U.S.-CHINA COMPETITION: ASIA-PACIFIC LAND FORCE IMPLICATIONS

A U.S. Army War College Integrated Research Project in Support of U.S. Army Pacific Command and Headquarters, Department of the Army, Directorate of Strategy and Policy (HQDA G-35)

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FOREWORD

This report is the product of the U.S. Army War College's (USAWC) inaugural Integrated Research Project (IRP) on "U.S.-China Competition: Asia-Pacific Land Force Implications." It addresses a Chief of Staff, Army priority research topic and was sponsored by the U.S. Army Pacific and the Headquarters, Department of the Army, Directorate of Strategy and Policy (HQDA G-35).

The report resulted from a whole-of-War-College effort. Core curriculum and regional elective studies augmented student research and facilitated analysis. The Center for Strategic Leadership hosted an implementation workshop to solicit subject matter expertise on recommendations and implementation plans. Faculty from across the USAWC supported the analytical debate, mentored student participants, and reviewed the written contributions. Additionally, the USAWC team engaged in extensive dialogue with senior military leaders, both in theater and at Carlisle Barracks, to explore issues and develop recommendations.

This research project drew on insights from a power transition theory, using the Chinese game of "go" as an analog. Additionally, it considered the concept of "gray zone" competition, while taking into account the vital role regional allies and partners play in achieving U.S. strategic outcomes. The key findings of the research project are: (1) counter-intuitively, the Asia-Pacific is a land force centric maritime theater; (2) the U.S.-China relationship continues to emerge as the central "determinant dynamic" for the future of Asia-Pacific international relations; (3) a range of economic, diplomatic, and security relationships impact gray zone competition in the theater; and, (4) the

U.S. Army requires a change in mindset to compete successfully in the gray zone, and senior defense and Joint Force leaders must understand the nature of this space to create a force capable of competing.

This report presents nine recommendations and an implementation plan. The full report benefited from a number of engagements with military staff and academia. The U.S. Army War College archived selected portions of these engagements via multiple media formats. We offer this report to enable better understanding of U.S. security challenges in the Asia-Pacific.

DOUGLAS C. LOVELACE, JR.

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Director

Strategic Studies Institute and U.S. Army War College Press

EXECUTIVE SUMMARY

This research project is a Chief of Staff of the Army (CSA)-directed study, conducted by the Army War College and co-sponsored by the Commander, U.S. Army Pacific Command (USARPAC) and the Head-quarters, Department of the Army, Directorate of Strategy and Policy (HQDA G-35). The report presents findings and recommendations derived from an 8-month, quick-turn, student-led research and analysis effort. The central theme of the research effort is U.S.-China competition and the development of relevant land force recommendations to compete effectively in the gray zone between peace and war.

THEORY AND ANALOGY

The report employs Power Transition Theory and a "go game" analogy to underpin and explain the various assumptions and perspectives taken by the researchers regarding the state of U.S.-China relations and gray zone competition, respectively.

KEY FINDINGS

Findings include: (1) counter-intuitively, the Asia-Pacific is a land force centric, maritime theater; (2) the U.S.-China relationship emerges as the central "determinant dynamic" for the future of Asia-Pacific international relations; (3) a range of economic, diplomatic, and security relationships impact gray zone competition in the theater; and, (4) the U.S. Army requires a change in mindset to compete successfully in the gray zone, and senior defense and Joint Force leaders must understand the nature of this space to create a force capable of competing.

RECOMMENDATIONS

The report offers nine specific recommendations and a two-tier implementation plan to integrate those recommendations into defense management processes. (See Figure 1.)



Figure 1. Report Logic Map with Quick Read Highlights.

The first category facilitates changes in both the mindset and the way the U.S. approaches winning in gray zone competition. This first recommendation calls for an integrated campaigning concept to provide a new lexicon, new campaign design, and new principles to guide the conduct of cooperative and coercive theater campaigns.

The second recommendation category addresses access and readiness through partners and presence.

The following four specific recommendations populate this category:

- Adjust Pacific Pathways to encourage direct engagement with China and promote regional partner leadership in cooperative defense;
- Expand the State Partnership Program to all Association of Southeast Asian Nations (ASEAN) stakeholders, to develop long-term and reliable trust networks, military-to-military, and military-to-civilian relationships;
- Synchronize civic action activities to rationalize resource expenditures and improve linkages to combatant command prioritized initiatives and objectives; and,
- Establish cooperative security locations (CSL) in South China Sea periphery states.

These CSLs should be constructed and maintained through negotiated logistics cost sharing (LCS) agreements to establish ports, infrastructure, exercise sites, and "warm basing" facilities. Host nations would own these CSLs; U.S. forces would position logistics, engineering, medical, communications, intelligence, and other activity sets in these CSLs. The U.S. Joint Force and regional partner militaries would rotate forces into these CSLs to exercise and mature Joint Force reception, operations, and political interoperability procedures.

The third recommendation category proposes the development of a robust and mobile land-based cross-domain control capacity for collective regional defense. The following three specific recommendations populate this category:

- Air control;
- Sea control; and,
- Cyber and space control.

The purpose of this collective set of recommendations is to impose costs on challengers, and to discourage escalation from gray zone competition to war. Additionally, the collection of recommendations would expand the political space to conduct coercive military options in support of U.S. interests to enforce international order short of war. This recommendation addresses a regional capability gap. Therefore, it requires more than a U.S.-centric equipping solution. The long-term strategic options for filling this capability gap require long-term U.S. force development decisions and actions to facilitate U.S. force development, U.S.-facilitated foreign military sales (FMS), and partner-fielded capability options.

In all cases, the U.S. Joint Force must lead in the development of land-based cross-domain control concepts, and pursue doctrine and Joint Capability Technology Demonstrations (JCTD) to re-mission existing capabilities, or incentivize partners and allies to pursue these gray zone competition-centric capabilities.

The final ninth recommendation category — the creation of a land-force assured shallow-water maneuver capability — fills a tactical and operational need, which is critical to land forces operations in the Asia-Pacific. The capability involves performing mobile tactical tasks (including **offensive** operations such as a raids and interdiction; or **enabling** operations such as reconnaissance, security, or support to civil authorities) by land forces in a maritime environment. It requires fielding land forces meant to interdict transnational criminal organization supply chains, pirates at sea and supporting land bases, commercial fishing fleets presenting illegal incursions into disputed waters, and similar maritime-borne disorder activities. During coercive operations, this recommendation pro-

vides land force commanders "division cavalry-like" capabilities in a maritime environment. Cavalry-like operations include screening, reconnaissance, armed patrols, raids (on land bases), interdiction (land bases and sea platforms), envelopment or bypass maneuver, and route reconnaissance for freedom of navigation operations.

IMPLEMENTATION

The primary implementation objective is a rebalance of defense management processes and resource prioritization, from an exclusive combat readiness focus to an appreciation of the interrelationship between war fighting and winning the gray zone competition. The implementation plan recommendations embrace a two-tier (near-term, longer-term) approach. Near-term, "first-steps" include concept and doctrine development to allow for "functional area analysis" and "functional needs analysis" assessments to establish feasible requirements.

Long-term force management options include capabilities developed exclusively for use by U.S. forces, U.S.-developed capabilities for FMS, and regional partner-generated capabilities. Unless the threat profile in the region shifts significantly, U.S.-centric development of the full spectrum of recommended solutions may not be feasible. Therefore, it is imperative that the United States collaborate with regional partners to develop concepts and conduct JCTDs that will facilitate strategic force management options. No matter who fields this capability, the United States must provide leadership in the near-term to incentivize and mature the concept and capabilities. Regardless of the U.S. economy, defense budgets, or threat profile fac-

ing the United States in the next 20 years, the report recommends immediate action on "near-term" recommendations to make a future decision between strategic force development options possible.

CONCLUSION

Academic institutions and security policy analysts from various research institutions have independently arrived at recommendations similar to those proffered in this report, supporting the soundness and validity of this quick-turn research and analysis.

Future Research.

This report did not consider the extensive China-U.S. competition space associated with Indian Ocean periphery states, the Americas, Russia, or Africa. Each of these regions deserves a focused consideration. The report's Asia-Pacific analysis is intertwined with Indian Ocean security issues; however, time constraints prevented the synthesis of these Indian Ocean and Asia-Pacific issues. Considering the U.S.-China relationship through the lens of security issues involving India, Pakistan, Bangladesh, Myanmar (Burma), Cambodia, and Thailand are critical to understanding the interdependent nature of the USARPAC's Indo-Asia-Pacific challenge.

Finally, the context of the Asia-Pacific rivalry has evolved over the last 5 or 6 decades. The regional stakeholders' political, economic, military, and cultural histories have also evolved. This suggests an urgent need to re-examine war plans for the region, starting with first-principle assumptions and creative assessments of potential strategies employed by rivals to advance their national interests.

FOUNDATIONAL UNDERSTANDING

I. INTRODUCTION

It is hard to overestimate the centrality and influence of the U.S.-China relationship in shaping the security environment and regional state behaviors in the Indo-Asia-Pacific theater. According to Chinese President Xi Jinping, "China and the U.S. account for onethird of the world economy, one-fourth of the global population, and one-fifth of global trade."1 The region is also home to half the world's population, eight of the world's ten largest armies, and five of the seven U.S. mutual defense treaties. Further, the U.S. Army has influenced regional stability and security by maintaining a continuous regional presence since the late 19th century.² Since the late 1970s, the U.S. relationship with China and the region has been characterized by strong elements of cooperation and economic growth.3 More recently, concerns over territorial dispute resolution, response to a bellicose nuclear threat emanating from North Korea, and an unease among regional allies and partners over China's increasingly assertive foreign policy and outward looking military strategy have further complicated policy calculations in the region.4 As rightly noted by Dr. David Lai, "for better or for worse, the U.S.-China relationship is becoming a defining factor in the relations among Asia-Pacific nations."5

U.S. President Barack Obama emphasized the importance of Asia-Pacific security and stability to U.S. interests by announcing a rebalancing of U.S. foreign policy toward the Asia-Pacific in his 2012 strategic guidance document. The 2015 National Security Strategy of the United States re-emphasized the administration's commitment to that policy choice. Since then, the U.S. Joint Force has responded to the rebalance in

several ways. Units deployed to the wars in Iraq and Afghanistan have been returning to the Asia-Pacific theater as the United States withdraws from those conflicts. The U.S. Marines are on their fourth rotation to Darwin, Australia, where they are gradually increasing their rotational presence to 2,500 marines by 2017.8 Finally, former Chairman of the Joint Chiefs, General Martin E. Dempsey, issued the *Joint Operational Access Concept* to direct "how the Joint Force will operate in response to emerging anti-access and areadenial [A2AD] security challenges" in the region.9

These military responses to the rebalance guidance—incorporating not only military but also diplomatic, economic, and other elements of national power—have improved U.S. security posture, presence, and readiness to respond to combat contingencies in the region. However, the most persistent challenges facing the U.S. have emerged in the contested security space between war and peace, commonly called the gray zone.¹⁰

Military practitioners must better understand the nature of these gray zone competitions and the forces of regional disorder that inhibit a united response to those challenges. Land force practitioners must develop or adapt capabilities to compete successfully in this contested security space. The purpose of this report is to identify the land force capabilities and initiatives necessary to advance U.S. national interests and achieve national strategic objectives in the face of gray zone competition and disorder activities in the Asia-Pacific region.

U.S. Army War College (USAWC) students wrote this report for land force military practitioners. The value of this student-led research project is to provide quick-turn insights, unconstrained by the realities of

staff filters and organizational culture limitations, to address gray zone competition and disorder activities. These preliminary insights, inspired by what is new or changing in the environment, are intended to feed formal command planning and defense management systems for further consideration. The research team offers actionable implementation first steps for each recommendation proffered. The research team aspires to provide recommendations to enhance land forces relevance in shaping U.S. relations with China through relationships with regional allies and partners. Each recommendation provides some improvement to the U.S. Joint Force's warfighting capability by enhancing multi-domain joint warfighting, providing deterrence and escalation mitigation options, or enhancing host government legitimacy and counter-corruption by leveraging partner capacity building activities. 11 The Report Logic Map (see Figure 2) depicts the logic flow leading to the report's conclusion: land forces relevance in the Asia-Pacific hinges on providing options to manage gray zone (between war and peace) competition, and providing cooperative to coercive means to enforce compliance with favorable international order norms through presence.



Figure 2. Report Logic Map.

The report logic map begins with a discussion of power transition theory and a Chinese "go game" analogy to rationalize the report's central focus on the U.S.-China relationship, explain the nature of gray zone competition in the Asia-Pacific, and highlight the vital role that U.S. engagement of regional allies and partners plays in achieving strategic outcomes.

The report briefly covers both U.S. and Chinese key interests and the security environment, followed by a description of the most significant challenges and opportunities affecting U.S. interests in the region. This discussion leads to the identification of six broad land forces capability gaps and recommendations to address them. Finally, the report proffers implementation first steps to embed the recommendations into formal defense management processes for further development. The report concludes with a self-assessment of the report's validity and suggestions for future research.

II. THEORY AND SCOPE

POWER TRANSITION

Power transition refers to a struggle among "big" and "powerful" nations ("big" primarily in terms of territory, demographics, and level of development; and "powerful" with respect to their consequential influence on world affairs). The stakes of power transition competition involve the modification of an existing international system.

The rise of a previously underdeveloped and frustrated big nation sets in motion a power transition. The upstart nation's frustration stems from a dissatisfaction with the existing international system and the dominant system leader nation.

As its national power . . . [begins to increase, this rising nation experiences] . . . the impulse to make changes, intentionally or compulsively, to the rules of the [international] system that purportedly works against its interests. Changes of this kind challenge the existing international order. If the challenger and the statusquo powers cannot come to terms with the changes . . . they often [tragically] settle their differences on battlefields.¹²

China's economic and military advancement and expanding influence around the world has precipitated a process of power transition competition between the United States and China. Unlike rivalries and competitive exchanges between other states, the U.S.-China competition has a revisionist nature. The countries engage in power transition competition not over temporal wins regarding specific issues, but over the future structure of the international system and

the norms that shape state behavior. The competition's myriad variables prevent prediction of an inevitable transfer of international system leadership from the United States to China, or the continued dominance of the United States. Rather, engaging in the process of competition results in a change of rules by which all nations interact within the international order.¹³

Though scholars may debate the viability of power transition theory or its application to U.S.-China relations, evidence of power transition appears nonetheless. Its first stage arguably began in 1978 when China launched its modernization mission and concluded in 2008 when China reached many of its developmental milestones. Now in a second stage, expected to continue through 2050, China continues to grow in ways that make compromise more difficult, as China becomes more assertive on matters involving its extant and expanding national interests.¹⁴ This stage marks a dangerous period in power transition. Neither Chinese nor U.S. interests can afford for competition to escalate to war; but the potential for miscalculation remains significant. China may push for change in the international system too quickly, using economic and military force to impose its will on the system. Likewise, the United States may succumb to the historic precedent of a system leader "concerned with, and uneasy about, the changing power balance" being tempted to "launch a preemptive strike to derail the rising power."15

Three critical insights derived from U.S.-China power transition analysis to inform the scope and focus of the report. First, the U.S.-China relationship emerges as the centerpiece and focus of the report. The nature of the U.S.-China relationship and competition for influence over international system structure

and norms fundamentally underpin U.S. engagement with regional partners and the land forces recommendations presented.

Second, U.S.-China power transition analysis provides context for understanding the behavior of China, the United States, and other regional state actors.

Third, this analysis of China-U.S. power transition provides a rationale and incentive for the United States to manage and influence the restructuring of international order in the gray zone competitive space between peace and war. The United States fails to protect its interests if it retreats from the competition, or escalates to war. If the United States retreats from direct competition, one of two outcomes seem likely. In the first, the United States avoids a confrontation with China until the competitive disadvantage compels the political leadership to employ the military instrument of power, thereby going to war to reverse unfavorable international order trends. In the second, the United States concedes to international system adjustments that no longer assure the advancement of U.S. interests. No doubt, other options exist that iteratively oscillate between these two extremes. Neither U.S. retrenchment nor bellicose behavior (nor oscillating between them) seems prudent. Rather, this report adopts the position that U.S. political leadership will aspire to a strategic vision that includes nuanced win adjustments to the international order (shared power, no victory-defeat), a nuanced foreign policy that operates on several levels to affect those adjustments, and the resourcing of a military capable of contributing to the advancement of foreign policy objectives in the gray zone.

GO GAME ANALOGY

Leaders must understand the nature of the gray zone competitive space to pursue a vision of the future that includes international order changed through China-U.S. competition, short of war. The Chinese board game of *go* offers a special insight into Chinese strategic thinking and operational art. The *go* gamechess comparison provides a useful analogy to understanding the difference between Western and Chinese perspectives of strategy and competition, especially in the gray zone.

Only a brief description of the go game is necessary to glean the key points of comparison between the Chinese and U.S. strategic approaches to the gray zone.¹⁷ Go is an ancient Chinese board game played on a 19x19 matrix with black and white stones. Like many other board games, the go game is a game of war; its object is to exercise control of territories, one of the most basic objectives of war. The go game is played between two players who alternately place black and white stones on the intersections of the grid matrix board - one piece at a time. Stones hold equal value and remain on the board unless captured (encircled) and removed by the opposing player. By encircling an intersection with the same colored stones, a player controls territory. The game begins with an empty board and ends when both players see no advantage in continuing (two passes, one by each player, ends the game).

Contrasting the strategies and play between the *go* game and chess offers at least five insights relevant to U.S. versus Chinese competition perspectives in the gray zone. First, the *go* game is designed to employ a win-without-fighting strategy. In chess, players attack

opponent pieces—removing them from play, simplifying the game as it continues. Competitors remove stones in the *go* game, but not through direct attack. They gradually out-position (encircle) the opponent's position and exercise control over the terrain—a hallmark of Chinese strategy. Further, in the *go* game, all the stones are of equal value and they do not move around the board. There is no "advantage of technology," with some pieces having greater mobility than others do—a hallmark of both chess and U.S. strategy.

Second, the go game features a multi-nodal initiative. Opposing players take the initiative across multiple regions of the board through successive turns. Players exploit opportunity and abandon failed initiatives in different regions as play progresses. There are always multiple sub-competitions occurring across a go game board. In chess, a player often pursues a single strategy across the board. Opportunity is usually limited to exploiting an opponent's mistake. Amongst skilled players, these rarely occur. The multi-nodal initiative nature of the go game represents the simultaneous regional and functional competition present in the natural environment. The United States and China pursue competition in multiple regions and across multiple functions (diplomatic, economic, security, and narrative) simultaneously. In some, the competition takes the form of cooperation; in others, it takes the form of coercion or confrontation. Yet the competition occurs simultaneously.

Third, *go* game strategy takes the long-view, as play continues and the game becomes more complex. The *go* game presents 361 possible opening moves, whereby chess offers only 20. Likewise, as the *go* game progresses, players add more stones on the board, increasingly complicating strategies and power dynam-

ics. In chess, the number of pieces on the board attrite as the game progresses, simplifying the options available. Both dynamics align with the U.S. preference to isolate issues and deal with them sequentially, often adopting binary language to describe competitors in different contexts. China is often characterized as a partner when discussed in international trade and commerce circles, but a rival (or threat) when discussed in security and territorial dispute circles.

Fourth, *go* game players often pursue a periphery to center strategy. Especially during early stages of the game, *go* game players seek to dominate the periphery and corners of the board before consolidating their advantage in the center. This demonstrates the Chinese willingness to tackle quick-win engagements in order to establish precedence and momentum before engaging in center of board competition. In chess, players adhere to the fundamental tenet of dominating the center. This is indicative of a Western fascination with engaging centers of gravity or the reduction to decisive points.

Finally, the *go* game results in nuanced outcomes. A typical *go* game produces a subtle "imperial" win between skilled players, often decided over as few as two or three spaces of territory. Most chess matches end with decisive victory, the defeat of the opponent's king. Binary language—for example, quick win and decisive victory or defeat and surrender, and mission accomplishment or failure—reflects Western military tradition and culture. The Chinese aspire to a perspective that incorporates long-term strategic success, resourcing trends that incrementally advance their interests, exploiting opportunities even when they were not the original objectives. These five game dynamics can shed light on the differing ways China and the

United States view both competition and the strategies pursued in the gray zone.

The go game fundamentally embodies a game of positioning, not a game of annihilation or attrition. The U.S. chess perspective values the preparation for war by developing competitive edge technology, overwhelming and ready combat capability and capacity, and strategies to defeat adversary A2AD capabilities. A go game perspective conforms to the ancient Chinese strategist Sun Tzu's dictum that the greatest victory is winning without fighting. The game relies on strategy and power dynamics (positioning), not technology or overwhelming force (analogous to the unequal power of various chess pieces). A central feature of the go game strategy involves creating multinodal and dynamic conditions for success. Initiative in a go game is derived from an inexhaustible variation of moves that create conditions requiring an opponent to react and thereby allowing the potential to achieve territorial advantage (or political objectives in security strategy parlance). Along these same lines, the go game becomes more complicated as play continues from the periphery to the center and the number of stones (stakeholders affected by the competition) increases. Very importantly, play proceeds in a measured and balanced manner. Strategic success at times involves reciprocal concessions resembling "nuanced win" conditions in a go game. This is not typical of adversarial engagements leading to decisive victory, as in chess. At the end of a go game, equally talented players nearly share overall territory distribution and power.

The go game perspective encourages a win-without-fighting strategic approach, nuanced win solutions to disputes, and the inclusion of regional stakeholders—starting with less contentious peripheral issues and moving to the more central disputes as initiative and power accrues. Finally, the *go* game reminds us that strategic success is characterized by sustainable and favorable political outcomes, not military victory over an opponent.

National Security Advisor Zbigniew Brzezinski observed that U.S. leaders think in terms of chess.¹⁹ The United States arguably expects other nations (or its opponents) to respond on chess terms. However, the aspirational perspective of the United States does not always prevail. This is particularly true in cases where the other player proves capable of envisioning an alternative game and strategy. The go game mindset ostensibly motivates China's behavior. This presents a problem for the United States, as it must manage a competitive and resurgent China in the gray zone competition between war and peace. The chess game, where pieces attrite from play and decisive victory over a king determines the outcome, does not reflect the contemporary competitive security environment. In fact, at the point that the game turns to chess (war), both sides stand to lose a great deal. Instead, the current competitive security environment looks more like a go game, and the United States needs to recognize the game it is engaged in.

The purpose of the Chinese *go* game analogy involves identifying and avoiding U.S. strategic cultural biases and an exclusive warfighting mind-set when competing with China. This may avert the probability of the United States losing a *go* game by accident, while preparing for a game of chess.

III. SECURITY ENVIRONMENT CONTEXT

U.S. INTERESTS

The *Quadrennial Defense Review 2014*,²⁰ the 2015 *National Security Strategy*,²¹ and the President's budget²² (among other documents) establish U.S. security interests and the means to pursue them. Subordinate federal departments and institutions provide documentation of the ways to achieve specific objectives nested under these national documents. For the U.S. military, these documents include *The National Military Strategy*²³ and combatant commander's regional strategies.²⁴

The three principle U.S. interests proffered by each of these documents include security, international order, and prosperity. Each of these broad interests has a global and regional component. Admiral Samuel J. Locklear III, the former Commander of U.S. Pacific Command (USPACOM), sums up the macro-level relevance of the Asia-Pacific to U.S. security and prosperity interests when he says:

The region is a vital driver of the global economy and includes the world's busiest international sea-lanes and nine of the ten largest ports. By any meaningful measure, the Asia-Pacific is also the most militarized region in the world, with seven of the world's ten largest standing militaries and five of the world's declared nuclear nations.²⁵

U.S. security interests specific to the Asia-Pacific start with protection of the homeland. Currently, no direct threat to the continental United States emanates from the Asia-Pacific. However, the Asia-Pacific theater includes a number of U.S. states and territories,

including Alaska, Hawaii, Guam, American Samoa, and the Commonwealth of the Northern Mariana Islands. In addition, the United States is a signatory to several security alliances and collective defense arrangements in the theater. "This homeland area, coupled with our [U.S.] treaty alliances with Australia, Japan, [the] Republic of Korea, [the] Philippines, and Thailand are the cornerstone of U.S. engagement in the region."26 The commitment to rebalance U.S. foreign policy to the Asia-Pacific strikes as a consistent theme across all national security documents. Renewed commitment to assure our allies, and a pledge to pursue deeper ties with a more diverse set of regional security partners, form the foundation to build the rebalance.

Deepening and diversifying regional security partnerships is not purely altruistic. The objectives of these security relationships are twofold: (1) to build partner capacity, increasing regional collective defense burden sharing; and, (2) to assure access and multilateral readiness if competition escalates to conflict. "The U.S. military . . . routinely provide[s] presence and conduct[s] training, exercises, and other forms of military-to-military activities - to build security globally in support of our national security interests."27 Of the dozen priority joint missions listed in The National Military Strategy (2015), six involve gray zone competition and presence.28 The recommendations offered in this report directly address all six gray zone relevant missions, and incorporate the concrete methods recommended in the Quadrennial Defense Review 2014 to conduct the missions.

Eight of the nine recommendations provide a stabilizing presence that concurrently improves crisis and contingency response capability. This stability

includes enhancing essential capabilities of missile defense, cybersecurity, maritime security, and disaster relief.²⁹ Four of the recommendations focus on military engagement missions involving security cooperation, stability operations, and support to civil authorities. These recommendations adopt tailored packaging of capabilities, regional alignment of forces, optimization of multilateral training facilities, and the pursuit of access agreements to increase interoperability with our allies and partners. Combined, they provide strategic and operational flexibility to respond to a crisis.30 Finally, three recommendations have a distinct humanitarian assistance and disaster relief component, as this mission provides the greatest opportunity for direct U.S. Army-Chinese People's Liberation Army (PLA) multi-lateral operations.

The report recommendations fully embrace the *Quadrennial Defense Review 2014's* aspiration to increase Asia-Pacific collective defense burden sharing and leadership. One recommendation in particular specifically calls for one of the traditional anchors of regional security (Australia, Japan, or the Republic of Korea³¹) to take on the additional leadership role of running a multi-site, multinational training exercise supported by U.S. logistics and transportation assets.³²

U.S. military engagement with regional allies and partners provides opportunities to advance other national interests not directly related to the security mission. The U.S. military "underpins the international order and provides opportunities to engage with other countries while positioning forces to respond to crises." U.S. economic strength relies on a stable international order, underwritten by the U.S. military's role and that of our allies and partners to ensure freedom of access and the free flow of commerce

globally.³⁴ The U.S. military can promote international order and universal values by facilitating dispute resolution through regional institutions that respect civil liberties and the rule of law. This can be done directly, by teaming with host nations to bring transnational criminals, pirates, and other violators of international order to the courts. Further, rebalancing land forces to the Asia-Pacific will directly contribute to stronger alliances and partnerships, as well as a diverse security posture. Indirectly, land force activities have the potential to create positive opportunities for increased diplomacy, expanded trade, and foreign military sales (FMS).

On a local level, land force activities can promote and empower civil society by strengthening statesociety relationships. Implementation of the recommendations offered in this report would facilitate the secondary benefits of extending host nation central government legitimacy to the periphery of their control. Land force presence activities have the potential to stimulate local economies, help reduce poverty, and mitigate conditions that lead to corruption and illegal shadow economy practices. Oversight of land force related contracting, construction, and workforce employment can directly confront corruption by advancing the standards of accountability and transparency as well as promoting universal values. The 2017 President's budget specifically addressed the advancement of U.S. interests by engaging democratic governments working toward reform by managing U.S. activities through local institutions, investing in infrastructure, and confronting corruption and financial mismanagement.35 These land force activities contribute to building strong democratic institutions and programs that foster good governance, promote justice, and strengthen civil society.36

Despite the balance between combat and gray zone competition mission sets found in U.S. security strategy documents, Joint Forces and Army concepts and doctrine lean heavily toward combat missions. U.S. strategy clearly requires the nation to maintain land forces prepared to fight and win in the Asia-Pacific. Additionally, it clearly requires land forces capable of developing regional allies and partners, contributing to stability through partner relationships, and advancing U.S. interests beyond the requirements of security. To advance U.S. national interests and achieve national strategic objectives, U.S. land forces should be prepared to fight and win, and commensurately be prepared to manage the peace in the competitive security environment known as gray zone competition.³⁷

CHINA'S INTERESTS38

China's national interests fall into three categories: (1) preservation of the Communist Party of China's control of China; (2) safeguarding Chinese sovereignty and territorial integrity; and, (3) sustainable economic and social development, which is dependent on retaining economic and market influence as well as access to/and security of resources, especially energy and minerals.³⁹

Currently, China places emphasis on the territorial disputes in the East and South China Seas. Several important factors have forced China's attention to this area. First, China's turn to assertive diplomacy has much to do with its intensified focus on the two seas. Second, China holds that the U.S. rebalance is all about China and presents China's assertive acts as a kind of reaction to the U.S. strategic rebalance toward the Asia-Pacific. China blames the U.S. for sending

"wrong" signals to China's neighbors, especially those who "dare" to challenge Chinese territorial assertions in the South and East China Seas. Third, China's quest for maritime power complicates the situation. The previous 30 years of economic reform and development transformed China from a land-based agrarian society into a global-reaching powerhouse. Much of China's resource supply and trade rely on seaborne transportation. These factors have compelled China to develop its sea power so that it can protect its expanding interests. Confident of security on the mainland, China has correspondingly increased efforts to settle maritime area disputes in its favor. As the Chinese put it, China wants to become a full-fledged global power; however, without unification with Taiwan and achieving what China perceives as territorial integrity in the East and South China Seas, China cannot pursue its broader goals at will.

China's assertive behavior in pursuing its interests in the Western Pacific have put pressure on the U.S.-China relationship, as both countries address power transition realities.

CHALLENGES

This report offers land forces relevant recommendations to respond to the four most pressing security challenges facing the United States in the Asia-Pacific: revisionists, state-based disorder, nonstate disorder, and natural disorder. The first challenge to regional stability emanates from China, a revisionist nation seeking to alter the nature of current international order to reclaim a central historic role in the Asia-Pacific.⁴⁰ China's military modernization investment — to include a nascent naval power projection capability —

combined with a more assertive foreign policy stance pose the most direct challenge. This assertive foreign policy manifests itself in military posturing to extend China's active defense periphery and in exercising physical claim to disputed territories. 41 Within the South China Sea, examples of this pattern of Chinese assertive behavior include the establishment of air defense and anti-ship missile systems on Woody Island, in the Paracel Islands. 42 Perhaps more disturbing is the use of commercial fishing fleets and artificial island construction to directly challenge China's neighbors by physically advancing Chinese claims to disputed territories distant from China's coast. China is not the only country advancing its territorial claims by developing features in the South China Sea; however, China's island construction activities - to include a 3,000-meter runway on Fiery Cross Reef, and the potential construction of a similar airfield on Subi Reef in the Spratly Islands – are among the most ambitious.⁴³ Even more distant from China's shores, Chinese commercial fishing fleets (backed up by the PLA's Navy [PLAN]) have challenged the Philippines' claims to the Scarborough Shoals and Malaysia's claims to the fisheries off Borneo.44

The second category of challenges involves state-based disorder challengers that lack the capacity China has to revise the international order. While not a gray zone competitor per se, North Korea represents the most troubling of this kind of state-based disorder force in the region. Following a decades-old tradition of bellicose behavior, North Korean leader Kim Jongun ordered the separate testing of a nuclear warhead and a ballistic rocket in March 2016. Further, within the next several months, he intends to test the capability to launch a ballistic missile from a mobile platform—a

missile capable of reaching Guam and Alaska.⁴⁵ The most troubling aspects of this challenge are North Korea's steadfast foreign policy antagonism and unpredictability, combined with their advances in nuclear warhead and mobile ballistic rocket technology; these aspects render an increasingly real and present threat to the U.S. Pacific Northwest.

As a rule, regional states with weak central government legitimacy, limited security force capacity, and an internally focused security apparatus make-up the remainder of the state-based disorder category. Particularly endemic among nations forming the peripheral boundary of the South China Sea, these weak states pose no direct threat to the United States, but instead prevent regional ally and partner central governments from effectively focusing externally on the challenges posed by China. Additionally, the central government's inability to provide order and prosperity at the periphery of their control present conditions that are fertile for nonstate disorder forces to proliferate. The Philippines, Malaysia, and Indonesia count among the nations whose weaknesses at the periphery could exacerbate challenges.

Nonstate disorder forces — the third challenges category — include transnational criminal organizations, pirates, and domestic criminal elements who establish shadow economies and power authorities. These nonstate disorder forces disrupt international order, present challenges to regional security, and consume partner nations' security force capacity. These disorder forces typically operate at the periphery of legitimate central government control. Parts of the southern islands of Mindanao and Sulu are at the periphery of the Luzon-based Philippine government's control. Parts of Sulawesi and the other islands bordering the

Celebes Sea are at the northeastern periphery of Indonesia's Java-based government control. Malaysia's two provinces in Borneo, Sabah and Sarawak, are 600 nautical miles across the South China Sea from the capital of Kuala Lumpur. Parts of each of these areas are hubs for human trafficking, drugs and gunrunning, piracy, and local shadow economies.

The final category of disruptive force in the Asia-Pacific involves those dealt by nature. East and Southeast Asia rank among the most prone to natural disasters and devastation as anywhere in the world. Typhoon-prone tracks of territory traverse expanses of the Western Pacific that include subduction zones prone to seismic activity. Dense human presence and vulnerable infrastructure often compound the magnitude of disasters, as witnessed during the 2011 tsunami and Fukushima nuclear accident. Pandemics, a few simple mutations away from rapid transmissibility, remain a perpetual risk.

Combined, these four categories of regional disorder forces underpin several capability gaps and influence the nature and location of the United Nations University's *World Risk Report 2014* recommendations.⁴⁷ The report outlines those activities likely to improve stability and reinforce several U.S. interests beyond the realm of security (e.g. support for democracies; prosperity enhancement; and poverty mitigation, rule-of-law, and human rights proliferation).

OPPORTUNITIES

The Asia-Pacific offers its share of opportunities. Australia, Japan, and the Republic of Korea are among the most stable U.S. allies, possessing robust military forces, legitimate governments, and stable economies.

In addition, "Australia and Japan are two of the most capable maritime powers in the Asia Pacific and serve as the longstanding southern and northern anchors of regional stability." ⁴⁸ Japan's recent reinterpretation of its constitution has opened the possibility of an expanded role in regional collective defense. Australia has already contributed to the U.S. capacity to provide land forces to regional collective defense by agreeing to base U.S. Marines at Darwin.

For very different reasons, Singapore and Vietnam both represent useful models for regional partners.⁴⁹ Singapore offers political stability, economic growth, and adherence to rule-of-law standards. Transparency International, a watchdog organization based in Berlin, has consistently rated Singapore among the leastcorrupt countries in Asia.⁵⁰ Vietnam, with a strong and relatively effective central government, boasts a record of accomplishment in protecting its interests vis-à-vis China. Vietnam defended itself against a direct invasion by China during the last Sino-Vietnamese war in 1979.51 China then fought a protracted war against Vietnam for 12 years, some directly but most through a proxy government in Cambodia. "The Chengdu summit denoted the end of China's twelve years of hostility toward Vietnam."52 The agreement included a Vietnamese concession to a Chinese request that the Khmer Rouge participate in post war governance of Cambodia. In part to avoid repeating the devastation caused by the war, Vietnam and China negotiated a delimitation of the territorial seas and a joint fishery agreement, dividing the Tonkin Gulf (known as Beibu Gulf or Bac Bo Gulf in the official document) between Vietnam and China on Christmas Day, 2000.53 This negotiation was significant for two reasons. It demonstrated China's willingness to negotiate on territorial

claims, if sufficiently compelled to do so. Moreover, though weaker in nearly every metric when compared to China, the negotiated settlement arguably favored Vietnam.

Mongolia, at the other end of the Asia-Pacific geography from the South China Sea, offers another opportunity for partnership. Mongolia has a long-standing relationship with both China and North Korea. Mongolia has been a constitutionally based democracy and market economy since 1992. Mongolia was the site of the third exercise of a Pacific Pathways rotation in 2015. The Mongolians have offered to host a military exercise on humanitarian assistance and disaster relief, with both China and the United States participating. This offer represents a potential opportunity for expanding direct China-United States military-to-military engagement.

The final opportunities presented in the region are the various cooperative organizations and forums available to engage with; resolve disputes; and gain understanding. The Association of Southeast Asian Nations (ASEAN) is a long-standing and credible organization within the region. Periodic changes in its leadership offer rich opportunities for expanding its role. Upcoming changes in ASEAN leadership will also offer opportunities for new perspectives and new roles.

U.S. CAPABILITY GAPS54

The U.S. whole-of-government approach falls short of effectively countering China's assertiveness in the gray zone and of influencing security environment disorder in the Asia-Pacific theater. Six capability gaps contribute to this shortfall. First, the U.S. Joint

Forces lack sufficient language and frameworks to describe or design campaigns for gray zone competition. Second, legislative and Department of Defense (DoD) oversight, in the form of authorities and timely permissions, limit U.S. land force military-to-military relations with China. These relationships are critical, regardless of political tensions and immediate state behavior. Especially during times of tense political disagreement and assertive behavior, U.S.-China trust relationships mitigate miscalculation, improve mutual understanding, and offer venues for unofficial dialogue. Third, relationships capable of assuring access and readiness among partners in the periphery states of the South China Sea remain embryonic. Fourth, several South China Sea periphery partners lack externally focused security forces, limiting their effective contribution to regional collective defense.⁵⁵ Fifth, U.S. land forces lack sufficient land-based cross-domain control capabilities. For air defense systems, capacity shortfall poses the greatest challenge. For sea control, lack of existing doctrine or capability to conduct antiship operations are the greatest challenge. In the cyber and space domain, the shortfall in training and in sufficiently transparent interoperability with partners complicates achieving cross-domain synergy. Finally, U.S. land forces lack an assured shallow-water maneuver capability. Cumulatively, these gaps amount to a serious multilateral and Joint Force shortfall for a land force centric, maritime theater.

In summary, the above sections comprise the rationale behind the recommendation screening criteria developed and used by the research project team. The centrality of the U.S.-China relationship in shaping the security environment and outcomes in the Asia-Pacific led to the first criteria. All recommendations

must address the improvement of U.S.-China relations or the advancement of U.S. interests in the gray zone competition with China. Mile acknowledging the primary role of a military force to fight and win the nation's wars, recommendations must focus on identifying land forces capabilities and activities that provide decision makers options for effectively competing in the gray zone—options for effecting a "winning without fighting" or "managing the peace" foreign policy and security strategy.

The project deliberately scoped recommendations to address emerging changes in the Asia-Pacific security environment. Distilled, four categories of new or unique regional security attributes appear. The first includes China's recent boldness in addressing territorial disputes and use of non-military and maritime law enforcement assets to advance that assertiveness. The second involves a growing desire for regional cooperative defense. Japan's reinterpretation of its constitution, allowing for an expanded role in regional cooperative defense, provides an important case-in-point. Third, there is a growing importance for partner/ally legitimacy, and an externally focused security apparatus. These factors increase a partner state's ability to resolve disputes through the rule-oflaw, and toward maturing international system norms that are nuanced wins for U.S.-China relations (and therefore for the region). Finally, leadership changes within ASEAN offer opportunities for expanded roles and new perspectives.

The final screening criteria for recommendations stipulated that they must be "dual-purpose" relevant. Recommendations must advance land forces options and effectiveness in gray zone competition; but they must also contribute to combat readiness of the Joint

Forces. No matter how useful a recommendation is to a combatant commander competing in the gray zone, preserving combat readiness within the constraints of austere budgets dominates resource prioritization and funding choices in Washington.

RECOMMENDATIONS

IV. REBALANCED MINDSET AND LEXICON

Several civilian and military leaders have praised the U.S. Joint Forces for being the best in the world. These accolades generally refer to the Joint Force's demonstrated ability to deploy force to fight the nation's wars. Over the last 2 decades, U.S. land forces have been called on disproportionally to project power and use violence to dominate the nation's enemies. For several decades, the U.S. Joint Force has been peerless in prosecuting wars characterized by nation-state armies clashing in armed conflict over a sustained period.

Perhaps because of the U.S. dominance in decisive warfare, rivals challenge the United States in other dimensions of coercive competition. Persistent competition between the United States and both state and nonstate actors in the gray zone characterize the current security environment. When this coercive competition involves capable competitors (China, Russia, maybe Iran), the terms of success include permanent changes to the norms of world order. Nations do not employ strategies that are dependent on land force victory to determine outcomes in gray zone competition. To maintain the contest below a level that would trigger a sustained military response, rivals introduce ambiguity by making use of proxies, cyber and socialmedia narratives, and other activities short of a direct and overt use of the armed forces.

Unlike wars fought by nation-state armies clashing over sustained periods, the United States is not currently competing well below the threshold of major combat operations and campaigns.⁵⁷ China's artificial island construction operations in the South China Sea and positioning of military capabilities on those fabri-

cated features are an example of gray zone competition for which the United States does not appear to have an effective response. Despite diplomatic challenges to Chinese claims and several recent freedom of navigation challenges by the U.S. Navy, China remains undeterred. In response to U.S. Navy cruisers exercising freedom of navigation rights within 12 nautical miles of Chinese occupied disputed territories, China dispatched advanced air-defense systems to Woody Island in the Paracel Islands. 58 In response to diplomatic sparing over China's sovereignty claims, General Fan Changlong (a senior commander in the PLA) made a symbolically significant visit to the Spratly Islands in April 2016, and the Chinese Ministry of Foreign Affairs denied the U.S.S. John C. Stennis a port call in Hong Kong in May 2016.⁵⁹

Lieutenant General (Ret) Daniel Bolger makes an argument that the U.S. military does not compete well outside major combat operations because the force is designed for rapid, decisive, conventional war. 60 Others consider military involvement in coercive conflict short of war troubling at best and folly at worst.61 Notwithstanding the policy choice argument and in recognition of Lieutenant General Bolger's argument, the U.S. military must be prepared to provide options to civilian political leaders who direct military action to advance U.S. interests and collective defense treaty obligations. As noted historian Dr. Antulio J. Echevarria points out, gray zone competition is nothing new, but "Chinese coercion . . . highlighted weaknesses in the U.S. military's conceptual framework for planning campaigns in support of strategies."62 The U.S. military must correct these conceptual shortfalls as a first step in addressing the gray zone challenge presented by China.

RECOMMENDATION 1: SUSTAINED COMPETITION FRAMEWORK

The Joint Staff publish a joint concept establishing a conceptual framework for conducting sustained competition operations that includes language and frameworks compatible with gray zone competition. The conceptual framework should account for partner cooperation through coercive enforcement of international order norms. Such enforcement may include episodes of lethal coercive force, without provoking a threshold for war escalation. The gray zone competition dialogue that would accompany the process of developing that concept would be worth the effort, even if a definitive framework proves elusive.

The first element to establishing a sustained competition conceptual framework requires challenging a few assumptions under which the Joint Forces, and the nation, operates. The first assumption to challenge is the myth of the war-peace binary narrative. This narrative views the nation, and therefore the military, as being in a state of war or peace. Historically during periods of peace, the nation cycles though defense budget austerity and invests in hedging strategies for developing future warfare technology. This binary narrative proves incompatible with the nature of gray zone competition or the realities of military commitment during periods of relative peace. It does, however, drive resource priority choices within the Pentagon.⁶³ The reality of the actual security environment involves continuous competition in the space between peace and war where no definitive end-state or objective drives a competition termination decision. Instead, it involves a success ("band-of-stability") measured in terms of maintaining favorable international order, achieving sustainable political outcomes, and managing a security environment within the capability and capacity of local security forces to preserve the peace.

The second element for a sustained competition conceptual framework requires the development and codification of a new lexicon to effectively discuss military actions and outcomes. The new lexicon must transcend echelons of command as well as be accessible and palatable within the communities of international and interagency partners that operate in the competitive gray zone environment. The recommendation intent includes creating a rich language to facilitate the understanding of various interagency methods, to describe various conditions and outcomes that contribute to gaining partner cooperation, and to achieve synergy of effort. The current joint lexicon of destroy, disrupt, neutralize, divert, delay, and others lend themselves to combat operations. In most cases, they prove alien or even offensive to interagency and multinational partners managing the peace in the gray zone competitive environment.64 It would be presumptuous to offer a definitive lexicon or definitions in this preliminary report. However, concept writers might consider starting with the categories of actions referred to earlier in the report, including: coordinate, cooperate, collaborate, coerce, challenge, confront, and compel to describe the competition. Each of these categories have dimensions that concept writers must explore to translate them into operational definition language. That exercise, done with our interagency and multinational partners, will facilitate precision of idea exchange between stakeholders. Potential outcome terms might include advance, maintain, change, counter, create, and restore. None of these words is

intended to be prescriptive. They represent exemplars to guide an initial conversation about neutral language that can inform communication regarding gray zone competitive actions and outcomes.

The third element of the sustained competition conceptual framework involves a design paradigm that accounts for robust interagency solutions and the nature of the gray zone competition environment. Dr. Echevarria suggests that a:

paradigm, of some sort is necessary because the exercise of non-kinetic (and eventually kinetic) power in economic, diplomatic, informational, and military dimensions requires a great deal of coordination. Moreover, not only must the United States coordinate its own efforts, it must synchronize them with those of its allies and strategic partners.⁶⁵

Military notions of unity of command may not be feasible or desirable to synchronize loosely harmonized activities across interagency partner activities. Concept writers must augment traditional elements of design⁶⁶ with new elements of design that are interagency friendly, relevant across national instruments of power,67 and easily applied in the gray zone competitive environment.68 The elements of design must also uncover the various authority, process, and forum relationships necessary to coordinate and synchronize activities. Plans resulting from new design elements must provide geographic combatant commanders with timely access to authorities, permissions, and resources required to compete continuously. This requires the national agility to approve periodic relief from peacetime restraints based on rapidly changing competition conditions. To be successful, Congress and the DoD must resource geographic combatant commanders for sustained competition operations and manage-the-peace initiatives. A deep and realistic understanding of joint, interagency, intergovernmental, and multinational stakeholders' capabilities and capacity, culture for engagement, and commitment to pursue mutually agreed upon outcomes prove essential to applying any new elements of design.

The fourth element of the sustained competition conceptual framework that will improve military effectiveness in the gray zone includes the notion of "strategic mindedness." Strategic mindedness involves the ability to think of military activities in an appropriate political context, to take a long-term view of success, and to consider military options in terms of their contribution to achieving favorable international order, sustainable political outcomes, and the ability of local security forces to manage the peace. This component of a conceptual framework remains closely tied to the development of real and relevant military options (versus courses of action, sharing similar outcomes and similar ways).⁶⁹

The final element of a sustained competition conceptual framework entails a recognition of the dual-purpose nature of military capability and capacity. This report has highlighted the value of land forces non-warfighting capabilities and relationship-building activities to combat operations. Equally important to a shift in military mind-set is the dual-purpose value of combat capability. The deterrent effect of a combat capability, combined with the national will to use it, is widely acknowledged—and as widely underappreciated. The ability to impose coercive combat capabilities into an opponent's behavior calculus expands the gray zone competitive space. The potential to apply force using a robust and present coercive force is the

most effective way to expand the competitive space. When the United States and regional partners can increase the potential cost on gray zone competitors who escalate to war, the available U.S. options—from cooperation through confrontation—to influence outcomes short of war grow exponentially.

V. ACCESS AND READINESS THROUGH PARTNERSHIP AND PRESENCE

Two recommendations in this category (2 and 3) are quick wins. They extend activities already in progress. Recommendation 4, civic action activity synchronization, appears easy; but in practice, it is difficult, requiring coordination and cooperation beyond the boundaries of military organizational authority. Recommendation 5, cooperative security locations, is the stretch goal. Many components of this recommendation are already underway. However, the synergistic affect achieved by full implementation of the recommendation will require a shared perspective regarding its value between the combatant command, service leaders, policy makers, Congress, and select regional partner governments.

RECOMMENDATION 2: NEW PACIFIC PATHWAYS INITIATIVES

Direct Engagement with China Through Mongolian Hosted Exercises.

The United States appreciates China's increasing contribution to solutions associated with global security challenges. China's recent economic growth and overall development makes their contributions to security solutions possible.⁷⁰ Additionally, the United States welcomes the peaceful rise of China. There are many security interests that the two countries share, such as countering terrorism and piracy, promoting international peacekeeping, and developing regional humanitarian assistance and a disaster relief capacity. These shared interests present opportunities for

military-to-military cooperation with China, which would help advance the bilateral relationship.⁷¹ In general, the United States endeavors to engage China, collaborate on shared interests, and better understand respective differences.

In order to engage with China in constructive ways, the United States should seek opportunities to leverage the relationship. Specifically, the United States should cooperate with other willing nations to foster U.S. cooperation with China. Mongolia represents a potential candidate for furthering U.S. engagement with China as well as North Korea.

In terms of opportunities, Mongolia offers U.S. land forces a rich opportunity to engage China (and tangentially North Korea). There are two attributes that render Mongolia a fertile partner to advance U.S.-China (or at least U.S. land force and PLA) relations. First, Mongolia maintains friendly relations with all nations in the region, including North Korea. Second, Mongolia has demonstrated the political willingness to take part in all activities that promote peace and security in the region.⁷²

Mongolia and the USPACOM have been successful in advancing military-to-military cooperation with the PLA in recent years. The PLA sent a platoon to participate in the Khaan Quest peacekeeping exercise in 2015, marking the first time ever that the PLA actively participated in this exercise. Mongolia and China conducted joint anti-terrorism exercises in each other's territories. Thus, opportunities exist to explore, and Mongolia could help advance U.S. efforts to engage China positively.

Mongolia has a special and long-lasting relation with North Korea. Mongolia was the second country to recognize the Democratic People's Republic of Korea's

(DPRK) independence in 1948, after the Soviet Union. At the time, both countries shared a socialist ideology, although Mongolia converted to a liberal-democratic political system in 1990. North Korea sees Mongolia as the only "non-threatening" nation in Northeast Asia.⁷³ Mongolia, however, has always expressed its desire to see North Korea behave in line with international norms and standards. Mongolia acknowledges current international attitudes toward North Korea and recognizes that it will be difficult for the international community to push North Korea toward an agenda change. Thus, Mongolia rightfully assumed that the best way to go forward in bringing sustainable and lasting stability to the region was by building confidence among the concerned states through open dialogue, collaboration, and engagement. Mongolian President Elbegdorj Tsakhia officially announced the "Ulaanbaatar Dialogue" initiative at the VII Ministerial Conference of the Community of Democracies in March 2013.⁷⁴ The initiative recommends dialogues on common issues facing the region, for example: regional stability, social-economic cooperation, and environmental reform. The initiative is not a substitute for the Six-Party Talks. Rather, it provides an instrument to encourage dialogue among regional countries, the most important factor in paving the road for resolving security challenges.

Within the context of the initiative, Mongolia hosted an international conference, the "Ulaanbaatar Dialogue" in 2014, at which more than 100 scholars and researchers attended from China, Russia, South Korea, North Korea, the United States, Singapore, and Mongolia. The main agenda was the Northeast Asian security situation. Experts in security studies exchanged their views and potential prospects for

the region. Although the initiative was only recently started, the results seem quite promising. Especially significant is the participation of all members of the region, including North Korean scholars, who are to inform their countries' respective decision makers. Overall, Mongolia's efforts to resolve regional issues through dialogue could be useful for the United States in promoting peace and security in the Asia-Pacific.

Another avenue of cooperation Mongolia could offer is increasing military-to-military engagement with the PLA through multinational military exercises and training. Mongolia has co-hosted a multinational exercise, Khaan Quest, annually since 2003.76 China has sent observers to participate in the exercise since 2013, and sent a platoon to participate in a field training exercise in 2015 for the first time ever. It seems likely that China will continue participation in the years to come.⁷⁷ This clearly demonstrates the possibility of reaching out to the PLA and establishing a network of trust relationships through military cooperation. The United States and Mongolia should encourage China to increase its participation in all aspects of the exercise; including command post exercises (CPX), engineering civic action program (ENCAP) projects, as well as cooperative health engagement (CHE).78 In short, direct military-to-military engagement initiatives brokered by Mongolia would build more cooperative relations between U.S. land forces and the PLA.

The U.S. Department of State (DoS)-sponsored Global Peace Operations Initiative (GPOI) enabled Mongolia to conduct several peace support operations training courses within Mongolia. In future iterations, Mongolia could invite Chinese peacekeepers to participate based on rising Chinese participation in peace support operations.⁷⁹ In addition, Mongolia worked

closely with the North Atlantic Treaty Organization (NATO) on improving its peace support operations training center capacity, and the center joined the NATO network of education and training centers in 2014. The Mongolian peace support operations training center is also a member of the Association of Asia-Pacific Peace Operations Training Centers (AAPTC), in which the United States has an administrative role.80 Based on Mongolian willingness to cooperate with the United States and other regional countries in developing peace support operations capacities, the United States could cooperate with both the NATO and the AAPTC to enhance military relations with the PLA - particularly in humanitarian assistance, disaster response, peacekeeping, and protracted stabilization operation (collapsed state with civil war and possibly nuclear weapons) training and education. In general, Mongolia offers a venue for further military engagement with the PLA through which all regional nations would benefit.

In addition, Mongolia and China have held joint anti-terrorism exercises, the Hunting Eagle series, in each other's territories bilaterally since 2009.⁸¹ In the summer of 2015, both the United States and China participated in the exercise.⁸² A People's Republic of China's (PRC) defense white paper 2015 acknowledged that China faces a serious challenge of "maintaining the political security and social stability," pointing to difficulties created by violent extremist organizations such as the "East Turkistan Separatist Forces." Given the United States' hard-earned experience from the Global War on Terror (GWOT), counterinsurgency operations (COIN), and small wars, the United States could be a potential candidate with whom China could cooperate. Within the scope authorized by U.S.

law and military combat skill transfer sensibilities, the United States can help the PLA to enhance its ability to counter terrorist activities through the exercise, while other interested countries like Japan and the Republic of Korea could assist the PLA to broaden conceptual understanding of anti-terrorism operations. Overall, anti-terrorism operations training and exercise could be one of the more productive engagements among the Asia-Pacific nations.

Even though Mongolia and the United States continue to work at increasing military cooperation with the PLA, official policy currently prevents the two nations' efforts from bearing full fruit. Joint Forces are limited in their ability to engage with the PLA by the National Defense Authorization Act (NDAA) 2000. The NDAA 2000 provides sufficient authorities and venues to gain additional authorities to USPACOM; but congressional and DoD oversight do not provide sufficient permissions to use professional military judgment to exercise those authorities. This limitation, in practice, stifles initiative and limits the ability of regional military staffs to explore engagement and planning opportunities. Enforcement and oversight of the act has a stifling impact regarding inviting the PLA to participate in more activities. The NDAA 2000 explicitly prohibits military exchanges that expose the PLA to various kinds of activities. It permits only search, rescue, and humanitarian assistance and disaster relief operations exchanges.84 It appears that without change in philosophy and new approaches to the application of U.S. policy, U.S. land forces will not broaden their military relations with the PLA, even though nations like Mongolia offer promising avenues and opportunities.

U.S. policy makers and military commanders are justifiably reluctant to improve the PLA's warfighting military capabilities. After all, in a study conducted by Allison Graham of Harvard University, 11 of 15 cases of power transition resulted in the competitors going to war. 85 Following this same line of thinking, some regional military experts believe cooperative exchanges and military engagements should be held out to the Chinese as carrots to reward good behavior; and withheld as a punishment for bad behavior. 86

Military-to-military engagement between U.S. land forces and the PLA will inevitably contribute to their effectiveness. At no point does the project team suggest improving or contributing to China's material or technological warfighting capability directly. The objectives of the recommendation are expanded trust relationship networks and improved mutual understanding to advance acceptable military behavior norms and prevent misunderstanding. Even professional military education exchanges, counter-terrorism exercises, protracted stability operations dialogues (to control nuclear weapons in failed states), and humanitarian/disaster relief exercises will improve the effectiveness of the PLA. However, the potential benefits of those engagements appear to outweigh the potential disadvantages of the military lessons learned though those exercises.

Avoiding direct military-to-military engagement with the PLA appears shortsighted. Using engagement as a carrot or stick is counter-productive. Routinizing engagement, so that it is not stifled by either nation's behavior or political climate, may prove to be a valuable tool for communicating intent and offering de-escalation opportunities should formal channels gridlock.

President Obama said there are many things the United States can do to lead the world, however, there are few that it can do alone. In general, Mongolia offers invaluable avenues to enhance U.S.-China military-to-military cooperation as well as broader regional security and stability. Mongolia can be a valuable partner in advancing common interests and regional security, especially through dialogue, cooperation, and exchanges with both North Korea and China.

Reverse Pathways.

The United States remains arguably the most important nation with regard to Asia-Pacific security, given its commitments and volume of effort in the region. However, few mechanisms have emerged for regional collective defense in the world's most populous, most diverse, and economically important region since the short-lived Southeast Asia Treaty Organization (1954-1977). Consequently, only bilateral defense agreements exist among certain nations, primarily between the United States and Australia, Japan, the Philippines, the Republic of Korea, and Thailand. In addition, Australia maintains a long-standing defense agreement with New Zealand, and China maintains an alliance of sorts with North Korea.

Routine, non-U.S. led, multinational military exercises in the Asia-Pacific are limited. These include the Australia-led Kakadu 2014, a multinational maritime exercise; and the India-led Force 18, a multinational military exercise with the ASEAN Defense Ministers' Meeting Plus nations. ⁸⁹ The United States leads or cosponsors a much higher number of exercises in the region, whose scope reaches far wider. Exercises can enhance interoperability, build mutual trust, strength-

en partnership, and improve multinational communication—contributing to the avoidance of miscalculation and miscommunication. The U.S. Army Pacific Command's (USARPAC) Pacific Pathways exercise exemplifies one such initiative.

Pacific Pathways involves 3-4 nations conducting a series of tailored Joint Force exercises throughout the region. Typically, the leadership, planning, logistics support, and theater transport for these exercises is U.S.-centric. These Pathway exercises improve multinational interoperability and facilitate the development of trust networks and understanding. They also improve U.S. Joint Force readiness and deployability more efficiently than individual or bilateral exercises.⁹⁰

In essence, the recommendation advocates that the United States cooperate with partners to conduct the Pacific Pathways in a reverse manner. Australia, Japan, and the Republic of Korea are potential candidates to lead such an effort as their capability and interoperability are relatively healthier compared to other partners in the region. This "Reverse Pathways" should differ in concept from the original initiative in the following ways. Any of the above-mentioned countries would lead the operation with two or three regional partner countries' military participating. The Reverse Pathways exercise would incorporate a series of military exercises in the Asia-Pacific region with the final destination in the U.S. Pacific Northwest or the National Training Center at Fort Irwin, California. Since this Pathways version will involve a large number of participants, potentially surpassing the transportation capacity of the regional lead nation, the United States might have to support the leading country with these assets. This variation of the original concept expands upon the existing initiative's outcomes (building relations, capacity building, and enhancing readiness) by increasing partners' leadership in regional common defense. Moreover, this initiative offers a unique opportunity for the participating nations to deepen cooperation and relationships among themselves.

The cost associated with U.S. support of the Reverse Pathways initiative must be a consideration, as the United States may need to provide logistics and transport depending on the scale and duration of the deployments. Nevertheless, the security benefit of the initiative could outweigh the cost, as regional partners share collective defense burdens and build multinational military leadership capacity. Overall, Reverse Pathways would offer an invaluable opportunity to increase regional military involvement and leadership among Asia-Pacific partners, providing regionally led security, stability, and cooperative defense.

RECOMMENDATION 3: EXPANDED STATE PARTNERSHIP PROGRAM (SPP)

The 10 countries that form the ASEAN are situated at the confluence of the most perplexing jurisdictional and maritime management problems in the world. While regional tensions over the South China Sea tend to attract international attention, there are, at the same time, less visible threats that put pressure on the ASEAN nations and prevent at least some of them from achieving their full potential as security partners for the United States. For example, modern maritime piracy, which cycles through transitions of intensity and geography, ⁹¹ remains a serious problem in Southeast Asia. Transnational criminal organizations and violent extremist and insurgent groups continue to afflict some ASEAN nations. The most prominent ter-

rorist and transnational criminal organizations that operate in Southeast Asia are located in Indonesia, Malaysia, and the Philippines. These organizations include Jemaah Islamiya (JI); Abu Sayyaf Group (ASG) with known ties to al-Qaeda; Bangsamoro Islamic Freedom Fighters (BIFF); and Moro Islamic Liberation Front (MILF). After the November 2015 Paris terrorist attacks, both ASG and BIFF pledged their allegiance to the Islamic State in Iraq and Syria (ISIS). These known terrorist organizations create a destabilizing effect on legitimate governments. They fund future destabilizing activities while actively recruiting and training new members.

The Philippines' Assistant Secretary for Strategic Assessment Raymund Jose Quilop remarked on "How 90 percent of their defense efforts focused on dealing with [these] internal terrorist and insurgent threats," which prevent the government from "focusing on external maritime domain awareness, in order to counter China." This is not only true for the Philippines. Several ASEAN nations currently lack the full governmental and military capacities they need to address simultaneously the internal and external challenges they face.

Adding complications to the mix are recurring natural disasters in Southeast Asia, which can create widespread regional instability resulting in human suffering, loss of life, and infrastructure destruction, in some cases with far greater disruptive effect than man-made disorder. Examples include the November 2013 Typhoon Haiyan, known as Super Typhoon Yolanda in the Philippines. Natural and man-made disasters regularly affect the stability of the Asia-Pacific region because of unstable geological fault lines, annual tropical depressions, and over-burdened coastal

environments.⁹⁴ Southeast Asia remains prone to frequent and severe natural disasters. Volcanic eruptions, tsunamis, earthquakes, monsoon rains, and cyclones hammer the region every year. These natural disasters present environmental, disease, displaced population, group grievance, and poverty challenges, testing the local government's ability to provide public services.

In this context, the ASEAN nations, the U.S. DoS, and USPACOM elements seek cooperation to improve security partnerships in order to counter man-made and natural threats. They seek to adapt or improve the effectiveness of regional theater security cooperation (TSC) activities. The 2014 signing of the Enhanced Defense Cooperation Agreement (EDCA) between the United States and the Philippines laid the groundwork for the U.S. military access that is needed to position troops and equipment, and to conduct Joint and multilateral training exercises on a rotational basis at five locations throughout the Philippines. This increased access demonstrates partner commitment and produces tangible evidence of the military aspect of the U.S. rebalance to the Pacific.⁹⁵

Another key resource in strengthening security cooperation between the United States and ASEAN partners is the State Partnership Program (SPP), "an innovative, low-cost, small-footprint, high-impact program that can help keep our alliances fit, strengthen existing partnerships, and develop new ones." ⁹⁶ The SPP dates back to 1993, originally established to build the partner capacity of new democracies emerging out of the former Soviet Union. This proven program has grown to 76 partnerships engaged with 54 National Guard units. "The State Partnership Program is a joint Department of Defense program that is managed and administered by the [National Guard Bureau (NGB)]." ⁹⁷

The true success of this DoD program is the "mutually beneficial relationship that is developed between the U.S. state and the partner nation." Presently, USPA-COM has only eight partnerships. This is in stark contrast to the United States European Command's (EU-COM) 22 partnerships. In fiscal year 2015, the DoD and USPACOM spent only \$1.6 million to conduct 68 partnership activities involving more than 2,200 foreign participants. 99

The unique dual-trained (civilian-military) nature of the soldier conducting the SPP provides invaluable experience to prospective partner nations in shaping their security. The Title 32 responsibility that the National Guard provides to its state allows National Guard members to serve as expert advisors in disaster risk preparedness, emergency response, and defense support to civil authorities as partner nations seek to improve their internal and external security against man-made and natural disorder activities and threats.¹⁰⁰

To help improve the security architecture of Southeast Asia and avoid potential gaps in military-to-military engagements, the DoD should extend the SPP to cover all ten countries of ASEAN. Currently, the SPP accommodates five of the ASEAN nations: Cambodia paired with Idaho, Indonesia with Hawaii, the Philippines with Guam and Hawaii, Thailand with Washington, and Vietnam with Oregon. This report recommends that the SPP add the five remaining ASEAN countries (Brunei, Laos, Malaysia, Myanmar, and Singapore). Singapore already cooperates with the Texas Army National Guard (ARNG) on helicopter aviation. Some of the other not-yet-partnered ASEAN countries have expressed interest in moving forward to identify U.S. state partners. ¹⁰¹

Expanding the SPP to cover all 10 ASEAN nations could help support the ASEAN community's aspirations to develop its political-security pillar alongside its economic and socio-cultural pillars. By including all ASEAN nations for the first time, it would break important new ground in U.S.-ASEAN military-to-military cooperation. While the recommendation's focus is specifically on ASEAN, it complements a broader recommendation from the Center for Strategic & International Studies (CSIS) that, as part of the rebalance to the Asia-Pacific, the United States should increase the number of state partnerships in the Asia-Pacific. 102

The DoD and U.S. ARNG should give new partnership priority to those nations that will have the greatest ability to advance U.S. security interests and security cooperation objectives, including control of access to the maritime commons. The nations of ASE-AN surround the "most important maritime choke point in the world." Security of and access to the global commons of the South China Sea is a key factor to be considered when selecting future program participants.

Analogous to the *go* game, each new partnership and lasting relationship formed is like placing another stone to enhance stability on the regional game board. The SPP will help shape the security environment and accomplish security cooperation objectives by enabling partnered states to engage regionally and sustain long-term relationships, allowing soldiers to apply their unique civilian-military and military-military expertise across multiple instruments of national power.¹⁰⁴

Since the inception of the SPP in 1993, there have been multiple examples of how the program contribthe partner nation's government legitimacy. Thailand entered the SPP in 2002 with the Washington National Guard. Both the partner nation and the United States share similar drug and human trafficking challenges due to their large and vulnerable shipping industries. "Both partners collaborated on better methods to enhance their respective [maritime] security" which benefited both the Port of Seattle and the Thai Port of Laem Chabang. The outcome of these engagements included building trust between the military and governmental organizations while improving global security.

The trust networks developed over time embody the most invaluable success of the program. Unlike partnered active duty units that travel to countries for training and exercises, National Guard unit's leaders do not frequently change, providing for deep and sustained relationships. Typically, relationships formed between junior leaders deepen as those leaders are promoted and serve in positions of greater responsibility.

Some challenges the SPP encounters include the limited number of training days that a reservist has to engage in partnership activities. Typical SPP engagements occur twice a year. States must pursue innovative strategies to increase the number of engagements, especially if resourcing levels remain constrained. In October 2014, the Chief of Staff of the Army, General Milley, announced his intent at the Association of the United States Army (AUSA) conference in Washington, D.C. to increase the total number of training days for reservists and national guardsman. It would be a missed opportunity if the additional training days did not go towards building the capacity of our partners and allies through the SPP.

Because the current SPP advances TSC goals and objectives, the U.S. Army should consider expanding the program. All U.S. states and territories that are involved in the SPP have at least one nation, and in some cases two nations, with whom they partner. USPACOM's TSC goals and objectives compete with other geographic combatant commands. DoD limits the funding of the SPP to \$10 million annually; this funding level supports 76 partnerships. Worldwide, one or two partnerships are added each year, and there is no provision for "graduation" from the program. This creates a difficult resourcing decision for the NGB as they forecast partner activities or explore the feasibility of adding new programs. To facilitate the expansion of the SPP, in terms of both the number of partnerships and engagement activities, the program will require an increased funding level. 107

RECOMMENDATION 4: CIVIC ACTION ACTIVITIES SYNCHRONIZATION

This recommendation encompasses two mutually supporting concepts. First, the alignment of activity sets and Joint Force engagements in locations that benefit local residual prosperity and extend host nation legitimacy at the periphery of their control. The second is the consolidation of planning and synchronization of all Joint Force civic action activities under a single executive agent. The agent responsibilities would include rationalizing linkages to theater campaign plan objectives and nesting activities under the greater whole-of-government effort. This synchronization has the potential to improve the overall synergy and effectiveness of military civic action activity. In addition, it provides the combatant commander

with a single agent to integrate planning, organize coordination forums, and provide liaison to external interagency forums. Because USPACOM conducts civic action activities in the land domain, the project team recommends USPACOM task USARPAC with this synchronization effort, and provide executive agent authorities to ensure military unit compliance.

Civic action activities contribute to setting the theater. These activities establish favorable conditions for conducting a range of military actions. Specific operation plans and other requirements established in the geographic combatant commander's theater campaign plan determine what tailored civic action activities are conducted by the Joint Forces. For civic action activities to achieve desirable outcomes, the executive agent must ensure the activities are closely linked to theater campaign objectives, synchronized with other Joint Force activities, and nested within the larger U.S. whole-of-government effort in the region. Shaping the security environment, setting the theater, and projecting national power are a few of the strategic advantages civic action activities afford the Joint Forces. Additionally, this recommendation offers U.S. land forces and the host nation the opportunity to mitigate the impact of organized crime (piracy, human/drug/ arms trafficking, gang violence, etc.), local terrorists, shadow governments and economies, and corrupt and disruptive activities.

Civic action activity synchronization provides a decisive advantage in shaping the strategic environment by providing assurance of U.S. development and security commitment to the region. The enduring security interests of the United States and the understanding of allies and partners is dependent on building strong relationships and maintaining a rotational

forward presence. As a result, the United States can leverage its forward presence in key locations to pursue bilateral and multilateral activities that enhance situational awareness, response capacity, trust, and responsible use of shared domains.¹⁰⁸

A cross-domain, interagency, and Joint Force synergy is necessary to engage allies and partners, enabling quick response to contingencies and helping to convey resolve. Additionally, linking civic action activities to the overarching national security and foreign policy strategies is critical to synchronization.

Geographical combatant commanders (GCC) execute their campaign plans continuously through numerous security and military cooperation activities. The lack of a common assessment framework might result in unsynchronized activity and divergent goals at the country level. This lack of synchronization can seriously dilute the overall effectiveness of the U.S. Government effort. Developing an assessment framework goes beyond the scope of this report. However, the report's recommendation to assign responsibilities and create forums to facilitate holistic (joint, interagency, intergovernmental, and multinational) civic action synchronization will facilitate their development.

For the purpose of projecting power and demonstrating U.S. commitment, co-locating civic action activity with pre-positioned equipment activity sets would provide for a non-escalatory U.S. military presence. Pre-positioned equipment could be maintained using local contractor service or by the host nation military, boosting the local economy or building host nation military capability respectively. Though not its primary purpose, units falling in on pre-positioned equipment would provide the United States with a credible rational to gain access during contingencies.

Synergy between civic action activities and equipment activity sets helps enable military-to-military engagement, exercises, and assure the sustained commitment of the United States to our partners and allies in the region. This effort contributes to land force training and readiness, promotes multinational interoperability with allies and partners, and improves access to Southeast Asia, without permanent basing. The ability to coordinate and train together gives additional flexibility to the United States government for crisis or disaster response. The proposed locations for emplacing equipment activity sets are aligned with the U.S. Army's Pacific plan (dated Oct 2015): Vietnam (FY16-18), Cambodia (FY 17-19), and Malaysia (FY 18-20).

Although each service is conducting civic action activities in support of the GCC's theater campaign plan in coordination with each Country's Development Cooperation Strategy, the military needs to synchronize these activities to optimize the desired effects. It is critical for a single executive agent to control land operations to help shape the security environment, deter conflict, and consolidate gains.

Civic action activities provide: a favorable U.S. military presence; transfer technical skills to local residents; and collaborate with the host nation in basic infrastructure development. Integral to this process are the four execution elements: (1) the community construction program; (2) the apprentice-training program; (3) the medical civic action program; and, (4) the community relations program. These programs provide a wide range of services to the host nation, such as construction support, assistance and training for the local population in general engineering skills, an in-camp clinic, outreach to outlying areas

and health education programs for local residents, and a positive U.S. presence. With this in mind, the equipment activity set should include logistics support (mobility and distribution), movement control, water production and purification, theater and port opening capabilities, medical support, and engineering support. Medical support could be as limited as unit medics providing sanitation education, up to a combat surgical hospital with United Nations Level II capability. Engineering support should include vertical and horizontal construction, de-mining, and debris clearing. Each activity set should complement a civic action activity execution plan.

Civic action activities support the full range of military operations, from military engagement and security cooperation, to crisis response and security force assistance. In addition, readiness, access, and relationships will improve multinational effectiveness when conducting major combat operations. Civic action activities build the host nation's capacity for combating the spread of infectious disease and responding to natural disasters. Civic action activities help strengthen relationships through engagement. They also offer a rich opportunity for direct U.S.-China military-to-military engagement, especially in support of humanitarian and disaster relief operations. Personnel rotations and equipment set placement supporting civic action activities also provide for a non-escalatory U.S. peacetime presence in the region.

International development is not a military mission; however, it is key to maintaining national security. According to the U.S. Agency for International Development (USAID), the current Southeast Asia regional growth model relies on an unsustainable use of resources that creates growing inequalities and

undermines future economic growth. The USAID goals stated in its Regional Development Cooperation Strategy for Asia's 5-year strategy (2014-2018) aspired to "A More Sustainable, Inclusive, and Prosperous Asia, with Particular Emphasis on Southeast Asia." Civic action activities assist USAID by increasing partner nation abilities and by countering the effects of domestic and natural disturbance disruptors. Civic action activities strengthen the individual national government's ability to project power, and Joint Force example and oversight can contribute to the mitigation of public health threats, corruption, and human rights violations. 110 The presence of activity sets and rotational units have the potential of improving local economic prosperity by infusing funds and providing jobs to support those activities. These efforts are essential to maintaining regional peace and building capabilities to provide for security and disaster relief.¹¹¹

The Joint Force operates across multiple domains and executes its mission through joint combined arms operations to achieve decisive action. Although civic action activities are not perceived as value added for conducting decisive action, military leaders should consider the value that stabilizing social trends and access through relationships can bring to the Army's role in preventing war by managing the peace. Civic action activity synchronization contributes to positive relations and conflict prevention in the gray zone competitive security environment. Military-to-military engagements during civic action activity promotes a safe and secure environment, rule of law norms, social well-being, stable governance, and sustainable economies.112 These partnership engagements will continue to strengthen U.S. relationships with host nations, promote unity of effort, and contribute to setting the theater in the event a military contingency emerges.

RECOMMENDATION 5: COOPERATIVE SECURITY LOCATIONS

Cooperative security locations are not new to the Asia-Pacific theater. This recommendation extends the current notion of cooperative security locations to incorporate the notion of host nation managed warm basing and the establishment of a multinational exercise site that accommodates the rehearsal of military, interagency, and non-governmental organization missions. Infrastructure development, to include transportation networks, storage facilities, reception infrastructure, and base billeting and ablutions could be funded through bilateral cost sharing agreements, reaffirming United States and host nation commitment to common interests.

The DoS has the lead on setting country-specific security cooperation goals. The DoD country teams within the embassy facilitate the linkage of military operations to DoS goals through various coordination forums involving the Joint Forces and other U.S. government agencies.

Cooperative security locations could provide a fiscally responsible platform to launch whole-of-government activities to confront security challenges and overcome the tyranny of distance inherent in interagency operations in the theater.

General Brooks, former Commander of the U.S. Army Pacific (USARPAC), stated that one of his greatest challenges was to provide "more faces in more places with fewer bases." While cooperative security locations do not completely address the challenge, the concept does mitigate the tyranny of distance and facilitate the employment of faces with fewer bases.

A string of cooperative security locations deliberately placed to provide access to areas of importance to the United States would significantly reduce the deployment and sustainment challenges faced by U.S. forces operating in Southeast Asia. The recommended cooperative security locations should be facilities with little or no permanent U.S. presence.¹¹⁴ If properly coordinated, the host nation could share the costs associated with running the facilities and maintaining pre-positioned equipment.

DoD Directive 3000.10¹¹⁵ establishes policy guidance for establishing basing outside the United States for contingency operations. Cooperative security locations could satisfy the basing needs associated with gray zone competition and power projection short of contingency operations. The primary functions of the cooperative security locations for the U.S. Joint Forces would be the establishment of a location to position and maintain equipment activity sets, rotate and temporarily house military units (primarily in support of SPP and the Civic Action Team activities), and facilitate the conduct of multinational and interagency training exercises. In the event of a military contingency, established cooperative security locations could serve as initial "warm" forward operating bases (FOBs) until the DoD coordinates alternative contingency basing outside the continental United States. 116

The synergy between civic action activities, the SPP, and prepositioned equipment activity sets enables military-to-military engagements, exercises, and assures U.S. sustained commitment to our partners and allies in the region. Additionally, this effort contributes to Army training and readiness, promotes multinational interoperability with allies and partners, improves access in Southeast Asia without permanent

basing, and gives additional flexibility to the United States government for crisis or disaster response.

Initial recommendations for cooperative security locations mirror the proposed civic action activity and equipment activity set locations (Vietnam FY16-18, Cambodia FY 17-19, and Malaysia FY 18-20). Future locations could be established to support host government legitimacy at the periphery of their control and in areas where cooperative security locations can boost local economies – mitigating the conditions that allow nonstate disruptors to flourish. Malaysia's Borneo states (Sarawak and Sabah), the Philippines' Southern islands (Mindanao, Palawan) and Indonesia's Eastern islands-bordering the Celebes Sea (Sulawesi, Kalimantan-Borneo) – present great opportunites for extending central government legitimacy, improving local prosperity, and providing a base of operations to counter transnational criminal organizations, shadow economies, and competing governance/power structures.

Cooperative security locations provide a decisive advantage in shaping the strategic environment by providing assurance of U.S. development and security commitment to the region. Strong relationships, maintained by a routinized rotational forward presence, advance the enduring security interests of the United States and Joint Force leader understanding of allies and partners. Similarly, by leveraging equipment activity sets present in key locations, the United States can pursue bilateral and multilateral military activities that further strengthen response capacity, trust, and promote responsible use of shared domains. Routine multinational and interagency exercises staged out of these cooperative security locations provide access to critical regions with little risk of escalation, should

intelligence indicators suggest a potential contingency requirement.

Cooperative security locations support the full range of military operations: from military engagement, security cooperation, and crisis response, to major operations and campaigns. Prepositioned equipment activity sets in cooperative security locations support military-to-military engagements, militaryto-civilian engagements, enhance emergency preparedness, facilitate global infectious disease prevention, and build host nation capacity for humanitarian assistance and disaster relief operations. They provide for a peacetime U.S. presence, contribute to flexible crisis response options, counter-terrorism operations options, and allow transnational criminal organization interdiction. Finally, robust cooperative security locations can transition to contingency locations if the need arises.

VI. LAND-BASED CROSS-DOMAIN CONTROL

In the Pacific theater, the limited capability and capacity of friendly force land-based cross-domain control systems represents a critical capability gap. The revisionist and disruptive challenger capability to exercise cross-domain control are increasing military risk in the Asia-Pacific region, creating an urgency to fill this gap expeditiously. 118 This recommendation is principally about providing cross-domain control capabilities to expand the range of operations the United States and its partners can conduct in the gray zone to combat challengers without triggering a sustained combat operation. It is about imposing a cost on a competitor willing to escalate to war. The Joint Operational Access Concept¹¹⁹ and Joint Concept for Entry Operations¹²⁰ provide guidance to prioritize the required capabilities needed to ensure access to the global commons while protecting our forces, partners, and allies. This recommendation proposes developing a friendly force land-based cross-domain control capability and capacity to impose an A2AD planning concern on U.S. rivals.

As a defensive capability, land-based cross-domain control provides a deterrent capability that is especially relevant to the security environment of Northeast Asia (Japan, Taiwan, and the Republic of Korea). In Southeast Asia, USPACOM could use this capability offensively or as a deterrent to Chinese military assertiveness in resolving territorial disputes.

Allies are already exploring this capability. For example, "Tokyo is responding by stringing a line of anti-ship, anti-aircraft missile batteries along 200 islands in the East China Sea stretching 1,400 kilometers from the country's mainland toward Taiwan." 121 The

United States and its regional partners would mutually benefit from a combined exploration and testing of available and emerging land-based cross-domain control systems. The United States should pursue future force development and partner capacity-building options, including both sales and purchases through FMS.

The Pacific Ocean is a geographic challenge for the commander of USPACOM. Due to the reduction of bases and troops in foreign countries throughout the region, the tyranny of distance to get U.S. combat formations in the theater to the critical point of contention remains a problematic issue. However, regionally deployed land-based cross-domain control formations could mitigate this challenge by providing mobile and deployable A2AD packages that include anti-ship, anti-air, anti-missile, and counter-cyber and space capabilities. These land-based A2AD "lily pad" formations would present rivals considering the possibility of becoming adversaries a multitude of planning challenges and risk considerations.

USPACOM should employ a land-based "lily pad" concept of tailorable packages consisting of anti-ship, anti-missile, anti-air, cyber, and electronic warfare (EW) capabilities to support theater security and contingency plans. The idea of using operational outposts is not new; during the Vietnam War, American units conducted operations from combat outposts called firebases. From these firebases, the United States was able to effectively engage the enemy with supporting fire elements, while also protecting these elements with ground maneuver units.

During Operation IRAQI FREEDOM, coalition forces dispersed units in FOBs and patrol bases, plac-

ing them closer to combat areas. More recently, the Pentagon announced that the United States would use land-based "lily pads" to employ U.S. troops closer to areas of combat, while taking advantage of their mobility for force protection. Currently, a land-based "lily pad" doctrine does not exist; however, USPA-COM and the U.S. Army Training and Doctrine Command (TRADOC) can adapt many of the firebase and FOB tactics, techniques, and procedures used in Vietnam War firebases and Operation IRAQI FREEDOM to employ land-based cross-domain control "lily pad" formations across the Asia-Pacific.

The Pacific theater is larger in scale and scope then Vietnam or Iraq; however, tailorable "lily pads" with land-based cross-domain control assets throughout the region could accommodate many of the USPA-COM commander's needs, while posing an unpredictable challenge to adversaries. The concept is to forward base A2AD assets in cooperative security locations, forward operating sites or the main operating base. However, if these locations are unavailable, the USARPAC commander could use Pacific Pathways as a temporary means of placing these formations in theater.

"Lily pad" formations could facilitate gaining U.S. entry into allied or partner countries. However, concerns over sovereignty and antagonizing China might prevent partners from allowing the United States to employ these assets, short of clear intelligence of an imminent threat. Therefore, making these capabilities available to partners though FMS or facilitating partner nation domestic development may be a more feasible multinational force development option.

Getting started on these capabilities is critical, as technology development and competitor military modernization are advancing at a rapid rate. With the availability of high volume, low-production cost, and ubiquitous access to three-dimensional (3D) printing technology, it will not be long before near-peer competitors could mass airborne and seaborne unmanned vehicles using swarm tactics. Perhaps more concerning, North Korea continues to develop its nuclear capability while testing the missile and rocket technology necessary to deliver it. In the maritime domain, China's expanded blue water navy and coastal antiship missile capabilities could challenge the future of U.S. regional dominance. Land-based cross-domain control capabilities can be a component of the U.S. response to all of these future threats.

Most importantly, land-based cross-domain control assets provide the USPACOM commander with a relatively cheap capacity for collective regional defense, which imposes costs on challengers who would escalate gray zone competition to war. Fielding the land-based cross-domain capability expands the political space available to conduct coercive military operations in support of U.S. interests to enforce international order short of war.

Secondarily, and outside the scope of this gray zone competition focused report, these land-based cross-domain control capabilities provide obvious benefits during combat operations. Land-based cross-domain control improves the Joint Force entry operations capability. In the event of a sustained combat contingency, this capability would improve force protection for Air Force assets operating within range of the mainland. Those Air Force assets could strike mainland and maritime targets, reducing the threat to U.S. Navy forces operating inside the first island chain. Viewed from this major combat operation per-

spective, the land-based cross-domain control "lily pad" formations become the first leg of a Joint Force's three-legged approach to countering an adversaries A2AD capability. While this argument is irrelevant to the gray zone competition context, it does provide a useful narrative to attract funding in the warfighting centric resource prioritization culture of the Pentagon.

This land-based cross-domain capability represents a regional gap in military capability and capacity, not a U.S.-centric gap. The long-term strategic options for filling this capability gap require long-term U.S. force development and fielding options. These options range from U.S. development and fielding to partner development and fielding options. They all originate with a U.S. Joint Force-led effort to development landbased cross-domain control concepts, capabilities, and doctrine—in concert with our regional partners. As a first step, Joint Concept Technology Demonstrations (JCTD) for the re-missioning of existing capabilities might incentivize partners and allies to pursue these gray zone competition-centric capabilities and expedite their fielding. The full potential of this recommendation cannot be realized without systems being fully interoperable across the Joint Forces—as well as between regional partners. It is essential that, from concept development through JCTD testing and fielding, the United States actively engage our partners in the process.

RECOMMENDATION 6: AIR CONTROL

The current air defense gap in the Asia-Pacific is one of capacity and interoperability more than capability. The primary purpose of anti-air assets in the tailored mission specific "lily pads" is to prevent competitors from gaining and maintaining air space control and dominance. To successfully control the air domain, the United States or its allies must employ an integrated anti-air system. An integrated system would include sensors, ground-based weapons, and interoperable command and control.

There are a myriad of anti-air weapons and systems available today, and currently emerging, from which to choose. However, in the short term, the United States should field preexisting systems and better integrate with partner nations to advance interoperability through exercises, training, and standardization of tactics, techniques, and procedures. Examples of current land-based short- and long-range air defense and missile systems that could be used for air control against aircraft, missiles, rockets, and drones are: counter rocket, artillery, mortar (C-RAM); Patriot; and Terminal High Altitude Air Defense (THAAD).

In the mid and long term, the U.S. Joint Forces must lead the development of concepts, and pursue doctrine and JCTDs for the re-missioning of existing capabilities. Additionally, in the long term, strategic options for filling this capability gap require long-term U.S. force development decisions and actions to facilitate U.S. force development, U.S. facilitated FMS, or partner fielded capability options.

RECOMMENDATION 7: SEA CONTROL

The primary purpose of anti-ship assets in the tailored mission specific land-based "lily pads" is to prevent competitors from gaining an advantage in the maritime environment and the littorals. Additionally, the systems must impose a much higher cost on competitors to discourage escalatory behavior dur-

ing gray zone competition. To control the maritime domain, land-based "lily pad" assets must maneuver along coasts, the littorals, and in brown water regions. To minimize cost and expedite fielding, the United States should improve systems that could serve dual-purposes. The Joint Forces could modify preexisting land-based artillery and missile systems, increasing their range and providing ordinance suitable to the anti-ship mission.

As with anti-air systems, employing land-based systems that are currently on-hand and interoperable with partner nations seems a logical first step. Hypervelocity projectiles (HVP) and precision guided munitions (PGM) are examples of current land-based weapons systems that the Joint Forces could adapt to anti-ship systems. The military's M777 155mm Howitzer can fire the Excalibur, a PGM. Blackhawk helicopters and small ships can move the M777s, which greatly increase their mobility and versatility. In response to Chinese militarization of disputed territories, the United States could emplace anti-ship capable M777s on features owned by U.S. partners throughout the South China Sea, and exercise them as part of Pacific Pathways. Employing a limited number of anti-ship capable systems in the region could compel competitors to modify their behavior in light of the increased risk. 122 Even though the range and mobility of these dual-purpose land-based systems are limited compared to U.S. Navy assets, they are a relatively low-cost anti-ship alternatives. The United States and partner nations could employ these systems without the risk of maneuvering limited and vulnerable naval assets to confront a challenge.

Land-based maritime control primarily supports two land forces mission frameworks: combat capability and peacetime presence. In the first framework—combat capability—land-based maritime control focuses on potential confrontation and conflict. One method to overcome A2AD challenges is through extended deterrence in the Asia-Pacific region.

One counter-argument to land-based maritime control is that the United States, its allies, and its partners are reluctant to stage offensive combat capabilities forward. For example, in March 2016 during an interview, Admiral Tomohisa Takei, Chief of Staff of the Japanese Maritime Self-Defense Force (IMSDF), admitted that although a land-based ballistic missile defense system is one of Japan's challenges, "at this moment the JMSDF is going to concentrate on increasing the number of Aegis destroyers."123 This underscores one of the Japanese government's biggest challenges; whereas the government and Prime Minister Shinzo Abe want to expand cooperative security with the United States and other countries, there is significant resistance within the Japanese population to increase it. Admiral Takei stated, "The Japanese government supports the U.S. Navy's freedom of navigation operations but Japan has no plan to participate."124 Because of Japan's and other Asian-Pacific nations' reluctance to appear more offensive, one option is to use mobile, tailorable packages for defensive, multilateral exercises. That capability could also be used offensively in the future should the need arise.

Another counter-argument is that land-based A2AD is an expansion of the Army's traditional roles and missions in a fiscally constrained environment. However, one can argue that it extends the U.S. presence without a larger footprint—and the costs associated with larger formations deployed forward. In addition, the U.S. can mitigate the expense of land-based

systems and technologies through possible cost sharing with other Asia-Pacific nations with similar security concerns, or repurposing old technologies such as short and long-range missiles onto existing A2AD platforms.

RECOMMENDATION 8: CYBER AND SPACE CONTROL

U.S. national security relies on the ability to preserve freedom of action in the Asia-Pacific at the time and place of our choosing. Today, the United States Army Pacific (USARPAC) faces a variety of challenges from fiscal austerity measures, political pressure, and military threats. These threats also affect USARPAC facilities, military forces deployed overseas, and partner nations. Regionally, Chinese interests in the South China Sea and a desire for regional influence exacerbate these issues. In light of increasing threats to national space and cyber capabilities, the commander of USARPAC must effectively protect, defend, and respond to destabilizing efforts or aggressive acts in the space and cyber domain. As such, the commander must have a dedicated team of cross-functional experts in space and cyber to train, advise, and assist U.S. international partners. Engaging the theater and working alongside partners and allies is not only the first line of effort, but it is critical to achieving the US-PACOM commander's theater campaign plan objectives 125

The DoD has three primary missions in cyber and space: (1) the DoD must defend its own networks, systems, and information; (2) the DoD must be prepared to defend the United States and its interests against cyber and space attacks of significant consequence;

and, (3) if directed by the President or the Secretary of Defense, the DoD must be able to provide integrated capabilities to support military operations and contingency plans. Additionally, the DoD has five interrelated strategic approaches to meet national security space objectives: (1) promote the responsible, peaceful, and safe use of space; (2) provide improved U.S. space capabilities; (3) partner with responsible nations, international organizations, and commercial firms; (4) prevent and deter aggression against space infrastructure that supports U.S. national security; and, (5) prepare to defeat attacks and to operate in a degraded environment. Description

Space and cyber capabilities are strategic capabilities and critical enablers to U.S. national security and activities within the gray zone. Together they enable the United States, our partners, and allies to maintain a significant advantage over our adversaries and enhance our national security. 128 They have been proven to enhance all aspects of military operations by providing global communications; positioning-navigationtiming (PNT) services; environmental monitoring; space-based intelligence, surveillance, and reconnaissance (ISR); links and networks; and warning services to combatant commanders, services, and agencies. 129 For decades, the United States has enjoyed a dominant military advantage in space and cyberspace. However, China's emerging space power and counter space activities are testing the U.S. space dominance enjoyed since the end of the Cold War. 130

Today USPACOM and USARPAC are at a defining moment concerning the PRC's development and modernization of counter-space, offensive cyber, and EW capabilities. ¹³¹ The current territorial and maritime jurisdiction disputes in the South China Sea and East China Sea could provide the incentive and situation

for the use of a counter-space or offensive cyberattack as a strategic instrument. In 2014, the Director of National Intelligence stated that the number one strategic threat to the United States was cyberthreats (displacing terrorism). 132 Additionally, he reported to the Senate Intelligence Committee that the United States would face increased threats to its national security space assets, specifically mentioning that "Chinese military leaders understand the unique information advantages afforded by [the] space system and are developing capabilities to disrupt United States use of space in conflict." The PRC is pursuing long-term, comprehensive military modernization with an emphasis on counter-space, offensive cyber operations, and EW capabilities. 134 China views this modernization effort as an essential capability to reduce core U.S. and allied military technological advantages, and they support China's status as a great power and regional hegemon.135

While the United States recognizes and understands China's desire to develop military capabilities commensurate with its strategic interests within the region, the United States remains committed to preserving regional peace and security and guaranteeing free access to the sea, air, and space domains. 136 The increased attacks in the space and cyberspace domain reflect a dangerous trend in international relations. Vulnerable space capabilities and data systems present state and nonstate actors within the USPACOM area of operation with an enticing opportunity to strike the United States and its allies.¹³⁷ A disruptive, manipulative, or destructive space or cyberattack could present a significant risk to U.S. national interests. Therefore, USARPAC should engage in a broad array of activities to help U.S. allies and partners to understand the space and cyberthreats they face, and to build the

capacity and collective defense necessary to defend their networks, data, and space capabilities.¹³⁸

Given the high demand and low density of space and cyber capabilities, USARPAC must focus its space and cyber partnership initiatives and leverage existing personnel and infrastructure. One approach to build partner nation space and cyber capacity and security is to establish an Integrated Cyber and Space Security Cooperation Center of Excellence (ICS2C-COE) within the Asia-Pacific Center for Security Studies. The Asia-Pacific Center for Security Studies is an existing facility designed to support USPACOM's security strategy of developing and sustaining professional relationships with partner nations in the Asia-Pacific region. 139 The development of an ICS2C-COE within the Asia-Pacific Center could provide professional space and cybersecurity education and training to eligible military, law enforcement, and civilian personnel of key partner nations of the Asia-Pacific region within the context of USPACOM's TSC plan and activities. 140 The ICS2C-COE concept would develop extensive partner nation networks and relationships amongst a community of mid- and senior-career space and cybersecurity practitioners. The center could be used as the primary location where United States and partner nations could gather to advise, assist, train, and exchange ideas on space and cybersecurity. The center and instruction would provide an opportunity to achieve a greater understanding of the challenges and security environment of the Asia-Pacific region.141

Under the ICS2C-COE concept, USARPAC would establish a mobile space and cyber training team concept at the Asia-Pacific Center and offer quarterly training to partner nations in order to build their capability and capacity. Assigned personnel from the US-

PACOM Joint Cyber Center (JCC) Pacific and Cyber Protection Teams would provide trainers and conduct the cybersecurity partnership program. The Cyber Protection Teams could serve to engage partners and build credibility, confidence, and trust through cybersecurity training and activities at the ICS2C-COE. Influence and rapport is an intangible element built on interactions and personal relationships, and the Army's Cyber Teams offer a nascent capability to form new relationships and create a vital "network of influence" that USARPAC can use to set the conditions to respond and win in cyberspace contingencies.

The Army Space Support Teams (ARSSTs) from U.S. Army Space and Missile Defense Command/Army Forces Strategic Command (USASMDC/ARSTRAT) could also provide trainers and conduct the space security partnership program at the ICS2C-COE. The ARSSTs could provide collaborative space training, education, and exercise support in order to build partner nation capacity and promote interoperability in the space mission areas of space situation awareness and space force enhancement. The space capabilities listed in Figure 3 represent a framework around which the U.S. Joint Forces could develop an initial curriculum.

The goal of the training and exercises would be for partner nations to increase their ability to identify key space issues and trends. To assist in the training, the ARSSTs would provide the partner nation with access to Army, Joint, and national space capabilities for their military headquarters. The teams would also provide satellite imagery, support satellite communications, and provide PNT data to support precision maneuver and fires. The technical and operational space expertise the ARSST provides to

Space Capabilities in Army Functional Concepts

Mission Command

- · Satellite Communications
 - Inter- and Intra-theater
- · Space Control
 - Offensive, Defensive and Space Situational Awareness
- · Position, Navigation and Timing
 - · Friendly Force Tracking
 - · Common Operating Picture

Movement and Maneuver

- · Position, Navigation and Timing
 - Situational Awareness
 - · Friendly Force Tracking
- · Satellite Communications
- · Space Control
 - · Planning, Coordination and Execution

Intelligence

- Imagery, Signals, Measurements and Signature Intelligence
 - National Technical Means
 - Commercial
- · Geospatial Support
- · Satellite Communications
- · Weather, Terrain and Environmental Monitoring

Fires

- Position, Navigation and Timing
 - · Precision Strike Support
 - Situational Awareness
- · Theater Missile Defense
 - Targeting
- · Satellite Communications

Sustainment

- · Satellite Communications
 - · Military and Commercial
 - · Inter- and Intra-theater
- Position, Navigation and Timing
 - · Commodities Tracking
 - Situational Awareness

Protection

- · Missile Warning
 - · Precision Strike Support
- · Intelligence, Surveillance and Reconnaissance
 - · Battlefield Characterization
 - · Change Detection
- · Satellite Communications

Source: U.S. Army Space and Missile Defense Command/Army Forces Strategic

Figure 3. Space Capabilities.

partner nations will develop an enduring capability to establish and maintain space security and deter the PRC activities in the Asia-Pacific region.

The space and cyber military training and advisory assistance teams could provide technical and operational expertise through a scaled-to-need concept at the ICS2C-COE and as mobile training teams. The ARSSTs and Cyber Teams could deploy to partner nations in order to enhance information sharing, as appropriate, and extend U.S. reach into environments where nefarious actors are currently operating undetected across the space domain. The teams could

provide vulnerability assessments on space and cyberthreats, and advise host nations on counter space and offensive cyber operations. During the mobile training, the teams and partner nation personnel would learn to identify key space and cyber issues and trends affecting the United States and partner nations within the security environment of the Asia-Pacific region. Advising, assisting, and training partner nations in space and cyber mission areas will help to build collective defense relationships that promote specific U.S. security interests, as well as provide USARPAC with peacetime and contingency access to partner nations.

USARPAC's engagement and partnership program is a crucial element of the Army Campaign Plan and the USPACOM theater campaign plan. 142 Comprehensive partnerships provide access to forward operating locations that are necessary to deter Chinese aggression within the region. They also create an environment where sustaining operational effects are possible, while also increasing support nodes to foreign territories that are necessary to sustain U.S. military activities. The partnership program must not stop at the traditional air, land, and sea capabilities, but extend into the domains of space and cyberspace. Evolving posture changes and host nation support in the region require a strategic approach to sustain a resilient, survivable force in an A2AD environment. The ICS2C-COE and mobile training teams concept has the capability to build U.S. and partner space and cyber capacity during peacetime, which can be used during conflict.

Space and cyber capabilities underwrite U.S. Army land dominance and must be preserved, expanded, and enhanced to support the rebalance to Asia. In light of increasing threats to our national space and cyber

enterprise by the PRC, USARPAC must work together with our partners and allies to effectively protect and respond to destabilizing efforts or aggressive acts in the space and cyber domain. As such, the ICS2C-COE and mobile training teams concept offers USARPAC a dedicated team of cross-functional space and cyber experts to deploy and train, advise, and assist our partner nations within the Asia-Pacific during peacetime and during conflict.

SECTION SUMMARY

As described in numerous defense strategic documents, overcoming A2AD challenges in the Asia-Pacific region is a stated strategic challenge. Within that context, land-based A2AD is a large capability gap that currently exists in the Asia-Pacific region. The 2012 strategic guidance, *Sustaining U.S. Global Leadership: Priorities for 21st Century Defense;*¹⁴³ the *Quadrennial Defense Review 2014;*¹⁴⁴ the 2015 *National Security Strategy;*¹⁴⁵ and the 2015 *The National Military Strategy*¹⁴⁶ all highlight the projection of power, despite A2AD challenges to maintain freedom of navigation in the global commons. They point towards the desire for protection and assured access to shared spaces.

In the past, the United States was able to take advantage of time and distance standoff capabilities to frustrate enemies. Today, with the ranges of ballistic missiles, loss of technological overmatch, cyber and space innovations, nuclear proliferation, and blurred lines on what constitutes an enemy, the United States faces a far more complex security environment than it had in the past. To bridge the strategic guidance to operational capabilities gap, the DoD developed joint concepts intended to guide the organization, training,

resourcing, and employment for gaining and maintaining assured access.

The *Joint Operational Access Concept*, ¹⁴⁷ and *Joint Concept for Entry Operations*, ¹⁴⁸ provides guidance for the prioritization of capabilities needed to ensure access to the global commons while protecting Joint Forces, partners, and allies. As adversary and competitor technologies and weapon systems advance, and they extend the range of their systems, it will be more difficult to operate in an increasingly contested environment. Without sufficient land-based A2AD protecting the United States and its allies, the United States will find it more difficult to project forces into the area to accomplish its missions.

Admiral Harry Harris, Commander USPACOM, expressed concern during Senate testimony on China's recent increased militarization of the South China Sea, including the stationing of HQ-9 missile batteries on Woody Island in the Paracels. This escalation of tensions increases the challenge of ensuring freedom of navigation and assured access in the region. Furthermore, the lack of forward deployed forces due to the downsizing of the military, the erosion of technological overmatch, and uncertainty about defense budget heightens this challenge. U.S. capabilities and technological overmatch in this region will continue to degrade without current and future investment.

Land-based A2AD is one investment option under discussion to gain an advantage in the region. Without sufficient land-based A2AD protecting the United States and its allies, the United States will find it more difficult to project forces into the area. Without quick solutions, USPACOM may not be able to complete its assured access mission if challenged in the near term. The United States must therefore balance the desired

ends (freedom of navigation within the global commons) with effective ways (land-based A2AD), and within limited means (defense resources). The main issue is how to build this capability in a resource-constrained environment.

One method of building this capability is through extended deterrence. For example, after the passage of its new security bills in September, Japan started developing plans to craft its own A2AD strategy by "stringing a line of anti-ship, anti-aircraft missile batteries along 200 islands in the East China Sea stretching 1,400 km (870 miles) from the country's mainland toward Taiwan...."150 Other new manifestations of Japan's interests include: entering into agreements with the Philippines and Vietnam on classified defense information, with possible sales of training aircraft and other military equipment; a bid for submarine sales to Australia; a deal to transfer defense technology to Indonesia; and the purchase of a Hawkeye aircraft from the United States. Additionally, Japan is selling amphibious aircraft to India and adopting an agreement to share classified intelligence and export nuclear power production technology to India.

This is the first time Japan reached a deal with a non-signatory to the Non-Proliferation Treaty, stating that they are "united by democratic values, large market economies, regional heft, and global aspirations." ¹⁵¹ Japan is also adopting its own rebalancing strategy with "rules-based order in the Indo-Pacific, calling on all parties to avoid unilateral actions in the South China Sea and implementing a code of conduct for activities there." ¹⁵² These and other initiatives, and planned future joint exercises, demonstrate Japan's recent moves to align their interests with regional action.

Another form of extended deterrence that the United States can leverage is through FMS and foreign military financing (FMF). Some countries in the Pacific, such as Japan, the Republic of Korea, or Taiwan, may be willing to base systems within their territory, which are either sold to them through the U.S. defense or industry base. These systems, if interoperable with U.S. military systems, can increase security coverage to our allies and partners without having more troops in the region. The United States could also pre-position activity sets in the region that it or its allies can access when the need arises. These activity sets can range from medical to combat sets, depending on the willingness of the host nation to support their placement.

The second framework, peacetime presence, focuses on competition and coercion. Land-based maritime control also supports this framework with the concept of access through presence. The United States can increase its "coercive force" activities in the gray zone if rivals fear an escalation to war. Since the United States must consider budget constraints, the downsizing of the military, and future resource competition with other theaters of operation, an increase in the forward basing of troops is unlikely without an imminent threat. The land-based "lily pad" concept offers a method which does not permanently forward base additional troops, but instead provides the capability of surging presence and sustainment forward when needed.

VII. ASSURED LAND FORCE MANEUVER

RECOMMENDATION 9: LAND FORCE ASSURED SHALLOW-WATER MANEUVER

It is incumbent on the United States to find the right balance when dealing with China in this gray zone, where the risk of inaction is as great as the risk of action. China's aggressive military modernization, land reclamation, and militarization of the South China Sea have the potential to create instability in the region. While the United States and China are competing in many areas across all instruments of national power, the territorial disputes are among the few areas of competition that put the two countries' militaries in direct confrontation. It is critical that the United States continue to work through diplomatic channels to dissuade China from militarizing the South China Sea. However, it is equally critical that the United States prepare for the worst-case scenario, which leads to the discussion of the current U.S. land forces gap – assured maneuver in a shallow-water environment. Before addressing the gap, some background on China's recent assertiveness and disorder activities in the South China Sea is appropriate to help highlight the significance of the gap and the potential threat associated with the gap.

First, China entered the land reclamation business in December 2013, and since then has established over 2,900 acres of islands in the Spratly Archipelago. This is more development than all other countries combined have produced over the last 4 decades.¹⁵³ While it is true that five of the six countries with competing claims in the region have established military fortifications throughout the area,¹⁵⁴ China's infrastructure

is much larger, more modern, and more robust when viewed in terms of potential military capabilities. For instance, in late 2015, China completed construction on a 3,000-meter runway on Fiery Cross reef in the Spratly's. A 3,000-meter runway is capable of landing the entire inventory of Chinese military aircraft (from fighters to strategic bombers), enhancing China's ability to project power deeper in the South China Sea. Additionally, China installed advanced radar systems, surface-to-air capability, and anti-ship cruise missiles on Woody Island in the Paracels, extending the potential for A2AD. China's most recent reclamation endeavor is taking place on Scarborough shoal, 150 miles west of Subic Bay in the Philippines. The Philippine government has contested China's claims to the Shoal at the international court for arbitration at The Hague; but China does not recognize the court's jurisdiction. Furthermore, China's refusal to participate in any multi-lateral negotiations is causing growing concern among other countries of South East Asia.

Second, not only are China's revisionist activities causing concern for smaller countries in the region, but also the growing threat of criminal organization and their disorder activities are contributing to a less stable international order in the South China Sea. Even with the 2010 rebalance to the Pacific, questions about actual U.S. commitment to the region arise, driving some regional partners to start hedging on who will be the dominant power in the future. During a Pentagon news conference in August of 2015, Assistant Secretary of Defense for Asia-Pacific Security Affairs (ASD [APSA]) David Shear sought to reassure our allies and partners by stating that the United States will "maintain the necessary military presence and capabilities to protect U.S. interests and those of

allies and partners against potential threats in maritime Asia."¹⁵⁵ So, are U.S. land forces prepared and capable to defend U.S. interests and those of our allies in the Asia-Pacific?

As former ASD (APSA) Shear stated, the Asia-Pacific is a maritime environment. U.S. land forces currently do not have the capability to maneuver in a shallow-water environment to provide wide-area security or maneuver, creating a significant capability gap considering the environment. An example of the environment is the Philippine island chain, which is comprised of over 3,200 km of navigable waterways that are limited to watercraft with less than 1.5-meter drafts. Many of the Philippine islands are only accessible via watercraft. These shallow-water environments present multiple challenges in the region, such as accessibility during natural disasters to provide humanitarian assistance and disaster relief services to affected areas. Transnational criminal organizations and other nefarious actors who exploit host nation limitations in shallow-water capacity conduct illicit activities such as drug trafficking, piracy, human trafficking, and terrorism in these isolated areas.

These disorder activities are counter to U.S. interests on multiple levels. First, they continue to act as fund raising activities and potential safe-havens for terrorists. Second, they tend to drive the countries to have an inward look when it comes to defense, which does not allow them to cooperate and help alleviate some of the burden the United States faces in its ongoing efforts to have nations be defense exporters vice consumers. Lastly, these nefarious actors start to develop shadow governance by threatening the local populace, which in term discredits the legitimate government. Developing a shallow-water capability

for the Army could have an impact across all of these threats. Based on China's (revisionist) and other bad actor (disruptor) activities, and the potentially destabilizing effects they may bring to the region, it is incumbent on the United States to address the current gap in assured shallow-water maneuver now.

U.S., allied, and partner land forces must develop a means to assure combat maneuver, security, and reconnaissance in the shallow-water maritime environment common to this region. The Asia-Pacific theater's key terrain is replete with shallow-water island and shoals, coastal littorals, and navigable rivers.

Although the Asia-Pacific environment is predominantly a maritime one, most of the regional militaries are land force centric. Why is this important? Because culture matters. While the United States is already facing challenges in the region dealing with different historical cultures, it could limit the amount of friction it encounters when dealing with organizational culture by leveraging land force engagement, making it a more predominant actor in the Asia-Pacific. The United States has a Joint Force ethos, but each service has unique language and sub-cultures. Making a land force the executive agent for shallow-water maneuver in the region allows for more commonality amongst the United States and host nation forces.

Land forces rely on equipment for combined arms maneuver. During the most recent operations in the Middle East, the Army relied on Stryker Brigade Combat Teams (SBCT) to balance lethality, mobility, and survivability against the requirements for rapid strategic deployability. The Army does not have a "Stryker" for shallow-water maneuver. Thus, in order to support joint TSC goals and objectives, the Joint Forces will require additional water-borne systems

capable of maneuvering land forces throughout shallow-water environments. At first glance, this seems like a Navy/Marine function, and perhaps it is; but current force structure within those services does not support the anticipated demand for shallow-water maneuver in the theater.

The U.S. Army is addressing part of the material solution. The Army is developing a request for proposal for a Maneuver Support Vessel (Light), as part of its Army Watercraft System (AWS), to replace its Vietnam-era mechanized landing craft (LCM-8 "Mike Boats"). This is a perfect opportunity for land forces to address the full maritime maneuver and movement gap holistically.

This recommendation offers great flexibility for operations in the gray zone. The recommendation also has direct relevance to land force decisive operations (maneuver and wide area security) in a littoral maritime environment. In the gray zone, assured maneuver in shallow-water provides the land force with a means to interdict an assertive revisionist China. It provides a low-escalatory means to interdict commercial fishing fleets and commercial shipping used to construct man-made islands from reef features. A shallow-water maneuver capability also provides the land forces commander with a means of interdicting disruptive challengers, like transnational organized criminals and local "shadow power" economies – both of which use the shallow coastal littorals as a maritime highway to transport their goods and influence.

Land force shallow-water maneuver is also essential should gray zone competition advance to confrontation—or worse, sustained combat. This capability is applicable across the full range of military operations. For example, a combat patrol boat equipped land force

could maneuver in a maritime environment to conduct an ambush, bypass a coastal obstacle, encircle a shore bound force, raid a trafficking supply hub, or provide covering fires to a ground unit maneuvering along a waterway. A combat patrol boat equipped land force could also provide traditional security and reconnaissance missions along coastal roads and maritime avenues of advance, providing early warning forward of coastal defensive positions and build-up lodgments.

Surveillance and reconnaissance are vital to any maneuver or security operation. In the expansive shallow-water environments of the Asia-Pacific, the land forces commander must retain an organic capability that assures situational awareness, early warning, and physical communication between flank elements separated by bodies of water. Fitted with enhanced technology autonomous and semi-autonomous systems, the shallow-water maneuver platform could provide extended range and duration surveillance and reconnaissance both above the sea and under the sea. The early warning, targeting, and route clearance advantages these capabilities could bring to the ground force commander are substantial.

Other missions that would greatly enhance land forces commander options, presenting multiple planning (and actual) dilemmas to an adversary, include interdiction patrols, seaborne supply line and landing raids, and stealthy infiltration and resupply of small units.

During gray zone competition, a shallow-water capable boat could further enhance partner nation building during peacetime activities. For instance, according to an analysis conducted by the United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP), "Asia and the Pacific is the

most disaster-prone region in the world."¹⁵⁶ According to the data, the Philippines rank number three in the world for most exposed to natural disasters; Japan is number four, Brunei is number six, and Cambodia is number 15. Considering the susceptibility of this region to maritime related disasters, having an easily transported shallow-water capability, capable of accessing areas that may be cut-off to ground transportation, would enhance humanitarian assistance and disaster relief efforts.

The Navy and Marine Corps have developed limited capability in this area. The sheer size of the Asia-Pacific, however, will require far more capacity than what is currently resident between these two services. This is a Joint Forces capability gap. It is unlikely that the Navy-Marine team will field sufficient capacity to accommodate the range of missions and expansive geography of the Asia-Pacific theater. Therefore, the Army should actively engage in concept and doctrine development and the joint operational testing, training, and equipment fielding associated with the force development of this capability.

The Army has long employed watercraft to support land force operations. Nevertheless, regardless of who fills this gap, someone has to develop and field the "Stryker" of the Pacific to support land forces conducting combined arms maneuver and wide area security missions in shallow-water environments.

SUMMARY AND IMPLEMENTATION OF RECOMMENDATIONS

VIII. SUMMARY AND IMPLEMENTATION

The capability gaps and solution recommendations identified in this report address new capabilities, new employment strategies, and the expansion of existing capabilities to meet current and projected gray zone competition needs in the Asia-Pacific.

This report presents the implementation activities as a two-tier construct. The tier-one implementation activity is a discussion of first-step actions that the U.S. Ioint Forces can take to move the recommendations forward. The objective of the near-term first-step is to identify a responsible-agent, and to offer that agent strategies to expand resourcing for existing initiatives or strategies to move recommendations toward inclusion in a formal defense management decision process. The tier-two implementation activity addresses longer-term options for implementing the recommendation within formal defense management processes, or alternative options to develop and deliver future capabilities. In the current fiscally constrained environment, there is limited institutional appetite for investing in new, opportunity-oriented capabilities. Therefore, when appropriate, the tier-two recommendation offers options that are not dependent on the U.S. defense establishment to bear the full burden of required capability development.

Near-term actions generally require a responsible agent (proponent) to secure funding for an existing program by demonstrating a regional requirement, then arguing for resource prioritization among competing requirements from around the globe. For new initiatives, the near-term action involves developing a white paper to socialize a new concept or requirement. The white paper should address: the aspects of the

operating environment that create the capability gap or opportunity; a clear military problem or challenge; a central idea animating the proposed solutions; and a description of the key aspects of the recommended solution. Responsible agents produce concept proposals from socialized white papers. The Joint Staff J7 manages the development of those proposals into concept documents. Approved Concepts provide the basis for detailed capability based assessments, which establish the need for new capability requirements documents. For each of the "new idea" recommendations proffered, the report narrative provides the basis for a white paper to begin this process.

In some cases, existing national strategy and guidance, DoD/service roles and missions, or the Capstone Concept for Joint Operations must be refined to justify the development of needed subordinate Joint Operating Concepts/Supporting Joint Concepts. This refinement requires a national level dialogue to generate the motivation for fundamental change in the national perception of security challenges or the ways to address them. National security dialogue advocating fundamental change typically occurs outside the formal defense management processes. Mechanisms to influence the change dialogue include reports like this one, congressional testimony, academic and think tank papers, professional journal articles, and discussions among security and military professionals.

Unless the regional threat profile or the strength of the U.S. economy shift significantly, U.S.-centric development of the full pallet of recommended solutions offered in this report may not be feasible. Therefore, the report offers long-term force management options that include U.S. developed and fielded capabilities, U.S. developed capabilities for FMS, and U.S. developed concepts to encourage regional partner development and fielding of capabilities.

Both the security and economic environments will inevitably change during the time it takes to develop the exploratory concept, requirement, JCTD, and doctrine initiatives. However, these initial steps remain sound regardless of a future environment informed optimal force development fielding decision. It is imperative that the documentation development take place to establish a baseline for capability development. Collaborating with regional partners to develop concepts and conduct JCTDs will facilitate force management option flexibility. Regardless of who fields the capabilities suggested in this report, U.S. leadership is necessary to stimulate idea development, concept development, and multinational participation in JCTDs to re-mission existing capabilities, as well as to incentivize partners and allies to pursue needed gray zone competition-centric capabilities. Despite fluctuations in the U.S. economy, defense budgets, or security estimates over the next 20 years, U.S. near-term action to ensure that future strategic force development options are imperative.

Four categories of actionable recommendations advance the ideas generated by the project's analysis. These categories include: mind-set changes through the development of concepts that facilitate effective gray zone competition; access and readiness through partnerships and presence; land-based cross-domain control; and land forces assured shallow-water maneuver. Each of these recommendation categories requires near-term, first-step action. Some recommendations will require a future force development choice between U.S.-centric and partner development options. The last two recommendations expand the

coercive options available to impose compliance with international order while reducing the risk of escalation to war.

The foundational implementation objective is to influence the national security dialogue, drawing attention to gray zone competition and the need to rebalance defense management processes and resource prioritization. The U.S. military mind-set requires a re-balance from war fighting to effectively competing in the gray zone. Warfighting is fundamental to the military's core competency. However, the nation could lose a competition with our rivals without ever triggering major combat operations. The U.S. military must provide options short of war to protect and advance U.S. interests when rivals challenge them using coercive force short of war. Investing in dual-purpose (war and gray zone) capabilities is required to compete in this fiscally constrained environment.

Several report recommendations expand existing program capacity, or re-enforce ongoing initiatives. This report does not provide detailed implementation steps for these recommendations. Implementation is dependent on senior military leader awareness and resource prioritization of these initiatives.

IX. REBALANCED MINDSET AND LEXICON

IMPLEMENTATION STRATEGIES FOR RECOMMENDATION 1

Sustained Competition Framework.

The Joint Staff J7 is currently developing a Joint Concept for Integrated Campaigning. This concept captures many of the ideas offered in Recommendation 1: to establish a sustained competition framework for competing in contested security space, from gray zone competition to major combat operations. The concept framework encompasses more than gray zone competition. It employs an alternative joint campaigning construct to align instruments of power across a security environment, representing competition from cooperation through sustained combat. The joint concept work group is composed of representatives from across the land forces services, the U.S. Army, U.S. Marine Corps, and U.S. Special Operations Command. The initial drafts of the Joint Concept for Integrated Campaigning posted the v0.3 "Draft for Red Team" review milestone in March 2016. 159 The joint concept work group expects to have the complete draft through the service operations deputies' (Ops-Dep) review, and ready for signature, early in the next fiscal year. The most important land force near-term action required to advance this effort is active involvement with the joint concept work group core writing team, to ensure the concept accurately captures needed reform and endorsement of the Joint Concept for Integrated Campaigning during general officer staffing later this summer. The U.S. Army lead agent coordinating this near-term activity is the TRADOC's Army Capabilities Integration Center (ARCIC). As the document drafts move through various general officer and OpsDep reviews, ARCIC will need to fully engage Headquarters, Department of the Army (HQDA) (G-3/5/7) and U.S. Army Pacific (among others) to prepare the concept for final signature.

X. ACCESS AND READINESS THROUGH PARTNERSHIPS AND PRESENCE

Success in gray zone competition is dependent on people-centric activities. Land force roles and missions in the gray zone may not fully align with traditional land force "warfighting" missions; however, land forces are perhaps the best suited and most value added instrument of national power to set the conditions in coercive gray zone environments. Operating in harmony with joint, interagency, and multinational partners, land forces can provide the skills, capacities, and relationships to succeed in the gray zone. As a dual-purpose (gray zone/major combat) capability, access and readiness through partner relationships and physical presence in the gray zone provide land forces access and improved warfighting skills if competition escalates to war. Gray zone competition is an opportunity to improve regional partnerships and access at the national level. The land forces are the right instrument of power to facilitate this; but success requires forward presence and new approaches to gray zone competition for land forces to be effective.

IMPLEMENTATION STRATEGIES FOR RECOMMENDATION 2

Pacific Pathways Modification.

This recommendation offers two approaches to address the greatest partner-building needs in the region. The first is developing a direct military-to-military relationship between the United States and China. China is not an enemy, nor must they be a rival. The United States and China cannot avoid being competitors, and

may wish to be rivals from time-to-time when they perceive their core national interests are at stake. The single greatest challenge facing both nations is the risk of miscalculation due to misunderstanding, which could lead to war. While it is the most common pattern, war is not the inevitable outcome when a rising power and an established power vie for hegemony. 160 The land forces, through a robust network of personal and organizational military relationships, can advance understanding and reduce the risk of miscalculation between the two nations. Below the Chinese Communist Party, the PLA is the most influential institution in China. Beyond commercial economic interests, the U.S. military is among the ubiquitous U.S. presence in the region. It makes sense that these two institutions, symbols of national power and intent, share in a direct, productive, and assuring relationship that strives for reflection and mutual understanding.

There are several methods for the United States to pursue the development of a closer and more robust U.S. land force-PLA relationship. The one proffered by this report suggests pursuing the natural advancement of the relationship through the mutually respected regional partner, Mongolia. The PLA relationship with Mongolia is already quite strong. PLA leaders regularly conduct training exercises with Mongolia, and PLA officers attend Mongolia's mid-career general staff college. Likewise, U.S. land forces have a close relationship with Mongolia. The U.S. Army conducts exercises in the region with Mongolian Army participation, and one of the researchers of this report is a Mongolian Army officer attending the USAWC in Carlisle, PA. All three countries (China, Mongolia, and the United States) seem receptive to developing stronger relationships through more routinized interaction.

Beginning those relations slowly, through educational exchanges and military exercises focused on Humanitarian Assistance and Disaster Relief (HA/DR) operations, will establish a precedent that the three armies can expand on over time.

The United States and China have already worked side-by-side on HA/DR exchanges and academic discussions in China. ¹⁶¹ A first step to expand these into multi-lateral military exercises requires USPACOM and USARPAC to work with the DoD and the U.S. Congress to lift bureaucratic and legislative barriers to allow more robust and diverse exchanges. Regardless of the political situation associated with the China-U.S. relationship, military-to-military engagement provides a real power based moderating venue for idea exchange and understanding. These moderating relationships, based on mutual respect and a desire for understanding, are perhaps most important when the two nations have divergent political perspectives on regional issues.

The second recommendation addresses the need to develop regional partners into leaders that orchestrate regional collective defense operations. The United States has been, and will continue to be, a strong influence in regional collective defense initiatives. This leadership role occasionally precipitates two negative narratives: (1) China sees the U.S. role in solidifying collective defense relationships as stirring up trouble, and as a direct challenge to China's historic interests in the region; ¹⁶² and, (2) Critics in the United States complain that our regional partners should take a more active burden-sharing role in regional collective defense. 163 The reverse pathways initiative encourages a regional partner (perhaps Australia, Japan, or the Republic of Korea) to coordinate and execute a Pacific Pathways-like military exercise. This exercise would

involve 3-4 countries participating in a series of collective training exercises, culminating with a visit to the U.S. National Training Center at Fort Irwin, CA, or a Pacific Northwest training area near Fort Lewis, WA.

Leadership for the coordination and planning of the operation would fall on the lead-country regional partner. The United States would support the exercise with strategic mobility and operational logistics. The effort would build confidence among regional partners, and develop systems and forums to facilitate collective defense cooperation and military planning. Implementation of this recommendation is a logical extension of the U.S. Army's initial efforts, which brought Singapore, Canada, and Japan to the United States to participate in exercises Tiger Balm (HI), Arctic Anvil (AK), and Rising Thunder (WA), respectively. 164

IMPLEMENTATION STRATEGIES FOR RECOMMENDATION 3

Expand the State Partnership Program (SPP) to all Association of Southeast Asian Nations (ASEAN) Members.

The SPP, resourced through the NGB, has significantly contributed to the GCC ability to execute theater campaign plans and TSC requirements. The continued requirements of the six geographic combatant commands and expanded interest in the program by Asia-Pacific countries indicate an increased demand for SPP activities.

Therefore, the implementation plan for this recommendation encourages defense policy guidance to direct an increase in SPP activities to meet the demand. The relative cost of increasing the SPP in the Asia-Pacific, versus redistributing programs aligned with

Europe, seems both a prudent and cost-effective way to assure allies while improving access and readiness for U.S. forces. The host (requesting) country provides the demand signal to expand the SPP by making a request through the U.S. Embassy. The U.S. Embassy country team processes the host country's request through the commander, USPACOM. The USARPAC, through USPACOM, facilitates the formal request to increase National Guard unit availability. USARPAC facilitates the request through formal coordination with the NGB, the Joint Staff, and HQDA. The commander, USPACOM, could use the Integrated Priority List to encourage funding prioritization for the program expansion. The NGB and the Adjutants General Association of the United States have mechanisms to encourage expanded program funding as well, both at the congressional and Army levels.

The NGB and ARNG can further improve the SPP by standardizing oversight, and by petitioning the Under Secretary of Defense for Policy to develop a strategy to amend Title 32 authorities with Congress. These authorities could provide participating National Guard units a habitual increase in mobilization, available training days, and funding to improve the availability of units and effectiveness of this important program.

As an existing program, the NGB-J35 has proactive mechanisms in place to assess the compatibility of state offerings with countries that have requested to participate in the SPP. The NGB shares their prioritization analysis with the DoD and the GCCs during annual program and budget development. Since the introduction of the SPP in 1990, the budget prioritization process has routinely expanded the program. ¹⁶⁵ In 2012, the Government Accounting Office (GAO) conducted a thorough audit of the SPP. The

study found that both participating units and host countries derived great benefit from the program. The GAO encouraged greater program oversight by the NGB, particularly with respect to standardizing and tracking program activities, objectives, outcomes, and funding.¹⁶⁶

IMPLEMENTATION STRATEGIES FOR RECOMMENDATION 4

Civic Action Activities Synchronization.

The final two recommendations in this category will take longer to coordinate than the first two programs within the Joint Forces, interagency, and regional partners. The implementation process to synchronize and coordinate civic action activities is dependent on the designation of a central synchronizing and coordinating agent. Many stakeholders are involved in the prioritization of civic action activity planning and execution. There has been no national or regional authority designated to coordinate those activities, though the embassies and USPACOM have the most interest in activities affecting regional security objectives. Further compounding the challenge, military units and federal agency elements operating in the region engage in unplanned civic action opportunities.

The logical first step to synchronize civic action activities is for USPACOM, the only regional authority with the capacity to manage the full range of activities, to designate an executive agent to synchronize all Joint Force activities. Since civic action activities are by nature population-centric and conducted on land, USARPAC stands out as the logical subordinate head-quarters to take on this management responsibility.

Once assigned executive agency, USARPAC needs to establish coordination and planning forums comprised of regional embassy country teams, USPA-COM subordinate Joint Force commands, and rotational military elements anticipated in theater. Prior to convening these planning forums, USPACOM staff would need to develop a list of embassy coordinated country-specific objectives for the civic action activities. USPACOM currently includes these State Department prioritized objectives in a theater campaign plan and refines them on a regular basis to accommodate changes in the security environment or political priorities.

USARPAC should develop and refine this embassy objective determination alongside military planning and synchronization efforts with an intent to expand stakeholder participation beyond the Joint Forces. This will require careful attention to the locations, battle rhythms (timing), and language used when convening forums or producing execution documents respectively. Once the participants extend beyond the U.S. military, the language and nature of execution documents must convey the collaborative and cooperative nature of the enterprise.

IMPLEMENTATION STRATEGIES FOR RECOMMENDATION 5

Cooperative Security Locations.

An equally long-term recommendation is the establishment of host nation run and supported cooperative security locations. The first-step near-term activity associated with implementing this recommendation is the co-location of activity sets with

rotational units and multinational exercises. In the near-term, the report recommends the permanent storage of activity sets in the region, and the routinization of multinational exercises to employ the sets.

A parallel element of the first-step is an interagency coordinated selection of the cooperative security location sites. Over time, the activities associated with these cooperative security locations will contribute to local prosperity by energizing the local economy with funds derived from military exercise, facilities and infrastructure construction, and continuing maintenance. Further, well-selected sites will extend host nation central government legitimacy to the periphery of their current influence. U.S. land forces operating in a cooperative setting with host country security, police, and commercial interests could also improve host nation legitimacy by gradually transferring best practices of individual rights, corruption controls, and transparent power relationships.

Cooperative security locations should be located in areas that have the greatest potential to contribute to host nation stability and legitimacy. Among the locations recommended for prioritization are Vietnam, Malaysia, the Philippines, and Indonesia. Vietnam is a natural and successful ally in balancing Chinese assertiveness. In addition, a Cooperative Security Location in Vietnam offers U.S. land forces access to an operating base from which HA/DR in the islands and littorals could be effective, and proximity to China might support cooperative training opportunities. Malaysia's Borneo states (Sarawak and Sabah), the Philippines' Southern islands (Mindanao, Palawan), and Indonesia's Eastern islands-bordering the Celebes Sea (Sulawesi, Kalimantan-Borneo) present great opportunities for extending central government

legitimacy, improving local prosperity, and providing a base of operations to counter transnational criminal organizations, shadow economies, and competing governance/power structures in these partner nations.

A central element of this recommendation is the host nation development and maintenance of infrastructure (ports, roads, barracks, and "soft basing" facilities), training areas, and storage facilities to accommodate routinized multinational HA/DR, and later cooperative defense military exercises, from these locations. This will likely require some U.S. funding support in the form of Logistic Cost Sharing agreements, which can be used as leverage to gain favorable "status of forces-like" agreements with the host nation.

XI. LAND-BASED CROSS-DOMAIN CONTROL

The very first step is the need to develop a U.S. policy perspective that acknowledges the appropriate use of coercive military force to advance U.S. interests in the region by confronting Chinese assertive and coercive behavior. China is a competitor whom the United States desires as a partner, especially in the economic arenas of finance, trade, and commerce. This aspiration is not in conflict with a realist view that China's use of coercive force as an extension of state power – even during periods of relative peace - threatens regional security and international norms which the United States wishes to protect. Left unchecked or unchallenged, the United States and regional partners have no leverage to limit China's use of coercive behavior to advance a "manifest destiny" march across the Asia-Pacific and beyond. Therefore, the first step in opening up the space for the United States or partners to use coercive force to blunt aggressive behavior is recognition that a legitimate deterrent capability is necessary to pursue those operations without escalating to war.

This recommendation requires a fundamental change, or possibly acknowledgement, that the United States must incorporate a real-power anti-access component to our national and military strategies to encourage a productive China-U.S. relationship. Current U.S. concepts address gaining access to regions protected by adversary A2AD capabilities once war breaks out. That IS NOT the recommendation proffered in this report. This report recommends building a regional capability to impose friendly force, land-based A2AD costs on a rival, to increase the operating space within which the United States and its partners

can conduct coercive gray zone competitive activities while minimizing the probability of escalation to war.

These land-based cross-domain control capabilities adopt the dual-purpose nature of all the report recommendations, but from the opposite direction. During conflict, this capability would allow the United States and its partners to fight for access inside the first island chain from relatively secure land-bases. By denying the enemy operating space from the land, friendly air forces could more easily deploy assets within striking range of areas controlling the first island chain. Combining land-based and Air Force assets, force protection of naval assets inside the first island chain will improve their survivability and freedom of maneuver. Despite the applicability of this recommendation to support the Joint Operational Access Concept¹⁶⁷ or the emerging Joint Concept for Access and Maneuver in the Global Commons (JAM-GC), the warfighting value of the capability is not the focus of the recommendation.

The purpose of the land-based cross-domain control is to impose a cost on rivals willing to escalate gray zone coercive competition to war. It is a deterrent capability that expands the range of coercive military options available to the United States and its partners to blunt assertive rival behavior (bordering on aggressive behavior or direct challenges to international norms), while reducing the likelihood that confrontation will escalate to war. To advance the national policy and strategy debate, the Joint Staff should develop a white paper capturing the need for this capability; and the pursuit of a white paper will help coalesce senior level thoughts and discussion on this topic, while providing a vehicle to engage in a national policy and strategy dialogue.

IMPLEMENTATION STRATEGIES FOR RECOMMENDATION 6

Air Control.

The second near-term first-step to advance this recommendation is the recognition that each element of the land-based cross-domain control recommendation, and its associated land-based "lily pad" employment strategy, requires a different approach to operationalize the ideas offered. Land-based control of the air domain is a capacity and interoperability issue. The greatest threat to U.S. and partner forces from the air are ballistic missiles, cruise missiles, airbreathing aircraft, semi-autonomous robots (drones), and the potential of a swarming attack by a combination of each. The United States and its allies possess land-based systems capable of defeating each of these threats. However, current U.S. resource prioritization and partner nation interoperability does not accommodate sufficient capacity in theater to counter these projected threats.¹⁶⁸

IMPLEMENTATION STRATEGIES FOR RECOMMENDATION 7

Sea Control.

Neither the United States nor regional partners willing to share their technology possess a sufficient land-based anti-ship (maritime control) capability to counter anticipated future threats. Japan is the only regional partner known to be adequately pursuing this capability. Without U.S. leadership to develop a land-based anti-ship concept, and probably the tech-

nology to operationalize it, it is unlikely that regional partner armies will develop the capability.

IMPLEMENTATION STRATEGIES FOR RECOMMENDATION 8

Cyber and Space Control.

Cyber and space domain control is largely a function of sharing technology, software, and techniques to counter attacks by rivals. The extent that partner nations rely on cyber and space technologies determines their exposure and vulnerability to attack. Defense systems interoperability and partner asset vulnerability are important aspects of Joint Force vulnerability to attack. Vulnerability awareness through education, shared defensive tools (software, techniques, and procedures), and transparency regarding attacks—to increase awareness and attribution—are critical first-steps in this domain.

In light of increasing threats to U.S. national space and cyberspace capabilities, the commander of USAR-PAC must effectively protect, defend, and respond to destabilizing efforts or aggressive acts in the space and cyber domain. As such, the commander must have a dedicated team of cross-functional expertise in space and cyber to train, advise, and assist U.S. international partners. Engaging partners and allies is not only the first line of effort; it is critical to achieving the USPA-COM commander's theater campaign plan objectives.

Space and cyber capabilities are strategic capabilities and critical enablers to U.S. national security and activities within the gray zone. They enable the United States and its partners to maintain a significant advantage over rivals. The rate of change in the systems and

resources that rivals commit to intrusion is expanding at an alarming rate. The USPACOM commander does not have sufficient systems to build the capacity and collective defense among partners and allies necessary to defend their networks, data, and space capabilities. To remedy this capability gap, the report recommends fielding three capabilities to the theater: increase Cyber Protection Teams, increase ARSSTs, and establish an ICS2C-COE.

It is important to note that the Cyber Protection teams and ARSST exist. Increasing or redistributing manpower to create additional teams requires US-ARPAC to submit a concept plan to HQDA (Deputy Chief of Staff, G-35 [DAMO-FMZ]). All requests for additional manpower requirements must be workload-based, and concept plans must include a manpower bill-payer strategy. Once approved, the HQ-DA-approved requirements in the concept plan form the basis for requesting additional resources, or for realigning proponent resources. Commands must be prepared to resource concept plans from within the command's available authorizations and total obligation authority.¹⁷⁰ The Total Army Analysis and Program Objective Memorandum processes facilitate the allocation of resources against approved requirements.

THE LONG VIEW

Force Development Options for Recommendations 6, 7, and 8.

The final near-term first-step is to begin the process of advancing this recommendation into formal defense management processes once the national level strategy and policy perspective will support it. There are several elements to this step, but they all begin with a white paper that leads to a joint concept proposal, and finally to a multinational collaboration on a joint concept for land-based cross-domain control. The concept provides the basis for a capability based assessment and capability requirement document generation. In collaboration with willing regional partners, a JCTD could test the land-based "lily pad" employment strategy, and identify existing anti-ship and air defense systems and technologies. This testing should incorporate partner-developed systems for cross-domain control in the demonstration.

At a minimum, the United States must lead the development of this capability set through these nearterm steps. This effort will take several years, likely extending beyond the current programming years (FY 22). At that time, the DoD and HQDA would need to assess the security environment and make a strategic decision regarding the fielding of this capability. Unless the security environment changes significantly, the DoD will select a force development choice favoring U.S. developed capability for FMS, or a collaborative U.S.-regional partner developed capability for partner fielding. These two options recognize the two most significant obstacles to fielding a U.S. landbased cross-domain control capability in the region. First, the current threat and fiscal environment would not support prioritization of this capability in sufficient capacity to meet the military requirements of the Asia-Pacific theater. Second, partner nations would be reluctant to allow the United States to station this capability within their sovereign territory, for fear of offending China. That concern would not prevent regional partners or allies from developing their own capability to provide capacity to a regional collective defense strategy.

The three critical points associated with implementing this recommendation are: First, to socialize the need for the capability despite the U.S. aspiration to collaborate with China in other spheres. Second, to pursue a U.S.-led, multinational effort to develop a concept and capability to operationalize it. Finally, to pursue defense management activities that provide senior civilian security decision makers strategic force development fielding options in what are now the "out-years."

XII. ASSURED LAND FORCE MANEUVER

IMPLEMENTATION STRATEGIES FOR RECOMMENDATION 9

Land Force Assured Shallow-Water Maneuver.

This capability is critical to land forces operations in the Asia-Pacific. Land force assured shallow-water maneuver requires the fielding of a land forces means to interdict: maritime transnational criminal organization supply chains, pirates at sea and supporting land bases, commercial fishing fleets presenting illegal incursions into disputed waters, and similar maritime-borne disorder activities. During coercive operations, this capability must provide land forces commanders "division cavalry-like" capabilities in a maritime environment. These include reconnaissance and security operations (screen and early warning) in support of land forces operating on narrow coastal plains, armed maritime patrolling, and maritime route reconnaissance to ensure shallow-water freedom of navigation.

This recommendation represents the rejuvenation of an old way of fighting, and the development of for-purpose capabilities, to improve the effectiveness of assured land force shallow-water maneuver. At various times in U.S. history, the Navy, Marines, and Army possessed systems and doctrine to provide a similar shallow-water maneuver capability. When relative peace removed the immediate combat requirement, each service abandoned this ad-hoc land force required capability. In the land forces-centric maritime environment of the Asia-Pacific, an assured land forces shallow-water maneuver capability is critical. Without it, any organized group in johnboats

can outmaneuver the best-equipped and trained land forces tied to the beach.

Similar to the land forces cross-domain control recommendation, this recommendation will require the development of a joint concept in collaboration with our regional partners. Only the Filipino Army currently possesses this capability within an Army formation. During the development of this report, US-AWC International Fellows from the region expressed interest in the capability; but all expressed reservations regarding their country's willingness to pursue the development of the capability short of U.S. leadership in socializing a concept for its employment.

The first-step in pursuing the joint concept is for the Joint Staff J7 to assign lead-agency to one of the land force elements of the Joint Forces. The U.S. Army should volunteer for this responsibility, but the U.S. Marine Corps would also be a logical choice. Each of the Joint Force land forces elements and the U.S. Navy have existing systems that could be adapted to this purpose. If a proponent develops an equipment solution prototype through a JCTD, the DoD could fast track procurement and fielding to 1-3 years.

All three strategic force development options are viable for fielding this capability. A Joint Force roles and missions discussion during the development of the joint concept would establish responsibility for funding the development and fielding of a capability within the Joint Forces. Once a concept and combat patrol boat system are developed, the strategic force management option to facilitate fielding through FMS is attractive. Since the principle use of the platform in the gray zone is closely tied to law enforcement and interdiction to blunt coercive violations of international norms, partners fielding the system may be the best option for filling this theater specific land forces capability gap.

CONCLUSION

XIII. CONCLUDING ANALYSIS

The Asia-Pacific is a land forces-centric theater when viewed through the lens of China and U.S. regional partners. It is also a maritime theater, requiring land forces to develop capabilities to control space and maneuver in littoral, shallow-water, and interior riverine environments.

Competition describes the China-U.S. relationship across several domains of national power. That competition is healthy and natural for both nations. The United States seeks friendly competition in economic arenas of commerce, trade, and international finance; diplomatic arenas of international law and norms; and security arenas of international stability and conflict avoidance. Yet, the United States must acknowledge that China-U.S. security competition in the gray zone is the central "determinant dynamic" for the future of Asia-Pacific international relations. Outcomes of the gray zone competition are setting precedent that will shape international norms for decades, if not centuries. Currently, the United States is not competing well with China or countering disorder activities in the gray zone competitive space effectively. This report has offered nine specific recommendations to improve land forces capabilities that could help reverse this trend.

The leadership of the U.S. security establishment must undertake a deliberate change in mindset to compete successfully in the gray zone. Senior civilian leaders must accept that there is coercive competition occurring below the threshold of sustained combat, and that U.S. land forces have a role to play in defending U.S. interests in that competitive space. Senior defense and Joint Force leaders must understand the nature of gray zone competition to create a force capable of competing. Contesting effectively in the gray zone underpins every report recommendation.

The nine recommendations proffered in this report represent the type of change required for land forces to compete effectively in the gray zone. They are not an exhaustive list. However, the four categories of recommendations do highlight the most important arenas of change required. Intentionally, the first arena of change is a change of mind-set. The first mind-set change required is an appreciation of the nature of gray zone competition, and a recognition that if a rival can "win-without-fighting," then the United States can lose without competing. The second set of recommendations acknowledge the people-centric nature of gray zone competition; and the criticality of partner relationships based on mutual understanding and trust to achieve any meaningful success. Through partnerships and presence, U.S. land forces can contribute to successful outcomes in gray zone competition. Additionally, through partnerships and presence, U.S. land forces can improve warfighting readiness and access should coercive competition escalate to sustained combat. The last two categories of recommendations acknowledge the maritime environment within which gray zone competition is joined.

The land-based cross-domain control category aspires to expand the range of options available to compete in the gray zone by exposing a rival to unacceptable costs if they chose to escalate coercive competition to war. The final category highlights the military imperative to conduct maneuver operations with land forces in shallow-water "no-go" dominated terrain.

Bottom line: The nation should view gray zone competition as an opportunity to advance national interests; land forces are the right instrument of military power to engage that competition, but success requires both forward presence and new thinking about land forces to be effective. Land force relevance in the Asia-Pacific hinges on providing options to manage gray zone (between war and peace) competition, and providing cooperative to coercive means to enforce compliance with favorable international order norms through presence.

XIV. VALIDITY ASSESSMENT

The Asia-Pacific Integrated Research Project (AP IRP) team arrived at the regional assessments and recommendations presented in this report independently. Each of the recommendations are consistent with the theory and scoping screening criteria underpinning the research design, and are appropriate remedies to capability gaps identified during the environmental scan. Perhaps the most significant confirmation of the report's analysis and recommendations validity is the similarity of conclusions reached by other prominent scholars, security experts, and practitioners familiar with the region and China-U.S. relations.¹⁷¹

The *go* game analogy facilitated the AP IRP team's assessment of the Asia-Pacific security environment. The report relies on the reader's knowledge of current events to draw conclusions. This is a weakness of the quick turn, student-led report. Future studies should confirm the linkage between the analogies and the environment using more rigorous regional case study. Having acknowledged this shortcoming, the insights presented in the report are consistent with foundational theory, the *go* game analogy, and current events.

The report benefited from three levels of vetting. The AP IRP team presented initial report assessment of the Asia-Pacific security environment, initial insights, and initial recommendations to a group of International Fellows (students) attending the USAWC. The group generally accepted the security environment assessment. A discussion of insights and recommendation feasibility contributed to the refinement of both in the final report. The USAWC Center for Strategic Leadership (CSL) ran a 2-day workshop with more than 20 defense management subject matter experts,

from the Pentagon to "Red Team" report recommendations and implementation plans. The final report reflects the insights gained from this review. Due to report length considerations, the AP IRP team did not include detailed process documentation or implementation path options in the final report. The depth of discussion during this implementation workshop, however, greatly improved the quality of the recommendations and the feasibility of the implementation strategies suggested. A select group of faculty from the USAWC, and staff from HQDA, USARPAC, and USPACOM provided a peer review of the coordinating draft of the report. Incorporation of several recommendations improved the readability and clarity of the report's logic argument.

XV. FUTURE RESEARCH

This report did not consider the extensive China-U.S. competition space associated with Indian Ocean periphery states, the Americas, Russia, or Africa. Each of these regions deserves a focused consideration. Indian Ocean security issues are intertwined with the Asia-Pacific analysis associated with this report. Constraints of time prevented the synthesis of Indian Ocean and Asia-Pacific issues. Considering the China-U.S. relationship through the lens of security issues involving India, Pakistan, Bangladesh, Myanmar (Burma), Cambodia, and Thailand are critical to understanding the interdependent nature of the US-PACOM's Indo-Asia-Pacific challenge.

Finally, the context of the Asia-Pacific rivalry has evolved over the last 5 or 6 decades. The regional stakeholders' political, economic, military, and cultural histories have also evolved. This suggests an urgent need to re-examine war plans for the region, starting with first-principle assumptions and creative assessments of potential strategies employed by rival stakeholders to advance their national interests.

ABOUT THE CONTRIBUTORS

XVI. ABOUT THE PROJECT DIRECTORS

WILLIAM G. BRAUN III Professor "Trey" Braun is a Professor of Practice with the Strategic Studies Institute (SSI), U.S. Army War College (USAWC). Professor Braun's research agenda includes national strategy and policy analysis, land forces employment, military leadership, and civil-military relations. He last deployed as the Director, CJ-7 (Force Integration, Training, and Education Directorate), Combined Security Transition Command-Afghanistan (CSTC-A). His 30year Army career included multiple tactical aviation and planner assignments at Division and Corps, and multiple force management assignments on the Army staff, U.S. Army Training and Doctrine Command (TRADOC), and the U.S. Army Recruiting Command. Professor Braun holds a bachelor of arts degree from Alfred University and master's degrees from the USAWC, School of Advanced Military Science, (SAMS), and Webster University.

DAVID LAI Dr. Lai is a Research Professor of Asian Security Affairs at the Strategic Studies Institute (SSI), U.S. Army War College (USAWC). Before joining SSI, Dr. Lai was on the faculty of the U.S. Air War College. Born and raised in China, Dr. Lai's research and teaching cover U.S.-China and U.S.-Asian security relations. He has also made special contributions to the study of Chinese strategic thinking and operational art. Dr. Lai's academic studies began in China. He later pursued his post-graduate studies at the University of Colorado, where he earned his master's and doctoral degrees in political science specializing in international relations.

XVII. ABOUT THE RESEARCHERS

JOSE A. ARANA Commander (CDR) Arana most recently served as Operations Officer, National Joint Operations and Intelligence Center, National Military Command Center, Directorate for Operations, J-3, Joint Staff, Pentagon, Washington, D.C. CDR Arana was responsible for the development and transmission of messages directing the execution of several numbered operations plans, to include combatant command nuclear plans. Prior to being assigned to the Joint Staff, CDR Arana deployed onboard every platform from which the MH-60S is employed, to include the maiden deployment of the USS George H.W. Bush (CVN 77) where he earned his Command Duty Officer (CDO) Underway qualification. He has been stationed on both coasts (San Diego, CA, and Norfolk, VA), and has flown missions in support of Operations IRAQI FREEDOM, ENDURING FREEDOM and NEW DAWN. He was recently selected to take command of Helicopter Sea Combat Squadron Twelve based out of Atsugi, Japan. CDR Arana graduated from the University of Florida in 1997.

TOM ASBERY Colonel (COL) Asbery was commissioned in the U.S. Army Corps of Engineers in May 1994. He holds a bachelor of science degree in landscape architecture from West Virginia University and a master of science in architecture from Virginia Polytechnic Institute and State University. COL Asbery most recently served as the Deputy Division Commander of the Pacific Ocean Division and Commander of the Honolulu District, U.S. Army Corps of Engineers, Fort Shafter, Hawaii. He has served in a variety of command and staff assignments in the continental

United States, Hawaii, and Europe. His next assignment will be as the Transatlantic Division-Forward Officer-in-Charge, U.S. Army Corps of Engineers at Camp Arifjan, Kuwait.

JASON P. CONROY Colonel (COL) Conroy was commissioned in 1995 as an armor officer from the U.S. Officer Candidate School. He has served in a variety of command and staff assignments, both in the continental United States and overseas. Most recently, he served as the Liaison Officer for U.S. Strategic Command Joint Functional Component Command for Integrated Missile Defense (JFCC IMD) and U.S. Army Space and Missile Defense Command/Army Forces Strategic Command (USASMDC/ARSTRAT) to U.S. Central Command (USCENTCOM), located in Tampa, FL. His previous assignments include: Deputy Chief, Strategy Division for Joint Forces Component Command Space (JFCC SPACE) and Chief of Operational Assessment for JFCC SPACE, Vandenberg Air Force Base (AFB), CA. COL Conroy holds a bachelor of science degree from Austin Peay State University, and a master's degree in military art and science from the United States Air University.

LANCE R. ELDRED Colonel (COL) Eldred is a U.S. Army Logistics officer whose 24-year career includes four deployments from Bosnia to Iraq. His most recent assignments include a tour on the Joint Staff as Director, Special Access Programs, Squadron Commander, 11th Armored Cavalry Regiment, and as an Observer-Controller/Trainer at the Joint Multinational Readiness Center (JMRC) in Hohenfels Germany. COL Eldred has held various command and staff positions in the European and Southwest Asian theaters. COL

Eldred's next assignment is the 8th Army G4 in Yongsan, Korea, while also performing as Support Operations Officer for 8th Theater Support Command, Hawaii. COL Eldred holds a bachelor's degree in history from Western Illinois University and a master's degree from the U.S. Naval War College.

MARK ILLG Mr. Illg has over 30-years of experience as a proven strategic leader with extensive management and hands-on experience in public sector operations. He has held positions at all levels of command to include Department of Army and combatant command level jobs. He has deployed to Afghanistan as a Department of Defense (DoD) Civilian twice, working reconstruction, and senior level bilateral agreement management. Mr. Illg holds a master of science degree in business organizational management from La Verne University and a bachelor of science degree in logistics management from Weber State University.

SANG K. LEE Colonel (COL) "Sonny" Lee was commissioned as a field artillery officer from the United States Military Academy with a degree in systems engineering. His previous assignment was as the Humanitarian Assistance Survey Team Chief for the Headquarters, United States Army Pacific (USAR-PAC) located at Fort Shafter, Hawaii. His next assignment is 3rd Army (Army Central) Headquarters at Shaw AFB, SC, as the electronic warfare (EW) director. He holds master's degrees in business administration from Webster University, and public administration from Farleigh Dickinson University.

DANIELLE NGO Colonel (COL) Ngo was a prior enlisted soldier before being commissioned as a U.S. Army engineer officer with deployments to Bosnia, Iraq, and Afghanistan. Her previous assignment was as a military assistant for a 4-star Danish General, Chairman of the NATO Military Committee, at Brussels, Belgium. Her next assignment is as the 130th Engineer Brigade Commander at Schofield Barracks, Hawaii. She also holds a master's degree in military arts and sciences in theater studies from the Command and General Staff College and a master's degree in public policy from Georgetown University.

HUNG NGUYEN Lieutenant Colonel (LTC) Nguyen is Vietnam's International Fellow at the USAWC. He is the second Vietnamese officer who has studied at the USAWC. LTC Nguyen started his military career in 1993 as an enlisted soldier in the Vietnam People's Air Force. He later shifted to study at the Vietnam People's Army Infantry Officers School and the Vietnamese Military Science Academy to become an Army officer. His last assignment was at the Vietnam People's Army Newspaper. He holds a master of arts degree in journalism from Griffith University, Australia.

ALBERTO RODRIGUEZ-CRUZ Lieutenant Colonel (LTC) Rodriguez-Cruz is a logistics officer with a functional area in simulation operations whose 20-year career includes three deployments to Kosovo and Iraq. He holds a master of arts degree in public administration from Bowie State University, Maryland. His previous assignment was as a Deputy, Operation Officer for the 8th Theater Sustainment Command, Fort Shafter, Hawaii. His next assignment is to the U.S. Army Pacific Command (USARPAC), Fort Shafter, Hawaii.

GALBADRAKH TOGOO Colonel (COL) Togoo is Mongolia's International Fellow at the USAWC. He previously taught National Security Studies as a Senior Instructor at the Mongolian Defense Leadership Academy, Ulaanbaatar, Mongolia. Previously, he served with Joint Multinational Peacekeeping forces and earned special qualifications as a joint planner, logistician, and military parachutist. He received a master's degree in military art and science from King's College, London, and attended the United Kingdom's Joint Service Command and Staff College.

XVIII. ABOUT THE WRITING MENTORS

RORY CROOKS Colonel (COL) Crooks is a field artillery officer. His most recent assignment was Deputy Chief of Staff for Strategic Communications and Outreach at the U.S. Army Fires Center of Excellence, Fort Sill, OK. He has held previous tactical assignments with 1st Special Forces Group, 2d Infantry Division (Fort Lewis and Korea), XVIII Airborne Corps (Iraq), 75th Ranger Regiment, and 501st Infantry Regiment (Alaska). He has also served as an operations officer for the Center for Army Lessons Learned at Fort Leavenworth, observer controller at Hohenfels, Germany, and small group instructor for the Field Artillery Captain's Career Course. He holds a bachelor of science degree in civil engineering from Washington State University and a master's degree in military arts and science from the U.S. Army Command and General Staff College. His next assignment is the Director of International Fellows and G9 at the USAWC.

JAMES A. FRICK Colonel (COL) "Buddy" Frick is the Director of the Defense Planners Course at the US-AWC. As a field artillery officer, he has served at every level from battery to division deep affects coordinator and fires planner. After graduating from the School of Advanced Military Science at Fort Leavenworth in 2009, COL Frick served as the Army's Chief of Contingency Plans and later as Chief of Strategy and Policy in USARPAC. He holds master's degrees in military art and science from the Air University and the School of Advanced Military Science and in strategic studies from the USAWC.

FREDERICK J. GELLERT is a Professor of Practice of Resource Management in the Department of Command, Leadership, and Management at the USAWC. His 30-year Army career included force management assignments at Department of the Army, U.S. Army Pacific (USARPAC), and deployment with NATO in Afghanistan. Professor Gellert holds a bachelor of science degree from Wayne State University, a master's degree in astrophysics from Rensselaer Polytechnic Institute, and a master's degree in strategic studies from the USAWC.

ENDNOTES

1. Anonymous, "Full Transcript: Interview with Chinese President Xi Jinping; China's president offers written answers to questions from The Wall Street Journal," *The Wall Street Journal*, September 22, 2015, available from www.wsj.com/articles/full-transcript-interview-with-chinese-president-xi-jinping-1442894700:

In approaching China-U.S. relations, one should see the larger picture and not just focus on differences, just as a Chinese saying tells us, "When important things are addressed first, secondary issues will not be difficult to settle."... If two big countries like ours do not cooperate with each other, just imagine what will happen to the world.

In the Asia-Pacific, both China and the United States should vigorously implement the principles of mutual respect and win-win cooperation.

- 2. U.S. Department of the Army, "U.S. Army in Asia Pacific: Ensuring Stability and Security," Washington, DC: U.S. Army Quadrennial Defense Review Office (G8), November 2013. Note: Admiral Samuel J. Locklear, III is using seven of the world's ten largest standing militaries. The difference involves the distinction between armies and militaries.
- 3. President Nixon visited the People's Republic of China (PRC) in 1972, which led to a Chinese agreement to settle the political status of Taiwan peacefully. This led to the United States normalizing relations with the PRC. By 1979, the United States established full diplomatic relations with the PRC. For a more detailed description of the four periods that categorize China's modern history, see David Lai, *The United States and China in Power Transition*, Carlisle, PA: Strategic Studies Institute, U.S. Army War College, 2011, ch. 3, available from www.strategicstudiesinstitute. army.mil/pubs/display.cfm?pubID=1093.
- 4. David M. Finkelstein, "China's National Military Strategy," in James C. Mulvenon and Richard H. Yang, The People's Liberation Army in the Information Age, Santa Monica, CA: RAND Corporation, 1999, available from www.rand.org/content/dam/rand/

pubs/conf_proceedings/CF145/CF145.chap7.pdf. For a more recent assessment of Chinese military capability and their emerging ability to project power at greater distances, see Eric Heginbotham et al., The U.S.-China Military Scorecard: Forces, Geography, and the Evolving Balance of Power, 1996-2017, Santa Monica, CA: RAND, available from www.rand.org/pubs/research_reports/RR392.html.

- 5. David Lai, *Asia-Pacific: A Strategic Assessment*, Carlisle, PA: Strategic Studies Institute, U.S. Army War College, May 28, 2013, p. ix, available from *www.strategicstudiesinstitute.army.mil/pubs/display.cfm?pubID=1155*.
- 6. Barack Obama, Leon E. Panetta, and the U.S. Department of Defense, *Sustaining U.S. Global Leadership: Priorities for 21st Century Defense*, Washington, DC: Department of Defense, January 2012, available from *archive.defense.gov/news/Defense_Strategic_Guidance.pdf*.
- 7. Barack Obama, *National Security Strategy*, Washington, DC: The White House, February 2015, available from *https://www.whitehouse.gov/sites/default/files/docs/2015_national_security_strategy.pdf*.
- 8. Steven Schubert and James Purtill, "US Marines begin arriving in Darwin in fourth rotation as part of US 'pivot' to the Asia-Pacific," ABC News, May 18, 2015, available from www.abc. net.au/news/2015-04-13/us-marines-arrive-darwin-us-pivot-amid-concern-tensions-china/6387444.
- 9. U.S. Joint Chiefs of Staff, *Joint Operational Access Concept* (JOAC), v. 1.0, Washington, DC: U.S. Joint Chiefs of Staff, January 17, 2012, available from *www.defense.gov/Portals/1/Documents/pubs/JOAC_Jan%* 202012_*Signed.pdf*.
- 10. This defense review is perhaps the first use of this term; see, U.S. Office of the Secretary of Defense, *Quadrennial Defense Review 2014*, Washington, DC: Department of Defense, March 4, 2014, available from *archive.defense.gov/pubs/2014_Quadrennial_Defense_Review.pdf*. For a brief article that answers the question "So what is gray zone conflict," see Hal Brands, "Paradoxes of the Gray Zone," Foreign Policy Research Institute, February 2016, available from *www.fpri.org/article/2016/02/paradoxes-gray-zone/*.

For a more in-depth exploration of the current national security dialogue associated with gray zone competition, see Michael J. Mazarr, *Mastering the Gray Zone: Understanding a Changing Era of Conflict*, Carlisle, PA: Strategic Studies Institute, U.S. Army War College, December 2015, available from *www.strategicstudiesinstitute.army.mil/pubs/display.cfm?pubID*=1303.

- 11. Thomas D. Waldhauser, "Memorandum for Military Education Coordination Council, Subject: 2016 Joint Professional Military Education Special Areas of Emphasis List," Washington, DC: U.S. Joint Chiefs of Staff, not dated, received April 12, 2016.
- 12. David Lai, "The US-China Power Transition: Stage II," *The Diplomat*, June 30, 2016, available from *thediplomat.com*/2016/07/ *the-us-china-power-transition-stage-ii*/.
 - 13. Lai, The United States and China in Power Transition.
 - 14. *Ibid.*, p. xi.
- 15. David Lai, "China's Strategic Moves and Counter-Moves," *Parameters*, Vol. 44, No. 4, Winter 2014-2015, p. 19, available from www.strategicstudiesinstitute.army.mil/pubs/Parameters/Issues/Winter_2014-15/5_LaiDavid_ChinasStrategicMovesCounter-Moves.pdf.
- 16. For a full development of this analogy, see David Lai, Learning from the Stones: A Go Approach to Mastering China's Strategic Concept, Shi, Carlisle, PA: Strategic Studies Institute, U.S. Army War College, May 2004, available from www.strategicstudiesinstitute.army.mil/pubs/display.cfm?pubID=378; and Lai, "China's Strategic Moves and Counter-Moves."
- 17. Also known as weiqi (wei Ch'i) in China, Igo in Japan, and Baduk in Korea, the United States calls the game *go*. For a more detailed discussion of the game, see the U.S. *Go* Association's webpage, available from *www.usgo.org*.
- 18. British *Go* Association webpage available from *www.brit-go.org/learners/chessgo.html*; and Lai, *Learning from the Stones*.
- 19. Zbigniew Brzezinski, The Grand Chessboard: American Primacy and Its Geostrategic Imperatives, New York: Basic Books, 1997.

- 20. U.S. Office of the Secretary of Defense, *Quadrennial Defense Review* 2014.
 - 21. Obama, National Security Strategy, February 2015.
- 22. U.S. Office of Management and Budget, *Budget of the U.S. Government: Fiscal Year* 2017, Washington, D.C.: U.S. Government Printing Office, 2016, available from https://www.whitehouse.gov/sites/default/files/omb/budget/fy2017/assets/budget.pdf.
- 23. U.S. Joint Chiefs of Staff, *The National Military Strategy of the United States of America* 2015: *The United States Military's Contribution to National Security*, Washington, DC: U.S. Joint Chiefs of Staff, June 2015, available from www.jcs.mil/Portals/36/Documents/Publications/2015_National_Military_Strategy.pdf.
- 24. Samuel J. Locklear, III, "USPACOM Strategy," quoted on U.S. Pacific Command (USPACOM) Strategy webpage, available from www.pacom.mil/AboutUSPACOM/USPACOMStrategy.aspx, accessed on April 28, 2016.
 - 25. Ibid., "Introduction."
- 26. *Ibid.*, "Alliances"; "U.S. Collective Defense Arrangements," U.S. Department of State's (DoS) Diplomacy in Action webpage, available from *www.state.gov/s/l/treaty/collectivedefense/*, accessed on April 29, 2016.
- 27. U.S. Office of the Secretary of Defense, *Quadrennial Defense Review* 2014, p. 16.
- 28. U.S. Joint Chiefs of Staff, *The National Military Strategy of the United States of America 2015*, p.11. The six missions most relevant to gray zone competition are: (1) Provide a global, stabilizing presence; (2) Respond to crisis and conduct limited contingency operations; (3) Conduct military engagement and security cooperation; (4) Conduct stability operations; (5) Provide support to civil authorities; and, (6) Conduct humanitarian assistance and disaster response.

29. Ibid.

- 30. U.S. Office of the Secretary of Defense, *Quadrennial Defense Review* 2014, pp. 23-24.
- 31. Anthony H. Cordesman and Steven Colley, "Chinese Strategy and Military Modernization in 2015: A comparative analysis," Final Review Draft, Washington, DC: Center for Strategic and International Studies, updated October 10, 2015, p. 15, available from https://csis-prod.s3.amazonaws.com/s3fs-public/legacy_files/files/publication/150901_Chinese_Mil_Bal.pdf. The analysis identified Australia, Japan, and the Republic of Korea (ROK) as traditional anchors and emerging leaders of regional security.
- 32. U.S. Office of the Secretary of Defense, *Quadrennial Defense Review* 2014, p. 4. Describes Australia, Japan, and the Republic of Korea as traditional anchors of regional security, and encourages their increased role in leading cooperative defense exercises.
- 33. U.S. Joint Chiefs of Staff, *The National Military Strategy of the United States of America* 2015, p. 9.
- 34. U.S. Office of the Secretary of Defense, *Quadrennial Defense Review* 2014, p. 9.
- 35. U.S. Office of Management and Budget, *Budget of the U.S. Government: Fiscal Year 2017*, p. 82.
 - 36. Ibid., p. 84.
- 37. Michael Green, Kathleen Hicks, and Mark Cancian, et al., Asia-Pacific Rebalance 2025: Capabilities, Presence, and Partnerships: An Independent Review of U.S. Defense Strategy in the Asia-Pacific, Washington, DC: Center for Strategic and International Studies, January 2016, available from csis.org/files/publication/160119_Green_AsiaPacificRebalance2025_Web_0.pdf:

Four lines of effort are highlighted: (1) Washington needs to continue aligning Asia strategy within the U.S. government and with allies and partners; (2) U.S. leaders should accelerate efforts to strengthen ally and partner capability, capacity, resilience, and interoperability; (3) the United States should sustain and expand U.S. military presence in the Asia-Pacific region; and, (4) the United States should accelerate development of innovative capabilities and concepts for U.S. forces.

38. H.E. Xi Jinping, "Working Together to Forge a New Partnership of Win-win Cooperation and Create a Community of Shared Future for Mankind," Statement by H.E. Xi Jinping, President of the People's Republic of China at the General Debate of the 70th Session of the UN General Assembly, New York, September 28, 2015, available from *qz.com/512886/read-the-full-text-of-xi-jinpings-first-un-address/*:

Major countries should follow the principles of no conflict, no confrontation, mutual respect and win-win cooperation in handling their relations.

We should advance international cooperation in both economic and social fields and take a holistic approach to addressing traditional and non-traditional security threats, so as to prevent conflicts from breaking out in the first place.

Also see, Anonymous, "Full Transcript: Interview with Chinese President Xi Jinping," President H.E. Xi Jinping's words to explain "Dream China's" historic roots; and his views on South China Sea territorial disputes. Note references to "history and reality." China is trying to change the reality of the South China Sea. They will argue for their territorial rights, not on an international law and norms basis, but on history and a changed reality:

The Chinese dream is fundamentally about making life better for the Chinese people, and I think one should approach this concept from two angles: history and reality. Starting from the Opium War in 1840, the Chinese nation went through a century of social turbulence, foreign aggression and the sufferings of war. Yet throughout all this trying time, our people stood on their feet and struggled tenaciously for a better future. They never gave up the longing for their cherished dream. To understand today's China, one needs to fully appreciate the Chinese nation's deep suffering since modern times and the profound impact of such suffering on the Chinese minds. That is why we regard the Chinese dream of the great rejuvenation of the Chinese nation as its greatest dream since modern times. The Chinese dream is as much the dream of every Chinese as it is the dream of the whole nation. It is not an illusion, nor is it an empty slogan. The Chinese dream is deeply rooted in the hearts of the Chinese people.

39. For more on China's foreign policy driver, see Christopher K. Johnson, *President Xi Jinping's 'Belt and Road' Initiative: A Practical Assessment of the Chinese Communist Party's Roadmap for China's Global Resurgence*, Washington, DC: Center for Strategic and International Studies, March 2016.

President Xi views OBOR as the signature foreign policy theme of his leadership tenure and the practical embodiment of his 'China Dream' for promoting national rejuvenation and cementing the country's place as a leading world power. (p. V)

Washington has been slow to recognize the intricate lattice the Silk Road projects are forming in conjunction with initiatives such as the Asian Infrastructure Investment Bank (AIIB) and the BRICS's (Brazil, Russia, India, China, South Africa) New Development Bank (NDB) that are shaping the economic landscape in Eurasia with important consequences for global business. (p. VI)

- 40. For a description of China in the context of global revisionist states (China, Russia, Iran), see Jakub J. Grygiel and A. Wess Mitchell, *The Unquiet Frontier: Rising Rivals, Vulnerable Allies, and the Crisis of American Power*, Princeton, NJ: Princeton University Press, 2016; For comparative U.S.-China military capabilities, trends, and vulnerabilities, see Heginbotham *et al.*, "The U.S.-China Military Scorecard."
- 41. For the unclassified letter disputing Chinese "limited militarization" of reclamation of disputed holdings in the South China Sea, see James R. Clapper, Director of National Intelligence, Memorandum to Sen. John McCain, February 23, 2016, available from https://news.usni.org/2016/03/08/document-dni-assessment-of-chinese-militarization-reclamation-in-south-china-sea.
- 42. Richard D. Fisher, Jr., "Imagery suggests China has deployed YJ-62 anti-ship missiles to Woody Island," Jane's Defence Weekly, March 23, 2016, available from https://janes-ihs-com.usawc.idm.oclc.org/DefenceWeekly/Display/1765554; Richard D. Fisher, Jr., "China deploys HQ-9 surface-to-air missiles to Woody Island," Jane's Defence Weekly, February 17, 2016, available from https://janes-ihs-com.usawc.idm.oclc.org/DefenceWeekly/Display/1763200.

- 43. Asia Maritime Transparency Initiative, "Airpower in the South China Sea," Center for Strategic and International Studies, available from *amti.csis.org/airstrips-scs/*.
- 44. See Simon Denyer, "How China's fishermen are fighting a covert war in the South China Sea," *The Washington Post* Asia and Pacific, April 12, 2016; Manuel Mogato, "Philippines says Chinese ship rammed fishing boats in Scarborough Shoal," Reuters World News, February 4, 2015, available from *www.reuters.com/article/us-philippines-china-idUSKBN0L81IM20150204*; Shannon Teoh, "China fishing boats dispute: KL summons envoy," *The Straits Times*, April 1, 2016. For a detailed description of the Philippine claim at the Permanent Court of Arbitration, see FPRI, "Shame Power: the Philippine Case against China at the Permanent Court of Arbitration," Philadelphia, PA: Foreign Policy Research Institute, available from *www.fpri.org/fpri_programs/asia-program/*.
- 45. Barbara Starr, "U.S. sources: Signs of North Korea mobile ballistic missile launch," CNN Politics, April 13, 2016, available from www.cnn.com/2016/04/12/politics/north-korea-mobile-ballistic-missile-launch/index.html?eref=rss_latest; Jack Kim and David Brunnstrom, "Declassified: Secretive North Korea lifts veil on arms program," Reuters, U.S. Edition, April 12, 2016, available from www.reuters.com/article/us-northkorea-nuclear-idUSKCN0X91LD.
- 46. Jörn Birkmann, Matthias Garschagen, Peter Mucke, et al., World Risk Report 2014, Berlin, Germany: Bündnis Entwicklung Hilft and United Nations University, Institute for Environment and Human Security, 2014, p. 49 (World Risk Index), available from i.unu.edu/media/ehs.unu.edu/news/4070/11895.pdf.
 - 47. Ibid., pp. 5-75.
- 48. Andrew Shearer, Australia-Japan-U.S. Maritime Cooperation: Creating Federated Capabilities for the Asia Pacific, Washington, DC: Center for Strategic and International Studies, April 2016, p. v, available from https://www.csis.org/analysis/australia-japan-usmaritime-cooperation.
- 49. Robert D. Kaplan, *Asia's Cauldron: The South China Sea and the End of a Stable Pacific*, New York: Random House, 2015, pp. xv, ch. 3, ch. 5, ch. 6, epilogue.

- 50. Singapore is rated 8 of 168 nations world-wide on Transparency International's 2015 "Corruption Perceptions Index," Transparency International webpage, available from www.transparency.org/research/cpi/overview.
- 51. David Stout, "The Last Time China Got Into a Fight With Vietnam, It Was a Disaster," *Time*, World Section, May 15, 2014, available from *time.com/100417/china-vietnam-sino-vietnamese-war-south-china-sea/*.
- 52. Xiaoming Zhang, *Deng Xiaoping's Long War: The military conflict between China and Vietnam*, 1979-1991, Chapel Hill, NC: University of North Carolina Press, 2015, p. 205.
- 53. "Treaties and international agreements registered or filed and recorded with the Secretariat of the United Nations," United Nations Treaty Series, Vol. 2336, No. I-41860, 2005, pp. 194-199, available from https://treaties.un.org/doc/Publication/UNTS/Volume%202336/v2336.pdf.
- 54. A review of U.S. security strategy documents, challenges and opportunities presented by the Asia-Pacific security environment, tacit knowledge of U.S. Joint Force concepts and doctrine, and various briefings on USPACOM and U.S. Army Pacific (USARPAC) initiatives in the theater informs this section's summary analysis.
- 55. Victor A. Manhit and Angelica Mangahas, "EDCA Refocus: Eyes on the AFP's Modernization Program," Asia Maritime Transparency Initiative, February 5, 2016, available from *amti.csis*. org/edca-refocus-eyes-on-the-afps-modernization-program/.
- 56. Brands, "Paradoxes of the Gray Zone"; Antulio J. Echevarria II, "How Should We Think About 'Gray-zone' Wars?" *Infinity Journal*, Vol. 5, No. 1, Fall 2015, available from *https://www.infinityjournal.com/article/158/How_Should_We_Think_about_Gray-Zone_Wars/*; For a discussion of the range of military "modes of war," to include gray zone/hybrid modes of war, see Frank G. Hoffman, "The Contemporary Spectrum of Conflict: Protracted, Gray Zone, Ambiguous, and Hybrid Modes of War," Essay written for the 2016 Index of U.S. Military Strength, Washington, DC: Heritage Foundation, pp. 25-36, available from *index.heritage.org/military/2016/essays/contemporary-spectrum-of-conflict/*.

- 57. Although, historically, the United States has done very well in this gray zone competition.
- 58. Dan De Luce and Keith Johnson, "Crunch Time for Washington and Beijing in the South China Sea," Foreign Policy, February 17, 2016, available from foreignpolicy.com/2016/02/17/crunchtime-for-washington-and-beijing-in-the-south-china-sea/.
- 59. Chris Buckley, "Chinese General Visits Disputed Spratly Islands in South China Sea," *The New York Times*, April 15, 2016, available from www.nytimes.com/2016/04/16/world/asia/china-south-china-sea-spratly-islands.html?_r=0; Bloomberg News, "China denies U.S. carrier Hong Kong visit," BusinessMirror, May 2, 2016, available from www.businessmirror.com.ph/china-denies-us-carrier-hong-kong-visit/.
- 60. Daniel Bolger, Why We Lost: A General's Inside Account of the Iraq and Afghanistan Wars, New York: Houghton Mifflin Harcourt, 2014.
- 61. Rachel Maddow, *Drift: The Unmooring of American Military Power*, New York: Crown Publishers, 2012; and Doug Bandow, "The U.S. Should Stay Out of Asia's Island Disputes," News Week Opinion page, May 29, 2015, available from *www.newsweek.com/us-should-stay-out-asias-island-disputes-337165*.
- 62. Antulio J. Echevarria, II, Operating in the Gray Zone: An Alternative Paradigm for U.S. Military Strategy, Carlisle, PA: Strategic Studies Institute, U.S. Army War College, April 4, 2016, p. 4, available from www.strategicstudiesinstitute.army.mil/pubs/display.cfm?pubID=1318.
- 63. Of course, current operations are prioritized across the military establishment. After that, however, the focus on future warfighting capability is emphasized to the exclusion of managethe-peace capabilities and operations. Each of these leader's positions have become more nuanced and refined (less blunt) over time, but the central theme of needing to resource and prepare for a future war is unwavering. Several examples of this include: A summary of several key points made in a speech by Deputy Secretary of Defense Robert Work: Recover readiness and keep pace with emerging threats; Research & Development and long-

term modernization to stay ahead of competitors, informed by the Third Off-set strategy. See Robert O. Work, "Deputy Secretary of Defense Speech: McAleese/Credit Suisse Defense Programs Conference," Washington, DC, March 17, 2015, available www.defense.gov/News/Speeches/Speech-View/Article/606653. "Army's No. 1 current priority is readiness [for ground combat], said Chief of Staff of the Army Gen. Mark A. Milley," quoted in David Vergun, "Milley names top 3 readiness focal points," Army News Service, April 7, 2016, available from https://www.army.mil/ article/165671; General Joseph Dunlap, Commandant U.S. Marine Corps, "fight and win," quoted in The Washington Post, "Marine Corps' General outlines priorities, vision," TribLive Blog, January 24, 2015, available from triblive.com/usworld/nation/7633478-74/ marine-dunford-corps. The prioritization of current combat and security operations followed by preparing for future warfare is unremarkable. These Joint Force priorities are widely held. What is remarkable is the near absence of any language that acknowledges the requirement to resource forces and capabilities to conduct the "manage the peace" and engagement missions the military is called on to perform every day.

64. U.S. Joint Chiefs of Staff, Joint Operations, Joint Publication (JP) 3-0, Washington, DC: U.S. Joint Chiefs of Staff, August 11, 2011, available from www.dtic.mil/doctrine/new_pubs/jp3_0.pdf. IP 3-0 offers numerous joint operations and establishes language that defines the effects intended by those operations. Examples include - Offensive counter air: destroy, disrupt, neutralize; Interdiction: divert, disrupt, delay or destroy; Force protection: degrade, neutralize and destroy; Strike: damage or destroy; and WMD: secure, inventory, destroy, neutralize, dispose. Some operations, like Stability Operations: assess, train, advise, and assist, are more palatable to interagency and multinational partners, but don't really provide a language that helps a Joint Force leader convey exactly what is being done or what outcomes are expected. The document uses the word "cooperate" twice, in both cases referring to international governmental organizations. The word "compete" is never used.

65. Echevarria, II, Operating in the Gray Zone, p. xii.

- 66. Among the least useful of the current 13 elements of design in the gray zone are termination, end-state, center-of-gravity, and decisive points. Notions of center-of-gravity and decisive points lend themselves to rigid pursuit of mission objectives. Flexibility and seizing opportunity are more desirable attributes of sustained competition. For a discussion of end-state and termination see Eliot A. Cohen, "Defense in a Disordered World," The American Interest, October 28, 2015, available from www.the-american-interest.com/2015/10/28/defense-in-a-disordered-world/; Eliot A. Cohen, "Colloquium Closing," Presentation at the U.S. Army War College's (USAWC) Annual Strategy Conference, "Defense Choices for the Next Administration," April 27-28, 2016, video available from https://strategicstudiesinstitute.army.mil/conf/2016bliss.cfm.
- 67. While several acronyms try to distill national instruments of power, the DIME acronym (Diplomatic, Informational, Military, and Economic) is widely used and accepted.
- 68. The *go* game analogy described earlier in the report offers a start point for these environment relevant aspects of design. The *go* game perspective encourages a win without fighting strategic approach, win-win solutions to disputes, multi-nodal spheres of initiative (geographic and instrument of power employed), and approaching challenges from less contentious peripheral issues first, then moving to the more central disputes as initiative and power accrue. Finally, the *go* game reminds us that strategic success is characterized by sustainable and favorable political outcomes, not military victory and the defeat of an opponent.
- 69. The term "Strategic Mindedness" and this aspect of a conceptual framework were developed by MG William E. Rapp, Commandant USAWC in his article: William E. Rapp, "Civil-Military Relations: The Role of Military Leaders in Strategy Making," Parameters, Vol. 45, No. 3, Autumn 2015, pp. 13-26, available from www.strategicstudiesinstitute.army.mil/pubs/Parameters/issues/Autumn_2015/Parameters%20Autumn%202015%20Vol45%20No3_ONLINE.pdf, accessed July 25, 2016.
- 70. The White House, "Remarks by President Obama and President Xi of the People's Republic of China in Joint Press Conference," September 25, 2015, available from https://www.white-house.gov/the-press-office/2015/09/25/remarks-president-obama-and-president-xi-peoples-republic-china-joint, accessed February 29, 2016.

- 71. USPACOM Strategy webpage.
- 72. David L. Caprara, Katharine H.S. Moon, and Paul Park, "Mongolia: Potential Mediator between the Koreas and Proponent of Peace in Northeast Asia," Brookings East Asia Commentary, No. 84, January 2015, available from www.brookings.edu/research/opinions/2015/01/20-mongolia-north-korea-caprara-moon-park, accessed July 25, 2016.
- 73. Stephen Noerper, "Mongolia Matters," Brookings East Asia Commentary, No. 12, available from www.brookings.edu/re-search/opinions/2007/10/mongolia, accessed July 25, 2016.
- 74. Alicia J. Campi, "Ulaanbaatar Dialogue on Northeast Asian Security," Jamestown, July 11, 2014, available from www.jamestown.org/programs/edm/single/?tx_ttnews%5Btt_news%5D=42618&tx_ttnews%5BbackPid%5D=756&no_cache=1#. VwE0FP72bIU.

75. Ibid.

- 76. Mendee Jargalsaikhany, "Mongolian Defense Diplomacy," Jamestown, October 9, 2013, available from www.jamestown. org/single/?tx_ttnews%5Btt_news%5D=41467&no_cache=1#.Vkd-3Pf6FPIU.
- 77. Ankit Panda, "A First: China Sends Troops to US-Mongolia-Led Khaan Quest Exercise," *The Diplomat*, June 23, 2015, available from *thediplomat.com/2015/06/a-first-china-sends-troops-to-us-mongolia-led-khaan-quest-exercise/*.
- 78. For an example of USMC & Mongolian exercises, see Ben Eberle, "Multinational peacekeeping exercise begins in Mongolia," U.S. Marine Corps Forces, Pacific News Articles, August 4, 2013, available from www.marforpac.marines.mil/News/News-Article-Display/Article/530644/multinationalpeacekeeping-exercise-begins-in-mongolia/.
- 79. "Chinese peacekeepers to exceed 3000 by year end," China Military Online, April 8, 2015, english.chinamil.com.cn/news-channels/china-military-news/2015-04/08/content_6434515.htm.

- 80. Forum Staff, "Maj. Gen. Byambasuren Bayarmagnai, deputy chief of the General Staff of the Mongolian Armed Forces, reveals keys to the successful resurgence of his nation's military," Indo-Asia-Pacific Defense Forum, February 27, 2015, available from apdf-magazine.com/maj-gen-byambasuren-bayarmagnai/.
- 81. B. Amarsaikhan, "Two countries' servicemen join in military exercises against terrorism," Montsame Mongolian News Agency, October 12, 2015, available from *en.montsame.mn/politics/two-countries-servicemen-join-military-exercises-against-terrorism*.
- 82. Alicia J. Campi, "Mongolian military trains with US troops while preparing for exercises with Russia," *Eurasia Daily Monitor*, Vol. 12, Iss. 133, July 16, 2015, available from www.jamestown.org/single/?tx_ttnews[tt_news]=44169&no_cache=1#.V3xuh3r2WJE.
- 83. China's State Council Information Office, "The Diversified Employment of China's Armed Forces," April 2013, available from *eng.mod.gov Gov.cn/Database/WhitePapers/*2012.htm.
- 84. National Defense Authorization Act (NDAA) of Fiscal Year 2000, Public Law 106-65, 106th Cong., 2nd Sess., October 5, 1999, p. 270.
- 85. Graham Allison, "Avoiding Thucydides's Trap," Financial Times (London), August 22, 2012, available from belfercenter.ksg. harvard.edu/publication/22265/avoiding_thucydidess_trap.html.
- 86. This was a common, though not universal, theme expressed by military and civilian planners on the USPACOM and USARPAC staff during the team's visits to theater.
 - 87. Obama, National Security Strategy, 2015, p. 2.
- 88. Center for Strategic & International Studies (CSIS), U.S. Alliances and Emerging Partnerships in Southeast Asia: Out of the Shadows: A Report of the CSIS Southeast Asia Initiative, Washington, DC: Center for Strategic and International Studies, 2009, available from csis.org/files/publication/090710_southeast_asia_alliances_partnerships.pdf, accessed May 3, 2016.

- 89. The Australian Navy KAKADU 2014 webpage, available from www.navy.gov.au/operations-and-exercises/kakadu-2014, accessed May 3, 2016; also see, Prashanth Parameswaran, "India Concludes 'Watershed' Military Exercise with ASEAN-Plus Nations," The Diplomat, March 11, 2016, available from thediplomat. com/2016/03/india-concludes-watershed-military-exercise-with-asean-plus-nations/.
- 90. For more details and articles describing Pacific Pathways, the 2016 scheduled exercises, and the USARPAC list of benefits, see USARPAC, "Pacific Pathways 2016," Tri-fold brochure available from https://www.usarpac.army.mil/pdfs/Pacific%20Pathways%2016%20Tri-fold.pdf; Brig. Gen. Kurt J. Ryan, "Pacific Pathways: Overcoming the tyranny of distance," Army Sustainment, March-April 2016, available from https://www.army.mil/article/162425/Pacific_Pathways__Overcoming_the_tyranny_of_distance/; and Gary Sheftick, "Soldiers shifting to Pacific via new 'pathway'," Army News Service, October 14, 2014, available from https://www.army.mil/article/136129/Soldiers_shifting_to_Pacific_via_new__pathway_/.
- 91. Donna J. Nincic, "Trends in Modern Piracy: Cycles, Geographical Shifts, and Predicting the Next 'Hot Spots'," *The SAIS Review of International Affairs*, Vol. 33, No. 2, Summer, 2013, p. 105, available from *search.proquest.com/docview/1465556433?accountid=4444*.
 - 92. Kaplan, Asia's Cauldron, p. 129.
 - 93. Ibid.
 - 94. USPACOM Strategy webpage.
- 95. Prashanth Parameswaran, "A Big Deal? U.S., Philippines Agree First 'Bases' Under New Defense Pact, A look at the significance of the initial locations agreed for EDCA's implementation," *The Diplomat*, March 19, 2016, available from *thediplomat*. com/2016/03/a-big-deal-us-philippines-agree-first-bases-under-new-defense-pact/.
- 96. William B. Boehm, The National Guard State Partnership Program: Forging and Maintaining Effective Security Cooperation

Partnerships for the 21st Century, Arlington, VA: Office of Public Affairs, National Guard Bureau, Historical Services Branch, 2014, p. vi.

97. Office of the Secretary of Defense, "State Partnership Program Nomination Process," Fact Sheet, November 17, 2015.

98. Ibid.

99. Eric Oh and Darryl Taguacta, "State Partnership Program Overview Brief," briefing slides, Carlisle Barracks, PA, U.S. Army War College, February 24, 2016.

100. Ibid.

- 101. Conversation by the researchers with Mike Hubner of the Bureau of Political-Military Affairs (PM) of the U.S. State Department. Mr. Hubner manages the State Partnership Program (SPP); also see, Pennsylvania Army National Guard (ARNG) Major Lutz, Presentation held at the U.S. Army War College, Carlisle Barracks, PA, June 15, 2016.
- 102. Zach Cooper and John Schaus, *Asia-Pacific Rebalance* 2025 *Capabilities, Presence, and Partnerships: An Independent Review of U.S. Defense Strategy in the Asia-Pacific,* Washington DC: Center for Strategic and International Studies, January 2016, pp. 18, 205.
 - 103. Kaplan, Asia's Cauldron, p. 94.

104. Ibid., p. 17.

105. Boehm, p. 38.

- 106. Michelle Tan, "Milley: Readiness for ground combat is no. 1 priority," *Army Times*, August 28, 2015, available from www. armytimes.com/story/military/pentagon/2015/08/28/milley-readiness-ground-combat-no-1-priority/71284206/.
- 107. Notes from a telephone interview of LTC Terry Duran, National Guard Bureau (NGB), SPP Office, conducted by this report's researchers, January 11, 2016.

- 108. USPACOM Strategy webpage.
- 109. U.S. Department of State, U.S. Agency for International Development, and the U.S. Department of Defense, "3D Planning Guide Diplomacy, Development, Defense," Pre-Decisional Working Draft, Washington DC: U.S. Government Printing Office, July 31, 2012, available from https://archive.org/details/3D-Planning-Guide-Diplomacy-Development-Defense-31-July-2012.
- 110. U.S. Agency for International Development, "Country Development Cooperation Strategy," available from https://www.usaid.gov/asia-regional/cdcs.
- 111. U.S. Joint Chiefs of Staff, *The National Military Strategy of the United States of America* 2015, p. 9.
- 112. Enumeration of benefits is identified in Headquarters, Department of the Army, *Stability Operations*, Field Manual (FM) 3-07, Washington, DC: Government Printing Office, October 2008, pp. 1-16.
- 113. Comment made during a meeting with General Brooks, former Commander of USARPAC with this report's project team in the U.S. Army War College's Command Conference Room, October 15, 2015.
- 114. This requirement is addressed in the Overseas Basing Commission report to the President of the United States; see Al Cornella *et al.*, *Report to the President and Congress*, Arlington, VA: The Commission on Review of Overseas Military Facility Structure of the United States, August 15, 2005, p. 25, available from *www.coherentbabble.com/Congress/OBC-FinalReport.pdf*.
- 115. U.S. Department of Defense, Directive 3000.10, "Contingency Basing Outside the United States," January 10, 2013, available from *dtic.mil/whs/directives/corres/pdf/*300010*p.pdf*.
- 116. By way of contrast, critics negatively discuss how the United States requires these developing nations to pay for U.S. presence in their countries. Nevertheless, the potential cost-benefit assessment by several host nations seems to indicate the benefits outweigh the costs. Cooperative security locations, especially

those focused on logistics, medical, and engineering capabilities that can be used to provide humanitarian assistance and disaster relief, provide a host nation with positive U.S. and partner commitments without unduly provoking an escalatory response from China.

117. USPACOM Strategy webpage.

- 118. J. Randy Forbes, "The U.S. Army Should Pursue a Counter-A2/AD Mission," *The National Interest*, October 16, 2014, available from *nationalinterest.org/feature/the-us-army-should-pursue-counter-a2-ad-mission-11486*.
- 119. U.S. Joint Chiefs of Staff, *Joint Operational Access Concept* (JOAC), v. 1.0.
- 120. Joint Chiefs of Staff, *Joint Concept for Entry Operations* (JCEO), Washington, DC: U.S. Joint Chiefs of Staff, April 7, 2014, available from *dtic.mil/doctrine/concepts/joint_concepts/jceo.pdf*.
- 121. Tim Kelly and Nobuhiro Kubo, "Exclusive: Japan's far-flung island defense plan seeks to turn tables on China," Reuters World News, December 18, 2015, available from www.reuters.com/article/us-japan-military-china-exclusive-idUSKBN0U107220151218.
- 122. Critics will argue this militarization runs counter to the norms to which we ask China to adhere. Others will point out the risk of an escalatory arms race in the South China Sea. However, used with discretion and as a response to Chinese assertiveness and militarization of these land features, the anti-ship enabled "lily pad" formation would offer a much greater deterrent to China's behavior than the recent naval freedom of navigation operations seem to be providing.
- 123. Christopher P. Cavas, "Interview: Adm. Tomohisa Takei, Chief of Staff, Japanese Maritime Self-Defense Force," Defense News, March 30, 2016, available from www.defensenews.com/story/defense/show-daily/singapore-air-show/2016/03/30/admiral-tomohisa-takei-japanese-maritime-self-defense-force-jmsdf/81858684/.

124. Ibid.

- 125. USPACOM Area of Responsibility webpage, available from www.pacom.mil/AboutUSPACOM/USPACOMAreaofResponsibility.aspx, accessed 17 Feb 2016.
- 126. U.S. Department of Defense, *The Department of Defense Cyber Strategy*, Washington, DC: U.S. Department of Defense, April 2015, p. 5.
- 127. U.S. Department of Defense, *National Security Space Strategy*, Washington, DC: Department of Defense, January 2011, p. 5.
- 128. Madelyn R. Creedon, Assistant Secretary of Defense (ASD) for Global Strategic Affairs, "Space and Cyber: Shared Challenges, Shared Opportunities," Remarks to the USSTRAT-COM Cyber and Space Symposium, November 2011, p. 1, available from: www.afcea.org/events/stratcom/11/documents/ASDsymposiumspeechFINAL_000.PDF.
- 129. U.S. Joint Chiefs of Staff, *Space Operations*, JP 3-14, Washington, DC: U.S. Joints Chiefs of Staff, May 2013, p. I-1.
- 130. Erik Seedhouse, *The New Space Race: China vs. the United States*, Chichester, UK: Praxis Publishing Limited, 2010, p. 108.
- 131. Office of the Secretary of Defense, "Annual Report to Congress: Military and Security Developments Involving the People's Republic of China 2015," Washington, DC: U.S. Department of Defense, April 2015, p. i.
- 132. U.S. Department of Defense, Mission Analysis for Cyber Operations of Department of Defense, August 2014, available from https://publicintelligence.net/dod-cyber-mission-analysis/.
- 133. Mike Gruss, "U.S. Space Assets Face Growing Threat From Adversaries, Stratcom Chief Warns," Space News, February 2014, available from *spacenews.com/39669us-space-assets-face-growing-threat-from-adversaries-stratcom-chief/*.
- 134. Office of the Secretary of Defense, "Annual Report to Congress: Military and Security Developments Involving the People's Republic of China 2015," p. i.

- 135. Ibid., p. i.
- 136. Admiral Samuel Locklear, III, "PACOM House Armed Services Committee Posture Statement," March 2014, available from www.pacom.mil/Media/SpeechesTestimony/tabid/6706/Article/565153/pacom-house-armed-services-committee-posture-statement.aspx.
- 137. U.S. Department of Defense, *The Department of Defense Cyber Strategy*, p. 5.
 - 138. Ibid, p. 5.
- 139. Asia-Pacific Center for Security Studies homepage, available from *apcss.org*.
- 140. Western Hemisphere Institute for Security Cooperation, "Mission Statement," available from www.benning.army.mil/ten-ant/WHINSEC/mission.html.
- 141. Asia-Pacific Center for Security Studies homepage, available from apcss.org.
 - 142. USPACOM Area of Responsibility webpage.
- 143. Obama, Panetta, and the U.S. Department of Defense, *Sustaining U.S. Global Leadership*.
- 144. U.S. Office of the Secretary of Defense, *Quadrennial Defense Review* 2014.
 - 145. Obama, National Security Strategy, 2015.
- 146. U.S. Joint Chiefs of Staff, *The National Military Strategy of the United States of America* 2015.
- 147. U.S. Joint Chiefs of Staff, *Joint Operational Access Concept* (JOAC), v. 1.0.
- 148. U.S. Joint Chiefs of Staff, *Joint Concept for Entry Operations* (JCEO).

- 149. Admiral Harry Harris, Statement Of Admiral Harry B. Harris Jr., U.S. Navy Commander, U.S. Pacific Command Before The Senate Armed Services Committee on U.S. Pacific Command Posture, Posture Statement presented to the Senate Armed Services Committee, Washington DC: U.S. Central Command, February 23, 2016, available from www.armed-services.senate.gov/imo/media/doc/16-15_02-23-16.pdf.
- 150. Kelly and Kubo, "Exclusive: Japan's far-flung island defense plan seeks to turn tables on China."
- 151. Richard Fontaine, "Where is America in Japan and India's Plans for Asia?" *The National Interest*, December 28, 2015, available from *nationalinterest.org/feature/where-america-japan-indias-plans-asia-14741*.
- 152. Ankit Panda, "G7 Leaders call for 'Rules-Based' maritime order, condemn North Korea," *The Diplomat*, June 9, 2015, available from *thediplomat.com/2015/06/g7-leaders-call-for-rules-based-maritime-order-condemn-north-korea/*.
- 153. David Alexander, Michael Martina, Dean Yates, "China's land reclamation in South China Sea grows: Pentagon report," Reuters, World Section, August 21, 2015, available from www.reuters. com/article/2015/08/21/us-southchinasea-china-pentagon-idUSKC-N0QQ0S920150821penta Gon-idusKCN0QQ0S920150821#uxovDtY oeRWSeYgR.97.
- 154. Michael Martina, "China Says Has Shown 'Great Restraint' in South China Sea," Reuters, Business Section, November 17, 2015, available from http://www.reuters.com/article/southchina sea-china-idUSL3N13C1MW20151117.
- 155. "Department of Defense Press Briefing by Assistant Secretary Shear in The Pentagon Press Briefing Room," August 21, 2015, News Transcript available from www.defense.gov/News/News-Transcripts/Transcript-View/Article/614509/department-of-defense-press-briefing-by-assistant-secretary-shear-in-the-pentag.
- 156. Information and Communications Technology and Disaster Risk Reduction Division (IDD) of United Nations Economic and Social Commission for Asia and the Pacific (ESCAP), "Over-

- view of Natural Disasters and Their Impacts in Asia and the Pacific, 1970-2014," Working Paper Series, March 2015, available from www.unescap.org/sites/default/files/Technical%20paper-Overview%20 of%20natural%20hazards%20and%20their%20impacts_final.pdf, accessed April 1, 2016.
- 157. David L. Goldfein, (Lt Gen, USAF), *Guidance for Development and Implementation of Joint Concepts*, Chairman of the Joint Chiefs of Staff Instruction (CJCSI) 3010.02D, Joint Staff (J7), November 22, 2013, available from *www.dtic.mil/cjcs_directives/cdata/unlimit/3010_02.pdf*; and David L. Goldfein, (Lt Gen, USAF), *Joint Capabilities Integration and Development System (JCIDS)*, Chairman of the Joint Chiefs of Staff Instruction (CJCSI) 3170.01I, Joint Staff (J8), January 23, 2015, available from *www.dtic.mil/cjcs_directives/cdata/unlimit/3170_01a.pdf*.
- 158. Goldfein, (Lt Gen, USAF), Joint Capabilities Integration and Development System (JCIDS).
- 159. The "Red Team report" is in the possession of the Joint Concept on Integrated Campaigning writing team lead, located at the Army Capabilities and Integration Center. At the time of this writing, the writing lead is COL Charles E. Hornick, Jr.
- 160. Graham Allison, "The Thucydides Trap: Are the U.S. and China Headed for War?" *The Atlantic*, September 24, 2015, available from *belfercenter.ksg.harvard.edu/publication/25783/thucydides_trap.html*.
- 161. Angela E. Kershner, "Disaster Management Exchange 2015 concludes in China," U.S. Army News, January 26, 2015, available from https://www.army.mil/article/141698/Disaster_Management_Exchange_2015_concludes_in_China/.
- 162. Justin McCurry, "China accuses Japan of threatening Pacific peace with military law," *The Guardian*, March 29, 2016, available from www.theguardian.com/world/2016/mar/29/china-accuses-japan-of-threatening-peace-in-pacific-with-new-law.
- 163. See Carl Baker and Brad Glosserman, eds., "Doing More and Expecting Less: The Future of US Alliances in the Asia Pacific," *Issues and Insights*, Vol. 13, No. 1, CSIS Pacific Forum, Janu-

- ary, 2013, available from csis.org/files/publication/IssuesInsights_vol13no1.pdf; also Patrick Cronin, "Security challenges in the Asia-Pacific: a US perspective," The Strategist website, Australian Strategic Policy Institute, April 3, 2013, available from www.aspistrategist.org.au/security-challenges-in-the-asia-pacific-region-a-usperspective/; for a deeper historic view focused on the 1960s-1990s, see Tomohiko Satake, "Japan, Australia and International Security Burden-Sharing with the United States" in William T. Tow and Rikki Kersten, eds., Bilateral Perspectives on Regional Security: Australia, Japan and the Asia-Pacific Region, London, UK: Palgrave Macmillan, June 15, 2012, pp. 183-199.
- 164. C. Todd Lopez, "I Corps Pacific Pathways brings partner nations stateside to enhance readiness," U.S. Army News, April 19, 2016, available from https://www.army.mil/article/166345/l_Corps_Pacific_Pathways_brings_partner_nations_stateside_to_enhance_readiness/.
- 165. See Major Galen "Mac" McAllister, "Capturing Effectiveness of SPP at the State Level," *National Guard Bureau J5 International Affairs Newsletter*, Vol. 2, Iss. 2, Summer, 2014; and LTC Brian Botkin, "Proactive Partnering Process: Getting SPP Ahead of the Curve," *National Guard Bureau J5 International Affairs Newsletter*, Vol. 2, Iss. 2, Summer, 2014.
- 166. For procedures for request processing, see U.S. Government Accountability Office, "State Partnership Program: Improved Oversight, Guidance, and Training Needed for National Guard's Efforts with Foreign Partners," Report to Congressional Committees, Washington, DC: U.S. Government Accountability Office, May 2012, pp. 7-8.
- 167. U.S. Joint Chiefs of Staff, *Joint Operational Access Concept* (JOAC), v. 1.0.
- 168. James Hackett, "Pacific Dragon and Asia-Pacific missile defense: more progress or familiar impediments?" IISS: Military Balance Blog, June 17, 2016, available from www.iiss.org/en/militarybalanceblog/blogsections/2016-629e/june-8109/james-hackett-missile-defence-aabb; Thomas Karako, "What North Korea's Latest Missile Test Means for the US and Its Allies," Defense One, February 8, 2016, available from www.defenseone.com/ideas/2016/02/north-

koreas-missile-test-implications-us-and-its-allies/125792/?oref=d-channelriver.

- 169. Terrence K. Kelly, Anthony Atler, Todd Nichols, and Lloyd Thrall, *Employing Land-Based Anti-Ship Missiles in the Western Pacific*, Santa Monica, CA: RAND Corporation, 2013, available from www.rand.org/pubs/technical_reports/TR1321.html.
- 170. For details of the process, see U.S. Department of the Army, Force Development and Documentation, Army Regulation (AR) 71-32, Washington, DC: U.S. Department of the Army, July 1, 2013, ch. 8, pp. 50-56, available from https://acc.dau.mil/adl/en-US/719817/file/79519/USA%20-%20Regulation,%20AR%2071-32,%20Force%20Dev%20_%20Doc,%201%20Jul%202013.pdf.
- 171. Recommendation 1: See writings associated with the Strategic Landpower Task Force and the Joint Concept for Integrated Campaigning core writing team. Recommendations 2-5: See US-PACOM and USARPAC theater campaign plan initiatives, Pacific Pathways exercises, activity set positioning and SPP activities. Recommendations offered in this report are natural extensions of these programs and activities. In several cases, the USARPAC staff is already examining the feasibility of implementing aspects of these report recommendations; also see, Green, Hicks, Cancian, et al., Asia-Pacific Rebalance 2025, The report emphasizes the importance of the region, forward posture of forces during peacetime, and the value of seeking partnerships and military-to-military relationships in the region. It further acknowledges the insufficiency of current U.S. efforts to blunt China and secure U.S. interests in the region. Recommendation 6: Multiple reports confirm China's growing capability and capacity across the "air domain" spectrum. For their ballistic missile capability, see Jeremy Bender, "This is the only chart you need to see about China's increasingly global ballistic missile capability," Business Insider, Military & Defense Section, May 12, 2016, available from www.business insider.com/chinas-ballistic-missile-capabilities-chart-2016-5. For their cruise missile capability, see Dennis Gormley, Andrew S. Erickson, and Jingdong Yuan, "China's Cruise Missiles: Flying Fast Under the Public's Radar," The National Interest, May 12, 2014, available from nationalinterest.org/feature/china%E2%80%99s-cruisemissiles-flying-fast-under-the-public % E2 % 80 % 99s-radar-10446; For their Semi-autonomous Unmanned Aerial Vehicles, see

"Unmanned Aerial Vehicles," SinoDefence, May 15, 2016, available from https://sinodefence.com/chinese-military-aircraft/unmanned-aerial-vehicles/. Recommendation 7: See Kelly, Atler, Nichols, and Thrall, Employing Land-based Anti-ship missiles in the Western Pacific. Recommendation 8: For China's offensive cyber and space capabilities, see Office of the Secretary of Defense, "Annual Report to Congress: Military and Security Developments Involving the People's Republic of China 2015." Recommendation 9: Gabrielle Joyner, "CTF-75 Receives New Riverine Command Boats," PACOM News, December 1, 2014, available from www.pacom. mil/Media/News/NewsArticleView/tabid/11348/Article/564878/ctf-75-receives-new-riverine-command-boats.aspx.

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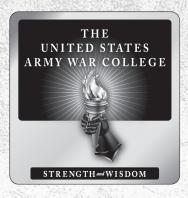
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