



## AIR-SEA BATTLE CONCEPT

*China's defence capabilities are growing and its military is modernising, as a natural and legitimate outcome of its economic growth. This will inevitably affect the strategic calculations and posture of regional countries and is changing the balance of military power in the western Pacific.*

Defence White Paper 2013, p. 11

The military forces of the United States (US) and its allies rely on unimpeded global movement to stabilise regions and deter threatening regimes. But the rise of anti-access/area denial (A2AD) capabilities pose a significant challenge to such movement, thwarting the US' ability to project power and force on its own terms. By developing an A2AD strategy and capabilities, regional adversaries are able to contest US power projection and presence, and to oppose the operational and strategic influence of the US.

In 2009, recognising a need to preserve ways to project power and maintain freedom of action in the global commons, the US Secretary of Defense directed the Departments of the Navy and the Air Force to address this challenge and to develop an operational concept to be called Air-Sea Battle (ASB). In November 2011, a multi-service office to advance the ASB concept was created—with Army, Marine Corps, Navy and Air Force members—to collaborate in developing and analysing new and innovative ways to address the A2AD military problem.

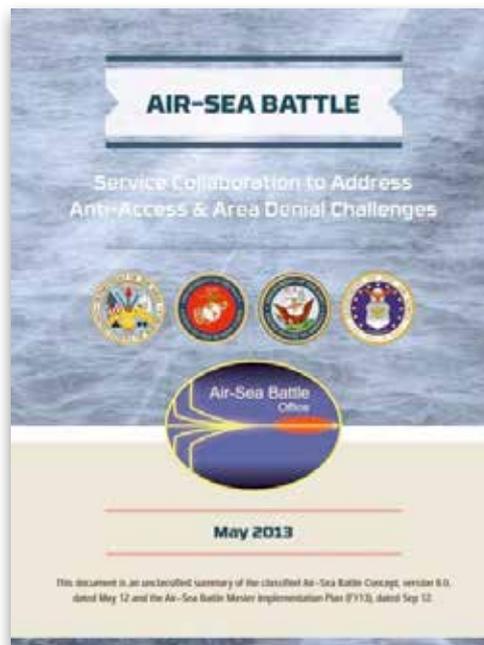
The recently released *Air-Sea Battle: Service Collaboration to Address Anti-Access & Area Denial Challenges* is the first unclassified, official summary of the classified ASB concept, detailing how the US will deal with extant—and emerging—A2AD challenges. A2AD capabilities are those which challenge and threaten the ability of friendly forces to both get to the fight and to fight effectively once there. Notably, an adversary can use the same capability for both A2 and AD purposes, thereby making power projection increasingly difficult, and in some cases extremely dangerous.

A2 and AD are relatively new terms in the military lexicon. A2 consists of actions intended to slow deployment of friendly forces into an operational theatre or cause forces to operate from distances farther from the conflict than they would otherwise prefer. AD actions are intended to impede friendly operations within areas where an adversary cannot or will not prevent access. That is, A2 affects movement to a theatre, whereas AD affects manoeuvre within it.

A2AD ideas are not new. The desire to deny an adversary both access and the ability to manoeuvre have always been elements of successful warfare. However, the proliferation of technologically advanced weapons are empowering potentially aggressive actors with previously unattainable military capabilities leading to instability. A new generation of cruise, ballistic, air-to-air and surface-to-air missiles with improved range, accuracy and lethality are now freely available. Modern fighter aircraft and submarines are now part of military forces of even smaller nations, while sea mines are being equipped with mobility, discrimination and autonomy. The space domain is now integral to communications, surveillance and positioning, and

along with the cyberspace domain, is becoming increasingly contested. The pervasiveness and advancement of computer technology and reliance on the Internet and usable networks are creating means and opportunity for debilitating cyber attacks by state and non-state aggressors.

Any concept aimed at addressing operational problems associated with A2AD must be based on realistic assumptions regarding how a potential adversary would employ A2AD capabilities. In developing its ASB concept, the US has identified five factors that provide a



*The recently released, Unclassified ASB document dealing with response to the challenges of A2AD.*

conservative view of what an adversary could do, and how they would influence the US response. The factors are: the adversary will initiate military activities with little or no warning; given the lack of warning, forward deployed friendly forces will need to address A2AD challenges at the commencement of hostilities; potential adversaries will attack US and allied territory considered to be supporting operations against adversary forces; all domains will be contested by the adversary—air, maritime, land, space, and cyberspace; and, no domain can be completely ceded to the adversary, as to cede one domain would inevitably lead to the eventual loss of the other interdependent domains.

ASB describes what is necessary for a joint force to sufficiently shape A2AD activities to enable concurrent or follow-on power projection operations. Although not officially identified as an operational plan or strategy for a specific region or adversary, ASB seeks to ensure the US' ability to gain and maintain freedom of action in the global commons against a sophisticated adversary. It includes an analysis of the threat and a set of classified concepts of operations, or CONOPS, describing how to counter A2AD challenges, both symmetrically and asymmetrically, and develop an integrated force with the necessary capabilities to succeed in denying A2AD activities. ASB is about building conceptual alignment, programmatic collaboration, and institutional commitment in an integrated manner across the military Services in order to develop forces and capabilities that can jointly address A2AD challenges. The purpose of ASB, therefore, is to increase operational advantage across all domains, enhance Service capabilities, and mitigate vulnerabilities.

The central idea behind ASB is to develop networked, integrated forces capable of attack-in-depth to disrupt, destroy and defeat adversary forces (NIA/D3). ASB's vision of networked, integrated and attack-in-depth operations requires the application of cross-domain operations across all the interdependent warfighting domains (air, maritime, land, space, and cyberspace), to disrupt, destroy and defeat A2AD capabilities, and provide maximum operational advantage to friendly joint and coalition forces. A networked force is people and equipment linked in time and purpose with interoperable procedures, command and control structures, and appropriate authorities capable of translating information into actions. An integrated joint force is better able to combine capabilities across multiple domains to conduct specific missions, but it needs to be embedded across Service lines as part of force development.

The attack-in-depth methodology is based on countering an adversary's process of finding, fixing, tracking, targeting, engaging and assessing an attack on friendly forces. Disrupt, destroy and defeat represents

the lines of effort for ASB; namely, disrupt adversary command, control, communications, computers, intelligence, surveillance and reconnaissance (C4ISR); destroy adversary A2AD capabilities; and, defeat adversary employed weapons and formations. Disrupting these effects chains includes impacting an adversary's C4ISR capabilities, ideally precluding attack on friendly forces. Destroying or neutralising adversary weapons platforms enhances friendly survivability and provides freedom of action. Defeating employed weapons, post-launch, defends friendly forces from an adversary's attacks and allows sustained operations.

At its core, ASB is the professed solution to the A2AD challenge in the global commons. It is based on creating multi- and cross-domain capabilities that can be exploited in an agile manner, by operating inside the adversary's decision loop without them knowing or suspecting where the next blow is coming from, denying the adversary the ability to react to it. It is not necessary to disrupt, destroy or defeat every ship, missile or aircraft. One only has to gain and maintain dominance for the necessary time period at the specific place needed to achieve the required effect. The key is figuring out how to operate inside the adversary's decision loop, change or influence their calculus, and operate at a pace with cross-domain, multi-domain capabilities that deny the adversary the ability to limit friendly force freedom of manoeuvre and action.

Given the proliferation of advanced A2AD technologies, NIA/D3 solutions will be a necessary component for US and allied forces to continue to confidently operate forward and project power on a global or regional basis. Air-Sea Battle should be seen as a natural evolution of the joint force towards more networked and integrated operational solutions. At its simplest, it is about fostering institutional and materiel change, and conceptual alignment in the Services to preserve ways to project power and maintain freedom of action in the global commons.

## Key Points

- *Air-Sea Battle: Service Collaboration to Address Anti-Access & Area Denial Challenges is the first unclassified summary describing how the US will deal with A2AD challenges.*
- *The Air-Sea Battle solution is to develop networked, integrated forces capable of attack-in-depth to disrupt, destroy and defeat adversary forces.*
- *Air-Sea Battle aims to increase operational advantage across all domains, enhance Service capabilities, mitigate vulnerabilities, assure allies and deter potential adversaries.*



## Air Power Development Centre

F3-GF, PO Box 7932, Department of Defence  
CANBERRA BC ACT 2610

Ph: 02 6128 7041 Fax: 02 6128 7053

Email: [airpower@defence.gov.au](mailto:airpower@defence.gov.au)

Web: [www.airforce.gov.au/airpower](http://www.airforce.gov.au/airpower)

