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**AIRSEA BATTLE TO JOINT CONCEPT FOR ACCESS AND MANEUVER IN
THE GLOBAL COMMONS:**

**IMPERATIVE FOR A CONTINUATION OF A CRUCIAL WARFIGHTING
CONCEPT**

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Nicholas J. Reed

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A paper submitted to the Faculty of the Joint Advanced Warfighting School in partial satisfaction of the requirements of a Master of Science Degree in Joint Campaign Planning and Strategy. The contents of this paper reflect my own personal views and are not necessarily endorsed by the Joint Forces Staff College or the Department of Defense.

This paper is entirely my own work except as documented in footnotes.

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If the United States intends to maintain its current strategic standing, effectively power project, and preserve its war fighting potential, the U.S. armed forces' most obvious shortcomings must be acknowledged by the continuation and further development of a war fighting concept fully addressing the Anti-Access/Anti-Denial (A2/AD) approach potential challengers have adopted. This thesis traces the origins of the *AirSea Battle* concept and reviews the deliberation over its merit. Concepts for future warfare formulated in the past will serve as a guide for assessing the status of *AirSea Battle* as a viable concept to model the development of capabilities the joint force will need to advance U.S. strategic interests and goals. Finally, this work makes recommendations on further distilment, incorporation, and refinement offering better options to senior leaders and decision makers.

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INTRODUCTION

Controversy and debate surrounded the attempted new course set for the U.S. armed forces born by the introduction of the *AirSea Battle* concept in the public release of the 2010 Quadrennial Defense Review. The concept became marred in controversy through unclassified interpretations and inter-service rivalry. The *Joint Operational Access Concept* (JOAC) document released by the Chairman of the Joint Chiefs of Staff in 2012 absorbed many of the thoughts presented in *AirSea Battle*. However, in 2015 the joint staff recast the concept as the *Joint Concept for Access and Maneuver in the Global Commons* (JAM-GC) resulting in the questioning of the Department of Defense's level of commitment to a new warfighting concept.

If the United States intends to maintain its current strategic standing, effectively power project, and preserve its war fighting potential, the U.S. armed forces' most obvious shortcomings must be acknowledged by the continuation and further development of a war fighting concept fully addressing the Anti-Access/Anti-Denial (A2/AD) approach potential challengers have adopted. This thesis traces the origins of the *AirSea Battle* concept and reviews the deliberation over its merit. Concepts for future warfare formulated in the past will serve as a guide for assessing the status of *AirSea Battle* as a viable concept to model the development of capabilities the joint force will need to advance U.S. strategic interests and goals. Finally, this work makes recommendations on further distilment, incorporation, and refinement offering better options to senior leaders and decision makers.

CHAPTER 1

Origins

The contest over operational access can dominate practically all other considerations of warfare.

Joint Operational Access Concept (JOAC), 2012

EVOLUTION OF DENIAL STRATEGY

Negating an enemy military force's freedom of movement by denying entry by land, air, or sea is not a new concept. Mines, physical obstacles, air defense, fortifications, and blockades are a few examples nations use to protect territory by denying access. In the last twenty-five years, technological advances have led to a rapid increase in both the numbers, types, and capabilities of weapon systems that threaten naval and amphibious forces as well as air forces seeking to operate close to or within a particular sea or air space. These weapons represent a challenge to traditional approaches to warfare as practiced by the United States since the beginning of the twentieth century. This attempt to limit air and sea access into or near a sovereign belligerent is termed Anti-Access/Anti-Denial (A2/AD).

Until now, the United States has enjoyed permissive operating and supporting lines of supply and communication in all domains enabling operations without a significant threat of opposition. However, no major power with an expeditionary capability can expect to operate close to shore, penetrate airspaces, or land forces without extreme risk in an A2/AD environment. For the United States, A2/AD threats have strategic implications, potentially limiting access to troubled spots around the globe, exploiting strategic chokepoints, and restricting the use of the global commons and the

long lines of communication and supply the United States and its allies (both commercially and militarily) rely on.

The impetus for A2/AD-based strategies came in the aftermath of the 1991 Gulf War. Arguably, for the first time in 50 years, the United States displayed its full range of air, sea, and land capabilities. Unhindered sea lines of supply and communication allowed the expeditionary force to build superior, then overwhelming combat power. Observers watched as American power, on display, out-maneuvered and destroyed Iraqi forces with minimal losses in an astoundingly short time due primarily to the complete American air, space, and sea control at the theater level.¹

This model of deployment, buildup, and attack—all sustained through unhindered sea- and air-lines of supply—continues to permeate U.S. military planning. According to this model, forces move and assemble at secure staging bases, allowing for the conduct of rehearsals and preparations just beyond the enemy's borders with minimal interference. U.S. sea assets mass off the coast and aggressive air and sea patrolling begins, in concert with reconnaissance platforms penetrating hostile airspace. Logistics support builds up to sustain high intensity combat. Once everything is in place and the assured dominance of air and sea space exists, the attack launches.

This model forms the basis for all current American warfighting concepts. The key assumption is that air and sea forces have unfettered access in their domains; land forces expect secure movement and the delivery of troops and equipment to secure bases with adequate time to prepare for combat. The United States and its allies utilized this

¹ For Russian views see: Gilberto Villahermosa, "Desert Storm: The Soviet View," <http://fmso.leavenworth.army.mil/documents/rs-storm.htm>; For Chinese views see: U.S. Embassy, "The Gulf War: Lessons for Chinese S & T," <http://fas.org/nuke/guide/china/doctrine/stmil14.htm> (accessed October 22, 2014).

model, although limited in scope and scale, in the conflicts in the former Yugoslavia, Lebanon, Libya, and currently in Syria and Iraq. The American-led invasions of Afghanistan and Iraq supported by the absolute control of the air and sea domains demonstrated both the unmatched capabilities of the United States as well as its vulnerable reliance on unhindered access. Fourteen continuous years of fighting two simultaneous insurgencies thousands of miles from its borders under uncontested air, sea, and space environments have furthered this conviction. A2/AD strategies challenge all of these assumptions.

Anti-Access (A2): Those actions and capabilities, usually long-range, designed to prevent an opposing force from entering an operational area.

Area-Denial (AD): Those actions and capabilities, usually of shorter range, designed not to keep an opposing force out, but to limit its freedom of action within the operational area.

Joint Operational Access Concept (JOAC), 2012

It is a historical truism that every dominating capability employed in warfare will eventually be limited, neutralized, or negated.² This is the case with the emergence of the A2/AD concept. Recognizing that no state (or non-state actor) can withstand the full onslaught of American power, the prudent response dictates finding ways to stem the seemingly boundless American power projection and force capabilities. Thus, there is an effort to balance power by increasing the cost and risk to American global reach and power projection.

Ballistic and cruise missiles, advanced surface-to-air missiles, extended range anti-ship missiles, and asymmetric efforts such as mining and small boat tactics offer a

² J.F.C. Fuller, *The Conduct of War 1789-1961* (New Brunswick: De Capo Press, 1992), 239-243.

new level of threat American forces have not grappled with previously. While only a few countries currently possess the technology to develop A2/AD systems, the spread of A2/AD technology presents a strategic conundrum for the United States, with second- and third-order effects that carry significant ramifications. Exportation of these weapons can turn a third world country into a regional power. Should Iran or Syria, as they reportedly have attempted, acquire weapons like the Russian S-300 surface-to-air missile systems, activities by the United States and its allies in the Middle East will be gravely vulnerable, or at the least more restricted. A2/AD capabilities can extend beyond a country's sovereign air and sea space to air and sea routes in the global commons and strategic chokepoints. The U.S. strategy of maintaining and advancing free trade, advancing democracy, or supporting coalitions against threats to its citizens will potentially incur much more risk and limit options.³

As the two nearest military peers to the United States, Americans must consider Russian and Chinese defense decisions carefully. Even though world opinion has universally condemned territorial aggression, neither Russia nor China appears significantly deterred. Richard Haass worries this global ambivalence “to allow Russia to escape ... universal condemnation after its taking of Crimea last spring,” could encourage Chinese attempts to gain control of disputed islands in the South China Sea.⁴ Few, if any, conventional forces or the threat of forces will have sway without the capabilities to survive the current proliferation of A2/AD advances both Russia and China are introducing.

³ U.S. White House, *National Security Strategy* (Washington, DC: Government Printing Office, February 2015), 2.

⁴ Richard N. Haass, “The Unraveling: How to Respond to a Disordered World,” *Foreign Affairs*, 93, no. 6 (November/December 2014): 71.

The implications will put the United States and its allies at substantially more risk due to the emerging character of an A2/AD conflict. History suggests third party interventions-which the U.S. finds itself often as the lead element-through unilateral, coalition, or international organizations will likely not abate soon.⁵ Typical American responses like deterrent power projection presence or punitive air strikes might prove less persuasive. Forward basing incurs more risk and usually avoided forcible entry operations may be required for effective intervention. All of these consequences potentially diminish American influence, power, and reduce options.

Some analysts argue that traditional state on state wars may become fewer and internal or trans-state “war amongst the people” may become dominant in the future.⁶ Nevertheless, U.S. forces must prepare for future security demands across the spectrum of conflict and the possibility of limited access to the global commons. Putting a total or economic war with China aside, consider a contested chokepoint like the Straits of Hormuz, Malacca, Sicily, or Gibraltar. Other than occasional piracy and fishery disputes, most of the world’s trade goods flow through these areas unmolested. If anyone of these areas were suddenly mined, covered with mobile advanced SAMs, long range anti-ship weapons, and other A2/AD systems including cyber-attack, not only would U.S. power projection activities be threatened but so would humanitarian assistance or disaster relief operations.

⁵ During the first thirty years after the establishment of the United Nations (UN), the UN launched thirteen peacekeeping operations; following the Cold War nations conducted more than forty-seven similar missions under United Nations auspices. Feargal Cochrane, *Ending Wars: War and Conflict in the Modern World* (Malden, MA: Polity Press, 2008), 42.

⁶ Rupert Smith, *The Utility of Force* (New York: Alfred A. Knopf, 2007), 19.

Even at the lowest tier, costs associated with operations in contested A2/AD might prove to be extremely high. Aircraft and ship loss rates, especially non-stealth designs, might suffer high attrition rates. Sea forces could find themselves effectively blockaded from areas of intended control. Land forces could lose air or amphibious insertion capabilities unless commanders assume enormous risks. Even intermediate staging bases and forces forward deployed overseas are continuously under increasing risk from intermediate range ballistic and cruise missiles during peacetime. Contingency plans relying on their use may require revision.

Higher tiered A2/AD systems might target space-based systems degrading communications, navigation, targeting, and data dissemination. Due to extended ranges for sanctuary, U.S. forces may lose the high density, high tempo operational levels they have used to overwhelm weaker foes, not to mention the added risk of extended resupply lines. Figure 1 illustrates some of the complex A2/AD obstacles confronting war planners. It is clear that gaining secure access will confront operational planners with significant sea, air, and space challenges in almost any scenario.

To come to grips with this emerging challenge to U.S. dominance, the Air Force and Navy are increasingly concerned about the tremendous costs required to support and sustain operations where A2/AD systems might pose a significant threat. Some question if the U.S. military's heavy reliance on combat systems that require a permissive environment is a strategic mistake. As a test case, planners studied scenarios in the Western Pacific Ocean taking place towards the end of the first decade of the twenty-first century. It pitted U.S. forces against a "near-peer" threat in a war game.

Conclusions drawn from these exercises gave birth to the AirSea Battle concept. In 2009, Secretary of Defense Robert Gates directed the Navy and Air Force to examine options to project power and maintain access to the global commons. This action yielded the AirSea Battle concept and led to the formation of AirSea Battle Office, an AirSea Battle executive committee, a senior steering groups, and subject matter expert working groups.⁷ Endorsement by the JCS to implement a concept that would support joint force development of capabilities to overcome A2/AD capabilities arrived in the form of the Joint Operational Access Concept (JOAC) document, which recommended institutional, conceptual, and initiative based approaches to meet this emerging problem set.⁸

When AirSea Battle authors publicly acknowledged the new joint concept, little detail was available to the public. Unsanctioned efforts by the nonpartisan think tank Center for Strategic and Budgetary Assessments expanded loose details into a more than 120 page treatment on its view of the subject.⁹ Various academics both expounded upon and derided varying points of this work; some even published books debating varying strategies in a potential state on state duel with China.¹⁰ Control of the central ideas became problematic as the unclassified and uninformed narrative wandered away from the essence of the problem that first drew military thinkers toward AirSea Battle – the proliferation of A2/AD systems and the perceived lack of concern for its growing impact on future U.S. strategic and operational level planning.

⁷ Department of Defense, Air-Sea Battle Office, *Air-Sea Battle: Multi-Service Collaboration to Address Anti-Access and Area Denial Challenges* (Washington DC: AirSea Battle Office, May 2013), 4-5.

⁸ Office of the Chairman, Joint Chiefs of Staff, *Joint Operational Access Concept, Version 1.0* (Washington, DC: Department of Defense, January 17, 2012), 4.

⁹ See Jan Van Tol, et. al., *AirSea Battle: A Point-of-Departure Operational Concept* (Washington, DC: Center for Strategic and Budgetary Assessments, 2010).

¹⁰ See Aaron L. Friedberg, *Beyond Air-Sea Battle: The Debate Over US Military Strategy in Asia* (New York: Rutledge, 2014), 73-99.

AIRLAND BATTLE AS A MODEL

Writers of AirSea Battle adopted the 1980s concept of the AirLand Battle as a model for capturing the new challenges and capabilities required for operating on a future battlefield. While the AirLand Battle overreached in its ambition to unify the Services under a single doctrine, it did yield an agreement on broad capabilities necessary to defeat a Soviet invasion of Europe.¹¹ AirLand Battle doctrine arose in the aftermath of Vietnam in the late 1970s. The U.S. Army was at a point of “physical depletion and psychological defeat” while “the Soviets had made huge gains in their conventional and nuclear forces.”¹² The Vietnam experience exposed a palpable gap that existed in service coordination.

As the U.S. military reconstituted and began a transition to a volunteer-based force, the Soviet Union’s conventional threat to Europe dominated discussions. AirLand battle marked a return to the Clausewitzian concept of a decisive battle and emphasized the importance of operational art. Borrowing the idea of deep battle from the Soviets, renaming it deep operations, it required a fusion of land and air capabilities coordinating on a scale not seen since World War II.¹³ While land forces engaged front line forces, other land and air assets would strike the second and third echelon Soviet forces to break the momentum of attack, disrupt movement, and frustrate coordination.

Many commonalities exist between the two documents (AirLand and AirSea) published 30 years apart. The major difference is that AirSea Battle’s premises required a mutually supporting joint approach to warfare while the 1980s AirLand Battle fell short

¹¹ With their own Maritime Strategy document, the USN remained largely independent of AirLand Battle influence.

¹² Douglas W. Skinner, *Airland Battle Doctrine* (Alexandria: Center for Naval Analyses, 1988), 3.

¹³ *Ibid.*, 31.

as a truly joint agreement.¹⁴ To meet their operational vision, Airland Battle advocates called for more than 70 technology development programs between the Army and Air Force, many later fielded such as data links, advancements in standoff precision weapons, and night vision devices.¹⁵ The 2012 *Joint Operational Access Concept* (JOAC) has codified many of the AirSea Battle precepts. The JOAC lists 30 operational capabilities that will lead to new or the refinement of existing war fighting systems.

It is not surprising that AirSea Battle used AirLand Battle as a model. The strategic conditions are closely parallel. During their respective developments, the armed forces were emerging from long and indecisive wars against an enemy that frustrated attempts to defeat it by conventional means. Meanwhile, the prospective contemporary state threats appeared to mature its conventional forces. These experiences led to a refocus on high intensity state on state warfare against a reliable threat. The potential enemy state's capabilities appeared to outmatch the current U.S. conventional force capabilities, creating a potential strategic mismatch. As a result, AirSea Battle, just as AirLand Battle did, advocated for a transformative modernization effort and a reordering of operational thinking.

The planting of the seeds for AirSea Battle occurred well before the events of 9/11. At the turn of the century, military scholars were calling for the creation of a joint national A2/AD training center for war-gaming against a simulated hostile force, but the

¹⁴ Many Air Force leaders viewed the concept as the Army's attempt to "dictate targets, attack timing, and airpower priorities" at the corps level subordinate to the land component commander's "scheme of maneuver" undermining the air component commander. Air Force leaders' views of strategic attack and deep interdiction appeared restricted at the behest of lower level Army commanders. Benjamin S. Lambeth, *The Transformation of American Air Power* (Ithaca: Cornell University Press, 2000), 292.

¹⁵ Skinner, *Airland Battle Doctrine*, 23.

events following 9/11 delayed the traction of these ideas.¹⁶ However, the AirSea Battle concept has met extreme resistance within the military and from civilian critics.

Although there is little debate over the increasing A2/AD threat, there has been significant debate about AirSea Battle as a valid, guiding military concept for future warfare.

The JOAC, which intended to provide the guiding precepts and capabilities necessary for the future joint force, absorbed many of the ideas underpinning the AirSea Battle concept. The AirSea Battle became a sub-concept, or a set of ideas within the broader JOAC document. Admittedly, it is difficult to discern clear differences between the AirSea Battle theme of networked, integrated, and attack in depth (actually a modernized version of AirLand Battle concepts) and the JOAC's theme of "cross domain synergy" in describing how the joint force will operate against A2/AD future challenges. It is now time to turn to an examination of AirSea Battle as a warfighting concept and its reception.

¹⁶ Steven Koisiak, Andrew Krepinevich, and Michael Vickers, "A Strategy for a Long Peace," in *Strategy and Force Planning*, ed. Richmond Lloyd et. al., 4th ed., (Newport: Naval War College Press, 2004), 556.

CHAPTER 2

AirSea Battle, Marred Reception

In its classified form, AirSea Battle concept writers sought to describe the emerging A2/AD threat, form methods and requirements the Services would need to deal with a future A2/AD environment, and reexamine existing systems and platforms to determine whether these systems would require enhancements or divestiture in favor of new systems and platforms. In 2014, the chair of the AirSea Battle Senior Steering Group, Rear Admiral James G. Foggo restated the concept as “a set of ideas that preserves freedom of access in the global commons in the face of emerging anti-access and area denial threats. It includes initiatives to improve doctrine, organization, training, materiel, leadership personnel and facilities within the Services’ purview to man, train and equip the Joint force.”¹⁷ Navy Chief of Naval Operations Admiral Greenert and Air Force Chief of Staff Mark Welsh defined the global commons as “those areas of the air, sea, cyberspace, and space that no one ‘owns’ but upon which we all depend.”¹⁸ At its root, the AirSea Battle concept describes an approach using network attacks to gain advantage and the initiative, attempts to paralyze the enemy’s command and control to break its kill chains to allow operational freedom of action, and then a sustained offensive of destroying delivery platforms and the weapons they launch.¹⁹ AirSea Battle

¹⁷ Harry J. Kazianis, “Air-Sea Battle Defined,” *The National Interest* <http://nationalinterest.org/Commentary/airsea-battle-defined-10045> (accessed December 11, 2014).

¹⁸ Jonathan Greenert and Mark Welsh. “Air-Sea Battle; the Challenge We Can’t Ignore.” www.navy.mil/cno/GreenertWelsh_FINAL_ASB.docx, (accessed November 22, 2014). 1.

¹⁹ In 2013, yet another acronym was added to the AirSea Battle lexicon: NIA/D3 – Networked, Integrated, Attack in Depth to Disrupt, Destroy, and Defeat. Air-Sea Battle Office, *Air-Sea Battle: Multi-Service Collaboration to Address Anti-Access and Area Denial Challenges*, May 2013 (Washington DC: AirSea Battle Office), 4-5.

is an application and development of methods that might be a “component of a larger strategy.”²⁰

When the Center for Strategic and Budgetary Assessments (CSBA) published an unclassified study titled *AirSea Battle: A Point-of-Departure Operational Concept*, presenting a backdrop and significant key tasks to combat an opponent featuring A2/AD capabilities, the document became the target of pundits, strategists, and partisans. This host of critics responded harshly to the AirSea Battle concept. Pointing to an unnecessary and unwarranted focus on China, critics charged that AirSea Battle was less an operational concept and more of a thinly veiled resource grab by the Air Force and Navy, at the expense of the Army and the Marine Corps. To some detractors, AirSea Battle represented an attempt to stoke a second Cold War to support an arms buildup to benefit the U.S. defense industry as the two wars wound down.

In the CSBA document China is, without question, America’s conceptual foe. The document even goes as far as portraying Chinese actions in the Pacific as similar to Nazi Germany’s unchecked rise prior to World War II.²¹ The scenarios presented ironically patterned Chinese perceived aggression along the lines of Imperial Japan in the 1930s.²² This rather alarmist depiction of China associated with a future warfighting concept did not contribute to harmonious relations with Asia Pacific nations, and least of all, China. The main problem, it seemed, was a concept without a strategy. At least the AirLand Battle concept resonated with the larger containment strategy of the Cold War.

²⁰ Friedberg, *Beyond Air-Sea Battle*, 81.

²¹ Jan Van Tol et al., *AirSea Battle: A Point-of-Departure Operational Concept* (Washington, DC: Center for Strategic and Budgetary Assessments, 2010), 4.

²² Amitai Etzioni, “Who Authorized Preparations for War with China?” 8, no. 2 *Yale Journal of International Affairs*, (Summer 2013), 21.

AirSea Battle, on the surface, appeared to have no such strategic rationale. George Washington University professor Amitai Etzioni worried that the paucity of policy guidance from the White House allowed an unrestrained military to create a mythical enemy in China to bolster demands for research and development funding for unnecessary and expensive technology.²³ T.X. Hammes opined that AirSea Battle was the “antithesis of strategy” and without proper accompanying strategic thought, he doubted whether AirSea Battle “logically advances or retards” American aims.²⁴

David Gompert and Terrence Kelly described the concept as incomplete and indecisive, and expressed fears that AirSea Battle could “make a crisis more likely to lead to hostilities.”²⁵ Another observer blamed much of the controversy over AirSea Battle on unqualified analysis resulting from “limited public knowledge thereof leading to misinterpretation, misunderstanding, and intellectual malpractice” and lamented its public release.²⁶ Various camps within the Pentagon and inter-Service rivalries also led to harsh criticism of AirSea Battle. Amid downsizing and redeployment from Iraq and Afghanistan, the Army and Marine Corps viewed AirSea Battle as a threat as they cast about to “secure new missions and funds” to fend off what they perceived as an unbalanced reduction in land forces and budgets.²⁷

Although focusing AirSea Battle on China provided a lucid reality and urgency to the emerging significance of the advances in A2/AD capability, the salient message of the

²³ Ibid., 37-38, 45.

²⁴ T.X. Hammes, “Offshore Control: A Proposed Strategy for an Unlikely Conflict,” *Strategic Forum*, no. 278 (June 2012): 2-3.

²⁵ David Gompert and Terrence Kelly, “Escalation Cause: How the Pentagon’s New Strategy Could Trigger War with China,” *Foreign Policy*, <http://foreignpolicy.com/2013/08/03/escalation-cause> (accessed January 3, 2015), 2.

²⁶ Bryan McGrath, “Five Myths about AirSea Battle,” *War on the Rocks*, entry posted July 15, 2013, <http://warontherocks.com/2013/07/five-myths-about-airsea-battle> (accessed December 12, 2014).

²⁷ Amitai Etzioni, “Who Authorized Preparations for War with China?”, 48.

universality of the threat that A2/AD measures represented to the current configurations of the American armed forces was blurred.²⁸ The AirSea Battle concept, like its predecessor AirLand Battle, attempted to address a specific theater strategic-operational threat with a joint concept. However, the AirSea Battle advocates followed the pattern too closely. Exchanging the USSR for China and assigning China the same motives for aggression of earlier enemies, the authors correspondingly exchanged the European Theater for the Western Pacific Theater. In response to the firestorm of criticism, the AirSea Battle office published a slimmed-down version of ASB in mid-2013, conspicuously removing any mention of China.

Despite the storm the CSBA document created, the fact remains that the United States faces a significant challenge to its current dominating warfighting capabilities. These challenges required acknowledgment and addressing. Appreciation of this reality reflected in both the 2010 Quadrennial Defense Review and the 2012 Defense Strategy Guidance emphasizing the importance of countering A2/AD threats. In 2012, the Chairman of the Joint Chiefs of Staff General Martin Dempsey signed the *Joint Operational Access Concept* (JOAC). This document, included as part of the *Capstone Concept for Joint Operations: Joint Force 2020*, called for a joint reexamination of the A2/AD problem. The JOAC document published by the JCS codified many of the AirSea Battle precepts (See Appendix A).

²⁸ All of these criticisms contain some validity, some based on misperceptions, and many were simply out of the purview of the concept. First, the unheralded Chinese modernization of its military began more than a decade before AirSea Battle, not as a reaction to it. Some suggested the adaptation of A2/AD strategy by China was the result of the American response during the Taiwan Strait crisis during the winter of 1995 and the accidental bombing of the Chinese embassy during the Serbian air campaign in 1999. China's increasingly aggressive disputes with its Asian neighbors over territories and fisheries also predated the AirSea Battle doctrine. The Chinese A2/AD strategy more likely represents an "anti-intervention" warning aimed at the United States regarding affairs in the Western Pacific. See Friedberg, *Beyond Air-Sea Battle*, 18-20.

Like AirLand Battle, AirSea Battle highlights a threat to U.S. and allied forces that will require new approaches to joint movement and maneuver. The great difference between the two concepts relates to budgets. AirLand Battle came on the scene just as the Reagan administration's rearmament effort began. AirLand Battle was perfectly suited for Congress to authorize funding for new technologies and equipment. AirSea Battle, in contrast, has emerged in the midst of post-war redeployments and fiscal retrenchment. Congress is reluctant to undertake new expenditures. No matter its importance, fiscal realities will directly limit the increased spending necessary to implement a new warfighting concept.

The JCS's appreciations for this is reflected in the JOAC directive related to AirSea Battle, requiring the Services to search for "*efficiencies and commonalities* in how (primarily) the Navy and Air Force do their jobs in contesting adversary A2/AD capability."²⁹ AirSea Battle as part of the JOAC is a concept, not a strategy. It serves to recommend investment in ways to defeat A2/AD stratagems to "enable follow-on operations," which can apply in any contested environment.³⁰

The JOAC states up front the gravity of the problem: "The contest over operational access can dominate practically all other considerations in warfare."³¹ The JOAC seeks to harness a joint effort toward creating a warfighting concept that ensures strategic movement in any contested environment. With the publication of the JOAC, AirSea Battle won a prominent role as the centerpiece of a new concept for a changing battle space – air, sea, cyber as the decisive domains of a campaign. The Army and the

²⁹ Bryan McGrath, "Five Myths about AirSea Battle."

³⁰ Greenert and Welsh. "Air-Sea Battle; the Challenge We Can't Ignore," 3.

³¹ Office of the Chairman, Joint Chiefs of Staff, *Joint Operational Access Concept, Version 1.0*, 5.

Marine Corps joined AirSea Battle in 2012 with the publication of a document entitled *Gaining and Maintaining Access: An Army-Marine Corps Concept*. This document began to grasp the importance of A2/AD strategies, emphasizing that ground forces should “employ with minimal need for reception, staging, onward movement, and integration or dependence on local infrastructure” while acknowledging a reliance on air and sea control.³² General Martin Dempsey, Chairman of the Joint Chiefs of Staff, summed up the land force view succinctly: “[i]f you’re stopped, we’re stopped.”³³

The emergence of AirSea Battle is representative of a phenomenon that was common in the twentieth century. Innovations in operational thinking and force development occur when strategic-operational circumstances force change. These circumstances vary, but in general, they relate to fiscal restraints, the consequences of a defeat, or the technological developments that drive recognition that reform, modernization, or change is necessary.³⁴

For AirSea Battle to be a viable and useful warfighting concept, it has to follow a particular intellectual process of analysis, assessment, and conceptualization leading to an operational outline that can guide both development and employment of an operational force. The next chapter will illustrate how a similar operational adjustment to new realities occurred over 80 years ago by examining the circumstances that served as impetus to change.

³² US Army Capabilities Integration Center and Marine Corps Combat Development Command, *Gaining and Maintaining Access: An Army-Marine Corps Concept Version 1.0* (Fort Eustis, VA: USACIC), 4, 7.

³³ John A. Tirpak, “Evolving the 21st Century Air Force,” *Air Force Magazine* 95 no. 11 (November 2012): 42.

³⁴ Jon T. Thomas, “Implementing Joint Operational Access: From Concept to Joint Force Development,” *Joint Forces Quarterly* no. 75 (4th Quarter 2014):140.

CHAPTER 3

Parallels to Past Military Concepts

You should not pour new wine into old vessels.

Heinz Guderian, *Achtung-Panzer!*, 1937

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Although wielding the premier dominant military force in the world, American national civilian and military leaders find themselves facing a range of strategic challenges. A bleak economic outlook and competition for limited resources appears to be the near term status quo. The dilemma emerging from the ambiguous legitimate use of conventional forces paired with an increasingly dangerous inaccessible battlefield is daunting. Does the mightiest military in the world spend and invest in technology for the modern battlefield, reorganize itself for irregular warfare, or continue as it has since the end of the Cold War with hedging strategies? Facing a myriad of global challenges without synergistic joint force thinking will cause a paralysis in strategic thinking and will lead to predictable, expensive, and all-encompassing solutions that lack ownership, trust, or purpose.

Contemporary writers on strategy argue over the makeup of the next military paradigm shift. Some opine the very nature of war is changing, the erosion of the nation state's monopoly of power has occurred, and envision future war characterized by warfare predominately conducted by drones, robots, and computers.³⁶ Yet constrained

³⁵ Heinz Guderian, *Achtung-Panzer! The Development of Armoured Forces, Their Tactics and Operational Potential* (London: Brockhampton Press, 1999), 212.

³⁶ Mary Kaldor, "American Power: From 'Compellence' to Cosmopolitanism?," *International Affairs* 79, no. 1 (2003): 4-5; A CSBA study suggests the U.S. military needs to "offset" the investments that adversaries are making in anti-access/area-denial (A2/AD) capabilities—particularly their expanding missile inventories—"by leveraging U.S. advantages in unmanned systems and automation, extended-range and low-observable air operations, undersea warfare, and complex system engineering and integration." Robert Martinage, *Toward a New Offset Strategy: Exploiting U.S. Long-Term Advantages to Restore U.S.*

resources and futuristic fantasies are typical in times of uncertainty. History illustrates how even in the worst of times, new military concepts and capabilities emerge.

In post-World War I Germany, a threatening future fraught with irrational fear, anger, and helplessness loomed. The Treaty of Versailles severely reduced the size of the standing army and navy, disbanded the general staff, and outlawed conscription. Intended to nullify Germany as a future threat, these limitations actually offered German military leaders the opportunity to advance new ideas about modern warfare.

Heinz Guderian consolidated the transformational sparks that fueled prewar German operational art, procurement, and doctrine. His vision expanded the scope and scale of operations and set the course for the *Wehrmacht* to dominate the battlefield during the first years of World War II. This transformation from a minuscule, defeated military surrounded by superior foes, to a continental power capable of defeating armies with speed and shock occurred in the span of only 15 years. Guderian authored the unifying concept that offered his national leadership the military ways to change completely what seemed to be impossible strategic ends. Despite minimal resources, political chaos, and economic turmoil, the German military leadership maintained a strategic focus and turned their efforts toward using the lessons of World War I to its advantage.

Guderian's visionary use of armor that became the vanguard of the German operational maneuver forces went much further than tactics. Much as Helmuth von Moltke, the elder, had appreciated the potential railway movement offered, Guderian saw

Global Power Projection Capability, 2014. <http://www.csbaonline.org/publications/2014/10/toward-a-new-offset-strategy-exploiting-u-s-long-term-advantages-to-restore-u-s-global-power-projection-capability> (accessed January 25, 2015), v.

in the tank and the internal combustion engine a way to mobilize his visualization of maneuver warfare.³⁷ His efforts provided a solution to the attrition of static trench warfare. He espoused the integration of tactical airpower in a close support role, addressed the sustainment needs of the deep penetration, and reduced the primacy of the infantry arm. Guderian synthesized his ideas by studying British and French experiences in tank warfare, coupled with emerging thoughts from theorists such as J.F.C. Fuller, Basil H. Liddell-Hart, Ernest Swinton, and Giffard Le Quesne Martel.³⁸ His vision went beyond traditional institutional arguments and instead relied on technology that was still in its infancy.

Instead of merely improving existing technology, which he considered a “narrowing and negative concept,” Guderian distilled the importance of the utility this new form of warfare offered.³⁹ Guderian linked evolving technology to a new concept intended to break tactical-operational stalemate. Despite limitations that were daunting the German military leadership designed and developed a force and operational concept to make it functionally effective. The German military then built and trained such a force to operate effectively.

The strategic uncertainty facing Germany in 1930 is akin to the daunting strategic environment emerging today. Despite the naysayers, Guderian harnessed a technology to support a novel operational concept of maneuver based on speed and tempo. This capability of the *Wehrmacht* did not occur overnight, and required an organizational rebirth, as well as a redesign of equipment, establishing new training approaches, and

³⁷ Moltke won three major wars during 1864-1871 during the unification of Germany. Quincy Wright. *A Study of War*, 2nd ed. (Chicago: University of Chicago Press, 1983), 67.

³⁸ Guderian, *Achtung-Panzer!*, 14.

³⁹ *Ibid.*, 24.

developing tactics and doctrine. Further, his initiative required backing by an institutional dedication to a concept that answered an operational problem in support of strategic ends.

COMMON TIES

One of the overarching premises of the original AirSea Battle concept's purpose was to illuminate a compelling need to confront the A2/AD approach that General Welsh and Admiral Greenert labeled as "a new form of coercion."⁴⁰ Near-term aggressive strategies potentially adopted and enabled by A2/AD systems may comprise of approaches and elements that include bordering annexations, anti-interference short duration operations, non-attributional demonstrations, and insidious, peripheral cyber-attacks. The impetus for the U.S. military to counter these threats to its own and its allies' interests stem from the National Security Strategy.

Today, potential enemies or actors resisting external interference have presented a problem on the global stage by introducing barriers restricting the military element of national power American foreign policy has traditionally employed. Strategic debates over future war tend to discount conventional large-scale operations. Nevertheless, the most dangerous threats to peace and security in the world do not include non-state actors like Boko Haram, ISIS, or the Taliban. It is Iran, Russia, and potentially China – traditional nation-states pursuing their national interests at the expense of other nation-states. By developing a significant A2/AD capability and exporting or projecting it into key chokepoints such as the Strait of Hormuz, the Black Sea, or the South China Sea the

⁴⁰ Greenert and Welsh. "Air-Sea Battle; the Challenge We Can't Ignore," 1.

U.S. and its allies will be limited in deploying forces and employing them, regardless of the scale of the conflict.

The point is that lesser powers (state or non-state) encouraged by these examples can cheaply attain A2/AD systems to deny intrusion by driving the cost up severely to intervening parties. A brief destructive event under the protection of A2/AD systems will become more difficult to deter, punish, or contain. Non-attributional actions like cyber-attacks present an ominous complementary denial weapon. Cyber-attacks against non-military infrastructure or those paralyzing communications-reliant command and control apparatuses like those of the U.S. can frustrate plans, forces, and affect political outcomes. The United States must develop an operational concept that supports national strategic interests and negates or limits A2/AD systems.

The achievement of Guderian in leading the process of developing a new concept of warfare to meet strategic goals can serve as a model for the U.S. military today. Echoing the Guderian model, the AirSea Battle Office argued that the concept went beyond the limited objective and “is about fostering institutional change, conceptual alignment, and material change in and among the Services.”⁴¹ This requires a similar model of thinking.

⁴¹ Department of Defense, Air-Sea Battle Office, *Air-Sea Battle*, 9.

CHAPTER 4

Where Are We?

Command of the commons is the military foundation of U.S. political preeminence. It is the key enabler of the hegemonic foreign policy that the United States has pursued since the end of the Cold War.

Barry Posen, “Command of the Commons,” 2003

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The previous chapters introduced the AirSea Battle as a warfighting concept and broadly traced the concept’s development to its inclusion into the JOAC, thereby gaining relevance among senior military leaders. In early 2015, the director of the joint staff, General Goldfein, announced the Services would develop, evaluate, and implement the AirSea Battle concept under a new title: *Joint Concept for Access and Maneuver in the Global Commons*, or (JAM-GC) (See Appendix B).⁴³ This same memorandum directed the J-7 Joint Force Development compartment of the joint staff to monitor and support the concept’s development.⁴⁴ It remains unclear if the J-7 is to absorb the personnel in the AirSea Battle office, or, more importantly, how the concept will fare once subsumed within the general staff structure.⁴⁵

It is possible that, part of a long view, JAM-GC will drive innovation and the force development initiatives within the Services. The term “global commons” as a centerpiece of strategic thinking about A2/AD threats may be the key to the success of JAM-GC. Fully grasped, strategists can now frame the enormity of the A2/AD problem,

⁴² Barry Posen, “Command of the Commons: The Military Foundation of U.S. Hegeomony,” *International Security* 28, no. 1 (summer 2003): 21.

⁴³ Lagrone, Sam, “Pentagon Drops Air Sea Battle Name, Concept Lives On,” USNI News. January 20, 2015. <http://news.usni.org/2015/01/20/pentagon-drops-air-sea-battle-name-concept-lives> (accessed January 21, 2015).

⁴⁴ Ibid.

⁴⁵ A paper outlining the revamped treatment under its new name is due at the end of 2105.

not from the lens of a state on state conflict, but in preserving the world's freedom of navigation and economic lifelines. This is directly in harmony with the U.S. National Security Strategy goals of international order and economic prosperity. Likewise, "freedom of maneuver" speaks to joint force better than "freedom of action or navigation." Thus, the choice of terms will play a large role in making the JAM-GC a truly joint strategic-operational concept for future warfighting.

Conversely, the new reorganization may signal the possible shelving and watering down of the concept by parochial interests. Congressional reaction to a lukewarm Service response to JAM-GC, along with a preoccupation with ongoing operations, and a willingness to continue to acquire or extend outdated infrastructure and platforms could lead to maintaining the status quo. The danger is that the majority of U.S. tactical units will remain unprepared for combat in a true A2/AD environment. Platform limitations, lack of live, advanced threat simulators, and antiquated, minimal training regiments will keep most units isolated from transforming their efforts to tackle the AirSea Battle scenarios.

ORGANIZATION, TRAINING, DEVELOPMENT

The AirSea Battle Office contended a closer collaboration among Services required "expanding integration efforts through collaborative planning and increased liaison to emphasize more joint training at the operational and tactical levels."⁴⁶ However, efforts towards this idea are more difficult to accomplish than they appear. Training opportunities among the Services are infrequent, cost prohibitive, and usually devolve into de-confliction exercises orchestrated straight from the 1990s playbook.

⁴⁶ Department of Defense, Air-Sea Battle Office, 9.

When coalition partners are involved, the simplification of the training objectives occurs due to safety concerns and classification security sensitivities. The merit of coalition exercises is in the establishment of safe practices, lasting personal relationships, and mutual respect among potential coalition partners. The issue of tackling the A2/AD problem, though, remains out of reach or lightly treated.

In one example, the USAF's prized RED FLAG exercises are typically tailored and restricted preventing originality of thought at the tactical level. Retired Air Combat Command chief General G. Michael Hostage stated the Air Force is "focusing on that contested, degraded environment, dealing with anti-access" but "the fifth generation brought us capabilities and lethality that are straining my abilities at RED FLAG to produce that same realistic combat environment."⁴⁷ The scenarios lack true A2/AD threats and often result in objectives suited to the lowest common denominator or participant. Artificialities include tasking friendly aircraft unsuitable to the scenario accomplishing unrelated mission sets. Instead of removing artificialities, a division of the scenarios into part-task training events occurs. A rotating tactical mission commander shares the opportunity to gain experience, but usually results in one-dimensional problem solving centered on that member's background. Air Force and Navy leaders acknowledge "a level of integration well beyond today's efforts to merely pre-plan and de-conflict actions between Services" is required.⁴⁸ No one service can solve the A2/AD problem, and the application of joint military power necessitates joint solutions.

⁴⁷ John A. Tirpak, "Evolving the 21st Century Air Force," 38. See also Brian Everstein, "Hostage: Virtual Training Needed to Address Limits of Red Flag," *Military Times*. August 10, 2014. http://www.airforcetimes.com/article/20140810/NEWS/308100_029 (accessed November 2, 2014).

⁴⁸ Greenert and Welsh. "Air-Sea Battle; the Challenge We Can't Ignore," 3.

The training ranges and the simulated enemy force are also inadequate to provide proper air and surface threats commensurate with a modern A2/AD battlefield. Space and cyber training is limited or wholly simulated. Mistakes go uncorrected, opponent units typically act in predictable patterns, and lessons taken away are lost due to the falseness of the entire premise of the force composition or mission set. It is difficult to find feedback documentation from an exercise, especially for units, which did not directly participate.

Efforts to grapple with emerging threats have improved in the form of the joint exercise NORTHERN EDGE, but it is only biannually and budgetary constraints forced its cancellation of the most recent planned event. The AirSea Battle Office touted tabletop war games held with multiple nations participating, but they apparently have little utility. Exercise VALIANT SHIELD, held in the Pacific near Guam, presents an excellent opportunity for Air Force and Navy synergy. However, planning appeared somewhat disconnected and communications with the forces at sea are not well coordinated.⁴⁹ Exercises involving Army missile defenses coordinating with air and sea forces are extremely rare even when operating in collocated areas. Constructs to grade and assess this training also require further refinement.

TESTING DEVELOPMENTS REALATED TO A2/AD CHALLENGES

The Services do reflect a serious attempt to modernize for an evolving A2/AD contested operational environment. The Army Joint Land Attack Cruise Missile Elevated Netted Sensor System (JLENS) successfully cued a cruise missile intercept by a Navy-launched SM-6 missile. In another test, an airborne Air Force F-22 updated coordinates

⁴⁹ Coordination based on author's own observations, 2012.

for a Navy launched Tomahawk cruise missile in flight.⁵⁰ Both of these bode well for AirSea Battle's vision of a joint, data shared interconnectedness. They also illustrate the benefit of integrating complementary joint force capabilities.

However, these efforts are rare, and not in concert or necessarily complementary. This lack of coordination further surfaces in the continuing pattern of procuring permissive environment weapons systems or incrementally improving outdated existing material and marginalizes the few joint initiatives. The Services continue to give life to systems with little utility except in permissive operating environments. In the 2015 budget request, for example, the Air Force is modernizing C-130 tactical transports, the Navy is buying more than a dozen littoral combat ships, and the Army is incrementally improving its existing fleet of tanks, infantry fighting vehicles, and mobile artillery.⁵¹ In fairness, some of these systems may have valid reasons for resourcing, but on the surface, these decisions do not appear to resonate with the new Secretary of Defense Ashton Carter, who stated that the military "needs to continue to invest in future-focused capability" and be relevant in a modern fighting environment.⁵² In fact, what is needed is a mutually agreed on, bounding warfighting concept to guide force development, integration, and employment based on a strategic understanding of the current and future conditions that will shape how wars (or conflicts) are fought.

⁵⁰ Greenert and Welsh. "Air-Sea Battle; the Challenge We Can't Ignore," 4. The SM-6 is an upgraded USN Standard Missile (Surface to Air missile) utilizing AMRAAM (Advanced Medium Range Air-to-Air missile) flight control logic. JLENS is a system of two tethered airships equipped with over-the-horizon radars arrayed primarily to protect land forces and key rear areas from missile attack.

⁵¹ Office of the Under Secretary of Defense (Comptroller)/Chief Financial Officer. *United States Department of Defense Fiscal Year 2015 Budget Request*. March 2014, Chapter 7.

⁵² John A. Tirpak, "Evolving the 21st Century Air Force," 36.

GAPS

The tenants of the JOAC and JAM-GC need purposeful presentation to shape strategic and operational thinking. In a case study of the causes of World War I, Steven Van Evera warned that arms races and parity “compel much of the same behavior and produce the same phenomena that drove the world to war in 1914.”⁵³ In the current balance of power, this requires maintaining a major edge over potential enemies while simultaneously sagely never putting these same entities on “death ground,” requiring them to make a choice between surrender and destruction.⁵⁴ Acquisition of capabilities to combat advanced A2/AD systems should focus towards the protection of forward basing and the global commons to make offensive overtures against the United States extremely costly, and to close windows of vulnerability to prevent potential actors from taking calculated strategic risks at the expense of the United States and its allies.

The Department of Defense should take notice that the JAM-GC requires attention to defensive systems, as well as offensive systems. Cyber systems require hardening as threats to their security accelerate especially with the U.S. adoption of the envisioned networked approach for command and control and information sharing. The U.S. footprint overseas exposes many of its forces and citizens to an increasingly lethal threat with the improvement of cruise and ballistic missile technology and precision. This requires more attention to the Integrated Air and Missile Defense (IAMD) architecture. Likewise, reliance on space-based enablers becomes more a liability as electronic attack and anti-satellite kill mechanisms proliferate.

⁵³ Stephen Van Evera, “The Cult of the Offensive and the Origins of the First World War” *International Security*, 9, No. 1 (Summer 1984): 106.

⁵⁴ Sun Tzu, *The Art of War* (New York: Oxford University Press, 1971), 133.

Applying the Guderian-model, it is clear that a warfighting concept is being developed. How well developed it becomes and how it is embraced as the joint approach to the Service's procurement, training, and development is still problematic at this stage. Likewise, there appears to be an overarching strategic-operational rationale that supports the warfighting concept, however, it too, is not fully integrated yet. Absorption of the concept's monitoring and maturation into an increasingly busy joint staff may delay or defer critical thinking and action regarding this complex problem.

CHAPTER 5

Summary, Recommendations, and Conclusion

Five years after its inception, Service leaders decided to rename the AirSea Battle concept and relocate the effort within the Pentagon. General Welsh and Admiral Greenert acknowledged embracing the ideas behind the AirSea Battle concept would require “institutional change, fostering conceptual alignment, and promoting programmatic collaboration.”⁵⁵ All the Services acknowledge its importance and relevance, but a harmonic approach to reorganize remains undone. Each service is coping differently after 15 years of war and on incredibly high operations tempo. Fiscal constraints are further hampering restructuring, recapitalization, and divestment overtures as the Services grapple to attain acceptable readiness in their core functions.

A holistic strategic husbandry of effort towards form, function, and institutionalization remains lacking. Guiding ideals without detail, integration, training, and institutionalization leads to wantonly throwing money at programs for niche capabilities. Current U.S. joint forces cooperate more than integrate, and command and control of these incongruent pieces into a formidable military strategy falls short. A unified concept of American modern warfare, in all its incongruent forms, is in much want to bind a national approach to force development, funding, and fielding.

However, this rebalance provides an opportunity. Instead of conforming to the normal patterns of hedging strategies and uniformly spreading future budget reductions across all programs, potentially the U.S. government can truly invest in an approach that the JOAC (JAM-GC) broadly captured. Analysis shows that the American way of war

⁵⁵ Greenert and Welsh. "Air-Sea Battle; the Challenge We Can't Ignore," 5.

must now cope with the emerging A2/AD stratagem that appears attractive to potential enemies or parties desiring no interference. Bounded by reality, this transformation will take time, and requires sage thinking. Through analysis, assessment, and conceptualization a great leap in the U.S. armed forces' freedom of action in contested A2/AD environments is attainable. While the threat takes varying shapes, the A2/AD strategy is clear; the warfighting concept to neutralize these potential advantages still requires fleshing out, and its particulars will undoubtedly be sensitive.

This paper recommends an increased devotion to science and technology development, the removal and downsizing of non-essential mission sets and personnel, and the divestiture of outdated platforms along with their corresponding large maintenance and logistical requirements. As this stage begins, the appointment of a messenger charged to carry on the vision advocated by the original Air Sea Battle's central ideas is necessary. Finally, in the meantime, a restructuring of current training and the advent of joint task force specifically tailored, equipped, and trained to confront the immediate A2/AD requirements an activated contingency plan.

Along with civilian industry, the military should commit to considerable science and technology investments. Mine sweeping, electronic attack, standoff weapons not reliant on space assets, advanced manned and unmanned air, surface, and submerged assets are a few areas to consider. Stealthy transportation of land forces, longer-range platforms and weapons, and adaptive synchronization tools require more development. More importantly, the Services should collaborate in efforts with the science and technology community to describe concepts, enumerate capability requirements, and

cooperate in experimentation as guided by the JOAC.⁵⁶ Additional funding towards these efforts will meet resistance as Department of Defense resources shrink, but tough times demand sage, forward thinking decisions and due diligence.

Downsizing normally conveys negative connotations. However, the joint forces are facing this reality as the two wars end or at least the footprint overseas reduces.

Reaffirmation to the core function each service provides in the context of warfighting in future contested environments offers opportunity to close or divest systems, functions, or auxiliary services that are no longer critical. This downsizing will require an accompanying reexamination of existing commitments and functions that are not critical. Close engagement with civilian leadership and the combatant commanders need to find common ground toward prioritizing existing obligations. Overlapping functions among the Services that do not require redundancy should face removal.

As the AirSea Battle Office closes, the ramifications remain unclear on the primacy of the message espoused in the ideals of the AirSea Battle concept and arrayed in the JOAC of the move to the joint staff. Ideally, the joint staff will appoint a high-ranking advocate to lead the concept towards further maturation and fruition. This messenger, much like Guderian, must be able to engage the leaders of all Services and appeal for the codification of the warfighting concept inaugurated by AirSea Battle in the colors of the different Services. This person should have access and frequent audience with all the combatant, functional, and major command commanders. Likewise, the JAM-GC leader will ideally serve as the director for the inauguration of an A2/AD task force construct.

⁵⁶ This approach is in harmony with the JCIDS (Joint Capabilities Integration Development System) process that currently validates requirements for future military systems.

Current training by the joint force must include scenarios requiring critical thinking beyond the tactical battlefield. Robust basing and short ranges to the forward edge of the battlefield situations should be a rarity. Instead, disbursed operating areas with poor communications and tenuous routing to the training area provide realistic situations that a U.S. expeditionary force will likely face. General Hostage advocated for centralized command, *distributed control*, and decentralized execution as an approach to contend with disruptions in the current “C2 architecture: communications, datalinks, navigational systems, and sensors” in order to test American reliance on robust, vulnerable systems.⁵⁷ He proposed the adoption of successful tactical experiments simulating contested command and control into operational level exercises, as he experimented with during his time as the Central Command JFACC.⁵⁸ Contested access to the area of operations also necessitates adaptive tactics, logistics, and procedures to marshal and coordinate forces. These rarely visited stresses might yield solutions or innovative ideas fueling new demands for equipment or adjustments to existing procedures. Wishing away these problems, prevalent practice in peacetime training, only serves to keep U.S. forces unprepared for this high probability when dealing with opponents employing A2/AD systems.

Most critically, and available as an option today, the adaptation of a joint A2/AD task force construct would increase the U.S.’s potential to overcoming the A2/AD threat. Further evolving the JAM-GC idea, this simple approach unifies units from the five domains (air, sea, land, cyber, and space) with capabilities against existing A2/AD

⁵⁷ Gilmary Michael Hostage and Larry R. Broadwell, “Resilient Command and Control: The Need for Distributed Control,” *Joint Forces Quarterly* no. 74 (3rd Quarter 2014): 40-42.

⁵⁸ *Ibid.*, 42-43.

systems and provides a forum to develop training specific to existing operational plans (See Figure 2). Planning conferences attended by the individual units and detailed analysis by the joint planning groups would preface actual live training. Even on a biannual basis, exercises of this extent would socialize the issues, evoke a greater understanding of the problems, trickle down into daily training syllabi, and yield feedback to top-level commanders.

Finding adequate air, sea, and land space for training will be difficult. Creating an opposition force and supporting an intelligence, space, and cyber force objectives would be no small task. However, using the current major exercise infrastructure and increasing the usage of the “virtual constructive arena” could add realism and save costs.⁵⁹ As important, a synergetic approach by forcing service members from all domains to solve the complex problem of A2/AD might yield an institutional dedication that will reflect in doctrine and procedures. These specialized task forces could deploy in support of a combatant commander’s operational plan and provide flexible deterrent options or combat power during phase one or two of a major operation or rehearsal. Once the A2/AD threat diminished or at the achievement of learning objectives, these teams would disband and be absorbed back into the apportioned forces for follow on use. Either way, this teaming of specialized experts in the focused take down of A2/AD systems, backed by evolving tactics, techniques, and procedures, will provide joint planning groups an answer to what is today characteristically understated as problematic.

⁵⁹ Everstein, Brian, “Hostage: Virtual Training Needed to Address Limits of Red Flag,” Military Times. August 10, 2014. http://www.airforcetimes.com/article/20140810/NEWS/308100_029 (accessed November 2, 2014).

The JAM-GC appointed advocate, above all, must see the eloquence and potential of this synergetic approach towards a joint warfighting concept. When queried, Guderian, on the eve of the proposed German assault on France in 1940, suggested he would cross the Meuse and continue to the English Channel after the fifth day to the bafflement of his fellow commanders in the German general staff.⁶⁰ His confidence emanated from his recognition of the advantage his efforts had created in the tested form of his concept of armored warfare. In the 1930s, the *Wehrmacht* trained, codified, procured, and institutionalized a way of fighting that presented German leadership with a variety of military solutions to what appeared to be an impossible strategic-operational situation.

A similar, although diametrically divorced politically, opportunity presents itself today to the American armed forces as they refurbish and resize to confront the challenges of the next decade. Carrying the torch of readying a force ready to gain and potentially fight for access first before even considering classic force on force battle requires a shift in operational thinking. Planners examining critical actions and requirements during phases one and two of a contingency plan cannot rely on secure deployed basing and staging areas and in potential future theaters. Securing access, less time to build up combat power, and adequate supply lines may require the most critical thinking. Gaining access not only enables follow on actions but also may even deter enemies or even staunch situations from spiraling towards open war. These capabilities might offer opportunities to leverage international disputes, and provide off ramps for belligerents contemplating direct conflict.

⁶⁰ J.F.C. Fuller, *The Conduct of War 1789-1961*, 256.

The window for opportunity will close without a reasonable grasp of the greatest shortcoming of the largest and most powerful military in the world. Preparing the joint force by configuring for the worst scenarios only enables a freer rein dealing with all situations. The reverse is strategic paralysis. A refocus on science and technology paired with a house cleaning of outdated functions and tasks benefits the entire enterprise of the Department of Defense. The windfall of costs savings occurs after the divestiture of unneeded platforms because the logistic tail goes away too.

This narrative must continue, ideally in the form of a high-powered well-connected military specialist, to keep the flame alive toward a consistent and cohesive approach toward a holistic view of the problem. Organization and training under a construct of a specific A2/AD thinking group might not only increase American options, but also add substance to operational plans and its corresponding flexible deterrence options. Potential enemies have used more than two decades to study American methods of projecting and wielding combat power, now it is time for the United States to reexamine its own ways and adapt where gaps exist. Guderian proved that critical analysis and conceptualizing a way forward could reveal extraordinary pathways. An American Guderian, to invigorate the JAM-GC movement, might be the catalyst most needed now. If the United States intends to maintain its current strategic standing, effectively power project, and preserve its war fighting potential, the U.S. armed forces' most obvious shortcomings must be acknowledged by the continuation and further development of a war fighting concept fully addressing the Anti-Access/Anti-Denial (A2/AD) approach potential challengers have adopted.

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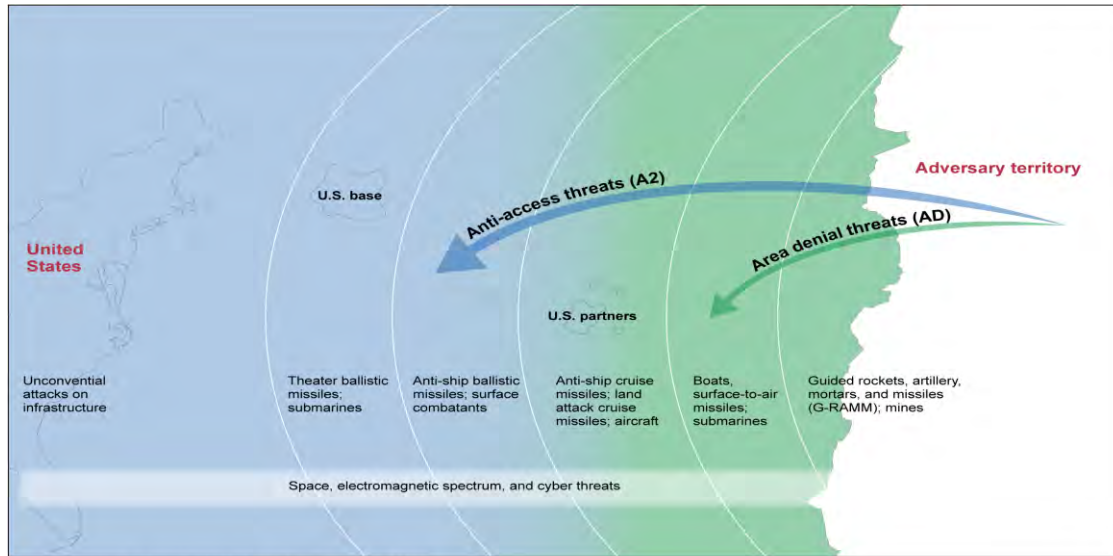
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FIGURE 1. Example illustration of A2/AD systems disposition.



Example of A2/AD systems utilized for an integrated defense.⁶¹

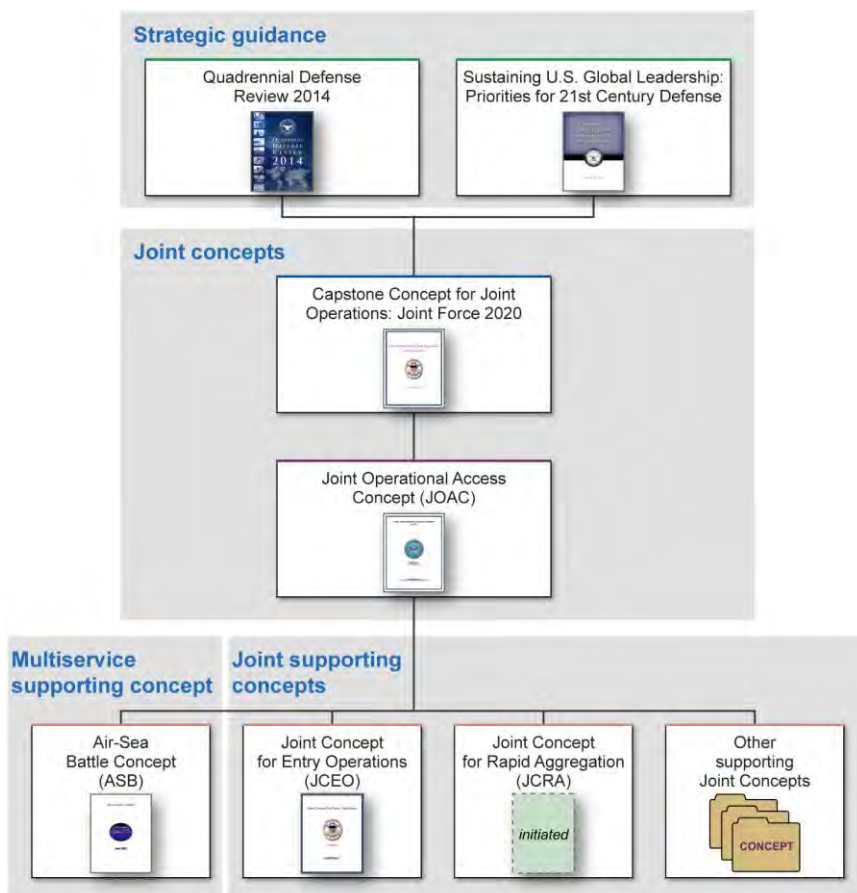
⁶¹ U.S. Government Accounting Office, *Defense Planning: DOD Needs Specific Measures and Milestones to Gauge Progress of Preparations for Operational Access Challenges*, GAO-14-801, Report to Congressional Committees. (Washington, DC: Government Printing Office, 2014), 5.

FIGURE 2. A2/AD TASK FORCE CONSTRUCT.

	AIR	SEA	LAND	CYBER	SPACE
1 ST LEVEL	Fighter Unit A Bomber Unit A Tanker Unit A	SAG – A Mine Warfare A Sub – A	SOF – A SOF – B	CSE – A	AOC – A Intel - A
2 ND LEVEL	Fighter Unit B C2 Unit A	CSG – A Sub – B	MEB – A	CMT –A	
MULTI PURPOSE	CAS Unit A EA/EW Unit A Tanker Unit B UCAV Unit A		AVI Unit – A		
FOLLOW ON UNIT(S)	Fighter Unit C Bomber Unit B C2 Unit B		BCT –A		

APPENDIX A. Nesting and Relationship of Operational Access Documents 2014.

Hierarchy.⁶²



Source: GAO analysis of Department of Defense information. | GAO-14-801

⁶² U.S. Government Accountability Office. *Defense Planning: DOD Needs Specific Measures and Milestones to Gauge Progress of Preparations for Operational Access Challenges*, GAO-14-801. Report to Congressional Committees. (Washington, DC: Government Printing Office, 2014).

APPENDIX B. Joint Staff Memo Renaming AirSea Battle Concept.

	THE JOINT STAFF WASHINGTON, DC
Reply ZIP Code: 20318-0300	DJSM 0009-15 8 January 2015
MEMORANDUM FOR DEPUTY COMMANDERS OF THE COMBATANT COMMANDS DIRECTOR, DEFENSE LOGISTICS AGENCY DIRECTOR, DEFENSE THREAT REDUCTION AGENCY SERVICE OPERATIONS DEPUTIES	
SUBJECT: Joint Concept for Access and Maneuver in the Global Commons	
1. As sponsoring organizations, United States Army, United States Navy, United States Air Force, and United States Marine Corps will organize and lead the development, evaluation, and implementation of a <i>Joint Concept for Access and Maneuver in the Global Commons</i> (JAM-GC), in accordance with Chairman of the Joint Chiefs of Staff Instruction 3010.02D. This concept was formerly known as <i>Air-Sea Battle</i>. 2. The Joint Staff J-7 directorate is directed to monitor and support development of the JAM-GC as required. This will include sponsoring and coordinating an independent red team review of the proposed concept and ensuring integration across other concepts under development. 3. The Joint Staff point of contact is [REDACTED] USN; J-7/FJED; [REDACTED] email: [REDACTED]	
 DAVID Y. GOLDFEIN, Lt Gen, USAF Director, Joint Staff	
cc: USD(AT&L) USD(P)	

Joint Staff Internal Memorandum.⁶³

⁶³ Lagrone, Sam. "Pentagon Drops Air Sea Battle Name, Concept Lives On." USNI News. January 20, 2015. <http://news.usni.org/2015/01/20/pentagon-drops-air-sea-battle-name-concept-lives> (accessed January 21, 2015).

APPENDIX C. ACRONYMNS.

A2/AD	Anti-Access and Area Denial
ASB	AirSea Battle
ASBO	AirSea Battle Office
ALB	AirLand Battle
AMRAAM	Advanced Medium Range Air-to-Air Missile
CAS	Close Air Support
CMT	Cyber Mission Team
CSBA	Center for Strategic and Budgetary Assessments
CSE	Cyber Support Element
CSG	Carrier Strike Group
DoD	The U.S. Department of Defense
EA / EW	Electronic Attack / Electronic Warfare
IAMD	Integrated Air and Missile Defense
JAM-GC	Joint Concept for Access and Maneuver in the Global Commons
JCEO	Joint Concept for Entry Operations
JCSLO	Joint Concept for Sustainment and Logistics Operations
JLENS	Joint Land Attack Cruise Missile Defense Elevated Netted Sensor System
JIP	Joint Implementation Plan
JOAC	Joint Operational Access Concept
MEB	Marine Expeditionary Battalion
SAG	Surface Action Group
SM-6	Standard Missile-6 (USN Surface-to-Air Missile)
UCAV	Unmanned Combat Aerial Vehicle
USA	United States Army
USAF	United States Air Force
UN	United Nations
USMC	United States Marine Corps

VITA

Lt Col Nicholas J. Reed graduated from the United States Air Force Academy in 1996. He is a command pilot in F-22A and F-15C aircraft. He has instructed at the USAF Weapons School and both the F-15C and F-22A fighter-training units. Additionally, he led the establishment of the F-22A Air and Ground Weapons System Evaluation Program. Lt Col Reed also participated in Operation DESERT FOX, Operation SOUTHERN WATCH, and Operation NOBLE EAGLE and deployed to several locations including Saudi Arabia, UAE, Japan, Guam, and Iceland. He is also a graduate of the Naval Command and Staff College and the Maritime Advanced Warfighting School. He holds Masters' Degree in Aeronautical Science and in National Security and Strategic Studies. His most recent assignment was as the commander of the 90th Fighter Squadron, JBER, AK.