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Charting a Course: Strategic Choices for a New Administration

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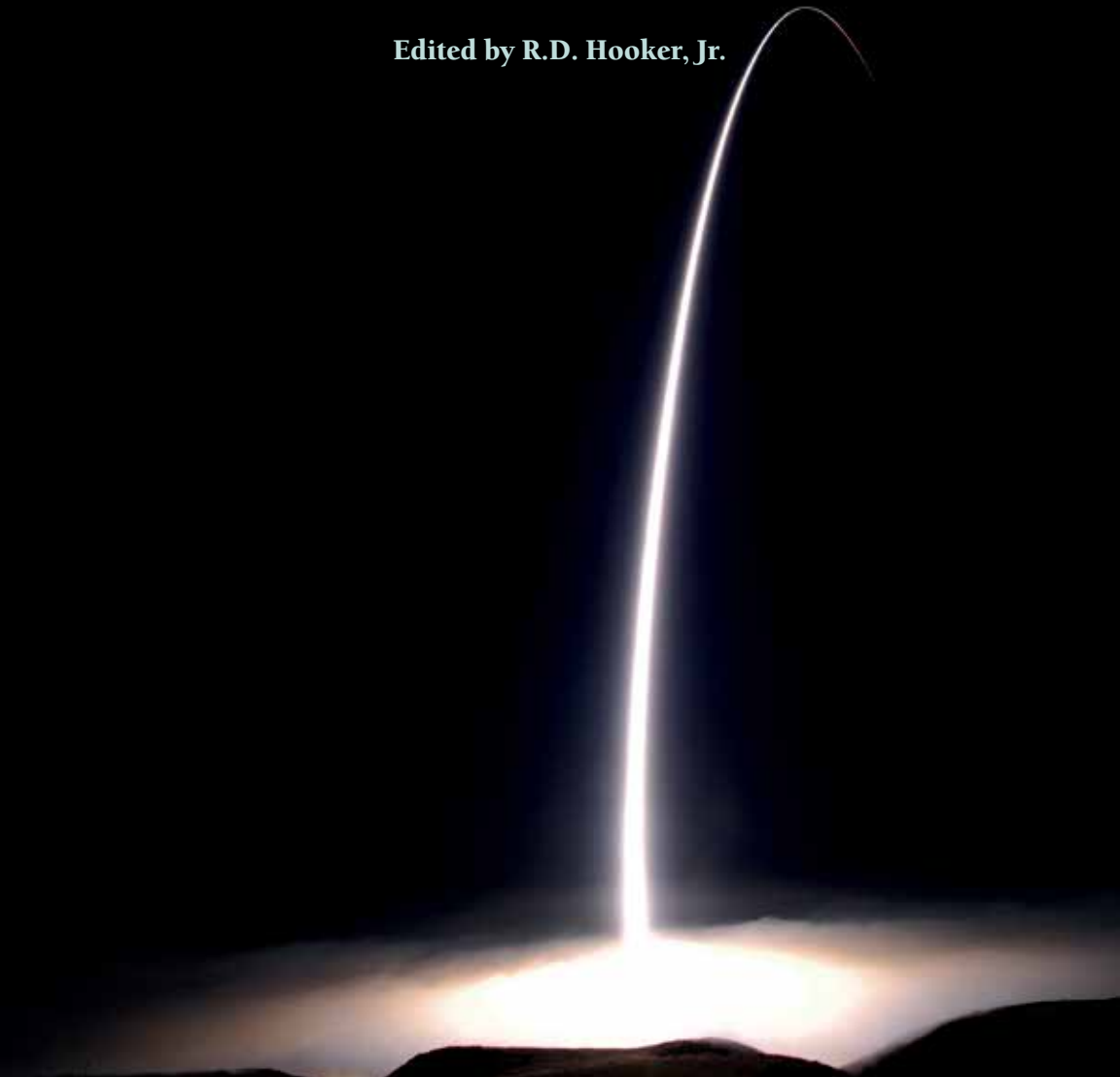
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Strategic Choices for a New Administration

Edited by R.D. Hooker, Jr.



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Cover photo: Unarmed Minuteman III ICBM accelerates toward test range near Guam after launching from Vandenberg Air Force Base, March 27, 2015 (DOD)

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Foreword

The new administration takes office in a time of great complexity. Our new President faces a national security environment shaped by strong currents: globalization; the proliferation of new, poor, and weak states, as well as nonstate actors; an enduring landscape of violent extremist organizations; slow economic growth; the rise of China and a revanchist Russia; a collapsing Middle East; and a domestic politics wracked by division and mistrust. While in absolute terms the Nation and the world are safer than in the last century, today the United States finds itself almost on a permanent war footing, engaged in military operations around the world.

We tend to think first of the military when pondering national security, but our political system and economic strength are its true wellsprings. Whatever our internal political disputes may have been, in former times a consensus on how best to address the most formidable security threats obtained. Against great threats we were able to come together. That consensus was shattered by the Vietnam War, the Watergate scandal, a 24-hour news cycle, and the terrorist attacks of 9/11. Our polarized domestic politics represents a clear challenge to our national security. Political fissures will always exist in our constitutional system. But without broad coherence and accommodation, sensible and sustained national security and defense policy is gravely impaired.

A parallel threat is our inability to rise above local and partisan political considerations to more effectively manage the defense budget, programming, and acquisition processes. The U.S. defense budget approaches \$600 billion per year, dwarfing China's \$150 billion defense budget and Russia's \$70 billion. Yet we get far less capability than the numbers suggest. Political opposition to base closures, rising personnel and program costs, and excessive influence by defense industries on defense acquisition limits decision space. Our inability to pass defense budgets on time further complicates programming and budget execution. More broadly, continued growth in nondiscretionary spending on entitlements and debt service will, in the next generation or so, begin

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to seriously crowd out defense spending if not brought under control. Meanwhile, expanding staffs and organizations sap resources from the fighting forces. Defense spending matches the height of the buildup by Ronald Reagan but can only support a force two-thirds the size. New systems feature exquisite technology but are so costly that we can afford far fewer of them, while cost overruns, delayed fielding, and system flaws are endemic. These are serious issues that cannot be solved without congressional action and determined Presidential leadership.

In a similar vein, the interagency process employed in national security decisionmaking increasingly faces criticism. Some see an inability to overcome parochialism on the part of departments and agencies in the interests of optimum policy development. Others see dramatic growth in the National Security Council staff leading to operationalizing the White House and curtailing the prerogatives of Cabinet officers and combatant commanders. In this view the excessive centralization of power in nonconfirmed White House staff marginalizes the expertise and statutory authority of the departments and degrades congressional oversight. The net effect is held to be suboptimal interagency performance that demands reform.

Turning to national security strategy, perhaps the key question for the new administration is whether to remain engaged as the guarantor of the international economic and political order. For the previous 8 years, caution was seen as the order of the day; military interventions have been few and limited essentially to airpower and trainers or infrequent special operations and drone strikes. In the heated 2016 political season, calls for “offshore balancing” and even withdrawal from overseas commitments were heard more loudly than in many decades. In the best of times, breaking crises and unforecasted events will tend to crowd senior leader agendas and decision space. Yet a broad strategic framework, emphasizing alliances, forward basing, active diplomacy, and military and economic preponderance, has characterized U.S. national security for almost a century. It is difficult to see how continued disengagement from world affairs will redound to improved national security. As we have seen, a proliferation of failed and failing states and the rise of nonstate actors have created political vacuums around the periphery of the former Soviet Union, eastern Congo, South Sudan, large parts of northern Africa, and the Middle East (among others), leading to massive population displacement, loss of life, security threats, terrorism, and instability.

A holistic approach to dealing with this security environment will not be easy to contrive but will be needed if America’s security posture is to improve. For some years, defense leaders have used a “4+1” construct as shorthand for the most serious threats: China, Iran, North Korea, and

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Russia, and violent extremist organizations like Daesh and al Qaeda. Though the rebalance to Asia specifically highlighted that region as a priority, in all likelihood the national security establishment will continue to orient on all these in the near and midterm. In this regard, containing and deterring adversary states will be called for. Armed conflict with any would represent a failure of both policy and strategy of the first order. Thus, U.S. approaches should seek to create the perception in the minds of adversary decisionmakers that the costs of any challenge to core U.S. interests will outweigh any benefits.

Peaceful economic and diplomatic engagement will remain important, but we should not be under any illusions. The temptation to treat these nations as simultaneously benign partners and aggressive adversaries may hamper effective strategy. Russia in particular has repeatedly demonstrated a willingness to use force to overturn or set aside international norms, while China's muscular assertion of sovereignty in the South China Sea has roiled our traditional partners and allies in the region and called into question U.S. leadership in the Asia-Pacific region. Iran pursues a hegemonic agenda deeply rooted in a strategic culture that is many centuries old, exacerbated by a militant Shia impulse directly at odds with the Sunni world. On the Korean Peninsula, an unstable and erratic nuclear regime threatens an increasingly fragile peace. Throughout the Middle East—and indeed the world—terrorist organizations like Daesh and al Qaeda remain potent threats that demand serious attention.

Other regions such as Latin America and Africa have traditionally enjoyed lower priority but cannot be ignored. In both the rise of more globalized transnational criminal organizations has eroded state control, increased corruption, and provoked mass immigration. Pandemics originating in these regions must also concern strategists and policymakers. Terrorist groups have gained a growing foothold, while stable and functioning democracy remains elusive in some quarters. Neither region will assume top priority in U.S. national security policy anytime soon, but both will require sustained engagement going forward.

When today's most senior military leaders entered the force, space and cyber began to emerge as distinct domains. Today they are crucial to our military success and to national security writ large. Our military is dependent on space for navigation, targeting, communications, and strategic intelligence gathering and early warning. Protection of our information networks (private and public, civilian and military) is a first order priority as is an offensive capability to target adversary networks in time of war or confrontation. Loss or degradation of these key capabilities offers war-winning advantages to China and Russia in particular. Amid many competing priorities these must be championed.

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On many of these fronts, diplomatic, informational, and economic instruments will matter greatly, but hard military power will count most. How much is enough? On the nuclear front, the deterrent force is aging, and large investments will be needed if the intent is to preserve the nuclear triad going forward. A survivable capability to deliver unacceptable levels of destruction is the sine qua non of deterrence. Yet the projected costs of replacement systems such as the Long Range Strategic Bomber, *Ohio*-class ballistic missile submarine, modernized intercontinental ballistic missiles, and nuclear-armed cruise missiles may approach \$1 trillion, forcing hard choices on the Department of Defense.

Conventionally, the U.S. military finds itself repeating a familiar pattern, with land forces declining following more than a decade of exhausting deployments. As noted in the most recent Quadrennial Defense Review, this factor poses a high risk. At sea and in the air, U.S. forces remain clearly preponderant—particularly when the forces of close allies are factored in. As a force-sizing construct, this volume argues that the force should be balanced among land, sea, and air forces and sized to conduct two major conventional campaigns simultaneously. (Since the end of the Cold War this construct has been progressively relaxed as the size of the force has declined.) The compelling argument is that a “one major war at a time” force reduces the United States from a global to a regional power, impairing deterrence and reassurance of key allies. Post-Cold War trends have also seen the force come home from many of its forward bases. Projecting force from the homeland to distant locations is now the norm, and airlift and sealift as well as prepositioned stocks will remain essential building blocks of American grand strategy.

If all these capabilities are important, what are our true strategic priorities? Effective nuclear deterrence must top the list, along with modernized space, cyber, and command, control, communications, computers, intelligence, surveillance, and reconnaissance systems and communities. With the majority of our combat forces no longer forward deployed, power projection in the form of sealift and airlift as well as prepositioned stocks must be resourced. Given our strong preponderance in seapower and airpower, the next administration has an opportunity to revisit program acquisition decisions in these domains, though ground forces are far less dominant or modernized and will need help.

No formal document describes a grand strategy for the United States, and indeed, many academics deny that one exists. Yet a close look at our history as a world power suggests that core interests and how we secure them have remained generally consistent over time. If grand strategy “rises above particular strategies intended to secure particular objectives,” many decades of focusing on nuclear deterrence, power pro-

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jection, alliances and partnerships, and military and economic strength probably constitute the underpinnings of a coherent grand strategy. How we employ and leverage these instruments of national power to protect, defend, and advance the national interest is, after all, the essence of grand strategy. In a dangerous world, these pillars have provided a strong foundation for national security. If our domestic politics can achieve consensus on future threats and solutions, America is well positioned to lead and prosper in a world that will remain both dangerous and uncertain.

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Acknowledgments

This volume represents a year-long effort by some of the best scholars at the National Defense University (NDU). No editor could be more fortunate than I have been to work with these talented writers. Their backgrounds are varied, combining high-level government service with sterling academic credentials, along with brilliant work by some superb young researchers who will make their mark in the coming years. I wish to express my deep appreciation to all who contributed to this effort. Special praise is due to the outstanding staff at NDU Press, whose hard work has been instrumental in bringing this volume to completion.

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Our intention is to offer useful policy advice and strategic recommendations to those senior leaders who will staff and lead the new administration in national security affairs. Only they can determine whether we have succeeded. Their task is not an easy one, and we offer our insights and reflections not with certainty, but with an ample dose of humility. We see no silver bullets, no elegant solutions to the complex problems we face. If we have helped to provide context and understanding to those who bear the heaviest responsibilities, we will have been well rewarded.

American Grand Strategy

R.D. Hooker, Jr.

Senior policymakers are often asked, “Does the United States have a grand strategy?” This chapter argues that a clearly definable American grand strategy exists and is set on firm foundations such as economic strength, nuclear deterrence, alliances and partnerships, and full-spectrum dominance in all warfighting domains. U.S. grand strategy is tied directly to enduring core interests that do not change over time, though the means employed to secure them are constantly evolving as technology and our national security institutions evolve.

From before the American Revolution, the outlines of an evolving grand strategy have been evident in our foreign and domestic policies.¹ Much of that history continues to inform our strategic conduct, and U.S. grand strategy therefore rests today on traditional foundations. Despite a welter of theory and debate, grand strategy as a practical matter is remarkably consistent from decade to decade, its means altering as technology advances and institutions evolve, but its ends and ways showing marked continuity.

Grand strategy can be understood simply as the use of all instruments of national power to secure the state.² Thus it exists at a level above particular strategies intended to secure particular ends, and above the use of military power alone to achieve political objectives. One way to comprehend grand strategy is to look for long-term state behavior as defined by enduring, core security interests and how the state secures and advances these over time. In a way, this means that what the state *does* matters more than what the state *says*. Grand strategy is therefore related to, but not synonymous with, national security strategies, national military strategies, quadrennial defense reviews, or defense strategic guidance. True grand strategy transcends the security pronouncements of political parties or individual administrations. Viewed in this light,

U.S. grand strategy shows great persistence over time, orienting on those things deemed most important—those interests for which virtually any administration will spend, legislate, threaten, or fight to defend.

At the conclusion of more than a decade of counterinsurgency operations, the United States finds itself repeating a familiar historical pattern. In the fiscal retrenchment that accompanies the end of every conflict (exacerbated by the economic collapse of 2008 and the Budget Control Act of 2011), military forces (particularly land forces) are being drawn down.³ Most U.S. ground and air forces have been repositioned to the continental United States, while defense spending (absent remedial legislation) will decline over the next 10 years by approximately 10 percent per year. At the same time, emerging nontraditional threats such as cyber attacks, weapons of mass destruction (whether chemical, biological, or radiological) wielded by nonstate actors, and international terrorism now crowd the security agenda. Increasingly, other threats such as narco-trafficking, illegal immigration, environmental degradation, shifting and unstable demographics, organized crime, and even climate change are also cast as national security threats. What does this portend for U.S. grand strategy?

The Ends of Grand Strategy

First, it is important not to confuse enduring core strategic interests with others that are less central. The current security environment, described in the 2014 Quadrennial Defense Review as “rapidly changing,” “volatile,” “unpredictable,” and “in some cases more threatening,” is certainly all those. Yet addressing this environment in fact aligns comfortably with U.S. grand strategy over time. Broadly speaking, vital or core national interests remain remarkably consistent. These include the defense of U.S. territory and its citizens and that of our allies, supporting and defending our constitutional values and forms of government, and promoting and securing the U.S. economy and standard of living. Virtually every strategic dynamic and dimension are encompassed in these. Grand strategy is by no means confined to our military forces and institutions but is far broader, encompassing all forms of national power. That said, we must beware of attempts to define everything in terms of national security. Any discussion of grand strategy quickly loses coherence and utility when we do.⁴ Grand strategy is fundamentally about security in its more traditional sense.⁵

Any assessment must begin with looking first at our security environment, and then at threats to our core or vital interests, without either overestimating or undervaluing them. The international security environment is by now well understood and familiar. Raymond Aron’s

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view of “a multiplicity of autonomous centers of decision and therefore a risk of war” holds true today.⁶ The bipolar and traditionally Westphalian state system of the Cold War has given way to a more multipolar system featuring a militarily and economically dominant, but not all-powerful, United States; a rising China and India; a resurgent Russia; an economically potent but militarily declining Europe; an unstable and violence-prone Middle East, wracked by the Sunni-Shia divide, economic and governance underperformance, and the Arab-Israeli problem; a proliferation of weak and failed states, particularly in Africa, the Middle East, and the Russian periphery; and empowered international and non-governmental organizations and nonstate actors.⁷ Terrorist organizations and international organized crime are far more significant than in the past, enabled by global communications and information flows. In absolute terms the world is safer, as the prospect of nuclear mutually assured destruction and world war costing millions of lives seems relegated to the past. Yet most societies feel threatened and insecure, while conflict, if more low-level, remains endemic.

The broad threats that confront us have deep roots but have also evolved over time. In order of importance, they can be summarized as:

- Use of weapons of mass destruction (WMD) against the homeland. These could be nuclear, biological, chemical, cyber, or explosive/kinetic in nature (such as the 9/11 attacks) delivered by either state or nonstate actors. Single or multiple attacks causing mass casualties could lead to partial or complete economic collapse and loss of confidence in our governance structures, imperiling our standard of living and way of life in addition to causing loss of life.⁸
- Economic disruption from without. The crash of 2008 was largely self-induced, but the health and stability of the U.S. economy could also be affected by the actions of foreign powers. Any major disruption to the global economy, which depends upon investor confidence as much as the free flow of goods and energy, could have catastrophic consequences for the United States, and Presidents have repeatedly shown a willingness to use force to ensure access to markets, free trade, and economic stability.
- The rise of a hostile peer competitor. For centuries, Great Britain aligned against the rise of any power able to dominate the European landmass and upset the balance of power. The United States did the same in opposing Germany in World War I, Germany and Japan in World War II, and the Soviet Union during the Cold War. The U.S.

“rebalance” to Asia and opposition to Chinese territorial moves in the East and South China seas can be seen as an attempt to counter the rise of China in a manner consistent with longstanding U.S. grand strategy.

- Direct challenges to key allies. Alliances such as the North Atlantic Treaty Organization (NATO) and bilateral security arrangements with close allies such as Japan and South Korea constitute solemn commitments that extend American power and influence globally. To preserve international stability and deter conflict, they must be honored. U.S. leaders can be expected to act decisively when close allies are directly threatened.

There are, of course, other threats of concern to national security practitioners that fall below this threshold. For example, promoting democracy and human rights abroad are sometimes touted as foreign policy “imperatives.”⁹ While consistent with American political culture and ideology, in practice, these are highly case specific. When consonant with the framework and principles of its grand strategy, the United States may act, but more often a pragmatic realism governs.¹⁰ The long nightmare in Syria, with its tragic loss of life, accelerating regional instability, mounting extremism and terrorist involvement, and massive human rights violations on all sides, would seem to be a classic case calling for military intervention. Yet there is no United Nations or NATO mandate, no strong reservoir of public support for military action, no appetite for intervention among our allies and partners, and no desire to dispute the agendas of Russia, China, and Iran in Syria, at least for the time being. With no direct threat to the homeland, U.S. citizens or allies, or the U.S. economy, the prospects for large-scale military intervention at present seem low, despite the humanitarian tragedy unfolding.

The crisis in Ukraine presents a different case study. The North Atlantic Council voted to defer NATO membership to Georgia and Ukraine and did not station NATO troops in the new member states, largely out of deference to Russian security concerns. These confidence-building measures notwithstanding, Russia in recent years sent troops into Georgia, Crimea, eastern Ukraine, and Syria.¹¹ The concerns of NATO members, especially the newer ones located in Eastern Europe and the Baltic States, are mounting as Russian leaders assert the right to “protect” ethnic Russian minorities in neighboring countries.

This scenario presents a different challenge to U.S. grand strategy. Should Russia seize more Ukrainian territory, NATO’s Baltic members could possibly come under threat.¹² Direct confrontation with Russia,

still a major nuclear and conventional power, may seem unthinkable. Yet failure to honor our treaty obligations to NATO would mean the virtual collapse not only of the Alliance but also of our security relationships around the world. Such a loss of global reach and influence would negate U.S. grand strategy altogether. For that reason, however much against its will, the United States will in all likelihood confront Russia should a NATO member be attacked or directly threatened.

The unfolding collapse of Iraq and Syria may fall somewhere in between. Across the United States and in both political parties, there remains a strong aversion to reintroducing a large ground presence into the Middle East. A direct threat to the homeland has not yet emerged (though “lone-wolf attacks” are mounting), and the prospect of lending military and material aid to the Shia regime in Baghdad, itself both supported and at least partially controlled by Tehran, is unpalatable. On the other hand, major human rights violations and the prospect of spillover and accelerating destabilization of the region could compel strong action against the Islamic State in Iraq and the Levant (ISIL) and its Sunni confederates. Should ISIL successfully establish a safe haven and launch major attacks against Europe and the United States, decisive U.S. and coalition military action would probably follow. Major disruption to the free flow of oil through the Arabian Gulf and attendant economic shocks could also compel a powerful military response.

These and similar examples raise the question of whether the United States consciously pursues an imperial or hegemonic grand strategy. Many scholars, both domestic and foreign, explicitly or implicitly assert that it does.¹³ On the one hand, the United States, along with other great powers, seeks to provide for its own security by maximizing its power relative to potential and actual adversaries, within limits imposed by its domestic politics. Its political and military leaders are constrained in attempting to balance what Aron called an ethics of responsibility—the pragmatic reality of an international politics that cannot and does not ignore the role of force—and an ethics of conviction, which is normative and classically liberal in seeking accommodation and an absence of conflict where possible.¹⁴ It is thus true that U.S. power, and particularly military power, is often employed to secure and advance American interests. On the other hand, U.S. interventions are marked by an absence of territorial aggrandizement or forced extraction of natural resources. Typically, huge sums are spent on development and infrastructure improvements. On its own or when asked (as in the Balkans, Somalia, Haiti, Panama, and Iraq), the United States usually withdraws and goes home. Even close allies remain free to opt out of military ventures, as seen in the invasion of Iraq in 2003 and in Libya in 2011.

The net effect has been to bring into being, largely if not entirely through America's own efforts, a rules-based international and economic order that has widely benefited much of the world:

It falls to the dominant state to create the conditions under which economic interdependence can take hold (by providing security, rules of the game, and a reserve currency, and by acting as the global economy's banker and lender of last resort). Without a dominant power to perform these tasks, economic interdependence does not happen. Indeed, free trade and interdependence have occurred in the modern international system only during the hegemonies of Victorian Britain and postwar America.¹⁵

These are the actions of a preponderant power but hardly of a classically imperialist one. If the United States is imperialist, it appears to be so in a historically benign way; if hegemonic, in a heavily qualified one.

The Means of Grand Strategy

The means of grand strategy are similarly enduring over time. Fostering strong alliances and bilateral security arrangements, maintaining a strong and survivable nuclear deterrent, fielding balanced, powerful, and capable military forces that are dominant in each warfighting domain and that can project and sustain military power globally and prevail in armed conflict, and providing intelligence services that can ensure global situational awareness and provide strategic early warning are basic components.¹⁶ They are intrinsically linked to a powerful economy and industrial base, advanced technology, an extensive military reserve component, an educated and technically skilled population fit for military service,¹⁷ and a political system based on classically liberal democratic values and able to make clear and sustainable policy and resource decisions.¹⁸

America's traditional reliance on forward presence and forward-deployed forces, another strategic linchpin, has declined since the end of the Cold War. Few combat forces remain in Europe (the last tank was removed in 2012, though rotational forces have returned in brigade strength), only a single ground combat brigade is based on the Korea Peninsula, and there are no ground combat troops based in the Middle East. Naval forward presence has also been scaled back in the post-Cold War era as the size of the fleet has declined.¹⁹ On the alliance front, relations with NATO Allies have been damaged by the rebalance to Asia,

widely perceived by Allies as a devaluation of Europe by U.S. leaders, and by Defense Secretary Robert Gates's stern speech in June 2011 that castigated European Allies for failing to meet targets for defense spending.²⁰ President Barack Obama's "leading from behind" stance in Libya, the pullout from Iraq, and inaction in Syria are interpreted by some as evidence of a disinclination to engage globally in the interests of international stability, though others see prudent and measured restraint.

The use of soft power also deserves consideration in this discussion.²¹ Described by its progenitor as "the ability to influence the behavior of others to get the outcomes you want,"²² soft power is concerned with development aid, cultural influence, the power of example (Coca-Cola, American blue jeans, and MTV are often cited), and other forms of suasion that are not coercive or easily directed. Theorists disagree on whether soft power should be considered part of the strategist's arsenal. Diplomacy, for instance, may lack utility when divorced from the military and economic power of the state; the artfulness of the discussion may be useful but will not be decisive absent hard power. On balance, though, the ability of soft power to influence adversary behavior for good or ill is probably incontrovertible, albeit not easily deployable or even controllable.²³ To that extent, it is an important factor that nevertheless falls outside the realm of grand strategy as traditionally understood and practiced.

While U.S. determination to act forcefully in support of the international order may be more open to question, and while U.S. economic and military power may not be as dominant as in the past, in absolute terms the United States remains by far the preponderant power in the world. Possessed of great actual and potential strengths, the United States is unequalled in hard power. Nevertheless, coherent and effective political direction is the essential precondition to strategic success. Since the end of the Vietnam War, mounting conflict between the legislative and executive branches, spurred by a fractious polarization of American politics, has reached alarming proportions. Repeated wars have led to a concentration of the war power in the executive branch, arguably resulting in more frequent uses of force that may not command public support. Unquestionably, a healthy and stable set of political arrangements that provides for effective sharing of power, while ensuring popular backing, is essential.²⁴ When lacking, successful strategic execution is at risk.

The Ways of Grand Strategy

How the United States addresses direct threats to its core or vital interests over time is the essence of grand strategy. Typically, America's solutions are not new, although the technologies employed often are.

U.S. grand strategy since 1945 has been based first and foremost on nuclear deterrence. The ability to deter other nuclear powers dominated strategic thought at least through the end of the Cold War. This meant a survivable nuclear arsenal able to deliver sufficient damage great enough to render any first strike by an adversary unimaginable. Originally, early technology meant bombers attacking cities with nuclear bombs. Eventually this gave way to land- and sea-launched ballistic missiles, whose improved accuracy allowed for targeting of enemy nuclear systems directly. The modern triad of strategic bombers, intercontinental ballistic missiles, and nuclear ballistic submarines dates from this time. Though smaller than during the Cold War, the U.S. strategic nuclear arsenal today is survivable, redundant, and accurate, providing an absolute nuclear deterrent against any adversary.²⁵

For the purposes of statecraft and strategy-making, deterrence is best understood in simple terms. Deterrence is the art of instilling in the mind of one's adversary the belief that the costs of a contemplated course of action outweigh the benefits. Here, both capability and credibility are essential. The capability to deliver the threat must exist, or at least the enemy must think so. But one's *willingness* to deliver the threat must also be seen and believed. Ambiguity, not certainty, is allowed if the threatened costs are high; rational decisionmakers are deterred if the price of miscalculation is unacceptably severe, as with nuclear weapons. But if the threatened costs are not seen as unacceptably high, or if there is genuine doubt as to whether the threat will be delivered, deterrence can fail.

This key dynamic explains why deterrence, especially the conventional kind, so often falls short. In Korea, Vietnam, the Gulf War, Iraq, and Afghanistan, U.S. military power was immeasurably superior. In each case, our opponent was not deterred. Why? In each, the U.S. use of nuclear weapons was correctly discounted. In each, our opponents calculated, again correctly, that we would not bring the full weight of American power to bear. And in each, our adversaries assessed our willingness to accept casualties and to persist over the long term as low. In short, we lacked the *credibility* to effectively deter. Military fiascos such as the bombing of the Marine barracks in Lebanon and the "Black Hawk Down" debacle in Somalia, which were followed by precipitate withdrawal, encouraged potential enemies to believe that high casualties to U.S. forces might cause America to quit.

Finally, the tendency to regard deterrence as a mission rather than an effect should be squarely addressed. Military forces cannot train to deter. They can only prepare to fight. If perceived as superior to one's adversary, and if directed by credible leaders, then effective deterrence can be achieved. The mere existence of forces is not enough. They must be

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trained, equipped, supplied, and led, in numbers and with capabilities enough to overawe one's likely opponent. As Wallace Thies argued in a classic essay:

The value of military forces is often better measured in terms of what does not happen rather than what does. The most capable armed forces are those that prevent trouble from arising because they exist in sufficient number and quality to dissuade troublemakers from threatening American interests. . . . [T]he debate over deterrence versus war-fighting is one of those rare cases where both sides have managed to miss the point. Winning wars is wonderful, preventing them is even better, but to prevent wars it is first necessary to be able to fight them.²⁶

Effective grand strategy must recognize this simple truth: It is far better to avoid a war than to fight one. But avoiding war cannot rest on good intentions. Hard military power and the will to use it are the coins of the realm.

In the conventional realm, the first principle is to meet the threat as far from the homeland as possible. Thus, since the end of World War II, the United States has established bases, positioned forces, and stockpiled weapons and munitions around the globe, buttressed by economic and development assistance, exercises, formal treaties, coalitions of the willing, and alliances.²⁷ (Counterproliferation may also be viewed in this light.) While U.S. ground forces have largely come home, America's network of overseas bases, airfields, and alliances as well as forward-deployed air and naval forces is still extensive. The Nation's ability to project power globally and sustain its forces almost indefinitely remains unmatched. U.S. satellites survey the globe and monitor adversary communications continuously.

Next, the United States prefers to meet serious threats using different tools at once, in theory reserving military force for last and relying on intelligence, diplomacy, forward presence, and its economic power to forestall, deflect, or defuse security challenges.²⁸ Still, U.S. military power is awesome. Its strength across the warfighting domains, supported by an unmatched ability to project and sustain military forces far from the homeland, remains far ahead of the rest of the world.²⁹ Whenever possible, the United States prefers to address threats in tandem with allies, partners, or like-minded states, working through international organizations such as the United Nations or NATO and conducting preconflict engagement and "shaping" operations on a large scale. Yet

when vital interests are engaged, the United States will act unilaterally if necessary.³⁰ Preemption to disrupt or prevent imminent threats falls well within America's grand strategic calculus.³¹ Prevention—the use of force to defeat threats before they become imminent—has, on the other hand, far less provenance.

As the preponderant global power, the United States attempts to shape the international security environment to prevent or ward off security challenges where it can.³² When it cannot, and when significant or vital interests are engaged, military force often comes into play. Since the end of World War II, the United States has used military force many times, with varying degrees of success, to protect, secure, or advance its security interests.³³ When military force was used, the record of success or failure is illustrative when viewed in light of the grand strategic framework described above. In the previous century, the United States experienced clear success when the threats to vital interests were unambiguous; when the response enjoyed strong support from the public and Congress; when overwhelming force was applied; when strong allies participated; and when the strategic objective was well understood.³⁴ Both World War I and II, the Cold War, and the Gulf War are examples. In cases where the direct threat to U.S. vital interests was less clear, overwhelming force was not applied, public and congressional support was not strong or sustained, and the strategic objective was unclear, defeat or stalemate ensued. Korea, Vietnam, Beirut, Somalia, Iraq, and Afghanistan are the relevant examples here. In some cases (the Dominican Republic, Grenada, Panama, Haiti, Kosovo), the desiderata listed above did not fully apply, but weak opposition and overmatching force led to early success, forestalling loss of public support or stagnation of the conflict.³⁵

These historical lessons are compelling. American political leaders have not always recognized these principles and have certainly not always applied them. Their apparent jettisoning by both Republican and Democratic administrations following the Gulf War has come with a heavy price. America's successes in war, and in deterring war, have resulted at least as much from an industrial and technological superiority, employed en masse by competent political and military institutions, as from any other factor.³⁶ This superiority is best translated into battlefield and campaign success by synergistically applying land, sea, air, space, and cyber power to achieve decisive objectives that see through and beyond the end of combat operations. Single-Service or one-dimensional applications of force have repeatedly failed of their promise to deliver strategic victory.

Relatedly, political leaders and strategists should be mindful of *strategic culture*, that mélange of history, tradition, custom, world view, economy, sociology, political systems, and mores that largely shapes how and why

nations fight. There may be no agreed upon American theory of war, but an “American way of war” surely obtains, based on concepts of joint and combined warfare, mass, firepower, technology, strong popular support, and a focus on decisive and clear-cut outcomes.³⁷ “Good wars” have historically followed this pattern. “Bad wars” have not. While the analogy can be taken too far, it captures central truths that should inform our strategic calculations.³⁸ Strategic culture is real and powerful, whether or not it is acknowledged.³⁹

The Way Ahead

As U.S. leaders assess a complex security environment, historical experience provides useful and helpful context and guideposts to understanding the present—even when security threats are harder to define and address, as in the case of cyber attacks.⁴⁰ U.S. forces are also held to standards increasingly difficult to guarantee; the prospect of even minimal casualties to our own forces or to civilians (however unintentional) or unintended environmental damage now colors every decision in the age of the 24-hour news cycle. On balance, traditional military security concerns often seem less paramount. Absent a clear and present danger, humanitarian considerations, environmental issues, and resource impacts and scarcities compete strongly with military factors in policy deliberations. In the meantime, nonstate actors are increasing their power and influence to effect policy changes across a wide spectrum of issues, many of which directly affect the ability of U.S. military forces to carry out their missions.⁴¹

In the last generation we have often seen the face of the future reflected in the bitter divisions of the past, in failed states, in emerging democracies, and in nations stuck in transition between authoritarian and democratic systems. A persistently uncertain and unstable international security environment places a premium on U.S. leadership. As the only remaining global power and as a coalition leader in organizations such as NATO, the United States is uniquely positioned to influence world affairs in ways that benefit not only the Nation, but also the international community as a whole.⁴² The prudent use of American military power, in concert with the economic, political, and diplomatic instruments of national power, remains central to attempts to shape the international environment and encourage peace and stability wherever important U.S. interests are at stake.⁴³

It is also useful to note that the formerly sharp distinction between the military instrument and others has become blurred. The definition of *national security* is now more expansive, encompassing a great domain

of “homeland defense,” with dozens of civilian agencies and large military organizations (such as U.S. Northern Command) intimately linked with and often working in subordination to other civilian entities. Even in conflict zones, tactical formations engaged in daily combat can find themselves with scores of embedded civilians representing civilian departments.⁴⁴ Informational technologies and a more globalized threat, able to strike from remote and underdeveloped locations with great effect, now force a greater degree of synergy and interoperability between military and nonmilitary organizations than ever before. These trends will continue on a trajectory toward ever greater civil-military integration, particularly in the intelligence, cyber, acquisition, logistics, and consequence management realms.

Taking the long view, and acknowledging the strong impact of new technologies and threats, the framework of U.S. grand strategy as described here will remain relevant and current for decades to come. The international security environment will remain anarchic and uncertain, with the state mattering more than supranational organizations, even as nonstate actors of many kinds proliferate. Conflict will remain endemic, and state-on-state conflict will recur. WMD attacks against the homeland will be attempted and may be successful. Pressures to intervene—in the Middle East, Africa, Eastern Europe, and perhaps even East Asia—will persist or surface anew. Strategic shocks—unanticipated crises requiring strategic responses—will be more the norm than not.⁴⁵ None of this is new, unique, or even more dangerous than in the past.

Strategists must accordingly consider and refine the ways and means by which our traditional and enduring interests may best be defended. Along the way, a certain humility is helpful; as Henry Kissinger wrote, “The gods are offended by hubris. They resent the presumption that events can be totally predicted and managed.”⁴⁶ At its best, grand strategy is not always or fundamentally about fighting or the military application of force, but rather an appreciation of its potential, along with the other instruments of power, in the mind of the adversary. President Ronald Reagan’s role in bringing about an end to the Cold War is the classic example. In this sense, effective grand strategy may often preclude the need to resort to force. To achieve this, the involvement of society in its own national defense, a strong, stable, and globally networked economy, an effective domestic politics that can make rational decisions over time in support of national security, and the promotion of values that invite support and consensus at home and abroad will count for much. So too will balanced and capable military forces, sized and able to operate globally and in concert with civilian counterparts, international organizations, allies, and partners. The decision when and if to use force should

never be approached casually, emotionally, or halfheartedly, but, rather, soberly, analytically, and with a whole-of-government and whole-of-society intention to prevail. There should never be doubt that when core interests are engaged, the United States will bring the full weight of its power to bear and will persist until success is achieved. On these foundations will rest an effective U.S. grand strategy far into the future.

Notes

¹ Defining *grand strategy* is admittedly onerous. Colin Gray defines it as the “purposeful employment of all instruments of power available to a security community.” Robert J. Art excludes nonmilitary instruments from grand strategy, while Christopher Layne simply calls it “the process by which the state matches ends and means in the pursuit of security.” Sir Hew Strachan sees grand strategy as forward looking, aspirational, and oriented on preventing or managing great power decline. Edward Luttwak is particularly opaque: “Grand strategy may be seen as a confluence of the military interactions that flow up and down level by level . . . with the varied external relations that form strategy’s horizontal dimension at its highest level.” See Colin Gray, *War, Peace and International Relations: An Introduction to Strategic History* (Abingdon, United Kingdom: Routledge, 2007), 283; Robert J. Art, “A Defensible Defense,” *International Security* 15, no. 4 (Spring 1991), 7; Christophe Layne, “Rethinking American Grand Strategy: Hegemony or Balance of Power in the 21st Century,” *World Policy Journal* 15, no. 2 (November 1998), 8; Hew Strachan, “Strategy and Contingency,” *International Affairs* 87, no. 6 (2011), 1281–1296; and Edward Luttwak, *Strategy* (Cambridge: Harvard University Press), 179.

² *Strategy* is more properly limited to “the deployment and use of armed forces to attain a given political objective.” See Michael Howard, “The Forgotten Dimensions of Strategy,” *Foreign Affairs* (Summer 1979), 975.

³ Active Army forces, according to Pentagon sources, will fall to 420,000, the lowest level since before World War II. See *Quadrennial Defense Review 2014* (Washington, DC: Department of Defense, 2013), ix.

⁴ As one example of this tendency toward incoherence, Paul Doherty discusses the importance of “walkabout communities” as part of a “new grand strategic construct” in “A New U.S. Grand Strategy,” *Foreign Policy*, January 9, 2013.

⁵ This trend is driven in part by a desire to access defense budgets to fund programs not traditionally considered as defense-related. Stanley Hoffman put it succinctly as far back as 1987: “There has been a trend towards indefinite extension of U.S. interests. ‘National security’ is considered to be everywhere and constantly at stake.” See *Janus and Minerva: Essays in the Theory and Practice of International Politics* (Boulder, CO: Westview Press, 1987), 316.

⁶ Raymond Aron, *Peace and War* (Paris: Calmann-Levy, 1962), 28.

⁷ As recently as 2002, William C. Wohlforth argued that “the balancing imperative . . . will not soon dominate great powers’ strategic choices in today’s novel unipolar system.” In fact, although the United States remains unquestionably the preponderant world power, great powers such as Russia, Iran, and China often combine to limit or deflect U.S. strategic choices in a classic balance of power formulation. See “U.S. Strategy in a Unipolar World,” in *America Unrivaled: The Future of the Balance of Power*, ed. G. John Ikenberry (Ithaca, NY: Cornell University Press, 2002), 117.

⁸ The official Department of Defense definition of *weapons of mass destruction* includes nuclear, biological, chemical, and radiological weapons only. The term is used more

broadly here to include events such as the Oklahoma City bombing and the 9/11 attacks on the World Trade Center and Pentagon, as well as potential cyber events that could cause large-scale loss of life. See Seth Carus, *Defining Weapons of Mass Destruction*, Center for the Study of Weapons of Mass Destruction Occasional Paper 8 (Washington, DC: NDU Press, January 2012).

⁹ *Quadrennial Defense Review 2014* lists “respect for universal values at home and around the world” as one of four “core national interests,” 11.

¹⁰ See R.D. Hooker, Jr., “U.S. Policy Choices During the Rwandan Genocide,” unpublished paper, National War College, 2003.

¹¹ In addition to troop deployments to Abkhazia and South Ossetia, “breakaway” regions that remain part of sovereign Georgian territory, Russia maintains 5,000 troops inside Armenia to ensure that neighboring Azerbaijan does not reclaim Nagorno-Karabakh, sovereign Azerbaijan territory occupied by ethnic Armenians.

¹² Latvia, Lithuania, and Estonia are 100 percent dependent on Russian natural gas and have large ethnic Russian populations. Without the North Atlantic Treaty Organization (NATO), their continued independence is probably unlikely. See Theresa Sabonis-Helf, “Energy Security: Strategic Questions and Emerging Trends,” presentation to NATO national representatives, National Defense University, April 11, 2014.

¹³ Andrew Bacevich is a leading critic of American “imperialism.” See *American Empire: The Realities and Consequences of U.S. Diplomacy* (Cambridge: Harvard University Press, 2002).

¹⁴ Kenneth Thompson, *Masters of International Thought* (Baton Rouge: Louisiana State University Press, 1980), 153.

¹⁵ Layne, 15.

¹⁶ “The United States leads a global alliance system of more than 60 partner states that collectively account for almost 80 percent of global [gross domestic product] and more than 80 percent of global military spending between them.” See Michael E. O’Hanlon, *Budgeting for Hard Power: Defense and Security Spending Under Barack Obama* (Washington, DC: Brookings Institution, 2009), 24.

¹⁷ The General Accounting Office reports that 16.2 million males aged 18 to 25 are registered for Selective Service. However, only one in four are eligible for military service, severely limiting the pool of prospective recruits. The rest are disqualified for obesity, other physical issues, lack of a high school diploma, or criminal records. See the prepared statement of Curtis Gilroy, Director for Accessions Policy, Office of the Undersecretary of Defense for Personnel and Readiness, before the House Armed Services Subcommittee, “Recruiting, Retention, and End Strength Overview,” March 9, 2009.

¹⁸ The U.S. industrial base remains a world leader, second only to China as of 2014, according to the United Nations Statistics Division. Ship-building remains a strong industry: “Currently there are 117 shipyards in the United States, spread across 26 states, that are classified as active shipbuilders.” See “The Economic Importance of the U.S. Shipbuilding and Repairing Industry,” Maritime Administration, May 30, 2013, 3. U.S. steel production has declined as a percentage of global market share since 1947, when the United States produced 60 percent of the world’s steel, but remains a world leader. The United States produced 87 million tons of steel in 2013, ranking fourth in the world. (This contrasts with 40 million tons dedicated to military production in 1943, the year of greatest manufacturing output in World War II.) See *World Steel Statistics Data 2013*, World Steel Association, January 23, 2014; and Alan Gropman, ed., *The Big L: American Logistics in World War II* (Washington, DC: NDU Press, 1997), 137. For a contrary view, see Michael E. O’Hanlon, *The National Security Industrial Base: A Crucial Asset of the United States Whose Future May Be in Jeopardy* (Washington, DC: Brookings Institution, 2011).

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¹⁹ Currently, 36 percent of the Navy's operational assets are classed as "globally deployed," including 2 of the Navy's 11 fleet carriers, with a third based in Japan. At least two Amphibious Ready Groups with embarked Marines are also always at sea. See Admiral Jonathan Greenert, USN, testimony before the House Armed Services Committee on the Fiscal Year 2015 Navy Posture, March 12, 2014.

²⁰ Thom Shanker and Steve Erlanger, "Blunt U.S. Warning Reveals Deep Strains in NATO," *New York Times*, June 10, 2011.

²¹ "Soft power is not about influence or persuasion—it attracts." See Harry R. Yarger, *Strategy and the National Security Professional* (London: Praeger, 2008), 74.

²² See Joseph Nye, *Soft Power: The Means to Succeed in World Politics* (New York: Public Affairs, 2004).

²³ Chris Schnaubelt, "The Illusions and Delusions of Smart Power," in *Towards a Comprehensive Approach: Integrating Civilian and Military Concepts of Strategy* (Rome, Italy: NATO Defense College Forum Paper, March 2011), 24.

²⁴ Effective civil-military relations is also a *sine qua non* of successful strategy. Despite much hyperbolic academic criticism, the United States is well equipped in this sphere. See R.J. Hooker, Jr., "Soldiers of the State: Reconsidering American Civil-Military Relations," *Parameters* (Winter 2003/2004).

²⁵ The most recent arms control agreement with Russia, signed by President Obama and Russian President Dmitrii Medvedev on April 8, 2010, agreed to reduce the number of active nuclear weapons from 2,200 to 1,550.

²⁶ Wallace J. Thies, "A Twenty-First Century Army," *Parameters* (Spring 1991), 68.

²⁷ The Department of Defense maintains prepositioned stocks both ashore and afloat in strategic locations worldwide to support the deployment of forces for contingency operations. Key sites are Japan, Korea, Italy, Qatar, Kuwait, and Diego Garcia.

²⁸ *Quadrennial Defense Review 2014*, 11.

²⁹ For example, in seapower alone the U.S. lead is staggering. The U.S. Navy operates 10 large aircraft carriers, all nuclear powered; no other country has even one. The United States has 57 nuclear-powered attack and cruise-missile submarines—again, more than the rest of the world combined. Seventy-nine Aegis-equipped surface combatants carry roughly 8,000 vertical-launch missile cells, outmatching the next 20 largest navies. All told, the displacement of the U.S. battle fleet exceeds the next 13 navies combined, of which 11 are allies or partners. Cited in Secretary of Defense Robert Gates's prepared remarks to the Navy League, National Harbor, MD, May 3, 2010. The U.S. Marine Corps alone is larger and more capable than the ground and air forces of all but a few nations. See *The Military Balance* (London: International Institute for Strategic Studies, March 2014).

³⁰ "The United States will use military force, unilaterally if necessary, when our core interests demand it—when our people are threatened; when our livelihoods are at stake; when the security of our allies is in danger." See President Barack Obama, Commencement Address at the United States Military Academy, May 28, 2014.

³¹ *The National Security Strategy of the United States* (Washington, DC: The White House, September 17, 2002), 15.

³² For a more detailed discussion of American preponderance and its strategic implications, see Layne, 9.

³³ The list of large-scale combat or "peace enforcement" actions alone is extensive and includes Korea (1950), Lebanon (1958), the Dominican Republic (1965), Vietnam (1955–1975), Beirut (1981), Grenada (1981), Panama (1989), the Gulf War (1991), Somalia (1992), Bosnia (1996), Kosovo (1999), Afghanistan (2001), and Iraq (2003).

Hooker

On average, the United States has deployed a division or larger force every 6 years since 1950.

³⁴ Both Secretary of Defense Caspar Weinberger and Chairman of the Joint Chiefs General Colin Powell promoted similar views on when and how to use force, espousing a conservative “last resort” philosophy stressing overwhelming force and clear objectives and emphasizing decisive results. Weinberger explained his in a speech titled “The Uses of Military Power,” delivered before the National Press Club in Washington, DC, on November 28, 1984.

³⁵ Max Boot attempted to argue in 2002 that “small wars” fought for less precise objectives could advance important, if not vital, interests and represented something of a future trend. On the whole, such thinking has been discredited by Iraq and Afghanistan. See Boot, *Savage Wars of Peace* (New York: Basic Books, 2002).

³⁶ “By and large, the virtues of American civilization have not been the military virtues and this has been reflected in American military performance.” See Samuel P. Huntington, “Playing to Win,” *The National Interest* (Spring 1986), 10.

³⁷ Russell Weigley is the principal exponent of this view. For a contrasting view, see Antulio Echevarria II, *Toward an American Way of War* (Carlisle Barracks, PA: Strategic Studies Institute, March 2004).

³⁸ “We make war the way we make wealth.” See Alvin Toffler and Heidi Toffler, *War and Anti-War: Survival at the Dawn of the 21st Century* (New York: Little, Brown and Company, 1993), 2.

³⁹ See R.D. Hooker, Jr., “The Strange Voyage: A Short Précis on Strategy,” *Parameters* (Winter/Spring 2013), 62.

⁴⁰ “I believe the most pressing threat facing our country is the threat from cyber attacks. The daily occurrences of attacks are damaging on a variety of levels and they are not only persistent and dangerous, the likelihood of serious damage to our national security is very real.” See Lieutenant General Mike Flynn, USA, Director of the Defense Intelligence Agency, statement before the Senate Armed Services Committee, U.S. Senate, April 18, 2013.

⁴¹ The international treaty banning landmines in 1999 and the International Criminal Court, established in 2002, are apposite examples. The United States is not a party to either.

⁴² As the only state able to project and sustain military forces globally, the United States retains this status today; the rise of China will not see an equivalent capability for years to come. See Andrew J. Nathan and Andrew Scobell, *China’s Search for Security* (New York: Columbia University Press, 2012), 312–315.

⁴³ Theorists sometimes cite the maxim that “everybody’s strategy depends on everyone else’s.” This must be the case for weaker or comparable powers. In its current position of preponderance, though its power has definite limits, the United States seeks whenever possible to impose its strategy on adversaries, and not to be imposed upon. All states would behave so if they could. See Kenneth Waltz, *Man, the State and War* (New York: Columbia University Press, 1954), 201.

⁴⁴ For example, Regional Command–East in Afghanistan in 2010 included a Senior Civilian Representative from the U.S. Agency for International Development, of equal rank to the division commander and empowered to co-sign his operational orders. She was supported by more than 100 civilian staff.

⁴⁵ Strachan, 1285.

⁴⁶ Cited in Hal Brands, *What Good Is Grand Strategy? Power and Purpose in American Statecraft from Harry S. Truman to George W. Bush* (Ithaca: Cornell University Press, 2014), 100.

2

The Future of Conflict

T.X. Hammes

Despite assertions to the contrary, war is not disappearing. If anything, it is increasing in frequency and duration. Armed conflict will remain central to relations among states and nonstate actors. It will remain a contest of human wills and thus the domain of uncertainty, compounded by human passions, friction, and fog. Technology will not bring clarity or brevity. Century after century, political and military leaders have embarked on wars they “knew” would be short and decisive—and subsequently paid the price for ignoring the true nature of war.

War is unlikely to disappear from human relations.¹ In contrast to the unchanging nature of war, its character—how it is fought—will change continually. How people fight wars is based on the social, economic, political, and technical aspects of their societies. Furthermore, it is not based solely on those aspects of one society but on those aspects of all societies in the conflict—and how they interact. One of the great challenges is to anticipate the changing character of war well enough to adapt rapidly when conflict reveals those changes. Perhaps the most important change to the character of war today is the proliferation of smart, small, and cheap weapons. These allow small states and even nonstate actors to acquire capabilities that previously were the exclusive preserve of major powers, such as space systems, long-range precision strike, and massed short-range autonomous weapons.

Creating further friction for policymakers is the fact that military planners are trained to ask for clear-cut objectives and a defined “endstate.” Planners do so because it apparently simplifies the military planning for the conflict. Too often the desire for a defined endstate is a false hope.² A clear military endstate has been a rarity since World War II and will remain so in the future. While the armed conflict may end, the political entities involved in the conflict will remain, and the United States will

have to maintain a relationship with them. A badly executed war may in fact greatly complicate those continuing relationships. The real goal of a military operation is not to reach a military endstate per se but rather to set the conditions for an acceptable, continued political relationship—the desired “better peace.” Such relationships have historically required continuing military support as seen in the cases of Germany, Japan, Korea, the Balkans, Iraq, and Afghanistan.

What policymakers do owe military commanders is a description of the desired continuing state and the policy parameters for a particular effort. Policymakers must also understand that this guidance should be just the beginning of an ongoing dialogue between civilian and military leaders that will evolve into the plan for the conflict. Furthermore, the past 50 years have clearly demonstrated that both political and military objectives will change over the course of a conflict. Thus dialogue must continue throughout the conflict and the subsequent peace. As always, the most important task for policymakers is to understand both the nature and character of the conflict they are engaged in—“neither mistaking it for, nor trying to turn it into something that is alien to its nature.”³

State Actors

Among state actors, China has taken the lead in developing methods to neutralize U.S. strengths. It has either demonstrated or is developing a wide range of capabilities that the Pentagon has characterized as being in the antiaccess/area-denial (A2/AD) arena.⁴ Many of these A2/AD systems are already proliferating among large and medium states. Moreover, as these capabilities become cheaper, smarter, and more numerous, we can be sure they will migrate to smaller states.

In addition, we will likely see an increase in the number of nuclear powers since nuclear weapons provide a guarantee against externally driven regime change. Once a regional power gets a nuclear weapon, its neighbors will seek the same capability as a matter of self-preservation. Thus proliferation is likely. While proliferation is not a desirable outcome, it should be noted that the presence of nuclear weapons has tamped down the level and intensity of conflicts and confrontations between nuclear-armed states. However, these confrontations have taken place between relatively stable states (the Soviet Union–China, India–Pakistan, and the United States–Soviet Union). The prospect of politically unstable states developing nuclear weapons remains a great concern. As unstable states acquire nuclear weapons, we have to plan for not only the potential collapse of a nuclear state but also the potential for a civil war with nuclear weapons.

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States will also employ surrogates to keep their own forces off the battlefield. We have seen Iran use Hizballah and Pakistan use the Taliban to pursue their strategic interests without committing their own forces to the conflicts. More recently, the Russians made extensive use of so-called little green men as surrogates in Ukraine. Contractors are another form of surrogate that states have used in numerous conflicts for a variety of reasons. Even criminal organizations have been employed to execute a range of activities from cyber to propaganda to kinetic attacks. This trend will continue. In summation, states will use a wide variety of methods and resources to neutralize conventional U.S. military power to achieve their strategic goals.

Nonstate Actors

Nonstate actors fall into three major categories: insurgents, terrorists/super-empowered small groups, and transnational criminal organizations. The United States has extensive experience in conflict with each type, yet each provides a unique challenge based on the political, economic, and social conditions of the conflict. Each has also been steadily evolving and has been greatly empowered by the information revolution.

The first category, insurgents, will be driven by different goals than in the past. Such efforts will still be about self-governance but now will add a desire to change borders. Since World War II, insurgencies have been primarily driven by a desire to throw off an imperial power. Once the colonial powers had withdrawn, the driving force became determining which local group would control the new nation. The People's Movement for the Liberation of Angola's long war against the National Union for the Total Independence of Angola is a prime example. After a multi-decade conflict, the People's Movement won. It now rules over a nation with essentially the same boundaries as existed when the country was a Portuguese colony. More recently, insurgents are fighting to redraw boundaries to align with social/cultural/religious boundaries that preceded the colonial era. This has been accomplished in places such as the former Yugoslavia and Sudan. Somalia, while not de jure separated, is de facto three separate political entities today. In the Middle East, the Islamic State in Iraq and the Levant (ISIL) is fighting hard to redraw boundaries and has plans to change boundaries far beyond. The Baluch and Kurds fight to create new states without regard to existing borders. The mismatch between the borders drawn by imperial powers and those needed to create functioning states is most acute in the Middle East and Africa and will increasingly be sources of conflict. It will reinforce other

drivers of insurgency—corruption, government incapacity, failure to address minority needs, and resource scarcity.

This desire to change borders will have a significant impact on U.S. counterinsurgency efforts. Current U.S. doctrine calls for supporting the host-nation government against the insurgents. If an insurgent movement crosses international borders, such as the Pashtuns who straddle the Afghan-Pakistan border, there is no single host nation. Thus the United States will have to work with two or more nations in most counterinsurgency efforts. The problem will come when the contending nations have irreconcilable strategic objectives. The fundamental differences between the strategic goals of Pakistan and Afghanistan have prevented effective cooperation against the insurgents. A variety of insurgent and terrorist groups based in the Pashtun regions have taken advantage of this fact. We must expect this to be the norm in insurgencies that strive to redraw international borders.

We are seeing the same issue in our conflict with ISIL. Iraq, Syria, and various insurgent groups have different strategic objectives, and each draws external support from several actors. Today's insurgencies are often a mix of the angry, who seek redress of a perceived injustice, and the opportunistic, who simply seek wealth. Thus U.S. doctrine for and experience with both counterinsurgency and unconventional warfare (support to an insurgent) are inadequate to these circumstances. Insurgencies that focus on creating new states—either across international boundaries or within an existing state—present a much more complex challenge than insurgencies focused on maintaining current boundaries. Historically, such efforts at state formation have taken from decades to centuries. Achieving relative political stability in these cases will be a much longer and more difficult process. An understanding of the long timelines must inform any decision to become involved and then must guide the subsequent commitment. Decisionmakers must understand that they are getting involved in a decades-long struggle and only make commitments that can be sustained for that extended period.

For their part, terrorists will continue to act in the name of various causes. While high-profile attacks such as the September 11 and Paris attacks will continue, it is essential to keep risk in perspective. With over 32,000 deaths per year in auto accidents, roughly as many Americans are killed *every month* on our highways as died in the Twin Towers.⁵ Thus, while the violent loss of life by terrorism is heinous, our response should be appropriate. That said, we should be concerned about terrorists' potential to use society's destructive power against itself. Accidents like the one at the Bhopal, India, chemical plant that killed 15,000 people in 1984 and the 1947 ammonium nitrate explosion that leveled Texas City,

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Texas, show that a terrorist can create mass casualties and catastrophic damage using material we keep in our cities. The easiest way for a terrorist to create mass casualties is to “bring the detonator.” It is difficult, if not impossible, to acquire and transport massive amounts of explosives or chemicals. It is much easier to detonate or release materials already in place. Terrorists will also benefit from new technology that will provide easier, cheaper ways to deliver the detonator to a wide variety of targets.

Criminal organizations across the globe will continue to challenge governments for control of territory. These organizations take various forms—from street gangs to drug cartels to transnational criminal networks—and will deal in a variety of commodities, from guns to drugs to people to counterfeits. With the exception of first-generation street gangs, these criminal organizations have a common motivation: profit. While some commentators dismiss them as a law enforcement problem, criminal organizations have demonstrated the ability to ally with both insurgents (Colombia) and terrorists as well as to seize and rule territory within a state (Mexico). Thus they can have an impact on the security of the United States, and our response may well go beyond law enforcement.

Hybrid Warfare

As if these challenges were not enough, we will also see the merging of state and nonstate actors in hybrid war. With Russia’s occupation of Crimea and eastern Ukraine, the concept of hybrid warfare became a major topic of discussion. Unfortunately, it also led to major confusion on what hybrid warfare is. In 2007, Frank Hoffman provided a clear definition:

Hybrid threats incorporate a full range of different modes of warfare including conventional capabilities, irregular tactics and formations, terrorist acts including indiscriminate violence and coercion, and criminal disorder. Hybrid Wars can be conducted by both states and a variety of non-state actors. These multi-modal activities can be conducted by separate units, or even by the same unit, but are generally operationally and tactically directed and coordinated within the main battlespace to achieve synergistic effects in the physical and psychological dimensions of conflict. The effects can be gained at all levels of war.⁶

In short, the military cannot focus on a single aspect of war but must be prepared to meet the full range of challenges at the same time in the same battlespace. Recent events in the Middle East and Eastern Europe have led to much discussion about hybrid war, gray zone conflict, and ambiguous actions. The discussion has done little to clarify the challenges the Department of Defense (DOD) faces. If one uses Hoffman's definition, the military aspects of each of these concepts are covered. In fact, hybrid warfare is not new. The participants on all sides in the Napoleonic and world wars used mixes of conventional operations, irregular operations, terrorism, and crime to achieve their goals. But while not new, the hybrid warfare concept as expressed by Hoffman is useful; it highlights for policymakers the range of challenges that must be met simultaneously in most conflicts.

Technology Converges, Power Diffuses

This does not mean technological changes are irrelevant to warfare. The convergence of dramatic improvements in electronic miniaturization, additive manufacturing, nanotechnology, artificial intelligence, space-like capabilities, and unmanned systems (drones) will significantly change the character of conflict in all domains. Of particular concern, this convergence is creating a massive increase in capabilities available to smaller political entities, extending even to the individual. Power is diffusing as capabilities that used to be the preserve of superpowers are becoming widely distributed among states and even some nonstate actors.

Electronic Miniaturization

We have watched electronic miniaturization transform almost every aspect of our lives. The cell phone combines the functions of dozens of stand-alone systems at a fraction of the weight and volume. Miniaturization is revolutionizing command and control and intelligence, surveillance, and reconnaissance systems as well as bringing smart technology to smaller weapons systems. Today even cheap miniature drones are capable of limited autonomous navigation and target selection.

Additive Manufacturing

Additive manufacturing (AM) is over 30 years old. It has been a useful tool for rapid prototyping to allow designers to see their final product in three dimensions. It also sparked a collection of hobbyists who were making a range of plastic items. However, in the last few years, AM, also known as three-dimensional (3D) printing, has exploded. It has gone from an interesting hobby to an industry producing a range of products

from a growing list of materials. AM is dramatically increasing the complexity of objects that it can produce while simultaneously improving speed and precision. It is progressing from a niche capability that produced prototypes to a manufacturing industry. United Parcel Service has created a factory of 100 printers with room to grow to 1,000.⁷ It accepts orders, prices them, prints them, and ships them the same day from the adjacent shipping facility. Recently Dr. Joseph Simone has demonstrated the ability to make 3D printing 100 times faster and has set a goal of making it 1,000 times faster, all while providing higher quality than current methods.⁸ Only three decades old, AM is rapidly encroaching on a wide range of traditional manufacturing. Soon it will allow small states and insurgent groups to print thousands of cheap drones.

Nanotechnology

Nanotechnology is science, engineering, and technology conducted at the nanoscale, which is about 1 to 100 nanometers. For comparison, a sheet of newspaper is about 100,000 nanometers thick. It was only in 1981 that nanotechnology was established.⁹ At the nanoscale, materials act very differently and thus provide opportunities in chemistry, biology, physics, material science, and engineering.

For the purpose of this discussion, nanotechnology is advancing in two areas of particular interest: energetics and materials. As early as 2002, nano-energetics (explosives) could generate twice the power of conventional explosives.¹⁰ Since research in this field is now close hold, it is difficult to say what progress has been made since then. Even if twice the power is as good as it gets, a 100-percent increase in destructive power of the same size weapon is a massive increase. Continued major improvements in the power of explosives steadily reduce the delivery system requirements—and thus favor the smaller state. If they come in to commercial use, they will also be available to nonstate actors.

The second area of interest is that of nanomaterials. This field has not advanced as far as nano-energetics, but numerous firms are applying nanomaterials to batteries and increasing their storage capacity.¹¹ In fact, a recent accidental discovery may triple battery power storage and increase battery life by a factor of four.¹² At the University of California, San Diego, researchers have found a cheap way to coat products with a super-thin, nonmetal material that manipulates radar waves and thus may lead to inexpensive stealth coatings for missiles and aircraft.¹³ Various experiments have demonstrated that the use of nanomaterials can greatly improve the strength of a given weight of material. These improvements in energy storage, materials, and explosives will lead to

increases in range, payload, and stealth for a wide variety of vehicles to include cheap drones.

Space and Space-Like Capabilities

Until recently cost and technology requirements limited the number of nations that could venture into space. This provided a great advantage to those few countries that could do so. The addition of cheap persistent space-based and air-breathing surveillance will soon provide small states and even nonstate actors access to a full suite of space and space-like capabilities. They will be able to surveil, communicate, and perhaps even attack in space. DOD has acknowledged the threat and is taking steps to protect U.S. space infrastructure.¹⁴

While states, particularly China, are steadily improving their own space capabilities, the democratization of space is being driven by private companies. Several companies are deploying cube satellites today. One, Skybox Imaging, has a goal of selling half-meter-resolution imagery with a revisit rate of several times a day—to include interpretation of what the buyer is seeing.¹⁵ The company's recent purchase by Google gives it the depth of resources necessary to bring this idea to fruition. Using this service, a buyer could track port, airfield, road, and rail system activity in near real time. Also, New Zealand's Rocket Lab is proposing to conduct weekly launches specifically for cube satellites to provide a rapid, cheap launch capability.¹⁶

Other companies are duplicating space capabilities with systems that remain in the atmosphere. Balloons like those of Google's Project Loon¹⁷ and drones such as the Global Observer drone¹⁸ and solar-powered follow-ons¹⁹ will provide space-like communications and surveillance capabilities at much lower costs.

Artificial Intelligence

Two areas of artificial intelligence are of particular importance in the evolution of small, smart, and cheap weapons: navigation and target identification. In fact, widely available systems have attained limited autonomy based on these capabilities. The U.S. Global Positioning System (GPS) has proven satisfactory for basic autonomous drone applications such as the Marine Corps KMAX logistics helo-drone in Afghanistan.²⁰ However, GPS will be insufficient for operations in narrow outdoor or indoor environments, dense urban areas, and areas in which it is jammed. Academic²¹ and commercial²² institutions are working hard to overcome the limitations of GPS to provide truly autonomous navigation for drones. Inertial and visual navigation are advancing rapidly and are already cheap enough to use in small agricultural drones.²³ The commercial ap-

plications for navigating in agricultural areas and inspecting buildings in urban areas clearly could be adapted for military uses. Such a system would serve to get a drone to the target area but would not ensure that it could hit a specific target. To select a specific target, there are already commercially available optical and multispectral recognition technologies in use that allow autonomous drones to attack specific classes of targets and perhaps specific targets.²⁴ And they are cheap.

Autonomy means drones will be highly resistant to jamming and will be able to operate in very large numbers. They can also be programmed to wait patiently prior to launch or even proceed to the area of the target but hide until a specified time or a specified target is identified.

Drones

Drone usage has spread widely. Most discussions of drones have focused on large, highly capable, and expensive drones such as the Predator or the Navy's X-47B. Too little discussion has considered the impact of small drones in all combat domains. While small drones can carry only a limited payload, this limitation can be overcome with three approaches. First is to think in terms of "bringing the detonator." The second is the use of explosively formed penetrators (EFPs).²⁵ The third is to employ swarms of small drones to magnify impact.

In "bringing the detonator," the objective is to simply detonate the large supply of explosive material provided at the target site by aircraft, vehicles, fuel, chemical facilities, and ammunition dumps. Against these targets (such as a parked airliner's wing root), even a few ounces of explosives delivered directly could initiate a much larger secondary explosion.

EFPs, weighing as little as a few ounces to a few pounds, will allow even small drones to damage or destroy armored and protected targets. In Iraq, coalition forces found EFPs in a variety of sizes, some powerful enough to destroy an Abrams tank. Others were small enough to fit in the hand—or on a small drone.²⁶ And of course nano-explosives can at least double the destructive power of the weapons. The primary limitation on EFP production was the requirement for the high-quality curved copper disks that form the penetrator when the charge is detonated. It required a skilled machinist with high-quality machine tools. Today, additive manufacturing can print copper.²⁷ Anyone with a 3D printer capable of using copper will be able to print an EFP disk. Thus we can expect small- and medium-sized drones to pack a significant punch against protected targets. The improvised explosive device (IED) of the future will be not merely "improvised" but also intelligent, inexpensive, long-range, and active hunters.

One can argue that such long-range autonomous drones will be difficult for nonstate actors to obtain for the next few years. That may be true. But today AeroVelo sells the FlexRotor drone that has a maximum range of 3,400 kilometers (km).²⁸ For shorter range missions, there is a variety of commercially available cheap drones that are already capable of hitting U.S. facilities such as Bagram, Afghanistan, or Taji, Iraq, when launched from within 20 to 40 km of the target. Given the Taliban's demonstrated ability to move within a few kilometers of Bagram, could we keep the airfield open against a threat like this? Would the benefits of doing so outweigh the costs?

The U.S. military is actively exploring the use of swarms for both naval and air applications.²⁹ While these programs are vague about how many drones they envision being able to employ, recent dramatic cost reductions in each of the needed technologies will increase the number by orders of magnitude. Researchers are using old 3D techniques to print a complex drone in a single day, then adding an Android phone to produce a \$2,500 autonomous drone.³⁰ Thus, a small factory with only 100 3D printers using Joseph DiSimone's process could potentially produce 10,000 drones a day. The limitation is no longer the printing but the assembly and shipment of products. How do we protect our air bases, headquarters, maintenance facilities, and supply centers in theater against potentially thousands of autonomous drones? Even if we could protect such fixed sites, how would we protect our vehicles, in particular soft-skinned vehicles such as fuel and ammunition trucks, when they are moving?

Nor will cheap drones be limited to the air. In 2010, Rutgers University launched an underwater "glider" drone that crossed the Atlantic Ocean unrefueled.³¹ Such drones are being used globally and cost about \$100,000.³² The U.S. Navy recently launched its own underwater glider that harvests energy from the ocean thermocline. It can patrol for weeks, surfacing only as needed to report and receive new instructions.³³ In short, small sea platforms have demonstrated the capability of achieving intercontinental range while producing very little in the way of signatures. Michigan Technological University plans to reduce the cost of oceanic gliders to about \$10,000.³⁴ These could be employed as self-deploying torpedoes or smart naval mines.³⁵ Current versions are launched by hand from small boats. They could be modified for launch from warships, commercial ships, or even the shore.

The convergence of new technologies discussed above may allow these small, smart, and cheap weapons based on land, sea, or air to dominate combat in these domains. Over time, the technology has become cheaper, more reliable, and more widely employed. We are seeing this

with the explosive growth in commercial drones. The *Economist* predicted 2015 would see the sale of 1 million drones.³⁶ Commercial demand is driving costs down while dramatically increasing capabilities. Advanced manufacturing techniques will soon make them cheap enough for small companies or even individuals to own a large swarm of simple and autonomous but powerful drones. For the first time since the Korean War, American forces will be subject to air attack.

Strategic Implications

Technological convergence will evolve over the next decade or two. It will have direct strategic impact on the United States in four principle ways: the loss of immunity to attack, the tactical dominance of defense, the return of mass, and a requirement to mobilize.

Loss of Immunity to Attack

The United States will cease to have a monopoly on long-range precision strike. China and Russia have repeatedly demonstrated this capability. However, long-range, relatively cheap, autonomous drones will provide this capability to many states and even to insurgent or terrorist groups. They will be able to project force at intercontinental range. These vehicles will provide the capability to strike air and sea ports of debarkation—and perhaps even embarkation. The United States will no longer be able to project power with impunity. This could create major political problems in sustaining a U.S. effort both domestically and internationally. Domestically, will the American public support distant actions if they result in a significant threat to the Nation's security or its economy? The “small, smart, and many” revolution will not only allow enemies to attack the United States, but it will also allow them to undermine our economy. Even a few self-deploying mines in key domestic or overseas container ports would drive up maritime insurance rates—and, hence, the cost of imported and exported goods.³⁷

Internationally, opponents could threaten intermediate bases. For instance, a great deal of our support for Iraq flows through Kuwait. Suppose ISIL demonstrates that it can hit an airliner sitting at Kuwait International Airport. Then ISIL states it will hold Kuwaiti airliners hostage until Kuwait withdraws landing and port rights for those nations supporting the Iraqi government. Is the West prepared to provide the level of defense required to protect key targets across the nations providing facilities in the Middle East and Europe? Will it expand the protection to all key targets in those states? Will those states trust our ability to do

so? If not, will those states accept risk to commercial assets to support U.S. actions?

Immunity from air attack is also gone. The Services must develop those defenses and then ensure they can cover the entire deployment and employment chains. Technological convergence means there are powerful, autonomous, stealthy sea and air drones in our immediate future. Defending against this threat is possible, but it will be expensive.

Tactically Dominant Defense

While these systems create a genuine threat to all nation-states, they and their descendants will provide a significant boost to anyone's defense. In state-versus-state war, this might create a situation similar to that existing between 1863 and 1917, when any person in range moving above the surface of the ground could be cheaply targeted and killed. The result was static trench warfare. Drone swarms may again make defense the tactically dominant form of warfare in ground, sea, and air domains and be able to attack the physical elements of the cyber domain.

As noted earlier, state actors could produce these small, autonomous drones in the tens of thousands. The Chinese have already demonstrated how to launch large numbers of drones with minimum force structure. They have mounted 18 Harpy drones in a launcher on a 20-foot trailer. The Harpy is a large drone with a 9-foot wingspan, a 500-km range, and a 32-kilogram payload.³⁸ Using a switchblade-sized system,³⁹ a 20-foot trailer could be modified to launch 1,500 drones. Thus a single battery of 6 trucks could launch 9,000 drones. New battery and fuel cell technology is extending the range of the small drones to 40 km. U.S. forces must be prepared to face thousands of autonomous short-range drones and dozens to hundreds of long-range drones. Today's U.S. forces could not sustain a ground offensive in the face of such a threat.

For their part, nonstate actors could use these systems to dramatically increase the cost of maintaining U.S. forces in a combat theater—what the Pentagon calls the area-denial challenge. The small size of many of these systems makes them ideal weapons for attacking U.S. airfields and base camps. Easy to hide, transport, and operate, cheap drones with even limited autonomy will require massive investment in the protection of U.S. logistics facilities and lines of communication in a tactical environment. Proponents of directed energy weapons—lasers and microwave systems—suggest their systems will defeat such swarms and thus return offense to the tactical battlefield. These systems will be expensive and power hungry and subject to defeat by relatively inexpensive countermeasures. While we must continue to develop these systems, we must also be aware that they put us on the wrong side of cost competition with

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cheap drones. It is imperative that these systems be tested against a thinking, reacting red team that employs countermeasures such as autonomy, smoke, and electromagnetic shielding. Most important is the willingness to adapt if the testing indicates swarms of small, smart systems can defeat our current inventory of few but exquisite ones.

Even if such systems become capable of defeating thousands of drones, they might also be able to defeat the much smaller number of conventional aircraft, guided bombs, and missiles the United States could deploy. This would reinforce the dominance of the defense.

At this point it is impossible to tell which will dominate. Thus it is essential that DOD run rigorous experiments to understand the character of such conflicts. If the experiments show the defense will become tactically dominant, DOD will have to determine how U.S. forces could exploit this situation to achieve its inherently offensive operational and strategic missions.

Return of Mass to the Battlefield

Since the 1980s, U.S. forces have bet on precision to defeat mass.⁴⁰ Precision helped numerically smaller allied forces defeat Iraq's much larger army (twice), as well as initially drive al Qaeda and the Taliban out of Afghanistan. However, technological convergence is pointing to the revival of mass (in terms of numbers) as a key combat multiplier. Current manufacturing techniques mean states can manufacture thousands of drones. Advances in additive manufacturing will make them cheaper and may make tens of thousands available to states and thousands to nonstate actors. How will our forces, which are dependent on a few, exquisite platforms—particularly sea and air—deal with the small, smart, and many?

Return of Mobilization

After the fall of the Soviet Union, the United States abandoned the concept of mobilization. A primary driver was the fact that the U.S. defense industry simply lacked the surge capability to rapidly equip a mobilized population. Mobilization in World War II was possible because industry could rapidly convert from civilian to military production. By 1990, the complexity of modern military weapons systems and limited capacity to produce them made rapid mobilization difficult if not impossible. As Richard Danzig has noted, modern manufacturing has been changing this situation.⁴¹ Additive manufacturing may radically change it. AM is inherently flexible since the product depends only on the materials the machine can use, the design of the machine, and the software that is loaded. Thus, as AM assumes a greater role in industry, the possibility of industrial mobilization will re-emerge. However, successful mobilization

is not only about producing the weapons. The Pentagon must also be prepared to enlist and train new personnel, build them into coherent units, and then move those units and the weapons to an overseas battlefield. Eliot Cohen has noted that successful mobilization will require significant peacetime planning, but the Pentagon is not even thinking about the issue.⁴²

Policy Implications

This diffusion of military power has implications for U.S. strategy, force structure, investment, and force posture. Scholars have proposed a range of U.S. grand strategies from restraint to aggressive interventionism.⁴³ Obviously, the strategy selected will drive our force design and our force posture. However, that strategy will itself have to deal with myriad risks posed by the diffusion of power and the kinds of threats we now face. Fundamental assumptions about traditional military power, including the viability of projecting force from the United States, become questionable when almost any enemy can strike selectively from in theater to the United States. While these attacks may not be militarily significant, they will be part of the political debate.

We may be entering an era in which small states and even nonstate actors will attempt to deter the United States through denial or punishment. They could achieve denial by interrupting the deployment chain, either by attacking intermediate staging bases or by tactical A2/AD. While the United States is developing methods for defeating A2 systems, we have made little or no progress on area-denial systems such as IEDs or even land and sea mines. Tomorrow's IEDs and mines will be mobile hunters with at least limited autonomy—and they will be available to any opponent with access to the Internet and a receiving address. In 2014, the mothers and friends of a battalion of Ukrainian soldiers purchased drones to provide the battalion with an aerial observation and spotting capability.⁴⁴

Adversaries might also adopt punishment as a way to deter or terminate U.S. involvement in a region. Would U.S. leaders risk even limited attacks on U.S. aircraft, military or civilian, anywhere on the ground to intervene in Syria? Would other nations provide flight transit or port rights if it meant their homelands would be subject to attacks on civilian aircraft or facilities? How much additional combat power would the United States have to dedicate to protecting both our lines of communications and allied infrastructure and population? Would our political willingness to engage decrease due to increased human and fiscal costs?

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Would our traditional allies stay aligned with us if our ability to sustain our access to key regions were imperiled or substantively reduced?

As a power projection nation, our deployment options may become more limited. We have to think through the implications of forward basing in theater versus basing in the United States and deploying only for a crisis. Our enemies and allies see the increasing density of A2/AD systems globally. It is essential we modify our planning accordingly. Wargaming must examine the operational impacts of fighting a variety of enemies with long-range sea and air precision strike. China will not be the only power to own such systems. Just as importantly, wargaming must explore the political implications when an enemy can threaten other nations that support our deployment chain. (Japan, for example, is crucial to any effort to help defend South Korea and could easily be targeted by the North Korean regime in time of war.) Accordingly, we must seek methods to attack an opponent's strategy rather than simply destroying its forces.

We need wide-ranging research and supporting analysis as well as wargames to address key questions. Deputy Secretary of Defense Robert Work's memorandum on wargaming is a very strong first step.⁴⁵ Continuing research is required to answer a wide range of questions:

- Most importantly, how can strategy neutralize potential opponents' strategies? For instance, how do we counter the perception that China may be able to exclude U.S. forces from the region? What steps can we take to assure allies that in fact we can honor our treaty obligations?
- How do we protect those nations providing support as we do so—in particular, the politically sensitive targets that can be attacked with long-range, precise, but relatively low-explosive-weight weapons?
- If we forward deploy, how dispersed will forward forces have to be to survive? How much would we have to invest in hardening forward bases versus investing in protecting stateside bases and building the lift necessary to deploy?
- What are the political/alliance costs if we choose to station fewer forces forward?
- Are we willing to employ long-range strike from the United States if we know the enemy can reply in kind?

- Once forces are deployed, how do they operate in the presence of swarms of smart weapons?
- Do we need to deploy more forces forward to ensure they are there for the fight? Or should we just preposition the equipment and supplies? Or are both supplies and forces safer out of the potential theater of operation?

Whether forward deployed or deployed in a crisis, the increased vulnerability of U.S. forces to standoff attack and resultant requirement for hardening and dispersion will dramatically impact our force structure. Hardening, to include digging in whenever not moving, will require increased engineering assets, while dispersion will require international agreements as well as increased logistic, force protection, and command and control assets.

As the United States develops its strategy and subsequent force posture, it will also have to rethink its procurement focus. Is the current plan of purchasing a few extremely capable platforms viable in a world where cheap, smart weapons in large numbers will actively hunt those exquisite platforms? Or should the Pentagon move to a concept of large numbers of much cheaper but individually less-capable platforms? Or is a mix a better solution?

This will not be an easy process with clear decision points. If the development of this new generation of weapons mirrors our past experience, it will take place over a decade or two. The new systems will first support our legacy systems, then the legacy systems will support them, and finally the new systems will completely supplant our legacy systems. Compounding the difficulty of deciding when to shift investment is the fact that we plan to use the weapons we are buying/developing today for decades. Will a *Ford*-class carrier be like the battleships of 1920—dominant at the time of purchase but nearly irrelevant two decades later? If so, when do we stop investing in carriers? Given the political reality, is it even possible to stop investing in new carriers? While extremely difficult, this transition represents one of the critical investment decisions facing Pentagon planners. Similar questions arise about manned aircraft systems, along with the attendant political issues of cancelling or reducing one of these programs.

Perhaps the biggest threat to success lies in our sclerotic development and acquisition process. The convergence of technologies is leading to extremely rapid increases in capabilities in all related fields. Clearly our 10-year development and initial fielding cycle cannot compete.

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The convergence of technology and the resultant diffusion of power should force thoughtful consideration of both policy and strategy. Perhaps the fundamental policy question will be a reconsideration of how and under what circumstances the United States can use military force to influence international events. Increasingly, we will have to ask the question: “Is the strategic benefit of an intervention worth the cost when the enemy could strike back in and out of theater?”

Summary

The underlying nature of war will not change, but the number and variety of conflicts will likely continue to increase. Certainly the convergence of new technologies will alter the character of conflict over time, but no matter what technology is employed to abet intelligence collection and human decisionmaking, policymakers will not have a clear understanding about what is happening or what to do about it. In fact, it is almost certain that the best experts on the subject will disagree on both aspects. Every administration has had to deal with these “wicked” problems. Fortunately, there is a growing body of literature articulating various approaches to do so.⁴⁶

Technological convergence is already changing the character of war. It is markedly altering the relative power among states and between state and nonstate actors. The phenomenon of small states possessing the military capabilities and perhaps capacities of large states is a new development that will create new challenges. Some of these challenges undercut key pillars and assumptions of our current defense strategy. However, they will not change the fact that conflict is driven by the interaction of the participants’ social, economic, and political structures.⁴⁷ Policymakers must drive the Pentagon to actively explore the implications of the changing character of war. Secretary of Defense Ashton Carter’s Strategic Capabilities Office is a great start.⁴⁸ Furthermore, it must honestly test legacy systems against emerging capabilities in free-play exercises. But understanding the impact of technology must be grounded in the reality that conflict will remain a political competition driven by human ingenuity tied to the societies in conflict. If anything is certain, it is that war will continue to be dominated by this element above all others.

Notes

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U.S. Defense Policy and Strategy

FG. Hoffman

To guide the development of the Armed Forces, the new team at the Pentagon will need an updated force design mechanism to size and shape that force. This chapter offers options and guidance for two major components of U.S. defense policy: alternative force design constructs and design principles. These force constructs are not the strategy itself, but they are the requisite building blocks and guidance that defense policymakers use to shape the desired force and explain that force in its requests for the funding required from the American people.

The need for a well-crafted U.S. defense strategy has never been greater since the end of the Cold War.¹ Today the United States confronts revisionist powers in three different regions (Russia in Europe, China in Asia, and Iran in the Middle East) that impinge on its vital interests and close allies. North Korea remains in a class by itself, an isolated but dangerous threat to two U.S. allies. In different ways, each of these powers is undermining and seeking to alter a U.S.-led, rules-based international system that enabled a lengthy era of stability and shared economic prosperity. The scale of the challenge they pose substantially exceeds that of the failed states and violent extremist organizations that have occupied policy during the past 15 years.

Any new administration will face a host of challenges, arguably with instruments and tools that, at least initially, are not well suited to the complex tasks at hand.² Currently our defense enterprise is facing an expanding mission range and increasingly constrained resources. Our present strategy hinges on sustaining deterrence but without the same degree of military dominance enjoyed in the past and with an admitted declining margin of technological superiority, producing appreciably increased risk.³ As Andrew Krepinevich has noted, “All other factors being equal, the decline in resources projected to be devoted to defense relative to those being invested by the revisionist powers suggest the United

States is accumulating risk to its ability to preserve security interests at an alarming rate, one that even a well-designed strategy may be unable to offset.”⁴

U.S. defense policy and strategy, of necessity, must account for many factors and incorporate many competing elements. They must incorporate the Nation’s defined interests, its geographical realities and territorial security, overarching grand strategy, alliance structure, and war plans and existing doctrine. Just as important, our strategy must account for potential challengers to U.S. interests, as well as the opportunities presented by ever-evolving technology trends. Finally, policymakers must be cognizant of the strategic planning, acquisition, and personnel systems that shape the fundamental outputs of policy and defense strategy.

At present, there is a growing deficit between our strategic aspirations and the resources allocated to obtain them.⁵ The outlook on future requirements that shapes today’s force planning is framed less by a realistic view of the challenges looming ahead and more by current fiscal constraints. Though defense resources appear high relative to past periods, a closer look shows less real capability due to rising personnel costs and unsustainable trends in our acquisition plans.⁶ Additionally, the U.S. defense budget supports a substantial overhead in terms of staffs, bases, and infrastructure. The result is that American taxpayers are spending in constant dollars as much as they were at the height of the Ronald Reagan-era buildup, but for a force structure at least 30 percent smaller.⁷ While many elements are more capable than previous platforms and formations, quantity counts for something, too. Moreover, the relative power advantage that the United States has enjoyed is steadily declining, and defense leaders have publicly recognized the need to address the erosion of the technological edge that undergirds U.S. military superiority.⁸

Effective strategy is the result of carefully aligning policy goals to realistic objectives with the resources necessary to obtain them.⁹ This strategic coherence, achieving the right balance between ends, ways, and means, is the most critical consideration in strategy. At the same time, resource constraints—limited means—are a constant reality in modern force planning and are more acute during periods of downsizing.¹⁰ This conundrum is driving the search for more innovative “ways” in U.S. defense strategy.

To guide the development of the force of the future, the Pentagon will need an updated force design mechanism to size and shape that force. Accordingly, this chapter focuses on two major components of U.S. defense policy: force design (sizing/shaping) constructs and design principles. In the context of these two elements, this chapter offers alternatives to our existing strategic framework and evaluates each of

them. These force constructs are not the strategy itself, but they are the requisite building blocks and guidance that defense policymakers use to shape the desired force and explain that force in its requests for the funding required from the American people.¹¹

Strategy and Force Design

Ever since the Berlin Wall fell, U.S. defense policy has had to continuously adapt its strategy and force planning mechanisms both to better define the size of the force needed to execute our strategy and to determine what kind of forces were best suited for an evolving security environment. Both the overall size of the force and its *shape* are important outputs of defense policy. Force planners speak of the *capabilities* (the kind of force in terms of land, sea, air, or space power) we can bring to bear and the overall *capacity* (how much) of each. To assess the risk involved in force design, policymakers employ various force planning constructs that usually center on the number and scale of conflicts (major regional wars or lesser contingencies) plausibly expected to be deterred or responded to. They must also make assumptions and estimates about the length of such wars and whether they might occur simultaneously.

During the Cold War, there was a general consensus about force size and threats. But after the devolution of the Soviet Union, new constructs became the critical building blocks of any defense strategy going back to the Base Force designed by General Colin Powell, USA, after Operation *Desert Storm* and the subsequent Bottom-Up Review of the early Bill Clinton administration.¹² These both employed a “two war” construct in defining a post–Cold War American military.¹³

The “two-war” model was criticized for its emphasis on maintaining force capacity without consideration of a larger strategy to prevent wars.¹⁴ A desire for a “peace dividend” generated a brief adoption of a win-hold-win framework that reduced the need for large forces by dropping the requirement for two overlapping campaigns. Criticism of this motivated Congress to establish a commission in 1997 to assess post–Cold War defense planning. This commission concluded that the “the two-theater construct has been a useful mechanism for determining what forces to retain as the Cold War came to a close, [and] to some degree, it remains a useful mechanism today.”¹⁵

Around the same time, the Hart-Rudman Commission criticized the two major theater war (MTW) yardstick for “not producing the capabilities needed for the varied and complex contingencies now occurring and likely to increase in the years ahead.” It called for forces for stability operations and homeland security, different from those designed for ma-

jor theater war.¹⁶ The Pentagon established a working group to explore force-sizing yardsticks and risk assessment techniques prior to the 2001 Quadrennial Defense Review (QDR).¹⁷

The George W. Bush administration's approach, called the "4-2-1 strategy," emphasized forward deterrence in four defined regions: Europe, Mideast and Southwest Asia, Northeast Asia, and East Asia.¹⁸ This framework defined a force required to be able to "swiftly defeat" two different opponents but "win decisively" in one of those conflicts. Winning "decisively" included the capacity to enforce a regime change instead of simply defeating the adversary's military.

The Barack Obama administration's first effort in this area was the 2010 QDR, which employed a sophisticated framework for shaping and sizing the future force.¹⁹ Department of Defense (DOD) planners employed several scenario combinations to represent the range of likely and/or significant challenges and tested its force capacity against them. The QDR concluded that it was "no longer appropriate to speak of 'major regional conflicts' as the sole or even the primary template for sizing and shaping U.S. forces."²⁰

The Pentagon's Defense Strategic Guidance (DSG) of 2012 attempted to square defense planning with major reductions mandated by the Budget Control Act.²¹ The DSG altered the "win two wars" framework by defining a force that could conduct a large-scale operation in one region, *"capable of denying the objectives of—or imposing unacceptable costs on—an opportunistic aggressor in a second region."*²² This "win/deny" framework has been the major shaping tool for several budget cycles.²³

However, the likelihood that the United States would find itself in two significant wars at once is not really the question that many strategists and defense policymakers actually consider. Instead, their focus is on deterring and preventing conflict. Both the international order and our alliance system are predicated upon U.S. core capabilities and their credibility. America's treaty commitments and alliance systems, and a projected environment of great power tension, augur clearly for the capacity to successfully engage in more than one conflict.²⁴ There is no shortage of possible combinations of crises in Europe, Asia, and the Middle East that would directly impact our core interests and require a response.²⁵

Constrained by reduced forces, the United States will find it difficult to play its historical role as a guarantor of a stable global system, a rules-based international and economic order that has widely benefited much of the world. The various regional chapters in this volume give additional credence to foreseeable demands for U.S. engagement and support. Given that conflict in the 21st century appears to be both increasing in frequency and lethality (compared to the last 25 years),

demand for U.S. forces is increasing, and the potential exists for longer duration conflicts.²⁶ Our policy and force design should recognize and strive to resolve this demand signal.

Force Design Options

Having established the evolution of past U.S. force designs, this section turns to the future. The option set explored here is framed by an assumption about resources that should be explicitly laid out. While the evolving strategic environment poses rising tensions between regional powers and revanchist regimes, U.S. domestic political forces will constrain the allocation of resources for security. The U.S. debt load is approaching 100 percent of gross domestic product, and the national interest payments will at some point rival our defense budget. U.S. demographics will continue to exert upward pressure on domestic spending for social security and medical insurance. Moreover, the recent electoral campaign gave scant evidence that the U.S. taxpayer is willing to sacrifice existing entitlement programs in support of protracted policing of the world or global hegemony. Hence, defense policymakers should not expect significant additional funding and will need to ruthlessly attack inefficiencies in overhead, acquisition, and personnel practices to preserve force levels and readiness as a matter of priority.

Table 1. Alternative Strategies and Force Sizing/Shaping Constructs				
	Selected Partnership: "Win + Deny"	Enduring Engagement: "1 + 2"	Forward Cooperative Security	Decisive Force: "Win 2 MTW"
Reassurance	Reduced	Reduced further	Limited to naval force	Enhanced
Deterrence	Moderate	Reduced	Reduced to a degree	Enhanced
Warfighting Capacity	Unbalanced	Reduced to enhance stability	Higher for naval expeditionary forces	Maximized for joint operations
Forward-Deployed Posture	Reduced	Forward	Forward naval forces in three hubs	Adapted to better support NATO
Role of Reserve	Operational Reserve	Less reliant on Guard	Operational Reserve	Strategic Reserve
Investment Priorities	Naval forces and aerospace power projection, BMD	Ground forces but add building-partner capacity and nonmilitary skills	Naval forces, submarines, unmanned ISR	Balanced in three major domains
Total Costs (in USD billions)	\$535–\$550	\$500	\$550	\$600

Table 2. Illustrative U.S. Military Force Composition				
	Selected Partnership: "Win + Deny"	Enduring Engagement: "1 + 2"	Forward Cooperative Partnership	Decisive Force: "Win 2 MTW"
Navy Ships Carriers Attack Submarines Surface Combatants/ Amphibious	282 11 40 88/29	240–250 9 Less than 40 78/18	346 9 <i>Ford</i> -class, 3 <i>America</i> -class 48 118/33	308 12 55 120/38
Air Force Fighter/ Attack (4 th - and 5 th - Generation Planes)	1,050 (648/402)	915 (568/347)	721 (440/281)	1,150 (748/402)
Army Divisions Active/Reserve End Strength (thousands)	8 440/530	10 490/430	6 <400/450	12 540/490
Marine Regiments Active Strength (thousands)	7 175	7 167	6 180	9 186
Special Operations	Baseline: 63,000	Increased 10 percent	Reduced 10 percent	Reduced 15 percent
Strategic Deterrent	Triad, 14 SSBNs	Triad, 12 SSBNs	Dyad	Triad, 12 SSBNs, nonstealthy bomber
Budget (in USD billions)	\$535–\$550	\$535	\$550	\$600+

While there is some value in defining a much larger military force that would allow the United States to be everywhere and fulfill all possible missions, there is greater value in helping the next team of defense policymakers with clear priorities about where to apply funding resources. Resource constraints, uncertainty, and risk are the constants of strategic planning, and we cannot escape them. Thus the option set of strategy/force designs examined here range from the Budget Control Acts levels of around \$500 billion to just above \$600 billion per year.

The following portion of this chapter evaluates the Obama administration's strategy and force levels against three alternative defense strategies and force design constructs. The outlines of each strategy are detailed and assessed, a summary of which is presented in table 1. Illustrative force structure mixes for each of the options are presented in table 2.²⁷

Selective Partnership (Win/Deny)

The Obama administration sought to sustain America's leadership role, adapt to strategic competition in Asia, and enhance partnership capabilities where needed. Its defense strategy has been one of selective partnership because the regional priorities and resource constraints imposed on DOD required priorities, and the 2015 National Securi-

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ty Strategy details specific regional priorities, and heavily emphasized partnerships. The planning force construct employed over the last 8 years justified enough ground combat power for forward engagement and one war, and an Air Force and Navy capable of fully contributing in one major war while providing the punishing strike assets to deny an aggressor state in the second scenario. This construct is aimed at the ability to conduct two nearly simultaneous wars, and it provides a limited degree of both reassurance to allies and deterrence to opportunistic aggressors. However, it does this to a lesser degree than did U.S. defense strategies prior to 2010 since it reduces conventional combat power and forward presence levels in Europe. Additionally, because it generates a joint force limited to defeating an opponent in only one theater, U.S. allies/partners are less reassured. They have to be wary of their position should their region be challenged after the United States has had to react to another crisis elsewhere. The force structure derived from this force-sizing construct is displayed in the “Win/Deny” option in the first column in table 2. This planning construct remains the basis for U.S. defense policy, but it is somewhat challenged by sequestration and underfunding.

Enduring Engagement (Win 1+2)

Another option, offered by Michael O'Hanlon of the Brookings Institution, proposes a revised yardstick for the Pentagon to use to base both the shape and the size of the Army. O'Hanlon's framework accounts for one major war, with two simultaneous prolonged smaller conflicts. These could be a protracted stabilization mission, a long counterinsurgency campaign, or an international response to a major disaster. He refers to this as a “1+2” planning paradigm. This framework emphasizes the role of land power in obtaining political objectives and in producing sustainable results in failed states, postconflict stabilization tasks, and major disasters.

O'Hanlon estimates the United States would require at least 20 ground maneuver brigades (Army brigades and Marine regiments) for the major conflict and no less than 18 additional brigade equivalents to handle each of the two smaller conflicts and their rotation base. Thus, he calculates a planning force of 56 active brigades. He is not optimistic about allied partners augmenting U.S. capacity or about the National Guard responding to the threats/scenarios in a timely manner. O'Hanlon notes, “The notion that even with a few months of full-time training, they can reliably be expected to perform as well as active duty units in the early going of a future military operation is suspect.”²⁸

This planning construct does an excellent job of focusing on the most likely scenarios that we could face and offers greater specialization for the full spectrum of conflict.²⁹ The character of the “+2” crises explains the size and desired capabilities for land forces and would no doubt shape the required airpower support (a greater emphasis on close air support, intelligence, surveillance, and reconnaissance systems, remotely piloted strike, and logistics) that the joint force has enjoyed from its aerospace assets in Iraq and Afghanistan. Reduction in short-legged, fifth-generation fighters could pay for these increases.

This option provides a more robust capacity for a global and protracted conflict against violent extremist organizations with additive special operations forces assets for persistent but low footprint forms of warfare.³⁰ Countering unconventional modes of conflict would be a principal role for U.S. Special Operations Command in this option.³¹ It would include a sizable increase to special forces above the current baseline of 63,000 Active troops and 12,000 civilians/contractors.³² Using this alternative planning paradigm, both reassurance and deterrence are reduced further by the reduction of high-end joint warfighting capacity. No doubt, some allies would not be convinced that our strategy satisfied their security concerns.

This force design covers the most likely scenarios but falls short in generating forces for the most dangerous ones. It would be better balanced between traditional military warfighting and nontraditional conflict stabilization tasks, with specialized forces designed, trained, and equipped for their specific tasks. However, the risk generated by force specialization is the loss of versatile combat forces. Table 2 illustrates more specific potential Service end strength and major formation changes to support this option.

Forward Cooperative Security

As its name suggests, this strategy operates forward with alliances and partners to leverage cooperative and preventive actions to preclude conflicts before they occur.³³ In direct contrast with the previous option, it emphasizes forward-deployed naval power to generate and sustain preventive actions and promote true partnerships. This strategy exploits command of the commons to both generate and sustain freedom of action for our alliances and partners.³⁴ Maritime forces would operate forward, ready to control the global commons and critical international chokepoints and trade links.³⁵ Given its emphasis on maritime power, a larger Navy would be the principal element of this strategy—one sized at roughly 346 ships, per the recommendations of the independent National Defense Panel. Both the surface Navy and the attack submarine

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force would be our principal instrument of regional deterrence, including a robust ballistic missile defense-capable surface force.³⁶

The force design implications of this strategy include:

- prioritization of naval assets to generate both strategic and operational freedom of action in priority regions and the ability to exploit the global commons to shift resources flexibly
- exploitation of the undersea warfare competition by increasing our attack submarine force
- prioritization of long-range maritime and aerospace power projection platforms to generate and sustain access to critical regions and flashpoints; carrier-based assets (9 large nuclear *Ford*-class and 3 smaller *America*-class carriers) would emphasize long-range unmanned systems³⁷
- maintenance of a mobile crisis response posture (Marine Expeditionary Units or airborne) exploiting freedom of maneuver and action wherever needed
- preservation of strategic mobility to project a decisive joint combined arms force from the continental United States.

This option might be thought of as the “prevent forward/win by surge” strategy. This strategy focuses on assuring access to key regions and maintaining the global commons. This option generates deterrence and reassurance through the routine deployment of credible naval power projection assets and through increased undersea warfare capacity with additional strike capabilities.³⁸ Rather than being sized to fight wars, this strategy is more preventative but still retains a potent and modernized single MTW capacity. It affords more flexibility in posturing forces in regions where land forces might be politically or military vulnerable. But reduced land forces might be perceived as less credible in terms of commitment and deterrence. The basic building blocks are displayed in the third column of table 2.

Decisive Force: Win Two MTWs

This option maximizes the joint force’s capacity to conduct high-intensity, sustained, combined arms warfare. It incorporates the assessments of various think tanks that the U.S. military is undersized.³⁹ This option is designed to maximize reassurance and conventional deterrence for in-

terstate warfare. It provides for a balanced and conventionally oriented joint warfighting force with robust capacity. It would be an inherently versatile force with the proper doctrine and training for full-spectrum operations.

Capable and balanced joint forces represent the ultimate in conventional deterrence and reassurance of our treaty partners. Land power is an essential element of that joint force and while not the principal force in every scenario, it is critical to strategic results in all campaigns waged on land. While the Pacific may be thought of as a maritime theater, “in reality, U.S. land forces . . . are vital to the nation’s capabilities in the Pacific.”⁴⁰ The option does not deny the critical need for potent naval and air forces but rather emphasizes the value of balance.

This option would reverse recent trends in cutting back on land power. U.S. defense policy has designed and resourced an Army capable of fighting one major regional contingency, but it would take months to generate sufficient forces to win a second.⁴¹ If sequestration and current budget plans hold, the Active Army will be driven to a ceiling of 420,000 and the Marine Corps below 170,000, yielding a land force of some eight Army and two-and-one-third Marine division equivalents.⁴² At this level of manning, most Army divisions will not be full strength. This force falls far short of what is projected as needed to fight and decisively win two MTWs.

Many defense analysts have become comfortable with the four to five Army divisions allocated to an MTW from the 1990s Base Force models and similar analyses. One should keep in mind that these planning yardsticks were framed in the early days of the post-Cold War era when America’s military power was at a zenith and when significant rivals did not exist. Moreover, these frameworks were developed for opponents in an age before the diffusion of advanced military capabilities to middle powers occurred. Both past historical experiences of major wars and projections into the future suggest that larger ground formations, no less than six Army divisions and a reinforced Marine expeditionary force per MTW, would be needed in pacing scenarios in Asia.⁴³

While the current plan reduces the Army from 5 to 3 heavy divisions—and reduces the readiness levels and manning of the Army—this option builds up to 12 divisions.⁴⁴ At least five of the Active Army divisions would be “heavy” or armored. This option yields important political dividends, reassures allies and partners, and makes conflict less likely.

This force is also better postured to cope with an MTW that persists beyond 6 months, providing divisions that can be rotated in. Should either conflict persist beyond 12 months, the Nation’s strategic reserve in the form of the National Guard can be employed. Land power will

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be a component of the force required to win those two conflicts as well as transition to a sustainable, stable peace. They are an essential part of our joint warfighting portfolio, completely essential to securing strategic effects that U.S. policymakers will ultimately require.⁴⁵

Unlike the first three options, the two-MTW decisive force option generates sufficient credible combat power forces to reestablish some additive forces outside the continental United States. Additional Army end strength for the two divisions would not necessarily come at the expense of current major procurement programs. Such an increase is affordable (at an expense of roughly \$6 billion per division). Greater attention to defense reforms in acquisition, personnel/ compensation, and overhead reduction could provide the resources to sustain an adequate force structure of this size.

Principles

A new administration should consider a number of key principles in its force design and development efforts. These principles are not an exclusive list but offer guidance to steer the U.S. military as it adapts to the rapidly changing strategic environment.

Embrace Uncertainty

The ability of U.S. strategists to predict the time, place, and character of wars has been “uniformly dismal.”⁴⁶ When one considers general principles about force planning, one cannot escape the conclusions of Colin Gray:

*We will certainly be surprised in the future, so it is our task now to try to plan against the effects of some deeply unsettling surprises. The key to victory here is not the expensive creation of new conceptual, methodological, or electro-mechanical tools of prediction. Rather it is to pursue defense and security planning on the principles of minimum regrets and considerable flexibility and adaptability.*⁴⁷

Minimizing regrets is not achieved with better computer-aided powers of prediction or by maximizing investments in a narrow or specific warfighting area. We cannot predict the future with consistent accuracy, and we should not be tempted to believe there is some wonderful methodology that enables American planners to gaze deep into the 21st century with precision.

As Professor Gray noted, “Expect to be surprised. To win as a defense planner is not to avoid surprise. To win is to have planned in such a manner that the effects of surprise do not inflict lethal damage.”⁴⁸ Tradeoffs and resource constraints are crucial to the exercise of strategy, but so is the recognition of risks and uncertainty.

Prepare for Longer and Harder Wars

Avoiding “lethal damage” by surprise also involves assessment about the character of future wars. As noted by former Chairman of the Joint Chiefs General Martin Dempsey in his QDR risk assessment 2 years ago, we need to prepare for more difficult conventional fights.⁴⁹ The Chairman reinforced that assessment in the National Military Strategy, warning that “we are more likely to face prolonged campaigns than conflicts that are resolved quickly . . . that control of escalation is becoming more difficult and more important.”⁵⁰ The “Army for the Future” report concluded that under the planning assumptions directed by the Pentagon and with the current fiscal year 2017 programmed force, “the Army is, in fact, neither sized nor shaped for conducting any kind of large-scale, long duration mission at acceptable risk.”⁵¹ This confirms other analyses by RAND.⁵²

Deterring rising competitors will also be harder, and there is more to deterring a major state such as China than buying a lot of robots or fifth-generation aircraft.⁵³ Our potential adversaries know our vulnerabilities, they are adaptive, and they will construct combinations that will outmatch some of our own capabilities.⁵⁴

Emphasize Force Design Versatility

Versatility is based on a breadth of competencies versus a collection of specialized organizations or players. It is difficult for general purpose forces to achieve full-spectrum coverage, but having forces prepared for high-intensity combat is the critical task. Some specialized units that are ready on day one for unique circumstances may also be required. Versatility is dependent on adequate resources, the time to absorb a wide array of scenarios, and investments in education and flexible doctrine so that leaders are both mentally prepared to apply best practices for the scenarios they are expected to be prepared for and have the requisite critical thinking skills to react to new contexts. Agility is a measurement of how easily and how quickly an organization can shift between competencies and execute them equally well.⁵⁵ In the past, we measured agility across the conflict spectrum in increments of months. We (and our allies) cannot afford the luxury of months anymore.

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Given that we cannot predict the place or nature of future military engagements, as former Secretary of Defense Robert Gates has noted, “We must place a premium on acquiring equipment and providing training that give our forces the most versatile possible capabilities across the broadest possible spectrum of conflict.”⁵⁶ Thus versatility is not merely desirable but essential when enemies are either vague or proliferating, when the time and place of the contest is uncertain, and when technologies are in dynamic flux. The core competencies required for high-intensity combined arms warfare are the essential foundation for generating versatility. This is not “Cold War” thinking, but a sober realization of the fact that high-intensity, major theater war poses the greatest challenge to core U.S. interests and thus deserves the highest prioritization.

Ensure Force Balance

One of the principal elements of a sound joint force design is a balanced force capable of generating options for decisionmakers in many contexts, and at the operational level, generating dilemmas for our opponents.⁵⁷ We may no longer have the overall size of the force we need to execute our national strategy at low risk, but we should be able to preserve a high-quality and balanced force as our hedge against uncertainty.⁵⁸

Technology cannot significantly offset the need for a balanced joint force, nor can it guarantee short wars.⁵⁹ Our forces have to cover a wide range of missions and forms of terrain, and they have to be rugged and reliable instead of exquisite and expensive. Of late we have been succumbing, almost subconsciously, to buying fewer numbers of more expensive platforms.⁶⁰ The end result is a kind of self-defeating approach in which we generate a smaller force structure unable to sustain desired forward presence tasks and impose more costs on ourselves than our adversary.

Certainly advanced forms of technology can benefit U.S. military performance in all domains, enhancing command and control, intelligence, undersea warfare, missile defense, and so forth. Over the last generation, America’s prowess in precision strike operations has been materially improved. But rarely have we applied the same level of investment toward enhancing its land power forces. For example, the U.S. Army’s modernization and research accounts are dramatically lower.⁶¹

A survey of the world’s trouble spots suggests that land warfare has more of a future than many now seem to believe. This does not suggest that we should not pursue strategic technological breakthroughs; we should explore innovation in all forms in a dedicated effort to arrest the erosion of our military edge.⁶² It just means that we need to pursue more than one domain in our option set.

Overall, a premium should be placed on forces that can do more than one thing. Therefore, providing flexibility across all domains should be foremost among the decision criteria we apply to our future military.⁶³ Airpower, by itself, will again prove effective but not decisive in isolation. U.S. force planning should hedge by providing general capabilities and organizational agility that allow both strategic and operational adaptations to unanticipated developments.⁶⁴ We should seek to invest to ensure that the joint force is as dominant on the ground as our sea and air Services currently are in their respective domains.⁶⁵

Recommendations

In order to better shape and size the force of the future, a number of recommendations are offered.

Reestablish a “Win Two Modern MTW” Force Construct

To reflect the principle of prudence and awareness of the evolving strategic environment, the Pentagon should return to a clearer “win two modern wars” construct and plan to do so with balanced combined arms forces. The “modern” in this construct highlights the need, per the Force of the Future initiative, to build a force for the 21st century that would include accelerated efforts to develop competitive capabilities that offset our lost materiel edge in critical domains. In recognition of coalition contributions and fiscal constraints, the Pentagon should frame its conventional force capacity within a framework that incorporates the roles of allies in Asia and Europe, or what might be called a “win one unilaterally, win one in coalition” yardstick. We should think in terms of our coalition partners, yet be honest about what our allies can actually deliver in terms of hard power.⁶⁶ This construct matches our strategic interests but recognizes the limits of our resources and capacity. It also precludes weak coalition partners from presuming that they do not have to invest in their own security capacity by relying upon U.S. taxpayers for their defense. The illustrative force structure to fulfill this option is contrasted with the current plan in table 3.

The joint force would be balanced for combined arms warfare, including 10 carriers and a slightly larger Navy of 290 ships. The Department of the Navy has plans for a larger fleet but underfunds its own shipbuilding accounts.⁶⁷ We should shore up that funding, exploiting long-term contracts to drive increased efficiency into the shipbuilding plans. Consideration should also be given to expanding naval forward presence without having to invest in so many vessels for rotational deployments.⁶⁸

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Table 3. Comparison of Current Forces with “Win 2 MTW” Design Construct		
	Current Forces	Win 2 MTW
Navy Ships	282	290
Carriers	11	10
Attack Submarines	40	48
Surface Combatants/Amphibious	98/30	100/33
Air Force Fighter/Attack Aircraft (4 th - /5 th -Generation)	1,050 (648/402)	820 (432/388) Additional UAV
Army Divisions Active/Reserve End Strength (thousands)	8 equivalent 440/530	10 fully manned 490/460
Marines Regiments Active End Strength (thousands)	7 176	7 182
Special Operations	Baseline	Baseline military but 20 percent fewer contractors
Strategic Deterrent	Triad, 14 SSBNs	Dyad, 10 <i>Ohio</i> -class replacement submarines; nonstealthy bomber with long- range standoff weapon
Defense Budget (in USD billions)	\$535	\$550

The illustrative force would sustain a robust and unsurpassed Air Force with both fourth- and fifth-generation fighters. There are arguments that our technology edge is eroding and that we are facing the receding frontiers of U.S. dominance in comparison to rising competitors.⁶⁹ Yet any holistic analysis of U.S. capabilities and capacity would show how far ahead we are in terms of aerospace and naval forces, including our command and control, human capital, training, experience, and systems integration. While continued investment in aerospace superiority is needed, greater attention to unmanned systems is warranted over short-legged manned systems. The notion that further cuts to ground forces provide the best candidates for savings for offsetting resources for increase aviation capability is not well grounded when exploring the full range of scenarios.⁷⁰

The programmed land combat force structure for 2020 is not adequate to the strategic objectives assigned by the current strategy, and it incurs higher risk. A modernization bow wave just beyond the current budget profile reinforces this assessment. Delaying modernization within DOD is possible. However, we need to manage the industrial base carefully and understand that we face the emergence of larger powers with greater access to modern capabilities. Delayed modernization may not deter rising powers, reassure friends, or posture us to respond appropriately. At present, Army research funding is paltry, and the lack of any new land combat systems in development that carry the Army forward against credible opponents in the 21st century is a mounting concern.⁷¹

The illustrative force design includes a total of 10 fully manned Active-duty Army divisions, including 5 heavy divisions. The costs of increasing our conventional force deterrent could be offset by savings generated by personnel reforms, base closures, overhead reductions, and better acquisition decisions. The resources to support additional land power would come from these reform initiatives. Further savings would be allocated from more targeted investments in strategic forces.

Reinvigorate Mobilization Planning

Our strategy should not assume short wars, a frequent optimistic flaw in American planning.⁷² Several notable scholars and military experts have recently noted the need to once again think in terms of national mobilization for manpower, unique civilian skills in cyber security, or industrial surge.⁷³ There are traditional elements of the U.S. industrial base that warrant special attention, and there are breakthrough technologies, particularly additive manufacturing, that should substantially impact our ability to convert commercial production capacity from domestic to military applications if properly designed.

Drop the Strategic Triad

Funding the modernization of our strategic deterrent will have to be carefully managed given the large bow wave of modernization projects such as the *Ohio*-class replacement and long-range bombers. Upgrades to the U.S. strategic deterrent will be nearly \$200 billion over the next decade and could approach \$700 billion over the next 25 years.⁷⁴ The United States cannot afford to simply rebuild and modernize its nuclear enterprise on a platform-for-platform basis. Although affordable in a relative sense, the funding is not available to buy new bombers, modernize human capital, update testing and warheads, and completely replace the ballistic missile submarine fleet.⁷⁵

Some efficiencies are going to have to be gained, and some risk absorbed. Human capital and warhead reliability are not the places to take that risk. The redundancy built into the nuclear triad delivery mix is the more feasible place, probably with land-based missiles.⁷⁶ Senior former DOD officials have offered up these as a possible reduction.⁷⁷

Hedge Risk with National Guard Enhancements

The United States should maximize the use of the Reserves wherever feasible and suitable.⁷⁸ An increased reliance on the National Guard is not without additional costs and higher risks given the time required to bring Reserve Component assets up to combat standards (large-scale combined arms maneuver in particular). Assessments of how much risk

we incur by counting on the National Guard should be made with an eye to defining required response timelines and for considering Guard readiness investments to meet these timelines.⁷⁹ Increased use of hybrid units (comprised of higher levels of full-time personnel), greater access to advanced training facilities and simulators, and additional paid drill time may be needed.⁸⁰ Policymakers should carefully evaluate the readiness levels and risks associated with reliance upon the National Guard. It may be more realistic to assign the Guard as the Nation's strategic reserve, with designated units provided to specifically defined mission sets and adequate equipment/training resources, to meet obtainable and objective readiness standards.

Demand Challenging Operational Scenarios to Promote Force Development

Defense planners seek to provide current and future occupants of the White House with the options and tools needed to respond to multiple crises and other rising forms of risk. In addition to this accumulating risk, it should be acknowledged that while the United States arguably deterred its most demanding tasks, it has never accurately predicted the character of future conflicts. DOD force design analysis should incorporate a rigorous evaluation of the potential crises we may face and should include the contributions of allies. Internal processes should also examine the key scenarios employed to evaluate risk and shape the force with equal rigor.⁸¹ Efforts to reshape the force should be aggressively pursued, but they must be grounded in prudent war games and experimentation, not just aspiration.⁸²

Conclusion

The future is always *terra incognita* to defense planners; uncertainty about the specifics of time, place, and adversary are the eternal constants of security planning.⁸³ Certitude is a chimera, but risk must be prudently prepared for; it cannot be ignored or wished away. We have only history and educated thinking to guide our forecasts.

We cannot assert certainty or gamble America's future security entirely on a single dimension or domain of warfare. Our opponents have a say in the character, frequency, and intensity of tomorrow's wars.⁸⁴ Future policymakers should not be simplifying potential opponents' strategic calculus and allow them to dedicate their preparations for fighting the U.S. Armed Forces with only a singular approach. This is why strategic balance is so valuable.⁸⁵ As our leaders have noted, we cannot invest in silver bullets.⁸⁶ In short, some analytical humility is in order as we

face several possible strategic shocks.⁸⁷ The design of tomorrow's military should reflect that reality and rely on strong balanced forces that can fight and prevail in all warfighting domains in prolonged conflict. Even more than victory in war, such a force will make conflict less likely in the first place—an effect well worth the cost.

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The American Defense Budget 2017–2020

Michael J. Meese

The continued sluggish recovery from the Great Recession of 2008–2009, the reduction in U.S. employment, and the significant and growing Federal deficit places increasing pressure on defense spending and threatens future U.S. national security. The new administration must recognize the importance of and advocate for policies to improve economic growth, responsibly address America's fiscal challenges, and rationalize defense spending. At over \$550 billion, defense spending is the largest discretionary part of the budget, representing 15 percent of total Federal spending. The Pentagon should continue to address military compensation reform, tackle the expansion of headquarters staffs, choose research and development over procurement, and strenuously argue for entitlement reform and increased fiscal responsibility. This approach can make significant improvements in defense spending that will enhance U.S. national security.

The American defense budget for 2017 to 2020 will be one of the first and most important issues that the new administration must address. Realistic economic and budgetary policies must be developed and implemented to replace the shortsighted and piecemeal approach that has dominated Federal and defense budgetary decisionmaking for the past several years. By taking specific steps regarding the defense budget, the new administration can maximize the military contribution to national security.

To understand the challenges facing defense budgeting, this chapter first examines the problems in the underlying economy, including the implications of the national debt and deficit. It then discusses Federal spending, including briefly reviewing the patchwork of solutions over the past decade that has delayed and exacerbated budgetary problems. With this context established, it identifies the necessary approach toward Federal budgeting in general and defense budgets in particular. Finally, the chapter discusses areas in which defense spending should be reformed and improved.

The Economic Context

Although 8 years have passed since the Great Recession of 2008–2009, the U.S. economy continues to suffer from the decisions made during that time. While the average annual nonrecession growth since 1970 has averaged over 3.5 percent, since the end of the Great Recession, the U.S. economy has grown at just over 2 percent. The 1.5 percent difference in economic growth may seem inconsequential, but, when compounded over the next 10 years, the economy will be \$3.4 trillion less than it would have been with previous, more robust growth levels. That \$3.4 trillion in lost output is as large as total annual Federal spending.

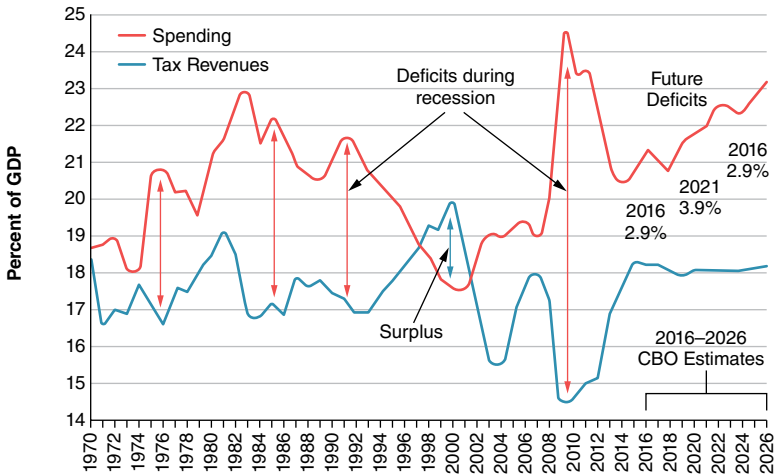
Why has growth declined? Well-intentioned programs approved during and after the Great Recession that were designed to help American citizens have reduced incentives to work. Unlike previous recoveries when unemployment fell because more people were employed, since the Great Recession most of the reduction in unemployment has been because workers left the workforce. Labor force participation has fallen from over 66 percent before the recession to 62.5 percent today.¹ That is over 8.8 million fewer Americans seeking employment, and their departure from the labor force reduces the productive potential of the U.S. economy.

In addition to a decline in economic growth, another lingering effect of the Great Recession is expanded government spending without a commensurate increase in tax revenues, which has led to persistently large annual deficits, reflected in figure 1 as the gap between the top line (expenditures) and the bottom line (revenues).² Consequently, the national debt (which reflects the sum of annual deficits) has grown to over 100 percent of gross domestic product (GDP) for the first time since World War II.³

A fundamental question that confronts the Nation is raised on the right side of figure 1, which projects future deficits. The 2016–2026 lines reflect the Congressional Budget Office projection for the Federal budget, optimistically assuming no future recession. The shortfall between 18 percent of GDP in projected revenue and 21 to 23 percent of GDP in projected spending cannot be sustained indefinitely. Consequently, there is substantial pressure to reduce all forms of spending, including defense spending.

What does this have to do with defense? Everything. U.S. defense budgets in the future depend, in part, on economic policies that both increase incentives for growth of the U.S. economy and address the challenges of the long-term fiscal debt. Former Chairman of the Joint Chiefs of Staff Admiral Mike Mullen aptly observed, “The single biggest threat to national security is our debt.”⁴ The next administration’s civilian and

Figure 1. Federal Spending, Revenue, and Deficit



Source: Bureau of Economic Analysis, St. Louis Federal Reserve

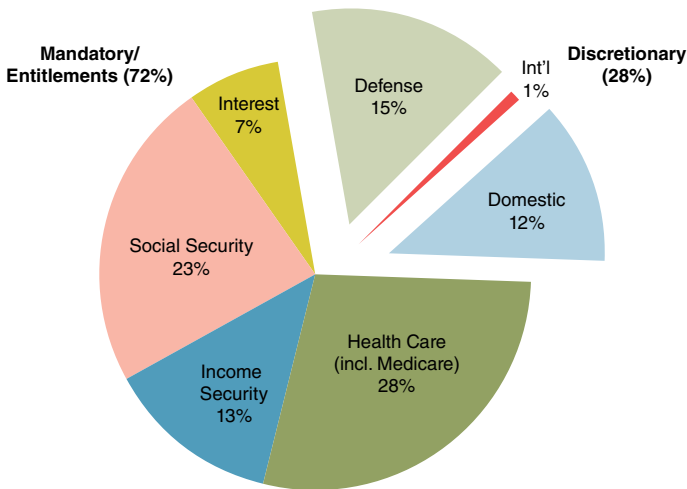
military leaders must recognize the importance of and must advocate for policies to improve economic growth and responsibly address American fiscal challenges.

Overall Federal Spending

Defense is disproportionately dependent on Federal budget policy because defense spending represents the largest discretionary portion of the budget. As indicated in figure 2, most of the Federal budget is “mandatory spending”—paying interest on the debt and providing entitlements established by law. Entitlement spending includes programs that comprise a social safety net, such as income security, Medicaid, and healthcare subsidies. Other entitlements are contributions from taxpayers’ and their employers’ paychecks, such as Social Security, Medicare, and military retirement. Although political leaders are reluctant to reduce entitlements, the fact that they represent two-thirds of the Federal budget requires any meaningful policy solutions to Federal budget challenges to include entitlement reform.

The defense budget will face increasing pressure in the next 4 years from other competing requirements for Federal spending, such as higher interest payments as interest rates rise from their historic low levels, increased Social Security and Medicare payments for retiring baby boomers, and bolstered funding for homeland security and domestic priori-

**Figure 2. Fiscal Year 2017 Federal Spending
(% by Type of Spending)**



Source: *Economic Report of the President*
(Washington, DC: Council of Economic Advisors, 2016)

ties. The best way to more effectively provide for the Nation's defense may not be a new weapons system or military unit, but rather support of comprehensive, long-term entitlement and budget reform.

Budgeting by Crisis

The Federal Government has a comprehensive process for planning, programming, budgeting, authorizing, appropriating, and executing the Federal budget. The problem is that for the past several years, the normal political and budgetary process has failed because of extreme polarization in Congress and inability to compromise except in crises. Understanding this history is important so that the next administration can learn from it and avoid perpetuating budgeting by crisis in 2017 and beyond.

Most recently in August 2011, the Nation was only days away from exceeding the debt limit and, absent congressional action, could have potentially failed to meet obligations to pay entitlement recipients, Federal workers, holders of U.S. debt, and Federal contractors. Congress reached a last-minute compromise by raising the debt ceiling and passing the 2011 Budget Control Act. That act bought time by appointing a bipartisan Joint Committee on Deficit Reduction (the so-called Super

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Committee) that was supposed to solve the budget impasse and provide a clear, rational way forward. In the absence of a solution by the Super Committee, a process known as sequestration would automatically implement dramatic and severe reductions of discretionary outlays to achieve a specified amount of savings.

Even with the threat of automatic sequestration budget cuts, the Super Committee could not achieve compromise. In September 2013 sequestration was imposed, which slashed \$109 billion from discretionary spending, with half coming from defense spending and the other half coming from non-defense spending (entitlement spending was exempt from cuts). Other than military salaries, every defense and non-defense account was reduced across the board, leading to the involuntary furlough of government workers, curtailment of contracts, and other unplanned reductions. The next crisis began on October 1, 2013, when Congress failed to approve the fiscal year 2014 budget and the Federal Government “shut down” for 16 days. To avoid another government shutdown, Senator Patty Murray (D-WA) and Representative Paul Ryan (R-WI) negotiated the Murray-Ryan budget plan, which forestalled any crises through the 2014 election year but did so by granting \$63 billion in sequester relief through the end of fiscal year 2015.⁵

With the risk of sequestration reemerging in 2016, the official Department of Defense Quadrennial Defense Review concluded:

*The return of sequestration-level cuts in FY2016 [the current law] would significantly reduce the Department's ability to fully implement our strategy. . . . Risks associated with conducting military operations would rise substantially. Our military would be unbalanced and eventually too small and insufficiently modern to meet the needs of our strategy, leading to greater risk of longer wars with higher casualties. . . . Ultimately, continued sequestration-level cuts would likely embolden our adversaries and undermine the confidence of our allies.*⁶

This is extraordinary because it is a statement that *following the law*, which is the obligation of all Federal departments, would lead to devastating consequences. When Congress approved the 2016 defense authorization in October 2015, it evaded sequestration limits by counting some regular spending as “overseas contingency operations” (which was designed to cover only war costs). President Barack Obama vetoed the bill, not because it violated the lawful Budget Control Act, but because domestic spending did not have a similar exception to circumvent se-

questration.⁷ After a new budget deal was struck, both domestic and defense spending were increased for fiscal year 2016, postponing and increasing the budgetary problem for the next President and Congress.

This budget-by-crisis approach in use since 2011 reflects a dysfunctional Washington environment that has preoccupied defense budgetary decisionmaking and distracted officials from using the budget process to make difficult but necessary choices for the good of the Nation. One of the most important attributes that the next President should bring to Federal spending is a clear articulation of national priorities and leadership to work with Congress to develop and execute a coherent, long-term budget strategy to accomplish those priorities. Certainly compromise will be necessary on some issues, but in the absence of leadership to solve fundamental problems, the resulting budgetary chicanery will continue to undermine American economic strength and hamper national security.

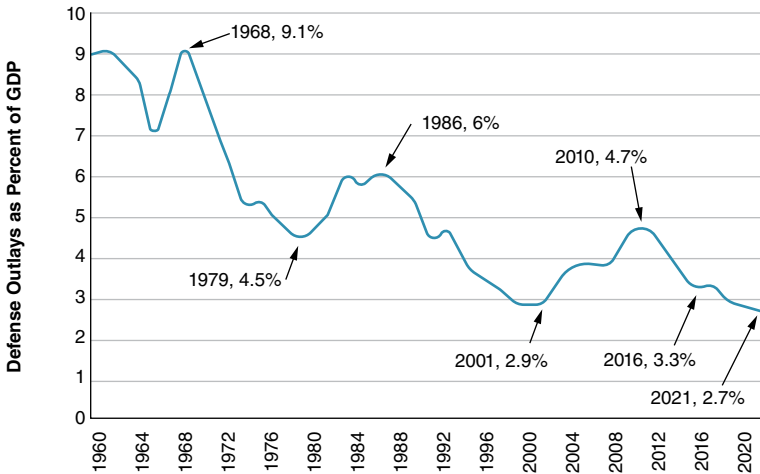
Budget Solutions

Budget problems are completely within the Federal Government's power to solve. The solutions will entail some kind of realistic long-term entitlement reform, a reduction in discretionary spending, an increase in total tax revenue raised, or any combination of the three to cause the lines in figure 1 to move closer together rather than spread farther apart. In 2010 the National Commission on Fiscal Responsibility and Reform, chaired by former Senator Alan Simpson (R-WY) and former White House Chief of Staff Erskine Bowles, developed a plan that would reduce the Federal deficit by nearly \$4 trillion in 10 years, reducing the deficit to 2.3 percent of GDP.⁸ More recently former Senator Pete Domenici (R-NM) and former Office of Management and Budget Director Alice Rivlin with the Bi-Partisan Policy Center have proposed a similar plan. Importantly, both of these plans, and any that would likely be successful, encourage incentives for increased employment and economic growth, which are essential to any long-term solution. With regard to revenues, most bipartisan plans maintain or reduce tax rates while eliminating "tax expenditures" (also known as loopholes) so that the ultimate result is more tax revenues through greater productive output and less manipulation of the tax code to favor specific actions, industries, or sectors of the economy.

Defense Spending as Part of the Solution

Reform of the defense budget, representing half of the discretionary budget, must play a significant part in solving the Federal budget challenges.

Figure 3. Defense Spending as a Percent of GDP



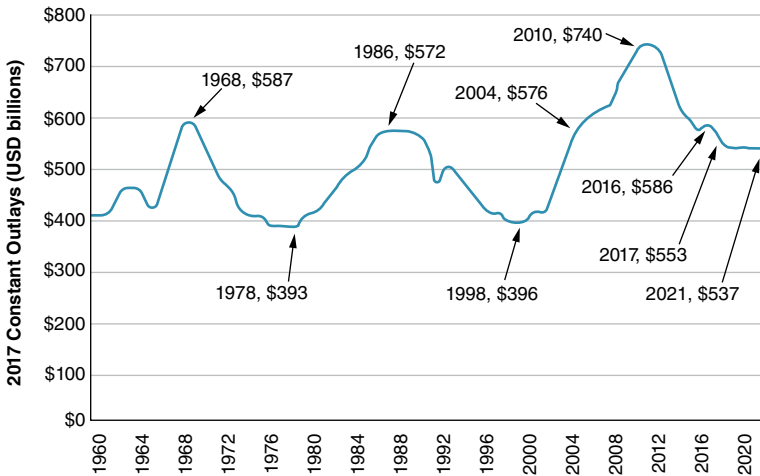
Source: Office of the Under Secretary of Defense (Comptroller), *National Defense Budget Estimates for FY 2017* (Washington, DC: Department of Defense, March 2016)

A first step for the next administration to address the defense budget is to understand both the level and composition of U.S. defense spending and how these have changed over the past 15 years.

Overall Spending

To some extent, the size of the defense budget depends on one's perspective because all of the following facts are true. The current defense budget:

- projects using the smallest proportion of U.S. national income since World War II (see figure 3)
- is 21 percent less than peak spending in 2010 (see figure 4)
- is about the same inflation-adjusted amount as was spent in Vietnam in the 1960s or during the Ronald Reagan–era military buildup in the 1980s
- is larger than that of the next eight nations combined, as President Obama has highlighted.⁹

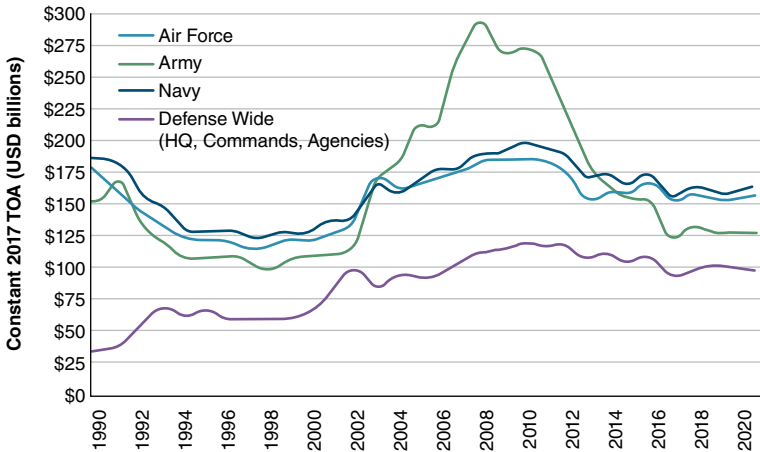
Figure 4. Defense Spending in Constant Dollars

Source: *National Defense Budget Estimates for FY 2017*

The size of the defense budget should be a function of national interests and strategic objectives. The sine qua non of a superpower is that it must have a military capable of engaging with other nations throughout the world and the capability to engage in multiple conflicts nearly simultaneously. Such engagement with a technology-based all-volunteer force is inherently expensive, which is why, even after the withdrawal of most forces from Iraq and Afghanistan, the U.S. defense budget today remains similar to spending at the height of the Cold War, after adjusting for inflation (see figure 4).

Each of the military Services generally responds differently to the budget, depending on the portion it receives (see figure 5). Although the Army receives additional funding during wartime, its budget has now returned to the regular 23 to 25 percent share that was its normal Cold War-era spending percentage. The Navy and Air Force each comprise approximately 30 percent of the budget. Defense-wide agencies and commands consume a consistently increasing portion of the defense budget, slowly reducing the shares going to each Service. Defense-wide spending has grown to about 18 percent of the defense budget today, which underestimates its proportion of resources because it does not include *any* military personnel costs (which are part of the individual Services' budgets with military members assigned to the defense agencies and commands).

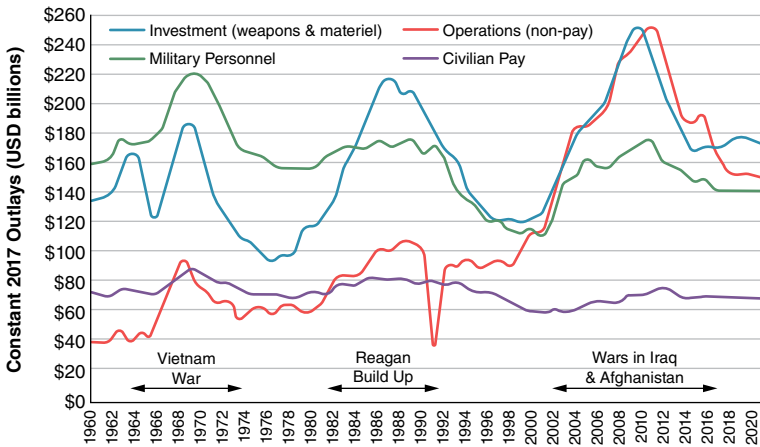
Figure 5. Defense Spending by Service



Source: *National Defense Budget Estimates for FY 2017*

Although the total defense budget is similar, the composition of defense spending has changed significantly in the past 15 years, which has profound implications for the next administration. The four major components that drive defense spending are military personnel, civilian pay, investment (weapons and materiel), and operations. In previous wars spending in all categories generally increased. For example, during the Vietnam War (illustrated on the left side of figure 6), each of the lines rises in roughly the same proportion, with military personnel spending representing the highest category of expenditure. During Vietnam, total military personnel expanded from 2.48 million in 1960 to 3.58 million in 1968, including approximately 2.2 million who were drafted over the course of the war.¹⁰

When the draft ended and the all-volunteer force began in 1973, defense leaders made a conscious decision to scale down to a smaller, more professional military, which fundamentally changed the way that America would fight wars from then on. The military shifted to a more efficient force with significantly fewer personnel using much better equipment. The personnel shift has been dramatic and has had a corresponding impact on defense spending. On September 11, 2001, the military had 1.45 million in uniform, less than half of the total during the Vietnam era, and the Army had 480,000 Soldiers, which was less than one-third of the 1.51 million soldiers during Vietnam.¹¹ Before 9/11, the Nation had not had to sustain the all-volunteer force during a period of prolonged conflict. There were very real concerns about whether the Department

Figure 6. Defense Spending by Category

Source: *National Defense Budget Estimates for FY 2017*

of Defense (DOD) could recruit and retain sufficient personnel during a long war. Additionally, then-Secretary of Defense Donald Rumsfeld decided against increasing the military's size, so the wars in Afghanistan and Iraq were fought with the existing force, albeit with some mobilization of the Reserves.¹²

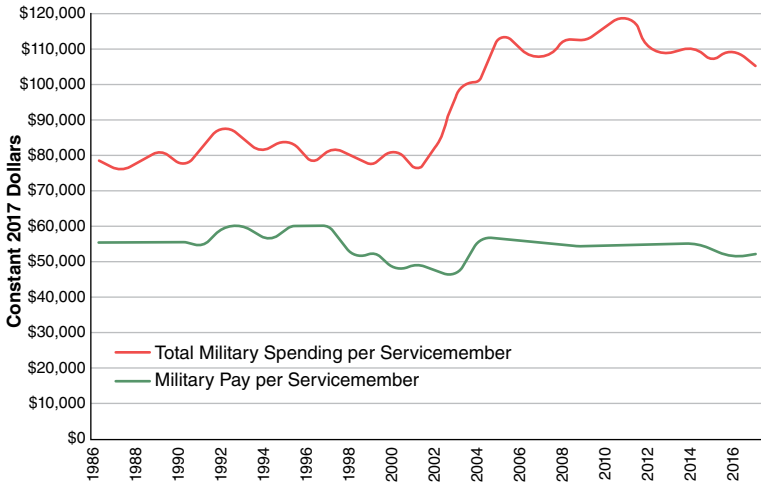
Effects of the Last 15 Years

With the need to sustain the all-volunteer force as an underlying assumption of the U.S. defense strategy, global operations since 9/11 in Iraq, Afghanistan, and elsewhere have had three significant, persistent budgetary effects. The first effect is that, like previous wars, all categories of spending increased—military personnel for mobilization and additional costs, investment to purchase new or replace destroyed equipment, and operations to cover deployment and warfighting costs. These wars account for some of the increase in all categories of spending on the right side of figure 6.

The second effect is that operations spending (the red line in figure 6, adjusted for inflation) increased disproportionately from \$100 billion in 1999 to over \$250 billion in 2011. With a limited number of troops available, the DOD strategy concentrated on using the operations budget rather than uniformed military to accomplish essential tasks whenever possible. This is not necessarily the wrong approach—just one that is different from the way that previous wars have been fought. In previous wars U.S. military logistics, transportation, maintenance, and construc-

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Figure 7. Military Personnel Spending



Source: *National Defense Budget Estimates for FY 2017*

tion units conducted base support and other sustainment operations in combat theaters. Today the number of military logistics units has been significantly reduced, and that work is contracted out through increased operations spending. Similarly some security operations and training of foreign military forces were outsourced to private military security companies in lieu of committing as many U.S. troops for those tasks. Some of those operations funds were expended to train and equip the Iraqi, Afghan, and other foreign armies to rightly carry the burden of defense in their own nations.

Much of this operational spending was for contracted labor. In both Iraq and Afghanistan, the number of contractors normally exceeded the number of U.S. troops deployed. For example, the number of DOD-employed contractors peaked with 163,591 contractors in Iraq in December 2007 and 112,092 contractors in Afghanistan in March 2010.¹³ For every 10 uniformed military deployed in the Balkans, Afghanistan, and Iraq, there have been 10 to 12 contractors. By contrast, in Vietnam, World War I, and World War II, for those same 10 uniformed military, there were fewer than 2 contractors.¹⁴ Although costly, using contractors was probably less expensive than recruiting, training, deploying, and sustaining military in those positions, even if that would have been possible in the absence of a draft. And those contractors certainly shared the risks of combat, with over 3,200 U.S. contractors killed in Iraq and Afghanistan—representing 32 percent of Americans killed in action.¹⁵

Increases in the operations budget, however, were not limited to training foreign forces and increasing contractors on the battlefield. Using contractors for wartime deployments extended to routine operations as well. Rather than use limited military or government civilian workers, DOD has increasingly relied on contractors with a commensurate increase in the non-pay operations budget. In fiscal year 2011, for example, DOD spent \$144.5 billion to purchase 709,879 full-time equivalent (FTE) years' worth of contracted services (at an average cost of \$203,565 per FTE).¹⁶ While expensive, contracting did provide an immediately responsive workforce to accomplish critical missions, especially during wartime. However, DOD may have grown overly reliant on contractors and high operations funding as a wartime exigency and must now re-adjust back to a new normal for budgeting and operations. The next administration must recognize this sea change in the way that DOD accomplishes its institutional work and determine the best mix of military, government civilian, and contractor resources to more effectively and less expensively accomplish operations in the future.

The third effect of the wars of the last 15 years has been the increase of military personnel spending per person. Measured in constant (inflation-adjusted) dollars, the average basic military pay for Soldiers, Marines, Sailors, and Airmen has remained relatively constant for the last three decades, as reflected by the bottom line on figure 7. However, after 9/11, with the wars in Iraq and Afghanistan, *total* military personnel spending per Servicemember significantly increased, primarily through increases in non-pay military personnel costs to ensure the continued viability of the all-volunteer force, a trend that has been consistent with the political need to “take care of the troops.” Previously, non-pay military personnel costs primarily consisted of accrual for military retirement. Since 9/11, costs of expanding services, improving the quality of housing, providing incentive pays, contributing to Medicare for retirees, paying unemployment compensation, and other obligations have significantly increased total military personnel spending in addition to base pay. This is not to say that increases in total military personnel spending are not well deserved, but those increases have driven up the cost of each person in uniform, as reflected by the top line in figure 7. Although the military has fewer people today than at any time since World War II, total military personnel costs are 25 percent higher than they were in 2000, after accounting for inflation. The high cost of military personnel presents a challenge to DOD that is akin to the problem of entitlements at the Federal level. The benefits are well deserved and were granted for all of the right reasons, but the rising cost of total compensation is almost pricing military personnel “out of the market.”

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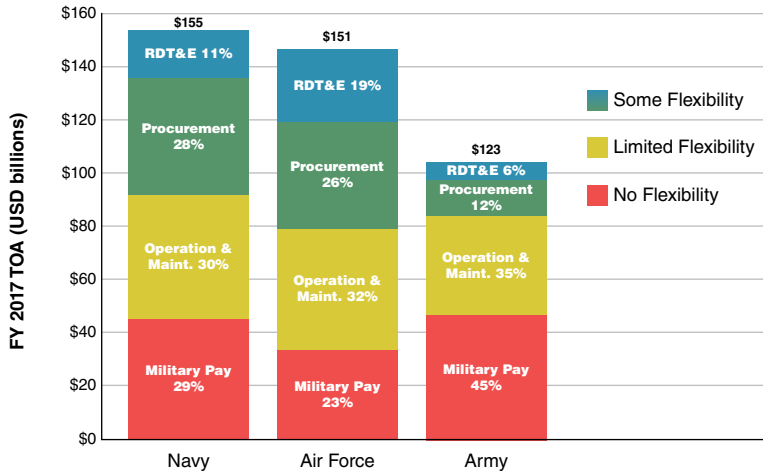
These three effects of the wars of the past 15 years—increased spending overall, increased contractors and operations spending, and increased per-person personnel costs—have led to a defense budget that is both large and in need of critical restructuring to provide clear direction and a path forward for the future national security of the United States.

Recommended Improvements

Given this understanding of the fiscal realities that confront the Nation, the next administration will need to take four specific steps with regard to the defense budget for 2016–2020. First, the defense budget for 2016 to 2020 must include ways to “bend the curve” on military personnel spending but must do so without breaking faith with those serving, who are truly deserving. In the absence of such reforms, the only solution that military leaders would have left is to further cut the number of Servicemembers in uniform. Fortunately in 2015, DOD took a step toward military compensation reform with the first major change in military retirement since World War II.¹⁷ This reform included adding a government contribution to a 401(k)-like defined contribution plan, and reducing military retirement benefits by 20 percent. Ultimately the change will save about \$2 billion per year.¹⁸ Further reforms, such as the one for military retirement, should be coordinated with across-the-board entitlement reform from other parts of the Federal budget so that financial sacrifices necessary for the Nation’s long-term fiscal stability and economic growth are borne by American citizens generally and not just placed on the shoulders of those who serve.

Making these adjustments in benefits will require courage and leadership, which has already been expressed by senior military leaders. The Sergeant Major of the Marine Corps, Michael Barrett, testified to Congress, “In my 33 years, we’ve never had a better quality of life. . . . We’ve never had it so good. If we don’t get a hold of slowing the growth [of personnel spending], we will become an entitlement-based, a healthcare provider-based Corps and not a war-fighting organization.”¹⁹ Barrett was arguing the point made in figure 7 that the costs are simply too high and that if they are not contained, funds will be redirected from equipment and training that are essential to combat readiness. The next administration would likely find that military leaders would welcome reasonable reforms of military entitlements to curb cost growth, especially in conjunction with other Federal entitlement reforms.

Rising personnel costs affect all Services but are especially prominent in the Army. Although the Army is downsizing, it still has the most uniformed personnel; in fiscal year 2017, military personnel costs represent

Figure 8. Defense Spending by Category by Service

Source: National Defense Budget Estimates for FY 2017

45 percent of its budget (see figure 8). This share is of a smaller budget and is about 50 percent more than the Navy's share of personnel costs (which includes the Marine Corps) and double that of the Air Force. Consequently, when there is a further call for flexibility within budgets, especially after reductions in spending for overseas contingency operations, the Army has severely limited budgetary options.

Second, the next administration should increase efficiency and return more resources to operational units by using the defense budget process as a forcing mechanism to discipline and reduce the size of headquarters. Understandably, in the midst of fighting multiple wars, the military forms additional structures, organizations, and headquarters, frequently in an ad hoc way. Many of these are effective, such as the Rapid Equipping Force, which was created during the wars in Afghanistan and Iraq to harness "current and emerging technologies to provide immediate challenges of U.S. Army forces deployed globally."²⁰ However, these innovations were often in addition to, rather than instead of, the existing institutional structure. Now is the time to reduce the previous structures and to right-size defense institutions proportional to the force that they are supporting.

One of the most critical areas to examine has been the growth of headquarters staff over the past 15 years. Each headquarters in the Pentagon has increased significantly since 9/11 (see table 1).²¹ These increases are only for civilian and military positions and do not include contractor

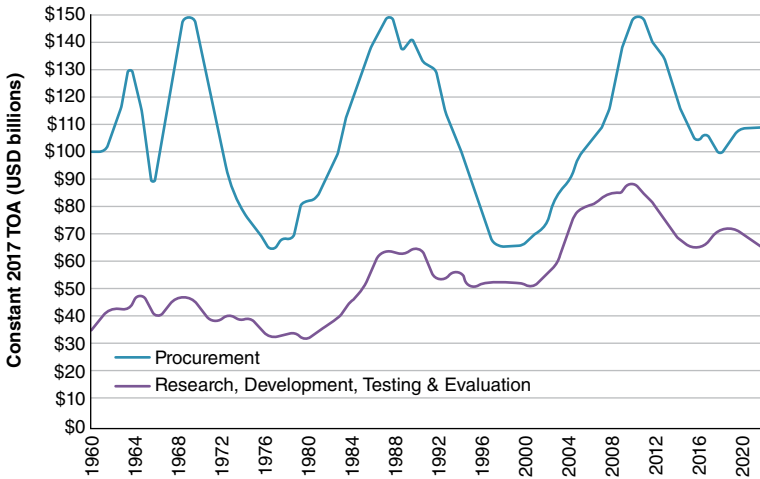
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Table 1. Military and Civilian Positions in DOD Headquarters				
	2001	2005*	2013	Increase (%)
Office of the Secretary of Defense Staff	2,205		2,646	20
Joint Staff		1,262	2,599**	105.9
Army	2,272		3,639	60.2
Air Force	2,423		2,584	6.6
Navy		2,061	2,402	16.5
Marine Corps		2,352	2,584	9.9
<p>* The Joint Staff, Navy, and Marine Corps did not have comparable numbers for 2001.</p> <p>**Joint Staff increase was largely due to disestablishment of U.S. Joint Forces Command in 2011.</p> <p>Source: Government Accountability Office, <i>DOD Needs to Reassess Personnel Requirements for the Office of Secretary of Defense, Joint Staff, and Military Service Secretariats</i>, GAO-15-10 (Washington, DC: GAO, January 2015), 10–17.</p>				

support, which can also be significant. For example, in addition to 2,646 military and civilians, the Office of the Secretary of Defense (OSD) staff employs 3,287 contractor FTEs in support of its operations.²² Similarly, the combatant commands have grown substantially in personnel and costs over the past decade. Excluding U.S. Central Command, whose growth is understandable from the wars in Iraq and Afghanistan, the other five geographical combatant commands (U.S. Northern Command, U.S. Southern Command, U.S. European Command, U.S. Pacific Command, and U.S. Africa Command) have grown from 6,800 in 2001 to 10,100 in 2012, with a similar increase in Service components supporting those commands.²³ Although some of that increase was clearly justified (about 1,100 positions with the creation of U.S. Northern Command, which had new responsibilities), when U.S. Africa Command was created in 2009 from U.S. European Command, the latter did not experience a concomitant decrease in size.

When the Pentagon, Service, and combatant command headquarters are totaled, there are 55,965 military and civilian personnel assigned to those staffs, excluding contract support and field operating agencies supporting those staffs.²⁴ Those people, who represent the equivalent of 11 Army brigades or Marine Corps regiments, are certainly working hard doing important work. However, to constrain the growth of the budget, increase efficiencies, and prioritize the work being performed, the next administration should determine what part of the work that has been accumulated over the past 15 years from Congress, the White House, OSD, combatant commands, and Service staffs should be reduced or eliminated.

Such a review should also examine the number of DOD senior leaders. Today there are 943 flag officers, including 37 four-star generals and admirals. That is 8 percent more than the total in 2001, while the size of

Figure 9. Research and Procurement Spending

Source: National Defense Budget Estimates for FY 2017

the military is 5 percent smaller.²⁵ Leadership in reducing headquarters and flag officers must come from the top because no Service will “unilaterally disarm” by reducing its flag officers so that it is disadvantaged in inter-Service or interagency discussions. For example, in the past 10 years, the Judge Advocate General of each Service has increased in rank from major general to lieutenant general. For over 200 years, having a two-star as the top Service lawyer was sufficient during periods where there were many more Servicemembers and units needing legal support. Reducing the rank and prestige of this and any other position will be difficult, unless such adjustment is coordinated with Congress and imposed by DOD. Secretary of Defense Ash Carter’s recent speech calling for reform and reduction of four-star billets is a step in the right direction that the next administration should build upon.²⁶

Similarly, the number of civilian leaders in the Pentagon has expanded even more than their military counterparts. At the height of the Reagan military buildup in 1985, with 2.2 million military on Active duty and significant ongoing procurement, there were only 2 under secretaries of defense and 11 assistant secretaries of defense. Today there are 5 under secretaries of defense, 16 assistant secretaries of defense, and a corresponding increase of military assistants, principal deputies, deputy assistant secretaries, and other staff members.²⁷ If these new OSD positions replaced work previously done by each of the military Services with a concomitant reduction of Service staffs, the increase could be justified. In many cases,

however, a bigger, higher-level staff necessitates increases in subordinate staffs to keep pace with the additional requirements, meetings, coordination, and oversight. DOD needs a comprehensive right-sizing of the staff, and the budget process is the appropriate forcing mechanism to begin that reduction. Budget savings from headquarters reductions can provide savings that can preserve resources for important DOD priorities.

Third, DOD should accept risk in procurement programs as long as there is a sufficient way to sustain research and development to spur technological progress. As shown in figure 9, the rapid drop in procurement from 2010 to 2015 is both understandable and a step in the right direction. Arguably, however, spending on research and development (bottom line of figure 9) should continue to be increased—even at the expense of current procurement.

Although there are certainly technological threats on the horizon, especially in the area of cyber warfare, it is not clear which weapon systems will be most effective in the future. It could be a waste of funds to field or replace massive systems, particularly when the United States is unlikely to face a technologically superior enemy in the near future. Moreover, technology is advancing so rapidly that systems procured today may become obsolete tomorrow. This was the case in both the 1970s and 1990s when DOD shifted investment dollars away from procurement to research and development, which paid dividends in the following decades when procurement was required and funds were available. Today, the largest procurement expenditures, such as those reflected in table 2, focus on ships, aircraft, and submarines, areas in which the United States already has significant technological superiority.²⁸ The challenge for the next administration is to develop the budgetary and political support for research and development in the cases where large-scale procurement is neither appropriate nor necessary.

Especially since the end of the Cold War, it has been difficult to garner the political support for significant weapons systems in the absence of a massive program, even if the Service's need is to research, support, or improve existing systems rather than to develop a new one. The Army's experience has been painful, as its last three major weapons projects have been canceled. The Army leveraged the circumstances to “win despite losing,” using reprogrammed funds to support existing programs in lieu of the failed programs. When the Crusader cannon was canceled, funds were reprogrammed into Excalibur precision-guided munitions and other artillery upgrades. When the Comanche helicopter was canceled, funds were used for modernization of the existing helicopter fleet. When the Army's largest procurement, the Future Combat System (FCS), was canceled, some of the procurement funds committed to it were re-

Table 2. Top Weapons System Acquisitions (FY 2017, USD millions)

Program	Research and Development	Procurement	Total
F-35 Joint Strike Fighter	1,801	8,703	10,505
Virginia-class Submarine	209	5,114	5,322
DDG-51 <i>Arleigh Burke</i> -class Destroyer	149	3,349	3,498
KC-46A Tanker Aircraft	262	2,885	3,319
<i>Gerald R. Ford</i> -class Nuclear Carrier	121	2,665	2,786
B-21 Long Range Strike (Bomber)	1,911	287	2,198
P-8A Poseidon Aircraft	57	2,108	2,165
Ohio-class Submarine Replacement	1,091	773	1,864
Evolved Expendable Launch Space Vehicle	297	1,506	1,803
<i>America</i> -class Amphibious Assault Ship	10	1,639	1,648
Littoral Combat Ship	137	1,462	1,599

allocated to further develop some FCS technologies, modernize existing Army brigades, and begin development of the new Ground Combat Vehicle. Had the Army merely requested relatively smaller scale programs for artillery, helicopter, or ground combat vehicles, it is unlikely that such requests would have garnered sufficient institutional or political support. Defense acquisition could be significantly improved and budget allocations reduced if funds were prioritized to be spent on equipment that Services truly need as opposed to programs that are larger than necessary just to obtain political support.

Finally, the ultimate step to addressing the challenge of defense spending ties back to the ability of the Nation to adequately fund defense. Future defense spending constraints will be largely determined by the extent of increased overall economic growth, reduced entitlement spending, and lower deficits. The defense top-line as currently projected (including the 2016 “exception” to the sequestration constraint) is barely sufficient to sustain defense that is appropriate for a superpower with global responsibilities. Assuming that U.S. strategic ends remain unchanged, the only viable budgetary approach to support continued defense spending of \$553 billion (in fiscal year 2017 dollars) is to aggressively support economic and fiscal policies that increase economic growth and reduce entitlement spending in the long term. Although this may be perceived to be “out of the lane” of military leaders, it is the only way to ensure sufficient funding to provide for adequate national security in the future. Defense officials should emphasize that military retirement reform was the first major change to Federal entitlement spending in two decades and should build on that fiscal leadership as a reason to call for similar reforms in non-defense entitlements as well.

Conclusion

The next administration has an opportunity to set an aggressive agenda for the Pentagon as it continues to engage globally, sustain the all-volunteer force, prepare for the future, and confront increasing budgetary pressure. To be successful, defense leaders must understand the reasons for the current economic and fiscal crises and the accumulated effects of 15 years of war on the Services, on the level and composition of the defense budget, and on the military establishment as a whole. The current strategy of muddling through from one budget crisis to the next is inefficient, counterproductive, and unsustainable. In response to these conditions, the next administration should continue to address military compensation reform, tackle the expansion of headquarters staffs, choose research and development over procurement, and strenuously argue for entitlement reform and increased fiscal responsibility. The power to make these changes lies entirely with the leadership in Washington. The next administration should seize that power and use it to make the improvements in defense spending to enhance U.S. national security.



Dr. Steven Bloom, Colonel S. Jamie Gayton, USA, and Dr. R.D. Hooker, Jr., provided extremely helpful comments on a previous version of this chapter.

Notes

¹ Bureau of Labor Statistics, “The Employment Situation—November 2015,” USDL-15-2292, December 4, 2015, available at <www.bls.gov/news.release/archives/emp-sit_12042015.pdf>.

² Calculations based on data from *Economic Report of the President* (EROP) (Washington, DC: Council of Economic Advisors, 2016), tables B-17 for fiscal years 1970–2017; *The Budget and Economic Outlook, 2016 to 2026* (Washington, DC: Congressional Budget Office, January 2016), table 1.

³ See EROP, 2016, table B-18. The 2017 national debt is projected to be \$20.1 trillion, which is 104.4 percent of gross domestic product. Of this total, \$14.8 trillion (73.3 percent of gross domestic product) is debt held by the public, and the balance is the portion of debt that is held by government agencies (such as trust funds).

⁴ Geoff Colvin, “Adm. Mike Mullen: Debt is Still Biggest Threat to U.S. Security,” *Fortune*, May 10, 2012.

⁵ U.S. House of Representatives, Committee on the Budget, “Murray and Ryan Introduce Bipartisan Budget-Conference Agreement,” press release, December 10, 2013.

⁶ *Quadrennial Defense Review 2014* (Washington, DC: Department of Defense, March 4, 2014), 53.

⁷ Steven Mufson, “Obama Uses Veto for Only Fifth Time, Rejecting Defense Authorization Bill,” *Washington Post*, October 22, 2015.

⁸ National Commission on Fiscal Responsibility and Reform, *The Moment of Truth* (Washington, DC: The White House, December 2010).

⁹ Barack Obama, “State of the Union Address,” Washington, DC, January 12, 2016, available at <www.whitehouse.gov/sotu>.

¹⁰ Personnel statistics are from Office of the Undersecretary of Defense, *National Defense Budget Estimates for FY 2016* (Washington, DC: Department of Defense, March 2015), table 7-5. Draft estimates are from Bernard Rostker, *I Want You: The Evolution of the All-Volunteer Force* (Santa Monica, CA: RAND, 2006), 44.

¹¹ Moreover, by comparison, the U.S. population in 2001 was 42 percent larger than it was in 1968. Data on historical size of the military are from Department of Defense, *Selected Manpower Statistics, FY 2005* (Washington, DC: Defense Manpower Data Center, 2005).

¹² In 2006, after Secretary Donald Rumsfeld resigned, President George W. Bush approved an increase in Army and Marine Corps end strength. See Donald Rumsfeld, *Known and Unknown: A Memoir* (New York: Sentinel, 2011), 715.

¹³ Moshe Schwartz and Joyprada Swain, *Department of Defense Contractors in Afghanistan and Iraq: Background and Analysis*, R40764 (Washington, DC: Congressional Research Service, May 13, 2011).

¹⁴ Defense Science Board, *Task Force on Contractor Logistics in Support of Contingency Operations* (Washington, DC: Department of Defense, June 2014), 10.

¹⁵ As of March 15, 2015, the U.S. contractor deaths in Iraq and Afghanistan were 1,620 and 1,592, respectively. In comparison, U.S. Servicemember deaths were 4,483 in Iraq and 2,353 in Afghanistan. See Sara Thannhauser and Christoff Luehrs, “The Human and Financial Costs of Operations in Afghanistan and Iraq,” in *Lessons Encountered: Learning from the Long War*, ed. Richard D. Hooker, Jr., and Joseph J. Collins (Washington, DC: NDU Press, September 2015).

¹⁶ Government Accountability Office (GAO), *Continued Management Attention Needed to Enhance Use and Review of DOD’s Inventory of Contracted Services*, GAO-13-491 (Washington, DC: GAO, May 2013), 14–15. It is important to note that \$203,565 is the fully burdened cost of the full-time equivalent (including payments made to the contractor, which includes recruiting, training, taxes, retirement costs, and other expenses; it is not just the salary paid to the individual).

¹⁷ The Department of Defense (DOD) proposed the change in retirement based on the Military Compensation and Retirement Modernization Commission and was included in the 2016 National Defense Authorization Act. The military retirement system has not substantively changed since World War II. There was one change in 1986—a proposal for “Redux” retirement was passed that would have saved DOD significant retirement costs—but that was essentially repealed in 1999, before it could save DOD personnel costs.

¹⁸ The new retirement plan has many additional details and is outlined in *Report of the Military Compensation and Retirement Modernization Commission* (Washington, DC: Department of Defense, January 2015). The \$2 billion in forecasted savings is in Tom Vandenbrook, “Defense Secretary Ash Carter’s Historic Personnel Changes Irk Generals,” *USA Today*, December 27, 2015.

¹⁹ Michael Barrett, quoted in “Sgt. Maj. of the Marine Corps Barrett: Less Pay Raises Discipline,” *Marine Corps Times*, April 9, 2014.

²⁰ “Rapid Equipping Force,” available at <www.ref.army.mil/>.

²¹ Table 1 is based on GAO, *DOD Needs to Reassess Personnel Requirements for the Office of Secretary of Defense, Joint Staff, and Military Service Secretariats*, GAO-15-10 (Washington, DC: GAO, January 2015), 10–17.

²² *Ibid.*, 52.

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²³ GAO, *DOD Needs to Periodically Review and Improve Visibility of Combatant Command's Resources*, GAO-13-293 (Washington, DC: GAO, May 2013).

²⁴ Office of the Assistant Secretary of Defense for Readiness and Force Management, *Defense Manpower Requirements Report, FY 2015* (Washington, DC: Department of Defense, June 2014), 18.

²⁵ The number of current flag officers is from *Defense Manpower Requirements Report, Fiscal Year 2015* (Washington, DC: Department of Defense, 2014), 73; *Selected Manpower Statistics, Fiscal Year 2001* (Washington, DC: Department of Defense, 2001). The reduction in the size of the military is from *National Defense Budget Estimates for FY 2016*.

²⁶ See Ash Carter, "Remarks on 'Goldwater-Nichols at 30: An Agenda for Updating,'" April 5, 2016, available at <www.defense.gov/News/Speeches/Speech-View/Article/713736/>.

²⁷ The best listing of DOD officials is *Department of Defense Key Officials, September 1947–May 2015* (Washington, DC: Historical Office of the Office of the Secretary of Defense, 2015).

²⁸ Office of the Under Secretary of Defense (Comptroller), *Program Acquisition Cost by Weapon System* (Washington, DC: Department of Defense, February 2016).

National Security Reform

Christopher J. Lamb

National security reform is more necessary now than ever, but some critics have exaggerated the costs and scope of the required changes. Actually, the system's most egregious limitations can be inexpensively fixed in three straightforward steps. These reforms would be politically and bureaucratically challenging and require knowledgeable and determined leadership, but they are not expensive, hopelessly complicated, or overly broad in scope or scale.

The national security system has grown substantially since World War II, but its ability to handle complex and dynamic problems has not changed much.¹ Therein lies the problem: As the security environment grows increasingly complex and dynamic, the current system remains unable to coordinate multiple elements of power and thus cannot contend with multidimensional threats or keep pace as they rapidly evolve. Consequently, the system performs increasingly poorly, and as a result, it is now commonplace for national security leaders to support national security reform. As Congressman Ike Skelton (D-MO) observed in 2010, “For many years, we’ve repeatedly heard from independent blue-ribbon panels and bipartisan commissions that . . . our system is inefficient, ineffective, and often down-right broken.”² Congressman Skelton was not exaggerating. One national-level blue-ribbon review after another has concluded the national security system needs reform,³ and virtually all published assessments of the system by individual leaders and experts reach the same conclusion.⁴

The reasons national security reform has not yet taken place are surveyed elsewhere.⁵ However, one key impediment to reform is the influential but false assumption that fixing the system would be too difficult and costly. In reality, Congress and the President could easily solve the primary problem bedeviling the system in three straightforward steps:

- pass legislation allowing the President to empower “mission managers” to lead intrinsically interagency missions
- make a concerted effort to create the collaborative attitudes and behaviors among Cabinet officials necessary for mission managers to succeed
- adopt a new model of a National Security Advisor with responsibility for system-wide performance.

These reforms would be politically and bureaucratically challenging but not expensive.

Mission Manager Authority

There is widespread agreement on the number-one problem plaguing the national security system: executive branch departments and agencies too often compete instead of collaborate, making it difficult if not impossible to achieve national security objectives. Few collective enterprises can succeed without unity of effort, and it is widely recognized that our national security system does a poor job in this regard. Many senior military and diplomatic leaders insist that our lack of success in Afghanistan and Iraq is best explained by just such an absence of unified effort (see figure). As these leaders argue, such complex, dynamic security problems are not managed well because no one other than the President has the authority to direct and integrate the efforts of departments and agencies, and he is too busy to do so. Orchestrating national security missions requires sustained attention, and Presidents simply do not have the time to manage even the most important security problems on a continuous basis. The President is the *de jure* commander in chief but a *de facto* “commander in brief.”⁶ As Ambassador Richard Holbrooke argued long ago, Presidents can usually decide on policy for high-priority matters, and “if it involves few enough agencies and few enough people . . . even carry it out,” but “the number of issues that can be handled in this personalized way is very small.”⁷

The President’s all-encompassing span of control and limited time also explain why the current mechanisms to help the President generate unified effort are ineffective. The hierarchy of interagency committees that are supposed to coordinate policy and strategy and oversee their consistent implementation can only suggest, not direct, activities. In our system, “interagency committees, conveners, and lead agencies are basically organized ways of promoting voluntary cooperation”⁸ and are thus

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Figure. What Really Went Wrong in Iraq and Afghanistan?

"The essential ingredient for victory is . . . a comprehensive strategy that draws together all the resources of the U.S. Government . . . [but] there are too many bureaucratic impediments," he says. It's too hard, in Abizaid's view, to balance elements that should be working together but are instead competing. . . . Abizaid . . . wants to join in a public debate about how to reform a national security system that hasn't worked well enough in Iraq."¹

—General John Abizaid, USA (Ret.), 2007

"There is still no effective, consistent mechanism that brings a whole interagency team to focus on a particular foreign policy issue."

—Ambassador Ryan Crocker, 2009

"Executive authority below the President is necessary to ensure the effectiveness of contingency relief and reconstruction operations. The role of executive authority—and the lack thereof—over interagency coordination lies at the heart of the failures in the Iraq reconstruction program."²

—Stuart Bowen

Special Inspector General for Iraq, 2009

"The issue to date . . . is that below the President there is no one person, head of a department, or head of an agency who has been tasked with or is responsible for the strategic direction and integration of all elements of national power, so the United States can properly execute a strategy for Iraq. . . . Nobody has the authority and influence needed across the whole U.S. Government. . . . We need some new constructs."³

—General Richard Myers, USAF (Ret.)

Former Chairman of the Joint Chiefs of Staff, 2009

"I think that if we look at ourselves hard in the mirror, you can't do something as difficult as Afghanistan without one person in charge. And we still don't have that."⁴

—General Stanley A. McChrystal, USA (Ret.), 2015

"[We] know personally most of those involved in leading the long wars in Iraq and Afghanistan. They are to a person—whether military officers or civilian officials—diligent and dedicated patriots. . . . However, when officials and officers in the field did not get along, the deficiencies of the system allowed their disputes to bring in-country progress to a halt. What is needed is an overall system that will make cooperation and integration the norm, not the exception."⁵

—Admiral Dennis Blair, USN (Ret.), Ambassador Ronald E. Neumann, and

Admiral Eric Olson, USN (Ret.), 2014

¹ David Ignatius, "Abizaid's Long View," *Washington Post*, March 16, 2007.

² *Hard Lessons: The Iraq Reconstruction Experience* (Washington, DC: Special Inspector General for Iraq Reconstruction, 2009), 14.

³ Richard B. Myers with Malcolm McConnell, *Eyes on the Horizon: Serving on the Front Lines of National Security* (New York: Threshold, 2009).

⁴ Stanley A. McChrystal, interview by Joseph J. Collins and Frank G. Hoffman, April 2, 2015.

⁵ Dennis Blair, Ronald Neumann, and Eric Olson, "Fixing Fragile States," *National Interest*, August 27, 2014.

often ineffective if not a waste of time.⁹ The interagency groups either come to a stalemate over differences or, as former Secretary of State Dean Acheson argued, reach "agreement by exhaustion" while "plastering over" differences.¹⁰ Lead agency and other approaches to coordination also have proved ineffective.¹¹

Seeing the need for better unified effort, Congress has passed laws that assign a designated individual responsibility for coordinating an issue area. Yet Congress never really empowers these individuals. Statutes designating coordinators for countering narcotics, countering weapons of mass destruction, and managing foreign relations all include limits and loopholes that invite departments and agencies to ignore or bypass the integrating official.¹² Many worry that fully empowering Presidential

subordinates to produce unified effort across the executive branch would confuse lines of authority from the President down through his Cabinet officials to their field activities. Yet all organizations with functional structures like the U.S. national security system have to balance the need for a clear line of authority down through functional capabilities with the need to integrate those capabilities to accomplish cross-cutting objectives. Where this balancing act takes place depends on the extent to which the organization is centralized. The range of problems that the organization must manage and how quickly it evolves should determine the optimal degree of centralization. Less centralization and more cross-cutting integration is needed to operate effectively in a complex and dynamic environment. But in the current system, deference to those in charge of functional capabilities routinely trumps the prerogatives of anyone charged with coordinating multifunctional missions, forcing issues upward for more centralized control by the President. The President needs to reverse this flow and delegate the executive authority for integrating the efforts of departments and agencies to a subordinate of his or her choice: a person sometimes referred to as a “mission manager.”¹³

It may seem surprising that the President, empowered by the Constitution to act as Chief Executive, cannot currently delegate his authority for integrating the work of departments and agencies. However, the stipulated authorities of the Cabinet officials have increased and been consolidated in law over the past 60 years. The 1947 National Security Act and its subsequent amendments, including the Goldwater-Nichols Department of Defense Reorganization Act of 1986, greatly strengthened the authority of the Secretary of Defense. The 1977 Department of Energy Organization Act created the Department of Energy and rolled up several agencies’ responsibilities into that new organization, empowering the Secretary of Energy. The Homeland Security Act of 2002 combined 22 separate organizations into the Department of Homeland Security, empowering another new Cabinet official. The Intelligence Reform and Terrorism Prevention Act of 2004 established the Office of the Director of National Intelligence and empowered the director to oversee and manage the Intelligence Community.

The numerous codified authorities of Cabinet officials often provide a legal basis for ignoring “czars” charged by the President with overseeing a cross-cutting mission area. An example is the chain of command for military operations. Goldwater-Nichols specified that it runs “from the President to the Secretary of Defense and from the Secretary of Defense to the commander of a Combatant Command.”¹⁴ The Department of Defense (DOD) used this provision to claim control of postwar planning for Iraq and ignore other departments. DOD argued that military forces

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would be involved and that the chain of command to those forces went through the Secretary of Defense, and thus DOD should be in charge of the entire interagency effort.¹⁵

Actually, Goldwater-Nichols gives the President other options because it includes the caveat “unless otherwise directed by the President.”¹⁶ However, for the President to insert anyone else in the military chain of command, or delegate decision authority over other departments and agency activities, other legal requirements must be met:

The President may, pursuant to 3 U.S.C. § 301, delegate particular functions to “the head of any department or agency in the executive branch, or any official thereof” who is subject to Senate confirmation. To qualify as a delegable function, a function must be “vested in the President by law” or vested in another officer who performs the function “subject to the approval, ratification, or other action of the President.” [Furthermore,] “Any individual in the interagency space who exercises meaningful authority to compel departments to act” would have to be an “officer of the United States,” and officers of the United States must have their positions established by statute as required by the Appointments Clause of the Constitution.¹⁷

Czars informally tapped by the President to coordinate an issue area do not meet these requirements. Thus we need new legislation for this purpose. It should empower the President to appoint and empower mission managers to lead cross-functional teams irrespective of pre-existing statutes. Only then could the President effectively delegate his authority for directing the efforts of the executive branch in a particular mission area involving capabilities “owned” by multiple Cabinet officials. Something like the following language suggests what is needed:

The President may designate individuals, subject to Senate confirmation, to lead interagency teams to manage clearly defined missions with responsibility for and presumptive authority to direct and coordinate the activities and operations of all of U.S. Government organizations in so far as their support is required to ensure the successful implementation of a Presidentially approved strategy for accomplishing the mission. The designated individual’s presumptive authority will not extend beyond the requirements for successful strategy implementation, and department and

*agency heads may appeal any of the designated individual's decisions to the President if they believe there is a compelling case that executing the decision would contravene public law or do grave harm to other missions of national importance.*¹⁸

Another reason for codifying the authorities in statute is the need to secure resources for the President's mission manager:

*"The President may create structures and processes and fund them temporarily by transferring resources, but ultimately it is Congress that provides resources on a sustained basis. Without Congress's input and resources, a presidentially imposed solution to interagency integration may wither for lack of funding." Thus, the statute . . . would likely also require a mechanism for funding their activities and associated congressional oversight.*¹⁹

Resource requirements vary greatly by mission. Countering disinformation may require nothing more than a compelling forensic case to discredit disinformation, whereas arming and training foreign forces require funds to purchase weapons and training. Whatever the resources required, ultimately Congress provides them to the executive branch, and a mission manager would need to keep Congress apprised of his or her activities. Given the authorities invested in each mission manager, Congress would want these officials to be subject to Senate confirmation.

Collaborative Cabinet

Legislation allowing the President to empower selected subordinates to direct executive branch activities is the key prerequisite for successful national security reform.²⁰ However, it is not sufficient. Structural adjustments in authorities must be accompanied by less visible but equally important elements of organizational performance.²¹ When senior leaders in the private sector impose hasty reforms without sufficient support and follow-up, the usual result is failure. A President imposing mission managers on his Cabinet officials and National Security Council (NSC) staff without supporting measures would also fail.²² To succeed, the President will have to personally lead a concerted effort to shape leadership attitudes and behavior, staff skills, and the organizational culture of the NSC staff.

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The place to begin is Cabinet officials and their expectations. The President would have to explain the need to use mission managers rather than the traditional interagency committees for high-priority, intrinsically interagency missions. Leaders of functional departments who want to protect their turf and fear losing control of their own operations and agendas are the greatest threat to the success of such cross-functional teams.²³ A case in point is U.S. Northern Command (USNORTHCOM). One commander of USNORTHCOM established cross-directorate Focus Area Synchronization Teams to improve overall organizational effectiveness and collaboration on key mission areas in 2010, and they produced good results. The teams also irritated the leaders of USNORTHCOM's functional staff directorates, who convinced a new incoming commander to dismantle them.²⁴ The same thing apparently happened to similar efforts to reform Marine Corps headquarters.²⁵ Functional leaders argue cross-cutting teams lack sufficient expertise, confuse lines of authority, and are inefficient. If they sense the senior leader (in this case the President) is not fully committed, they typically exert control over their representatives on teams by reminding them pointedly to "remember who you work for." Under this kind of pressure, team members stalemate over the way forward or compromise to the point of incomprehension. The group becomes a committee whose members protect their parent organizations' equities rather than a team focused on accomplishing the mission. In such cases the poor results seem to justify the observation that the team is just another layer of useless bureaucracy.

When teams are allowed to perform, their results demonstrate their worth and, over time, resistance fades. However, resistance from functional departments often cripples the teams before they can demonstrate their potential.²⁶ Despite everyone's interest in serving the Nation and safeguarding its security, similar issues will arise when a President decides to use mission managers leading interagency teams. To ensure mission managers have a chance to succeed, the President would have to personally communicate support for them and allay the concerns of Cabinet officials. The President should make the following points to his Cabinet:

- Mission managers are necessary. An abundance of historical cases illustrates the inadequacy of our existing mechanisms. As experience also teaches, our mechanism for managing complex problems must mirror the complexity of the security problem it tackles.²⁷ It must be a truly multifunctional, interagency team empowered to formulate, consider, and pursue fully integrated approaches. As President, I need to hear more than competing military, diplomat-

ic, and intelligence perspectives. I need alternative but fully integrated interagency approaches. Past examples of such teams clearly demonstrate they perform with much greater proficiency than czars or lead agencies.²⁸

- Mission managers will not dilute your authority. If we have learned anything since 9/11, and arguably since World War II, it is that no one Cabinet official can direct another Cabinet official to do anything.²⁹ Thus, none of you, no matter how talented, dedicated, or insightful on a particular issue, can lead and control an integrated, interagency approach to solving inherently interagency problems. Because you do not currently have this authority, you are not losing it to mission managers when we empower them to lead a well-defined mission. If the problem is largely a diplomatic, military, or intelligence problem, it will be managed by the Secretary of State, Secretary of Defense, or Director of National Intelligence, respectively. When we assign an interagency problem to a mission manager, it is because none of you are in a position to manage the problem well yourselves.
- Mission managers will manage the problem “end to end.” The mission manager will assess the evolution of his or her mission; develop policy; propose and execute a strategy for dealing with the issue; conduct or oversee all requisite planning for associated operations; oversee implementation of policy, strategy, and plans; and evaluate progress, solving problems as they arise and adjusting as necessary. When mission managers discover an impediment to progress, I expect them to intervene selectively but decisively to ensure mission success. They will drill down to whatever level of detail is necessary to identify the origin of suboptimal performance and remove it, and I will encourage their doing so within the bounds of the procedures outlined below.
- Mission managers may impact your equities. If this occurs, you have two remedies: one advantage of mission managers is that they are singularly focused on and held accountable for outcomes. The disadvantage is that their mission focus inclines them to ignore other legitimate concerns. They may take actions that complicate other national security objectives or that complicate your ability to manage your departments and agencies to best effect. We will prevent that from happening in two ways.

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- The first way is through *strategy concurrence*. After being assigned a mission, the mission manager will conduct a review of the situation and, after due deliberation with his or her team, propose strategy alternatives with associated resource implications. We will meet and agree upon the best strategy. Any concerns of yours will be noted and addressed at that time. My staff will codify our decisions in a directive that clarifies the mission manager's mission, strategy, authorities, and resources. The mission manager's authority will only extend to the parameters of the assigned mission, consistent with the strategy we discuss and I approve. If the strategy requires amendment, we will meet to consider its revision. However, once we agree upon these elements, I expect you to support the mission manager.
- The second way is through *implementation objections*. When we select mission managers and issue them mission directives, we will choose highly competent senior leaders who understand the importance of treating your institutions with respect. However, if they transgress the bounds of their mission directive or inadvertently make decisions with dire consequences for the welfare of your department or agency, I expect you to raise the issue. We will then quickly meet to adjudicate the competing objectives, risks, and anticipated benefits. I expect you to raise principled rather than bureaucratic concerns. I will not protect perceived prerogatives or respond to exaggerated allegations of harm to your organizations or the national interest that are clearly less important than the mission we are trying to execute. This right of appeal has worked well elsewhere.³⁰
- Mission managers must succeed. The missions assigned to mission managers are critical for the security of the Nation. They cannot be allowed to fail for lack of support. The presumption is that the mission manager is empowered by me to manage the problem and direct executive branch activities as they best see fit. The NSC staff will ensure the mission manager and team have the resources they need to succeed, including office space, communications, administrative support, and team members committed for specific periods of duration. The mission manager will decide what expertise the team needs, and I expect you to make that kind of expertise available. I expect those members to be rewarded if the team succeeds, and above all, I expect your subordinates to avoid the temptation to control members of the mission team. If the mission manager concludes a team member is simply representing his or her parent

organization's interests rather than trying their best to accomplish the mission, that person will be dismissed. If members of your organization are repeatedly dismissed for lack of collaboration, I will conclude that you personally do not support these priority national security efforts.

The President could go on to underscore some major advantages to doing business this way. In contrast to a Deputies Committee, which meets periodically and must examine a host of security problems, mission managers and their teams would be able to pursue their issue full time, enabling them to better keep abreast of developments. Because they are empowered they could manage problems end to end. Rather than simply promulgating broad and often obscure policy and hoping for the best as departments and agencies implement it, mission manager-led teams would be able to quickly zero in on any impediment to their success wherever it occurs. Because teams are not hamstrung by the need for political consensus, and their authority is commensurate with their responsibilities, they could make clear choices and take decisive action.

Another advantage is that this approach would make the best use of the President's time. Currently, Presidents are often asked to review briefings from departments and agencies intended to keep them informed and comfortable with general policy and progress on a range of issues, but seldom are these meetings structured to ensure that the really contentious issues are highlighted for Presidential attention. In fact, such issues are often downplayed to avoid confrontation. Using mission managers, a President could be confident that the full, integrated capabilities of the U.S. Government are being used to solve high-priority problems consistent with an approved strategy and that any major problems hampering the effort would be brought to the President's attention. Department heads would not embarrass themselves by raising marginal concerns, so only the most consequential issues would arise for Presidential decision, which are precisely the kind of hard decisions only the President has the power to make. An example from recent history was the Pentagon's concern that surging forces in Iraq in 2007 ran the risk of breaking the Army and elevating the risk of war in other theaters where enemies might seek to take advantage of overextended U.S. ground forces. These were legitimate concerns that the President needed to hear and rule on, which he did.³¹

Best of all, mission managers would be accountable. A President cannot currently hold anyone accountable for failure to manage complex security threats because no one other than the President has the authority

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to orchestrate the multiple lines of effort they require. In this respect the President faces precisely the same dilemma that the chairman and chief executive officer of Xerox was dealing with when the chairman observed:

We see attractive markets, and we have superior technology. On the other hand, we won't be able to take advantage of this situation unless we can overcome cumbersome, functionally driven bureaucracy. . . . we were functional in nature. So every function . . . all came up the line and, in the end, reported to me. . . . I was the only one responsible for anything in its entirety. If a product . . . did not [meet] success, there was no clear way to see what went wrong. Finger-pointing and shifting the blame were inevitable. The only one responsible for the failure of that product, therefore, was me.³²

Xerox solved its accountability problem by empowering cross-functional teams, and the President will have to do the same if he wants anyone empowered and thus accountable for dealing with similar cross-functional problems in the national security environment.

Many senior leaders like the idea of a cross-cutting team but believe it should simply advise the President rather than exercising executive authority. This would sidetrack the team's success and must be avoided at all costs. One reason such teams succeed is their ability to focus full-time on managing the cross-cutting mission. They make numerous small decisions that move the effort forward and communicate constantly. If they are merely advisory and can take no action without appealing to the President, much of this energy is vitiated and the President will inevitably be called upon to rule on innumerable lesser disputes, which negates the value of the mission manager from the President's point of view. Also, if the teams are not empowered they will not behave as if they are responsible for outcomes. Instead they will concentrate on providing "good advice." Instead of being singularly focused on accomplishing their mission, they will worry about what sounds reasonable; what Cabinet officials and the majority of informed observers will support; or what they know of the President's inclinations. Finally, department heads would take the "advisory" designation as clear evidence the President is not serious about empowering the group. Accordingly, they would protect their institution's narrow equities and support efforts by others to do the same.

New Model of Assistant to the President for National Security Affairs

The third change necessary is a new model of National Security Advisor.³³ The current model emphasizes the National Security Advisor as an honest broker, ensuring the decisionmaking process fairly represents the positions of the different departments and agencies on any given issue, resolving conflicts and elevating the most important disagreements to the President for resolution. The honest broker role is often contrasted with powerful National Security Advisors such as Henry Kissinger and Zbigniew Brzezinski, who unabashedly advocated policies and tried to engineer their implementation.

In reality, all National Security Advisors must balance their roles as process managers and confidential advisors to the President. As process managers, they must be trusted by Cabinet officials to articulate their department's views fairly. For this reason, high-level interagency committees have competing department and agency positions to contend with, not integrated strategy choices for the President's consideration. If advisors and their staffs took input from the departments and agencies and redefined it into a set of integrated alternatives, they would be accused of trying to direct outcomes. Similarly, if National Security Advisors or NSC staff are too creative in summarizing the results of discussion at meetings (as they are on occasion), they again risk alienating the Cabinet officials. In such circumstances, the departments and agencies can be expected to resist the National Security Advisor during policy implementation.

On the other hand, in their role as policy advisor, National Security Advisors must retain the confidence of the President by providing insightful advice and orchestrating positive outcomes. There are so many interdepartmental disagreements that the President cannot possibly resolve them all, and the differences often reflect bureaucratic equities rather than honest differences over alternative courses of action, which is what the President needs and wants. If all the National Security Advisor does is summarize department positions, he or she will be a disappointment to the President. For this reason, advisors work hard to forge consensus and integrate alternatives, sometimes at the expense of accurately replicating department and agency positions, which causes friction with Cabinet officials.

With the reforms recommended here, much of the tension between the two advisor roles would disappear. Mission managers would integrate alternative courses of action for consideration by the President and NSC and implement the approved strategy. It would be the National Security Advisor's job to run the process and ensure that the President hears any appeals from Cabinet officials to curb or overturn a mission manager's decision. For this purpose, the National Security Advisor could truly be

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an honest broker, ensuring that the mission manager, who is working the issue full-time, and the Cabinet officials and their concerns are honestly summarized for the President.

However, the new model of National Security Advisor also would have system-wide duties and a system-wide perspective. The advisor would have to ensure mission managers are set up for success and assess and keep track of their progress. Finally, with the help of the NSC staff, they would have to identify areas where mission managers are in conflict with one another. All this would require a system-wide perspective. Instead of concentrating on a handful of top Presidential priorities, the new National Security Advisor would be responsible for ensuring the system as a whole was working well and addressing the full range of critical issues.

This new model of National Security Advisor is much more practical. Currently our expectations of National Security Advisors are altogether unrealistic. We want them to be master administrators who advance the multilayered interagency committee process in a timely, transparent, and comprehensive fashion. But we also want them to be foreign policy and national security maestros who combine a comprehensive appreciation of the international system and security environment with a wide range of subject matter expertise across an incredible array of multifarious, complex problems that enables them to discreetly offer sagacious advice when circumstances, or the President, demand it. Furthermore, we insist that advisors have an exceptionally close and well-recognized personal relationship with the President, essentially serving as the President's alter ego on national security.

National Security Advisors are criticized for not meeting these naive expectations.³⁴ National Security Advisor General James Jones, USMC (Ret.), is a case in point. He was relentlessly attacked as inadequate despite a successful career as a Service chief and the North Atlantic Treaty Organization's Supreme Allied Commander Europe. Leaks to the press complained that he did not work himself into a state of utter exhaustion. He was accused of being "too measured and low-key to keep pace with the hard chargers working late hours in the West Wing"³⁵ and of falling behind "a White House on a manic dash to get a lot of top-tier issues dealt with."³⁶ He was resented for biking at lunchtime, leaving after a 12-hour day instead of working late into the night,³⁷ for missing key meetings and, at the same time, not being by the President's side all day long.³⁸

Jones was also criticized for managing collaboration rather than ensuring his voice dominated debate on key issues. People complained about Jones for "speaking up less in debates than [Secretary of State Hillary] Clinton and not pushing as hard for decisions."³⁹ He was not

seen as a dominant national security figure, but rather as self-effacing, collaborative, and generous in meetings.⁴⁰ He even sent others who were substantively competent to meetings in his stead. One pundit observed, "This kind of NSC collaboration always sounds good in principle [but] when sharp disagreements arise . . . the self-effacing retired general may have to summon his inner Henry Kissinger."⁴¹ Even his admirers agreed that "he needs to drive the agenda."⁴²

Finally, Jones was criticized as insufficiently close to the President. The lack of a close, personal relationship with the President meant Jones would not be taken seriously by other senior officials. One critic insisted, "He has to be first among equals—the fact that Condi [Rice] couldn't control [Richard] Cheney and [Donald] Rumsfeld in [George W.] Bush's first term was disastrous. A lot depends on what sort of relationship develops between Jones and [Barack] Obama."⁴³ Another expert worried, "The National Security Advisor needs to be behind the president," both literally and figuratively, but General Jones is not "seen as the guy in the room."⁴⁴ Pundits carped that other Presidential advisors had closer personal relationships with President Obama, which put Jones at a major bureaucratic disadvantage.

Critics were looking for an indefatigable subject matter genius and bureaucratic warrior with close personal ties to the President to run the national security system because that is just the kind of heroic individual it would take to make our current system work minimally well. In a system where only the President has the authority to compel collaboration, critics wanted Jones to be an extension of the President and his power. In a system where failures quickly gravitate to the White House for centralized management, critics wanted Jones to be knowledgeable enough to control the debate on all national security topics that came his way. This kind of empowered subject matter maestro might improve cross-departmental collaboration for a few issues, but the vast majority will necessarily go unattended. This explains the criticism that Jones was not working frantically enough. Without working around the clock (and in the process exhausting intellectual capital rather than building it), even fewer critical issues can be addressed.

The omnipresent, omniscient, and omnipotent National Security Advisor does not exist and never has, and we should stop expecting one to materialize. Instead we need someone who promotes collaborative decisionmaking and less-centralized issue management and who understands the importance of running the overall national security system well. Jones's admirers considered him a genius on management structures and decisionmaking processes,⁴⁵ and in a reformed system such as the one advocated here, his approach would work admirably. If the

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President had the authority to designate mission managers, and a collaborative Cabinet that understood and supported their use, a National Security Advisor with Jones's measured pace, attention to system-wide performance, and collaborative bearing would serve the Nation and the President well.

Conclusion

The 9/11 Commission's report did a good job of identifying the major limitations of the current national security system. It argued that "the agencies are like a set of specialists in a hospital, each ordering tests, looking for symptoms, and prescribing medications. What is missing is the attending physician who makes sure they work as a team."⁴⁶ The report explained this deficiency could not be rectified without adjusting the authorities of Cabinet officials. However, the report did not recommend circumscribing the authorities of Cabinet officials. Instead, the commission, which only adopted recommendations with unanimous support, advised in favor of creating the National Counterterrorism Center, a new organization that would conduct planning but not make policy or direct operations. As the Project on National Security Reform noted, this recommendation was clearly inadequate to solve the problem the commission identified:

Using the commission's analogy of the different departments and agencies acting like a set of specialists in a hospital without an attending physician, we can say the commission settled for a specialist who could offer a second opinion without providing the attending physician who directs the operations. Not surprisingly, to date the departments and agencies have treated the National Counterterrorism Center as a source for second opinions. The reality is that all priority national security missions—not just counterterrorism—require an attending physician.⁴⁷

The recommendations in this chapter correct the shortcoming that the 9/11 Commission identified but ignored. We do not need large, expensive, new organizations and complex processes. We need legislation from Congress, a President with a strong desire to improve national security system performance, and a National Security Advisor with a collaborative bent and organizational and bureaucratic acumen. Once in place, the mission managers would prove effective and their use would proliferate, which would require some additional follow-on reforms.

Once mission managers demonstrate they can produce better outcomes, additional reforms to help the system better support their use could be implemented. The critical thing now—if we want a system capable of significantly better performance—is to focus on these three indispensable steps forward.

The author was the study director for the Project on National Security Reform and its major report, *Forging a New Shield* (November 2008). He would like to thank Jim Kurtz of the Institute for Defense Analyses for multiple reviews of this chapter.

Notes

¹ Douglas Stuart, “Constructing the Iron Cage: The 1947 National Security Act,” in *Affairs of the State: The Interagency and National Security*, ed. Gabriel Marcella (Carlisle Barracks, PA: Strategic Studies Institute, 2008), 53. See also *Forging a New Shield* (Washington, DC: Project on National Security Reform, November 2008).

² Ike Skelton, comments to the press, September 30, 2010, available at <<http://armed-services.house.gov/pdfs/HR6249/SkeltonStatement.pdf>>.

³ Christopher J. Lamb and Joseph C. Bond, *National Security Reform and the 2016 Election*, INSS Strategic Forum 293 (Washington, DC: NDU Press, April 2016).

⁴ A survey of over 250 books, articles, and studies on interagency cooperation in the U.S. Government found only one report that concluded that interagency cooperation is successful. See Christopher J. Lamb et al., “National Security Reform and the Security Environment,” in *Global Strategic Assessment 2009: America’s Security Role in a Changing World*, ed. Patrick M. Cronin (Washington, DC: NDU Press, 2009), 412–413. See also Lamb and Bond.

⁵ Lamb and Bond.

⁶ Christopher J. Lamb and Edward Marks, *Chief of Mission Authority as a Model for National Security Integration*, INSS Strategic Perspectives 2 (Washington, DC: NDU Press, December 2010).

⁷ Richard Holbrooke, “The Machine That Fails,” *Foreign Affairs*, January 1, 1971, available at <<http://foreignpolicy.com/2010/12/14/the-machine-that-fails/>>.

⁸ Harold Seidman, *Politics, Position, and Power: The Dynamics of Federal Organization*, 5th ed. (New York: Oxford University Press, 1980), 219, 224.

⁹ Lamb and Bond, 2. The ineffectiveness of interagency committees was well explained in Henry Jackson, *Organizing for National Security: Inquiry of the Subcommittee on National Policy Machinery*, Senator Henry M. Jackson, Chairman, for the Committee on Government Operations, *United States Senate*, 3 vols. (Washington, DC: Government Printing Office, 1961).

¹⁰ Cited in *Forging a New Shield*, 260.

¹¹ Ibid.

¹² Lamb and Marks.

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¹³ The term *mission manager* has gained some currency, and so it is used here. But as some reviewers have noted, *mission director* would be a more appropriate title given the authorities recommended for the position.

¹⁴ Title 10 U.S. Code, Section 162(b), available at <www.law.cornell.edu/uscode/text/10/162>.

¹⁵ Douglas J. Feith, *War and Decision: Inside the Pentagon at the Dawn of the War on Terrorism* (New York: Harper, 2008), 316.

¹⁶ Title 10 U.S. Code, Section 162(b).

¹⁷ Lamb and Marks, 20.

¹⁸ *Ibid.*, 18.

¹⁹ *Ibid.*, 20ff. For an extended argument on this topic see Gordon Lederman, “National Security Reform for the Twenty-first Century: A New National Security Act and Reflections on Legislation’s Role in Organizational Change,” *Journal of National Security Law and Policy* 3, no. 2 (February 2010).

²⁰ Project for National Security Reform argued such legislation would need to be accompanied by new Select Committees on National Security in the Senate and House of Representatives with jurisdiction over all interagency operations and activities.

²¹ James R. Locher III, statement before the Senate Armed Services Committee, “30 Years of Goldwater-Nichols Reform,” November 10, 2015. Frank Ostroff makes the same point in *The Horizontal Organization: What the Organization of the Future Looks Like and How It Delivers Value to Customers* (New York: Oxford University Press, 1999), 12.

²² Ostroff, 12–13. Ostroff argues that employing cross-functional teams “without any sense of how to ensure that the teams are working in an integrated way that advances the performance of the entire entity, is nothing short of irresponsible.”

²³ *Ibid.*, 178.

²⁴ Author conversations with a staff officer from U.S. Northern Command about his strategy research project at the Army War College.

²⁵ Conversation with a senior official in a Washington, DC–based think tank that conducted an after-action report on the failed reforms for the U.S. Marine Corps.

²⁶ As Ostroff states, “Performance trumps ideology,” and he provides much evidence from both the private and public sectors. Ostroff, 159.

²⁷ This is consistent with the organizational principle of “requisite variety.” “If a business unit or team is to be successful in dealing with the challenges of a complex task, it is vital that it be allowed to possess sufficient internal complexity.” See Gareth Morgan, *Images of Organization* (Thousand Oaks, CA: Sage, 1997), 113.

²⁸ There are several in-depth case studies of high-performing interagency national security teams. See Christopher J. Lamb and Evan Munsing, *Secret Weapon: High-Value Target Teams as an Organizational Innovation*, INSS Strategic Perspectives 4 (Washington, DC: NDU Press, March 2011); Evan Munsing and Christopher J. Lamb, *Joint Interagency Task Force–South: The Best Known, Least Understood Interagency Success*, INSS Strategic Perspectives 5 (Washington, DC: NDU Press, June 2011); Fletcher Schoen and Christopher J. Lamb, *Deception, Disinformation, and Strategic Communications: How One Interagency Group Made a Major Difference*, INSS Strategic Perspectives 11 (Washington, DC: NDU Press, May 2012); and Christopher J. Lamb with Sarah Arkin and Sally Scudder, *The Bosnian Train and Equip Program: A Lesson in Interagency Integration of Hard and Soft Power*, INSS Strategic Perspectives 15 (Washington, DC: NDU Press, March 2014).

²⁹ Numerous examples of this point are offered in *Forging a New Shield* and its 107 supporting case studies. *Forging a New Shield*, 160.

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³⁰ The Goldwater-Nichols Department of Defense Reorganization Act of 1986 has such a right of appeal in Section 151, d, 1.

³¹ Frank G. Hoffman and G. Alexander Crowther, "Strategic Assessment and Adaptation: The Surges in Iraq and Afghanistan," in *Lessons Encountered: Learning from the Long War*, ed. Richard D. Hooker, Jr., and Joseph J. Collins (Washington, DC: NDU Press, 2015).

³² Quoted in Ostroff, 131, 188.

³³ For simplicity's sake we will refer to the Assistant to the President for National Security Affairs as the National Security Advisor.

³⁴ See the discussion of complaints leveled against Condoleezza Rice in Christopher J. Lamb with Megan Franco, "National-Level Coordination and Implementation," in *Lessons Encountered: Learning from the Long War*, 188, 198ff, 212ff.

³⁵ Karen DeYoung, "National Security Adviser Jones Says He's an 'Outsider' in Frenetic White House," *Washington Post*, May 7, 2009.

³⁶ Steve Clemons, "Can James Jones Survive a Second Round of Attacks and 'Longer Knives'?" *The Washington Note*, June 12, 2009.

³⁷ Helene Cooper, "Obama to Speak from Egypt in Address to Muslim World," *New York Times*, May 8, 2009.

³⁸ Ben Smith and Jonathan Martin, "Reporters Jonesin' for NSC Profiles," *Politico*, May 8, 2009.

³⁹ Mark Landler, "Her Rival Now Her Boss, Clinton Settles into New Role," *New York Times*, May 1, 2009.

⁴⁰ Joe Klein, "Sizing Up Obama's First 100 Days," *Time*, April 23, 2009.

⁴¹ David Ignatius, "General James Jones's Outlook as Barack Obama's National Security Adviser," *Washington Post*, April 30, 2009.

⁴² Klein.

⁴³ Ibid.

⁴⁴ Cooper.

⁴⁵ Clemons.

⁴⁶ 9/11 Commission Report. Interestingly, McChrystal uses the same analogy in his recent book on teams. Stanley A. McChrystal, Tantum Collins, and David Silverman, *Team of Teams: New Rules of Engagement for a Complex World* (New York: Portfolio, 2015), 101–103.

⁴⁷ *Forging a New Shield*.

Weapons of Mass Destruction

John P. Caves, Jr.

The next U.S. administration faces four pressing WMD challenges. First, the prospects of a direct clash between the United States and a nuclear-armed adversary that could escalate to the nuclear level are likely to grow. Second, the scope of North Korea's nuclear, chemical, and suspected biological weapons programs likely will require resources for countering weapons of mass destruction that exceed those currently available. Third, longstanding international efforts to prohibit chemical and biological weapons are threatened by the reemergence of chemical weapons use and potentially by rapid advances in the life sciences. Finally, concern that the 2015 Joint Comprehensive Plan of Action may only postpone—rather than prevent—Iran's acquisition of nuclear weapons will perpetuate tensions and proliferation pressures in the region.

The 2015 National Security Strategy identifies the proliferation and/or use of weapons of mass destruction (WMD) among the top strategic risks to the Nation's interests.¹ This chapter examines four pressing WMD challenges for the next U.S. administration. First, the prospects of a direct clash between the United States and a nuclear-armed adversary that could escalate to the nuclear level are likely to grow. Russia in particular has become more assertive in challenging U.S. interests and has developed concepts for the limited use of nuclear weapons in a conflict with the North Atlantic Treaty Organization (NATO). Second, the scope of North Korea's nuclear, chemical, and suspected biological weapons programs likely will require resources for countering WMD that exceed those currently available to the United States and South Korea. Third, longstanding international efforts to prohibit chemical and biological weapons are threatened by the reemergence of chemical weapons use and potentially by rapid advances in the life sciences. Finally, concern that the 2015 Joint Comprehensive Plan of Action may only postpone—rather than prevent—Iran's acquisition of nuclear weapons will perpet-

uate tensions and proliferation pressures in the region. To meet these challenges, the next U.S. administration needs to:

- close gaps in capabilities, plans, and policies that weaken deterrence
- reduce incentives for further proliferation by enhancing monitoring and verification measures and reassuring allies and partners
- strengthen the Nation's countering-WMD posture with increased resources and improved organization
- stay on top of and leverage rapid scientific and technological developments in the life sciences and related fields
- improve the education of military officers, civilian national security professionals, and the broader public on WMD challenges and the necessary responses thereto.

Challenges

The next U.S. administration will face numerous challenges in addressing the threats arising from WMD, both large and small, but the four challenges discussed below are expected to be most pressing.

Detering and Managing Escalation in Conflicts with Nuclear-Armed Adversaries

The United States is entering a new period of heightened risk of direct conflict with nuclear-armed regional powers, with the potential to escalate to the nuclear level. The nuclear problem is no longer just about proliferation and global threat reduction, the twin imperatives that characterized post-Cold War policy.² Today we also confront the challenge of deterring an adversary's first use of nuclear weapons and managing the risks of further escalation.³ Being better prepared for new and complex escalation situations requires adapting capabilities, plans, policies, exercises, and education.

A number of nuclear-armed states are challenging important U.S. interests through both military and nonmilitary means. Russia has been most aggressive, invading Georgia, annexing Crimea, enabling separatists in eastern Ukraine, and militarily intervening in Syria. Meanwhile, China has asserted its claims to disputed territory in the East and South China seas through more aggressive measures, including armed patrols,⁴ commercial exploitation activities with armed escorts,⁵ and physical en-

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largement of disputed formations that it controls.⁶ North Korea frequently issues threats, including nuclear ones, against Seoul and Washington, and periodically perpetrates military provocations.⁷ These activities threaten the territorial integrity and security of U.S. treaty allies, and more broadly the rules-based order that the United States views as central to global security. As such they carry the possibility of direct conflict with U.S. forces.

Russia's and China's increasing assertiveness may be explained by a confluence of ambition and opportunity. The ambition is their respective aspirations for a more powerful role globally and primacy in their own regions. Both view the United States as the principal obstacle to realizing such ambitions. The opportunity principally is the mitigation of U.S. military superiority resulting from their aggressive military modernization programs, particularly in antiaccess/area-denial (A2/AD) capabilities, power projection, and other information-centric capabilities.⁸ That sense of opportunity may be enhanced by a perceived asymmetry of interests with the United States in regional conflicts and a certain war-weariness among the United States and some of its Western allies after more than a decade of conflict in Afghanistan and Iraq.

The ability of U.S. forces to prevail in the early stages of conventional conflicts with Russia and China in areas close to their borders—and by extension the ability to deter such conflicts—should no longer be assumed. Geography and growing deployments of modern A2/AD capabilities⁹ increase the vulnerability of U.S. forces in these regions and complicate U.S. reinforcement efforts.¹⁰ This situation makes it more likely that Russia or China could achieve a rapid fait accompli, such as seizing territory in the Baltic region or East China Sea, respectively, and shift the burden of escalation onto the United States if those gains are to be reversed.

The burden of escalation is heavy in conflicts with nuclear-armed adversaries.¹¹ To degrade adversary capabilities threatening U.S. and allied efforts to assemble and employ sufficient force to reverse a fait accompli, U.S. forces likely would have to strike assets, including missile, integrated air defense, and command and control sites, on Russian or Chinese territory.¹² Such attacks could be viewed as escalatory and strategic by those nations and invite retaliatory strikes on U.S. and other allies' territories. Some Chinese strategic thinkers have suggested that conventional attacks on strategic targets would merit a nuclear response, notwithstanding China's longstanding nuclear no-first-use policy.¹³ Of more direct concern, Russia reportedly has adopted a concept, generally referred to as "escalate-to-de-escalate," by which it would resort early in a conflict to nuclear as well as conventional strikes against critically

important adversary targets to convince the adversary that the risks of continuing the conflict outweigh any possible rewards.¹⁴ Indeed, Russia has been keen to impress upon others its readiness to employ nuclear weapons. It espouses a military doctrine reliant on nuclear weapons to deter and defeat major conventional as well as nuclear aggression.¹⁵ It also frequently rattles its nuclear saber, as it did to deter intervention in the Ukraine conflict and to try to dissuade European states from hosting U.S. missile defense assets.¹⁶

U.S. nuclear escalation options currently are more limited than those available to Russia. Nonstrategic U.S. nuclear weapons based in Europe and assigned to NATO are an important rung on the escalation ladder: they can signal resolve and under the right circumstances have real military effect, but can also demonstrate restraint by allowing strategic systems to be held in abeyance. Russia holds a much larger number and greater variety of nonstrategic nuclear weapons than the United States does.¹⁷ Some Russian delivery systems also are more modern and capable, for example, the Iskander missile system, which can deliver nuclear- or conventionally armed ballistic and cruise missiles that are maneuverable and re-targetable in flight.¹⁸ This suggests that Russia may accord greater importance and more roles to nonstrategic nuclear weapons than does NATO. The Alliance's land-based nuclear deterrent is limited to aging gravity bombs delivered by dual-capable tactical aircraft (DCA) that are vulnerable to Russia's integrated air defense systems.¹⁹ The planned replacement of most DCA with F-35s and completion of the life extension program for the B-61 bombs will not occur before the 2020s.²⁰

The threat posed by Russia's Iskander missile system to NATO is currently limited by range. The 1987 Intermediate Range Nuclear Forces (INF) Treaty bars Russia and the United States from developing, testing, or deploying ballistic missiles or ground-launched cruise missiles (GLCM) with ranges between 310 and 3,400 miles.²¹ The Iskander-M extended-range ballistic missile system currently deployed with the Russian army has a range of 250 miles.²² The more recent Iskander-K variant launches the R-500 cruise missile, which some analysts believe has an intermediate range but which the United States has not identified as a treaty violation.²³ The United States, however, has accused Russia of testing a different GLCM in violation of the INF Treaty, though it has not publicly identified the missile.²⁴

Russia's development and deployment of intermediate-range nuclear missiles would pose a particular problem for NATO. These missiles could strike targets across Europe within minutes without threatening U.S. territory. When the Soviet Union fielded such systems in the 1970s, NATO governments considered it so serious a threat to Alliance cohesion

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that they unanimously agreed, despite widespread public opposition, to pursue a dual-track approach of deploying a comparable capability in Europe while seeking to negotiate mutual limits with the Soviets. Only after those NATO deployments actually began did the Soviet Union agree to negotiate what would become the INF Treaty. Contemporary Russian violations would be consistent with dissatisfaction that Russian officials have expressed with the treaty in recent years for constraining their ability to counter intermediate-range missiles deployed by countries such as China and Pakistan or by missile defense and conventional precision-strike capabilities possessed by the United States.²⁵

China poses its own escalation challenges for the United States. Not a party to the INF Treaty, it fields a large and growing force of modern, medium-range, conventionally armed ground-based ballistic missiles. These MRBMs as well as a variety of land-attack cruise missiles hold U.S. bases in Japan at risk. There are reports that China is developing a new advanced intermediate-range ballistic missile (IRBM) that could strike U.S. bases in Guam.²⁶ China also is fielding an anti-ship ballistic missile with a range of 900 miles and maneuverable warhead that can attack ships, including aircraft carriers, in the western Pacific Ocean.²⁷ China's growing missile force is part of its expanding A2/AD capabilities that challenge the U.S. ability to fulfill its security commitments to regional states.

China also currently deploys nuclear-armed MRBMs and IRBMs as well as intercontinental ballistic missiles and submarine-launched ballistic missiles.²⁸ Unlike Russia, China does not have, nor has it sought, nuclear parity with the United States. It currently maintains only about 200 operational nuclear warheads in support of a long-stated nuclear doctrine of no-first-use and minimum deterrence.²⁹ China, however, is modernizing and expanding its nuclear arsenal, which may promote stability in some regards by making its arsenal more survivable, but also may afford China greater scope to employ its weapons in counterforce or nonstrategic roles without compromising the counter-value retaliatory capacity at the heart of its strategic doctrine.³⁰ Also, unlike Russia, China does not share a ground border with any U.S. ally, making its military competition with the United States more focused on the sea and associated air and space domains. These domains may be more inviting to operational use of nuclear weapons since they offer less scope for collateral damage.

North Korea also poses nuclear deterrence and escalation management challenges but of a different scale and circumstance from Russia or China. The long-feared prospect of a massive North Korean invasion of the South to achieve reunification has receded as the quality of its con-

ventional forces has deteriorated along with its economy,³¹ but Pyongyang has managed to build a small and growing nuclear arsenal and a ballistic missile force of increasing range with which to deliver those weapons.³² The greater risk of conflict now is seen as arising from an escalatory spiral initiated by a North Korean provocation or the possibility of serious unrest in the North that necessitates outside intervention to address a humanitarian crisis, secure WMD, and/or respond to a related attack against an external actor.³³ Given North Korea's huge investment in its nuclear weapons program and the frequency and virulence of its nuclear threats, it is only prudent to anticipate that it may respond to such developments with nuclear weapons use.

Preparing for WMD Contingencies on the Korean Peninsula

Beyond deterrence and escalation management risks, North Korea also poses a major countering WMD (CWMD) challenge.³⁴ In the event of a collapse of the Pyongyang regime or as the result of a major conflict on the peninsula, the United States and its allies must be prepared to defend against the possible use of North Korean chemical and biological as well as nuclear weapons and to enter North Korea to secure and eliminate its WMD capabilities. North Korea represents the most comprehensive CWMD challenge we face, one whose potential scale could exceed the resources currently available to the United States and South Korea. Being fully prepared for WMD contingencies on the peninsula and beyond will require a larger pool of forces with specialized training and equipment and improved organization.

North Korea may have between 6 and 30 nuclear weapons and could expand its stockpile, perhaps dramatically, over the coming years.³⁵ Its growing and increasingly sophisticated ballistic missile force spans from short- to intercontinental-range missiles.³⁶ According to an unclassified assessment by South Korea's Ministry of National Defense (MND), the North likely possesses between 2,500 and 5,000 metric tons of chemical warfare agents. This probably includes first- and second-generation agents, such as mustard and sarin. Less is known about North Korea's biological weapons (BW) capabilities, but the MND assesses the North has the capability to cultivate and weaponize various types of agents, such as anthrax and smallpox.³⁷

In the event of a major conflict on the peninsula and/or the collapse of the North Korean regime, it will be a high priority task for U.S. and South Korean forces to locate, control, defeat, disable, and/or dispose of North Korean WMD capabilities to prevent their use by North Korean forces or agents, or their loss to third parties. This task will be complicated by incomplete knowledge of the locations and specific types and

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quantities of WMD and related capabilities. WMD programs, especially chemical and biological ones, are difficult intelligence targets, especially in North Korea. Parts of North Korea may be difficult to access, and coalition forces also may have to accomplish other priority tasks like non-combatant evacuations, humanitarian operations, and/or conventional warfighting.

The potential scale of this task exceeds existing coalition resources, particularly units with specialized training and equipment for CWMD missions. These units number in the single digits while WMD sites may number in the hundreds.³⁸ It will not be possible to reach and secure all or most sites of concern in a timely fashion, except in the most limited and permissive contingencies. Even with little or no North Korean resistance, the difficult terrain alone is a major obstacle to timely access. The less warning of a crisis, the longer will be the response time to deploy forces from home bases. The United States also will have to anticipate the possibility of some WMD assets proliferating off the peninsula and devote resources to their interdiction.³⁹

Successful North Korean use of WMD against U.S. and South Korean forces in the context of a shooting war could seriously complicate operations. Chemical and biological attacks may not preclude ultimate victory by the combined forces, but large-scale attacks in particular would increase the length and costs of the fight and could have unpredictable political consequences.⁴⁰ If North Korea also employed nuclear weapons on the battlefield—which it will have greater scope to do as its arsenal expands—this would re-introduce a dimension to warfighting for which U.S. forces have not extensively prepared since the Cold War's height.⁴¹

Holding the Line Against Chemical and Biological Weapons

New chemical and biological weapons threats are emerging. Some on the chemical side have already manifested. These developments challenge the integrity and force of international norms and regimes prohibiting chemical and biological weapons. They also impose new demands on Department of Defense (DOD) force protection. To hold the line against a resurgence in the proliferation and use of chemical and biological weapons, the United States needs to lead international efforts to update nonproliferation regimes for the new strategic environment and hold accountable those who defy international norms and law in these areas. The United States also needs a greater understanding of emerging technologies and the threats and opportunities they pose.

The Biological Weapons and Toxins Convention (BWC) and Chemical Weapons Convention (CWC) came into force in 1972 and 1997, respectively, to prohibit biological and chemical weapons. Almost all

states are now party to these agreements.⁴² No state is known to have employed biological weapons (BW) since the BWC entered into force. Nor had any state been known to employ chemical weapons (CW) since the CWC entered into force—until 2012–2013, when Syria, not then a CWC state party,⁴³ used sarin on several occasions on its own territory.⁴⁴ The large-scale sarin attack in eastern Ghouta in August 2013, which caused at least hundreds of civilian deaths,⁴⁵ prompted threats of military action against the Syrian regime by the United States, United Kingdom, and France. That crisis was resolved when Russia and the United States brokered Syria's agreement to join the CWC, declare its CW capabilities, and submit its declared stocks to destruction (largely accomplished in 2014).⁴⁶ With this accession to the CWC by one of its most significant holdouts, the cause of prohibiting CW, initially undermined by Syria's sarin use, appeared to be reinforced.

But that moment was short-lived. Even before the most dangerous of Syria's declared chemicals were destroyed, reports emerged of the employment of chlorine-containing chemicals as a weapon of war in Syria. During 2015 the Organisation for the Prohibition of Chemical Weapons (OPCW) Fact-Finding Mission in Syria (FFM) investigated alleged incidents of CW use and concluded that several uses of chlorine likely had occurred in Syria's Idlib Governorate between March 16 and 20, 2015.⁴⁷ Although the FFM's mandate proscribes it from attributing responsibility for these attacks, Secretary of State John Kerry and others expressed high confidence that at least the preponderance of attacks were perpetrated by the Syrian regime.⁴⁸

If the Syrian regime conducted these chlorine attacks, as is widely believed, it would constitute an unprecedented violation of the CWC by a state party. The CWC prohibits the use of any toxic chemical as a method of warfare, whether it is listed in the convention's Schedules of Chemicals.⁴⁹ But in contrast to the explicit Western threats of military action following the Ghouta attacks, no comparable threat or sanction was visited upon Syria in the immediate wake of these chlorine uses. This may reflect several factors. First, the chlorine attacks have caused few deaths because chlorine is much less lethal than sarin. Second, the human toll caused by chlorine (or all CW) use in Syria pales in comparison to the mounting carnage there caused by conventional weapons.⁵⁰ Third, the longer and more complex the Syrian conflict becomes, the less inclined other countries may be to take strong stands that complicate achievement of a political settlement. The United States and its allies chose first to seek an official finding of the Syrian regime's responsibility for chlorine use from a cognizant international body. In August 2015 the United Nations Security Council adopted Resolution 2235 establishing

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a Joint Investigative Mechanism of the United Nations and the OPCW (JIM) to attribute responsibility for the use of CW in Syria.⁵¹ In August 2016 the JIM found the Syrian regime to be responsible for two chemical attacks during 2014 and was continuing to assess several other cases.⁵² The United States and its allies now need to decide how to respond.

Unfortunately, the CW use problem extends beyond the Syrian regime's actions. There is increasing evidence that the Islamic State of Iraq and the Levant (ISIL) also has employed CW in Iraq as well as Syria.⁵³ For example, in its August 2016 report, the JIM found that ISIL was "the only entity with the ability, capability, motive, and the means to use sulfur mustard" during an attack in Marea, Syria, on August 21, 2015.⁵⁴ Like the Syrian regime since 2014, ISIL's apparent CW use to date has caused few fatalities, featuring relatively low-lethal toxic industrial chemicals (TICs) and sulfur mustard.⁵⁵ The use of mustard suggests ISIL may be producing chemical agents in addition to commandeering widely available TICs. ISIL's conquest of territory in Syria and Iraq, including the major city of Mosul, has afforded it control of modern scientific facilities and perhaps also expertise seldom available to terrorist organizations. This may enable ISIL to develop, produce, and employ more lethal chemical agents than mustard and perhaps biological weapons, too, but there also is skepticism about ISIL's ability to do so.⁵⁶

It also is noteworthy that ISIL, like the Syrian regime, appears to have used CW primarily to support military objectives rather than for more purely terror purposes. While both ISIL and the Syrian regime use chemicals against civilians and likely, at least in part, for their psychological effect, both are doing so in the prosecution of a war in which they are attempting to defeat an adversary and control territory. But more traditional forms of terrorism using CW or even BW cannot be ruled out, considering ISIL has claimed responsibility for recent mass casualty attacks outside the region.⁵⁷ This has been on the mind of some European officials.⁵⁸

CW use in the Middle East points to several limitations of the CW nonproliferation regime. The Syria case demonstrates the difficulty of mobilizing sufficiently unified, timely, and strong international action to deter or sanction a CWC state party that violates its treaty obligations, at least when its use of CW is killing few people. The ISIL case reminds us that terrorist organizations are not bound by the norms and agreements made by states. Both cases show that CW encompass more than the sophisticated chemical warfare agents that are the monitoring and verification focus of the CWC. Widely available TICs also can be employed as weapons with both military and terror effect.

No comparable recent instances of BW use have occurred, but this should not be cause for complacency. There are indications of interest in BW by both state and nonstate actors. For example, the United States discovered an al Qaeda BW program when it invaded Afghanistan,⁵⁹ and more recently a document on BW production was found on an ISIL member's captured laptop.⁶⁰ On the state side, Russian President Vladimir Putin spoke in 2012 about the future emergence of genetic weapons,⁶¹ a disturbing reference in light of the Soviet BW program. BW also is potentially more impactful than CW, generally possessing a far lower mass-to-effect ratio.⁶²

Technological barriers to BW development, production, and use also are receding. Dual-use production and dissemination equipment that was hard to acquire is now widely available.⁶³ Rapid developments in the life sciences (for example, genetic mapping, "big data" genetic analytic capability, specific gene editing), other emerging technology areas (nanotechnology, additive manufacturing), and the broad dissemination of the resulting information via the Internet also have made it possible and/or easier to perform an ever broader range of biological activities. These include enhancing traditional forms of BW (for example, resistance to medical countermeasures), recreating agents of past scourges (the 1918 Spanish Influenza), and even creating entirely new organisms.⁶⁴ It may even become possible to design BW that target specific individuals or groups on the basis of their unique genetic profiles.⁶⁵

These rapid and far-reaching scientific and technological developments increase the prospects for technological surprise and pose significant challenges for the BW nonproliferation regime. The BWC was drawn broadly enough to prohibit new forms of BW that may emerge from technological change, but its current processes are hard-pressed to keep pace with such change. The BWC's review conferences occur only every 5 years, a period in which major scientific and technological developments can transpire. Also, no standing body of experts exists to regularly assess scientific and technological developments and to advise state parties' political representatives of their implications for the convention, as the Scientific Advisory Board and OPCW Technical Secretariat do for CWC state parties.

The new BW possibilities enabled by these scientific and technological developments also pose serious challenges for the protection of forces, populations, and economies, but they could provide means to counter these threats, too. They already are the source of many positive improvements in other areas, such as medicine, energy, and agriculture. The potential impacts of emerging technologies are the subject of increasing interest and activity across the U.S. Government, but the activi-

ty generally lacks structure, integration, and a focus on what needs to be done, though there are recent efforts to rectify these shortcomings. Government research, development, and acquisition processes in most cases also lack the dexterity to capitalize quickly on rapidly emerging technological opportunities to address biodefense and public health needs.⁶⁶

Containing Nuclear Proliferation Pressures in the Middle East

The 2015 Iran nuclear agreement—the Joint Comprehensive Plan of Action (JCPOA)—constrains Iran’s ability to develop nuclear weapons but does not eliminate proliferation pressures within the region. Indeed, the nature of the agreement could heighten such pressures if regional rivals are concerned that Iran may resume its pursuit of nuclear weapons when the agreement’s key restrictions on its enrichment capability expire. To contain these proliferation pressures, the United States will need to reassure its regional partners that together they can keep an aggressive Iran in check while trying to induce Iran to behave more responsibly.

The JCPOA limits Iran’s ability to produce fissile material through a set of physical constraints and intrusive monitoring and verification measures.⁶⁷ But the JCPOA also allows Iran to retain a substantial nuclear infrastructure (including virtually all of the physical infrastructure associated with its uranium enrichment program) and the capacity to expand its enrichment program after the physical constraints on fissile material production and most of the verification and enforcement provisions expire in 10 to 15 years. Assuming that the JCPOA is implemented and effectively deters Iran from producing fissile material from its *declared* facilities, there remains concern that Iran will bide its time until the agreement’s latter years in order to reap the benefits of sanctions relief and then resume pursuit of nuclear weapons from a stronger economic position.⁶⁸ In addition, there is concern that Iran might cheat on the margins during the JCPOA by conducting small-scale enrichment or weaponization work at *undeclared* facilities, the detection of which will rely heavily on national intelligence capabilities.⁶⁹

Iran’s regional rivals could be motivated to pursue their own nuclear hedging strategies to guard against the possibility of a future nuclear-armed Iran. Saudi Arabia, the leader of the Sunni Arab bloc opposed to Iran, has warned it would have to respond to Iran’s acquisition of nuclear weapons.⁷⁰ Hedging strategies could include pressing ahead with civilian nuclear energy programs (which can provide a foundation for nuclear weapons development), developing enrichment and/or reprocessing capabilities (which is permissible under the Nuclear Non-Proliferation Treaty (NPT) if done openly and with safeguards), covertly inves-

tigating nuclear weapons technologies, and/or pursuing nuclear security guarantees from outside powers.

Saudi Arabia was among a number of Arab states that initiated civilian nuclear energy programs in the mid-2000s.⁷¹ It likely was not a coincidence that these initiatives appeared within a few years of revelations of Iran's secret enrichment activities and the failure of the initial, European Union–led negotiations to end those activities. While this may represent a Saudi hedging strategy for the longer term, some observers believe that Riyadh might also pursue a nuclear deterrence strategy for the shorter term, one that presumably would leverage its historic relationship with Pakistan.⁷² Alternatively, the Saudis and other Gulf Cooperation Council (GCC) states could seek a formal security guarantee from the United States or possibly France.

Lingering questions about Iran's ultimate nuclear intentions also could inhibit efforts to resolve or mitigate key sources of regional instability. Some observers believe the nuclear agreement could motivate both Iran and its Saudi-led Arab opponents to become more confrontational toward one another, at least in the short term. Iranian hardliners may act to heighten tensions to preclude the agreement from serving as a springboard for wider diplomatic and economic cooperation with the international community. Iranian Supreme Leader Ali Hoseini-Khamenei may acquiesce to assuage concerns within Iran's conservative political establishment while JCPOA implementation proceeds.⁷³ The financial windfall that Iran expects from sanctions relief under the agreement also could underwrite increased funding and weapons shipments to Shia militants and proxies in Iraq, Syria, Yemen, Lebanon, and Palestine.⁷⁴ For its own part, the Saudi-led Arab coalition states may feel compelled to stand up more vigorously to Iran to offset any perceived lessening of the U.S. commitment to their security.⁷⁵ Arab states are concerned that the agreement may lead to a closer U.S.-Iran relationship or a progressive U.S. disengagement from the region.⁷⁶ Saudi Arabia's uncharacteristic commitment of its own forces and prestige to the difficult conflict in Yemen can be seen as a case in point. The JCPOA, moreover, has not alleviated Israel's concerns about Iran's nuclear program. Israeli Prime Minister Binyamin Netanyahu appealed directly to the U.S. Congress to oppose the agreement.⁷⁷

Recommendations

The foregoing WMD challenges are serious but surmountable. To meet them, the next U.S. administration should:

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- close gaps in capabilities, plans, and policies that weaken deterrence
- reduce incentives for further proliferation by strengthening monitoring and verification measures and reassuring allies and partners
- strengthen the Nation's countering WMD posture with increased resources and improved organization
- stay on top of and leverage rapid scientific and technological developments in the life sciences and related fields
- improve the education of military officers, civilian national security professionals, and the broader public on WMD challenges and the necessary responses thereto.

Close Gaps that Weaken Deterrence

The United States should strengthen its own and regional allies' abilities to resist and thus deter a territorial fait accompli by Russia and China that would shift the burden of escalation on the United States and its allies. For Europe, this means implementing the proposed expansion of the European Reassurance Initiative in DOD's fiscal year 2017 budget request to enable a larger rotational force presence on the ground of NATO Allies most vulnerable to Russian aggression. If Russia acts more aggressively, consider a larger, permanent force presence in those allied states. If Russia fields MRBMs and IRBMs, accord the U.S. European missile defense architecture an orientation against such missiles and consider developing and deploying comparable U.S. missiles. Expand air defense systems in the theater to protect a larger array of assets against cruise missile attack. In the Pacific, complete the redeployment of 60 percent of all U.S. naval and air forces to that theater.⁷⁸ Continue to expand and integrate U.S. and East Asian regional allies' missile defense capabilities. Vigorously pursue the Third Offset Strategy that DOD announced in 2015 to strengthen U.S. conventional deterrence in the face of both China's and Russia's growing capabilities.⁷⁹

Modernize U.S. nuclear forces and employment plans to enhance nuclear deterrence. Press ahead with the programmed life extension of the B61 nuclear bombs and the replacement of NATO dual-capable aircraft with F-35s. Proceed with the planned modernization of the broader U.S. nuclear force, including development of the long-range standoff nuclear cruise missile as a replacement for the aging air-launched cruise missile to provide a more reliable standoff attack capability against modern in-

tegrated air defenses. The planned modernization effort will require a significant increase in spending for U.S. nuclear forces, but these costs will still represent a small portion of the overall U.S. defense budget,⁸⁰ and there is no substitute for modernizing an aging nuclear force that is fundamental to U.S. security. The bomber leg of the triad, including standoff cruise missiles and gravity bombs deliverable by penetrating bombers, is especially important to the effectiveness and credibility of U.S. extended deterrence commitments to major allies.⁸¹

Expand theater nuclear planning expertise in relevant geographic combatant commands (GCCMDs) and better integrate conventional and nuclear force planning at the theater level.⁸² Because the effective posturing and potential employment of nuclear assets in a theater may be critical to preventing a regional conflict from escalating to the strategic level, GCCMDs need to be well-versed and centrally involved in planning for the nuclear dimensions of regional conflicts. They also must be able to deconflict their conventional operations with nuclear ones, which may be directed by U.S. Strategic Command (USSTRATCOM), so as not to undermine the conventional campaign. Deterrence and warfighting will be further strengthened by GCCMDs' understanding of how to enhance their forces' resilience in conducting operations in a nuclear environment.

Review existing doctrine, concepts, and campaign plans for conflicts with nuclear-armed adversaries to assess their implications for nuclear escalation and revise them as appropriate to minimize that risk. This mindset was not necessary for post-Cold War conflicts because U.S. adversaries were not nuclear armed. The United States could and did apply overwhelming conventional force to rapidly crush those adversaries' capacity to wage war wherever it existed and also, in some cases, to overthrow their regimes. The United States will need to pursue more limited aims with calibrated applications of force, and associated messaging, in potential future conflicts with states that are able to wreak nuclear devastation upon U.S. allies, forces, and even populations.⁸³ This mindset is especially salient to planning for war in Korea, which long assumed a decisive counteroffensive to reunify the peninsula under South Korea, as opposed to wars with Russia and China, for which invasion and regime change have not been war aims.

Hold accountable those who are using CW in the Middle East. If other actors observe that CW use goes largely unpunished, they may be less deterred from similar resort in their own conflicts if they perceive advantage in doing so. To deter such use, the United States needs to provide leadership in holding the Syrian regime accountable for its CWC violations. The JIM's continuing efforts to ascribe responsibility for CW use in Syria must be actively supported. If the ultimate outcome in Syria is

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the demise of the Bashar al-Asad regime, members of the regime deemed responsible for CW use should still be pursued and prosecuted. As concerns ISIL, the United States must continue to pursue aggressively its comprehensive defeat, including denying it the sanctuary and facilities of the territory it now controls in Iraq and Syria, which likely contribute to its ability to produce CW. In the meantime, priority should be accorded to efforts to understand and disrupt ISIL's WMD activities, deter use, and prevent proliferation to affiliate groups.⁸⁴

Determine why Syria and ISIL have resorted to proscribed chemical weapons. Do they see these weapons as having unique military advantages, such as the ability to reach opponents within structures that protect them from bullets and high explosives? Is it because chemical weapons terrorize target populations into fleeing territory that they are trying to seize? Is it because widely available TICs are cost-effective alternatives to conventional weapons, such as improvised barrel bombs are to military-grade bombs? Understanding their motivations can inform future efforts to dissuade and deter CW proliferation and use.

Reduce Incentives for WMD Proliferation

Advocate for and contribute to increased funding, inspectors, and intelligence resources for International Atomic Energy Agency monitoring and verification of Iran's nuclear program. Confidence in Iran's essential compliance with the JCPOA will be necessary to achieving the agreement's goal of preventing Iran from acquiring nuclear weapons. These measures could help allay Israel's and GCC states' concerns that Iran will seek to increase its enrichment capacity during the JCPOA, and eventually make the decision to build nuclear weapons. The United States also should begin working as soon as practical with key allies and partners to identify ways to induce Iran, positively and negatively, to abide by its NPT obligations once the JCPOA's limitations and enforcement provisions expire. Planning now for the post-JCPOA period could mitigate a tendency to assume the JCPOA is only a hiatus in Iran's pursuit of a nuclear arsenal.

Address the security concerns of U.S. regional allies and partners arising from the JCPOA to reduce their incentives to pursue courses of action that could harm U.S. interests or lead to a more proliferated region. An effort to reassure partners was at the heart of President Barack Obama's Camp David summit with GCC states in May 2015, a number of whom were reported to be dissatisfied with U.S. attention to their security concerns.⁸⁵ The resulting joint statement reaffirmed the "unequivocal" U.S. commitment to "deter and confront external aggression against [its] allies and partners" and indicated that the assembled leaders had discussed "a new U.S.-GCC strategic partnership to enhance their

work to improve security cooperation, especially on fast-tracking arms transfers.”⁸⁶ Conventional arms transfers have gained additional significance given concerns that the lifting of sanctions and unfreezing of Iranian assets under the JCPOA will enable Iran to acquire sophisticated arms from Russia and elsewhere.⁸⁷ The United States will need to reassure Israel, however, that efforts to strengthen GCC states will not come at the expense of its qualitative military edge. A new 10-year military assistance agreement that the United States and Israel signed on September 14, 2016, providing for a substantial increase in U.S. military aid to Israel, should help in that regard.⁸⁸ The United States also should be open to adding an explicit nuclear dimension to its statements intended to reassure regional partners, albeit short of a nuclear security guarantee to any particular partner that likely would be politically unsalable.⁸⁹ For example, the United States could state publicly that it will never tolerate the threatened or actual use of nuclear weapons *against its vital interests in the region* and that it would be prepared to use all the instruments at its disposal to defend those interests. At the same time, it should reinforce privately with its nonnuclear partners that it will not tolerate their pursuit of nuclear weapons capabilities.

Increase Resources and Improve Organization for CWMD Contingencies

Make more effective use of U.S. and South Korean resources to prepare for countering weapons of mass destruction contingencies on the Korean Peninsula, the most likely and demanding of current CWMD challenges facing the United States. DOD should seek to expand CWMD expertise among Reserve and Guard forces and raise the readiness of such forces to deploy for CWMD missions. It also should look for ways to broaden and deepen interagency contributions to CWMD operations, such as by the Department of Energy’s National Nuclear Security Administration, which has expertise and capabilities relevant to nuclear elimination tasks.⁹⁰ It also should encourage South Korea to expand its specialized CWMD forces and ensure that their training and equipment are comparable to and interoperable with counterpart U.S. forces, especially to deal with North Korea’s chemical and biological programs. The United States and South Korea, a nonnuclear weapons state, further should determine to what extent South Korean forces can participate in operations associated with eliminating North Korea’s nuclear weapons program, consistent with the NPT and U.S. Atomic Energy Act.

Engage other countries with advanced CWMD capabilities to determine how they might contribute to CWMD operations in Korea. This includes allies and partners such as the Australia, France, Germany, Japan,

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the United Kingdom, and Singapore. China also could bring resources to bear on this problem. China inescapably will play a major role in any conflict or crisis in North Korea, possibly with forces on the ground. China has its own interest in ensuring that a crisis does not lead to the use or loss of North Korean WMD, lest it also become a victim of or at least be seen as culpable in such an eventuality. Still, the obstacles to eliciting China's cooperation in matters concerning the possible collapse or defeat of its North Korean ally are obvious.⁹¹ But the need remains, and the situation is changing as North Korea's behavior creates more problems for China and as China bids for influence in South Korea. Efforts should continue to engage China in discussions about how it can contribute to preventing the use or loss of North Korean WMD.⁹²

Implement the reassignment of the DOD CWMD mission to U.S. Special Operations Command (USSOCOM). In 2005, DOD established CWMD as a distinct military mission and assigned U.S. Strategic Command responsibility for synchronizing CWMD efforts across the department.⁹³ USSTRATCOM made strides toward increasing military focus on CWMD, including instituting semiannual CWMD Global Synchronization Conferences and preparing CWMD Concept Plan 8099. Yet with an unusually diverse set of missions—also including strategic deterrence; intelligence, surveillance and reconnaissance; space; and cyber—USSTRATCOM could not devote as much effort to the CWMD mission as it required. The reassignment of CWMD to another command able to give the mission greater attention should enable stronger leadership, improved planning, and more effective advocacy. USSOCOM is best suited of the combatant commands to assume the mission given its global scope, special authorities, existing CWMD roles, and interest in the mission.⁹⁴

Stay on Top of and Leverage Rapid Scientific and Technology Developments

Actively encourage ongoing efforts across the U.S. Government to understand the implications of emerging technologies, but provide them with more structure, better integration, and a focus on identifying what can and should be done. Rapid developments in the life sciences and other relevant fields may lead to new types of biological and chemical weapons, but also new means for countering these threats. The mindset needs to be one of leveraging these developments to the maximum extent possible, such as in achieving better countermeasures and applying controls only where necessary and practical. Nimble research and development capabilities will be needed to exploit rapid advances that offer the prospects for developing new kinds of countermeasures to address existing and emerging biological threats.

Strengthen the BW nonproliferation regime's capacity to deal with rapid scientific and technological change. Create structures and working methods that allow BWC state parties to tackle issues in a more effective way, such as by meeting more frequently between review conferences and delegating more authority to those gatherings. A body of experts also should be established to regularly assess relevant scientific and technological developments and their implications for the purposes of the convention, and the annual Meeting of Experts should be used as an opportunity to advise state party representatives on these matters. Recognizing the limits to controlling the availability and utilization of rapidly developing technologies, BWC state parties also need to reinforce the international norm against BW through active outreach to the science and technology communities to dissuade their involvement in proliferation efforts.

Educate Military Officers, Civilian Officials, and the Broader Public on WMD Challenges

Make deterrence and escalation management essential elements of the education and experiential learning of all military officers and civilian national security officials. The knowledge and skills needed to address these challenges, once sharpened by the centrality of the Cold War nuclear threat, atrophied thereafter as the risk of nuclear war rapidly receded and attention turned to conventional wars against nonnuclear states, terrorism, and irregular warfare. But with the increased potential for nuclear weapons use today, deterrence and escalation management, including a greater understanding of adversary doctrine and the elements of crisis management, must again figure prominently in the core educational curricula for military officers and civilian officials.⁹⁵ It also is no longer acceptable to rule out the possibility of nuclear weapons use when designing and conducting exercises involving conflict with nuclear-armed adversaries; these threats must be faced head on so military and civilian leaders gain valuable experiential learning in this area.

Improve CWMD education for military officers and civilian national security professionals with related responsibilities. Many military officers still arrive at CWMD planning positions with no or little CWMD background. DOD can improve CWMD planning by expanding CWMD training and education offerings and making them available earlier in officers' careers.⁹⁶

Inform the broader public, at home and abroad, about the changing nature of the WMD threat and the circumstances necessitating countermeasures like those discussed above, particularly as they relate to the politically difficult subject of nuclear weapons. The President and senior advisors need to acknowledge regularly and forthrightly the essen-

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tial contribution that nuclear weapons and other elements of military strength make to U.S. and international security in the current and foreseeable international security environment. At the same time, they need to reiterate that the United States is no less committed to its NPT Article VI obligations to pursue negotiations toward nuclear disarmament, and show it by continuing to attempt to engage Russia, foremost, and other nuclear weapons states, as and when appropriate, toward that end. Rebutting the false premise that the dangers posed by nuclear weapons can be eliminated by simply outlawing these phenomena, as some supporters of the Humanitarian Initiative advocate,⁹⁷ or by disarmament by example (unilateral disarmament), is a continuous task from which responsible national security leaders must not shrink.

Conclusion

Weapons of mass destruction pose diverse, complex, and enduring challenges for U.S. and international security. The challenges no longer are predominately about preventing proliferation; they are again increasingly about deterring and responding to the use of WMD. To surmount the most pressing WMD challenges it will face, the next U.S. administration will need to invest in the skills and capabilities required to deter and manage escalation risks in conventional conflicts with nuclear-armed adversaries, especially Russia and China. It will need to expand the resources and improve the organization required to meet the countering WMD problem posed by North Korea. To hold the line against a resurgence in the proliferation and use of chemical and biological weapons, it will need to hold accountable those who violate international norms and laws in these areas and to invest in acquiring a greater understanding of new and emerging threats and opportunities and how to defeat and exploit them, respectively. Finally, to contain regional proliferation pressures in the aftermath of the Iran nuclear agreement, the next U.S. administration will need to reassure regional partners that together we can keep an aggressive Iran in check while incentivizing Tehran to adopt a more responsible and moderate position in the region and around the world.



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Notes

¹ *National Security Strategy* (Washington, DC: The White House, February 2015), 2, available at <www.whitehouse.gov/sites/default/files/docs/2015_national_security_strategy.pdf>. Additionally, the National Military Strategic identifies maintaining a secure and effective nuclear deterrent and countering weapons of mass destruction (WMD) among the Joint Force Prioritized Missions. See *National Military Strategy of the United States of America 2015* (Washington, DC: The Joint Staff, 2015), 11, available at <www.jcs.mil/Portals/36/Documents/Publications/2015_National_Military_Strategy.pdf>.

² The 2010 Nuclear Posture Review states, “changes in the nuclear threat environment have altered the hierarchy of our nuclear concerns and strategic objectives. In coming years, we must give top priority to discouraging additional countries from acquiring nuclear weapons capabilities and stopping terrorist groups from acquiring nuclear bombs or the materials to build them. At the same time, we must continue to maintain stable strategic relationships with Russia and China and counter threats posed by any emerging nuclear-armed states, thereby protecting the United States and our allies and partners against nuclear threats or intimidation, and reducing any incentives they might have to seek their own nuclear deterrents.” See *Nuclear Posture Review Report* (Washington, DC: Department of Defense, April 2010), v, available at <www.defense.gov/Portals/1/features/defenseReviews/NPR/2010_Nuclear_Posture_Review_Report.pdf>. This chapter, in contrast, argues that subsequent developments have altered the Nuclear Posture Review’s assessment and have elevated the importance of deterring limited nuclear weapons by state adversaries.

³ For example, see Keir A. Lieber and Daryl G. Press, “The Nukes We Need: Preserving the American Deterrent,” *Foreign Affairs*, November 1, 2009, available at <www.foreignaffairs.com/articles/2009-11-01/nukes-we-need>.

⁴ For example, see Christopher Harress, “South China Sea Dispute: Japan Spots Armed Chinese Ships Patrolling Senkaku Islands,” *International Business Times*, December 22, 2015, available at <www.ibtimes.com/south-china-sea-dispute-japan-spots-armed-chinese-ships-patrolling-senkaku-islands-2236290>.

⁵ For example, see Gerry Mullaney and David Barboza, “Vietnam Squares Off with China in Disputed Seas,” *New York Times*, May 7, 2014, available at <www.nytimes.com/2014/05/08/world/asia/philippines-detains-crew-of-chinese-fishing-vessel.html?_r=0>.

⁶ For example, see Derek Watkins, “What China Has Been Building in the South China Sea,” *New York Times*, October 27, 2015, available at <www.nytimes.com/interactive/2015/07/30/world/asia/what-china-has-been-building-in-the-south-china-sea.html>.

⁷ For example, Jethro Mullen, “North Korea Warns U.S. It’s Ready to Use Nuclear Weapons ‘Any Time,’” *CNN.com*, September 15, 2015, available at <www.cnn.com/2015/09/15/asia/north-korea-nuclear-program/>. North Korean military provocations are examined in Ken E. Gause, *North Korea’s Provocation and Escalation Calculus: Dealing with the Kim Jong-un Regime* (Arlington, VA: Center for Naval Analyses, August 2015), 4–14, available at <www.cna.org/CNA_files/PDF/COP-2015-U-011060.pdf>.

⁸ For concise discussions of Russia’s and China’s challenge to U.S. dominance, see “Why America’s Military Is Losing Its Edge,” *The Economist*, June 11, 2015, available at <www.economist.com/blogs/economist-explains/2015/06/economist-explains-9>; “The Great Game: America’s Dominance Is Being Challenged,” *The Economist*, October 17, 2015, available at <www.economist.com/news/leaders/21674699-american-dominance-being-challenged-new-game>.

⁹ Antiaccess/area-denial capabilities include such systems as advanced integrated air defense systems, medium-to-intermediate range ballistic and cruise missiles, modern attack submarines, antisatellite systems, and cyber warfare capabilities. While there is no official Department of Defense (DOD) definition of the term, at least as reflected in Joint

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Publication 1-02, *Department of Defense Dictionary of Military and Associated Terms*, see, for example, Nathan Freier, “The Emerging Anti-Access/Area-Denial Challenge,” Center for Strategic and International Studies, Washington, DC, May 17, 2012, available at <<https://csis.org/publication/emerging-anti-accessarea-denial-challenge>>.

¹⁰ Regarding China’s improving military capabilities vis-à-vis the United States, see Eric Heginbotham et al., *U.S.-China Military Scorecard: Forces, Geography, and the Evolving Balance of Power, 1996–2017* (Santa Monica, CA: RAND, 2015), available at <www.rand.org/content/dam/rand/pubs/research_reports/RR300/RR392/RAND_RR392.pdf>. On Russia’s military improvements, see Stephen J. Blank, “Imperial Ambitions: Russia’s Military Buildup,” *World Affairs*, May/June 2015, available at <www.worldaffairsjournal.org/article/imperial-ambitions-russia%E2%80%99s-military-buildup>.

¹¹ See, for example, Elbridge Colby, “America Must Prepare for Limited War,” *The National Interest*, November–December 2015, available at <<http://nationalinterest.org/print/feature/america-must-prepare-limited-war-14104>>.

¹² Indeed, strikes against the Chinese mainland are associated with what used to be known as the U.S. AirSea Battle concept of operations for conflict with China, as described in Jan Van Tol, *AirSea Battle: A Point-of-Departure Operational Concept* (Washington, DC: Center for Strategic and Budgetary Assessments, 2010), available at <<http://csbaonline.org/publications/2010/05/airsea-battle-concept/>>. It also is one of the aspects of the concept critiqued in T.X. Hammes, “Sorry, Air Sea Battle is No Strategy,” *War on the Rocks*, August 7, 2013, available at <<http://nationalinterest.org/commentary/sorry-air-sea-battle-no-strategy-8846>>. In January 2015 the AirSea Battle concept was renamed the Joint Concept for Access and Maneuver in the Global Commons. See memorandum from Lieutenant General David L. Goldstein, director, Joint Staff, “Subject: Joint Concept for Access and Maneuver in the Global Commons,” DSJM 0009-14, January 8, 2015, available in redacted form at <<http://news.usni.org/2015/01/20/document-air-sea-battle-name-change-memo>>.

¹³ Phillip C. Saunders, “China’s Nuclear Forces and Strategy,” testimony before the U.S.-China Economic and Security Review Commission Hearing on “Developments in China’s Cyber and Nuclear Capabilities,” March 26, 2012, 4–5, available at <www.uscc.gov/sites/default/files/3.26.12saunders.pdf>.

¹⁴ Nikolai N. Sokov, “Why Russia Calls a Limited Nuclear Strike ‘De-escalation,’” *Bulletin of the Atomic Scientists*, March 13, 2014, available at <<http://thebulletin.org/why-russia-calls-limited-nuclear-strike-de-escalation>>.

¹⁵ “The Russian Federation reserves the right to use nuclear weapons in response to use against it and (or) its allies of nuclear and other weapons of mass destruction, as well as in the case of aggression against the Russian Federation with the use of conventional weapons, when under threat [to] the very existence of the state.” See *Military Doctrine of the Russian Federation*, 2014, Section II, paragraph 27, available at <www.scribd.com/doc/251695098/Russia-s-2014-Military-Doctrine#scribd>. Russia’s reliance on nuclear weapons to offset the conventional military superiority that the United States and its North Atlantic Treaty Organization (NATO) Allies now enjoy is not unlike the United States and NATO’s reliance on nuclear weapons during the Cold War to counter the assessed conventional military superiority of the Soviet Union and its Warsaw Pact allies. Until circumscribed in 2010, it was also U.S. policy to reserve the right to use nuclear weapons against those who might employ chemical and biological as well as nuclear weapons against the United States and its allies. Current U.S. policy is to “only consider the use of nuclear weapons in extreme circumstances to defend the vital interests of the United States or its allies and partners” and to “not use or threaten to use nuclear weapons against non-nuclear weapons states that are party to the NPT and in compliance with their nuclear nonproliferation obligations.” See *Nuclear Posture Review Report*, vii–ix. Despite the broad areas of overlap between current Russian policy and the earlier U.S. one, there are important differences. Russia in recent years has explicitly threat-

ened other nations with nuclear weapons in evident attempts to intimidate and coerce them (see following note), whereas the United States and its NATO Allies have issued no comparable threats and indeed have been generally reluctant to discuss the use of nuclear weapons at all. Russia also identifies NATO as its main external danger (*Military Doctrine of the Russian Federation*), and has been unwilling to negotiate mutual reductions in nonstrategic nuclear weapons; see Amy E. Woolf, *Nonstrategic Nuclear Weapons*, RL32572 (Washington, DC: Congressional Research Service, February 23, 2015), 34–37, available at <www.fas.org/sgp/crs/nuke/RL32572.pdf>. In contrast, NATO policy emphasizes that it considers no country to be its adversary, that it views the circumstances that would merit nuclear weapons use as extremely remote, and that it contemplates reducing the number of the Alliance's nonstrategic nuclear weapons. See *Deterrence and Defence Posture Review* (Brussels: NATO, May 20, 2012), available at <www.nato.int/cps/en/natolive/official_texts_87597.htm>. Russia's caveat that it would use nuclear weapons against conventional aggression only when such aggression threatens the very existence of the Russian state also may be less reassuring than it sounds given that some observers believe that the Putin regime equates its regime survival with the survival of the state. As such, any conventional aggression that imperils the Putin regime, which may include its impending defeat in a regional war of its own making if such defeat undermined popular Russian support for the regime, could justify the regime's resort to nuclear weapons. See Kroenig, *The Renewed Russian Nuclear Threat and NATO Nuclear Deterrence Posture*, Issue Brief (Washington, DC: Atlantic Council, February 2016), 2; Paul Bernstein and Deborah Ball, "Putin's Russia and U.S. Defense Strategy," workshop report on same subject held at National Defense University, August 19–20, 2015, 5, available at <<http://inss.ndu.edu/Portals/82/Documents/conference-reports/Putins-Russia-and-US-Defense-Strategy.pdf>>.

¹⁶ For example, see "NATO Chief Says Russian Nuclear Threats Are 'Deeply Troubling and Dangerous,'" *The Guardian*, May 27, 2015, available at <www.theguardian.com/world/2015/may/28/nato-chief-says-russian-nuclear-threats-are-deeply-troubling-and-dangerous>; Adam Withnall, "Russia Threatens Denmark with Nuclear Weapons If It Tries to Join NATO Defence Shield," *Independent* (London), March 22, 2015, available at <www.independent.co.uk/news/world/europe/russia-threatens-denmark-with-nuclear-weapons-if-it-tries-to-join-nato-defence-shield-10125529.html>.

¹⁷ Russia possesses approximately 2,000 nonstrategic nuclear weapons, spanning antiballistic missile, short-range ballistic missile, ground-launched cruise missile, and a variety of naval systems. All Russian nonstrategic nuclear weapons reportedly are in storage. See Hans S. Kristensen and Robert S. Morris, "U.S. Nuclear Forces, 2015," 115, available at <<http://bos.sagepub.com/content/71/2/107.full.pdf+html>>; "Russia Nuclear Forces, 2015," 1–2, available at <<http://bos.sagepub.com/content/early/2015/04/13/0096340215581363.full.pdf+html>>. While the *Bulletin of the Atomic Scientists* reflects all of Russia's nonstrategic nuclear weapons in storage, the Congressional Research Service notes that the status of nonstrategic nuclear weapons in Russia is uncertain. It notes that some estimates put the number of active Russian nuclear warheads assigned to nonstrategic delivery vehicles at 2,000. See Woolf, *Nonstrategic Nuclear Weapons*, 12.

¹⁸ "Iskander Tactical Ballistic Missile System, Russia," *Army-Technology.com*, available at <www.army-technology.com/projects/iksander-system/iksander-system2.html>.

¹⁹ For a discussion of the problems that Russia's modern integrated air defense systems pose for fourth-generation aircraft, see David Majumdar, "American F-22s and B-2s Bombers vs. Russia's S-300 in Syria: Who Wins?" *The National Interest*, September 22, 2015, available at <<http://nationalinterest.org/blog/the-buzz/american-f-22s-b-2-bombers-vs-russias-s-300-syria-who-wins-13905>>.

²⁰ Current NATO dual-capable aircraft are scheduled for retirement in the 2020s; see Rachel Oswald, "U.S. Tactical Nuclear Arms Mission Could Shift Among NATO Jets," *Nuclear Threat Initiative*, March 26, 2014, available at <www.nti.org/gsn/article/aircraft-could-be-given-nato-tactical-nuclear-arms-mission/>. The U.S. National Nuclear

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Security Administration (NNSA) aims to have the first production unit of the refurbished B61 gravity bomb ready by the end of fiscal year 2020. See NNSA, "Life Extension Programs," December 23, 2015, available at <<http://nnsa.energy.gov/ourmission/managingthestockpile/lifeextensionprograms>>.

²¹ Treaty between the United States of America and the Union of Soviet Socialist Republics on the Elimination of Their Intermediate-Range and Shorter-Range Missiles, signed at Washington, DC, December 8, 1987, Articles I, II, available at <www.state.gov/t/avc/trty/102360.htm#text>.

²² "Iskander Tactical Ballistic Missile System, Russia."

²³ Rod Lyon, "The Great Nuclear Guessing Game: Has Russia Violated the INF Treaty?" *The National Interest*, September 25, 2015, available at <www.nationalinterest.org/blog/the-buzz/the-great-nuclear-guessing-game-has-russia-violated-the-inf-13936>.

²⁴ *Interfax*, interview with Rose Gottemoeller, U.S. Under Secretary of State for Arms Control and International Security, June 23, 2015, available at <www.interfax.com/interview.asp?id=600960>.

²⁵ Amy F. Woolf, *Russian Compliance with the Intermediate Range Nuclear Forces (INF) Treaty: Background and Issues for Congress*, R43832 (Washington, DC: Congressional Research Service, October 13, 2015), 5–8, 16–18, available at <www.fas.org/sgp/crs/nuke/R43832.pdf>.

²⁶ *Annual Report to Congress on Military and Security Developments Involving the People's Republic of China 2015* (Washington, DC: Office of the Secretary of Defense, 2015), 34–35, available at <www.defense.gov/Portals/1/Documents/pubs/2015_China_Military_Power_Report.pdf>.

²⁷ *Annual Report to Congress on Military and Security Developments Involving the People's Republic of China 2016* (Washington, DC: Office of the Secretary of Defense, 2016), 25, available at <www.defense.gov/Portals/1/Documents/pubs/2016%20China%20Military%20Power%20Report.pdf>.

²⁸ *Annual Report to Congress on Military and Security Developments Involving the People's Republic of China 2015*, 32.

²⁹ Saunders, 1.

³⁰ For example, see Daniel Blumenthal and Michael Mazza, "Why China May Want More Nuclear Weapons," American Enterprise Institute, Washington, DC, April 6, 2011, available at <www.aei.org/publication/why-china-may-want-more-nuclear-weapons/>.

³¹ See, for example, Institute for International Security Studies (IISS), *North Korean Security Challenges: A Net Assessment* (London: IISS, July 21, 2011), chapters 3, 5, 6, available at <www.iiss.org/en/publications/strategic%20dossiers/issues/north-korean-security-challenges-4a8d>; *Military and Security Developments Involving the Democratic Republic of Korea* (Washington, DC: Office of the Secretary of Defense, 2015), 9, 10, 13, 14, 21, available at <www.defense.gov/Portals/1/Documents/pubs/Military_and_Security_Developments_Involving_the_Democratic_Peoples_Republic_of_Korea_2015.PDF>; Van Jackson, "Preparing for the Next Korean War," *The Diplomat*, August 24, 2015, available at <<http://thediplomat.com/2015/08/preparing-for-the-next-korean-war/>>.

³² Shane Smith, *North Korea's Evolving Nuclear Strategy*, North Korea Nuclear Futures Series (Baltimore, MD: U.S.-Korea Institute at SAIS, August 2015), 7, available at <<http://38north.org/2015/08/nukefuture082415/>>.

³³ For a discussion of the risks of a limited conflict with North Korea, see Jackson. For a discussion of the risks of a collapse of the North Korean regime, see Robert D. Kaplan and Abraham M. Denmark, "The Long Good-Bye: The Future of North Korea," *World Affairs*, May/June 2011, available at <www.worldaffairsjournal.org/article/long-goodbye-future-north-korea>.

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³⁴ The 2014 Strategy for Countering WMD defines *countering WMD* as “efforts against actors of concern to curtail the conceptualization, development, possession, proliferation, use and effects of WMD, related expertise, materials, technologies, and means of delivery.” See *Strategy for Countering Weapons of Mass Destruction* (Washington, DC: Department of Defense, June 2014), 17, available at <http://archive.defense.gov/pubs/DoD_Strategy_for_Countering_Weapons_of_Mass_Destruction_dated_June_2014.pdf>. This is a separate DOD mission from the nuclear one, wherein a safe, secure, and effective nuclear deterrent force is maintained to deter strategic attacks against the United States and to assure its allies; see U.S. Strategic Command Web site, “About/Missions & Priorities,” available at <www.stratcom.mil/mission/>. Another way to state the difference between the missions is that countering WMD is what we do about other’s WMD, while the nuclear mission is what we do with our own nuclear forces. Clearly there is some overlap in that U.S. nuclear forces primarily deter others’ use of their nuclear weapons against the United States and its allies. U.S. Strategic Command currently has responsibility for both of these DOD missions.

³⁵ Smith. The estimate of the number of nuclear weapons that North Korea possesses varies with assumptions about how much fissile material it has produced and the designs of its weapons.

³⁶ James R. Clapper, “Worldwide Threat Assessment of the U.S. Intelligence Community,” Statement for the Record before the Senate Armed Services Committee, February 26, 2015, 6, available at <www.dni.gov/index.php/newsroom/testimonies/209-congressional-testimonies-2015/1174-statement-for-the-record-worldwide-threat-assessment-of-the-u-s-ic-before-the-sasc>.

³⁷ 2014 *Defense White Paper* (Seoul: Ministry of National Defense, 2014), 32, available at <www.mnd.go.kr/user/mnd_eng/upload/pblicitn/PBLICTNEBOOK_201506161156164570.pdf>. The U.S. Department of State also judges that Pyongyang may still consider the use of biological weapons as an option, even though it is a state party to the Biological Weapons Convention (BWC). The State Department further notes that North Korea has a longstanding biological weapons (BW) capability and biotechnology infrastructure that could support a BW program, although the United States does not possess definitive information to support a finding of North Korean noncompliance with the BWC. See 2015 *Report on Adherence to and Compliance with Arms Control, Nonproliferation, and Disarmament Agreements and Commitments* (Washington, DC: Department of State, June 5, 2015, Part III, “North Korea,” available at <www.state.gov/t/avc/rls/rpu/2015/243224.htm#North%20Korea>.

³⁸ Bruce Bennett has estimated the existence of 200 or so WMD sites in North Korea. See Bruce W. Bennett, *Preparing for the Possibility of a North Korean Collapse* (Santa Monica, CA: RAND, 2013), 99, available at <www.rand.org/content/dam/rand/pubs/research_reports/RR300/RR331/RAND_RR331.pdf>.

³⁹ For an expanded discussion of the challenges of WMD elimination operations in North Korea and ways of responding to them, see Robert J. Peters, *The WMD Challenges Posed by a Collapse of North Korea* (Baltimore, MD: U.S.-Korea Institute at SAIS, April 14, 2015), available at <<http://38north.org/2015/04/rpeters041415/>>; Scott Daulton and Bill Shavce, “The Challenge of Countering Weapons of Mass Destruction on the Korean Peninsula,” *Military Review*, November–December 2014, available at <http://usacac.army.mil/CAC2/MilitaryReview/Archives/English/MilitaryReview_20141231_art011.pdf>.

⁴⁰ It is worth noting that U.S. forces’ capability to fight through large-scale chemical and biological attacks is a matter of conjecture, based on simulations and noncombat testing, since U.S. forces have not encountered any such attacks since World War I.

⁴¹ For example, see Sydney J. Freedberg, Jr., “No Longer Unthinkable: Should U.S. Be Ready for ‘Limited’ Nuclear War?” *BreakingDefense.com*, May 30, 2013, available at <<http://breakingdefense.com/2013/05/no-longer-unthinkable-should-us-be-ready-for-limited-nuclear-war/2/>>.

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⁴² The BWC entered into force on March 26, 1975, and the Chemical Weapons Convention (CWC) entered into force on April 29, 1997. Only three states currently remain outside the CWC: Egypt, North Korea, and South Sudan. Israel signed the convention in 1993 but has never ratified it. Angola, Myanmar, and Syria joined within the last 3 years. Fourteen states remain outside the BWC: Angola, Chad, Comoros, Djibouti, Eritrea, Guinea, Israel, Kiribati, Micronesia, Namibia, Niue, Samoa, South Sudan, and Tuvalu. Myanmar and Andorra are the most recent state parties, joining in December 2014 and March 2015, respectively. See Arms Control Association, Fact Sheets and Briefs, “Chemical Weapons Convention Signatories and States-Parties,” available at <www.armscontrol.org/factsheets/cwcsig>; “Biological Weapons Convention Signatories and States-Parties,” available at <www.armscontrol.org/factsheets/bwcsig>; United Nations Office for Disarmament Affairs, “The Biological Weapons Convention, Status and Text of the Treaty,” available at <<http://disarmament.un.org/treaties/t/bwc>>; Organisation for the Prohibition of Chemical Weapons, “Note by the Technical Secretariat, Status of Participation in the Chemical Weapons Convention as at 17 October 2015,” available at <www.opcw.org/fileadmin/OPCW/S_series/2015/en/s-1315-2015_e_.pdf>.

⁴³ Syria, however, had acceded in December 1968 to the *Protocol for the Prohibition of the Use in War of Asphyxiating, Poisonous, or Other Gases, and of Bacteriological Methods of Warfare* (also known as the 1925 Geneva Protocol). United Nations Office for Disarmament Affairs, Treaties Database, available at <<http://disarmament.un.org/treaties/t/1925>>. As such, Syria’s use of sarin in 2012–2013 violated its obligations under the 1925 Geneva Protocol.

⁴⁴ The White House, “Government Assessment of the Syrian Government’s Use of Chemical Weapons on August 21, 2013,” press release, August 30, 2013, available at <www.whitehouse.gov/the-press-office/2013/08/30/government-assessment-syrian-government-s-use-chemical-weapons-august-21>.

⁴⁵ *Ibid.* Estimates of the number of fatalities range from the low hundreds to more than 1,400. On August 30, 2013, the White House claimed 1,429 deaths resulted from Syria’s use of sarin. On August 29, 2013, the Chairman of the British government Joint Intelligence Committee report referred to “at least 350 fatalities.” See United Kingdom Chairman of the Joint Intelligence Committee, “Syria: Reported Chemical Weapons Use,” August 29, 2013, available at <www.gov.uk/government/uploads/system/uploads/attachment_data/file/235094/jp_115_JD_PM_Syria_Reported_Chemical_Weapon_Use_with_annex.pdf>. The term *hundreds of deaths* is used in a Human Rights Watch report from September 2013. See Human Rights Watch, “Attacks on Ghouta,” September 10, 2013, available at <www.hrw.org/report/2013/09/10/attacks-ghouta/analysis-alleged-use-chemical-weapons-syria>.

⁴⁶ See Organisation for the Prohibition of Chemical Weapons (OPCW), “Syrian Chemical Destruction Data as of 27 July 2015,” available at <www.opcw.org/special-sections/syria/destruction-statistics/>.

⁴⁷ OPCW, “Report of the OPCW Fact-Finding Mission in Syria Regarding Alleged Incidents in the Idlib Governorate of the Syria Arab Republic between 16 March and 20 May 2015,” S/1319/2015, October 29, 2015.

⁴⁸ Theodore Schleifer, “Kerry: Syrian Regime ‘Absolutely’ Used Chlorine in Attacks,” *CNN.com*, June 17, 2015, available at <www.cnn.com/2015/06/16/politics/john-kerry-syrian-chemical-weapons-chlorine/>. Numerous eyewitness accounts indicate that the weapons were delivered by helicopters, which the Syrian regime possesses but not by the rebels it is fighting. See, for example, OPCW, “Report of the OPCW Fact-Finding Mission in Syria,” annex 2.

⁴⁹ Inaccurate media reports have given rise to the fallacy that Syria’s use of chlorine as a weapon of war is not prohibited by the CWC. The likely basis of these reports is the fact that chlorine is not listed on the CWC’s Schedules of Chemicals. However, the schedules were drawn up during the negotiation of the CWC to inform the convention’s monitor-

ing and verification efforts and focused on the types of chemical warfare agents known to be in military arsenals of the time. Though chlorine was the chemical released in the first successful, large-scale chemical attack of the modern age—by Germany in the 1915 World War I Battle of Ypres—the world's militaries had long moved on to more potent agents optimized for warfare purposes such as phosgene, sulfur mustard, sarin, and VX. Chlorine came to be viewed as a toxic industrial chemical widely used for commercial purposes rather than a chemical warfare agent. But that does not exempt it from the CWC's prohibition on chemical weapons, which is defined as applying to any toxic chemical used as a method of warfare. Syria's use of chlorine as a weapon of war unequivocally is a violation of its CWC obligations.

⁵⁰ Per *The Economist*, “the last precise death toll published by the [United Nations] was 191,369 in August 2014, followed by an estimate of more than 250,000 in August 2015. But it then stopped updating the figure because of dwindling sources of good information. On February 11 the Syrian Centre for Policy Research, a nonprofit group, claimed that the true figure is now almost double that estimate at about 470,000.” See “Quantifying Carnage,” *The Economist*, February 20, 2016, available at <www.economist.com/news/middle-east-and-africa/21693279-how-many-people-has-syrias-civil-war-killed-quantifying-carnage>.

⁵¹ United Nations, “Security Council Unanimously Adopts Resolution 2235 (2015), Establishing Mechanism to Identify Perpetrators Using Chemical Weapons in Syria,” SC/12001, August 7, 2015, available at <www.un.org/press/en/2015/sc12001.doc.htm>. Russia insisted at the time that, if the Joint Investigative Mechanism attributes the attacks to the Syrian regime, another United Nations Security Council Resolution (UNSCR) would be required to authorize any punitive action. If Russia and others block adoption of such a UNSCR, the United States and its allies will need to determine whether the situation merits taking action on their own.

⁵² United Nations, “Joint Investigative Mechanism Presents Its Third Report to Security Council,” DC/3651, August 30, 2016, available at <www.un.org/press/en/2016/dc3651.doc.htm>.

⁵³ Stephen Hummel, “The Islamic State and WMD: Assessing the Future Threat,” *CTC Sentinel* 9, no. 1 (January 2016), 18–22, available at <www.ctc.usma.edu/v2/wp-content/uploads/2016/01/CTC-SENTINEL-Vol9Iss13.pdf>. Also see Beatrix Immenkamp, *ISIL/Da'esh and “Non-Conventional” Weapons of Terror* (London: European Parliamentary Research Service, 2015), available at <[www.europarl.europa.eu/thinktank/en/document.html?reference=EPRS_BRI\(2015\)572806](http://www.europarl.europa.eu/thinktank/en/document.html?reference=EPRS_BRI(2015)572806)>.

⁵⁴ United Nations, “Joint Investigative Mechanism.”

⁵⁵ The Fact-Finding Mission (FFM) “confirmed with utmost confidence” that two individuals in Syria suffered exposure to sulfur mustard and concluded that it was “very likely” that a baby also died from exposure to that chemical. See OPCW, “Report of the OPCW Fact-Finding Mission in Syria Regarding Alleged Incidents in Marea, Syrian Arab Republic, August 2015,” S/1320/2015, October 29, 2015. Consistent with its mandate, the FFM did not attempt to ascribe responsibility for the attack, but media reports suggested the Islamic State of Iraq and the Levant (ISIL).

⁵⁶ For example, see Hummel, 18–22; Robert Windrem and Tracy Connor, “Could ISIS Strike the West with Chemical Weapons?” NBC News, November 19, 2015, available at <www.nbcnews.com/storyline/isis-terror/could-isis-strike-west-chemical-weapons-n466431>.

⁵⁷ ISIL claimed responsibility for the March 2016 terror attacks in Brussels, Belgium. See Kim Hjeltnaard, Delphine Reuter, and John Bacon, “Islamic State Claims Responsibility for Brussels Attack That Killed Dozens,” *USA Today*, March 23, 2016, available at <<http://www.usatoday.com/story/news/world/2016/03/22/explosions-rock-brussels-airport/82107254/>>; for the November 2015 attacks in Paris, see Rukmini Callimachi, “ISIS

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Claims Responsibility, Calling Paris Attacks ‘First of the Storm,’” *New York Times*, November 14, 2015, available at <www.nytimes.com/2015/11/15/world/europe/isis-claims-responsibility-for-paris-attacks-calling-them-miracles.html>.

⁵⁸ In November 2015, as French Prime Minister Manuel Valls observed, “Terrorism hit France not because of what it is doing in Iraq and Syria . . . but for what it is. We know that there could also be a risk of chemical or biological weapons.” See Hamza Hendawi, Qassim Abdul-Zahra, and Ken Dilanian, “Officials: Islamic State Determined to Produce Chemical Weapons,” Associated Press, November 19, 2015, available at <<http://bigstory.ap.org/article/b6c721d1beb34b989bf46aa101cf361a/iraqi-us-officials-working-produce-chemical-weapons>>. In December 2015 the European Parliamentary Research Service wrote, “the European Union and its Members States must prepare for the possibility of a chemical or biological attack on their territory by the self-styled ‘Islamic State’ in Iraq and the Levant.” See Immenkamp, 1.

⁵⁹ Rolf Mowatt-Larssen, *Al Qaeda Weapons of Mass Destruction Threat: Hype or Reality?* (Cambridge, MA: Belfer Center for Science and International Affairs, January 2010), available at <http://belfercenter.ksg.harvard.edu/publication/19852/al_qaeda_weapons_of_mass_destruction_threat.html>.

⁶⁰ Harald Doornbus and Jenan Moussa, “Found: The Islamic State’s Terror Laptop-top of Doom,” *Foreign Policy*, August 28, 2014, available at <<http://foreignpolicy.com/2014/08/28/found-the-islamic-states-terror-laptop-of-doom/>>.

⁶¹ Vladimir Putin, “Being Strong: National Security Guarantees for Russia,” *Rossiiskaya Gazeta*, February 20, 2012, available at <<http://archive.premier.gov.ru/eng/events/news/18185/>>.

⁶² “Chemical and Biological Weapons: The Poor Man’s Atom Bomb,” North Atlantic Assembly, International Secretariat, AN 253, STC (96) 8, Lord Lyell, General Rapporteur, October 4, 1996, table 1, available at <<http://fas.org/irp/threat/an253stc.htm>>.

⁶³ John P. Caves, Jr., and W. Seth Carus, *The Future of Weapons of Mass Destruction*, Center for the Study of Weapons of Mass Destruction Occasional Paper 10 (Washington, DC: NDU Press, June 2014), 27, available at <http://wmdcenter.dodlive.mil/files/2014/07/CSWMD_OccasionalPaper-10.pdf>.

⁶⁴ *Ibid.*, 27–28.

⁶⁵ See, for example, Andrew Hessel, March Goodman, and Steven Miller, “Hacking the President’s DNA,” *The Atlantic*, November 2012, available at <www.theatlantic.com/magazine/archive/2012/11/hacking-the-presidents-dna/309147/?single_page=true>; Gigi K. Gronvall, *Mitigating the Risks of Synthetic Biology*, CFR Discussion Paper (New York: Council on Foreign Relations, 2015), available at <www.cfr.org/health/mitigating-risks-synthetic-biology/p36097>; Laurie Garrett, “Biology’s Brave New World,” *Foreign Affairs* 92, no. 6 (December 2013), 28–46.

⁶⁶ For a discussion of the limitations of and possibilities for achieving a “rapid and nimble” medical countermeasures capability for infectious disease, see Theresa Wizemann, Megan Reeve Snair, and Jack Herrmann, *Rapid Medical Countermeasure Response to Infectious Diseases: Enabling Sustainable Capabilities Through Ongoing Public- and Private-Sector Partnerships: Workshop Summary* (Washington, DC: National Academies Press, 2015), available at <<http://www.nap.edu/catalog/21809>>.

⁶⁷ Joint Comprehensive Plan of Action (JCPOA), Vienna, Austria, July 14, 2015, available at <www.state.gov/e/eb/tfs/spi/iran/jcpoa/>.

⁶⁸ See, for example, Mark Dubowitz, congressional testimony, “Hearing before the U.S. House Committee on Foreign Affairs,” Washington, DC, July 23, 2015; Institute for Science and International Security (ISIS), *The Joint Comprehensive Plan of Action “Kicks the Can Down the Road”: How to Prepare for the Day When the Can Finally Lands* (Washington,

DC: ISIS, July 22, 2015); Eliot Cohen, Eric Edelman, and Ray Takeyh, "Time to Get Tough on Tehran: Iran Policy After the Deal," *Foreign Affairs*, January/February 2016, 65.

⁶⁹ For a discussion of the verification challenges of the JPCOA, see, for example, David Albright, testimony for the Senate Foreign Relations Committee, "Joint Comprehensive Plan of Action (JPCOA): Non-Proliferation, Inspections, and Nuclear Constraints," August 4, 2015, 9–14, available at <www.foreign.senate.gov/imo/media/doc/080415_Albright_Testimony.pdf>; Ollie Heinonen, *Strengthening the Verification and Implementation of the Joint Comprehensive Plan of Action* (Washington, DC: Foundation for Defense of Democracies Press, November 25, 2015), available at <www.defenddemocracy.org/media-hit/strengthening-the-verification-and-implementation-of-the-joint-comprehensive/>.

⁷⁰ Kenneth M. Pollack, "Regional Implications of a Nuclear Agreement with Iran," testimony before the House Committee on Foreign Affairs, July 9, 2015, 7, available at <www.brookings.edu/research/testimony/2015/07/09-pollack-iran-nuclear-agreement>.

⁷¹ World Nuclear Association, "Emerging Nuclear Energy Countries," updated December 2015, available at <www.world-nuclear.org/info/Country-Profiles/Others/Emerging-Nuclear-Energy-Countries/>.

⁷² Saudi Arabia conceivably could attempt to purchase nuclear weapons or seek some form of extended nuclear deterrence commitment from Pakistan. Pakistan has a longstanding defense cooperation relationship with Saudi Arabia, and Pakistan's nuclear weapons development program benefited from Saudi support. See Feroz Hassan Khan, *Eating Grass: The Making of the Pakistani Bomb* (Stanford: Stanford University Press, 2012), 172, 280, 363. A discussion on one possible manifestation of a Pakistani extended nuclear deterrence commitment to Saudi Arabia is discussed in Kenneth M. Pollack, "U.S. Policy Toward the Middle East after the Iranian Nuclear Agreement," testimony before the Senate Committee on Foreign Relations, August 5, 2015, 9, available at <www.brookings.edu/research/testimony/2015/08/05-us-policy-iran-nuclear-deal-pollack>.

⁷³ For example, see *ibid.*, 3. Pollack considers it more likely that Iran does not change its regional strategy as a result of the nuclear agreement, but believes other courses, like the one discussed here, are possible.

⁷⁴ Ben Hubbard, "Arab World Split Over Iran Nuclear Deal," *New York Times*, July 14, 2015, available at <www.nytimes.com/2015/07/15/world/middleeast/iran-nuclear-deal-provokes-sharp-reactions-across-the-arab-world.html>.

⁷⁵ For example, see Payam Mohseni, "Introduction: Views from the Arab World and Iranian Politics Post-Nuclear Deal," in *Iran and the Arab World after the Nuclear Deal: Rivalry and Engagement in a New Era*, ed. Payam Mohseni (Cambridge: The Belfer Center for Science and International Affairs, August 2015), 8–9, available at <<http://belfercenter.ksg.harvard.edu/files/Impact%20on%20Arab%20World%20-%20Web.pdf>>. The local observers on regional implications of the nuclear agreement generally believe that the short-term increase in tensions could give way to a longer term improvement.

⁷⁶ For example, see *ibid.*, 9–10; Pollack, "U.S. Policy Toward the Middle East," 4–5.

⁷⁷ Peter Baker, "In Congress, Netanyahu Faults 'Bad Deal' on Iran Nuclear Program," *New York Times*, March 3, 2015, available at <www.nytimes.com/2015/03/04/world/middleeast/netanyahu-congress-iran-israel-speech.html?_r=0>.

⁷⁸ According to a Deputy Secretary of Defense statement in 2014, this is supposed to occur by 2020. See Cheryl Pellerin, "Budget Constraints Won't Halt Asia-Pacific Rebalance, Work Says," *DoD News*, October 1, 2014, available at <www.defense.gov/News-Article-View/Article/603364/budget-constraints-wont-halt-asia-pacific-rebalance-work-says>.

⁷⁹ *Third Offset Strategy* refers to a DOD initiative to identify and exploit new capabilities to preserve U.S. military technological advantages over its most capable adversaries as they "catch up" to current U.S. capabilities. Deputy Secretary of Defense Robert Work has described it as "new combinations of technologies, operational concepts, and organiza-

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tional constructs to once again bolster a weakened conventional deterrence.” See “The Third Offset Strategy and America’s Allies and Partners,” prepared remarks by Deputy Secretary of Defense Bob Work at Royal United Services Institute, London, September 10, 2015, available at <<https://rusi.org/event/robert-work-united-states-deputy-secretary-defense-third-offset-strategy-and-americas-allies>>. Deputy Secretary Work later identified five technological focuses for Third Offset investments: learning machines, human-machine collaboration, assisted-human operations, advanced manned and unmanned combat teaming, and network-enabled autonomous weapons that are hardened for cyber attack and electronic-warfare environments. See Jason Sherman, “DoD Unveils Technology Areas That Will Drive ‘Third Offset’ Investments,” *InsideDefense.com*, December 9, 2015, available at <<http://nges.insidedefense.com/inside-pentagon/dod-unveils-technology-areas-will-drive-third-offset-investments>>.

⁸⁰ The Congressional Budget Office (CBO) estimates that the Obama administration’s plans for nuclear forces—including the cost to field, operate, maintain, and modernize—would cost \$348 billion over the 2015–2024 period or about 5–6 percent of the administration’s plans for national defense. See CBO, *Projected Costs of U.S. Nuclear Forces, 2015 to 2024* (Washington, DC: CBO, January 22, 2015), 3, available at <www.cbo.gov/publication/49870>. A report estimated that the United States plans to spend approximately \$1 trillion over the next 30 years on maintaining and modernizing its nuclear forces. See Jon B. Wolfsthal, Jeffrey Lewis, and Marc Quint, *The U.S. Trillion Dollar Nuclear Triad* (Monterey, CA: James Martin Center for Nonproliferation Studies, January 2014), 4, available at <www.nonproliferation.org/wp-content/uploads/2016/04/140107_trillion_dollar_nuclear_triad.pdf>. Modernization costs will peak in the latter 2020s and early 2030s. In April 2016 Secretary of Defense Ashton Carter stated, “We expect the total cost of nuclear modernization to be in the range of \$350–\$450 billion. Although this still presents an enormous affordability challenge for DOD, we believe it must be funded. Previous modernizations of America’s strategic deterrent and nuclear security enterprise were accomplished by topline increases to avoid having to make drastic reductions to conventional forces, and it would be prudent to do so again.” See Secretary Carter, “Submitted Statement—Senate Appropriations Committee—Defense (FY 2017 Budget Request),” Washington, DC, April 27, 2016, available at <www.defense.gov/News/Speeches/Speech-View/Article/744066/submitted-statement-senate-appropriations-committee-defense-fy-2017-budget-request>.

⁸¹ The U.S. nuclear force has been the foundation of national security as long as adversaries have possessed nuclear weapons. It is not only the primary and irreplaceable means by which the United States deters a potentially existential attack, but it also underpins extended deterrence commitments to major allies. Some have asserted that the United States cannot afford the planned modernization of its nuclear force and advocated various cost-savings measures, including reducing the number of delivery platforms and warheads, eliminating the intercontinental ballistic missile (ICBM) or bomber legs of the triad, and canceling the development of the long-range standoff cruise missile. See, for example, James E. Doyle, “Better Ways to Modernize the U.S. Nuclear Arsenal,” *Survival* 58, no. 4 (August–September 2016), 27–50; Tom Z. Collina et al., *The Unaffordable Arsenal: Reducing the Costs of the Bloated U.S. Nuclear Stockpile* (Washington, DC: Arms Control Association, October 2014), available at <www.armscontrol.org/files/The-Unaffordable-Arsenal-2014.pdf>; and Global Zero, *Modernizing U.S. Nuclear Strategy, Force Structure and Posture* (Washington, DC: Global Zero, May 2012), available at <www.globalzero.org/files/gz_us_nuclear_policy_commission_report.pdf>. Reducing the number of warheads and delivery platforms within the triad force may have merit, but only as part of mutual, binding, and verifiable reductions with Russia that preserve or strengthen strategic stability. The United States has declared its willingness to pursue further reductions, but Russia has not taken up the offer. See “Remarks by President Obama at the Brandenburg Gate—Berlin, Germany,” June 19, 2013, available at <www.whitehouse.gov/the-press-office/2013/06/19/remarks-president-obama-brandenburg-gate-berlin-germany>. Unilateral reductions, especially given an aggressive Russia that is deploying

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multiple new nuclear weapons systems and issuing explicit nuclear threats, would weaken deterrence. Discarding any leg of the U.S. triad would be highly risky as each has attributes that complement the others and together ensure that no rational adversary could calculate, on the basis of capabilities (leaving aside questions of will), that it could successfully execute a disarming first strike against the United States or use limited nuclear strikes to decisive effect in a regional conflict. The latter consideration is particularly pertinent to bombers and their associated nuclear weapons (standoff cruise missiles and gravity bombs) as these capabilities provide less escalatory and more credible options to respond to an adversary's limited employment of nuclear weapons than those afforded by higher yield weapons delivered by ICBMs and submarine-launched ballistic missiles. Both standoff cruise missiles and gravity bombs deliverable by penetrating bombers are needed to complicate sufficiently the air defense challenge of sophisticated allies with increasingly effective integrated air defense systems. As long as alliances and extended deterrence commitments remain central to U.S. national security strategy, the United States will require an effective nuclear bomber force.

⁸² A recent DOD Inspector General (DODIG) investigation found, inter alia, that theater nuclear planning expertise has not been maintained and that there is no resident expertise on integrated theater nuclear planning at any of the geographic combatant commands (GCCMD). The Chairman of the Joint Chiefs of Staff and Under Secretary of Defense for Policy agreed with the DODIG recommendation that they update policy documents and provide oversight of the capability to integrate nuclear options into conventional plans. They also agreed with the DODIG that applicable GCCMD commanders should develop nuclear planning capabilities and processes and exercise those plans. See DODIG, "(U) Assessment of the U.S. Theater Nuclear Planning Process, (Report No. DODIG-20150134), June 18, 2015"; Information memo from John T. Rymer, Inspector General, DOD, to Secretary of Defense, Subject: "(U) Release of Inspector General Report, 'Assessment of the U.S. Theater Nuclear Planning Process, dated June 18, 2015.'" These are classified documents; only excerpts specifically marked unclassified are reflected in this chapter. "Gulf Leaders Back Out of Camp David Summit in 'Snub' to Obama," *BBC.com*, May 12, 2015, available at <www.bbc.com/news/world-us-canada-32694184>.

⁸³ See, for example, Colby.

⁸⁴ In March 2016 the U.S. military conducted airstrikes against ISIS chemical weapons-related targets based on information obtained by a senior ISIS detainee. Barbara Starr, "U.S.: ISIS Detainee Providing Information on Chemical Weapons," *CNN.com*, March 9, 2016, available at <www.cnn.com/2016/03/09/politics/u-s-isis-detainee-providing-crucial-information-on-chemical-weapons/>.

⁸⁵ BBC.

⁸⁶ The White House, "U.S.-Gulf Cooperation Council Camp David Joint Statement," press release, May 14, 2015, available at <www.whitehouse.gov/the-press-office/2015/05/14/us-gulf-cooperation-council-camp-david-joint-statements>.

⁸⁷ Nicole Gaouette and Tony Capaccio, "U.S. Offers Billions in Arms to Ease Mideast's Iran Anxiety," *Bloomberg.com*, July 9, 2015, available at <www.bloomberg.com/news/articles/2015-07-09/u-s-offers-billions-in-arms-to-ease-mideast-s-iran-deal-anxiety>.

⁸⁸ Michael Bowman, "U.S., Israel Sign Record Military Aid Agreement," *Voice of America*, September 14, 2016, available at <www.voanews.com/a/us-israel-military-aid-agreement/3509463.html>.

⁸⁹ It would be a much bigger step for the United States to explicitly extend its nuclear umbrella to Gulf Cooperation Council (GCC) partners. It also may not be politically saleable to the U.S. Congress or broader public given that GCC partners are not treaty allies, unlike other states that enjoy the explicit protection of the U.S. nuclear umbrella, and given the connection that a significant segment of the U.S. population seems to draw between Muslims generally and terrorism, as highlighted in the 2016 Presidential pri-

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mary season. Others may object to the United States adding to its international security obligations at a time when the country already is stretched thin by security challenges in Eastern Europe and East Asia, as well as in the Middle East and South Asia.

⁹⁰ In the 1990s the U.S. Government seconded Department of Energy employees to the International Atomic Energy Agency to support South African elimination operations as well as the United Nations Special Commission in Iraq.

⁹¹ For a discussion of why China would not cooperate with the United States and South Korea concerning a North Korean contingency, see Yun Sun, *The North Korean Contingency: Why China Will Not Cooperate* (Baltimore, MD: U.S.-Korea Institute at SAIS, July 25, 2014), available at <<http://38north.org/2014/07/ysun072514/>>.

⁹² The value of engaging China about cooperation in the event of North Korean contingencies has been widely recognized. For example, see *North Korea Contingency Planning and U.S.-ROK Cooperation* (Washington, DC: Asia Foundation, September 2009), available at <<https://asiafoundation.org/resources/pdfs/DPRKContingencyCUSKP0908.pdf>>; Paul B. Stares et al., *Instability in North Korea and Its Impact on U.S.-China Relations* (New York: Council on Foreign Relations, 2011), 18–24, available at <www.cfr.org/asia-and-pacific/managing-instability-chinas-periphery/p25838>. The United States has sought to do so in both official (Track I) and unofficial (Track II) channels, but China largely has been unresponsive. For example, see “U.S.-China Discuss North Korean Collapse Possibility,” *Global Security Newswire*, January 13, 2014, available at <www.nti.org/gsn/article/us-china-discussed-regime-collapse-north-korea-years-ago/>.

⁹³ This was a significant step toward increasing military focus on WMD contingencies. WMD use is a low-probability (albeit increasing), high-impact contingency that has tended to garner more attention from civilian policymakers than military leaders.

⁹⁴ On September 21, 2016, *Marketwired.com* reported that the countering WMD mission would soon move from U.S. Strategic Command to U.S. Special Operations Command. See “DTRA/SCC-WMD Hosts the 15th Combating Weapons of Mass Destruction Global Synchronization Conference,” *Marketwired.com*, September 21, 2016, available at <www.marketwired.com/press-release/dtra-scc-wmd-hosts-15th-combating-weapons-mass-destruction-global-synchronization-conference-2160546.htm>.

⁹⁵ Paul Bernstein, “Deterrence in Professional Military Education,” *Air and Space Journal* 29, no. 6 (November–December 2015), available at <www.airpower.maxwell.af.mil/digital/pdf/articles/2015-Jul-Aug/C-Bernstein.pdf>.

⁹⁶ This challenge, inter alia, was addressed in a U.S. Strategic Command DOTMLPF-P (doctrine, organization, training, materiel, leadership and education, personnel, facilities, and policy) Change Recommendation recently approved by the DOD Joint Requirements Oversight Council (JROC), per the JROC decision memorandum issued by General Paul J. Selva, USAF, Vice Chairman of the Joint Chiefs of Staff, Subject: DOTMLPF-P Change Recommendation for the Countering Weapons of Mass Destruction Leader Development Education and Training, JROC Memorandum 123-IS, December 7, 2015.

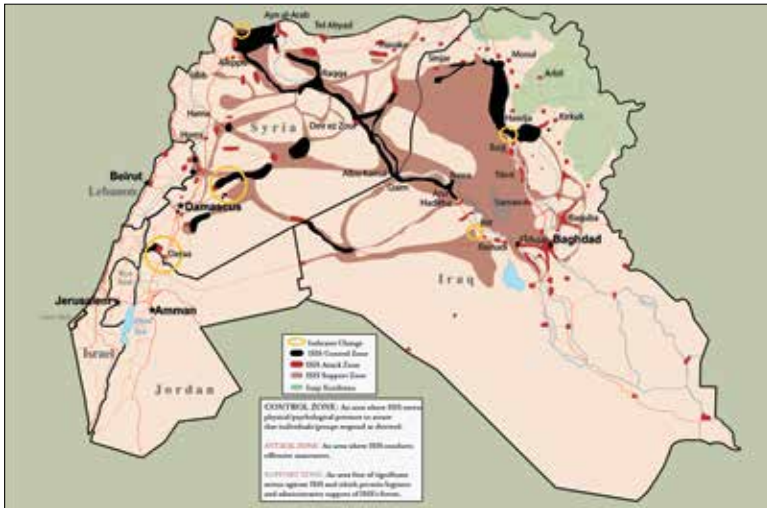
⁹⁷ See, for example, “Humanitarian Impact of Nuclear Weapons,” *ReachingCriticalWill.org*, March 11, 2016, available at <www.reachingcriticalwill.org/disarmament-fora/hinw>.

Countering Terrorism

R. Kim Cragin

The United States faces an unprecedented threat from terrorism today: two transregional networks actively plot attacks, recruit foreign fighters, and seek to inspire “lone wolf” terrorists. But this threat is manageable. Rather than trying to defeat terrorist adversaries, U.S. strategy should emphasize reducing the risk of significant attacks in the homeland, Western Europe, Canada, and Australia. In addition to homeland security measures, such a strategy would be characterized by a shift, and likely an increase, in the placement of U.S. special operations forces and intelligence assets overseas. Managing this threat would also require greater coordination with, and persistence from, other instruments of national power, including diplomacy and law enforcement. The key counterterrorism challenge for a new administration, therefore, is how to develop and sustain a strategy that manages this threat persistently, without being on a constant war footing.

This chapter addresses the counterterrorism challenges facing U.S. policymakers today. To do so, it focuses on foreign terrorist groups and how they threaten the United States and its allies in Western Europe, Canada, and Australia. Of course, most of these terrorist groups also pose a threat to regional stability, as addressed in other chapters. But this chapter prioritizes the safety of the U.S. homeland, citizens, and residents. It argues that not only the primary threat to the United States comes from two transregional terrorist networks but also that the Nation faces an unprecedented threat from foreign fighters and individuals inspired by those transregional networks. This combination can be difficult to disrupt persistently, whether overseas or inside the United States.¹ So the key counterterrorism challenge for policymakers today is how the U.S. Government can manage this threat without being on a constant war footing.

Figure 1. ISIL Presence in Syria and Iraq

Source: Institute for the Study of War

Threats Posed by Terrorist Networks

This section provides an overview of the foreign terrorist and insurgent groups that pose a threat to the United States, as well as the nature and extent of that threat. Note that significant research exists on how and why terrorism arises, why individuals become involved in terrorism, how terrorist groups generate and maintain support, and why terrorism declines.² This section does not delve into that research. Instead it posits that groups with transregional objectives and reach present the greatest threat to the U.S. homeland and its allies in Western Europe, Canada, and Australia. Subsequent sections address the threats posed by foreign fighters and lone wolves in greater depth.

The Islamic State and Its Provinces

The primary threat to the U.S. homeland today emanates from the Islamic State of Iraq and the Levant (ISIL).³ Led by Abu Bakr al-Baghdadi, ISIL maintains its headquarters in Raqqa, Syria, and Mosul, Iraq. Beyond these two cities, ISIL either controls movement (or at the very least retains freedom of movement) across territory in both countries (see figure 1).⁴ So it is often referred to as a terrorist group, an insurgency, and a proto-state. ISIL has an estimated 20,000 to 30,000 local fighters, as well as foreign fighters, also known as “volunteers,” who have traveled to Iraq and Syria to assist with the struggle against Syrian President Bashar al-Asad and join ISIL’s newly established caliphate.⁵ Experts assess that

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ISIL had an annual revenue of between \$265 million and \$615 million as of late 2015, stemming from local taxation, oil, kidnapping for ransom, smuggling, and other forms of crime, although their revenue decreased in 2016.⁶ ISIL leaders utilize this revenue, and personal relationships built over the years, to reinforce their authority over “provinces” that have been established outside the borders of Syria and Iraq, including Afghanistan, Algeria, Bangladesh, Egypt, Indonesia, Libya, Nigeria, Pakistan, Russia (Chechnya), Saudi Arabia, Somalia, and Yemen.⁷

In June 2014, ISIL spokesman Abu Muhammad al-Adnani announced the creation of an Islamic caliphate in the territory under ISIL’s control in Iraq and Syria, changing his organization’s name from the Islamic State of Iraq and the Levant to simply “Islamic State.”⁸ The primary message from al-Adnani at the time was that the Islamic State had established governing structures and religious law in its territories, and thus all Muslims had a religious obligation to transfer their allegiance to ISIL and relocate to this newly established caliphate.⁹ Al-Adnani’s announcement was accompanied by additional military victories, territorial gains, and a concerted social media campaign to terrorize local and international opponents in 2014 and 2015.¹⁰ Militant groups in the outlying provinces of ISIL’s so-called caliphate also have followed its lead, adopting ISIL tactics and using social media to advertise their campaigns.

While most of this violence has been directed inward or toward the local residents of territories under dispute, ISIL and its affiliates also have attacked international targets. Examples of international terrorist attacks by ISIL and loyal groups include:

- August 2014: ISIL fighters decapitated American journalist James Foley. The beheading was videotaped and posted online.¹¹
- June 2015: A gunman attacked a beach vacation resort in Tunisia, killing 38 individuals.¹²
- November 2015: Paris came under attack by ISIL fighters; 129 people died.¹³
- March 2016: Twin suicide attacks on the airport and subway system in Brussels killed 32 individuals; responsibility for the attacks was claimed by ISIL.

Notably, prior to the Paris and San Bernardino attacks, terrorism experts debated whether ISIL or al Qaeda presented the greatest threat to the United States, especially the U.S. homeland.¹⁴ This debate centered

on two key assumptions. First, some experts assumed that ISIL leaders were focused exclusively on the battle for control over territory in Syria and Iraq and, therefore, would not attempt to reach beyond those countries. As a corollary, because ISIL leaders prioritized the near enemy (for example, so-called apostate Muslim regimes) over the far enemy (for example, the United States), it would not sponsor external attacks.¹⁵

Second, other experts assumed that ISIL would experience a backlash among Muslim communities for its brutality on the battlefields of Syria and Iraq. Examples of ISIL brutality included the widely disseminated beheadings of Western journalists.¹⁶ ISIL also captured and then burned alive a Jordanian pilot in February 2015. This assumption drew on past experience with ISIL's predecessor, al Qaeda in Iraq (AQI), which faced significant backlash after its members conducted its own decapitation campaign against Iraqi officials and foreign journalists throughout 2004 and then subsequently attacked a wedding party in Jordan in November 2005.¹⁷

Yet events eventually called both of these assumptions into question. In the early summer of 2014, for example, rumors circulated that ISIL had begun to reach out to militant groups that were associated with al Qaeda but were disgruntled with its leadership and direction. These rumors were substantiated several months later as terrorist groups in Afghanistan, Algeria, Chechnya, Egypt, Libya, Nigeria, Saudi Arabia, Somalia, and Yemen declared their allegiance to, and were formally accepted by, ISIL.¹⁸

Additionally, an unprecedented number of foreign fighters—30,000 in Iraq and Syria and 5,000 in Libya by November 2015—continued to travel overseas to join ISIL.¹⁹ This constant flow of foreign fighters, even after the highly publicized beheadings, suggested that the anticipated backlash was unlikely to occur. It was coupled with an escalating number of plots both directed and inspired by ISIL leadership.²⁰ Indeed, investigations into the Paris and Brussels attacks subsequently revealed that al-Adnani had been given responsibility over external operations as early as January 2014.²¹ It therefore became increasingly obvious that ISIL posed the greater threat to North America, Western Europe, and Australia.

Al Qaeda and Its Affiliates

If ISIL represents the primary terrorist threat to the United States in 2016, al Qaeda and its associates should not be ignored entirely. Currently led by Ayman al-Zawahiri, al Qaeda was responsible for the attacks on the World Trade Center and the Pentagon in September 2001.²² It has been a prominent actor in the wider Salafi jihadi movement since the mid-1980s, initially under the auspices of Maktab al-Khidamat.²³ Much

of al Qaeda's worldview and ideology parallels ISIL. But al Qaeda leaders prioritize attacks against the far enemy over the near enemy.²⁴ Al Qaeda leaders also have cautioned their adherents to avoid Muslim casualties whenever possible.²⁵ These divergences are not insignificant. They have caused a rift not only between jihadists on the battlefields of Syria and Iraq but also worldwide. Al-Zawahiri apparently anticipated this rift; in May 2013 he designated an emissary to the conflicts in Syria and Iraq, Abu Khalid al-Suri, in an attempt to resolve these differences. But al-Suri was killed by ISIL fighters in February 2014.²⁶

Al Qaeda, in contrast to a more hierarchical ISIL, has retained its networked structure over the years. Often described as a franchise, al Qaeda senior leaders reportedly remain based in Pakistan, but they provide guidance to affiliated militant groups around the world. These affiliates include al Qaeda in the Arabian Peninsula (AQAP), al Qaeda in the Islamic Maghreb (AQIM), al Qaeda in the Indian Subcontinent, and the al-Nusra Front in Syria.²⁷ Additionally, the Khorasan Group, also based in Syria, is comprised of experienced al Qaeda fighters from Afghanistan and Pakistan who traveled to Syria to fight the Asad regime.²⁸ In total, al Qaeda and its affiliates have an estimated 8,700 fighters globally, although it is worth noting that the majority of these fighters exist with affiliated groups, not core al Qaeda.²⁹ Al Qaeda leaders also have established ties to the Taliban, Haqqani network, Tehrik-e-Taliban, and Lashkar-e-Tayyba in Afghanistan and Pakistan.

The rise of ISIL, its 2014 declaration of a caliphate, and subsequent defections clearly put pressure on al Qaeda leaders to demonstrate their relevance to the wider Salafi jihadi movement, of which both ISIL and al Qaeda are part. They have responded to this pressure by positioning al Qaeda as the most viable alternative to ISIL for those Muslims who do not feel comfortable with ISIL's tactics on the battlefield. Al Qaeda leaders also have rebuked ISIL for causing disunity within the Salafi jihadi movement. The following joint statement by AQAP and AQIM illustrates this approach: "On top of this the [ISIL] spokesman declared war on all groups and factions everywhere and threatening to fight and shed their blood. This indicated the extent of their deviation and misguidance. Instead of directing their fight towards the enemies of the ummah, and to direct their arrows towards the Jews and Christians, they chose to direct their arrows towards the chests of Muslims."³⁰

Al Qaeda affiliates also have tried to revive their own efforts against the United States and its allies. This has manifested itself in the emergence of new al Qaeda training camps in Afghanistan and attacks by al Qaeda affiliates against Western targets overseas.³¹ These include an attack by AQAP on the office of the *Charlie Hebdo* satirical magazine in

Figure 2. Select Al Qaeda Leaders Killed by Counterterrorism Forces

Naseer al-Wuhayishi (2015), AQAP leader and deputy to Ayman al-Zawahiri
Sanafi al-Nasr and Muhsin al-Fadhli (2015), leaders of the Khorasan Group
Abu Yahya al-Libi (2012), al Qaeda spokesman and commander in Afghanistan
Saeed al-Sherhri (2012), AQAP founder and former Guantanamo prisoner
Anwar al-Awlaki (2011), American-born cleric and recruiter for AQAP
Atiyah 'Abd al-Rahman (2011), deputy leader for al Qaeda in Pakistan
Osama Bin Laden (2011), the founder and visionary behind al Qaeda

Paris in January 2015 and an attack by AQIM on the Radisson Blu hotel in Mali in December 2015. That said, neither of these attacks reached the level of death, injury, or damage as those conducted by ISIL fighters.

Will al Qaeda fully reemerge in 2017? Will al Qaeda join with ISIL to form a united transregional network? Will this united network pose an even greater threat? These are the questions being asked by terrorism analysts today. The answers will likely depend on the extent to which the United States and its partners can maintain pressure on ISIL and al Qaeda's transregional networks simultaneously. Over the past decade, al Qaeda senior and mid-level leaders have been targeted by U.S. and other counterterrorism forces (see figure 2). It is arguable that these and other intensive efforts have diminished al Qaeda's ability to attack North America, Western Europe, or Australia or even to mount significant attacks on Western targets overseas. But this type of counterterrorism campaign requires concerted resources, including intelligence collection and analysis, law enforcement and diplomatic pressure, and, in many cases, the use of U.S. military instruments, primarily U.S. special operations forces (SOF) and airpower. These resources are finite, and tradeoffs exist. It still remains an open question as to whether the U.S. Government can effectively combat two transregional terrorist networks, as well as maintain its readiness against more conventional state adversaries. The new administration, Democratic or Republican, will have to reconcile these national security priorities.

Lebanese Hizballah and Lashkar-e-Tayyba

In addition to ISIL, al Qaeda, and their affiliates, two additional transregional terrorist networks are worthy of note for U.S. national security policymakers. Neither of these networks poses a threat to the United States today, but they should be monitored for shifts in intent and behavior. The first, Lebanese Hizballah, has not threatened the United States directly since the early 1980s. But despite this absence, it often emerges in discussions of transregional terrorist networks that might pose a threat in the future. This is due in part to its relationships with Iran's Islamic

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Revolutionary Guard Corps (IRGC), Shia militias in Iraq, the Palestinian Islamic Jihad, and Huthi rebels in Yemen.³²

Led by Hassan Nasrallah, Hizballah has maintained strong ties to Iran since the 1980s.³³ Originally an actor in the Lebanese civil war, Hizballah shifted its attention to Israel and its forces in southern Lebanon after a power-sharing arrangement was reached for the governance of Lebanon as part of the 1989 Ta'if Agreement.³⁴ Today, Hizballah reportedly has 5,000 fighters under its command in Lebanon with up to 2,000 more deployed to assist President Assad's forces in Syria.³⁵ Its close ties with the IRGC also provide Hizballah with access to weapons and financing, and, in some instances, the two have been accused of collaborating on terrorist attacks.³⁶ Hizballah's transregional network also has reach into the United States, albeit in a limited way. In March 2014, for example, Federal Bureau of Investigation (FBI) agents arrested a Lebanese-born American for attempting to travel to Syria to fight with Hizballah; he reportedly received between \$500 and \$1,000 for his trip.³⁷

Lashkar-e-Tayyba (LeT) also deserves some mention as another transregional terrorist network that might pose a threat (albeit much less so than the other networks discussed in this chapter) to the United States and its allies in the future. Based in Pakistan, LeT is led by Hafiz Muhammed Saeed and has a fighting force of between 750 to several thousand.³⁸ LeT has ties to al Qaeda and the Haqqani network, but it also operates its own independent network, stretching from Pakistan to Saudi Arabia to the United States.³⁹ In November 2008, gunmen associated with LeT attacked the Taj Hotel in Mumbai as well as 11 other sites, killing 164 people. U.S. citizen David Headley pleaded guilty in March 2010 to scouting targets for this attack.

New Dynamics

The United States also faces two additional counterterrorism challenges: increased numbers of foreign fighters and lone wolves. This section addresses these two threats as they exist now and how they might evolve in the future.

Foreign Fighters

As of November 2015, 30,000 foreign volunteers had traveled to Syria and Iraq either to fight against the Assad regime or otherwise support the ongoing battles; an additional 5,000 were believed to be in Libya.⁴⁰ While foreign fighters are not a new phenomenon, these numbers are unprecedented (see table 1). For example, an estimated 20,000 foreign volunteers fought against Soviet forces in Afghanistan between 1980 and

Table. Basic Comparison of Foreign Fighters		
Country (Years of Conflict)	Volunteers	Average Volunteers per Year
Syria (2012–2015)	30,000	7,500
Iraq (2004–2009)	5,000	1,000
Afghanistan (1980–1992)	20,000	1,650

1992; that is an average of 1,650 foreign fighters entering the conflict per year.⁴¹ Similar numbers existed for Operation *Iraqi Freedom*. Approximately 5,000 foreign fighters traveled to Iraq between 2004 and 2009 to fight against U.S. forces for an average of 1,000 per year.⁴² These averages are hardly comparable to the current conflicts: 7,500 volunteers per year for Syria and Iraq and 2,500 per year for Libya.

Some debate exists, however, as to the nature and extent of the threat posed by foreign fighters to the U.S. homeland, Western Europe, Canada, or Australia. Most agree that foreign fighters can provide unique skills to terrorist groups, such as medical skills or how best to use social media. But questions remain about how many will return home and whether those who do will conduct attacks there. The latter represents a key concern for Western Europe today. If 30,000 foreign volunteers are in Syria and Iraq, for example, some can be expected to be killed on battlefields. Estimates vary. A report by the Soufan Group suggests that approximately 7 percent have been killed on battlefields.⁴³ A separate report released by the Brookings Institution cites an estimate by European intelligence officials of 20 percent.⁴⁴ By comparison, a report by Al-Manar, the television news source associated with Hizballah, estimates 37 percent.⁴⁵ It is difficult to take numbers from Hizballah—ISI's archenemy—too seriously. Nonetheless, if we use the high-range number of 37 percent killed on battlefields, this still leaves 18,800 foreign fighters remaining in Iraq and Syria with an additional 3,150 remaining in Libya. Roughly 15 percent of these are estimated to be from North America, Western Europe, or Australia, equating to 3,293 Western foreign fighters.⁴⁶

From a counterterrorism perspective, over 3,000 Western fighters still represents a fairly significant number, given the ease with which they can travel throughout Western countries and the historical difficulties that intelligence and law enforcement have experienced in monitoring them. Clearly not all will return home to conduct attacks or will commit terrorist acts if they do return. But some will. Estimates vary on potential recidivism rates from 9 percent to as high as 60 percent (see figure 3).⁴⁷ This variance suggests that more needs to be done to understand how foreign fighters travel to conflicts, when and how they return home, and how they will behave upon their return. Abdel Hamid Abaaoud, one of the leaders of the November 2015 attacks in Paris, for example, recruited

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Figure 3. Western Foreign Fighters after Battlefield Losses	
15 percent of 18,900 in Syria and 3,150 in Libya = 3,293 total	
Recidivism Estimate: 9 percent 296 return home to conduct attacks	
Estimate: 15 percent 494 return home to conduct attacks	
Estimate: 60 percent 1,976 return home to conduct attacks	

at least two dozen additional team members to conduct this attack. Seven of the nine attackers were foreign fighter returnees from Syria. Two were Iraqis. But most of the other team members—13 in total—had not traveled to Syria or Iraq to fight, suggesting that returnees represent more of a threat than their initial numbers might suggest because they could recruit others to their cause.⁴⁸

Notably, the FBI thus far has managed the risk to the U.S. homeland posed by foreign fighter returnees successfully, while security services in France and Belgium have not done as well. The question for a new administration is whether the FBI can sustain this level of effort within the United States in the mid-term or increase its investigations as more foreign fighter returnees reenter the United States.

Lone Wolves

Experts use the term *lone wolves* to denote residents of the United States who plan or participate in terrorist attacks without direct support or operational guidance from terrorist leaders. Some lone wolves are inspired by conflicts overseas. Others are part of local paramilitary groups, white supremacists, or even environmental activists. Members of the U.S.-based Sovereign Citizen Movement, for example, have targeted local police officers in Arkansas, Connecticut, Florida, Nebraska, New Hampshire, and Wisconsin.⁴⁹ This section focuses only on lone wolves inspired by transregional terrorist networks, namely ISIL and al Qaeda.

According to Director James Comey, the FBI had open investigations on suspects associated with or inspired by ISIL in all 50 states as of February 2015.⁵⁰ Recent examples of lone wolf attacks include an attack by two men against an event in Garland, Texas, in May 2015 and the death of 14 people in San Bernardino, California, in December 2015. While some experts dispute the danger to the U.S. homeland posed by foreign fighters, most agree that lone wolves represent a real threat.

Significant research has been devoted to understanding why the current conflicts have inspired so many lone wolves and attracted so many foreign fighters. Most studies, one way or another, point to the relatively

sophisticated social media campaign waged by ISIL.⁵¹ In characterizing this sophistication, experts generally make two key observations. First, while the production of ISIL messages tends to be centralized, the dissemination is diffuse. This means that it is difficult to “shut down” ISIL messaging.⁵² Second, ISIL messages appear to be targeted toward specific audiences, including foreign recruits, as illustrated by its English-language magazine, *Dabiq*.⁵³ Comey has taken this assessment one step further, arguing that ISIL uses social media platforms to target messages directly to recruits via smartphones.⁵⁴ While less appears to be known about which messages resonate with specific audiences, it seems clear that ISIL’s use of social media has contributed to the increase in plots by lone wolves within the United States.

Policy Implications

In summary, the primary terrorist threat to the U.S. homeland, Western Europe, Canada, and Australia today emanates from ISIL; al Qaeda represents a secondary threat; and Hizballah and Lashkar-e-Tayyba represent potential future threats. Given the nature and extent of these threats, the U.S. Government faces three main counterterrorism challenges: how to counter two transregional networks simultaneously, how to anticipate and halt the emergence of new transregional networks, and how to mitigate the danger posed by lone wolves and foreign fighters. These tasks are not easy. But while it is impossible to provide a thorough counterterrorism policy in this chapter, the following steps represent a viable way forward for a new administration.

First, a new administration should take the opportunity to revisit the access and placement overseas necessary for the U.S. Government to sustain activities against the ISIL and al Qaeda transregional networks, as well as anticipate emerging threats. “Access and placement,” in this instance, refers to the allocation of not only U.S. SOF but also intelligence assets, FBI legal attachés, and other law enforcement personnel, such as Customs and Border Protection and Drug Enforcement Administration officers.⁵⁵ The Barack Obama administration has already taken several steps in this direction by increasing the number of SOF deployed to Syria and Iraq and delaying their withdrawal from Afghanistan.⁵⁶ But given the counterterrorism challenges outlined in this chapter, a new administration is unlikely to be able to rely solely on SOF and airpower. It will also need to leverage even more nonmilitary assets, such as diplomacy, intelligence, and law enforcement.

Second, a new administration should take the opportunity to revisit the authorities and structure within the executive branch needed to

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counter ISIL, al Qaeda, or other transregional networks effectively. For example, as a new administration develops a way forward to counter these threats, it may want to request an additional Authorization for the Use of Military Force from Congress. It may also need to revisit intelligence-sharing relationships and partnerships. Equally important, as a new administration devotes more nonmilitary assets toward countering these threats, this will require close coordination across the government. The National Counterterrorism Center could help bring all of the Federal agencies together, but it cannot direct the reallocation of resources toward this fight. Such an effort will need to be undertaken by the White House.⁵⁷

Third, the United Nations has undertaken multiple efforts to mobilize the international community against foreign fighter flows. These efforts include Security Council Resolution 2178, passed in September 2014, that requires member countries to prevent their citizens from traveling abroad to join terrorist organizations.⁵⁸ The United Nations also has attempted to work with member states to tighten their legal frameworks against foreign fighter flows, as well as identify any needs for technical assistance, especially with respect to advance passenger information.⁵⁹ A new administration should take the opportunity to broaden this effort so that it focuses on not only outbound travel but also returnees. Specifically, the ceasefire and transition negotiations should address the dilemma of what to do with foreign fighters residing within Syria and Iraq. Some countries, such as Russia, have decided to revoke the citizenship of their foreign fighters. But it is not in the interest of the United States to allow these fighters to remain in Syria or relocate to another conflict. The issue of returnees should receive more diplomatic emphasis, forethought, and planning. Similarly, the United Nations should be encouraged to emphasize the challenges posed by recidivism, to identify lessons learned, and to help member states put programs in place now before they experience an unmanageable surge of returnees. A new administration should prioritize assistance to these efforts, whether it be diplomatic, information-sharing, or providing technical support and resources to member states.

Fourth and finally, a new administration should conduct a full and thorough review of the U.S. Government's efforts to counter messaging by ISIL, al Qaeda, and potentially other transregional terrorist networks. This will not be easy. Multiple departments and agencies play a role in what is referred to as public diplomacy, strategic communications, information operations, or counter-messaging. But opportunities exist. For example, defectors from ISIL have begun to speak out. Refugees also have told their stories of horrible treatment and losses, which undermine

ISIL's claim to a legitimate caliphate. And just as social media assists ISIL and al Qaeda, it also can be used to gauge the nature and the extent to which ISIL and al Qaeda messages resonate with local populations around the world. But the U.S. Government must have appropriate authorities, structures, resourcing, and plans to take advantage of these opportunities.

The United States faces an unprecedented threat from terrorism today, emanating from a combination of transregional terrorist networks, foreign fighters, and the lone wolves that they inspire. Yet this threat does not necessitate that the United States be on a constant war footing. It can be managed. Doing so, however, requires the U.S. Government to prioritize its military and intelligence assets appropriately, coordinate its diplomatic efforts more effectively, and expand the use of law enforcement instruments for combating terrorism not only inside the United States but also overseas.

Notes

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² For a summary of this extensive research, see Paul K. Davis and Kim Cragin, eds., *Social Science for Counterterrorism: Putting the Pieces Together* (Santa Monica, CA: RAND, 2009); see also Kim Cragin, "Resisting Violent Extremism: A Conceptual Model for Non-Radicalization," *Terrorism and Political Violence* 26, no. 2 (2014), 337–353.

³ For additional information on this group, see Michael Weiss and Hassan Hassan, *ISIS: Inside the Army of Terror* (New York: Regan Arts, 2015). Note that some experts still believe that al Qaeda poses the greatest threat.

⁴ Note that the Islamic State of Iraq and the Levant (ISIL) lost control over territory in 2016. For further discussion on gauging ISIL control over territory, see Kathy Gilsinan, "The Many Ways to Map the Islamic State," *The Atlantic*, August 27, 2014, available at <www.theatlantic.com/international/archive/2014/08/the-many-ways-to-map-the-islamic-state/379196/>.

⁵ Subsequent sections address the foreign fighter flows into Syria and Iraq in greater detail. For additional references, see Patricia Zengerle, "U.S. Fails to Stop Flow of Foreign Fighters to Islamic State," Reuters, September 29, 2015, available at <www.reuters.com/article/2015/09/29/us-mideast-crisis-congress-fighters-idUSKCN0RT1VZ20150929>; Michael Pizzi, "Foreign Fighters in Syria, Iraq Have Doubled Since Anti-ISIL Intervention," Al-Jazeera, December 7, 2015, available at <<http://america.aljazeera.com/articles/2015/12/7/foreign-fighters-in-syria-iraq-have-doubled-since-anti-isis-intervention.html>>.

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⁷ "Islamic State Expands into Pakistan with Tehrik-e-Khalifat," *Jane's Terrorism and Insurgency*, January 30, 2015; Lara Jakes, "Who's Part of the Islamic State? Depends on Who You Ask," *Foreign Policy*, May 21, 2015, available at <<http://foreignpolicy.com/2015/05/21/whos-part-of-the-islamic-state-depends-whom-you-ask/>>; Charlie Winter, "The Virtual 'Caliphate': Understanding Islamic State's Propaganda Strategy," Quilliam Foundation, July 2015, available at <www.quilliamfoundation.org/wp/wp-content/uploads/publications/free/the-virtual-caliphate-understanding-islamic-states-propaganda-strategy.pdf>; Aaron Zelin, "New Video Message from the Islamic State: 'Victory from God and an Imminent Conquest—Wilayat al-Khayr,'" *Jihadology.net*, May 11, 2015, available at <<http://jihadology.net/2015/05/11/new-video-message-from-the-islamic-state-victory-from-god-and-an-imminent-conquest-wilayat-al-khayr/>>.

⁸ Abdallah Suleiman Ali, "ISIS Announces Islamic Caliphate, Changes Name," Pascale al-Khoury, trans., *al-Monitor.com*, June 30, 2014, available at <www.al-monitor.com/pulse/security/2014/06/iraq-syria-isis-announcement-islamic-caliphate-name-change.html#>.

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¹³ Andrew Higgins and Kimiko de Freytas-Tamura, "Paris Attack Suspect Killed in Shoot Out Had Plotted Terror for 11 Months," *New York Times*, November 19, 2015, available at <www.nytimes.com/2015/11/20/world/europe/paris-attacks.html?ref=live-blog&_r=0>.

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¹⁷ *Ibid.*, 176; Hassan M. Fattah and Michael Slackman, "Three Hotels Bombed in Jordan; At Least 57 Die," *New York Times*, November 10, 2015, available at <www.nytimes.com/2015/11/10/world/middleeast/3-hotels-bombed-in-jordan-at-least-57-die.html>.

¹⁸ Liam Stack, "How ISIS Expanded Its Threat," *New York Times*, November 14, 2015, available at <www.nytimes.com/interactive/2015/11/14/world/middleeast/isis-expansion.html>.

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²⁰ Byrnes.

²¹ Rukmini Callimachi, "How ISIS Built the Machinery of Terror Under Europe's Gaze," *New York Times*, March 29, 2016, available at <www.nytimes.com/2016/03/29/world/europe/isis-attacks-paris-brussels.html>.

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²⁵ Ayman al-Zawahiri, "Letter to Zarqawi on Campaign in Iraq," July 9, 2005, translated and released by West Point Counterterrorism Center, available at <www.ctc.usma.edu/v2/wp-content/uploads/2013/10/Zawahiris-Letter-to-Zarqawi-Translation.pdf>; Abu Musab al-Suri, "Call for Global Islamic Resistance," unpublished paper released December 2004/January 2005, translated and posted by SITE Intelligence Group, February 16, 2007; Abu Laith al-Libi, "Confronting the War of Prisons," as-Sahab Media, May 24, 2007, translated and posted by SITE Intelligence Group.

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³³ For more information on Lebanese Hizballah, see Hala Jaber, *Hezbollah: Born with a Vengeance* (New York: Columbia University Press, 1997); Naim Qassam, *Hizballah: The Story from Within* (London: Saqi Books, 2005); Augustus Richard Norton, *Hizballah: A Short History* (Princeton: Princeton University Press, 2009).

³⁴ Hassan Krayem, "The Lebanese Civil War and the Taif Agreement," Digital Documentation Center, American University of Beirut, n.d., available at <<http://ddc.aub.edu.lb/projects/pspa/conflict-resolution.html>>.

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³⁶ Kim Cragin, "Hizballah, Party of God," in *Aptitude for Destruction*, ed. Brian Jackson et al. (Santa Monica, CA: RAND, 2005).

³⁷ Abha Shankar, "Dearborn Man Arrested Trying to Join Hizballah Fighters in Syria," Investigative Project Blog, March 18, 2014, available at <www.investigativeproject.org/4318/dearborn-man-arrested-trying-to-join-hizballah#>.

³⁸ The National Counterterrorism Center Web site states that Lashkar-e-Tayyba has several thousand fighters, while the South Asia Terrorism Portal Web site estimates 750. See "Lashkar e Tayyba," available at <www.nctc.gov/site/groups/let.html> and <www.satp.org/satporgtp/countries/india/states/jandk/terrorist_outfits/lashkar_e_toiba.htm>.

³⁹ Ibid.

⁴⁰ Zengerle; Pizzi.

⁴¹ The number 20,000 represents a high-end estimate. See Thomas Hegghammer, "The Rise of Muslim Foreign Fighters," *International Security* 35, no. 3 (Winter 2010/2011), 61.

⁴² Ibid.

⁴³ Richard Barrett, *Foreign Fighters in Syria* (New York: Soufan Group, June 2014), available at <<http://soufangroup.com/wp-content/uploads/2014/06/TSG-Foreign-Fighters-in-Syria.pdf>>.

⁴⁴ Daniel Byman and Jeremy Shapiro, *Be Afraid, Be a Little Afraid: Western Foreign Fighters in Syria and Iraq*, Policy Paper 34 (Washington, DC: The Brookings Institution, November 2014), 20.

⁴⁵ "9936 al Qaeda-linked Arabs Killed in Syria," *al-Manar.com*, December 24, 2013, available at <www.almanar.com.lb/english/adetails.php?fromval=1&cid=23&frid=23&eid=126949>.

⁴⁶ The 15 percent comes from estimated totals: 30,000 foreign fighters and 4,500 from the West.

⁴⁷ Byman and Shapiro.

⁴⁸ These numbers were calculated based on the ratio for the Paris attacks—3 foreign fighters: 10 local recruits.

⁴⁹ *The Lawless Ones: The Resurgence of the Sovereign Citizen Movement*, Special Report by the Anti-Defamation League, 2nd ed. (New York: Anti-Defamation League, 2012), available at <www.adl.org/assets/pdf/combating-hate/Lawless-Ones-2012-Edition-WEB-final.pdf>.

⁵⁰ Byrnes.

⁵¹ See, for example, Byman and Shapiro; Winter; Zelin, “Picture or It Didn’t Happen”; Barrett; see also Scott Shane and Ben Hubbard, “ISIS Displaying a Deft Command of Varied Media,” *New York Times*, August 30, 2014, available at <www.nytimes.com/2014/08/31/world/middleeast/isis-displaying-a-deft-command-of-varied-media.html?_r=0>.

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⁵³ *Ibid.* See also Zelin, “Picture or It Didn’t Happen.”

⁵⁴ Kevin Johnson, “FBI Director Says Islamic State Influence Growing in U.S.,” *USA Today*, May 7, 2015, available at <www.usatoday.com/story/news/nation/2015/05/07/isis-attacks-us/70945534/>.

⁵⁵ Under the leadership of Admiral William McRaven, U.S. Special Operations Command explored the possibility of establishing what was referred to generally as a “global SOF network.” This proposition came under significant criticism and so did not gain traction among policymakers. This chapter does not advocate a return to the global SOF network, but rather, a more limited presence in the form of a series of Special Operations Command–Forward elements attached to Embassies or consulates. For more information, see Posture Statement of Admiral William H. McRaven, Commander, United States Special Operations Command, before the 113th Congress House Armed Services Committee, March 6, 2013, available at <<http://docs.house.gov/meetings/AS/AS00/20130306/100394/HHRG-113-AS00-Wstate-McRavenU.S.NA-20130306.pdf>>; Jack Jensen, “Special Operations Command–Forward Lebanon: SOF Campaigning Left of the Line,” sidebar in reprint of Michael Foote, “Operationalizing Strategic Policy in Lebanon,” *Special Warfare* (April–June 2012), available at <www.soc.mil/swcs/SWmag/archive/SW2502/SW2502OperationalizingStrategicPolicyInLebanon.html>.

⁵⁶ Jim Acosta and Jeremy Diamond, “Obama Again Delays Afghanistan Troop Draw-down,” *CNN*, October 15, 2015, available at <www.cnn.com/2015/10/15/politics/afghanistan-troops-obama/index.html>.

⁵⁷ For further discussion on how to improve interagency performance against these types of threats, see Christopher J. Lamb’s chapter on national security reform in this volume.

⁵⁸ Somini Sengupta, “Security Council Passes Resolution to Thwart Foreign Fighters,” *New York Times*, September 24, 2014, available at <www.nytimes.com/news/un-general-assembly/2014/09/24/security-council-passes-resolution-to-thwart-foreign-fighters/?_r=0>.

⁵⁹ United Nations, “Action Against Threat of Foreign Terrorist Fighters Must Be Ramped Up, Security Council Urges in High-Level Meeting,” Press Release No. 11912, May 29, 2015, available at <www.un.org/press/en/2015/sc11912.doc.htm>.

Cyber Policy

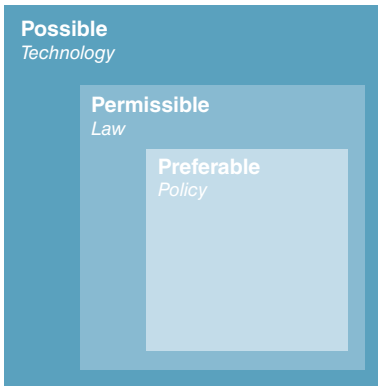
Janice M. Hamby and Thomas C. Wingfield

The effective use of the informational instrument of national power in all domains, and the use of all the instruments of national power in the cyber domain, will be a serious and growing challenge for the United States. The next U.S. President must have a clear understanding of the relationship of technology, law, and policy in formulating options. Centralized but not procrustean, leadership at the highest level, providing a clear and rational delineation of authorities, will be needed to coordinate and effectively employ U.S. cyber and information capabilities. Internationally, engaging with allies and partners will be vital to our defense; engaging with adversaries will require a new understanding of deterrence and counter-espionage in cyberspace. Domestically, new approaches to public-private partnerships will be key to addressing threats, preserving civil liberties, and unleashing our potential for improved governance and expanded commerce.

By any measure, the United States leads the world as a cyber power in terms of its cyberspace-related leadership and capabilities, research and development, innovation, and commercialization of leading-edge hardware and software, as well as more specialized products for military and scientific applications. This is also true for the world of information. Without any whole-of-government coordination, the United States produces and exports the lion's share of globally consumed television, film, music, and games, as well as data, information, and knowledge systems. Its advances in mobile communications and social media have revolutionized the way the global community communicates, learns, and even thinks.

With this largely unplanned success has come a series of challenges, many of which require a more deliberate approach and a national-level strategic effort with Presidential leadership to resolve. This chapter provides summary views of many of these challenges and offers recom-

Figure 1. Framing Cyberspace



mentations by which the administration could gain traction over even the most daunting issues in the information and cyberspace domain.

From the perspective of the Department of Defense (DOD), the term *cyberspace* is defined as a global domain within the information environment consisting of interdependent networks of information technology infrastructures and resident data, including the Internet, telecommunications

networks, computer systems, and embedded processors and controllers.¹ Protecting this domain is a national priority. It underpins U.S. and global commerce, governmental and private discourse, innovation, and creativity. It has evolved into an essential enabler of governance, business, and personal transactions. It has elevated the impact of information in all its forms and provides both opportunities for and limitations to the way we conduct our national security strategy.

The actors with whom the United States must engage (and sometimes counter) include capable nation-states, criminals, and nonstate actors. Many of these are not bound by the same norms and restraints that the United States observes. The complex motives and methods, combined with a low barrier to entry, heighten the potential for damaging effects caused by competitor and adversary actions.

The need to ensure that we both leverage the potential of cyberspace for U.S. national and global advantage and protect our systems and information to ensure our prosperity and security as a nation demands a comprehensive, integrated strategy that provides coherence of action and synchronizes Federal, state, and local initiatives in cooperation with our partners in industry as well as with foreign governments.

Framing Cyberspace: The Possible, Permissible, and Preferable

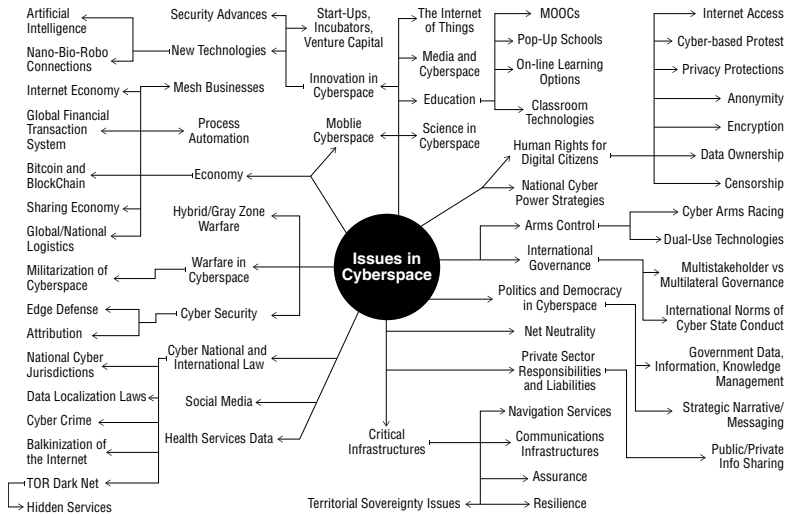
Because cyberspace is a domain of near-infinite complexity, we need models to allow us to build common theoretical frameworks to help us synchronize our academic research, operational planning, and high-level policymaking. Nowhere is such a common operating picture more important than in explaining the relational positions of technology, law, and policy.

In figure 1, the outermost box represents technology—the range of the possible. As the largest box, it consists of everything that technologists have delivered or can deliver without violating the laws of physics. Some of these options are lawful, some are not; others make good policy sense, while others do not. To extend the metaphor, the top and sides of the box can be extended with more time, more money, or smarter scientists and engineers. The bottom, however, cannot be extended—it represents those laws of physics and other barriers beyond our control that limit our expansion to the other three directions.

The intermediate box represents the law—the limits of what is permissible. Outside this box are options that are technically feasible but legally impermissible; inside the box is the full range of lawful options for policymakers to consider. Just as with technology, the top and sides of this box can be expanded—domestically by an executive order, statute, or court ruling. Internationally, we can expand (or contract) this box with treaties or, more often, by concerted changes to state practice with *opinio juris* (the stated position that international law requires or permits a certain action), resulting in a reinforcement of, or change to, customary international law. But just as with technology, there are virtually unchangeable aspects of the law. Domestically, the best examples are fundamental constitutional norms—freedom of speech, or freedom from unreasonable search and seizure—that are unlikely to be altered, even through another constitutional amendment. Internationally, we refer to these near-unchangeable laws as *jus cogens* norms—prohibitions accepted by so many states for such a great length of time that only other *jus cogens* norms could displace them. Examples include the universal bans on piracy, slavery, grave war crimes, and genocide. This is not to say that these crimes do not exist but rather that their historical severity has rendered them unlikely to ever be legalized. Their most important aspect is their universal applicability, even in the face of a dissenting state. For international lawyers, *jus cogens* norms are the equivalent of the laws of physics.

The innermost, and smallest, box is policy—the realm of the preferable. These are the policy options that make the most strategic sense, aligning desired ends with available means most effectively. They make the most political sense, whether in response to public opinion, media coverage, or interest-group or thought-leader positions. They might be the path of least resistance within a bureaucracy, the least common denominator position adopted by a coalition of allies, a workable compromise within a legislature, or an executive's daring vision. In any case, they are the product of the political forces operating at the time and should be derived from the largest possible menu of lawful options. As

Figure 2. Cyberspace Issues and Federal Boundaries



with the other two boxes, we can imagine three sides that can be moved with time, money, and political capital, just as we can imagine a fourth side that cannot be—policy options that are considered so politically toxic or strategically unfeasible as to be impossible.

Governance Framework and Policy

Multiple partitions abound in the Federal Government's design, reflecting the economic and political priorities of the Industrial Age. One effect is the pile-up of “cross-cutting” issues—particularly those generated by the disruptive information/digital age—that fail to fit neatly within outdated Federal agency/department boundaries. Figure 2 shows examples of cyberspace issues that run across, over, under, and around these boundaries.

This leads to costly dysfunctionality. Issues of cyberspace become too fractured and segregated to fit within the logic of existing department/agency mission areas. This limits responses to departmental or agency-specific responsibilities, which rarely consider or incorporate all the other parts of a cross-cutting issue. The results are solutions with a higher risk of failure—for example, the persistent failure to share electronic health records between DOD and the Veteran's Administration. Departments and agencies waste resources and duplicate efforts. Bureaucratic barriers bound Federal work and employees within department

and agency authority structures, which lose synergistic value. Moreover, these arrangements cause unnecessary contestation for resources and arguments over leadership, spending, and control at the expense of shared best practice solutions.

Four reform strategies have been attempted thus far: grabbing agency components to create an Industrial Age-style Department of Homeland Security, designating lead agencies, appointing “supervisory czars” over groups of agencies (for example, Director and Office of National Intelligence), and building lower-level issue-specific fusion centers for cross-agency information-sharing and coordination. Collectively, these strategies have generated modest improvements in shared situational awareness on the cross-cutting issues of cyberspace. They have been handicapped by a narrow focus, inappropriate appropriations classifications, and misaligned authorities and responsibilities, leading to continued duplication of effort, poor exploration of unintended consequences of policy actions, and constant work to address undiscovered feasibility, affordability, and utility issues. We offer the following recommendations:

- Map Federal Government relationships within cyberspace writ large to generate shared situational awareness as the basis for effectively integrating the executive branch. This map should offer a dashboard-style real-time presentation of connections, crossovers, databases, and knowledge sets of the Federal Government and expand to include commercial, nongovernmental, and international networks.
- As a first step to fitting the Federal Government for the digital age, create an empowered and resourced leadership structure in the executive office with a cyberspace remit (rather than one focused on e-government or cybersecurity).
- Task this new structure and leadership to launch a “hackathon”-style initiative to acquire and explore new options for executive branch network structures that are not dependent on current Federal Government agency and department boundaries, budgets, and authorities.
- Design a collaborative follow-on strategy with congressional Members and staffs for identifying legal frameworks for authorizing, appropriating, and overseeing such networked and adaptive structures.

Reviewing Cyber Authorities

The U.S. Government has not clearly laid out the roles, responsibilities, and authorities (RRA) of its components for cyberspace operations. As a result, U.S. actions in cyberspace are neither coordinated nor synchronized, and resources are not coordinated to reduce inefficiency and unintended redundancy.

As identified in the 2016 Cybersecurity National Action Plan (CNAP), the Barack Obama administration's cyber policy has been based on three strategic pillars: raising the level of cybersecurity in American public, private, and consumer sectors; taking steps to deter, disrupt, and interfere with malicious cyber activity aimed at the United States or its allies; and responding effectively to, and recovering from, cyber incidents.² In addition to the CNAP, areas previously addressed include information-sharing (Executive Order 13691³), improving government information technology and information security, increasing public cyber awareness and education, and increasing the size and quality of the military and civilian cyber workforce. These initiatives are helping to address the tactical and operational weaknesses of the United States. Unfortunately, what is missing is a comprehensive framework that clearly articulates the RRA for Federal, state, and local governments. There are several key documents that address aspects of this problem, the most important of which are Presidential Policy Directive (PPD)-20, PPD-21, and PPD-41.⁴ All address important shortfalls, but greater synchronization and clearer authorities and responsibilities are needed. We offer the following recommendations:

- Replace the patchwork of executive branch policies that describe cyber roles, responsibilities, and, on occasion, authorities with a single overarching document.
- Ensure specificity and clarity when assigning RRA in cyberspace for Federal organizations. There are debates about responsibility whenever agencies have to interpret RRA, which delays collaboration and hinders the sharing of information. Require rotational assignments for senior executives to ensure a more complete understanding of the roles and responsibilities of other Federal agencies.
- Ensure this new document expands upon the framework initially outlined in PPD-20. Unlike PPD-41, which focuses solely on event response, the policy must look holistically at cyberspace to include planning for the building of the cyberspace terrain and how we operate in that terrain (both offensively and defensively).

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- Continue the concept of using lines of effort as introduced in PPD-41. This format is an easy structure to understand, clearly identifies the supported and supporting organizations, and will enhance collaboration among agencies across the range of cyber activities.
- Make the document unclassified. A major issue with PPD-20 is that it is a top secret document and the vast majority of the workforce has no idea of its contents—or even its existence. This made it challenging for the Federal workforce to understand how its organization fit into the cyberspace architecture. In addition, the private sector and American people lacked knowledge of U.S. defenses and cyberspace capabilities.
- Consider creating a Department of Cyber to unify capabilities and provide leadership. Following the U.S. Coast Guard precedent of having one of the Armed Forces report to an agency other than DOD, consider aligning U.S. Cyber Command under this new department.

Engaging the International Community on Internet Governance

The United States must engage the international community regarding Internet governance to ensure that information in cyberspace remains free and accessible to U.S. citizens and the global community. Framing this complex challenge requires understanding the roles that cyber strategy, policy, regulation, and security play in Internet governance. It is also important to assess whether our efforts to secure the Internet and protect information and privacy rights are consistent with overarching “governing” objectives (that is, information freedom and net neutrality) and to ensure that our security efforts do not threaten the very liberties they are intended to protect.

This is not to suggest that U.S. engagement can wait. The pace and scope of the Internet’s growth and the infinite ways it is evolving (with economic, political, and social implications) necessitate a deliberate and decisive engagement. While the Internet has ushered in great societal benefits, it has also introduced new risks, such as crime, terrorism, and warfare, that threaten the critical infrastructure and services on which societies depend. The risk borne by individuals and societies continues to expand as complex and tightly coupled systems⁵ such as electrical power grids, services such as health care, and the emerging “Internet of things” are increasingly interconnected, moving us from the information age to a “network society.”⁶ As with any technology, there are intended and unintended uses and users. There are some who desire to leverage

the Internet to bring local, national, and global services and benefits.⁷ There are others with nefarious intentions, introducing crime, exploitation, and terrorism into cyberspace. We offer the following recommendations:

- Map infrastructural Internet components to identify gaps and redundancies in governance.
- Incorporate cyberspace policies and standards into future bilateral and multilateral trade agreements to establish and reinforce needed international cyber norms.
- Forge new ties with a variety of nonstate actors including industry, nongovernmental organizations, and international organizations (for example, the International Telecommunications Union, Internet Corporation for Assigned Names and Numbers, and so forth) to build a coalition of governing actors that share democratic values as they relate to information and cyberspace.
- Engage the public in this policy formation process, as its understanding of the benefits and risks associated with the Internet is key to its future security and resiliency. This can be accomplished through different forms of public forums.

Measuring Performance in Cyberspace

Performance management has been required of Federal agencies since passage of the Government Performance and Results Act of 1993. However, the integration of performance information into agency decision-making is not well advanced.⁸ Despite efforts by the George W. Bush and Obama administrations, the Government Accountability Office noted that reported use of performance information for high-level objectives did not improve between 2007 and 2013.⁹ Since cyber is a relatively new field, *cyber performance management* is still a fairly undefined term. During this developmental stage, the cyber world must embrace performance measures that link organizational strategic goals and objectives with strategic initiatives in order to assist government agency-level leaders or executives with organizational decisionmaking.

Traditional information technology (IT) services, those commonly found under the domain of Federal chief information officers (CIOs), do have performance metrics. These existing metrics (for example, network availability, number of trouble tickets resolved) do not address cyber per-

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Table. Differences Between Nuclear and Cyber Weapons					
	Target of Deterrence	Development Effort	Effects of Use	Proliferation	Deterrence
Nuclear Weapons	State	State-level resources	Immediate overt destruction	Low	Well understood
Cyber Weapons	State Nonstate Individuals	Individuals to state, but also self-creating	Widely variable breadth, depth, and time	High	Debatable

formance management. As a result, organizational cultures inappropriately place responsibility for gains from cyberspace on technicians alone. We offer the following recommendations:

- Include a performance management framework for cyber in the next National Security Strategy (NSS).
- Mandate agency strategies include performance measures that directly align with the performance management framework in the NSS.
- Develop performance measures that reflect cyberspace's impact on national strategy goals such as national security, civil liberties, and economic growth.

Deterrence and Offensive Cyber Operations

Cyber deterrence is a critical component of overall strategic deterrence, but it is far less developed conceptually. Some see a parallel between nuclear weapons and cyber weapons and posit that nuclear deterrence models could therefore be usefully applied to cyberspace. One critical difference is the scalability of cyber weapons, which allows for cyber deterrence at the operational and tactical levels. The table highlights some of the differences between nuclear and cyber weapons. These differences illuminate the need to develop a new model that incorporates the unique aspects of cyber deterrence.

The target of deterrence needs to believe the deterring state has the capability to impose an unacceptable cost for an attack, coupled with the will to use that capability, or the capability to defend against or immediately recover from an attack, rendering it ineffective. The highly secretive nature of our offensive cyber capabilities and the many restrictions placed on their use limit their deterrent effect. Additionally, cyber attacks are often difficult to trace. This lack of attribution means attackers need not fear retribution. Finally, leaders who feel vulnerable to retaliation or

find an attack to be pointless due to resilience may also hesitate to act or to escalate.

Cyber weapons are part of a larger arsenal of national power that the United States could bring to bear to deter or, should deterrence fail, to defeat our enemies. While cyber weapons may be the most appropriate means to achieve a specified effect, other sources of national power are also clearly relevant to both cyber deterrence and cyber operations in conflict scenarios. We offer the following recommendations:

- Support a sufficiently capable cyber force to ensure a deterrent effect and, should deterrence fail, to prevail in conflict scenarios.
- Emphasize the essential nature of cyber resilience as a matter of broad national policy to promote necessary investments in backup and restoration capabilities, and invest in technologies that make defensive cyber operations faster and less manpower-intensive, such as artificial intelligence and big data analytics.
- Direct research on the integration of cyber capabilities into deterrence theory frameworks.

Advancing Public-Private Partnerships

The loss of critical infrastructure “would have a debilitating impact on security, national economic security, national public health or safety.”¹⁰ The majority (about 85 percent) of critical infrastructure is privately owned and operated, requiring a public-private partnership to provide its security.¹¹ Operating alone, the private sector is incentivized by profit and is averse to liability. This puts the resiliency of national critical infrastructure at risk.

The current strategy of promoting and facilitating best practices and information-sharing with the government is necessary but insufficient to addressing sophisticated threats of organized crime, terrorists, and nation-states. National interests traditionally handled through law enforcement or national defense are not aligned with the financial and reputational interests of the private sector. As the United Kingdom Cyber Security Strategy states, “Just as in the 19th century we had to secure the seas for our national safety and prosperity, and in the 20th century we had to secure the air, in the 21st century we also have to secure our advantage in cyber space.”¹² We offer the following recommendations:

- Propose legislation to accelerate and expand the provisions of the U.S. Cybersecurity Act of 2015.
- Promote incentives, venues, and opportunities that encourage private-sector participation in solution development.

Privacy and Identity

The laws, regulations, and standards that govern the protection of personal information and the release, mandatory or otherwise, of data collected or maintained by the U.S. Government are undergoing a period of review. The triple challenges of IT advances, the globalized flow of data for trade and other purposes, and the value, both legal and illegal, of individually identifiable information have caused this relook. Advances in IT have included an exponential increase in collection, storage, and processing capabilities, including the development of machine learning algorithms that greatly surpass human ability in pattern matching and discovery. The globalized flow of data is fueled by electronic commerce, off-shoring, and transnational workforces enabling 24/7 operations that flow from time zone to time zone. Finally, the value of individually identifiable information enables both good and bad things: it can not only assist law enforcement and intelligence activities and enable better service, but it also fuels identity theft, fraud, and blackmail.

This situation is exacerbated by the reality that different cultures approach the definition and protection of privacy very differently. This difference has complicated global commerce and international legal structures, but solutions such as the European Union–U.S. Privacy Shield have been developed to bridge such divides. Challenges remain. Existing controls are structured for legacy structures and technologies. Emerging technologies present new challenges. This new and evolving state of affairs requires careful consideration to ensure that government activities are consistent with social values, international trade agreements, and reality.

Several important initiatives are emerging to create a foundation for a solid path forward. The creation of the Federal Privacy Council is critical to these efforts and signals the importance with which the problems associated with privacy and technology are considered. Similarly, the National Institute of Standards and Technology (NIST) has begun twin efforts in developing guidance and standards for privacy and de-identification processes. Emerging research from academia and industry in topics such as privacy labeling and management, database privacy, and differential privacy is critical to the development of tools and practices

for privacy problems. There is an emerging community of practice of privacy officers, mathematicians, computer scientists, and civil libertarians that provides fora for the discussion and presentation of research. Building on these initiatives provides a way forward to address privacy and data release concerns. We offer these recommendations:

- Leverage the Privacy Council and NIST efforts to provide intellectual support to the community of practice and create feedback mechanisms to U.S. Government efforts.
- Prioritize funding the National Science Foundation and other government research to support existing privacy enhancing functional research, such as differential privacy.
- Fund research into the future of privacy, such as the issues associated with big data analysis that derives private information from contextual data, a lack of published information, or from cross-referencing information from multiple sources. All these approaches have been used to expose private information and present significant challenges for both individuals who wish to keep aspects of their lives secret and for governments that need to keep aspects of operations (such as research and development and counterintelligence efforts) secret.
- Sponsor research into cascading effects from privacy violations that subvert national goals in order to reveal currently unimagined policy and scientific needs.

Foreseeing the Future of Identity

Concepts of identity are evolving in ways that are difficult to predict. In the past, identity elements were defined through elements of personhood (name, eye color), job (title, responsibilities), profession (lawyer, doctor), relationship (family or network member), interests (hobbies, habits), culture (values and belief systems, heritage, citizenship), and political structures. Layering on those established identity elements are new, cyber-enabled identities, which may or may not relate closely (or at all) to physical reality.

Cyber identities may be expressed through a variety of means, including avatars in artificial worlds, software bots that execute behaviors (such as troll armies), affiliation with ad hoc communities (such as Anonymous), or as social media characters. Besides being new ways to create or express identity, these cyber-enabled identity elements can be difficult

to relate to real people and thus cause challenges in realms as diverse as national security and mental health. As cyber-innovation continues at its breakneck pace, cyber-enabled identities and identity elements will continue to evolve and mutate in ways that are difficult to predict, including allowing people to “live” or express themselves through multiple different identities or even many cloned identities.

There are important implications for this emerging fluidity in identity. One is in governance: when one person can have multiple identities, that person can opt in to multiple governance structures, ranging from political to practice to commercial. Another is in security: identities can be used to disguise or hide subversive activities, but may also be used effectively to discover and understand alternative ways of thinking and acting. There is benefit and worry; the balance between the two requires significant understanding and structural philosophical approaches. We offer the following recommendations:

- Appoint an interagency working group, with representatives from the Justice, State, Defense, Transportation, and Homeland Security departments, to formulate, lead, and coordinate legal approaches, domestically and internationally, because cyber-enabled identities can easily engage in behavior that crosses jurisdictional boundaries.
- Create an office in the Department of Homeland Security to engage in dialogue with communities formed in the virtual world by cyber-enabled identities for communication and intelligence.
- Fund research into the implications (for example, psychological effects or national security considerations) of single individuals engaging in the virtual world through multiple cyber identities.

Technology for Governance

Explosive growth of unstructured data demands solutions to the challenge of information management. As the use of mobile devices and sensors grows and evolves, experts expect data volume to grow to over 4,300 percent of 2009 levels by the year 2020. The Federal Government faces a need to shift from collecting data to gaining new insights, identifying unexpected patterns and trends, and using data analytics to find new solutions to complex problems—an analysis best conducted using data visualization techniques. Unfortunately, correctly interpreting trends and patterns hidden in the data requires special skills in information and computing technologies that are lacking in the current cyber workforce. Additionally, ap-

proprate investment in the underlying technologies themselves lags well behind need. Ultimately, information processing and visualization must be improved for national leadership to make sense of the proliferation of data in order to inform policy and decisionmaking.

Visual analytics is an especially compelling technology because of its potential to facilitate leadership's ability to understand a situation quickly and clearly and to make better decisions. However, a major challenge, in addition to a very small talent pool, is the level of funding required for high-end visualization resources and machine learning capability. Google researchers note that machine learning can solve problems that no other methods can but that the cost of the technology and maintenance of the algorithms is significant and may be out of reach for individual organizations.¹³ A collective approach to develop capabilities that could then be further customized for individual organizational use is warranted to make these technologies affordable. We offer the following recommendations:

- Tap private sector and academic research to inform development of objectives and policy regarding data visualization capabilities.
- Direct NIST to move more aggressively to instantiate a collaborative model to catalyze development of data visualization capabilities for the purpose of government sense-making and decisionmaking.

Decoding Encryption: Aligning Technology, Law, and Policy

The Nation faces the risk that our adversaries' use of encryption technologies to "go dark" will cause the loss of the ability to surveil their actions in cyberspace.¹⁴ Terrorists are using the Dark Web and strong encryption technologies to plan and execute their operations protected from government surveillance.¹⁵ National security and law enforcement entities desire a backdoor or master key built into the encryption algorithms or legislation compelling companies to engineer their software allowing for searches to surveil terrorists and investigate criminals.

The cryptographic, scientific, and technologic communities are united in saying strong encryption is an all-or-nothing position and that weaker encryption jeopardizes the global infrastructure of trust. Encryption is founded in mathematical principles and is considered strong only when it is subjected to rigorous public scrutiny. A weakness—whether accidental or legislative—is a globally exploitable feature.

Strong encryption is important to national security. Critical infrastructure, banking, commerce, and communications all rely on strong encryption for security. Encryption protects and enables national defense,

commercial activities, and freedom of speech. Public and private entities use strong encryption to fulfill their obligations to protect personal information under legislation (for example, the Health Insurance Portability and Accountability Act and the Privacy Act of 1974).

Recent attacks in the United States, France, Belgium, and Turkey aided by secret communications using strong encryption provide a case to limit it. This, however, would not be effective. Encryption technologies used by criminals and terrorists are not controlled solely by U.S. companies or interests and cannot be effectively curtailed through U.S. legislation. Additionally, methods to surveil and apprehend criminal and terrorist actors who use encrypted technologies do exist. These methods exploit how the actors build and use encryption technologies and the infrastructures of the Dark Web. Additional research is needed, as many methods and techniques were exposed and rendered ineffective by the Edward Snowden leaks of 2013, but others can be developed. We offer the following recommendations:

- Support use of strong encryption, acknowledging its utility for protecting citizen data.
- Require use of strong encryption technologies in the Nation's critical infrastructure.
- Invest in advanced tools to identify and surveil criminal and terrorist actors.

Developing a Coherent Artificial Intelligence Agenda

Between May and July 2016, the U.S. Office of Science and Technology Policy (OSTP) completed four public workshops on artificial intelligence (AI) to “identify challenges and opportunities related to this emerging technology.”¹⁶ Focus areas included legal and governance, use for public good, safety and control, and social and economic implications. Additionally, OSTP created a new National Science and Technology Council (NSTC) Subcommittee on Machine Learning and Artificial Intelligence to coordinate Federal Government activities in these areas. These two initiatives demonstrate that AI is gaining attention, but they do not constitute a strategy for assessing the associated benefits and risks in a comprehensive manner.

With the imminent arrival of self-driving vehicles and precision autonomous weapons systems, it is imperative that the United States advance a coherent AI agenda addressing the technological, legal, and

policy implications of this technological revolution. Failure to do so threatens to leave the Nation incapable of benefiting from AI use for the government or influencing responsible AI use in the private sector. We offer the following recommendations:

- Charge the newly formed NSTC Subcommittee on Machine Learning and Artificial Intelligence to maintain currency on AI capabilities and trends, regularly convene diverse experts in the field, offer expanded participation in the subcommittee, and produce actionable, timely AI goals.
- Complete a formal review of White House expectations to influence private AI use and implementation of AI in government.
- Conduct outreach to address public fears that AI may cause loss of jobs or that autonomous machines may threaten public safety.

Modernizing Government Cyber Infrastructure

The White House and Congress must continue to reform IT acquisition practices in order to meet modernization goals and objectives. Numerous studies and congressional testimonies have highlighted the need for a synchronized and cohesive strategy to plan, program, budget, and execute modernization of IT. A May 2016 report by the Government Accountability Office (GAO) found that Federal agencies are spending almost 75 percent of the \$88 billion IT budget to maintain legacy systems.¹⁷ The report specifically identified that 5,233 of approximately 7,000 Federal IT systems are spending all of their funds on operations and maintenance costs. By comparison, development, modernization, and enhancement spending for the same programs represents less than 25 percent of spending and has declined \$7.3 billion since 2010. The study also highlighted that numerous systems were developed decades ago with parts and programming languages that are now obsolete and pose significant risk. Some of the programs, such as the DOD program that coordinates the operational functions of the Nation's nuclear forces, were developed over 50 years ago and use 8-inch floppy disks that have long ceased being produced. In other cases, agencies rely on outdated operating systems such as those from Microsoft in the 1980s and 1990s that ceased vendor support long ago. As a result, the GAO study found that agencies spend significantly more to hire and maintain programmers who hold specific skill sets as well as expose increased security risks. This comes at a time when more than \$3 billion worth of Federal IT investments will reach end-of-life in the next 3 years.

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In response to these issues, the Office of Management and Budget (OMB) developed the IT Modernization Fund (ITMF).¹⁸ The fund, as part of the White House's Cybersecurity National Action Plan, follows up on the gains made from the Federal IT Acquisition Reform Act in 2014.¹⁹ The ITMF is in line with the recommendations from the May 2016 GAO report and supports other modernization initiatives such as the General Services Administration (GSA) 18F program.²⁰ Success of the ITMF is at risk unless several major weaknesses are addressed. We offer the following recommendations:

- Establish a centralized board of experts to identify and prioritize the most pressing legacy IT systems to be targeted for replacement with a smaller number of common platforms.
- Provide an initial \$3.1 billion in seed funding. Based on calculations provided by OMB, the funding will address at least \$12 billion in modernization projects and generate the momentum needed to establish a repayment process to ensure the ITMF is self-sustaining.
- Establish, under the oversight of the GSA, a centralized fund supporting agency modernization plans, competitively distributed based on plan quality.
- Leverage GSA experts in IT acquisition and development to support agencies in implementing their modernization plans.

Improving the Cybersecurity Workforce

U.S. national security, the protection of critical infrastructure, and the effective functioning of the Federal Government require reliable and secure cyber-based government assets supported by a professional cybersecurity workforce that protects these assets from all types of threats, including cyber attacks. Recent breaches, including those resulting in significant data losses at the Office of Personnel Management (OPM) and Internal Revenue Service, revealed that the cybersecurity workforce is significantly challenged in protecting the government's cyber-based assets against attacks. Efforts to generate the numbers of personnel with the requisite competencies have been unsuccessful. The government lacks a coherent and comprehensive approach to improve the cybersecurity workforce.

OPM has a responsibility to develop a holistic and proactive approach to improve the cybersecurity workforce. This approach must include,

but not be limited to, recruiting, hiring, developing, and retaining. We offer the following recommendations:

- Establish a cybersecurity executive council composed of senior executives from each department and agency to establish the executive governance for cybersecurity workforce policies, initiatives, and strategies.
- Develop and publish an updated job specialty standard specific to cybersecurity positions to establish a single authoritative source for cybersecurity positions.
- Establish common higher-level cybersecurity educational criteria to create a baseline for cybersecurity educational requirements.
- Offer tuition assistance, reimbursement, and scholarships to enhance retention of government cybersecurity workforce members and attract new employees from the private sector.
- Index compensation for specific cybersecurity workforce positions to comparable private sector positions in order to retain top performers.
- Require quarterly progress reports until these actions are fully implemented.

Sensing and Responding for Agile Government

Information technologies now feed a swelling appetite for real-time information. Citizens demand and rely on data from their mobile devices to make decisions (such as travel routes or which consumer product to buy) that can immediately disrupt markets or drive new behaviors. Private industry recognizes this as part of doing business in the 21st century. Governments have not realized this and have failed to find ways to use it to drive innovations.

Failure to adopt a strategy to serve citizen needs for information that leverages the opportunities of technology while avoiding the inherent challenges (privacy concerns, information overload, and so forth) places the government at risk of losing relevance, confidence, and trust in the eyes of its citizenry. Citizens will find information elsewhere and construct their own stories about particular experiences with government entities based on their perceptions of the value realized from the

interaction. Worse yet, citizens may find governance of no value or fill any vacuum with information from untrustworthy or biased sources to construct their perception of events and motivations.

These alternate sources have demonstrated their ability to seize opportunities to sense public mood and provide the storylines that will advance their cause by taking advantage of gaps in public information and any signs of insecurity or fear. They feel no obligation to be truthful or unbiased. The same dynamic has reduced the time allowed, from the emergence of a public policy issue through the development and implementation of policy to address it, such that the failure to immediately address a problem is viewed as unresponsiveness. Civil movements rely on cost-effective, instantly deployed social media platforms to engage advocates and escalate favorable public opinion. These same platforms can be used to cultivate public friction and hateful or counterproductive civic positions that present obstacles to positive government initiatives.

In this context, government has also failed to seize the opportunity to employ the same information technologies to develop a better sense of how citizens perceive public good and how they find value in government service delivery models. There is a need for the administration to establish a sensing framework to develop insights regarding if it is serving or failing to serve those to whom it is accountable. This applies whether dealing with cyberspace or traditional governmental obligations in establishing trust and engagement by the technology-enabled citizen. A positive outcome of such an initiative would be the repackaging of government data and information to proactively explain internal decision factors, competing agendas, and crowdsourced data gaps to external consumers. This could illuminate the complexity of governance activities and decrease the need to seek substitute data sources. Effectively it offers content for civic education and distributes responsibility for governance to a community of interested people. This new vision embeds contemporary consumer sense-making in the practices of the good governance. We offer the following recommendations:

- Charge the Federal CIO with rapidly crafting a strategy to synchronize and elevate e-government initiatives into effective citizen engagement capabilities addressing needs for information dissemination, service provision, and gauging citizen valuation of government policy, services, and transparency.
- Link agency IT funding to successful implementation of the Federal CIO strategy (referenced above) to engage citizenry using required metrics on citizen-perceived utility of systems, trustworthiness of

governance messaging, transparency of governance processes and decisionmaking, and government responsiveness to citizen needs.

- Develop a Web-based performance dashboard to present customizable views of internal policy administration data metrics, provide a more accessible window into government institutional activity and value creation, and promote accurate perceptions of government activity.

Conclusion

In a short time, cyber has emerged as both a warfighting domain, fully as significant as the land, sea, air, and space domains, and an omnipresent public-private operating universe. The potential opportunities found within the domain of information and cyberspace are seemingly limitless. The risks of this reliance are clear, as demonstrated by recent highly publicized network breaches. It is important that these risks be deliberately accounted for and addressed in the process of making decisions about the use of cyberspace.

Cyber competence must be part of the skill set for all senior leaders in the national security enterprise. Most senior leaders received their professional educations at the beginning of the cyber age, and their understanding of, and sensitivity to, the opportunities and vulnerabilities described above may be limited. Nevertheless, mastery of the cyber domain has now assumed critical importance because of our dependence on cyberspace. Agency heads must be held accountable for their organization's employment of information technologies—abrogation of responsibility to CIOs and other “cyber experts” is unacceptable.

Addressing the critical challenges of cyberspace must be approached with an understanding of limitations and risks inherent in the use of the technologies that underpin the domain's potential. The authors here have highlighted promising opportunities and areas of concern. Specific recommendations are offered to contribute to a Presidency ready to embrace both the risks and the opportunities facing the Nation in cyberspace.



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Notes

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³ Executive Order 13691, “Promoting Private Sector Cybersecurity Information Sharing,” February 13, 2015, available at <www.federalregister.gov/articles/2015/02/20/2015-03714/promoting-private-sector-cybersecurity-information-sharing>.

⁴ Presidential Policy Directive (PPD) 20, “U.S. Cyber Operations Policy” (2012), is a classified document that provides a framework for the roles and responsibilities of the executive branch’s agencies in cyberspace as well as a framework for U.S. cybersecurity. PPD-21, “Critical Infrastructure Security and Resilience” (2013), provides a top-down risk management architecture and directed the creation of the national critical infrastructure centers for enhanced information-sharing and collaboration. Supporting PPD-21 is Executive Order 13636, “Improving Critical Infrastructure Cybersecurity,” which focuses on the cyberspace security aspect of PPD-21. PPD-41, “United States Cyber Incident Coordination” (2016), articulates how the Federal Government coordinates its incident response activities to significant cyber incidents.

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¹³ Zachary Chase Lipton, “The High Costs of Maintaining Machine Learning Systems,” *KDNuggets News*, 2015, available at <www.kdnuggets.com/2015/01/high-cost-machine-learning-technical-debt.html>.

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¹⁵ The *Dark Web* is commonly defined as a sub-portion of the Internet that consists of Web sites, portals, and social media similar to the open Internet, but that is accessible only through specially designed Web browsers and using technologies that easily anonymizes the user and encrypts all of his traffic, data, and activities.

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¹⁶ Ed Felton, “Preparing for the Future of Artificial Intelligence,” *WhiteHouse.gov*, May 3, 2016, available at <www.whitehouse.gov/blog/2016/05/03/preparing-future-artificial-intelligence>.

¹⁷ “Federal Agencies Need to Address Aging Legacy Systems,” *GAO.gov*, May 25, 2016, available at <www.gao.gov/products/GAO-16-696T>.

¹⁸ “Federal Agencies: Reliance on Outdated and Unsupported Information Technology: A Ticking Time Bomb,” hearings before the Committee on Oversight and Government Reform, House of Representatives, 114th Cong., testimony of the Honorable Tony Scott, available at <<https://oversight.house.gov/wp-content/uploads/2016/05/2016-05-25-Scott-Testimony-OMB.pdf>>.

¹⁹ White House Fact Sheet, “Cybersecurity National Action Plan.”

²⁰ GAO, *Building the 21st Century Digital Government*, available at <<https://18f.gsa.gov/>>.

Asia Pacific

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This chapter examines the strategic challenges the United States confronts in the Asia-Pacific region and argues that the United States should work with allies, partners, and multilateral organizations to build a rules-based regional order that includes China and advances U.S. national interests. This requires sustaining the U.S. rebalance to the Asia-Pacific and intensifying cooperation with other regional actors to shape China's choices. The chapter begins by reviewing the history of U.S. engagement with Asia and describing the range of important U.S. national interests located in the Asia-Pacific region or strongly influenced by developments there. It then reviews major trends shaping the region (including economic dynamism, China's rise, and the U.S. rebalance to Asia) and considers specific security challenges in Northeast Asia, the Korean Peninsula, the China-Taiwan relationship, and in the South China Sea. The authors argue that the United States needs to devote high-level attention to its alliances in Asia, to cooperation with new regional security partners, and to shaping the Asia-Pacific strategic and economic order in favorable directions. These actions will place the United States in a better position to shape China's strategic choices and integrate China within a rules-based regional and global order.

America's engagement with Asia began before the United States existed. In February 1784, the ship *Empress of China* departed New York harbor, arriving in Macau in August of that year. The ship returned the following year with a cargo of Chinese goods that netted a \$30,000 profit. In Federalist Paper No. 4, John Jay referred to American commerce with China and India.

In 1835, before the United States touched the shores of the Pacific Ocean, the U.S. Navy East India Squadron was established. In 1844, China, in the Treaty of Wanghia, granted trading rights to the United States. Two years later, the United States attempted to negotiate a commercial treaty with Japan. The talks ended in failure, but a decade later

Commodore Matthew C. Perry concluded the Treaty of Kanagawa, opening Japan to American goods and providing protection for shipwrecked American sailors engaged in the China trade.

In the last half of the 19th century, U.S. commercial interests expanded rapidly. At the end of the century, U.S. interests expanded beyond trade. In the Treaty of Paris ending the Spanish-American War, Spain ceded the Philippines and Guam to the United States.

Expansion across the Pacific brought the United States into contact with the geopolitics of Asia, focused then on China and the efforts of the imperial powers (France, Germany, Great Britain, Italy, Japan, and Russia) to carve out spheres of influence and commercial privileges in the weakening Qing empire.

Over the past century, the United States has adopted multiple policy frameworks to protect and advance its national interests in the Asia-Pacific region. The Open Door policy toward China represented a unilateral U.S. initiative aimed at rejecting imperial spheres of influence and special privilege and advancing the principle of equality of commercial opportunity. The Open Door evolved into a multilateral framework for managing commercial competition in China. A second Open Door note, issued at the time of the Boxer Rebellion, appealed to the imperial powers to preserve China's territorial and administrative integrity.

President Theodore Roosevelt, playing balance-of-power politics, aligned the United States with Japan to check Russia's efforts to develop an exclusive sphere of influence in Northern China and Korea. Roosevelt's diplomatic intervention in the Treaty of Portsmouth brought the Russo-Japanese war to a close.

In 1920, at the Washington Conference, the United States worked to fashion a multilateral, cooperative framework to preserve China's territorial integrity and the postwar status quo in the Asia-Pacific region. Lacking any enforcement mechanism, the Washington Conference system failed to meet the challenges of rising Chinese nationalism, the great depression, and Japanese unilateralism.

From 1945 through the end of the Cold War and the Barack Obama administration's rebalance to the Asia-Pacific, the United States has relied on bilateral security treaties with Japan, the Republic of Korea (ROK), Australia, the Philippines, and Thailand to protect and advance its security interests. This bilateral "hub and spokes" framework has served as the region's informal security structure, underpinning its remarkable postwar reconstruction and present-day prosperity. Today, the hub-and-spokes framework is evolving to encompass trilateral cooperation among alliance partners and multilateral cooperation involving U.S. allies and strategic partners.

Asia Pacific

The common principle underlying these various policy approaches is the concept of “access”: economic access to the markets of the region to pursue U.S. commercial interests; strategic and physical access to our allies to ensure confidence in U.S. security commitments; and political access to allow for the promotion of democracy and human rights.

At the same time, the United States has championed the evolution of a postwar liberal, open, rules-based international order allowing for the free flow of commerce and capital supported by the Bretton Woods institutions of the World Bank, International Monetary Fund, General Agreement on Tariffs and Trade, and its successor the World Trade Organization. At the same time, the United States has promoted efforts to support international stability and the peaceful resolution of disputes. This principled U.S. commitment has contributed significantly to the stability and prosperity of the Asia-Pacific region today.

U.S. National Interests in the Asia-Pacific Region

The United States has a range of important national interests either located in the Asia-Pacific region or strongly influenced by developments there. These interests include:

- defense of the homeland, U.S. territories, and U.S. citizens
- maintenance of an open, rules-based international order, including resolution of disputes through peaceful means rather than coercion or the use of force
- access to the region and freedom of navigation in the maritime and air domains
- maintenance of a stable balance of power that supports regional stability and promotes economic prosperity joined with opposition to any power or group of powers that would deny U.S. access to the region or threaten U.S. interests
- strengthening U.S. alliance relationships and reinforcing U.S. commitment to security of its allies
- prevention of the proliferation of weapons of mass destruction and missile delivery systems

- promotion of global norms and values, such as human rights, democracy, and good governance.

Defining Trends in the Asia-Pacific Region

The Asia-Pacific region is marked by important opportunities and challenges that require high-level attention. Economic dynamism is increasing the region's weight in world affairs and its importance to U.S. interests. China's rise is part of this positive story, but Beijing is also converting its astonishing economic growth into military power and diplomatic influence that are challenging the regional balance of power and threatening the stability of the existing order. The Obama administration has responded to regional opportunities and challenges via its rebalance to the Asia-Pacific, which sought to increase U.S. diplomatic, military, and economic engagement there. U.S. interests merit increased strategic attention and resources, but the next administration will need to decide how to sustain the rebalance and what adjustments are necessary given the changing global and regional strategic environment and the U.S. domestic political context.

Asia's Economic Dynamism

In 2013, the Asia-Pacific region generated close to \$21 trillion in economic activity, over a quarter of the global economy. China and Japan stand as the world's second and third largest economies, while the 10 countries in the Association of Southeast Asian Nations (ASEAN) have a combined economic output of over \$2.3 trillion.¹ East Asia remains one of the fastest growing regions in the world, with an annual growth rate of 6.8 percent in 2014, accounting for about 40 percent of global growth.² This economic dynamism is increasing the region's overall strategic weight and importance to the U.S. economy.

In 2015, U.S. trade with Asia totaled more than \$1.5 trillion, growing from \$397 billion at the end of the Cold War and \$503 billion at the turn of the century.³ In 2014, U.S. exports to the Asia-Pacific region represented 27.8 percent of total exports, while imports accounted for 37 percent of total imports. Capital goods, excluding automotive, led U.S. exports to the region, amounting to 26.3 percent, while consumer goods, excluding food and automotive, accounted for 32.2 percent of U.S. imports from the region. Meanwhile the U.S. direct investment position in the region amounted to \$738.8 billion, an increase of 6.1 percent over 2013.⁴ The United States remains the single largest investor in the Asia-Pacific region.

In 2012, 32 percent of export-related jobs in the United States were tied to the Asia-Pacific region, representing 1.2 million American jobs, an increase of more than 52 percent over 2002. In 2011, 68 percent of all congressional districts exported more than \$500 million to the region, with 39 states sending approximately 25 percent of their exports to the Asia-Pacific region.⁵ Governor-led trade missions target the region's booming economies. Top U.S. trading partners include China (the second largest), Japan (fourth), and South Korea (sixth); if taken as a whole, ASEAN would be the fourth largest U.S. trading partner.⁶

The Rise of China

China's rise is altering the strategic landscape of the region and challenging the existing regional order. In 1980, as Deng Xiaoping began to open China to the market, China had a \$200 billion economy; by 2014, its economy topped \$10 trillion. This remarkable transformation was achieved by adopting market-oriented economic reforms and opening China to foreign trade, investment, technology, and ideas. The result is a China that is firmly integrated into the regional and global economy. China is now more exposed to external economic developments; the 1998 Asian Financial Crisis and 2008 Great Recession both caused significant slowdowns in Chinese growth.⁷ Conversely, China's economy is now big enough and integrated enough that its economic problems can move global trade patterns and U.S. stock markets.

Like other Asian countries, China's economic rise was enabled by an open international trading order and stability in the Asia-Pacific region underpinned by U.S. military power and the U.S. alliance system. A reasonably good working relationship with the United States remains critical for Chinese goals such as sustaining economic growth and maintaining regional stability, but the relationship has become more competitive and many Chinese elites believe that the United States seeks to subvert the Chinese political system and contain China's economic and military potential. As China has become more powerful, and has converted some of its economic gains into military power, it has become less comfortable with the U.S. alliance system and begun to seek more influence within the region and in the international system as a whole.

China's economic growth has reshaped regional trade and investment patterns and greatly increased Beijing's influence. China is now the number one export market for almost all countries within the region and has dramatically expanded its foreign investment across Asia. China has a free-trade agreement (FTA) with ASEAN and is currently pursuing both a China–Japan–South Korea FTA and a broader Regional Comprehensive Economic Partnership agreement. Chinese foreign aid and infrastructure

projects within Asia, some of which are now under the umbrella of Xi Jinping's "One Belt, One Road" initiative, are another source of influence. Beijing has mostly used its economic power as assurance measures and inducements to cooperate with China, but in recent years has become more willing to use more coercive economic measures to punish countries that displease it.⁸

Rapid economic growth has also supported modernization and expansion of the Chinese military, which has enjoyed double-digit budget increases for most of the last 20 years and now has the largest defense budget in the Asia-Pacific region (\$154 billion for 2016).⁹ The People's Liberation Army has been modernizing its forces and developing the joint doctrine, training, and capabilities necessary to win "local wars under conditions of informationization."¹⁰ This modernization effort gives priority to naval, air, and missile forces capable of projecting power beyond China's borders and places increasing emphasis on the maritime, space, and cyber domains. As part of its efforts to deter potential U.S. intervention in a Taiwan contingency, the People's Liberation Army has emphasized the development of antiaccess/area-denial capabilities that would raise the costs and risks for U.S. forces operating near China.¹¹ These capabilities threaten to put at risk the U.S. ability to access its allies, extend deterrence, and meet its regional security commitments. Expanded naval and coast guard capabilities have also supported more assertive Chinese efforts with respect to maritime territorial disputes in the East and South China seas.

Countries in Asia have been carefully monitoring China's rise and the potential for a strong China to dominate the region. Aggressive Chinese behavior toward Taiwan and in the South China Sea from 1994 to 1996 created regional alarm about a "China threat," but more restrained Chinese behavior and assurance measures adopted over the period from 1997 to 2008 helped ease regional concerns. During this period, Asian views largely shifted from regarding China as a potential threat to regarding China as an opportunity; this shift was widely interpreted as an indicator of the success of China's Asia policy.¹² Beginning in 2009, however, more assertive Chinese behavior on maritime territorial disputes and other issues dissipated much of the goodwill built by China's charm offensive and revived regional concerns about how a strong China might behave in the future.¹³ These concerns are most acute for countries with maritime or land territorial disputes with China, such as India, Japan, Malaysia, the Philippines, and Vietnam. Chinese policymakers talk about the need to maintain the proper balance between the competing goals of defending Chinese sovereignty (*weiquan*) and maintaining regional stability (*weiwen*); under President Xi Jinping there has been more emphasis

on pursuing territorial claims and less concern about the negative impact on relations with China's neighbors.

In interviews conducted as part of the Institute for National Strategic Studies research project "The Rebalance Beyond 2016," analysts across the region described China's rise as "inexorable." Despite the significant economic and political challenges facing China, they were confident that China will, at worst, muddle through, if not succeed eventually. Looking ahead, interviewees defined a best-case China scenario as one in which the pace of change would slow, allowing countries of the region to adapt and, over time, engage and socialize China toward acceptance and support of the existing regional order. This will require sustained U.S. involvement and coordination with regional allies and partners. For the United States and the Asia-Pacific region, China's rise (and international reactions to that rise) will shape the contours of the international order in the century ahead.

While participating in the postwar Bretton Woods system and benefiting from a stable regional order underpinned by U.S. alliances, China has moved to advance a parallel set of institutions that mostly exclude the United States. These include the Shanghai Cooperation Organization; the initial proposal for an East Asian Summit that would have excluded the United States; and under President Xi, the Asian Infrastructure Investment Bank, the One Belt, One Road Eurasian trade initiative, the Regional Comprehensive Economic Partnership, and the "Asia for Asians" security concept, widely viewed as aimed at U.S. alliances and the U.S. security role in the region. Taken as a whole, China's growing power and willingness to use that power to try to alter regional security arrangements and support new institutions that advance Chinese interests and exclude the United States pose a significant challenge to U.S. interests in the Asia-Pacific.

The U.S. Rebalance to Asia

Upon taking office in January 2009, Obama administration officials proclaimed a U.S. "return to Asia." This pronouncement was backed with more frequent travel to the region by senior officials and increased U.S. participation in regional multilateral meetings, culminating in the decision to sign the ASEAN Treaty of Amity and Cooperation and to participate in the East Asia Summit at the head-of-state level.

The strategic rebalance to Asia built on these actions to deepen and institutionalize U.S. commitment to the Asia-Pacific region. In announcing the rebalance in a November 17, 2011, address to the Australian Parliament, President Obama argued that "Our new focus on this region reflects a fundamental truth—the United States has been, and always

will be a Pacific nation. . . . Here we see the future.” The President noted that Asia is “the world’s fastest growing region,” “home to more than half of the global economy,” and critical to “creating jobs and opportunity for the American people.” He described the rebalance as “a deliberate and strategic decision” to increase the priority placed on Asia in U.S. policy.¹⁴

Then—Secretary of State Hillary Clinton elaborated on the rationale for the rebalance, arguing that “harnessing Asia’s growth and dynamism is central to American economic and strategic interests” and that the United States had an opportunity to help build “a more mature security and economic architecture to promote stability and prosperity.” Given the importance of the Asia-Pacific region, she argued that “a strategic turn to the region fits logically into our overall global effort to secure and sustain America’s global leadership.”¹⁵

While the main objective of the rebalance was to bring U.S. foreign policy commitments in line with U.S. interests, it also responded to China’s increasingly assertive regional policies, especially on maritime territorial disputes. Countries across the Asia-Pacific region urged Washington to play a more active role in regional economic, diplomatic, and security affairs in order to demonstrate U.S. commitment and help maintain regional stability in the face of a more powerful and more active China.

Obama administration officials have stressed that the rebalance includes diplomatic, economic, and military elements, all of which must be applied in a coordinated manner for maximum effect.¹⁶ The diplomatic element has involved enhanced high-level diplomatic engagement, including frequent travel to the region by the President, Secretary of State, and Secretary of Defense. President Obama has participated regularly in Asia-Pacific Economic Cooperation (APEC) and East Asia Summit meetings; had periodic meetings with the leaders of U.S. allies Japan, South Korea, and Australia; and launched a new U.S.-ASEAN dialogue mechanism that included a summit with Southeast Asian leaders at Sunnyslands, California, in February 2016.

American allies and partners in the region have stressed U.S. economic engagement with Asia as a key means of demonstrating U.S. staying power. The Obama administration faced a number of practical and political obstacles in increasing U.S. trade and investment ties with the Asia-Pacific, especially in the context of the global financial crisis. The centerpiece of the administration’s efforts is the Trans-Pacific Partnership (TPP), as “an ambitious, next-generation Asia-Pacific trade agreement” including Australia, Brunei Darussalam, Canada, Chile, Japan, Malaysia, Mexico, New Zealand, Peru, Singapore, the United States, and Vietnam.¹⁷ The TPP agreement was signed on February 4, 2016, but will not

take effect until all member countries have ratified the agreement. The Obama administration has not submitted the agreement to Congress for approval; once submitted, Congress will have 90 legislative days to approve or disapprove it. TPP is an example of “open regionalism,” meaning that other Asia-Pacific countries willing to meet TPP standards will eventually be able to join the agreement.

The military element of the rebalance includes both increased commitments of U.S. military forces to the Asia-Pacific region and enhanced military and security cooperation with a range of allies and partners. The Navy and Air Force both announced plans to devote 60 percent of overseas-based forces to the Asia-Pacific region, including deployments of advanced systems such as the Littoral Combat Ship and F-35 Joint Strike Fighter. The Army announced plans to align 70,000 troops to Asia missions, while the Marines announced plans for rotational deployments of 2,500 Marines to Australia. Secretary of Defense Ashton Carter described a three-part Department of Defense approach to the “next phase” of the rebalance that includes investing in future capabilities relevant to the Asia-Pacific security environment, fielding key capabilities in quantity, and adapting the U.S. defense posture to be “geographically distributed, operationally resilient, and politically sustainable.”¹⁸ A significant part of the rebalance involves efforts to expand military cooperation with traditional allies such as Australia, Japan, and South Korea, while using exercises and dialogues to reach out to nontraditional partners such as India, Malaysia, and Vietnam.¹⁹

While the President’s remarks set out a comprehensive strategy toward the region, the initial public diplomacy rollout focused on the military aspects, unfortunately playing into the Chinese conceit that U.S. policy is aimed at containing China. Beijing has subsequently gone a step further, blaming the rebalance for increasing tensions in the region even though it was partly a response to regional concerns about increasing Chinese assertiveness.

Asia-Pacific Security Challenges

Asia’s economic dynamism, China’s rising power, and the U.S. rebalance are broad trends that are having a major impact on the Asia-Pacific region as a whole. These trends co-exist with a number of specific security challenges in Northeast Asia, the Korean Peninsula, the China-Taiwan relationship, and the South China Sea, including unresolved territorial disputes, competition to secure natural resources, and freedom of navigation issues that present complex challenges to regional stability and security.

Northeast Asia

Even 75 years after the end of World War II, tensions over the history of Japanese colonialism and aggression continue to complicate Tokyo's relations with Beijing and Seoul. The Japan-China relationship is also marked by conflicting territorial claims in the East China Sea, including disputes over possession of the Senkaku/Diaoyu Islands, an unresolved maritime boundary, and resource competition for fish, oil, and natural gas. Both China and Japan claim the islands (as does Taiwan) and tensions over them have flared periodically since the late 1970s.²⁰ The United States does not take a position on the sovereignty dispute but recognizes Japanese administrative control and has stated that the unpopulated islands are covered under the U.S.-Japan Security Treaty.

In September 2010, a Chinese fishing trawler operating within Japan's exclusive economic zone north of the Senkaku Islands collided with two Japanese coast guard ships. The ships pursued and boarded the trawler, taking into custody the captain and crew. Tokyo took the position that the coast guard's actions were correct, taking place in Japanese waters and based on Japanese law. Beijing's response was to call on Japan to refrain from taking "so-called law enforcement activities" in Chinese waters. To have accepted the legality of the coast guard's action would have been to compromise China's claim to sovereignty over the islands. The rapid deterioration of relations that followed, China's suspension of rare-earth metal exports to pressure the Japanese business community, widespread anti-Japanese demonstrations across China, and small-scale anti-Chinese protests in Japan all underscored the sensitive nature of the territorial issue.

Two years later, in September 2012, the Japanese government purchased ("nationalized") three of the five Senkaku islands from their private-sector owner. Widespread anti-Japanese demonstrations spread across China, and Beijing suspended all high-level political and diplomatic contacts. To assert its claims to the islands, China stepped up patrols of white-hulled paramilitary ships (now consolidated into the Chinese coast guard) into Japan's contiguous zone around the islands, establishing an almost daily presence in the area. Chinese ships also entered Japan's territorial waters in the Senkakus. By the end of 2013, Chinese coast guard ships had entered Japan's territorial waters in the Senkakus 256 times. Of the incursions, 68 took place in the period September–December 2012 and 188 in 2013.²¹ In November 2013, China declared an Air Defense Identification Zone that extended over the Senkaku Islands. The following month the government of Prime Minister Shinzo Abe, in its national security strategy, defined Japan's security environment as "ever more severe."²²

Japan and China also hold conflicting claims over the maritime boundary in the East China Sea. Japan claims a mid-line boundary in the East China Sea, while Beijing's claim is based on the continental shelf and extends beyond the mid-line to the Okinawa trough. In the context of this unresolved boundary, exploration for oil and natural gas has also served as a flashpoint. In June 2008, Japanese and Chinese diplomats reached agreement on the joint development of resources in the East China Sea; implementing details were left to follow-on talks, which have failed to resolve outstanding issues. In June 2013 China began the construction of large exploration platforms on the Chinese side of the mid-line boundary. Tokyo considered the Chinese action to be at odds with the 2008 agreement and an "attempt to change the status quo unilaterally." Beijing's response was to make clear that exploration was taking place within China's sovereign waters, that China and Japan have yet to reach agreement on the maritime boundary, and that China does not recognize Japan's unilateral boundary demarcation. The Japanese press reported that Prime Minister Abe has raised the issue twice with President Xi at the November 2014 and April 2015 meetings.

North Korea

North Korea, as it has for decades, remains the most destabilizing element in the Asia-Pacific security environment. Pyongyang's growing nuclear and missile arsenal poses a direct threat to U.S. national security interests. Senior U.S. defense officials have stated that North Korea, within a decade, will be able to deploy intercontinental ballistic missiles capable of reaching U.S. territory in the Pacific and the homeland itself.²³

North Korea's estimated 1.2 million-man conventional army also continues to pose a direct threat to the Republic of Korea, a treaty ally of the United States. North Korean provocations, such as the sinking of the ROK navy's warship *Cheonan*, in March 2010, the shelling of Yeonpyeong Island in November 2010, and the August 2015 incident at the demilitarized zone (DMZ), risk escalation into a wider conflict. Pyongyang remains committed to the unification of the Korean Peninsula on its terms.

Diplomatic efforts to address North Korea's nuclear program have a long history. Beginning in 1991, then–Undersecretary of State Arnold Kanter met with North Korean diplomats in New York and proposed the basic tradeoff that has marked diplomatic efforts since: abandonment of North Korea's plutonium-based nuclear program in exchange for an array of security guarantees and economic benefits. The initiative eventually played out into the 1994 Agreed Framework, which offered Pyongyang two light water reactors, a security guarantee, and moves toward normalized relations. Profound distrust on both sides gradually

unraveled the accord, which collapsed in 2002 when the George W. Bush administration discovered that Pyongyang was secretly pursuing uranium enrichment as an alternative path to the bomb.

In September 2003, China launched the Six Party Talks to reduce the risk of unilateral U.S. military action and to keep denuclearization of North Korea on the security agenda. The talks produced the September 19, 2005, agreement, yet another attempt at a grand bargain. The Six Party Talks collapsed in December 2008 when North Korea failed to produce details of its nuclear activities that would verify compliance with the agreement. Efforts to revive the Six Party Talks have proved unavailing.

In 2009 the Obama administration attempted to break the diplomatic deadlock, offering to extend an open hand to North Korea. North Korea answered with ballistic missile and nuclear weapon tests. Nevertheless, the administration continued to pursue a diplomatic opening to Pyongyang, which resulted in the February 29, 2012, Leap Day agreement, a mini-grand bargain in which the United States would provide food in return for North Korea's freezing of its missile and enrichment programs. Pyongyang responded with another ballistic missile test.

In 2012 the nuclear and missile programs were enshrined in North Korea's revised constitution. Today, under the leadership of thirty-something Kim Jong-un, North Korea is pursuing *byungjin*, a two-track policy aimed at sustaining its nuclear weapons and missile programs and simultaneously promoting economic growth—in short, guns *and* butter. Pyongyang has made very clear that it has no interest in surrendering its nuclear program, even for an economic windfall. Instead it seeks international recognition as a nuclear weapons state.

Uncertainties about the long-term life expectancy of the regime under Kim Jong-un, including the prospect of instability or regime collapse, raise daunting security challenges.²⁴ China might intervene to prop up a failing regime, prevent a refugee crisis from spilling over its borders, or secure North Korea's weapons of mass destruction. Similar conditions could prompt the ROK to cross the 38th parallel in an effort to unify the peninsula or the United States to intervene to secure North Korea's weapons of mass destruction. The prospects for strategic miscalculation in a fast-moving, dynamic environment are extremely high, especially given the absence of substantive dialogue between the United States and China about contingency responses.

China-Taiwan

The political dispute between Mainland China and Taiwan remains an unresolved legacy of the Chinese civil war. The People's Republic of China

(PRC) claims Taiwan as an inherent part of Chinese territory. While pursuing a policy of unification through peaceful development, Beijing has refused to renounce the use of force if Taiwan should pursue *de jure* independence. Even as economic integration has deepened to the point where Mainland China is now Taiwan's number one export market and the main destination for Taiwan investment, political trends have continued to diverge.

On the mainland, the narrative of a “century of humiliation” at the hands of foreign powers makes Taiwan reunification a benchmark goal for Chinese nationalism and a domestic political third rail where top leaders have little room to compromise. Conversely, democratization and social changes on Taiwan have reduced the political dominance of the mainlanders who fled the Communist takeover in 1949 and produced a population with less sense of a Chinese identity and little desire for closer political relations with Mainland China, much less unification with a country led by a Communist government. Despite an increasing sense of an identity separate from the Mainland, the pragmatic population on Taiwan prefers to maintain the political status quo and avoid pro-independence actions that might provoke hostile PRC responses.

U.S. policy is based on three communiques signed with the People's Republic of China and the 1979 Taiwan Relations Act. U.S. policy recognizes the PRC government as the sole legal government of China, acknowledges the Chinese position that there is but one China and that Taiwan is part of China, and maintains cultural, commercial, and other unofficial relations with the people on Taiwan. At the same time, U.S. policymakers have clearly and consistently stated that the United States does not support Taiwan independence. The Taiwan Relations Act provides the legal basis for U.S. unofficial relations with Taiwan and enshrines a U.S. commitment to assist Taiwan in maintaining its defensive capability. It also states that peace and stability in the Western Pacific area “are in the political, security, and economic interests of the United States, and are matters of international concern” and that U.S. policy is 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.”

U.S. policy is focused on maintaining a framework within which the two sides of the strait can work out their political differences rather than on achieving specific outcomes. Accordingly, the United States insists on peaceful resolution of cross-strait differences, opposes unilateral changes to the status quo by either side, and encourages cross-strait dialogue to help advance a peaceful resolution. This approach has helped the United States cooperate with the PRC on a range of global, regional, and bilat-

eral economic and security issues while maintaining robust unofficial ties with the people on Taiwan. However, the growing imbalance in economic and military power between China and Taiwan poses challenges for the viability of this policy framework, especially as Chinese military modernization expands the coercive tools available to PRC leaders.

Contentious cross-strait relations improved considerably from 2008 to 2016 under Taiwan President Ma Ying-jeou, whose willingness to endorse the so-called 1992 consensus (which he interpreted as “one China, separate interpretations”) reduced tensions and permitted a major expansion of cross-strait economic ties, establishment of direct air and sea links, and the signing of 23 cross-strait agreements. Ma resisted pressure from Mainland China to engage in talks on political issues or to define Taiwan’s status more precisely. Although this period saw stability and a significant expansion in cross-strait contacts, many on Taiwan claimed that the economic benefits went largely to politically connected big businesses and that the Ma administration did not stand up enough for Taiwan’s interests.

Opposition Democratic Progressive Party candidate Tsai Ing-wen won a decisive victory in January 2016 elections; her party won control of the legislature for the first time and she took office as president on May 20, 2016. Mainland China is suspicious of Tsai because of her party’s pro-Taiwan independence stance and her service in former president Chen Shui-bian’s government, although she has pledged not to challenge the status quo and has made subtle policy adjustments to reassure Beijing that she will not take pro-independence actions that might disrupt stability.²⁵

Nevertheless, Mainland China officials have insisted that Tsai explicitly acknowledge that Taiwan is part of China and endorse the 1992 consensus, a concession she is unwilling (and perhaps unable) to make. A March 2016 Center for Strategic and International Studies delegation to China and Taiwan concluded that China is deliberately setting the bar high because it wants Tsai’s term in office to be considered a failure. To that end Beijing has severed semi-official cross-strait dialogue mechanisms, reduced the flow of tourists to Taiwan, and may take additional actions to curtail Taiwan’s international space, including by inducing some of Taiwan’s 21 diplomatic allies to shift recognition to the PRC. Beijing’s strategy appears to be to blame Tsai for a downturn in cross-strait relations that damages Taiwan’s economy, and to hope that Taiwan voters choose a candidate committed to improving cross-strait relations in the 2020 election.

This all suggests that cross-strait relations will enter a period of greater turbulence with Beijing seeking to depict Tsai as challenging the status

quo by refusing to endorse the 1992 consensus and Tsai and her government looking to Washington for support in the face of increasing Chinese pressure. At the same time, Beijing knows that any attempt to resolve the Taiwan issue with force would have extremely high costs and risks (including the likelihood of U.S. military intervention) and would severely damage China's relations with the United States and other major countries in the region.

South China Sea

In contrast to the East China Sea, competing territorial claims and maritime boundaries in the South China Sea involve multiple parties. The disputes center on three sets of overlapping claims. China, Taiwan, and Vietnam all claim the Paracel Islands, which China occupied in 1974 during the last days of the Republic of Vietnam. China, the Philippines, and Taiwan claim Scarborough Shoal, site of a 2012 dispute between Beijing and Manila. China, Taiwan, and Vietnam claim all the land features in the Spratly Islands, while Brunei, Malaysia, and the Philippines each claim a number of specific features. China has not clarified the exact nature or legal basis of its claim to land features and adjacent waters inside the "nine-dash line" that it inherited from the Republic of China. The nine-dash line overlaps with part of Indonesia's exclusive economic zone claim, including part of the Natuna natural gas field.

In 2002, the member states of ASEAN and China adopted the "Declaration on the Conduct of Parties in the South China Sea" to address conflicting claims. In the document, the parties:

- reaffirmed "their respect for and commitment to the freedom of navigation in and overflight above the South China Sea as provided for by the universally recognized principles of international law, including the 1982 UN [United Nations] Convention on the Law of the Sea"
- undertook "to resolve their territorial and jurisdictional disputes by peaceful means, without resorting to the threat of or use of force"
- undertook "to exercise self-restraint in the conduct of activities that would complicate or escalate disputes and affect peace and stability including, among others, refraining from . . . inhabiting . . . the presently uninhabited islands, reefs, shoals, cays, and other features and to handle their differences in a constructive manner."²⁶

Finally, the parties reaffirmed that “the adoption of a code of conduct in the South China Sea would further promote peace and stability” and agreed “to work, on the basis of consensus, toward the eventual attainment of this objective.”

A binding code of conduct today stands as a distant vision, and much has transpired that is at odds with the spirit of the Declaration of Conduct. Claimants have used a variety of tactics to reinforce their claims, with a significant increase in activity since 2009.²⁷ Tactics to assert sovereignty include patrols by coast guard and naval forces, occupying land features, enforcing fishing regulations in disputed waters, oil and natural gas exploration, harassment of military ships and aircraft operating in disputed areas, and using legal means (such as the case the Philippines brought against China in the International Tribunal of the Law of the Sea). None of the claimants has clean hands, but China has been the most active in using military and paramilitary means to assert its claims, including by coercion of other claimants.²⁸ Since 2009 China has become more assertive in enforcing its claims, including harassment of U.S. military ships and aircraft operating legally in international waters or within China’s exclusive economic zone. In May 2014 China deployed an oil rig into waters in the Paracels claimed by Beijing and Hanoi, raising tensions and setting off collisions between Chinese and Vietnamese coast guard ships and virulent anti-Chinese demonstrations in Vietnam.

In 2013 China began land reclamation projects in the South China Sea on several low-tide elevations, geologic features that do not extend above water at high tide. China’s efforts at land reclamation were not unprecedented: Malaysia, the Philippines, Taiwan, and Vietnam have also engaged in such projects since the 1980s. The U.S. Department of Defense *Maritime Security Strategy* notes that, in the period from 2009 to 2014, Vietnam “was the most active claimant in terms of both outpost upgrades and land reclamation,” adding “approximately 60 acres of land at 7 of its outposts and [building] at least 4 new structures as part of its expansion efforts.”²⁹

However, China’s land reclamation activities dwarf those of other claimants. By June 2015 China’s land reclamation projects totaled “more than 2,900 acres, or 17 times more land in 20 months than the other claimants combined over the past 40 years, accounting for approximately 95 percent of all reclaimed land in the Spratly Islands.” In comparison Vietnam had reclaimed “a total of approximately 80 acres, Malaysia, 70 acres; the Philippines 14 acres; and Taiwan, 8 acres.”³⁰ Beijing’s position remains that “China has indisputable sovereignty over the Nansha islands and their adjacent waters,” with “sovereignty and relevant rights . . . formed over the long course of history and upheld by successive Chinese

governments.”³¹ In October 2015 President Xi pledged that China would not “militarize” the islands that it had constructed, but the exact nature of this commitment is vague and most observers expect China to use the airfields and port facilities that it is building for both military and civilian purposes.

U.S. policy has been to avoid taking sides in the sovereignty disputes, but to stress the importance of respect for international law and peaceful resolution of disputes without coercion. China’s successful use of incremental salami tactics to expand its effective control of disputed maritime territory in the South China Sea has brought this approach into question, as Beijing has been able to “work around” the United States to gradually expand its naval and coast guard presence and power projection capabilities while avoiding the use of lethal force. More recently, the United States has adjusted its policies to increase security assistance to help improve maritime domain awareness of U.S. allies and partners and has also reinvigorated its Freedom of Navigation program, which challenges excessive or illegitimate maritime claims.³²

U.S. Policy Responses: Sustaining the Rebalance

U.S. policies must take the broad trends of Asia’s economic dynamism, China’s rising power, and the U.S. rebalance into account even as they grapple with specific regional security challenges. We believe the correct strategy is to work with U.S. allies, partners, and multilateral organizations to build a rules-based regional order that includes China and advances U.S. national interests. This requires sustaining the U.S. rebalance to the Asia-Pacific and intensifying cooperation with other regional actors to shape China’s choices and make it pay a price for aggressive actions that violate international rules and norms.

For over a half century, the U.S. system of bilateral security alliances (with Australia, Japan, the Philippines, the Republic of Korea, and Thailand) has served as the informal security architecture of the Asia-Pacific region, underpinning stability and enhancing economic prosperity. Although most countries in the region share concerns about how China is using its power (and especially about its aggressive pursuit of its maritime territorial claims), they are reluctant to choose between China (a critical economic partner) and the United States or to participate in security cooperation aimed against China. Given the diversity of the region in terms of political culture and security interests, a formal alliance system such as the North Atlantic Treaty Organization has been widely recognized as impractical.

The best approach is to build on the existing bilateral alliance system by encouraging increased cooperation between U.S. allies, engaging other regional security partners, and shaping the evolution of regional organizations through active U.S. participation. U.S. policymakers must recognize China is a powerful country that is also attempting to reshape the regional order in directions favorable to its interests. An open, rules-based regional order that includes the United States will be more attractive to Asia-Pacific countries than Chinese-backed alternatives.

Strengthening Alliances

To address the security challenges in 2017–2021 and beyond, a critical first step for the next administration is to focus on strengthening the bilateral alliance structure. This starts with the U.S.-Japan Alliance.

Japan. For over half a century, the alliance with Japan has served as the foundation of U.S. strategy toward the Asia-Pacific region and an integral element of U.S. global strategy. Elements of the Seventh Fleet based in Yokosuka, Japan, were among the first U.S. units to support coalition efforts in the Persian Gulf War in 1991 and Operation *Enduring Freedom* in 2001.

Under the government of Prime Minister Abe, Japan has taken steps to enhance security cooperation with the United States. In December 2013, the Abe government released Japan's first-ever national security strategy, which defined Japan as a "Proactive Contributor to Peace" in support of international stability and security. The document set out three objectives for Japan's security policy: to strengthen deterrence, to strengthen the Japan-U.S. Alliance, and to strengthen the rules-based international order. In July 2014 a decision by the Japanese government cabinet reinterpreted Japan's constitution to allow for the exercise of the right of collective self-defense.

In April 2015 the Obama administration and the Abe government released the Revised Guidelines for Defense Cooperation. The new guidelines aim to enhance U.S.-Japan Alliance cooperation by providing for an Alliance Coordination Mechanism; closer operational coordination; a whole-of-government, upgraded bilateral planning mechanism; seamless coordination of efforts "to ensure Japan's peace and security in all phases, from peacetime to contingencies"; and defense equipment and technology cooperation as well as cooperation in space and cyberspace. The limiting geographic reference to "Situations in Areas Surrounding Japan" in the 1997 guidelines was omitted, theoretically expanding the scope of alliance-based security cooperation.

Of increasing concern to Japan is the potential for “gray zone” activities, attempts to change the status quo by force or coercion such as China’s frequent incursions into Japan’s sovereign waters and air space that could cause “unexpected situations” and challenge the alliance in response. In April 2014 President Obama made clear that Article 5 of the alliance extends to the Senkaku Islands given Japan’s administrative control. To strengthen deterrence, it is critical for the new administration to be seen actively planning and exercising with Japan’s Self-Defense Forces to deal “seamlessly” with gray zone situations that could arise in the Senkaku Islands.

With respect to North Korea’s growing missile threat, Japanese strategists are concerned with the potential for “decoupling,” the result of a North Korea inclined to engage in provocations, confident that its nuclear arsenal would preclude a U.S. response. Japanese strategists are also concerned with the deterrence challenge posed by China at both the regional and strategic levels.

Implementation of the new defense guidelines, in particular the U.S. commitment “to extend deterrence to Japan through the full range of capabilities, including U.S. nuclear forces” and to continue forward deployment in the Asia-Pacific region will be critical to sustaining Japanese confidence in the alliance. Implementation of the guidelines will be a critical test both of the new administration’s commitment to the alliance and to the rebalance.

Across the region, the strength of the U.S.-Japan Alliance as well as the U.S. commitment to the defense of the Republic of Korea are widely perceived as a barometer of the U.S. security commitment to the Asia-Pacific region.

The Republic of Korea. For over 60 years, the U.S. alliance with the Republic of Korea has succeeded in deterring North Korea from again attempting to unify the Korean Peninsula by force of arms. The resulting armed peace has allowed for a political evolution to take place in which the Korean people have transformed an authoritarian political system into a vibrant democracy, while allowing the native energies of the Korean people to flourish and develop a dynamic market economy with an international presence.

At the same time, the threat posed by North Korea to the security of the ROK and the broader international community remains. The sinking of the ROK navy corvette *Cheonan* in March 2010 and the shelling of Yeonpyeong Island in November 2010 and the August 2015 landmine incident at the DMZ underscore North Korea’s continuing hostility.

While North Korea's conventional capabilities have continued to degrade, the threat posed by its nuclear weapons and missiles is increasing at an accelerating pace. Since the September 19, 2005, Six Party Talks agreement on denuclearization, North Korea has conducted five nuclear tests (in October 2006, May 2009, February 2013, January 2016, and September 2016). The UN Security Council imposed sanctions after the first four tests and is currently considering additional sanctions. Meanwhile North Korea continues to develop and test a ballistic missile arsenal. In October 2014, U.S. Forces Korea (USFK) commander General Curtis Scaparrotti, USA, cautioned that North Korea may have developed a miniaturized nuclear warhead and mated the warhead to missiles capable of striking U.S. territory.

North Korea's evolving nuclear and missile capabilities raise issues related to deterrence and defense, affecting both the ROK and Japan.³³ Defense planners are concerned that "newly nuclear states often are more assertive at the conventional level because of their confidence in being able to deter a strong adversary response with their nuclear means."³⁴ To address this potential risk, the ROK and the United States reached agreement on a Counter-Provocation Plan in March 2013. The plan was employed during the August 2015 DMZ landmine incident. Updating the Counter-Provocation Plan to deal with the evolving threats posed by North Korea will be an important alliance management instrument for the new administration.

Enhancing missile defense will also be a critical alliance issue for the new administration. In July 2016 the United States and the ROK agreed to deploy the Terminal High Altitude Area Defense (THAAD) system to the ROK. The deployment will defend against North Korean missile attacks and open the door to the development of an interoperable U.S.-ROK-Japan multilayered missile defense system that would enhance defense and deterrence in Northeast Asia. China, however, has expressed concerns that the U.S. deployment of the THAAD system in South Korea could put China's nuclear deterrent at risk and aggravate tensions on the peninsula. In July 2014 President Xi Jinping reportedly told President Park Geun-hye that THAAD deployment on the peninsula "went against China's security interests."³⁵ After the deployment decision, China expressed "firm opposition" and has applied economic and diplomatic pressure on the ROK to reconsider. U.S. and ROK policymakers will need to stand firm in the face of Chinese pressure.

Meanwhile, efforts to implement the September 19, 2005, Six Party agreement on the denuclearization of North Korea remain on diplomatic life support. In April 2009 North Korea announced its withdrawal from

the Six Party Talks and subsequently made clear that its nuclear arsenal will not be used as a bargaining chip to secure economic benefits.

The next administration should take the long view with respect to North Korea—not all problems will be solvable within its term in office. An effective policy will aim to strengthen deterrence and defense of the ROK, maintain the external pressure of economic sanctions, and keep the door open to dialogue and diplomacy.

To deal with the possibility of instability or regime collapse, the next administration should work to closely coordinate U.S. and ROK objectives, endstates, and policy responses and, at the same time, make every effort to bring China into the conversation. To date China has considered such official-level discussion to be premature.

The Philippines. In 1992, after the Philippine senate rejected an extension of the basing agreement, the United States closed Clark Air Base and the Subic Bay Naval Base and withdrew its military forces from the Philippines. U.S. military assistance resumed after 9/11, directed to support Manila's counterterrorism efforts in Mindanao and the southernmost islands.

As Philippine concerns about China have increased, Manila has become more willing to expand security cooperation. In 2011, the United States agreed to support programs aimed at enhancing its maritime security capabilities. In 2012, the Balikatan joint exercise took place off Palawan Island, near the contested Spratly Islands in the South China Sea. The United States also transferred two former Coast Guard ships to the Philippines. In 2014, Washington and Manila signed the Enhanced Defense Cooperation Agreement, aimed at “addressing short-term capability gaps, promoting long-term modernization, and helping maintain and develop additional maritime security, maritime domain awareness, and humanitarian assistance and disaster relief capabilities.”³⁶ During his visit to the Philippines in 2014, President Obama made clear that the U.S. commitment “to defend the Philippines is ironclad and the United States will keep that commitment because allies never stand alone.” Obama reiterated the “ironclad commitment” formulation during his 2015 visit to the Philippines. Despite new Philippine President Rodrigo Duterte's recent remarks questioning the value of security cooperation with the United States, U.S. policymakers should exercise patience and remain focused on the long-term interests of both countries.

Moving Beyond the Hub-and-Spokes Alliance System

Since the turn of the century, the U.S. alliance structure has been evolving from the Cold War bilateral hub-and-spokes construct toward a

more open architecture that includes increased cooperation between U.S. allies and active efforts to engage other regional security partners. The United States has supported increased bilateral security cooperation between U.S. allies, most notably between Australia and Japan and Japan and the Philippines; trilateral cooperation among Australia, Japan, and the United States and among Japan, the ROK, and the United States; and quadrilateral engagement involving the Australia, India, Japan, and the United States. Exercises that began in the context of U.S. bilateral alliances have expanded to include a wide range of regional participants, including China (which participated in the 2014 and 2016 Rim of the Pacific exercises).

At the same time, the United States has developed Comprehensive Partnerships with Indonesia, Malaysia, and Vietnam and a Strategic Partnership with Singapore. Japan and Australia, both U.S. allies, have developed similar partnerships with Indonesia, Malaysia, Singapore, and Vietnam. These non-alliance partnerships help to enhance broad-based regional security cooperation and contribute to stability.

Australia, Japan, and the United States are focusing on maritime issues in Southeast Asia and the South China Sea, including maritime capacity-building, maritime domain awareness, joint training and exercising, and port calls. In 2013 the United States committed \$156 million (2014–2015) to support maritime capacity-building in Southeast Asia, including \$18 million to Vietnam.³⁷ In November 2015, the White House announced its intention to enhance capacity-building efforts by committing more than \$250 million over the 2015–2016 period, focused on Indonesia, Malaysia, the Philippines, and Vietnam.³⁸

In November 2015 Japanese and Vietnamese ministers of defense agreed to strengthen defense cooperation, including joint maritime exercise and a 2016 port call at Cam Ranh Bay by Japan's Maritime Self-Defense Force. Earlier, in 2006, Japan, making strategic use of its Official Development Assistance program, sent three patrol boats to Indonesia and in 2012 transferred 10 Japanese Coast Guard ships to the Philippines. Similarly, Australia has used the Pacific Patrol Boat Program to donate aging Australian ships to South Pacific and Southeast Asian neighbors.

One of the most difficult regional security issues is maritime territorial disputes, which are sensitive domestic political issues (but not existential interests) for all the claimants. China's efforts to use military and paramilitary means to expand its effective control of disputed territories and waters pose a challenge to key U.S. interests and principles such as peaceful resolution of disputes, respect for international law, and freedom of navigation. The United States should continue to resist pressure

to take sides in sovereignty disputes and maintain an even-handed approach. However, when countries, including China, take actions that we view as inconsistent with international law, the United States should impose costs, including via official statements, diplomatic efforts to organize opposition to illegal or destabilizing actions, and enhancing security cooperation with regional allies and partners. The United States must maintain its military capabilities and be willing to act to assert its own interest in freedom of navigation, including by military activities that challenge excessive maritime claims. If carried out on a routine basis, there will be less need to publicize each freedom of navigation operation.

Enhancing the rebalance's focus on maritime capacity-building in Southeast Asia will be an important benchmark of the next administration's commitment to regional stability and security. At the same time, given the diversity and complexity of the Asia-Pacific region, alliances and partnerships should not be viewed as being exclusively threat-centric. They can also play an important role in building regional order by strengthening cooperation in dealing with nontraditional security issues, thereby enhancing confidence among states. Efforts to work with allies and partners in enhancing regional security cooperation will strengthen U.S. political and diplomatic leadership in the region.

Shaping the Asia-Pacific Order

Scholars have long argued that the Asia-Pacific region lacks the web of multilateral organizations that have facilitated European integration. Explanations for Asia's under-institutionalization include the region's economic and cultural diversity, mutual suspicions between countries, and the impact of Cold War political divisions. In 1967, the governments of Indonesia, Malaysia, the Philippines, Singapore, and Thailand came together to create ASEAN. For over two decades, ASEAN stood as the lone multilateral institution in the region. However, recent decades have seen the creation of new regional organizations and meetings that may become building blocks for a new regional order.

As the Cold War was ending in 1988, Malaysia's Prime Minister Mohammed Mahathir advanced the concept of an East Asia Economic Caucus that would exclude the United States. U.S. opposition doomed the caucus, but in 1989 Australia, with strong U.S. support, established the Asia-Pacific Economic Cooperation to advance regional trade liberalization. With the establishment of APEC, Asian multilateralism gathered momentum. In 1993, ASEAN created the ASEAN + 3 (China, Japan, South Korea) format, followed by the ASEAN Regional Forum in 1994, the East Asian Summit in 2005, and the ASEAN Defense Ministers Meeting Plus in 2010—ASEAN + Australia, China, India, Japan, New Zea-

land, the ROK, Russia, and the United States. In addition, the annual Shangri-la Dialogue sponsored by the International Institute for Strategic Studies in Singapore has served as a high-level multilateral forum for the discussion of political and security issues.

In 2008, the Bush administration appointed the first U.S. Ambassador to ASEAN, a clear recognition of the growing importance of ASEAN and of the region's expanding multilateral, diplomatic, economic, and security forums. One explicit goal of the rebalance was to increase the U.S. ability to help shape the emerging multilateral architecture in the Asia-Pacific region. The Obama administration has paid particular attention to high-level participation in the region's multilateral institutions and dialogues, with the President, Secretary of State, and Secretary of Defense regularly attending meetings in Asia. Countries across the region have welcomed the Obama administration's sustained high-level attention, but are concerned whether the next administration will place an equally high priority there. U.S. interests would be best served by continued high-level U.S. participation and active U.S. engagement in efforts to shape the regional order.

The Trans-Pacific Partnership

The priority that almost all Asia-Pacific governments place on economic growth means that trade and investment agreements are a critical aspect of international relations in Asia and important building blocks for the emerging regional order. If the United States is not actively engaged, other countries will be allowed to shape regional economic rules, norms, and standards in ways that may work against U.S. interests. The centerpiece of the Obama regional economic agenda has been the Trans-Pacific Partnership, a "gold-standard" free trade agreement. Ten countries reached agreement on the deal in October 2015, but Congress will need to approve the agreement in an up-or-down vote.

Ambassador Michael Froman, the U.S. official in charge of negotiating the agreement, told a Center for Strategic and International Studies audience:

*TPP is a critical part of our overall Asian architecture. It is perhaps the most concrete manifestation of the President's rebalancing strategy toward Asia. It reflects the fact that we are a Pacific power and that our economic well-being is inextricably linked with the economic well-being of this region. . . . TPP's significance is just not economic, it's strategic—as a means of embedding the United States in the region.*³⁹

Similarly, Assistant Secretary of State for East Asian and Pacific Affairs Daniel Russel cast TPP as a “strategic agreement . . . the economic leg and ‘crown jewel’ of the Obama Rebalance Strategy . . . one that convincingly demonstrates that sustained engagement by the U.S., as a Pacific nation, is shaping an open, prosperous, rules-based region.” Russel went on to state, “That’s why TPP is worth as much to Defense Secretary Carter as a new aircraft carrier, as he recently said.”⁴⁰

In interviews across the region over the past 2 years, political leaders, diplomats, and military officials all underscored the strategic importance of TPP as a benchmark of long-term U.S. commitment to the region and the cornerstone to securing a rules-based, open international trading order in Asia. Failure to enact TPP would be viewed as a sign of U.S. strategic withdrawal from the region. Beyond TPP, negotiations with the European Union on the Trans-Atlantic Trade and Investment Partnership (TTIP) will provide the next administration an opportunity to structure a rules-based trade and investment order that includes more than one-third of global gross domestic product. Taken together, TTIP and TPP provide the United States an opportunity to shape a rules-based international economic order that advances its long-term economic and strategic interests.

China Policy: Managing a Mixed Relationship

One of the most difficult policy challenges will be dealing with China, which has the ability to affect a range of U.S. global, regional, and domestic interests. The U.S.-China relationship is marked by a mix of cooperation and competition; the policy challenge is to maximize cooperation in areas where common interests exist, while competing successfully in areas where U.S. and Chinese interests are opposed. Both countries have a strong interest in maintaining an effective bilateral working relationship in order to pursue important global, regional, and domestic goals. High-level leadership will be needed on both sides to keep the competitive and cooperative aspects of the relationship in balance.⁴¹

Cooperation is important for the United States because China has become an important global actor, with the ability to influence the effectiveness of global institutions such as the UN Security Council and World Trade Organization. On some issues, such as climate change and dealing with North Korea’s nuclear and missile ambitions, progress is impossible without cooperation with China. While Chinese leaders view some aspects of global institutions as unfair and are not interested in shoring up U.S. hegemony, they like a rules-based global economic system and view the United Nations as the most legitimate institution of global governance.⁴² China has been one of the biggest beneficiaries of

the open global trade system established by the United States after World War II, which facilitated its economic rise. Beijing seeks to wield greater influence within global institutions, and where possible to work with other countries to adjust international rules and norms to better reflect its own interests and perspectives. Nevertheless, China remains reluctant to take on the costs, risks, and commitments necessary to play a global leadership role; its actions are usually focused on defending narrow Chinese interests rather than aspiring for global leadership. Given that China's main interest in most parts of the world is to maintain stability and secure access to resources and markets, its interests will often be relatively compatible with those of the United States.⁴³

U.S. and Chinese interests are less aligned at the regional level, where there is increasing competition for influence. Over the last decade Beijing has become more critical of the U.S. alliance system, arguing that it reflects Cold War thinking and emboldens U.S. allies to challenge Chinese interests. The U.S. rebalance to the Asia-Pacific and increased U.S. regional security cooperation have stoked Chinese fears of U.S. encirclement or containment. Beijing's proposed alternatives emphasize nontraditional security cooperation and the importance of resolving disputes through peaceful dialogue. Beijing has resisted making any binding commitments that might restrict its military capabilities or ability to employ military power to defend its core interests. Its increasing military capabilities and more assertive approach to maritime territorial disputes have heightened regional concerns about how a strong China will behave, leading most countries to improve their security ties with the United States. If the United States emphasizes its alliances, expanding security cooperation with other partners, and active engagement with regional multilateral institutions, it will be able to deal with Chinese regional security initiatives and actions from a position of strength and successfully resist Chinese efforts to erode the U.S. alliance system.

Although cooperation with China is important, U.S. policymakers should be careful to resist Beijing's efforts to create a U.S.-China condominium or "G-2"-like arrangement. Such an arrangement would be unlikely to last and would probably require unacceptable compromises to accommodate China's so-called core interests (including accepting China's territorial claims to Taiwan and in the South China Sea and East China Sea). Accepting a Chinese sphere of influence or giving the appearance of siding with Beijing against U.S. allies would damage U.S. credibility and compromise the U.S. position in the Asia-Pacific region.

The next administration will have the opportunity to develop a new label for the U.S.-China relationship to replace Beijing's preferred formulation of a "new type of major country relationship." It will be important

to adopt a label that reflects the importance of the U.S.-China relationship but does not suggest that the United States values its relationship with China above its relationships with its treaty allies.

China's more assertive regional behavior is partly the product of misreading global power trends (including the mistaken assessment that the 2008 global financial crisis marked a fundamental shift in the relative balance of power between the United States and China). Current Chinese Communist Party efforts to tighten political control over the Chinese population and restrict the flow of information into China reflect increasing concerns about domestic stability in the face of slowing economic growth. China's successful economic model needs to be adapted to place more weight on markets and domestic demand, but there are widespread concerns that the political system may not be able to push through the necessary reforms. Moreover, past efforts to stimulate the economy in the wake of the financial crisis have created debt burdens at various levels of the Chinese financial system that increase the risk of a major financial crisis.

Although an economic collapse that brings down the Chinese regime is unlikely, the next U.S. President will likely face a Chinese leadership more focused on maintaining domestic stability and less inclined to engage in provocative international behavior. This will heighten the importance of a cooperative working relationship with the United States to give China the space to deal with its internal problems and should give U.S. policymakers more leverage. China will continue its military modernization and regional infrastructure investments through the Asian Infrastructure Investment Bank and One Belt, One Road initiative but may have fewer resources to devote to these efforts. Chinese leaders are unlikely to engage in provocative international behavior to divert attention from domestic problems but will be concerned that other countries may seek to exploit a distracted Chinese leadership.⁴⁴ The result may be an increased interest in stabilizing maritime territorial disputes and avoiding challenges to Chinese sovereignty claims. This approach might also spill over into more interest in engaging with the Democratic Progressive Party on Taiwan to work out an acceptable formulation for cross-strait relations.

Conclusion

Over the next 4 years, the United States will be challenged to maintain its leadership of a rules-based order in the Asia-Pacific region. U.S. diplomacy must play a leading role in strengthening our alliances, partnerships, and regional institutions that widely share the U.S. commitment

to a rules-based order as the foundation of regional peace and stability. The engagement of the highest levels of U.S. leadership with the region will be critical. Allies, partners, and potential challengers will all judge the regular presence of the President, Secretary of State, and Secretary of Defense in the region as a key indicator of U.S. commitment.

The U.S. bilateral alliances with Australia, Japan, the Philippines, the Republic of Korea, and Thailand remain the foundation of our strategic presence in the Asia-Pacific region and need appropriate high-level attention. At the same time, the alliance structure is evolving toward a more open system, with new security partnerships forming across the region. This has been most noticeable in Southeast Asia, where Australia, Japan, and the United States are all engaged in maritime capacity-building with states bordering on the South China Sea. The United States should expand bilateral and multilateral security cooperation with its allies and partners and support their efforts to promote regional security cooperation. Given U.S.-China regional competition, initiatives from other countries may sometimes be the best means of moving forward.

The United States is best positioned to deal with China if it has devoted sufficient attention to its regional alliances, partnerships, and participation in multilateral organizations. The U.S. President will need to engage directly with his Chinese counterpart in order to keep both governments focused on a cooperative agenda and to manage the more competitive aspects of the relationship. The relationship with Beijing will be challenging, but Chinese internal economic and political problems are likely to give U.S. policymakers more leverage. Chinese leaders will remain suspicious about U.S. intentions to contain China. U.S. policymakers should stress that the United States supports open, rules-based regional and global organizations, which will require China's active participation and support if they are to achieve their goals and, at the same time, can help generate international pressure on China to be a constructive participant.

As it has since the turn of the century, U.S. trade and investment in the region will continue to expand. The U.S. economic presence is the ultimate foundation of long-term U.S. presence and commitment. Providing a rules-based order for commerce and investment and, in turn, sustained economic growth is the focus of the Trans-Pacific Partnership. Legislation to provide for U.S. accession is now before Congress. There are many competing studies on the effect of TPP on U.S. growth and employment, and political leadership will be faced with a truly historic decision in terms of U.S. participation. U.S. accession to TPP will be viewed as a test of U.S. leadership and commitment to a trade and investment rules-setting agenda.

Notes

¹ The Association of Southeast Asian Nations (ASEAN) is made up of Brunei Darussalam, Cambodia, Indonesia, Laos, Malaysia, Myanmar (Burma), the Philippines, Singapore, Thailand, and Vietnam.

² The World Bank, “East Asia Pacific Economic Update, October 2015: Staying the Course,” available at <www.worldbank.org/en/region/eap/publication/east-asia-pacific-economic-update>.

³ U.S. Census Bureau, “Trade in Goods with Asia,” available at <www.census.gov/foreign-trade/balance/c0016.html>.

⁴ U.S. Census Bureau, “U.S. Direct Investment Abroad for 2012–2014,” September 2015, available at <http://bea.gov/scb/pdf/2015/09%20September/0915_outward_direct_investment_detailed_historical_cost_positions.pdf>.

⁵ East-West Center, “Asia Matters for America,” available at <<http://www.asiamatters-foramerica.org/overview>>. Note that the Asia Matters for America project includes 40 countries as comprising the Asia-Pacific region.

⁶ Walter Lohman, Olivia Enos, and John Fleming, *2014 Asia Update: What’s at Stake for America*, Special Report No. 158 (Washington, DC: The Heritage Foundation, October 8, 2014), available at <www.heritage.org/research/reports/2014/10/asia-update-whats-at-stake-for-america-2014>.

⁷ China’s official growth statistics for 1998 and 2008 do not fully reflect this slowdown, which was partly offset by large economic stimulus packages.

⁸ Bonnie S. Glaser, “China’s Coercive Economic Diplomacy—A New and Worrying Trend,” *PacNet* 46 (Honolulu, HI: Center for Strategic and International Studies, July 23, 2012).

⁹ Christopher Bodeen, “China’s Military Spending Increase to Be Smallest in 6 Years,” Associated Press, March 4, 2016.

¹⁰ State Council Information Office, “China’s Military Strategy,” May 2015, available at <<http://eng.mod.gov.cn/Database/WhitePapers/>>.

¹¹ See *Annual Report to Congress: Military and Security Developments Involving the People’s Republic of China 2015* (Washington, DC: Department of Defense, 2015).

¹² David Shambaugh, ed., *Power Shift: China and Asia’s New Dynamics* (Berkeley: University of California Press, 2006); Evelyn Goh and Sheldon W. Simon, eds., *China, the United States, and Southeast Asia: Contending Perspectives on Politics, Security, and Economics* (New York: Routledge, 2008).

¹³ See David Shambaugh, *China Goes Global: The Partial Power* (New York: Oxford University Press, 2013); Phillip C. Saunders, “China’s Role in Asia: Attractive or Assertive?” in *International Relations of Asia*, ed. David Shambaugh and Michael Yahuda, 2nd ed. (Lanham, MD: Rowman and Littlefield, 2014), 147–172.

¹⁴ “Remarks by President Obama to the Australian Parliament,” Canberra, Australia, November 17, 2011, available at <www.whitehouse.gov/the-press-office/2011/11/17/remarks-president-obama-australian-parliament>.

¹⁵ Hillary Clinton, “America’s Pacific Century,” *Foreign Policy* 189 (November–December 2011), 56–63.

¹⁶ For an analysis of the origins of the rebalance, see Phillip C. Saunders, “China’s Rising Power, the U.S. Rebalance to Asia, and Implications for U.S.-China Relations,” *Issues and Studies* 50, no. 3 (September 2014), 19–55.

¹⁷ See the fact sheets from the U.S. Trade Representative’s Office, available at <www.ustr.gov/tpp>; Jeffrey Schott, Barbara Kotschwar, and Julia Muir, *Understanding the*

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The North Atlantic Treaty Organization and Europe

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The cohesion of the North Atlantic Treaty Organization (NATO), the linchpin of the U.S. global security order for over 65 years, is threatened externally by Russian aggression and internally by centrifugal European forces spawned by persistent economic challenges and immigration. Yet NATO is as relevant to the future as it was in the past. Europe is by far the region with the most enduring ties to the United States. The world's largest and richest region, it is the strongest U.S. partner across all elements of power: diplomatic/political, informational, military/security, and economic/financial. The United States should protect this irreplaceable resource by moving with urgency to assert strong and sustained leadership and commitment to the future of NATO's dominant roles in regional peace and global security. The United States should likewise strengthen its ties to individual European nations and with the European Union to underscore its enduring support for an appropriately integrated and prosperous Europe at peace.

Every new administration in Washington must struggle to set the right priorities as it gets organized. The President's national security team—a team that now includes new economic and financial players—must find its own cohesiveness. Early decisions will set the tone for the 4 years to come. These first choices will signal where the North Atlantic Treaty Organization (NATO) and Europe fit among the new President's priorities. There is a compelling need for strong, active, and inclusive U.S. leadership of its most important global security alliance.

The United States and Europe have more in common than any other two regions of the world. Their economies are the largest by far: the \$18 trillion European Union (EU) economy and \$17 trillion U.S. economy represent more than one-third of global gross domestic product (GDP). The largest foreign investor in the EU is the United States, and the largest foreign investors in the United States are in Europe. Together

the United States and EU annually account for \$4 trillion in collective foreign direct investment (FDI), close to 50 percent of world's FDI, an average of 15 million jobs related to transatlantic trade per year, \$5 trillion in commercial transatlantic sales per year, and \$120 billion in U.S.-EU development assistance globally per year. In addition, 98 percent of U.S.-EU trade is dispute-free. Europe is the largest regional investor in the United States, representing approximately two-thirds (66 percent) of FDI through 2013. Asia is a distant second with 17 percent.

NATO is the cornerstone of U.S. allies and partners across the globe. Treaty partners represent 28 of 34 defense treaty allies around the world. Of the six Asian non-NATO allies, three are formal partners of the Alliance. In total NATO has 41 formal partner countries. When coupled with NATO's 28 members, these 69 countries account for one-third of the nations in the world willing to operate at times with NATO, following the Alliance's doctrine, standards, and operational procedures. NATO's military and political influence is unparalleled, with its membership including three of the five founding permanent members of the United Nations Security Council and three of the world's nuclear powers.

This close cooperation with like-minded nations is embedded in U.S. national security strategy, our defense strategic concepts, and our military strategy.¹ It is fundamental to our doctrines and planning for operations. Although the United States reserves the right to act unilaterally, seeking out allies for support and conducting international affairs with partners has long been a bedrock of U.S. foreign policy. Working with allies has become part of our national security DNA.

And there is no greater grouping of allies and partners than the North Atlantic Alliance, the strongest cohort of U.S. allies and partners anywhere in the world and at any point in history. NATO members and partners offer flexible military capabilities able to support the United States around the world.² By virtue of their membership or formal partnership in the Alliance, each nation testifies to its willingness to pursue common interests with the United States politically, economically, and, at times, militarily. Given the large number of nations linked to NATO, it can only be regarded as the linchpin of U.S. security strategy. Although a unique military alliance, NATO is also a successful, even essential, venue for political consultation, cooperation, and crisis response, both military and nonmilitary. It has also served as a forum for diplomatic actions and even economic cooperation.

NATO therefore is and will continue to be the enduring alliance for the United States in the 21st century.³ Our vital national security interests require that the United States engage in demonstrable leadership of it. Every U.S. administration comes to appreciate the value of the invest-

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ment in and commitment to NATO. Realizing the highest return on that investment demands early, steady, and substantive engagement at all levels, including by the President.

Unfortunately, this has not always been the case in recent years, and rebuilding is required. Preoccupation with turmoil throughout the Middle East, South Asia, and North Africa has sapped Washington's diplomatic as well as military time, resources, and energy. Since 2009 the U.S. rebalance to Asia has consumed unprecedented Presidential and Cabinet-level attention and travel. NATO/Europe has been (until recently) an area for culling resources and lowered focus for overtasked agencies.⁴

A different perspective is warranted. The United States needs its allies united behind a positive global agenda. Without the political, financial, and military support of NATO's many Allies and partners, the United States pays a far higher price for less peace in the world. NATO should be accorded standing recognition by U.S. policymakers as the most crucial diplomatic/military tool in America's international repertoire. NATO is a global, not a regional contributor, worthy of high engagement at all times, not only when Europe is in peril.⁵

The next U.S. President should prioritize staffing key positions well before June 2017 when the administration's first meeting with NATO leaders and ministers will be held. The President should have a substantive phone call with the NATO Secretary General (as well as the President of the European Council of the European Union) within the first 30 days. Allies should know what agenda the United States has in mind, and ideally consensus-building will have begun. How the United States prepares, and whether it presents a solid vision, will be leadership signals to Allies for the next 4 years. During that time there may be two summits and eight sets of ministerial meetings for the State and Defense departments, plus discussions triggered by crises. The United States must work to create expectations of close cooperation going both ways. In any global crisis, a key question will be, "What kind of support can our NATO Allies and partners provide?"

U.S. leadership in NATO has been challenged in recent years. A string of U.S. actions since September 11 has not ended well, cooling allied ardor. Allies want a tension-lowering, communicative but firm approach to Russia that takes into account the concerns of all Alliance members. They also look to a new U.S. President for wise choices regarding crises from NATO's south. Delivering on both will strengthen U.S. leadership and transatlantic ties. It will also send a strong message to Russia and other powers that there is solidarity across the Atlantic—that the United States and Europe cannot be divided on key issues.

The Warsaw Summit

The very successful Warsaw Summit in July 2016 exemplifies the modern NATO event: decisions by heads of state are made that address the most significant threats to Allies' security, plus agreed top-level positions are announced on a host of other important matters (at Warsaw, more than 100) that the Alliance intends to act on and resource. Summits sustain their impact by calling for follow-up actions and reports by staffs, commands, and the nations themselves. The 27th NATO summit in Warsaw also typified most summits by publishing a number of separate declarations by heads of state on topics of particular importance, such as Ukraine, transatlantic security, Afghanistan, commitment to resilience, cyber, Georgia, and NATO-EU relations. These declarations joined the primary declaration where heads of state gave the weight of their high offices to more than 30 pages of issues NATO is working to achieve.

NATO commitments showcased at Warsaw were particularly strong. They include:

- the continuous rotational deployment of NATO battalion battle groups beginning in 2017 in Estonia, Latvia, Lithuania, and Poland
- establishing the framework for a NATO multinational division headquarters in Poland
- the continuous rotation of a U.S.-armored brigade in Germany with prepositioned equipment
- substantially increased funding (\$3.4 billion) for the European Reassurance Initiative
- further construction of missile defense facilities ashore in Poland
- additional deployments of maritime and air forces in the NATO area, including the Black and Baltic Sea regions.

In recent years, every administration has experienced several Alliance summits. A Brussels Summit is possible in 2017 to introduce the new heads of state of the United Kingdom (UK) and the United States, and possibly France and Germany (both hold elections in 2017). Leaders might also call for a vision for the future and new Strategic Concept to be prepared for NATO's next decade. A summit will take place on NATO's 70th anniversary in April 2019 (which, notably, would be only months after Russia's presidential election). Summits include all NATO

members plus representatives of the EU and many partners, and they are watched around the world. NATO convenes a special meeting between NATO members and Russia after each summit, adding to their potential to improve international relations and reduce tensions. NATO and its members typically begin to prepare for summits a year before.

Strengthening and Sustaining Alliance Political Cohesion

NATO needs leadership that overcomes differences, works to find common ground, achieves consensus decisions, and marshals support for action. Alliance cohesion is stressed by many factors, including continuing economic distress, a more aggressive Russia, massive refugee overflows, terrorism, differences over the role of nuclear weapons or missile defenses, ethnic divisions, and intra-Alliance relations. These challenges are manageable with steady leadership and an agenda that addresses members' discrete security interests. NATO should not be only a rare tool for collective defense, but it should also function as connective tissue for both the United States and Europe, a transatlantic underpinning to international security.

Building and maintaining cohesion inside NATO is complex for different reasons. First, NATO has a much larger and more diverse membership than it did 25 years ago, complicated by an EU that at times seems more competitive than complementary. Second, the Cold War threat that kept lesser national and regional concerns in the background for the sake of security ended a generation ago. An additional and mounting concern is Turkey and its increasingly authoritarian leader, Recep Tayyip Erdogan, whose July 2016 post-coup consolidation of power has raised serious concerns about Turkey's democracy and even its future in NATO. Finally, Russian president Vladimir Putin's objective is likely to damage or destroy the very cohesion NATO is trying to preserve and strengthen.⁶

NATO expansion has done much to bring democracy to the newer member states, but in an alliance of 28 or more members, there will always be perennial competing interests to take into account and differing agendas to navigate and integrate. Well-known clusters of nations—the Arctic, Balkan, Baltic, Benelux, Nordic, Southern, or Visegrád countries—divide resources and localize priorities when it comes to external threats and military requirements. Bilateral voices add to this mix at times: the U.S.-UK “special relationship,” the Franco-German “axis,” and the U.S.-Canada “North American pillar” are examples. Also, decades of NATO membership have masked but never completely overcome lingering tensions between Turkey and Greece. These fissures or fault lines are offset by the clear need for collective action to contain Russian

expansion and the instability emanating from NATO's southern flank. There are powerful contributions to be harnessed within each of NATO's "subcommunities," and NATO's agenda must always take into account their separate concerns.

Better NATO Decisionmaking

Decisionmaking has become unwieldy in an alliance that has mushroomed from 12 to (soon) 29 members; growth has slowed NATO to a crawl. The decision process itself is straightforward; every agreement requires consensus, and each member's voice has equal weight. One member can block any decision. The consensus method applies at every level of debate. An objection in any forum thwarts progress until resolved. However, consensus is not unanimity. Total affirmation is not required. Members who disagree can either raise objections or simply remain silent to achieve "consensus."⁷ However, silent members may later offer no political or material/military support or may even criticize agreed actions in some way. Members may also interpret differently what was agreed. Thus, achieving consensus does not always signal an Alliance in harmony.

Are there ways to expedite agreements and strengthen consensus support? The Libya operation in 2012 illustrates that in crisis NATO's machinery can move very fast indeed. Several suggestions have been put forth. Could NATO agree to a formal steering committee to develop North Atlantic Council (NAC) proposals?⁸ Might the informal "quad" employed during the Cold War (France, Germany, United Kingdom, and the United States) be resurrected to work out issues in advance?⁹ Another suggestion has been to adopt less than full consensus criteria for minor decisions or at working levels of agreement.

U.S. sponsorship and support from at least key members in Europe would be needed for even minor changes to be put in place. Structural changes to the consensus custom are certain to be drawn out and fraught with the potential for discord.¹⁰ Working to make decisions less contentious within the current process will be more promising. Regular informal discussions among key leaders, including at the highest levels, appears to hold the most potential for improvement. The mechanism could be varied based on the issue, consulting other members on particular matters. Implementation should be transparent and only as a precursor to formal decision sessions.

Other changes could be employed to speed decisions. For example, written decision drafts could be circulated in advance of discussions except in emergencies.¹¹ Already there are instances where working pa-

pers are distributed after meetings with dissenting views included. These practices indicate there is flexibility at least in the formative stages. The Supreme Allied Commander Europe could be authorized to complete select contingency planning and steps toward military alerts to reduce the complexity of reaching decisions in a crisis.¹²

The new U.S. administration should decide on one or two techniques for improving consensus decisionmaking and refine them with key Allies. Transparency with other members should be part of the plan, and their views should be brought into the mix before a final proposal is on offer. The rewards will be reinforced cohesion and stronger support for reform. In the end there will also be greater participation in implementation.

Detering and Communicating with Russia

When it comes to Russia, U.S. and NATO policies are integrated: the Alliance generally follows the U.S. lead. Furthermore, NATO and Russia are both encumbered by the same history—an adversarial past that is often more in focus than any possible future. NATO wants Russia as a partner but not a co-decider in crafting the Alliance agenda. Russia seeks a new European order without NATO and EU “blocs.” Promising cooperation deteriorated with the first NATO enlargement and NATO’s bombing of Russian partner Serbia in 1999.¹³ Relations were mutually suspended after the 2008 Russo-Georgian War, and they all but ended over the 2014 crisis in Ukraine. By 2015 Russia listed NATO first among its military threats,¹⁴ and both U.S. and NATO military leaders have made a reciprocal assessment.¹⁵ At the end of a third consecutive 8-year U.S. Presidency, each begun with the goal of improving relations with Russia, the NATO-Russia relationship has regressed to near Cold War stasis.¹⁶

Rapprochement will be challenging. Putin’s worldview seems fixed. Above all he fears a “color revolution,” inspired by next-door representative democracy he cannot tolerate and standards of living he cannot hope to emulate. The West cannot easily acquiesce politically to Russian revanchism in Crimea and Ukraine, and it will not give way to Russia’s assertions of suzerainty on NATO’s eastern borders. The stage is set for a period of mutual confrontation for some time.

In this environment NATO must resolutely reassure the worried Baltic states and deter Russia. Stronger deterrence posturing is therefore under way and will likely continue. No current indicators suggest that Russia wants military confrontation with NATO, yet Russian military adventures since 2008 are grounds for caution and concern.¹⁷ NATO must strike a delicate balance: reassuring Allies and deterring Russian miscalculation

while also calming tensions. Russia should suspend provocative exercises near borders and, more importantly, its activities seeking political, economic, or social destabilization of NATO members through “ambiguous warfare” intended to exploit “the conflict potential of populations.”¹⁸ Nothing is more likely to deter such behavior than NATO firmness and resolve, demonstrated by strong forces on the ground in threatened areas.

The Southern Flank

The situation to NATO’s south has evolved from a distraction to a central concern. The present galvanizing threats from this region are terrorism infiltrating from failed states across the Middle East and North Africa and the collateral flow of refugees from the same conflict zones. Countering terrorism includes protecting national homelands from attack, but also intelligence-gathering and protecting the flow of energy and commerce. Stemming the flow of refugees calls for both humanitarian relief and removing the impetus to leave home for the unknown. Terrorists from the south have struck NATO members throughout Alliance territory. The growing flow of migration now challenges every Ally as well. Hence the risks from the south are demonstrably risks to all.

A “NATO southern strategy” has been called for to address the increasing risks from across the Mediterranean in North Africa, and from the Middle East.¹⁹ NATO is already implementing a host of important programs and operations in the region, from active partnerships to operations, and from joint exercises to force contingencies such as and enhanced NATO Response Force and Very High Readiness Joint Task Force (VJTF), both tailorable and responsive to the south as well as the east. NATO’s political focus is appropriately balanced toward the south, and one of two joint force headquarters, Joint Force Command Naples, has a southern region mandate and is also active in overseeing NATO representation at and support to the African Union.

Stronger steps may, however, be needed. Refugee displacements from the Middle East and North Africa have reached calamitous proportions, causing the greatest political crisis in Europe since the Cold War and fueling in part Britain’s exit from the EU. The campaign of terror in Europe shows no signs of abating and may well increase in intensity as the Islamic State of Iraq and the Levant loses territory and resorts to even greater violence abroad. As argued elsewhere in this volume, the United States will be hard put to shore up its traditional allies in a Middle East in near collapse. Should conjoined refugee and terrorist pressures in Europe continue to magnify, NATO may be forced to consider stronger military measures as it looks south.

Alliance Defense Spending²⁰

Every U.S. administration since 1952 has engaged in NATO burdensharing debates, the constant struggle over defense spending among “friendly rivals.”²¹ In terms of annual GDP, Europe is larger than the United States but spends far less on defense per nation and much less per capita than its American counterpart.²² In 2014, *declining* U.S. defense spending reached only 3.5 percent of GDP; however, Europe’s *rising* average was just 1.33 percent of GDP. That year, the United States spent the equivalent of \$2,051 per person on defense, while Europe averaged less than one-fifth that amount, just \$404 per capita. That is only about \$1.32 per citizen per day invested in self-defense.²³

The charge that Europe is “free riding,” however, is false.²⁴ Europe, with a larger GDP than the United States and with twice its population, spent almost \$300 billion on defense for 2014 (the United States spent \$654 billion, about 2.25 times higher). However, much of the U.S. defense budget supports American security interests worldwide and is not specifically focused on Europe. Europe should not spend like the United States on defense. It is not the dominant world power and, per capita at least, few Europeans enjoy the wealth of the United States, which on average is half again that of Europeans.²⁵ More than a 2 percent commitment that many Allies cannot meet, NATO needs military formations that are better trained, supported by modern equipment and enablers, and stocked to appropriate levels with repair parts, munitions, fuels, and other items. In short, they should be employable. In any great crisis, even modest contributions of quality units (such as a division from the larger powers and a brigade or battalion from the smaller ones with appropriate air and naval units) add up to a formidable military force no likely adversary can match.²⁶ This may be a more prudent and effective approach than insisting on higher defense spending per se.

Critical U.S. Leadership Priorities for NATO

Ten critical priorities will be on NATO’s agenda as a new administration is seated. Each will probably come to the fore in the first term, demanding U.S. attention and direction. They are sketched briefly as follows.

Sustaining Investment in NATO Partnerships

The substantial network of NATO partnerships built up since the mid-1990s is at risk of withering on the vine for lack of attention post-Afghanistan. U.S. leadership will be needed to reinvigorate political and military cooperation with 41 partner countries and several international organizations.²⁷ Together with NATO members, this is a reservoir of

more than one-third of the world's nations disposed to operating with NATO, a substantial addition to both U.S. and NATO security.²⁸

At their Wales Summit in September 2014, Allies agreed to a Defense and Related Security Capacity Building initiative to assist partners in strengthening capabilities they might contribute to NATO. The Warsaw Summit established a Partnership Interoperability Initiative for willing and capable partners to become better prepared for future crisis management missions. Another Warsaw program offers enhanced opportunities for partners making substantial operational contributions to draw even closer to the Alliance.²⁹ These programs should be pursued in full. Broader partner groups—the Partnership for Peace Program, Mediterranean Dialogue, Istanbul Cooperation Initiative—provide regional focus and should be kept vibrant.³⁰ NATO's eight “partners across the globe” engage in dialogue and cooperate on issues of mutual interest such as counterterrorism, cyber defense, and energy security.³¹ NATO military leaders strongly endorse the contributions of partners and the programs that build their capabilities.³² However, realizing the benefits of partnership programs will require sustained effort and resources over the long term from NATO staffs as well as nations.

Keeping NATO's Nuclear Arsenal Relevant

Alliance leaders regularly reaffirm NATO's pedigree as a nuclear alliance.³³ However, beneath that broad agreement, some Allies openly question the utility of theater nuclear forces (TNF) in Europe.³⁴ TNF is how Europeans share the responsibility for, as well as the risk of their own, nuclear defense. The indivisibility of nuclear defense is why TNF should be modernized and kept viable. In 2012 NATO completed a Deterrence and Defense Posture Review to harmonize these differences but did not succeed.³⁵ The relevant issue is the impending obsolescence of the specialized “dual (i.e., nuclear) capable aircraft” (DCA) operated by five participating Allies.³⁶ These are the delivery systems essential to TNF. Already, experts note, current DCA aircraft are too vulnerable in today's air defense environments.³⁷ The solution for three of the five participating Allies will be the planned acquisition of the U.S. F-35, currently the only future DCA.³⁸ Germany and perhaps Belgium will have to consider modifying the EF 2000 Eurofighter for a DCA role, in coordination with U.S. plans to modernize the TNF arsenal.³⁹ In addition to fleet modernization, weapons storage facilities must also be upgraded, especially in light of heightened terrorist activities across Europe. These costs should be a priority for NATO common funding.

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Readiness Action Plan: Reassuring Allies and Force Adaptation

The Wales Summit approved and Warsaw confirmed a Readiness Action Plan featuring two parts, Assurance and Adaptation. In 2015 alone NATO held more than 300 exercises, many conducted by rotational forces in Eastern Europe, highlighted by NATO's largest exercise in a decade (Trident Juncture) held in the south. Tailored assurance measures are being implemented in Turkey to address risks arising from the Syrian conflict. Assurance is now an Alliance-wide endeavor under regular review by NATO ministers.

Post-Warsaw measures will include a substantial increase in U.S. military force presence and prepositioned equipment in Europe. NATO's VJTF is a 5,000-strong force deploying over 2 to 7 days.⁴⁰ VJTF is backed by 35,000 troops in an enhanced NATO Response Force comprised of interoperable land, maritime, air, special operations, and enabling forces (including cyber defense). Behind these are remaining national forces of members and partners in graduated levels of readiness. Ensuring that all force commitments, including U.S. participation, are interoperable and fully resourced over time will be crucial to success.⁴¹ Response times are just as critical to deterrence, as adversaries must see that NATO forces will respond effectively before there is any opportunity for success.

Full-Spectrum Deterrence

The United States should lead NATO toward a 21st-century vision of strategic deterrence. Deterrence cannot plateau with the operational or tactical positioning of a few ready units. In order to be credible, deterrence must be strategic as well: geographically broad, resourced in depth and across the spectrum of forces from conventional to nuclear. Geographically, NATO capabilities must deter risks from the north as well as the east and south. Nuclear deterrence requires exercising in that realm too, something that has been absent for 25 years. A conceptual 360-degree deterrence posture must be full spectrum—effective against terrorism and hybrid threats as well as conventional and nuclear threats. Strategic deterrence also means up-to-date mobilization and exercise plans to bring the full weight of national forces, industry, and resources to bear against any serious challenge.⁴² Highlights of national plans should be reflected in the NATO Defense Planning Process, including mobilization of critical civil resources and relevant industrial capacity.

Cyber Defense

In conflict and peacetime, no domain is more contested than cyberspace. The Alliance should undertake to coordinate national command activities relevant to NATO by creating a Coordination Center for Operational

Cyber Forces.⁴³ NATO cyber defense requires steady investment via common funding. This reflects universal dependence on information systems for mission execution, the fast-paced nature of technology evolution, and the rapid evolution of cyber. A top priority is to ensure protection of Alliance data on national systems connected to NATO networks.

Ten years after first being defined, it is time for NATO cyber defense requirements to transition from incremental project-based funding to a planned level of common funding. The reality of universal dependence on information systems for mission execution makes steady NATO funding an imperative. Fast-paced technology evolution and the rapid morphing of the cyber threat environment ensure cyber defense has become a fundamental item in NATO resource planning.

Defense Against Hybrid Threats

Every NATO member and partner is affected, directly or indirectly, by hybrid threats from Russia. These threats take the form of cyber intrusions, public media manipulation and disinformation (*maskirovka*), encouragement of separatist movements, corruption of public officials, large-scale penetration of NATO member intelligence services and political parties, and energy resource intimidation, as well as others. The initial goals are economic and political instability. But the collapse of a bordering NATO state such as Estonia due to Russian subversion—clearly an Article 5 event—could be an existential threat to NATO's viability altogether. The failure to achieve unanimity in the North Atlantic Council in this event through the defection of even a few of NATO's smaller, poorer, newer members—those most susceptible to Russian intimidation—might spell the end of the Alliance as we have known it. NATO thus requires a viable concept for resilience and hybrid defense, a concept that builds on and assists in national defensive measures. Stronger and better integrated national forces, especially in eastern Europe, are badly needed, and here NATO can help. Energy dependence on Russian supplies also constitutes a serious vulnerability that must be addressed. The Alliance can help build member capacity with respect to governance for internal minorities, energy independence, strategic communications, and cyber defenses. NATO can also help coordinate national measures for intelligence, police, paramilitary, special operations, and conventional military forces.

Missile Defense

Missile defense is an essential Article 5 capability.⁴⁴ It has been a goal of NATO for 15 years given ever-growing missile threats, including potential weapons of mass destruction payloads. The Alliance is making progress toward missile defense for all allied territory and populations.

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Systems are also in place for protecting deployed troops. Aegis systems, both ship-borne (based in Spain) and land-based (in Romania), cover the southern regions of the Alliance. Another Aegis system is under development in Poland. This will be the final piece of the U.S. European Phased Adaptive Approach missile defense system. It requires funding through 2018. When completed NATO will have an Article 5 collective defense capability against missile attacks. Other Allies contribute to NATO missile defense with land- and sea-based systems, and these contributions should expand. The latest countries to join the program are Denmark, the Netherlands, and Spain.⁴⁵

Missile defense is also a major NATO-Russia issue. Russia fears NATO capabilities may neutralize the missile and rocket forces it relies on for national defense, both conventional and nuclear, creating a destabilizing situation of Russian vulnerability.⁴⁶ Russia wants NATO to terminate its missile defense program or allow Russia in as co-directors and decision-makers. NATO has stated neither option is acceptable. Thus there is an impasse at a time when risks have increased and communications are minimal. Given that some 30 countries have missile systems capable of reaching NATO territory, the need for effective missile defense is clear.⁴⁷ It will come, however, at the price of continued Russian intransigence.

The NATO Strategic Concept

The 2010 Strategic Concept (SC) no longer reflects the strategic environment and is in need of updating. The SC states that “the Euro-Atlantic area is at peace and the threat of a conventional attack against NATO territory is low.” Since peace was shattered in Ukraine, many Allies have raised concerns about the threat of conventional attack. Terrorist threats born in the conflicted territories to NATO’s south have spawned deadly attacks in France, Germany, and Belgium. Refugee flows across Europe have grown to alarming proportions and continue unabated. The world of 2010 seems far away indeed. A near-term option may be to provide interim political guidance to NATO military leaders for revision of MC 400/3, the classified instructions commanders use to implement the 2010 Strategic Concept, followed by a revised SC rolled out at the 70th anniversary summit. In crafting a revised concept, NATO leaders will likely consider guidance tailored to NATO’s eastern region and separately for NATO’s south and southeast. Branch plans for other areas (for example, the Arctic) should be included.

NATO’s Open Door Policy

NATO has invited Montenegro to join the Alliance and has a long-pending decision to accept Macedonia once its name dispute with Greece is

resolved.⁴⁸ Allies want to assert their resolve that Russia not have a de facto veto over new members. However, it is equally important to take in new members only where there is demonstrable mutual benefit to security. Expansion for expansion's sake is unwise. For some, a permanent partnership is all that is desired. Militarily neutral Serbia is an example of a NATO partner (since 2006) that does not aspire to membership.

Bosnia-Herzegovina's long, slow Membership Action Plan process is hampered by internal political disputes between its two entities, Republika Srpska and the Federation of Bosnia and Herzegovina. Near-term goals are further reconciliation and avoidance of retrenchment or open conflict.

Membership for Ukraine and Georgia will continue to be contentious with Russia. Russia commenced military operations in Georgia and Ukraine in part to send a clear signal that membership in NATO now is unacceptable. In spite of NATO's 2008 Bucharest Declaration (one repeated at Wales) that both countries will become members, NATO should be in no hurry. Both will take some time to complete Membership Action Plans, a process neither has begun. Their priority should be much-needed internal reforms. The goal should be to draw them closer to NATO as active partners, along the examples set by Finland and Sweden.

Reform

NATO should respond to recent terrorist attacks and other threats facing the Alliance by solving its longstanding failure to share information. Many attempts have failed at getting Allies to generate more than a minimalist and untimely intelligence picture. A major transformation is called for. A worthy solution is to invest in a standing committee of national intelligence directors, answerable to the NAC and parallel in both structure and process to the Military Committee. Such an institution is the only way to establish a culture of information-sharing not only for terrorism but also for threats in every domain.

Alliance-wide reforms were initiated at the 2010 Lisbon Summit and endorsed in 2012 at Chicago.⁴⁹ These included reforms to NATO headquarters staffs, military command structure, and agencies. Reforms were also enacted for Alliance resource management and common funding processes. At the start of 2017 the focus should be on developing team excellence, assessing performance, and making adjustments.

There is an urgent need to achieve far greater outcomes from Alliance programs and operations. The culprit here is the unavoidable political processes that are necessary for the Alliance to function at all. The solution is greater cooperation and more effective leadership, not just by the Secretary General and the United States but by all members. No member should merely "show up" and be minimally engaged. Representatives

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must know the processes and prepare well. Military commands should receive all the properly trained and skilled personnel nations promised. Leaders and staffs alike should lean in and be willing to support initiatives even as they protect essential prerogatives.

NATO, the European Union, and Brexit

Though U.S. relations with Europe are primarily through NATO, since the mid-1990s U.S.-EU relations have been part of the mix, broadening cooperation in the economic, financial, political, and even security arenas.⁵⁰ The growing power of the EU as a partner in nonmilitary global affairs has been at the heart of these developments. The EU is a full member of both the G-7 and the G-20 with global influence. It elaborates Europe's collective foreign and security policy interests. It maintains 139 delegations around the world, including in most nations and with the United Nations, African Union, Organization for Security and Cooperation in Europe, International Atomic Energy Agency, World Trade Organization, and others. The EU has steadfastly cooperated with NATO in postconflict stabilization in Bosnia-Herzegovina, Kosovo, Macedonia, Afghanistan, and, in the near future, perhaps Libya.

The United States gains substantial benefit from a healthy EU economy and stable EU financial picture because Europe and the United States are each other's most significant investment and job-creating partner. A stable, politically cohesive Europe free from conflict will be America's strongest partner in global affairs. For example, EU economic sanctions against both Iran and Russia have helped further U.S. security interests. Achieving the same result through myriad bilateral negotiations across Europe would be difficult if not impossible. A strong EU depends on good relations among members that are themselves politically and economically vibrant. When this is the case, the EU is a force for global stability and a reliable partner for the United States, including in the prevention and resolution of conflicts worldwide.

Today, the United States should be concerned. The EU has been buffeted by too many crises over the past several years: the 2008 economic recession and the subsequent euro financial crisis; a series of tragic and seemingly unending terrorist attacks in Madrid, London, Paris, Brussels, Nice, and beyond; a political crisis triggered by the unprecedented result of the Brexit referendum in June 2016; and a refugee invasion from the south spawning mass encampments, riots, renationalization of borders, and the rise of xenophobia across the Union. Were the EU to unravel, the impact would be global—economic and political uncertainty, but also in terms of peace and security. The United States should take three steps to help the EU find its way back to sound political and economic health.⁵¹

First, the United States and the EU should agree on a new 21st-century pact to replace the limited and ancient 1995 New Transatlantic Agenda that still defines their relationship. There is much to build on through transatlantic cooperation in diplomatic, political, and economic realms. Development aid is one area. Prevention of and recovery from crises and conflict are other portfolios. And there are myriad other issues from terrorism (a mainstay of the 1995 agreement that should endure) to environmental, social, and poverty issues among the disenfranchised.

Second, the United States should actively collaborate with the EU on strategies to alleviate its most acute problems. This might include working with the World Bank and International Monetary Fund to find new approaches to the euro crisis, within the context of a recovering global economy. This might also include collaboration on border security to address overwhelming refugee flows.

Third, the United States should work with the EU to preserve its cohesion in the face of persistent attempts by Russia to divide Union members on a host of issues from energy supplies to sanction support related to Russian aggression against Ukraine. Closer transatlantic ties will help ward off hybrid attacks against the EU by partnering on cyber security, energy security, strategic communications, and counterterrorism.

NATO-EU relations have unquestionably been affected by the June 2016 Brexit referendum vote to leave the EU, a historic event. Though future EU-UK relations are a matter for the parties to negotiate, the United States should make known to both sides its major interests in a strong EU as well as a healthy United Kingdom. We can neither take solace nor be a disinterested party in seeing the EU unravel politically, a potential that Brexit may portend as anti-EU sentiments strengthen into political movements within other members' polities. We cannot know whether Brexit will ultimately be a positive for the United Kingdom. However, it is already positive for a Russia intent on eroding EU solidarity on economic sanctions and its overall political resolve. Spillover into NATO decisionmaking and cohesion cannot be ruled out, and in fact should be anticipated.

No one anticipates the EU disintegrating, and the immediate risk of further "leave" votes appears low. However, Brexit has strengthened similar political movements across Europe, most notably in France, Germany, and Spain, and it would be unwise to ignore their genesis. For Brussels, the UK "leave" vote should kindle determination to build a more politically credible EU, one less focused on regulating and more intent on addressing the day-to-day concerns of its citizenry. The United States should urge the EU to move in that direction. No matter its faults, it is hard to see how disintegration could best the status quo ante, even for the United Kingdom.

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The United Kingdom has made clear its desire to maintain access to the EU's single market. The most probable path will be arduous negotiations between London and Brussels on bilateral agreements rather than, for example, rejoining the European Free Trade Association or otherwise coordinating trade relations as a member of a group. The United Kingdom must also negotiate new agreements around the globe, heretofore arranged for it by the EU. However, negotiating any new trade relations must await completion of the Brexit separation process that the United Kingdom will initiate by invoking Article 50 of the Treaty on European Union (also called the Lisbon Treaty). That step is expected to be taken in spring 2017. Negotiations are anticipated to take 2 years. During that time Brexit will be the dominant preoccupation in UK-EU relations, demanding much top-level attention by both sides. The United States should take account of the magnitude and duration of this distraction over the next several years.

The future foundation for transatlanticism should be a mutual U.S.-EU commitment to NATO as the primary security provider for Europe. This will allow mutual cooperation in a host of nonmilitary yet urgent priorities essential to regional and global prosperity. The United States should design programs that highlight the mutual value of a strong partnership with the EU to spread global prosperity. U.S.-EU cooperation should also help surmount the final obstacle (the Cyprus conflict) to building a collaborative and comprehensive NATO-EU transatlantic crisis response capacity.⁵² This is sorely needed. The EU has superb capacity for conflict prevention and postconflict recovery, and NATO has taken on the heavier lifting of the in-between mission of crisis response. As the two institutions learned in Kosovo, they will eventually find modalities of cooperation during a crisis, but they can do so much better if they can plan ahead.

Conclusion: Building Beyond Warsaw

The new administration will have to engage from the beginning in hands-on leadership of the NATO alliance. That necessarily includes tangible commitment to the North Atlantic Treaty's Article 5 and endorsement of agreements reached most recently at the Warsaw Summit. Executive-level personal relationships across the Atlantic should be sought out early in 2017. NATO and EU portfolios should be passed on, hand-to-hand, between outgoing and incoming U.S. administrations. The aim is to establish assured U.S. leadership of an Alliance from the beginning and to confirm that NATO remains the cornerstone of U.S. engagement abroad on security matters.

Solid transatlantic cohesion should be consciously woven into a positive and active agenda. The best start will be to follow through on commitments already under way. Allies will react positively to initial consistency, especially on top priorities such as Russia and crises to the south. Managing consensus should be eased by working informally and regularly with a select group of NATO members to propose and hone positions favorable to the Alliance as a whole. The discrete small group concept has proved acceptable in the past, and such a group need not be exclusive in every case. This is an effective way to expedite Alliance business. A corollary to the small group method is that it is incumbent on group members to be aware of the positions of nonmembers and keep them informed. This is particularly important for the United States because of its geographic distance from and unique role in the Alliance.

Beyond NATO's internal cohesion, the United States should encourage NATO to invest in deepening the quality of its vast and valued partnerships. That so many nations desire to work with NATO is a treasure to be preserved: members and partners who have indicated a willingness to operate together using NATO procedures. With solid leadership, a cohesive membership, and a strong participating partner cohort, NATO will always have the fundamentals in place to maintain interoperable capabilities, to respond to Russia, and to address crises to the south.

The end of the Cold War led many to believe that NATO's fundamental *raison d'être* no longer existed. Since then, NATO has proved resilient, enduring, and essential. For the United States, NATO represents by far the most important link in a chain of security alliances and partnerships that span the globe. The Alliance is a bedrock of U.S. national security and, with care and attention, will remain so for many years to come.

Notes

¹ This point is brought out in an excellent piece on developing strategy, advising that one strategic consideration is that "it is always better with allies." See R.D. Hooker, Jr., "'The Strange Voyage': A Short Précis on Strategy," *Parameters* 42, no. 4/43, no. 1 (Winter/Spring 2013), 67.

² For more elaboration on the many ways the North Atlantic Treaty Organization (NATO) continues to serve U.S. interests, see W. Bruce Weinrod, "We Still Need NATO," *The American Interest*, January 15, 2016, available at <www.the-american-interest.com/2016/01/15/we-still-need-nato/>.

³ Julian Lindley-French, *The North Atlantic Treaty Organization: The Enduring Alliance*, 2nd ed. (Milton Park, UK: Routledge, 2015), chapter 7.

⁴ As an example, President Barack Obama did not formally meet with new NATO Secretary General Jens Stoltenberg until May 2015, 8 months after Stoltenberg took office, in spite of the ongoing crisis with Russia, a request to do so from NATO, and a multiday Stoltenberg visit to Washington, DC, in the interim. See Josh Rogin, "Obama

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Snubs NATO Chief as Crisis Rages,” *Bloomberg.com*, March 24, 2015, available at <www.bloombergvew.com/articles/2015-03-24/obama-snubs-nato-chief-as-crisis-rages>.

⁵ Examples of NATO’s global engagement include its cooperation with China in anti-piracy operations in the Gulf of Aden, airlift and training with the African Union in Addis Ababa, earthquake relief operations in Pakistan in 2005, and humanitarian relief airlift operations for earthquake victims in the Philippines in 2013. See NATO Web site at <www.nato.int/>.

⁶ S.R. Covington, *Putin’s Choice for Russia* (Cambridge, MA: Belfer Center for Science and International Affairs, 2015), 12. See also February 2016 National Public Radio (NPR) interview with Lieutenant General Ben Hodges, USA, commander, U.S. Army Europe, who made the same point as firsthand experience; available at <www.npr.org/2016/02/05/465672051/u-s-presence-in-eastern-europe-is-vital-commanding-general-says>.

⁷ Paul Gallis, *NATO Decision-Making Procedure*, RS21510 (Washington, DC: Congressional Research Service, updated May 5, 2003).

⁸ Christof Bertram, “Toward 2015—Institutions Matter,” in *Visions of the Atlantic Alliance*, ed. Simon Serfaty (Washington, DC: Center for Strategic and International Studies, 2005), 82–83.

⁹ The informal “quad” was formed as the Berlin group, the three occupying powers and Germany, to deal with issues related to the security of Berlin during the Cold War. It continued as the quad after the Cold War but was abandoned during strong disagreement over requests from the United States for NATO support for the invasion of Iraq. It has not been functional since 2003.

¹⁰ The method of Alliance decisionmaking is not specified in the Washington Treaty except with regard to Article 10 dealing with the acceptance of new members. In that one case, the Alliance must be unanimous. Consensus was adopted early to reflect collective decisions of sovereign members. See “Consensus Decision-Making at NATO,” March 14, 2016, available at <www.nato.int/cps/en/natolive/topics_49178.htm>.

¹¹ Edgar Buckley and Kurt Volker, *NATO Reform and Decision Making*, Issue Brief (Washington, DC: Atlantic Council, February 2010), 2.

¹² Leo G. Michel, *NATO Decisionmaking: Au Revoir to the Consensus Rule?* INSS Strategic Forum 202 (Washington, DC: NDU Press, August 2003), 6–7.

¹³ Lindley-French, chapter 5. Operation *Allied Force* was a bombing campaign against Serbia, a Slavic partner of Russia, from March 24 to June 10, 1999. Its success forced withdrawal of Serbian forces from the province of Kosovo, allowing its protection from Belgrade by NATO forces to this day. The bombing had a significant adverse effect on Russian perceptions of NATO.

¹⁴ See *Military Doctrine of the Russian Federation*, December 26, 2014, para. 12 (“The Main External Military Dangers”), a. (NATO), available at <www.scribd.com/doc/251695098/Russia-s-2014-Military-Doctrine>.

¹⁵ See Weinrod for congressional testimony statement by Chairman of the Joint Chiefs of Staff General Joseph Dunford. For U.S. and NATO, see General Phillip M. Breedlove, USAF, *United States European Command Theater Strategy* (Stuttgart-Vaihingen, Germany: Headquarters U.S. European Command, October 2015), 4.

¹⁶ Bridget Kendall, “Rhetoric Hardens as Fears Mount of a New Cold War,” *BBC.com*, November 14, 2014, available at <www.bbc.com/news/uk-30010263>; Dmitri Trenin, “Welcome to Cold War II,” *Foreign Policy*, March 4, 2014, available at <<http://foreignpolicy.com/2014/03/04/welcome-to-cold-war-ii/>>.

¹⁷ Covington, 21; NPR, Hodges interview.

¹⁸ Charles Barry, interviews with national defense officials in Lithuania, Latvia, and Estonia, February 2015.

¹⁹ F. Stephen Larrabee and Peter A. Wilson, "NATO Needs a Southern Strategy," *National Interest*, January 27, 2014, available at <<http://nationalinterest.org/commentary/nato-needs-southern-strategy-9769>>.

²⁰ All data are for actual expenditures in 2014, unless otherwise noted.

²¹ Wallace J. Thies, *Friendly Rivals: Bargaining and Burdenshifting in NATO* (Armonk, NY: M.E. Sharpe, 2003).

²² *Europe* used here means the 28 European Union (EU) countries plus non-EU NATO members Albania, Norway, and Turkey (31 countries). See World Bank, "European Union," available at <<http://data.worldbank.org/region/EU>>; World Bank, "United States," available at <<http://data.worldbank.org/country/united-states>>.

²³ Calculations based on data from *Military Balance 2016* (London: Institute for International Strategic Studies [IISS], 2016), chapter 4.

²⁴ *Ibid.* All data in this section refer to 2014 actual defense spending, unless otherwise noted.

²⁵ An interesting fact is that, applying IISS data, Europeans would only need to spend €1.86/person/day to reach 2 percent. Today they only average €1.24/person/day. The difference: €0.6 euros. In contrast, the United States spends the equivalent of €6.30/person/day.

²⁶ For example, a force consisting of U.S., United Kingdom, French, Polish, and German divisions, with brigades from Italy, Spain, Turkey, and the Nordic members and battalions from the others, would constitute a full field army, larger than the Russian Federation could deploy in the east.

²⁷ This number includes Russia, whose partnership with NATO is suspended but has not been dissolved by either party in a formal sense.

²⁸ Breedlove, 6.

²⁹ The initial partners invited at Warsaw to become "enhanced opportunity partners" are Australia, Finland, Georgia, Jordan, and Sweden. See Warsaw Summit Communiqué, para. 101.

³⁰ At Warsaw, NATO also announced that its international staff will soon begin working-level ties with the international staff of the Gulf Cooperation Council (GCC). The four Istanbul Cooperation Initiative (ICI) partners—Bahrain, Qatar, Kuwait, and the United Arab Emirates—are all members of the six-nation GCC, and NATO has long held open invitations for the remaining GGC members, Oman and Saudi Arabia, to join the ICI.

³¹ NATO's eight partners across the globe reveal two distinct groups: Afghanistan, Iraq, and (to a lesser extent) Pakistan are partners seeking improvement of weak security capacity; Australia, Japan, the Republic of Korea, Mongolia, and New Zealand are stable partners contributing to NATO missions and pursuing interoperability.

³² Breedlove, 6.

³³ NATO Wales Summit Declaration, September 5, 2014, para. 49. This affirmation is also found in the 2012 Chicago Summit Declaration (para. 58) and the 2010 Alliance Strategic Concept (para. 17) approved at the Lisbon Summit of that year.

³⁴ John R. Galvin, *Fighting the Cold War: A Soldier's Memoir* (Lexington: University Press of Kentucky, 2015), 360. Writing about his thoughts as Supreme Allied Commander Europe after a discussion with Chairman of the Joint Chiefs of Staff Admiral William J. Crowe in early 1990, General Galvin stated, "For my part, I had become convinced that NATO could defend itself without the use of nuclear weapons at all." For much fuller treatment of military as well as political factors impacting theater nuclear weapons utility,

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refer to Laurence T. Martin, "Concluding Remarks: Reflections on the Forty Years' History of TNF [theater nuclear forces]," in *The History of NATO TNF Policy: The Role of Studies, Analysis and Exercise Conference Proceedings, Volume II, Papers and Presentations*, ed. R.L. Rinne (Livermore, CA: Sandia National Laboratories, February 1994), 311–321, available at <www.iaea.org/inis/collection/NCLCollectionStore/_Public/26/072/26072023.pdf>.

³⁵ Synthesis of March 5–6, 2012, roundtable featuring three European institutes—Institut de Relations Internationales et Stratégiques (IRIS, France), Institut für Friedensforschung und Sicherheitspolitik an der Universität Hamburg (Germany), British American Security Information Council (United Kingdom)—and the Washington, DC–based Arms Control Association. IRIS report, April 2012.

³⁶ This is a good point at which to emphasize that TNF is the *only* nuclear capability subject to NATO decisionmaking. The strategic nuclear forces of NATO's nuclear members—France, the United States, and the United Kingdom—are employed by national decisions of those powers alone. NATO is tied to the U.S. strategic nuclear umbrella by the North Atlantic Treaty. In an attack demanding a nuclear response, presumably NATO would first attempt to secure its territory by conventional means and then by TNF. An unlimited strategic nuclear war would call for the national decisions noted here.

³⁷ Germany and Italy use the Panavia Tornado IDS fighter as a dual-capable aircraft platform (DCA). Belgium and the Netherlands use the F-16A/B, and Turkey uses the upgraded F-16C/D (Block 50). Both basic models were introduced in 1974, though all are presumed updated to some degree. Italy, the Netherlands, and Turkey are to purchase the U.S. F-35A, a new DCA aircraft. Germany was to retire the Tornado in 2015 but will keep it until 2020 at least. See Justin Bronk, "The Forced Evolution of Europe's Tactical Nuclear Capability," RUSI Defense Systems, February 1, 2016, available at <<https://rusi.org/publication/rusi-defence-systems/forced-evolution-europe%E2%80%99s-tactical-nuclear-capability>>.

³⁸ The five European NATO members hosting an aggregate of fewer than 200 U.S.-controlled B61 gravity bombs are Belgium, Germany, Italy, the Netherlands, and Turkey. Italy, the Netherlands, and Turkey are already committed to purchase the dual-capable U.S. F-35 Lightning II. Belgium is undecided and Germany has no plans for the F-35.

³⁹ The United States will convert current B61 Mod 3 and 4 TNF weapons to digital Mod 12 weapons within 10 years, allowing the EF 2000 to be modified for the DCA role. See Bronk.

⁴⁰ The Very High Readiness Joint Task Force (VJTF) is similar to the Allied Command Europe Mobile Force—Land (AMF-L), NATO's initial response force from the early 1960s until 2002. Both forces are broad-participation (14–22 nations) multinational brigade-size units of 5,000, kept on high alert at home bases until called on. However, AMF-L was comprised of assigned forces under a permanent active headquarters. VJTF is comprised of units and a command that rotates each year, following an intense train-up and certification process. Views differ on the merits of the two designs.

⁴¹ Charles Barry, *Building Future Transatlantic Interoperability Around a Robust NATO Response Force*, Transatlantic Current Paper 7 (Washington, DC: NDU Press, October 2012).

⁴² Author discussion at NATO headquarters in July 2012 with a senior allied military officer. Response to author's question regarding force reconstitution and mobilization was simply that "we have no such plans."

⁴³ The model for such a center is the Special Operations Forces (SOF) Coordination Center that resulted from the 2006 Riga Summit initiative on SOF transformation. Today that center has evolved into the very successful NATO SOF headquarters under Allied Command Operations.

⁴⁴ Lindley-French, chapter 6.

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⁴⁵ Breedlove, 10–11.

⁴⁶ Julianne Smith, *The NATO-Russia Relationship*, Project Report (Washington, DC: Center for Strategic and International Studies, November 2008), 13.

⁴⁷ For more detailed information and a chronology of allied missile defense development, see NATO, “Ballistic Missile Defense,” available at <www.nato.int/cps/en/natolive/topics_49635.htm>.

⁴⁸ NATO’s Warsaw Summit Declaration, para. 1, July 9, 2016, available at <www.nato.int/cps/en/natohq/official_texts_133169.htm>.

⁴⁹ NATO Chicago Summit Declaration, paras. 69–73.

⁵⁰ In the security arena, the United States has developed common efforts on assistance to Africa through U.S. Africa Command and on common concerns in the areas of security-sector reform, terrorism, and cyber security.

⁵¹ James G. Stavridis, “Once Again Europe Needs America,” *Politico.com*, January 21, 2016, available at <www.politico.eu/article/europes-security-disorder-demands-american-help-pressure-refugees-social-strain-open-borders/>; also see Damon Wilson, “Rallying the Transatlantic Community to a Greater Purpose,” Atlantic Council, February 3, 2016, available at <www.atlanticcouncil.org/blogs/new-atlanticist/rallying-the-transatlantic-community-toward-a-greater-purpose>.

⁵² Lindley-French, chapter 7.

Russia

Peter B. Zwack

U.S. and Western relations with Russia continue to deteriorate as Russia increasingly reasserts itself on the global stage. Driven by a worldview based on existential threats—real, perceived, and contrived—Russia, as a vast 11-time zone Eurasian nation with major demographic and economic challenges, has multiple security dilemmas both internally and along its vulnerable periphery that include uncertain borders to its south and far east. Exhibiting a reactive xenophobia curried from a long history of destructive war and invasion along most of its borders, the Soviet Union's collapse in 1991, the North Atlantic Treaty Organization's peaceful enlargement, and perceived Western slights, Russia increasingly threatens or lashes outward with its much improved but still flawed military. Time is not on Russia's side, however, as it has entered into a debilitating status quo that includes unnecessary confrontation with the West, multiple unresolved military commitments, and a sanctions-strained economy. In a dual-track approach, the U.S. and its allies must deter Russian aggression while simultaneously rebuilding atrophied conduits between key U.S. and Russian political and operational military leaders to avert incidents or accidents that could lead to potential brinksmanship.

In recent years Russia has dramatically reasserted itself on the global stage, drawing attention to a complex and increasingly tense relationship with the United States that has never been fully resolved. Despite the complexities, U.S. national security interests in the region are clear. The United States must deter Russia from further aggression in Eastern Europe, bolster the security of North Atlantic Treaty Organization (NATO) Allies and partners, reconstitute direct conduits for frank dialogue and deconfliction while aggressively countering Russian disinformation campaigns, and reestablish and reinvigorate languishing arms control regimes. These interests are directly linked to the turbulent course Russia has charted as it struggles to break out of a status quo that

it views as debilitating and threatening. As this chapter explores, the resulting security dilemmas that have emerged are grounded in Russia's historic perception of what it considers to be an existential threat, and in the growing number of both real and perceived vulnerabilities facing the Russian state.

In 2014 Russia set into motion a turbulent course with its illegal annexation of Ukraine's Crimea that by year's end left it isolated, hemorrhaging resources, and under a heavy international sanctions regime. The euphoria from the Sochi Olympics and the invasion of Crimea rapidly dissipated as Russian proxy separatists became bogged down in an increasingly bloody conflict within eastern Ukraine, culminating with Air Malaysia MH-17 being shot down by a Russian-provided Buk missile.¹ In the interim Russia had been thrown out of the prestigious Group of Eight and was suffering from increased sanctions by the European Union (EU) and the United States. Additionally, NATO moved to reassert its Article 5 mission. The EU coalesced behind a strong sanctions regime, despite the threat of Russian disruption of energy supplies. Ukrainians found a sense of national purpose and patriotism. Oil prices, from which Russia derives the bulk of its revenue, collapsed while the ruble lost over 50 percent of its value.²

For these reasons, the Putin regime, a pseudo-democratic autocratic kleptocracy, was forced to confront the prospect that its domestic legitimacy was beginning to erode from 2014 to mid 2015. Despite a purported 85 percent approval rating for President Vladimir Putin, polls did not necessarily translate to full public approval of the Russian regime and its actions abroad, or even internally. The regime no doubt remembered the large and primarily middle-class "Bolotnaya" protests in Moscow and St. Petersburg during the winter of 2011–2012.³ Despite the strident disinformation that dominated Russian airwaves, Russia simmered internally with disparaging international news and difficult economic conditions that stressed its generally loyal population. Even this patriotic majority became troubled by stories of egregious corruption and by disconcerting information about Russian soldiers and intelligence operatives being captured or killed in eastern Ukraine.⁴

During much of 2015 Russia remained isolated internationally. The sanctions continued to bite and NATO continued to regain its confidence and strategic balance, taking measures to increase shared spending while reasserting its presence in and around those areas that felt threatened by an increasingly confrontational Russia. Paradoxically, Russia did manage to remain active within international organizations, notably the United Nations (UN), the Brazil, Russia, India, China, South Africa association of nations, the Shanghai Cooperation Organization (SCO), the Collec-

tive Security Treaty Organization (CSTO), and the Eurasian Economic Union. Russia also was instrumental as a member of the P5+1 consortium (China, France, Germany, Russia, the United Kingdom, and the United States) that negotiated the Iran nuclear deal.⁵ Perhaps most important was Russia's deepening but utterly transactional "strategic partnership" with China. Despite a flawed natural gas deal, this gave both nations the opportunity to focus their attention and efforts toward different fronts and not against each other.⁶

In late October 2015 Russia undertook a gamble to break out of its perceived containment by aggressively asserting itself in the Middle East as both a diplomatic and military actor. With its sharp-elbowed military intervention in Syria, Putin and his regime, for the first time since 1979 in Afghanistan, successfully reasserted Russia's military presence beyond the confines of the Former Soviet Union (FSU), establishing Russia as once again a key actor in the Middle East.⁷ By restoring the near-term viability of the Bashar al-Asad regime and securing bases at Tartus and Latakia, Russia is showing the region, the world, and its own citizens that it remains a powerful nation on the world stage.⁸ The widely reported "shock and awe" demonstration of military firepower using heavy bombers and long-range cruise missiles from the Caspian Flotilla accentuated this narrative.⁹ This phenomena may in part explain the sortie of Russia's sole aircraft carrier, the *Admiral Kuznetsov*, and flotilla from its Northern Fleet to the eastern Mediterranean.¹⁰

In so doing, Russia has partially broken out of the debilitating status quo of late 2014–2015. The Russian population, suffering the effects of sanctions and collapsing oil prices, responded positively to Putin's decisiveness and verve through the eastern Ukrainian and Syrian interventions. The destruction of Russia's civilian Metrojet by Islamic State of Iraq and the Levant (ISIL) entities and the Turkish downing of a Russian warplane sent tremors into Russia, however, ending the easy phase of intervention and signaling that Russia may face a long, hard slog. Despite the apparent success in Syria, this may be the new status quo for Putin's Russia. Russia is now deeply and violently enmeshed in an open-ended Syrian civil and sectarian war that has a long way to go before any cessation of hostilities. It is also internationally tarred by its indiscriminate bombing of Aleppo that brutally breached any mainstream adherence to international laws of war. Furthermore, Russia has the added burden of being stuck with a violent, expensive, and increasingly frozen conflict in eastern Ukraine. Meanwhile, Russian coffers dwindle, food imports are reduced, and despite slight increases oil prices remain low with the ruble inflated. These external and domestic factors will continue to put increasing pressure on Russia and Putin. What will Russia do next to break out

of the status quo? While it is difficult to predict Russian actions, it is clear Russia will be looking for every way to keep “the narrative”—both internationally and domestically—assertive, positive, and forward moving.

The single main event that undermined the 2009 political “reset” between the United States and Russia and set off Russia’s strategically defensive, tactically preemptive military actions of early 2014 was the February ouster of pro-Russian President Viktor Yanukovych of Ukraine.¹¹ For many observers, it is difficult to comprehend how inclusion into a peaceful economic union could set off a violent reaction and invasion by a dominant neighbor. Called a Western-backed coup by the Russian disinformation machine, this vociferous and dogged expression of majority Ukrainians hit at the core of the Putin regime’s existential fear of internal regime change.¹² In fact Russia exists in and in some ways is trapped by its historical worldview. It lives in a world full of existential threats, real and perceived—and contrived.

Russia and Its Perception of Existential Threats

Russia is Eurasia. It touches or influences about 70 percent of the world where the United States has serious economic and security interests. Any discussion about Russia must first begin by recognizing the role geography and history have played in determining the Russian perspective. How does one rule a barely cultivatable, permafrost-heavy nation of 144 million people spread out over 11 time zones, where all trains depart on centralized Moscow time through lands mostly cut out of the hide of former nations and civilizations?¹³

In prior generations, ideological struggle was represented by the great “isms,” namely capitalism, communism, socialism, and fascism. These drove great power dynamics and conflict. Tomorrow’s conflicts will be resource-driven. Russia is a warehouse of yet untapped natural resources and, as competition grows, will perceive its increasing vulnerability to energy and resource-dependent neighbors.¹⁴

Given these challenges, a Russian general staff planner conducting an objective strategic assessment out to 2050 would necessarily be highly concerned about the future of his nation. Foremost Russia has a looming demographic challenge. Whether the population increases, any growth will be marginal at best.¹⁵ A significant portion of Russia’s population, about 74 percent, lives in urban areas primarily west of the Ural Mountains where greater Asia becomes greater Europe.¹⁶ This gives the state a predominately Western feel even in Siberia and the Far East. The nature of the population is also changing, becoming increasingly ethnically Central Asian or from the Caucasus. Much of this population “supple-

ment” will be Muslim, which has to be concerning to the Russian Orthodox Church that is enjoying a “renaissance” of faith and worship with up to 73 percent of the “Great Russian” population.¹⁷ The conflicts along Russia’s periphery and within the Middle East involving Sunni Islam threaten to intensify anti-Russian sentiment both externally and among Russia’s approximately 15 million predominantly Sunni Muslims.¹⁸ The dynamics of Chechnya, and the incipient Sunni insurgency in Dagestan, can only become more complicated and dangerous for Russia as surviving jihadists fighting in Syria and Iraq eventually return home.

Russia’s petroleum-based economy must adapt as access to oil and natural gas becomes more challenging in the years ahead. With extraction increasingly difficult and costly in the high latitudes of the frozen but melting tundra, the economy will increasingly struggle with fewer barrels extracted at higher cost.¹⁹ This is a major catalyst driving Arctic development—an area of potential cooperation—and concomitant military basing to expand and secure its claims. These claims include the Lomonosov Ridge and access to natural resources along the widening Northern Sea Route.²⁰ Additionally, much of the Russian population is unhealthy. This is exacerbated by high alcohol and tobacco use, plus the ecological blight that came with Soviet-era rust belt industrial development and poorly regulated nuclear reactor development and storage.²¹

A Short Geostrategic Survey Around Russia’s Periphery

The Far East and Asia

The Russian Far East is currently calm though geostrategic fault lines persist. One should not forget that Russia is also an Asian power, albeit on a scale smaller than in the West. Though armed with plenty of deterrent capability, particularly within its Rocket Forces and Pacific Fleet, Russia is playing pure defense and has no territorial ambitions in the east. The heart of its defensive posture is built around a capable antiaccess/area-denial (A2/AD) posture that the Chinese are working to adopt.²² Russia’s principal active Asian territorial issue beyond the dormant Chinese border remains the Kurile Island dispute with Japan. Far from being resolved, the dispute has lingered for over 70 years after the southern four islands were occupied by the Soviet Union.²³ Despite resettlement efforts by the Russian regime, regional demographics are overwhelmingly in China’s favor. While a scant seven million Great Russians live between Siberian Irkutsk on Lake Baikal to Vladivostok on the Pacific Ocean, longitudinally there live several hundred million Chinese, including a large minority living and trading on Russia’s side

of the border.²⁴ The border dispute along the Ussuri River that culminated in bloody clashes between the Soviet Union and China in 1969 was pragmatically resolved in 2004.²⁵ Additionally, trade and military contact have increased, including the signing of a natural gas deal.²⁶ With Russia embroiled in eastern Ukraine and Syria and China increasingly committed to exerting influence and control within the Spratley and Senkaku islands, these arrangements relaxed tensions over their 2,700-mile land border.²⁷

Looking long term, however, one could see a natural tension reoccurring along this resource-rich zone, especially on the Russian side. Russia's Far East and Eastern Siberia are rich in natural resources beyond oil and gas that resource-starved China could covet. For years Russian locals along the border have complained about illegal Chinese logging activity along their remote border regions.²⁸ Notably a huge chunk of the Russian Far East, including those lands that encompass Vladivostok east of the Amur River, was annexed by Imperial Russia from the weak Qing Dynasty in the mid-1800s and formalized by the Treaties of Aigun (1858) and Peking (1860)—a fact that has not been forgotten by Chinese historians.²⁹ While the Russians and Chinese are both practicing prudent foreign policy regarding one another, they are not natural friends or allies, with a history, culture, religion, and ethnicity that are different from one another.

Central Asia

In Central Asia Russia sees the five independent FSU nations of Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, and Uzbekistan within its “privileged sphere of influence” and will take firm action to ensure that no excessive foreign military presence takes root in the region.³⁰ Whatever its post-Soviet imperial desires, Russia does not have the military means to retake and occupy these diverse states. Therefore, it has taken measures to maintain a strong and influential regional suzerainty among them. There is little doubt that Russia has military contingency plans to prop up Central Asia's existing regimes and is prepared to counter a wide range of scenarios, including extremist Islamists or so-called color revolutions, that might lead toward some form of local liberal democracy. This is a major reason that the Russian-controlled CSTO exists, whose members include Kazakhstan, Kyrgyzstan, and Tajikistan (Uzbekistan withdrew in 2012) as well as Belarus and Armenia.³¹ While likely impossible today due to an extreme trust deficit, it could be far-sighted to offer exchanging modest observer missions among Russia-controlled CSTO, Chinese-led SCO, and U.S.-NATO.

The dynamics of Central Asia have evolved since the Soviet Union's breakup in 1991. In the 1990s, with Russian power and influence di-

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minated, major Western initiatives were undertaken economically, most notably in 1994 through accession into NATO's Partnership for Peace. These relationships, with Russian acquiescence, were leveraged to support the swift U.S.-allied invasion of Taliban-controlled Afghanistan after 9/11.³² The Russians were generally uncomfortable with U.S. activity and airbases in Central Asia (Karshi-Khanabad in Uzbekistan and Manas in Kyrgyzstan); however, their initial support of the war on terror and concern about militant Sunni Islam triumphing in Afghanistan superseded those worries, allowing (at considerable financial benefit) the establishment of the Northern Distribution Network in 2008. The network brought substantial nonlethal materiel and personnel through Russia and Central Asia into Afghanistan.³³ This logistics arrangement, which included the brief establishment of a Russian-operated NATO logistics hub at Ulyanovsk in 2012, gradually eroded as relations degenerated between NATO and Russia.³⁴ For example, under major Russian pressure, Kyrgyzstan forced the United States to close its logistics base at Manas in 2013.³⁵ The paradox is that Russia does not want the United States and its allies to depart Afghanistan, fearing the possibility that the fragile Afghan government would ultimately implode and releasing a flood of radical Sunni Islam, drugs, crime, and illegal migration into its buffer zone of regional partners. Russia dreads the destabilizing effect this might have, potentially spreading into an already demographically and ethnically vulnerable southern Russia.³⁶

The Caucasus

This complex, fractious region of both Russia and the FSU looms as dynamic and contentious in the years ahead. An ethnic, religious, and migratory crossroads for centuries, the Caucasus bifurcates both the Black and Caspian seas and presents significant current and future security challenges for Russia. The issues are not only geostrategic and economic, but also ethnic, linguistic, and religious.

The clumsy Russian invasion of Georgia in 2008 served notice to the region and the world that Russia would remain engaged in the FSU and not tolerate what it perceived to be discrimination against ethnic Russians living outside Russia after the breakup of the Soviet Union. South Ossetia and Abkhazia, wrested into autonomous "statelets" by force of arms, remain a frozen conflict between Russia and Georgia.³⁷ The Russian 102nd Military Base garrison in Armenia, consisting of about 3,000 troops, remains the guarantor of Christian Armenia that borders hostile Azerbaijan.³⁸ Smarting and revanchist over their 1990's losses in still simmering Nagorno-Karabagh, Azerbaijan in April 2016 launched major incursions using late model Russian-provided weapons that shook

Armenian trust in Moscow. Meanwhile, neighboring Turkey still refuses to acknowledge the Armenian genocide.³⁹

The gravest danger to Russia is within the Russian Caucasus. Moun-tainous Chechnya, site of two horrific campaigns commencing in 1995 and 1999, remains under Russia's thumb under the guise of the Russian-enabled President Ramzan Kadyrov, who staunchly supports most of Putin's actions, including sending Chechen fighters into the Donbass in 2014.⁴⁰ This support could be severely challenged, however, when the several thousand Chechen jihadists in Syria return to fight Russia in Chechnya and elsewhere.⁴¹ In adjacent Dagestan, the Russian Ministry of Internal Affairs has been fighting a low-boil insurgency for years. It is likely this insurgency will increase in intensity as fighters return home and radical Wahhabist Islam spreads in the overall region.⁴² There is significant concern that this radical cancer could "metastasize" from the Caucasus and Central Asia into Southern Russia, where in contrast to Russia's overall demographic stagnation, the Muslim population is rapidly growing via high birthrates and illegal migration.⁴³ Additionally these concerns have been stoked by several pointed ISIL statements branding Russia as an enemy.⁴⁴ This is a dangerous long-term threat to Russia and another reason Russian forces have been ordered into Syria to fight Islamic extremists while supporting an old ally.⁴⁵

The Middle East

The Russian intervention in late September 2015 on behalf of Bashar al-Asad's Baathist regime in Syria signaled a major geostrategic shift in Russia's military activity since the end of the Cold War. This was a bold, high-risk endeavor that could leave Russia enmeshed in a hornet's nest of competing regional factions and interests that has taken on a Sunni-Shiite sectarian flavor involving Iran, Saudi Arabia, and Turkey.⁴⁶ Up until then, direct Russian military action had been confined to within territorial Russia, notably in Chechnya and Dagestan, and then within states of the FSU.

Not since the Soviet Union's invasion of Afghanistan during Christmas 1979 has Russia moved so aggressively "out of area."⁴⁷ For Russia watchers, this intervention should not have been a surprise. As one of his unstated "Red Lines," similar to Donetsk and Lugansk in eastern Ukraine from summer 2014, President Putin repeatedly signaled Russia's full support for the Syrian Baathist regime, an unbroken Soviet-Russian-Syrian relationship that dates back continuously since 1956.⁴⁸ Preservation of the Syrian regime was a major reason in 2013 that Russia acceded to assisting the removal of the bulk of Syria's chemical munitions that precluded a U.S.-led coalition bombing of Syrian regime installations and

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bases.⁴⁹ With Asad's forces significantly weakening in late summer 2015, the Russians went through a "go and no/go" intervention criteria and risk assessment before launching their operation in late September with the intent to save the Syrian regime and batter the Islamic rebels most threatening to its immediate viability.⁵⁰ It should be no surprise, therefore, that the Russians first went after anti-regime rebels, the so-called moderates, most lethal to the Asad regime. While the Russians loathed ISIL, their first priority in Syria was to stabilize the Asad regime and consolidate longstanding interests in Syria such as the Tartus Naval Base, their only functioning port facility outside of the FSU.⁵¹ Their key equity is the perpetuation of a stable and allied Syrian regime and regional platform, and not necessarily over time the persona of Asad.

Putin also wanted to take the fight against militant Sunni Islam beyond Russian borders. Only time will tell if this preemptive strategy will prevent attacks both against and within the Russian homeland by its large Sunni minority.⁵² Woven into this entire situation is a supporting narrative that asserts Russia's role as a serious global player beyond the confines of the FSU, while simultaneously promoting a narrative of U.S. and Western weakness.⁵³

The Russian intervention in Syria also created the conditions to test and showcase the resurgence of Russian military prowess, capability, and systems. These include the swift, opportunistic deployment into Syria of the lethal long-range S-400 air defense system with its formidable A2/AD capability in the stunned aftermath of the Turkish downing of a SU-24 bomber in November 2014. This deployment, along with recently inserted S-300s, has changed the regional airpower equation.⁵⁴ On top of the rapid deployment of air and ground assets into Syria in late September 2015, coupled with air- and naval-launched Kalibr precision missile strikes and bombing by strategic bomber assets, this was definitely a regional, domestic, and international demonstration and testing of firepower reminiscent of the 1936 Spanish Civil War. It signaled to the world that the Russian military was back.⁵⁵ Essentially a laboratory for its evolving tactics, techniques, and procedures across a wide spectrum of conventional warfare and a training ground for a new generation of military leaders, Syria, and more subtly Eastern Ukraine, has reaped numerous near-term benefits for the Russian military. Russian arms exporters are also benefiting from the successful demonstration of their leading-edge systems.⁵⁶

The West

Any discussion about the West must begin with the Russian psychosis toward what it perceives as a liberal democratic and economic system of governance and finance that is totally at odds with, and perceived to be

an existential threat to, the Russian state. NATO and the EU are seen as the hard-power and soft-power agents that threaten Putin's regime. With a false narrative designed to present and pump up external threats and reinforce Russian self-reliance and internal controls, the regime sees Russia in a permanent state of competition and confrontation with the West. As events have shown since Georgia in 2008, Russia will use force, overt or nonattributed, if it feels its direct interests are threatened, especially within the FSU. Russia does not want to go to war with NATO or the United States, but certainly feels threatened by them, and has singled out the Alliance as its principal adversary.⁵⁷ As such it prepares its military and is mobilizing its societal base for what some would say is inevitable war.⁵⁸

Russia's obsession with so-called color revolutions and regime change reveals Putin's deep insecurity concerning the legitimacy of his regime within the eyes of Russia's own domestic population.⁵⁹ Secure nations, comfortable with their governance and secession processes, do not obsess and talk about regime change. Since Muammar Qadhafi's fall in 2011 in Libya, and the large-scale and apparently frightening Bolotnaya protests in Moscow in 2011–2012, the Russian media and official pronouncements have sounded increasingly strident.⁶⁰ In spring 2014 a main theme at the Moscow Security Conference, and again in 2015 and 2016, was the perceived threat to Russia of Western-backed color revolutions. Some Russian variation of President Yanukovich's ignominious February 2014 fall from power in Ukraine is likely what "keeps Putin up at night."

Anyone in Russia over 45 years old remembers the fall of Communism, when a restive Soviet population induced by deteriorating economic conditions, a discredited ideology, and the unpopular conflict in Afghanistan pressed Soviet leaders such as Mikhail Gorbachev and Boris Yeltsin to take bold reform measures. Those measures unintentionally led to the breakup of the Soviet Union in December 1991 and to a new Russia—shorn of 14 of its republics comprising one-third of its landmass and half its population including 25 million ethnic Russians. This remarkable event was, and still is, a bitter pill for many Russians. The difficult and mismanaged economic reforms in the 1990s saw the rise of the first wave of oligarchs. Western political chortling following victory in the Cold War, and poorly handled insurgencies and conflicts in Chechnya and the Russian "near abroad," helped pave the way for a strong no-nonsense leader when Putin became President of Russia in 2000.

From the Western perspective, NATO enlargement focused on the incorporation of newly sovereign states into a democratic, market-based system with only defensive intentions. The Alliance worked hard to bring Russia into its fold as a partner in the 1990s, resulting in the NATO-Russia Founding Act and NATO-Russia Council.⁶¹ Both Russia and

the United States signed the Budapest Memorandum in 1994, guaranteeing Ukrainian sovereignty in exchange for Ukraine giving up its nuclear weapons.⁶² Russian paratroopers were even integrated into NATO operations in Bosnia.⁶³ This was a challenging, difficult process that ended with the NATO bombing of Belgrade and intervention to stop genocide in Kosovo in 1999.⁶⁴ Even moderate Russians were deeply upset by the U.S.-NATO intervention despite the righteousness of Western actions to prevent a Kosovar Albanian genocide. This was the real break, and the beginning of the downward spiral of post-Cold War NATO-Russia relations.

From a Russian perspective, the problems concerning NATO's enlargement began after Germany's reunification. While no official document exists, the Russian narrative contends that verbal promises were made at high levels that NATO would not expand to the east.⁶⁵ Most Russians, stoked by their state-controlled press, genuinely believe this. By 1990, reunited Germany was in NATO, and in 1999, Poland, Hungary, and the Czech Republic entered the Alliance.⁶⁶ Throughout the process, the Russians were consulted, and to any informed observer, the militaries joining the Alliance were not a conventional threat to Russia. In 2004 a second major tranche joined the Alliance. Estonia, Latvia, and Lithuania were invited into the Alliance along with Bulgaria, Romania, Slovakia, and Slovenia.⁶⁷ It has long been the policy of NATO to dictate that no external state should interfere with the accession process. Russia's direct interference in this process by issuing incendiary statements over Montenegro's recent invitation to join NATO further damaged the NATO-Russia relationship.⁶⁸

While a natural progression from the Western perspective, this advance was seen by the Russians ominously through a prism steeped in the historiography of contemporary Western threats. In 1989 the Warsaw Pact extended deep into central Europe. While providing a menacing offensive platform for huge Soviet and satellite country armies, xenophobic Soviets also saw the borders as a major buffer separating the Soviet Union from the West, which in the lifetime of senior Russian and FSU citizens perpetuated a war of annihilation by Nazi Germany that led to the deaths of a staggering 20–26 million Soviets, many of whom were civilians. The 1989 East-West German border was 880 miles from Leningrad and surrounded West Berlin 800 miles away. Today the distance from NATO's Estonian-Russian border at Narva to St. Petersburg is only 85 miles.

A deep suspicion toward EU soft power exists as well. It was, after all, Russia's response to the EU's offer of Association to Ukraine in late 2013 that began the slide into today's difficult confrontation.⁶⁹ Russia's reaction following Yanukovych's ouster—committing special forces to seize Crimea and backing proxy forces in eastern Ukraine—shed light

on evolving Russian geostrategic thinking, especially around its periphery. The idea that color revolutions spurred by NATO/EU enlargement are the greatest existential threat to Russia has likely played a major role in all Russian interventions since.⁷⁰ In each, Russia took both overt and covert military action to achieve its objectives, which should give policymakers and planners insight into how Russia might preemptively react over future events involving FSU nations Belarus, Georgia, Kazakhstan, Transnistria, Ukraine, and, most dangerously, NATO's Baltic allies. Watching what transpires in Uzbekistan, after the elderly President Islam Karimov's recent death, will be instructive.

Much has been written about the dramatic events that transpired between Russia and Ukraine after the fall of its pro-Russian regime in 2014. While the Russians appeared successful with their masked invasion and annexation of Crimea, follow-on efforts to secure large tracts of eastern Ukraine on behalf of its large ethnic Russian population bogged down after initial successes.⁷¹ Efforts to use variations of hybrid, nonlinear warfare, seemingly so effective in Crimea, failed to create the conditions to seize Kharkiv, Mariopol, and Odessa. The downing of Air Malaysia MH-17 in July 2014 signaled a nadir for Russian efforts in eastern Ukraine.⁷²

From 2014 through 2016, four new strategic factors emerged and continue to influence the conflict today:

- Catalyzed by aggressive Russian actions, a sense of mainstream Ukrainian patriotism beyond former right-wing splinter nationalism coalesced among the bulk of the Ukrainian population and especially with Ukrainian elites.⁷³ Over 32 million Ukrainians, while not necessarily anti-Russian, were now proudly pro-Ukrainian. They would fight. This was a significant strategic miscalculation by Russia.
- The EU managed to implement effective, sustained sanctions that have remained in place despite Russian countermeasures and even beyond Brexit, adding pressure on both the Russian economy and public well-being.⁷⁴
- NATO sharpened its strategic Article 5 focus after withdrawal from Afghanistan. This was another strategic development Russia had not counted on.
- Russia had not anticipated the simultaneous fall in oil prices and the inflation of the ruble. These, combined with EU sanctions, placed great stress on the Russian economy.⁷⁵

Despite the apparent success in Syria and elsewhere, these four strategic developments will continue to extract a high cost in exchange for limited gains.

The Russian Military

The Russian military, though much improved as an overall fighting force, is not the juggernaut it is sometimes made out to be. With a defense budget only one-ninth of the U.S. budget, and few true allies, Russian leaders and planners must think carefully before employing the military.⁷⁶ Therefore, the aggressive intervention into Syria was of major significance.

Russia's current demographic challenges make it difficult to sustain large standing field forces.⁷⁷ Short of a mobilization, it is hard-pressed to put a million active-duty personnel under arms. Russia's robust security services, even before factoring in the omnipresent Federal Security Service, include roughly a quarter-million Ministry of Internal Affairs troops, which compete in the same Russian personnel pool as the regular armed forces. The role of the ministry will likely further change with the announcement of a new "national guard" that could be employed internally or beyond Russia's borders.⁷⁸ While major strides have been made under its "New Look" initiative in reducing its bloated structure and streamlining the military into a more lethal and deployable force as displayed in Syria, major inconsistencies remain.⁷⁹ Despite its major and partially successful effort to create a contract (volunteer) force, the expense as well as social challenges have slowed progress.⁸⁰ The Russian military, especially the Land Forces, still consist of over 30 percent conscripts who are called up in annual drafts for a service term of 1 year. This was reduced from 18 months in 2008.⁸¹ Conscription is generally unpopular, though the popularity of the Russian military has grown in recent years. However, for career leaders and trainers, the challenges of annually bringing in and assimilating several hundred thousand new 1-year recruits into formed units is daunting.⁸² *Dedovshina* (hazing) of recruits still occurs, and Russian decisionmakers have to think long and hard before deploying conscript-heavy ground units that are connected to social media into complicated, sensitive, and potentially divisive arenas such as eastern Ukraine, the Baltics, or even Syria.⁸³

Russia's standing nuclear forces (Strategic Rocket Forces, Strategic Aviation, and Navy) still command the *crème* of the Russian military personnel system. Additionally, elite forces such as the Main Intelligence Agency and FSB Spetsnaz, airborne forces, and Naval Landing Infantry, which do most of the hard "out of area" work, continue to improve their capabilities and are increasingly battle hardened across a broad spectrum

and direct and indirect (hybrid) conflict in Crimea, Donetsk-Lugansk, and Syria. These forces have been heavily used in the past 2½ years and likely are in major need of rest and refit. Cracks have appeared in the facade of even elite elements, as revealed by their occasional capture and unpopular nonattribution in Russia.⁸⁴

The Russians have stated that they do not want to go to war with the United States and NATO, as demonstrated in the recent rewrite of their Strategic Doctrine⁸⁵ and recently announced National Security Strategy.⁸⁶ However, they are preparing for conflict against the West. The Russians are well aware of their overall deficiencies and lack of allies.⁸⁷ Therefore, any prospective action must invoke surprise and be fast, deep, precise and multispectral. While there are those who wish for the geographic reknitting of the Soviet Union, most practical Russian military thinkers realize this is impossible. Instead the military is being rebuilt to maintain credible strategic nuclear retaliation, conventional area and maritime denial using precision munitions, and swift deployable forces that could, for example, overturn a looming color revolution within a failing former FSU capital or even conduct limited out-of-area operations in strategically important regions such as Syria. Without a significant mobilization, the Russian military, especially conscript-heavy ground forces, cannot hold large expanses of contested ground as would have been the case if it made an attempt at seizing Crimea's Perekop Isthmus via Mariupol.⁸⁸ An added factor to consider—an enormous tactical-to-strategic leap—is the emergent Soviet doctrine of using tactical nuclear weapons to “deescalate” a conflict.⁸⁹ Finally, Russia still must contend with the challenges posed by extremely long and chronically difficult-to-defend borders with the Caucasus, Central Asia, and the Far East. Unfortunately, due to its reactive behaviors based on obsolete threat perceptions, Russia views the Ukraine and Baltic border regions as tense—as reinforced by the recent deployment of SS-26 Iskander short-range ballistic missiles to Kaliningrad—even though these areas should be the quietest and most peaceful.⁹⁰

Possible Worst-Case Scenarios

If Russia saw war as inevitable, much as Japan did before World War II, it would attempt to strike first and fast using *maskirovka* (deception) and *disinformatsiya* (disinformation) to mask its intent. War could be sparked by the fear of regime change, a bordering color revolution, some incendiary incident that rapidly moves to brinksmanship, or, worst case, a failed attempt to subvert the Baltic states protected by NATO Article 5. While preparing its population and the world with an intense media and disinformation campaign, Russian moves would also involve an

initial cyber and electronic warfare onslaught to blind and deafen U.S. command and control, intelligence, surveillance, and reconnaissance, as well as space and navigational capabilities. Kinetic strikes would follow to attack U.S. and allied capital ships and forward-based aviation with an opening barrage of precision munitions. The loss of these symbols of Western power and prestige would be followed by a declaration of Russian readiness to use nuclear weapons if the United States were to respond in kind.⁹¹ These approaches suggest a defensive mindset by a nation that understands it is globally outmanned and outgunned, except in the nuclear realm. In any initial phase of a conflict, Russia will use surprise and shock as a decisive force multiplier. For any major preplanned scenario, Russia will have to stage a discreet mobilization and call-up of reserves to buttress its standing forces.

Russia's military buildup and modernization are hampered by the effects of ongoing sanctions and the overall weakened state of the Russian economy.⁹² This resulted in the announcement of a 5 percent reduction in the 2016 modernization budget.⁹³ Relatedly, since the Cold War, the diplomatic ties holding together much of global arms development and proliferation have been unraveling. At an impasse over missile defense and increased Russian obsession about strategic U.S. global conventional strike capabilities, the possibility for a tactical-to-strategic nuclear exchange triggered by an accident or incident is now greater than during the Cold War.⁹⁴ The New Strategic Arms Reduction Treaty and Open Skies Agreement are increasingly questioned, the Nunn-Lugar Cooperative Threat Reduction initiative is history, the Conventional Armed Forces in Europe treaty is suspended, and the Anti-Ballistic Missile Treaty is scrapped.⁹⁵ Furthermore, a longstanding agreement signed in 2000 between the United States and Russia for the mutual disposal of dangerous military plutonium stockpiles was recently canceled by Russia.⁹⁶ Besides actively working to reduce nuclear arsenals and to moderate the building and testing of new destabilizing weapons, these treaty regimens (with their associated communities of diplomats, scientists, and bureaucrats that met nearly every working day) were confidence-building measures that reduced tensions and enhanced understanding between the United States and the Soviet Union/Russia. The same could be said for U.S. and Russian (diminished but still active) cooperative space programs.

Where is all this headed? The United States and Russia remain at odds both officially and in much of written and spoken media. Russia continues to work to divide Western allies and partners politically, domestically, and economically (principally through energy deliveries). Its disinformation machine, modulated directly by the Putin regime, is a good way

to track the nature of the currently troubled relationship. Tangible lines of stress, confrontation, and even potential cooperation are well demarcated. While eastern Ukraine simmers in Donetsk and Lugansk, further seizing and holding larger tracts of Ukrainian territory would require a large-scale use of conscripts against an improved Ukrainian military that would extract high financial and domestic costs. Russia could emerge victorious against Ukraine but would then be forced to confront a large, seething fellow-Slavic population, broken economy, and a hostile global community. Greater Russian pressure on Ukraine will drive Western upgrades to the Ukrainian military, adding modern defensive weapons to Ukraine's arsenal. Furthermore, Russia could expect added sanctions by an increasingly resolute West reinforced by the return of U.S. units and capabilities to Europe.

The Russians also know that if they try to destabilize the Baltic states with a variation of their hybrid Crimea operation, they will at some point face the invocation of NATO's Article 5. The Baltic states could be overrun in 48 to 72 hours, but the results would be too unpredictable for even Putin's regime to calculate. This would also open a NATO-enabled and expensive partisan ulcer on the Baltic periphery that Russia could ill afford to maintain for long. It would also shake the neutrality of Sweden and Finland.

An adventure in Transnistria would also bring more trouble than progress for Russia. Russia could easily subvert Moldova, but again, to what end? To support any such adventure, Russia would be forced to support with main force Russian units in an area bounded by NATO forces. And then there is an angry Turkey, a strategic nation and NATO Ally with a strong military. Even after its internal failed coup and warming relations with Russia, Turkey will always—due to difficult history, geography, and increasingly conservative Sunni religious orientation—present future challenges for Moscow.

The Russians are in a strategic bind. If they continue to use military force to change the status quo in the name of protecting ethnic Russian populations and maintaining unwilling buffer states, they will likely fail as a nation. Eastern Ukraine will limp along in an increasingly expensive, frozen status. Syria, which is becoming a public relations and legal disaster internationally, will continue to be challenging for Russia due to its unpredictability and volatility. Syria does, however, despite Russia's brutal bombing campaign and failed diplomatic efforts, present a potential opportunity to build a real international effort to address the conflict. Without international cooperation leading to a sustained ceasefire, even the Russian people will eventually demand to bring troops home. As history has repeatedly proved, bad things happen to foreign militaries

Russia

that remain fighting and indefinitely exposed within Middle Eastern civil and sectarian wars.

To navigate this complex relationship, the following recommendations might warrant consideration by U.S. policymakers:

- Develop a dual-track policy regarding the Russian Federation. First, push back hard on transgressions against NATO Allies and partners, and breaches of international law. Second, rebuild direct, cogent conduits between key civilian and operational military leadership to increase understanding on issues, activities, and incidents that could reduce the enormous and increasingly dangerous trust deficit between our nuclear-tipped nations.
- Support and reassure Allies and partners. Reinforce Europe militarily. Place credible defensive forces in eastern European countries that feel threatened by Russia. Work closely with framework nations such as France, Germany, and the United Kingdom. Add a U.S.-flagged combat engineer company to each of the three NATO battalions in the Baltic states. Ensure forward-based ground units have a short-range air defense capability. Deter, remove, or mitigate any viable early stage offensive military option from the Russian strategic calculus.
- Emphasize nuclear deterrence. Rebuild eroded U.S.-Russia arms control and confidence-building regimens. Patiently and transparently chisel away at missile defense concerns.
- Improve strategic messaging. Aggressively counter Russian narratives seeking to justify actions or divide Western opinion in a more responsive and coordinated manner. Agree to exchange observers for major exercises.
- Work with European allies toward agreement on ways to provide defensive armaments to threatened partner states. In tandem with such, establish direct conduits for messaging to Russia to clearly explain why.
- Continue to communicate to Russian officials why a strong NATO is important for Russia as well. Make clear in every venue that Russian attempts to erode and undermine peaceful Western stability-focused institutions, such as the EU or NATO, will only end badly for a fundamentally vulnerable Russia. Russia should *not* want an unstable, anxious, and possibly reactionary West as a result.

- Enhance full-spectrum cyber capabilities for deterrence. Emphasize to other cyber nations that the United States will aggressively respond with the full range of possible options to proven state-sponsored cyber attacks. Collectively avoid at all costs opening a state-sponsored cyber “Pandora’s Box” while being ready for a worst-case scenario.
- Maintain sanctions and political isolation in coordination with the EU until Russian actions deescalate in both Ukraine and Syria.
- Build political offramps to ensure that countries do not fall into strategic brinksmanship.
- Coordinate U.S. national and theater policy and activities to ensure that they do not inadvertently drive China and Russia—not traditional allies—into a transactional temporal military pact.
- Buttress the U.S. role in a flawed and frustrating United Nations. As primary donors, press for internal UN reform. Press Russia and China to promulgate and support positive UN international actions including joint peacekeeping.
- Reiterating the first point: Rebuild atrophied personal links and conduits between key Western and Russian political and military leaders, despite inevitable disagreements and disinformation. Establish a network of crisis “first responders” on both sides that could rapidly intervene at the regional level in event of a fast-breaking accident or incident.

The status quo remains ominous for Russia as current demographic, economic, political, and security trends play out. In medical terms, all Russia’s vital signs are trending negatively into the next generation. What comes next? If the United States and Russia, despite their huge trust deficit, focus on core interests, with a reasonable appreciation for the concerns and interests of each other, a stable relationship could be regained. There is a clear danger, however, that Putin’s conflation of Russia’s interests with those of his regime may drive him to more and greater military-backed adventurism. Continued Russian military use of force as an increasingly preferred policy tool of choice in the face of economic decline will raise the chances of open conflict with the West—an outcome that represents a policy and strategy failure of the first order. Managing this risk must rest at the very top of the administration’s foreign policy and national security agenda. This task will require equal doses

of firmness and pragmatism; U.S. alliances and partnerships must be stoutly upheld, while Russia's core concerns on its periphery and insistence on recognition of its great power status should be acknowledged. Over time, rapprochement and economic reintegration with the West represent Russia's best option. Without such pragmatism, the future of the Russian state, and therefore the stability of the international order writ large, will be at peril.

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The Middle East

Denise Natali

U.S. national security interests in the Middle East are threatened by weak and failed states, sectarianism and geopolitical disorder, and the frozen Israeli-Palestinian conflict. Although these threats are unlikely to break up external state borders in the near term, they have reconstituted the nature of states and regional politics. The United States should recognize the deeply rooted nature of these threats and the limitations of its leverage in the Middle East. Rather than seeking to fix weak and failed states and attempt to comprehensively resolve protracted conflicts, the United States should project power defensively, contain instability, and selectively engage and support traditional partners who can serve as strategic anchor points in the region.

The primary U.S. national security interests in the Middle East are to protect the U.S. homeland from terrorism (particularly the global jihad of the Islamic State's millenarian ideology), bolster the security and stability of regional allies such as Israel, prevent mass migration that can destabilize European allies, and assure the development and free flow of energy resources to world markets. These interests are directly threatened by security dilemmas that have emerged over the past decade: failed governance and weak states, sectarianism and geopolitical disorder, and the frozen Israeli-Palestinian conflict. Mitigating the causes and potential consequences of these threats requires an explicit formulation of U.S. national security priorities that recognize the depth of Middle Eastern security dilemmas and the opportunities and limitations of U.S. leverage in affecting change. It suggests that the United States should pursue pragmatic policies that sustain the territorial integrity of states, limit the damage of instability, and balance the growing influence of Iran with support for traditional Middle Eastern partners that can serve as strategic anchor points in the region.

Strategic Environment

For the first time in a century, no major foreign power exercises dominant influence in the Middle East. U.S. foreign policy that emphasizes greater selectivity and multilateralism in major military interventions overseas has also left a vacuum of global leadership.¹ Competing regional states such as Iran, Turkey, and Saudi Arabia are attempting to fill this vacuum; Russia too is interested in renewed influence.² The Middle East is also being redefined by the strategic consequences of externally driven regime change and popular uprisings against failed governance. Highly centralized “deep” states are no longer the major threat to international order; rather, weak states that are unable to effectively govern, control populations, or secure borders are the danger. Failed governance has destabilized Iraq, Syria, Yemen, and Libya and is unsettling traditionally stable U.S. regional partners such as Saudi Arabia, Turkey, and Egypt.

These trends, alongside the Iranian nuclear deal (that is, the Joint Comprehensive Plan of Action [JCPOA] signed with the P5+1 countries in July 2015), have aggravated sectarian schisms based on Sunni and Shia Islam. Sectarian power struggles are also being fueled by regional actors and are playing out through local proxies in weak and failed states. These conditions have encouraged the proliferation of local militias and become drivers of terrorism; jihadist groups such as the Islamic State of Iraq and the Levant (ISIL) and al Qaeda affiliates have taken root in Iraq, Syria, Yemen, Libya, and Egypt/Sinai and threaten other regions where state authority and governance have broken down. Centrifugal forces are fragmenting states and their societies, causing ongoing political dysfunction in national and regional level governance.

The Middle East’s sectarian polarizations, however, have not created strong or unified regional alliance structures that could effectively balance power. Rather, different gradations of sectarianism coexist with domestic security priorities, state nationalisms, commercial interests, and distinct interpretations of Islam.³ Turkey, Saudi Arabia, and the Arab Gulf states may converge in their aim to replace the regime of Bashar al-Asad in Syria and challenge Iranian hegemony, but they are not unified as a Sunni bloc. The conflict in Libya is being driven by tribal divisions and competing Sunni Muslim powers; Saudi Arabia and the United Arab Emirates (UAE) back former president Muammar Qadhafi’s supporters while Turkey and Qatar are reinforcing Muslim Brotherhood groups. Syria’s civil war is also embedded in power struggles between Sunni Muslim opposition and jihadist groups. The result has been geopolitical disorder, local instability, and economic stagnation or collapse in key regional states.

These destabilizing dynamics have reconstituted the nature of Middle Eastern states and regional politics. Although external state borders

are unlikely to dissipate—no powerful regional state wants to see states break up—internal boundaries are being reordered by opportunistic state and nonstate actors seeking to create spheres of influence. These spheres do not represent cohesive ethnosectarian entities that can replace failed central governance, but rather are hyper-fragmented enclaves of communities that have their own militias and that seek different forms of local self-rule and economic gain. Substate actors are also engaged in territorial and demographic engineering, which is setting the groundwork for new and renewed conflicts over territories and resources.

Failed Governance and Weak States

U.S. allies are increasingly vulnerable to domestic and regional unrest that undercuts their security. The most important source of instability is failed governance, or the inability of governments to adequately provide services, security, jobs, and political freedoms to their citizenry. The fall-out of failed governance varies according to the strength and durability of state institutions and the influence and personality of ruling leaders. Most significant are states wherein governance has failed outright: Iraq, Syria, Yemen, and Libya. In these cases, externally driven regime change and/or civil war have destroyed existing state institutions without replacing them with viable alternatives. Political and security vacuums have been filled by subnational groups and violent nonstate actors (including ISIL and al Qaeda) that directly target or threaten to target the U.S. homeland and Europe. These subnational entities and nonstate actors thrive on illicit economies, porous borders, and warlordism, all of which further undermine state authority and internal stability.

Failed governance also threatens traditionally stable regional partners. Gulf state monarchies reliant on oil revenues and/or authoritarian rule to pacify societies are significantly challenged by depressed world oil prices, population increases, expanded energy consumption, calls for greater political freedoms, and costly regional conflicts.⁴ In Saudi Arabia, where oil represents 85 percent of state revenues, the government has incurred a \$100 billion deficit since 2015 and risks depleting its sovereign wealth fund by 2020. Kuwait has lost \$20 billion over the same period. The future stability of Gulf oil monarchies will depend on their ability to adapt to the changing political and economic order through fiscal reforms, greater political openness, and control of ISIL and al Qaeda extremists inside the kingdoms and in Yemen.⁵

Turkey, a U.S. ally in the North Atlantic Treaty Organization, is deeply unsettled. President Recep Tayyip Erdogan has failed to consolidate democratic governance and address the country's decades-old Kurdish prob-

lem. The resumption of an insurgency by the Kurdistan Workers' Party (Partiya Karkerên Kurdistanê, or PKK) against the Turkish government in July 2015 after a 2-year ceasefire has paralyzed portions of the country's southeast, while spreading to some city centers in western and central Turkey.⁶ The Kurdish insurrection and unresolved Kurdish problem have also become a leading transborder threat. PKK insurgents have established bases in the Kurdish regions of northern Iraq, Syria, and Iran, and they enjoy popular support among millions of Kurds in these territories who seek greater autonomy or statehood. Coalition support for Kurdish forces in Syria tied to the PKK has aggravated Turkey's threat perceptions and commitment to prioritizing the PKK over countering ISIL. The July 2016 attempted coup in Turkey has also greatly complicated U.S.-Turkey relations, adding a further distraction to an already complex equation.

In Egypt, the state remains brittle after the overthrow of President Hosni Mubarak in 2011. The ouster of the short-lived Muslim Brotherhood government under President Mohamed Morsi, absence of political space for legitimate opposition under the successor military government of President Abdul Fattah El-Sisi, and economic crises have deepened the country's secular-Islamist divide. Egypt's new authoritarianism without reforms risks exacerbating these crises. Another key security risk is the military's crackdown on the Muslim Brotherhood. Tighter restrictions will likely embolden Islamist extremists, much the same way that Egypt's "successful" defeat of the Islamic Jihad and Gamaat Islamiyya in the early 1990s resulted in the emergence of al Qaeda leader Ayman al-Zawahiri and Muhammed Atta, chief hijacker of the September 2001 terrorist attack against the United States. Egypt faces a drawn-out battle against terrorist threats that will reverberate throughout the country.

Sectarianism and Geopolitical Disorder

Regional stability is further undermined by sectarianism and geopolitical disorder. The overthrow of Saddam Hussein in 2003 revived regional sectarian divisions by removing a strongman without a viable replacement. It also disenfranchised Sunni Arabs who had governed the Iraqi state for nearly a century. These dramatic changes have emerged in conjunction with hardened feelings of sustained injustice, absence of Arab unity, weakening of secular ideologies, undeveloped economies, government corruption, and youth bulge unemployment. They have reinforced local resentment against central governments, polarized communities along sectarian lines, and fragmented groups internally over leadership and influence.

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Sectarianism has become most salient in Middle Eastern states with Sunni Muslim majorities and leaders that espouse fundamentalist interpretations of Sunni Islam. These states fear a territorially contiguous Shia arc encompassing Iran, Iraq, Syria, and Lebanon that would permit Tehran to establish itself as a regional hegemon. Saudi Arabia is particularly sensitive to Iran becoming a dominant regional power and acquiring a nuclear weapon. The Kingdom is challenged by Iranian-backed Shia groups in its eastern province, Iranian-supported Houthi rebels in neighboring Yemen, and Iranian attempts to undermine the minority Sunni monarchy in Bahrain.⁷ Saudi Arabia, Turkey, and Qatar also regard Iran's Islamic Revolutionary Guard Corps (IRGC) and Lebanese Hizballah as the main cause of the Syrian conflict.⁸ Iran, in turn, is reacting to radicalized Sunni Arab communities and the propagation of Salafist and Wahhabist ideology that directly targets Shia and non-Sunni Arab communities across the Middle East. These tensions have hardened with Saudi Arabia's termination of diplomatic relations with Iran in January 2016.

Weak and failed states have become playing fields for sectarian power struggles. Regional actors are backing local proxies in Iraq, Syria, Yemen, and Libya in an effort to advance their political and economic interests, which include creating Sunni and Shia spheres of influence. Iranian hardliner influence has filled part of the political vacuum in post-Saddam Iraq and in neighboring states with Shia populations or leaders that support Tehran, such as Syria and Lebanon. Turkey also seeks to benefit from the weak Iraqi state by extending its influence in northern Iraq as a counterweight to Baghdad and Iran, to check the PKK, and to enhance Ankara's access to Iraq's oil and gas resources.

Similar trends are occurring in Syria. What commenced as a popular local revolution against the regime of President Asad has morphed into a sectarian proxy war. To ensure Sunni Islamic governance and to challenge Iranian influence, Turkey, Saudi Arabia, and Qatar have become leading sponsors of the Syrian opposition and some jihadist groups. Their aim is to overthrow Asad, an Alawite and longtime beneficiary of Iran. Tehran, in turn, has sent IRGC–Quds Force advisors and fighters to support Asad regime forces, alongside Shia fighters from Iraq, Afghanistan, Pakistan, Lebanon, and central Asia.⁹ Russian military intervention has also proved essential in saving Asad's regime and further weakening opposition forces.

In Yemen, regional political interests, internal power struggles between tribal groups, and renewed sectarianism are feeding off the failed state. Most Sunni Arab states regard the civil war as an Iranian-inspired effort backed by the Houthis and former President Ali Abdullah Salih to overthrow the Saudi-backed government of President Abd Rabuh

Mansur Hadi. Iran and the Lebanese Hizballah view the conflict as driven by tribal rivalries and supported by Saudi Arabia.¹⁰ These sectarian tensions, if not a protracted civil war, are likely to continue as Saudi Arabia and the UAE remain militarily engaged and Iran extends support to Houthi rebels.¹¹ Saudi Arabia has also retaliated against Hizballah's support for the Houthis by withdrawing \$3 billion in pledged military support to Lebanon.

Powerful sectarian spheres of influence, however, have not led to Sunni or Shia Muslim blocs that could effectively balance power in the Middle East. Sunni Muslim–dominant states are also driven by domestic security priorities, state nationalisms, economic opportunities, and different interpretations of Islam that prevent cohesive action. For instance, instead of supporting Turkey against the Shia-led government in Baghdad, most Sunni Arab Iraqis strongly oppose Ankara's military interventions in northern Iraq as a violation of state sovereignty. The Syrian civil war has also become embedded in conflicts between Sunni Arab opposition and jihadist groups, while fueling tensions between Kurds and Arabs, regardless of shared Sunni Muslim affiliations.

Similarly, Iran has been unable to fully circumvent state nationalisms and export its brand of revolutionary Islam to Shia populations in the Middle East. In Iraq, most Shia Arabs are committed to Iraqi nationalism and oppose becoming a satellite of Tehran. These distinctions are also doctrinal; the Iraqi Shia religious establishment (*marja-iyya*) under the guidance of the influential Grand Ayatollah Ali al-Sistani rejects the Iranian practice of *vilayet-e faqih* (rule by Islamic clerics and fundamentalist legal views) and follows a moderate approach of limited clerical engagement in political affairs. In Lebanon, some Shia organizations project both religious and secular perspectives that do not necessarily align with Iranian clerical rule. Nor have Houthis in Yemen or Alawites in Syria, which are Shia offshoots, shown any indication of supporting *vilayet-e faqih*, even though they have aligned with and accepted Iranian military support to assert power against opposing forces.

Frozen Israeli-Palestinian Conflict

Bolstering the stability and security of regional allies includes supporting the state of Israel. The leading existential threats to Israel are a potentially nuclear-armed Iran and the unresolved Israeli-Palestinian conflict. The second is a far greater threat than the first. The vanishing feasibility of a two-state agreement leaves both Israelis and Palestinians more vulnerable to escalating conflict, while exposing Israel to greater international censure. Failure to reach a settlement has also left the government

of Israel increasingly reliant on mitigating internal terrorist threats by “managing the conflict” without a clear strategic endstate. This approach means continuing to occupy the West Bank and maintaining a blockade on the Gaza Strip, which is controlled by the Palestinian terrorist group Hamas.¹²

The frozen Israeli-Palestinian conflict leaves Tel Aviv dependent on the twin pillars of external economic support for the Palestinian Authority and security cooperation with the U.S.-funded Palestinian Authority Security Forces (PASF).¹³ Both components lower the direct financial costs of the occupation to Israel; the bulk of revenues that sustain the Palestinian Authority is derived from outside donors. Similarly the PASF is largely responsible for security in the West Bank.¹⁴ The problem is that if either of these pillars falters, the daily costs of the occupation to Israel would increase dramatically.

Even if these security structures remain intact, they do not guarantee Israel's internal stability. The Palestinians continue to loathe what they regard primarily as “the occupation”; in the occupied territories unemployment is about 40 percent—the world's highest—with youth unemployment at more than 60 percent.¹⁵ Absence of hope for a final status settlement, tensions over claims to religious sites, Israeli security measures, and deep intra-Palestinian divisions have caused a recent upsurge in violence from both sides. Ongoing violence may work in Palestinian leader Mahmoud Abbas's favor by reminding Israel and the international community of the potential outcome of changing the status quo.¹⁶ These consequences are inadvertently encouraging a single, binational state. The problem, however, is that this state will eventually be either Jewish or democratic, but not both. Demographic shifts within the next decade are such that Israel is expected to have a greater number of Arabs than Jews in the territories lying between the Mediterranean Sea and Jordan River.¹⁷

Israel also remains vulnerable to violent nonstate actors despite its qualitative military edge,¹⁸ conventional military superiority, and unacknowledged nuclear program.¹⁹ Terrorist organizations and malign groups that vehemently oppose Zionism pose dramatically different threats than the strong states that used to surround Israel. In addition to Hamas and Palestinian Islamic Jihad operating in Gaza, Israel is confronted with ISIL penetrations into Libya, Egypt's Sinai region, and potentially the Gaza Strip.²⁰ Israel is further exposed to destabilized neighboring states. Most important is the Hashemite Kingdom of Jordan, considered Israel's most important neighbor and its strategic depth. Infiltrations of ISIL and radical jihadists from Iraq and Syria into Jordan, some of which seek to overthrow King Abdallah II and tap into the country's socioeco-

monic crisis, have gained domestic sympathy and support. In Lebanon the Syrian war has brought Hizballah in direct confrontation with the al Qaeda affiliate in Syria, Jabhat al-Nusra, and reinvigorated militant Sunni Arab jihadist groups.²¹ A strengthening of Hizballah would pose grave threats to Israel itself.

Israel regards its most significant regional security threat as an empowered Iran developing a nuclear program that could directly target the Israeli state. Although most Iranians do not seek Israel's demise, leading conservative hardliner Iranian leaders continue to call for the destruction of the state. Some Israeli security leaders fear that a nuclear-armed Iran would be far more likely to attack Israel conventionally. Consequently, while some Israeli officials regard the nuclear deal as a best option to deter Iran from obtaining a nuclear weapon, other leaders harshly oppose it. A key criticism is that the provisions are less likely to deter or detect incremental Iranian cheating, such as covert nuclear weapons research or advanced centrifuge research.²² Even if strong safeguards are enacted, many fear that the lifting of sanctions would further empower the IRGC, which controls about 30 percent of the Iranian economy, and its regional proxies. Iranian-backed threats against Israel have already occurred in Lebanon and the Gaza Strip and through other Palestinian organizations such as Palestinian Islamic Jihad.

Spillover on Regional Allies

These security dilemmas have created massive refugee flows that can destabilize regional and European allies. By January 2016 the Syrian civil war had resulted in 4.6 million refugees who fled to Turkey, Jordan, Lebanon, Iraq, and Egypt with an additional 6.6 million internally displaced persons.²³ Host countries have assumed large-scale costs of integrating and maintaining refugee populations that are expected to continue over the long term. The spillover of the Iraq and Syrian conflicts has undermined fragile regional economies. By December 2014 Lebanon had lost more than \$20 billion in direct costs from the Syrian civil war, mainly in foregone infrastructure development and the costs of hosting the over one million Syrian refugees that account for 25 percent of its population.²⁴ Jordan's 800,000 Syrian refugees comprise 10 percent of its population and are compounding the country's socioeconomic crises.

Turkey currently hosts the world's largest refugee population of about 2.7 million, with 250,000 Syrians living in 20 camps managed by the Turkish government. While Syrian refugees represent only about 3 percent of Turkey's total population, they have created demographic shifts in mixed localities in southeastern Anatolia where ethnic and sectarian

tensions are salient. In some areas Syrian refugees have helped boost local production and local labor markets; however, the long-term impact on growth and stability depends on how they can be integrated into local and regional labor markets and society.

Mass migration from failed states also threatens European security. By 2015 about one million migrants had fled to Europe, mainly from Iraq, Syria, and Afghanistan. In contrast to the large-scale refugee flows caused by the wars of Yugoslavia, which gradually brought over two million refugees from 1992 to 2000, the massive and sudden population displacements from Syria to Europe have reached levels not seen since World War II. From April 2011 to November 2014, over 775,000 Syrians applied for asylum in Europe, more than two-thirds of whom are young adult men. The total number of asylum seekers to Europe during the first 10 months of 2015 increased to about one million, more than twice the amount of the same time period in 2014.²⁵ Instability in Libya and its proximity to Europe's Mediterranean shores threaten another migration spike, with Italy being increasingly vulnerable.

Massive refugee flows are occurring amid Europe's ongoing economic slowdown and ISIL-inspired terrorist threats. They have further heightened Europe's financial and security burdens and strained recipient countries' capacities to process asylum requests, meet humanitarian needs, and integrate refugee communities into society.²⁶ Demographic changes and economic pressures have fueled a populist backlash from anti-immigration and anti-European Union parties, creating conditions for marginalization and potential radicalization. Regional trade and energy flows have also been negatively affected. Turkey's trade to Syria has declined by 70 percent since 2011, while Jordan has lost about 75 percent of its trade to Syria.²⁷ Egypt, Jordan, Lebanon, and Turkey have realized losses in tourism and total household income while military and border security costs have increased.²⁸

Moreover, weak and failed states and geopolitical disorder are hindering the development and export of hydrocarbons to regional and global markets. Although Iraqi oil exports have increased to over four million barrels per day since 2003, the country's energy sector is vulnerable to instability and conflict. Nearly 85 percent of Iraqi oil exports rely on the Iranian-controlled Strait of Hormuz. A sustained closure of this strategic chokepoint would instigate the economic collapse of Iraq as well as of Arab Gulf oil economies.

Oil and gas exports are also susceptible to contentions over state sovereignty and ownership of resources. In Iraq the Kurdistan Regional Government (KRG) has taken *de facto* control of some oil and gas fields in disputed territories, as well as the Iraqi government pipeline, for its

own legally contentious oil exports to Turkey. The pipeline is prone to terrorist attacks and closures, often due to the PKK insurgency and Ankara's bombing campaigns against PKK bases in the Kurdistan region. Libyan oil sector development has confronted similar obstacles. Since the overthrow of the Qadhafi regime and ISIL threats, Libya has seen its oil production plummet from about 1.6 million to 360,000 barrels per day in April 2016 due to the absence of a strong, unified government, ongoing rivalries between tribal and militia groups, and limited storage capacity. Even if the eastern ports are reopened, Libya may realize just half of its Qadhafi-era production levels and see significant losses in oil export revenues.²⁹

In the Levant, protracted conflict has prevented Lebanon and Syria from tapping into vast offshore gas discoveries while the Israeli-Palestinian conflict has hindered gas development in the Gaza Strip. Egypt's gas export agreements with Israel have been canceled due to opposition from the Muslim Brotherhood and local populations. These untapped markets could potentially source regional energy hubs, as well as Turkish and European economies that rely on Russian gas and are exposed to high energy insecurity.³⁰ Assuring the free flow of energy resources to regional and global markets also depends on security of supply issues, individual country gas pricing policies, and the absence of integrated regional and domestic gas markets. Without any change in these conditions, intra-regional gas trade will likely remain limited to gas exports from Qatar to the UAE and Oman, and through the Arab Gas Pipeline from Egypt to Jordan, Israel, Syria, and Lebanon.

Conclusions and Policy Recommendations

Failed governance, sectarianism and geopolitical disorder, and a frozen Israeli-Palestinian conflict pose protracted long-term threats to U.S. national security interests in the Middle East. The breakdown of strong state institutions that can secure borders and effectively provide public services has created conditions in which terrorism, illicit economies, and political conflict breed. These security dilemmas are occurring at a time when the United States has limited leverage in the Middle East, lacks domestic and financial support to engage in large-scale and long-term interventions, and has strained relations with traditional partners such as Saudi Arabia and Turkey.

Under these conditions and constraints, the United States should not attempt to fix failed states. Nor should it seek to resolve protracted conflicts without the necessary requisites in place, namely political conditions and regional actors committed to making necessary compromises.

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Rather, the United States should be prepared to project power defensively within the parameters of sustained regional chaos and limited influence. This defensive policy approach demands selective and pragmatic engagement in the Middle East that is grounded in a clear commitment to the territorial integrity and sovereignty of states, no matter how weakened they have become, and traditional regional partnerships. It can include preventive measures to help regional partners stem refugee flows, develop economies, and tap energy resources needed for domestic and external consumption. There are several key U.S. policy options.

Support Strategic Anchor Points

It is in the interest of the United States that its traditional Middle East partners are politically stable, militarily cooperative, and economically strong, and serve as strategic anchor points that can contain terrorism and geopolitical disorder. To this end, the United States should work to reverse the image of a fickle ally by affirming and/or resuming full security cooperation with regional partners that can help diminish the prospects of terrorist threats penetrating Gulf monarchies and the region, including Jordan, Lebanon, Yemen, Turkey, Egypt, and Israel. Enhancing the capabilities of regional partners also entails hard choices; there may be aspects about these countries that the United States does not necessarily support, but these strategic partnerships should be regarded in terms of the stability they could provide. Developing strategic anchor points should take precedence over short-term tactical alliances with substate actors that undermine state sovereignty.

Contain Instability and Limit Damage

Iraq and Syria: Defeat ISIL and Stabilize. The United States should continue to support regional and local partners to defeat ISIL and stabilize ISIL-free territories. This effort can include reconstruction and humanitarian assistance, technical expertise to assist with services and capabilities, reconciliation efforts, training Iraqi Security Forces and federal and local police forces, and tapping energy resources needed for domestic and external consumption. Support for the KRG could be included in this effort but should be based on the condition that the Kurds remain committed to the Iraqi state and that all support continues to be channeled through and be approved by central and federal authorities. The United States should more carefully leverage the KRG and avoid enabling the Kurds to the point where they do not think they have to negotiate with Baghdad. The United States should also be prepared for ongoing Kurdish threats to declare independence and the regional and local backlash that may elicit.

The United States should support Shia leaders in Iraq who are driven by Iraqi nationalism, seek to bridge ethnosectarian divides, and engage in reforms. This effort should include regular and frequent engagement at the executive level that openly supports the Haydar al-Abadi government (and any successor inclusive, Iraqi-nationalist government) and affirms the U.S.-Iraq strategic partnership. To diminish the influence of Iranian-backed hardliner factions, the United States should assist Iraqi government efforts to incorporate “reconcilable” popular mobilization units (Shia militia) into the Iraqi Security Forces command and control structure, and/or as a distinct counterterrorism force, while excluding Quds Force–supported factions aligned with Iran. The United States should also tacitly support Iraq’s *marja’iyya* to ensure that Najaf’s “quietism” and Iraqi nationalism are sustained, particularly in the event that the aged Ayatollah Sistani passes away.

In Syria the United States should continue efforts to negotiate a ceasefire with the overall aim of defeating ISIL and maintaining state institutions and Syria’s territorial integrity. It should not actively seek regime change without a negotiated settlement among leading regional and local actors and a viable transitional government in place. Turkey’s engagement in stabilizing Syria and negotiating a strategic endstate is essential and should take priority over unconditional tactical assistance to Syrian Kurdish groups. The United States should also engage diplomatically with Turkey to negotiate a ceasefire with the PKK and assuage Turkey’s threat perceptions about the territorial integrity of its southern borders.

Israel-Palestine: Break and Resume Later. Under current dynamics, the negotiation process for a two-state solution is not viable. The sustained tumult in the region has heightened Israeli and Palestinian concerns about security, terrorism, and political instability and has diminished interest to compromise on security and territorial matters. A negotiating climate is further undermined by Palestinian weakness and disunity and Israeli settlement expansion. In the absence of a clear commitment from both sides toward a two-state solution, the United States should not reengage in the peace process. It should, however, watch closely for indicators that signal a major shift in the political climate that would be more propitious for negotiations. Key triggering conditions include, at minimum, political realignment in Israeli politics that moves away from a hard-right to a centrist government; the departure of Palestinian Authority President Mahmoud Abbas and a viable leader to replace him; and willingness of both sides to engage in meaningful negotiations.

During the interim period, the United States should help neutralize threats to Israel, provide economic incentives to Palestinians, and ensure

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the continuation of a Jewish and democratic state. This effort could focus on building economic interests through natural gas development and revenue and resource-sharing in Palestine between the Israeli and Palestinian governments. It should also raise civil society funding and community level projects while continuing to support long-term objectives of Israeli-Palestinian peace. The United States should revisit the situation when conditions change and are amenable to negotiation.

Assist European Partners. The United States should assist European allies that are most vulnerable to refugee flows and ISIL foreign fighters returning to Europe through political and operational support. It should enhance intelligence-sharing, joint security measures in refugees' home and host countries, and financial support to Turkey and "frontline European countries" to support comprehensive asylum and humanitarian needs. The U.S. Sixth Fleet in the Mediterranean should cooperate with the European Commission's liaison (European Union Naval Force) to help interrupt refugee smuggling operations, support Libyan and Turkish coast guards and border authorities, and provide diplomatic pressure on Arab Gulf states to increase their support of Syrian refugees.

Engage with and Deter Iran

The United States should pursue a two-track approach in dealing with Iran that includes negotiating with Tehran and checking Iranian ambitions. In one track, the United States should develop a constructive bilateral relationship with Iran. It should respect Iran's position as an important Middle Eastern country, bring it into multilateral forums in the effort to establish standards and resolve differences, and make measured statements that could incentivize societal opening and reform. This effort should also encourage economic and commercial interdependence between Iran and Arab Gulf states that could enhance moderate structures, institutions, and regional relations.

In a second track, the United States should push back hard on Iranian regional terror and guerrilla networks. It should work to diminish the Islamic Republic's continuing revolutionary mission, primarily through IRGC–Quds Force activity in Iraq, Syria, and Yemen and its relationship with Lebanese Hizballah, to establish itself as a regional hegemon. This effort should also actively target and attempt to break up Iranian terror networks. Additionally, U.S. policymakers must rigorously monitor Iranian compliance with the JCPOA nuclear agreement and act swiftly to exact consequences in the event of any Iranian violation that would threaten the security of Israel and regional Sunni Arab allies. Furthermore, the United States should support Saudi Arabia's efforts to defeat

the IRGC–Quds Force-backed Houthi rebels and stabilize Yemen, and the Kingdom's efforts to counter IRGC–Quds Force machinations in Saudi Arabia's eastern province and in Bahrain. The United States should not let Iran or Sunni Arab states think it is equidistant.

Summary

The Middle East will be unstable and prone to conflict for the next decade, even after ISIL is defeated. External borders are likely to remain officially intact, but the nature of states will be reconstituted in ways that demand new security and political arrangements at national and local levels. These shifts may encourage politically and economically expedient pacts between substate and nonstate actors, but they are also likely to stir or deepen conflict over control of territories, hydrocarbons, and revenues. Although the United States cannot be expected to resolve these problems, it can play a more effective leadership role that reaffirms its commitment to state territorial integrity and shores up traditional regional partners. There is no realistic or viable alternative from which to choose; state breakup is not supported by any key regional government and would only lead to greater bloodshed and instability.

While seeking to project its power defensively, the United States should be prepared for events that could trigger dramatic shifts and force it to engage in the Middle East at higher levels. Some key triggering events include but are not limited to an official merger of al Qaeda and ISIL; catastrophic collapse of the Mosul Dam; civil war in Egypt; violent uprisings and/or civil war in Jordan; major escalation of ISIL-inspired violence in the West Bank; Iranian nuclear or ballistic missile attacks on Israel; and large-scale terrorist attacks inspired by Iran, ISIL, and/or al Qaeda affiliates in Saudi Arabia. The United States should also reconsider its level of engagement in the case of a mass casualty terrorist attack in the U.S. homeland linked to core al Qaeda or ISIL operations in Iraq or Syria. This threat is particularly pertinent if it occurs during the final days of an outgoing administration concerned with its legacy or the beginning of a new administration vulnerable to the hazards of transition.



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South Asia

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In late 2016, the United States has four major national security interests in South Asia. Three of these are vital security interests with more than a decade of pedigree. They will require new administration policies and strategy to prevent actions that could gravely damage U.S. security: a major conventional war between India and Pakistan, the return of global terrorist safe havens in the region, or the proliferation of nuclear weapons or materials into the hands of America's enemies. The challenge will be "to keep a lid" on the potential for a major terrorist strike of the U.S. homeland emanating from South Asia or from a major interstate war that could risk nuclear fallout, involvement of China, the loss of nuclear material to terrorists, or a combination of all three. A fourth objective is relatively new, but rising in importance. It requires the new administration to pursue a flexible strategy and proactive but patient security initiatives that enable the responsible rise of an emerging American security partner, India, in a manner that supports U.S. security objectives across the Indo-Pacific region without unintentionally aggravating the Indo-Pakistan security dilemma or unnecessarily stoking Chinese fears of provocative encirclement.

South Asia will not be a glamour portfolio for the incoming U.S. administration's security team in January 2017, but it will be one of top-five importance. Critical U.S. national security interests are at stake that can be compromised gravely should the South Asia security portfolio be misappreciated or improperly managed. South Asia will require non-trivial defense expenditure and a focused, cohesive security framework advancing four major U.S. national security interests during the period from 2017 to 2020.

Running from Afghanistan in the northwest to Sri Lanka in the south-east, South Asia includes the second most populous country in the world, India, and the sixth most populous one, Pakistan. It is the only region in the world where two independent nuclear weapons states with

major security disagreements border each other—India and Pakistan—and sits astride a third—China. Pakistan and India have a seemingly intractable border security dilemma that has produced four general wars and two near-wars since 1947. India and China have an equally vexing, unresolved border demarcation and territory dispute involving 133,000 square kilometers of ground that precipitated a month-long interstate war between them in late 1962.¹ South Asia also is plagued by an increasingly deadly mixture of local, regional, and international terrorist organizations, some state-sponsored and others, such as al Qaeda, with a global span and aspirations.

Historically South Asia has been a region of certain distraction for U.S. security interests and defense resources. Since World War II, Washington has aimed to minimize its security profile and defense role in the region. But it has found itself drawn into expensive and lengthy military ventures there. Despite the successive efforts of Presidents George W. Bush and Barack Obama to withdraw American military forces, the persistence of international terrorist organizations across the Afghanistan-Pakistan region, the fragile nature of the security situation within Afghanistan, and the highly unstable political and security situation in Pakistan have kept the United States substantively engaged into 2016.

As the Cold War gave way to the war on terror in defining American security interests with Pakistan and Afghanistan, those same security interests in India evolved, too. Throughout the Cold War, America pursued a wary-to-hostile relationship with India guided by a fundamental mistrust of India's Cold War nonalignment posture, especially after New Delhi inked a 1971 Treaty of Friendship and Cooperation with Moscow.² U.S. mistrust slowly gave way after 1991 as India began a deliberate move away from the defunct Soviet bloc and toward a market-based economy and greater connectivity with the modernized Western world.

The United States has four major national security interests in South Asia. Three of these are vital security interests with more than a decade of pedigree. The fourth is relatively new, but rising in importance.³

First, the incoming administration will be faced with the growing complexities associated with the decades-old, vital counterterrorism (CT) interest of preventing any return to the region of a terrorist group safe haven—especially one in Afghanistan and Pakistan—from where acts of catastrophic global terrorism against the homeland or American interests abroad might be planned and facilitated. Return of an al Qaeda safe haven is of special concern. The new administration will confront a second vital interest: the increasingly difficult challenge of trying to reduce the risks from nuclear weapons proliferation within the region and the potential loss of nuclear weapons material to those with aims to

use that material there and beyond. The administration also will inherit a third vital interest, the decades-old security interest of trying to prevent a fifth major general war between Pakistan and India. Mitigating the risks to these three vital U.S. national security interests requires a proper and balanced U.S. military and intelligence presence in Afghanistan along with a sustained, albeit somewhat reduced, U.S. CT partnership with Pakistan focused on verifiable transactional outcomes.⁴

The next administration will face a fourth major (but not vital) interest: it must actively manage India's rise as an international security stakeholder. India's emerging military strength and diplomatic confidence best assist America's important national interest of constraining China's use of military might in any manner that would threaten the territorial integrity or sovereignty of its neighbors, or that would hamper free trade, liberal commerce, human rights or the peaceful resolution of grievances in the Indo-Pacific region. American strategy to realize this national security interest should expand upon already accelerating bilateral defense and security initiatives, and, at the same time, it should encourage growing Indian bilateral security activities with long-time U.S. defense partner states in the Asia-Pacific region.

Vital Interest 1: Reducing the Risks of War on the Subcontinent

The United States has a historic, albeit underappreciated, vital national security interest in preventing a major interstate war between India and Pakistan. The disruption of trade and commerce as well as the loss of life from such a conflagration would be severe in the region and ripple across the globe. The consequences would multiply infinitely if either antagonist chose to use even a fraction of its nuclear arsenal in the fight, or if China, Pakistan's 40-year security ally against India, were to directly engage in the hostilities. Worse yet, the potential for terrorist acquisition of nuclear weapons increases greatly in the event of their deployment onto a chaotic wartime battlefield. At a minimum harm to the U.S. homeland would come from economic and ecological fallout.

Neither India nor Pakistan wants the certain and massive disruption from such a nation-on-nation war and some in India predict that the circuit breakers in place would prevent a major clash.⁵ Yet despite frequent declarations of a desire to remain at peace, India and Pakistan have fought four major wars between 1947 and 1999, and nearly came to blows in 2001–2002 and in 2008.⁶ The 1947–1948 war over Jammu-Kashmir ended indecisively, with that region remaining in dispute between the two nations today (see figure 1).

The 1965 Indo-Pakistan war, which began with subconventional and conventional military activity in Jammu-Kashmir, ended without a clear

Figure 1. Jammu-Kashmir Region of Dispute



Source: Arun Ganesh/Planemad

victor while featuring the largest single clash of armored and air forces witnessed since 1945. The 1971 war began as ugly civil strife in what was then East Pakistan and concluded with Indian military intervention, the defeat of a 90,000-man Pakistani army, and the establishment of the sovereign nation of Bangladesh—stripping away half of Pakistan’s population and one-third of its land mass. The short, sharp 1999 war in the Kargil district of Jammu-Kashmir was the fourth formal war fought between the two antagonists. It was fought under the nuclear umbrella after both Pakistan and India tested nuclear weapons successfully in 1998.

Islamist terrorist strikes in the Indian Parliament in December 2001 and against multiple venues in Mumbai, India, in November 2008—both of which India blamed on the Pakistani state—brought India and Pakistan to the brink of major interstate war once again. In each of these near-miss incidents, India stepped back from a major conventional retaliatory attack against Pakistan after close consultation with American political and military officials.⁷ Significant American military presence in the region (in Afghanistan, Pakistan, and environs) and unparalleled American leadership access the key civilian and military decisionmakers on both sides of the security divide helped avert a fifth dramatic conflagration.

Escalating Indo-Pakistani animus during 2014–2016 and growing military capabilities assure that the new U.S. administration will be challenged to sustain the peace. The spark for a general Indo-Pakistan war could come from at least three separate sources. Islamist terrorism strikes inside India like those of 2001 or 2008 could again serve as the catalyst for miscalculation leading to major conventional or nuclear war. The government of Indian Prime Minister Narendra Modi, a Hindu nationalist one, has made it clear that it would not be compelled to show the restraint of its predecessor governments should terrorism with suspected Pakistani origins again occur in India.⁸

Military-on-military clashes between Pakistani and Indian forces along the disputed Line of Control (LOC) in Jammu-Kashmir could, like in 1947 and 1965, lead to such a conflagration.⁹ The number and severity of cross-LOC direct and indirect fire incidents rose steadily during 2014–2016.¹⁰ In early 2016, militants presumed from the Pakistan-resident, Islamist terrorist group Jaish-e-Mohammed stormed Pathankot Indian Air Force Base in Jammu-Kashmir, killing at least seven Indian security personnel and signaling that Pakistan-based militant groups remain willing and perhaps enabled by Pakistan military and intelligence to derail attempts at normalization of relations between national civilian leaders.¹¹ The deadly cross-LOC exchanges also demonstrate how long-standing tensions in Jammu-Kashmir can erupt into stability-threatening military exchanges between the two nuclear armed adversaries.

An escalating proxy war between India and Pakistan in Afghanistan is a third possible catalyst for general war. India and Pakistan treat influence in Afghanistan as a zero-sum game. Islamabad believes that India has established increasingly effective political and economic influence there, believing that Afghans collude with the Indian national intelligence agency (the Research and Intelligence Wing) to weaken Pakistan from within.¹² Pakistan's Inter-Services Intelligence Agency supports the Afghan Taliban and affiliates as a security proxy counterweight. The potential for Afghanistan to become a catalyst for major interstate war was demonstrated in an early January 2016 attack by Afghan Taliban elements on the Indian consulate in the north Afghan town of Mazar-i-Sharif.¹³ Like the suspected Jaish-e-Mohammed militant attack into Pathankot Indian Air Base days earlier, this strike by a Pakistan-affiliated jihadist group was perceived by many in India as a proxy attack aimed to aggravate India and disrupt any prospects of reduced tensions or a normalized relationship between India and Pakistan.¹⁴

New Delhi preferred not to provoke Pakistan while the prospect of security and stability generated by the United States and the North Atlantic Treaty Organization (NATO) in Afghanistan was present. Nonetheless,

India has longstanding enmity toward the Afghan Taliban and a silent resolve to see that it never again rules from Kabul or governs sufficient space in Afghanistan to become a conduit for anti-Indian terrorist activities.¹⁵ As Western security forces stand down across Afghanistan, India has proffered more direct lethal support to Afghan security forces. In late 2015, India began offering more overt offensive weapons support to the Afghan air force, “gifting” it with four Russian-made Mi-25 “Hind D” attack helicopters for the first time.¹⁶

New Delhi also has been expanding and extending its military and intelligence footprint at locations in Tajikistan that can be used to provide logistical, medical, equipment, and intelligence support for an Afghan government fight against the Afghan Taliban or other Pakistani militant proxies.¹⁷ New Delhi will support Afghan government efforts to remain sovereign and to safeguard Indian personnel and investments in Afghanistan. It also is setting the diplomatic conditions in Iran and the military-intelligence access arrangements in Tajikistan necessary to support organized proxy resistance should the Afghan government suddenly collapse under the weight of Pakistani-abetted insurgency.¹⁸

The means for deadly warfare between India and Pakistan have been growing for more than a decade. India’s increasing military spending and its evolving conventional offensive warfare doctrine contribute to this increasing lethality and instability. India has become the world’s largest arms importer, accounting for 14 percent of global international arms imports from 2009 to 2013.¹⁹ India is expected to spend more than \$130 billion on arms imports between 2014 and 2020 to upgrade its deteriorating weapons stock.²⁰ Its modernization efforts put at risk critical components of Pakistan’s conventional defenses.

Ever since its frustrating inability to rapidly mobilize forces against Pakistan during the 2001–2002 Indo-Pakistan crisis, India has been slowly updating its offensive conventional military doctrine into one known as “Cold Start.”²¹ In concept, Cold Start would enable a critical mass of conventional Indian military forces to strike Pakistan in a punitive manner within 48 hours in the event of irregular militia or terrorist provocation.²² Cold Start remains in 2016 an Indian military aspiration rather than a reality. But its impact on Pakistan’s defense psyche has been profound.²³ Cold Start caused Pakistan to reshape its nuclear weapons arsenal toward one usable for both deterrence and warfighting.²⁴

Since 2006, Pakistan’s nuclear weapons arsenal has grown dramatically and its capabilities have become ever more oriented toward assured survival and short-range, accurate use in a battlefield warfighting scenario.²⁵ In 2008, Pakistan had an estimated 70–90 nuclear weapons, roughly equivalent to the 60–80 operational weapons estimated for India.²⁶

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Table. Pakistan's Growth in Mid- and Short-Range Nuclear Weapons Delivery Systems			
Aircraft	Mid-Range Ballistic Missiles	Short-Range Ballistic Missiles	Cruise Missiles
F16 A/B (1998) 1,600 kilometers	Ghuari (2003) 1,200+ kilometers	Shaheen-1 (2003) 450+ kilometers	Babur (2011) 600 kilometers
Mirage Vs (1998) 2,100 kilometers	Shaheen-2 (2011) 2,000+ kilometers	Ghaznavi (2004) 400 kilometers	Ra'ad (2012) 350+ kilometers
		Abdali (2012) 180 kilometers	
		Nasr (2014) 60 kilometers	

By early 2009, Pakistan began a much more focused effort on smaller plutonium-warhead designs with battlefield capability.²⁷ It also developed short-range warhead delivery capability and increased fissile material production.²⁸ By mid-2012, Pakistan's half-decade focus on development of nuclear-capable, short-range and cruise missiles had doubled its number of different nuclear missile warhead delivery systems from four to eight, with three of the four newest delivery systems capable of operating in the short ranges necessary for tactical battlefield delivery²⁹ (see table³⁰).

It is hard to disentangle the difference between Pakistani tactical nuclear capabilities that are robust enough to signal India of its intent to fight a limited nuclear war in response to an Indian conventional incursion into Pakistan from those capabilities that can actually execute a nuclear attack.³¹ But there are many sobering clues that suggest Pakistan is resolved to use tactical nuclear weapons in the event of a major clash with India.³²

The incoming U.S. administration will face the ongoing challenges of trying to educate Pakistan about the counterproductive nature of tactical nuclear weapons and dissuading Pakistan from continuing down a path of reliance upon battlefield nuclear weapons use as its means to deter a major Indian conventional military strike.

Vital Interest 2: Prevent Reset of International Terrorist Haven in the Region

South Asia will remain a top-tier location for international terrorist organizations seeking safe haven from which to launch catastrophic global attacks against U.S. and Western interests. Standing U.S. CT strategy applied to South Asia aims at preventing al Qaeda's return to safe haven, denial of any other Salafi jihadist group successor access to unfettered sanctuary, and U.S. assistance to partner-nation capabilities to counter terrorist group activities.³³ The enduring challenge for U.S. CT strategy in South Asia is to prevent a reset of a safe haven for international terrorist outfits in Afghanistan and western Pakistan.³⁴

Bowed but unbroken from the U.S.-led ground force and drone attack “surge” during 2009–2013 into Afghanistan and Pakistan, many Salafi jihadist group leaders remain in the region, intermixed with jihadist outfits that transit Central Asia and Iran, waiting for the right moment to regenerate sanctuary in what they believe to be an ideal location from which to manage global jihad.³⁵ In his September 2014 announcement of al Qaeda of the Indian Subcontinent, al Qaeda leader Ayman al-Zawahiri prominently praised the Afghan Taliban mujahideen, telling all Salafi jihadist groups in South Asia to fully resource the Afghan Taliban-led effort to reestablish a Salafist emirate in Afghanistan.³⁶ At the same time, a growing array of South Asian-based jihadist groups have been infesting eastern Afghanistan under pressure from a 2014–2015 Pakistani military offensive against terrorists in its North Waziristan border province. Many in the remaining leadership of al Qaeda complicit groups such as Tehrik-i-Taliban Pakistan, Tehreek-e-Nafaz-e-Shariat-e-Mohammadi, the Islamic Movement of Uzbekistan, the East Turkmenistan Movement, and others have established new operational nodes in Nuristan, Kunar, and Nangarhar provinces in Afghanistan.³⁷

The Islamic State of Iraq and the Levant (ISIL) is also a terrorist player in eastern Afghanistan and western Pakistan.³⁸ However, ISIL-Khorasan, as it calls itself, remains small in number, with inspiration but no direct material support from ISIL in Iraq or Syria and little traction when compared to the dozens of Salafi jihadist outfits in the Afghanistan-Pakistan region with solid ties to al Qaeda.³⁹ ISIL-Khorasan’s fate notwithstanding, Afghanistan and Pakistan will remain highly contested spaces for bruised but unrepentant international jihadist organizations.

Since assuming the major role in fighting the insurgency and localized terror groups in January 2015, the 352,000-man strong Afghan National Security and Defense Forces (ANSDF) has struggled against a Taliban resurgence in Afghanistan’s south, its east, and in Kabul itself. In the south and east, Afghan security units have been challenged to secure hard-won U.S./NATO territory contested during the surge fights of 2009–2011.⁴⁰ In its December 2015 semi-annual report to Congress, the Pentagon admitted that despite ANSDF abilities to consistently retake major ground lost to the Taliban, the overall security situation in Afghanistan had deteriorated, indicating a robust and resilient insurgency.⁴¹

The unmistakable growth of Taliban power across southern and eastern Afghanistan in 2015–2016 carved out space for precisely the kind of international terrorist training safe haven that the United States swore to prevent.⁴² Al Qaeda reportedly established two new terrorism training camps in Kandahar Province, one of which covered nearly 30 square miles. A joint U.S.-Afghan special operations attack raided these

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camps in the fall of 2015, reportedly killing 100 terrorists in training and wounding 50 more.⁴³ But this episode confirmed the continuing challenge of inhibiting the return of terrorism safe havens in Afghanistan absent a more robust U.S. military intelligence and operational presence.

In recognition of these great and growing challenges in the CT struggle in South Asia, President Obama extended the U.S. military mission in Afghanistan for a longer time and at a larger level of American troops than previously announced.⁴⁴ In his fall 2015 announcement, Obama promised to maintain some 9,800 U.S. military forces in Afghanistan through most of 2016, tapering to about 5,500 troops by early in 2017. Pentagon officials also indicated that American forces will retain bases of operation beyond Kabul: in Bagram Air Field, at Kandahar, and in Jalalabad.⁴⁵ These announcements leave it to the next administration to decide on an appropriate U.S. military footprint thereafter.

The incoming administration also will be left to determine the terms of its CT relationship with Pakistan. Enduring although troubled, U.S.-Pakistan collaboration has continued since 2001 against selected regional and international terrorist organizations. The Obama administration, as the Bush administration before it, used a direct support program for Pakistani military, paramilitary, and law enforcement CT activities. American financial support for Pakistani military CT efforts largely consists of a reimbursement program for CT expenditures by the Pakistani military known as Coalition Support Funds (CSF).⁴⁶ U.S. military CSF dispersed to Pakistan from 2002 to 2015 totaled almost \$13 billion.⁴⁷ Over the same period, indirect support for Pakistan's military and intelligence services totaled \$7.6 billion, and economic-related aid to Pakistan linked to U.S. CT objectives totaled some \$10 billion more.⁴⁸ Pakistan continues to view U.S. compensation and assistance sums as insufficient for its disproportionate losses as "a victim of terrorism," seeking full reparation for what it contends to be more than \$52 billion dollars in physical damages and lost economic activity in its 15-year-old fight of "America's War on Terror."⁴⁹

Despite its 2014–2015 Zarb-e-Azb offensives against the anti-Pakistan Tehrik-i-Taliban Pakistan and selected international terrorist groups in North Waziristan, Pakistan's military-intelligence organizations have not broken ties with many longstanding jihadist outfits viewed as beneficial to its state security mission. Chief among these many groups are Lashkar-e-Tayyib and the Afghan Taliban.⁵⁰ The incoming administration is likely to see a continuation of the Pakistani national security narrative in the years 2017–2020: CT cooperation against selected Salafi jihadists terrorist groups while protecting those deemed as most essential to Pakistan's existential battle against real and perceived threats from India.⁵¹

The U.S. record of success in fighting terrorist actors in South Asia with Pakistan as an ally is not entirely positive. Yet the record of CT success without Pakistan's participation during the period 1992–2001 is much worse. The delicate and dangerous situation calls for some form of continuing U.S. military engagement with Pakistani military headquarters in Rawalpindi, albeit at a reduced level, rather than a total cutoff of CT support or military-to-military interactions championed by some.⁵²

The new administration should commit to provide the ANSDF with sufficient direct operational support in the key counterinsurgency capabilities these units inherently lack and will continue to lack through at least 2020: aeromedical casualty evacuation, aerial troop transport to crisis areas, timely heavy indirect fire support from air and artillery, rapid and reliable logistical resupply, and reconnaissance and intelligence support down to brigade and regimental levels.⁵³ The 2016 U.S. military presence in Afghanistan still does too little in support of the ANSDF and has insufficient operational or strategic intelligence assets to independently monitor the increasingly negative interplay of Indian and Pakistani proxy agents or to track the ever-evolving cross-border terrorist milieu. A proper post-2016 residual American military presence should be composed of 20,000 personnel, not 9,800 or 10,800. It should feature much more intelligence capability. This kind of a commitment would not be inexpensive. It would likely cost U.S. taxpayers about \$20 billion a year in direct military costs and another \$3 to \$4 billion a year in indirect costs to pay for sustainment of the ANSDF.⁵⁴ But this would be less than a \$10 billion increase for a capable force from the \$15 billion spent in 2015 for the sustainment of an under-resourced and insufficiently capable one scheduled to fall to 5,500 troops in late 2016.⁵⁵

Across the border, a prudent policy moving forward would sustain U.S.-Pakistan CT collaboration with annual CSF authorities of up to, but not exceeding, \$750 million per year, along with sustained economic-related support authority of up to \$500 million a year and another \$300 million a year in broader security assistance programs.⁵⁶ These amounts would not make the Pakistani military and intelligence services end their unhelpful relationships with Salafi jihadist militant outfits. However, the sums would help sustain U.S.-Pakistani dialogue in both military-to-military and civilian-to-civilian forums and keep open the possibilities for critical terrorist information exchange and—if needed—crisis response.

Vital Interest 3: Constrain Proliferation of Nuclear Weapons on the Subcontinent

Although related to those above, this is a distinct U.S. vital regional security interest. India and Pakistan have been vexing to American nuclear

nonproliferation interests for more than 40 years. India and Pakistan acquired nuclear weapons despite American and international blandishment and warnings. Both withstood international military and economic sanctions after their announced testing of nuclear weapons in 1998. But in the mid-2000s, their nuclear weapons trajectories diverged. India, championed by the George W. Bush administration as a responsible steward of its nuclear weapons arsenal, gained exceptional status as a nuclear weapons state in 2008. Pakistan remained an international nuclear pariah without formal recognition for its nuclear arsenal, which continues to grow and is feared to be at growing risk from loss to a terrorist organization.⁵⁷

For most of the past 60 years, American Presidents have been strong advocates of preventing the spread of nuclear weapons to countries beyond the original “nuclear weapons states club”: the United States, Soviet Union (Russia), China, Great Britain, and France.⁵⁸ Since 1972, most American administrations have been verbal proponents of halting the growth of standing nuclear weapons arsenals or reducing their size despite the massive growth of the U.S. nuclear arsenal during the height of the Cold War. From at least 1992 and the dissolution of the Soviet Union, American Presidents also have focused on preventing the spread of nuclear weapons to international criminal organizations and terrorist groups.⁵⁹

The Obama administration’s comprehensive approach to nuclear nonproliferation differed in form from the pragmatic flexibility pursued by the administration of George W. Bush in South Asia.⁶⁰ Under President Bush, the United States in September 2001 lifted the nuclear-related sanctions imposed on both India and Pakistan following their nuclear weapons tests in 1998.⁶¹ The lifting of sanctions against Pakistan was a quid pro quo for an urgently required U.S.-Pakistan partnership in the American-led war on terror and imminent American attacks against the Taliban and al Qaeda in Afghanistan. The near-simultaneous lifting of sanctions against India set the conditions for something even bigger: a pathbreaking India-U.S. civil nuclear deal. Announced as an aspiration in July 2005, negotiated and signed by 2006, and ratified in 2008, this India-U.S. Civil Nuclear Agreement (or 123 Agreement) moved India from international nuclear outcast to insider.⁶² It also worried China and upset Pakistan.

China fretted over the deal because of its obvious pathway for greater Indian strategic interaction with the United States. Beijing protested, briefly, that the deal unfairly excluded Pakistan, arguing that Islamabad should be accorded a similar exception. When the United States and other nations countered that Pakistan had a highly checkered record of safeguarding its nuclear weapons technology, Beijing backed off.⁶³ But China then sold Pakistan additional civil nuclear reactors in what was

seen as a violation of nuclear sanctions against Pakistan, but what Beijing argued was an allowed “grandfathered exemption” to its 2004 accession to the Nuclear Suppliers Group non-transfer prohibitions for Pakistan.⁶⁴ India, as does the rest of the world, worries that these new reactors will augment Pakistan’s ability to harvest nuclear weapons fuel for its expanding nuclear weapons arsenal.

The new administration will have three major nonproliferation concerns with Pakistan. First, the continuing overall growth of Pakistan’s nuclear weapons arsenal is historic and destabilizing. In 2015 Pakistan had a nuclear weapons stockpile of 110 to 130 warheads, up from an estimated 90 to 110 in 2011.⁶⁵ This gave Pakistan the world’s sixth largest nuclear weapons arsenal—only behind the arsenals of the original six pre-Nuclear Non-Proliferation Treaty nuclear weapons states. Pakistan’s presumed mastery of the processes for building lighter, smaller tactical nuclear weapons (miniaturization) means that it now has the potential to produce up to 15 tactical nuclear systems a year, which is forecast to grow to an additional 30–35 per year from 2020.⁶⁶

Second, Pakistan continues to develop smaller nuclear warheads and more accurate short-range delivery systems for these warheads, clearly setting the conditions for their use in a battlefield scenario. This increases both the risk of nuclear weapons use in the event of a general Indo-Pakistani war and the risk of accidental loss or theft of these more widely dispersed nuclear devices.

Finally, domestic radicalization and proliferating Islamist terrorist and violent extremist groups in Pakistan put it at serious risk of national fragmentation and severe domestic violence. In these extreme but entirely plausible scenarios, the risks of terrorists or rogue international actors acquiring nuclear weapons or material grows precipitously.⁶⁷

The new U.S. administration should continue CT engagement as well as offers of assistance to Pakistan to safeguard its nuclear arsenal. At the same time it should sustain recent U.S. practices of discouraging Pakistan from its nuclear weapons growth trajectory with information sessions and earnest discussion about the dangers from and counter-productivity of tactical nuclear weapons.⁶⁸ There can be no illusions that Pakistan will be easily dissuaded from its present nuclear weapons course. At the same time, Pakistan is nowhere near ready for consideration as a civil nuclear deal (123 Agreement) partner. Yet discussions about where and how far Pakistan must go to be viewed as a responsible player offer more promise for eventual reversal of Islamabad’s dangerous course than does a policy of isolation.

There also are concerns with India’s nuclear weapons nonproliferation standards, although not as acute as those concerns with Pakistan.

Three stand out. First, when compared to Pakistan, India's nuclear weapons safeguards are not independently verified and feared to be somewhat weak despite Indian insistence to the contrary.⁶⁹ While treading gently so as not to excite a negative Indian response, the new administration should encourage greater Indian transparency. Second, India has a long-standing policy of "no first use" (NFU) of nuclear weapons, meaning that India will not use nuclear weapons first, but if its opponents do, then India's response would be overwhelming.⁷⁰ Incoming Prime Minister Modi ruled out change of the NFU policy in August 2014, but some in the Indian military community continue to agitate for a revision away from massive retaliation and toward "punitive" retaliation if struck first.⁷¹ Any such change in Indian nuclear use policy would be unhelpful for strategic stability between India and Pakistan and between India and China. The new American administration should take every opportunity to encourage the Indian government to sustain its NFU doctrine.

Finally, the nuclear ballistic missile competition between Pakistan and India is close to spurring a serious arms race. Both have flight-tested ballistic missiles with short- and longer range delivery capability for nuclear warheads. Pakistan's ballistic arsenal can now reach targets in all of India. India's can now reach targets throughout China. India and China have the technical know-how to place multiple warheads atop some of their missiles and to deploy limited ballistic missile defenses.⁷² Any serious move by India to pursue even a limited ballistic missile defense (BMD) against Pakistan's growing nuclear arsenal—as some in its hawkish minority now advocate—would have major ripple effects. Growth in Indian BMD coupled with testing of multiple reentry vehicle nuclear warhead technology could be seen as threatening by China, igniting an undesirable and dangerous nuclear missile versus antiballistic missile arms race.⁷³ In addition, investments by India and Pakistan in sea-based nuclear weapons delivery capabilities are increasing and create greater uncertainty and instability in the region.⁷⁴ American nonproliferation interests require that the incoming administration conduct an earnest dialogue with the Indian government about the advisability of restraint in these areas.⁷⁵

Given the multivariate challenges to nuclear weapons nonproliferation in Pakistan and India, the new administration will be best advised to pursue prudent pragmatism as its regional nonproliferation approach.

Major Interest 4: Nurture the Rise of India as a Strategic Partner

In early 2012, the Obama administration announced its "Rebalance to the Asia-Pacific Strategy."⁷⁶ By the summer of 2012, senior American defense officials like then-Secretary of Defense Leon Panetta and then-U.S.

Pacific Command Commander Admiral Samuel Locklear made it clear that this region included India—speaking openly about the rebalance focusing on the Indo-Asia-Pacific region.⁷⁷ With these clarifications of geographic intent, the U.S. rebalance to the Indo-Pacific incorporated its decade-old emerging strategic engagement with India.

The warming relations between the two countries had an economic baseline. But they also had a security and defense component influenced by India's growing financial ability to purchase American military hardware and informed by India's potential to be a defense partner in balancing against the possible rise of a militarily assertive and anti-status quo China.⁷⁸ From 2004 to 2008, the Bush administration set the conditions for this growing security collaboration.⁷⁹

The Obama administration significantly extended these Bush administration advances and simultaneously linked a decade of bilateral U.S.-Indian defense and security interactions with the U.S. rebalance strategy when it signed the Joint Strategic Vision for the Asia-Pacific and Indian Ocean Region (JSV) with India in January 2015.⁸⁰ The U.S.-India JSV put on paper the basic framework for U.S.-Indian security cooperation, emphasizing the common interests between Washington and New Delhi in assuring that the entire Indo-Pacific region remains one where the following conditions prevail:

- maritime security is safeguarded
- freedom of navigation and overflight remains unfettered, including in the South China Sea
- all parties choose peaceful means for the resolution of territorial and maritime disputes
- the interests of peace, prosperity, and stability are underpinned by a common commitment to human rights.⁸¹

Although it will not become a military ally in the foreseeable future, India is a good bet to become a valuable security partner of the United States and other East Asian countries against an aggressive and anti-status quo China. While India remains a strong trading partner with China—and relies upon this partnership to meet its ambitious annual gross domestic product growth goals—India's geopolitical issues with China make it plausible that India could become adversarial with China at some point in the future.⁸²

Figure 2. Disputed Border and Territory Areas Between India and China



Source: CIA

Geopolitical strains between India and China are evident in five major areas. First, India and China have a large and seemingly intractable land border dispute over 133,000 square kilometers of contested land⁸³ (see figure 2). They fought a short, sharp war over these borders in 1962. Despite decades of halting diplomatic talks, the borders remain unresolved.⁸⁴ Second, even though India recognized Chinese territorial sovereignty over Tibet in the 1950s—with the caveat that China respect the cultural, religious, and social uniqueness of Tibet—New Delhi has been aggravated by Chinese treatment of Tibet, offering the Dali Lama safe haven in the late 1950s and supporting the Lama's ownership of his Buddhist successor selection. India views the growing presence of Chinese military units and construction outfits there to be menacing.

Third, India chafes over China's decades-long role as an enabler of Pakistan's military. From the 1960s, China has been the main channel for information and equipment necessary to advance Pakistan's heavily embargoed nuclear power program and its nuclear weapons activities.⁸⁵ For the past two decades, China has been a key conduit of information to Pakistan on the design of ballistic missiles and, more recently, tactical nuclear weapons.⁸⁶ Almost all security observers in India are wary that China would become party to a two-front war with India should any combination of the three come to blows.

Fourth, India worries greatly about Chinese maritime activities in the Indian Ocean. Many Indians believe that ongoing Chinese efforts at acquiring deep water berthing ports for commercial activities there are actually a step toward building a “string of pearls” to encircle India.⁸⁷ In 2015 and 2016, the government of Prime Minister Modi moved to assert its soft-power tools, courting neighboring countries such as Bangladesh, Sri Lanka, the Maldives, and the Seychelles with lucrative commercial port alternatives to those from China. At the same time, more Indian voices advocate the use of hard power against Chinese maritime encroachment in the Indian Ocean maritime space.

Finally, India has great and growing concerns about Chinese respect for freedom of navigation on the high seas. New Delhi has been worried about Chinese aggressive claims and its threats of force to gain control over the important international navigation space in the South China Sea. India has been a critic of Chinese actions and acted as a friend to the states of Southeast Asia who challenge Chinese hegemonic encroachment. India has sent its warships into waterways astride Vietnam and China, and in the vicinity of disputed South China Sea islands. India should be expected to continue with these unilateral actions challenging China should Beijing not desist in its assertive South China Sea activities.⁸⁸

Since 2010, India has participated in more annual military exercises with U.S. military forces than with any other nation in the world.⁸⁹ It will remain difficult for the new U.S. administration to dramatically accelerate the pace or the scope of India’s bilateral engagement with America. India’s historic preference for strategic autonomy remains strong and will inhibit any formal alliance. This means that New Delhi will partner with Washington in areas of common security and economic interest where China’s actions do not align.

Anticipating the certainty of challenges with the pace and the depth of U.S.-Indian bilateral security progress in the years from 2017 to 2020, the incoming U.S. administration might best think in terms of how it can help facilitate deeper Indian bilateral engagements with Washington’s other security partners in the Indo-Pacific region. This approach—one involving “third party facilitation” of an enhanced web of Indian security partnerships across the wider Pacific region—should feature three areas for administration attention: military technology, multilateral military doctrine, and regional training partnerships.

The new administration should conduct a review of standing U.S. export constraints on certain military technology transfers. As an example, India may become interested in purchasing Japanese submarines with quiet propulsion technology.⁹⁰ Existing U.S. export controls on this technology might constrain Japan’s ability to sell or license it to India. The

U.S. critical technologies standards could—and should—be updated to allow for this kind of a mutually beneficial exchange.

The incoming administration should be creative in its approaches to military training and doctrinal development with India. In the area of doctrine, the United States might work with India to establish regional partnership forums to discuss the way ahead for shared doctrine in the areas of military cyberspace, military operations in space, military operation of remotely piloted vehicles, and other emerging defense areas. Indian officials have expressed interest in becoming a “training node” for Southeast Asia and Pacific states’ militaries seeking to become interoperable in activities ranging from disaster management and relief to coastal waterway security and beyond.⁹¹ The United States might look at creative ways to encourage regional hub training centers for multilateral military interactions.

At the end of the day, India’s rise as a hedge against malevolent Chinese behavior in the Indo-Pacific region uniquely supports a vital U.S. security interest. If the incoming administration can work around Indian security peculiarities patiently, it can shape an Indo-Pacific Ocean security architecture featuring India, Japan, Australia, South Korea, and others capable of limiting malign Chinese behaviors and of safeguarding the standards and norms of the post–World War II economic and security architecture in the Far East—and at a bearable cost to U.S. taxpayers.

Major Implications for U.S. Security Policy in South Asia

Absent a truly unexpected event or an unlikely set of circumstances, the United States will have four major national security interests in South Asia from 2017 to 2020. Three of these interests are vital and will require administration policy and strategy to prevent actions that could gravely damage U.S. security. The challenge is “to keep a lid” on the potential for a major terrorist strike of the U.S. homeland emanating from South Asia—or, from a major interstate war that could risk nuclear fallout, involvement of China, the loss of nuclear material to terrorists, or a combination of all three. A fourth objective requires flexible administration strategy and activities to enhance the natural trajectory of an emerging security partner, India, in a manner that supports U.S. security objectives in the Indo-Pacific region.

The incoming administration must work to inhibit the potential for major conventional or nuclear war between India and Pakistan that might embroil China. Success in this objective will require a mixture of diplomatic acumen and properly positioned U.S. military forces in countries that will host them—like Afghanistan.

Simultaneously, the new administration will need to invest wisely in policies and activities that prevent any return of safe havens for international terrorist outfits in Afghanistan or western Pakistan. To attain this challenging objective, Washington policymakers must do a thorough review of the insufficient U.S. force structure in Afghanistan, increasing the number and properly balancing the composition of U.S. forces, while maintaining a proper basing structure throughout Afghanistan including locations in Kabul, Bagram, Kandahar, and across the East and South-east of the country. The incoming administration also should continue to pursue CT cooperation with Pakistan, reframing it in a manner that continues the beneficial aspects at a reduced cost and that sustains important military-to-military interactions and intelligence access.

The incoming administration also will be challenged to inhibit the proliferation of nuclear weapons on the subcontinent. But a pragmatic and discriminate nuclear nonproliferation approach could achieve the most important regional aims. Limiting the potential for nuclear weapons use in a major Indo-Pakistani war is a paramount objective. Continuing multilateral dialogue to educate Pakistan about the counterproductive nature of battlefield nuclear weapons use is a key element. The new administration should work to assure Pakistani openness to nuclear weapons security best practices and exchanges and to validation of the security of Pakistan's nuclear arsenal. Enabled by a proper balance of U.S. intelligence assets in Afghanistan, the administration also should seek to anticipate major risks for loss or compromise of Pakistani nuclear weapons and materials, resolving to arrest any such compromise before it can occur.

Finally, the incoming administration has an unparalleled opportunity to extend and enhance India's ongoing rise in the regional and international security system. It should steadily expand on already growing bilateral defense initiatives in the areas of military hardware purchases, military exercises and training, and military administration dialogues. It also should abet third-party facilitation of Indian bilateral security activities with longstanding American defense partners in the Asia-Pacific region, especially Japan, South Korea, and Australia, in support of the current Indo-Pacific security and economic order and as a hedge against potential Chinese challenges to that order.

The first three vital regional U.S. national security interests share one common theme: the need to establish a proper U.S. military and intelligence presence in Afghanistan. Properly sizing—and paying for—an American military presence in Afghanistan into 2020 enables key elements of the top three U.S. national security interests: preventing major Indo-Pakistani war emanating from a proxy spiral from inside Afghani-

stan, militating against the return of any globally capable terrorist combination to safe haven in Afghanistan or Pakistan, and thoroughly tracking and—if necessary—responding to the loss or theft of nuclear weapons material in Pakistan by terrorists or criminals.⁹²

A properly scoped American military presence in Afghanistan combined with a reduced but sustained U.S. counterterrorism partnership with Islamabad also helps keep the Pakistan military-intelligence complex engaged in the regional fight against traditional and emergent terrorist organizations with global reach. Sustained U.S.-Pakistan CT interaction also helps to enable military-diplomatic access to Pakistan military leaders in order to monitor and/or help arrest dramatic escalation in a future India-Pakistan military crisis or militate against an implosion of security or stability in Pakistan itself.

South Asia should rank among the top-five focus areas for new administration national security priorities. It will continue to engage vital U.S. security interests in CT, nuclear nonproliferation, and the deterrence of major interstate war between nuclear weapons nations. It will also involve a major interest in managing the rise of India in the shadow of China. The costs to national treasure for sound management of these vital security interests should come to about 20,000 U.S. troops and \$25 billion in Afghanistan, 500 to 1,000 U.S. troops and about \$2.5 billion in U.S. CT and other aid in Pakistan, and a robust and growing military-to-military exercise and exchange presence with India. The expense will not be trivial, but the national security benefits will be great.

Notes

¹ Bruce Riedel, *JFK's Forgotten Crisis: Tibet, The CIA and the Sino-Indian War* (Washington, DC: Brookings Institution, 2015).

² Shri Ram Sharma, *India-USSR Relations, 1947–1971: From Ambivalence to Steadfastness, Part-I* (New Delhi: Discovery Publishing House, 1999); Andrew Small, *The China-Pakistan Axis: Asia's New Geopolitics* (New York: Oxford University Press, 2015), 9–16.

³ There are several other relatively new opportunities for increased American security engagement across South Asia between 2017 and 2020. Burma (Myanmar) and Sri Lanka are continuing to emerge from lengthy periods of international sanction for human rights abuses and are anxious for greater direct American security engagements. Nepal is ready for greater American assistance with security-sector reform. Bangladesh continues to request more engagement in U.S. military naval and special operations forces exercises along with continuing counterterrorism financial and maritime-shore security equipment support. Worthy of American national security attention as these opportunities are, none of them rise to the threshold of major American security interests in South Asia. See Murray Hiebert, “Engaging Myanmar’s Military: Carpe Diem Part II,” *CSIS.org*, September 5, 2013, available at <<https://csis.org/publication/engaging-myanmars-military-carpe-diem-part-ii>>; David Brunnstrom, “U.S. General Eager for Myanmar Engagement, Awaiting Policy Decision,” *Reuters*, December 8, 2015, available at <www.reuters.com/article/us-usa-myanmar-military-idUSKBN0TR21B20151208>; Department of State Fact Sheet,

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⁴ This chapter identifies three vital and enduring U.S. national security interests in South Asia. The author's assessment of these as *vital*—meaning that a failure to meet them would lead to significant harm to the American homeland—concurs with and extends similar assessments found in James Dobbins et al., ed., *Choices for America in a Turbulent World* (Santa Monica, CA: RAND, 2015), 108–110, 113–119, available at <www.rand.org/content/dam/rand/pubs/research_reports/RR1100/RR1114/RAND_RR1114.pdf>; and "Threats to U.S. Vital Interests: Where Are U.S. Interests Being Threatened Around the World?" *2016 Index of U.S. Military Strength* (Washington, DC: Heritage Foundation, 2016), available at <<http://index.heritage.org/military/2016/assessments/threats/>>.

⁵ For example, see Bharat Karnad, *Why India Is Not a Great Power (Yet)* (London: Oxford University Press, 2015).

⁶ See Stephen P. Cohen, *Shooting for a Century: The India-Pakistan Conundrum* (Washington, DC: Brookings Institution, 2013), 88–117; C. Christine Fair, *Fighting to the End: The Pakistan Army's Way of War* (New York: Oxford University Press, 2014), 136–153.

⁷ Polly Nayak and Michael Krepon, *U.S. Crisis Management in South Asia's Twin Peaks Crisis* (Washington, DC: Stimson Center, 2006); Polly Nayak and Michael Krepon, *The Unfinished Crisis: U.S. Crisis Management After the 2008 Mumbai Attacks* (Washington, DC: Stimson Center, February 2012).

⁸ "Everything Will Be Fine Soon: PM Modi on Kashmir Ceasefire Violations," *The Times of India* (Mumbai), October 8, 2014, available at <<http://timesofindia.indiatimes.com/India/Everything-will-be-fine-soon-PM-Modi-on-Kashmir-ceasefire-violations/articleshow/44713666.cms>>; George Perkovich and Toby Dalton, "Modi's Strategic Choice: How to Respond to Terrorism from Pakistan," *The Washington Quarterly* 38, no. 1 (Spring 2015), 23–45.

⁹ This scenario is cited as a feasible one leading to general Indo-Pakistani war in Michael E. O'Hanlon, *The Future of Land Warfare* (Washington, DC: Brookings Institution, 2015), 109–116.

¹⁰ Violating the standing ceasefire agreement, units from Pakistan's Punjab Rangers and its X Corps exchanged artillery, mortar, rocket, and small arms fire with elements of the Indian Army Northern Command in 60 incidents from July 2014 to November 2015. Both sides engaged in deadly violations. Their exchanges reportedly resulted in the deaths of 22 Indian soldiers, 19 Pakistani soldiers, and nearly 90 civilians, with dozens more military personnel wounded and hundreds of civilians wounded and displaced from homes near the border. See Kamran Yousaf, "Pakistan, India Agree to Stop Ceasefire Violations at Working Boundary," *The Express Tribune* (Karachi), September 12, 2015, available at <<http://tribune.com.pk/story/955626/pakistan-india-agree-to-stop-cease-fire-violations-at-working-boundary/>>; Perkovich and Dalton, 23–26.

¹¹ Niharika Mandhana and Aditi Malhorta, "Indian Forces Hunt for Militants After Deadly Attack on Air Force Base," *Wall Street Journal*, January 3, 2016, available at <www.wsj.com/articles/indian-forces-hunt-for-militants-after-deadly-attack-on-air-force-base-1451820057>; Navjeevan Gopal, "Pathankot Attack: Parrikar Admits 'Gaps' in Security, Says Terrorists Used 'Pak-made' Equipment," *The Indian Express* (Uttar Pradesh),

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January 5, 2016, available at <<http://indianexpress.com/article/india/india-news-india/terrorists-used-pakistan-made-equipment-in-pathankot-attack-manohar-parrikar/>>.

¹² See Umar Farooq, "Afghanistan-Pakistan: The Covert War," *The Diplomat*, January 1, 2014, available at <<http://thediplomat.com/2014/01/afghanistan-pakistan-the-covert-war/>>.

¹³ "Reports: Indian Consulate in Afghan City Attacked," Radio Free Europe–Radio Liberty, January 3, 2016, available at <www.rferl.org/content/afghanistan-indian-consulate-attacked/27465427.html>.

¹⁴ "Pakistani Non-State Actors Backed by State Responsible for Pathankot Attack, Says Parrikar," *FirstPost.com*, March 1, 2016, available at <www.firstpost.com/world/pakistani-non-state-actors-backed-by-state-responsible-for-pathankot-attack-says-parrikar-2650334.html?utm_source=FP_CAT_LATEST_NEWS>; "Pakistan Military Officers behind Indian Consulate Attack: Afghan Police," *HindustanTimes.com*, January 13, 2016, available at <www.hindustantimes.com/india/top-afghan-official-says-pakistan-military-officers-behind-indian-consulate-attack-in-mazar-e-sharif/story-tpMK8zHcCm-Kiv4HY8FNBDM.html>.

¹⁵ Gareth Price, *India's Policy Towards Afghanistan* (London: Chatham House, August 2013), 3, 9.

¹⁶ "Afghanistan Turns to India for Military Helicopters," *Dawn* (Karachi), November 6, 2015, available at <www.dawn.com/news/1217859>; "Taking Ties to the Next Level—India Gifts MI-25 Helicopters to Afghanistan," *MotivateMe.in*, December 24, 2015, available at <<http://motivateme.in/taking-ties-to-the-next-level-india-gifts-mi-25-helicopters-to-afghanistan/>>.

¹⁷ "Farhkhhor Air Base: India's Foreign Military Base," Indian Aerospace and Defence News, December 27, 2015, available at <<http://iadnews.in/2015/12/farkhor-air-base-in-dias-foreign-military-base/#.VoKlKf1liM8>>; "Tajikistan Entertains Indian Offer for Air Base," *SilkRoadReporters.com*, July 17, 2015, available at <www.silkroadreporters.com/2015/07/17/tajikistan-entertains-indian-offer-for-air-base/>; Joshua Kucera, "India's Central Asia Soft Power," *The Diplomat*, September 3, 2011, available at <<http://thediplomat.com/2011/09/indias-central-asia-soft-power/>>.

¹⁸ For a discussion of India's upgrades to its military and intelligence access in Tajikistan, see Rajeev Sharma, "India's Anyi Military Base in Tajikistan is Russia-locked," *Russia and India Report*, October 26, 2012, available at <http://in.rbth.com/articles/2012/10/26/indias_ayni_military_base_in_tajikistan_is_russia-locked_18661.html>; "India, Tajikistan to Step Up Counter-Terrorism Cooperation," *Business Standard* (New Delhi), September 11, 2014, available at <www.business-standard.com/article/pti-stories/india-tajikistan-to-step-up-counter-terrorism-cooperation-114091101203_1.html>.

¹⁹ Siemon T. Wezeman, "International Arms Transfers," in *SIPRI Yearbook* (Stockholm: Stockholm International Peace Research Institute, 2013), available at <www.sipri.org/yearbook/2014/05>.

²⁰ India is focused on modernization of its Soviet-era carrier-based aircraft systems, its attack aircraft, its unmanned aerial vehicles, its antitank missiles, and its air mobility. See Rama Lakshmi, "India Is the World's Largest Arms Importer: It Aims to Be a Big Weapons Dealer, Too," *Washington Post*, November 16, 2014, available at <www.washingtonpost.com/world/asia_pacific/india-is-the-worlds-largest-arms-importer-it-aims-to-be-a-big-weapons-dealer-too/2014/11/15/10839bc9-2627-4a41-a4d6-b376e0f860ea_story.html>.

²¹ The detailed historical review of the 2001–2002 "Twin Peaks" crisis by researchers also suggests that American diplomatic intervention proved a critical inhibitor to conflict escalation in a pattern they found repeated in many respects during the 2008 Mumbai Crisis. See Nayak and Krepon, *U.S. Crisis Management*; Nayak and Krepon, *The Unfinished Crisis*.

²² For a detailed description and analysis of India's Cold Start doctrine, see Walter C. Ladwig III, "A Cold Start for Hot Wars? The Indian Army's New Limited War Doctrine," *International Security* 32, no. 3 (Winter 2007/2008), 158–190; also see Nitin Gokhal, "India Military Eyes Combine Threat," *The Diplomat*, January 17, 2012, available at <<http://thediplomat.com/2012/01/17/india-military-eyes-combined-threat/>>. For more on Indian limitations in attaining its doctrinal aims, see Shashank Joshi, "The Mythology of Cold Start," *New York Times* blog, November 4, 2011, available at <<http://india.blogs.nytimes.com/2011/11/04/the-mythology-of-cold-start/>>. For an alternative name to Cold Start, *proactive doctrine*, first observed in 2012–2013 Indian military writings, see Dhruv Katoch, *Looking Beyond the Proactive Doctrine* (New Delhi: Centre for Land Warfare Studies, September 2013), available at <<http://strategicstudyindia.blogspot.com/2013/09/looking-beyond-proactive-doctrine.html>>.

²³ See Feroz Hassan Khan, *Eating Grass: The Making of the Pakistani Bomb* (Stanford: Stanford University Press, 2012), 381–382.

²⁴ As observed by Indian national security adviser Shiv Shankar Menon in August 2012, India's civilian leadership perceives Pakistan's nuclear weapons program to be aimed at reducing India's conventional military advantage, not for deterrence against nuclear weapons first use: "The possession of nuclear weapons has, empirically speaking, deterred others from attempting nuclear coercion or blackmail against India . . . unlike certain other nuclear weapons states, India's weapons were not meant to redress a military imbalance or some perceived inferiority in conventional terms." Quoted in "India Faced N-blackmail Thrice: NSA," *Hindustan Times* (New Delhi), August 21, 2012.

²⁵ Jaganath Sankaran, "Pakistan's Battlefield Nuclear Policy: A Risky Solution to an Exaggerated Threat," *International Security* 39, no. 3 (Winter 2014/2015), 118–151; Tom Hundley, "Pakistan and India: Race to the End," Pulitzer Center on Crisis Reporting, September 5, 2012, available at <<http://pulitzercenter.org/reporting/pakistan-nuclear-weapons-battlefield-india-arms-race-energy-cold-war>>.

²⁶ Hans M. Kristensen and Robert S. Norris, "Pakistan's Nuclear Forces, 2011," *Bulletin of the Atomic Scientists* 67, no. 4 (2011), 83, available at <<http://bos.sagepub.com/content/67/4/91.full.pdf+html>>.

²⁷ Joby Warrick, "Nuclear Experts Say Pakistan May Be Building a 4th Plutonium Reactor," *Washington Post*, February 9, 2011.

²⁸ Cited in "Pakistan Successfully Test Fires Hatf-9 Nasr Missile," *The Nation* (Lahore), May 29, 2012, available at <www.nation.com.pk/pakistan-news-newspaper-daily-english-online/national/29-May-2012/pakistan-successfully-test-fires-hatf-9-nasr-missile>.

²⁹ Kristensen and Norris, 93.

³⁰ Table from Thomas F. Lynch III, *Crisis Stability and Nuclear Exchange Risks on the Subcontinent: Major Trends and the Iran Factor*, INSS Strategic Perspectives 14 (Washington, DC: NDU Press, November 2013), 8.

³¹ On the dynamic of signaling versus credibility in relation to U.S. military historical experience with battlefield nuclear weapons and the applicability to Pakistan, including his conclusion that, "rather than improving Pakistan's deterrence of India, these weapons hold only the promise of lowering the nuclear threshold and guaranteeing a larger nuclear exchange by both sides once they are used," see David O. Smith, *The U.S. Experience with Nuclear Weapons: Lessons for South Asia* (Washington, DC: Stimson Center, 2013), especially 31–41. Also see Akhilesh Pillalamarri, "Confirmed: Pakistan Is Building 'Battlefield Nukes' to Deter India," *NationalInterest.org*, March 24, 2015, available at <<http://nationalinterest.org/blog/the-buzz/confirmed-pakistan-building-battlefield-nukes-deter-india-12474>>. On the degree to which Pakistan's ambiguous and uncertain relationship with Islamic militants and terrorist organizations acting in Jammu-Kashmir and India render it a dubious "unitary actor" in the construct of nuclear weapons deterrence

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theory, see George Perkovich, *The Non-Unitary Model and Deterrence Stability in South Asia* (Washington, DC: Stimson Center, November 13, 2012), 8–16.

³² See Zachary Keck, “Watch Out, India: Pakistan Is Ready to Use Nuclear Weapons,” *NationalInterest.org*, July 8, 2015, available at <<http://nationalinterest.org/blog/the-buzz/watch-out-india-pakistan-ready-use-nuclear-weapons-13284>>; interview with a senior Pakistani Strategic Plans Directorate official by author in Washington, DC, February 2011; Maria Sultan, “Cold Start Doctrine and Pakistan’s Counter- measures: Theory of Strategic Equivalence-III,” *The News* (Karachi), September 30, 2011, available at <www.thenews.com.pk/TodaysPrintDetail.aspx?ID=70218&Cat=2>; Vipin Naran, “Pakistan’s Nuclear Posture: Implications for South Asian Stability (Cambridge, MA: Belfer Center for Science and International Affairs, January 2010), available at <http://belfercenter.ksg.harvard.edu/publication/19889/pakistans_nuclear_posture.html>; interview with former Pakistani nuclear weapons program leader by author in Washington, DC, November 2012.

³³ *National Strategy for Counterterrorism* (Washington, DC: The White House, June 2011), 2–3, 8–13. Also see Thomas F. Lynch III, *The 80 Percent Solution: The Strategic Defeat of bin Laden’s al-Qaeda and Implications for South Asian Security* (Washington, DC: New America Foundation, February 2012).

³⁴ Terrorism and radicalism in Bangladesh continue to pose a threat to foreigners—and often Westerners—residing there. There is some evidence that international terrorism facilitators transit Bangladesh. See “U.S. Updates Security Alert in Bangladesh,” *Dhaka-Tribune.com*, October 18, 2015, available at <www.dhakatribune.com/bangladesh/2015/oct/18/us-updates-security-alert-bangladesh>; *The Role of Civil Society in Countering Radicalization in Bangladesh* (Dhaka: Bangladesh Enterprise Institute, September 2014). In addition, India remains at moderate risk from attempts by al Qaeda of the Indian Subcontinent to radicalize its Muslim youth for local terror activities and from the Islamic State of Iraq and the Levant (ISIL) to leverage sympathetic Indian Muslims for social media support of its global recruiting quest. See Elizabeth Bennet, “A Comeback for al-Qaeda in the Indian Subcontinent?” *Foreign Policy Journal*, May 12, 2015, available at <[www.foreignpolicyjournal.com/2015/05/12/a-comeback-for-al-qaeda-in-the-indian-subcontinent/](http://foreignpolicyjournal.com/2015/05/12/a-comeback-for-al-qaeda-in-the-indian-subcontinent/)>; Praveen Swami, “Al-Qaeda Chief Ayman al-Zawahiri Announces New Front to Wage War on India,” *Indian Express* (New Delhi), September 4, 2014, available at <<http://indianexpress.com/article/india/india-others/al-qaeda-leader-ayman-al-zawahiri-announces-formation-of-india-al-qaeda/>>. But these counterterrorism issues pale in comparison to those in Afghanistan and Pakistan.

³⁵ See Lynch, *The 80 Percent Solution*, 810.

³⁶ See “Al-Qaeda Chief Zawahiri Launches al-Qaeda in South Asia,” BBC News Asia, September 4, 2014, available at <www.bbc.com/news/world-asia-29056668>; “Full Text of Al Qaeda Chief Ayman al-Zawahiri’s Audio Message,” *TheDailyStar.net*, available at <www.thedailystar.net/upload/gallery/pdf/transcription-zawahiri-msg.pdf>.

³⁷ See “Pakistan Wants Afghanistan to Hand Over Maulana Fazlullah,” *The Express Tribune* (Karachi), October 21, 2014, available at <<http://tribune.com.pk/story/454861/pakistan-wants-afghanistan-to-hand-over-maulana-fazlullah/>>; Bill Roggio, “U.S. Military Continues to Claim al Qaeda Is ‘Restricted’ to ‘Isolated Areas of Northeastern Afghanistan,’” *The Long War Journal*, November 19, 2014, available at <www.longwarjournal.org/archives/2014/11/us_military_continue.php>; Zahir Shah Sherasi, “U.S. Drone Strike Kills 7 on Pak-Afghan Border,” *Dawn* (Karachi), September 14, 2014, available at <www.dawn.com/news/1131869/us-drone-strike-kills-7-on-pak-afghan-border>.

³⁸ ISIL is the official name used by the U.S. Government, originating at the U.S. National Counter Terrorism Center (NCTC), for the Salafi jihadist terrorist group led by Abu Bakr al Baghdadi, headquartered in Raqqa, Syria, and Mosul, Iraq, and alternatively known as the Islamic State of Iraq and Syria (ISIS) and the Islamic State (IS). Although many of the sources and citations in this chapter for the group reference ISIS or IS, ISIL

is used to remain consistent with the official U.S. nomenclature. See “Islamic State of Iraq and the Levant (ISIL),” *Counter Terrorism Guide*, available at <www.nctc.gov/site/groups/aqi_isil.html>.

³⁹ Thomas F. Lynch III, *The Islamic State as Icarus: A Critical Assessment of an Untenable Threat* (Washington, DC: Woodrow Wilson International Center for Scholars, October 2015), 14–16, 21–25, available at <www.wilsoncenter.org/sites/default/files/theislamic-stateasicarus.pdf>; Bill Roggio, “U.S. Drone Strike Kills Mufti of Islamic State Khorasan Province,” *The Long War Journal*, October 15, 2015, available at <www.longwarjournal.org/archives/2015/10/us-drone-strike-kills-mufti-of-islamic-state-khorasan-province.php>; Michael R. Gordon, “ISIS Building ‘Little Nests’ in Afghanistan, U.S. Defense Secretary Warns,” *New York Times*, December 18, 2015, available at <www.nytimes.com/2015/12/19/world/asia/afghanistan-ash-carter.html?action=click&contentCollection=Middle%20East&module=RelatedCoverage®ion=Marginalia&pptype=article>.

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⁴¹ *Enhancing Security and Stability in Afghanistan: A Report to Congress in Accordance with Section 1225 of the National Defense Authorization Act (NDAA) for Fiscal Year (FY) 2015* (Washington, DC: Department of Defense, December 2015), 16–24, available at <www.defense.gov/Portals/1/Documents/pubs/1225_Report_Dec_2015_-_Final_20151210.pdf>. Also see Elizabeth Williams, “Taliban Summer Offensive Shows Increasing Capability,” Institute for the Study of War, September 2014, available at <www.understandingwar.org/sites/default/files/Taliban%20violence%20report_0.pdf>; Eric Schmitt and David Sanger, “As U.S. Focuses on ISIS and the Taliban, Al Qaeda Re-emerges,” *New York Times*, December 29, 2015, available at <www.nytimes.com/2015/12/30/us/politics/as-us-focuses-on-isis-and-the-taliban-al-qaeda-re-emerges.html?ref=world&_r=0>; Jawad Sukhanyar and Mujib Mashal, “Bombings Near Kabul Airport Add to String of Attacks Around Afghan Capital,” *New York Times*, January 4, 2016, available at <www.nytimes.com/2016/01/05/world/asia/bombings-near-kabul-airport-add-to-string-of-attacks-around-afghan-capital.html?_r=0>.

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⁴³ Bill Roggio and Thomas Joscelyn, “U.S. Military Strikes Large al Qaeda Training Camps in Southern Afghanistan,” *The Long War Journal*, October 13, 2015, available at <www.longwarjournal.org/archives/2015/10/us-military-strikes-large-al-qaeda-training-camps-in-southern-afghanistan.php>; *Enhancing Security and Stability in Afghanistan*, 23–24.

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⁴⁵ Lucas Tomlinson, "Pentagon Pushing for Long-Term U.S. Presence at Bagram, as Taliban Gain Ground," *FoxNews.com*, December 28, 2015, available at <www.foxnews.com/politics/2015/12/28/pentagon-pushing-for-long-term-us-presence-at-bagram-as-taliban-gains-ground.html>. Mark Mazzetti and Eric Schmitt, "Obama's 'Boots on the Ground': U.S. Special Forces Are Sent to Tackle Global Threats," *New York Times*, December 27, 2015.

⁴⁶ Coalition Support Funds (CSF) normally take a year from Pakistani request to American reimbursement. Congress has set limits on the annual maximum amount of U.S. CSF that Pakistan's military can receive. In fiscal year (FY) 2014, this cap was \$1.2 billion; in FY2015 it was \$1 billion, with \$300 million of that made conditional on Pakistani actions against the Haqqani Network; in FY2016 the congressional cap was \$900 million. See Stephen Tankel, "Is the United States Cutting Pakistan Off? The Politics of Military Aid," *War on the Rocks*, August 31, 2015, available at <<http://warontherocks.com/2015/08/is-the-united-states-cutting-pakistan-off-the-politics-of-military-aid/>>.

⁴⁷ Alan Kronstadt, *Pakistan-U.S. Relations: Issues for the 114th Congress*, R44034 (Washington, DC: Congressional Research Service, May 14, 2015), 16.

⁴⁸ *Ibid.*, 16.

⁴⁹ Figure cited in multiple presentations by senior Pakistani military officials in Washington, DC, during 2015, including by Pakistani Air Chief Marshal Sohail Aman at a National Defense University student presentation, October 7, 2015.

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⁵¹ See Stephen Tankel, "Pakistan Militancy in the Shadow of the U.S. Withdrawal," in *Pakistan's Enduring Challenges*, ed. Christine Fair and Sarah J. Watson (Philadelphia: University of Pennsylvania Press, 2015).

⁵² Fair, "Pakistan's Security Shift Is Pure Fiction."

⁵³ The Afghan National Army had 152 D-30 howitzers in its inventory as of late 2013 and is eventually scheduled to have 204 fielded. It has a reasonable quantity of heavy indirect fire support, but it lacks the ground and air mobility to move these heavy artillery pieces to support infantry in the remote and foreboding territory where most counterinsurgency fighting occurs. See Praveen Swami, "Why India Is Concerned about Supplying Arms to Afghanistan," *FirstPost.com*, May 22, 2013, available at <www.firstpost.com/world/why-india-is-concerned-about-supplying-arms-to-afghanistan-800711.html>; Antonio Giustozzi with Peter Quentin, *The Afghan National Army: Sustainability Challenges Beyond Financial Aspects* (Kabul: Afghan Research and Evaluation Unit, February 2014), 3–6, 17–19, available at <www.ecoi.net/file_upload/1226_1400655058_ana-20issues-20paper.pdf>.

⁵⁴ For a detailed review of the numbers, functions, and costs of a sufficient residual U.S. military presence, see Thomas F. Lynch III, "After ISIS: Fully Reappraising U.S. Policy in Afghanistan," *The Washington Quarterly* 38, no. 2 (Summer 2015), 119–144.

⁵⁵ See Tom Vanden Brook, "Top U.S. General May Seek More Troops for Afghanistan," *USA Today*, December 29, 2015, available at <www.usatoday.com/story/news/world/2015/12/29/gen-john-campbell-afghanistan-taliban-isis/78033970>.

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⁵⁷ Dan Twining, "Pakistan and the Nuclear Nightmare," *ForeignPolicy.com*, September 4, 2013, available at <<http://foreignpolicy.com/2013/09/04/pakistan-and-the-nuclear-nightmare/>>.

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⁶⁰ Theodore Kalionzes and Kaegan McGrath, “Obama’s Nuclear Nonproliferation and Disarmament Agenda: Building Steam or Losing Traction?” *NTI.org*, January 15, 2010, available at <www.nti.org/analysis/articles/obamas-nuclear-agenda/>; Department of State, “Nuclear Security Summit: Washington, 2010,” available at <www.state.gov/t/isn/nuclear-securitysummit/2010/>.

⁶¹ John Bolton, “The Bush Administration’s Nonproliferation Policy: Successes and Future Changes,” testimony before the House International Relations Committee, March 30, 2004, available at <<http://2001-2009.state.gov/t/us/rm/31029.htm>>.

⁶² “The Timeline of the India-U.S. Nuclear Agreement,” *The News Minute* (Bangalore, Karnataka), February 25, 2015, available at <www.thenewsminute.com/article/timeline-india-us-nuclear-agreement-22957>; “Agreement for Cooperation between the Government of the United States of America and the Government of India Concerning Peaceful Uses of Nuclear Energy (123 Agreement),” Council on Foreign Relations, August 2007, available at <www.cfr.org/india/agreement-cooperation-between-government-united-states-america-government-india-concerning-peaceful-uses-nuclear-energy-123-agreement/p15459>; C. Raja Mohan, “10 Years of Indo-U.S. Civil Nuclear Deal: Transformation of the Bilateral Relationship Is the Real Big Deal,” *The India Express* (New Delhi), July 20, 2015, available at <<http://indianexpress.com/article/explained/10-ys-of-indo-us-civil-nuclear-deal-transformation-of-the-bilateral-relationship-is-the-real-big-deal/>>; “Joint Statement by President George W. Bush and Prime Minister Manmohan Singh,” press release, Department of State, July 18, 2005, available at <<http://2001-2009.state.gov/p/sca/rls/pr/2005/49763.htm>>.

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⁶⁶ See Shaun Gregory, “Terrorist Tactics in Pakistan Threaten Nuclear Safety,” *Combating Terrorism Center Journal* 4, no. 6 (June 2011), 4.

⁶⁷ On the plausibility of extreme violence, national fragmentation, and widespread civil disorder in Pakistan’s future, see Stephen P. Cohen, *The Future of Pakistan* (Washington, DC: Brookings Institution, 2011).

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⁶⁸ David O. Smith, *The U.S. Experience with Tactical Nuclear Weapons: Lessons for South Asia* (Washington, DC: Stimson Center, 2013), available at <www.stimson.org/images/uploads/research-pdfs/David_Smith_Tactical_Nuclear_Weapons.pdf>.

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⁷⁴ See "Pakistan Developing Sea-based Nuclear Arms," *The Times of India* (Mumbai), September 22, 2014, available at <<http://timesofindia.indiatimes.com/world/pakistan/Pakistan-developing-sea-based-nuclear-arms/articleshow/43115566.cms>>; Andrew Winner, "Why India and Pakistan Sea-based Nukes Are So Troubling," *The Interpreter* (Sydney), August 29, 2014, available at <www.lowyinterpreter.org/post/2014/08/29/Why-Indian-and-Pakistani-sea-based-nukes-are-so-troubling.aspx>.

⁷⁵ Michael Krepon, "Introduction," in *Deterrence Instability and Nuclear Weapons in South Asia*.

⁷⁶ *The East Asia-Pacific Rebalance: Expanding U.S. Engagement* (Washington, DC: Department of State, December 16, 2013), available at <www.state.gov/r/pa/pl/2013/218776.htm>.

⁷⁷ See Nick Bisley and Andrew Phillips, "A Rebalance to Where? U.S. Strategic Geography in Asia," *Survival* 55, no. 5 (October 2013), 95–114.

⁷⁸ India's ever-growing consumer middle class had risen from 47 million in 1995 to 265 million in 2014. See Pravan K. Varma, "India's Middle Class Awakes," *The Times of India* (Mumbai), November 23, 2013, available at <<http://timesofindia.indiatimes.com/edit-page/Indias-middle-class-awakes/articleshow/26221440.cms>>.

⁷⁹ Bolton; *New Framework for the U.S.-India Defense Relationship*, OSD 12428-05, Rumsfeld Archive, 2005, available at <<http://library.rumsfeld.com/doclib/sp/3211/2005->>

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⁸⁰ "U.S.-India Joint Strategic Vision for the Asia-Pacific and Indian Ocean Region," press release, The White House, January 25, 2015, available at <www.whitehouse.gov/the-press-office/2015/01/25/us-india-joint-strategic-vision-asia-pacific-and-indian-ocean-region>.

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⁸² See Larry M. Wortzel, "PLA Contingency Planning and the Case of India," in *The People's Liberation Army and Contingency Planning in China*, ed. Andrew Scobell et al. (Washington, DC: NDU Press, 2015), 225–250.

⁸³ Vivek Raghuvanshi, "India-China Border Talks Make No Headway," *DefenseNews.com*, May 23, 2015, available at <www.defensenews.com/story/defense/policy-budget/leaders/2015/05/23/india-china-border-dispute-summit-talks-lac-tibet-pakistan/27601373/>.

⁸⁴ Riedel, 109–146, 168–180; Vivek Raghuvanshi, "India-China Talks Fail to Make Progress on Border Dispute," *DefenseNews.com*, November 17, 2015, available at <www.defensenews.com/story/defense/land/2015/11/17/india-china-talks-fail-make-progress-border-dispute/75918626/>.

⁸⁵ Khan.

⁸⁶ *Ibid.*; Small, 29–65, 107, 155–187.

⁸⁷ C. Raja Mohan, *Samudra Manthan: Sino-Indian Rivalry in the Indo-Pacific* (Washington, DC: Carnegie Endowment for International Peace, 2012), 47, 124–132, 203. Important Indian military and political leaders persist in this belief despite the strong case made that China's maritime efforts in the Indian Ocean are far from a military or strategic menace. See this case made in Christopher D. Yung and Ross Rustici with Scott Devary and Jenny Lin, "Not an Idea We Have to Shun": *Chinese Overseas Basing Requirements in the 21st Century*, China Strategic Perspectives 7 (Washington, DC: NDU Press, October 2014), available at <<http://ndupress.ndu.edu/Portals/68/Documents/stratperspective/china/ChinaPerspectives-7.pdf>>.

⁸⁸ Mohan, 13–34, 181–187. Among other examples of this increasing multilateral and calculated martial response to Chinese activities that it perceives to be provocative, India agreed to have its warships participate with the United States and Japan in joint naval exercises in the northern Philippine Sea during 2016. See Sanjeev Miglani, "U.S. Plans Naval Exercises with India and Japan in Philippine Sea," *Reuters*, March 3, 2016, available at <<http://uk.reuters.com/article/uk-india-usa-idUKCN0W41UL>>.

⁸⁹ "U.S.-India Security and Defense Cooperation," *CSIS.org*, January 5, 2016, available at <<http://csis.org/program/us-india-security-and-defense-cooperation>>; interview of U.S. Army and Naval attachés in New Delhi, India, by author, December 14, 2015. In late 2015, India's Ministry of Defence announced its return to formal status as a 2016 participant in joint special forces operational training for the first time since 2012, as a participant in the 2016 U.S. Air Force Exercise Red Flag for the first time since 2008, and in the U.S. Navy's 2016 RIMPAC exercise for the first time ever. See Sushant Singh, "Joint Training Exercise of India, U.S. Special Forces to Be Held after Four Years," *The Indian Express* (New Delhi), December 28, 2015, available at <<http://indianexpress.com/article/india/india-news-india/joint-training-exercise-of-india-us-special-forces-to-be-held-after-four-years/>>.

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⁹⁰ Interview with deputy U.S. naval attaché to India by author in New Delhi, December 14, 2015.

⁹¹ Interview with Indian Deputy National Security Advisor Arvind Gupta by author in New Delhi, December 15, 2015.

⁹² Another benefit to a properly shaped residual American military and intelligence presence in Afghanistan is that of robust physical capability for refugee support, humanitarian relief, and other aspects of what would be a massive international crisis response in the event of a Pakistan implosion or devastating impacts in Pakistan from a major India-Pakistan war.

Africa

Hilary Matfess

In Sub-Saharan Africa, the movement of populations, proliferation of violent, nonstate actors, expansion of criminal networks, and continued weakness of governance indicators all present serious challenges in the short, medium, and long term. Reevaluating American partnerships on the continent and reinstating the principle of first doing no harm are critical if the United States is to achieve its objectives in the region and strengthen multilateral partnerships to advance our global security agenda.

Though often relegated to the back burner of American foreign policy deliberations, developments in Sub-Saharan Africa have garnered increased attention in recent years. The *U.S. Strategy Toward Sub-Saharan Africa* identified four “strategic pillars” that American policy would strive toward on the continent: “the strengthening of democratic institutions, spurring economic growth, trade, and investment, advancing peace and security and promoting opportunity and development.”¹ The assumption underlying all of these objectives is that progress will be enabled by strong partnerships with countries and regional blocs across the continent.

The majority of these strategic priorities are economic; one could also argue that some of the most publicized American initiatives toward Sub-Saharan Africa are focused on catalyzing economic growth. Power Africa’s goal of bringing electricity to 60 million new people across Africa has been marketed as necessary for industrialization and development.² The African Growth and Opportunity Act, passed in 2000 and subsequently renewed, abides by the logic that expanding preferential trade policies to African countries will result in the sort of growth necessary for human development and peace-building.³

As the dependence on strategic partnerships and emphasis on economic goals suggest, Africa is a low priority for America’s national securi-

ty agenda, despite increased attention over recent decades. The threats to American security and prosperity emanating from the region are largely indirect, and the overarching American strategy toward Africa has been to maintain a minimal presence. Troubling developments in Sub-Saharan Africa have been overshadowed by events elsewhere. The creation of U.S. Africa Command (USAFRICOM) in 2007, however, signaled the growing recognition that these indirect threats demand some sort of security-oriented response.

Unfortunately, certain aspects of American policy in the region have proved counterproductive to our efforts to stabilize the region and promote democratic state-building. “Strategic partners” is all too often a euphemism. American alliances and capacity-building initiatives have often endowed us with strange bedfellows, including governments that harass their own populations and sponsor rebel groups across borders. As Stephen Watts reflected, the “strategic implications of failed [Sub-Saharan Africa] policies extend beyond the direct and immediate consequences in the partner nation. Perhaps most obviously, the United States risks being ‘tarred by the brush’ of partner governments who act abusively toward their own populations.”⁴

Often, the nature of the aid extended by the United States to African counterparts is given more consideration than the host-nation system it enters. This generally reflects the lack of institutional expertise concerning Sub-Saharan African countries and their politics in the U.S. Government, but it is also a by-product of recipient countries’ manipulation of this bureaucratic blind spot. Just as it is unhelpful to conceive of spaces as being “ungoverned,” disregarding the agency of African counterparts undermines the pursuit of U.S. objectives. If these objectives are to be realized on the continent, more attention must be paid to the local contexts in which operations occur and to the characteristics of the institutions with which the United States partners. A light footprint cannot be synonymous with insubstantial local knowledge.

American policymakers must focus on cultivating effective partnerships to achieve the strategic objectives laid out by recent U.S. Presidents regarding the institutionalization of rule of law, democratization, and economic growth. Given current social, political, and economic patterns, the coming years herald dramatic change throughout Sub-Saharan Africa; if America is to maintain a light footprint on the continent, plans must be crafted and implemented today to help African partners ameliorate current problems and prepare for coming climatological, demographic, and ideological shifts. This will require a broader conceptualization of “security,” as a number of the challenges African countries face do not fall within the traditional security realm. A holistic approach to security will

require interagency harmonization rather than merely an expansion of USAFRICOM's mandate. If handled properly, partnerships with African countries could enhance the prospects for peace and economic growth, as well as further American strategic and normative objectives globally. Cultivating partnerships with the 48 countries in Sub-Saharan Africa can also translate into more support for American positions in multilateral forums such as the United Nations (UN).

A Continent on the Move

Contradicting long-held tropes about the static nature of its cultures and societies, Africa is a continent in flux. Seasonal migration, often related to pastoralism and agricultural schedules, has long been a characteristic of communities in Africa. This migration often crosses borders, creating issues of cooperation for neighboring African states. Compounding these flows are the proliferation and movement of displaced populations across the continent. The adjustments made to accommodate transient, displaced, or seasonal populations have at times placed a measure of stress on host populations; this has resulted in low-intensity violence in a number of regions across the continent, as groups compete over land and other scarce resources.

There are two emerging patterns of migration in Africa that have significant consequences for the stability and security of the continent: climate change–related displacement and urbanization. Both of these phenomena strain legal, agricultural, and social systems across the sub-continent and show signs of increasing in size and speed in coming years.

Climate change will radically alter the productive capacity of a number of agricultural regions across Africa, primarily through shifting precipitation patterns. Considering that an estimated 70 percent of Africans are employed by rain-fed agriculture (which constitutes an estimated 30 percent of the continent-wide gross domestic product), the effects of even a small change in rainfall patterns could be enormous. There is a looming possibility of a food crisis as agricultural productivity is depressed amid booming African demographics. The result of these patterns, according to Calestous Juma, is that Africans “already see climate change and security through the same lens.”⁵ The U.S. analytical framework must catch up to that of our regional counterparts. Numerous studies have suggested a link between food prices and civil unrest; given the profound disconnect between many African heads of state and their young populations (to be discussed later in this chapter), a rise in food prices could kick off the sort of ill-fated political revolutions that characterized the Arab Spring.

The conflict in Darfur illustrates the potential scale of instability related to climate change. The conflict, which claimed an estimated 400,000 lives and displaced millions, has been described as the first “modern climate-change conflict” by Jeffrey Mazo, due to the role that prolonged drought played in fomenting violence.⁶ Just as the tragedy in Darfur foreshadows the coming conflicts from climate change, it illustrates the shortcomings of the existing mechanisms to respond to such violence.⁷ Though then-President George W. Bush and Secretary of State Condoleezza Rice both traveled to the region and described the conflict as genocide, the United States failed to “put any real pressure on the Sudanese regime.”⁸ The result was not only a humanitarian disaster but also a geopolitical crisis for neighboring countries attempting to absorb refugees.

Along with climate change, urbanization poses a particular and daunting set of challenges to policymakers. The rapidity and lethality with which Ebola spread through West Africa in 2014–2015 were, in part, due to the disease entering urban areas for the first time.⁹ The lack of state capacity to engage in proactive urban planning exacerbates the complications inherent to urbanization, as nearly all of the growth in urban populations is more accurately described as an increase in slum-dwelling populations. With less access to state services, less security, and fewer resources, slums act as incubators for violence and criminality.

One of the most obvious weaknesses of African states has been their inability to secure a monopoly of the legitimate use of force within their borders. The number and influence of armed groups in the region can be attributed both to the weak institutions of the state as well as to a huge surplus of small arms and light weapons circulating throughout the continent. The UN Office on Drugs and Crime (UNODC) notes, “Given the number of weapons still circulating from past conflicts in the region, there is very little need to import large numbers of weapons into West Africa.”¹⁰ Urbanization will entail not only increased population concentration but also a concentration of the small arms and light weapons that they bring with them. If improperly managed, urbanization in African may give rise to new waves of violent instability.

The Rise of Islamist Terrorism and Militia Groups

Perhaps the most obvious militia-related development in Sub-Saharan Africa in recent years—and the one that most directly affects American security interests—has been the rise of Islamic terrorism. While Islam has long been a critical part of African societies and political economies, violent mobilization around Salafist jihadism is relatively new. Prior to 2001, there were no designated foreign terrorist organizations in Sub-Sa-

haran Africa.¹¹ Today Nigeria (and the broader Lake Chad region) is struggling with Boko Haram, Kenya and Somalia are still grappling with al Shabaab, and the Sahel is afflicted by al Qaeda in the Maghreb and Ansar al Dine. Though these groups have sworn allegiance to global jihadist movements, they all arose out of specific socioeconomic contexts and political systems; they evolved from campaigning on local grievances to broader issues. Countering Islamist terrorism in Sub-Saharan Africa will require not only identifying the international ties of these groups but also recognizing the domestic roots of their discontent.¹² These armed groups have taken advantage of not only the weakness of African states but also the rising criminality across the continent (addressed below) and the popular discontent of much of the population.¹³ With such low trust in the state's security sector and political orientation, it is no surprise that antigovernment movements have generated significant support. Civilian support for antigovernment groups has made it difficult to counter them. Furthermore, given porous borders, transnational kinship networks, and displacement patterns that characterize the region, domestic armed groups frequently have regional consequences.

Though these groups are motivated by domestic grievances, they often have foreign sponsors. The foreign dimension of domestic rebel groups threatens regional stability, as governments often engage in tit-for-tat sponsorship of antigovernment militias.¹⁴ The states sponsoring these militias typically benefit (politically and/or financially) from the development of a "war economy" in their neighboring states; the incentives are thus perverted for regional peace efforts, as some of the actors at the table may not be earnestly interested in brokering peace. The vested interest of some countries in fomenting instability limits the capacity of the United States to cultivate effective partnerships on the continent; this is compounded in instances where the U.S. Government lacks subject matter expertise regarding intracontinental geopolitics.

The proliferation of vigilante and pro-government militia groups highlights the weak position and lack of capacity of African states; security has been decentralized to unofficial community levels. This "democratization," however, is not accompanied by the development of accountability mechanisms, creating the conditions for impunity.¹⁵ Some recent troubling research has suggested that "informal ties to militias [are] a deliberate government strategy to avoid accountability" and has correlated weak democracy and foreign aid to such ties.¹⁶ Even following the cessation of conflict, the existence of such groups complicates the peace-building process. These groups at times "feel a sense of entitlement for some reward or recognition for their contribution to the government's 'victory.'"¹⁷

Transnational Criminal Groups

Civil governance in Sub-Saharan Africa is also challenged by highly organized and often transnational criminal groups. Criminal actors have made use of the improved infrastructure and economic profile of a number of African communities, while exploiting the gaps in governance and capacity to operate criminally.¹⁸ Development projects in Africa overseeing the expansion and legitimization of state authority have unwittingly empowered criminal actors.

Criminal networks have become a central feature of a number of African economies, and the region is rising in importance to global criminal networks. Andre Le Sage has described Africa as a “‘duty free’ port for organized crime.”¹⁹ The World Bank estimated in 2009 that organized crime in Sub-Saharan Africa brought \$1.3 trillion to the region, and UN-ODC research suggests that 7 to 10 percent of illicit global trade is linked in some way to Sub-Saharan Africa.²⁰ Since transnational criminal flows often manifest in distinctly domestic crime (such as robbery, murder, and extortion), there has been insufficient regional attention paid to the effects of criminality in favor of treating the domestic symptoms.²¹

The scope of criminal activity in Sub-Saharan Africa is nearly as astounding as its scale. The drug trade, human trafficking, arms and wildlife trafficking, and cyber crime are all major criminal activities that show signs of expanding and entrenching their networks. The convergence and mutually reinforcing relationship between criminal syndicates and other destabilizing forces pose a daunting challenge to African governments.

For example, both coasts on the continent are critical transit points in the international drug trade: cocaine in West Africa and heroin in East Africa. These narcotics flows appear to be on the rise. It is estimated that two-thirds of the cocaine consumed in Europe has passed through West Africa; the UN estimates that the region is a corridor for \$1.25 billion worth of cocaine every year.²² Human trafficking also afflicts the continent; in East Africa, many people are trafficked to the Middle East, while many from West Africa and the Sahel cross the Sahara desert to reach Europe. In Western and Central Africa, women and children have been especially susceptible to trafficking for sexual exploitation and forced labor in Europe and other places.²³

As mentioned, a significant number of arms circulates throughout the continent, frequently through criminal networks. Wildlife trafficking has gained international attention in recent years, as emerging markets’ taste for luxury goods like ivory has driven a rise in elephant poaching. Internationally, illegal wildlife trade is valued at \$7 billion to \$23 billion annually.²⁴ This places it as the fourth most profitable illicit sector, behind drug trafficking, human trafficking, and counterfeiting. African

wilderness areas, prized for their exoticism, are particularly affected by the rise in this trade.²⁵

Counterfeit goods, including electronics, apparel, and medicine, populate markets across the continent. It has been estimated that counterfeit anti-malarial pills generate over \$400 million annually in revenue. Such a trade not only empowers criminal networks but also undermines public health initiatives and exacts a tragic human toll.²⁶

Africa is also the fastest growing region in the world for cyber crime. Experts estimate that 8 in 10 personal computers on the continent are infected.²⁷ While that threat may seem like merely a drag on African growth and development, the rise and spread of cyber crime in Sub-Saharan Africa represents one of the most tangible threats to American national security. Infected computers can be manipulated, from a central hub and without owners' knowledge, to pass along information regarding transmissions.

The proliferation of criminal trades and networks helps set the stage for further criminality; thus they constitute a threat through their immediately destabilizing effects and their secondary effects of institutionalizing networks of criminality. The Global Initiative Against Transnational Organized Crime notes that as "networks of corruption and collusion [are] established, they [are] well placed to adapt to flows of other illicit goods, assuming that the price [is] right."²⁸ As the National Intelligence Council noted in 2011, "Terrorists and insurgents increasingly will turn to crime to generate funding and will acquire logistical support from criminals."²⁹ Already the lucrative practice of kidnapping for ransom is a tactic shared by terrorist groups and criminals from the Niger Delta to the coast of Somalia. Though claims that all criminal activity has coalesced into a single network are overblown, it is undeniable that there has been convergence between illicit networks seeking to circumvent the state and armed groups seeking to undermine it. As Erik Alda and Joseph Sala note:

cooperation between terrorists and criminal networks takes place when each group determines that their inherent fear of contact outweighs the risks. While collaboration might deliver some mutual benefits and/or satisfy some organizational necessity, there are common disincentives to affecting such partnerships including increased and unwanted attention and surveillance, fear of compromising internal security through infiltration and the heightened prospect of capture. Such contact routinely takes the form of "pay-as-you-go" operations, one-off instances of customer-service provider relationships.³⁰

The potentially destabilizing nature of these partnerships was highlighted in 2012, when al Qaeda in the Maghreb and Ansar al Dine, both of which are Salafist jihadi sects, partnered with Tuareg separatist groups, which have robust historical connections to illicit trade networks, and declared the independence of northern Mali. Moreover, the development of criminal networks across northern Mali has weakened the already anemic state presence in the region, making it all the more difficult to counter radical armed groups there. The situation in Mali became so dire in 2012 that France was compelled to intervene to restore order and maintain the country's territorial integrity; the expansion of criminality and the deepening of the crime-terror nexus could advance to a stage where the United States is also forced into a similar intervention, if preventive measures are not taken.³¹

Even more troubling than the convergence of terrorism and criminality across Africa are the instances in which the state is complicit. Guinea-Bissau is a frequently cited example of a "criminal state" in which the highest rungs of the government's leadership have been drawn into criminality. Clearly such complete criminalization represents a challenge to American security as it reduces the number of eligible partners in the region. Furthermore, even the incorporation of lower levels of government into criminal networks (whether they participate directly in criminal networks or merely accept bribes to allow for the functioning of these groups) undermines the rule of law, erodes citizens' trust in their governments, and increases the odds that the area will be a source of instability and grievances.³²

Governance Challenges

Africa is a young continent. The median age of its population is in the teens. Development economists speculate that the demographic characteristics of the region could result in a "demographic dividend" that could jumpstart economic growth. Unfortunately, however, the sort of economic infrastructure (from jobs and emerging industrial sectors to educational opportunities and technical training) necessary to absorb this youth bulge does not exist. Given a UN survey that found 40 percent of those who joined rebel movements did so because of a lack of jobs, this youth bulge seems poised to contribute to instability and violence rather than economic development.³³ The events of the Arab Spring could very well be repeated in Sub-Saharan Africa if disaffected youth also take to the streets.

In general, African youth feel distant from their political systems, which have often been stagnant for generations. The table gives the

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Table. Africa's 10 Longest Serving Leaders: Median Age and Length of Current Term in Office (in Years)		
Country	Median Age of Population	Leader's Term in Office
Cameroon	18.3	40
Equatorial Guinea	19.4	36
Angola	17.9	36
Zimbabwe	20.2	35
Uganda	15.5	29
Sudan	19.1	26
Chad	17.2	24
Eritrea	19.1	24
The Gambia	20.2	21
Republic of the Congo	19.8	18

median age and length of the current term in office of Africa's 10 longest-serving leaders. The lack of economic opportunities, coupled with unresponsive, static political systems, could contribute to an increase in rebel movements and violent conflict. Recent reversals in term-limit restrictions, particularly in the Great Lakes region and East Africa, could further such destructive dynamics.

Another troubling pattern that aggravates discontent is security forces' violence against civilians. This pattern has extended beyond the high-profile incidences of state-sponsored killings and genocides that the world witnessed in Rwanda, the Sudans, and eastern Democratic Republic of the Congo to the point that low-grade predation by security forces is routine in many African countries. Transparency International found that the police are perceived as the most corrupt institution in Sub-Saharan Africa; according to a recent Afrobarometer report, "On average, 42% of citizens say 'most' or 'all' police are corrupt."³⁴ Obviously, a corrupt and ineffective police force reduces security by hampering states' ability to respond to challenges. As the Center for Strategic and International Studies report on police reform in Sub-Saharan Africa noted, "Many of Africa's current and emerging security challenges are more appropriately addressed in the first instance by competent and professional police forces than by military forces." The report suggests that because the police's "interface with the public is far wider than that of the military, effective police forces can play a critical role in public safety, civilian protection, and conflict protection."³⁵ The lack of confidence in African police incentivizes the aforementioned troubling trends of community policing and vigilantism. Reports of rampant torture, corruption, and violence against civilians suggest that security-sector reform, aimed at improving the professionalism not only of African militaries but also of

their police services, must be central to American policy in the region. Such reforms could imbue citizens with greater trust in their governments and ameliorate some of the insecurity in the region.

Refocusing and Improving U.S. Policy in Sub-Saharan Africa

U.S. objectives in Sub-Saharan Africa center on creating an environment in which direct intervention to mitigate conflict and alleviate humanitarian disasters is unnecessary. A corollary to this objective is American interest in preventing criminality and destabilizing factors from expanding beyond Africa's borders. Though African issues are usually on the policy back burner, sound and effective regional policies can reduce the chance that the problems and challenges discussed above will metastasize into direct threats to core U.S. interests. Many have noted that, in the absence of robust American commitment, other countries have expanded their investment activities.

The People's Republic of China, for example, is now Africa's largest trading partner and is deeply engaged in trade, banking, energy, and infrastructure projects. Some 800 Chinese corporations are active in Africa. Chinese-African trade approached \$300 billion in 2015, far more than traditional investors such as France and the United States. Though actual direct foreign investment from China lags behind the West, there is an undeniable increase in China's presence on the continent. The nature of this increasing influence is worth consideration. Direct Chinese contributions to authoritarian regimes, including debt forgiveness, is a genuine concern for those seeking to promote democracy and the rule of law. While Chinese military interest in the continent appears to be low, China's economic engagement with Africa provides useful political as well as economic advantages, especially in the UN, where dozens of African countries are represented. China's rising profile in Africa may not pose an immediate security concern, but these trends are worth consideration within the broader international balance of power and normative system.³⁶

Though the establishment of a combatant command represents a significant shift in American policy toward engagement in African conflicts, USAFRICOM is not designed to act as a frequent or rapid responder to crises. Additionally, it is unclear if it is well-suited to address the softer realms of security that mitigating conflict in Africa will require. The command should make a point of cultivating regional expertise in African affairs. Annual military exercises with African security partners (such as Operation *Flintlock*) should become more frequent and should be complemented by greater bilateral contact. Recognizing African coun-

tries' importance to American national security and developing effective policies in the region require a greater understanding of national and subnational African politics than currently exists generally within the Department of Defense.

The current policy of relying on a handful of strategic partners is not strategically untenable; however, the current choice of partners in the region is ultimately counterproductive to American policy objectives. Many of our partnerships are dependent upon individual leaders; their countries' trajectories following their departure from power (due to natural causes, coups, or term limits) are uncertain. U.S. objectives in the region can benefit greatly from legitimate institutions. Fortunately, the United States is in a position to help cultivate legitimacy for regional bodies and institutionalize good governance in individual states. This recognition leads us to the first two steps in reforming and improving American policy in Sub-Saharan Africa. First, we should empower regional efforts through increased support to the African Union (AU) and pan-regional security endeavors, improving security sector reform programing and establishing multiyear funding authorities for such programs. Second, we should recommit to democracy promotion, in particular through a rethinking of our current strategic partnerships and enhanced funding for civil society groups and political party training.

An obvious imperative is closer engagement with the African Union.³⁷ The recent Ebola crisis demonstrated AU capacity to use a security lens when considering the impacts of soft threats to human security, yet it remains unclear as to how the continent will cope with the next pandemic.³⁸ Identifying how and why certain countries were able to stymie the spread of Ebola, as well as coordinating continental public health policies and responses, is critical if we are to develop effective responses to future public health concerns. The AU is well positioned to take on such responsibility. Additionally, the African Union could play a valuable role as a partner in addressing the threats stemming from climate change-related displacement and urbanization. The challenge is moving the AU from a normative body to one that produces tangible policy outputs.³⁹ Additionally, engagement with the African Union requires that the institutionalized impunity for sitting heads of state be revoked and that the United States work with the AU to promote good governance and accountability at the multinational level as a priority.

An improved working relationship with and stronger support of the UN Department of Peacekeeping Operations, the African Union, and other regional organizations might also strengthen the many different peacekeeping and peace enforcement missions currently active in Africa. Through 2015, more than 100,000 peacekeepers were deployed on the

continent, including 80,000 in nine different UN missions (principally in the Democratic Republic of the Congo, Darfur, South Sudan, and Mali), 22,000 deployed under AU auspices in Somalia, and a smaller mission in Guinea-Bissau run by the Economic Community of West African States.⁴⁰ This is far more than a generation ago; despite the increase, there is still some ambiguity as to which countries should bear the burden of arranging and maintaining peacekeeping operations. Given the continent's horrific experiences with genocide and violent conflict, stronger regional organizations backed up by U.S. trainers and enablers make sense as one way to help prevent future recurrences.

Synchronizing U.S. objectives and priorities among agencies will strengthen the efficiency of American partnerships at the bilateral and multilateral levels. At present, interagency communication is lacking; rather than expanding the mandate of military institutions to include developmental objectives (and vice versa), interagency lines of communication should be improved.

Regional interventions to strengthen security systems and promote postconflict reconciliation show particular promise; especially with American support, these efforts could mend relations between governments and their populations.⁴¹ Reforming African police forces in particular has the potential to reap governmental dividends.⁴² These reforms would not only engender greater civilian trust in their military but also facilitate security objectives in general. William Rosenau of RAND, echoing counterinsurgency doctrine, argues that "service-oriented, community policing, intended to protect the public from serious crime, can itself be a powerful counterinsurgency tool by fostering a climate in which the public freely provides the police with information about security threats."⁴³

Security-sector reform, in general, is outside of the mandate of institutions such as the World Bank, despite their endorsement of the results and objectives of such reforms. As a result, American partnerships in the region must promote holistic security-sector reform to cultivate civilian trust and regional stability. At present, Section 660 of the Foreign Assistance Act requires a waiver for the United States to engage in police training; while it is not an arduous process to obtain such a waiver, even a small hurdle is a disincentive.⁴⁴

Military training and education, bilaterally, regionally, and in pan-continental endeavors, should emphasize respect for the rule of law and ways of cultivating effective civil-security partnerships rather than merely focusing on enhancing the tactical capacity of the units in training. This may require a modification of the current Leahy Law "vetting process." At present, the requirement that military units receiving Ameri-

can training and support have not committed human rights violations is unevenly applied and frequently waived. As RAND notes, these requirements do not apply to “most drug enforcement and non–Defense Department counterterrorism assistance” or to Federal Bureau of Investigation assistance.⁴⁵ RAND concludes that the “U.S. government needs to improve its vetting practices by making them more consistent across programs and agencies and standardizing them across different types of assistance.” Through this process of review, the definition of military *unit* should be reconsidered, as should the withholding of training in cases of human rights abuses. Training that emphasizes improved civil-military relations and respect for human rights should be considered in instances where strategically important partner nations violate human rights principles.⁴⁶ Revamping American legal restrictions on foreign assistance to improve capacity-building objectives should be a congressional priority.

In addition to rethinking the content of our training programs, we must reconsider their funding. The lack of multiyear funding authorities calls into question American commitment to building partner capacity. Establishing long-term, clearly funded programs telegraphs American commitment more appropriately than episodic engagements. The United States should recalibrate its continental policy to reemphasize the importance of security-sector reform enshrining the rule of law through a revamping of our security assistance programming’s legislative regulation, operational content, and partnering bodies.

While pan-regional efforts deserve more attention than they currently receive, bilateral relationships must also be reformed to promote good governance; American understanding of the political, social, and cultural relationships that contribute to governance patterns across the continent needs significant bolstering. This dearth of information has incentivized one-size-fits-all strategies and has allowed events hundreds of miles away (and often decades later) to dictate contemporary policies.

Reform requires catalyzing change from our regional partners and rethinking our assistance paradigm. Too frequently U.S. assistance (military, humanitarian, and developmental) is co-opted by undemocratic governments to serve their interests and bolster their regimes. Evidence suggests that the assistance levied to the Ethiopian government to ease the suffering from the 1984–1985 famine was used to further the government’s war effort; multiple sources found that “relief supplies were used to pay soldiers and militia and to lure people into locations where they were recruited into the military or subjected to forcible resettlement.”⁴⁷ Natural disasters, famines, and droughts are all too frequently used to deflect attention from the failures of governance that have allowed suffering to be so widespread. International assistance to crises in

Sudan and Rwanda has also been used to bolster oppressive regimes. As David Bayley wrote for the National Institute of Justice, “The question is not whether assistance is political—it all is—but what its likely consequences are for American objectives.”⁴⁸

Reforming our assistance paradigm requires recognition of the distinct political economies of countries with whom we partner. This will require cultivating expertise that is currently lacking within American policy circles. Too frequently Africa is treated as a homogenous bloc and vessel through which American aid can be implemented without being affected by the specific characteristics of partnering governments. Increasing American institutional knowledge about specific African political economies in all sectors of government is critical; increasing the number of American military advisors in the region, bolstering ties between American and domestic development agencies, and enhancing the duration and frequency of training programs (for civil servants and the security sector) are all important for advancing overarching American security interests in the region. As the Overseas Development Institute notes:

*It is useful to draw a distinction between fragile and conflict-affected states that are willing but unable, and those that are unwilling and unable to reduce the vulnerability of populations to disaster risks and impacts. Disaster risk management tends to assume a positive state-society “social contract” exists where the state adopts the management of risk as a public good. But in some states disaster risk management is treated as a benefit available to political supporters. Intervention strategies . . . therefore need to be tailored to suit the context.*⁴⁹

Imposing homogeneity on African states serves no interest other than expediency. American assistance must first abide by the principle to do no harm. This will require a closer examination of how current assistance programs and partnerships have empowered undemocratic actors and oppressive regimes.

Additionally, U.S. assistance to political parties and civil society groups should be considered a means of fostering long-term stability. Democracy and governance programs cannot be disregarded as “soft” politics; improving the political climate and increasing the legitimacy of the political process in African countries are vital for long-term peace in the region.

Ultimately, much of the insecurity and instability in Sub-Saharan Africa is a result of poor relations between African governments and their populations. In order to successfully utilize the “strategic partnerships”

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model of dealing with security threats in Sub-Saharan Africa, American policies will have to strengthen and improve upon the governance patterns of African countries. Too often, strengthening government capacity and bolstering the power of the ruling party have been confused with state-building efforts. Institutionalizing accountability mechanisms and revamping the civilian/ government/military contract are critical to managing African security now and in coming decades.

In short, African stability is threatened by the lack of institutional capacity to manage the threats stemming from migratory patterns and the rise of violent nonstate and criminal actors. Revamping the relationship between African governments and their populations is critical to enabling successful strategic partnerships between the United States and African counterparts. Revising our assistance paradigms and ensuring that our strategic partners share our values and objectives can best achieve American objectives on the continent, but they require rethinking our political assistance and general objectives for promoting democracy, enhancing support to civil society, and considering lending assistance to political parties.

Sub-Saharan Africa will not rise in importance to American national security priorities to match Europe, the Asia-Pacific, or the Middle East in the near term, but the region's size, population, resources, and many challenges will engage U.S. policymakers in important ways. Much can be done to improve the conditions and prospects of its millions of inhabitants without massive increases in development assistance. Already the largest single donor nation, the United States can lead the international community in a sustained effort toward better governance, improved economic performance, and better security for all Africans. These efforts will benefit not only Africa, but also the international community as a whole and U.S. interests particularly.

Notes

¹ U.S. Strategy Toward Sub-Saharan Africa (Washington, DC: The White House, June 2012).

² U.S. Agency for International Development, "Power Africa Info Sheet," available at <www.usaid.gov/powerafrica>.

³ The African Growth and Opportunity Act, "About AGOA," available at <<http://agoa/about-agoa.html>>.

⁴ Stephen Watts, *Identifying and Mitigating Risks in Security Sector Assistance for Africa's Fragile States* (Washington, DC: RAND, 2015).

⁵ Michael Werz and Laura Conley, *Climate Change, Migration, and Conflict in Northwest Africa: Rising Dangers and Policy Options Across the Arc of Tension* (Washington, DC: Center for American Progress, April 2012).

⁶ Jeffrey Mazo, *Climate Conflict: How Global Warming Threatens Security and What to Do About It* (London: International Institute for Strategic Studies, 2009), chapter 3.

⁷ International Crisis Group (ICG), *Darfur: The International Community's Failure to Protect* (Washington, DC: ICG, 2006).

⁸ Ibid.

⁹ World Health Organization, "A Fast-moving Ebola Epidemic Full of Tragic Surprises," available at <www.who.int/csr/disease/ebola/ebola-6-months/surprises/en/>.

¹⁰ The fall of Muammar Qadhafi in 2012 led to an outpouring of weapons across the Sahel as Libyan armories were looted and fighters returned to their home countries.

¹¹ Ryan Miller, "The Rise of Terrorist Groups in Sub-Saharan Africa," *Boren Magazine*, May 19, 2014.

¹² There is an interesting interplay between local grievances and aspirations to a global brand at play among African jihadists. Jakkie Cilliers observes that "violent jihadism is increasingly regionalized . . . the ability of either the Islamic State or al-Qaeda to manage a terror network with affiliates in Africa, Asia and the Middle East is limited. The schisms and infighting within and between these groups reflect this reality, which should not detract from the motivational impact of local groups seeking to associate themselves with a global brand." See *Violent Islamist Extremism and Terror in Africa*, ISS Paper 286 (Pretoria: Institute for Security Studies, October 2015), available at <www.issafrica.org/uploads/Paper%20286%20_v3.pdf>.

¹³ Andre Le Sage, *Africa's Irregular Security Threats*, INSS Strategic Forum 255 (Washington, DC: NDU Press, May 2010).

¹⁴ British Broadcasting Corporation, "DR Congo Country Profile," October 2, 2016.

¹⁵ "Who Are the Anti-balaka of CAR?" *IRIN News*, February 12, 2014.

¹⁶ Neil Mitchell, Sabine Carey, and Chris Butler, "The Impact of Pro-Government Militias on Human Rights Violations," *International Interactions* 40, no. 5 (October 2014).

¹⁷ Eric Y. Shibuya, *Demobilizing Irregular Forces* (Cambridge: Polity, 2012).

¹⁸ The South Africa-based Institute for Security Studies notes that the expansion of criminality in Sub-Saharan Africa can be partially explained by "a more sustainable state-building path." The group explains that the "weak capacity for governance in state institutions and their inability to provide stable regulatory frameworks and deliver services to marginalized populations mean that Africa's economic growth in the last decade has often occurred despite the state." See Mark Shaw and Tuesday Reitano, *The Evolution of Organised Crime in Africa: Towards a New Response*, ISS Paper 244 (Pretoria: Institute for Security Studies, April 2013), available at <www.issafrica.org/uploads/Paper244.pdf>.

¹⁹ Le Sage.

²⁰ Shaw and Reitano.

²¹ United Nations Office on Drugs and Crime (UNODC), *Transnational Organized Crime in West Africa: A Threat Assessment* (Brussels: UNODC, 2013).

²² *Global Initiative Against Transnational Organized Crime, Fixing a Fractured State* (Brussels: Global Initiative Against Transnational Organized Crime, 2015). Legal drugs too, such as tobacco, are smuggled in West Africa and generate an estimate \$775 million per year. According to the UNODC, in 2010 a "series of larger seizures were made indicating that large volumes of Afghan heroin were entering the region by sea from Iran and Pakistan. Between 2010 and 2012, more heroin was seized than in the previous 20 years. . . . It was not that the number of seizures were increasing, but those that were being made were far larger than ever before." The drug trade has fundamentally transformed the political economies of the regions in which they operate, particularly in countries such as Guinea-Bissau, where the state has become complicit with (and may even benefit from) the drug trade.

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Enhancing drug policies globally will do little if African states remain a weak link in the system aimed at stemming the flow of drugs.

²³ Not all trafficking funnels people out of the continent. The UN notes that “general trends within the Economic Community of West African States . . . include trafficking from rural to urban and industrial areas for employment and sexual exploitation.” *UN Global Initiative to Fight Human Trafficking, Human Trafficking: An Overview* (New York: UN Office on Drugs and Crime, 2008).

²⁴ Tom Maguire and Cathy Haenlein, *An Illusion of Complicity: Terrorism and the Illegal Ivory Trade in East Africa* (London: Royal United Services Institute, 2015).

²⁵ Ibid.

²⁶ Le Sage.

²⁷ Shaw and Reitano; Franz Stefan-Gady, “Africa’s Cyber WMD,” *Foreign Policy*, March 24, 2012., Cameroon, Ghana, Nigeria have become major hubs for cyber crime and the global revenue derived from such activity is estimated to near \$600 million.

²⁸ *Global Initiative Against Transnational Organized Crime*.

²⁹ James Clapper, Director of National Intelligence, “Statement for the Record: Threat Assessment,” available at <www.dni.gov/index.php/newsroom/testimonies/194-congressional-testimonies-2013/816-statement-for-the-record-worldwide-threat-assessment-of-the-u-s-intelligence-community>.

³⁰ Erik Alda and Joseph L. Sala, “Links Between Terrorism, Organized Crime and Crime: The Case of the Sahel Region,” *Stability: International Journal of Security and Development* 3, no. 1 (September 2014).

³¹ Research has demonstrated that though criminal networks and narcotics trade may not necessarily catalyze new conflicts, these activities are connected to the elongation of conflicts. In Sub-Saharan Africa, this has particular significance as the continuation of existing conflicts would preclude the sort of infrastructural and human development projects necessary for sustainable growth, development, and peace-building. American national security policy in Africa must recognize the development of mutually beneficial relationships between criminal networks and terrorist groups. Cooperation between these groups weakens the rule of law and problematizes the cultivation of effective strategic partnerships in the region. See Francesco Strazzari, “Captured or Capturing? Narcotics and Political Instability along the ‘African Route’ to Europe,” *The European Review of Organised Crime* 1, no. 2 (2014), 5–34, available at <http://sgocnet.org/site/wp-content/uploads/2014/06/Strazzari_2_5-34.pdf>.

³² Le Sage.

³³ Kingsley Ighobor, “Africa’s Youth: A ‘Ticking Time Bomb’ or an Opportunity?” *Africa Renewal*, May 2013.

³⁴ Pauline M. Wambua, “Police Corruption in Africa Undermines Trust, but Support for Law Enforcement Remains Strong,” *Dispatch #56, Afrobarometer*, 2015.

³⁵ Richard Downie and Jennifer Cooke, *Policy Reform in Africa* (Washington, DC: Center for Strategic and International Studies, 2011).

³⁶ See Hilary Matfess, “Should You Worry about China’s Investments in Africa?” *Washington Post*, September 9, 2015; Deborah Brautigam, “5 Myths about Chinese Investment in Africa,” *Foreign Policy*, December 4, 2015.

³⁷ One of the most obvious mechanisms to support this initiative is through the provision of funding. It has been estimated that \$1 billion is needed to make the force operational.

³⁸ The mobilization of a Military-Civil Humanitarian Mission, led by the African Union and consisting of medical and military personnel and coordinating domestic,

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regional, and international volunteers and donations, suggests that partnerships are possible to plan for similar disasters.

³⁹ John L. Hirsch, “Africa’s Challenges and the Role of the African Union: Q&A with Aisha Abdullahi,” IPI Global Observatory, October 7, 2014.

⁴⁰ Danielle Renwick, “Peace Operations in Africa,” Council on Foreign Relations Backgrounder, May 15, 2015.

⁴¹ William Rosenau, *Low-Cost Trigger-Pullers: The Politics of Policing in the Context of Contemporary “State Building” and Counterinsurgency* (Washington, DC: RAND, 2008).

⁴² Ibid. Rosenau argues that many African police forces have been drawn into a military role as “low-cost ‘trigger pullers,’” rather than serving their primary purpose of “protecting the public from serious crime.”

⁴³ Ibid.

⁴⁴ Downie and Cooke.

⁴⁵ Seth G. Jones et al., *Securing Tyrants or Fostering Reform? U.S. Internal Security Assistance to Repressive and Transitioning Regimes* (Washington, DC: RAND, 2007).

⁴⁶ Ibid.

⁴⁷ Katie Harris, David Keen, and Tom Mitchell, *When Disasters and Conflicts Collide: Improving Links between Disaster Resilience and Conflict Prevention* (London: Overseas Development Institute, 2013).

⁴⁸ David H. Bayley, *Democratizing the Police Abroad: What to Do and How to Do It* (Washington, DC: Department of Justice, 2001).

⁴⁹ Harris, Keen, and Mitchell.

Latin America

Craig A. Deare

U.S. national security interests in Latin America are undermined by two key threats: transnational criminal organizations, which exploit weak levels of governance across the majority of countries in the region, and extra-regional actors, which fill the vacuum of U.S. distraction and inattention to its neighborhood. The United States must acknowledge the deeply rooted causes of the weak levels of governance and engage with greater attention and presence while recognizing its limitations for helping to resolve those weaknesses in the short term. Limited resources will constrain U.S. efforts, so the United States must prioritize support to select strategic partners.

As a new administration takes office, the time is ripe for new approaches to improve the quality of the security relationship that the United States has with its counterparts throughout Latin America. U.S. foreign policy in general, and U.S. national security strategy in particular, does not routinely focus on the nations of Latin America, where threats are assumed to be less pressing than in other parts of the world. Despite a traditional attitude of benign neglect, U.S. security interests there are indeed consequential. Given a globalized world, and the fact that the United States is no longer the only viable option available to the region's nation-states seeking external engagement, American policymakers will need to work harder—and more importantly, smarter—to remain relevant and engaged with our Latin American partners. Geopolitical realities at play in this part of the world are serious and troublesome; they will not disappear in the short term and will require dedicated time and attention by senior national security decisionmakers sooner rather than later.

The national security interests of the United States were captured succinctly by the Project on National Security Reform: “*To maintain security from aggression against the nation by means of a national capacity to shape*

the strategic environment; *to anticipate and prevent threats; to respond to attacks by defeating enemies; to recover from the effects of attack; and to sustain the costs of defense.*"¹ If these interests are at varying degrees of risk in other parts of the world, they are also under assault in Latin America. Obviously this part of the world is an environment we should wish to shape; after all, we share the same neighborhood. It seems clear that anticipating and preventing threats in Latin America are both prudent and cost-effective. Consequence management after the fact will be far more expensive, and these problems are on our doorstep.

There are two primary threats in this part of the world that should concern U.S. policymakers. The first is a growing and dangerous amalgam of criminal entities that destabilize our neighbors and operate on a large scale within our own borders. The second is the presence of extra-regional actors with anti-U.S. intentions. Both are exacerbated by poor governance, endemic poverty, and an inconsistent level of U.S. interest in and commitment to our neighbors. As former Assistant Secretary of State Bernie Aronson has stated, "The historic U.S. failure in Latin America has not been interventionism but, rather, neglect."² These threats are thriving in an environment where many national governments are ill-equipped to confront them.

Though lack of capacity is not unique to Latin America, there is an important distinction: Latin America is the only region in the world where those adversely affected by violence and extreme poverty can walk to (and across) the U.S. border. It is also true that not all regional governments are incapable of handling these two major challenges—there are a handful of countries whose political systems have matured sufficiently to handle alternating political parties in power and maintain workable levels of governance.

At this juncture, the response required from the United States is not one requiring a dominant military component because the threats are not fundamentally military in nature—although there are elements and derivatives of a military tone. Rather, the combination of serious structural shortcomings and malign actors results in a toxic mixture that erodes effective governance throughout the region. The nature of the environment and the challenges confronting the countries of the region, as well as U.S. national security interests, require new thinking and new approaches that transcend traditional U.S. approaches.

Overview of the Threats

As with any other region, there are those who view the level and quality of U.S. involvement as adequate, while others believe it is insufficient to

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the task. Few experts, however, see generally positive trends in recent years, as Michael Reid (who views the glass as half full), writing in a recent *Foreign Affairs* article, acknowledges:

True, for years, the [Barack] Obama administration took a largely reactive approach to Latin America that resulted in multiple fumbles. And the recent attention it has paid to the region, although welcome, came late in the day and is still incomplete. But Obama's record must be viewed in the context of dramatic changes in Latin America, which have inevitably reduced the United States' influence. The region still suffers from unresolved challenges—notably, a persistent drug trade, widespread violent crime, and the erosion of democracy in Venezuela.³

Reid concedes that the current administration took a “largely reactive approach” and that recent attention came late. His characterization of what is happening in Venezuela as “the erosion of democracy” is akin to those in 1930s Europe reflecting that Germany too was experiencing an “erosion of democracy.” The United States has lost influence not solely because other actors have stepped up their efforts, but also because we have chosen to place our priorities elsewhere. This is an error with geopolitically adverse consequences for U.S. interests. Although regional specialists concerned with security matters may have a tendency to enumerate a long list of “threats” existent in the region, upon reflection they are mostly variations of the same thing. While there certainly are elements of radical and popular movements (and the terrorist tactics associated with some of these groups) in some countries, these phenomena are manifestations of deeper issues. The first—and arguably most troubling—is pervasive and corrosive criminality, formally and informally organized, transnational as well as local, economically motivated at times but politically at others. Organized transnational crime represents a clear and direct threat to U.S. interests. As Director of National Intelligence James Clapper captures succinctly:

Transnational Organized Crime . . . is a global, persistent threat to our communities at home and our interests abroad. Savvy, profit-driven criminal networks traffic in drugs, persons, wildlife, and weapons; corrode security and governance; undermine legitimate economic activity and the rule of law; cost economies important revenue; and undercut U.S. development efforts.⁴

The impact of the drug trade, much of which comes from or through Latin America, is profound. In 2014, more than 16,000 Americans died from heroin and cocaine overdoses—far more than were killed in Iraq and Afghanistan over more than a decade at war.⁵ The monetary costs to American society associated with the drug trade exceed \$200 billion every year, far surpassing those associated with terrorism, which receives greater attention.⁶

Many of these criminal networks are internationally integrated activities. Like today's global corporations, which work above, around, and across national borders, these criminal groups will operate wherever a profit can be made. Another factor, of course, is that typically these developing countries also have weak economic systems incapable of generating sufficient meaningful employment opportunities, for the young in particular. An opportunity to join a *mara* (youth gangs prevalent in Central America) or a more structured drug-trafficking organization (DTO) becomes an attractive option, particularly given the lack of alternatives.

In addition to their ability to operate across borders, some of these criminal enterprises have been relatively effective at displacing the state in providing services demanded by the local population, in particular within urban settings. The degree of effectiveness varies country by country, and even by certain geographic locations within a given country. Beyond establishing a secure environment in which they can operate—and this security also holds for those living in the area—transnational criminal organizations (TCOs) routinely deliver other services, ranging from resolution of conflict to trash collection to providing greater security. As the TCOs consolidate their hold over the region, the formal governments' power and authority erode, undermining state legitimacy.

TCOs routinely violate governmental sovereignty and undermine judicial systems at all levels because they are unencumbered by legal norms. With huge profit margins at their disposal, they can purchase the best weaponry, communications capability, and security money can buy—giving them tactical advantages over most government agencies. Unrestrained by the bureaucratic sclerosis that limits governments both domestically and internationally, TCOs employ state-of-the-art information technology and communications technology to operate effectively across the business cycle.

Unlike terrorist organizations, organized crime is dependent on a baseline of infrastructure and services, and therefore most TCOs do not seek to destroy the state. They are content with undermining and co-opting the government at the municipal, provincial, and at times national level, depending on their requirements and capacity. Importantly, weak and still developing states are the most vulnerable to the increasing strength of

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TCOs, and a significant number of Latin American countries fit this characterization. These relatively weak governments lack effective and capable institutions and frequently have small and corrupt police organizations. The catch-22 of the situation is that because of their very weakness, these developing states are hard pressed to generate strong popular participation. A growing concern is the degree to which the TCO assumes greater levels of penetration of governmental power, both locally and nationally.

In certain cases, given that the government cannot provide for public safety and security, it is the TCO—whether a gang, mara, DTO, or even an ideologically motivated armed group—that fills that void, thus supplanting the legitimacy forfeited by the state, generating a profound impact on the sociopolitical construct. Of even greater concern are those instances where states are not simply the victims of such a downturn, but where governments are active participants in this devolution.⁷ Beyond being penetrated or infiltrated by TCOs and becoming overwhelmed, in some cases officials actually lead the process of criminalizing the state. The result, as former Commander of U.S. Southern Command Admiral James Stavridis, USN (Ret.), points out, is:

*These illicit criminal networks threaten the United States both directly and indirectly. Directly, these criminals have attacked U.S. facilities and citizens throughout the globe. They also weaken the fabric of American society, which they touch through violence and corruption. Indirectly, these organizations threaten the United States by attacking our allies and partners throughout the world.*⁸

In short, the rise of TCOs in Latin America poses a serious and growing national security danger that deserves greater attention. Sharing a region with unsteady neighbors represents a risk to U.S. interests, and steps must be taken to reverse those conditions. Most theorists point to the rise in influence of nonstate actors, which is undeniable. At the systems level of analysis, great powers will continue to dominate the international system. As Moisés Naím warns, however:

*the recent proliferating interaction among criminal, terrorist, and insurgent networks and the exponentially greater magnitude of their commerce made possible by the processes of globalization have moved the overall threat posed by state collusion with transnational illicit networks from the status of international nuisance to a substantial threat to the contemporary international order.*⁹

The jury is still out on whether illicit nonstate actors and their networks threaten the international system writ large, but their activities demand much greater attention.

The second major threat to U.S. interests in this region is the growing presence and activity of external actors with anti-U.S. intentions. It is one thing for extra-regional actors to promote their economic and political interests in the hemisphere. In today's globalized world, every market in every country is fair game for trade; Airbus has the same right as Boeing to market its airliners worldwide. But certain countries—Russia, Iran, and China are the most prominent examples—are seeking access to the region for reasons that go beyond commerce and diplomacy. The actions in this region by these three countries in particular should give pause to U.S. policymakers. Russia views the current geopolitical environment as a new Cold War; China's continued expansion into the South China Sea clearly demonstrates its intentions; and Iran's aggression in the Persian Gulf and beyond reveals its global ambitions. Accepting their growing presence in this part of the world will only embolden these countries. Unfortunately, Secretary of State John Kerry's unilateral declaration in November 2013 that the Monroe Doctrine was dead did little to reassure the governments in the region, instead serving as a clear invitation to those extra-regional actors looking for opportunities to increase their influence. This invitation was welcomed by the anti-U.S. alliance known as ALBA (Alternativa Bolivariana para los Pueblos de América, or the Bolivarian Alternative for the Americas), which is eager to reduce U.S. influence despite the long-term costs to their peoples.¹⁰

At first blush, China's expansion into the region might be perceived as benign. Given its explosive economic growth over the past 30 years, it comes as no surprise that its exports and imports from around the world would expand accordingly. After all, U.S.-China trade grew from \$2 billion in 1979 to \$591 billion in 2014, with an accompanying trade deficit of \$344 billion.¹¹ Chilean copper, Argentine soy and wheat, Brazilian iron, Venezuelan oil, and Peruvian minerals are attractive commodities, and those countries profit from increased sales to satisfy Chinese demand. Upon closer examination, however, China's economic activities generate additional concern. Chinese economic expansion globally has come at the direct cost of U.S. commercial contraction; China's "policy banks" have become the largest annual public creditors to governments in the region.¹² In 2006 the United States was the largest trading partner for 127 countries around the world, versus just 70 for China. However, by 2011, the situation had almost inverted itself, with 124 countries for China and 76 for the United States.¹³ Leaving Mexico aside—a unique case given the North American Free Trade Agreement (NAFTA) of

1994—the rest of Latin America is turning away from the United States and toward China, although at different rates and degrees of engagement.

Even the case of NAFTA serves to demonstrate the strength of China's impact on the region. Prior to China's entrance into the World Trade Organization in 2001, Mexico benefited greatly from the new trade agreement with its northern neighbors. However, once China gained preferred access to the U.S. market, the picture changed, with Chinese products gaining market shares in the United States at Mexico's expense, as well as increasing market shares in Mexico from U.S. products.¹⁴ Mexico's geographical advantage remains important, as demonstrated by \$81.5 billion in bilateral trade in goods and services prior to NAFTA in 1993, which increased to \$247.3 billion in 2000 and reached \$532.3 billion in 2015.¹⁵

A related but largely unrecognized factor here is that China is filling a trade space that could—and should, from a U.S. interests perspective—be filled by Latin American manufacturers. While China has surpassed the United States as the most important destination for South American exports, shipments to China continue to be heavily concentrated in primary goods, with only a small portion of manufactured products. When commodity prices inevitably fall and the terms of trade worsen, Latin American manufacturers' inability to compete effectively with the Chinese will undermine the potential for sustained growth throughout the region. The net effect for Latin American countries will only worsen in the future.¹⁶

Beyond China's deep economic engagement with Latin America, China's explicit support for the anti-U.S. alliance ALBA is even more problematic and troubling. Given ALBA's declared intent to establish an alternative to U.S. leadership in the region and to distance itself from Western companies and conventional multilateral institutions, China has stepped in as its partner of choice, with both markets and financing. This has meant the prolonged endurance of certain regimes—Venezuela is the most obvious example—that would have failed years ago due to flagrant incompetence, mismanagement, and corruption. China continues to fund this failed model despite the economic losses it generates; Chinese intentions are geopolitical, not financial. Having transcended the role of strategic partners in 2001, the China-Venezuela relationship is now characterized as a comprehensive strategic partnership, moving beyond trade to military weapons sales and training. With the death of Hugo Chavez in March 2013, his designated successor, Nicolás Maduro, has accelerated Venezuela's economic collapse with ideological decisions uninformed by financial realities and exacerbated by oil prices declining to \$30 per barrel. Despite the opposition parties' takeover of the legisla-

ture in December 2015, Maduro's strong executive powers ensure that he will continue to prioritize politics over economics, and Venezuela's pain will continue beyond his tenure.

These brief examples highlight the fact that China is taking advantage of U.S. inattention to the evolving geopolitical and economic realities in its own hemisphere. Careful not to directly antagonize the United States, China is playing the strategic long game and will gradually and slowly expand into whatever spaces it can in the region. U.S. policymakers must be aware that in so doing, the Chinese government will pursue its own interests in the Western Hemisphere, which are often not congruent with our own. Chinese analyst Lei Yu hypothesizes:

China's economic and geopolitical orientation toward Latin America reflects Beijing's desire not only to intensify its economic cooperation and trade with Latin America, but also to create a "sphere of influence" in the traditional "backyard" of the United States, the only superpower in the current global hierarchy, in retaliation for the U.S. containment and encirclement of China, and as a fulcrum in its rise as a global power capable of challenging U.S. dominance and reshaping the current world system in a fashion more to its liking.¹⁷

In a world that remains ordered anarchically, China's great power aspirations are being played out in Latin America. Similarly, the United States has the right to protect its geopolitical interests in the region. If it does not do so, the United States cedes to China its strategic goal of "reshaping the current world system in a fashion more to its liking."

Iran's growing presence in Latin America is a different story than China's. It is no coincidence that Iran's expansion has also been with ALBA countries, such as Venezuela, Ecuador, Bolivia, Nicaragua, and even Argentina (although this expansion ended with Cristina Kirschner's departure). Iran is infiltrating Latin America primarily through Hizballah, a Shiite terrorist group loyal to Ayatollah Ali Khamenei, as well as with the Islamic Revolutionary Guard Corps and Quds Force members.¹⁸ There are reports of more than 80 Iran-supported Shiite cultural centers, operated by Hizballah and Quds Force, spread across the region. The clear intent of Iran is not only to convert individuals to Shia Islam but also to advance Iranian objectives at the expense of U.S. interests. As then-Commander of U.S. Southern Command General John Kelly, USMC (Ret.), testified before the Senate Armed Services Committee, "As the foremost state sponsor of terrorism, Iran's involvement in the region and

these cultural centers is a matter for concern, and its diplomatic, economic, and political engagement is closely monitored.”¹⁹ Despite the nuclear agreement between the Obama administration and Iranian leaders, Iran continues to employ terrorism as a deliberate tool of national power.

Iran’s honorary membership in Latin America’s anti-U.S. club—ALBA—demonstrates Iran’s success in advancing its objectives of penetrating the U.S. area of influence. Participation in ALBA provides Iran with access to greater intelligence, regional military organizations, and other security-related activities, and it promotes Iran’s agenda in this part of the world. Given its previous situation of being under a strong United Nations sanctions regime, Iran was interested in gaining access to proscribed military technologies, promoting its nuclear program, and finding a way into the international banking system. The confluence of Hizballah’s terrorist activities with transnational criminal networks is even more alarming. Hizballah has evolved into one of the region’s most significant DTOs, leveraging its networks in Africa, Asia, and Europe. Unlike China, Iran seeks a presence in the region not for commercial trade purposes—although this is used as a façade—but as a way to promote its geopolitical and ideological goals. Given Iran’s proclivity to support terrorism to achieve its objectives, U.S. policymakers should harbor no illusions that its presence in Latin America is benign.²⁰

But of greatest immediate concern to U.S. national security interests is Russia’s renewed efforts to gain access in the region and undermine U.S. goals and objectives. Taking advantage of the anti-U.S. populist stance of the late Hugo Chavez, Russia has also established itself as an honorary member in good standing of ALBA. Vladimir Putin’s government is providing ALBA nations with weapons, police and military training and equipment, intelligence technology and training, nuclear technology, oil exploration equipment, financial assistance, and support as an influential friend on the United Nations Security Council and other international forums. With Russia’s help and advice, the once-shared hemispheric values of a functioning democratic system are being replaced by a toxic mix of antidemocratic values, additional inputs of massive corruption, and a doctrine that draws on totalitarian models. The ALBA bloc embraces terrorism and terrorist groups such as the Fuerzas Armadas Revolucionarias de Colombia (Revolutionary Armed Forces of Colombia), Hizballah, and the Basque revolutionary organization Euskadi Ta Askatasuna. Also, ALBA’s military doctrine includes the justification for the use of weapons of mass destruction against the United States.

Russia’s intentions in this part of the world are antagonistic in nature. Russia’s ongoing efforts to deepen ties with the nine ALBA bloc members raise real strategic concerns. Although some attempt to excuse Rus-

sian actions as a tit-for-tat response to U.S. engagement in Russia's near abroad, it is one thing for the United States to support democratic governance, rule of law, and free market economies; after all, these actions are nonthreatening. But actively supporting anti-U.S. populist leaders for the sole purpose of undermining the United States in a zero-sum game is another matter; U.S. leaders must recognize this for what it is and take appropriate measures to safeguard our national interests. As General Kelly noted in congressional testimony:

Russian activities in the region are more concerning. . . . Periodically since 2008, Russia has pursued an increased presence in Latin America through propaganda, military arms and equipment sales, counterdrug agreements, and trade. Under President Putin, however, we have seen a clear return to Cold War tactics. As part of its global strategy, Russia is using power projection in an attempt to erode U.S. leadership and challenge U.S. influence in the Western Hemisphere. . . . Russia's activities in the hemisphere are concerning and underscore the importance of remaining engaged with our partners.²¹

Cultural Underpinnings

Five hundred years of externally imposed influence across the region—political, economic, religious, and social, dating from the late 15th century—have had the net result of generating a new culture. Infused into the native inhabitants of the Americas over the years by invading colonists, this new culture—explicitly Latin American—is a factor that requires an appreciation of how different it is to what we would broadly characterize as American. Political scientist Howard Wiarda captured the many differences—and the reasons behind those differences—of cultural development between the British colonies and Spanish and Portuguese empires:

Latin America, colonized and settled in the sixteenth century, was premodern and felt the full weight of medievalism in the form of an authoritarian political regime from top to bottom, a feudal landholding system and mercantilism in the economic sphere, a rigid two-class society without a large or solid middle class, an educational system based on rote memorization and deductive, unscientific reasoning,

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and a religious pattern of absolutism and orthodoxy that buttressed and reinforce the state concept.

The United States, settled and colonized in the seventeenth and eighteenth centuries, belonged, right from the beginning, to the modern world. It was nascently capitalistic, middle class, nonconformist, supportive of representative government, religiously pluralistic, and educationally and legally inductive and scientific.²²

This cultural/societal component is thus key to understanding how the region's political, economic, and judiciary systems developed differently from those of the United States, and why the region—despite its strain of Western traditions—evolved in a different fashion. Independent of the effect of globalization across the world, these cultural differences remain relevant in terms of how nation-states participate in the international system. They continue to directly influence how regional countries' political, economic, and judicial systems behave at the state and sub-state level.

Political Culture

The evolution of political parties and processes in the region has amounted to a slow and gradual move away from explicitly authoritarian regimes to a variety of democratic models, in many cases ostensibly based on separation of powers but typically highly presidentialist and characterized by a dominant executive. This process only began to emerge in the early 20th century (in Uruguay) and has progressed in fits and starts across the region, with countless interruptions by coups of all sizes and colors. But the image of the Latin American military *junta* is not simply coincidental; as recently as the 1980s, the major countries of the Americas were under military control—Argentina, Brazil, Chile, Paraguay, Peru, Uruguay, and others. In addition, the majority of the countries are based on a unitary (versus a federal) model, although even then the concentration of authority in the national executive is the norm. This brief description is provided simply to underscore the fact that when we use the term *democratic government* in referring to Latin America, this does not mean an American model or a Canadian parliamentary variant.

Indeed a variety of factors have contributed to create a political culture that would be characterized as “left of center” in U.S. terms. Although communist ideologies are considered fringe elements within the mainstream of the U.S. political system, they are alive and well throughout the region. Cuba's communist party continues to serve as

a model emulated by political movements throughout the region. It is no accident that leaders in Venezuela, Bolivia, Nicaragua, El Salvador, Ecuador, Chile, Brazil, and until recently Argentina continue to revere Fidel Castro. President Obama's historic overture to the Cuban regime, however well intentioned, decidedly downplayed the strength of the authoritarian domination of the Cuban people. In the recently concluded Seventh Congress of the Cuban Communist Party—only a month after the Presidential visit—the party rejected any notion of political reform; despite the handshakes and photo opportunities, Raúl Castro continues to refer to the United States as “the enemy.” This aspect of the region's political culture presents an additional degree of difficulty, and U.S. policymakers must fully understand this fundamental reality as they consider policy options.

Economic Culture

As with other elements, the disparity in capacity across the range of countries is striking. Latin America is the most unequal region in the world in terms of distribution of wealth. Although poverty has declined from 48.3 percent to 28 percent between 1990 and 2014,²³ 10 of the 15 most unequal countries in the world are in the Americas (including Brazil).²⁴ The region with the lowest quintile is Latin America, which has 4.1 percent of income. The bottom quintile in other developing regions includes South Asia, which has 7.9 percent, and Eastern Europe/Central Asia, which has 8.1 percent. At the other end of the spectrum, the top quintile in Latin America has 53.9 percent of income, the highest regional average.²⁵ Measured by gross domestic product, Brazil is one of the top 10 producing countries of the world, and both Mexico and Argentina are members of the Group of 20. But as richly endowed as those countries are, they too share in significant levels of poverty, and their income distribution schemes are far from ideal. Although many of the countries in the region are amply endowed with natural resources, in most developed countries intangible capital is the largest share of total wealth. This is not the case in Latin America, and it is explained in large part by weaknesses in educational systems as well as rule of law.

Judiciary Systems

The legal systems throughout the region are quite different from a U.S. model. Latin America's legal foundations, established in the 16th and 17th centuries, were cast in a manner that would lead to continued authoritarian rule, founded on a legal tradition based on Roman law (versus common law in the United States and Canada inherited from Britain). Quoting again from Howard Wiarda:

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Among the most important influences brought by Rome to Hispania was its concept of law. In the Roman conception, law derived deductively from divine precepts, nature, and right reason—not from everyday experience as in the more practical Anglo-American common-law tradition. Law and everyday practice were separated, divorced—a situation that leads to widespread violations of the law.²⁶

Levels of corruption throughout Latin America are notorious. With the notable exceptions of Uruguay, Chile, and Costa Rica (ranked 21, 23, and 40 in Transparency International's 2015 Index), Latin American countries have their origins in the legal practices and mores imported in the 16th century.²⁷

The Iberian Peninsula judicial legacy was the inquisitorial system, where prosecuting attorneys and judges are responsible for *both* the investigation and the determination of guilt; they do so without a trial, but rather by reviewing evidence in private. The common law adversarial system used in the United States, by contrast, has active prosecution and defense attorneys, arguing in open court, and an independent judge whose role is to serve as an impartial umpire. Reform efforts in the region began in the late 1980s/early 1990s (more recently in Mexico) and were undertaken initially as the judicial aspect of democratization efforts, although the business sector's interest in market assurance was another strong element. Notwithstanding some progress, however, many countries continue to struggle with substandard judiciary systems due largely to ideological divides and culturally ingrained corruption. The challenge continues to be creating trusted and competent legal institutions, which are necessary to generate confidence in the minds of all citizens—entrepreneurs, bureaucrats, and everyone in between—that their rights will be protected. The poor levels of effective rule of law throughout the majority of the region continue to have a negative impact on countries' abilities to perform effectively across the entire spectrum of political, economic, judicial, and security development.

Among the most pernicious effects of this developmental delay is that Latin America is the most violence-prone region of the world, besting southern Africa. With 9 percent of global population, the region produces 27 percent of murders worldwide. Of the top 20 countries with the highest rates of homicides, 10 are from Latin America:²⁸

Latin America has long been a violence-prone continent. No other region in the world shows higher homicide rates, no other region shows such a variety of different types and

*forms of violence. A high incidence of crime, the proliferation of violent youth gangs, the prevalence of domestic violence, violence related to drug trafficking or money laundering as the burning issues of the day come on top of more historical forms of violence in the form of persistent civil wars, guerrilla movements and death squads, state terrorism and dictatorships, social uprisings and violent revolutions.*²⁹

With the exception of soccer, in no other category does Latin America so dominate world rankings.

A “Big Idea” for U.S. National Security Policymakers

U.S. national security interests in Latin America are enduring and transcend administrations and political parties; what varies over time are levels of attention paid to the region and the ways and means used to pursue the ends. The most current expression emphasizes “the security of our allies and partners, an open international economic system that promotes opportunity and prosperity, respect for universal values, and a rules-based international order advanced by U.S. leadership that promotes peace, security, and opportunity through stronger cooperation to meet global challenges.”³⁰ It is not an exaggeration to state that all these interests are at risk throughout most of Latin America. The good news in this potentially depressing picture is that for the most part, the U.S. model is by far the most attractive model to emulate for the majority of the peoples of Latin America. Very few want to send their children to study in China, Russia, or Iran. The bad news is that the U.S. national security system is poorly structured to deal with the nature of the threats and challenges within Latin America. What is lacking is a coherent U.S. effort to actively promote that ideal-model type with willing partners in the region.

Part of the U.S. challenge is due to the factors laid out previously. At the same time, U.S. policymakers must recognize the limits of what can be done, and how much help is needed. Even if the United States had the resources and interest necessary to effect important and tangible change, the initiative to fundamentally upgrade their systems must rest with the countries in the region. Beyond that, given the underlying conditions seen throughout the region, the solutions are not exclusively, or even primarily, within the purview of the U.S. Government to address. Real progress depends on more than a well-integrated, whole-of-government approach. What is truly needed includes our most productive elements

(namely, the private sector) and beyond, including nongovernmental organizations (NGOs), private charities, universities, religious orders—in a word, our civil society. Empowering someone to bring those sectors into the mix is a key element to future success.

If the interagency community is challenged to provide coherent solutions at the individual country level—and it is—the notion that it can do so region-wide is unrealistic. What is lacking in that regard is an overarching coordinating entity with authorities to direct the various key Federal actors—Department of State/U.S. Agency for International Development, Departments of Defense, Justice, Homeland Security, Treasury, and Commerce, among others. The Senior Director for the Western Hemisphere on the National Security Council lacks the authority to effectively direct, control, or task these departments and other Cabinet-level agencies.

The “Big Idea,” then, requires first the recognition that stating, “We need a more holistic and effective whole-of-government approach,” is insufficient and that more innovative steps should be taken. Taking a page out of President Bill Clinton’s playbook, we need to move beyond the “Special Envoy for Latin America” and designate a serious regional expert heavyweight—someone like John Negroponte comes to mind—to lead a new team authorized and empowered to develop, coordinate, and lead policy for the region.³¹ The vision would entail going beyond the governmental sector serving as a “partner of choice,” to include a broader civil society—to-civil society engagement, encouraged and supported by the interagency entities of the U.S. Government. It would build upon an already existing proposal—that of the Integrated Regional Centers (IRC) suggested by the Project on National Security Reform:

Shift the existing system’s emphasis to the regional level with regional directors heading integrated regional centers, which act as interagency headquarters for national security policy . . . convening Cabinet members and integrated regional directors based on issues, not statutory membership. The departments and agencies support IRCs by providing capabilities. This option builds on the success of the regional military commands while correcting the current civil-military imbalance by providing a civilian counterpart to the regional commands; it allows Washington to focus on global and long-range policy and strategy; and it gives embassies clear authority to coordinate their country plans.³²

The IRC model is a necessary but insufficient first step in the right direction. This Big Idea would go beyond the IRC concept to give it the additional responsibility of also engaging more effectively with the “civil society”—universities, NGOs, churches, the private sector—to do those things not well suited to the government per se.

This proposal recognizes the limits of U.S. time, attention, and resources available to dedicate to the region; other parts of the world represent more significant and urgent threats to U.S. interests. The idea here is to work smarter, not necessarily harder or with more money. Resources will be required elsewhere in the world to confront the threat du jour and traditionally have not been available.³³ But a truly comprehensive approach that includes nongovernmental actors, coordinated, synchronized, and supported by the U.S. Government, would be a game changer. There are areas of concern with duplication of effort that would be deconflicted, as well as gaps and seams that could be recognized and addressed by an entity authorized and bestowed with available—but not coherently integrated—capabilities. The Latin American “Policy Director” would lead a team of regional- and country-specific as well as functional experts (economists, lawyers, judges, political scientists, anthropologists, sociologists, security and defense specialists, law enforcement officers, and so forth) to identify the key elements to assist in addressing essential developmental goals for the region.

A natural reaction to this proposal is that it is unrealistic, too bold, unworkable, or a combination of all three. Perhaps. But prolonging the status quo is demonstrably ineffective; after all, the status quo is what got us here. A system-wide reform effort, à la the Project on National Security Reform, is currently unlikely; unfortunately, a new major crisis will be required to propel us to action. But a pilot program in one specific part of the world might well succeed.

In the event that the Big Idea is too great a leap and simply too hard to pursue, there are other more limited—but still innovative—recommendations that could help in the near term. First, recognizing the real threat presented by transnational criminal organizations, as well as the fact that a number of different actors play a role in identifying the threat as well as dealing with it, a new administration might establish a joint interagency task force (JIATF) with the broad mandate to go after the TCO threat. The idea is to build upon the JIATF-South model, which integrates many of the interagency actors with the Department of Defense (DOD) and Coast Guard to conduct detection and monitoring operations regarding the interdiction of illicit trafficking and other narco-terrorist threats in support of national and partner nation security. This Joint Interagency Task Force–Transnational Criminal Organizations

(JIATF-TCO) would incorporate law enforcement and intelligence agencies to fuse all available information to identify the gamut of bad actors involved in the broad range of criminal actors and activities. In addition, however, the other critical aspect is the action side of the equation.³⁴ This JIATF-TCO would coordinate and execute the takedown of TCO groups and other criminal activities, both internationally and domestically. The notion of synchronizing policy, diplomacy, defense, intelligence, finance, law enforcement, and clandestine and covert action by one centralized and integrated entity is easier said than done but is essential to combating the ability of nonstate actors to exploit the gaps and seams in our current organizational construct. This organization should be led by a senior civilian with recognized gravitas and experience such as a former Director of Central Intelligence, Federal Bureau of Investigation director, or retired combatant commander.

Another important concept is to strengthen DOD capacity to focus its capabilities and interact more effectively with the armed forces and law enforcement agencies of Latin America. Although not of traditional interest to much of DOD, the institutional importance of the Armed Forces in the region requires greater support by the Pentagon to promote enhanced security, improve internal civil-military relations issues, and address ongoing human rights concerns. Beyond recognition by the State Department that greater Pentagon support is a positive thing, there are two structural changes that could also help. The first is the creation of the Office of the Assistant Secretary of Defense (ASD) for Western Hemisphere Affairs, elevating the seniority of the individual responsible for crafting policy for the region. There was a short period of time when this was in effect, when the ASD for Homeland Defense and Americas' Security Affairs played that role to a limited degree, complementing the Deputy Assistant Secretary of Defense for Western Hemisphere Affairs as needed. During that time, both ASDs who held that office—Paul McHale and Paul Stockton—were hired first and foremost for their expertise in homeland defense issues. They were not Latin American specialists. But having an Assistant Secretary of Defense engaged with those details, playing an active role within both the interagency and senior regional counterparts, proved helpful.³⁵

The second and related idea is to consider consolidating the responsibilities for oversight of security cooperation and foreign military sales programs within the region under the supervision of a single geographic combatant commander. There are two basic options regarding how the Unified Command Plan should incorporate Mexico.³⁶ One is to maintain the status quo with Mexico, Canada, and the Bahamas as part of U.S. Northern Command. The other alternative makes the case to include Mexico (and portions of the Caribbean region) within the purview of one

geographic combatant command as the logical step to provide operational support to the policy shop in the Office of the Secretary of Defense.³⁷ As James Stavridis, testified, we should:

*merge SOUTHCOM and NORTHCOM [U.S. Northern Command] into a single Americas Command. The artificial division of Mexico from SOUTHCOM hurts our unified purpose throughout Latin America and the Caribbean; and our Canadian allies are very involved in the world to the south as well. Making this one command—probably headquartered in Miami, with a sub-unified command in Colorado Springs retaining NORAD [North American Aerospace Defense Command] and air defense—would be efficient, save resources, and improve focus on the Americas.*³⁸

Stavridis clarified his remarks, adding, “I absolutely think we should merge NORTHCOM and SOUTHCOM, not only for the efficiencies, but I think there’s cultural connections, to get Canada and Mexico, two of the largest economies in the Americas, into the flow of our work to the south.”³⁹

The proponents of the current configuration make the compelling point that the political, economic, social, and security entity that is North America should be conserved and strengthened. They argue that the defense of the United States demands having Canada and Mexico as special and unique partners as part of a dedicated defense structure. The downside of this option is that the status quo essentially places a wall around the United States, Canada, and Mexico, which may convey a message of writing off the rest of the hemisphere. It would confer upon Mexico status as a key strategic partner, but at the cost of appearing to neglect the rest of our neighborhood. The notion of an Americas Command versus either the status quo or a Southern Command that includes Mexico recognizes that the neighborhood is important to the entire region (to include the United States and Canada) and implies an organizational structure sufficient to that task. The disadvantage, at least in the short term, could be a message received by Mexico that suggests the United States does not value the unique relationship that has developed since 2002. It is an important debate that merits serious consideration at the highest levels of DOD.

There are many other smaller details that could also contribute to improving the ways in which the U.S. Government pays attention to and interacts with the key actors in Latin America. But unless major initiatives are undertaken, the smaller moves are probably akin to simply rearranging the deck chairs—and there are icebergs ahead.

Notes

¹ Project on National Security Reform (PNSR), *Forging a New Shield* (Washington, DC: PNSR, November 2008), v. Emphasis added.

² Linda Robinson, *Intervention or Neglect: The United States and Central America Beyond the 1980s* (New York: Council on Foreign Relations, 1991), 173. Bernie Aronson has also noted that Latin Americans are less annoyed by U.S. intervention than by the inconsistency of our intervention, an important qualifier.

³ Michael Reid, "Obama and Latin America: A Promising Day in the Neighborhood," *Foreign Affairs* 94, no. 5 (September/October 2015), 46. Emphasis in the original.

⁴ James R. Clapper, Director of National Intelligence, "Statement for the Record: Worldwide Threat Assessment of the U.S. Intelligence Community," House Appropriations Subcommittee on Defense, March 25, 2015, 8; available at <<http://docs.house.gov/meetings/AP/AP02/20150325/103200/HHRG-114-AP02-Wstate-ClapperJ-20150325.pdf>>.

⁵ Centers for Disease Control and Prevention, National Center for Health Statistics 2015, available at <www.drugabuse.gov/related-topics/trends-statistics/overdose-death-rates>.

⁶ National Drug Threat Assessment 2010, Product No. 2010-Q0317-001, National Drug Intelligence Center, U.S. Department of Justice, 2010.

⁷ For a more in-depth understanding of these arguments, a number of articles in *Convergence* are quite helpful. See Michael Miklaucic and Jacqueline Brewer, eds., *Convergence: Illicit Networks and National Security in the Age of Globalization* (Washington, DC: NDU Press, 2013).

⁸ *Ibid.*, foreword, by James G. Stavridis, ix–x.

⁹ Michael Miklaucic and Moisés Naim, "The Criminal State," in *Convergence*, 149.

¹⁰ Formal members of Alternativa Bolivariana para los Pueblos de América, or the Bolivarian Alternative for the Americas (ALBA), include the two original members—Cuba and Venezuela—as well as Antigua and Barbuda, Bolivia, Dominica, Ecuador, Nicaragua, Saint Lucia, and St. Vincent and the Grenadines. Iran and Syria maintain observer status.

¹¹ Wayne M. Morrison, *China-U.S. Trade Issues*, RL33536 (Washington, DC: Congressional Research Service, December 15, 2015), available at <www.fas.org/sgp/crs/row/RL33536.pdf>.

¹² Chinese "policy" banks differ from Chinese commercial banks in that they target specific sectors for economic and trade development issues. Specifically these include the Agriculture Development Bank of China, China Development Bank, and Export-Import Bank of China.

¹³ "China Denies 'Biggest Trader' Status, Insists It's 'Developing Country,'" *RT.com*, February 19, 2013, available at <www.rt.com/business/china-trading-us-partner-577/>.

¹⁴ Enrique Dussel Peters and Kevin P. Gallagher, "NAFTA's Uninvited Guest: China and the Disintegration of North American Trade," *CEPAL Review* 110 (August 2013), 86–89.

¹⁵ Data from the U.S. Census Web site, available at <www.census.gov/foreign-trade/balance/c2010.html#1994>.

¹⁶ For an excellent analysis of the current China–Latin America trade and finance situation, see Rebecca Ray and Kevin Gallagher, *China-Latin American Economic Bulletin 2015 Edition*, Discussion Paper 2015-9 (Boston: Global Economic Governance Initiative, 2015), 1–22.

¹⁷ Yei Lu, "China's Strategic Partnership with Latin America: A Fulcrum in China's Rise," *International Affairs* 91, no. 5 (2015), 1047–1048.

¹⁸ Alma Keshavarz, “A Review of Iran’s Revolutionary Guards and Qods Force: Growing Global Presence, Links to Cartels, and Mounting Sophistication,” *Small Wars Journal*, December 23, 2015, available at <<http://smallwarsjournal.com/jrnl/art/a-review-of-iran%E2%80%99s-revolutionary-guards-and-qods-force-growing-global-presence-links-to-car>>.

¹⁹ General John F. Kelly, Posture Statement before the Senate Armed Services Committee, March 12, 2015.

²⁰ For a particularly sobering overview of Iran’s interests and activities in the region, see Matthew Levitt’s “Iranian and Hezbollah Operations in South America: Then and Now,” *PRISM* 5, no. 4 (2013), 118–133.

²¹ Kelly, Posture Statement. Emphasis added.

²² Howard J. Wiarda, *The Soul of Latin America* (New Haven: Yale University Press, 2001), 3–4.

²³ Economic Commission for Latin America and the Caribbean, “Poverty and Indigence Reduction Stalls in Most of Latin American Countries,” January 26, 2015, available at <www.cepal.org/en/pressreleases/poverty-and-indigence-reduction-stalls-most-lat-in-american-countries>.

²⁴ United Nations (UN) Development Programme, “About Latin America and the Caribbean,” available at <www.latinamerica.undp.org/content/rblac/en/home/regioninfo.html>.

²⁵ World Bank, “Poverty and Equity Regional Dashboards,” available at <<http://povertydata.worldbank.org/poverty/region/ECA>>.

²⁶ Wiarda.

²⁷ Transparency International 2015 Index, available at <www.transparency.org/cpi2015#map-container>.

²⁸ UN Office on Drugs and Crime, *Global Study on Homicides*, 2013, 35, available at <www.unodc.org/documents/gsh/pdfs/2014_GLOBAL_HOMICIDE_BOOK_web.pdf>.

²⁹ Fernando Carrión, “Violence Research in Latin America and the Caribbean: A Literature Review,” *International Journal of Conflict and Violence* 5, no. 1 (2011), 88.

³⁰ *National Security Strategy 2015* (Washington, DC: The White House, February 2015), 2.

³¹ Lifelong friend of President Bill Clinton, Thomas “Mack” McLarty, first served as White House Chief of Staff and was then designated “Special Envoy for the Americas.” His success in this position was due primarily to his close relationship with the President, not his regional expertise.

³² PNSR, 441–442. See pages 492–506 for greater details regarding the integrated regional center model.

³³ A colleague who also specializes in Latin America makes a compelling case for more funding: “I think more money is a necessary suggestion. We spend less in Latin America in one year, adding up all of our programs—civilian and military—than the military spends in Afghanistan in one week. That’s shameful for a region that neighbors the United States. No wonder we’ve lost influence.” Dr. David Spencer, email note to author, April 1, 2016.

³⁴ While it is true that “mini” versions of this proposal already exist within the Department of Justice, Department of Treasury, and Intelligence Community, they continue to exist within functional stovepipes. The concept is to integrate efforts across all agencies.

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³⁵ The precedent of having an Assistant Secretary of Defense for a single region was established in late 2007 with the creation of the office of the Assistant Secretary of Defense for Asian and Pacific Security Affairs.

³⁶ An outlier would be to place Mexico and the Caribbean into U.S. Southern Command, and merge U.S. European Command into what is left of U.S. Northern Command. See *Armed Forces Journal*, “Redrawing the COCOM Map,” available at <www.armedforces-journal.com/redrawing-the-cocom-map/>.

³⁷ For a more detailed explanation of the logic behind these recommendations, see Craig A. Deare, “Time to Improve U.S. Defense Policy toward the Western Hemisphere,” *Joint Force Quarterly* 53 (2nd Quarter 2009), 38–39.

³⁸ Testimony of Admiral James G. Stavridis, USN (Ret.), before the Senate Armed Services Committee, December 10, 2015.

³⁹ Joe Gould, “As Congress Pushes Defense Department Reform, So Does Carter,” *Defense News*, December 12, 2015, available at <www.defensenews.com/story/defense/policy-budget/budget/2015/12/12/congress-pushes-defense-department-reform-so-does-carter/77057422/>.

Central Asia

Theresa Sabonis-Helf

After a decade of competition for influence in Central Asia, the region's future path is now clearly tied to China. While Russia retains some roles in the region, the trend toward China is likely to continue without strong contestation. The United States has an interest in meaningful economic development and can help shape some aspects of China's involvement in the region.

With the winding down of the war in Afghanistan and low oil prices, Central Asia is no longer visible in the forefront of U.S. foreign policy. U.S. priorities in the region have already been through two distinct phases. First, U.S. attention to the region from independence to the terrorist attacks of September 11, 2001, focused on consolidation of independence and state-building. Then from 9/11 to 2014, Central Asia was a focus because of its proximity to Afghanistan. Now, in a third and post-Afghanistan phase, the United States is reassessing the distant, landlocked region and how it does—or does not—tie to U.S. national interests.

The United States continues to be concerned about political instability in the region, the persistence of drug-trafficking, and the prospects for the rise of violent extremism. In each of these areas, concerns are not matched with clear U.S. levers for influencing the outcome. In the Afghan War era, the United States was the third party in what was commonly referred to as the “Great Game” for influence. The United States is no longer a key player in the new Great Game that is unfolding between Russia and China, but it is still likely to be called on to referee and can play a role in ensuring that Central Asia benefits from the overlapping and sometimes competing interests of its powerful neighbors.

The states of Central Asia face a “connect or die” challenge. Long-standing grievances, which are personal (among the leaders) and historical (among the nations), make cooperation difficult. Yet regardless of

which hegemon wins the most influence, Central Asia's future success rests on economic integration and to some extent political and security integration.

The Central Asian states are not yet persuaded of this. In February 2014, aging Kazakh President Nursultan Nazarbayev floated the idea of changing his country's name from Kazakhstan to Kazak Yeli, omitting the "-stan" suffix in favor of its Kazakh equivalent.¹ This idea may be the vanity of an aging ruler, but it also reflects a sense, common in Kazakhstan, that as the most successful state in the region, Kazakhstan benefits from distancing itself (as much as possible) from its more troubled neighbors.² The fact that Kazakhstan's name is even a point of discussion illustrates a problem that is somewhat perplexing to outsiders: Central Asia's core question for the coming decade is what sense will be made of its region—and if it is a region at all. Although Central Asia is always described as a crossroads, a renewed competition is now under way to define the crossroads, what forms of government and security provision will prevail, what markets will now be connected to what producers, and what physical infrastructure and rules will shape the trade within the region and beyond.

The United States framed its efforts to integrate Afghanistan into the region as a "New Silk Road Strategy," but that gained little traction beyond supply for and retrograde from the war in Afghanistan. The U.S. New Silk Road Strategy did not promise or provide major investment in the region, and the signature project, the Turkmenistan-Afghanistan-Pakistan-India gas pipeline, failed to move forward due to a persistently problematic security climate and lack of investors. While the North Atlantic Treaty Organization and European nations sought to connect Central Asia to its south, Russia is seeking to integrate some (but not all) Central Asian states into its Eurasian Economic Union (EEU). Moreover, China has launched an ambitious program of investment tying the region to its own Xinjiang Province. Central Asia has established itself as an energy powerhouse with growing exports in oil, gas, and electricity, but the direction of these exports is evolving unexpectedly. Economically, the only other significant export besides resources is labor, and the migration of labor is going in a different direction than resource exports. Security is largely contingent on economic and governance success or failure, but the alliances promising security, such as the Collective Security Treaty Organization (CSTO), are not the same as the ones promising prosperity, such as the EEU.

This chapter provides a brief overview of governance, oil and gas development, and emerging security challenges, but its emphasis is on the question of the competitive evolution of the crossroads themselves. Re-

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Table 1. Indicators of Governance in the Region					
Country	Human Development Report 2015 (of 188 countries) ¹	Corruption Perceptions Index 2015 (of 167 countries) ²	World Bank Ease of Doing Business 2015 ³	Freedom in the World 2016 ⁴	Per Capita Electricity Consumption (kilowatt hours per year) ⁵
Kazakhstan	56 (high)	123	77	6/5: not free (aggregate score 24)	5,085
Kyrgyzstan	120 (medium)	123	102	5/5: partly free (aggregate score 38)	1,809
Tajikistan	129 (medium)	136	166	7/6: not free (aggregate score 16)	1,732
Turkmenistan	109 (medium)	154	Not rated	7/7: not free (aggregate score 4)	2,384
Uzbekistan	114 (medium)	153	141	7/7: not free (aggregate score 3)	1,605
Afghanistan	171 (low)	166	Not rated	6/6: not free (aggregate score 24)	78
<p>Source: Jane's World Armies Database.</p> <p>¹ <i>Human Development Report 2015: Work for Human Development</i> (New York: United Nations Development Programme, 2015), 208–211.</p> <p>² Transparency International, "Corruption Perceptions Index 2015," available at <www.transparency.org/cpi2015#results-table>.</p> <p>³ World Bank, <i>Doing Business 2016: Measuring Regulatory Quality and Efficiency</i>, 13th ed. (Washington, DC: World Bank, 2016), available at <www.doingbusiness.org/~media/WBG/DoingBusiness/Documents/Annual-Reports/English/DB16-Full-Report.pdf>.</p> <p>⁴ Freedom House, "Freedom in the World 2016," Table of Country Scores, available at <https://freedomhouse.org/report/freedom-world-2016/table-scores>. Political rights and civil liberties are scored on a 1 to 7 scale, with 7 being least free. Aggregate score of 0 is worst, aggregate score of 100 is best.</p> <p>⁵ Data (except Afghanistan) are from International Energy Agency, "Statistics," available at <www.iea.org/statistics/statisticssearch/>. For Afghanistan consumption, see Index Mundi, "Electricity Consumption Per Capita," available at <www.indexmundi.com/g/r.aspx?v=81000>. By comparison, Russia's consumption per capita is 8,763 and U.S. consumption per capita is 12,884.</p>					

gional scholar Alexander Cooley frames the problem as "Great Games, Local Rules," arguing that Central Asian leaders have been highly successful at serving their own interests while the United States, China, and Russia vie for influence.³ Although the leaders have managed to entrench themselves and gain extensive side payments, the economic and political development of the region has not been well served by the way the game has been played to date. Central Asia's future prospects for success lie in managing that overlap of great power and local interests strategically rather than in the narrow personal interests of the leaders. A critical component of this is improved integration among the Central Asian states.

Development Traps and Central Asia

Despite more than 25 years of independence that coincided with a period of world economic growth during which many states experienced a dramatic rise in standard of living, Central Asia as a region continues to be plagued by slow, uneven development and poor governance. The Human Development Index for each of the five states is higher than that of Afghanistan (and in some of the past 20 years has shown marginal improvement), but as table 1 shows, other indicators of governance, corruption, and ease of doing business make it clear that the capitals of Central Asian states have much in common with Kabul. The Soviet legacy of education has been preserved to the extent that literacy in the region remains high, but many aspects of public health, education, and domestic infrastructure have continued to deteriorate over the years. The states have not succeeded in diversifying their economies, and remain economically hostage to commodities prices and poor governance.

Electricity per capita is provided in table 1 as one illustration of development level. Although electricity generation has increased in all Central Asian states since 1992, supply per capita in Kyrgyzstan, Tajikistan, and Uzbekistan is low enough to suggest that (in spite of Soviet claims to the contrary) the region was never fully electrified and still has significant gaps in electricity provision. World Bank survey data provide additional support for this, finding in 2015 that many rural households in Tajikistan were not connected to the grid at all and that 38 to 58 percent of the connected rural households experienced regular outages even in the May–September season,⁴ which is particularly striking since Tajikistan and Kyrgyzstan are large-scale exporters of electricity during that season.

Examination of the World Bank's "Ease of Doing Business 2015" data provides more evidence that the states are poor performers. Uzbekistan ranks lowest in the broader region for its performance in registering property and in trading across its borders, and Tajikistan has the lowest regional performance in paying taxes and highest cost (per container) to export or import. Kazakhstan, despite its higher level of development, has the worst regional score in number of days needed to export a container (79) while Uzbekistan has the worst regional score in number of days needed to import (104).⁵ These numbers point to a striking problem: the Central Asian states continue to make it difficult to engage in commerce within their countries, but even more so, they make it difficult to engage in commerce across the states. Not only is this "great crossroads" poorly connected to larger markets, but it also connects poorly across even the local boundaries.

Three of the five Central Asian states are highly dependent on remittances from labor migration. For Tajikistan, Kyrgyzstan, and to a lesser extent Uzbekistan, participation in the regional economy is through the

export of mostly unskilled labor, and mostly to Russia. Indeed, Tajikistan is the most remittance-dependent country on Earth.

In his landmark work *The Bottom Billion*, development scholar and World Bank expert Paul Collier identifies four key traps that continue to prevent some nations from experiencing development even in periods of rising global prosperity. Although his expertise is concentrated in Africa, Collier's work makes frequent reference to Central Asia because the region is home to three of the four classic "development traps" he identifies. They include the problem of poor governance in a small state, the problem of being landlocked with bad neighbors, and the natural resources trap.⁶ The fourth development trap he identifies—the conflict trap—is less relevant to the Central Asian cases (except for Tajikistan).

Poor governance is more problematic in small states than in large ones, he argues, because a rapacious state with small territory has a tendency to extract wealth from any region or business that tends to succeed, thereby discouraging entrepreneurship that might rise from below. (Larger states with poor governance, by contrast, often have pockets of economic prosperity far from the central government.) Being landlocked with bad neighbors is particularly problematic because access to international markets—for export or for import—depends not only on the state's own infrastructure (roads, electricity, rule of law) but also on the infrastructure of neighboring states. According to Collier, the landlocked trap is particularly associated with labor migration, with the home state often becoming over-reliant on remittances. This is highly visible in Central Asia: Tajikistan's remittances in 2014 constituted 36.6 percent of gross domestic product (GDP)—the highest proportion of remittance reliance in the world. Kyrgyzstan was not far behind, with remittances constituting 30 percent of GDP in 2014, and remittances in Uzbekistan (although Uzbekistan denies that labor migration is a problem) appear to have constituted 9.3 percent of GDP in 2014.⁷ The regional governments do a relatively poor job of promoting fair or safe migration through good policy compared to the governments of South or East Asia, which leads to unintended consequences. A recent U.S. Government study identifies labor migrants from Central Asia as a source of highly valued foreign volunteers for violent extremist organizations in Iraq and Syria, according to the Islamic State of Iraq and the Levant.⁸

Collier's third trap, the natural resources trap, offers states the option of deriving state revenues from commodities extraction rather than development of the people. Hence natural resource riches can lead to a tendency on the part of a government to ignore the people. Only three of the Central Asian states are rich in oil or gas: gas provides 81 percent of export revenues in Turkmenistan, gas and minerals provide 44 percent of

export revenues in Uzbekistan, and oil provides 58 percent of revenues in Kazakhstan.⁹ Despite these facts, it is instructive to note that exports of hydroelectricity have been significant sources of income for the state in both Kyrgyzstan and Tajikistan and that exports of commodities are central in the economies of all five states.¹⁰

Collier's framework aptly characterizes the regional development challenge in Central Asia. The states discourage entrepreneurship within, make it difficult to trade across states, and base their revenues on commodities rather than development of human capital. Commodities booms and labor remittances have provided what economic success the region has enjoyed. The problem of being landlocked has been exacerbated for Central Asian states by their difficult regional relations—the Kazakhs focus on Russian and Chinese relations, with some investment in Kyrgyzstan but with difficult relations with Uzbekistan. The Uzbeks have contentious relations with all neighbors but especially with Kyrgyzstan (motivated by Uzbek ethnic minority politics) and with Tajikistan (motivated by the politics of water and dams). The Turkmen, registered as permanently neutral before the United Nations, refuse to engage in any regional agreements. Although there have been international efforts to better integrate the region since 1992, tensions among the various states make such integration problematic.

Choosing a Leviathan

With the problems of non-integration plaguing the region, the role of outside actors in connecting the Central Asian states to each other—if only to reach markets beyond Central Asia—is critical. The low levels of trust among the states cause each Central Asian state to place hopes in outside actors to moderate the behavior of its immediate neighbors. The two leading competitors in the region—Russia and China—have each taken a different approach.

For Russia the preferred approach is for the Central Asian states to join the EEU. This union, which came into being in January 2015, allows for a common customs area. The common market envisioned by the EEU is expected to go into effect in 2025, with the intervening years being used to harmonize legislation and practices.¹¹ Kazakhstan was a founding member, as was Kyrgyzstan, but each state had some skepticism about the future of the EEU from the outset. Kazakhstan joined the World Trade Organization (WTO) prior to joining the EEU to ensure that it would be bound by international rules and regulations, limiting Russia's power to fundamentally reshape markets. Kyrgyzstan (long a member of the WTO) secured a clause in its agreement with the EEU

that ensured it would be able to continue with its economic ties to China without interference. Russia has indicated (although not yet implemented) that it will give preference to labor migrants from EEU countries over non-EEU ones, a factor that strongly shaped Kyrgyzstan's decision to join. Although Tajikistan is exploring the possibility of membership, it is unclear how eager Russia is to add further to the union at this time—and a closer economic relationship with impoverished Tajikistan is not necessarily in the Kremlin's interests. There has been no evident discussion about expanding the EEU to include Uzbekistan (whose relations with Russia are off and on) or Turkmenistan (which remains permanently neutral and therefore does not belong even to the Shanghai Cooperation Organization [SCO]). Meanwhile the economic recession in Russia has somewhat reduced its attractiveness to Central Asian migrants. According to World Bank data, Tajik migrants to Russia decreased by 3.8 percent and Uzbek migrants decreased by 18.6 percent in 2015.¹²

While Russia's current economic offering, the EEU, focuses on institutions, China's efforts in the region clearly focus on something more immediately attractive to the region: infrastructure. In September 2013, Chinese President Xi Jinping took the opportunity of a speech at Nazarbayev University in Astana, Kazakhstan, to announce China's plans to build a "Silk Road Economic Belt" across Eurasia. This Silk Road became the land-based component of China's subsequent "One Belt, One Road" (OBOR) strategy, which envisions land-based infrastructure connecting China to Europe via Central Asia (One Belt) as well as a maritime network linking Asia to Africa via the Indian Ocean (One Road).¹³ The policy envisions long-term political cooperation and cultural exchange, but physical blueprints focus on infrastructure in three areas: transportation, energy, and telecommunications.¹⁴

Physical aspects of the OBOR include pipelines, railways, and highways. The entire program is exceedingly ambitious—involving some 68 nations—but Central Asia does seem to be enjoying some pride of place in the project to date. Analysts of China's OBOR strategy in Central Asia note that China's infrastructure development in the region serves several purposes at once: China is able to export its current overcapacity in infrastructure development to neighboring states, this new infrastructure potentially helps stabilize the Xinjiang region by better linking it economically to its nearest neighbors, and it helps China reap the benefits of access to natural resource markets as well as to consumer markets that have been isolated.

As envisioned, financing will come from China bilaterally, from Chinese private investors, and from multilateral funds. China often cites the Asian Infrastructure Investment Bank (AIIB) as an important multilateral

source for Silk Road project financing. China holds a 30 percent stake in the AIIB, which is expecting to have a \$100 billion capital base. Since the articles of agreement for the AIIB require 75 percent support to make major decisions, China's priorities will be well reflected in funding. China is also expecting to use the BRICS (Brazil, Russia, India, China, and South Africa) New Development Bank (which also expects to establish a capital base of \$100 billion), although it will have less clout in that organization. China is also believed to be pressuring the SCO to establish funding available for these projects.¹⁵ Although the ambition and scope of China's OBOR strategy are striking, Central Asia has an important place. Oil and gas pipelines from Central Asia to China are already well established (this point is discussed in the next section), and China has established a \$40 billion Silk Road Fund for additional projects in the region. Analysts note that even if China does not follow through on all its investment promises, projects already undertaken with Chinese funding represent more investment than Central Asia has received from any other source since independence.

Oil and Gas

Efforts to acquire energy resources have played a large and early role in China's attention to Central Asia. Much international attention in the past decade was drawn to Central Asia because it contains large untapped reserves of oil and gas, located in countries that are not members of the Organization of the Petroleum Exporting Countries cartel. The Caspian Sea, when first opened to development in the 1990s, was the scene of scrambles from major oil companies all over the world, and the celebrated "deal of the century" signed in 1994 gave rights to develop the Azeri-Chirag-Gunashli field offshore of Azerbaijan.¹⁶ Central Asia was more difficult, but promising, and attracted large investment, particularly from Chevron, in the early years.

In the decade between 2004 and 2014, production continued to rise, although not as rapidly as anticipated, delayed by the global economic downturn and low prices. Production of oil from Kazakhstan rose from 1.2 to 1.7 million barrels a day. Production of gas in Turkmenistan rose from 52.9 billion cubic meters per annum (BCMA) to 69.3 BCMA.¹⁷ China was closely involved in increases of production from both states. China is a key investor in Kazakhstan's oil sector, and Kazakhstan sent 16 percent of its 2013 oil exports to China.¹⁸ China is also the key investor in Turkmenistan's natural gas sector, and imports more than 50 percent of all Turkmenistan exports. In both cases, China is continuing to invest and has expectations of increasing import levels. When we examine the

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Table 2. Central Asia Exports in Natural Gas: 2008, 2010, and 2014 in Billion Cubic Meters per Annum (BCMA)

Origin > Destination	2008 BCMA	2008 as %	2010 BCMA	2010 as %	2014 BCMA	2014 as %
Turkmenistan > Russia	47.1	86 trade*/71 production**	9.68	49 trade*/23 production**	9	22 trade*/13 production**
Uzbekistan > Russia	13.5	100 trade/22 production	10.32	76 trade/17 production	4.1	48 trade/7 production
Kazakhstan > Russia	9.6	100 trade/32 production	11.95	100 trade/35.5 production	10.9	96 trade/56 production
Turkmenistan > China	N/A		3.55	18 trade/8 production	25.5	61 trade/37 production
Uzbekistan > China	N/A		N/A		2.4	23.5 trade/3 production
Kazakhstan > China	N/A		N/A		0.4	3.5 trade/2 production
<p><i>Source:</i> For 2008 data, see <i>BP Statistical Review of World Energy June 2009</i> (London: British Petroleum, 2009), 24, 27, 30. For 2010 data, see <i>BP Statistical Review of World Energy June 2011</i> (London: British Petroleum, 2011), 22, 28. For 2014 data, see <i>BP Statistical Review of World Energy June 2015</i> (London: British Petroleum, 2014), 22, 28.</p> <p>*Percentage of natural gas trade.</p> <p>**Trade relationship as percentage of overall natural gas production.</p>						

years since 2009, a striking pattern emerges: Russia lost Central Asia, at least in energy transit terms.

Historically, Russia had been the transit state for all exports of oil and gas from the region, using its power to allow and disallow access to markets. Early after the breakup of the Soviet Union, Russia established a practice of using Central Asian production as “swing” capacity, which allowed access to the pipelines only when demand in European markets was high enough to use full Russian production plus Central Asia. The rapid development of pipelines, which began coming on line in 2001, began to change that, and by 2010 the picture of energy in the region was starkly different. Kazakhstan’s oil production increased and its natural gas production declined (as it increasingly used reinjected gas to improve the productivity of the oil fields). Uzbekistan’s production remained relatively constant, but its export of oil and gas declined sharply, as it used more of its natural endowments to support autarkic industries within Uzbekistan. Turkmenistan’s production of natural gas rose sharply, but it simultaneously reduced exports and developed entirely new routes in an effort to secure independence and prosperity. Table 2 gives a sense of the changes and shifts in natural gas flows from the region.

As table 2 shows, the clear winner in this development has been China, particularly with regard to Turkmenistan. It is instructive how much of China’s relationship with Turkmenistan resulted from a Russian policy

blunder. China did not so much “win” Turkmenistan as Russia “lost” it. During the global economic downturn, in an effort to preserve scarce profits, Gazprom responded slowly to a rupture on the main Turkmenistan pipeline (and, some argue, caused it). Turkmenistan was unable to export any gas via its main line for several months, throwing the nation into a severe economic crisis. By the end of that crisis, Turkmenistan had committed to completing pipeline infrastructure to China—infrastructure that had been discussed for years but on which there had been little progress. In short, the cost to Russia of Gazprom using Turkmenistan as its “swing” capacity was the geostrategic loss of Turkmenistan as an energy ally. Although Turkmenistan accounted for only 2 percent of global production in 2015, it has the fourth largest proven reserves of natural gas in the world, indicating a promising future.¹⁹

Construction of Turkmenistan’s first pipeline to China preceded articulation of the OBOR strategy, but now the network of natural gas pipelines connecting Central Asian gas to markets in China is seen as an important component of the strategy. The Central Asia–China gas pipeline, the longest pipeline in the world, transits Uzbekistan and Kazakhstan on its way to China. It is currently comprised of three lines, with a total capacity of 55 BCMA. A fourth line, currently under construction, will take a different route, flowing through Uzbekistan, Tajikistan, and Kyrgyzstan, and will add another 25-BCMA capacity. Since the completion of the Central Asia–China gas pipeline, Turkmenistan’s production has risen by over 25 BCMA.

This infrastructure is especially attractive to China as it provides for an expansion of supply that is overland (and therefore not involved in growing pressures on the Strait of Malacca), and it enables China to tap into—and presumably become a near-monopsony for—available but landlocked natural gas in Central Asia. At the outset, Turkmenistan provided all the natural gas that traverses the Central Asia–China gas pipelines, but China has since pursued development of natural gas supply in Uzbekistan and in Kazakhstan, with the intention of these nations becoming suppliers rather than merely transit states for China. At the same time, China is involved in infrastructure improvement that will help gasify regions of these countries that do not currently have such infrastructure.²⁰

The fourth line of the gas pipeline, Line D, which takes a new route and is still under construction in late 2016, is particularly attractive to the energy-poor states of Kyrgyzstan and Tajikistan. They will receive both transit fees and lower dependence on their historical gas supplier, Uzbekistan.²¹ China is billing this route choice as an aspect of regional development. This route also helps discipline the main transit states by

ensuring there is an alternate route in the event of unrest or dispute. It is also most likely a reflection of China's interest in Tajikistan's natural gas potential. Although recent efforts to exploit Tajik gas have proved uneconomic (the gas reserves are at an unusual depth and believed to lie under a salt layer), the China National Petroleum Corporation (CNPC) and Russia's Gazprom both remain investors in spite of the departure of Western firms (most notably the American firm Tethys).

Oil is also being developed by China, albeit more slowly. Kazakhstan, the most important producer of oil in the region, has seen an increase of 30 percent in its production. The light sweet crude characteristic of Kazakhstan is highly desirable, and although the Kazakhstan-China pipeline completed in 2006 was not filled to capacity until January 2011, China remains interested in investing in the oil sector in Kazakhstan.²² CNPC has an 8.3 percent stake in the Kashagan oil field, the largest oil field outside the Middle East, expected to begin producing in 2016 (although it has experienced significant delays already).²³ Once the considerable technical hurdles are overcome, Kashagan is likely to produce 1.5 million barrels a day.²⁴ CNPC is currently the majority owner of two major oil companies, AktobeMunai and PetroKazakhstan.²⁵ Another Chinese parastatal, Sinopec, has a memorandum of understanding with KazMunayGas (Kazakhstan's State Oil and Gas Company) for cooperation in exploration and development.²⁶

China is interested not only in production but also in long-term arrangements that bind the Kazakh energy sector more closely to Chinese interests. For example, during the low oil prices that caused the Kazakh oil industry to be cash-strapped, in December 2015 the private Chinese firm CEFC Energy agreed to take control of one unit of KazMunayGas. This agreement, valued at between \$500 million and \$1 billion, was part of a \$4 billion agreement that focused on oil and gas but also involved uranium mining and telecommunications.²⁷

Other Trade and Economic Activity

Trade between China and Central Asia is estimated to have been \$350 to \$750 million per year in the 1990s.²⁸ From 2000 to 2010, estimates of China's overall annual trade rose from \$1 billion to \$30 billion. In subsequent years, Central Asia trade with China surpassed trade with Russia, and in 2013 stood at \$50 billion. During that period, time required for import and export declined significantly, although Central Asia continues to take more time for imports and exports than most of China's other trade partners.²⁹

Although commodities have so far dominated the trade from Central Asia, China emphasizes that its interests are much broader in the long term. China's investments in the transportation sector in Uzbekistan, extension of scholarships to students from SCO countries,³⁰ and investment in telecommunications in the region are all evidence of broader interests. China also characterizes the OBOR investments as encouraging economic growth and integration rather than an effort to expand its own political influence. One goal of China's strategy, according to regional scholar Thomas Zimmerman, is to leverage greater economic integration with neighboring states to promote the use of the renminbi in global trade.³¹

China's investments in Kazakhstan—in uranium, telecommunications, the dry port in Khorgos, asphalt factories, and free-trade zones on the border—do demonstrate an interest beyond energy trade. But China's asymmetric advantage in trade will not likely change. Kazakhstan, which has received the most investment so far from China, represents a tiny portion of China's overall trade. The *Washington Post* reported that in the first quarter of 2015, trade with Kazakhstan represented 0.25 percent of China's global trade.³² Meanwhile, for Kazakhstan, China represents 15.9 percent of all exports. For Turkmenistan, the relationship is even more strikingly asymmetric, with China purchasing 69.7 percent of its exports.³³ Concern that China will become a monopsony for Turkmen gas is well founded.

Security Climate

Although Central Asia trade has shifted decisively toward China, Russia continues to play a soft-power and a security role. To date Russia retains the soft power of language: news services in Russian remain popular, Russian remains one of two official languages in Tajikistan, Kazakhstan, and Kyrgyzstan, and Russia provides almost the only coverage in the region of international affairs. It also retains security relationships with most Central Asian states, as reflected in table 3. The Collective Security Treaty Organization, led by Russia, was established in 1992 and includes three of the five states. China shares some (minimal) security relations with Russia through the SCO, established in 2001 and including four of the five Central Asian states. The security obligations of the SCO have in recent years expanded somewhat and include military cooperation and intelligence-sharing. The SCO, however, focuses on countering separatism and extremism, while the CSTO is a more comprehensive intergovernmental military alliance.

While Uzbekistan and Turkmenistan have opted out of security infrastructure linking with Russia, the other three states retain military and

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Table 3. Central Asia Militaries					
	Kazakhstan	Kyrgyzstan	Tajikistan	Turkmenistan	Uzbekistan
Armed Forces Personnel	31,000 army 12,000 air force 3,000 navy	8,500 army	6,800 army 800 air force	18,500 army 4,300 air force 700 navy	40,000 army 13,700 air force
Cooperation with Russia	Collective Security Treaty Organization (CSTO) joint exercises	CSTO joint exercises	CSTO joint exercises	Not a CTSO member	Withdrew from CSTO in June 2012
Russian Military Presence	Joint air defense Baikonur Space Facility	Kant Kara-Balta Communications Center Submarine test site	201 st Motor Rifle Division in Dushanbe	None	None
Shanghai Cooperation Organization (SCO)	Founding member	Founding member	Founding member	Not an SCO member	Founding member

state security links. Military security is arguably the only sphere in Central Asia where Russia actively plays a leading role. Russia seems eager to maintain these relationships but has limited resources available to intervene in ethnic or sectarian conflicts, as evidenced by Russia's choice to stay out of 2010 ethnic clashes in Kyrgyzstan, despite the Kyrgyz government's requests for assistance.³⁴

Beyond threats from each other, and concerns about their militarily powerful northern neighbor, threats to Central Asian states are largely internal. Central Asian governments voice growing concern about the threat of Islamic extremism, but these risks are often exaggerated. As some analysts note, the governments often misrepresent political protest in order to justify repression. Also, because of relatively effective state repression in Central Asia, several militant groups (including the Islamic Movement of Uzbekistan) have moved the base of their operations from Central Asia to South Asia.³⁵ While not an existential threat to the state in Central Asia in the near term, foreign fighters from Central Asia have been and are a source of instability in Afghanistan and Pakistan as well as in Iraq and Syria. Their return home to Central Asia is a concern for the long term. The role of opium routes in financing both extremism and criminal organizations is another key issue that the Central Asian states remain poorly equipped to address.

Beyond the commitments of the SCO, China has not sought to project military power into the Central Asian region, but most analysts expect that China will protect its growing economic stakes and that China will remain vigilant against terrorism, separatism, and extremism.³⁶ China is positioning itself to, at a minimum, mediate between the Central Asian

states. Regional scholar Alexander Cooley notes that the legal structure of Central Asia's pipelines gives China an unusual role: each country along the Central Asia–China pipeline route has a separate joint venture agreement with China concerning the pipeline on its territory. China owns 50 percent, while the host nation owns the other. This means that any regional dispute that interferes with the flow of gas will be mediated by China.³⁷ While the implications of this for price, volume, and maintenance are obvious, it also suggests that China itself will take responsibility—and hold each transit state individually responsible—for continuing the flow of natural gas regardless of other problems among the states.

U.S. Interests in Central Asia

The United States does not have stakes in the region comparable to either China or Russia. Assistance for transitions to democratic rule has tapered off throughout the region, a reflection of diminished hopes for governance transformation given the levels of Central Asian corruption, human rights violations, and the consolidation of state structures in most states to prevent the rise of further “color revolutions.” Between 1992 and 2014, total U.S. economic and military assistance to Central Asia amounted to approximately \$6.8 billion. In 2010, during the Afghanistan surge, assistance reached its high point of \$648 million. As the war in Afghanistan began to wind down, so did U.S. assistance, which totaled about \$148 million in 2014.³⁸ In spite of its diminished contributions, are there useful roles for the United States to play in refereeing this phase of a Great Game in Central Asia?

As noted by some analysts' recommendations on the future of U.S. policy in Central Asia:

*few of Russia's former client states in the region are likely to seek an outright confrontation with Moscow. But all can be counted upon to seek partners elsewhere to help balance their difficult northern neighbor. Russia's goal of securing a privileged sphere of interest in Central Asia will prove elusive.*³⁹

The United States need not be concerned about the Russia-China competition. These states will, to some extent, balance each other. China displays some reluctance to become involved in security affairs of the region, while Russia has ongoing security involvement but displays little effort to develop coherent economic strategy in the region (other than the EEU, which has not yet enjoyed any economic success). Infra-

structure sponsored by China offers better development prospects than continued isolation, and Russia's economic interests in China are likely to moderate the competition.

It is possible, however, for the United States to help ensure that Central Asia benefits from the competition and that U.S. interests in the rules of global trade are served as well. The United States could help the region with designing better remittance transfer systems and fairer practices for migrant labor in order to ensure better treatment and therefore lower levels of radicalization. The "Beijing Consensus," in which China focuses on economic relations with scant attention to politics, is welcomed by Central Asian leaders, but it makes all of China's projects vulnerable to corruption. The United States, in spite of its distance from the region, has comparative advantages in rule of law, helping states develop the ability to contract and supervise effectively. As Alexander Cooley notes, China's skill with the "hardware" of infrastructure is not matched with skill in the "software" of market institutions and norms.⁴⁰ The United States may play a useful role in helping the states of Central Asia better develop their software skills in designing, monitoring, and enforcing infrastructure contracts more effectively.

Both China, which wants the infrastructure completed, and the Central Asian states, which want quality control, could benefit from technical assistance in design and supervision of major contracts. The Pakistanis have discovered (through U.S. technical assistance) that the quality of China's infrastructure construction depends in great measure on the host country's ability and willingness to provide oversight and enforce quality control.

The United States could also share its rule-of-law approach with the multilateral development banks which China now leads. Since the AIIB is poised to play an important role in development projects in the region, membership would provide the United States with some insight into its investment decisions and conditions, and Central Asia would benefit from the higher level of transparency that an investment bank following best practices could offer. One specific example is China's expressed interest in the Central Asia South Asia-1000 project (the U.S.-supported effort to make it possible for Kyrgyzstan and Tajikistan to sell hydro-power in the southern markets of Afghanistan and Pakistan). China was involved in early discussions on the project and retains an interest in participation. The president of the World Bank has expressed enthusiasm for cooperating with AIIB on this project.⁴¹ To do so would further promote the sharing of best practices.

Only Central Asian actors can reduce the role of corruption and its ability to undermine the benefits of development efforts. A U.S. role of

referee, however, in which U.S. assistance focuses on better agreements and enforcement of contracts, can help Central Asia along a path toward development. The United States will retain concerns with the weakness of states in the region, but the political-economic success of the states is the best bulwark against spreading extremism. After decades of inability to make their own way to world markets, Central Asia countries seem to welcome China's ability to do so. If China offers Central Asia the best route out of its development traps, helping Central Asia play the Great Game in its own long-term interests is perhaps the best contribution to security in the region.



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Notes

¹ The name in either formulation means "place of the Kazakhs."

² "Don't Call Me Stan," *The Economist*, February 22, 2014. This article does not note the fact that, in the Soviet era, the region was often termed "Kazakhstan and Central Asia," a reflection of Kazakhstan's higher status in Moscow's eyes.

³ See Alexander Cooley, *Great Games, Local Rules: The New Great Power Contest in Central Asia* (Oxford: Oxford University Press, 2012).

⁴ See World Bank Report, "Listening2Tajikistan: Survey of Wellbeing," April 25, 2016, based on a survey of 3000 households, available at <www.worldbank.org/en/country/tajikistan/brief/listening2tajikistan>.

⁵ The World Bank defines Europe and Central Asia as a region that includes Albania, Armenia, Azerbaijan, Belarus, Bosnia and Herzegovina, Bulgaria, Croatia, Cyprus, Former Yugoslav Republic of Macedonia, Georgia, Hungary, Kazakhstan, Kosovo, Kyrgyz Republic, Latvia, Lithuania, Moldova, Montenegro, Romania, Russian Federation, San Marino, Serbia, Tajikistan, Turkey, Ukraine, and Uzbekistan. Turkmenistan is not included in the region, presumably for lack of reliable data. See *Doing Business 2015: Going Beyond Efficiency*, 12th ed. (Washington, DC: World Bank Group, 2014).

⁶ See Paul Collier, *The Bottom Billion* (Oxford: Oxford University Press, 2007).

⁷ *Migration and Remittances: Recent Developments and Outlook*, World Bank Migration and Development Brief #26 (Washington, DC: World Bank, April 2016), annexes, 22.

⁸ Noah Tucker, *Central Asian Involvement in the Conflict in Syria and Iraq: Drivers and Responses* (Arlington, VA: Management Systems International, May 4, 2015).

⁹ Based on 2014 data as provided on the "Observatory of Economic Complexity," MIT Media Atlas, available at: <<http://atlas.media.mit.edu/en/>>.

¹⁰ Kyrgyzstan exported 12 percent of its electricity production and Tajikistan exported 6 percent of its electricity production in 2012, even though both states faced domestic

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electricity crises. See Central Intelligence Agency (CIA), *The World Factbook*, available at <www.cia.gov/library/publications/the-world-factbook/>.

¹¹ Eugene Rumer, Richard Sokolsky, and Paul Stronski, *U.S. Policy Toward Central Asia 3.0* (Washington, DC: Carnegie Endowment for International Peace, January 2016), 12.

¹² *Migration and Remittances*, 23.

¹³ Thomas Zimmerman, *The New Silk Roads: China, the U.S., and the Future of Central Asia* (New York: New York University Center on International Cooperation, October 2015), introduction.

¹⁴ *Ibid.*, 7.

¹⁵ *Ibid.*, 8.

¹⁶ For a full discussion of the negotiations, see Daniel Yergin, *The Quest: Energy, Security, and the Remaking of the Modern World* (New York: Penguin Press, 2011), 43–63.

¹⁷ See *BP Statistical Review of World Energy June 2015*, 64th ed. (London: British Petroleum, 2014), 8, 22.

¹⁸ Department of Energy, Energy Information Administration, “Kazakhstan International Energy Data and Analysis,” January 14, 2015 edition, available at <www.eia.gov/beta/international/analysis.cfm?iso=KAZ>.

¹⁹ Turkmenistan contains 9.4 percent of world reserves and supplied only 2 percent of global production in 2014. Data according to *BP Statistical Review of World Energy June 2015*, 20, 22.

²⁰ Martha Brill Olcott, “China’s Unmatched Influence in Central Asia,” Carnegie Endowment for International Peace, September 18, 2013.

²¹ *Ibid.*

²² Kazakhstan-China Crude Oil Pipeline, Kazakhstan, data available at <www.hydrocarbons-technology.com/projects/>.

²³ Usen Suleimen, “Energy Cooperation between Kazakhstan and China,” *Astana Times* (Kazakhstan), January 14, 2014, available at: <<http://astanatimes.com/2014/01/energy-cooperation-kazakhstan-china/>>.

²⁴ Department of Energy, Energy Information Administration, “Kazakhstan Country Analysis,” available at <www.eia.gov/beta/international/analysis.cfm?iso=KAZ>. Other international corporate investors in Kashagan include Eni, ExxonMobil, Shell, Total, and Inpex.

²⁵ Bobo Lo, *China’s Energy Policy Toward Central Asia*, Short Term Policy Brief #54, Europe-China Research and Advice Network, April 2012.

²⁶ Chen Aizhu and Adam Rose, “Private Chinese Firm to Take Control of Unit of Kazakh State Oil Company,” Reuters, December 15, 2015.

²⁷ *Ibid.*

²⁸ Rumer, Sokolsky, and Stronski, 9.

²⁹ For a full discussion of this transformation and its significance, see Alexander Cooley, “China’s Changing Role in Central Asia and Implications for U.S. Policy: From Trading Partner to Collective Goods Provider,” prepared remarks for “Looking West: China and Central Asia,” U.S.-China Economic and Security Review Commission, March 18, 2015, available at <www.uscc.gov/sites/default/files/Cooley%20Testimony_3.18.15.pdf>.

³⁰ For these and other examples, see Olcott.

³¹ Zimmerman, 6.

³² Simon Denyer, “In Central Asia, Chinese Inroads in Russia’s Back Yard,” *Washington Post*, December 27, 2015.

³³ *The World Factbook*.

³⁴ Rumer, Sokolsky, and Stronski, 13.

³⁵ *Ibid.*, 9.

³⁶ *Ibid.*, 10.

³⁷ Cooley, “China’s Changing Role,” 2.

³⁸ For a detailed discussion of U.S. assistance, see Rumer, Sokolsky, and Stronski, 17.

³⁹ *Ibid.*, 13.

⁴⁰ Cooley, “China’s Changing Role,” 4.

⁴¹ Zimmerman, 15.

The High North

David Auerswald

When it comes to security policy, there are three distinct Arctic subregions: North America, the North Atlantic and Europe, and Russia. As Arctic ice melts from climate change, the security of the United States and its allies will be increasingly challenged in the Atlantic and European Arctic subregion. Russian behavior is becoming more aggressive, the Arctic states have different priorities and approaches to regional issues, and the region lacks an international forum to resolve hard-power disputes. This chapter advances four initiatives to manage Arctic relations in light of these developments: amending the 2013 U.S. Arctic strategy to account for regional changes, creating a regional forum for security and economic discussions, initiating a Western security organization in the European Arctic subregion to complement the North Atlantic Treaty Organization, and improving U.S. capabilities to operate across the Arctic. Each initiative supports U.S. regional interests at a relatively low cost.

The security of the United States and its allies depends on preventing regional hegemony or coercion by hostile powers. Economic prosperity depends on the protection of the global commons. How do those interests play out in the Arctic?¹ U.S. security interests there are closely linked to our allies' and partner nations' freedom from both coercion and threats to their territorial integrity. U.S. economic interests are closely linked to the maintenance of exclusive economic zones (EEZs) for resource extraction and to regional freedom of navigation in Arctic international waters. Developments in the Arctic and neighboring regions could put security interests at risk within the next 5 years, the time horizon for this assessment.

Not all U.S. interests are applicable in all parts of the Arctic. Indeed, the premise behind this chapter is that when it comes to security policy, there are three Arctic subregions. The North American Arctic is dominated by the United States and is largely peaceful. The primary concerns

there are search and rescue and early warning of nuclear attack. The Siberian Arctic is dominated by Russia and is also largely peaceful. The final Arctic subregion is in Northern Europe and above the North Atlantic (for simplicity's sake, called the European Arctic in this chapter). This is a contested Arctic, a place of increasing security competition between East and West and the most likely Arctic subregion for instability, crises, and even military conflict. As a result, much of this chapter is devoted to the European Arctic.

Based on author interviews with more than 70 current and former senior government officials in the region, the most immediate regional concern for the European Arctic is Russia's growing proclivity to challenge the international order, as demonstrated through its actions in Ukraine, its remilitarization of its northern and eastern provinces, and its infringements on Nordic and Baltic states' airspace and territorial waters. Russian actions have heightened threat perceptions among European Arctic states and led to the belief among security professionals in the region that the Arctic will not be compartmentalized from broader geopolitical concerns for much longer. In the words of Norwegian Foreign Minister Borge Brende, the "Arctic cannot be viewed in isolation from events elsewhere."² Indeed the relatively cooperative dynamic within the region on climate research, pollution controls, and search-and-rescue protocols is already being eclipsed by diverging policies on refugees, European integration via the European Union (EU), security policy priorities, and resource extraction.

At the same time, Arctic states have no ready-made forum for addressing regional, hard-power economic and security concerns. Going through the United Nations (UN) brings a wide variety of non-Arctic actors into the discussion, which is anathema to some Arctic states. The primary regional venue, the Arctic Council, is limited by an explicit focus on environmental cooperation and economic development. Absent a new regional forum, there is no easy way to bridge the significant differences between Nordic approaches to regional issues and those emphasized by the United States and Canada, to say nothing of Russia.

Just because a solution is hard does not make it impossible. Prudent, relatively modest initiatives could address many of these challenges and protect U.S. and Western interests across the European Arctic subregion. As discussed in more detail later, U.S. Arctic strategy should account for Russian challenges to the existing international order. The United States should establish a new confidence-building forum for economic and security negotiations in the Arctic. At the same time, the United States and its Nordic partners should engage in visible Nordic-Baltic war planning and exercises to deter Russian coercion in the region. And finally, the

United States needs to invest in the infrastructure and surface ships to monitor, reassure, and maintain a surface presence in Alaskan waters and the European Arctic.

Activity in the Arctic

The Arctic had been a relatively quiet region for 25 years, the domain of environmental scientists and scattered indigenous peoples, with pockets of industrialized activity in the European subregion. The Arctic geopolitical situation is changing rapidly, however. Climate change is one reason. Fourteen of the last 15 years have seen the warmest average global temperatures ever recorded, with 2015 breaking all previous records. And the Arctic is warming faster than the rest of the globe, with much of the European and western Russian Arctic remaining relatively ice-free for much of the year. The eastern two-thirds of the Russian Arctic clears next, while the eastern North American and Greenland portions of the Arctic remain ice-bound for much of the year. Melting ice has led to speculation that the Arctic would become a new hotbed of global activity.

Use of the Northwest Passage across Canada or the Northern Sea Route across Russia could shorten transcontinental shipment distances by at least a third compared to existing routes, and open new venues for destination tourism.³ Melting Arctic ice was also seen as enabling the next resource gold rush. A 2008 report by the U.S. Geological Survey revealed that 13 percent of the world's undiscovered oil and 30 percent of the world's undiscovered natural gas could lie in the Arctic, with 90 percent of that in Arctic waters, to say nothing of huge ore and rare-earth deposits in the region.⁴ With oil prices exceeding \$130 per barrel before the 2008 financial crisis, and then fluctuating around \$90 to \$100 per barrel from 2010 to late 2014, there was every reason to expect significant oil and gas extraction in the Arctic.

Reality has diverged from expectations. The resource gold rush stalled and shows few signs of occurring in the next 5 years, in large part due to plummeting oil and gas prices.⁵ Environmental concerns have also played a role in slowing hydrocarbon extraction in Arctic waters, particularly in Norway.⁶ Finally, Russian extraction continues but has slowed because post-Crimea sanctions on Russia have made it impossible for Western companies to enter into joint ventures with Russian oil and gas companies, and Russia needs Western expertise, technology, and money for future offshore extraction.⁷ These developments have put a temporary halt to additional offshore Arctic energy extraction, even if the long-term potential remains.

Shipping traffic has not expanded to the extent expected either. Decreasing amounts of ice do not necessarily translate into ice-free ocean transit, forcing businesses that rely on just-in-time delivery to avoid Arctic shipping. Traditional international shipping routes may be slower but are more predictable. Perhaps more importantly, uncertainty about risk has made it difficult for insurance companies to price insurance, and shipping companies are reluctant to risk Arctic transshipments without loss insurance.⁸ The exception to the rule may be destination shipping. Even without a boom in offshore resource extraction, there is every likelihood of increased onshore economic activity from tourism, mining, new high-tech facilities, and cold weather infrastructure. That will require an increase in destination shipping, particularly for the European and Russian Arctic subregions given their less extensive ice coverage compared to the North American Arctic.⁹

Emerging Challenges

Just because the resource and shipping gold rush has yet to occur does not mean that the region has been immune to important geopolitical developments. Three challenges will confront the next U.S. administration in the region, each focused on but not exclusive to the European Arctic: Russian activities in the Nordic-Baltic region, diverging preferences across the region on important hard-power issues, and a lack of viable international venues to discuss and negotiate solutions to regional challenges. Consider each in turn.

Russia and the Nordic-Baltic States

Until recently, post-Cold War Europe has been a region of peaceful relations based on international law, democratization, and economic and political integration. The region had operated from roughly 1990 through 2013 in the belief that armed conflict in Europe was something that belonged to a bygone era. Northern European politicians, government officials, and mass publics held the belief that international law and European solidarity were the future of international politics. In short, the regional focus was increasingly on a post-Westphalian conception of international politics centered on the European Union.

These beliefs had policy implications. Defense budgets were cut in each country, as no one perceived a real threat to European territorial integrity. For example, Norway's defense budget went from 1.6 percent of gross domestic product (GDP) in 2005 to 1.4 percent in 2013. Sweden's defense spending went from 1.4 percent of GDP in 2005 to 1.15 percent in 2013. Denmark went from 1.4 to 1.25 percent of GDP. Finland

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was the only exception to the rule, increasing from 1.3 to 1.4 percent of GDP over the same period, largely because of its 833-mile border with Russia.¹⁰ Moreover, the focus within defense establishments was on expeditionary operations such as the International Security Assistance Force in Afghanistan rather than territorial defense. The result was that Denmark gutted its armored, artillery, and air defense capabilities, and Sweden essentially dissolved its army and its antisubmarine capabilities, to give just two examples.

That all changed in early 2014 with events in Ukraine. Russian actions were seen by Nordic states as a fundamental challenge to the European international order in a way that was not true with the 2008 invasion of Georgia.¹¹ Nordic states vocally condemned Russian actions. As Norwegian Defense Minister Ine Soereide noted, “We are in a completely new security situation where Russia shows both the ability and the will to use military means to achieve political goals.”¹² Later she went on to note that “we are faced with a different Russia. The situation has changed, and it has changed profoundly. There is no going back to some sort of normality because it does not exist.”¹³ Carl Bildt, Swedish Foreign Minister at the time, stated, “A new sense of being exposed and vulnerable has descended on the security debates around Europe.” Soon after he noted that “Russia has emerged as a revisionist power violating and questioning the very foundations of the European order of peace and stability.”¹⁴ Each country backed up its rhetoric with actions, complying with EU sanctions on Russia even when such sanctions cost them domestically, as was the case with Norwegian fish and Finnish dairy and meat exports.

Nordic states are particularly concerned about three things with regard to Russia. First, Russia demonstrated that it is willing to advance its interests through military force and has done so in Georgia, Ukraine, and now Syria. Russian military exercises involve the movement of thousands of troops and heavy equipment, sometimes without advance warning, to include exercises such as Vostok-2014 with over 100,000 troops and Western Strategic Direction with 150,000 troops, among others.¹⁵ In his 2015 annual report, North Atlantic Treaty Organization (NATO) Secretary General Jens Stoltenberg warned that “these [Russian] exercises have been used to mask massive movements of military forces.”¹⁶ The Russians have used their military to repeatedly violate Nordic airspace and territorial waters, with increasingly complex military formations, most famously with mock airborne nuclear attacks against Sweden in 2013 and against a 90,000-person political convention on Denmark’s Bornholm island in June 2014, and an alleged October 2014 submarine intrusion into the waters near Stockholm.¹⁷ Each time Nordic states hold an exercise, Russia responds with a larger so-called snap exercise.¹⁸

Second, Russia has deployed advanced military capabilities in the Russian Arctic, capabilities that support an antiaccess/area-denial strategy. Russia is in the process of refurbishing or creating new military bases and capabilities along its northern and western borders. The Russians have deployed advanced air defenses, interceptor aircraft, and offensive tactical weapons. Some of these capabilities should help with search-and-rescue efforts along the Northern Sea Route and serve the defensive purpose of protecting Russian strategic nuclear forces from U.S. conventional attack.¹⁹ Yet new Russian capabilities also create significant problems for the United States and NATO in defending Alliance territory from Russian coercion and potential invasion.²⁰ For example, Russian air defenses located in Severomorsk, St. Petersburg, and Kaliningrad cover the airspace across Finland and the Baltic States, northern Sweden and Norway, southern Sweden, most of Poland, and parts of Germany. The Iskander-M, a nuclear-capable missile with a likely range of at least 435 miles, when deployed to Kaliningrad, puts the Baltics, Poland, eastern Germany, southern Finland, and Sweden at risk. These new Russian capabilities have led some to believe that a Russian attack on the Baltics would quickly be successful.²¹ In this sense, new Russian capabilities in the Arctic may be useful for operations in both the Arctic and neighboring regions.

Third, and relatedly, Nordic states believe that a crisis or hybrid war in the Baltics is the most likely regional flashpoint between the West and Russia. Such a crisis would directly involve Norway and Denmark as NATO members, and probably involve Sweden and Finland due to their geographic proximities and informal ties to the Baltics. Sweden in particular has pledged to come to the aid of EU members who are subject to external attack, though they are vague about the exact nature of Swedish assistance. In the words of then-Foreign Minister Bildt, "Sweden will not remain passive if another EU member state or Nordic country suffers a disaster or an attack. We expect these countries to act in the same way if Sweden is similarly affected."²²

The result is that the Nordic states are increasingly focused on national and regional defense rather than expeditionary warfare. Nordic defense ministers released a joint statement on April 9, 2015, that stated, "Russia's conduct represents the gravest challenge to European security. As a consequence, we must be prepared to face possible crises or incidents." They went on to note that "Russian military exercises and intelligence operations in our region have increased. The Russian propaganda and political maneuvering is aiming to create a rift between states and within organizations such as the EU and NATO."²³

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The shift to national and regional defense has been particularly pronounced in Norway and Sweden and to a lesser extent in Denmark. Planned defense spending will increase in both of the former states, when measured in dollar equivalent amounts, though defense spending as a percentage of GDP will stay relatively flat or increase only slightly.²⁴ And both Norway and Sweden are crafting new defense strategies, with a focus on territorial defense rather than expeditionary capabilities.²⁵ The Norwegians have been pushing for years for a larger NATO role in the region, over the objections of the Canadians and others, and have decided that Norway must act on its own, on NATO's behalf, to secure Norwegian territory and its EEZ. In short, there has been a fundamental change in perceptions among most Arctic states regarding Russian will and capabilities, leading officials to believe that at least the European Arctic is less peaceful and stable than it was 2 years ago.

The most obvious regional response, NATO membership for Sweden and Finland, does not appear to be a viable option. It is true that NATO membership is for the first time being openly debated in both countries, which represents a break from past practice. That said, neither Sweden nor Finland is on the verge of applying for NATO membership, though that is not out of the question should Russia take more aggressive actions in the region. Three factors have affected their decisions on NATO membership.

First, no one in either country knows what might be the international ramifications of applying for NATO membership. Those ramifications weigh particularly heavy in Finland, which shares a long border with Russia. Some in Finland believe that Russia's newfound aggressive posture makes NATO membership imperative for national defense and regional stability, particularly given that neither Finland nor Sweden can unilaterally defend itself from Russian attack or do so bilaterally with its Nordic neighbor. Others argue that applying would needlessly antagonize Russia, worsening rather than increasing regional stability. Russian officials have played to those fears in public statements.²⁶

Second, there is also a bilateral dimension at work. Neither country wants to apply for NATO membership without the other. Politicians and civil servants in both Sweden and Finland want to avoid repeating the coordination problems associated with their EU membership applications, when Sweden unexpectedly moved ahead with its request after promising Finland that both countries should join the EU together. So while the current government in Helsinki might be amenable to joining NATO if Sweden were also on board, it will not move without Sweden, and the current Swedish government is opposed.

Third, as the Swedish example demonstrates, there are domestic political dimensions to this debate. Some political parties have built opposition to NATO membership into their party platforms; to change would be to redefine what their party stands for. The current minority coalition government in Stockholm, for example, is comprised of the Social Democrats and the Green Party. The Social Democrats are internally divided on NATO, and the Greens are firmly opposed to NATO membership. So despite support for NATO membership from the main opposition parties in Sweden, and growing support from the public, the government has no plans to apply for membership largely because it would split the governing coalition.²⁷

Absent NATO membership, both countries' defense decisions have focused on increasing interoperability with NATO countries and weapons systems. The intent is that if a conflict occurs and a political decision is made to side militarily with the Alliance, Sweden and Finland can be seamlessly folded into NATO operations. More generally, Nordic states have increased their intelligence cooperation, information-sharing, multinational training and exercises, and shared use of airbases and port facilities. The Swedes and Finns have partially integrated their air forces and navies, and they have entered into a new agreement on air force cooperation in peacetime. That pooling and sharing does not extend to combat operations during crisis or war, however, which is consistent with their nonaligned status. We thus have the beginnings of regional security cooperation, but nothing like a Nordic military alliance. Instead, all states in the region are looking to the United States for leadership and security assurance.

Current defense trends—spending patterns and regional defense cooperation—will continue absent another Russian incursion into Ukraine, an invasion of Moldova, or military aggression in the Baltics. Regional security cooperation will remain limited to peacetime exercises, training, and intelligence-sharing. Defense budgets will grow only very slowly, if at all. Sweden and Finland will remain outside NATO. Combined, these measures will be inadequate to provide for Nordic defense needs. The United States—not NATO—will continue to be seen as the ultimate security guarantor by countries in the region.

Differences Among Nordic, North American, and Russian Perspectives

Arriving at policy solutions to ensure stability across all three Arctic subregions will be difficult, not least because the Nordic states approach regional issues differently than do North American states and Russia. Multilateralism is the venue/method of choice for Nordic international relations

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Table 1. Relative Power of Arctic Nations				
Nordic				
	Population (millions)	2014 GDP (USD billions), PPP	Military spending as percentage of GDP	Territory in square kilometers (arable land)
Denmark	5.58	250.7	1.37 (2013)	43,000 (25,300)
Finland	5.48	221.7	1.47 (2012)	338,000 (2,500)
Iceland	0.33	14.3	0.13 (2012)	103,000 (124)
Norway	5.21	346.3	1.4 (2012)	324,000 (7,100)
Sweden	9.8	450.5	1.18 (2012)	450,000 (28,800)
Non-Nordic				
Canada	35.1	1,596	1 (2014)	9.9 million (465,300)
Russia	142.42	3,577	3.49 (2014)	17.1 million (1.25 million)
United States	321.37	17,350	4.35 (2012)	9.83 million (1.65 million)
Source: Central Intelligence Agency, <i>The World Factbook</i> , available at <www.cia.gov>.				
Key: GDP = gross domestic product; PPP = purchasing power parity				

for geopolitical and cultural reasons. The United States, Canada, and Russia have often taken a more unilateral route when their vital interests are at stake.

The Nordic focus on multilateralism and international law is at least partly due to their geopolitical reality as relatively small European powers. Table 1 lists common measures of power for each Arctic nation. The Nordic states *combined* have fewer people, a smaller GDP, and far less territory and arable land, and spend roughly the same amount on defense as does Canada, which is the least powerful of the non-Nordic Arctic states.

Multilateralism makes sense for relatively weak powers surrounded by more powerful neighbors, and Nordic states have utilized multilateral approaches to advance their national interests since well before the end of the Cold War. Working through multilateral institutions such as NATO, the EU, and the UN creates partners that can help balance against more powerful states such as Russia. This is particularly true when thinking about the security and environmental implications of Nordic economic reliance on the Baltic and North seas. Linking their economies to the EU—even if to varying degrees—and its relatively stringent monitoring and regulation help protect their economies from predation by larger powers.

Emphasizing international law is another way of constraining great power behavior. As Icelandic Prime Minister Sigmundur Cunnlaugsson noted, “Small states usually favor multilateralism where our voices can

be amplified and it is easier to bring messages across. Small states are also heavily dependent on adherence to international law.”²⁸ The Nordic states base their own behavior on international law even when they are temporarily disadvantaged by such rules. Debate over the first and second Nord Stream pipelines through the Baltic Sea is an example. Security communities in both Sweden and Finland warned against European dependence on Russian gas, just as officials from Eastern Europe have been warning. Both countries, however, have taken positions on Nord Stream based on United Nations Convention on Law of the Sea (UNCLOS) and EU rules rather than basing their policies on unilateral interests. In the words of one senior Nordic diplomat, “The moment we start disregarding international law is the moment that we open the door for Russia to do the same.” The perspective inside the region is that international law maintains the stability that they so depend on for their economic and political success. Abandon international law and Russia will do the same more frequently and blatantly than it does now.

The Nordic preference for multilateralism and international law also fits with its cultural predilection for *domestic* stability and the rule of law, as well as their domestic political history of coalition governments. Nordic states are consensual democracies. They have adopted proportional representation electoral systems that regularly produce multiparty governing coalitions, as displayed in table 2. Decisionmaking in coalition governments is by necessity done only after considering multiple perspectives and reaching compromise solutions. Minority coalitions, when they occur, require compromise even beyond the governing coalition to pass legislation. The broader or more fragile are governing coalitions, the more inclusive and status quo oriented their policies tend to be.

Contrast this with North American and Russian behavior, which often defaults to unilateral national decisions. This should not be surprising from either an international or domestic perspective. We know from table 1 that non-Nordic Arctic states are more powerful internationally, and in many cases are able to act unilaterally even when opposed. Non-Nordic Arctic states also stand in stark contrast when it comes to their electoral systems, as displayed in table 2, where winner-take-all electoral rules bias these governments away from compromising with opposition parties.

An example of how these differences have played out is each Arctic nation’s positioning with respect to oceans management within its respective EEZ. Both Canada and Russia have unilaterally claimed that the Northwest Passage and waters of the Canadian Archipelago (Canada) and the Northern Sea Route (Russia) are internal waterways subject to their unilateral control. In contrast, the Danes convened the five Arctic

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Table 2. Ruling Governments in Arctic Nations		
Nordic		
	Current Government	Previous Government*
Denmark	Rasmussen government (June 2015)** Venstre Party	Thorning-Schmidt government (2011–2015)** Social Democrats Social Liberal Party Socialist People's Party
Finland	Sipilä government (May 2015) Centre Party National Coalition Party Finns Party	Katainen/Stubbs government (2011–2015) National Coalition Party Social Democrats Green League Swedish People's Party Christian Democrats Left Alliance
Iceland	Gunnlaugsson government (2013) Progressives Independence Party	Sigurðardóttir government (2009–2013) Social Democrats Left-Green Party
Norway	Solberg government (October 2013)** Conservatives Progress Party	Stoltenberg government (2005–2013) Labour Party Socialist Left Centre Party
Sweden	Lefven government (October 2014)** Social Democrats Green Party	Reinfeldt government (2010–2014)** Moderates Party Liberal People's Party Centre Party Christian Democrats
Non-Nordic		
Canada	Trudeau government (October 2015)	Harper government (2011–2015)
Russia	Putin government (May 2012)	Medvedev government (2008–2012)
United States	Obama government (January 2009)	Bush government (2001–2009)
<p>* <i>Previous Government</i> signifies the government holding office since the previous election, where there was a transition in governing coalitions. So while Canada's Stephen Harper held the prime minister's office from 2006 to 2015, his party only achieved majority status following the 2011 elections.</p> <p>** Signifies a minority government.</p>		

coastal states to draft the multilateral 2008 Illulissat Declaration, which asserted the so-called Arctic Five's right to govern Arctic waters under the terms set out by UNCLOS.²⁹ So while the Canadians and Russians made unilateral declarations, the Danes proposed a multilateral agreement that reaffirmed the role of international law and by doing so kept Arctic governance largely in the hands of the Arctic Five.³⁰ Two different categories of states produced two different approaches to accomplish similar goals.

Finally, it should be noted that the Nordic preference for multilateralism is under threat from within Europe. As discussed elsewhere in this volume, European multilateralism is fraying based on differing northern and southern European reactions to the 2008 global financial crisis, na-

tional vulnerability to the vagaries of Russian energy policy, and disputes over refugee policy and the related phenomenon of rising nationalistic or populist political parties across Europe. The recent influx of refugees, in particular, has had a caustic effect on European unity. Waves of refugees have led to the reimposition of border controls in some states, such as between Denmark and Sweden. In the words of one Nordic diplomat, "National refugee policies are tearing the EU apart." Finnish President Sauli Niinisto recently stated, "Europe cannot withstand uncontrolled migration for much longer. Our values will give way if our capacity to cope is exceeded."³¹ The refugee crisis has also contributed to the rise of nationalist parties. The Danish People's Party, True Finns party, and Sweden Democrats are all growing in strength and are examples of such movements. Arriving at multinational solutions is more difficult when European states' policies are influenced by nationalism. All this has led influential European officials to publicly voice concern for the future of the EU.³²

European unity will be increasingly under strain due to the refugee crisis, nationalist parties, uneven access to non-Russian energy resources, and economic vulnerability. As a result, Nordic countries will increasingly look to the United States for leadership and reassurance given the growing cracks in the European system. Bilateralism vis-à-vis the United States may quietly replace multilateralism in the practice of international relations in the region, though Nordic countries will maintain their attachment to multilateral rhetoric.

Challenges to Future Arctic Cooperation

The final challenge involves future international cooperation in the Arctic. To this point the primary venue for Arctic cooperation has been the Arctic Council.³³ Formed in 1996, the council by design deals exclusively with environmental protection and sustainable development. It does not have decisionmaking authority, but council discussions have increased scientific and environmental cooperation in the region and led to formal multilateral agreements under UN and International Maritime Organization authority; these include agreements on search-and-rescue responsibilities (2011), oil spill prevention and response (2013), and a Polar Code for ships operating in polar waters.³⁴ At the bilateral level Arctic states have peacefully demarcated offshore EEZ claims between Russia and the United States and between Russia and Norway. In 2010, the Norwegian and Russian governments established protocols on fishery quotas and hydrocarbon extraction.

Despite this record of cooperation, there are significant differences among the eight Arctic nations in terms of the priority represented by

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the Arctic for each country. Those differences matter when the issues in question represent vital interests (security and prosperity) rather than tertiary interests (scientific cooperation and shipping protocols). It is relatively easy to get regional cooperation on tertiary national interests even if not all Arctic nations see the region as a priority. Region-wide cooperation becomes difficult, however, when some nations believe the issue in question is a vital interest but others do not, or when states have diametrically opposed interests.

The Arctic as a distinct region is only a priority for some Arctic nations. The Norwegian government, for example, has consistently seen the Arctic as its top priority in large part because so much of its EEZ, its export revenue, and Norwegian maritime traffic are located in European Arctic waters. The Russian government has prioritized the Arctic because Russia's strategic nuclear submarine force is home-ported in Murmansk, and northern Russia contains abundant hydrocarbon, mineral, and timber deposits. The Canadian government under Prime Minister Stephen Harper saw the Arctic as a priority issue principally for domestic political reasons dealing with economic development of the northern Canadian provinces and with Canadian control of the Northwest Passage.

But other countries in the region have placed Arctic issues much lower on their agendas. Sweden has few direct interests in the Arctic beyond environmental stewardship and has focused more of its attention on economic and political relations with its neighbors to the south and east. Finland is much more focused on the Baltic Sea and relations with Russia, Sweden, and the EU than it is on the Arctic per se. The current government in Iceland sees the Arctic as a priority, but the same could not be said for previous governments. The Danes see the Arctic through the prism of their territory in Greenland and the Faroe Islands, and their main concern there is in ensuring the local people are eventually self-sufficient. And last but not least, the United States essentially ignored the Arctic as a policy issue between 1991 and 2015.³⁵ Even the Barack Obama administration's recent efforts to highlight the Arctic seem to be a small piece in the administration's larger climate agenda, rather than a focus on the Arctic for its own sake.

If getting all regional countries to pay attention to Arctic issues is difficult, it is even more difficult to get agreement on issues of vital national interest, particularly in the European Arctic. Take the question of resource extraction. Finland would like to engage in mining above the Arctic Circle with fewer environmental constraints. Sweden wants strict environmental controls on mining and oil extraction, but less regulation of recreation. The Green Party in Sweden, a member of the two-party coalition government, would like to halt all oil and gas extraction from

Arctic waters. Norway is particularly sensitive to policy differences on resource extraction because so much of Norway's GDP comes from offshore hydrocarbon extraction, fisheries, and aquaculture. Though the Norwegians have an agreement with Russia on fisheries and hydrocarbons, the same is not true with regard to fishing quotas between Norway and Iceland, Scotland, the Faroe Islands, or the EU, leading to a significant dispute between Norway and Iceland over mackerel overfishing in 2012.

Rival territorial claims continue to bubble up to the surface. The most complex and potentially dangerous involves Norway's claim to the waters around the Svalbard archipelago. Norway believes these waters are part of its EEZ, while Russia believes these are international waters governed by the terms of the 1925 Spitzburgen Treaty.³⁶ At the same time, Denmark and Russia have submitted competing claims to the Lomonosov Ridge in the central Arctic Ocean. The Canadian government has long argued that the Northwest Passage is an internal waterway, over quiet U.S. objections.³⁷ The official arbiter of undersea territorial claims under the terms of UNCLOS is the Commission on the Limits of the Continental Shelf, which has shown little desire to reach a definitive ruling on these competing claims, instead asking for more scientific data (from the Russians in particular) and by some views hoping that the claimants will negotiate a solution on their own.

And finally there is the issue of Arctic management. The five Arctic coastal states have repeatedly asserted authority over and responsibility for Arctic waters within their EEZs. Such claims pit them against the three other Arctic states (Finland, Iceland, and Sweden) as well as non-Arctic states with interests in the Arctic (China, India, Japan, and Poland). These jurisdictional disputes have complicated decisions on designating permanent observers to the Arctic Council and may have led to the creation of the annual Arctic Circle forum, which brings together Arctic and non-Arctic states, nongovernmental organizations, and business interests to discuss Arctic governance and other topics.

The Arctic, particularly the European Arctic, will not be compartmentalized from broader geopolitical concerns for much longer.³⁸ Too many important issues are infringing on the peaceful scientific cooperation that has ruled to this point. Western relations with Russia, competing economic interests among Arctic states, and potential territorial disputes will increasingly infringe on Arctic political discourse. Again, in the words of Norwegian Foreign Minister Brende, "Arctic cannot be viewed in isolation from events elsewhere."

For the next 5 years the Arctic Council will be limited to sidebar issues such as scientific research and nonbinding pollution protocols—issues that are not central to international affairs as commonly under-

stood. Anything more, particularly with regard to security policy or issues where there are significant political disagreements, will remain in limbo because of underlying policy differences, the lower priority of the region compared to other regions, and the absence of viable regional forums where hard-power issues can be discussed.

Policy Recommendations

Four policy initiatives could improve the regional situation in the Arctic from a U.S. perspective. First, the United States needs a new Arctic strategy that accounts for the differences between the North American, European, and Russian Arctic subregions.³⁹ As I argue elsewhere, the resulting U.S. strategy should account for developments on the political and security fronts. That strategy should have three goals.⁴⁰ The United States should prevent either Russia or China from dominating the European Arctic subregion in terms of economics or security. Regional participation by both countries is inevitable (and, one could argue, desirable), particularly regarding Chinese investment. Dominance by either power, however, would undercut U.S. influence and commitments and put at risk U.S. interests in protecting the global commons. Another goal could be preventing an environmental disaster in any part of the Arctic. This requires that existing cooperation continue on shipping protocols, fisheries management, and oil spill prevention and response—something in the interests of all Arctic coastal states. A final goal could be fostering responsible private-sector investment in the North American subregion. Specific actions here could include providing U.S. loan guarantees, tax incentives, or access to government climate and geological data in exchange for private-sector creation of needed Alaskan infrastructure.

These goals deconflict the myriad crosscutting priorities, threats, and opportunities of the Arctic nations. The first goal aligns the United States with every Arctic nation except Russia and is just the sort of assurance that Nordic states (and their Baltic neighbors) have been looking for from the U.S. Government. The second goal focuses on the environmental concerns of the Arctic coastal states and their economic self-interest. Even Russia, with its less-than-stellar environmental record, has an interest in maintaining fish stocks, and the Western-based oil companies that Russia will need to extract oil and gas from the Barents and Kara seas have the reputational and fiduciary need to engage in relatively careful extraction in Arctic waters. The third goal is attractive to those in Alaska, and if expanded across the Arctic could be attractive to Canada, Denmark, and Iceland, each of which wants more investment in its Arctic territories.

As a second policy recommendation, the United States should propose an Arctic forum to discuss political and security concerns across the region, but particularly within the European Arctic subregion. A lack of recent transparency on hard-power issues is a significant challenge in the region. Western states do not trust Russian military activities and political statements. Within the Nordic region, states are pursuing diverging refugee policies. On the political level, changing government coalitions and domestic political dynamics have fostered a sense of uncertainty regarding international commitments. The focus of this new forum should be on transparency and confidence-building measures, on everything from refugee policies to military exercises to joint energy initiatives. The forum could be modeled on the existing Nordic Council but with a broader agenda and with the added participation of the United States and Canada, possibly the Baltic States, and ideally Russia if possible. It would leave environmental and scientific discussions to the Arctic Council and private-sector economic cooperation to the recently created Arctic Economic Council.⁴¹

Third, the United States should work with its Nordic allies and partners to develop a Northern European security architecture that complements but stands apart from NATO efforts. As noted earlier, it is unlikely that Sweden and Finland will apply for NATO membership, much less join the Alliance, in the next few years barring another significant Russian act of aggression in Europe. There are simply too many domestic and bilateral impediments in the way. Moreover, key NATO members (including some officials in Canada and Denmark) believe the Alliance should focus on instability to the south and east rather than devoting precious resources to the north. A northern European security organization under a U.S. imprimatur, however, is not beyond the realm of possibility.

The organization could be modeled on the existing Nordic Defense Cooperation (NORDEF),⁴² which links Nordic states in peacetime information-sharing, military education, training, and exercises.⁴³ A “deepened” NORDEF could include an implicit security guarantee among Nordic states, explicit war plans with designated chains of command to respond to a Russian attack against either the Nordic or Baltic states or a closure of the Baltic Sea, and exercises to test and demonstrate those plans. This new security architecture could include active U.S. participation in exercises and prepositioning of U.S. weapons in the region that could contribute to those war plans.⁴⁴ The United States would not be entering into a new alliance commitment to Sweden and Finland. Rather the United States would be operating with existing allies (Norway, Denmark, and possibly the Baltic States) and partner nations (Sweden and Finland) to generate viable war plans for the Nordic-Baltic theater, particularly

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those focused on countering Russian antiaccess/area-denial capabilities.⁴⁵ Even without an alliance commitment across the region, such a northern European security architecture could greatly improve the planning and exercise frequency necessary to prepare for a variety of wartime scenarios, which could itself act as a deterrent to Russian aggression.⁴⁶

Fourth and finally, the United States needs to increase its capabilities, both civilian and military, to operate in the North American and European Arctic subregions. Relatively inexpensive capabilities could be acquired today or in the near future that would support a variety of U.S. Arctic strategies. The most immediate priorities are in sensors, communications, and surface ships. Sensors are necessary for even rudimentary maritime domain awareness. The United States needs better civilian capabilities in this regard to regulate shipping and avoid maritime accidents, including oil spills. Better civilian and military communications are needed for everything from coordinating search and rescue to managing sea and air traffic. Communications are particularly challenging given the lack of radio or cellular infrastructure in the region and the mismatch between high northern latitudes and the orbital paths of most communications and geopositioning satellites. Perhaps most importantly, the United States needs to improve its naval capabilities to demonstrate a maritime presence across the region, but particularly in the European Arctic where the United States has NATO commitments. At the least, that will require more U.S. Coast Guard icebreakers and ice-capable Navy surface ships. The Coast Guard has begun exploring the acquisition of a new icebreaker, but no real money has been allocated for a new vessel.⁴⁷

This chapter begins by noting that the security of the United States and its allies depends on preventing regional hegemony or coercion by hostile powers. Economic prosperity depends on protecting the global commons. Developments in the Arctic and neighboring regions could put both interests at risk within the next 5 years. The four initiatives listed above—developing a new U.S. Arctic strategy, creating a regional forum for security and economic discussions, initiating a regional security organization to complement NATO, and improving U.S. capabilities to operate in the Arctic—support U.S. interests in the region at a relatively low cost.

Notes

¹ For the purposes of this chapter, I follow the U.S. Government's definition of the *Arctic* as anything north of the Arctic Circle, at approximately 66 degrees, 34 minutes north latitude. See <www.arctic.noaa.gov/faq.html>. U.S. law (15 U.S. Code § 4111) also adds all U.S. territory and territorial waters north of the Aleutian island chain to the defi-

nition of the U.S. Arctic. Others define the Arctic by a maximum average July temperature or by the northernmost tree line. Norwegian officials call the Scandinavian portion of the Arctic the *High North*, though there is no precise territorial delineation associated with that term.

² Borge Brende, "The Arctic: Important for Norway, Important for the World," *Harvard International Review* 36, no. 3 (Spring 2015).

³ The Northern Sea Route is the more viable, near-term shipping route from a climate perspective.

⁴ U.S. Geological Survey, "Circum-Arctic Resource Appraisal," Fact Sheet 2008-3049, available at <<http://pubs.usgs.gov/fs/2008/3049/fs2008-3049.pdf>>.

⁵ Gordon Kristopher, "Why Is the Breakeven Price of Crude Oil So Important?" *Market Realist*, January 15, 2015, available at <<https://marketrealist.com/2015/01/breakeven-price-crude-oil-important/>>; U.S. Department of the Interior, "Interior Department Cancels Arctic Offshore Lease Sales," October 16, 2015, available at <www.doi.gov/press-releases/interior-department-cancels-arctic-offshore-lease-sales>. The partial exception is the Norwegian government's new drilling concessions awarded in mid-May 2016 for areas in the Barents Sea, but drilling test wells will not start until 2017, with no guarantee that extraction will occur in the near future.

⁶ The Swedish government, for example, has called for a prohibition on hydrocarbon extraction unless stringent conditions are met: "We want only companies that can assume the entire cost of a disaster to be granted permits to extract oil in the Arctic." See "Government to Strengthen Arctic Environmental Policy," January 25, 2016, available at <www.government.se/articles/2016/01/government-to-strengthen-arctic-environmental-policy/>.

⁷ That said, Gazprom continues to extract gas and oil from the Yamal Peninsula, though most of those wells were established before sanctions took effect.

⁸ "Cooperation Needed to Allay Arctic Risks," *Lloyds.com*, September 8, 2014, available at <www.lloyds.com/news-and-insight/news-and-features/emerging-risk/emerging-risk-2014/cooperation-needed-to-allay-arctic-risks>.

⁹ Arctic economic development is a priority in the Arctic strategies of each Arctic nation.

¹⁰ Bergt-Göran Bergstrand, "Military Expenditure Trends in the Baltic Sea States, FOI Memo 5544," Swedish Defense Research Institute, December 9, 2015. Figures for North Atlantic Treaty Organization (NATO) members are comparable to those reported in Jens Stoltenberg, *The Secretary General's Annual Report 2015* (Brussels: NATO Public Diplomacy Division, January 28, 2016), available at <www.nato.int>.

¹¹ The 2008 Russian invasion of Georgia took place outside of Europe and was a conflict where blame could be placed with both sides.

¹² See Ine Soeride's interview with Reuters, May 20, 2014.

¹³ See Ine Soeride's interview with CNN, February 26, 2015.

¹⁴ Carl Bildt, "Statement at IISS [International Institute for Strategic Studies], London," September 19, 2014; "Statement on the Ukrainian Crisis," September 22, 2015. This was in marked contrast to Bildt's praise for Russian cooperation with Europe before Crimea in statements such as "Russian foreign policy has become oriented towards serving the goals of this cooperation, which is very welcome." Carl Bildt, "Russia and the World," Keynote Speech at the Andrei Sakharov Foundation Conference, Moscow, May 21, 2011.

¹⁵ The most disturbing exercise before 2014 from the perspective of Nordic-Baltic security was Zapad-2013, which took place in late 2013 and focused on the "defense" of Kaliningrad. For exercise numbers and composition, see Johan Norberg, *Training to*

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Fight: Russian Military Exercises 2011–2014, FOI-R-4128-SE (Stockholm: Swedish Defense Research Agency, 2015).

¹⁶ Stoltenberg.

¹⁷ “Russia Carried Out Practice Nuclear Strike Against Sweden,” *The Local SE* (Stockholm), February 3, 2016, available at <www.thelocal.se/20160203/russia-did-practice-a-nuclear-strike-against-sweden>.

¹⁸ For example, the June 2015 Arctic Challenge exercise, with 4,000 Western troops and 115 airplanes operating out of Scandinavian airfields, was immediately matched by a Russian snap exercise involving 12,000 troops and 250 planes.

¹⁹ Strategic Forecasting, Inc. (Stratfor), “Russia in the Arctic: A Different Kind of Military Presence,” November 11, 2015, available at <www.stratfor.com/analysis/russia-arctic-different-kind-military-presence>; Ekaterina Klimenko, *Russia’s Arctic Security Policy*, Policy Paper 45 (Stockholm: Stockholm International Peace Research Institute, February 2016); Heather Conley and Caroline Rohloff, *The New Ice Curtain: Russia’s Strategic Reach to the Arctic* (Washington, DC: Center for Strategic and International Studies, August 2015).

²⁰ For a discussion of Russian capabilities, see “The Security Dimensions of the Arctic Region,” *Royal Swedish Academy of War Sciences*, no. 2 (April–June 2015), 93–113, available at <http://kkrva.se/hot/2015:2/waldemarsson_mfl_arctic_reg.pdf>.

²¹ David Shlapak and Michael Johnson, *Reinforcing Deterrence on NATO’s Eastern Flank: Wargaming the Defense of the Baltics*, RR-1253-A (Santa Monica, CA: RAND, 2016), available at <www.rand.org/content/dam/rand/pubs/research_reports/RR1200/RR1253/RAND_RR1253.pdf>.

²² Carl Bildt, “Presentation to the Riksdag on Foreign Affairs,” Stockholm, February 19, 2014. Identical language was agreed upon by parliamentary vote in 2009 though it did not receive much attention at the time. Finland has taken a similar policy position, though it does not publicize that fact. These positions are consistent with Article 42.7 of the Treaty of Lisbon, which states:

If a Member State is the victim of armed aggression on its territory, the other Member States shall have towards it an obligation of aid and assistance by all the means in their power, in accordance with Article 51 of the United Nations Charter. This shall not prejudice the specific character of the security and defense policy of certain Member States. Commitments and cooperation in this area shall be consistent with commitments under the North Atlantic Treaty Organization, which, for those States which are members of it, remains the foundation of their collective defense and the forum for its implementation.

Available at <www.lisbon-treaty.org/wcm/the-lisbon-treaty/treaty-on-europe-an-union-and-comments/title-5-general-provisions-on-the-unions-external-action-and-specific-provisions/chapter-2-specific-provisions-on-the-common-foreign-and-security-policy/section-2-provisions-on-the-common-security-and-defence-policy/129-article-42.html>.

²³ *Joint Communiqué of Nordic Defense Ministers*, April 9, 2015, available at: <<http://formin.finland.fi/public/download.aspx?ID=126747&GUID=A6A5DF01-72E4-45BD-8B29-488EE055ACC1>>.

²⁴ See, for example, Sweden Ministry of Defense, “The Swedish Defense Bill 2016–2020,” April 24, 2015. For projected regional numbers through 2020, see Bergstrand.

²⁵ Swedish Major General Anders Brännström noted in early 2016 that Sweden will focus more on territorial defense and less on international peacekeeping and peace-enforcement due to the increasing Russian threat. See Gerard O’Dwyer, “Russian Aggression Drives Swedish Defense Spending,” *Defense News*, February 7, 2016, available at <www.defensenews.com>.

defensenews.com/story/defense/policy-budget/warfare/2016/02/07/russian-aggression-drives-swedish-defense-spending/79841348/>. Yet, projected defense spending will not provide for adequate national defense against Russia and does not account for big-ticket replacements for aging fighter aircraft, naval ships, and submarines.

²⁶ For example, see Jorge Benitez, "The Bully to the East," *U.S. News and World Report*, August 6, 2015, available at <www.usnews.com/opinion/blogs/world-report/2015/08/06/russia-bulies-sweden-and-finland-away-from-joining-nato>.

²⁷ A September 2015 poll showed that 41 percent of Swedes supported NATO membership, up 10 points from May, versus 39 percent opposed. See Gerard O'Dwyer, "New Poll Shows Sharp Shift in NATO Support," *Defense News*, September 17, 2015, available at <www.defensenews.com/story/defense/policy-budget/leaders/2015/09/17/new-poll-shows-sharp-shift-nato-support/32549641/>.

²⁸ Sigmundur Gunnlaugsson, "Iceland in a Sea of Change," speech delivered at St. Gallen Symposium, May 7, 2015.

²⁹ The five Arctic littoral states are Canada, Denmark (via Greenland), Norway, Russia, and the United States. The text of the Illulissat Declaration is available at <www.oceanlaw.org/downloads/arctic/Illulissat_Declaration.pdf>.

³⁰ Philip Steinberg, Jeremy Tasch, and Hannes Gerhardt, *Contesting the Arctic* (New York: Palgrave Macmillan, 2015), 1–6, 73–74.

³¹ Sauli Niinistö, "Speech at the Opening of Parliament on 3 February 2016," available at <www.presidentti.fi/public/default.aspx?contentid=341376&culture=en-US>.

³² Alastair MacDonald and Noah Barkin, "European Leaders Fear the Refugee Crisis Will Tear the EU Apart," Reuters, January 18, 2016, available at <www.huffingtonpost.com/entry/european-leaders-fear-the-refugee-crisis-will-tear-the-eu-apart_569cf-c32e4b0778f46fa010c>.

³³ Other venues include the United Nations and its subsidiary entity (International Maritime Organization), European Parliament, Nordic Council of Ministers, and NATO, depending on the issue and the countries involved.

³⁴ For additional information on the Polar Code, see <www.imo.org/en/MediaCentre/HotTopics/polar/Pages/default.aspx>. For texts of the agreements on Arctic search and rescue and oil spills, see <www.state.gov/documents/organization/205770.pdf>; and <www.state.gov/r/pa/prs/ps/2013/05/209406.htm>.

³⁵ The United States maintained a robust scientific research agenda in the area and has been a mainstay in the Arctic Council. It also has a nuclear submarine presence in the region and military facilities in Alaska. That said, the Arctic has not been a priority region for U.S. policymakers since the Cold War.

³⁶ See statements by Leonid Kalashnikov, Russia's First Deputy Chairman of the Duma's Committee on International Affairs, quoted in Thomas Nilsen, "Norway Summons Russian Ambassador," *BarentsObserver.com*, April 20, 2015, available at <<http://barentsobserver.com/en/politics/2015/04/norway-summons-russian-ambassador-20-04>>.

³⁷ For a review, see Donald Rothwell, "The Canadian-U.S. Northwest Passage Dispute," *Cornell International Law Journal* 26, no. 2 (Spring 1993), 331–372.

³⁸ According to Swedish Supreme Commander General Micael Bydén, "We also know that areas in our region, the Baltic and increasingly the Arctic, constitute areas of friction between Russia and the West." Quoted in O'Dwyer.

³⁹ The current U.S. strategy for the Arctic was written in 2013, before events in Crimea. See *National Strategy for the Arctic Region* (Washington, DC: The White House, May 2013), available at <www.whitehouse.gov/sites/default/files/docs/nat_arctic_strategy.pdf>.

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⁴⁰ David Auerswald, "Geopolitical Icebergs," *Proceedings* 141, no. 12 (December 2015), 18–23.

⁴¹ The Arctic Economic Council is a public-private entity that seeks to coordinate business activities in the region. See <<http://arcticeconomiccouncil.com>>.

⁴² For information on Nordic Defense Cooperation (NORDEF), see <www.nordef-co.org>. For a discussion of NORDEF expansion to the Baltics, see Henrik Breitenbach, "Strengthening Nordic-Baltic Defense Capabilities," in *Advancing U.S.-Nordic-Baltic Security Cooperation*, ed. Daniel Hamilton, Andras Simony, and Debra Cagan (Washington, DC: Center for Transatlantic Relations, 2014), 135–155.

⁴³ Note that while information-sharing is proceeding well, coordinating weapons acquisition across NORDEF nations has proved difficult in the extreme.

⁴⁴ The Obama administration has begun this process with its \$3.4 billion request for fiscal year 2017 to deploy weapons and equipment to Eastern Europe. Prepositioning standoff weapons and refurbishing and hardening airfields in the Nordic states are critical additional steps, however. On the administration request, see Mark Landler and Helene Cooper, "U.S. Fortifying Europe's East to Deter Putin," *New York Times*, February 1, 2016, available at <www.nytimes.com/2016/02/02/world/europe/us-fortifying-europes-east-to-deter-putin.html>.

⁴⁵ Note that the United States already participates in exercises involving Nordic members of NATO and partner nations such as Sweden and Finland. The proposal here is to tailor those exercises to more accurately reflect war plans that include Swedish and Finnish territory and militaries as full participants.

⁴⁶ Deeper transatlantic security cooperation for the European Arctic was one of the subjects discussed at the May 2016 U.S.-Nordic summit. See "U.S.-Nordic Leaders' Summit Joint Statement," May 13, 2016, available at <<http://tpk.fi/Public/default.aspx?contentid=346273&culture=fi-FI>>.

⁴⁷ Yasmin Tadjdeh, "Coast Guard Releases Solicitation for New Polar Icebreaker," *National Defense*, January 13, 2016, available at <www.nationaldefensemagazine.org/blog/Lists/Posts/Post.aspx?List=7c996cd7-cbb4-4018-baf8-8825eada7aa2&ID=2060&utm_source=Sailthru&utm_medium=email&utm_campaign=New%20Campaign&utm_term=%20ASituation%20Report>.

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The new administration takes office in a time of great complexity. The President faces a national security environment shaped by strong currents: globalization; the proliferation of new, poor, and weak states, as well as nonstate actors; a persistent landscape of violent extremist organizations; slow economic growth; the rise of China and a revanchist Russia; a collapsing Middle East; and domestic policies wracked by division and mistrust. While in absolute terms the Nation and the world are safer than in the last century, today the United States finds itself almost on a permanent war footing, engaged in military operations around the world.

This book, written by experts at the Defense Department's National Defense University, offers valuable policy advice and grand strategy recommendations to those senior leaders who will staff and lead the next administration in national security affairs. The President and his staff, Members of Congress, and the many leaders throughout government concerned with the Nation's security interests should find this book valuable. Their task is not an easy one, and this volume's insights and reflections are offered with an ample dose of humility. There are no silver bullets, no elegant solutions to the complex problems confronting America and its leaders.

This volume provides context and understanding about the current national security environment to those in the new administration as they prepare to lead the Nation during challenging times. To those senior leaders who bear the heaviest responsibilities, these policy insights may chart a course forward.

