is improving its military and intelligence satellite capabilities and has used them in Syria. Russia's "senior leadership probably views countering the US space advantage as a critical component of warfighting," and "[i]ts 2014 Military Doctrine highlights at least three space-enabled capabilities—'global strike,' the 'intention to station weapons in space,' and 'strategic non-nuclear precision weapons'—as main external military threats to the Russian Federation."¹⁶⁸ Additionally, "Russian defense officials acknowledge that they have deployed radar-imagery jammers and

are developing laser weapons designed to blind US intelligence and ballistic missile defense satellites.”¹⁶⁹ Russian efforts to develop weapons to destroy satellites in orbit will be a growing threat.

Summary: Despite some interruption of cooperation in space as a result of Russia’s invasion of Ukraine, cooperation on the International Space Station and commercial transactions involving space-related technology have continued unabated. Russia also continues to build out its counterspace capabilities and has sought to deepen its space cooperation with China as a result.¹⁷⁰

Cyber. Perhaps the most contested domain in Europe is the cyber domain. Russian cyber capabilities are incredibly advanced. In his 2010 book *Cyberwar*, former White House cyber coordinator David Smith quoted a U.S. official as saying that “[t]he Russians are definitely better, almost as good as we are.”¹⁷¹ Such an assessment is not an outlier, as multiple other organizations and reports have noted, from cybersecurity firms such as FireEye to the Worldwide Threat Assessment of the U.S. Intelligence Community, which stated in 2016 that “Russia is assuming a more assertive cyber posture based on its willingness to target critical infrastructure systems and conduct espionage operations even when detected and under increased public scrutiny.”¹⁷² Russia engaged in high-profile cyber aggression in 2007 against Estonia and in 2008 against Georgia in coordination with its invasion of that country. Its more recent actions against Ukrainian and Swedish critical infrastructure further illustrate Moscow’s aggressive use of cyber attacks.

By December 2015, Russia’s skills were highly advanced. A sophisticated Russian cyber attack against Ukrainian power companies resulted in widespread power outages that affected 225,000 Ukrainians for several hours. Subsequent investigations by Ukrainian and U.S. cyber officials found that the attack was “synchronized and coordinated, probably following extensive reconnaissance,” and that efforts were taken to “attempt to interfere with expected restoration efforts.”¹⁷³

While the U.S. government has not named the perpetrator, many experts see Russian government involvement due to the sophisticated, well-financed, and coordinated nature of the attack during a period of ongoing conflict between Ukraine and Russian-backed separatists.¹⁷⁴

It also appears that the attack continues Russia’s use of allied criminal organizations, so-called patriotic hackers, to help it engage in cyber aggression. Both the Georgian and Estonian attacks were conducted by these “patriotic hackers” and likely coordinated or sponsored by Russian security forces. Using these hackers gives the Russians greater resources and can help to shield their true capabilities. At the same time, Russia’s Federal Security Service is reportedly spending \$250 million a year on offensive cyber capabilities.¹⁷⁵

The Ukrainian attack represents an escalation in cyber attacks, moving beyond crippling communications or mere infiltration of critical systems to taking down critical infrastructure with widespread physical effects. In early 2016, the U.S. Defense Intelligence Agency warned that Russian hackers using software from Russian-origin companies could gain access to industrial systems in the U.S., including electrical and water systems.¹⁷⁶ Russia is also thought to be behind five days of cyber attacks against Sweden’s Air Traffic Control system in November 2015, which led to flight delays and groundings.¹⁷⁷ Swedish authorities are reported to believe that the attack was the work of Russian military intelligence.¹⁷⁸

In February and March of 2016, Finland’s Ministry of Defense withstood cyber attacks that are suspected of emanating from inside Russia. The attack in March began just hours before Finland’s President was set to meet with Russian President Putin.¹⁷⁹ In April 2016, Lithuania’s Parliament suffered a suspected Russian cyber attack while hosting a gathering of Crimean Tatars.¹⁸⁰ Russia hackers are also suspected of being behind a cyber attack against Germany’s Bundestag in 2015, an attack that sought access to computers of Bundestag members and their staffs. Hans-Georg

Maassen, President of Germany's domestic intelligence agency BfV, described Russia's evolving cyber targets: "The campaigns that the BfV has observed in the past have generally been focused on obtaining information, in other words spying...but lately intelligence agencies have also shown a willingness to conduct sabotage."¹⁸¹

WWTA: The U.S. intelligence community notes Russia's increasing assertiveness and boldness in cyberspace. Russia will likely target various U.S. interests in order to "support several strategic objectives: intelligence gathering to support Russian decision-making in the Ukraine and Syrian crises, influence operations to support military and political objectives, and continuing preparation of the cyber environment for future contingencies."¹⁸²

Summary: Russia's cyber capabilities are advanced. Russia shows a continued willingness to utilize cyber warfare, most recently and brazenly against the Ukrainian electric grid and Sweden's Air Control Systems. Russia's increasingly bold use of cyber capabilities, coupled with their sophistication, presents a challenge for the U.S. and its interests abroad.

Russian Military Capabilities. According to the International Institute for Strategic Studies' *The Military Balance 2016*, among the key weapons in Russia's inventory are 332 intercontinental ballistic missiles, 2,700 main battle tanks, more than 5,400 armored infantry fighting vehicles, over 6,000 armored personnel carriers, and over 4,180 pieces of artillery. The navy has one aircraft carrier; 63 submarines (including 13 ballistic missile submarines); six cruisers; 18 destroyers; 10 frigates; and 89 patrol and coastal combatants. The air force has 1,090 combat-capable aircraft. The IISS counts 230,000 members of the army. Russia also has a reserve force of 2,000,000 combined for all armed forces.¹⁸³ Despite public embarrassments—such as when it was forced to ground its aging Tu-95 Bear bomber fleet in July 2015, "for a second time in barely a month,"¹⁸⁴ after a Bear bomber skidded off the runway and caught fire¹⁸⁵—Russia maintains a formidable military.

Russia has been investing heavily in modernization of its armed forces, especially its nuclear arsenal. Russia announced research and development plans for a new ICBM, although *The Military Balance* states that "such ICBMs are a distant prospect, with analysts assessing little progress likely before 2020."¹⁸⁶ The first of the *Borey*-class SS-BNs, the *Yuri Dolgoruky*, formally joined the fleet at the beginning of 2013 and is intended as part of a broader recapitalization of the country's nuclear capability. The armed forces also continue to undergo process modernization begun by Defense Minister Anatoly Serdyukov in 2008.¹⁸⁷ The success of some reform measures was put on display during the seizure of the Crimean Peninsula. The invasion showcased Russia's use of a host of tools in effective combinations. However, most of the forces used were highly trained special forces, so Russian successes in Crimea may not reflect the impact of modernization on the larger army.¹⁸⁸

Russian forces continue to face problems from corruption and a long-term shortage of recruits due to declining birthrates, poor access to health care, and the reduction of conscription service to one year.¹⁸⁹ These problems were on full display in 2008 in the Russian invasion of Georgia, particularly in the areas of communications and logistics. In comparison, "Russian forces in Crimea benefited from improvements in personal equipment, logistics, personnel discipline, electronic-warfare capability and junior-commander training."¹⁹⁰

A report from the Swedish Defense Research Agency (FOI) on the 2011–2020 State Armament Program assigns the program at least partial credit for Russia's ability to intervene in Syria: "It is difficult to conceive that Russia could have mounted the military action in Syria in autumn 2015 without the positive outcomes achieved in implementing GPV-2020."¹⁹¹ The Russian Defense Ministry claims to have received 1,200 new or modernized aircraft over the past three years as part of the 2011–2020 State Armament Program.¹⁹²

However, the FOI report also states that declining budget revenues and Russia’s invasion of Ukraine have hurt the country’s ability to meet the program’s benchmarks. Western sanctions and Ukraine’s decision to end delivery of military products and components to Russia in 2014 have hurt the ability of Russia’s defense industries to access certain technology and components.¹⁹³ Overall, Russia’s industrial capacity and capability remain problematic.

Conclusion

Overall, the threat to the U.S. homeland originating from Europe remains low, but the threat to American interests and allies in the region remains significant. Behind this threat lies Russia. Although Russia has the military capability to harm and (in the case of its nuclear arsenal) to pose an existential threat to the U.S., it has not demonstrated the intent to do so.

The situation is different when it comes to America’s allies in the region. Through NATO, the U.S. is obliged by treaty to come to the aid of the alliance’s European members. Russia continues to seek to undermine the NATO alliance and presents an existential threat to U.S. allies in Eastern Europe. NATO has been the cornerstone of European security and stability since its creation 67 years ago, and it is in America’s interest to ensure that it maintains the military capability and the political will to fulfil its treaty obligations.

While Russia is not the threat to U.S. global interests that the Soviet Union was during the Cold War, it does pose challenges to a range of American interests and those of its allies and friends closest to Russia’s borders. Russia possesses a full range of capabilities from ground forces to air, naval, space, and cyber. It still maintains the world’s largest nuclear arsenal, and although a strike on the U.S. is highly unlikely, the latent potential for such a strike still gives these weapons enough strategic value vis-à-vis America’s NATO allies and interests in Europe to keep them relevant.

Russian provocations far below any scenario involving a nuclear exchange pose the most serious challenge to American interests, particularly in Central and Eastern Europe, the Arctic, the Balkans, and the South Caucasus. It is in these contingencies that Russia’s military capabilities are most relevant.

Threat Scores by Country

Russia. Russia seeks to maximize its strategic position in the world at the expense of the United States. It also seeks to undermine U.S. influence and moral standing, harasses U.S. and NATO forces, and is working to sabotage U.S. and Western policy in Syria. Moscow’s continued aggression and willingness to utilize every tool at its disposal in pursuit of its aims leads this *Index* to assess the overall threat from Russia as “aggressive” and “formidable.”

Threats: Russia

	HOSTILE	AGGRESSIVE	TESTING	ASSERTIVE	BENIGN
Behavior		✓			
	FORMIDABLE	GATHERING	CAPABLE	ASPIRATIONAL	MARGINAL
Capability	✓				

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