

#### ABOUT THE CENTER FOR STRATEGIC AND BUDGETARY ASSESSMENTS

The Center for Strategic and Budgetary Assessments (formerly the Defense Budget Project) is an independent, nonprofit, public policy research institute established to make clear the inextricable link between near-term and long-range military planning and defense investment strategies. The Center is directed by Dr. Andrew F. Krepinevich and funded by foundations, corporations, and individual grants and contributions.

This report is one in a series of CSBA analyses on future U.S. military strategy, force structure, operations, and budgets. These assessments are integrally linked to CSBA's research on the emerging military revolution. They are intended to stimulate innovative thinking about defense planning under conditions of relatively high uncertainty. Previous reports that utilize scenarios as an illustrative tool include *A New Navy for a New Era* and *Restructuring for a New Era*: *Framing the Roles and Missions Debate*.

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However, the analysis and findings presented here are solely the responsibility of the Center for Strategic and the Budgetary Assessments and the author.

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## I. Introduction: Crafting Tomorrow's Military

#### Needed: A Very Different U.S. Military

What kind of military will the United States require in 2016? Given the uncertainties involved, it is impossible to say with a high degree of confidence. However, it will *not* be a close descendent of its Desert Storm military. Military-related technologies are progressing and diffusing too rapidly to assume that the future competitive environment will merely be a linear extrapolation of the recent past. Potential competitors have the incentive and will increasingly also have the means to present the United States with very different and more formidable challenges in 2016 than did Iraqi forces a quarter of a century earlier.

Despite the great uncertainties involved, the United States cannot wait 20 years to begin thinking about the U.S. military of 2016. That military is already being shaped by decisions being made today. It is possible, however, to narrow the range of uncertainty, craft a vision of the military's future operating environments, and build in "hedges," or "strategic options," that will facilitate comparatively rapid course adjustments should the U.S. military find itself moving into a substantially different competitive environment than the one currently envisioned. Exploring a representative range of future conflict scenarios can assist in this process by providing informed challenges to the "conventional wisdom." This process also can help the Defense Department to derive its "core competencies" and make appropriate investment decisions.

#### Predicting is Difficult, Especially About the Future

All military organizations, implicitly or explicitly, for better or worse, have a vision of the conflict environment in which their forces will have to operate. In the absence of a conscious attempt to develop a vision, the "default" vision seems to assume that the future conflict environment will be a linear extrapolation of the present circumstances. Change is seen as incremental, or evolutionary. Military systems are viewed as improving at the margins. Consequently, military organizations tend to refine existing operational concepts, rather than substantially altering or even displacing them. In brief, military organizations often prepare to fight the next war as an "improved" version of the last war. This approach is not necessarily a bad one, although it seems particularly ill-suited for today's U.S. military, which faces substantial, if not radical, changes in its geopolitical and military-technical operating environments from what existed only a few years ago.

Alternatively, the U.S. military might attempt to address the dramatic changes under way by developing a new, and very different vision of the future conflict environment. To be sure, the new vision can be no more than a "best guess." Given this, and the enormous risks involved if the vision proves to be off the mark, it is important to hedge against uncertainty, and the possibility that the vision may prove incorrect.

Since the U.S. military must look 20 years or so into the future, there is a significant likelihood that it will have to adjust its vision as it progresses toward 2016. Periodic mid-course corrections will be needed, as the future comes into better focus. Time will eventually erode much (but not all) of the uncertainty concerning the 2016 competitive environment. Realistically, the Pentagon's goal should not be "predicting" the future, so much as to understand it better than its potential adversaries — to be "more right" or "less wrong" about the competitive environment than its enemies, and to be able to adapt to it more quickly.

#### A Vision of the Future: The Conventional Wisdom

The Clinton Administration has advanced a strategy of "Engagement and Enlargement," which focuses primarily on the immediate dangers to U.S. security — deterring major regional conflicts like Desert Storm — and on engaging in internationally sanctioned operations to promote stability in places like Somalia, the Balkans, Rwanda, and Haiti. It gives far less attention — both in strategic focus and defense investments — to the long term, where the greatest challenges to U.S. security are likely to emerge, and where an emerging military revolution will likely change dramatically the character of conflict.<sup>2</sup>

Indeed, the Defense Department's Bottom-Up Review (BUR) defense blueprint seemingly assumes the future will resemble the past. The BUR presents variations on essentially one contingency, a major regional conflict occurring in the Persian Gulf region or on the Korean Peninsula.<sup>3</sup> The parameters of the contingency are strikingly similar to the Persian Gulf War. It is assumed that the enemy has forces roughly similar to those employed by Iraq in 1990, and conducts combined-arms, mechanized offensive military operations as the Iraqis did.<sup>4</sup>

This scenario forms the principal basis for structuring U.S. forces for the next 10-20 years, and for defense planning and budgeting. The long-range planning scenarios in the Defense Department's Defense Planning Guidance (DPG), which are intended to reflect the 2011-2016 competitive environment, also represent a linear extrapolation of the present into the

<sup>4</sup> Aspin, *BUR*, pp. 13-15.

<sup>&</sup>lt;sup>1</sup> William J. Clinton, A National Security Strategy of Engagement and Enlargement (Washington, DC: n.p., February 1995). See also Andrew F. Krepinevich, Jr., Restructuring for a New Era: Framing the Roles and Missions Debate (Washington, DC: Defense Budget Project, 1995), pp. 25-29.

<sup>&</sup>lt;sup>2</sup> For a discussion of the military revolution, see Andrew F. Krepinevich, Jr., "Cavalry to Computer: The Pattern of Military Revolutions," *The National Interest* (Fall 1994); and Andrew F. Krepinevich, Jr., "Keeping Pace with the Military-Technological Revolution," *Issues in Science and Technology* (Summer 1994).

<sup>&</sup>lt;sup>3</sup> See Les Aspin, *Report on the Bottom-Up Review* (Washington, DC: Department of Defense, October 1993). While the BUR purportedly employs two scenarios, one each for the Korean Peninsula and the Persian Gulf, in both cases the aggressor possesses the same force structure, U.S. forces respond on the same "short notice," with the same force package, and the same four-phased approach to combat operations. Thus there seems to be little or no real difference in the two scenarios. Other planning scenarios are included in the Defense Planning Guidance (DPG). However, the recommendations of the BUR still guide U.S. defense planning and force structure requirements. Despite the crafting of DPG scenarios, there have been no significant modifications made to the BUR force structure. For a comprehensive assessment of the Bottom-Up Review, see Andrew F. Krepinevich, Jr., *The Bottom-Up Review: An Assessment* (Washington, DC: Defense Budget Project, January 1994).

future; yet there seems little basis for making such a crucial determination. In short, current DoD planning envisions future challenges as remarkably similar to the challenges of the Cold War and the Gulf War. Thus the effectiveness of American forces is judged, to a great extent, by their ability to achieve tasks established during those conflicts, such as deploying Army mechanized divisions and Air Force tactical fighter wings quickly to forward bases, positioning carrier battle groups forward, arresting the rate of advance of enemy forces as rapidly as possible, achieving air superiority by destroying the enemy's air force (often measured in "tactical fighter wing equivalents"), and destroying enemy mechanized forces (often measured in "armored division equivalents").

But the Pentagon's toughest future competitors are not likely to be updated versions of Saddam Hussein's Iraq, as depicted in the BUR's major regional contingency scenarios. Nor are they likely to be a new incarnation of the Soviet military. Rather, the greatest challenges, if they emerge, will be the consequences of eroding American great-power relationships, the proliferation of weapons of mass destruction and the diffusion of information-age military technologies. Moreover, there is a strong likelihood that an emerging military revolution will change the character of conflict itself, as military revolutions have in the past. If history is any guide, the Air Force will find itself facing very different competitors than it did during the Cold War and competing in a fundamentally different kind of conflict environment.

Given these concerns, how might the American military proceed to restructure itself for a new era, when it is not clear *who* will present the next major challenge to the nation's security, or *when* the challenge will emerge, or *how* such a challenger might choose to compete? How does the Pentagon restructure to forestall the prospective danger from rogue states possessing weapons of mass destruction and advanced conventional technologies? How should the Defense Department hedge against the possibility that efforts to forestall competition and sustain nonproliferation might, over time, fail? Finally, how should senior Defense Department leaders determine which missions and capabilities to emphasize, and which to consider as prudent targets for "divestment"? The answers to these questions are not likely to come by "assuming away" uncertainty and focusing on familiar challenges.

#### Scenario-Based Planning: Defrosting the "Conventional Wisdom"

Scenario-based planning is an effective means for challenging the conventional wisdom of large, successful organizations — both in the defense and in the corporate sector — that may be inclined to "rest on their laurels." Oftentimes the conventional wisdom concerning our view of the future is little more than a linear extrapolation of current trends. Yet conflict and competition among states, military organizations, and corporations is typically nonlinear, and often does not conform to the conventional wisdom. Scenarios (and, for the military, the wargaming that often accompanies them) permit the exploration of plausible alternatives, thus enabling planners to challenge the conventional wisdom.

<sup>&</sup>lt;sup>5</sup> See Peter Schwartz, *The Art of the Long View: Planning for the Future in an Uncertain World* (New York: Doubleday, 1991). For an abbreviated treatment of this issue, see Pierre Wack, "Scenarios: Uncharted Waters Ahead," *Harvard Business Review* (September-October 1985); and Pierre Wack, "Scenarios: Shooting the Rapids," *Harvard Business Review* (November-December 1985).

In developing a strategy to hedge against an uncertain future (and to reduce uncertainty where possible), the Defense Department should examine a range of scenarios to help refine its vision of the future competitive environment, as well as to identify prospective strategic and operational challenges, and responses. The scenarios should examine how the greatest and the most likely challenges might shape the competitive environment in which the U.S. military will have to operate. They also should explore how prospective competitors might exploit the emerging military revolution to change the way in which military organizations compete.

Scenarios are *not* intended to predict the future, but they can be valuable tools in helping to accelerate the process of thinking about and preparing for the future. Properly crafted, they provide a way of testing various options for organizational restructuring, and of acquiring insights, or clues, about which factors will be most important in shaping the future competitive environment.

What follows are a four scenarios in the year 2016. They are fairly detailed since, in order to "defrost" the conventional wisdom mindset, a scenario must present a *plausible* path from the present to the future. Each scenario is "driven" by certain assumptions concerning the future international system. The first and third scenarios, *The Blockade of Taiwan* and *Crisis in Ukraine*, suggest a realist perspective combined, in the former, with a "clash of cultures" point of view. The second and fourth scenarios are reflective of the "haves versus have-nots" perspective advanced by futurists such as Clem Sunter, with *The Streetfighter State* also linked to the "clash of cultures." The *Indonesia Erupts* scenario also has links to the "global disorder" perspective associated with Robert Kaplan and, interestingly, with the "cooperative security" vision of global order.

The scenarios present a range of potential challenges for the American military that, in many respects, are quite different from those they face today. These scenarios are meant to be representative, not exhaustive. Although the military services must prepare as best they can for every plausible future security challenge, it is neither possible nor necessarily helpful to examine every plausible contingency. However, if the Defense Department can hedge against these contingencies, it should be able to adjust its plans, programs, and doctrine, as necessary over time as the "real" contingencies are clearly identified.

The reader should note that while the scenarios presume competition with certain states, or in particular regions, *the intent is not to declare them future adversaries of the United States*. Indeed, the goal of U.S. national security strategy is to *avoid* a resumption of intensive military

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<sup>&</sup>lt;sup>6</sup> For a realist perspective, see Donald Kagan, *On the Origins of War and the Preservation of Peace* (New York: Doubleday, 1995); Henry A. Kissinger, *Diplomacy* (New York: Simon and Schuster, 1994). pp. 804-35; and John Mearsheimer, "Back to the Future: Instability in Europe After the Cold War," *International Security* (Summer 1990). For a discussion of cultural clash as a source of competition, see Samuel P. Huntington, "The Clash of Civilizations?" *Foreign Affairs* (Summer 1993); and Aaron L. Friedberg, "The Future of American Power," *Political Science Quarterly* (Spring 1994).

<sup>&</sup>lt;sup>7</sup> Clem Sunter, *The World and South Africa in the 1990s* (No location: Human and Rousseau Tafelberg).

<sup>&</sup>lt;sup>8</sup> Robert Kaplan, "The Coming Anarchy," *Atlantic Monthly* (February 1995); and Ashton B. Carter, William J. Perry, and John D. Steinbruner, *A New Concept of Cooperative Security* (Washington, DC: The Brookings Institution, 1992).

competition, not promote it. However, the Defense Department has been charged with supporting efforts to dissuade a resumption of military competition, to hedge against the failure of such efforts, and to do so efficiently within declining resources for defense. Thus it should explore a range of scenarios; again, not to cast certain states or regions as rivals, but rather to get a feel for what the future conflict environment might look like, and how the military services can operate effectively in that environment.

#### Scenario Assumptions

The following scenarios incorporate several key assumptions, which exert a substantial influence on the operational environment presented. These assumptions are that:

- Long-range precision strike (LRPS) capability against fixed-point targets improves significantly, through a continuation of two current trends: the improved accuracy and declining costs of precision-guided munitions.
- Strikes against a military force's information assets (to include strikes against military assets in space) become an increasingly important means of degrading its overall effectiveness.
- Stealth is robust. Efforts to degrade significantly the "cloaking" that stealth provides to military systems either fail or are offset by improvements in low-observable technologies. Thus, in some respects, the stealth/counter-stealth dynamic can be viewed as somewhat similar to the competition between submarine "quieting" and antisubmarine warfare efforts to make the oceans "transparent."
- Missile defenses remain limited in their effectiveness. Although progress is likely to be made in this area, the assumption here is that it is offset by improvements in stealth and in the declining costs of PGMs.<sup>11</sup>
- The "biotechnology revolution" will not have hit stride. There is a significant possibility that, as the science of biotechnology matures, it will offer the potential to change dramatically the measurement and distribution of military power, but not by 2016.
- Unlike earlier periods of military revolution, which witnessed the displacement or marginalization of earlier dominant weapons or military systems, this revolution will

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<sup>&</sup>lt;sup>9</sup> Clinton, Engagement and Enlargement; and William J. Perry, Annual Report to the President and the Congress (Washington, DC: Department of Defense, March 1996), pp.viii-xi.

<sup>&</sup>lt;sup>10</sup> For a more detailed discussion of these assumptions, see, Michael G. Vickers, *Warfare in 2020: A Primer* (Washington, DC: Center for Strategic and Budgetary Assessments, 1996).

This is not the same as saying that missile defenses are irrelevant. In fact, active missile defenses may prove to be important military assets, in combination with other elements of an overall missile defense architecture (e.g., information strikes, long-range precision strikes against enemy missile forces, passive defenses, the operational concepts for integrating these capabilities).

have to contend with a "nuclear overhang." <sup>12</sup> That is to say, nuclear weapons will continue to exert a substantial effect on the conduct of military operations, independent of the advances in military effectiveness brought about by the emerging military revolution.

These key assumptions are stated clearly since, if they are not borne out, the conflict environment would likely change substantially, requiring corresponding changes in the U.S. military's plans, programs, and concepts of operations.

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<sup>&</sup>lt;sup>12</sup> The term "nuclear overhang" was coined by Michael Vickers. See Michael G. Vickers, *The Revolution in Military Affairs and Military Capabilities: Broadening the Parameters of Future Conflict*, (Unpublished paper, n.d.).

### II. Great Power Competition (I): Blockade of Taiwan

It is August 2016. The last 20 years have seen a gradual, yet significant change in East Asia's security environment, and in the military balance of power.

China is now the region's dominant great power, with the largest economy and biggest military. This has occurred despite the turbulent transition period following the death of Deng Xiaoping in 1998. China remains united and staunchly authoritarian. Economically, however, considerable autonomy is vested in the provinces. The Chinese people seem satisfied to defer greater political freedom as long as the nation's strong economic growth offers the prospect of continuing the marked improvement in their living standard.

While China's economic growth remained strong through the early years of the new century, the long-term projections are not encouraging. Demand for energy now substantially outstrips domestic supplies, and China finds itself importing oil and gas, primarily from Siberia and the Persian Gulf. Concerns over growing environmental damage that have been ignored for years can no longer be deferred, as they are beginning to cause significant damage to the national economy, and to public health. Both energy and environmental concerns have acted as a brake on the Chinese economy. The "Third Brake" (as it is called, apart from energy and the environment) stems from trade sanctions imposed by the United States in 2008 for Beijing's alleged trade and human rights violations, which have severely crimped China's export-led growth strategy.

The slowdown effect of the "Three Brakes" has been offset, to a large extent, by the absorption of Hong Kong. Beijing's policy of economic (but not political) "laissez-faire" with Hong Kong has produced substantial economic benefits for China. But the three-year recession of 2010-2012 eroded the political leadership's confidence that it can return to annual economic growth rates in the range of 5-10 percent. Indeed, as China's economy matures, most independent economic observers foresee far more modest growth rates, even now that the recession is over.

China's military establishment has seen a slow, steady growth in its capabilities, as Beijing has invested to underwrite the changes in Chinese military doctrine that began in the mid-1980s, and which became more pronounced following the "lessons learned" from the Gulf War. The new doctrine calls for an aggressive forward defense of China, engaging any prospective enemy at considerable distances from China's coastline and land frontiers. Investments in space satellite systems, a blue-water navy (with significant numbers of diesel submarines and surface combatants equipped with PGM-capable vertical launch systems), inflight refueling, and large numbers of cruise missiles, sophisticated antiship mines and PGMs, among other improvements, have given the Chinese military the ability to project substantial power over 400 miles from its shores.

Twenty years of declining defense budgets has seen U.S. military presence in the region diminish over time, to the point where the leadership of long-term allies like Korea (reunified in 2002) and Japan publicly debate whether they need to take a more active — and independent — course in providing for their own defense. Despite their historical mutual animosity, Japan and Korea initiate military staff discussions, following China's stepped-up militarization of the Spratly Island chain in 2005. Beijing strongly denounces these discussions. This notwithstanding, it is generally believed that Tokyo and Seoul have entered into an informal alliance against China.

Stability in the region began to erode precipitously in late 2015. The Chinese leadership increasingly views some kind of economic integration with Taiwan as the key to returning China's economic growth rate to its 1980-2005 levels. Taipei not only rebuffs Beijing's advances, but looks to reestablish its long-dormant security relationship with the United States. Given Washington's growing antipathy toward China, and the emerging Tokyo-Seoul "axis," what appeared farfetched only a few years before now seems possible. At the same time, Taipei finds its concerns over China's "adventurous" moves in the Spratlys (which Taiwan covets as well) shared by Japan and Korea. There is talk of extending the Japan-Korea relationship to Taiwan, especially if ROK-Japanese trade relations with the United States continue to decline, and if Washington fails to react vigorously to the region's growing instability by beefing up its military presence.

There is an air of desperation in Beijing in the summer of 2016. Mired in a recession that threatens to erode a fragile political stability, Chinese leaders receive intelligence regarding Taiwan's political and military initiatives toward the United States, Korea, and Japan. There is both fear and anger that China might be confronted with efforts to interfere in its internal affairs. After all, Taiwan is still seen as a "breakaway" province, and the Spratlys as Chinese territory. The Chinese military is instructed to dust off plans for defending the Spratlys and "neutralizing" Taiwan.

Matters come to a head in the summer of 2016. Once the People's Liberation Army completes its preparations, some senior leaders in Beijing argue that China should act preemptively while conditions are relatively favorable. They remain a small minority until June, when Beijing, Shanghai, Nanjing, and other major Chinese cities are beset by large-scale popular demonstrations calling for new leadership to provide economic growth, a clean environment, and political freedoms. The demonstrations are ruthlessly put down, leading to an international outcry. Washington views with alarm both the suppression of popular protest, and the buildup of Chinese forces along the coast opposite Taiwan. The president appears on television in late June to denounce the Chinese leadership and declares that the U.S. 7th Fleet will increase its presence in the Taiwan Straits as a signal of support for Taipei.

Armed with this information, and with intelligence "reports" that the United States and Taiwan had helped instigate the demonstrations, the "War Faction" of the Chinese leadership emerges as dominant. It is decided that China will act with military force before the situation erodes any further.

On September 20, 2016 Beijing declares a maritime and air exclusion zone extending 1,000 kilometers out from Taiwan and the Spratly Islands. Any ship or aircraft found within the zone will be liable to destruction. For nearly two weeks before the announcement, the Chinese deploy their forces. Submarines slip out to sea, taking forward positions along an arc running east of Taiwan and the Spratlys. Stealthy long-range, high-endurance unmanned aerial vehicles (UAVs) are launched, establishing a reconnaissance grid in support of Chinese naval patrols. Four small low-Earth orbit, short-duration satellites are launched to supplement China's reconnaissance architecture and associated C3I network. China, long a major subscriber of the major commercial space consortium (e.g., Inmarsat, Iridium, Teledesic), increases its time shares. More ominously, U.S. intelligence services report that China appears to be readying several direct-ascent anti-satillite (ASAT) missiles for possible use against U.S. military satellites. Moreover, China places its nuclear forces, which include over 120 ICBMs, on heightened alert.

Once China declares the exclusion zone, Chinese forces begin laying mines near Taiwan's major ports, using submarines, aircraft, and long-range missiles. Beijing announces that Chinese ballistic and low-observable cruise missile batteries have pre-targeted all of Taiwan's major ports and airfields. (Beijing is careful to announce that these missiles do not carry weapons of mass destruction — nor will China be the first to employ such weapons.) These missiles are believed to be highly accurate, relying on the United States global positioning system (GPS) satellites as well as the Russian Glonass system. Beijing declares that any aircraft or ship that manages to circumvent China's "blockade" and arrive at a port or airfield risks having that facility subjected to cruise and/or ballistic missile attack.

Despite China's impressive economic growth and growing technological sophistication, its air force is not formidable by U.S. standards, as the PLA has opted to

emphasize missiles and information systems over combat platforms. manned Consequently, China's air force is configured primarily for three missions: air defense of the mainland; support of power projection operations; antisurface warfare operations (which, of course, are component of the other two missions). The small Chinese surface fleet takes up positions close to the Chinese coast. While the PLA concentrates significant forces along the shore opposite Taiwan, it is clear that it poses no immediate threat of amphibious assault. Rather, it appears more a prospective army of occupation,

assuming Taiwan's capitulation.

The Chinese military is relying on several systems to assist in maintaining what the U.S. president described as a long-range blockade. For example, Russia's long-delayed Glonass system, which is now both operational and sufficiently reliable, offers China's forces GPS-like service for targeting and navigation. Given its "Cold Peace" with the United States and its desire to be seen as a reliable alternative provider to the U.S. system, Russia proves unwilling to terminate China's service, despite heated protests from the U.S. ambassador to Moscow, and later the American president himself. China also subscribes to four global telecom companies — Iridium (in which China's Great Wall corporation is part owner), Inmarsat, Globalstar, and Teledesic — which provide voice, data, and video communications. China also has access to high-resolution multi-spectral imagery provided by Russia and France, along with its own less sophisticated indigenous capability. While France is somewhat sympathetic to the U.S. predicament, there are commercial and legal considerations involved in terminating Chinese service, especially in the absence of any strong stand by the United Nations (where both Russia and China can exercise their veto). Ironically, some of China's reconnaissance and surveillance capability was acquired as part of an Intelligent Vehicle Highway System (IVHS) project with the United States.

Beijing publicly declares that as long as Korea and Japan do not allow their bases to be used by American forces, their territory will not be threatened. Although publicly unstated, China informs the Japanese and Korean governments that it also will extend the exclusion zone to include the territorial waters of both countries, if necessary (i.e., if they offer support to Taipei, Chinese forces will either intercept, disable, or sink all oil and natural gas supertankers found within these Korean and Japanese exclusion zones). The Chinese leadership notes that the crisis would be resolved when Taiwan — whose activities as a "breakaway" province have now gone beyond the pale — agrees to rejoin the mainland under terms similar to those "enjoyed" by Hong Kong.

The Taiwanese leadership strongly denounces China's act of "unwarranted aggression." Taipei places its military on a high state of alert, but its missile defense and mine warfare capabilities are believed insufficient to deflect determined action by mainland forces.

Faced with this challenge, the president asks the Pentagon for options on how to break the Chinese blockade if negotiations with Beijing fail to produce a diplomatic solution. The Pentagon is told to assume that former U.S. bases in Korea and Japan will *not* be available for U.S. forces. Explorations are under way to determine if bases will be available in Thailand, Singapore, and the Philippines. Both the Australians and the New Zealanders offer to provide limited base support, but no military forces. Bases in Taiwan are available, but they also are within easy striking distance of Chinese precision-guided missile forces.

# III. Major Regional Conflict: The "Streetfighter" State

It is October 2016. The United States is about to confront the first major act of regional aggression in over a quarter century. This time the aggressor is Iran, but it takes a very different path than that chosen by Iraq in 1990.

For Iran the new century has meant both internal and external turbulence. Internally, the Iranian people have grown weary of nearly a quarter century of Islamic fundamentalist rule. The mullahs, in attempting to diffuse growing discontent, have tried to apply the "Chinese" model by engineering rapid economic growth to mute political (and sectarian) opposition. Thus between 1998 and 2003 Iran adopts a much more friendly approach to the West. Tehran suspends its support of terrorism. Threats to blockade the Strait of Hormuz cease. Attempts are made to cultivate better relations with Saudi Arabia and the other Gulf States.

The reaction from the West is overwhelmingly favorable, except from the United States. Washington objects to Iran's decision to purchase commercial nuclear reactors from Russia, along with other arms purchases from China. Tehran retorts that it remains a member of the Non-Proliferation Treaty (NPT), that its nuclear program is peaceful and operating under International Atomic Energy Association (IAEA) safeguards, and that given the relative instability of the region, it is only prudent to engage in a slow-paced modernization of its armed forces.

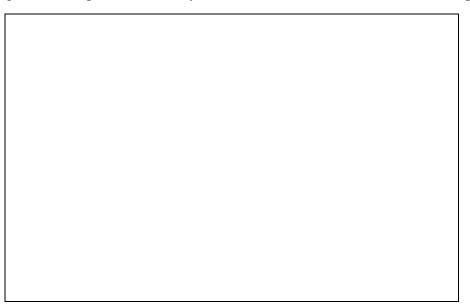
Washington's European allies, growing increasingly distant from America over economic issues and NATO's inability to deal successfully with the Balkan crisis, embrace the Iranian peace initiative. From London to Paris, Berlin to Rome, the Americans are seen as catering to their long-term visceral dislike of Iran's fundamentalist regime. Soon European and Japanese energy firms are operating in Iran, focusing especially on developing that nation's huge reserves of natural gas.

Although the results are initially promising, sustaining high economic growth rates proves difficult to achieve. Indeed, developments "conspire" to work against the Iranian leadership's hope of pursuing the Chinese model. First, there is the continued transition in the developed world from "industrial" to "information" economies, which acts to flatten the growth of energy demand. This transition also is beginning to emerge in the newly industrializing countries, many of whom are skipping some phases of industrialization on their way to information-based economies. Second, alternatives to carbon-based fuels are coming "on line," especially nuclear power (in Japan and China) and renewable energy sources (i.e., solar, wind). Third, the long decline in Russia's energy production is finally reversed in 2009. Fourth, the lifting of sanctions on Iraq in 2002 brings that country fully back into the oil market — while creating a growing security threat to Iran.

The Iranian fundamentalist leadership's inability to generate rapid economic growth through "accommodation" with the West is made clear with the reverse energy "shock" of April

2014, when the factors described above produce a temporary "collapse" of oil and gas prices. Efforts to enforce limited production agreements among exporting producer states prove fruitless. This leads to a political backlash in Iran, with hard-line fundamentalists in the ascendant. The hard-liners argue that Iran is again being exploited by the West, which is accused of depressing oil prices while supporting Iran's prospective enemies in Baghdad (through the lifting of sanctions) and Saudi Arabia (through the sale of advanced arms, including a theater missile defense system that is manned and maintained primarily by Americans).

The hard-line faction in Tehran argues that the only way to insure Iran's economic growth and political stability is to achieve freedom from Western exploitation. This requires



confronting the West and altering dramatically the world energy equation in favor of the "exploited" oil and gas producing and exporting states. Iranian military instructed to prepare to execute long-held plans to block the Strait of Hormuz and to target Saudi and other Gulf oil state production facilities. The target date is November 2016.

It turns out that Washington's suspicions regarding the Iranian nuclear weapon program are not without foundation. By the fall of 2014 Iran has an inventory of eight nuclear weapons, which are mated to eight of its nearly 1,400 ballistic missiles. The Iranian military also boasts over 2,000 cruise missile systems, over 800 advanced conventional munitions (e.g., laser- and optically-guided bombs), and wide access to commercial satellite communications networks. Iran also possesses limited chemical munitions stocks, nearly 7,000 antiship mines (some quite advanced), and some late-generation "traditional" systems (e.g., tanks, aircraft, surface warships), including five diesel submarines capable of conducting clandestine minelaying operations. Finally, Iran has maintained a core terrorist network in the Middle East and Europe, with a limited network in the United States.

Iran's political and strategic culture is such that it is willing to accept what the United States would consider a disproportionate amount of punishment, including casualties, and collateral and environmental damage, and to wage a protracted struggle if necessary to accomplish its strategic objectives. Finally, Iran's leadership understands the American political and strategic culture, and is prepared to exploit it.

On November 6, 2016 Iran executes its war plan. Iranian ballistic and cruise missile forces disperse. Mine seeding of the Strait of Hormuz commences. Iranian submarines begin their "underwatch" patrols of the mine fields. Antiship missile batteries (e.g., the Silkworm and Seersucker) position themselves along the approaches to the strait. Iran's small air force, equipped primarily with antiship missiles, disperses.

The Iranian leadership moves to deep underground shelters for its protection. Fiber-optic land lines and satellite "subscriber" service on systems like Iridium handle essential communications. Overhead reconnaissance is provided by Russian satellites. (Russia is only too happy to both reduce the influence of the United States and the European Union (EU) in the region and realize windfall energy profits during the crisis, and after, assuming the Iranian ploy is successful.)

Next, the Iranian leadership declares that three conditions must be met before the Strait will be reopened and the flow of oil resumed. First, all western forces must depart the region, including U.S. support forces in Saudi Arabia. Second, Saudi Arabia must dramatically curtail its oil and gas production. Third, tankers transiting the Strait of Hormuz must pay a transit fee to Iran. The mullahs believe that, if they can achieve these objectives, the key, enduring effect will be to make the Saudi Kingdom and the Gulf Cooperation Council states wards of Iran.

Recalling the Gulf War, Tehran issues a warning to all states in the region. Cooperation with any powers "external to the region" will lead to "dire consequences" being visited upon the cooperating state. Several options are open to Iran in making good on this threat. First, it might employ weapons of mass destruction, even though its arsenal is very limited. Second, it might conduct a precision strike on oil and gas fields in the region. Third, it could threaten environmental, or "dirty war," (e.g., destroying water supplies, detonating industrial plants that employ toxic chemicals, striking oil wells, etc). Iran's hope is that these threats will deter potential U.S. allies, especially within the region of conflict. Ideally, these concerns could be sufficient to preclude U.S. military action. As an aside, Iran plans to attack Israel, with a nuclear weapon if necessary (although Iranian leaders believe this will not be necessary), in order to weaken any U.S.-Arab coalition.

Still, there is no guarantee that attempts to exploit fault lines in a U.S.-led coalition will prove successful. In short, the Iranian leadership realizes that it may find itself opposed by a U.S.-led coalition prepared to take military action. Should this occur, Iran is prepared to make the war as sanguinary and protracted as possible. The hard-line fundamentalists are prepared to exploit the social dimension of strategy to offset Iran's clear disadvantages in the technical dimension. In short, Iran's leaders are banking that Americans do not have the will to engage in protracted conflicts, especially those that are bloody, if U.S. national survival is not perceived to be at stake.

If U.S. and other extra-regional coalition members prepare to project their forces into the region, they will find themselves confronting several challenges. The Iranian armed forces are instructed to attack any port or airfield employed by the United States or its allies to introduce its forces into the region. (The option also is open to strike these targets pre-

emptively, prior to the arrival of U.S. forces). This may include missiles armed with nuclear, chemical, or even biological warheads. Conventional attacks, employing integrated packages of missile and air strikes could occur, are another possibility.

The Iranians do not intend to challenge American and other coalition naval forces directly. Their objective is not command of the seas, but rather sea denial. Tehran uses information obtained through third-party commercial satellites to plot the movement of U.S. forces at sea, for early warning and targeting purposes. Washington is faced with the dilemma of allowing its forces to be observed in this manner, or of attempting to deny this information to the Iranians by convincing Russia to cease providing satellite information to Iran. Other alternatives involve employing electronic warfare against the satellite or ground station, or perhaps even contemplating attacks on the satellites themselves.

Iran lacks the means to conduct long-range strikes against U.S. forces on the open seas with a high confidence of success. It hopes to make up for this shortcoming by combining its handful of modern diesel submarines and mine barriers to slow and canalize U.S. movement (an action that would be especially effective around the straits), and covering fires in the form of missiles or long-range aircraft that might be employed selectively against high-value U.S. targets (e.g., aircraft carriers), if they can be located.

If U.S. forces prepare for deep-strike operations on key aggressor targets, the mullahs intend to make these targets exceptionally difficult to strike, even with advanced conventional munitions and near-real-time intelligence. First, many key targets are "cloaked" with a human shield of hostages (ideally American or coalition member nationals, many selected from firms operating in Iran). Second, key elements of the Iranian military are positioned in densely populated areas. In some instances, these elements are co-located alongside Iran's nuclear reactors or power plants, or industrial plants that utilize significant quantities of highly toxic chemicals as part of their manufacturing process (i.e., "Bhopals in waiting"). The Iranian people, declare the mullahs, are ready to die to defend their faith against the "Great Satan."

If need be, the Iranian leadership is prepared intentionally destroy several "dirty" targets, while accusing the United States of causing the catastrophe. Again, Tehran's aim is to prevail by employing a superior strategy against a technologically superior force, even at a cost in human and material resources that would be unacceptable when viewed from the value system of advanced western industrial states. Once these targets are destroyed, Iran plans to "retaliate" in kind by striking similar targets in coalition states located within the region. These strikes could be executed by mobile ballistic missile or cruise missile systems, or by special operations sabotage teams. Attempts also will be made to appeal directly to the U.S. public and international opinion to stop the war.

If, for whatever reason, the Iranian denial strategy fails and the U.S.-led coalition conducts successful forced-entry operations following the neutralization of most Iranian long-range systems and their corresponding C3I network, the Iranians have a fallback plan. It involves countering U.S. and coalition ground forces' operations to physically control the country.

The Iranian forces will not employ the armor-heavy, combined-arms Cold War era conventional operations favored by the Iraqis and the Bottom-Up Review planners. They will not attempt to "close with and destroy" coalition forces. Nor will they sit and await a coalition attack in prepared defensive positions constituting a "front line." Rather, they will initiate unconventional warfare operations against coalition forces. Iranian forces will operate in small, independent groups, diffusing the target base and making effective U.S. deep-strike attacks difficult. Small but numerous enemy partisan units will attempt to infiltrate past the coalition screening forces and conduct hit-and-run or suicide attacks on U.S. and allied rear base areas.

The objectives of such operations would be to raise U.S. costs, especially in time and blood, and to fracture the coalition. To this end, the Iranian leadership will likely attempt to establish sanctuaries for its forces, either in remote, inhospitable areas of the country or in neighboring states that are willing to act as benevolent neutrals. From these locations the Iranians could support unconventional operations, and could also stockpile weapons like cruise missiles that are difficult to target, but which themselves can strike effectively at long ranges. As coalition forces occupy the country, they would find themselves engaged in an unconventional war that would negate much of their military effectiveness. The Iranians hope to pose the United States with a "best case" outcome that sees coalition forces winning a Pyrrhic victory, with no easy or early end to the conflict in sight.

## **IV.** Great Power Competition (II): Crisis in Ukraine

It is July 2016, and over a quarter century has elapsed since the Berlin Wall fell, signaling the Cold War's end. Now once again Russia and the United States find themselves at loggerheads. This time, the competition is not occurring on a global scale. Rather, its focal point is the country of Ukraine.

Ukraine declared its independence from the Soviet Union in 1991. The regime in Kiev experienced a very difficult post-separation period. The economy, already weak from nearly 75 years of communist rule, initially seemed on the verge of collapse. Ukraine's would-be business class had little experience in free market economics. The country's energy supplies came almost exclusively from Russia at market prices. Cleaning up the vast environmental degradation that had occurred during the Soviet years proved a long, arduous, and expensive proposition.

Still, Ukraine is resource rich. Since tsarist days it had been known as the "Breadbasket of Russia," thanks to its rich agricultural belt. It possesses a long seacoast on the Black Sea, with a number of fine ports. Ukraine also boasts a potentially strong industrial base, thanks to the resources of the Donets Basin, and a technically literate work force.



Despite the Soviet Union's collapse and Ukraine's early economic dependence on Moscow, the leadership in Kiev very early on stakes the country's fate, both in economic and security terms, with the West. Western economic aid is solicited, and received (although at far lower levels than most Ukrainians feel is appropriate). Although there are disputes with Russia early on over the disposition of the Black Sea Fleet, the status of the Crimea, and the substantial number of Russian nationals living in eastern Ukraine, the Ukrainian leadership dismantles its formidable nuclear arsenal, which had been part of the Soviet Strategic Rocket Forces.

To hedge against a return of Russian expansionism, Kiev looks for potential allies in the West, but finds its overtures rebuffed. To be sure, NATO does expand, but only into Poland, Hungary, the Czech Republic, and Slovakia, and not until 2006. Ukrainian membership in the European Union proves a chimera, even after Kiev achieves steady economic growth rates in the 5-7 percent range. The principal reasons for the West's aloofness are the decline in U.S. military presence in Europe, the unwillingness of the European NATO states themselves to take up the slack, and the general fear that expanding NATO to include Ukraine will lead to a crisis in NATO's relations with Russia. For its part, Washington offers Ukraine encouragement, but little else. Although Germany emerges as Ukraine's principal economic partner, Berlin remains very reluctant to stress its relations within NATO or the EU by serving as a forceful advocate for Ukrainian membership in either organization.

Remarkably, however, Ukraine manages not only to survive, but to thrive. Several factors are responsible for this happy state of affairs. First, the Ukrainians, after a slow start, prove themselves to be good capitalists. Independent farms yield record harvests from Ukraine's black earth. The growing stability of the regime in Kiev produces first a trickle, and then a growing stream of foreign investment.

Another contributory factor is the substantial decline in energy prices, the product of several key events. First, Russia's energy production recovers from the depredations of communism and the turmoil following the Soviet Union's collapse. Second, Persian Gulf production soars as U.N. sanctions on Iraq are removed following the overthrow of Saddam Hussein in 1999, and as a moderate ruling faction rises in Iran, which welcomes western investment and development of that country's enormous natural gas reserves. Third, there is the transformation of the global economy (to a more efficient economy) driven by the information revolution. Finally, renewable sources of energy (e.g., solar, wind) are becoming increasingly practical.

Ukraine's growth is viewed in Moscow with envy. Russia's brand of democracy proves similar to that enjoyed by Mexico for much of the twentieth century. Opposition parties exist, the press is somewhat free, religious freedom is not questioned, and elections are held regularly. But one faction, comprising a mix of Russian nationalists and pragmatic former communists, predominates. Its unifying theme is restoring Russia's status as a true great power. "Restoration" is seen as coming from a combination of economic growth (market economics are supported), military strength, and Russian domination of its traditional sphere of influence in the "near abroad" — the former Soviet republics and eastern Europe.

Russia views NATO's expansion to the east as an unfriendly act. Never seriously considered for membership in the European Union, the Russians become increasingly aloof politically from the West. Ukraine's clear tilt toward the West, and especially Germany, contributes to Moscow's anxieties. All this is made worse by Russia's failure to realize its own economic miracle. To be sure, the Russian economy has recovered from its near-collapse in the 1990s, but growth rates are steady, not spectacular. Consequently, Russia's GDP is now the world's fifth largest, behind the United States, China, Japan, and the EU.

Still, by 2015 Ukraine is the only former Soviet republic over which Moscow does not cast a large shadow. The combination of Russia's recovery and NATO's gradual decline (notwithstanding its one-time expansion, which is privately regretted in some NATO member capitals given Russia's strong hostile reaction) facilitates Russia's return to dominance in the near abroad. The former Soviet republics retain their independence (save Belarus, which votes to rejoin Russia in 2003). Still, they are either economically dependent upon Russia, or clearly within its military orbit. All except Ukraine.

Over the years, matters other than Moscow's envy of Ukraine's economic growth and frustration at its independence lead to friction between the two states. To begin, there are the lingering effects of the Chernobyl nuclear reactor disaster. Russia essentially disclaims any responsibility for helping cope with the enormous human and economic costs resulting from the reactor's explosion in 1986. The situation is made worse when, in 2007, a Russian nuclear reactor of the Chernobyl model type also suffers a catastrophic failure. Its radioactive cloud passes over part of Ukraine. Moreover, Russian nationalists are clearly vexed by the fact that the Russian nationals in eastern Ukraine are quite content to remain apart from Russia, and apparently share none of the nationalists' desire to see Russia restored to its former greatness. Then there is the Crimea — held by Russia for nearly 200 years when it was "given" to Ukraine in 1954 by the Soviet leader, Nikita Khrushchev. At the time, it seemed a harmless act, given that Russia dominated the Soviet Union, whose existence as a superpower seemed assured. Finally, many Russians have never clearly understood why their Ukrainian Slavic "brothers" would ever want to secede in the first place.

As in 1914, the crisis of 2016 is the product of unintended consequences, stemming from the issue of Russian nationals living in the "near abroad." Strong nationalists among the Russian leadership argue that the ethnic Russians in eastern Ukraine and in the Crimea (which constitute a majority in those regions) are a "repressed" minority. Moscow both cultivates and amplifies the "grievances" of a minority of Russian nationals in the Crimea. Covert financial support for the disaffected nationals is soon forthcoming from Russia. A series of demonstrations and acts of sabotage by Crimean Russians occur in late 2015 and continue into the early months of 2016. These acts culminate during a mass rally in a violent exchange between Russian demonstrators and Ukrainian police in the streets of Sevastopol. Over twenty Russians are killed and scores more wounded. Moscow reacts quickly, demanding that Kiev accept the deployment of Russian military units to Crimea and eastern Ukraine to enforce order and protect Russian nationals.

The Russian leadership expects the Ukrainian leadership to accommodate its demands, especially when Kiev realizes that neither Germany nor the United States will risk a crisis over the Crimea. That proves to be Moscow's first mistake. The Ukrainian leadership not only refuses to negotiate, it reacts vigorously to what it considers to be Russian attempts to subvert its independence. On July 2, 2016 the Ukrainian armed forces are put on alert. Martial law is declared in the Crimea.

Faced with this unexpected display of Ukrainian resolve, the Russian leadership is put in the awkward position of backing down and appearing weak, and perhaps eroding the influence it has labored for twenty years to gain over the former Soviet republics, or ratcheting

the crisis higher. The latter course is chosen, again under the assumption that Ukraine is militarily and diplomatically isolated. ("Ukraine is not Poland," observes the Russian foreign minister.) This proves to be Russia's second mistake.

Russian forces are put on high alert status on July 4, 2016. Twelve army divisions deploy along Russia's border with eastern Ukraine, while another 20 watch along Ukraine's northern border with Russia. But, unlike the old Cold War era, these forces are not to spearhead the Russian attack; rather, they are seen as prospective forces of occupation, to be employed only *after* the victory is won.

The Russian Strategic Rocket Forces, comprising some 800 missiles, six SSBNs, and 45 bombers assume heightened alert status. Russia's satellite constellation, while not up to U.S. standards of reliability and sophistication, nevertheless provides Russian commanders with GPS capability through Glonass. Remote sensing support is provided by Russian, Chinese and French satellites (the latter two being used as a backup). Multi-spectral imagery at 1-5 meters resolution is available from Russian and Chinese systems. The Russians also are subscribers to several global communications satellite systems, including Inmarsat and Globestar.

It is known that Russian military doctrine calls for disabling enemy space-based assets if the situation demands it. The means to be employed include "electronic strikes" against enemy satellites, and employing nuclear weapons to generate an electromagnetic pulse. U.S. intelligence sources also suspect that the Russians have a limited number of weapons, perhaps 60-80, that are designed to generate a high-powered microwave pulse, to disable enemy field forces or other targets. These weapons are believed to be deliverable by aircraft, or by cruise and ballistic missiles.

Except for the United States and China, Russia has the world's largest inventory of precision-guided weaponry, ranging from over one thousand cruise missiles, to a variety of laser and optically guided munitions employed by the Russian Air Force, which comprise some 1,100 aircraft, many of them of late Cold War vintage. The Russian Black Sea Fleet is not formidable. Still, it boasts 11 surface combatants with vertical-launch systems (24-36 each), and an estimated 16 diesel submarines, seven of which have a modest (4 VLS) cruise missile launch capability. (The Ukrainian share of the fleet, which was divided after the collapse of Soviet Union, comprises only five surface combatants and eleven aging submarines.) In summary, the Russians are judged to have a formidable long-range precision strike capability (LRPS), and all unhardened fixed point targets in Ukraine, such as ports and air bases, are considered to be held at risk.

Russian capabilities for tracking and destroying mobile targets are unknown. What is known is that the Russian military has been experimenting with unmanned aerial vehicles (UAVs) and, recently, with significant numbers of unmanned weaponized UAVs (UWAVs). Although Russian combat aircraft have minimal stealth characteristics, both their UAV and UWAVs incorporate low-observable technology.

Russian missile defenses are inferior to those of the United States. The Russians have a theater missile defense that is judged to be "adequate" against a Third World rogue state

threat of a few dozen ballistic missiles and perhaps a few score cruise missiles. With respect to space, U.S. and allied (i.e., French and Japanese) intelligence sources conclude that the Russians have tested a direct-ascent ASAT, and deployed four maneuverable "space mines" in low-earth orbit (LOE), although Moscow vigorously denies this. Finally, they have refurbished much of their once-impressive space launch infrastructure, giving them a formidable rapid-relaunch capability. They have combined this with a significant stockpile of small, LOE, short-duration reconnaissance, surveillance, and communications satellites, some of which they produced indigenously, with the remainder purchased from France, China, and Japan.

Perhaps most intriguing, U.S. intelligence reveals that the Russian military has a number of information warfare units. One unit, under the direct command of the defense ministry, is apparently tasked to produce and disseminate information and disinformation viruses, and to develop antidotes, both for Russian-developed and hostile viruses. All Russian field armies and air armies have information warfare units attached, both to support "electronic strike" operations and to defend against such strikes. Finally, it is known that Russia has a cadre of agents (the "Hacker Brigade" in Pentagon-speak) operating abroad who are capable of infiltrating national information systems and doing potentially enormous damage to communications and financial networks, among other things. (The Pentagon asserts that U.S. defense information assets are well protected against such prospective intrusions.)

Kiev demands support from Germany/EU and the United States, pointedly reminding both countries that Ukraine voluntarily relinquished its nuclear arsenal 20 years earlier with the understanding that its security would not be compromised as a result. The Germans temporize, waiting to see how Washington will respond. Somewhat surprisingly, both France and Poland offer to support a vigorous U.S. response in support of Ukraine.

The president of the United States calls an emergency NSC meeting on July 8th. The president's preference is to support Ukraine in the crisis, in the hope that it can somehow be diffused without war, and without Kiev falling under the lengthening shadow of a resurgent Russia, which would weaken U.S. interests along an arc running from the newest members of NATO in eastern Europe, through Turkey, and even into an increasingly cooperative Iran. Concerns also are voiced that Germany, which is banking on its partnership with the United States, might itself adopt a more "evenhanded" policy between Russia and the United States if it becomes clear that Moscow's influence in European affairs is growing, while Washington's is declining.

The president poses the following questions to his military leadership: Can we offer a credible deterrent to a Russian attack on the Ukraine quickly — say, within three weeks? Can we do it without placing U.S. forces at high risk? Can we do it while protecting our information systems at home, and those of our friends and allies abroad (i.e., the Ukrainians and Germans)? The president also asks his national security advisor and the intelligence community to produce an assessment of the risks of crisis escalation, especially with respect to any possible use of Russian weapons of mass destruction. An address to the nation is scheduled for July 15th. In the interim, the United States undertakes a diplomatic "blitzkrieg" in the United Nations and among the great powers with the purpose of finding a way to diffuse the crisis before things become any worse.

As planning proceeds feverishly in the Pentagon, on July 13th, U.S. news correspondents in Kiev report that the Ukrainian stock market's information network has suffered a catastrophic failure. Later that day U.S. intelligence sources report that, prior to the failure, sums amounting to several billions of dollars in U.S. currency are surreptitiously electronically transferred from the Ukraine's central bank to bank accounts in Switzerland. The CIA attempts to identify the owner of those Swiss-based accounts.

On the evening of the 13th, the major news organizations report large-scale power blackouts in Maryland and in Munich, Germany. The problem, in both instances, is attributed to "computer malfunction." On the morning of July 14th, the U.S. embassy in Riyadh, Saudi Arabia reports that a number of oil flow control valves are malfunctioning, causing a shut down of production in some fields, and a near explosion at one refinery. It is reported that, for several minutes, Ukraine's major television network and its two largest radio stations have gone off the air.

The president requests an assessment by the military and the intelligence community as to whether the United States is already under attack. Based on its findings, he also asks the Pentagon to determine the implications for U.S. troop deployments and operations.

Shortly thereafter, a personal message is received from the Russian president over the "hot line." The message acknowledges Moscow's responsibility for the "demonstration" electronic strikes on Ukraine, Germany, and the United States. It goes on to say that the United States and Germany should pressure Ukraine to accede to Russia's demands for Crimean autonomy which, after all, are "quite modest." So as not to panic the public or upset Western financial markets, Moscow will not publicize these attacks.

If the United States refuses to accept the Russian offer, Moscow intends to declare an "anti-access zone" in and around Ukraine. Russia's military will enforce the zone through its dispersed LRPS units, and with its electronic strike forces.

## V. Internal Conflict: Indonesia Erupts

On November 8, 2016 the United Nations Security Council meets in emergency session to address the situation in Indonesia, which appears on the verge of chaos. Although the crisis erupted with sudden fury, experts declare that it has been building for nearly two decades, since that country's military strongman, President Suharto, died in 2002 after over 30 years as Indonesia's head of state.

Suharto had arranged for power to remain in the hands of his family, a number of whom had been placed in high government posts. This attempt at perpetuating a Suharto dynasty was short-lived, however, for several reasons. Among them:

- The successor generation of Suhartos lacked the military connections and political savvy of the elder Suharto. Moreover, their abuse of privilege through blatantly corrupt business dealings (a practice which had begun during Suharto's rule) eroded foreign investor confidence and increased resentment among Indonesians. Finally, no single strong successor to Suharto emerged among the younger generation, which led to considerable infighting among the group.
- Indonesia's strong economic growth rates of the 1980s and 1990s have slowed appreciably, due to the high level of government corruption, mismanagement of Indonesia's foreign debt, the continued granting of business preferences based on family and political association rather than economic consideration, and the resulting decline in foreign investment.
- The decline in economic growth also corresponded with a widening of the gap between the "haves" and "have nots" in Indonesian society, which was exacerbated by the Indonesia's high population growth rate. By 2016 Indonesia claimed over 230 million citizens. But for most, poor diet, overcrowded housing, lack of sanitation, and impure water contributed to the serious health problems facing the nation.
- The information and communications revolutions, combined with a literacy rate in excess of 75 percent, permitted the Indonesian people to see, in a way earlier generations could not, the corruption and inequities of their society, thereby fueling popular resentment and frustration.

The first economic crisis of the new regime occurred in the spring of 2008. In deference to its size, strategic location, and status as a major oil exporter, Indonesia received emergency financial assistance from the advanced industrial states, and was permitted to restructure its debt servicing. In return, Jakarta was to crack down on corruption and take concrete steps toward making Indonesia a truly democratic state. This failed to come about, and the situation has worsened.

In the summer of 2013, anti-government riots in Jayapur, the provincial capital of Irian Jaya, are quickly succeeded by similar anti-government demonstrations in several cities on

Sumatra, Java, and Borneo, including Jakarta itself. Opposition is broad-based, drawing support from disaffected students, Islamic fundamentalists (Indonesia is over 80 percent Muslim), and separatist groups in East Timor and on Irian Jaya (on the island of New Guinea). Police suppress the demonstrators, and arrests are made among the political opposition, a number of whom are executed after trials that are roundly condemned by the international community.

But the situation only worsens, as those arrested are seen as martyrs to the cause of those opposing the regime. Acts of terror against the government, which had been growing for a decade, increase. nearly Separatist insurgent movements initiated guerrilla operations in Irian Jaya and East Timor, and foreign investors accelerated their exodus from the country. fundamentalist Islamic guerrillas operating in Java, Borneo, and Sumatra strike at police, radio, and television stations, and even military barracks.

The current crisis begins in December of 2015, when the Indonesian military, frustrated by its increasing inability to cope with the growing insurrection, initiates a bloody coup against the regime. The coup is marked by the execution of members of the political elite and the political opposition and their followers. By March of 2016, tens of thousands have perished. Free of even the pretense of government restrictions on its operations, the military leadership seeks to restore order and preserve its position as the country's new privileged class by crushing the various insurrectionist groups through a massive use of force. The carnage approaches that following Suharto's consolidation of power 50 years before, after a coup against President Sukarno. Human rights organizations estimate the number of people killed exceed half a million.

Despite the bloodbath, the insurrection grows in intensity, fueled by anger against the military and by fissures within the armed forces itself. The brutal military campaign against the insurrectionists leads to widespread desertions in a number of Indonesian units. Several dozen Indonesian Air Force pilots fly their aircraft to Malaysia, Singapore, the Philippines, Papua New Guinea, or Australia. Three ships of the Indonesian Navy sail (with many of the crew's families) to Singapore. The army sees deserters abandoning the ranks. In many cases, these men defect to the guerrillas.

The world community condemns the events in Indonesia, and the United Nations votes in February 2016 to impose an arms embargo on the country. But there is little talk of international intervention in the internal conflict until July, when two events capture the world's attention.

The first occurs on the night of July 10-11, when the Japanese oil supertanker, *Nara*, on its way from the Persian Gulf to Nagoya, Japan, explodes after transiting the Strait of Malacca. The main Muslim separatist insurgent group on the island of Sumatra, *Sarekat Islam* (or Islamic Union, named after the anti-Dutch nationalist movement formed some 100 years before), claims credit, declaring it sank the *Nara* with an antiship missile. The group declares that it has "several dozens" of these missiles. The *Sarekat Islam* leadership also announces that it has deployed hundreds of antiship mines in the Malacca Strait and in the narrow waterway between the islands of Sumatra and Java, and warns that both straits will remain closed until the Jakarta regime is deposed. The group's announcement, released via the internet and fax broadcast, concludes by calling upon Islamic states and the "great powers" to take "immediate action" to depose the Indonesian government.

The second event occurs shortly thereafter, on July 1. Indonesia's Chinese minority, which numbers only several million, enjoys influence far beyond its numbers, owing to its disproportionate wealth. As the Indonesian people grew increasingly hostile toward their government, the regime tried to deflect this hostility by, among other things, casting the Chinese community as a "scapegoat" for the country's woes. Although this tactic was only modest successful, the Suharto ruling clan persisted with these false attacks right up until the coup of December 2015. Now it is the military's turn. Finding its position increasingly precarious, the military leadership's actions grow in desperation. Acts of violent repression increase and, for the first time, include the Chinese community, despite earlier warnings by China that it would broach no such action on the part of the Indonesian government.

Although the number of Indonesians of Chinese descent killed is comparatively small (in the hundreds) when compared to what is occurring nationwide, the Chinese government in Beijing reacts promptly and aggressively. A Chinese naval task force operating in the Timor Sea, and numbering eight ships, including two guided-missile cruisers, launches a cruise missile attack against the main Indonesian air base on the island of Java. Simultaneously, 18 Chinese long-range aircraft operating off of Hainan Island execute an attack with precision-guided munitions against an Indonesian army base on the island of Borneo.

The United States quickly requests an emergency session of the United Nations Security Council to add the Chinese punitive strike incident to the discussion over actions taken by *Sarekat Islam* to close the straits around Sumatra. Pressure is mounting for the deployment of an international force to stabilize the situation in Indonesia. Of the three great powers in the region, only the United States is seen as the logical candidate to take the lead. Owing to recent events, and to China's growing power in the region, Indonesia's neighbors are not anxious to see a Chinese-led intervention. Japan, which has discarded many of the restrictions that once curbed its ability to deploy military forces abroad, nevertheless remains incapable of projecting significant military power far beyond its shores. Moreover, Japan is still viewed with distrust in the region, although it has been over 70 years since its occupation of Southeast Asia. This leaves the United States, whose power-projection capabilities remain unmatched by any power, although Russia, China, and the European Union have made progress in recent years in closing the gap. Washington agrees to *consider* leading an International Stability Force (ISTAFOR), but only if it is understood that all forces will operate under U.S. command. After some initial

reluctance on the part of China, this condition is accepted. A security council resolution is passed authorizing such a force, with the ultimate objective being to reestablish order in Indonesia, with elections to follow based on the principal of self-determination.

The pressure for some form of action is accentuated on July 20th when a low-observable, ground-launched, short-range cruise missile, apparently fired from Borneo, strikes an Indonesian off-shore oil platform, setting off an oil fire. Anti-government guerrillas claim responsibility, and threaten more missile strikes until the "Jakarta Junta" is toppled. This is followed by mass demonstrations in the three major Indonesian cities on Borneo — Pontianak, Balikpapan, and Banjarmasin, which leads to open conflict between government and insurgent forces.

The Indonesian military is expected to resist the ISTAFOR deployment, given that its success will lead to elections that will depose the military regime. Moreover, it is unclear how the various opposition groups will view the U.S.-led deployment, given Washington's long history of support for the Suharto regimes. While the Indonesian military has no weapons of mass destruction, it does possess several hundred antiship cruise missiles, and over 500 medium-range (500-1000 km) low-observable cruise missiles, which have been dispersed in clusters of four to six in roughly 100 remote sites among the country's more than 13,000 islands with many believed to be stored in mountain caves. Communication is maintained via satellite link. The Indonesian military's hundred or so combat aircraft, few hundred tanks, and dozen or so battalions of artillery pieces are of late Cold War vintage. The Indonesian Navy comprises mostly coastal patrol craft, with fewer than 20 major surface combatants. The pride of the fleet are the three modern Russian submarines, purchased only recently.

The low end of the Indonesian military threat comes from its ground forces, which are believed ready to abandon the countryside and concentrate their resistance in the cities that remain under their control, principally those on the islands of Sumatra and Java. The military leadership is believed to be in deep underground bunkers below the defense ministry complex in Jakarta, where the army's elite ground units are stationed. The generals have vowed to turn Jakarta into an "Asian Stalingrad" should ISTAFOR attempt to occupy it.

As for the anti-government insurgents, it is not clear that they will welcome ISTAFOR's arrival. Thus American forces may find themselves in the middle of a full-scale civil war on Borneo, facing government troops in the cities of Sumatra, *Sareket Islam* guerrillas in the countryside, and ascendant separatist forces on Timor and Irian Jaya bent on revenge against those supporting continued affiliation with Jakarta. These groups have already demonstrated access to antiship mines, low-observable cruise missiles, and short-range antiship missiles. They also have demonstrated the ability to use the commercial satellite network for command, control, communications, and intelligence purposes.

The British, French, Russians, Poles, Swedes, and Norwegians offer to place major troop elements under U.S. command. Over a dozen other nations promise to provide what amounts to token support.

On July 21st the U.S. president holds a meeting of the national security council. The Joint Chiefs of Staff have been asked to present their estimate of the situation and options for the

use of American military forces to stabilize the situation. The White House has told the Pentagon that their objective is to stabilize the situation on the major islands (Sumatra, Jakarta, Borneo, Timor, and Jayapur, Irian Jaya), and on "others as may be deemed necessary by the intheater commander," separate the belligerents, secure all shipping lanes in and around Indonesia (and the safe transit of all ships therein), and insure the continued safe operation of all oil facilities, including those operating off-shore.

#### VI. CONCLUSION: EXPLOITING SCENARIO-BASED PLANNING

As the preceding scenarios demonstrate, scenario-based planning techniques can help defense planners develop a richer vision of how the character of conflict is being transformed as a consequence of the geopolitical and military-technical revolutions now under way. For example, the two scenarios suggest that the United States military may want to accord increased focus to a number of activities, including, but not limited to:

- Extended-range precision strike operations, which may become the only early means of applying substantial levels of combat power when air bases in the theater are either not available, available in limited numbers, or threatened by enemy long-range missiles, especially those armed with weapons of mass destruction.
- Conducting *theater missile defense* (TMD) operations under the conditions outlined under extended-range precision strike above.
  - *Countermine* operations.
  - *Littoral ASW* operations.
  - *Electronic strike* operations.
  - The changing nature of *forcible entry, rapid reinforcement, and logistics* operations implied in these scenarios.
  - Protecting assets in *space*.
  - Sea control operations in littoral areas.
  - *Deception/information denial* operations.

Should the U.S. military place more emphasis on these missions? If so, which Service, if any, should take the lead? And, in an era of increasingly constrained resources, which missions will have to be abandoned, or (perhaps more likely) benefit from a lower level of "redundancy" (to use the critics' phrase), or "complementarity" (the euphemism of choice among defenders of the status quo)? And what role can or should America's allies play in developing the military capabilities that will dissuade such challenges from occurring, and dealing with them effectively if they do occur?

Scenarios alone will not provide the answers to how the Defense Department needs to restructure, nor do the two scenarios provided here for illustrative purposes capture the full range of contingencies for which the U.S. military must prepare. (For example, this discussion does not address the range of peacekeeping operations, which in many respects are fundamentally different from "traditional" or conventional military operations.)

Finally, this paper does not claim that scenarios "predict" the future. What is asserted here, and supported through experience, is that scenarios can provide insights on the kinds of changes in the character of conflict that may be under way, the kinds of military capabilities that will be needed to respond effectively, as well as the military capabilities that are becoming increasingly less relevant.