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JSOU Report 14-6 Challenges in the Asia-Pacific Theater for U.S. and Partner Nation SOF Haddick

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Challenges in the Asia-Pacific Theater for U.S. and Partner Nation Special Operations Forces

Robert Haddick
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On the cover. U.S. Army Chief of Staff General Raymond Odierno and General Wang Ning, Deputy Chief Staff of the People's Liberation Army, review an honor guard at China's Ministry of Defense in Beijing on February 21, 2014. Photo used by permission of Newscom.

Challenges in the Asia-Pacific Theater for U.S. and Partner Nation Special Operations Forces

Robert Haddick

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Contents

Foreword

In this monograph, Robert Haddick discusses why United States Special Operations Forces (USSOF) and its partner nation Special Operations Forces (SOF) in the Asia-Pacific region should prepare for expanded roles and responsibilities in that region. China's re-emergence as a global power and its pursuit of its security interests has exposed increasing friction between it and its neighbors and the United States. U.S. policymakers have employed engagement with Beijing and the People's Liberation Army as the preferred course to increase trust, avoid disputes, and resolve conflicts. However, the U.S. Government's "rebalance" policy to Asia and the top priority assigned to the region in the 2012 Defense Strategy Guidance and the 2014 Quadrennial Defense Review, recognize that defense planning and preparation will remain essential components of the U.S. Government's strategy for maintaining stability and bolstering deterrence in the region.

Haddick explains why U.S. and partner SOF will have a larger role in this hedging component than is commonly understood. He also specifically describes the future operating environment in the Asia-Pacific region U.S. and coalition SOF will face, the expanded set of missions they should prepare for, and what training and equipping programs they should undertake in order to prepare for these increased roles and responsibilities.

In addition, Haddick discusses how China's military planners have carefully taken advantage of China's continental position in the region, the revolution in guided missile and sensor technology, and favorable cost economies to fashion a military doctrine that by next decade will threaten the ability of U.S. expeditionary forces to achieve access and freedom of maneuver in the East and South China Seas. Recent responses by U.S. defense planners to these emerging Chinese military capabilities focus on the employment and increased coordination of naval and aerospace power, with little role mentioned for U.S. and partner SOF. Haddick explains why these are costly, uncompetitive, and ultimately ineffective responses to the deteriorating military balance in the Western Pacific.

Haddick asserts that a competitive and sustainable response to the looming security challenge in the Asia-Pacific region will include not only naval and aerospace components, but also diplomatic, information, political, and

economic tools. In addition, U.S. and coalition partners must prepare for the likelihood that the security competition in the region will eventually manifest itself in various forms of irregular and unconventional conflict. The United States and its partners must prepare to defend against irregular and unconventional adversaries. Coalition SOF should also prepare for the likelihood that policymakers will call on them for offensive unconventional warfare options as part of a larger dissuasive strategy aimed at enhancing deterrence and stability in the region.

In order to prepare for this operating environment and increased roles and responsibilities, Haddick explains, U.S. special operations planners will need to expand special operations activities along four dimensions. USSOF should increase the quality and frequency of security force assistance engagement with existing partners in the U.S. Pacific Command area of responsibility. SOF should expand their geographic scope by adding new engagement partners in the region. USSOF should expand the functional scope of their security force assistance efforts to include foreign external defense engagement to defend against higher-intensity conventional threats. Finally, U.S. and partner SOF should prepare for offensive unconventional warfare operations, adding that capability to a broader set of dissuasive tools.

U.S. and partner SOF will have critical roles to play in a truly competitive response to the growing security competition in the Asia-Pacific region. The goal of an effective competitive strategy will be to sustain an open-ended peacetime competition with China that successfully perpetuates the current rules-based status quo and that dissuades China from adopting courses of action that impair the interests of the U.S. and its partners. SOF commanders and planners should anticipate that future policymakers will look to them for options, especially when conventional alternatives are impractical. For the security competition in the Asia-Pacific region, the quiet implementation of dissuasive courses of action as part of a peacetime competitive strategy will go far in maintaining the status quo, preserving the peace, and ensuring that a hypothetical conflict with China remains as unlikely as everyone wishes it to be. Achieving this outcome will require an expanded role for U.S. and partner SOF in the region.

Kenneth H. Poole, Ed.D.
Director, Center for Special Operations Studies and Research

About the Author

Robert Haddick is a former U.S. Marine Corps officer. He served in infantry and field artillery units in the 3rd Marine Regiment and commanded a rifle company in the 23rd Marine Regiment. While on deployment he conducted security force assistance activities with host nation and partner military forces in the Western Pacific, East Asia, the Indian Ocean region, and Africa. He served on a battalion staff and participated in the Personnel Reliability Program.

In the private sector, Haddick was Director of Research at The Fremont Group, the investment affiliate of Bechtel Corporation. He led Fremont's economic and investment research team, founded and led its proprietary trading unit, led one of Fremont's overseas subsidiaries, and established a trading network that spanned the United States, Europe, Latin America, Asia, and Australia.

From January 2009 to September 2012, Haddick was the author of This Week at War, a weekly column on national security affairs for *Foreign Policy*. His column covered the counterinsurgency campaigns in Iraq, Afghanistan, and elsewhere; the Pentagon's budget and reform efforts; the evolution of U.S. military doctrine and operational concepts; and adaptation to emerging security challenges. Simultaneously, Haddick was the managing editor of *Small Wars Journal*, a leading intellectual resource on modern conflict, irregular warfare, and emerging threats.

Haddick's essays on national security issues have appeared in the *New York Times, Wall Street Journal, Washington Post, Air & Space Power Journal, The National Interest, War on the Rocks*, and other publications. He has conducted numerous interviews with media outlets such as the BBC, various NPR affiliates, CNBC, and others. Haddick has been a paid adviser to the U.S. State Department, U.S. Central Command, and the National Intelligence Council.

Haddick is the author of *Fire on the Water: China, America, and the Future of the Pacific* (Naval Institute Press, slated for release September 2014). *Fire on the Water* discusses how China's reemergence as a great power is

leading to a growing clash of interests in the Asia-Pacific region. The book explains how China's strategy, based on non-military assertiveness and its exploitation of the missile and sensor technical revolution, is taking advantage of vulnerabilities in long-standing U.S. and allied operational concepts in the region, which current U.S. policies and programs are struggling to address. *Fire on the Water* provides a detailed description of diplomatic, military, and acquisition reforms the U.S. and its partners in the region should undertake if they are to maintain stability and protect their interests.

Introduction

An intensifying competition for power and influence is developing between the United States and China. Both powers are highly dependent on deep economic and financial interconnections and both have a stake in the maintenance of stability. Both face substantial internal challenges and could ill afford a conflict with each other. However, clashing interests, driven by fundamental security requirements, economic development, history, and ideological forces, threaten to overwhelm the many factors that otherwise argue for cooperation and conciliation.[1]

Both China and the U.S. are expanding their military presence in the Western Pacific region. Each side possesses structural strengths and weaknesses in their respective positions. China benefits from its continental position, which offers its military forces a relatively secure base, interior lines of communication, and an advantageous position from which to employ a missile-based strategy. At the same time, China suffers from a lack of modern military experience, and nearby island geography inhibits its freedom to employ its naval and air power. The U.S. position is nearly the mirror opposite. U.S. and coalition forces have deep experience with combined, joint, and combined-arms operations. However, the U.S. is an expeditionary power projecting its force across a very wide ocean or from a few vulnerable bases in the region, facts which place substantial limits on what it can bring to bear against a continental opponent.

China's emerging military strategy over the East and South China Seas makes careful use of its continental position and China's advantages in production costs. Its missile-based architecture is creating an effective anti-access/area denial environment in the Western Pacific that by the next decade may make it too risky for U.S. air and naval forces to operate in the East and South China Seas during a crisis. U.S. defense planners have recognized the problem and are attempting to craft doctrine and military acquisition programs in response. However, these responses do not appear to be competitive, in the sense that they push further U.S. defense resources, focused mainly on naval and aerospace power, at China's comparative strengths, a spending competition the U.S. is not in a position to win.

China's rapid military modernization is causing the U.S. strategic position in the region to deteriorate. The U.S. and its coalition partners in the region need a new approach that leverages and directs their comparative advantages against China's weaknesses and vulnerabilities. Maintaining stability in the Asia-Pacific region will require the full range of U.S. and allied national power, not just superior naval and aerospace power. Coalition Special Operations Forces (SOF) are an allied strength, and are particularly well-suited for holding at risk several of China's strategic vulnerabilities. By establishing a more competitive strategy in the region, one that will include an adroit role for coalition SOF, the U.S. and its partners will increase the likelihood of successful regional deterrence and bolster the prospects for peaceful harmony in the region, a key U.S. national security objective.[2]

For many observers, it is not obvious why conflict between the U.S. and China is plausible. Chapter 1 will explain how China's rise is leading to a clash of interests in the region, and why a future conflict is something for which U.S. defense planners should prepare. Recent responses by U.S. defense planners to emerging Chinese military capabilities focus on the employment and increased coordination of naval and aerospace power, with little if any role mentioned for U.S. and coalition SOF. Chapter 2 discusses the strategic and military strengths and weaknesses of China and the U.S.-led coalition. Chapter 3 describes China's emerging military capabilities and the strategy it employs to achieve its interests in East Asia. Chapter 4 critiques current U.S. responses to China's emerging strategy and capabilities and discusses why responses focused mainly on naval and aerospace power will be insufficient to maintain stability in the region. Chapter 5 describes a more competitive response to China's strategy, including the critical role in such an approach for U.S. and coalition SOF. The chapter also discusses what actions U.S. and coalition SOF should take in order to prepare for the challenges they will face in the Asia-Pacific region over the next decade.

U.S. policymakers and planners will inevitably conclude that current naval- and aerospace-centered responses to China's military modernization will not be adequate. These policymakers and planners will then turn to United States Special Operations Forces (USSOF) planners and others to increase these lines of effort to protect East Asia's stability. Given the long lead times associated with most SOF lines of effort, USSOF planners should prepare now for the future tasks they will be called on to perform.

1. The Sources of Potential Conflict in the Asia-Pacific Theater

The U.S. and China have encountered clashing interests at points encompassing the entire globe.[3] However, it is in the Western Pacific, especially the East and South China Seas, where conflict between the U.S. and China has the highest probability of leading to military action, if only because it is there that their military forces are in closest proximity.[4] The U.S. has maintained a dominant naval and air power presence in the East and South China Sea region since 1945, a presence which has supported economic development and political liberalization in the area, with commercial, political, and diplomatic benefits accruing to the U.S. and all other countries in the region.

However, China's emergence over the past three decades as a strong economic and political power has inevitably resulted in a clash of interests in the East and South China Sea region. During its rapid economic expansion since the early 1980s, China's economy has become highly dependent on seaborne trade for its imports and exports. China's increasing confidence as a global power has reignited internal interest in resolving several long-standing and unresolved territorial claims. China's economic and political security interests, and what many Chinese leaders see as an imperative for Chinese reunification, have set up a clash with what most U.S. policymakers will view as the perennial status quo, established by U.S. power for the benefit of all in the region.

U.S. goals and interests in East and Southeast Asia

The goals and interests described in the capstone 2010 National Security Strategy of the U.S., signed by President Barack Obama, apply as much to the East and Southeast Asian region as they do anywhere else in the world.[5] In an article published in *Foreign Policy* in November 2011, then-U.S. Secretary of State Hillary Clinton applied the principles in the National Security Strategy (NSS 2010) specifically to the Asia-Pacific theater.[6]

The NSS 2010 declared the enduring national interests of the U.S. These included an open international economic system, respect for universal values

around the world, and a rules-based international order that promotes peace, security, and opportunity through stronger cooperation.[7] The document restated the U.S. commitments to its treaty allies and other security relationships. The strategy promoted engagement with allies and partners as an essential method of achieving the goals and interests stated in the strategy. As the incumbent dominant power in the region since 1945, the U.S. has had a leading role in shaping the international order in East and Southeast Asia. This incumbent position, combined with the stated enduring interests in the NSS 2010, imply a preference by the U.S. for maintaining the status quo, which has served to sustain the U.S. position in the region for nearly seven decades.

During this time, the U.S. has seen other enduring interests listed in the NSS 2010 gain in range and acceptance. The strategy discusses the goal of promoting universal values such as individual freedom, democratic choice, protection of minorities, and the rule of law.[8] East and Southeast Asia have been remarkable successes in this regard, with all but a few countries in the region having transitioned away from authoritarianism and arbitrary legal systems since World War II. The broad acceptance across the region of another enduring interest in the strategy, an open international economic system, has led the region to arguably become the most economically successful region in the world over the past seven decades, with gains in per capita income larger during this time than in any other region in the world.[9] The region has been the best example to the rest of the world of how citizens' lives can improve through the application of the interests and principles in the NSS 2010. The U.S. will logically have an interest in preserving what U.S. policymakers view as a triumph of American values, ethics, beliefs, and policy.

The U.S. has long defended freedom of navigation in the global commons (navigable sea and air space beyond territorial boundaries), a principle reinforced by Secretary Clinton in her *Foreign Policy* essay.[10] For example, $5.3 trillion in trade passes through the South China Sea each year, $1.2 trillion of which passes through U.S. ports. The global trading system relies on the security the U.S. military provides in the South China Sea and elsewhere, the disruption of which could be very damaging to the global economy.[11] Freedom of navigation is a benefit of an open international economic system, one of the enduring interests listed in the NSS 2010. Trade through the global commons in the Western Pacific has been an essential feature of the region's

economic success and would not have been possible without freedom of navigation. It is thus little wonder that maintaining freedom of navigation is a basic mission of U.S. military forces and a long-standing goal of U.S. policymakers.[12]

The U.S. has formal security treaty commitments with five countries in the Asia-Pacific region: Japan, South Korea, the Philippines, Thailand and Australia.[13] In theory, these treaties obligate the U.S. to provide military assistance to these countries in the case of military aggression. With the formal recognition of the People's Republic of China, the mutual defense treaty the U.S. maintained with Taiwan terminated on 31 December 1979. However, the Taiwan Relations Act of 1979 mandates the U.S. "to provide Taiwan with arms of a defensive character" and "to maintain the capacity of the U.S. to resist any resort to force or other forms of coercion" jeopardizing the security, or social or economic system of Taiwan's people.[14] In another example of the U.S. defense role in the region, in 2005, the U.S. entered into a strategic framework agreement with Singapore that deepened defense cooperation between the two countries.[15]

The NSS 2010 lists as the first of four enduring national interests "The security of the U.S., its citizens, and U.S. allies and partners."[16] For decades, U.S. presidents and statesmen have placed great weight in their public statements on the reliability of U.S. security commitments to allies and partners. Indeed, such commitments have been expressed even when ownership of the territory the U.S. has obligated itself to defend is ambiguous. The dispute between Japan and China over the Senkaku/Diaoyu Islands in the East China Sea provided one such occasion. In 2010, in response to a question about the U.S. position in the dispute, then-Secretary of State Clinton stated, "with respect to the Senkaku Islands, the U.S. has never taken a position on sovereignty, but we have made it very clear that the islands are part of our mutual treaty obligations, and the obligation to defend Japan."[17]

The U.S. thus has long-standing and expanding defense and diplomatic commitments in the region, which are integral to stated U.S. strategy. The region has been a leading adopter of the goals of the NSS 2010, leading to the region's success and to a boost in U.S. prestige. The U.S. has five formal treaty allies in the region and numerous additional informal security partnerships, which count on U.S. credibility.[18] And U.S. economic ties to the region are critical to the U.S. economy and standard of living.

Since 1945, the U.S. has maintained a substantial military presence in the region in an effort to promote the goals and interests just described and to react to contingencies on the Korean peninsula. The U.S. Seventh Fleet includes 17 major combat ships permanently stationed in Japan and Guam: the aircraft carrier USS *George Washington* (which, when underway, hosts Carrier Air Wing Five); two guided missile cruisers; seven guided missile destroyers; three attack submarines; and four amphibious assault ships.[19] Other naval forces include mine countermeasures, patrol and reconnaissance, command and control, logistics support, and a naval special warfare unit on Guam. Forward-deployed Marine Corps forces include the 3rd Marine Expeditionary Force, which includes the 3rd Marine Division on Okinawa, the 1st Marine Air Wing in Japan, and logistics support units.[20] The U.S. Fifth Air Force operates three combat wings from three air bases in Japan, including the 18th Wing and the 353rd Air Force Special Operations Group from Kadena Air Base on Okinawa.[21] In addition to its combat forces in Korea, the U.S. Army maintains a variety of support units in Japan, to include an air defense artillery regiment on Okinawa.[22] The 1st Special Forces Group, home-based at Joint Base Lewis-McChord in Washington State, maintains its 1st Battalion forward-deployed in Japan.[23] Finally, beginning in 2013, the U.S. Navy will deploy, on a rotational basis, up to four Littoral Combat Ships to Singapore.[24]

In sum, the U.S. has a deep commitment of interests and enjoys prestige in the East and Southeast Asian region. Over the past seven decades, the countries in the region have, with a few exceptions, increasingly adopted the values and principles described in the NSS 2010, a course that has improved the well-being of the countries that have done so. This success has advanced U.S. influence and has served as a positive example for other regions. U.S. policymakers have an interest in preserving this success. The U.S. has numerous formal and informal security commitments across the region, the preservation of which is highly important to U.S. prestige. U.S. economic interests are highly connected to the region; the U.S. exports nearly $1.3 trillion in goods and services annually to the region,[25] equaling about 8.3 percent of U.S. economic output.[26] According to the Office of the U.S. Trade Representative, in 2012, 61 percent of total U.S. goods exports, 75 percent of U.S. agricultural exports, and 38 percent of U.S. private sector services exports went to customers in the Asia-Pacific region.[27] Policymakers have consistently backed a policy of forward military deployments and engagement as

the preferred means of defending U.S. interests in the region and boosting the credibility of its security commitments.

China's goals and interests in East and Southeast Asia

Assessing China's specific goals and interests in East and Southeast Asia necessarily requires some conjecture. China is a one-party, authoritarian state. Although its policy discourse is much more open than it was just two decades ago, the goals and intentions of the elite in the ruling Chinese Communist Party (CCP) remain shrouded in mystery. Government ministries issue policy white papers but such papers are mostly opaque and incomplete. It is also likely the case that top Chinese leaders may be unable to specifically define their regional goals because they cannot agree among themselves what they should be.[28]

That said, we can reasonably surmise Chinese intentions and aspirations based on a study of actions, history, and logical inference. The paramount goal of China's leaders is to maintain the preeminent power of the CCP. The party's desire to retain power shapes every aspect of national policy. This perspective is not simply the result of avarice among the members of the CCP elite. These leaders view the party as the indispensable power in China. It was the CCP that ejected foreign invaders from Chinese soil, unified the mainland, delivered political stability to a nation that has had so little during its history, and has lately engineered a three-decade economic boom. Such a record of success would logically lead CCP leaders to presume that their continued leadership is both necessary and welcome to meet present and future challenges.[29]

With respect to China's external policy, China's leaders seek to promote conditions that improve China's military security, protect the factors that support China's economic growth, and strengthen China's negotiating position with its neighbors. Perhaps most important, China's leaders seek a way of reducing the role of the U.S. in the region, both to widen China's freedom of action but also to reduce the cultural influence of the U.S. in the region, which they see as a threat to the authority of the CCP.[30]

An important goal for China's leaders is the reunification of China under Beijing's leadership. China annexed Tibet in 1950-51, shortly after the establishment of the People's Republic of China in 1949.[31] Hong Kong and Macao reverted to Chinese sovereignty in 1997 after the treaties that ceded those

territories to Great Britain and Portugal, respectively, expired. Of interest to this monograph, three significant claims remain unresolved: Taiwan, the Senkaku/Diaoyu Islands (currently under Japanese administration), and China's broad claims to numerous islets and shoals in the South China Sea. Peacefully regaining sovereignty over these claims, in a manner that does not antagonize regional or global antipathy against Beijing, would greatly improve China's strategic position and bolster the prestige of the CCP.

China's leaders likely seek to gradually reestablish China's historical position as the dominant power in the region, with a leading position over its smaller neighbors. China's cultural history, extending back five millennia, describes the Chinese "Middle Kingdom" as the central and paramount power, with small neighbors as either tributaries or distant powers rating an inferior status.[32] China's dealings with the Association of Southeast Asian Nations (ASEAN) provide an example of this Chinese aspiration in a modern context. In July 2010, the U.S. Government's (USG) diplomatic intervention in support of ASEAN over negotiations on China's territorial claims in the South China Sea increased friction between China and the U.S.[33] China's preference then and now is to negotiate these territorial disputes on a bilateral basis with its small neighbors rather than with the ASEAN block, the method bolstered by then-Secretary of State Hillary Clinton in her remarks after the ASEAN Regional Forum conference in Hanoi in July 2010.[34] Two years later at an ASEAN Regional Forum conference in Phnom Penh, China had more success breaking up ASEAN's negotiating cohesion regarding the disputed claims in the South China Sea. Cambodia, China's ally and the chair of ASEAN that year, blocked ASEAN from producing a consensus position on the South China Sea disputes, the first time in ASEAN's history that it failed to produce such a statement from a conference.[35] Should China subsequently succeed at degrading ASEAN's negotiating role over the settlement of territorial disputes in the South China Sea, China will be able to use its greater leverage in bilateral settings to increase its payoffs in such negotiations.

Like any other great power, China is interested in increasing its influence over the areas adjacent to its periphery. Rising influence over neighbors can often translate into the ability to shape the policies of neighbors in a more favorable direction. The paramount reason throughout history for a great power to increase influence beyond its borders is to create deeper security space, a buffer zone protecting the homeland. Regarding the East and South

China Seas, China retains harsh memories of the nineteenth century, when an expansionist Europe employed its superior sea power to establish colonies such as Hong Kong, from which they projected influence deep into China's interior. The result, in Chinese memory, was social and cultural chaos, economic decline, and a century of humiliation at the hands of foreigners.[36] The end of the Cold War and the collapse of the Soviet military allowed China to redirect its security focus to naval and air power, with a view to establishing a greater military presence in the maritime regions to the east and southeast. Overlapping the rise in these components of China's military power is the renewed attention to Taiwan's status and the territorial claims in the Senkaku/Diaoyu Islands and the South China Sea.

By 2016, the Chinese Navy (formally, the People's Liberation Army-Navy or PLAN) plans to build and operate six *Jin*-class (Type 094) nuclear-powered ballistic missile submarines (two are already in service).[37] Each *Jin*-class boat will be armed with twelve JL-2 nuclear-armed ballistic missiles, having an estimated range of more than 7,400 kilometers.[38] The fielding of the *Jin* force will give China a secure second-strike nuclear retaliatory capability. This sea-based nuclear deterrent was a critical strategic acquisition priority of the U.S., Soviet Union, Great Britain, and France during the Cold War and is still in service with all of these countries today. Strategic planners have long considered a submarine-based deterrent the most survivable and thus the most stabilizing. China is undoubtedly fielding the *Jin*-class for the same reasons. The success of this effort, however, will depend on whether China will be able to establish secure patrol areas for these submarines, where they will be relatively protected from adversary anti-submarine warfare efforts. Finding patrol sanctuaries for the *Jins* will be another motivation for China to extend its maritime influence to its east and south.

Finally, the CCP has a strong interest in fending off the propagation of Western concepts of democracy, open government, human rights, and the rule of law by an increasing number of countries in the Asia-Pacific region. This trend is directly antithetical to the CCP's survival and thus constitutes a cardinal reason to resist U.S. influence and presence in the region.[39]

Territorial disputes in the East and South China Seas

The dispute between Japan and China over the sovereignty of the Senkaku/Diaoyu Islands in the East China Sea has recently intensified. The five

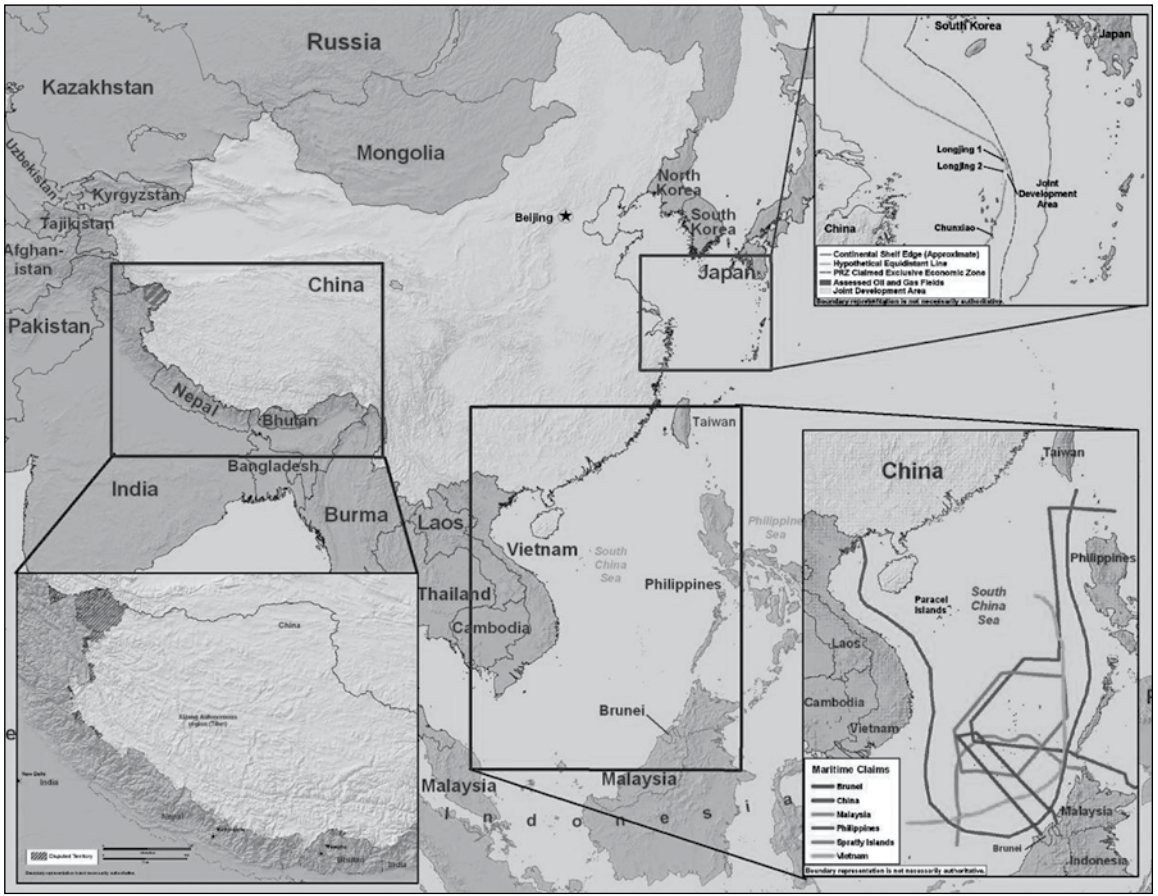

Figure 1. Territorial disputes in the East and South China Seas. Source: Annual Report to Congress: Military and Security Developments Involving the People's Republic of China 2011.

Senkaku islands (also claimed by Taiwan) are currently uninhabited and were recently purchased by the Japanese Government from a private owner. A flare-up occurred in September 2010 when a Chinese fishing boat rammed a Japanese coast guard vessel, resulting in the arrest of the Chinese captain and a two-week diplomatic crisis. In September 2012, protests in both China and Japan broke out over the disputed islands, causing disruption in trade between the two countries.[40]

Friction between China and Japan accelerated during 2013. During the first half of the year, three Chinese state or party-owned newspapers published articles that called for China's government to claim ownership of Okinawa, the home of 1.3 million Japanese citizens and a base for 27,000 U.S. troops.[41] On 23 November 2013, China declared an air defense identification zone (ADIZ) over a portion of the East China Sea.[42] Japan, South Korea, and Taiwan declared their own ADIZs many years ago. China's declaration occurred suddenly and without coordination with its neighbors. China's zone overlaps those of South Korea and Japan and thus increases the risk of accident and miscalculation. Most damaging, China's ADIZ covers the disputed Senkaku Islands, an act that heightens the sovereignty dispute with Japan and increases the risk of confrontation between Chinese and Japanese military air patrols, which will now become more frequent as a result of the declaration. In these ways, China's declaration differed from international norms and thus increased tensions in the region.[43]

Intense nationalism and still-fresh memories of Japan's behavior in China during World War II complicate the Senkaku dispute. However, strategic factors are equally prevalent. Fishery resources around the island are rich. Undersea hydrocarbon deposits around the islands are thought to be extensive; the East China Sea is thought to contain approximately seven trillion cubic feet of natural gas and up to 100 billion barrels of crude oil.[44] Sovereignty over the Senkakus would affect the respective rights of China and Japan to exploit these hydrocarbon resources. From a naval strategy perspective, Chinese control of the islands would open up a gap in the island chain between the Japanese home islands and Taiwan that would ease PLAN access to the open Pacific. Conversely, Japan can use the islands for sensor emplacement and patrol operations. Perhaps most worrisome for Japan, should China achieve legal control of the islands, it would be able to extend its 200-mile exclusive economic zone (EEZ) right up to Japan's home waters.[45]

Thus, nationalism and strategic interests will combine to keep the Senkaku dispute energized.

China's territorial claims in the South China Sea have equally profound strategic implications. China's claim, denoted by the "nine-dash line" that outlines virtually all of the sea, dates back to maps drawn by the former Nationalist government in 1946.[46] This claim encompasses two million square kilometers, includes land features such as the Paracel Islands (also claimed by Vietnam), Scarborough Reef (claimed by the Philippines and Taiwan), and the Spratly Islands (claimed in whole or in part by Taiwan, Vietnam, the Philippines, Malaysia, and Brunei).

As with the Senkaku dispute, the conflicting claims in the South China Sea involve both nationalism and strategic interests. In addition to rich fishing resources, Chinese state-owned oil developers estimate that deposits under the South China Sea may hold enough crude oil to supply China's needs for more than 60 years and enough natural gas for more than 30 years of Chinese consumption.[47] Tapping these hydrocarbon reserves immediately adjacent to China's home waters would mitigate China's geostrategic vulnerability to the Middle East while also improving its balance of payments position.

Why the U.S.-China security competition is likely to worsen

China's rapid economic development over the past three decades has lifted tens of millions of China's citizens out of poverty. China's development has also greatly increased its stature as a global power. These achievements have come with political and strategic consequences. China's export and investment-led development strategy has made the country highly dependent on the transit of its imports and exports through the global commons.

China's economy is now highly dependent on seaborne trade along sea lines of communication largely protected by the U.S. and its allies. For example, China's reliance on crude oil imports is increasing; in 2012, China imported nearly 5.9 million barrels of oil per day, over half of its average daily oil consumption, a figure that is expected to rise to 75 percent of China's daily consumption by 2035.[48] Eighty-five percent of China's crude oil imports pass through the Strait of Malacca, constituting a virtual single point of failure for China's economy.[49] The fact that the security of this critical chokepoint is ultimately guaranteed by the U.S. and its allies must be unnerving to the

CCP leadership in Beijing. It is therefore logical that China's leaders would seek to gradually mitigate this vulnerability through a steady increase in naval and air power in the Western Pacific region.

China may perceive the need to expand its military power as a hedge against possible strategic surprises originating from the U.S. Like other observers, China's leaders were stunned by the technical and tactical efficiency displayed by U.S. military forces in Iraq in 1991, in Afghanistan in 2001, and again in Iraq in 2003.[50] Since 1945, U.S. military technology breakthroughs—nuclear weapons, intercontinental missiles and bombers, stealth technology, precision-guided munitions—have appeared to have stunning geopolitical consequences. These and other military-technical breakthroughs gave U.S. military planners and policymakers the freedom to fashion competitive military strategies that overcame adversary advantages and allowed the U.S. to achieve its geostrategic goals at reasonable costs.[51] With the U.S. thus viewed as a source of frequent strategic surprise, one should expect China's leaders to respond with hedging behavior in the form of military modernization.

China's long history, stretching back at least five millennia, includes countless episodes of invasion by foreigners, China's conquest, and long humiliating setbacks to the nation's development. With China once again ascendant, its leaders will naturally look for an opportunity to improve security beyond China's borders, including into China's maritime approaches.[52]

China's sense of nationalism is likely to expand in parallel with its economy and global status.[53] Although still an authoritarian state, there will be internal political payoffs to those leaders inside China who use this nationalism to boost their careers without simultaneously exposing China to too much strategic risk. Finding the proper balance offers political rewards but also carries the risk of miscalculation. Future political developments inside China could alter these reward-to-risk calculations. President Xi Jinping has adopted the slogan "China Dream" as the theme of his new presidency. Although the definition and implications of "China Dream" are murky, many analysts have concluded that the theme amounts to a stirring of Chinese nationalism, with possibly troublesome consequences in the future.[54]

The new challenges in the East and South China Seas threaten to upend assumptions and patterns of behavior officials in Washington and elsewhere have long taken for granted. The China challenge is also aimed at fundamental U.S. interests that extend back to 1945 and beyond. China's claims in

the South China Sea threaten the principle of freedom of navigation, a U.S. interest since at least the 18th century. Although the Chinese Government insists that its broad territorial claim in the South China Sea will have no bearing on the free transit of commerce through those waters, China also claims, contrary to the interpretation of maritime law by the vast majority of countries, that it has the legal right to exclude foreign warships from its 200-nautical mile EEZ. This would imply China's legal right to exclude U.S. and allied warships from the South China Sea, in the event China was granted its claims there. In these circumstances, free commercial navigation through the sea, currently valued at $5.3 trillion per year, would do so at the whim of the Chinese Government and the PLAN. That would be an uncomfortable conclusion for U.S. and allied policymakers.

U.S. policymakers have also long been defenders of a rules-based international system, wherein negotiations, usually sponsored by international legal bodies, are the basis for making changes to such rules. Should China succeed in unilaterally achieving its territorial demands in the East and South China Sea, it would severely damage the concept of a rules-based international system. The U.S. and its allies do not want such a precedent to be set.

The USG's support to ASEAN at the Hanoi conferences in 2010 was an attempt to bolster a rules-based international legal system and a multilateral negotiating process as the proper means of modifying these rules. It also showed the U.S. attempting to stand up for its partners in the region, when they needed such support to push back against China's assertions. In standing up for its allies and partners, the U.S. was supporting its own interests. The U.S. alliance and partnership network is perhaps its most important asset in the region and therefore a prime interest worthy of defense. U.S. allies elsewhere in the world are reassured by the example provided by the support it displays for its allies in the Asia-Pacific region.

Ongoing tension on the Korean Peninsula and differences between the U.S. and China on how to manage North Korea sustain another potential flashpoint in the region. The USG would like to see political reform inside North Korea, an end to political and humanitarian repression, and an end to North Korea's nuclear and missile programs. China by contrast tolerates North Korea's regime and its occasionally provocative behavior because the country provides a security buffer between U.S. military forces and Chinese territory. These ongoing differences, combined with North Korea's belligerency, maintain another instance of clashing interests and potential conflict.

Finally, as China's economy and military power expands, U.S. policymakers must reckon with the capabilities-versus-intentions paradigm. China's stated intentions are benign, but its publicly-announced military budget has grown at an 11.8 percent compound annual rate, excluding inflation, since 2000.[55] Should that growth rate continue, while the U.S. maintains its defense spending at three percent of nominal gross domestic product, China's defense spending will exceed U.S. military spending in 2025.[56] U.S. policymakers will have to assume that such spending would result in substantial Chinese military capabilities. They will also have to contend with China's intentions, currently inscrutable, and potentially subject to rapid change. Given China's interests, previously stated, and its potential military capabilities, U.S. policymakers and planners will have to assume a worsening security situation in the East and South China Sea region.

There are thus the makings of a classic security dilemma between the U.S. and China in the Western Pacific. While both sides have a strong interest in avoiding conflict, they both also have substantial security interests in the region and the necessity to defend those interests. Necessity will likely lead to plans and actions, which will spark subsequent responses.

Reasons for a more hopeful outcome

Might the incentives to avoid conflict offset the logic that would otherwise drive the security dilemma forward? Both the U.S. and China face substantial internal challenges. The USG faces a precarious financial situation and can seemingly ill-afford a 1980s-style arms buildup that increased defense spending by about 1.5 percent of real gross domestic product between 1980 and 1986.[57] However, China has its own problems. China's economy, heavily weighted to debt-financed investment spending and highly reliant on exports, has its own vulnerabilities and may face the same kind of debt crisis that has hobbled Japan, Europe, and the U.S.[58] China's leaders face immense challenges managing a rapidly evolving economy and society and would seemingly have good reasons to focus their time and resources on these internal challenges instead of an arms race against the U.S. and its allies. The CCP's position may be equally precarious; according to official Chinese government reports, there were more than 90,000 protests in each of the past three years, in the face of China's large and strict internal security apparatus.[59] Other research puts the number of mass protests at 180,000 per

year, a twenty-fold increase since the mid-1990s.[60] A fragile political position could induce CCP leaders to adopt a risk-averse external strategy.

Then there are the deep economic and financial linkages between China and the U.S. and its allies in the Asia-Pacific region. China's economy is highly dependent on the exports it provides to customers in these countries. U.S. financial markets and the overall economy benefit greatly from the massive investments China's central bank makes in U.S. Treasury securities and other U.S. dollar-denominated assets. Although the central bank makes these purchases for China's benefit (to control the yuan-dollar exchange rate to promote Chinese exports), the U.S. economy benefits from interest rates lower than they otherwise would be. Deep economic and financial linkages among the combatants before World War I did not prevent the outbreak of that great war. But policymakers on both sides of today's Pacific are certainly aware of the grave economic consequences of conflict.

Finally, China, the U.S., and other countries in the Pacific benefit from their current cooperation on a variety of security activities, including cooperation on counterterrorism, counter-piracy, and cooperation on proliferation issues. The U.S.-China relationship in no way resembles the Cold War relationship between the U.S. and the Soviet Union; diplomatic contact is nearly continuous and covers a broad range of issues.

There is hope that the numerous incentives on both sides to cooperate and avoid conflict will prevail. However, the logic behind a deteriorating security dilemma is equally compelling. Both sides possess fundamental security interests in the region, the pursuit of which is nearly a zero-sum game. China has a strong interest in expanding its authority around its periphery, including in its maritime regions. Achievement of its sovereignty goals in the South China Seas would open up huge hydrocarbon resources while simultaneously reducing China's vulnerability to the Middle East and the Strait of Malacca. More generally, China's leaders likely see a need to hedge against future U.S. military-technical breakthroughs of the type that have proven strategically consequential in the past. For the U.S., its status as a reliable ally and the maintenance of the rules-based international order it established after World War II are at stake. More broadly, for a century, U.S. policymakers have resisted allowing one great power to dominate either end of Eurasia. As China's influence expands, U.S. policymakers will again feel compelled to guide China's strategic calculations in a favorable direction. For these reasons, the U.S.-China security competition may intensify.

2. An Assessment of U.S. and Chinese Military Strengths and Weaknesses with Respect to Potential Theater Military Operations

In a competition involving territorial claims, access to the commons, and the credibility of alliances, policymakers will ultimately need to assess relative military power in the context of specific strategic and tactical circumstances. In a hypothetical conflict between China and the U.S. and its allies over conflicting claims and interests in the East and South China Seas, the U.S. would find itself an expeditionary power attempting to project military power against Chinese military forces, which would enjoy the benefits of a continental position and the low-cost production of military hardware. As we will see, current U.S. approaches to China's military modernization—based largely on naval and aerospace power—appear to neglect the findings of this net assessment. They focus U.S. resources at China's strengths while overlooking U.S. comparative advantages with regional allies and special operations capabilities and forces, assets that could achieve leverage against some of China's weaknesses at relatively little cost.

Net assessment of China's political-military position

China enjoys the advantages of a continental power in a hypothetical matchup against the U.S. This affords China a wider variety of basing options for its military forces, a greater variety of platforms usable for its objectives, and more secure lines of logistics and communications for its forces. Its security goals regarding the East and South China Seas are limited and defensive in nature. In addition, China will enjoy cost advantages compared to the U.S. with respect to some platforms and munitions.

With its territorial demands for the Senkakus, Taiwan, and the South China Sea, China may hope to establish the legal basis to eventually exclude foreign military forces from operating near the First Island Chain.[61] Its demand to exclude foreign naval vessels from its EEZ (contrary to both the United Nations Convention on the Law of the Sea and customary

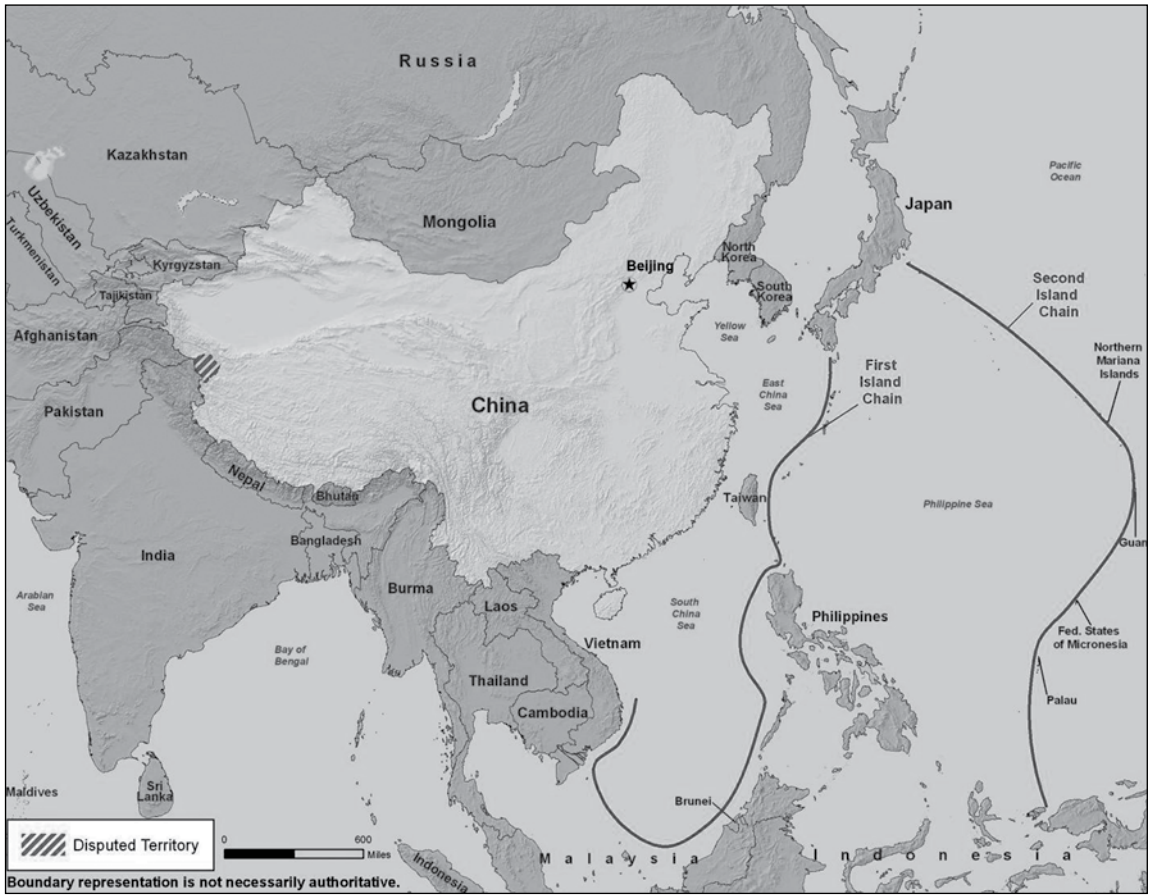

Figure 2. The First and Second Island Chains. Source: Annual Report to Congress: Military and Security Developments Involving the People's Republic of China 2011.

international maritime law) is another means by which China hopes to exclude foreign military forces from the First Island Chain zone.[62] China's apparent security goal is to establish a defensible buffer between the mainland and adversary military forces. A second goal would be to simplify the problem of providing security to Chinese commerce to and from ports in East Asia, the Indian Ocean, and the Middle East. The discrete and largely defensive nature of this security objective gives China's military planners a well-structured military problem on which to focus their doctrine, acquisition plans, and training.

China's continental position affords it a much wider variety of basing options compared to the U.S., the expeditionary power. For example, a study published by RAND Corporation in 2011 identified 12 major Chinese airbases in southeast China from which China's air force could conduct air operations using fighter-bomber aircraft against Taiwan.[63] Eleven of these bases feature advanced air base hardening techniques such as underground aircraft hangers and support facilities, reinforced concrete shelters, revetments, and camouflage. In addition to those air bases in China's southeast, China's air power can take advantage of basing options along the entire length of its long coast and deep into China's interior. China's air power basing options far exceed those available to U.S. commanders in the region, greatly complicating the task of coping with China's air threat to U.S. forces and plans.

China's military procurement has emphasized large inventories of ballistic, cruise, and air defense missiles systems.[64] Most of these systems are mounted on mobile launchers and are thus able to use the expanse of China to maneuver, hide, and shelter under an advanced integrated air defense system.[65]

As a continental power, China's military forces have the advantage of land-based logistics and communications networks. As the home team operating from interior lines, China's military supply network can be resilient, redundant, and expansively prepositioned for enduring operations. Its military communications system can make use of terrestrial links, including underground fiber-optic cable that will not always be available to the forces of a deployed expeditionary power.

As the land-based power, China will in some cases be able to employ platforms and systems with heavier payloads and longer ranges than those available to the expeditionary power. For example, China's DF-21D anti-ship ballistic missile, based on a road-mobile medium-range ballistic missile

design, will be able to attack adversary warships at a range of 1,500 kilometers.[66] China's J-11B fighter-bomber (a derivative of the Russian SU-27/30 Flanker) has an unrefueled combat radius of 1,500 kilometers.[67] China's J-11Bs can be armed with the air-launched version of the SS-N-22 Sunburn high-speed anti-ship cruise missile (ASCM), with a range of about 250 kilometers, or the YJ-91/12 ASCM with a range of up to 400 kilometers.[68] The J-11B-ASCM combination can thus attack targets up 1,750 to 1,900 kilometers distant. By contrast, the F/A-18 E/F Super Hornet, armed with the SLAM-ER air-to-surface missile, has a striking range of about 1,000 kilometers.[69] This shows that China's land-based systems will possess a greater range than the naval power projection systems U.S. forces would employ in the East and South China Seas.

Thus, although China's strike aircraft would have to fly within a U.S. aircraft carrier strike group's combat air patrol perimeter before launching anti-ship cruise missiles, U.S. carrier groups would be under risk of attack from numerous Chinese land-based platforms before they could attack the Chinese mainland. During a conflict, U.S. surface naval operations near the First Island Chain would be very risky. The U.S. Navy's Tomahawk cruise missile, with a range of 1,600 kilometers, roughly matches the range of China's shore-based maritime strike assets.[70] Nevertheless, the expected trend is for China's land-based systems to have greater range, payload, protection, and command-and-control than analogous U.S. sea-based systems.

China has the most active land-based ballistic and cruise missile program in the world. It is also expanding the classes and inventories of ship and submarine-based anti-ship cruise missiles.[71] The broad purpose of these missile development efforts is to take advantage of China's continental position and industrial cost advantage to produce a competitive capability that will allow China to assert dominant military effects against adversary expeditionary forces beyond the First Island Chain.[72]

China's land-attack, anti-ship, and anti-aircraft missile systems allow China to take advantage of its continental position. China has growing inventories of short, medium, intermediate, and intercontinental range land-attack ballistic missiles.[73] As mentioned above, it has adapted a medium-range ballistic missile with a maneuvering warhead and terminal guidance sensors for attacking adversary warships underway. China has an inventory of land-attack cruise missiles with a range of more than 1,500 kilometers.

Nearly all of these missiles are mobile and can thus take advantage of China's continental position for concealment, protection, and servicing.

China has a wide variety of anti-ship cruise missiles, some of Russian origin and others indigenously produced.[74] These missiles are mounted on mobile land-based launchers, missile patrol boats, destroyers, submarines, and strike aircraft. This variety of launch platforms is designed to complicate an adversary's task of fleet defense, especially as adversary naval forces approach the First Island Chain and come within range of more of China's missile platforms.

A missile-based strategy allows China to take advantage of its position as a low-cost industrial producer. An advanced long-range cruise missile costs the U.S. Department of Defense (DOD) as little as $1.5 million; it is reasonable to assume that China's production costs for similar models will be lower. A modern U.S. destroyer or amphibious ship will cost at least $1.5 billion and likely much more.[75] China will be able to acquire hundreds or even thousands of anti-ship missiles for the cost of single ships in a hypothetical U.S. expeditionary force. Should China perfect the sensor and command network necessary to control its anti-ship missile forces, it will be increasingly difficult for the U.S. to project expeditionary forces near the First Island Chain during a conflict. China will have in place a missile-based defensive strategy, well-suited for establishing and protecting a maritime buffer zone off China's coast. This strategy, matching cheap missiles against expensive adversary warships and aircraft, will be very costly for China's adversaries to contest. As we will see, an effective response to China's emerging military power will require more than naval and aerospace capabilities.

In spite of these significant structural advantages, China labors under some substantial weaknesses. China's most significant strategic weakness may be its lack of allies and friends in the region. China can count only North Korea as an ally, and one whose strategic utility is questionable. In Southeast Asia, China has strategic relationships with Laos, Cambodia and Burma. However, Burma's leaders are now opting to open up to the U.S. and its partners in the region, a sign that these leaders want more options.[76] Laos and Cambodia, which have occasionally provided diplomatic support to China at ASEAN Regional Forum conferences, are otherwise weak and limited partners. By contrast, nearly all of the countries around the South China Sea are increasingly stiffening their resistance to China's assertions there, as discussed in Chapter 1. Despite its openness to commercial and cultural

détente, Taiwan still resists China's political and security encroachments. Moreover, China's contentious activity directed at the Senkaku Islands has provoked a nationalist backlash in Japan and stepped-up preparedness by Japan's defense forces.[77] China is the strongest power in the region and its power continues to expand. It should be no surprise that virtually all of its neighbors are increasingly concerned about their security in this regard and are now taking diplomatic and military steps to counter this development.[78]

Geography in the Western Pacific presents obstacles to Chinese military operations. The islands of the First Island Chain, extending from the Japan's home islands to the Philippines and Malaysia, are potential sites for U.S. and coalition sensors, air defense systems, anti-ship missiles systems, and positions for undersea surveillance and operations. Positioning sensors and weapons systems along the First Island Chain could inhibit China's warships from accessing the wider Pacific Ocean, or channel their passage into corridors favorable to the coalition. Such positions could also threaten the freedom of Chinese air operations.

Compared to China, the U.S. and its allies possess a competitive advantage with undersea operations.[79] The U.S. enjoys a substantial lead in attack submarine technology and experience. China has very limited anti-submarine warfare (ASW) capacity and has shown little inclination thus far to develop such capacity. Although China's diesel attack submarines rarely operate east of the First Island Chain, these submarines could be a significant force to the west of the island chain. This zone will be a contested domain beneath the ocean's surface; U.S. ASW operations inside this area will be limited by China's missile network and the restrictions the zone's shallow water impose on U.S. underwater sensors. In summary, U.S. submarines will likely have a free hand, with China's subs able to operate near China's shore.

China's missile forces will be useful only to the extent that PLA commanders can make use of sensors to find adversary targets, the communication networks to transmit information to and from their forces, and the command and control systems required to integrate information and make efficient and effective use of military forces. According to the U.S. DOD's 2013 report on Chinese military developments, the PLA frequently conducts exercises developing its military information and command operations, with the level of proficiency increasing.[80] According to the report, in order for China's military commanders to achieve the full benefits of the modern C4ISR (command, control, communication, computers, intelligence

surveillance, reconnaissance) system China is building, the PLA will need to overcome a shortage of trained personnel and its culture of centralized, micro-managed command.[81] China's C4ISR network is vulnerable to attack. To what extent China's C4ISR nodes will be exposed to disruption by U.S. forces during a conflict is a topic this monograph will discuss in Chapter 4.

The PLA lacks modern combat experience. Its last major combat operation was the 1979 multi-division punitive expedition into northern Vietnam. Having observed U.S. combined arms, joint, and combined operations over the past two decades, China's military leaders understand the PLA's limitations in experience and leadership.[82] Although it is improving, the PLA continues to face deficiencies in inter-service cooperation and actual experience in joint exercises and combat operations.[83] China similarly has miniscule experience preparing for coalition combat operations and its lack of significant allies in the Western Pacific holds out little hope of improvement in this area regarding contingencies in the East and South China Seas.

Finally, China's internal political fragility is a risk factor for decision-makers and might be a vulnerability that adversaries could exploit. We should expect that Chinese nationalism, especially as it relates to unresolved grievances with Japan and other neighbors, would bolster support for China's political and military leadership, at least during the early stages of a potential conflict. However, wars develop in unexpected ways and China's leaders face even greater uncertainty with respect to the endurance of domestic political support than do leaders in other countries, such as the U.S., who have more recent experience with wartime leadership. As mentioned in Chapter 1, China has one of the largest and most pervasive internal security structures in the world, a force that currently must cope with more than 90,000 protests per year. In his inaugural address in November 2012 as China's top leader, President Xi Jinping acknowledged that the CCP "faces many severe challenges," mentioning corruption and its officials being divorced from the people.[84] China's leaders must reckon with the prospect of increased internal stress during a prolonged conflict, with uncertain consequences. In Chapter 5, this monograph will discuss how U.S. and coalition SOF might exploit this potential vulnerability.

Net assessment of the U.S. political-military position

The U.S. enjoys several enduring advantages in a hypothetical conflict against China. Its most powerful competitive advantages are the broad U.S. alliance and partnership network in the Asia-Pacific region and the geographical constraints imposed on China's military forces.

The U.S. alliance and partnership network in the region is long-standing, wide-ranging and growing. As mentioned in Chapter 1, the U.S. has formal defense treaty relationships with five countries in the region. Originating during the Cold War, several of these treaty relationships are now evolving to face the rising military challenge from China. For example, in November 2012, Japan's defense minister Satoshi Morimoto announced his desire to revise the security alliance with the U.S. to place more emphasis on the perceived threat from China. Morimoto wanted updated guidelines that would clarify alliance responsibilities for the defense of the disputed Senkaku Islands and improve coordination regarding maritime contingencies.[85] In October 2012, the Philippines Foreign Ministry confirmed that the Subic Bay port and airbase complex would play a growing role hosting U.S. naval forces for visits, exercises, and ship servicing.[86] In 1992, a political backlash against the U.S. military presence at Subic Bay and nearby Clark Air Base caused the Filipino Government to eject the U.S. forces from those bases. But China's growing assertions in the South China Sea, specifically its claims regarding the Scarborough Reef and the Spratly Islands that directly conflict with the Philippine's claims, have caused Filipino policymakers to rethink their position, a trend that began a decade ago and has accelerated since. Finally, in April 2012, the U.S. Pacific Command (USPACOM) began rotational deployments of Marine Corps detachments to a military base near Darwin, Australia. This troop presence began with just 200 Marines and will grow to 2,500 personnel within several years.[87] The purpose of the Marine Corps deployment program to Australia is to improve operational relationships with partner military forces in the region and improve response times to contingencies in the southwest Pacific.[88]

Beyond its formal treaty allies, the U.S. is extending its military partnerships with a long list of other countries in the region. Singapore has built a pier capable of servicing the U.S. Navy's aircraft carriers and will host a rotational deployment of up to four Navy Littoral Combat Ships.[89] In June 2012, Vietnam hosted the repair of a U.S. Navy support ship at a local ship repair

facility in Cam Ranh Bay. That port visit coincided with a defense ministerial meeting in Hanoi at which the U.S. and Vietnam further expanded military cooperation.[90] In November 2012, President Barack Obama made the first visit by a U.S. president to Burma, a response to that government's diplomatic moves to diversify itself away from its previous sole dependence on China.

Moving around China's periphery, after the end of the Cold War in the 1990s, successive U.S. administrations have courted India as a counterweight to China. This has resulted in a slowly expanding military relationship between India and the U.S., including military sales by U.S. contractors to India and regular military exercises between the two countries. India now conducts more military training exercises with the U.S. than with any other country and is purchasing billions of dollars of U.S.-sourced military hardware.[91]

The September 2001 terrorist attacks in the U.S. resulted in a long-term U.S. military presence in Central Asia. Conventional operations by U.S. military forces in Afghanistan are due to end in 2014. But Afghanistan's agreements with the U.S. and the North Atlantic Treaty Organization (not formally signed at the time of this writing) contemplate an enduring presence of military advisers, air power assets, and SOF for an undefined period after 2014.[92] Although the strategic partnership and bilateral security agreements between the U.S. and Afghanistan prohibit the U.S. from using bases in Afghanistan for military operations against third countries,[93] the presence of U.S. military forces in Central Asia over the long-term will allow the USG to further extend its relationships and influence in that region. U.S. and allied intelligence services will likely also have access to bases in Afghanistan and supporting facilities in neighboring countries. This military and intelligence posture will lie adjacent to China's Xinjiang province, where the restive Muslim population has provided an internal security challenge to Beijing.[94] To China's north, the USPACOM has a military training relationship with Mongolia, a link that first became prominent during President George W. Bush's first term.[95]

These diplomatic and military relationships, which encompass China's perimeter, provide numerous benefits to U.S. policymakers and planners. First, they provide political legitimacy to U.S. and coalition concerns about China's regional assertions. When countries such as Japan, the Philippines, Australia, Vietnam, India, Mongolia, and others openly express an interest in deeper security coordination with the U.S., it is evidence that concerns

about China are becoming increasingly widespread and uncontroversial. Second, when U.S. diplomacy succeeds in adding additional members to the loose coalition facing China, it gives both the U.S. and the coalition's policymakers and planners additional options and flexibility. Finally, the more the U.S. security network expands, the more complicated China's diplomatic and military tasks become, which can translate into strengthened regional deterrence.

The First Island Chain provides a potential barrier to effective Chinese air and naval operations and is therefore a military asset to the U.S. and its partners. In addition to actual and potential First Island Chain bases such as Kadena Air Base on Okinawa and the Subic Bay complex on Luzon, U.S. and coalition forces will attempt to use the islands as sites for sensors and weapon platforms. The islands will channelize the movement of PLAN warships, making it easier for coalition forces to track their movements and reveal their intentions.

The U.S. possesses an advantage in technology and experience with undersea operations, both regarding submarine forces and anti-submarine warfare. The U.S. and its allies will attempt to gain synergy between these forces and the First Island Chain geography to limit the PLAN's operational potential and to then expand the freedom of action of coalition forces west of the island chain. For many decades, U.S. submarines have routinely operated first as intelligence-gathering assets, a role that has grown as electronic technology has advanced and has been installed on current model attack submarines. These submarines are well-equipped for anti-submarine, anti-surface, and land-attack missions and are believed to best their Chinese counterparts in range, speed, and acoustic signature.[96]

The U.S. and many of its allies and partners in the region have decades of training and operational experience with each other, an experience base that would be a critical advantage during a conflict. Naval and air operations are intricate tasks, requiring the integration of complex technologies, organizations, and training systems. Performing such missions with countries considering their own organizational histories, training regimes, and cultural differences compounds the challenges. However, the U.S. and its network of military partners have conducted regularly-scheduled training exercises for decades, for the purpose of maintaining interoperating skills and procedures. For example, the U.S. Navy conducts 170 exercises and 600 training events with more than 20 allied and partner countries in the Asia-Pacific region

every year.[97] China itself has begun to participate in some of these exercises, but thus far at a small scale. As mentioned earlier, the PLA is much behind the U.S. and many of its partners with respect to military staff work, combined arms operations, joint operations, and combined operations with the military forces of other countries.

USSOF have a long-standing presence in the Asia-Pacific region. As mentioned in Chapter 1, these forces include a U.S. Army Special Forces battalion in Japan (Honshu and Okinawa), an Air Force special operations group on Okinawa, Marine Corps special operations capable units on the same island and a naval special warfare unit on Guam. The mission of these forces is to prepare for special operations tasks in the theater and to establish and deepen relationships with partner military forces in the region.

One example of special operations relationship-building is Joint Special Operations Task Force Philippines (JSOTF-P). Established in 2002, JSOTF-P is a small multi-service detachment headquartered in Zamboanga City, with a mission of assisting the Filipino Government and military with its operations against Islamic militants in the southern Philippines.[98] Although not directly related to the security challenge posed by China, JSOTF-P is an example of USSOF extending a relationship with an ally, improving the capabilities of its armed forces and thereby improving the larger security environment in the region. In another example, USSOF have recently expanded training missions with special forces and counterterrorism units in Cambodia, the Philippines, Bangladesh, and Indonesia.[99] Given continuing security tensions on the Korean peninsula, USSOF assigned to missions there are unlikely to be available for contingencies elsewhere in the region. Finally, even as the high demand over the past decade for USSOF in the U.S. Central Command region has taxed those nominally assigned to the Western Pacific, USSOF in the region have a portfolio of capabilities and operational experience that China does not possess.

Few would doubt that U.S. military forces enjoy a technological advantage over any other rival, including China. The U.S. is the only country with an operational force of fifth-generation stealth fighter aircraft and intercontinental-range stealthy bombers. The U.S. leads in military space operations with respect to reconnaissance, communications, navigation, and access to space. The U.S. possesses the broadest and most sophisticated global intelligence, surveillance, reconnaissance and command system. The U.S. similarly has the most wide-ranging and most mature missile defense capability. At

sea, the U.S. operates the most powerful attack submarine fleet. In addition, U.S. aircraft carrier strike groups and amphibious expeditionary forces are without peer.

Although these technological and operational advantages are real, they are likely fleeting, at least over the medium term. China possesses formidable scientific and engineering capacity and has in many cases delivered military platforms and capabilities faster than U.S. intelligence officials have expected.[100] China has made significant advances in space access and operations, cyber and electronic warfare, stealthy aircraft, and surface warship design. To the extent that the U.S. enjoys technical military advantages, its policymakers and planners should not assume those advantages will persist over the medium term.

In spite of these advantages, as the expeditionary power in the Western Pacific, the U.S. suffers under some substantial structural weaknesses. Compared to China, the U.S. has very few useful air and naval bases in and near the East and South China Seas. These bases are vulnerable to suppression by Chinese land-attack ballistic and cruise missiles. For example, the U.S. Air Force operates from six main bases in East Asia: two in South Korea, three in Japan (including Kadena Air Base on Okinawa) and one base on Guam. According to the U.S.-China Economic and Security Review Commission, China's land-attack missile forces have the capability to overwhelm the defenses and shut down all of these bases except the one on Guam.[101] As China's bomber and submarine forces expand, Guam will come under increasing threat from cruise missiles. Suppression of these bases would restrict the employment of the U.S. Air Force's aircraft and limit defense and attack options for coalition military planners.

U.S. and allied surface naval platforms are similarly exposed to Chinese missile attack. As mentioned above, China is mounting an expanding inventory of capable anti-ship cruise missiles on a wide variety of platforms, including strike aircraft, surface ships, coastal patrol craft, submarines, and mobile land-based launchers.[102] China's DF-21D anti-ship ballistic missile, with a 1,500 kilometer range and a guided maneuvering warhead, is likely to emerge next decade as a significant threat to adversary surface naval forces. China is rapidly developing a multi-spectral reconnaissance satellite constellation that, when combined with aircraft and submarine surveillance, will be able to provide useable targeting data to its missile forces.[103] China's development of long-endurance maritime surveillance drones will further

boost its ability to find targets at sea or dissuade adversary naval forces from operating in certain areas.[104]

U.S. land-based and naval air power is heavily weighted toward short-range fighter-bomber systems; in Fiscal Year 2013, the U.S. DOD's aircraft inventory included 3,567 fighter-bomber aircraft but only 159 long-range bombers.[105] Of these 159 bombers, only 19 are the stealthy B-2 platform, capable of operating with limited risk inside the advanced integrated air defense system that China possesses. Should China's missile forces succeed in disrupting operations at the six U.S. Air Force bases in the region and deter U.S. aircraft carrier strike groups from approaching within the roughly 1,000 kilometer combat radius of the Navy's strike fighter aircraft, U.S. military planners could have much of their striking power, in the form of U.S. tactical air power, removed from the battlefield.

If U.S. commanders are unable to make use of many aircraft assets, they will have to resort to U.S. missiles deployed on submarines and warships to neutralize Chinese military capabilities. The U.S. Navy currently has 44 cruisers and destroyers assigned to naval bases in the Pacific.[106] These ships can launch the Tomahawk cruise missile, with a range of 1,600 kilometers.[107] The Navy's cruisers and destroyers launch the Tomahawk from Mark 41 Vertical Launch System (VLS) cells. VLS cells are also used for missile and air defense interceptors and anti-submarine weapons.

U.S. cruisers and destroyers assigned to the Pacific have a total of 4,596 VLS cells available for these missions. Attack and guided missile submarines allocated to the Pacific add 572 Tomahawks to the inventory.[108] How many of these cells on the cruisers and destroyers are allocated to each mission is not disclosed. By one report, the "baseline" loading of VLS cells allocates just four cells on cruiser or destroyer to Tomahawks, with almost 92 percent of the VLS cells allocated to air and missile defense.[109] Defending aircraft carriers and amphibious ships against missile, air, and submarine threats is the main mission of the cruisers and destroyers, which will limit the allocation of cell space for Tomahawks, especially as the Chinese anti-ship missile threat grows. In addition, the Navy does not have the capability of reloading VLS cells at sea—ships must return to port for a maintenance period to be rearmed.

With "baseline" loading of VLS cells, the Navy would deploy 748 land-attack Tomahawks (each able to service one aim point) on ships and submarines in the Pacific. By comparison, during the six weeks of the 1991 air war

against Iraq, coalition air forces attacked 35,085 targets (often consisting of more than one aim point), of which 11,655 were strategic targets (all other than Iraqi ground forces).[110] It is reasonable to presume that the potential target set in a hypothetical conflict with China will be larger than the target set in Iraq in 1991. Thus, although the Navy's Tomahawk inventory would be a critical tool during a conflict with China, the potential target set in China will certainly be at least one and perhaps as much as two orders of magnitude greater than the Tomahawk inventory available in the Pacific.

The U.S. C4ISR network is vulnerable to Chinese disruption. U.S. military forces in the Western Pacific will rely on military satellite constellations for reconnaissance, communications, and navigation. China has several means of disrupting these constellations and the broader U.S. C4ISR network. In January 2007, China demonstrated a direct-ascent anti-satellite capability when it destroyed one of its own obsolescent weather satellites in orbit with a ground-based missile. This capability can naturally be employed against some U.S. military satellites, especially those in or near low earth orbit. Second, China is suspected of having developed formidable offensive and defensive cyber warfare capabilities, which could disrupt U.S. military communications and computer networks during a conflict.[111] Finally, China's military forces are employing increasingly sophisticated electronic attack and electronic warfare capabilities, which could disrupt U.S. sensors and communications.[112]

U.S. policymakers would have to contend with domestic political limitations when addressing a potential conflict in the Western Pacific. The disputes in the East and South China Seas are highly important issues for China. For example, flair-ups over the Senkaku Islands typically result in demonstrations at the Japanese embassy in Beijing and boycotts of Japanese exports to China.[113] Statements from the Chinese Government clearly explain China's claims.[114] It is even illegal in China to make a map that does not include all of China's disputed claims as Chinese territory.[115] For China, the territorial disputes in the region are a nearby security concern and an emotional issue relating to China's culture and history.

For most in the U.S., by contrast, the disputes in the East and South China Seas are a distant abstraction and seemingly of little direct significance to the United States. In order to avoid getting drawn into a conflict on another party's whim, the USG refuses to take sides in the various territorial disputes, a position that maintains diplomatic flexibility but that also reveals political

wariness about a deeper commitment to allies and partners. With its public holding a more intense interest in the region's disputes, China's policymakers may have a greater ability to sustain political commitment during a conflict compared to their U.S. counterparts.

Summary of net assessments

An analysis of the Chinese and U.S. net assessments should reckon with those competitive advantages possessed by each side that are likely enduring—such as continental position or island chain geography—and those that could be more fleeting, for example, as a result of gaining experience, adding resources, or applying feasible technology. On these measures, time is likely to favor China. The PLA will gradually narrow the training gap with the U.S., while China's growing economy, improving technology, and its position as low-cost producer will eventually provide China with a quantitative edge across a broad range of platforms and munitions. To these, China will add its enduring advantage as the continental power.

In contrast to China, U.S. military planners face, at least over the medium term, diminished resources, ongoing problems with platform and munitions costs, and troubles delivering new technology to deployed forces. As a result, U.S. advantages with force structure and technology in the theater are likely to shrink over the next decade. The disadvantages of being the expeditionary power will persist. The vulnerability of its existing bases in the region is likely to increase as China's missile inventories expand. Taking into account China's missile capability and the range constraints of U.S. platforms and munitions, only a small fraction of U.S. military power in the region will be able to obtain a low-risk firing position against Chinese targets.

It is clear that regarding the match-up against China's emerging military power, U.S. advantages in naval and aerospace power are quickly fading. By next decade, U.S. military strategies for the region that rely mainly on naval and aerospace power will no longer be tenable. An effective response to China will require a broader range of national and military power, with U.S. and coalition SOF playing critical roles. U.S. policymakers and planners will have to find new ways to take advantage of enduring advantages. Chapter 5 will discuss how U.S. and coalition planners can match the full range of their competitive advantages against China's vulnerabilities.

3. China's Anti-access and Area-denial Doctrine and Capabilities

Salami-slicing in the Southwest Pacific

China's strategy for establishing control over its territorial claims in the East and South China Seas is based on patience, the slow accumulation of incremental gains, and the avoidance of overt conflict. The approach of slowly accumulating gains while avoiding confrontation is a product of former paramount leader Deng Xiaoping's dictum from the early 1990s that China should, "observe calmly; secure our position; cope with affairs calmly; hide our capabilities and bide our time; be good at maintaining a low profile; and never claim leadership."[116]

China's diplomatic strategy regarding its assertions in the East and South China Seas seeks to weaken the U.S. alliance network, reduce the role and effectiveness of multilateral groupings such as ASEAN, and conduct dispute resolution on a bilateral basis, a format that would favor China's dealings with its weaker neighbors. The military force structure China is building currently emphasizes forces best suited for defending its possessions in and beyond the First Island Chain, rather than forces suited for offensive expeditionary operations in distant regions, although such expeditionary capabilities may come in future modernization efforts. In summary, China hopes to gradually assume control over the territories it claims without sparking a conflict, and then use its land-based and maritime military power to dissuade adversaries from attempting to reclaim these disputed islands and seas.

As this chapter will make clear, by next decade, U.S. naval and aerospace power in the Western Pacific region will be poorly designed and improperly deployed to cope with China's strategies for the East and South China Seas. In order to maintain stability in the region, the U.S. will need a new approach for balancing China's emerging military power. Such an approach will require the wide-ranging employment of U.S. and coalition SOF to provide leverage against Chinese vulnerabilities.

Recent events in the South China Sea illustrate China's use of salami-slicing, the slow accumulation of small changes, none of which amounts to a casus belli, but which add up over time to a significant strategic change.

The Chinese concept of "three warfares"—psychological, media, and legal warfare—support China's salami-slicing strategy in the region.[117] In 1974, China seized Woody Island in the Paracel Islands chain from South Vietnam. As mentioned in Chapter 1, sovereignty over the Paracel group remains contested between China and Vietnam. In June 2012, China declared the establishment of Sansha City on Woody Island. China intends Sansha to be the administrative center for all of China's claims in the South China Sea, including the Spratly Islands and Scarborough Reef, also claimed by the Philippines. China also announced its intention to send a permanent military garrison to the area.[118] In April 2012, Chinese maritime law enforcement and Filipino coast guard vessels engaged in a protracted standoff over Scarborough Reef, located about 230 kilometers from the Philippines. The Filipino coast guard eventually retreated. China's enforcement vessels have remained at the reef since,[119] and have prevented Filipino fishermen from returning to the reef.[120] In addition, beginning in 2013, China announced its intention to have its police vessels in the South China Sea board and search vessels it considers illegally in Chinese territory.[121]

With these actions, Chinese authorities hope to systematically establish legal legitimacy for their claims in the South China Sea. It has stood up a local government in the Paracel Island group, which will command a military garrison, both traditional indicators of state authority. These actions challenge the claims of Vietnam and the Philippines and are moves these countries are unable or unwilling to replicate. Under China's legal warfare doctrine, China's leaders are likely hoping that moves to establish a more substantial presence than the other claimants will bolster the legal legitimacy of its claims.

China's attempts at economic development in the South China Sea are another indicator of its attempts to assert its sovereignty in the area. In June 2012, the China National Offshore Oil Corporation (CNOOC), a huge state-owned oil developer, invited foreign oil drillers to bid on blocks of the South China Sea that are inside Vietnam's EEZ. In fact, some of these blocks had previously been put up for lease by Vietnam.[122] At Reed Bank near Palawan Island, China and the Philippines have similarly clashed over oil and gas drilling rights.[123] With the much larger resources it commands in entities such as CNOOC, China will eventually be able to maintain a more widespread and persistent hydrocarbon exploration presence across the South

China Sea. China's leaders likely hope that such a presence will bolster its sovereignty claims in the region.

In the East China Sea, China may be hoping to use its growing resources to maintain a persistent presence around the Senkaku Islands, and in a manner that will eventually achieve China's goals without a conflict with Japan or the U.S. China's establishment of an air defense identification zone encompassing the air space above the disputed Senkakus would seem to be another incremental assertion of China's sovereignty claims in the East China Sea.

In parallel with the growth of the PLAN, China's paramilitary and non-military maritime power is also expanding. China has used these softer forms of maritime power—civilian fishing fleets, coast guard cutters, and the China Maritime Surveillance Agency (CMS)—to press China's presence near the Senkakus in a manner that U.S. and Japanese military forces find politically difficult to contest.[124] China may hope that its superior resources will allow it to maintain a more persistent presence of fishing vessels, oil rigs, coast guard and EEZ patrol vessels in the East and South China Seas, a presence that will exceed its rivals' ability to respond in kind and over time bolster its legal claims to sovereignty.

For over a decade, ASEAN has hoped to negotiate a code of conduct for resolving disputes in the South China Sea. ASEAN members bordering the sea have hoped to increase their bargaining leverage with China by having ASEAN adopt a common position on such a code. However, in 2012, China succeeded in thwarting, at least for a time, this plan. Cambodia, one of China's few friends in the region, chaired ASEAN during 2012. Acceding to China's wishes, Cambodia used its position in the chair to prevent ASEAN from establishing a negotiating position on the code of conduct at two summit meetings during 2012.[125] This outcome conformed with China's preference for bilateral dispute resolution as compared to dealing with a unified and multilateral ASEAN position on the South China Sea.

The view from Beijing is that the disputed claims are already China's possessions. China's moves to patrol the two seas, protect its fishing fleets, set down offshore drilling rigs, and establish administrative offices and garrisons are acts that create facts on the ground that gradually legitimize China's legal position. Over time, China will be able to build up its military and non-military maritime power to a point where it will be able to have a continuous presence at the most important sites, something its rivals in

the region won't be able to sustain. At the end of this road will be China's claimed right to exclude foreign warships from its EEZ, as it attempted in March 2009 when five Chinese ships harassed the surveillance ship USNS *Impeccable* in international waters south of Hainan Island.[126] The PLAN's harassment of USS *Cowpens* in December 2013 (mentioned in Chapter 1) is another such example. Under this interpretation, China would feel the right to exclude foreign warships from the Strait of Malacca all the way to Japan's home islands.

China's salami-slicing tactics place its rivals in an uncomfortable position. Each of China's actions is calibrated to be too small to amount to a casus belli. China's adversaries will be forced to draw red lines and engage in brinkmanship over actions the rest of the world will perceive as politically trivial. Over time, China's leaders are counting on this inertia to result in their achievement of de facto and operational sovereignty over their claims. China's small rivals or the U.S. may find themselves having to contemplate making the first military move against a prepared adversary, difficult political and military decisions. China's military doctrine and acquisition strategy is designed for this scenario, which the monograph will discuss next.

China's access denial doctrine

China plans to defend its interests in the East and South China Seas with a military doctrine it calls "active defense" or "counter-intervention" (U.S. military analysts term this doctrine "anti-access/area denial," "A2/AD," or "access denial.").[127] This doctrine and related Chinese acquisition programs foresee using a wide variety of ballistic and cruise missile types, land-based aircraft, missile-armed coastal patrol craft, submarines, surface warships, and naval mine warfare to dissuade U.S. and allied naval forces from approaching the First Island Chain during hostilities. China will attempt to use its continental position to achieve its limited goal of controlling the near seas adjacent to its shores. The success of this "anti navy" approach will thus not depend on the PLAN achieving operational parity with the U.S. Pacific Fleet.[128] Elements of the PLAN, specifically its submarines, distributed missile-armed surface units, and mine warfare capability, will make specific contributions to the PLA's overall counter-intervention, or access denial, war plans. However, most of China's access denial capacity will reside in land-based platforms and capabilities.

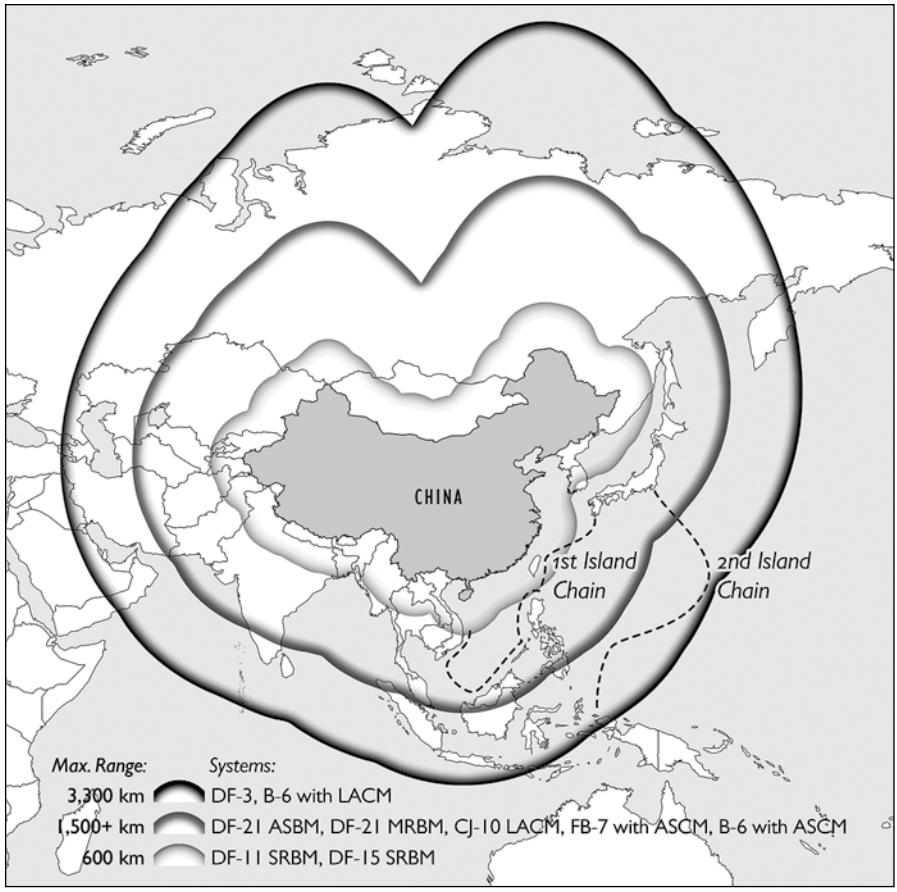

Figure 3. China's missile capabilities. Source: Annual Report to Congress: Military and Security Developments Involving the People's Republic of China 2012.

China's emerging air superiority

Achieving air superiority is a well-known requirement for military success. China intends to achieve air superiority over its near seas through the application of its land-attack missile power and by exploiting the U.S. military's overreliance on relatively short-range tactical aircraft, a weakness suffered by both the U.S. Air Force and Navy.

As mentioned in Chapter 2, China's land-attack missile forces very likely possess the capability of shutting down or severely suppressing the sortie generation rates of five of the six major U.S. air bases in the Western Pacific

(two in South Korea, two on the Japan home islands, and one on Okinawa).[129] China's ground-based missile forces consist of 1,000 to 1,200 short-range ballistic missiles with ranges up to 1,000 kilometers, putting them within range of the air bases on Okinawa and South Korea. China has an additional 600 ground-launched cruise missiles and medium-range ballistic missiles, with ranges from 1,500 to 3,000 kilometers. China also possesses 550 bomber and attack aircraft capable of employing new long-range cruise missile types.[130] Many of China's submarines are also armed with a variety of cruise missile types, adding another threat to U.S. air bases in the region. In such a conflict, U.S. air base personnel would implement their plans to repair damaged facilities and attempt to restore sortie generation capability. Nonetheless, China will also have the missile inventories to re-strike these bases, its task made easier by having a small target set to focus on.

Excessive U.S. reliance on short-range tactical aircraft will also simplify China's goal of achieving air superiority over its near seas. China's task here is to push the U.S. Air Force's high-value enablers—tanker and ISR aircraft—beyond the tactical aircrafts' combat radii near the First Island Chain zone. Variations of China's J-11 fighter aircraft (modeled on Russia's Su-27/30 Flanker) have an unrefueled combat radius of about 1,500 kilometers, a range that would put at risk U.S. Air Force tanker and ISR aircraft operating from South Korea and Japan's mainland. Current U.S. tactical aircraft models—F/A-18, F-22, and F-35—have unrefueled combat radii of about 1,100 kilometers or less. With vulnerable U.S. tankers and other enablers forced to operate at least 1,500 kilometers from China, U.S. tactical aircraft will not be able to reach targets inside China and will have very limited loiter times inside the First Island Chain zone.[131]

According to a 2011 RAND Corporation report prepared for the U.S. Air Force, by 2015, China's inventories of modern fighter aircraft and surface-to-air missile batteries will make China's air defense capacity "highly challenging for U.S. air forces."[132] Similarly, according to the RAND report, those same modern fighters, along with ground-launched conventional ballistic and cruise missiles, cruise missile–carrying medium bombers, and aerial refueling aircraft, will enable China to conduct offensive operations far into the western Pacific. Another report from RAND estimates that China's force of J-11 and Su-27/30 Flankers will number about 342 aircraft by 2015, with about 14 more added to the inventory every year.[133] According to the U.S. DOD's annual report on Chinese military power, China possesses

1,570 modern fighters and 550 bomber and attack aircraft, which China is modernizing and arming with advanced and long-range air-to-air and air-to-surface missiles.[134]

Operational units of China's fifth-generation J-20 stealthy fighter should enter service by 2018. Although China needs to improve the J-20's engine performance, this aircraft is expected to have a combat radius of 2,000 kilometers and hold at risk adversary tanker, airborne early warning, and surface naval forces. At that range, the J-20 could push the last airborne refueling point for U.S. tactical aircraft such as the F/A-18 and F-35 beyond their combat radii to targets inside China and much of the First Island Chain zone. The arrival of operational J-20 units in the next decade, combined with China's anti-ship missiles, could thus remove U.S. tactical aircraft, constituting the vast majority of U.S. strike air power, from any useful role over or near China.[135]

China continues to expand its inventories of long-range, advanced ground and sea-based surface-to-air missile (SAM) forces, which the U.S. DOD terms as "one of the largest such forces in the world." China operates the S-300 system, the most advanced SAM system exported by Russia. China's mobile ground and naval SAMs have an operating envelope up to 150 kilometers, and will provide a challenge to adversary air forces.[136]

China's strategy for sea denial

Like its defensive air strategy, China's naval strategy aims to protect Chinese territory by deterring adversary naval forces from projecting power into the First Island Chain zone and beyond. China will employ a variety of shore-based and sea-based platforms in its attempt to achieve this goal. The DF-21D anti-ship ballistic missile, with a range estimated at 1,500 kilometers, is perhaps China's most notable anti-access system if only because no other country is thought to be attempting such a concept. Based on the DF-21 medium-range ballistic missile (MRBM), the DF-21D employs a maneuvering reentry vehicle warhead (unitary, submunition, or electromagnetic pulse), which will be guided to an underway adversary warship by onboard active radar and infrared guidance. With the employment of mid-course countermeasures, high hypersonic speed and warhead maneuvering, the DF-21D warhead is thought invulnerable to existing missile defenses.[137]

Anti-ship cruise missiles (ASCM) are another key means China's air, naval and land forces will employ against adversary naval forces. Many of China's ASCMs, such as the Russian Sunburn and Sizzler models, have ranges up to 250 kilometers, approach their targets at wave-top heights to avoid detection and ship defenses, and fly at supersonic speeds while executing 10g terminal attack maneuvers. As with the DF-21D, there are grave doubts about the capacity of U.S. warships to defend themselves against ASCMs that have acquired their targets, especially when launched in coordinated, multi-axis volleys.[138]

U.S. warships approaching the First Island Chain would have to pass through several layers of Chinese ASCM platforms. As mentioned in Chapter 2, China's J-11B Flanker variant strike fighter, each of which could be armed with two YJ-91/12 supersonic ASCMs, can reach targets out to 1,900 kilometers from a refueling point. China will possess over 400 J-11 and Su-27/30 variants by 2020 and will be able to mount multi-axis raids involving potentially hundreds of cruise missiles against a U.S. carrier strike group that is discovered approaching the First Island Chain. With the improved range of China's air-launched ASCMs, the J-11 and Su-27/30 variants would be able to launch their missiles before entering the engagement range of the U.S. Navy's Aegis SAM system.[139] The J-11/Flanker ASCM launch point would be within the carrier strike group's combat air patrol perimeter. However, the potential size and multi-axis nature of such a raid could overwhelm the capacity of the strike group's fighter defense, which will be stretched to provide a continuous combat air patrol over the strike group. In past engagements of anti-ship missiles against alerted surface warships, 32 percent of attacking missiles scored hits.[140] If only five percent of a 100 to 200 ASCM raid scored hits, the carrier strike group's ships would still receive five to 10 missile impacts, likely causing enough damage to render the group ineffective and possibly defenseless against another attack. Even if few or no ASCMs achieved hits, the carrier strike group would still very likely have to retire, having exhausted its defensive missile magazines.

Coalition naval forces will also have to contend with Chinese submarines and surface ships armed with ASCMs. China currently possesses 29 submarines each armed with up to eight advanced ASCMs. Eight of these submarines are Russian-built *Kilo*-class boats armed with the supersonic Sizzler ASCM. China also operates 13 destroyers and 22 frigates armed with ASCMs. Four of China's destroyers are the Russian-built *Sovremenny*-class

ships, each armed with 16 of the supersonic Sunburn ASCMs. Closer to shore, the PLAN operates over 80 fast attack craft, each armed with eight ASCMs. In almost all cases, the ASCMs China deploys on surface ships outrange the U.S. Navy's Harpoon ASCM. In a hypothetical surface engagement, U.S. warships would have to endure missile volleys from China's surface forces before they closed to the Harpoon's range. Finally, China's land-based ASCM batteries, deployed on mobile transporter-erector-launchers (TELs), will be able to strike naval targets out to 160 kilometers.[141]

China's shipbuilding and missile development programs aim to extend China's access denial capabilities during the remainder of this decade. These improvements will come almost exclusively from China's own industrial base and indigenous engineering advancements. China's annual production of MRBMs, the missile class used for the DF-21D ASBM, is estimated at 10 to 11 per year,[142] with the capacity to perhaps double this rate during a surge in production.[143] By the end of the decade, the PLA could possess at least 80 DF-21Ds mounted on mobile TELs, a force large enough to execute many multi-missile volleys on adversary naval task forces. While China's land-based missile programs remain unconstrained, the 1987 Intermediate Nuclear Forces (INF) treaty, still in force, prohibits the U.S. (and Russia) from fielding land-based missiles with ranges between 500 and 5,500 kilometers.[144] While the U.S. remains a party to the INF Treaty, its military planners will not be able to consider deployments of land-based land-attack and anti-ship missiles with ranges greater than 500 kilometers as methods of countering China's increasing missile power in the region.

China is introducing a new diesel-electric submarine, the Type 041 *Yuan*-class. The *Yuan* class submarine is expected to have air-independent propulsion (AIP), for sustained and very quiet subsurface operations. Unlike nuclear-powered submarines, diesel-electric submarines like the Type 041 are not well-suited for long-range operations. However, AIP-equipped diesel-electric submarines present a particular challenge to anti-submarine forces, especially when operating in the relatively shallow waters such as those found in the First Island Chain zone.[145] The *Yuan* boats are armed with new models of long-range land-attack and anti-ship cruise missiles, wire-guided and wake-homing torpedoes, and naval mines (of which, China has over 50,000). The Congressional Research Service estimated that China added five *Yuan* submarines to its fleet in 2012, with a similar production rate presumably available in the future. In 2015, China is expected to begin production

of a new Type 095 nuclear-powered attack submarine, which will feature improved quieting technology. Although somewhat easier to detect than the Type 041 *Yuan*, as a nuclear-powered boat, the Type 095 will be capable of wide-ranging missions in the Pacific, including intelligence-gathering and land-attack strikes on bases in the Second Island Chain (such as Guam) and beyond. China's total attack submarine force is expected to reach more than 70 units by 2020 and become increasingly modern and well-armed as new models replace obsolescent types.[146]

China's surface naval forces will also undergo modernization during the decade. Of particular note is the arrival of the Type 052D guided missile destroyer. The Type 052D is a very modern multi-mission ship, roughly similar in features and design to the U.S. DDG-51 *Burke*-class, which is the current mainstay of the U.S. Navy's surface fleet. Recent Chinese practice has been to introduce small production runs of many classes of ships, presumably in order to experiment with designs and systems. China now has as many as 10 Type 052Ds under construction, possibly indicating that the PLAN has settled on a favored design. Like the U.S. *Burke* class, Type 052D has phased-array radars to support anti-air and anti-surface warfare and will be armed with late-model and long-range land-attack and anti-ship cruise missiles and anti-submarine weapons, all housed in vertical launch cells.[147] Until the U.S. Navy finds a replacement for its slow and relatively short-ranged Harpoon ASCM, in a surface battle, U.S. ships will have to withstand volleys from longer-ranged Chinese ASCMs before closing to engagement range. In addition, as a leading high-volume and low-cost shipbuilder, China has the capacity to rapidly step up output of the Type 052D if it chooses to do so.

China's emerging reconnaissance complex

China's many missile-launch platforms will require an improved C4ISR network in order to realize their potential. As mentioned in Chapter 2, China is attempting to build a modern C4ISR network, but that effort is hampered by system integration issues, problems with inter-service coordination, and reliable access to outer space. However, China is making steady progress in these dimensions, in parallel with the progress it is making air power, naval platforms and missiles.

The PLA possesses a variety of complementary and redundant reconnaissance systems to detect adversary naval, air, and space platforms. China operates land-based sky- and surface-wave over-the-horizon radars, capable of detecting surface naval forces as far as 3,000 kilometers out to sea.[148] China's military and dual-use surveillance satellite constellations are enjoying steady growth. As of November 2010, China had 30 such satellites in orbit with optical, synthetic aperture radar (SAR), infrared, and multispectral observational capabilities. The performance of these constellations improves as new satellites, with better all-weather and high-resolution features, replace older models. For example, China's SAR satellites provide all-weather, day and night coverage, with imaging resolution of five meters or less, sufficient to detect any U.S. Navy warship. By 2020, China's reconnaissance satellite constellations are likely to be capable of revisiting targeted areas every 30 minutes, frequently enough to track adversary naval task forces underway. China also operates constellations of meteorology, communication and navigation satellites, such as the Compass array, which will provide global navigation coverage for PLA forces by 2020.[149]

China's attack submarine and surface naval forces, including the Type 052D, guided missile destroyer equipped with long-range phased array radars, will be other sources of information on adversary naval and air forces. China also operates ocean-bottom sonar beds in its near seas, similar to the anti-submarine listening networks the U.S. operated during the Cold War.[150] In the air, China has adapted the indigenously produced Y-8 cargo aircraft for airborne early warning, electronic surveillance and warfare, and communication relay missions.[151] Planners should not exclude China's use of its civilian maritime patrol craft or even fishing vessels to spot adversary naval targets for its C4ISR network.[152] Finally, China will be able to find synergy between its position as a continental power and the use of unmanned aerial systems (UAS) to reinforce its maritime and air surveillance to the First Island Chain and beyond. From its many land bases, the PLA will be able to support the operation of a network of high-altitude, long-endurance surveillance drones that will provide persistent collection of data on air and maritime targets. In addition, such a UAS surveillance network will be able to use airborne communication relay aircraft to transmit data to Chinese intelligence centers, eliminating the network's reliance on possibly vulnerable communication satellite networks.[153]

In summary, China's air, naval and missile acquisition programs are designed to support a specific access denial strategy that seeks to deter adversary air and naval forces from approaching the First Island Chain during hostilities. By setting a priority on this mission, China has heretofore downplayed investments in military forces required for expeditionary and power projection missions, at least beyond the Taiwan scenario. China's access denial strategy is deliberately multi-dimensional, involving overlapping capabilities in land, air, space, surface and submarine forces.

This analysis also shows that China's military planners have made an intensive study of U.S. forces and capabilities and have designed their forces to achieve the missions these planners need them to accomplish, given the characteristics of U.S. naval and air forces. Although in most respects U.S. naval and air forces remain more advanced, experienced, and capable in the aggregate, China's planners have still discerned notable shortcomings, which their strategy, doctrine, and investments are seeking to exploit.

In a mid-ocean battle between Chinese and U.S. naval task forces, the U.S. would undoubtedly prevail, due to its advantages in submarines, aircraft carriers, and operational experience. However, that is not the battle China is preparing for. Using salami-slicing tactics, China aims to slowly establish its physical and legal presence over its claims in the South and East China Seas. Should the U.S. and its allies attempt to roll back this presence, they will have to make the first military move, a difficult political act. From a military perspective, U.S. and allied forces would have to confront China's naval forces, optimized for missile and submarine combat in its near seas, and China's land-based air and missile power, also specifically structured for an anti-naval campaign out to 2,000 kilometers. U.S. air power, heavily weighted to short-range platforms, will find its few bases in the region vulnerable to missile attack. U.S. surface naval forces, including its aircraft carrier strike groups, will be vulnerable to missile attack long before coming into range of Chinese military assets. U.S. long range striking power, from submarine-launched cruise missiles and long range bombers, will be too few in number or too vulnerable to China's integrated air defenses to be decisive against China's dispersed and mobile forces.

The next chapter will critique new approaches U.S. military planners are developing to overcome the strategic advantage China is rapidly acquiring, and explain why these approaches will be inadequate for maintaining stability in the region in the face of China's emerging military power.

4. An Assessment of the U.S. Responses to China's Anti-access and Area-denial Doctrine

Andrew F. Krepinevich, president of the Center for Strategic and Budgetary Assessments (CSBA), lays claim to the first discussion of the anti-access and area-denial problem, at least in its current form. In November 1993, while serving as an analyst at the U.S. DOD's Office of Net Assessment (ONA), Krepinevich completed a draft report that forecast the consequences of adversary long-range missiles and precision weapons. Once these adversaries acquired the precision-guided munitions and targeting capabilities U.S. forces had recently demonstrated in the 1991 Persian Gulf War, Krepinevich concluded that such capabilities would threaten U.S. forward military bases and the ability of U.S. forces to project power in traditional ways into forward operating theaters.[154] Over the past decade, CSBA has published numerous studies on the access denial problem and recommended responses for U.S. planners and policymakers.[155]

The modern form of the access denial challenge for U.S. military planners dates back to the 1970s with the development by Soviet military planners of the "reconnaissance-strike complex" concept.[156] The 1991 Persian Gulf War was the first large-scale demonstration of the effects a wide-ranging C4ISR network and precision-guided munitions (the envisioned components of the Soviet reconnaissance-strike complex) could inflict on dispersed adversary command and control, air, and land forces. Subsequent to that episode, Krepinevich and others at ONA and CSBA began to contemplate the consequences of a modern adversary reconnaissance-strike complex for forward-deployed and expeditionary U.S. naval and air power. As Chapter 3 of this study explained, the PLA has applied these concepts to the design and acquisition of its forces tasked with operations over its near seas and beyond. Twenty years after Krepinevich's original study for ONA, the U.S. DOD is now highly engaged with developing concepts and doctrine for addressing the access denial challenges that are mounting in the Western Pacific and elsewhere.

The 2010 Quadrennial Defense Review report (QDR), issued in February of that year, made explicit mention of the access denial problem and noted in detail China's development of access denial capabilities.[157] The report explained the DOD's responses to access denial challenges. Prominent in those responses was the revelation that the Air Force and Navy were by that time "developing a new joint air-sea battle concept for defeating adversaries across the range of military operations, including adversaries equipped with sophisticated anti-access and area denial capabilities."[158] This chapter will assert that although the development of these responses by U.S. military planners is necessary, they are not by themselves a sufficient response to China's military modernization. They direct expensive U.S. military resources at China's strengths and are thus an uncompetitive and likely unsustainable approach. A competitive strategy will require a much broader response, including substantial roles for U.S. and coalition SOF.

The Joint Operational Access Concept (JOAC)

Soon after becoming Chairman of the Joint Chiefs of Staff in 2011, General Martin Dempsey, USA, directed the Joint Staff, augmented by representatives from all the Services, the combatant commands, multinational partners, and others, to write the Joint Operational Access Concept (JOAC). Issued in January 2012 under Dempsey's signature, the JOAC is Dempsey's and the Joint Staff's attempt at a capstone, all-service response to the access denial problem.[159] In November 2011, the Pentagon announced the creation of the Air-Sea Strategy Office, staffed by officers from all four Services and tasked with developing operational concepts and doctrine for access denial threats.[160] This monograph will discuss the Air-Sea Battle concept in greater detail in the next section.

The authors of the JOAC assert that *cross-domain synergy*—"the complementary vice merely additive employment of capabilities in different domains [land, sea, air, space, and cyber] such that each enhances the effectiveness and compensates for the vulnerabilities of the others"—should be the central operating tenet for U.S. and allied forces attempting to prevail against adversary access denial capabilities. An example of cross-domain synergy would be employing submarine-launched cruise missiles to suppress enemy air defenses in prelude to an air campaign. Another would be the use of cyber weapons to disrupt an adversary's space-based C4ISR network. The JOAC

also calls for U.S. and coalition forces to achieve cross-domain synergy at lower organizational echelons. The goal is to enable the joint force to generate the operational tempo necessary to exploit fleeting local vulnerabilities to adversary forces and systems.[161]

The JOAC defines the military challenge presented by a high-end, anti-access adversary in a manner that matches the description of China's military investments presented in Chapter 3. The JOAC's description of key adversary anti-access capabilities includes items such as:

1. A variety of surface-, air- and submarine-launched ballistic and cruise missiles able to accurately attack forward bases and deploying U.S. forces and their supporting logistics at ranges exceeding 1,000 nautical miles.

2. Long-range reconnaissance and surveillance systems that provide necessary targeting information, including satellites, aircraft, and land and ship-based radar.

3. Kinetic and non-kinetic anti-satellite weapons that can disable space systems vital to U.S. force projection.

4. Submarine forces able to interdict U.S. and friendly sea lines of communications in both sovereign and international waters between U.S. bases and the theater of operations.[162]

In describing the military access challenges, the JOAC's authors have described the military capabilities the PLA is building up adjacent to the East and South China Seas, but also military capabilities that will increasingly be available to lesser powers and eventually non-state actors.[163]

In response, the JOAC describes a list of precepts that should guide the development of joint warfighting doctrine and war plans that must cope with access denial scenarios.[164] Some of the JOAC's precepts are long-standing warfighting principles. These familiar precepts include recommendations to "maximize surprise," "disrupt enemy reconnaissance and surveillance efforts," "prepare the operational area in advance," "exploit advantages in one or more domains to disrupt enemy anti-access/area-denial capabilities in others," and "create pockets of local domain superiority." Such precepts, while helpful, should not be new concepts for trained U.S. and allied commanders. Other items on the JOAC's list of precepts, such as "maneuver

directly against key operational objectives from strategic distance," "attack enemy anti-access/area-denial defenses in depth," and "attack the enemy's space and cyber capabilities" may be beyond the capabilities of U.S. and allied forces or may create unfavorable escalation risks, points this monograph will discuss in more depth later.

The JOAC then discusses a list of 30 operational capabilities the joint force should possess if it expects to succeed in a high-end access denial environment. The list includes capabilities such as:

1. "The ability to perform effective command and control in a degraded and/or austere communications environment."
2. "The ability to employ mission command to enable subordinate commanders to act independently in consonance with the higher commander's intent and effect the necessary cross-domain integration laterally at the required echelon."
3. "The ability to locate, target, and suppress or neutralize hostile anti-access and area-denial capabilities in complex terrain with the necessary range, precision, responsiveness and reversible and permanent effects while limiting collateral damage."
4. "The ability to conduct and support operational maneuver over strategic distances along multiple axes of advance by air and sea."
5. "The ability to mask the approach of joint maneuver elements to enable those forces to penetrate sophisticated anti-access systems and close within striking range with acceptable risk."[165]

Many of these required capabilities involve operations few if any U.S. or allied commanders have had to execute, at least outside of scripted training events. The U.S. has not faced large-scale opposed access to the global commons since 1945. Today's commanders and their staffs thus face the disorienting task of having to discard long-standing assumptions and procedures related to strategic maneuver, engagement ranges, logistics support, and force protection, among other considerations.

To their credit, the JOAC's authors listed 10 risks that if not addressed could compromise the joint access concept and presumably the viability of access operations by U.S. and coalition forces.[166] Frequently mentioned in the

risk analysis is the possibility that U.S. and allied forces would fail to achieve sufficient cross-domain synergy, the key tenet of the concept. This failure could occur because of an adversary's success at degrading the coalition's command and control network, thus preventing the effective integration of domain capabilities. Failure could similarly occur because the systems in the various domains are unable to integrate their operations or because particular operational demands make it too complicated to do so. The JOAC calls for cross-domain synergy to occur at low echelon levels in order to speed operational tempo and to take advantage of fleeting opportunities. However, low-level commanders and staffs may be either untrained, ill-equipped, insufficiently connected, or lack the authority to achieve the cross-domain synergy the JOAC's authors intend.

Perhaps even more critical, the JOAC's authors posited that U.S. and allied forces may simply lack the proper systems and capabilities to implement some of the concept's required precepts and tasks, and that policymakers may conclude that it is too expensive to acquire these systems and capabilities. For example, the concept calls for employing deep and precise strikes to attack an adversary's systems and networks at depth. U.S. and coalition forces may not be able to acquire at a reasonable cost the capabilities needed to locate and target mobile and stealthy adversary platforms operating from deep continental positions. Similarly, planners may find it impractical to logistically support the concept at strategic distances through contested lines of communication.

Finally, and perhaps most crucially, the JOAC's authors suggest that policymakers may not be able to execute some of concept's essential features. Deep strikes against enemy systems and networks could greatly increase escalation risks, in ways unfavorable to U.S. interests. For example, policymakers may blanch from bombarding the homeland of an adversary armed with intercontinental-range nuclear forces. In addition, attacks on an adversary's space and computer systems would likely lead to retaliation against U.S. systems, an escalation that could impair U.S. expeditionary forces more than an adversary operating from a continental position.

JOAC version 1.0 was a good start by the U.S. Joint Staff in organizing a response to the access denial problem, if only because the document illuminated so clearly the wide gap between the operating environment U.S. commanders have become used to and the far more challenging future they now must face. By listing the military capabilities the U.S. must acquire and

the risks of attempting to execute the tasks needed for success, the JOAC described the steep and possibly insurmountable road ahead for policymakers, commanders, and planners.

The Air-Sea Battle concept (ASB)

Before General Dempsey focused the entire Joint Staff on the access denial problem, the Air-Sea Battle Concept, the JOAC's predecessor and now subcomponent, presented the first outline for how U.S. air and naval power should defeat adversary anti-access barriers.

In February 2012, General Norton Schwartz, then Chief of Staff of the Air Force, and Admiral Jonathan Greenert, Chief of Naval Operations, jointly wrote an essay on the Air-Sea Battle (ASB) concept for *The American Interest* journal. Their purpose was to discuss the military problem ASB is designed to address and to explain some of the concept's operational methods. In doing so, Schwartz and Greenert also attempted to squelch some of the misunderstanding the previously secretive concept had spawned.[167]

Schwartz and Greenert's description of the military problem closely matches that found in the Joint Staff's JOAC document. They surveyed past examples of adversary anti-access and area-denial efforts, such as the German submarine campaign in the Atlantic during World War II and the Soviet blockade of Berlin in 1948, and explained how ad hoc inter-service cooperation (or what JOAC calls "cross-domain synergy") overcame these adversary attempts at exclusion. Army Air Corps long-range bombers coordinated their actions with Navy sub-hunting destroyers and escort carriers to eventually defeat the German submarine threat. In Berlin, Air Force cargo aircraft persuaded Soviet leaders that a land blockade of Berlin was fruitless.

Schwartz and Greenert concluded that the proliferation of highly capable access denial threats, not limited to just the PLA's expanding capabilities in the western Pacific, will require the end of ad hoc solutions and the creation instead of a permanent and wide-ranging organization, both at the Pentagon and at the combatant commands, to ensure comprehensive inter-service integration to achieve the goals of ASB. They point to the establishment of the Air-Sea Battle Office at the Pentagon to improve integration and inter-service communication. As mentioned earlier, among the ASB Office's goals is to influence joint and service doctrine with the access denial problem and

to integrate joint operational access precepts and methods into procurement requirements and system designs.

In their essay, Schwartz and Greenert described how ASB concepts would be employed in combat operations. They discussed three lines of effort:

1. *Disruption* of adversary C4ISR networks.
2. *Destruction* of adversary platform such as submarines, aircraft and ships to reduce the missile threat to allied forces.
3. *Defeating* adversary missiles before they impact allied targets.

The officers discussed how a networked and integrated joint force, able to operate at great depth, will be required to execute ASB's three lines of effort.

As the JOAC's discussion of risks noted, it will be both technically challenging, and perhaps strategically imprudent, to implement the lines of effort Schwartz and Greenert describe, especially against a highly capable and nuclear-armed adversary like China.

Disrupting adversary C4ISR networks involves a variety of passive and active measures. Some are traditional measures such as operating under electronic emissions control (EMCON) and employing deception such as fake transmitters. More modern forms of disruption include electronic attacks on adversary sensors and signature reduction through stealthy designs and materials.

More controversial would be kinetic attacks on China's reconnaissance satellite constellations and cyber attacks on the PLA's communication and computer networks. As mentioned earlier, U.S. military forces are highly dependent on space and computerized global communication systems. At the same time, China has already acquired a high level of expertise with both space and counter-space operations and cyber-warfare.[168] Regarding warfare in the space and cyber domains, China may enjoy escalation dominance—China may benefit from a rising intensity of combat in these domains because of a greater reliance by U.S. military forces on space and computer assets. China's position as the continental power will further bolster its position in this regard. As a large land power in a hypothetical conflict against U.S. expeditionary forces, China will have a much easier time operating a land-based manned and unmanned aircraft reconnaissance network to supplement and substitute for a space-based ISR system. In a

hypothetical war over space-based ISR networks, China will have an easier time fielding substitutes, at least for military operations over China's near seas, than will the U.S. Thus for technical and structural reasons, the U.S. may find it imprudent to disrupt China's C4ISR networks.

Next, Air-Sea Battle contemplates destroying adversary platforms such as submarines, aircraft, and ships to reduce the missile threat to allied forces. If the battle were to take place over neutral ground, U.S. forces would enjoy advantages in both technical sophistication and operational experience. However, the conflict contemplated here will occur between China and the Second Island Chain, where China's land mass and its missile forces will increasingly give it an advantage over U.S. expeditionary forces. As discussed in Chapters 2 and 3, by the next decade, China's land-attack and anti-ship missile forces will make it dangerous for U.S. short-range tactical air power, constituting the vast majority of U.S. striking power, to get close enough to suppress China's land-based aircraft and missile forces.

We should expect U.S. submarines to eventually get the upper hand against China's naval forces west of the Second Island Chain (although not without risk—by 2020, China's submarine fleet will outnumber the U.S. Pacific Fleet's submarine force by two-and-a-half to one[169]). However, that would leave China's land-based air power and missile forces, operating from expansive and well-defended territory. As mentioned in Chapter 3, China's many air bases usually have high levels of hardening and the protection of integrated air defense systems (IAD). The PLA Second Artillery's missiles are almost all mounted on mobile transporter erector launchers (TEL), forcing the U.S. to pursue dispersed, hidden, and relocating targets. The U.S. will rely on its relatively small number of sea-based Tomahawk cruise missiles and long-range bombers to service these targets. By the start of the next decade, should China's IAD prove too intimidating to U.S. air planners, the U.S. will have only a handful of B-2 stealthy bombers available to search for and attack China's TELs and air bases.[170] These bombers would receive the support of likely no more than 2,000 Tomahawk missiles (see Chapter 2) to suppress China's terrestrial C4ISR network and IAD. Facing this small U.S. strike capability will be the requirement to service a target set that would very likely number in the tens of thousands of aim points. The current U.S. order of battle is not a good match for the platform destruction line of effort called for by ASB.

Finally, Schwartz and Greenert envision kinetic and non-kinetic missile defense systems defeating the remaining attacking missiles, the ranks of which have been thinned through the disruption of C4ISR networks and the destruction of adversary platforms. As discussed in Chapters 2 and 3, there are grave questions about the current capabilities of U.S. surface ships and air bases to prevail against coordinated ballistic and cruise missile attacks. Although calls for increased missile defense capacities and base hardening are important symbols of U.S. will and its commitment to forward bases in allied countries, on a practical level, the U.S. is on the wrong side of a marginal cost inequality. Additional Chinese missiles will be cheaper to field than additional U.S. missile defense systems and hardening measures. Some analysts are pointing to directed-energy weapons to shift the marginal cost imbalance in the defender's favor.[171] However, the Navy does not foresee a laser effective against ASCMs and maneuvering ASBM warheads becoming available to the fleet until after 2025.[172]

Until then, ASB, at least as described by Schwartz and Greenert, appears to be a largely non-competitive approach to China's anti-access and area-denial threat. ASB does little to avoid China's strengths in missile range and quantity or China's ability to use its continental position to disperse, hide, and harden its forces. The search for weaknesses in China's well-considered strategy has led some analysts to recommend targeting China's C4ISR network. Yet that conclusion has only exposed the U.S. vulnerability to escalation.

In order to demonstrate resolve and improve conventional deterrence in the region, policymakers will have to improve the ability of U.S. forces to perform the tasks required by the JOAC and ASB. This will require a major investment in long-range power projection capabilities, along with hardening and redundancy for forward bases, space, and C4ISR networks. Policymakers and planners should recognize that this is not a competitive approach to the access denial problem and that they should consider other approaches and strategies (which this monograph will discuss in Chapter 5).

Distant blockade and offshore control

Realizing the drawbacks of ASB, Dr. T.X. Hammes, a senior research fellow at the U.S. National Defense University, recommended a different approach which he termed *offshore control*. Under this approach, Hammes

recommends using U.S. air, maritime, and ground forces to impose a distant blockade of Chinese commerce, as an alternative to a seemingly expensive and risky direct assault on China's homeland contemplated by ASB.[173]

Hammes sees several advantages to a distant blockade compared to ASB's direct approach. He notes the Chinese economy's high exposure to sea-borne commerce, both for raw material imports and for finished goods exports. Hammes posits that China's economy would have a tough time adjusting to a cut-off of sea-borne trade. Next, Hammes explains that a distant blockade, implemented at the Indonesia archipelago and the two Island Chains, would take advantage of these permanent geographical features to China's detriment. In addition, the enforcement of the blockade by U.S. and coalition surface forces would largely occur outside the range of China's land-based air and missile power. Closer to China's shore, the U.S. would use its advantage in submarine forces to tighten the blockade.

Equally important, in Hammes's view, is what offshore control would not do. It would not require a buildup by the U.S. of long-range striking power, which he does not believe will in any case be affordable. Next, offshore control would explicitly rule out kinetic and cyber attacks on China's homeland, space assets and other C4ISR networks. Hammes asserts that such forbearance would avert risky and self-defeating escalation and would make it easier for policymakers on both sides to find a path to negotiated war termination. Finally, Hammes believes that offshore control will be more acceptable than ASB to U.S. allies in the region. Some of these allies are likely reluctant to openly join up with an aggressively offensive military strategy against China. Nor are most of the region's military forces technically prepared for the high-tech operations contemplated by ASB.

Thus, Hammes concludes that a distant blockade is a more sensible and less risky approach than ASB. It takes advantage of geographic and U.S. maritime strengths while avoiding China's air and missile power. It attacks a particular vulnerability in the Chinese economy. Perhaps most important, it is a slow-moving approach, allowing policymakers on both sides to avoid dangerous escalation and find a way to resolve a conflict without losing face.

Although formulated to avoid ASB's drawbacks, offshore control contains its own weaknesses, which inhibit its competitiveness and practicality. Hammes assumes that a conflict with China would last for years and would result in massive damage for the global economy.[174] Indeed, he asserts that these characteristics are favorable to the U.S. and a competitive weakness

for China.[175] Hammes reasons that in a long conflict structured on blockade and global trade disruption, the U.S. would be less vulnerable than China and in a better position to adapt by building new global trading patterns. He concludes that the U.S. would thus gain negotiating leverage and position itself for favorable war termination.

This reasoning seems questionable. A military blockade against China would make the U.S. an aggressor against the global economy, since the damaging effects of the blockade, as Hammes correctly points outs, would be felt everywhere. This premise will especially be the case if the U.S. is forced to act in response to Chinese salami-slicing, as discussed in Chapter 3. It is questionable whether the U.S. would be able to politically sustain such a policy, especially when some of the greatest collateral damage from the policy would occur to U.S. partners in Asia, Europe, and Latin America. Economic damage inside the U.S. and China would also be severe. As an authoritarian country, with strict censorship controls and a large internal security apparatus, it is reasonable to presume that the CCP and government would stand a better chance of outlasting the domestic and global political backlash from the blockade's consequences. This is even more likely to be the case when one considers the high level of nationalist feeling inside China compared to the U.S., and the memory the Chinese population has concerning foreign economic exploitation. It is questionable to conclude that a prolonged and economically devastating blockade would favor the U.S.

Next, the U.S. military is neither equipped nor organized to execute the distant blockade that offshore control will require. In his paper, Hammes discusses the need to board and inspect up to 1,500 very large commercial container ships that constitute the core of the trans-oceanic merchant fleet.[176] He concedes that the U.S. Navy's current amphibious fleet, numbering 33 ships,[177] is too small for this task, but suggests that the Navy could be supplemented by leased commercial ships and helicopters, provisioned with U.S. Marine Corps and Army Visit, Board, Search, and Seizure (VBSS) teams.[178]

Hammes is correct that the U.S. Navy's amphibious fleet is too small for the task. Enforcing a distant blockade would be an immense task. For example, over 60,000 ships transit the Strait of Malacca every year, a rate of over 164 ships every day.[179] The 1,500 very large container ships is likely just the start of the search requirement. It would not be politically feasible in the modern era for U.S. submarines to simply lie off China's ports and sink all incoming merchant ships. Such "unrestricted submarine warfare," and the

resultant casualties to third-nation civilians, would be even less politically sustainable today than it was for Germany in the 20th century.

The U.S. military thus would have the task of boarding and searching thousands of container ships at a variety of distant points in the Indian and Pacific Oceans, out of range of China's military forces. Cargos bound for China would be mixed on container ships with cargo bound for many other countries in the region. It would seem highly impractical for the U.S. Navy to seize and then sort through hundreds and perhaps thousands of merchant ships in the Indian and Pacific Oceans, in an effort to remove cargo bound for China.[180] U.S. board and search operations would be blamed for both the inevitable global recession and the delays in the arrival of cargo to these third-party countries. This could increase hostility toward the United States and boarding parties could eventually encounter armed resistance, the video of which would likely appear in global media, possibly affecting the U.S. diplomatic position.

In response to the sea-borne blockade, China would attempt to reroute trade through Russia and Central Asia. Hammes is correct to conclude that China would have great difficulty using the old Silk Road to regain what it lost in sea-borne traffic. However, the blockade would boost geopolitical ties between China and Russia and greatly increase Russia's overall geopolitical and economic role. Europe's trade with China would go through Russia, which could cause Europe to strategically drift away from the U.S. In essence, a distant blockade would cut the U.S. away from Eurasian affairs, increase the power of U.S. adversaries there, and inadvertently push its Eurasian allies away.

Searching for a competitive coalition response

The currently contemplated responses to China's military modernization and its assertions in the East and South China Seas are not supported by the current force structure. They are impractical, and are uncompetitive in that they mostly play to China's strengths.

The top-level strategic goal of the U.S. is to maintain free access to the commons in the western Pacific. An equally important corollary goal is maintaining the U.S. alliance and partnership network in the region. To achieve both of these goals, the U.S. will have to demonstrate that its military forces can operate at will in the region's commons, even when events cause

tensions with China to rise. However, the specific program and characteristics of China's military modernization will by next decade put at risk the ability of U.S. forces to operate in the time and manner they choose.

The JOAC and the ASB concepts have illuminated the looming shortfalls in U.S. capabilities. In order to implement the vision contained in the JOAC and ASB, U.S. commanders will need the capability to significantly degrade China's C4ISR network without suffering the same result to U.S. and coalition C4ISR systems. U.S. forces have the capacity to cripple Chinese satellite constellations, launch kinetic strikes against Chinese command and control nodes, and presumably initiate cyber attacks against Chinese military computer networks. However, U.S. satellite constellations, forward command centers, and computer networks are also vulnerable, and as the expeditionary power, the U.S. has much more to lose in such an exchange. Without a capability to harden, defend, or quickly regenerate U.S. C4ISR capacity in a conflict, the U.S. will have to forego the ASB's first line of effort, thus exposing U.S. platforms in the region to much greater risk.

U.S. military forces in the region need to regain the range advantage they have lost due to recent Chinese military modernization. The vast bulk of U.S. striking power is currently in short-range tactical platforms that will be pushed out of range in a conflict by China's missile forces and air power. The solution to this problem is a large inventory of stealthy and survivable long-range bombers, able to deliver significant payloads from beyond China's missile zone and maintain high sortie rates during a prolonged campaign. It also means developing replacements for the legacy Harpoon anti-ship cruise missile that will have range and performance at least equal to China's missiles.

Achieving and maintaining theater access will require significant improvements in the ability of fixed bases and surface naval forces to defend against ballistic and cruise missiles. For the U.S., the challenge is reducing the marginal cost of effective missile defense below the cost of additional adversary missiles, the prospects for which (such as directed energy weapons) will not be present for perhaps 15 years.

Successful implementation of the JOAC and ASB will thus require an expensive and more tightly focused military investment program in order to field the high-end platforms and capabilities necessary to compete against China's well-designed modernization effort. Within a limited overall defense budget, such an outcome will require prioritization to an extent not recently

witnessed inside the Pentagon and Congress. More broadly, U.S. policymakers face a large gap relative to their Chinese counterparts concerning the strategic importance of the Western Pacific. For the U.S. public and policymakers, the security situation in the East and South China Seas is either a distant abstraction or just one of many global security concerns. For China, these seas are central to Chinese history and very likely are the government's prime external security interest. U.S. policymakers thus face a more difficult task mobilizing resources to meet the challenge.

In order to achieve the goals spelled out in the NSS 2010 and other capstone policy documents, U.S. policymakers will have to acquire the missing capabilities demanded by the JOAC and the ASB concept. U.S. commanders require much greater survivable long-range strike capacity, not only to implement the JOAC and ASB, but also to bolster conventional deterrence against highly capable adversaries and hold at risk targets and assets these adversaries value. U.S. forces need reliable, hardened and resilient C4ISR networks in order to remove an existing strategic vulnerability and turn it into an escalation advantage, whereby adversaries and not the U.S. are made worse off through attacks on such networks. In addition, U.S. policymakers need to support hardening of forward bases in order to bolster allied confidence in U.S. treaty commitments, and they need to improve missile defenses to better protect those facilities along with the huge investments the country has made in surface naval forces.

Nevertheless, while these programs are necessary, they are by themselves an insufficient response to China's military modernization and its assertions in the region. A military investment plan confined to this approach would be uncompetitive because it would throw resources at China's comparative advantages rather than its vulnerabilities. Maintaining stability in the Asia-Pacific region will require the full range of U.S. and allied elements of national power, not just superior naval and aerospace power.

Coalition SOF can play a critical role in a more competitive strategy that matches coalition strengths against an adversary's vulnerabilities and weaknesses. Chapter 5 will discuss the roles coalition SOF can play in a more competitive strategy and recommend actions policymakers, commanders, and planners can take to prepare these forces for these critical roles and missions.

5. Preparing USSOF for Challenges in the Asia-Pacific Theater

The U.S. is very likely to face a long and open-ended contest with China over influence in the Western Pacific and the Asia-Pacific region. U.S. policymakers and military planners will have to get comfortable with the fact that this competition will occur even as the two countries mutually benefit from trade and financial linkages. They will also have to prepare for the likelihood that the resources available to China's policymakers, for example China's military budgets, will continue to ascend rapidly while those available to the Pentagon and elsewhere in the USG will be constrained. Planners and policymakers in Washington and the Pacific will need better strategic choices than those currently contemplated if they are to preserve stability and guide China's behavior in a favorable direction. In light of the limitations imposed on conventional forces discussed in the previous chapter, U.S. and coalition SOF will likely be tasked to contribute solutions to the security problems the U.S. and its partners face, something for which special operations planners should prepare.

Designing a competitive strategy for the region begins with establishing goals (or ends) for the strategy, conducting an assessment of the operating environment, assessing the players' assets and vulnerabilities, and stating assumptions about critical factors that the strategist can't factually support. The strategist should also explain a theory of success, or the logical link between intended actions and the achievement of the strategy's goals. A truly competitive strategy will clearly depict ways to match the strategist's best assets and advantages against an opponent's weaknesses, hopefully in ways that are sustainable to the strategist's side while imposing unsustainable costs on the opponent.

U.S. goals in the Asia-Pacific region should remain as they have been for decades, namely to preserve the rule of law, the open commons, and respect for sovereignty in the region. The issue in the current context is to dissuade China from employing its future military potential—either directly or indirectly—in an attempt to change the existing international system in ways that substantially diminish the sovereignty and benefits enjoyed by the U.S. and its partners in the region. And if this attempt at dissuasion fails, the strategy

should provide U.S. and coalition policymakers with effective options for settling a crisis or conflict with China on favorable terms.[181] As mentioned in Chapter 1, China's intentions remain a mystery, while its capabilities are ascending on a disturbing trajectory. Intentions can change rapidly. U.S. and coalition policymakers and strategists must therefore reckon with what could unfold should future Chinese policymakers employ China's capabilities in ways unfavorable to U.S. interests and coalition partners.

The first four chapters of this monograph constitute an assessment of the strategic situation in the region. To this we must add assumptions about factors that we cannot factually support.

1. In order to protect its growing interests and hedge future uncertainty, China will continue its buildup of air, naval, missile, and military space capabilities with the goal of eventually establishing greater influence over its critical lines of communication.

China's security interests, within the region and beyond it, will continue to expand and increasingly overlap those of other powers. Regardless of how China's economy evolves in the years ahead, it will still retain a high dependence on export markets and imports of raw materials. China will retain a very high exposure to sea-borne trade, a disturbing risk from Beijing's perspective.

2. Even as China's economy expands and its standard of living improves, economic, social, and political volatility inside China is likely to increase.

Rising internal instability will be the likely consequence of the public's growing dissatisfaction with corruption, inequality, and stresses caused by economic adjustment and pollution. Rising nationalism is another likely consequence, brought on by both rising expectations inside China and the elite's use of nationalism as a means of social control.[182]

3. As they observe China's rising nationalism and military modernization with increasing alarm, China's neighbors will step-up their internal and external balancing initiatives.

A few countries may agree to subordinate their policies to China's, which will cause the others that do not to accelerate their military buildups and other balancing actions.

4. The security competition in the Asia-Pacific region will be open-ended.

Even as the U.S. and its partners compete with China over security concerns, they will simultaneously expand trade and financial partnerships with China. In spite of this duality, all of the players will have to prepare to sustain their competitive positions and strategies for an indefinite period.

5. China will continue to enjoy the advantages of a continental position, lower marginal production costs for military hardware, and a narrowing gap between U.S. military technology and training standards.

In addition, China's military spending is likely to continue its robust upward trajectory, while U.S. military spending, including on research and procurement, will likely stagnate for the rest of this decade.

6. China's leadership will respond to incentives.

This implies that regarding large and consequential decisions, China's leaders will evaluate the costs, benefits, and risks embedded in those decisions. It also assumes that in a crisis, China's top leaders can and will assert their authority over China's security institutions, even if this is not always the case during peacetime. If this assumption remains valid, it provides an opening for the U.S. and its allies to increase the costs for those courses of action they do not want China to pursue and increase the benefits to China for those actions they favor. If this assumption proves to be invalid, the U.S. and its partners in the region will in any case need to generate methods and resources to protect their interests regardless of China's decision-making process.

7. There are inherent weaknesses and vulnerabilities in China's current strategies that the U.S. and its allies in the region can exploit to influence China's behavior.

This chapter will discuss these weaknesses and vulnerabilities in more detail. The purpose of studying these is to generate leverage that can influence China's behavior in a favorable direction during an open-ended peacetime competition. Should conflict occur, the U.S. and its allies would seek to use

these weaknesses and vulnerabilities to increase China's costs and attempt to settle the conflict on terms that are more favorable.

This list of assumptions leads to a theory of success. In an open-ended peacetime competition, policymakers should employ techniques that raise China's costs for unfavorable behavior while providing China with benefits for favorable choices. Military planners should prepare techniques and tactics that will increase the costs to China of employing its favored strategies and deny China benefits from military action. Ideally, these measures should be visible to the extent possible in order to influence China's prewar decision-making. Finally, in the event of conflict, the U.S. and its allies should prepare for escalation on terms and in domains that would increase China's pain compared to that of the coalition, in an effort to achieve conflict resolution on favorable terms.

Implementing this theory of success requires a deeper understanding of China's vulnerabilities. This will mean finding what assets and conditions its leaders value most and then fashioning ways and resources for targeting these vulnerabilities. In an essay in the October-November 2012 issue of *Survival*, published by the International Institute of Strategic Studies, Michael Pillsbury discussed sixteen potential areas of strategic vulnerability for China's leaders.[183] Pillsbury, a senior fellow at the Hudson Institute and a former top planner for China and Asian issues at the U.S. DOD, also called for stepped-up research on China's strategic decision-making process, similar to the research on Soviet decision-making analysts in the West conducted during the Cold War. Pillsbury's "sixteen fears" can be grouped into several broad categories:

1. Fear of internal instability, riots, civil war, and terrorism inside China,
2. Fear of a blockade or other maritime disruption,
3. Fear of Taiwan's independence or a lack of PLA capacity to deal with Taiwan,
4. Fear of the potential military capacity of regional neighbors such as India, Russia, Japan, and Vietnam, and of China's territorial dismemberment after a land invasion,
5. Fear of bombardment from long range bombers or aircraft carriers,

6. Fear of attacks on important strategic assets such China's missiles forces, its anti-satellite capability, its information technology and telecommunications networks, and its pipelines,
7. Fear of escalation and a loss of control during a crisis.

In his essay, Pillsbury discussed unilateral actions the U.S. could take to reassure China's leaders, with the hope of decelerating China's military buildup. These actions include the U.S. making a "no first use" pledge regarding nuclear weapons, voluntarily capping its long range missile defense program to thwart China's need for an expanded strategic nuclear force, reassuring China about its access to sea lines of communication, and revising the U.S. security commitment to Taiwan. According to Pillsbury, bilateral arms control negotiations have little hope of success until China agrees to more transparency regarding its military forces and doctrine.[184]

Although U.S. policymakers should pursue reassurance efforts with China, they should not expect such actions by themselves to resolve the growing security competition. In the long-term, unilateral American assurances are unlikely to persuade China's policymakers and military planners, and for the same reasons that U.S. officials should focus on China's capabilities rather than its intentions. China's leaders are likely to presume that U.S. assurances can change rapidly, especially during a crisis, when these assurances would be most valuable to Beijing.

Thus, dissuasive and cost-imposing approaches must necessarily play a large role in a competitive strategy. Pillsbury's list of Chinese fears can serve as a starting point for fashioning some dissuasive and cost-imposing courses of action. These courses of action would serve at least four purposes:

1. Increase the political and diplomatic costs to China for, say, the continuation of its salami-slicing in the East and South China Seas,
2. Impose costs and deny China the rewards from any successes it might enjoy from territorial expansion or the intimidation of its neighbors,
3. Dissuade China from assertive policies by holding at risk assets and conditions valued by China's leaders, and
4. Reduce the value of China's military modernization by creating new capabilities that will negate China's current military strategy in the region.

By this view, the U.S. and its partners in the region should formulate a dissuasive strategy that will convince CCP leaders that expansionary or hegemonic policies will fail and leave China worse off. As we have seen, an effective and credible dissuasive strategy will require the employment of the full range of national power, not just naval and aerospace power.

USSOF could play a critical role in a competitive, cost-imposing strategy. The use of special operations will be especially valuable during a peacetime competition; indeed, the more successful this peacetime role is, the greater the likelihood that conflict will be avoided, on terms favorable to the U.S. and its partners.

Expanding the peacetime role of SOF in the Asia-Pacific region

USSOF in the Asia-Pacific theater are already playing important roles advancing U.S. security interests. Their most important role is establishing and maintaining relationships with partner military forces across the region. In this role, they are an important component of the diplomatic mission of U.S. country teams in the region, as well as the security cooperation plans developed by the interagency process in Washington and by the USPACOM. In addition to deepening the U.S. relationship with each partner, the USPACOM intends to build multilateral, special operations cooperation in the region through the establishment of a *regional special operations coordination center* (RSCC), sponsored by the USPACOM.[185] Implementation of the RSCC concept in the USPACOM AOR currently awaits approval from the U.S. Congress. Such approval could allow detailed planning for the concept to begin in Fiscal Year 2015.[186]

These current USPACOM and U.S. Special Operations Command (USSOCOM) initiatives provide a good basis for deepening security relationships, building partner capacity, and expanding multilateral security cooperation. However, to meet the challenge of dissuading Chinese assertiveness and protecting the sovereignty of U.S. partners, USSOF should prepare to expand their portfolio of peacetime initiatives. These initiatives will require USSOF in the region to expand their operations into new lines of effort and country relationships, in turn requiring USSOF in the region to learn and exercise new skills and operate in more places—enhancements that will likely require increased force structure, training, and resources for the theater.

Here are initiatives involving USSOF that would bolster the ability of U.S. partners in the region to resist China's salami-slicing, increase multilateral military cooperation, and threaten to impose costs on China for behavior that might be considered contrary to the interests of the U.S. and its partners.

1. USSOF should assist partners in building military capacity to resist external as well as internal threats.[187]

These are long-standing USSOF missions. However, much of the security force assistance provided over the past decade by USSOF to partners in the region has been training for foreign internal defense and counter-terrorism. While this was a proper focus during this period, the emphasis in the future should shift toward external and conventional threats to partner security and sovereignty. For example, the USG should, and very likely will, encourage partner governments to establish their local versions of access denial capabilities as a method of resisting increased Chinese encroachment. USSOF should prepare for this security force assistance tasking. This implies that USSOF will spend more time training partner conventional forces or facilitating the efforts of others who will do so. USSOF will also very likely be members of a broad team building partner capacity in the region, a team that will include conventional military personnel, advisers from other countries, and contractors.

2. The U.S. and its partners in the region should prepare for the likelihood of irregular warfare and proxy competitions in the region.[188]

Conventional arms races will not be the only form of security competition in the Asia-Pacific region. China, with few useful allies, will in the years ahead attempt to convince other countries to band-wagon with it. It will also likely attempt to weaken the resolve of countries that resist its assertions. As has happened throughout history, China and its competitors will likely employ a full range of tools to achieve these goals, including diplomatic, economic, informational, and covert actions. Planners should not dismiss the possibility of proxy conflicts and deniable subversion and incitement as means of effecting desired political change inside potential targets. The U.S. and its allies should prepare to both defend against these actions and to employ these same techniques as cost-imposing measures during a prolonged peacetime

competition. USSOF planners should prepare for when policymakers task them with these missions.

3. USSOF should expand and deepen their relationships around the region.

Under the guidance and coordination of U.S. country teams, USSOF should prepare for deeper and more persist engagement with emerging U.S. security partners such as Vietnam, Burma, Nepal, the former Soviet republics in Central Asia and Mongolia. The purpose of this initiative would be to establish relationships and trust in advance of a long and uncertain future, thus preparing future options for policymakers and planners. This initiative will also signal to China's leaders a latent capacity by the U.S. and its partners to impose costs on China for potential adverse behavior.

4. USSOF should assist partners in the development and expansion of indigenous psychological and information operations (IO) capacity.

There are several aspects to this initiative that could provide leverage to partners in the region who are attempting to resist China's assertions. With more U.S. support, these countries could make better use of media and IO to make their legal case against China's territorial encroachments in the Near Seas, and to further the impression that China is bullying its small neighbors.

The U.S. and its partners could also develop psychological warfare capacity that in the event of conflict or Chinese aggressiveness, they could employ against the PLA and Chinese command and control, vulnerabilities that Pillsbury identified in his Survival essay.[189] For example, Chinese President Xi Jinping has ordered senior officers in the PLA to periodically perform the duties of the junior enlisted ranks, an indication of possible morale problems in the PLA.[190] The threat of coalition psychological operations directed at the PLA's morale could perhaps dissuade China from implementing assertive courses of action.

5. U.S. and coalition SOF should prepare unconventional warfare and maritime irregular warfare options for possible future employment.

Over the past decade, U.S. and allied SOF spent much of their time and effort on counter-terrorism and foreign internal defense, employing these

techniques against the tactics used by their irregular adversaries. However, a decade from now, China may be the dominant conventional military power in East Asia. Under those circumstances, the U.S. and its allies may be forced to rely on irregular warfare methods to resist possible Chinese expansion. Policymakers would turn to SOF to provide options.

The intent of this approach would be to impose costs on hypothetical Chinese expansion and to deny China the benefits it seeks should it eventually achieve its territorial goals through salami-slicing or other means. Examples of irregular warfare in the maritime domain could include more aggressive media and information operations directed against China's actions; the clandestine targeting of Chinese naval and paramilitary ships; sabotage of Chinese oil facilities in the South China Sea; and sabotage to undersea data cables connecting to China. Other forms of irregular warfare might include covert action and unconventional warfare aimed at creating trouble for the CCP in Tibet and Xinjiang province.

6. The U.S. and coalition SOF should prepare unconventional warfare options that target China's economic and political presence and interests in the Middle East, Africa, and Latin America.

The purpose of such options for horizontal escalation would be to hold at risk additional interests and conditions that may be of high value to influential actors in China in an attempt to guide China's external policies in directions favorable to the U.S. and its partners. As discussed in Chapter 1, China's emergence as a great power is the result of its rapid growth, which has also resulted in a vastly increased Chinese presence around the world. Yet this process has also created exposures and vulnerabilities that could be sources of leverage should China opt to pursue unfavorable policies toward the U.S. or its partners.

These are controversial measures that policymakers should not employ without very careful consideration. Nevertheless, merely preparing for their employment could be a powerful and low-cost deterrent to hypothetical aggressive Chinese behavior. The U.S. and its allies should prepare offensive irregular warfare options, and do so quietly but within full view of China's intelligence collection system. The intent would be to show resolve, and the capability to impose costs and deny benefits to China, should it seek to expand its authority in the region at the expense of its weaker neighbors.

In summary, in order to prepare for the challenge China will present in the region during a largely peacetime security competition, USSOF will have to expand its efforts in four dimensions. USSOF will have to expand the frequency and intensity of its partner engagement activities in the Asia-Pacific theater. Second, USSOF will have to expand the geographic scope of its engagement efforts to encompass new partners around China's periphery. Third, USSOF should expand the functional scope of its partner engagement activity beyond mainly foreign internal defense and counter-terrorism to include preparing partners for more high-end and external military challenges. Finally, USSOF should be prepared to work with state and non-state partners across the region to develop offensive information warfare and unconventional warfare options for potential employment as components in a larger dissuasive strategy.

Wartime special operations missions in the Asia-Pacific theater

Kinetic conflict in the region could take many forms, widening the number of scenarios for which USSOF must prepare. Combat between conventional U.S. and Chinese military forces is only one possibility and (hopefully) the least likely event. Alternatives could include conflict between nation-state proxies or by non-state proxies sponsored by other powers. Finally, low-level kinetic action, in the form of sabotage, assassinations, terrorism, and other acts of irregular warfare may occur, perpetrated by belligerents in an attempt to achieve strategic goals while maintaining official deniability (e.g., it is widely believed that the Chinese government sponsors deniable and non-attributable offensive action in the cyber domain). Should a clash of interests continue to rise, belligerents may choose some of these indirect methods of kinetic action first, in an attempt to achieve intimidation over adversaries while avoiding the risks of overt escalation. Should these scenarios occur, U.S. policymakers will turn to the DOD and perhaps SOF to formulate and execute options under executive authority.

For cases of indirect conflict involving the employment of proxies (state or non-state), USSOF would be expected to execute many of their traditional missions. In a defensive role, these would include security force assistance, foreign internal defense, and counter-terrorism. Special operations planners should be prepared for offensive special warfare assignments including unconventional warfare, information operations, special reconnaissance,

and direct action, especially against targets in the maritime domain. Should escalation concerns constrain the conflict to deniable and non-attributable operations, SOF must be prepared to covertly train partners in a variety of cost-imposing kinetic and non-kinetic operations. Policymakers may also employ horizontal escalation as a means of increasing costs on a belligerent. That implies that USSOF must be prepared to support indirect proxy forces either elsewhere in the theater or in another theater, in an attempt to achieve the campaign's goals.

In the event U.S. forces are engaged in overt combat, SOF would be tasked to support the broader theater campaign. In addition to special warfare missions such as foreign internal defense, information operations, and unconventional warfare, SOF would likely be tasked to support conventional kinetic operations. As a heavily maritime theater, SOF should prepare for amphibious reconnaissance and maritime advanced force operations. SOF will likely have roles in support of undersea operations. In cases when overhead imagery lacks the fidelity to achieve required target discrimination, SOF may be called on to provide target reconnaissance. In these cases, SOF could be called on to perform terminal ordnance guidance, including for more exotic munitions such as the retargetable Tactical Tomahawk land-attack cruise missile. Finally, there may be rare cases when SOF may be called to execute direct action raids against adversary C4ISR nodes, in support of a counter-access denial line of effort.

Preparing USSOF for future mission requirements

Preparing for the challenge posed by China's rise will require USSOF to expand the geographical scope of their operations, the functional skills of these forces, and their breadth of knowledge. Meeting the China challenge will call on the resources of at least two theater special operations commands (Pacific and Central, for possible operations in Central Asia related to China). As both a continental and maritime theater, with alpine, desert, urban, jungle, and littoral terrain, SOF will have to prepare for the widest possible spectrum of environments. The region's cultural terrain is equally vast and complex. Finally, the range of potential military operations encompasses the entire spectrum of conflict from psychological influence, terrorism, and low-level insurgency, through high-intensity combined-arms clashes, all the way to the possible employment of nuclear weapons. It is difficult to imagine

a more comprehensive challenge than that faced by SOF preparing for the Asia-Pacific region's future.

As discussed above, building the military capacity of partners is and will continue to be a major line of effort for the USG. SOF will obviously have a major role to play in this regard. However, in contrast to the past dozen years, SOF will be expected to facilitate capacity-building in military capabilities beyond just foreign internal defense and counter-terrorism. Partners will need to build their capacities to defend against conventional external threats. This means building up conventional combined arms capabilities and establishing local access denial capacities. Thus, for example, USSOF operating in the region will need to acquire knowledge about the employment of anti-ship and anti-aircraft missiles systems, in order to train partners in the use of these systems, or to facilitate the presence of conventional forces or other experts who will impart that knowledge to U.S. partners.

As mentioned, the region encompasses widely varied and complex cultural terrain. USSOF must be prepared to function in a cultural gamut stretching from China and Korea, through the cultures of southeast and south Asia, and into central Asia. Gaining language and cultural skills for this vast range will require intensive study by SOF and their leaders. The arrival of new emerging and potential partners such as Burma and Vietnam adds both opportunities and new tasks for USSOF. Likewise, some USSOF should learn the languages and cultures of Tibet and Xinjiang province, in case those skills are needed in the future. Achieving language and cultural fluency for this region will require a substantial commitment to training time, instruction resources, and leadership emphasis from top USSOCOM officials.[191]

USSOCOM officials should ensure that the command has sufficient capacity in the full range of maritime special operations skills. As mentioned above, proxy and irregular warfare, including in the maritime domain, are possibilities for which the U.S. and its partners should be prepared. The U.S. and its allies may have to defend interests, assets, and personnel in the maritime domain from piracy, sabotage, terrorism, and other forms of irregular warfare. It also may come to pass that should China eventually achieve conventional military and escalation dominance, the U.S. and its partners may have to turn to offensive irregular warfare tactics in the maritime domain to raise China's costs. U.S. special operations officials and planners should prepare for these scenarios.

Likewise, USSOF should prepare for the offensive employment of unconventional warfare. This technique may be necessary to oppose proxy forces employed against U.S. or partners interests, or it may need to be employed as a cost-imposing measure in response to Chinese aggression. Once again, special operations leaders and planners should anticipate that policymakers in the future will call on them for options in cases where leverage is required and standard methods of obtaining it are no longer feasible. Preparing for this line of operations in the Asia-Pacific theater will entail the acquisition of language and cultural skills at relevant places in the region, the establishment of relationships and trust with appropriate actors, and effective cooperation and coordination with other agencies of the government and with foreign partners. These are all long lead-time tasks, for which special operations leaders and planners should prepare.

Finally, USSOCOM officials and planners should study the special mobility requirements of the theater and assess whether existing and near-term capacities will meet future needs. The Asia-Pacific region presents particular mobility challenges that differ from the experiences of the past decade. The theater's distances are vast compared to the northern Persian Gulf and Afghanistan, where SOF have been employed in combat in recent times. Vast distances limit the role of helicopters, at least until the U.S. and its partners can establish overt or clandestine forward operating bases near operating requirements. The U.S. Air Force Special Operations Command's acquisition of the CV-22 Osprey aircraft,[192] with an unrefueled combat radius of about 800 kilometers, somewhat mitigates the theater's "tyranny of distance" for the SOF the CV-22 supports. However, for the distance requirements imposed by the theater's geography, SOF would benefit from even greater range in a vertical lift aircraft.

The maritime nature of the theater will call for maritime mobility for SOF. The U.S. Pacific Fleet operates submarines that are specially configured for special operations and other capabilities, such as USS *Ohio*, USS *Michigan*,[193] and USS *Jimmy Carter*.[194] However, it is likely that USSOF still need a modern undersea connector from these platforms to critical littoral objectives. In April 2006, the Navy cancelled the troubled Advanced SEAL Delivery System (ASDS) program, citing technical challenges and contractor shortcomings.[195] Although the ASDS was cancelled, the need for the required capability, especially for clandestine special operations in the

Western Pacific's littorals very likely persists.[196] The Navy and USSOCOM may need to consider a follow-on undersea connector.

China's access denial capabilities will affect the planning and execution of special operations, just as they do for conventional operations. Special operations tactics, techniques, and procedures (TTPs) for mobility, infiltration, and exfiltration will have to account for access denial capabilities that special operations planners, with a few exceptions, have mostly been free to disregard in recent years. In the next decade, special operations planners might investigate whether the Air Force's new long range strike platform merits consideration for adaptation as a stealthy and long range insertion and resupply vehicle for operations in otherwise denied areas.[197]

Conclusion

The U.S. and China face overlapping security interests in the Asia-Pacific region, resulting in an intensifying security competition in the region. All the players in this competition have deeply-integrated economies and financial systems, and all have an interest in stability and risk avoidance. However, the vital interests of the U.S. and its partners in freedom of navigation and preservation of the current rules-based international system will increasingly conflict with China's strong interest in establishing security over its own lines of communication, which are vital to its economic development and internal political stability.

As China's global interests continue to expand, it is possible that its leaders will conclude that it is intolerable that forward-based U.S. military forces in the Western Pacific and Indian Oceans should continue to be the security guarantee for China's large and expanding overseas trade. China's two-decade military modernization program is clearly designed to reverse this situation. Taking advantage of its continental position, China's rapidly growing military investments are putting in place naval, aerospace, and missile power that, by early next decade, will pose a grave threat to U.S. expeditionary forces operating within 2,000 kilometers of China's coast. China's well-designed military modernization takes advantage of specific U.S. vulnerabilities in the region, which include a paucity of U.S. bases in the region that are either too close or too far from the theater; a large over-investment by the U.S. military in short range aircraft and missiles; and China's marginal cost advantage regarding weapons procurement. China's

access denial military strategy is linked to a patient salami-slicing approach to its territorial claims in the East and South China Seas that seeks to gradually establish sovereignty over China's claims while avoiding overt conflict.

U.S. military policymakers and planners are now attempting to respond to this deteriorating situation. However, these responses are either impractical or uncompetitive. Emerging U.S. DOD models such as the JOAC and the ASB concept are uncompetitive because they direct U.S. resources against China's strengths, such as its continental position, and its status as a low-cost producer of munitions and weapon platforms. Other ideas such as imposing a distant blockade on China during a conflict are impractical because U.S. forces are not organized and equipped for such a task and third-party nonbelligerents are unlikely to cooperate with such a campaign.

U.S. and partner SOF will have critical roles to play in a truly competitive response to the growing security competition. The goal of an effective competitive strategy will be to sustain an open-ended peacetime competition with China that successfully perpetuates the current rules-based status quo and that dissuades China from adopting courses of action that either overturn the status quo or impair the interests of the U.S. and its partners.

Coalition SOF can make several critical contributions to achieving these goals. Dissuading China from seeking to overturn the status quo will involve displaying to China the coalition's capacities to impose costs on China for errant behavior and for denying China the benefits it seeks from its territorial assertions or other changes to the status quo. USSOF can accomplish these goals through expanded security force assistance in the region, to include building partner capacity against external threats; establishing security relationships with new partners in the region; building partner capacity with information and psychological operations; and preparing for defensive and offensive special operations missions, including unconventional warfare.

In order to execute these tasks, USSOF in the theater will need to expand their military expertise into high-intensity combined arms assistance, expand their language and cultural skills to include a larger set of partners,[198] ensure that they are prepared for irregular operations in a maritime environment, and prepare for mobility operations in access denied environments.

Skeptics of these recommendations may assert that these preparations are unnecessary and needlessly provocative. They may claim that conflict between China and the U.S. is very unlikely, because the two countries' interests are deeply intertwined and that conflict would be mutually and

irrationally destructive. Regrettably, those same conditions have not prevented conflicts from occurring at similar junctures in history, perhaps most notably the outbreak of World War I under comparable circumstances. More broadly, sustaining the favorable status quo in the Asia-Pacific region will require active preventive maintenance by the U.S. and its partners in the region. The dissuasive and potentially cost-imposing measures recommended for U.S. and partner SOF should be performed quietly but, for the most part, in view of China's intelligence collection systems. Rather than instigating conflict, such actions will help ensure that the odds of conflict will remain low.

As is typical with many special operations activities, execution of these courses of action will take years to accomplish. This adds to the urgency of their consideration by commanders and planners. Commanders and planners should similarly anticipate that future policymakers will look to them for options, especially when conventional alternatives are impractical, as is frequently the case. For the security competition in the Asia-Pacific region, the quiet implementation of dissuasive courses of action as part of a peacetime competitive strategy will go far in maintaining the status quo, preserving the peace, and ensuring that a hypothetical conflict with China remains as unlikely as everyone wishes it to be.

Endnotes

1. Aaron L. Friedberg, *A Contest for Supremacy: China, America, and the Struggle for Mastery in Asia*, (New York: W.W. Norton, 2011), 1-2.
2. U.S. Government, *National Security Strategy*, (Washington, DC, 2010), 7, accessed October 18, 2012, http://www.whitehouse.gov/sites/default/files/rss_viewer/national_security_strategy.pdf.
3. For example, over the past decade, China has repeatedly used its permanent seat on the United Nations Security Council to block U.S. and Western policy preferences regarding Iran's nuclear program, more forceful international action regarding Syria's civil war, and more effective action against North Korea's nuclear and missile programs.
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