

STRATEGY FOR THE LONG HAUL



Defense Planning for the Long Haul

Scenarios, Operational Concepts, and the Future Security Environment

BY EVAN BRADEN MONTGOMERY

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DEFENSE PLANNING FOR THE LONG HAUL: SCENARIOS, OPERATIONAL CONCEPTS, AND THE FUTURE SECURITY ENVIRONMENT

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EXECUTIVE SUMMARY

Senior defense officials face a host of critical issues when assessing the nation's military posture. Most importantly, they are responsible for determining which threats the United States must be prepared to address, what capabilities will be required to do so, and how the US military should be organized, trained, equipped, and employed to counter these threats successfully if and when they materialize. Answering these questions is difficult enough when preparing for existing challenges or threats that appear to be on the immediate horizon. For instance, the United States is currently fighting irregular wars in Afghanistan and Iraq, both of which are likely to persist for some time. Yet there is still no consensus in the Pentagon or the wider defense policy community on whether these conflicts represent the types of challenges the United States should expect to confront in the years ahead, whether the armed forces should be reoriented away from conventional warfare and toward counterinsurgency and stability operations, and how this might be done. When preparing for a distant and uncertain future, however, resolving issues such as these becomes far more difficult.

Although it is impossible to predict how the future will unfold, it appears increasingly clear that the United States will confront a very diverse and demanding array of strategic challenges over the coming decades: transnational terrorist groups, weak and failed states, and the intersection between them; the rise of a near-peer competitor that is not yet overtly hostile toward the United States but has nonetheless implemented a comprehensive military modernization program devoted to countering the US military's ability to project power; and the proliferation of nuclear weapons to aggressive regimes and perhaps eventually non-state actors. Both individually and collectively, these challenges represent a significant departure from those the US military has focused its attention on in the past, particularly the large-scale, ground-centric conventional conflicts that dominated military planning during the Cold War and the immediate post-Cold War period. Nor do today's counterinsurgency campaigns in Afghanistan and Iraq or the counterterrorism operations taking place across the globe provide a complete blueprint for the challenges that the US

military should expect to confront in the years ahead. Preparing for these challenges is therefore almost certain to require significant changes in both the capabilities that the US military develops and how they are employed.

At the same time, military organizations often have trouble adapting and innovating absent specific operational problems and clear contingencies. The purpose of this report, therefore, is to translate the principal strategic challenges the United States is likely to confront into a set of illustrative planning scenarios, and to discusses the critical importance of devising new operational concepts and developing new capabilities to address each one. Specifically, this report presents three scenarios:

- > An irregular war in Nigeria between the government and an insurgent movement in the country's southern region;
- > An attempt by the People's Republic of China to reincorporate Taiwan through a policy of economic and military coercion; and
- > An Iranian regime that is emboldened by its acquisition of a small nuclear arsenal and becomes increasingly hostile toward both the United States and its neighbors in the Persian Gulf region.

Of course, there is no guarantee that any of these scenarios will occur in the future, or that the United States would choose to intervene militarily if they did. Nevertheless, all three are plausible, would clearly impact American national security interests, and would present a number of very difficult operational challenges for US military forces.

Intervention in a Nigerian civil conflict, for example, might require the United States—either alone if necessary or in support of indigenous forces whenever possible—to conduct direct-action missions against terrorist or insurgent targets, defend critical government or economic facilities from attack or sabotage, and, in some areas, provide basic healthcare or civil infrastructure improvements to gain local support and generate intelligence. Moreover, because a protracted military operation could fatally undermine the legitimacy of the central government and fuel instability throughout the country, a critical goal would be to expand the government's ability to provide both security and essential services to the population. This would require a systematic effort to organize, train, and equip competent local police and military forces, and to reduce the level of corruption in major government institutions. In addition, to avoid eroding the tenuous legitimacy of the central government while US military forces are present in significant numbers, it would be necessary to (1) engage in a major strategic communications campaign emphasizing that the United States is acting in support of the host nation government and will leave as soon as a degree of stability has been restored, and (2) implement an operational and logistical support system that minimizes the "footprint" of US forces to the greatest extent possible.

A conflict with China would also be a daunting contingency; the People's Liberation Army has spent more than a decade building capabilities that could enable it to hold at risk a set of key targets—including regional bases, aircraft carriers, and C4ISR (Command, Control, Communications, Computers, Intelligence, Surveillance and Reconnaissance) systems—that collectively underpin the US military's ability to project power and defend its allies in East Asia. Of course, whether China would actually use these capabilities at the outset of a crisis is uncertain. Nevertheless, the ability to credibly threaten attacks that could severely hamper the American military's ability to project power into a region of vital national interest would have a major impact on the balance of power. As a result, the US Navy and Air Force will have to devise new operational concepts, including the ability to conduct operations from much greater ranges, from a more diversified basing posture, and without secure and reliable communications.

Finally, a confrontation with a nuclear-armed Iran has the potential to be a truly "hybrid" war, one that might require the United States military to counter Iran's conventional anti-access capabilities, defeat its irregular forces both at sea and on land, prepare for attacks by terrorist groups against American targets or US allies globally, and most importantly conduct operations under the shadow of a possible nuclear attack. Moreover, any effort to neutralize a rogue nation's small nuclear arsenal is unlikely to resemble the first or second Gulf War, for a host of reasons. Rather than launching a ground invasion or occupation, an operation would rely principally on air, sea, and undersea assets to strike critical targets; special operations forces with an expanded capability to secure or destroy nuclear weapons and material; and most importantly intelligence regarding the locations of those weapons as well as delivery systems.

Preparing for these challenges is therefore almost certain to require significant changes in both the capabilities that the US military develops and how they are employed. Yet implementing major changes in the face of geopolitical uncertainty and entrenched institutional interests has historically proven difficult. Nevertheless, using scenarios to identify potential threats and, perhaps more importantly, to generate new operational concepts to meet existing and emerging challenges is an important first step toward overcoming these constraints and fielding a more effective military.



INTRODUCTION

Senior defense officials face a host of critical issues when assessing the nation's military posture. Most importantly, they are responsible for determining which threats the United States must be prepared to address, what capabilities will be required to do so, and how the US military should be organized, trained, equipped, and employed to counter these threats successfully if and when they materialize. Answering these questions is difficult enough when preparing for existing challenges or threats that appear to be on the immediate horizon. For instance, the United States is currently fighting irregular wars in Afghanistan and Iraq, both of which are likely to persist for some time. Yet there is still no consensus in the Pentagon or the wider defense policy community on whether these conflicts represent the types of challenges the United States should expect to confront in the years ahead, whether the armed forces should be reoriented away from conventional warfare and toward counterinsurgency and stability operations, and how this might be done.¹ When preparing for a distant and uncertain future, however, resolving issues such as these becomes far more difficult.

The future may be unpredictable, but that does not mean that reasonable assessments cannot be undertaken or that difficult choices should be avoided. Anticipating possible challenges and determining the best means to address them are critical steps to maintaining an effective military over the long run. Policymakers cannot afford to simply wait for events to unfold, nor should they assume that the future will closely resemble the present or the recent past. Just as many of the major weapon systems that are currently in use today were produced decades ago, the systems that the United States military will use in the decades ahead are being conceived, designed, and built today. It also takes years to develop the new operational concepts and doctrine that

For a small sample of this debate, see Michael J. Mazarr, "The Folly of 'Asymmetric War'," *The Washington Quarterly*, Summer 2008; John A Nagl and Brian M. Burton, "Dirty Windows and Burning Houses: Setting the Record Straight on Irregular Warfare," *The Washington Quarterly*, April 2009; and John A. Nagl, "Let's Win the Wars We're In," and Gian P. Gentile, "Let's Build an Army to Win *All* Wars," both in *Joint Force Quarterly*, 1st Quarter 2009.

The impact of the choices that senior Defense Department leaders are making today will enable—or constrain—their successors for decades.

will determine how these systems are employed, and even more time to provide military personnel with the appropriate training. In short, the impact of the choices that senior Defense Department leaders are making today will not be fully realized for many years to come, and will enable—or constrain—their successors for decades.

Implicitly or explicitly, these choices will be guided by a vision of the future security environment. Because of the potential consequences of their decisions, defense officials are thus under tremendous pressure to envision the "right" future, or at the very least to avoid planning for the "wrong" one. In the worst cases, a failure to prepare adequately for contingencies that may arise could undermine deterrence, erode crisis stability, prevent the United States from successfully defending vital national interests, or even lead to defeat in a conflict. Of course, it is possible for a military to adapt, even in the middle of a war, if its equipment, force structure, or doctrine proves ill suited for the particular threat that it faces. The current war in Iraq, for example, has demonstrated that a force trained primarily for combined-arms mechanized warfare against a similarly armed adversary can undergo the necessary adjustments to conduct military operations effectively at the other end of the conflict spectrum. Yet this type of reactive transformation is often difficult and time-consuming. As Secretary of Defense Robert Gates has lamented, the transition to counterinsurgency operations in Iraq "came at a frightful human, financial, and political cost." Ultimately, while the US military must continuously adapt to counter prevailing threats, it should also seek to engage in anticipatory transformation to better prepare for new threats before they fully emerge.3 Equally important, senior leaders must ensure that the military is capable of addressing a wide range of contingencies in order to diminish the likelihood that another round of reactive transformation will be required in the future.

This is no short order. A starting point would involve a careful assessment of the current and future security environments, a well-developed understanding of the principal operational challenges that the US military might eventually confront, and preliminary suggestions for how it should respond to these challenges if they arise. This report attempts to shed light on each of these areas. It complements the first monograph in the Center for Strategic and Budgetary Assessments' *Strategy for the Long Haul* series, *The Challenges to US National Security*, which describes the three major strategic challenges the United States is likely to face over the next two decades—violent Islamist extremism, a rising China, and nuclear proliferation—and describes the operational-level military problems that stem from these existing and

Secretary of Defense Robert M. Gates, Remarks at the National Defense University, Washington, DC, September 29, 2008, accessed at http://www.defenselink.mil/speeches/speech.aspx?speechid=1279 on March 20, 2009.

Reactive transformation entails a significant shift in investment priorities and the corresponding development of new operational concepts and doctrine to confront a threat after it has already emerged. In the case of anticipatory transformation, these steps are undertaken before a threat has fully materialized. See Andrew F. Krepinevich, Defense Investment Strategies in an Uncertain World (Washington, DC: Center for Strategic and Budgetary Assessments, 2008), p. 2.

potential dangers.⁴ This report translates these strategic and operational challenges into three illustrative planning scenarios and discusses the importance of devising new operational concepts to address each one.

This remainder of this monograph is comprised of six chapters. Chapter 1 discusses the role of uncertainty in strategic planning, the major constraints that often prevent military institutions from developing new concepts and capabilities to address plausible threats, and the key challenges the United States should prepare for over the next twenty years. Chapter 2 assesses the role that scenario-based planning can play in reducing uncertainty, enabling adaptation and innovation, and stimulating the development of new operation concepts-a crucial but often neglected element of military power. Drawing on the analysis of the future security environment in Chapter 1, Chapters 3, 4, and 5 each present plausible scenarios describing how the United States could find itself in a conflict for which it is not adequately prepared. Specifically, Chapter 3 describes an irregular war in Nigeria between the government and an insurgent movement in the country's southern region. In this scenario, the United States is asked to assist the Nigerian government in its efforts to contain the escalating violence, train and equip its police and military forces, and prevent a complete collapse of the state. Chapter 4 describes an attempt by the People's Republic of China (PRC) to reincorporate Taiwan through a policy of economic and military coercion. Here, the United States must be prepared to respond to China's aggressive behavior—in particular by countering its significant anti-access capabilities. Chapter 5 describes an Iranian regime that is emboldened by its acquisition of a small nuclear arsenal and becomes increasingly hostile toward both the United States and its own neighbors, culminating in an attempt to close the Strait of Hormuz. In this scenario, the United States must be prepared not only to reopen the Strait, but to conduct a weapons of mass destruction (WMD) elimination operation.⁵ Finally, Chapter 6 assesses the core challenges that these scenarios would pose, discusses why they should encourage the development of new operational concepts and capabilities, and offers preliminary suggestions regarding what these concepts should entail and what these capabilities should be.

⁴ Andrew Krepinevich, Robert Martinage, and Robert Work, *The Challenges to US National Security* (Washington, DC: Center for Strategic and Budgetary Assessments, 2008).

It is important to note, however, that this set of scenarios is not intended to be comprehensive. Rather, the goal is to provide a starting point for a more thorough analysis. For a larger set of more detailed scenarios, see Andrew F. Krepinevich, 7 Deadly Scenarios (New York: Bantam, 2009).



CHAPTER 1 > **DEFENSE PLANNING, UNCERTAINTY, AND THE FUTURE SECURITY ENVIRONMENT**

The primary objective of defense planners is to devise and implement a military posture that will enable the United States to respond quickly and effectively to a range of potential contingencies, many of which may require distinct capabilities and methods of operating. In reality, attaining this level of success is nearly impossible. Perhaps the single most important reason this goal is so difficult to achieve is that, as the strategist Colin Gray has noted, "the dominant reality for the defense planner is uncertainty."6 The key characteristics of the future security environment are unknowable, which virtually guarantees that senior officials will be forced at some point to grapple with developments they did not anticipate. Moreover, this limitation is more salient today than it was in the past, owing to the wide range of factors that have the potential to shape the future environment in significant ways. As the 2006 Quadrennial Defense Review maintained, whereas the previous era was one of "reasonable predictability," the United States has now entered "an era of surprise and uncertainty." The 2008 National Defense Strategy elaborated this point, suggesting that "over the next twenty years physical pressures—population, resource, energy, climatic and environmental—could combine with rapid social, cultural, technological, and geopolitical change to create greater uncertainty. This uncertainty is exacerbated by both the unprecedented speed and scale of change, as well as by the unpredictable and complex interaction among the trends themselves."8 Given these difficult circumstances, this chapter attempts to address two principal questions. First, how does uncertainty over the future security environment influence defense policy and planning,

⁶ Colin S. Gray, "Coping with Uncertainty: Dilemmas of Defense Planning," Comparative Strategy, July 2008, p. 329.

Quadrennial Defense Review Report (Washington, DC: Department of Defense, February 6, 2006), p. vi, accessed at http://www.defenselink.mil/qdr/report/Report20060203.pdf on August 15, 2009.

The National Defense Strategy of the United States of America (Washington, D.C., Department of Defense, June 2008), p. 4, accessed at http://www.defenselink.mil/news/2008%20national%20defense%20strategy.pdf on August 12, 2009.

and where can these effects be observed today? Second, realizing that the future cannot be predicted, which possible security challenges should the United States still be ready to confront?

DEBATING THE FUTURE

Uncertainty over the future security environment makes defense planning extremely difficult for a number of reasons, not least of which is that it often leads to contentious debates over the types of challenges the United States is likely to confront, how serious those challenges really are, and how best to prepare for them. This is certainly understandable and can even be healthy, especially if these debates illuminate the need for changes in organization, force structure, and doctrine, or if they credibly demonstrate why changes should not be made. Yet opponents of significant change often prevail irrespective of whether their case has merit. This can be attributed in large part to a pair of powerful constraints: sunk costs and opportunity costs. Specifically, considerable resources have already been spent building the current generation of weapon systems, training personnel, devising war plans, and so forth. If addressing a new or different threat requires weapons to be abandoned or replaced, personnel to be retrained, and plans to be modified or revised entirely, then the value of these resources would be greatly diminished, if not wasted entirely. At the same time, any effort or money devoted to preparing for a new set of challenges cannot be used to prepare for other potential threats.

Sunk costs and opportunity costs are interrelated, and give rise to dilemmas that are notoriously difficult to resolve. For example, over the past several decades the US military has devoted most of its resources to preparing for large-scale conventional wars, first against the Soviet Union and then against rogue nations such as Iraq and North Korea. Understandably, it has been reluctant to shift its focus to irregular conflicts (which would devalue at least some and perhaps much of the hardware and the knowledge that have been accumulated during this time), even if the ongoing wars in Afghanistan and Iraq seem to suggest that doing so may be warranted. The impact of these sunk costs is apparent in a number of areas, notably institutional resistance to divesting legacy platforms or investing in alternative capabilities. Yet continuing to focus on conventional wars also imposes opportunity costs by limiting the military's ability to prepare for current and future counterinsurgency, stabilization, or reconstruction operations. Of course, the reverse is true as well: resources spent preparing for irregular wars cannot be used to prepare for other forms of conflict. In fact, the ongoing debate between proponents and critics of the US military's (and particularly the Army's) increasing focus on counterinsurgency at the expense of conventional warfare centers in large part on this issue.

Because of these constraints, change is often controversial, potentially risky, and difficult to implement. It is hardly surprising, then, that defense officials often

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succumb to a number of common temptations: preparing for the last war; assuming that forces which were intended for use against one type of threat are sufficient to counter very different threats; and predicting that future wars will largely resemble current conflicts. This last tendency is especially likely when the nation is already at war, in which case efforts to devote attention or material resources elsewhere are often viewed as unwise and potentially dangerous. Secretary Gates, for example, recently highlighted a phenomenon he sardonically referred to as "Next-War-itis," or "the propensity of much of the defense establishment to be in favor of what might be needed in a future conflict." He went on to explain that

This inclination is understandable... But in a world of finite knowledge and limited resources, it makes sense to lean toward the most likely and lethal scenarios for our military. And it is hard to conceive of any country confronting the United States directly in conventional terms—ship to ship, fighter to fighter, tank to tank—for some time to come. The record of the past quarter century is clear: the Soviets in Afghanistan, the Israelis in Lebanon, the United States in Somalia, Afghanistan, and Iraq. Smaller, irregular forces—insurgents, guerrillas, terrorists—will find ways, as they always have, to frustrate and neutralize the advantages of larger, regular militaries. And even nation-states will try to exploit our perceived vulnerabilities in an asymmetric way, rather than play to our inherent strengths. Overall, the kinds of capabilities we will most likely need in the years ahead will often resemble the kinds of capabilities we need today.

Secretary Gates makes three valid points. First, he is right to caution that planning for the future should not undermine efforts to address the present, especially when the nation is engaged in two wars. Second, he is correct to suggest that today's conflicts may not be unique events that are unlikely to be repeated elsewhere, but are instead indicative of broader trends in the character of modern warfare and the types of adversaries the United States is likely to confront. Finally, it is also true that the possibility of a large-scale conventional conflict is increasingly remote. Today, there are few prospective adversaries with either the motive or the capability to pose this type of challenge to the United States. Moreover, the two nations most often cited as presenting a conventional military threat, North Korea and Iran, are unlikely to fight the United States military symmetrically, or in a manner similar to the Iraqi Army and Republic Guard during the 1991 Persian Gulf War. With respect to the threat posed by North Korea, the chief concern for American and South Korean military planners is not that Pyongyang's large conventional forces will overrun the South, but rather its ability to conduct massive artillery barrages against civilian as well as military targets, launch ballistic missiles strikes (especially missiles armed with chemical, biological and perhaps nuclear warheads), and carry out rear-guard attacks

Secretary of Defense Robert M. Gates, Remarks to the Heritage Foundation, Colorado Springs, CO, May 13, 2008, accessed at http://www.defenselink.mil/speeches/speech.aspx?speechid=1240 on March 20, 2009 (emphasis added).

Today, the shift toward irregular warfare against non-state actors is a key feature of the security environment, but it does not fully capture the very diverse set of challenges the United States should be prepared to confront in the decades ahead.

with its special operations forces. ¹⁰ In the event of a conflict with Iran, the United States is also unlikely to find itself confronting massed armored forces in relatively open terrain. Instead, as one recent study notes,

Iran's concept of war appears to be to avoid a conventional military conflict, especially with the United States, and to rely on irregular warfare and the implicit threat of weapons of mass destruction and terrorism to deter or inhibit an opponent. If war occurs, Iran seeks to reduce its costs by maximizing its passive defenses and taking advantage of its strategic depth and manpower mobilization capabilities while trying to increase the costs to its opponent through attrition and unconventional warfare, including terrorism against an opponent's interests anywhere in the world.¹¹

These three arguments suggest that using current conflicts as a model for future contingencies—and as a guide to shape the US military posture—is entirely reasonable. Unfortunately, this type of "forecasting," or a linear approach to the future, is likely to fail when preparation is most needed: when there is a major shift in the challenges confronting the nation.¹² The danger is that the Pentagon could repeat the mistakes that were made during the immediate post-Cold War period, when both military planning and procurement decisions were based in large part on the perceived need to prevail in two simultaneous conflicts (variously referred to as major theater wars (MTWs), major regional conflicts (MRCs), and major conventional operations (MCOs)) that closely resembled the first Gulf War. As critics have often noted, however, this simply "constricted the focus of force-planning efforts to a fairly narrow portion of the spectrum of plausible challenges US forces might face."¹³

Today, the shift toward irregular warfare against non-state actors (and the use of asymmetric tactics by states as well) is a key feature of the security environment, but it does not fully capture the very diverse set of challenges the United States should be prepared to confront in the decades ahead. Opponents may seek to offset US advantages in conventional warfare not only by operating "among the people," but also by developing advanced information, surveillance, reconnaissance and strike capabilities,

Vernon Loeb and Peter Slevin, "Overcoming North Korea's "Tyranny of Proximity'," Washington Post, January 20, 2003; Roxana Tiron, "ROK Fears North Korean Ability to Wage Asymmetric War," National Defense, January 2003; and Robert Karniol, "North Korea Rethinks War-Fighting Strategy," Straits Times, March 16, 2009.

Steven R. Ward, "The Continuing Evolution of Iran's Military Doctrine," The Middle East Journal, Autumn 2005, p. 567.

Pierre Wack, "Scenarios: Uncharted Waters Ahead," Harvard Business Review, September-October 1985, p. 73.

Zalmay Khalilzad and David Ochmanek, "Rethinking US Defence Planning," Survival, Spring 1997, p. 47. See also Paul K. Davis, Analytic Architecture for Capabilities-Based Planning, Mission-System Analysis, and Transformation (Santa Monica, CA: RAND, 2002), chap. 1.

pursuing nuclear weapons, or perhaps some combination of these three alternatives. ¹⁴ As a result, placing too much emphasis on any single type of threat is almost certain produce a flawed defense strategy. ¹⁵ Ultimately, "defense planning should seek to seek to achieve and sustain a military posture that is flexible and adaptable, and not geared toward a single, preclusive vision/doctrine of future war." ¹⁶

A CHANGING SECURITY ENVIRONMENT

It is frequently argued that past challenges were far less complex than those the United States faces today. Although this point may be overstated, it does contain an element of truth. For much of the Cold War, the United States was able to focus the bulk of its attention on a single adversary—the Soviet Union. Of course, American strategists and military planners still had to grapple with both the conventional and nuclear balance of forces, and the United States also found itself fighting against Soviet proxies (and often through its own) in the developing world rather than fending off an armored thrust through the Fulda Gap. Overall, however, the ability to concentrate on one principal opponent reduced uncertainty to a manageable level. Then, in the years immediately following the dissolution of the Soviet Union, the United States found itself in the midst of the unipolar moment—a period of unparalleled economic and military dominance.¹⁷ While it still confronted significant security challenges, notably from rogue nations such as Iraq and North Korea, these dangers were few in number and paled in comparison to the Soviet threat.

However, for more than a decade the security environment has been undergoing a significant transformation, which is still underway. The 9/11 attacks against the World Trade Center and the Pentagon, China's growing military strength, and nuclear tests by India, Pakistan, and North Korea are some of the more dramatic indicators of the changes that have been taking place. The result is a much more complex environment than the one the United States faced during the Cold War, and a much more dangerous environment than the one it confronted during the immediate post-Cold

For more than a decade the security environment has been undergoing a significant transformation, which is still underway.

These three offsetting strategies parallel the irregular, disruptive, and catastrophic challenges described in the 2005 National Defense Strategy and the 2006 Quadrennial Defense Review. *The National Defense Strategy of the United States of America* (Washington, DC: Department of Defense, March 2005), pp. 2–3; and *Quadrennial Defense Review Report*, p. 19.

To be fair, although Secretary Gates has repeatedly emphasized the need to focus on the wars at hand as well as their implications for future conflicts, he has also called for the Pentagon to adopt a strategy that "strives for balance," particularly "between trying to prevail in current conflicts and preparing for other contingencies," and "between institutionalizing capabilities such as counterinsurgency and foreign military assistance and maintaining the United States' existing conventional and strategic technological edge against other military forces..." Robert M. Gates, "A Balanced Strategy: Reforming the Pentagon for a New Age," *Foreign Affairs*, January/February 2009, p. 28.

Gray, "Coping with Uncertainty," p. 330.

Charles Krauthammer, "The Unipolar Moment," Foreign Affairs, Winter 1990/1991; and William C. Wohlforth, "The Stability of a Unipolar World," International Security, Summer 1999.

These challenges represent efforts by existing or potential opponents to adopt asymmetric capabilities and strategies that exploit perceived US weaknesses, including a low tolerance for casualties, a dependence on vulnerable battle networks and forward bases, and a deep reluctance to project power against a nucleararmed adversary.

War period. Although the United States remains the world's leading power, it finds itself confronting three major, enduring, and very different strategic challenges:

- > Containing and if possible defeating violent Islamist terrorists, in particular Salafi-Takfiri extremists within the broader Sunni Muslim community (notably al Qaeda and its various affiliates);
- > Hedging against the rise of a hostile China, which is not only growing economically but is also developing a robust anti-access/area-denial (A2/AD) network designed to impede the US military from entering and operating within the East Asian region during a crisis; and
- > Preparing for a world where nuclear weapons have spread to a number of additional states and possibly to non-state actors, which would increase the likelihood of a direct conflict with a nuclear-armed opponent, the collapse of a nuclear-weapon state, or a nuclear terrorist attack.¹⁸

In each instance, these challenges represent efforts by existing or potential opponents to adopt asymmetric capabilities and strategies that exploit perceived US weaknesses, including a low tolerance for casualties, a dependence on vulnerable battle networks and forward bases, and a deep reluctance to project power against a nuclear-armed adversary.

Beyond these three overarching challenges, a number of other important and potentially destabilizing trends can be identified. For example, most nations in the Middle East and North Africa have very young populations—a "youth bulge"—which are the result of a significant decline in childhood mortality rates combined with a much slower decline in fertility rates. While these youth bulges can contribute to economic growth, they can also be a source of instability if sufficient opportunities for education and employment are not available.¹⁹ The Second Lebanon War in 2006 also raised the possibility of non-state actors acquiring increasingly advanced military capabilities. During the war Hezbollah not only launched thousands of rockets against the Israeli home front, it also used improvised explosive devices, anti-tank guided missiles, and sophisticated surveillance and communications equipment to observe and attack Israeli Defense Forces within Lebanon. Moreover, it employed several unmanned aerial vehicles (UAVs) and a guided anti-ship cruise missile. This conflict is frequently described as the harbinger of a new form of "hybrid warfare" which has

For a more detailed assessment of these three challenges, see Krepinevich, Martinage, and Work, The Challenges to US National Security.

Richard P. Concotta, Robert Engelman and Daniele Anastasion, *The Security Demographic* (Washington, DC: Population Action International, 2003); and Graham E. Fuller, "The Youth Factor: The New Demographics of the Middle East and the Implications for U.S. Policy," Analysis Paper No. 3, The Brookings Institution, June 2003.

emerged as a growing concern for military planners.²⁰ Finally, along with the rise of China, the emergence (or reemergence) of India and Russia as major powers suggests that the era of unparalleled US dominance is beginning to wane.²¹

Frank G. Hoffman, "Hybrid Warfare and Challengers," *Joint Force Quarterly,* 1st Quarter 2009; Greg Jaffe, "Short '06 Lebanon War Stokes Pentagon Debate," *Washington Post,* April 6, 2009; and Thom Shanker, "Pentagon to Outline Shift in War Planning Strategy," *New York Times,* June 22, 2009.

For varying assessments regarding the future global balance of power, all of which predict some degree of US relative decline, see National Intelligence Council, Global Trends 2025: A Transformed World, November 2008, accessed at http://www.dni.gov/nic/NIC_2025_project.html on January 3, 2009; Fareed Zakaria, "The Future of American Power," Foreign Affairs, May/June 2008; and Robert A. Pape, "Empire Falls," The National Interest, January/February 2009.



CHAPTER 2 > SCENARIOS AND OPERATIONAL CONCEPTS

Given the diverse array of existing and potential threats described, it seems increasingly clear that the United States military will have to reexamine its force structure, investment options, and methods of employment in order to remain highly effective across the range of very different—and very demanding—operational challenges that it must be prepared to face. In short, it will have to both adapt and innovate. Yet military organizations often have trouble doing so absent specific operational problems and clear contingencies on which they can focus their attention.²² Moreover, even when militaries do prepare for future challenges, they often "put the cart before the horse" by debating issues such as manpower requirements or the value of existing and prospective weapons systems without a clear sense of how both men and materiel can and should be employed—or without critically examining whether the prevailing concepts that guide their use continue to be relevant. The purpose of this chapter, therefore, is to discuss a valuable tool for mitigating uncertainty and encouraging military adaptation and innovation: scenario-based planning. It also describes one of the most important outputs that can be generated by scenario analysis: new operational concepts.

SCENARIO-BASED PLANNING

As Barry Watts and Williamson Murray have argued, to engage in successful innovation, militaries "not only need to make the initial intellectual investments to develop visions of future war, but they must continue agonizing over such visions to discern how those wars might differ from previous conflicts due to changes in military technology and weaponry, national purposes, and the international security

Williamson Murray, "Innovation: Past and Future," in Murray and Allan R. Millet, eds., Military Innovation in the Interwar Period (New York: Cambridge University Press, 1996), pp. 311–312.

If a scenario is plausible and highlights operational military challenges that pose a significant threat to US national security interests, then senior officials should be motivated to begin addressing these challenges before they fully materialize.

environment."²³ Scenarios can facilitate this process by challenging senior leaders' preconceived notions of the future, identifying possible threats, and helping officials determine what types of capabilities may be needed to prevent them from emerging or to combat them when they arise.²⁴ Scenarios themselves are simply "stories about the way the world might turn out tomorrow, stories that can help us recognize and adapt to the changing aspects of our present environment."²⁵ At the heart of these stories are "drivers": economic, political, technological, demographic, or other trends that have the potential to shape the future, in particular by influencing the likelihood of conflict, changing the character of military competition, or both. If a scenario is plausible and highlights operational military challenges that pose a significant threat to US national security interests (particularly challenges for which the US military may not yet be adequately prepared), then senior officials should be motivated to begin addressing these challenges before they fully materialize.

How many scenarios should be developed and analyzed? In theory, dozens could be written that would present significant security challenges for the United States, some more plausible than others. Yet senior defense officials cannot devote their attention to thirty or forty different contingencies, nor can they determine how to reshape the armed forces with this many possibilities in mind, especially if no effort is made to establish a clear priority among them. Perhaps more importantly, examining such a large number of scenarios in detail would quickly result in diminishing returns. While an analysis of several dozen contingencies might highlight numerous operational challenges (and produce a host of recommendations in terms of both capabilities and methods of employment), in all likelihood many of these will be redundant, and can be reduced to a smaller and more manageable number. Despite the distinct context of a particular operational challenge, measures taken to address it are likely to be relevant in multiple contingencies. For example, analysis of a scenario that describes a potential Sino-US conflict in the Taiwan Strait (discussed in Chapter 4) could spur recommendations that would not only be useful for countering China's A2/AD network, but that might also enable the United States to prevail over rogue nations armed with advanced integrated air defense systems (IADS), submarines, ballistic and cruise missiles, and other capabilities similar to those being developed

²³ Barry Watts and Williamson Murray, "Military Innovation in Peacetime," in ibid., p. 406.

Scenario-based planning as described in this report should not be confused with "point-scenario planning," or the "fixation on particular enemies, particular wars, and particular assumptions about those wars" that characterized defense-planning efforts throughout the 1990s. Davis, Analytic Architecture for Capabilities-Based Planning, p. 8. The need to move away from this type of planning method is a theme that has been echoed by a number of defense analysts for some time. See, for example, Khalilzad and Ochmanek, "Rethinking US Defence Planning," pp. 46-49; Michèle Flournoy, "Did the Pentagon Get the Quadrennial Defense Review Right?" The Washington Quarterly, Spring 2006, p. 82; and Andrew F. Krepinevich, The Quadrennial Defense Review: Rethinking the US Military Posture (Washington, DC: Center for Strategic and Budgetary Assessments, 2005), chap. 3.

⁵ Peter Schwartz, *The Art of the Long View: Planning for the Future in an Uncertain World* (New York: Currency Doubleday, 1991), p. 3.

and deployed by China. Likewise, a scenario might be devised in which Pakistan collapses due to internal violence and some of its nuclear weapons are unaccounted for. Not only is this contingency plausible, but efforts to devise a comprehensive response could also yield organizational or force structure changes that would improve the United States' ability to respond to state failure in another part of the world, to track down "loose nukes" from another source, or to prevent non-state actors from delivering weapons of mass destruction covertly against targets inside the United States.

Scenarios are not intended to be predictions of the future, however. Rather, scenario-based planning is a method for minimizing risk. Scenario planners accomplish this by developing a number of plausible futures—perhaps half a dozen—that produce a comprehensive list of critical operational challenges. If senior leaders employ these scenarios to develop, assess, and create options for addressing these challenges, they can significantly minimize the prospect of being caught off guard or underprepared whenever and wherever new threats emerge.

OPERATIONAL CONCEPTS

Perhaps the most important contribution that scenario-based planning can make is to enable and encourage the development of new operational concepts to address the key challenges that scenarios identify. An operational concept is a general approach to a potential military problem; in effect, it represents a "working hypothesis" for solving that problem, which can later be tested and refined through war games, simulations, and field exercises before ultimately being codified in doctrine. Substantively, these concepts should include general capability requirements for meeting a set of operational challenges (including both existing as well as prospective capabilities) and, perhaps most importantly, a clear argument for how these capabilities should be employed to achieve operational and strategic objectives. A new operational concept therefore "changes the basic operating framework that military organizations have about the relationships among weapons systems and those who use them against the enemy."²⁷

Perhaps the most important contribution that scenario-based planning can make is to enable and encourage the development of new operational concepts.

David A. Fastabend, "That Elusive Operational Concept," *Army Magazine*, June 2001. As Fastabend notes, while the term operational concept is used frequently, its meaning is highly varied and often unclear. In fact, it has no official definition. Closely related is the term "concept of operations," which the military defines as "a verbal or graphic statement that clearly and concisely expresses what the joint force commander intends to accomplish and how it will be done using available resources." *Joint Publication 1-02*, "DOD Dictionary of Military and Associated Terms," as amended through 17 March 2009. The difference between the two terms is subtle but important. A concept of operations is a commander's overall approach to an existing threat, which then informs the development of an operational plan detailing when and how available forces will be deployed to the theater of operations, employed in combat, and sustained over time. An operational concept is a general proposition regarding how future conflicts can and should be fought, and is used to shape doctrine and determine what types of forces should be retained, developed, or divested.

²⁷ Williamson Murray, "Innovation: Past and Future," p. 306.

To maintain their effectiveness over the long run, military organizations must have the capacity to develop and implement new concepts in light of changing circumstances.

The development of operational concepts is a crucial aspect of defense planning for several reasons. First and foremost, operational concepts directly influence military effectiveness, or "the process by which armed forces convert resources into fighting power." They are, therefore, a key component of a nation's overall military power, which cannot be measured solely by quantitative indicators such as the size of its defense budget, the number of men and women that it maintains under arms, or even the technological sophistication of its major weapons systems. ²⁹ Each of these factors is certainly important; all else being equal, the nation that devotes more resources to defense, deploys more troops in the field, and purchases or produces better equipment should have a significant advantage over its opponents. Yet all else is *not* always equal. As one study correctly notes, "possessing resources in the form of raw equipment inventory and manpower is inadequate if these two assets are not appropriately structured and trained to solve certain operational tasks in a coherent way. Having sophisticated military technologies and a large mass of soldiers is one thing. Being able to use them effectively is something else." ³⁰

Ultimately, the effectiveness of a nation's military also depends upon *how* it is employed in response to a particular operational challenge. Without concepts that take into account a nation's strengths, an opponent's weaknesses, the likely character of a potential conflict, and the constraints imposed by technology, geography, and strategic culture (as well as the opportunities these factors may create), even large or advanced forces may prove inadequate as a deterrent and ineffective in combat. Perhaps the most salient example of this is the fall of France in 1940. Although the Allies had a quantitative advantage over Germany in both manpower and tanks, in addition to some qualitative advantages in armored vehicles, "what mattered most was that the Germans had evolved concepts for mobile, combined-arms warfare and had trained their army to execute those concepts." Moreover, to maintain their effectiveness over the long run, military organizations must have the capacity to develop and implement new concepts in light of changing circumstances, including the rise of

Allan R. Millet, Williamson Murray, and Kenneth H. Watman, "The Effectiveness of Military Organizations," in Millet and Murray, eds., Military Effectiveness, Volume 1: The First World War (Boston: Allen & Unwin, 1988), p. 2.

²⁹ Barry Watts, Six Decades of Guided Munitions and Battle Networks: Progress and Prospects (Washington, DC: Center for Strategic and Budgetary Assessments, 2007), pp. 38-45.

³º Ashley J. Tellis, Janice Bially, Christopher Layne, and Melissa McPherson, Measuring National Power in the Postindustrial Age (Santa Monica, CA: RAND, 2000), p. 149. See also Stephen Biddle, Military Power: Explaining Victory and Defeat in Modern Battle (Princeton, NJ: Princeton University Press, 2004).

Watts and Murray, "Military Innovation in Peacetime," p. 373.

a new opponent or the realization that existing concepts are no longer effective. This type of flexibility is also a critical element of military power.³²

Second, operational concepts can be catalysts for change across of range of areas. If a new concept gains widespread acceptance, it can drive decisions related to force structure and organization, training and doctrine, and research and development.³³ A useful historical example is the "flotilla defense" concept advocated by Admiral Sir John Fisher, who served as Britain's First Sea Lord in the early years of the twentieth century. During his tenure, the Royal Navy confronted a new and significant operational challenge: the adoption of submarines and torpedo craft by potential adversaries. Because of the heightened risk they posed to capital ships, this development threatened to undermine a traditional element of British naval strategy—imposing a close blockade of enemy naval bases at the start of a war to compel a rival navy to remain in port or accept a decisive engagement at sea. In response, Fisher maintained that Britain should alter its strategy and depend on similar flotilla craft both to deter an invasion of the British Isles and to attack enemy troop transports if deterrence failed. This decision led to a marked increase in funding for submarines and destroyers along with a decreased emphasis on armored battleships—the core element of British naval power.34

Third, operational concepts and the changes they stimulate may have significant utility beyond the particular circumstances that led to their creation. Although a new concept may have been developed in response to a scenario that is no longer relevant, the challenges highlighted by that scenario may be present elsewhere. Consider, for instance, the Army's "extended battlefield" concept, which became the basis for its AirLand Battle doctrine of the 1980s. Given AirLand Battle's considerable influence on both force employment and force structure, it may be one of history's most successful examples of an operational concept. It was, however, successful in ways that were not expected when it was devised or adopted.

During the 1970s, US military planners debated how to fight a major war against the Soviet Union in the European theater, which appeared increasingly difficult in light of several factors: recent improvements in Soviet air and armored forces threatened to erode the North Atlantic Treaty Organization's (NATO) longstanding qualitative military advantage; massive second- and third-echelon Soviet forces had the potential to break through NATO's defenses at the forward edge of the battle area (FEBA); modern weapons, with their increased firepower and lethality, were expected to make

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Risa A. Brooks, "Introduction: The Impact of Culture, Society, Institutions, and International Forces on Military Effectiveness," in Brooks and Elizabeth A. Stanley, eds., Military Power: The Sources of Military Effectiveness (Stanford, Calif.: Stanford University Press, 2007), p. 11; and Millet, Murray, and Watman, "The Effectiveness of Military Organizations," pp. 18–19.

New operational concepts can therefore influence what the Department of Defense refers to as DOTMLPF: Doctrine, Organization, Training, Materiel, Leadership, Personnel, and Facilities.

Nicholas A. Lambert, "Admiral Sir John Fisher and the Concept of Flotilla Defence, 1904–1909," Journal of Military History, October 1995.

initial engagements shorter and more decisive, which could in turn undermine the United States' ability to reinforce forward-based NATO forces before they were overrun; and Western European NATO members were increasingly unwilling to fight a defense-in-depth across their own territory. In response to these factors, US Army planners introduced a new concept for fighting the Warsaw Pact. Rather than directing all available firepower to stopping Soviet and Warsaw Pact forces along the FEBA, US air, ground, and special operations forces would strike deep into the enemy's rear in order to disrupt Soviet second- and third-echelon forces, which would then give US forces opportunities for offensive maneuver. This new concept not only became official doctrine in 1982 with the publication of the revised Army Field Manual 100-5, Operations, it also helped to spur the development of the sensor platforms and weapons necessary to implement the concept fully, including the Joint Surveillance and Target Acquisition Radar System (JSTARS) and the various guided munitions and sub-munitions that emerged from the Defense Advanced Research Projects Agency's (DARPA) Assault Breaker program.³⁵ It also influenced NATO's decision to adopt a similar operational concept that became known as Follow-on Forces Attack (FOFA) doctrine. Notably, although a direct conflict with the Soviet Union never occurred, the doctrinal and programmatic implications of preparing for that conflict in a novel way enabled the United States to prevail quickly in contingencies that were not anticipated at the time, in particular Operation Desert Storm in 1991 and the initial phases of Operation Iraqi Freedom in 2003.³⁶

SUMMARY

Together, scenario-based planning and operational concepts are crucial elements of the defense planning process; they enable military organizations to not only identify and prepare for future security challenges, but also to address existing challenges more effectively. The following chapters explore these tools in greater detail and demonstrate their utility by presenting three illustrative scenarios, assessing the difficulties they would pose for US military forces, and offering preliminary observations regarding the implications these scenarios would have for concept development as well as capability requirements.

John J. Romjue, "The Evolution of the AirLand Battle Concept," Air University Review, May-June 1984; Douglas W. Skinner, "AirLand Battle Doctrine," Professional Paper 463, Center for Naval Analyses, September 1988; and Watts, Six Decades of Guided Munitions and Battle Networks, pp. 28–30.

Robert H. Scales, Jr., Certain Victory: The U.S. Army in the Gulf War (Washington, DC: Office of the Chief of Staff, United States Army, 1993), pp. 106–107.



CHAPTER 3 > NIGERIA ON THE BRINK

October 2019. Nigeria, one of Africa's most resource-rich nations, is dangerously close to becoming a failed state. For more than six months, the Nigerian government has unsuccessfully attempted to contain a wave of violence that originated in the troubled Niger River Delta region, but has recently spread. Attacks against the country's sprawling onshore oil infrastructure and offshore oil platforms have become more frequent and more deadly, as have clashes between armed groups and government forces. Riots have broken out in Lagos, Port Harcourt, and several other southern cities. Over the past two months, a series of suicide attacks have also taken place in the country's northern region, and in the capital of Abuja. The proximate causes of this upsurge in violence are well known: an indigenous insurgent movement with longstanding grievances against the government, the presence of foreign terrorist operatives seeking to accelerate and take advantage of Nigeria's slide into chaos, and the government's own heavy-handed response, which has only fueled widespread popular resentment. The roots of the current crisis go much deeper, however, to the nexus of oil, poverty, and corruption that has plagued Nigeria for more than half a century.

AN UNSTABLE NATION

Nearly two decades into the twenty-first century, Nigeria remains a strategically important yet politically fragile country. With approximately 190 million people, it is by far Africa's most populous nation, and has also played a leading role in multi-national organizations such the African Union. Its strategic value, however, stems principally from its abundant natural resources, especially oil and gas. With its combined onshore and offshore reserves, Nigeria is capable of producing more than four million barrels per day of crude oil, although sabotage and theft generally ensure that actual production levels are much lower. Nevertheless, Nigeria remains one of the world's

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leading crude oil producers, in addition to being a major supplier of oil for the United States. In addition, Nigeria possesses the world's seventh-largest proven reserves of natural gas. Together, the oil and gas sector accounts for virtually all of Nigeria's export revenues, 85% of government revenues, and more than half of the nation's gross domestic product (GDP).

Despite its significant wealth, Nigeria is riddled with extreme poverty, internal divisions, and political corruption. Its population—half of which lives on less than one dollar a day—is comprised of more than two hundred and fifty different ethnic groups that speak five hundred indigenous languages and are divided between two major religions (Christianity and Islam). Perhaps not surprisingly, then, Nigeria has experienced recurring bouts of sectarian violence that have led to tens of thousands of deaths over the past several decades. Politically, Nigeria's post-independence history has been characterized by authoritarian rule punctuated by a series of military coups. Although the country has now experienced six consecutive national elections beginning with its transition to democracy in 1999, intimidation, bribery, and other voting irregularities are regular occurrences.

Many of Nigeria's most serious problems intersect in its volatile Delta region. Located in the country's southern tip and home to over 20 million residents, the Delta is one of the world's largest natural wetlands and, more significantly, the source of virtually all of Nigeria's oil and gas reserves. Despite supplying much of the nation's wealth, however, the region's inhabitants face abysmal living conditions, which have created a vast reservoir of popular resentment directed not only at the government, but also at the international oil companies (IOCs) that operate in the region. Poverty and unemployment are rampant; basic public services and infrastructure, such as running water, sewage, schools, medical facilities and roads, are minimal and in some areas nonexistent. Environmental degradation has also been an ongoing problem: a combination of pipeline corrosion, sabotage, and bunkering (the common practice of illegally tapping pipelines in order to siphon off oil, which is later sold on the black market) has caused thousands of oil spills over the years. Compounding these difficulties, and in part because of them, the Delta has also seen the proliferation of "cults," or gangs of well-armed young men. While some of these groups are politically motivated, others are simply criminal elements that participate in bunkering operations, coerce local voters on behalf of corrupt politicians, and engage in vicious conflicts with one another.

Of the various militant groups that have appeared in the Delta since the 1990s, none has had a greater impact than the Movement for the Emancipation of the Niger Delta (MEND), an umbrella organization that has worked with and through the numerous gangs and militias that populate the region. The group first appeared almost fifteen years ago, threatening to shut down Nigeria's oil industry unless all security forces were withdrawn from the region and half of all oil revenues were given to the Delta's six oil-producing states (at the time, those states received only 13% of all oil revenues, and much of that money was lost to corruption). Its operations included

raiding onshore and offshore oil installations—often to capture hostages who could then be ransomed—and sabotaging pipelines and other oil infrastructure. For years, these attacks have prevented the IOCs operating in the Delta region from reaching maximum production capacity. Moreover, MEND repeatedly demonstrated its ability to defeat government forces dispatched to capture or kill its fighters. This was generally attributed to the group's better weapons and equipment, and perhaps most of all to its members' superior knowledge of the region's complex geography, which allowed MEND fighters to surprise their opponents and then quickly disappear back into the Delta's swamps.

BACKGROUND TO THE CRISIS

For nearly ten years, MEND and other criminal elements harassed the Nigerian government and the international oil companies, but their actions were never sufficient to collapse the government or to drive the IOCs out of the country. Nor was it in their interest to do so, given that many of these groups reaped significant profits from bunkering oil, ransoming kidnapped foreign workers, and extorting oil companies for protection money. Beginning in 2015, the situation in the region even began to improve. In the aftermath of national elections that year, Nigeria's new president began sporadic (and secret) negotiations with representatives of MEND, as well as several of the Delta's other militias. In November 2016, an agreement was reached that many observers hoped would end the conflict and restore order to the south.

The agreement itself contained a number of provisions, including the release of prisoners held by the government, promises on the part of the government and the IOCs to contribute significant resources for community development projects in the region, and most importantly a 7% increase in the amount of oil revenue that would go to the Delta's oil producing states. Although this figure was far less than what the militants had demanded in the past, it was the largest amount acceptable to the rest of the nation, which would now see its share of oil profits diminish. Moreover, to ensure militant support for the deal, several MEND leaders and other key figures are suspected of having received substantial individual payments, subsidized in part by the IOCs. In exchange, the recipients agreed to end their attacks against government forces and oil infrastructure.

During the two years following this agreement, violence in the region declined significantly, although many of the smaller gangs not party to the accord and not under the control of MEND continued to engage in attacks, sabotage, and kidnappings. Unfortunately, this period of relative calm was short-lived. Despite the promises made by the national government and the IOCs, most of the region's inhabitants saw only marginal improvements in their day-to-day lives; basic services, critical infrastructure, and employment all remained scarce. In large part this was the result of endemic corruption at the state level, which ensured that most of the resources

MEND repeatedly demonstrated its ability to defeat government forces dispatched to capture or kill its fighters.

MEND fighters who had acquired increasingly sophisticated rocketpropelled grenades, anti-tank missiles, explosives, and communications equipment through the black market continued their attacks against oil facilities and infrastructure throughout the south.

earmarked for development projects were never used as intended. In January 2019, after a two-year hiatus, MEND claimed credit for a series of attacks against oil pipelines and offshore platforms. Over the next several months, similar attacks once again became a regular occurrence. The group's apparent hope was to pressure the government into enforcing the existing agreement (or at the very least to solicit another round of bribes) in advance of the April 2019 national election. This strategy backfired, however. After campaigning on a platform that called for firmer measures against Delta militants—an increasingly popular position in much of the nation as violence in the south escalated—Nigeria's president was easily reelected.

In the aftermath of the election, violence escalated quickly. MEND fighters—who had acquired increasingly sophisticated rocket-propelled grenades, anti-tank missiles, explosives, and communications equipment through the black market—continued their attacks against oil facilities and infrastructure throughout the south, causing production rates to decline considerably. The group also conducted frequent ambushes of Nigerian coastal and riverine patrols, and engaged in several intense firefights with military and police forces inside major southern cities. In one particularly bloody incident in July, elements of a combined government task force clashed with civilians in Lagos during a botched attempt to capture a high-ranking MEND commander. In all, nearly one hundred civilians were killed and more than three hundred were seriously injured. This incident spurred a wave of protests throughout the south. It did not, however, prevent the Nigerian government from engaging in aggressive and counterproductive tactics in an effort to stem the violence, including mass arrests and the razing of villages suspected of being MEND strongholds.

THE CURRENT SITUATION

In August, MEND's leaders announced that they had joined with several other militias to form the Delta Liberation Front (DLF). Rather than fight on behalf of "resource control," militants had adopted separatism as their chief goal, and justified this shift by calling attention to the government's increasingly hard-line measures. Like MEND, the DLF is a loosely organized umbrella movement. It has also incorporated some of the most violent gangs in the region. As a result, its attacks over the past two months have become more expansive and more violent. In September, for example, a group claiming to be part of the DLF raided a foreign workers' compound outside of Port Harcourt. Several dozen private military guards and contract workers were killed, and five workers were kidnapped. Two of those workers were subsequently executed. Within days, all of the major IOCs operating in country announced that they would immediately suspend their onshore operations, and would prepare for the suspension of offshore operations as well unless the security situation improved.

As conditions have deteriorated in the south, violence has also spread to the north. Over the past six weeks there have been more than a dozen suicide attacks, including one in the capital city, that have killed more than two hundred people. So far, these attacks have targeted police stations and other government offices, and are believed to be the work of an al-Qaeda affiliated group that has developed a small but significant presence somewhere in Nigeria's predominantly Muslim northern region. Al Qaeda elements have been resident in Nigeria for some time, and terrorism experts and intelligence officials have warned for several years that the organization was likely to develop an interest in economically and strategically important nations that have only a limited security apparatus. That prediction now appears to have come true.

At present, there is no indication that al Qaeda is working with the DLF. Rather, the group appears intent on hastening Nigeria's collapse by opening a second front against the government. This has presented Nigeria's leaders with a dilemma. Given their limited capabilities, which are already insufficient to contain the threat from the south, government forces cannot mount a significant counterterrorism campaign in the north without drawing resources away from the Delta and allowing the situation there to worsen. However, if the government fails to address the growing threat in the north, it not only risks losing popular support throughout the nation, it also faces the possibility that al Qaeda-linked groups could establish an operational sanctuary similar to the ones they previously enjoyed in Afghanistan and Pakistan, which would increase their ability to plan, organize, and launch attacks against targets throughout Africa, and perhaps in the Middle East, Europe, and North America.

TASKING

Although Nigeria's president remains publicly defiant, insisting that his government is in control of the country and will eventually prevail over both insurgents and terrorists, privately he has admitted to US officials that his forces are unable to restore order in the south, defend the region's extensive oil and gas infrastructure, and combat al Qaeda elements in the north. By the middle of October the United States received an official request for assistance: the Nigerian government has asked for help to reestablish internal security and border control in the short term, and to adopt lasting economic, political, and military reforms in the long run that will allow it to maintain order and meet the needs of its citizens without significant external aid.

A US intervention in support of the Nigerian government would mean undertaking some and possibly all of the following tasks:

- > Organizing, training, equipping, and advising Nigerian police, military units, and recruits in order to improve the quality and quantity of local security forces;
- > Protecting Nigeria's offshore oil and gas infrastructure, in addition to critical onshore facilities;

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- > Engaging in coastal and riverine patrols to provide security in the Delta region, deter or interdict illegal oil shipments that fund local militants, and escort commercial ships; and
- > Conducting counterterrorism and counter-sanctuary operations against al Qaeda elements in the north.

With state failure a real possibly in the very near future, however, the United States would have to deploy substantial forces that could begin to perform these tasks immediately, before the government collapses and intervention is no longer a realistic possibility.



CHAPTER 4 > CRISIS OVER TAIWAN

August 2019. For the first time in more than two decades the United States faces the prospect of a conflict with China in the Taiwan Strait. Less than twenty-four hours ago Chinese state-run news agencies carried a televised message by the country's president announcing a blockade of its "wayward province," demanding that Taiwan accept reincorporation with mainland China as a "special administrative region," and declaring that any effort to intervene in this "purely internal matter" would constitute a violation of Chinese sovereignty. Caught off-guard and cognizant that time is not on the side of Washington or Taipei, senior US officials are now frantically attempting to determine whether to intervene and, if so, how. Unlike the last crisis over Taiwan in 1996, however, it is doubtful that a brief show of force will be sufficient to end the standoff; the PRC seems determined to bring Taiwan's de facto independence to an end and has spent over twenty years developing the means to do so.

A RISING POWER

There is little doubt that China's emergence as a major power has been one of the most significant developments of the late twentieth and early twenty-first centuries. Since it began the process of economic reform in the late 1970s, China's annual economic growth has averaged almost 10%. Although the Chinese economy experienced diminished growth rates during the Great Recession of 2008–2011, and has suffered a major downturn over the past four years, it remains on track to overtake the US economy in terms of GDP sometime in the next two decades. Until recently, this continued economic growth had allowed Chinese Communist Party (CCP) leaders to easily resist what little domestic and international pressure existed for democratic political reform.

China's impressive economic development has also been the catalyst for an ambitious military modernization program, which has been geared almost entirely toward

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countering US air and maritime forces and reducing the US military's ability to project power into East Asia. Despite having fairly amicable relations since the 1970s, it was only natural that a rising power and the world's dominant power would look warily upon one another. Moreover, Chinese leaders have long been concerned about the possibility of US intervention in a dispute between the PRC and Taiwan. These predispositions were only exacerbated by US military operations throughout the 1990s, which demonstrated just how advanced the American military's reconnaissance-strike capabilities had become, and the lengths to which the People's Liberation Army (PLA) would have to go in order to compete with the United States militarily. From the perspective of Chinese strategists, however, these operations also called attention to possible vulnerabilities that could be exploited, in particular the US military's dependence on a small number of forward bases to stage troops and launch attacks, and its extensive use of vulnerable space-based assets and data networks for C4ISR (Command, Control, Communications, Computers, Intelligence, Surveillance and Reconnaissance).

Based on these observations, PLA modernization efforts have focused on developing the means to hold at risk US regional bases, surface ships, satellites, and computer networks. In the event of a crisis, China could use (or threaten to use) these capabilities to prevent US forces from entering or operating freely within an area that PLA military planners refer to as the "first island chain" (a defensive perimeter extending outward to Japan, Okinawa, Taiwan, and the Philippines), and possibly further east. By 2019 the components of this A2/AD network included:

- > Over-the-horizon radars, satellites, and UAVs for maritime and aerospace surveillance;
- > Thousands of surface-to-surface ballistic missiles with a variety of warheads;
- > Thousands of land-attack and anti-ship cruise missiles;
- > Dozens of anti-ship ballistic missiles (ASBMs) armed with maneuverable reentry vehicle (MARV) warheads;
- > An integrated air defense system that includes advanced sensors and thousands of short-, medium-, and long-range surface-to-air missiles (SAMs);
- > A large number of fourth-generation air superiority fighters;
- > Six nuclear-powered attack submarines (SSNs) and a large number conventionally-powered submarines (including approximately a dozen with air-independent propulsion (AIP) systems for enhanced endurance), all armed with submerged-launch anti-ship cruise missiles (ASCMs) and wake-homing torpedoes;
- > Directed- and kinetic-energy anti-satellite (ASAT) weapons; and
- > Cyber warfare and electronic attack capabilities.

Together, these capabilities form a reconnaissance-strike complex that has made it increasingly difficult for US forces to conduct and sustain military operations in the region.

Despite its rapidly growing economic and military power, until recently China's rise had largely been a peaceful one. Although PRC leaders were still criticized by the international community on various human rights issues, China's strong participation in a number of international institutions, its deepening trade relationships with the United States, Europe, and especially the rest of Asia, and its unwillingness to resolve any of its remaining territorial disputes through the use of coercion or force convinced most observers that it had indeed become a responsible and peaceful nation. At the same time, however, China was experiencing growing internal strains.

BACKGROUND TO THE CRISIS

After recovering from the Great Recession in 2011, China's spectacular economic growth began to falter again by mid-decade, declining from 8% in 2014 to 6.5% in 2015, to just over 5% in 2016. Growth slowed even further, to roughly 4%, in 2017. This was not entirely unexpected, however, and by itself may have been manageable. But China's demographic profile, government corruption, and outside events all conspired to drive the country into an economic and political crisis.

Like many other countries, China's population has been aging for some time, with citizens sixty-five and older comprising an expanding portion of society. Unlike advanced industrialized nations experiencing an aging population such as Japan and most members of the European Union, however, China has an extremely limited national pension system, an underdeveloped healthcare system, and an economy still dominated by manual labor. As a result, China's elderly have increasingly had to work longer, in physically demanding jobs, and without the medical care necessary to help them do so productively. This situation has caused a significant amount of resentment not only among the elderly, but also among younger generations that are forced to care for their parents, grandparents, and in many cases both. In addition, like many Asian nations, China is experiencing a growing sex ratio imbalance, as more and more boys are being born relative to girls. The steadily increasing number of these "surplus" males—many of whom are unmarried, come from the lowest socioeconomic class, and feel alienated from mainstream society—has created a pool of frustrated, potentially violent, and easily mobilized young men.

Although it now appears that the combination of slowing economic growth and demographic trends were already fueling an increasingly dissatisfied population, this only became evident in the aftermath of the 2016 oil shock. The price of crude oil, already at near-record highs, spiked even further in the wake of a massive terrorist attack that shut down Saudi Arabia's Abqaiq oil processing facility for nearly six months. China's economy, which has grown more dependent on foreign oil each

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passing year, suffered a serious blow. The resulting economic downturn—which included a significant rise in unemployment rates, decreased wages, and rising inflation—triggered widespread protests against the CCP leadership between February and April of 2017. China's economic troubles were only accentuated by a sharp decline in US demand for Chinese-manufactured products, as America entered its second major economic downturn in less than a decade.

While most demonstrations in China's rural areas were peaceful, several outbreaks of violence and rioting were reported in major urban centers. This was not surprising, however, given that many of China's "surplus" men were either born in or had moved to major cities, and were employed in the most vulnerable economic sectors. In response, the Chinese government chose not to use force against demonstrators, apparently fearful of an "another Tiananmen" that might trigger an international backlash and the imposition of sanctions that could further destabilize its increasingly stressed economy. Instead, the CCP embarked on a massive public relations campaign, attempting to diffuse popular anger by assuring the Chinese people that long-promised reforms to both the pension and healthcare systems were imminent.

The government's restrained reaction, as well as its promised reforms, were initially viewed throughout the international community as proof not only that China was a responsible great power, but that it would soon evolve into a democratic regime more accountable to its people. Yet ominous signs remained. In its efforts to return to stability, the regime did more than promise economic reforms—it also began resorting to nationalistic rhetoric as a way to shift blame for the country's difficulties onto foreign sources. With Japanese, Taiwanese, and South Korean investments in China decreasing, and US demand for Chinese products still declining, all four nations were accused of contributing to the PRC's economic weakness; in some cases, they were even charged with deliberately undermining China's economic recovery and fomenting internal disorder.

During the remainder of 2017 and throughout 2018, CCP leaders increased both the frequency and volatility of their nationalist rhetoric as promised reforms were slow to materialize and economic growth rates continued to decline. Not surprisingly, most of their vitriol was directed against Taiwan. The goal of restoring China's national honor after the "century of humiliation" that preceded its civil war has long underpinned the CCP's legitimacy, particularly as the appeal of communist ideology has waned. Consequently, Taiwan's status remained a sensitive issue as well as a useful one for members of the political elite, a number of whom suggested that Taiwan was not simply contributing to China's economic decline but would likely take advantage of the situation by declaring formal independence when Beijing was at its weakest. Because deterring or turning back a Taiwanese effort to become formally independent has remained the central public rationale for China's military buildup, this rhetoric also helped PLA leaders counter the increasingly popular suggestion that military resources should be diverted to enable social reforms.

By the spring of 2019 public unrest was once again on the rise in both cities and rural areas, triggered by revelations that several high-ranking party officials had embezzled large sums of money. With economic growth rates projected to remain at or below 4%, and reforms proving extremely difficult to implement due to both their cost and the continuing presence of widespread corruption, public discontent increased dramatically. As a result, CCP leaders debated two options that they hoped could resolve the crisis or at the very least distract the public long enough for planned internal reforms to take effect: using force to disperse rioters throughout the country and deter further protests, which might lead to hundreds and perhaps thousands of casualties and could fundamentally undermine the legitimacy of the regime over the long-term; or compelling Taiwan to integrate with Mainland China, which CCP leaders believed could be accomplished quickly, thereby minimizing the chance of US intervention. Either path posed significant risks.

THE CURRENT SITUATION

On August 18, 2019, China's president announced the start of a "comprehensive trade enforcement operation" aimed at Taiwan. It was, he declared, China's right to regulate all international commerce conducted by and with its constituent territories, and China would henceforth assert that right. Accordingly, any ship or aircraft not explicitly authorized by the Chinese government to enter Taiwan's territorial waters or airspace would do so at its own risk. The policy would continue, he argued, until Taiwan's "misguided" leaders accepted incorporation into the PRC as a special administrative region. In effect, China has placed a blockade around Taiwan that threatens its economic lifeline. CCP and PLA leaders appear to have calculated that by offering Taiwan considerable autonomy and placing the onus on others to fire the first shot, neither Washington nor anyone else will intervene, which will in turn cause Taipei to capitulate quickly.

China's actions confirm the severity of the situation. Over the past two weeks, under the cover of a training exercise, the People's Liberation Army-Navy (PLAN) has put to sea a substantial portion of its submarine fleet, part of which has since moved into position to execute a blockade of Taiwan's main seaports and begun seeding the approaches to those ports with a variety of advanced anti-ship mines. Meanwhile, its AIP conventional submarines and SSNs have are believed to have taken forward positions somewhere east of Taiwan, in effect forming a "picket line" capable of ambushing naval forces attempting to come to Taiwan's assistance. Intelligence reports indicate that China's large inventory of land-based ballistic and cruise missiles have targeted not only Taiwan's ports, airfields, and military installations, but also US naval and air bases in Japan, South Korea, and on the island of Guam.

In addition, the PLA Second Artillery's nuclear-armed intercontinental ballistic missiles have been placed on heightened alert, while two of the PLAN's second-

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generation nuclear ballistic submarines are believed to be deployed at all times. Although the Chinese government has publicly and privately reaffirmed its pledge not to be the first nation to resort to nuclear weapons use in the event of a conflict, this is a clear reminder that its arsenal is sufficient to overwhelm the United States' limited national missile defense system. The PRC is also believed to have readied its various ASAT weapons, and is capable of "dazzling" or destroying US military and commercial satellites if it detects American forces deploying to the region or launching an attack from their bases nearby.

TASKING

Thus far Taiwan's military has made no effort to break the blockade, although its leadership has declared that it will not alter its "current status" as a consequence of threats from Beijing. Yet Taiwan has only limited reserves of food and energy, and must maintain a constant flow of exports to sustain its lifeline with the global economy. Faced with economic collapse in a matter of a few weeks, the Taiwanese leadership has appealed to the United States for support. Publicly, Washington is advocating a diplomatic solution. Privately, however, the President has tasked the Pentagon with developing and presenting options for several possible missions if diplomacy fails, with the explicit guidance that all options should minimize the chance that any conflict could escalate to the nuclear level:

- > Breaking the blockade of Taiwan and neutralizing the most threatening elements of China's A2/AD network, including its various anti-satellite weapons and its anti-ship ballistic missiles;
- > Defending US bases as well as the territory of key allies in the region from air and missile attacks;
- > Protecting US satellites, computer networks, and communication systems; and
- > Applying pressure on the PRC by threatening its sea-borne energy supplies and commercial exports if China escalates any conflict either vertically or horizontally.

The United States has only a limited amount of time to prepare these options, and to credibly demonstrate (to both Beijing and Taipei) its willingness and ability to resist China's coercive efforts before Taiwan's leaders are expected to capitulate to the PRC's demands—a development that could fundamentally alter the balance of power and influence in the region.



CHAPTER 5 > IRAN'S DANGEROUS GAMBLE

February 2019. More than a year has passed since Iran tested its first nuclear weapon in defiance of the international community, an event that has proven extremely destabilizing. Today, Iran is attempting to blockade the Strait of Hormuz while threatening other states in the region with an attack. Global energy markets are in turmoil, tensions between Pakistan and India are at their highest point in nearly a decade, Arab-Israeli friction is increasing, and the non-proliferation regime is on the verge of collapsing. All of these developments can be traced back to Iran's nuclear test. Pressure is mounting from several key allies and partners of the United States for a WMD elimination operation against Iran—an opponent with a limited yet lethal military, a willingness to accept significant costs in any conflict, and, most importantly, a small nuclear arsenal.

THE NUCLEAR THREAT

American-Iranian relations have ebbed between cold and outwardly hostile in the four decades since the 1979 revolution that overthrew the Shah and brought a fundamentalist Islamic regime to power in Tehran. Although Iran has long been considered a rogue nation by the United States, due in large part to its support for terrorist groups throughout the Middle East, the threat that it posed took on a new level of significance at the turn of the twenty-first century. In 2002, an exile group publicly revealed that the Iranian government was in the process of constructing a uranium enrichment facility at Natanz and a heavy water nuclear reactor at Arak. According to Iranian officials, the former would be used to produce fuel for light water nuclear power reactors, while the latter would be used to produce radioactive isotopes for medical applications. Nevertheless, this discovery was deeply troubling. Facilities designed to manufacture low enriched uranium (LEU) for nuclear power reactors could be modified to produce highly enriched uranium (HEU) for nuclear weapons, and

By 2009, Iran had achieved what some observers referred to as a "breakout" capability: it had accumulated an amount of LEU that, if further enriched, would be sufficient to fuel a single nuclear weapon.

heavy water reactors are ideal for producing plutonium. Moreover, Iran's failure to report these facilities to the International Atomic Energy Agency (IAEA), although not a clear violation of its commitments under the nuclear non-proliferation treaty (NPT), raised suspicions about Iran's true intentions.

These suspicions were only compounded over the next several years. Not only was it discovered that Iran had procured sensitive nuclear material through the notorious proliferation network run by Pakistani scientist AQ Kahn, but IAEA inspectors also determined that Iran had repeatedly violated its existing nuclear safeguards agreement over a period of nearly twenty years. Confronted with these allegations, Tehran refused to suspend its ongoing enrichment activities as required by a series of United Nations (UN) Security Council resolutions. By 2009, Iran had achieved what some observers referred to as a "breakout" capability: it had accumulated an amount of LEU that, if further enriched, would be sufficient to fuel a single nuclear weapon. Given these developments, even a US national intelligence estimate concluding that Tehran had suspended its nuclear weapons program in 2003 failed to dampen concerns that its ultimate goal was to build a nuclear arsenal.

BACKGROUND TO THE CRISIS

Although a new American administration came to office in 2009 with the explicit goal of improving US-Iranian relations and finding a diplomatic solution to the threat posed by Iran's nuclear ambitions, very little changed over the next few years. Between 2010 and 2012, sporadic and low-level negotiations between the two sides failed to make any substantive progress toward either goal; Iran refused to abandon its efforts to produce nuclear fuel, and the United States along with its principal European allies—France, Germany and Great Britain, typically referred to as the EU-3—could not find an acceptable formula that would allow Tehran to retain this capability. At the time, many observers assumed that Iran's participation in negotiations was little more than a stalling tactic, which enabled it to continue operating and expanding its nuclear facilities. While Iran remained in breach of several United Nations Security Council resolutions that called for the suspension of these activities, Iranian officials did provide "satisfactory" responses to several of the IAEA's lingering questions regarding its alleged clandestine nuclear weapons program.

Despite the American emphasis on diplomacy, the option of a military strike was considered repeatedly during this period but was rejected each time. In part, this was due to the US military's steadily increasing commitment to Afghanistan and Pakistan, as well as renewed violence in Iraq that escalated sharply between 2011 and 2012. Both developments made a significant military operation against Iran unfeasible and domestically unpalatable. Moreover, civilian and military officials had little confidence that an attack relying solely on tactical and long-range aircraft in concert with ship- and submarine-launched cruise missile strikes would significantly

degrade Iran's nuclear program. Not only had Tehran invested heavily in both passive and active defenses for its nuclear facilities (including hardening some facilities, burying others, and deploying an increasingly robust air defense network), but it was also suspected of covertly constructing backup facilities and stockpiling centrifuge components, which would allow it to quickly restart its nuclear program in the aftermath of an attack. At the same time, because of its territorial size, its mountainous terrain, and the size of its population, there was virtually no support for a ground invasion and occupation. Unconfirmed reports also indicated that the United States Government effectively vetoed Israeli plans to attack Iran on several occasions between 2010 and 2012.

In 2013, Iran's economy was continuing to suffer from high levels of inflation and unemployment, largely as a result of chronic economic mismanagement. That year, the Iranian people elected a new president. With solid conservative credentials but a desire to bolster Iran's long-term power through economic reform and rapprochement with the West, Iran's president had the support of both the general population and Ali Khamenei, the country's aging Supreme Leader. Yet few reforms were actually implemented over the next four years, and those that did take effect had little impact on the struggling economy. Although relations with the West improved somewhat as the rhetoric coming out of Iran took on a notably less hostile tone, Tehran still refused to halt its uranium enrichment program or suspend operations at its heavy water nuclear reactor, which finally came online in 2012 and was capable of producing enough plutonium for one or two nuclear weapons per year. At the same time, both the United States and Israel faced the same constraints that had restricted their military options in previous years. In short, the nuclear impasse continued.

Then, in February 2017, Iran's president unexpectedly lost his bid for reelection to a hawkish, little-known member of Iran's parliament and former general officer in the Iranian Revolutionary Guard Corps (IRGC). Within months of the election public opposition to the regime reached an all-time high. Not only had the economy failed to register any significant growth for more than half a decade, but the election itself had been marred by widespread accusations of voter fraud and intimidation. The new government, moreover, imposed stringent measures to limit free expression and crackdown on dissent, many of which had been eased by the previous administration. This series of developments ultimately led to Iran's withdrawal from the Non-Proliferation Treaty later that summer.

Within Iran, popular support for the country's nuclear program remained high. While a significant portion of the public understood that Iran's nuclear ambitions were a major impediment to improved economic and political relations with the West, most Iranians still viewed the program with a strong sense of pride, and considered the international community's efforts to halt it deeply unfair. Attempting to capitalize on the latter sentiment and bolster flagging support for the regime, in August 2017, Iran's new president announced that his country would immediately withdraw from the NPT, citing the international community's "ceaseless efforts to deny the Iranian

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A number of press reports indicated that the Saudi government had quietly initiated negotiations with Islamabad to purchase several nuclear warheads and associated delivery vehicles.

government and the Iranian people their legal right to nuclear power and nuclear fuel cycle technology." Within Iran, the move was met with broad approval. Moreover, while the United States and the EU-3 condemned Tehran's decision, the international community's reaction was generally muted, the result of differing views regarding the scope of the Iranian threat as well as the longstanding expectation in many quarters that Tehran would eventually take this step.

Within Israel, Iran's decision to withdraw from the NPT triggered an intense and public debate over the merits of launching an attack before Tehran could construct a significant nuclear arsenal, assuming it had not done so already. Having long suspected that Iran had a parallel nuclear weapons program, a majority of the Israeli cabinet would not consent to an attack that had little chance of destroying any nuclear devices Iran may have assembled. A large and extremely vocal element of the public was outraged, however, as were many members of the Knesset. Less than a month after Iran's announcement, Israel's prime minister failed to survive a vote of no confidence, and an election was scheduled for December.

As the election drew closer, the rhetoric from many candidates grew heated, much of it centering on Iran. Throughout the Arab world and the broader Middle East, commentators also suggested repeatedly that the Israeli government might undertake a military operation in the Palestinian territories, Lebanon, or even against Iran in order to demonstrate its military effectiveness and rally the public before it went to the polls. Whether these developments led to genuine fear in Iran or simply provided its leaders with the excuse they were looking for is unknown, but on December 3, 2017, two weeks before the Israeli election, Iran conducted an underground nuclear weapon test. Seismic measurements indicated that the device had a yield of approximately fifteen kilotons. Immediately following the test, Iran's state-run news service broadcast prerecorded messages by the Supreme Leader and the president. The latter blamed Israel for the test, claimed that Iran already had a "significant" arsenal of weapons that would "allow it to respond decisively" to any attack, and declared that those weapons would only be used in defense of the regime.

THE CURRENT SITUATION

For six months, Iran's nuclear test stimulated little reaction beyond an initial wave of condemnation throughout the international community. All this changed in June 2018, however, as a series of developments quickly shook the region. That month, a number of press reports indicated that the Saudi government had quietly initiated negotiations with Islamabad to purchase several nuclear warheads and associated delivery vehicles (i.e., ballistic missiles); failing that, it apparently hoped to convince the Pakistani government to deploy a contingent of troops armed with mobile, nuclear-armed ballistic missiles on Saudi territory. The Indian and Israeli governments reacted immediately: the former argued that any move by Pakistan to place nuclear

weapons outside of its territory "would fundamentally shift the strategic balance on the subcontinent and could only undermine the prospects for peaceful relations," while the latter strongly hinted that it would "reexamine" its policy of nuclear ambiguity if Saudi Arabia acquired nuclear weapons. Then, in September, the IAEA publicly reported its suspicion that the Egyptian government had sanctioned experiments in plutonium reprocessing, which could allow it to extract weapons-usable fissile material from the spent fuel produced by the two power reactors it had acquired over the previous decade. It appeared that Cairo and Riyadh were racing to become the first Arab state with a nuclear weapon.

By early fall, Israeli officials were telling their American counterparts in no uncertain terms that they could no longer justify their existing nuclear weapons posture if an Arab nation joined Iran as a nuclear-armed state. At the same time, both Egyptian and Saudi leaders made virtually the same case in private meetings with US officials, arguing that they were under tremendous pressure to "go nuclear" now that Iran had joined Israel as a nuclear power. Both nations were also adamant that a US commitment to extend its "nuclear umbrella" to key allies in the region was insufficient, and would only provoke further domestic opposition to the ruling regimes by illustrating their continued dependence on the United States. Moreover, Turkey's government also informed Washington that its nuclear guarantees to Ankara by virtue of its NATO membership might not be sufficient given the unpredictability of the regime in Tehran. Remarkably, this broad spectrum of states—from India and Pakistan, to Turkey and Israel, to Saudi Arabia and Egypt-encouraged the United States to act quickly and decisively against Iran, promising at least tacit diplomatic support. As Washington shared the results of these exchanges with the EU-3 members, their opposition to US military action declined as well.

In a last-ditch effort to avoid a conflict, international support for major economic sanctions against Iran reached an unprecedented level. In late November 2018, all five permanent members of the UN Security Council agreed to a resolution that not only prohibited the sale of refined petroleum products to Iran, but that also placed an embargo on Tehran's sale of oil and natural gas until it agreed to suspend its production of fissile material and nuclear weapons, provide a full accounting of its HEU, plutonium, and weapon stockpiles, and open all of its nuclear facilities to IAEA inspections. At the same time, Saudi Arabia and several other Gulf States agreed to increase their oil production levels as much as possible to compensate for the loss of Iranian supplies on the world market. Although it was acknowledged that the terms of the resolution would be difficult to implement in full, any significant reduction in petroleum imports and oil exports, both of which remained critical to the Iranian economy, was certain to place significant pressure on the regime.

After only a few weeks it became clear that the sanctions were having an impact on the Iranian people. Public disturbances were on the rise. Yet Tehran remained unwilling to yield to the international community, and chose escalation instead. On the morning of December 20, Iran's president announced that Iranian naval forces In September,
the IAEA publicly
reported its
suspicion that the
Egyptian government
had sanctioned
experiments
in plutonium
reprocessing.

Iran's leadership
has declared that it
will not give up its
nuclear weapons,
and that it will
continue to attack
any US forces that
enter the Gulf, as
well as any nations
in the region that
support the existing
sanctions regime.

had commenced mining operations in the Strait of Hormuz (though which a third of the world's oil supplies pass), and would prevent any ship from entering or exiting the Persian Gulf until the Security Council revoked its resolution. It also threatened to attack the oil facilities of any state that increased its production levels in support of the UN sanctions. In doing so, the regime apparently made three calculations: that it could prevent most oil supplies from leaving the region by sea for a sustained period of time; that by doing so it could force key nations that were highly dependent on the region's oil exports (particularly Japan, China, and India) to end their support for the new UN sanctions; and that it could break the international coalition it faced before economic circumstances in Iran grew so dire that it would confront a broad-based popular uprising.

Within days, the United States dispatched two littoral combat ships (LCS) with specialized mine countermeasure (MCM) modules to the Gulf of Oman, in addition to an expeditionary strike group with an aerial MCM capability. On December 30, only one day into their mine clearing efforts, an LCS and an amphibious assault ship suffered major damage when attacked by a combination of IRGC fast-attack boats armed with anti-ship cruise missiles and by ASCMs fired from mobile batteries located on one of the small islands adjacent to the Strait's shipping lanes. Less than forty-eight hours later, Iran launched a salvo of conventionally-armed ballistic missiles, several of which struck the Saudi port of Ras Tanura.

TASKING

Iran's leadership has declared that it will not give up its nuclear weapons, and that it will continue to attack any US forces that enter the Gulf, as well as any nations in the region that support the existing sanctions regime. With oil prices increasing rapidly in the wake of Iran's mining campaign and its missile strike on Ras Tanura, it is clear that the economic coalition against Iran cannot be sustained much longer. The US president has therefore ordered the military to prepare for operations to eliminate the Iranian regime's ability to threaten other states in the region or to disrupt international commerce. To do so, America's armed forces must be prepared to execute a range of missions, including:

- > Neutralizing Iran's anti-access/areal denial capabilities, which consist primarily of air defense systems, mines, ASCMs (which can be launched from ships, mobile batteries on land, and short-range aircraft), small boats using swarming tactics, ballistic missiles, and several Kilo-class diesel-electric submarines;
- > Deploying air and missile defense systems to defend American forces, bases, and allies from attacks, particularly attacks using weapons of mass destruction;

- > Locating and destroying Iran's nuclear arsenal, which is estimated to consist of no more than a dozen weapons that are hidden, stored in known but heavily guarded facilities, or linked to mobile delivery systems;
- > Identifying critical nuclear weapons and material production facilities and either destroying or seizing and securing their contents;
- > Locating and destroying any additional nuclear delivery systems.

Finally, while an overt effort to remove Iran's rulers could prove counterproductive by encouraging the leadership in Tehran to use its available nuclear weapons against American forces or US allies, the president has also directed senior military officials to present options for a regime change operation if intra-war deterrence fails and Iran does attempt to employ them.



CHAPTER 6 > IS TODAY'S MILITARY PREPARED FOR TOMORROW'S CHALLENGES?

There is no guarantee that any of the events described in the preceding chapters will occur in the future, or that the United States would choose to intervene militarily if they did.³⁷ Nevertheless, all three scenarios are plausible, would clearly impact American national security interests, and would present a number of thorny operational challenges for US military forces. This chapter briefly discusses why these scenarios are so complex, as well as some the implications that can be drawn in terms of the military capabilities the United States may require, the investments it should make, and the operational concepts it will need to develop.

SCENARIO 1: STATE FAILURE AND IRREGULAR WARFARE

Over the past several years the United States has been engaged in major counterinsurgency (COIN) campaigns in both Afghanistan and Iraq, neither of which appears likely to end in the immediate future. Although its ability to bring these campaigns to a successful conclusion remains an open question, the US military has undoubtedly improved its understanding of this form of conflict and how to wage it. During the same period the United States has also worked closely with a number of other nations in smaller and more discrete ways to support their own counterterrorism and COIN efforts, for example by dispatching Special Operations Forces (SOF) to train or advise local military units. This "indirect approach" to combating existing and emerging threats has achieved some notable successes in places like the Philippines. Moreover,

³⁷ Although it is impossible to predict whether the United States would choose to intervene in a future crisis, it is important to note that having the means to do so is often prudent in either case, because the inability to intervene effectively can increase the likelihood that a particular scenario will come to pass. For instance, should China consider an aggressive move against Taiwan at some point in the future, its decision will undoubtedly be influenced by the US's ability to counter an attack or some other form of coercion.

The Nigeria scenario depicted in this report represents a third type of irregular warfare contingency, one that differs sharply from both the ongoing **COIN** campaigns in Afghanistan and Irag, and the smaller-scale foreign internal defense (FID) missions that the United States has conducted throughout the world. because it allows the United States to conserve its limited resources by enabling allies and partners to address the causes of instability largely on their own, it is likely to remain a key element of US defense strategy.

In short, since late 2001 the US military has gained considerable experience in two very different types of irregular warfare operations, and it expects to remain engaged in both. The Nigeria scenario depicted in this report represents a third type of irregular warfare contingency, however, one that differs sharply from both the ongoing COIN campaigns in Afghanistan and Iraq, and the smaller-scale foreign internal defense (FID) missions that the United States has conducted throughout the world. This scenario—or one like it—would therefore pose challenges for the US military that its recent experiences may not have fully prepared it for. For example, FID missions are typically undertaken in support of a reasonably stable government that faces a growing internal threat, and involve only a small number of military personnel whose primary task is often (although not always) to train and support local security forces. Alternatively, major COIN campaigns or stability operations often take place after a state has collapsed due to internal instability or external intervention, are extremely manpower intensive, and require a major effort to restore most government functions—from establishing a secure environment to providing essential social services to the local population. In contrast to both, the Nigeria scenario describes an extremely fragile but still functioning government that is at risk of collapsing in the very near future. Given the scope of the challenges confronting that government, as well as the need to act swiftly in order to prevent impending state failure or civil war, successfully intervening in a situation such as this would require the ability to surge a large force capable of executing several major tasks.

From the outset, the United States would have to augment and reinforce the host nation's ability to combat its most pressing internal threats. Doing so could require US forces—either alone when necessary or in support of indigenous forces whenever possible—to conduct direct-action missions against terrorist or insurgent targets, defend critical government or economic facilities from attack or sabotage, and in some areas provide basic healthcare or civil infrastructure improvements to gain local support and generate intelligence. At the same time, a protracted military operation could fatally undermine the legitimacy of the central government and fuel instability throughout the country. To ensure that the majority of US forces could be withdrawn as rapidly as possible, a critical goal would be to expand the government's ability to provide both security and essential services to the population. This would require a systematic effort to organize, train, and equip competent local police and military forces, and to reduce the level of corruption in major government institutions. Finally, to avoid eroding the tenuous legitimacy of the central government while US military forces are present in significant numbers, it would be necessary to (1) engage in a major strategic communications campaign emphasizing that the United States is acting in support of the host nation government and will leave as soon as a degree of stability has been restored, and (2) implement an operational and logistical support system that minimizes the "footprint" of US forces to the greatest extent possible.

Like a small-scale FID mission, therefore, this effort would be proactive, insofar as the United States would not be intervening in the aftermath of state collapse, and therefore would not be responsible for establishing an entirely new government or creating new institutions. Like a major COIN or stability operation, however, the effort would still be broad in scope and large in scale. Finally, unlike either, it would need to be fairly short in duration. In sum, the United States would have to apply many of the irregular warfare lessons it has learned in recent years, but in very different ways.

This contingency would also have significant implications for US force structure. Were the United States to become involved, the most important task it could perform would be to train and equip a very large indigenous security force as quickly as possible. The more effective that force is, the fewer missions US troops would have to undertake directly and on their own, reducing the prospect that they will alienate the local population. The faster the United States can expand both the size and capabilities of indigenous police and military units, the faster US troops can begin to withdraw, avoiding a lengthy-and potentially counterproductive-operation. This task is challenging under any circumstances, but it would be extraordinarily difficult given the forces that the United States currently has, the forces it is projected to have in the future, and the constraints imposed by other operations. Traditionally, the mission of training and advising foreign forces has been the responsibility of SOF, particularly the Army Special Forces (SF). Although the Army is now in the process of increasing the number of SF battalions in the force, it will still lack the capacity to conduct this type of operation on the scale that would be required in a nation as large as Nigeria. Making this situation even more challenging, however, is the fact that the vast majority of deployed SOF-including Army SF-are currently operating in Afghanistan and Iraq, and are likely to remain there (even if general purpose combat units withdraw) unless the security situation in both nations improves dramatically.³⁸

As a result, the burden would fall primarily on general purpose forces, particularly from the Army. Yet this would also be problematic under these circumstances. To date, the Army's response to the growing demand for trainers and combat advisers in Afghanistan and Iraq has been to create new ad hoc units or, more recently, to rebrand existing brigade combat teams (BCTs) as "Advisory and Assistance Brigades," which are augmented with civil affairs personnel and additional military police, engineers, and field-grade officers.³⁹ The first option could be exercised fairly quickly, although

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Julian E. Barnes, "U.S. Special Forces to Stay in Iraq, Afghanistan," Los Angeles Times, May 22, 2008; and Sandra I. Erwin, "Special Forces' Skills 'Needed More Than Ever'," National Defense, March 2007; and Sean D. Naylor, "Special Ops 'Surge' Sparks Debate," Army Times, December 23, 2008.

Donna Miles, "New U.S. Advisory, Assistance Brigades to Deploy to Iraq During Next Troop Rotation," American Forces Press Service, July 15, 2009, accessed at http://www.mnf-iraq.com/index. php?option=com_content&task=view&id=27267&Itemid=225 on September 12, 2009.

In order to respond both quickly and effectively to a contingency like this one, the United States would need the ability to draw upon a sizeable pool of general purpose units that are not only optimized for irregular warfare. but are permanently assigned to help train and advise foreign forces. to generate trainers and advisors in sufficient quantities for this scenario it might be necessary to remove a significant number of field-grade and non-commissioned officers from existing BCTs, diminishing the readiness of those units. Perhaps more importantly, the quality of trainers and advisors is likely to vary inversely with the amount of time devoted to producing them. Alternatively, converting existing combat brigades into Advisory and Assistance Brigades could yield a better-prepared and more effective force, but it would also require a considerable amount of time to retrain these units and provide them with the added capabilities that are likely to be particularly useful in this type of operation.

In order to respond both quickly *and* effectively to a contingency like this one, the United States would need the ability to draw upon a sizeable pool of general purpose units that are not only optimized for irregular warfare, but are permanently assigned to help train and advise foreign forces; if these units have to be created after a nation on the verge of collapse requests assistance, then it may already be too late by the time they are ready to deploy. The Army should therefore consider converting a number of its BCTs into Advisory and Assistance Brigades (or a similar construct) indefinitely, while the other Services should expand those organizations that perform a similar function—for example, the Air Force's 6th Special Operations Squadron. At the same time, if the United States expects not only to train but also rapidly equip a large foreign security force, it should also explore the possibility of creating stockpiles of necessary materiel well in advance of a crisis.

While training and advising local forces may be the most important task that the United States can perform in this contingency, it is certainly not the only one, nor is it the only one where the US military faces potential capability or capacity shortfalls. For example, the Air Force's ability to provide persistent aerial surveillance increasingly depends on the number of UAV orbits it can sustain—a capability that is heavily taxed by COIN operations in Afghanistan, Iraq, and other counterterrorism operations globally. If the demand for these critical assets continues to exceed their supply, which seems likely, it will be difficult to provide this important capability on a scale that would be required to support another major irregular warfare operation. The Navy's ability to conduct patrols in littoral areas and internal waterways is also limited, but given Nigeria's geography, doing so would be crucial to provide security and ensure the flow of commerce.

SCENARIO 2: CONFRONTING A NEAR-PEER COMPETITOR

Along with the Korean peninsula, the Taiwan Strait has been and remains a potential flashpoint in East Asia. To prevent any military conflict between China and Taiwan, the United States has long sought to discourage both sides from taking actions that would threaten the status quo—either an attack by Beijing or a decision by Taipei to pursue formal independence. If this strategy fails, however, and especially if it fails

to deter China from seeking to forcibly reincorporate Taiwan, the United States could be drawn into a military conflict in order to protect Taiwan's de facto independence and its democratic government, preserve the United States' status as the region's dominant power, defend its reputation as a reliable ally, and ensure that aggressive behavior on the part of China did not have more far-reaching and destabilizing consequences—for example, encouraging Japan to develop its own nuclear deterrent. If so, this would be the first direct military confrontation between the United States and a peer (or near-peer) competitor in more than half a century.

Although it is impossible to predict how a conflict might unfold, it would certainly be far different than the large-scale conventional wars that the United States prepared for during the Cold War and twice engaged in during the post-Cold War era. Instead of a major ground campaign, any conflict would be fought principally in the air, at sea, and almost certainly in both space and cyber-space as well. Given the capabilities that China has developed to counter US forces in the region, however, as well as the US military's current posture and preferred methods of operating, it is not clear that the United States is well prepared to engage in this type of conflict—or to deter it.

In the event of a contingency in East Asia, the US military's main tool for projecting power is its inventory of short-range tactical fighters, which operate from large regional bases and aircraft carriers. Yet this method of projecting power is becoming increasingly difficult to sustain. For example, over the past several decades the United States' primary opponents have been unwilling or unable to pose a significant threat to its major overseas bases and staging areas, including airports and seaports of debarkation. This has allowed the United States to patiently build up its forces and conduct operations virtually unimpeded. During any conflict with China, however, the United States would be highly dependent upon a small number of bases in the Western Pacific, all of which are—or soon will be—at risk from the PLA's large and growing arsenal of ballistic and cruise missiles. A concerted attack with these weapons could destroy exposed aircraft if US forces were caught off-guard; even if most aircraft survived an assault, runways, fuel and ammunition storage facilities, and command-and-control centers could all sustain major damage, which would significantly degrade the United States' ability to conduct fighter, reconnaissance, and refueling operations.

Carriers are also subject to an emerging threat. Given their inherent mobility, the substantial defensive capabilities provided by their escort ships, and the relative weakness of past US adversaries, the prevailing assumption has been that the United States can operate its carriers largely unopposed and fairly close to shore, maximizing the number of sorties that can be generated by their air wings. Going forward, however, carriers operating in the Western Pacific could be targeted by land-based ASBMs during a conflict, which have the potential to disable or even destroy surface vessels at ranges of more than 1,500 kilometers. In addition, the PLA is already capable of launching attacks against US carrier strike groups with advanced ship-, air-, or submarine-launched ASCMs. Eventually, the PLA may achieve the capability to

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engage in coordinated, multidimensional attacks with ballistic missiles, cruise missiles, and torpedoes, which could stress and perhaps even overwhelm the US Navy's sea-based defensive systems.

Even if the United States Air Force is able to conduct fighter operations from its regional bases and the Navy can operate its carriers at ranges that maximize their striking power (either because the PLA chooses not to immediately attack American bases and surface vessels during a confrontation, or because American air and maritime forces manage to weather any attacks), both will still have to contend with China's sizeable air force and its dense network of ground-based air defense systems. US carriers could therefore face a significant threat from Chinese fighters and fighter-bombers; if so, their air wings will be forced to place more emphasis on defensive combat air patrols and less on offensive strike missions, sharply reducing their effectiveness. Meanwhile, any carrier- or land-based fighters that are able to conduct offensive missions will have to penetrate an air defense network that extends over the Taiwan Strait and is comprised of mobile launchers, sophisticated radars, and increasingly long-range missiles, as well as an opposing air force that will not only have a quantitative advantage but which is also working to narrow the qualitative gap between itself and the United States. In this environment, surviving-let alone achieving air superiority—will be extremely difficult for non-stealthy aircraft, which includes the vast majority of US short-range fighters and most of its long-range bomber force.

Finally, the US military relies heavily on its extensive—and potentially vulnerable—C4ISR platforms to coordinate large numbers of forces over a wide geographic area, to locate and track critical targets, and to guide precision munitions toward those targets, among other functions. These systems may be at significant risk, however, from China's growing ability to disable or destroy satellites and disrupt computer networks.

In sum, China is pursuing capabilities that will enable it to hold at risk a set of key targets—including regional bases, aircraft carriers, and C4ISR systems—that collectively underpin the US military's ability to project power and defend its allies in East Asia. Of course, whether China would actually use these capabilities at the outset of a crisis is uncertain, and the scenario in this report describes a situation in which Chinese leaders attempt to avoid escalation and discourage American intervention by choosing not to conduct an immediate attack on US forces. Nevertheless, even the ability to credibly threaten attacks that could so severely hamper the American military's ability to project power into a region of vital national interest will have a major impact on the balance of power.

The implications of this development are therefore quite significant, and should prompt the US military to rethink both the forces that it requires and, more importantly, how it plans to use them. The US Navy and Air Force, for example, will have to devise new operational concepts as their traditional methods of employment become progressively less effective over time. For the Navy (and Marine Corps aviators), this could mean fighting from much greater ranges than it has in the past, especially at

the start of a conflict. For the Air Force, it may be necessary to develop a more robust capability to conduct and sustain operations while under attack, and to operate from a more diversified basing posture (if the United States can either construct or gain access to additional bases in the future). All of the Services—including the Army, which will play an important role in defending regional bases from ballistic and cruise missile attacks—should also prepare to operate without secure and reliable communications systems. The Services that would be most directly involved this type of contingency should also explore the possibility that traditional roles and missions may change as new operational concepts are developed. For instance, although the suppression and destruction of enemy air defenses has generally been conducted by aircraft, other platforms—perhaps cruise missile submarines (SSGNs) or nuclear attack submarines (SSNs) armed with land-attack cruise missiles—may have to undertake this mission if US fighters and bombers cannot survive long enough and in sufficient numbers to do so.

As operational concepts change, capabilities may have to change as well. Specifically, the United States may need to invest more resources in both passive and active defenses for its regional bases, including hardened aircraft shelters and perhaps directed energy missile defense systems (if they can ultimately provide a more cost-effective alternative to expensive kinetic interceptors). In terms of the relative value of existing and prospective weapons systems, the growing danger to large regional bases and the difficulty of penetrating an advanced IADS network with most current platforms strongly suggest that range and stealth will be the two most important characteristics for future US aerial systems. The Air Force should therefore begin to develop a successor to the aging B-2 bomber as soon as possible, while the Navy should accelerate its efforts to develop a stealthy, unmanned, air-refuelable, carrierbased platform that can not only survive in a high-threat environment, but will also enable carriers to project power from ranges far greater than what their current air wings (or future air wings consisting of F-35 Joint Strike Fighters in addition to F/A-18s) will allow. Perhaps no weapons systems embody the characteristics of range and stealth better than the Navy's nuclear powered submarine fleet. This force can become even more valuable and more flexible, however, if additional ballistic missile submarines (SSBNs) are converted to the SSGN configuration over time and future Virginia-class SSNs are built with a larger payload capacity, which would increase their ability to conduct attacks against land-based targets if necessary. The United States should also hedge against the possibility that its C4ISR systems will be degraded or disabled, for example by developing back-up satellites that can be launched quickly after an attack, as well as air-breathing substitutes—including high altitude, long endurance UAVs—that can function as communication relays if satellites are lost.

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SCENARIO 3: WMD ELIMINATION OPERATION

There is little doubt that the proliferation of nuclear weapons and material is one of the principal strategic challenges confronting the United States. At present, Iran is at the center of this threat for a number of reasons: the widespread suspicion that it is developing or is likely to develop nuclear weapons in secret; its longstanding support for a variety of terrorist groups; its location along a vital economic chokepoint; and, perhaps most importantly, the fear that an Iranian nuclear weapons program could trigger an intensified security dilemma or a heightened competition for prestige and regional influence that ultimately leads to a cascade of nuclear proliferation across the Middle East. Although the potential consequences of an Iranian nuclear capability have fueled intense debates over how to forestall this outcome, far less effort has been devoted to exploring what would happen if the international community fails to check Iran's nuclear ambitions, Tehran does indeed become more aggressive, and the US military is subsequently called upon to disarm a nuclear-weapon state. 40 Doing so is particularly warranted because any future conflict with Iran would pose a number of extremely difficult operational challenges for US forces.

First, at both the operational and tactical levels the character of this type of conflict is likely to be far more complex than perhaps any wars the United States has previously fought. Specifically, a confrontation with Iran has the potential to be a truly "hybrid" war that combines an extremely diverse group of threats. For example, based on the scenario presented in this report, the US military would have to counter Iran's conventional anti-access capabilities—which are likely to resemble a less advanced version of the anti-access/area denial network that China is currently fielding—in order to reopen the Strait of Hormuz, minimize the threat to US forces operating in the region, protect US allies from attack, and enable US ground forces and SOF to enter the country if and where necessary. At the same time, the United States could face irregular threats both at sea (where US naval forces would need to defend against swarms of small fast-attack boats armed with ASCMs) and on land (where US ground forces and SOF could confront paramilitary groups as well as highly-trained, well-equipped Iranian Revolutionary Guard Corps units using tactics and weapons similar to those employed by Hezbollah, including more and better guided weapons over time). The possibility of horizontal escalation would also be high, as Iran could employ the IRGC's Qud's Force, Hezbollah, Shiite militias in Iraq, or other militant

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⁴⁰ It is impossible to know how the presence of nuclear weapons would influence the calculations of US officials during a crisis, although it would almost certainly make them more reluctant to take military action. Nevertheless, it seems reasonable to suggest that the United States is highly unlikely to attempt a WMD elimination operation against a nation armed with several dozen or more weapons. However, it might not be deterred from conducting this type of operation against a nation with a very small arsenal—perhaps half a dozen or a dozen weapons—if the circumstances were grave enough. In fact, in a crisis with an emerging nuclear power the United States might have an incentive to remove or destroy its nuclear capability, however difficult that would be, before its arsenal and delivery systems become so large and advanced that the option of doing so is lost completely.

groups that it controls or supports to carry out terrorist attacks against American targets or US allies. Finally and most importantly, in addition to these conventional and irregular threats any military operation would be conducted under the shadow of a possible nuclear attack.

Second, the conditions under which any war would be fought are also likely to be very different and far more complicated than conflicts of the recent past. As noted earlier, in previous operations the United States has generally been able to rely upon its allies to provide access to main operating bases and other facilities located on their territory (as well as the airspace above it), while opponents have failed to seriously contest the United States' use of these forward bases. Together, these factors have allowed the US military to build up its forces abroad over an extended period of time. In this scenario, however, a lengthy build-up may not be possible or desirable. Because American allies may face an explicit or implicit threat of retaliation-including nuclear retaliation—for offering their support, the United States cannot depend on them to grant unfettered access. Moreover, even if the United States was able to use its regional bases without restrictions, it may still prefer not to, for two main reasons: massing forces would create a target of opportunity for a nuclear-armed opponent; and negotiating access in such a high-threat environment would likely be a time-consuming process—perhaps requiring the United States to deploy substantial defensive systems to threatened allies before undertaking any offensive operations which would provide that opponent with an opportunity to further harden or relocate any critical targets (including nuclear weapons and delivery systems) that the US intelligence community may have identified.

Third, in this scenario or one like it the United States would not be able to rely on past campaigns as a model for how to devise or conduct a WMD-elimination operation. During the First and Second Gulf Wars (the only large-scale US military operations that had WMD elimination as a major goal), the United States and its allies did not have to make destruction of the adversary's WMD infrastructure the principal military objective at the start of the operation, for a combination of reasons: Iraq did not possess an operational nuclear arsenal; US forces were prepared to conduct operations under chemical and biological attack, and it was assumed that the United States would still prevail under these conditions, although at a much higher cost; and (during the First Gulf War) the United States also threatened to escalate its strategic objectives to include regime change if Saddam did attack US forces or American allies with WMD, decreasing the likelihood that these weapons would be employed. As a result of these factors, in 1991 and again in 2003 US forces were able concentrate on defeating the Iraqi military (or removing Iraq's political and military leadership) before embarking on a comprehensive effort to locate, secure, and eliminate WMD stockpiles and infrastructure.

Future WMD-elimination operations are unlikely to follow a similar pattern, however. If an adversary does possess a small nuclear arsenal, it will be critical to neutralize that arsenal rapidly at the start of a conflict; not only does the United States have If an adversary does possess a small nuclear arsenal, it will be critical to neutralize that arsenal rapidly at the start of a conflict.

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a strong incentive to maintain the "taboo" against nuclear use if at all possible, but the immediate operational, political, and psychological ramifications that would follow the use of even one or a handful of low-yield fission weapons could be profound. Moreover, given the costs of recent operations in Afghanistan and Iraq, the United States is unlikely to conduct a major ground invasion or a prolonged military occupation in the near future (although it may still have to hedge against this possibility), particularly in a nation as large as Iran, which has more than twice the population of Iraq and is nearly four times the size. In sum, the United States cannot assume that it will be able to defeat a rogue nation's military forces, deter or weather any WMD attacks, and then locate and eliminate its nuclear capability in the aftermath of major combat operations.

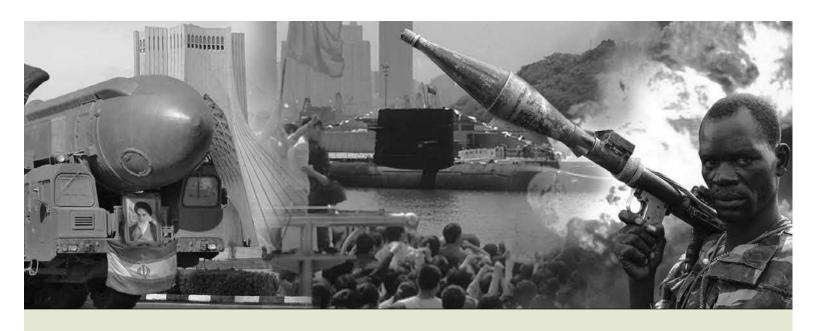
What should the United States do to prepare for the very difficult challenges high-lighted by this scenario, and what capabilities would it need to respond effectively? If the US is unlikely to conduct a major invasion or occupation—a reasonable assumption—then perhaps the most important step it could take would be to develop a new operational concept for WMD elimination, one that relies far more heavily on air, sea, and undersea assets to strike key targets, and perhaps the extensive use of special operations personnel and supporting airborne forces to seize, destroy, or render safe any nuclear weapons material that cannot be reliably eliminated with stand-off weapons. Devising this type of campaign would require addressing a host of complex issues, including how to deploy and sustain adequate forces if major bases in the region are unavailable and whether the priority should be to destroy an adversary's nuclear weapons or potential delivery systems.

Equally important, however, is obtaining the precise intelligence regarding the location of those weapons and delivery systems in order to destroy them before they can be used in retaliation for an attack or transferred outside of the country. It goes without saying that this is the single most important capability that will influence the success of a WMD-elimination operation. Yet this information is extremely difficult to acquire: not only are these targets likely to be well-hidden or mobile, but tracking them may require some knowledge of how an adversary plans to respond in the event of an attack—including whether its weapons will be moved, and where.⁴¹ Most importantly, though, unlike during the two Gulf Wars, the United States would need a fairly complete and accurate picture of their location at the outset of a conflict. Despite these difficulties, this type of information is most likely to be obtained through human intelligence, which suggests that a concerted, long-term effort to develop sources within the military and scientific communities of rogue nations may be necessary.

Tracking and destroying key targets after they are located may also prove difficult, particularly if they are mobile. Ideally, aerial reconnaissance and strike platforms tasked with this mission would be able to survive in defended airspace at the outset of a conflict, operate effectively if access to forward bases in the region is limited or

⁴¹ I am grateful to Chris Dougherty for calling this point to my attention.

denied, and strike emerging or fleeting targets. Stealth, range, and persistence are therefore crucial attributes, yet the United States currently has very few systems that possess all three characteristics. Because SOF could play a critical role, it may also be necessary to expand their ability to secure or destroy nuclear weapons and material, and to examine the logistical requirements of conducting multiple, simultaneous, distributed operations throughout a country as large as Iran. Finally, any future conflict with Iran could place a heavy burden on the United States to defend not only its bases but also its many allies in the region from missile attacks, which could be an effective coercive tool even if the majority of those missiles remain inaccurate—a situation that may change in the years to come as Iranian capabilities become more advanced and missile technology continues to proliferate. The United States should therefore continue to invest in existing ground-based missile defense systems (such as the Theater High Altitude Area Defense system) in addition to expanding the number of Aegis cruisers and destroyers equipped with a ballistic missile defense capability, while also pursuing the development of new systems that are more cost effective and can be deployed rapidly during a crisis.



CONCLUSION

Although it may be impossible to predict how the future will unfold, it appears increasingly clear that the United States will confront a very diverse and very demanding array of strategic challenges over the coming decades: transnational terrorist groups, weak and failed states, and the intersection between them; the rise of a nearpeer competitor that is not yet overtly hostile toward the United States but has nonetheless implemented a comprehensive military modernization program devoted to countering the US military's ability to project power; and the proliferation of nuclear weapons to aggressive regimes and perhaps eventually non-state actors. Both individually and collectively, these challenges differ greatly from those the US military has focused its attention on in the past, particularly the large-scale, ground-centric conventional conflicts that dominated military planning during the Cold War and the immediate post-Cold War period. Nor do today's counterinsurgency campaigns in Afghanistan and Iraq or the counterterrorism operations taking place across the globe provide a complete blueprint for the challenges that US military forces should expect to confront in the years ahead. Preparing for these challenges is therefore almost certain to require significant changes in both the capabilities that the US military develops and how they are employed. Implementing major changes in the face of geopolitical uncertainty and entrenched institutional interests is always difficult, however. Nevertheless, using scenarios to identify potential threats and, perhaps more importantly, to generate new operational concepts to meet existing and emerging challenges is an important first step toward overcoming these constraints and fielding a more effective military.

GLOSSARY

A2/AD Anti-Access/Area Denial

AIP Air-Independent Propulsion

ASBM Anti-Ship Ballistic Missile

ASCM Anti-Ship Cruise Missile

ASAT Anti-Satellite Weapon

BCT Brigade Combat Team

C4ISR Command, Control, Communications, Computers, Information,

Surveillance, and Reconnaissance

CCP Chinese Communist Party

COIN Counterinsurgency

DARPA Defense Advanced Research Projects Agency

DLF Delta Liberation Front

FEBA Forward Edge of the Battle Area

FID Foreign Internal Defense

FOFA Follow-On Forces Attack

GDP Gross Domestic Product

HEU Highly Enriched Uranium

IADS Integrated Air Defense System

IAEA International Atomic Energy Agency

IOC International Oil Company

IRGC Iranian Revolutionary Guard Corps

JSTARS Joint Surveillance and Target Attack Radar System

LEU Low Enriched Uranium

Littoral Combat Ship

MARV Maneuverable Reentry Vehicle

MEND Movement for the Emancipation of the Niger Delta

MCM Mine Countermeasure

MCO Major Combat Operation

MRC Major Regional Conflict

MTW Major Theater War

NATO North Atlantic Treaty Organization

NPT Non Proliferation Treaty

PLA People's Liberation Army

PLAN People's Liberation Army-Navy

PRC People's Republic of China

SAM Surface-to-Air Missile

SF Special Forces

SLOC Sea Lines of Communication

SOF Special Operations Forces

SSBN Ballistic Missile Submarine

SSGN Cruise Missile Submarine

SSN Nuclear-Powered Attack Submarine

TEL Transporter-Erector-Launcher

UAV Unmanned Aerial Vehicle

UN United Nations

WMD Weapons of Mass Destruction

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