



TESTIMONY

CHILDREN AND FAMILIES
EDUCATION AND THE ARTS
ENERGY AND ENVIRONMENT
HEALTH AND HEALTH CARE
INFRASTRUCTURE AND
TRANSPORTATION
INTERNATIONAL AFFAIRS
LAW AND BUSINESS
NATIONAL SECURITY
POPULATION AND AGING
PUBLIC SAFETY
SCIENCE AND TECHNOLOGY
TERRORISM AND
HOMELAND SECURITY

The RAND Corporation is a nonprofit institution that helps improve policy and decisionmaking through research and analysis.

This electronic document was made available from www.rand.org as a public service of the RAND Corporation.

Skip all front matter: [Jump to Page 1](#) ▼

Support RAND

[Browse Reports & Bookstore](#)

[Make a charitable contribution](#)

For More Information

Visit RAND at www.rand.org

Explore [RAND Testimony](#)

View [document details](#)

Testimonies

RAND testimonies record testimony presented by RAND associates to federal, state, or local legislative committees; government-appointed commissions and panels; and private review and oversight bodies.

Limited Electronic Distribution Rights

This document and trademark(s) contained herein are protected by law as indicated in a notice appearing later in this work. This electronic representation of RAND intellectual property is provided for non-commercial use only. Unauthorized posting of RAND electronic documents to a non-RAND website is prohibited. RAND electronic documents are protected under copyright law. Permission is required from RAND to reproduce, or reuse in another form, any of our research documents for commercial use. For information on reprint and linking permissions, please see [RAND Permissions](#).

The Role of Maritime and Air Power in DoD's Third Offset Strategy

David Ochmanek

RAND Office of External Affairs

CT-420

December 2014

Testimony presented before the House Armed Services Committee, Subcommittee on Seapower and Projection Forces on December 2, 2014

This product is part of the RAND Corporation testimony series. RAND testimonies record testimony presented by RAND associates to federal, state, or local legislative committees; government-appointed commissions and panels; and private review and oversight bodies. The RAND Corporation is a nonprofit research organization providing objective analysis and effective solutions that address the challenges facing the public and private sectors around the world. RAND's publications do not necessarily reflect the opinions of its research clients and sponsors. **RAND**® is a registered trademark.



Published 2014 by the RAND Corporation
1776 Main Street, P.O. Box 2138, Santa Monica, CA 90407-2138
1200 South Hayes Street, Arlington, VA 22202-5050
4570 Fifth Avenue, Suite 600, Pittsburgh, PA 15213-2665
RAND URL: <http://www.rand.org/>
To order RAND documents or to obtain additional information, contact
Distribution Services: Telephone: (310) 451-7002;
Email: order@rand.org

David Ochmanek¹
The RAND Corporation

The Role of Maritime and Air Power in DoD's Third Offset Strategy²

**Before the Committee on Armed Services
Subcommittee on Seapower and Projection Forces
United States House of Representatives**

December 2, 2014

The Department of Defense (DoD) has embarked on a new initiative—the Third Offset Strategy—in order to “sustain and advance America’s military dominance for the 21st century.” The initiative is necessitated in part by the fact that “DoD no longer holds exclusive access to some of the most cutting-edge technology the way [it] once did.” For this reason, DoD will intensify its efforts to “explore and develop new operational concepts, and new approaches to warfighting, war-gaming and professional military education.”³

This initiative, and the resources required to make it a reality, are urgently needed. As the Chairman of the Joint Chiefs of Staff, General Martin Dempsey observed in DoD’s report of the 2014 Quadrennial Defense Review, he expects

... the risk of interstate conflict in East Asia to rise, the vulnerability of our platforms and basing to increase, our technology edge to erode, instability to persist in the Middle East, and threats posed by violent extremist organizations to endure. Nearly any potential future conflict will occur on a much faster pace and on a more technically challenging battlefield. And, in the case of U.S. involvement in conflicts overseas, the homeland will no longer be a sanctuary either for our forces or for our citizens.⁴

Present trends, in short, are not favorable. Of particular concern for future U.S. power projection operations is the accelerating proliferation of systems and concepts aimed at impeding U.S. forces’ access to key regions in Eurasia and dramatically raising the risks and suppressing the

¹ The opinions and conclusions expressed in this testimony are the author’s alone and should not be interpreted as representing those of RAND or any of the sponsors of its research. This product is part of the RAND Corporation testimony series. RAND testimonies record testimony presented by RAND associates to federal, state, or local legislative committees; government-appointed commissions and panels; and private review and oversight bodies. The RAND Corporation is a nonprofit research organization providing objective analysis and effective solutions that address the challenges facing the public and private sectors around the world. RAND’s publications do not necessarily reflect the opinions of its research clients and sponsors.

² This testimony is available for free download at <http://www.rand.org/pubs/testimonies/CT420.html>.

³ Secretary of Defense Chuck Hagel, “A New Era for the Defense Department,” *Defense One*, November 18, 2014.

⁴ Note that this was written prior to Russia’s recent aggression against Ukraine and the takeover by the so-called Islamic State of large areas of Syria and Iraq. U.S. Department of Defense, *Quadrennial Defense Review 2014*, p. 61.

operating tempo of those forces that do deploy forward. Key elements of these anti-access/area denial (A2/AD) strategies are: accurate ballistic and cruise missiles; dense, integrated surface-to-air defenses; large numbers of modern 4th generation fighter aircraft and capable air-to-air missiles; near-real time surveillance and reconnaissance systems; hardened, redundant command and control networks; electronic warfare (jamming) systems; anti-satellite weapons; and cyber weapons. Today, China is, by far, the leading exponent of sophisticated A2/AD capabilities, while Russia has also been able to field substantial numbers of these systems. As such, China will be the “pacing threat” motivating the modernization of U.S. forces and capabilities for power projection.⁵

States, such as North Korea and Iran, that cannot afford large numbers of these sophisticated systems are fielding them selectively and in smaller numbers. North Korea has also been developing and testing nuclear weapons and delivery systems. When deployed in deeply buried facilities or on mobile launchers, even a small nuclear arsenal can be difficult to neutralize, posing serious risks of escalation. North Korea and Iran also espouse military doctrines that incorporate irregular forces and unconventional operations as means of countering U.S. conventional superiority.

The other factor threatening the future of U.S. power projection capabilities is the growth of constraints on U.S. defense spending due to the budget deficit and other demands on the federal budget. Defense appropriations in Fiscal Years 2012 and 2013 were, respectively, 6 percent and 13 percent less than that for which the Department of Defense (DoD) had been planning.⁶ These cuts have been imposed against the Pentagon’s “base budget,” meaning that they have come on top of reductions in spending for combat operations in Iraq and Afghanistan. Moreover, these cuts have been absorbed by a force that is, in some ways, less well trained and equipped than it was in 2001. Neither the Air Force nor the Marine Corps, for example, has been able to invest heavily in new combat aircraft, resulting in a force that is the oldest in history. In the case of the Air Force, the average age of the aircraft in its fleet now exceeds 26 years.⁷

⁵ For a broad assessment of these developments and their potential significance, see David Shlapak, *Question of Balance: The Shifting Cross-Strait Balance and Implications for the U.S.*, CT-343, RAND, 2010. See also, Office of the Secretary of Defense, *Military and Security Developments Involving the People’s Republic of China 2014*, U.S. Department of Defense; and Evan Braden Montgomery, “Contested Primacy in the Western Pacific: China’s Rise and the Future of U.S. Power Projection,” *International Security*, Spring 2014, pp. 115-149.”

⁶ Office of the Secretary of Defense (Comptroller)/Chief Financial Officer, *United States Department of Defense Budget Request Overviews for Fiscal Years 2011, 2012, and 2013*.

⁷ As CSBA’s Todd Harrison has observed, during the buildup associated with the wars in Iraq and Afghanistan, “Rather than getting larger and more expensive, . . . the military has become smaller, older, and more expensive.” Todd Harrison, *Chaos and Uncertainty: The FY2014 Defense Budget and Beyond*, Center for Strategic and Budgetary Assessments, October 2013. See also <http://www.defenseindustrydaily.com/aging-array-of-american-aircraft-attracting-attention-0901/>.

Assessing A2/AD Threats

How might a large-scale conflict with a capable adversary unfold in the 2020 time frame? And what sorts of capabilities will be called for if U.S. forces are to prevail in such a conflict?

Long-Range, Accurate Missiles. The most obvious source of concern for U.S. planners in such a scenario is the large number of accurate ballistic and cruise missiles that the adversary might field.⁸ Accuracy is a key factor. The Scud missiles that Iraqi forces fired at U.S. and coalition forces in the 1991 Gulf War featured circular errors probable (CEPs) on the order of 1000 meters. This meant that those missiles could be used to harass operations by forward-based forces at fixed installations, such as airbases, but that they were unlikely to do significant damage.⁹ Today, just as U.S. forces use modern, lightweight inertial measuring units, positioning data from satellites such as the Global Positioning System (GPS) constellation, and sometimes, terminal homing sensors to guide weapons to their targets, so do some adversaries.¹⁰ These technologies can allow an adversary to achieve much higher accuracies (on the order of 20-30 meters or less for some models), meaning that missiles with ranges of 1000 kilometers or more can attack not only specific installations but particular facilities on those installations with high probabilities of damage.¹¹ As a result, forward-based forces, such as combat and support aircraft, can now be vulnerable to being damaged on the ground before they get to the fight. And supplies and facilities needed to support combat operations, such as fuel, munitions, maintenance hangars, runways, crew quarters, and communications sites may be vulnerable as well. China has also reportedly developed ballistic and cruise missiles that can detect and attack large ships at sea, raising the risks to aircraft carriers, large surface combatants, and other naval components of U.S. power projection forces.¹²

U.S. and allied forces are investing in active defense systems, such as Patriot, THAAD, and sea-based SM-3 missiles, to shoot down ballistic and cruise missiles. However, the defensive systems are expensive, they take time to deploy to the theater, and, thus far, have not consistently achieved high probabilities of kill against the most capable threat systems. As a consequence, they can be overwhelmed by large salvo attacks and taken out of the fight.

⁸ For example, DoD estimates that in 2013 China possessed more than 1000 short-range ballistic missiles (SRBMs) capable of reaching Taiwan. The PLA is also deploying growing numbers of conventionally armed medium-range ballistic missiles, as well as sea-launched and air-launched land attack cruise missiles. *Military and Security Developments Involving the People's Republic of China 2014*, pp. 6- 9.

⁹ For an early and seminal assessment of the potential for conventionally armed missiles to threaten operations at forward airbases, see John Stillion and David T. Orletsky, *Airbase Vulnerability to Conventional Cruise- and Ballistic Missile Attacks: Technology, Scenarios, and U.S. Air Force Responses*, MR-1208-AF, RAND, 1999.

¹⁰ *Military and Security Developments Involving the People's Republic of China 2014*, p. 40.

¹¹ Shlapak et al, pp. 32-35.

¹² *Military and Security Developments Involving the People's Republic of China 2014*, pp. 7, 31, 36.

Integrated Air Defense Systems (IADS). Radar-guided surface-to-air missiles (SAMs) and their associated surveillance and control networks have been a feature of modern military operations since the 1960s. Since the Gulf War, U.S. forces have demonstrated the ability to suppress, avoid, and degrade these defenses through a combination of dynamic targeting, specialized radar-homing weapons, electronic jamming, stealth aircraft, and other measures. These techniques have been instrumental in allowing U.S. and coalition air forces to operate within the enemy's airspace largely unimpeded.

Beginning in the late 1990s, first Russia, then China began investing in a new generation of SAMs that feature powerful tracking and guidance radars equipped with electronic countermeasures and high-performance missiles capable of engaging fighter aircraft at ranges of 125 miles or more. The radars and missile launchers are mounted on mobile vehicles that make them difficult to locate and target.¹³ When fielded in sufficiently dense arrays and supported by survivable command and control facilities, it can be difficult, dangerous, and time consuming to suppress these modern IADS.

Fighter Aircraft. Russia and China complement their surface-based air defenses with substantial numbers of highly capable fighter aircraft, such as the Russian-made Su-27. Roughly comparable in range, payload, and aerodynamic capabilities to the formidable U.S. F-15C fighter, these aircraft can operate over areas not well covered by SAMs, threatening both combat aircraft (fighters and bombers) and support assets, such as aerial refueling and surveillance aircraft. Equipped with modern air-to-air missiles and backed by robust networks for command and control, Russian and Chinese fighters today represent a more formidable challenge to air superiority than any adversary the United States has faced since World War II.

To date, neither Russia nor China has fielded an operational 5th generation fighter, such as the U.S. F-22 or F-35. In a direct engagement, assuming aircrews with comparable skills, 5th generation fighters would be expected to achieve highly favorable exchange ratios against their 4th generation foes. But only a small portion of the U.S. fighter force to date has been equipped with 5th generation aircraft and Russia and China are both building their own advanced fighters.¹⁴ Moreover, Russian and Chinese commanders would strive to limit the flow of U.S. combat aircraft

¹³ <http://www.globalsecurity.org/military/world/russia/s-300pmu2.htm>.

¹⁴ China has flown prototypes of the J-20 advanced fighter, which has been characterized as a "4.5 generation" aircraft. Today, the United States fields 120 5th generation F-22 fighters in operational units out of a total force of approximately 2,700 Air Force, Navy, and Marine Corps front-line fighters. See Bill Sweetman, "J-20 Stealth Fighter Design Balances Speed and Agility," *Aviation Week and Space Technology*, November 3, 2014. See also Government Accounting Office, *Tactical Aircraft: DoD's Ability to Meet Requirements is Uncertain, with Key Analyses Needed to Inform Upcoming Investment Decisions*, GAO-10-789, July 2010, p. 4 (figures adjusted to reflect only combat coded aircraft).

into the theater and into the fight through heavy attacks on their forward operating bases. It is therefore possible that in a conflict involving either of these states U.S. and allied air forces would have to fight outnumbered, at least in the conflict's early phases.¹⁵

These developments will make it much more costly for the United States and its allies to gain the air superiority to which they have grown accustomed. In a future conflict air superiority could be contested for days or weeks and achieved only after incurring potentially significant losses.¹⁶

The Struggle for Information Superiority. Adversaries that have studied U.S. military campaigns since Operation Desert Storm understand the critical role that information superiority plays in modern military operations. In that conflict and others since then against conventional foes, U.S. forces have been able to develop a “common operating picture” (COP) of the battlefield, providing commanders and front-line units with current information about the location and status of both enemy and friendly units. The picture is built by fusing information from myriad sources, including airborne and space-based sensors, human intelligence, and reports from friendly units. The picture is not perfectly accurate or entirely comprehensive, of course, but U.S. commanders today have far better situational awareness of a large and complex battle space than commanders at any time in history. Importantly, they have also been able to degrade the enemy's COP.

Potential adversaries are striving to develop similar capabilities, fielding sensor systems on satellites, unmanned aerial vehicles, and other airborne sensor platforms; building command centers where the information from these sensors is fused; and using multiple communication systems to connect these nodes and units in the field. They are also working to degrade the quality, timeliness, and reliability of the COP available to U.S. forces. China, for instance, has fielded large numbers of electronic jamming systems to degrade U.S. theater communications.¹⁷ China's forces also have capabilities to interfere with the sensors on surveillance satellites and to destroy the satellites themselves.¹⁸ And numerous adversaries are using cyber operations to attempt to penetrate U.S. military information networks in order to both extract information and to disrupt operations. As a result, U.S. forces cannot be confident that, in a conflict with the most capable adversaries, they would have an accurate and timely view of the battlefield or that they could communicate effectively at all times in the theater.

¹⁵ Shlapak et al, p. 67.

¹⁶ Shlapak et al, p. 118.

¹⁷ J. Randy Forbes, “Caucus Brief: Chinese Military Capable of Jamming U.S. Communications System,” The Congressional China Caucus, September 20, 2013, <http://forbes.house.gov/news/documentsingle.aspx?DocumentID=350448>.

¹⁸ Wendell Minnick, “China Developing Capability to Kill Satellites, Experts Say,” *Defense News*, August 4, 2014.

Undersea Warfare. The PLA Navy is building modern submarines, including nuclear-powered vessels, and equipping them with capable weapon systems, including long-range anti-ship and land attack cruise missiles. And while DoD judges that the PLA Navy's deep-water anti-submarine warfare capability "seems to lag behind its air and surface warfare capabilities," it notes that China "is working to overcome shortcomings in this and other areas."¹⁹

In short, the loss of the near-monopoly that U.S. forces have enjoyed over a wide range of key capabilities can have potentially profound effects on their ability to project power and to defend U.S. interests, allies, and partners. Analyses of future conflicts against the most capable adversary forces in the 2020 time frame and beyond suggest that U.S. and allied forces will have to fight for advantages that they have heretofore taken almost for granted. *Without very substantial investments in new capabilities and concepts for power projection, U.S. and allied decision makers could lose confidence in the United States' ability and will to defeat aggression.* Should this happen, our role as security partner of choice would be called into question, and our influence and ability to help sustain a stable and economically vibrant world order would erode. DoD's Third Offset initiative or something very much like it is, therefore, needed if U.S. forces are to acquire the capabilities and develop the new operating concepts called for to meet this stressing set of challenges.

Meeting the Challenge: Developing New Military Concepts and Capabilities

If U.S., allied, and partner forces are to retain credible capabilities to deter and defeat an adversary with advanced military capabilities, new investments in platforms, weapons, infrastructure, and support systems will be called for. But meeting the challenge will require more than simply buying and fielding new and better gear. The scope of the A2/AD challenge posed by the most capable adversaries also calls for new concepts for the conduct of power projection operations. Money, time, and talent must therefore be allocated not only to the development and procurement of new equipment and infrastructure but also to concept development, gaming and analysis, field experimentation, and exploratory joint force exercises.

The following key capability areas merit priority attention:

- **Enhanced capabilities to thwart the enemy's attacking forces early in a conflict.** Adversaries intend to use their A2/AD capabilities to create a window of opportunity during which they can achieve their operational objectives. In response, the United

¹⁹ *Military and Security Developments Involving the People's Republic of China 2014*, pp. 31-32.

States and its allies must find more ways to damage and destroy the adversary's attacking forces and suppress their key supporting assets—his operational centers of gravity—early in a conflict; i.e., prior to gaining air and maritime superiority in proximity to adversary territory and forces.²⁰ This is key. Because U.S. forces have for so long been confident in their ability to dominate these domains in conflicts against less capable adversaries, they have not, for the most part, invested in capabilities for ISR and strike in contested environments. This is not a “first strike” capability; it is about defeating those forces that the adversary is using to attack a U.S. ally or partner or U.S. forces and bases.

- **Resilient basing** – Making forward-deployed forces and bases (including surface ships) more survivable (see below).
- **Rapid suppression/destruction of enemy air defenses**, including jamming of radars, disrupting command and control, destroying missiles on their launchers, and neutralizing large formations of fighter aircraft.
- **Degrading the enemy's situational awareness** and control capabilities while enhancing the resiliency of ours.
- **Cyber defense and offense** - Making the information networks used by U.S. forces less vulnerable to cyber attacks and at the same time developing improved tools for degrading the networks of adversary forces.

It is beyond the scope of this statement to identify specific programs, systems, or technology areas most appropriate for providing these capabilities. However, some broad implications are clear:

- **The United States should continue to modernize its fleets of both long-range and shorter-range military aircraft.** One reaction to the growth of adversary strike capabilities has been to seek ways to conduct more joint operations from bases

²⁰ The key term here is *operational* centers of gravity. Successful defense will require that U.S. and allied forces be able to quickly damage and destroy the forces that the adversary is using to prosecute aggression. If they can do that it will not be necessary or desirable to threaten to impose additional costs through escalatory attacks, either vertical (i.e., against political or economic centers of gravity) or horizontal (i.e., against military forces far outside of the contested area). As the United States develops new capabilities, concepts, and postures for countering A2/AD threats, it should make clear through its public statements and its military exercises that it does not intend such escalation, in order to minimize prospects for a destabilizing dynamic.

beyond the range of the most numerous threats (e.g., short- and medium-range ballistic missiles and air-launched cruise missiles). This makes sense to some degree and bombers, long-range air- and sea-launched cruise missiles, aerial refueling aircraft, and long-range, long-dwell ISR platforms will play important roles in any future U.S. CONOPs for power projection. But high-performance shorter-range systems (i.e., 5th generation fighter aircraft) will also be needed in order to defend against enemy bomber raids and contest for freedom of maneuver in contested battle space (e.g., over the Taiwan Strait). The likelihood that U.S. air forces will have to fight outnumbered for some time underscores the need for fighter aircraft and air-to-air weapons that are qualitatively superior to those of the most capable potential adversary states.

- **Larger stocks of advanced weapons and munitions are called for.** A conflict with an advanced A2/AD adversary will consume large quantities of missiles and precision guided munitions. Early on, weapons such as anti-ship and land-attack cruise missiles that make possible attacks on key targets from ranges beyond the reach of the adversary's most capable air defense systems will be in high demand. And because U.S. forces will be encountering far larger arrays of advanced fighter aircraft and SAMs than in previous conflicts, they will expend large numbers of air-to-air and air-to-surface missiles. Such weapons are costly but are essential to getting the most capability out of a force that is sortie-limited.
- **New approaches are required for basing and operating forward forces.** During the Cold War, airbase survivability was provided at forward bases primarily by hardening key facilities, such as aircraft hangars, maintenance structures, weapons storage, and crew quarters. With the advent of highly accurate ballistic and cruise missiles, broader-based approaches are essential. Efforts should include: (1) hardening selected facilities in theaters threatened by missile and air attacks, (2) ensuring that land-based forces can operate from a large number of austere facilities, (3) investing in more capabilities for rapid repair of damaged facilities, especially runways, (4) confusing enemy targeting of both land bases and surface ships through camouflage, decoys, and deception measures, and (5) providing better protection of key facilities through active defenses against ballistic and cruise missiles. The last of these approaches is particularly challenging given the high cost, modest effectiveness, and vulnerability of theater ballistic missile defense systems. Efforts are underway to develop lower-cost ways of intercepting ballistic missiles and these should receive high priority. In the near term, identifying new airfields that U.S. forces

might use in wartime, making modest improvements to the infrastructure at those airfields where feasible, developing capabilities and procedures for operations at unimproved airfields, and conducting exercises at such fields could contribute greatly to reducing the vulnerability of U.S. forces in wartime while strengthening deterrence. This calls for developing relationships with new partners and deepening existing ones. In addition, more dispersed and expeditionary basing will place new burdens on joint logistics, base security, and engineering assets.

- **U.S. assets based in space will need to be made more robust.** Much of the outcome of the fight for information superiority will turn on the extent to which one side or the other can maintain such critically important capabilities as over-the-horizon communications, surveillance, and positioning, many of which are on satellites. Many adversaries have or are developing weapons that can jam or otherwise interfere with the operations of these satellites. And Russia and China have anti-satellite missiles that can destroy satellites, at least in low-earth orbit. Countering these threats will call for enhanced space situational awareness systems, which monitor activities in space and characterize and track objects there. These efforts will need to be complemented by a host of measures to make satellite constellations less vulnerable.²¹ Policy makers should also consider the potential benefits and costs of developing airborne and terrestrial complements to selected space-based capabilities and fielding offensive space capabilities, as a means of both deterring attacks on U.S. assets and degrading adversaries' C4ISR.

Of course, countering the threats posed by potential adversary states is not solely a problem for the United States. In fact, it would be unwise and infeasible for the United States to attempt to address these challenges unilaterally. Allies and partners, particularly those directly or indirectly threatened by adversary activities or in the same region, have a strong interest in ensuring that their forces can impose a high price on an aggressor and contribute effectively to combined regional operations that may be led by the United States.

With these goals in mind, the proliferation of systems and technologies that are causing U.S. planners such concerns can be turned to our advantage. If allies and partners invest wisely, they can impose smaller-scale A2/AD challenges on the states that are wielding them against them.

²¹ One promising approach is to make greater use of commercial satellites (both U.S. and foreign-owned and operated). DoD can make direct use of imaging and communications satellites, for example. It can also put its own payloads on satellites launched primarily for other customers. Doing so complicates the adversary's targeting problem. See U.S. Department of Defense and Office of the Director of National Intelligence, *National Security Space Strategy: Unclassified Summary*, January 2011, pp. 9 – 11.

Taiwan, for example, has both the economic means and the technical and operational savvy to develop, deploy, and operate systems such as short-range UAS and anti-ship cruise missiles, shallow water mines, rocket artillery, mobile short-range air defenses, and communications jamming gear, all of which, properly employed, could contribute mightily to an effective defense against invasion.²² Similar capabilities could also help states such as the Philippines and Vietnam, which have faced coercive threats from China over control of disputed territories in the South China Sea, to better monitor and protect areas close to their shores.

GCC (Gulf Cooperation Council) countries concerned about aggression from Iran likewise could invest in hardened airbases, mine-sweeping craft, missile defenses, UAS, and other capabilities useful in countering conventional and unconventional threats. And through regular combined forces exercises and planning and more inter-operable communications networks, the United States, its allies, and partners can make the whole of their capabilities as great as the sum of their parts. But make no mistake: enhancements such as these cannot take the place of U.S. forces and the commitment to use them as the means of offsetting major imbalances in military power.

Ingredients for Success

If the Third Offset Strategy—or any serious force planning effort undertaken in this challenging environment—is to succeed, the following elements will be essential:

- Deliberations and decisions about resource allocation must be underpinned by rigorous and credible joint analysis of future operational challenges and potential solutions to them. Specifically, DoD will need to reconstitute and reinvigorate its ability to conduct iterative, carefully adjudicated tabletop exercises and model-based campaign assessments in order to identify key gaps in programmed capabilities, test nascent operational concepts for power projection, and evaluate candidate systems to enable those concepts.
- More resources will be needed for modernizing elements of the force and supporting new operational concepts. Many practical, proven ways of addressing key A2/AD threats are left unfunded or underfunded today because of budget constraints. If the limits on DoD's topline imposed by the Budget Control Act are not lifted in FY 2016 and beyond, it is very

²² See Michael Lostumbo, *A New Taiwan Strategy to Adapt to PLA Precision Strike Capabilities*, RAND and The Institute for National Security Studies, 2011, pp. 7-10.

difficult to see how even a flawlessly executed Third Offset approach could be sufficient to meet growing challenges.

- Congress must partner with the Administration to allow greater flexibility and agility in managing defense programs and resources. As Secretary Hagel has observed, DoD needs “flexibility to undertake critical cost-saving measures, from reducing excess basing to reforming military compensation to shedding outdated platforms and systems.”²³

Conclusion

Assessing trends in the military balance between the United States and China or other potential adversaries, some observers have concluded that the competition is becoming too demanding and that efforts to maintain America’s status as the security partner of choice for many of the world’s most important states are economically unaffordable, operationally infeasible, or both. Some counsel a “strategic retrenchment” and adoption of a strategy of “offshore balancing,” under which the United States would disengage from its major security commitments and rely on “regional power balances to contain rising powers.”²⁴ Others claim that the United States can deter adventurism, coercion, and aggression by China and other adversaries “on the cheap” by threatening to impose economic costs in response to aggression and/or by building up the self-defense capabilities of regional allies and partners.²⁵

The problem with these approaches, put bluntly, is that they are not likely to work. They can be valuable complementary approaches to a strategy aimed at denying Chinese forces their objectives, but by themselves such indirect approaches are not likely to deter or defeat a determined China or other powerful state. Gaming and analysis of hypothetical conflicts involving China and neighboring states in the 2020 time frame suggest that in plausible scenarios, if the goal is to defeat a large Chinese military operation, there is simply no substitute for the type of and level of military support that the United States uniquely can provide. And this support must be brought to bear quickly and be sustained throughout the campaign.

The most credible deterrent to aggression is one that presents the adversary with the prospect of failure: He perceives that his forces will be unlikely to achieve the operational objectives assigned

²³ Hagel, “A New Era for the Defense Department,” p. 3.

²⁴ Christopher Layne, “America’s Middle East Grand Strategy After Iraq: The Moment for Offshore Balancing Has Arrived,” *Review of International Studies*, January 2009, p. 10.

²⁵ For a discussion of the merits of a “war of economic attrition,” see T.X. Hammes, “Offshore Control: A Proposed Strategy for an Unlikely Conflict,” *Strategic Forum*, National Defense University, June 2012. For an assessment of the potential of allies and partners to enhance their self-defense capabilities, see David Gompert and Terrence Kelly, “Escalation Clause: How the Pentagon’s New Strategy Could Trigger War With China,” *Foreign Policy*, August 2, 2013.

to them due to a combination of the capabilities of the defending forces and will to employ them. Posturing forces to support such a robust direct defense or denial strategy can be difficult for a nation that is called upon to project power over long distances. But future U.S. forces, properly modernized, postured, and employed in concert with the forces of regional allies and partners, should be capable of posing very significant obstacles to aggression by potential adversary states. This is not to imply that doing so will necessarily be easy or inexpensive, but the costs of a credible defense posture are worth the security advantages it provides. This, as I understand it, is the prime motivation behind DoD's Third Offset initiative. It is a worthy and, I believe, achievable objective.