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## Anti-Access Strategies in the Pacific: The United States and China

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Sam J. Tangredi

**ABSTRACT:** This article reviews the elements of anti-access strategies the United States and China might use in the event the latter begins to project power out from the South China Sea region. Requirements for the US Army to plan for land-based forces and the US Navy to contain China effectively in the first and second island chains are also provided.

The idea that China will employ an anti-access strategy against the United States has become conventional wisdom.<sup>1</sup> Most sources apply the term anti-access/area denial—or more frequently its acronym “A2/AD”—to describe the type of campaign China would conduct. The concept also corresponds to China’s goal of being able to win a regional war under high-technology conditions and “winning informationized local wars.”<sup>2</sup>

Indeed, for the past three decades, China has invested in combat systems—sensors, weapons, and battle management—optimized for an anti-access campaign against America’s forward-based forces projecting power in the region. Such systems include satellites for covering maritime areas, backscatter radars, intermediate-range ballistic missiles (IRBMs) with anti-ship targeting capabilities, long-range cruise missiles, land-based maritime-capable bombers and attack aircraft, attack submarines, and advanced naval mines.<sup>3</sup> Additionally, China has built artificial island bases over the awash features of the South China Sea. To be sure, China has also invested in ground-combat systems and amphibious assault capabilities, which would likely be necessary for a forcible annexation of Taiwan. But the Chinese Communist Party (CCP) has prioritized its tremendous growth in military spending to its navy, air force, and rocket forces, while cutting army manpower.<sup>4</sup>

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1 For a typical example, see “Using Clever Technology To Keep Enemies at Bay,” *Economist*, January 25, 2018.

2 M. Taylor Fravel, “China’s New Military Strategy: ‘Winning Informationized Local Wars,’” *China Brief* 15, no. 13 (July 2, 2015): 3–4.

3 Andrew Krepinevich Jr., Barry Watts, and Robert Work, *Meeting the Anti-Access and Area Denial Challenge* (Washington, DC: Center for Strategic and Budgetary Assessments, 2003); and Roger Cliff et al., *Entering the Dragon’s Lair: Chinese Antiaccess Strategies and Their Implications for the United States* (Santa Monica, CA: RAND Corporation, 2007).

4 U.S. Department of Defense (DoD), *Military and Security Developments Involving the People’s Republic of China: Annual Report to Congress, Fact Sheet* (Washington, DC: DoD, 2018); and DoD, *Annual Report to Congress: Military and Security Developments Involving the People’s Republic of China 2018* (Washington, DC: DoD, 2018), 94–103.

Nonetheless, its current posture toward anti-access does not mean China will stay with such a strategy after expanding its military. Since anti-access strategies are adopted by nations who perceive their potential opponents as strategically superior, China is likely to shift defense resources away from A2/AD systems and toward power projection and expansion capabilities once this perception of inferiority dissipates. Indeed, China is preparing to make this shift.<sup>5</sup> This change will obviously affect US strategy toward the western Pacific, particularly in the East and South China Seas.

American forces are now focused on penetrating the A2/AD network designed to extend the PLA's ability to contest American sea and air control to the so-called first island chain. In such a struggle, US forces would be operating offensively. But a PLA power-projection capability—comprised of the People's Liberation Army Navy (PLAN) and People's Liberation Army Air Force (PLAAF)—that buttresses China's existing A2/AD capabilities would put US forces on the operational defensive.

Current assessments indicate US forces can maintain sea control between the first island chain (the Aleutian Islands to the Philippines) and the second (the Japanese archipelago as well as the Bonin and Marshall Islands). But they would have a difficult fight for sea control within the first island chain. China claims its DF-26 intermediate-range missiles are capable of targeting US and allied bases in Guam, from the second chain, which is approximately 2,000 miles away.<sup>6</sup> Moreover, the increasing range of China's intermediate-range ballistic missiles forbids further expansion into the Pacific.<sup>7</sup>

When this shift occurs, US forces may be required to adopt their own A2/AD posture—centered on the two island chains—to maintain the security of its alliance network in the western Pacific. In other words, the United States will have to shift its deterrence and warfighting strategy from breaking through the anti-access wall to creating its own barrier to confine China's power projection within the island chains. The implications of a “mobile maritime barrier in the Asian seas” and the requirements of China's strategic shift have only recently—and indirectly—been contemplated.<sup>8</sup> Preliminary analysis of conflict scenarios in the western Pacific indicates there will be a greater requirement for land-based forces than originally envisioned. The air-sea battle may indeed change to an air-sea-land battle, but not in the way contemplated by the anemic Joint Concept for Access and Maneuver in the Global Commons that replaced the Air-Sea Battle concept.

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5 US Defense Intelligence Agency (DIA), *China Military Power: Modernizing a Force to Fight and Win* (Washington, DC: DIA, 2019), 33–36.

6 David Axe, “Report: China Tests DF-26 ‘Carrier-Killer’ Missile (Should the Navy Be Worried?),” *National Interest*, January 30, 2019. The unclassified estimated maximum range of DF-26 is 4000 kilometers. DIA, *China Military*, 93.

7 James Holmes, “Visualize Chinese Sea Power,” *Proceedings* 144, no. 6 (June 2018): 28.

8 “Breaking the Mold” (workshop, US Naval War College, Newport, RI, October 24–25, 2018).



Map of the so-called first and second island chains by Pete McPhail

### Anti-Access Strategies

The term A2/AD has become ubiquitous since its popularization over 15 years ago. It is used to describe practically all the military challenges—save counterterrorism and counterinsurgency—the United States has encountered since the Cold War. It is used as an adjective often to describe the types of weapons systems and networks expected to be used in an anti-access campaign and rarely to refer to underlying strategy.<sup>9</sup>

<sup>9</sup> Jeffrey L. Caton, *Impact of Anti-Access/Area Denial Measures on Space Systems: Issues and Implications for Army and Joint Forces* (Carlisle Barracks, PA: Strategic Studies Institute, 2018).

This ubiquity has recently caused some defense leaders to question the practical use of the term:

To some, A2AD is a code-word, suggesting an impenetrable ‘keep-out zone’ that forces can enter only at extreme peril to themselves. To others, A2AD refers to a family of technologies. To still others, a strategy. . . . The term “denial,” as in “anti-access/area denial” is too often taken as a *fait accompli*, when it is, more accurately, an aspiration. . . . the reality is much more complex. . . . but the threats are not insurmountable.<sup>10</sup>

Though A2/AD remains a standard term in the lexicon of defense debates, there is a significant divergence between anti-access as a strategy and A2/AD as shorthand for what may be described, at least initially, as asymmetric weapons systems designed to make a region unattainable. As a strategy, anti-access warfare focuses on driving a distant power out of one’s region, and optimizing one’s forces (and diplomatic and economic pursuits) to keep the distant power out. Thus, an anti-access strategy involves both a multidomain military campaign and an all-means-of-power effort to create a *fait accompli*.

Imperial Japan used such a strategy during the Pacific War. Judging incorrectly that its forces could prevent America from returning to the western Pacific until a negotiated armistice would allow Japan to retain its gains in China and the East Indies, the Imperial leadership chose to go to war with a much stronger, albeit distant, opponent. The attack on Pearl Harbor was not a prelude to an invasion of the Western Hemisphere but an attempt to destroy enough US forces to convince the Americans that returning to the Pacific would take too long and be too costly.

At the current time, and given the present “correlation of forces,” this strategy would include any forcible effort China makes to annex Taiwan or the territory of one of its other neighbors. In short, China would seek to drive America out of East Asia—or destroy US forces in place—and then use all tools, including effects on Wall Street and the global economy, to convince America to accept the new status quo.

One way to understand anti-access strategies is to identify their five fundamental elements: a strategically superior opponent; influential geography; maritime conflict; decisive information; and extrinsic events.

The perception of any opponent’s strategic superiority motivates an entity to adopt an anti-access strategy as a primary defense. This strategy does not mean the absence of offensive objectives, such as seizing territory or intimidating neighbors. In fact, such goals might be long-range intentions. Rather, an anti-access defense indicates a potential conflict is expected to involve an opponent of greater military, political, diplomatic, or economic power, possibly on a global scale.

Returning to the strategy of Imperial Japan during the Second World War, competent Japanese leaders—such as Fleet Admiral Yamamoto Isoroku—knew the United States was a strategically superior global

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<sup>10</sup> John Richardson, “Chief of Naval Operations Adm. John Richardson: Deconstructing A2AD,” *National Interest*, October 3, 2016.

power. But they were committed to conquering the Asia-Pacific. This goal required driving US military forces out of the region, and ending America's political, diplomatic, economic, and social influence in the western Pacific, including its possession of the Philippines. To protect these gains, Japan needed to create an anti-access barrier, fortified island chains and a powerful navy, to ensure the strategically superior, but now regionally ousted United States could not reenter the contested region.

The primacy of geography as an element that buys time for a defender and facilitates the attrition of an attacker is recognized in practice by all military planners and is certainly a major aspect of land warfare. Naval warfare is a bit different because of the vast expanses of flat maneuver space, which is why there is no strategic defensive in naval warfare. Without a barrier of islands (along with vast distances) in the western Pacific, Imperial Japan would have been hard pressed to adopt an anti-access posture against a US response to its conquests. Similarly, the islands and straits isolating the East and South China Seas from the vast maneuver space of the Pacific, allows China to adopt an anti-access strategy against potential military responses and the general political influence of the United States. Without vast distances of the Pacific, the maritime geography of relatively short distances from China to its neighbors would channel the US fleet as it reentered the first island chain.<sup>11</sup>

The maritime domain will be the main conflict space during an engagement between China and the United States. America lies across oceans from the areas of potential regional conflict. Thus, the sea, as well as the air and space above it, would be the predominant conflict space in any US counter anti-access contingency. But the second step to countering China would involve other domains.

In contrast, the determinative impact of extrinsic events is generally the element acknowledged least by those who conduct campaign- or tactical-level analysis of anti-access warfare. Yet, this factor is the most important. The current win-hold construct of building an American joint force that can defeat an opponent in one region while holding off another opponent in a different region until forces can be "swung," does acknowledge simultaneous conflicts can occur. But events in other regions or in nonmilitary dimensions can have a profound impact on any conflict.

Research indicates most nations (or armed groups) that adopt an anti-access approach never actually defeat their strategically superior opponent in combat. Generally, the strategically superior power just quits fighting because the costs appear too high, especially when an event of even greater interest occurs elsewhere. Arguably, this affected US involvement in Vietnam. Similarly, Imperial Japan's improbable alliance with racist Nazi Germany and tacit nonaggression agreement

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11 Anthony H. Cordesman and Steven Colley, *Chinese Strategy and Military Modernization in 2015: A Comparative Analysis* (Washington, DC: Center for Strategic and International Studies [CSIS], 2015), 134.

with the Soviet Union can be understood as an effort to generate an extrinsic event (German victory in a war in Europe) to divert British, Dutch, French, and American attention and forces away from the western Pacific. Indeed, the French and Dutch could do little in the Pacific region and the United States, prompted by Britain, did adopt a Germany-first strategy.

### China's Shifting Strategy

The perception of superiority is the fulcrum on which the choice of adopting an anti-access posture tilts. For the present moment, the US Navy and US Air Force are perceived to be superior to China's sea and air forces. Thus, the PLA has concentrated on developing asymmetric means to buttress China's A2/AD posture—for example, the United States currently has no equivalents to Chinese IRBMs and anti-ship ballistic missiles (ASBMs). But Chinese military literature acknowledges (albeit sometimes indirectly) the US Army's greater experience, and by implication, capabilities in high-technology conditions. The tremendous victory in Operation Desert Storm promoted this perception and prompted the PLA's revolution in military affairs.<sup>12</sup>

At the same time, however, China's military buildup, which extends beyond A2/AD systems, has been tremendous and unrelenting. The Defense Intelligence Agency estimates Beijing increased the PLA budget by an average of 10 percent per year from 2000 to 2016. Comprehensive assessments based on programs and costs have proved elusive.<sup>13</sup> But such estimates are difficult to compare with Western military budgets due to the lack of transparency and the lower wage scales and manpower costs that fuel the Chinese export economy. Nonetheless, many analysts have done so to provide reassuring assessments of America's strategic superiority.

At the 19th Chinese National Congress of the Communist Party in October 2017, Chinese president and CCP leader Xi Jinping directed the PLA to “prepare for military struggle in all strategic directions.” He also set “three developmental benchmarks . . . becoming a mechanized force with increased informatized and strategic capabilities by 2020, a fully modernized force by 2035, and a worldwide first-class military by midcentury.”<sup>14</sup> As part of this build up, the PLA has acquired deployable weapon systems that US joint forces do not possess—the IRBMs and ASBMs previously described as well as orbiting anti-satellites (ASATs) and cruise missiles that increase to three times the speed of sound in terminal phase (Russian-designed SS-N-27). China has also shown a willingness to intersperse nuclear-armed missiles within conventional missile batteries, something Western decisionmakers would never contemplate.

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12 Dean Cheng, “Chinese Lessons from the Gulf Wars,” in Andrew Scobell, David Lai, and Roy Kamphausen, *Chinese Lessons from Other Peoples' Wars* (Carlisle, PA: Strategic Studies Institute, 2011), 153–99.

13 DIA, *China Military Power*, 3, 21.

14 DIA, *China Military Power*, 6.



Moreover, China has increasingly demonstrated a willingness to deploy naval forces forward (anti-piracy patrols off East Africa) and establish forward bases (such as in Djibouti), activities once shunned as out of reach. And of course, it has built land bases on the disputed shoals of the South China Sea that harbor military aircraft, surface-to-air missile batteries, anti-ship cruise missiles, underground fuel tanks, and hardened weapons storage facilities.<sup>15</sup> These activities indicate a growing focus on developing power-projection capabilities.

When viewed in isolation rather than as more abstract assessments of capabilities, these indicators seem less alarming: “The PLA is not close to catching up to the U.S. military in terms of aggregate capabilities, but it does not need to catch up to the United States to dominate its immediate periphery. The advantages conferred by proximity severely complicate U.S. military tasks while providing major advantages to the PLA.”<sup>16</sup>

Yet, abstract assessments of capabilities reveal growth beyond parity and development of offensive capabilities with greater reach and greater numbers. During 2017, “The Chinese Navy became the world’s largest, with more warships and submarines than the United States, and it continues to build new ships at a stunning rate. Though the American fleet remains superior qualitatively, it is spread much thinner.”<sup>17</sup> Some analysts quickly explain how vessel tonnage and quantity factor into the comparison.<sup>18</sup>

Such responses neglect China’s effort to match US warships type-for-type and ability to build them at a faster rate. In 2015, China’s navy built its equivalent to the US Navy’s proprietary expeditionary transfer dock—despite the fact that the PLA does not yet have the expeditionary capabilities to use the vessel effectively.<sup>19</sup> In 2018, China’s navy installed an apparent electromagnetic railgun, similar to the US railgun under development since 2005, on a warship for testing at sea.<sup>20</sup> Debate has ensued whether China surpassed US development of this technology, which was originally intended for *Zumwalt*-class destroyers.<sup>21</sup> Or perhaps, it is a deception for the propaganda value of being first.

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15 Thomas Shugart, “China’s Artificial Islands Are Bigger (and a Bigger Deal) Than You Think, War on the Rocks, September 21, 2016; Megan Specia and Mikko Takkunen, “South China Sea Photos Suggest a Military Building Spree by Beijing,” *New York Times*, February 8, 2018; and Amanda Macias, “China Quietly Installed Missile Systems on Strategic Spratly Islands in Contested South China Sea,” *CNBC*, May 2, 2018.

16 Eric Heginbotham et al., *The U.S.-China Military Scorecard: Forces, Geography, and the Evolving Balance of Power, 1996–2017* (Santa Monica, CA: RAND Corporation, 2015), xxx.

17 Steven Lee Myers, “With Ships and Missiles, China Is Ready To Challenge U.S. Navy in Pacific,” *New York Times*, August 29, 2018.

18 Ian Livingston and Michael E. O’Hanlon, “Why China Isn’t Ahead of the US Navy, Even with More Ships,” *Order from Chaos* (blog), Brookings, September 10, 2018.

19 “PLA Receives its First Mobile Landing Platform,” *Want China Times*, June 30, 2015.

20 David Axe, “China’s Navy Railgun Is Out for Sea Trials: Here’s Why It’s a Threat to the U.S. Navy,” *National Interest*, January 6, 2019.

21 Kyle Mizokami, “China’s Railgun Has Reportedly Gone to Sea,” *Popular Mechanics*, December 31, 2018.



Regardless, fleet size matters. Even if US ships remain more tactically capable than their Chinese counterparts, one ship cannot be in two locations at the same time. The PLAN fleet could exceed 400 battle force ships by 2030, while the US Navy will struggle to reach 355.<sup>22</sup>

Such developments are not confined to seapower. China's research into hypersonic weapons and artificial intelligence have been widely trumpeted.<sup>23</sup> Although PLA mechanization of land forces is behind that of the United States, a fact China has acknowledged, the PLA remains the world's largest army. And since increased military capabilities eventually lead to shifts in military strategies, so will it be with China.

### America's Anti-Access Posture

If China is building superior strength to be a global, not just a regional military power, the logical focus in US strategy would be to deter China's power projection by confining Beijing's forces within the first and second island chains.<sup>24</sup> American strategists perceive these chains to be areas in which US operating forces would be under great threat. But Chinese strategists originally perceived these features as potential barriers to their maritime access to the Pacific.<sup>25</sup>

To make the Chinese perception into a reality, the US Navy needs to adopt a denial posture within the first island chain and establish defenses similar to the Greenland-Iceland-United Kingdom (GIUK) gap used during the Cold War: acoustic listening arrays; targetable mines; satellite and surface intelligence, surveillance, and reconnaissance; and frequent anti-submarine patrols by submarine, aircraft, and surface platforms (which can now include unmanned vehicles). Fortunately, geography favors this approach, since the first island chain is mostly made up of US treaty allies or de facto partners: South Korea, Japan, Taiwan, the Philippines, Malaysia, and Singapore and Indonesia at the Strait of Malacca. The gaps between these allies are numerous. But the relatively small areas pale in comparison to open-ocean operations and the GIUK gap.

America's anti-access posture would not be exclusively naval; nor would it have only maritime effects. Without unfettered ocean access, the PLA cannot move heavy land combat equipment or bulk supplies to out-of-area positions except at the sufferance of the United States.

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22 Kyle Mizokami, "This Is What a Real Naval Buildup Looks Like," *Popular Mechanics*, June 5, 2018; FS Aijazuddin, "Water Wars over the Indus," *New Age* (Dhaka, Bangladesh), April 5, 2019; Rick Joe, "Predicting the Chinese Navy of 2030," *Diplomat*, February 15, 2019; Eric J. Labs et al., *An Analysis of the Navy's Fiscal Year 2019 Shipbuilding Plan* (Washington, DC: Congressional Budget Office, 2018); and Marcus Weisgerber, "U.S. Navy Re-Evaluating 355-Ship Goal," Government Executive, February 4, 2019.

23 John Grady, "Panel: China Leading the World in Hypersonic Weapon Development," *USNI News*, March 14, 2019; "Gliding Missiles That Fly Faster than Mach 5 Are Coming," *Economist*, April 6, 2019; and Lora Saalman, "Fear of False Negatives: AI and China's Nuclear Posture," *Bulletin of the Atomic Scientists*, April 24, 2018.

24 Cordesman and Colley, *Chinese Strategy*, 134.

25 Eli Huang, "China's Master PLAN: How Beijing Wants To Break Free of the 'Island Chains,'" *National Interest*, May 19, 2017.

Some might see the change in US posture as ceding the South China Sea to China's de facto control, with de jure control contested through Freedom of Navigation Program operations and routine air transit. Others, however, would view such a change as adjusting to reality.<sup>26</sup> The US Marine Corps, reestablishing its maritime mission after decades of counterinsurgency, is already anticipating this stance.<sup>27</sup> The US Army could also have a role supporting anti-access capabilities as opposed to countering A2/AD.<sup>28</sup>

### America's Archipelagic Defense

Throughout the A2/AD debate, the US Army has struggled to articulate its role in the joint campaign to counter China's anti-access efforts. Once the Air-Sea Battle concept started to gain steam in the attempt to optimize US Navy and US Air Force resources to counter China's growing A2/AD capabilities, particularly in the South China Sea, the US Army staff (and to a lesser extent Headquarters, U.S. Marine Corps) started to get nervous. Counterterrorism had crept into the mission of nation building in never previously unified states, with mixed results. Countering A2/AD operations against China in the western Pacific seemed to offer little role for decisive land forces.

The political result was a strange alliance of bureaucratic concerns. It restructured the practical Air-Sea Battle approach, which was indeed loosely modeled on the AirLand Battle of the Cold War, into the Joint Concept for Access and Maneuver in the Global Commons.<sup>29</sup> The Army-led demand for more jointness in the Air-Sea Battle effort resulted in conceptual anemia, and the bureaucratic fears behind it were misplaced. Forgotten was the fact that a counter anti-access campaign is only the first step in the majority of wars. The second step, the application of decisive power, occurs on land. That the Army had little involvement in the first step is perfectly logical since the United States is separated from the potential theaters of conflict by oceans. Breaking the great wall of an anti-access strategy is thereby a sea-air-space affair.

Rarely in history has crossing an anti-access barrier resulted in a victory without the introduction of landpower. Decisive land operations would have been required, and were planned, in the war against Imperial Japan had the atomic bomb not been invented. A counter anti-access campaign is, thus, a prerequisite and an enabler of joint operations—similar to how the Navy and Marine Corps have described

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26 Hannah Beech, "China's Sea Control Is a Done Deal, 'Short of War with U.S.,'" *New York Times*, September 20, 2018; and Brahma Chellaney, "Who Lost the South China Sea?," *Strategist* (blog), Australian Strategic Policy Institute, June 15, 2018.

27 Steven Stashwick, "US Marines Seeking Anti-Ship Cruise Missiles," *Diplomat*, March 4, 2019.

28 Andrew F. Krepinevich Jr., "How To Deter China: The Case for Archipelagic Defense," *Foreign Affairs* 94, no. 2 (March/April 2015): 78–86; and Ryan Kort, "Anti-Access/Area Denial Options in the South China Sea," *RealClear Defense*, March 9, 2017.

29 Michael E. Hutchins et al., "Joint Concept for Access and Maneuver in the Global Commons: A New Joint Operational Concept," *Joint Forces Quarterly* 84 (January 2017): 134–39. The Joint Concept for Access and Maneuver in the Global Commons concept focuses on military access in the global commons of sea, airspace over the oceans, and space, which are not contested seriously today.

themselves in the post-Cold War era: first responders and enablers of the joint force. Eventually, however, American decisionmakers would have recognized an army is necessary for decisive operations.

Admittedly, China is an outlying case since no contemporary American decisionmaker dares even to contemplate fighting a land war in Asia. Yet, the current expectation that a successful counter A2/AD campaign would cause China to capitulate to US objectives without any application of decisive power on the mainland has very little, perhaps no, evidence behind it. As Japan demonstrated at Pearl Harbor, one can destroy much of an enemy's fleet and airpower without causing the enemy to give up. Thus, landpower is required as the second step or, hopefully, a final conventional deterrent.

Since the two-step was a forgotten aspect of the strategic dance, Army thinkers revisited the role of land forces in a counter A2/AD campaign without satisfaction. In 2015, one author explained most books on A2/AD say very little about the Army's role because no one has quite figured out what it is—with the exception of missile forces that were then hobbled in range by the Intermediate-Range Nuclear Forces Treaty (INF Treaty).<sup>30</sup> An earlier RAND study even focused almost exclusively on options to reduce anti-access threats to the Army, rather than methods for the Army to break the great wall.<sup>31</sup>

Actually, there are very apparent joint tasks the US Army could perform to support the Navy and Air Force roles in overcoming A2/AD. The foremost of these tasks would be to provide air and missile defenses for fixed land bases, particularly, air bases. The employment of terminal high-altitude area defense (THAAD) and Patriot Advanced Capability-3 (PAC-3) missiles to defend air bases in Guam, Japan, South Korea, and elsewhere in the western Pacific would seem an obvious requirement that would not merit detailed analysis. Naval theater ballistic missile defense could then focus on defending maneuver forces. In fact, THAAD has been deployed (2013) to Guam and South Korea (2017) in the face of North Korean missile threats.<sup>32</sup>

Amazingly, however, a RAND study on *Air Base Attacks and Defensive Counters* not only fails to mention the historical role of Army ground forces in defending air bases, it dismisses ballistic missile defenses as “extremely expensive and hav[ing] limited effectiveness, particularly against large attacks.”<sup>33</sup> Instead, its recommendations include passive defenses such as camouflage, concealment, deception, hardening, and aircraft dispersal, all essential but hardly reassuring in themselves. Perhaps THAAD and PAC-3 employment in the western Pacific does

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30 Martin N. Murphy, “Kick the Door Down with AirSea Battle . . . Then What?,” *Parameters* 45, no. 2 (Summer 2015): 97–107.

31 John Gordon IV and John Matsumura, *The Army's Role in Overcoming Anti-Access and Area Denial Challenges* (Santa Monica, CA: RAND Corporation, 2013).

32 Chris Buckley, “Why U.S. Antimissile System in South Korea Worries China,” *New York Times*, March 11, 2017.

33 Alan J. Vick, *Air Base Attacks and Defensive Counters: Historical Lessons and Future Challenges* (Santa Monica, CA: RAND Corporation, 2015), 34.

need to be analyzed rigorously against alternatives, if only to identify itself as a valuable. If the United States establishes an A2/AD posture in the first or second island chain, much of the US anti-access campaign will fall to the Army. The Navy and Air Force will likely concentrate on destroying China's A2/AD assets and targeting its navy, its air force, and the Rocket Forces.

As previously noted, the US Marine Corps has embraced its land-based responsibility with enthusiasm. In 2016, the Marines began testing the high-mobility artillery rocket system (HIMARS) both from land and from the decks of amphibious warships in anticipation of acquiring an anti-ship missile suitable for HIMARS.<sup>34</sup> Prompted by the commander of the Pacific Command, the Army similarly tested the Norwegian Naval Strike Missile using a palletized naval launcher during the 2018 Rim of the Pacific exercise.<sup>35</sup> Meanwhile, the Marine Corps developed the intellectual groundwork for a combined countering and implementing A2/AD strategy in its concepts on littoral operations in a contested environment and expeditionary advanced base operations.<sup>36</sup>

But the Marines are keen to keep their objectives aligned with the blue-water Navy's plans for sea control and countering A2/AD in the waters off China. There is no overt suggestion of this constituting an American A2/AD posture despite outside sources referring to it as such.<sup>37</sup> As Marine Corps Commandant General Robert B. Neller states, "There's a ground component to the maritime fight."<sup>38</sup>

In opting to develop the concept of multidomain battle, US Army leadership appears to have avoided considering a static defense in the island chains. Some Army officers might have suggested a coastal defense artillery could have a role in countering and implementing A2/AD, but that discussion has not fully blossomed.<sup>39</sup>

One defense analyst who has suggested an American A2/AD posture in the western Pacific with a major Army role is Andrew Krepinevich Jr., former director of the Center for Strategic and Budgetary Assessments. Krepinevich did much to popularize the A2/AD and revolution in military affairs concepts. Coining the phrase "archipelagic defense" for a greater role for US ground forces—in conjunction with US allies and partners—in the first island chain, Krepinevich argues, "If Washington wants to change Beijing's calculus, it must deny China the ability to

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34 Hope Hodge Seck, "Top Marine Wants To Fire Anti-Ship Missiles from HIMARS Launcher," *Military.com*, December 14, 2016.

35 David B. Larter, "The US Navy's New Anti-Ship Missile Scores a Hit at RIMPAC, But There's a Twist," *Defense News*, July 20, 2018.

36 In deference to ADM Richardson's dislike of the A2/AD terms, naval strategists use the term "contested environment" as a euphemism.

37 Steven Stashwick, "US Navy, Marine Corps Unveil New Strategy To Turn Tables on A2/AD," *Diplomat*, October 2, 2017.

38 James Holmes, "The U.S. Marine Corps Wants Anti-Ship Weapons for 'Island-Warfare.' Here's Why That's A Big Deal," *National Interest*, March 9, 2019.

39 LTC Stephen L. Melton (USA Retired), "Resurrecting the Coast Artillery," *Fires* (May-June 2014): 61–63; and Evan Braden Montgomery, "How Should America Respond to China's Deadly Missile Arsenal?," *National Interest*, September 19, 2014.

control the air and sea around the first island chain . . . [and] integrate allied battle networks and strengthen allied capabilities . . . those goals can be achieved with ground forces, which would not replace existing air and naval forces but complement them.”<sup>40</sup>

Krepinevich describes archipelagic defense as a way of deterring China from seizing territory in the first island chain rather than an effort to contain Chinese power projection forces. He assumes, however, the United States will remain strategically superior on a global scale. As argued, this assumption is questionable given China’s strategic trajectory.

## US Army Missions

Thus far, archipelagic defense has not gained much traction with policymakers even with additional writings by Krepinevich and a small group of commentators.<sup>41</sup> In his initial article, Krepinevich identifies potential Army missions, but with only limited detail. Defense of land bases is an obvious mission to identify. Training of local forces is another obvious one—and one that is routinely carried out regardless of regional defense posture. Krepinevich (and others) characterize the acquisition of anti-ship cruise missiles as coastal defense, although, as the Marines conceive it, this could also be considered part of offensive maritime capabilities. Other suggestions include using coastal artillery units to deliver naval mines and anti-submarine torpedoes via missiles.<sup>42</sup>

These suggestions are worthy of experimentation, particularly if the multiple missions could be conducted by simply switching warhead types on a common, mobile missile. Unfortunately, these capabilities hardly sound innovative, dynamic, aggressive, efficient, transformational, let alone decisive, all the adjectives needed to justify new acquisition programs. Linking Marines to coastal defense also identifies them with a mission the US Army gave up in 1945.

There are, however, at least five aggressive missions that can be identified as Army roles in the establishment of an American and allied anti-access posture in the island chains. All require significant investments in defense resources, but could have high payoffs in constraining PLA power projection capabilities: active defense of regional air bases, integrated fires and counter fires, anti-satellite fires, anti-ship fires and straits closures, and defense of Taiwan.

## Active Defense

Admittedly, today’s active defenses could not cope with a saturation missile attack. But it makes little sense to wait for kinetic-effect electromagnetic weapons to be fully developed before deploying a modest capability to defend US air bases in Japan and elsewhere in the island chains. Since deterrence is a matter of perception, even a modest defense

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40 Krepinevich, “How To Deter China,” 80–81.

41 James R. Holmes, “How To Deter China: Enter Archipelagic Defense,” *RealClear Defense*, March 2, 2015.

42 Krepinevich, “How To Deter China,” 82.

would be preferable to no defense at all. Despite justifications in reports, passive defenses—while necessary—are less effective as a deterrent.

An aggressive approach to air and other land-based defenses would require greater funding for an increased number of missile batteries as well as evolutionary improvements in accuracy and range. In recent years, both the US Army and Navy have relied on the Missile Defense Agency (MDA) to fund such improvements, causing both services to fight for some control over the outputs of the programs. Since the MDA was created to provide national missile defense against nuclear weapons, not to focus on improving the defense of forward locations, the services must fund necessary improvements if they are to be timely.

Additionally, the services need to work more toward theater integration of air and ballistic missile defense rather than rely on coordination from the US Strategic Command or other combatant commands.<sup>43</sup> This may be a fertile area for applying artificial intelligence to calculate the integration of multiple sensors and multiple shooters. That cross-service capabilities are at least conceptually compatible is evidenced not only in exercises but also in the recent decision to deploy THAAD to Romania while the Navy's Aegis Ashore installation goes down for planned maintenance.<sup>44</sup>

A more aggressive approach to air and missile defense at forward locations would include the Army assuming regional defense, based upon the RAND report that dismissed the utility of ballistic missile defense and identified the significant threat special operations forces pose to airbases.<sup>45</sup> For this threat, the Army clearly has a comparative advantage over the Air Force.

### *Integrated Fires and Counter Fires*

When the withdrawal from the INF Treaty is completed, the United States would be free to redevelop ground-based conventional-warhead IRBMs. Indications are the Department of Defense is planning IRBM tests.<sup>46</sup> Despite the obvious focus on countering the Russian treaty breakout missiles, the new IRBM should be prioritized for defending the western Pacific region to eliminate the PLA's asymmetric advantage that has thus far terrorized US planning for the region. Press reports have suggested the new IRBM "may see deployment on the U.S. territory of Guam."<sup>47</sup>

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43 Jen Judson, "Lockheed To Double Patriot Missile Production as Orders Explode," *Defense News*, July 11, 2018; Thomas Karako and Wes Rumbaugh, "Reorganizing the Missile Defense Enterprise," *Defense News*, August 6, 2018; and Jen Judson, "So Patriot and THAAD Will Talk. What Does That Really Mean?" *Defense News*, October 10, 2018.

44 Jen Judson, "US Army Terminal Missile Defense System Is Headed for Eastern Europe," *Defense News*, April 11, 2019.

45 Vick, *Air Base Attacks*, 30–31.

46 Robert Burns, "Pentagon Plans Tests of Long-Banned Types of Missiles," *Military Times*, March 13, 2019.

47 Ankit Panda, "After the INF Treaty: US Plans First Tests of New Short and Intermediate-Range Missiles," *Diplomat*, March 14, 2019.



*Anti-Satellite Fires*

Critical nodes in any reconnaissance-strike complex for an anti-access warfare strategy are space-based sensors. Without warnings from this technology, the oceanic movements of a strategically superior force could not be targeted. Likewise, the appropriate initial tactic in any counter anti-access campaign would be the destruction of the enemy's satellites. American decisionmakers have long viewed reconnaissance satellites as strategic elements of nuclear deterrence. But the United States has been slow to match the tests conducted by the former Soviet Union, and now Russia, and China—and presumably the hardware developed by them.

Fears of further militarizing space have also been a factor. And the United States has never demonstrated an orbiting ASAT, although the Soviet Union claimed the primary purpose of the American space shuttle was to capture their satellites. The US Navy did demonstrate the destruction of a decaying satellite by the AEGIS system-controlled Standard Missile-3 (SM-3), which was designed for theater ballistic missile defense (TBMD).<sup>48</sup> This missile, however, had been modified for the purpose, and was, presumably, a single production model of the variant.

Engaging or deterring ASAT warfare would obviously require a missile model that could be readily produced since warship inventories are inevitably limited by space and volume. Logistical concerns thus cause the mix of offensive and defensive missiles to be a perpetual concern. For this reason, the Navy would position at least some part of US theater missile-launched ASAT capabilities ashore. Aegis Ashore would appear the most likely system, but the Army should examine and experiment with the potential to launch ASAT warheads against low earth-orbit sensors using THAADs or a follow-on system. The disadvantage of land-based ASATs is that they are potentially targetable by coordinates. Road mobility, however, mitigates that in part, and such systems provide an advantage since a larger inventory can be stored in hardened shelters.

*Anti-Ship Fires and Straits Closures*

Perhaps the PLA's anti-ship ballistic missiles are not quite the “carrier killers” they are popularly portrayed to be.<sup>49</sup> Certainly, their effectiveness depends largely on satellite sensors, particularly at maximum range. Shooting down Chinese satellites, as well as neutralizing backscatter and sky-wave radars, would significantly reduce their threat. That solution may not do much for the security of land bases, since only coordinates are needed to target them, but naval TBMD assets would be free to complement ground-based interceptors.

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48 Jamie McIntyre, Suzanne Malveaux, and Miles O'Brien, “Navy Missile Hits Dying Spy Satellite, Says Pentagon,” CNN, February 21, 2008.

49 J. Michael Cole, “The DF-21D or ‘Carrier Killer’: An Instrument of Deception?,” *Diplomat*, April 22, 2013.



But US land forces should also pursue the capability to fire anti-ship ballistic and cruise missiles against targets at sea. The value of a modest anti-ship ballistic missile capability is that it changes the calculus of deterrence: no longer would the DF-21D be perceived as an unanswered PLA advantage. Indeed, the ability of warships to call for fires from land- and air-based systems would recast naval warfare in the near seas, and particularly in narrow straits.

Contrary to some claims, ASBMs and land-based cruise missiles are as capable of enhancing the value of naval surface forces as they are of making them obsolete. It is all dependent of how forces and capabilities are combined. Perhaps multidomain battle can include the Army's roles for supporting the other services' capabilities rather than a struggle to get it a share of their domains.<sup>50</sup>

### *Land Defense of Taiwan*

If China's economy were to falter and the CCP's internal control would appear to be threatened, the forcible annexation of Taiwan might rise on the CCP's agenda.<sup>51</sup> As PLA doctrine indicates, this island is China's top power-projection target around which much of its forces have been developed, even as the party has bided its time in the hope that a more peaceful unification would occur. Annexation is more likely to occur if the CCP perceives its internal control is in question because it would end the Chinese civil war once and for all, demonstrating the CCP has a mandate from heaven. In Western historical terms, it would be similar to the Argentine junta's decision to invade the Falkland Islands in 1982: it was intended to bolster a faltering regime by generating patriotic unity in the face of foreign opposition to a long-standing national claim.

Even though Taiwan is not a formal treaty ally, many interpret the Taiwan Relations Act of 1979 as a requirement for the United States to defend Taiwan in the event of an attack by China.<sup>52</sup> A forcible annexation or reunification would have dire long-term effects on the US alliance system as well as the established world order. Chinese control of Taiwan would also eliminate the first island chain as a constraint on China's global power projection. Even though the second island chain (or perhaps a modified chain and a half) would remain, such a success would enable and motivate further projections of power.

Currently, the Army cannot publicly plan to position forces on Taiwanese soil in event of an emerging crisis. Perhaps the future political situation will not allow such planning either. Nevertheless, that does not mean the Army should not carefully examine its capabilities to do so. The availability of and training for the use of pre-positioned war materials, as well as the readiness state of heavy-lift sealift vessels for use

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50 Megan Eckstein, "‘Multi-Domain Battle’ Concept To Increase Integration Across Services, Domains," *USNI News*, October 4, 2016.

51 Deng Yuwen, "Is China Planning To Take Taiwan by Force by 2020," *South China Morning Post*, January 3, 2018; and Peter Gries and Tao Wang, "Will China Seize Taiwan?," *Foreign Affairs*, February 15, 2019.

52 Taiwan Relations Act, 22 U.S.C. 3301 (1979).

in potentially contested environments, however, should be examined. It is easy to conclude these are not capabilities over which Army leadership lost sleep during the conflicts of the last two decades.

Such an examination would require considerable collaboration with the US Navy and Marine Corps to prioritize lift and provide maritime defenses. Unfortunately, these capabilities are not usually funded in periods of fiscal austerity, such as might be emerging. Yet, an honest evaluation of whether the Army can rely primarily on pre-positioned material and sealift during a conflict will allow decisionmakers clearer insight into prospective options. This process will also familiarize at least part of the Army with the service's potential for operations in a soon-to-be-contested environment.

The Army will unlikely have the future resources to fund all these A2/AD-enhancing capabilities. But these missions must be seriously examined and considered if we expect to deter China from using military power to overturn the world order. The key to limiting expansion of PLA bases in distant places, such as Djibouti, lies in the first island chain.

## **Conclusion**

As China's military buildup continues, it is only a matter of time before the Chinese Communist Party determines it is appropriate to shift from an anti-access strategy to one of power projection. The CCP is intent on rewriting the international system to make it safe for domestic authoritarianism, as well as convenient for achieving its international objectives. The key will be the party's determination that the United States no longer possesses strategic superiority, one of the elements that prompts the adoption of an anti-access warfare strategy.

The United States—a western Pacific nation by virtue of Hawaii, Guam, and the Marianas, and a guarantor of the security of its Asia-Pacific allies—that will need to adopt the tactics (perhaps even the strategy) of anti-access warfare in conjunction with those allies to contain a significant part of China's power projection capabilities within the island chains. Although primarily a naval task, and one already envisioned by the Marine Corps, such planning is also appropriate for the US Army.

There are at least five aggressive missions the Army could conduct in an A2/AD posture: active defense of regional air bases, integrated fires and counter fires, ASAT fires, anti-ship fires, straits closures, and land defense of Taiwan. Army leadership may, however, be reluctant to place much emphasis on them because they do not appear to be applications of decisive force. Nevertheless, they do deserve emphasis, examination, experimentation, and resources. The leadership must content itself with the realization that if deterrence fails and there is a conflict with China, decisive force will eventually need to be applied. In sum, implementing an A2/AD posture that can confine the PLA's power projection capabilities may be the most effective way the United States can deter conflict.