1. REPORT DATE (DD-MM-YYYY)  
08-04-2014

2. REPORT TYPE  
Master of Operational Studies-Future War Paper

3. DATES COVERED (From - To)  
August 2013-April 2014

4. TITLE AND SUBTITLE  
China's A2AD Strategy & Capabilities in 2015-2030: Implications for the United States

5a. CONTRACT NUMBER  
N/A

5b. GRANT NUMBER  
N/A

5c. PROGRAM ELEMENT NUMBER  
N/A

5d. PROJECT NUMBER  
N/A

5e. TASK NUMBER  
N/A

5f. WORK UNIT NUMBER  
N/A

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8. PERFORMING ORGANIZATION REPORT NUMBER  
N/A

9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)  
N/A

10. SPONSOR/MONITOR'S ACRONYM(S)  
N/A

11. SPONSOR/MONITOR'S REPORT NUMBER(S)  
N/A

12. DISTRIBUTION/AVAILABILITY STATEMENT  
Unlimited

13. SUPPLEMENTARY NOTES  
N/A

14. ABSTRACT  
China is developing anti-access/area denial (A2AD) capabilities to impair U.S. force projection into the Asia Pacific region. The Chinese are advancing these capabilities guided by a well-reasoned strategy, with milestones they are achieving, focused on sea control within two island chains. The Chinese are probably capable at present of executing their A2AD strategy within the first chain. The PRC will be militarily capable by 2030 of preventing U.S. power projection west of the second island chain, necessitating review of U.S. strategy, operating concepts, capability prioritization, and consideration of multilateral defense partnerships to counter Chinese A2AD. The capabilities critical to successful A2AD to the second island chain include: anti-ship missiles, fifth-generation fighter/attack aircraft, and submarines. Numerous implications for the U.S. are addressed, including the effect on strategy vis-à-vis the Asia Pivot, the impacts to contingency plans, and possible revisiting of the Air-Sea Battle operating concept. Finally, the potential of a U.S.-led coalition partnership as a low-cost alternative to unilaterally opposing China in a A2AD scenario is discussed.

15. SUBJECT TERMS  
China, A2AD, Active Defense, Near Seas Defense, Air-Sea Battle, Anti-Ship Ballistic Missile, Fifth-Generation Fighter

16. SECURITY CLASSIFICATION OF:
   a. REPORT  
   Unclassified
   b. ABSTRACT  
   Unclassified
   c. THIS PAGE  
   Unclassified

17. LIMITATION OF ABSTRACT  
UU

18. NUMBER OF PAGES  
23

19a. NAME OF RESPONSIBLE PERSON  
Marine Corps University / School of Advanced Warfighting

19b. TELEPHONE NUMBER (Include area code)  
703-432-5318 (Admin Office)
FUTURE WAR PAPER

China’s A2AD Strategy & Capabilities in 2015-2030:

Implications for the United States

SUBMITTED IN PARTIAL FULFILLMENT
OF THE REQUIREMENTS FOR THE DEGREE OF
MASTER OF OPERATIONAL STUDIES

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AY 2013-14

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Date: 28 Apr 2014
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While the United States remains the world's sole superpower, the People's Republic of China (PRC) is rapidly closing the power and influence gap. Within the U.S. Government in general and the Department of Defense (DOD) in particular, the way America must prepare for potential conflict with China appears ambiguous. The U.S. DOD 2010 Quadrennial Defense Review (QDR) Report identified China (as well as Iran and North Korea) as developing capabilities to deny or impede U.S. military access in a crisis.¹ Such crises include aggression against the Republic of Korea (ROK), Taiwan, or Japan. This is a serious threat because the United States must be capable of projecting military power into the Asia Pacific region to support its allies' defenses and ensure unimpeded use of sea lines of communication (SLOCs) upon which trade flows. China's capabilities to oppose U.S. power projection are expanding, so it is critical to prepare now to defeat China's anticipated anti-access/area denial (A2AD) capabilities.

Operating concepts such as Air-Sea Battle (ASB) are much discussed within the Washington, D.C. beltway, with proponents claiming that ASB enables America to defeat anti-access challenges. The 2010 QDR Report identified that the ASB concept offers America the means to defeat anti-access measures and "help guide the development of future capabilities needed for effective power projection operations."² That report defined anti-access strategies as those that "seek to deny outside countries the ability to project power into a region, thereby allowing aggression or other destabilizing actions to be conducted by the anti-access power."³ The ASB Office within the DOD defined area-denial as "action intended to impede friendly operations within areas where an adversary cannot or will not prevent (access). Area denial affects maneuver within a theater."⁴ War may not be imminent, but China is preparing for conflict with the United States by developing A2AD capabilities to prevent or delay U.S.
intervention within the Asia Pacific region. China's A2AD strategy focuses on sea control within two island chains. The first island chain connects southern Japan, east Taiwan, the western Philippines, and Malaysia. The second island chain runs from middle Japan, to the Marianas Islands, Guam, and finally Indonesia. Figure one graphically depicts the two island chains.

Figure 1: China's First and Second Island Chains

The PRC will be militarily capable by 2030 of preventing United States power projection west of the second island chain, necessitating review of U.S. strategy, operating concepts, capability prioritization, and consideration of multilateral defense partnerships to counter Chinese A2AD. China is evolving into a maritime power and remains focused on long-term recovery of Taiwan, while investing in A2AD capabilities to frustrate U.S. power projection into
the Asia Pacific region. Chinese military capabilities of greatest concern to the U.S. from year 2015 to 2030 are anti-ship missiles, strike aircraft, and submarines. These threats will increase in numbers and sophistication in the future, warranting a comprehensive review of U.S. strategy, as well as operating concepts intended to counter them. America must be prepared to spend heavily on the capabilities required to counter these A2AD threats, but this may be difficult for DOD to justify under tight fiscal constraints.

**China, the Maritime Power**

China’s area of maritime influence straddles globally vital SLOCs, upon which much of the world economy depends. Under Deng Xiaoping’s leadership in the 1970s and 1980s, China shifted resource priority into the naval domain and established a massive merchant marine. Enormous Chinese shipping companies, such as China Ocean Shipping Company, enhanced and sustained China’s economic growth, through imports and exports, and the flow of natural resources from around the globe. China’s merchant marine numbers over 3,600 ships, second only to those of Panama and Liberia, whose flags often fly as flags of convenience. The U.S. merchant marine, by comparison, is roughly one-third the size of China’s, when non-U.S. flagged vessels are included.

China’s neighbor-states include key U.S. allies such as Japan, the ROK, Taiwan, and the Philippines. China’s 200 nautical mile (nm) economic exclusion zone (EEZ) overlaps the EEZs of these states in various places, resulting in disputes. Figure two depicts the proximity of the Senkaku/Diaoyu Islands to China, Japan, and Taiwan, where these states’ EEZs overlap. In such circumstances, EEZs normally divide the maritime domain equally from the shorelines of the affected countries, unless a treaty provides for a larger zone at the expense of one country. Over the years, China has generally disregarded the legitimacy of other states’ EEZs. This study does
not examine China’s claims regarding these territories, other than to acknowledge their potential to drag the United States into military intervention in the region. The United States remains obligated by treaties to assist in defending Japan, the ROK, and other states. The Taiwan Relations Act of 1979 establishes the United States’ responsibility to assist in defending Taiwan.

**Chinese Motivations and A2AD Strategy**

*Taiwan, China’s Primary Concern:* China’s motivation to prevent U.S. force projection west of Guam within 15 years stems primarily from ambitions to unify with Taiwan.¹⁰ Regaining control of Taiwan is a central objective of Chinese policy now and likely for the next few decades.¹¹ Quasi-independent Taiwan, with U.S. support, represents a threat to China, because it offers a base for operations against the Chinese mainland. However, China’s desires to recover Taiwan may be part of larger regional ambitions. For China to dominate the Asia Pacific region, it must minimize U.S. influence there and be capable of intimidating weaker states, including U.S. allies.¹³ China’s strategy aims to deny future U.S. intervention in the Asia Pacific region within the two island chains, supported by the theories of “active defense” and “near seas defense.”
Recent history showed the United States’ countering Chinese political maneuvering by supporting Taiwan militarily. In 1995-96, China sought to intimidate Taiwan and interfere with its elections. China test fired missiles, which fell in Taiwanese waters. America responded by deploying two carrier battle groups to the area, demonstrating resolve to defend Taiwan. China’s efforts to manipulate Taiwanese elections resulted in the pro-independence candidate Lee Teng-hui winning the presidency. In 1996, the PRC was militarily incapable of preventing U.S. aircraft carrier deployments to the Taiwan Straits.

China’s reversal in 1996 hardened its resolve to strengthen its air and naval forces to prevent future U.S. interference in cross-strait relations. China will likely intimidate Taiwan again. To do this effectively, the PRC must prevent or minimize U.S. intervention and isolate Taiwan. To accomplish that, China developed an A2AD strategy, creating a layered threat to increase the difficulty for U.S. forces to approach the Straits and project power. The nation will acquire the capabilities, guided by the “active defense” and “near seas defense” theories, to implement the two island chain strategy.

**Active Defense:** “Active defense,” implies that China “adheres to the principle of self-defense and striking only after the enemy has started an attack.” However, active defense includes the possibility of preemptive or surprise attack. The theory implies Chinese forward deployment of military capabilities, particularly the People’s Liberation Army Navy (PLAN), and the possibility of kinetic action against U.S. forces in the western Pacific Ocean.

**Near Seas Defense and Liu’s ambitious timetable:** China’s early 1980s PLAN Chief Liu Huaqing coined the second theory, “near seas defense.” Liu’s strategy propelled the PLAN beyond its coastal defense role to operate outside China’s 200 nm EEZ. Liu’s “near seas defense” theory advocated sea control and set timelines to build a suitable force to exert control.
to both island chains. Liu identified the Yellow, East China, and South China Seas (all within the first island chain) as key maritime terrain. These areas provide natural resources and protect China’s future economic growth. Liu also foresaw the Spratly Islands’ importance to SLOCs linking China with the world’s oceans.\textsuperscript{20} Liu’s second stage of near seas defense would extend the operational reach of China’s forces to the second island chain.\textsuperscript{21} Liu’s plan set goals of sea control to the second island chain by the year 2020 and incorporating aircraft carriers for global naval operations by 2050.\textsuperscript{22} The Chinese are likely to reach these goals before 2030. In a hypothetical Taiwan crisis, China would seek to extend the standoff distance for U.S. forces to beyond the first island chain and ideally, the second island chain, while further impeding operations within those areas. The PRC would also likely conduct actions at and beyond the second island chain to deter U.S. intervention.\textsuperscript{23} \textsuperscript{24} China’s present capacity to strike targets as distant as the second island chain is limited to long-range land attack cruise missiles (LACMs) and intercontinental ballistic missiles (ICBMs), primarily striking stationary land targets.\textsuperscript{25} As China advances its missile, submarine, and strike aircraft capabilities, the country will increasingly control the maritime domain within the second island chain.

China can at present significantly increase the risk and cost of U.S. intervention in a contingency in the Asia Pacific region and delay power projection.\textsuperscript{26} U.S. forces must deploy across the vast Pacific Ocean to intervene in a Korea, Japan, or Taiwan contingency. Bases in the region would be vital to sustain U.S. force projection in a contingency. Assuming the United States retains use of these bases and secures them from attack, America must still rely heavily on its carrier strike groups to project naval and air power. These carrier groups require underway replenishment and are unlikely to expose their logistical tail to Chinese strikes. The Marine and Army prepositioning squadrons would be similarly challenged in approaching contested areas. In
the future, when Chinese A2AD measures can reliably range east of Guam to strike mobile
targets at sea, American decision-makers may balk at intervention when faced with the enormous
difficulties and lengthy delays in projecting power into the Asia Pacific region, to the point of
rendering intervention ineffective.

**Chinese Critical A2AD Capabilities 2015-2030**

China is developing a wide range of A2AD threats, but anti-ship missiles, fifth-
generation fighter/attack aircraft, and submarines are the country’s most critical capabilities to
prevent U.S. access to the maritime and air domains within the two island chains. These
capabilities can strike U.S. forces preemptively before their arrival in theater, and greatly extend
the ranges at which U.S. forces must operate to mitigate their threat. Chinese A2AD capabilities
are most dangerous when integrated. These capabilities expanded in numbers and grew in
sophistication since 1995 and they will continue to improve in the future. The PLA continues
evolving into a more professional force, facilitating employment of these sophisticated
capabilities.\(^{27}\) PLA training is also increasingly realistic and technologically driven.\(^{28}\) The
Chinese understand the U.S. reliance on aircraft carriers to project power into the region. While
carriers are escorted by air, surface, and subsurface platforms, the Chinese designed,
experimented with, and are implementing capabilities that threaten the carriers themselves.
Missiles and aircraft in particular present a threat to a carrier strike group.\(^{29}\) Worse, these
capabilities and others will be improved to extend their range to the second island chain. The
Chinese subsurface fleet is the least evolved of the three primary threats examined, but the
PLAN is developing, building, and purchasing advanced submarines. China will possess a
capable nuclear and non-nuclear subsurface fleet by 2030, further compounding A2AD
challenges.
**Missiles, the Chinese A2AD Core Competence:** China’s most threatening A2AD capability is missiles. These weapons are so important that years ago the country established an independent service branch (PLA Second Artillery) to oversee missile operations. China deployed an impressive arsenal of anti-ship ballistic missiles (ASBMs), anti-ship cruise missiles (ASCMs), medium range ballistic missiles (MRBMs), and LACMs. The Chinese continue innovating on existing missile designs, extending range, and improving accuracy. Chinese missile procurement increased since 2005 and trends toward further growth in the future.\(^3^0\) While all missiles are dangerous, the type most relevant for the A2AD discussion is ASBMs. The Chinese developed this particular missile by improving upon the Dong Feng (DF) MRBM to produce the highly accurate DF-21D. The DF-21D launches from mobile transporter-erector-launchers (TELs) from mainland China, though China could deploy the TELs elsewhere. The DF-21D ASBM is probably accurate to 5 meters and capable of carrying a number of warheads, including electromagnetic pulse.\(^3^1\) The DF-21D threatens surface combatants generally and aircraft carriers in particular.\(^3^2\) This missile incorporates a maneuverable reentry vehicle, delivered by high trajectory into the target’s area, and then uses terminal guidance and complex maneuver to defeat anti-missile capabilities to destroy the target.\(^3^3\) Though Aegis cruisers provide the carriers’ air defenses, China’s missile technology may be eclipsing Aegis’ intercept capability.\(^3^4\)

The U.S. DOD confirmed in 2013 that numbers of Chinese DF-21D missiles are increasing, that the missiles are capable of striking aircraft carriers and have a range greater than 1,500 km, armed with a maneuverable warhead.\(^3^5\) The DF-21D cannot reach targets as distant from China as Guam; this means that it currently has limited utility to prevent access to the second island chain, but only if the Chinese restrict themselves to launching the missile from the Chinese mainland. However, at present these missiles, used in conjunction with other
capabilities, could overwhelm carrier defenses roughly halfway between the first and second island chains. China can fire relatively inexpensive but accurate missiles from the mainland, beyond the unfueled reach of carrier-based aircraft, from mobile platforms extremely difficult to detect and locate. China possesses a tactical asymmetry applying these ASBMs against a U.S. carrier and its escorts because the technology potentially surpasses Aegis technology and the missiles are far cheaper to produce.

Future design improvements may increase the range of the DF-21D. Other Chinese maritime platforms such as submarines and surface combatants could launch DF-21 variants, extending their plausible threat range beyond Guam. These missiles fired in conjunction with aerial strikes from stealthy platforms would present a formidable challenge to the carrier strike group.

**Fifth-Generation Fighter/Attack Aircraft:** The People’s Liberation Army Air Force (PLAAF) will also play a significant role in any A2AD scenario, reinforcing and augmenting the PLAN and Second Artillery. The PLAAF would attempt “to neutralize U.S. forces, bases, and sustainment infrastructure already in the region.” This translates to a requirement for “extended range air defense, air-to-air, and precision-strike capabilities.” The PRC recently instituted a new strategy for the PLAAF, which “integrated air and space, with both attack and defense.” The PLAAF is transitioning from an air defense-focused force to one capable of conducting offensive operations. The PLAAF is developing sophisticated fifth-generation air combat and precision strike platforms that could preemptively strike U.S. forces. Their primary limitation is the service’s present shortage of aerial refueling platforms, limiting long-range strike potential.

Fifth-generation aircraft possess stealth from radar, outstanding speed and maneuverability, and technologically sophisticated, integrated sensors. Fifth-generation aircraft
are the most advanced aircraft currently in production. According to Dr. Thomas Mahnken of the U.S. Naval War College, "China is fielding growing numbers of fourth-generation fighters and is developing fifth-generation aircraft." Jane's Defence Weekly reported further that, "Since 2011 seven new aircraft have made their maiden flights, including two fifth-generation combat aircraft designs, the J-20 and the J-31." The J-20 extends PLAAF reach to 1,000 nm (nearly to the second island chain) and may be capable of firing anti-satellite missiles. China observers compare its capabilities to the U.S. F-22 Raptor. The DOD identified the J-31 as another fifth-generation fighter the Chinese are testing, noting its first flight occurred on 31 Oct 2012. Additionally, several multirole fighter platforms such as the J-10B, J-15, and SAC J-16 are in various stages of development and fielding. The J-15 is the PLAN’s carrier-capable fighter, and the J-31 may include a carrier variant, similar to the U.S. F-35 Joint Strike Fighter.

In September 2012, the PRC commissioned the Liaoning, its first aircraft carrier and thereafter demonstrated the ability to launch and recover J-15 fighters. This carrier will be used for several years for training, experimentation, and integration of aircraft. The Chinese intend to construct their own carriers. These carriers will probably not immediately challenge U.S. carriers directly, but rather influence regional states and offer China a limited power projection capability. They will be capable of carrying several squadrons of PLAN attack aircraft and would deploy beyond the first island chain, extending range and utility to the A2AD strategy.

The limited number of aerial refueling platforms restricts Chinese precision strike capability. Addressing this shortfall would enable the PLAAF to conduct long-range precision strikes, potentially against targets as distant as Guam and be a key indicator of attack aircraft integration into an integrated A2AD strategy. The Chinese H-6 bomber is capable of launching LACMs that could range beyond Guam and a variant H-6 provides aerial refueling, but in limited
numbers.\textsuperscript{52} 53 The PLAAF probably possesses 10 H-6U aerial refueling platforms.\textsuperscript{54} The limitation is less vital to the PLAN, whose mission inferred from 2010 Chinese “white papers,” focused on sea denial and control more than long-range strike.\textsuperscript{55} Nonetheless, the PLAN possesses strike aircraft that can operate beyond the first island chain to attack U.S. forces. The U.S. Air Force squadrons based in Korea and Japanese Air Self Defense Forces may check their effectiveness.\textsuperscript{56} The PLAAF and PLAN also conduct joint training, particularly in support of amphibious operations and in attacking surface vessels.\textsuperscript{57}

\textit{Submarines and China’s Potential to surpass the U.S. subsurface fleet:} China’s subsurface fleet is a final lynchpin to its near seas defense A2AD strategy, particularly in extending operational reach beyond the second island chain. In a contingency scenario involving China, PLAN submarines would likely deploy forward to the second island chain and Straits of Malacca.\textsuperscript{58} With long-range ballistic missiles, land attack capabilities, and ASCMs, Chinese submarines could threaten carriers, surface combatants, and land installations, including Hawaii. Chinese submarines, especially the more stealthy ones, could interdict SLOCs and threaten logistical ships, such as replenishment and prepositioning squadrons required to project power into the western Pacific Ocean. Submarines become more dangerous if their weaponry integrates into a complex joint strike with the Second Artillery’s land-based MRBMs, ASCMs/ASBMs, and PLAAF air strike platforms. These capabilities used simultaneously would be difficult to defeat and increase the chances of destroying critical U.S. platforms and bases to achieve China’s A2AD objectives.

Accordingly, the PLAN continues developing its own nuclear-powered submarines and acquiring Russian built Kilo-class submarines. The Chinese currently build one model of nuclear-powered ballistic missile submarine (SSBN) (JIN-class - Type 094) and one model of
nuclear-powered attack submarine (SSN) (SHANG-class - Type 093). The JIN-class can launch ballistic missiles, including the JL-2, with estimated ranges in excess of 4,000 nm.\(^5^9\) This missile can deliver a nuclear or conventional payload well beyond the second island chain, threatening installations as far away as Hawaii. These submarines could be fitted with ASBMs, possibly variations of the DF-21D, extending their range vastly from TEL firing positions on mainland China. Like the PLAAF, the PLAN is a high priority for Chinese future spending to implement a sea control strategy. Similarly, this resource prioritization will result in testing and implementation of a number of increasingly sophisticated submarines not yet fielded.

While the Chinese are building an increasingly capable and sophisticated subsurface fleet, the United States commissions few new submarines and appears not to be developing innovative new platforms. Future China submarine developments include an improved SSBN (Type 096) and Type 095 guided-missile attack submarine (SSGN), further enabling land-attack. The Type 095 will probably incorporate improved ASCMs.\(^6^0\) While the U.S. submarine fleet is larger than China’s, fiscal constraints reduce the number of submarines in service and limit new procurements. The PLAN subsurface fleet will continue to grow numerically and in sophistication, potentially surpassing the U.S. Navy. The current disparity is also deceiving because the U.S. Navy disperses its submarine fleet globally, whereas the Chinese concentrate their fleet primarily in the western Pacific and the Indian Ocean.

**Chinese Intentions Uncertain:** By 2030, with expected Chinese improvements in missiles, aircraft, and submarines—among other related A2AD capabilities—China will probably be capable of preventing U.S. access west of the second island chain and impeding U.S. forces’ maneuver within that area. It is difficult to discern China’s intentions because PRC “white papers” and policy reports do not clearly articulate strategy. China’s April 2013 *The Diversified*
Employment of China’s Armed Forces provides some insights into future developments but does not mention A2AD directly or specifically highlight the United States as a threat. It is reasonable to assume that PRC A2AD capabilities will be employed when they contribute to accomplishing political and strategic objectives, such as intimidation or seizure of Taiwan. Little information is openly available in the unclassified domain regarding Chinese leadership intentions or military plans. The lack of transparency regarding strategic intentions and military planning is perhaps understandable, but hardly settling to states observing China’s military power growth. The United States itself often does not transmit “redlines” or specific strategic intentions openly or clearly. In a crisis where China warns against U.S. intervention, the PRC could preemptively use its A2AD capabilities to strike a surprise blow geared to reduce U.S. resolve. “Soft targets” such as Maritime Prepositioning Squadrons and underway replenishment vessels are probably high payoff targets to China. U.S. carrier strike groups cannot close with and conduct sustained operations without support from replenishment vessels. If China threatened these vessels, it would greatly extend the range at which U.S. platforms must operate and reduce their effectiveness. This would require U.S. forces to defeat multiple threat capabilities to project power into the Asia Pacific region. The time China gains through employing A2AD measures could allow the country to achieve its objectives before delayed U.S. intervention could make a difference.

Implications for the United States

An effective Chinese A2AD strategy and capabilities has many implications for the United States. U.S. policy and strategy require revisit and adjustment based on the future threat. This paper focuses primarily on military implications, particularly those relevant to strategy, plans, and operations. Operating concepts such as Air-Sea Battle must be examined for viability,
especially determining prioritized capability requirements to execute ASB and identifying whether they are resourced adequately. The Chinese strategy also indicates that the United States may do well to explore possibilities of coalition options to defeat Chinese A2AD.

*U.S. Strategy and the Asia Pivot:* First, DOD must consider the threats described as significant ones. The United States will not be dealing with a technologically inferior and unsophisticated Chinese military in future confrontations. The “Asia Pivot” and rebalancing of DOD forces to the Pacific does not itself constitute a coherent policy or strategy. A more coherent strategy vis-à-vis China is required. When the DOD articulated ASB as the operating concept to defeat A2AD, it implied potential conflict with China. A military strategy is needed that nests within U.S. policy to accomplish national objectives with regard to China, even if those objectives remain passive for the time being. The strategy must define the end states U.S. military forces should prepare to accomplish, and include whether we are willing to confront China to fulfill treaty obligations to allies and to achieve our national goals. This strategy must validate planning assumptions and identify the resources required to achieve our ends.

*The Impact to U.S. Contingency Planning:* Second, numerous operations plans (OPLANs) and concept plans maintained by the DOD are affected by the Chinese A2AD threats discussed. U.S. deficiencies in the military capabilities required to defeat these threats will reduce the DOD potential to execute those OPLANs involving the Asia Pacific region successfully. U.S. contingency plans hinge on the assumption of feasible power projection into the region, but Chinese A2AD may invalidate that. DOD OPLANs may require significant revision based on an updated intelligence estimate of Chinese A2AD capability growth and improvement between years 2015-2030. In some cases, these OPLANs may require rewriting. This would entail a substantial planning effort within PACOM, the Joint Staff, and OSD.
Another Look at Air-Sea Battle: A third implication of the Chinese strategy is the requirement for a thorough assessment from multiple perspectives of whether ASB addresses Chinese A2AD challenges. The DOD stated that ASB would guide future capability developments for power projection, but unclassified ASB publications fail to even mention China.\(^6\) Further, it is unlikely given the U.S. military services’ parochial manner of prioritizing and selecting capabilities that any branch would willingly give up some control over procurement to enable a truly joint ASB operational concept. China’s future capability to isolate U.S. allies in the Asia Pacific region is real. U.S. contingency plans call for power projection and military operations to achieve strategic objectives in that region. If ASB fails to address Chinese A2AD measures, U.S. objectives become endangered. The DOD must review ASB to ascertain what substance lies behind it and its utility to defeat the forecasted Chinese threat. The DOD must further examine whether ASB integrates with U.S. contingency plans (OPLANs) to ensure America can project military power into the prospective operating areas. The DOD must advise the Congress and President whether ASB’s critical capabilities will receive adequate resources, despite sequestration.

Based on the realistic projection of threat described here, key counter-A2AD capabilities for U.S. investment must include air defense, air combat, long-range strike, and anti-submarine warfare platforms and systems. Even if ASB is sound, the concept provides little benefit if the capabilities underpinning it go unfunded. If those capabilities are in jeopardy, it is dangerous to continue offering the concept as a panacea to solve A2AD challenges and continue military planning with invalid assumptions that U.S. forces will be able to project power into China’s periphery. In that eventuality, it is necessary to reevaluate policy and strategy based on a future when the United States fails to commit funding to develop the expensive capabilities needed to defeat Chinese A2AD.
Coalition-Alliance Partnership: Potential Key to Countering China: The challenge of defeating Chinese A2AD strategy and capabilities, projected to be enhanced and developed over the next 15 years, may be one that the United States is unwilling or incapable of tackling unilaterally, given the future reality of greatly reduced military spending. If unilaterally fielding the forces and capabilities necessary to defeat Chinese A2AD exceeds U.S. political reality, then a coalition approach might be explored to address the challenge. Something akin to the North Atlantic Treaty Organization (NATO) could be established in the Asia Pacific region and beyond to balance the rising threat of Chinese military power. The political imperative and military necessary of a NATO-like organization in the Pacific to counter China may not be attainable and difficult to maintain if it were established. Some countries such as Japan and the ROK may be presently on reasonable terms, but history between the two nations will always complicate cooperation. However, giving U.S. allies a hard choice between shouldering a larger burden of the cost of their own defense under a coalition structure or a diminished commitment of U.S. support may result in a win-win outcome. On one hand, if concerned nations sign on to a NATO-like regional defense structure, the costs of maintaining capabilities to counter Chinese A2AD could be spread between several rising nations. On the other hand, should those nations fail to commit to pooling resources to counter China, the United States could divest itself of the cost of maintaining the capabilities necessary to defense commitments. When the treaties were initially set up obligating the United States to defending the ROK, Japan, and Taiwan, these other countries were less developed economically and far poorer. At present and in the future, these countries can afford to spend a much larger portion of their own GDP for military forces.

The United States could lead development of multinational doctrine and forces designed to interoperate in counterbalancing China. One study indicated that the United States could find a
potentially capable and willing ally in India to counterbalance growing Chinese regional dominance. In this approach, the United States could accept responsibility in maintaining strong air and naval forces, but require other nations on China's periphery who rely on America for assistance to invest both generally in strong defense and specifically in capabilities to be integrated with those of the U.S. to counter Chinese aggression. This approach would be risky, diplomatically arduous, and potentially subordinates some U.S. goals to those of other nations. A coalition effort would require an extraordinary level of coordination and cooperation between the United States and many other nations, but this might ensure the continuation of U.S. power and influence in the region for generations to come. The United States engages in this kind of close international coordination only to a limited extent today, and typically in bilateral relations such as those with the ROK relating to defense against North Korea.

**Conclusion**

China is expanding as a maritime power, with an economy and military rapidly increasing in capability relative to the United States. The PRC is following a long-range plan in developing its military to exert sea control within the two island chains. China's tightening control over its adjacent maritime domain advances its status as a potential regional leader and challenges U.S. power projection into the Asia Pacific region. The Chinese are presently capable of denying or deterring access to the first island chain and possibly to the second island chain in a limited capacity. In 15 years, China will be much more capable of challenging U.S. forces' maritime access west of the second island chain and threaten maneuver within it through anti-ship missiles, fifth-generation fighter/attack aircraft, and submarines.

This future poses serious implications for U.S. strategy, contingency plans, and questions the viability of operating concepts like ASB. This threat forces the United States to prioritize
some services’ capabilities over others if it intends to counter the Chinese A2AD strategy. This could result in divisive inter-service bickering for resources. Innovative solutions should be considered, such as developing a multinational defense organization to counter China’s future military potential. The United States’ influence in the region will be far weaker if it fails to plan and prioritize resources now to address future A2AD challenges. The United States’ future capacity to defeat A2AD threats will only exist if well-reasoned strategy is set and capabilities are funded to ensure America retains the capability to militarily intervene wherever it chooses. However America rises to the challenge, ensuring future U.S. prominence in the Asia Pacific region requires hard decisions be made now and the government be willing to shoulder the financial cost of expanding power projection capabilities.

Word Count: 4995

7 Dooley, 56.
12 Noguchi, 66, 73.
14 Kostecka, 109. Kostecka compares the strategies of Liu Huaqing to the United States’ Alfred Thayer Mahan, particularly in how Mahan’s theories serve an expansionist naval power. He indirectly compares China’s “near seas defense” strategy to Mahan’s policy of strategic defense in the Caribbean Sea and Gulf of Mexico. Similar to how Mahan identified key geographic terrain of Cuba and Jamaica to controlling the Caribbean and later Panama Canal,
Kostecka discusses the critical importance to the Chinese of the Yellow Sea, East China Sea, and South China Sea for their resources, which are vital to China's sustained economic growth. Where Mahan was of no value to Liu was in incorporation of airpower, as Mahan's writing predated aviation.  

13 Kostecka, 109.  
19 Kostecka, 107-108.  
20 Kostecka. 107-108  
22 Cole, 48-51.  
23 Flaherty, 97.  
26 Cliff, 41-43.  
27 Sloan, 267.  
29 Cliff, 71-74.  
31 Pradun, 13-14.  
33 Pradun, 13.  
34 Pradun, 16.  
37 Flaherty, 99.  
38 Flaherty, 99.  
39 Flaherty, 98.  
40 Flaherty, 98.  
42 Mahnken, 313.  
50 Kostecka, 114.
52 Kostecka, 112.
55 Schuster, 36-41.
56 Kostecka, 113.
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