

Headquarters U.S. Air Force

Integrity - Service - Excellence

Air-Sea Battle & Technology Development



**Col Gantt
AF/A5XS
20 Mar 12**

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Agenda

- **Background & Scope**
- **Definitions**
- **ASB Concept Overview**
- **ASB Central Idea:**
 - **Networked, Integrated, Attack-in-Depth to Disrupt, Destroy, Defeat (NIA-D3)**
- **Technology Development**
- **Way Ahead**



Background & Scope

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AIR-SEA BATTLE

Preface

Since the end of World War II, the United States military has fostered and protected global systems of trade, commerce, information, finance and law. With the ability to project power nearly anywhere in the world, our nation's military services have intervened in crises large and small to support U.S. and allied security and prevent local conflicts from becoming regional or global disruptions. This ability to "take the fight to an adversary" – in the air, on land, and at sea – has assured our allies and partners and formed the foundation of worldwide coalitions.

The rapid development and proliferation of certain military technology, however, empowers those who would challenge the continuity of these global systems and the U.S. ability to protect them. Various nations and non-state actors have begun to acquire a broad array of military capabilities that threaten U.S. and allied freedom of action. These capabilities include traditional weapons such as aircraft, submarines, mines, and missiles; and also encompass emerging capabilities in the space and cyberspace domains. Taken together, these systems constitute a formidable array of "anti-access, area-denial" capabilities that challenge the U.S. military's ability to project power. Unless countered, this challenge will reduce the credibility of U.S. security guarantees and the confidence of legitimate users that they will continue to enjoy unconstrained access to the global commons.

In July 2009, the Secretary of Defense directed the Departments of the Navy and Air Force to address this challenge by collaborating on an Air-Sea Battle Concept. This concept is intended to drive the institutional and doctrine, organization, training, materiel, leadership, personnel and facilities actions of an integrated Navy, Air Force, and Marine Corps team as it embraces an evolving anti-access, area denial environment. Through unprecedented cooperation, integration, and determination, the Air Force, Navy Marine Corps – and Army - will continue to employ a lethal future fighting force that is together greater than the sum of its parts.



James F. Amos
General, U.S. Marine Corps
Commandant, U.S. Marine Corps

Gary Roughead
Admiral, U.S. Navy
Chief of Naval Operations

Norton A. Schwartz
General, U.S. Air Force
Chief of Staff, U.S. Air Force

- Task originated with SecDef – Followed-up with QDR and other documents / speeches
- An *Initiating Concept*
- A Limited Objective Concept
 - Enables concurrent or follow-on operations
- Adaptable to all potential adversaries
 - Advanced State Actors
 - Regional Non-State Actors
- DOTMLPF actions derived
- Concept Implementation to be done:
 - Force Development
 - Planning and Execution of Operations
- ASB requires change on three levels:
 - Institutional / Conceptual / Materiel



Anti-Access/Area Denial (A2/AD)

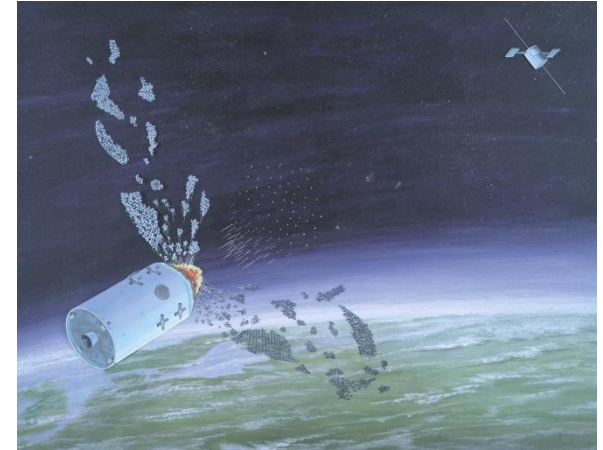
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■ Anti-Access:

- Action aimed to slow movement into theater or cause operations from distances farther than desired

■ Area Denial:

- Action intended to impede ability to maneuver within the theater



VS





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ASB Concept Overview

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- Creates maximum operational advantage for DAF, DA & DON forces to address A2/AD challenges
- Framework for a tailorable portfolio of capabilities to deter and, if necessary, to defeat an A2/AD adversary





ASB Central Idea: NIA-D3

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Networked: C2 of Cross-Domain Operations; enhanced level of command and control

Integrated: Air and naval capabilities tailored to missions or operations

Attack In-Depth: Project forces through denied space zones

- **Lower-Signature Forces (LSF):** Forces that exploit specific U.S. capability advantages to conduct ISR and deliver precision effects in denied areas with a low probability of detection.
- **Higher-Signature Forces (HSF):** Forces that provide the bulk of U.S. power projection.

Single or Multiple LOEs
In Parallel and/or Sequentially

LOE 1: *Disrupt C4ISR networks*

LOE 2: *Destroy enemy capabilities*

LOE 3: *Defeat enemy employed weapons*

Enemy A2/AD Strategy & Capabilities

Result: Gain decision advantage

Result: Regain freedom of action

Result: Sustain offensive operations

NIA describes the "HOW" ... D3 describes the "WHAT"



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Networked, Integrated, Attack-in-Depth

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- ***Networked*** – Managing and controlling Cross-Domain Operations
 - Physical networks: Mission-Assurance focused
 - Human networks: Mission-type command
- ***Integrated*** – Capabilities combined for specific missions or operations
 - Interoperability
 - Common training
 - Create familiarity via habitual relationships
- ***Attack-in-depth*** – Attack critical vulnerabilities wherever required
 - Timely, offensive action to gain or maintain initiative
 - Deploy and fight versus deploy then fight
 - Task-organized for the mission and risk

U.S. Will Employ a Lethal Fighting Force That is Together Greater Than the Sum of Its Parts

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D3 Lines of Effort

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- ***LOE 1: Disrupt adversary C4ISR***
 - **Intent: Attack the left side of the effects chains**
 - **Example: Physical attack, CNA, EA, deception, and dispersion**
 - **Result: Gain decision advantage**
- ***LOE 2: Destroy adversary platforms and weapons systems***
 - **Intent: Neutralize threatening systems in range of coalition forces**
 - **Example: Physical attack to destroy specific capabilities**
 - **Result: Regain freedom of action**
- ***LOE 3: Defeat adversary employed weapons***
 - **Intent: Defend forces in order to preserve offensive/defensive power**
 - **Example: Kinetic/non-kinetic; Reversible/non-reversible defense**
 - **Result: Sustain offensive operations**

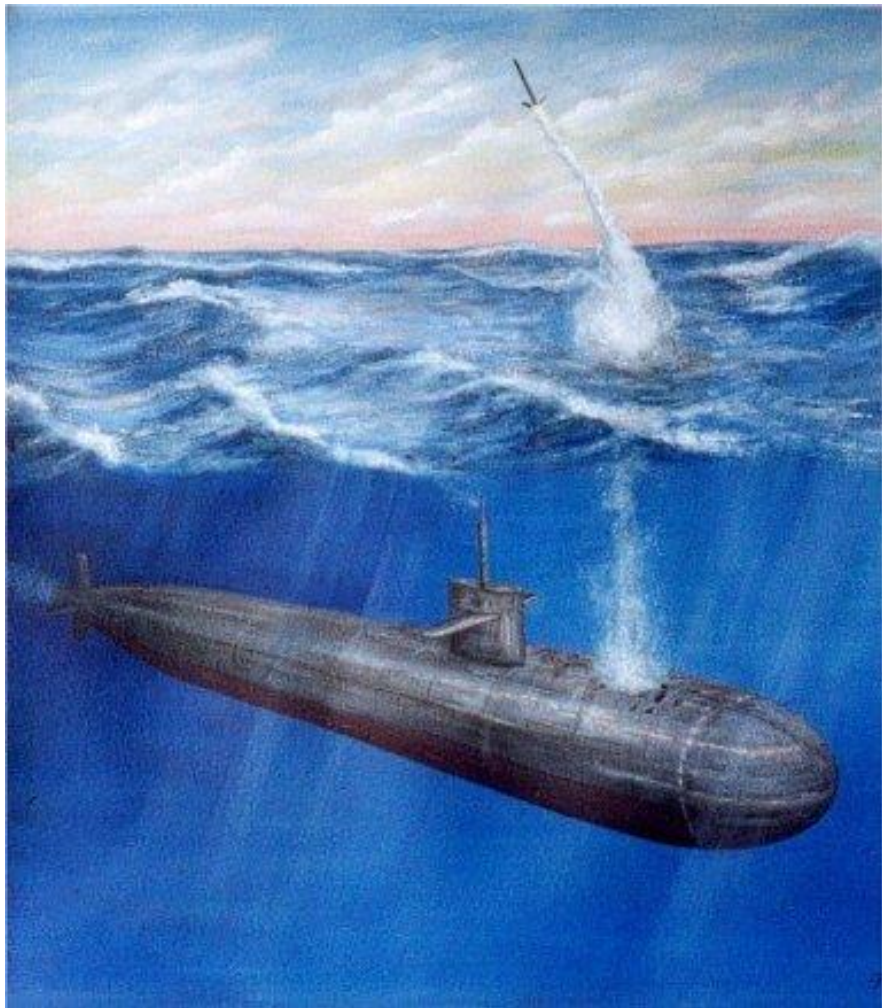
LOEs Executed Simultaneously or Sequentially ... In Any Needed Order



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ASB Applied

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Technology Support to ASB

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- **Technology Must Support Key ASB Principles:**
 - **Networked**
 - **Integrated**
 - **Cross Domain**
 - **Multi-Pathing**
 - **Data Sharing**
 - **Preserve and/or Create Joint Operational Advantage**



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Areas for Development

-
- **Areas for technology development to support ASB:**
 - **Long Range Strike / Stand-Off Capabilities**
 - **Data Links**
 - **Communications**
 - **Sensors**
 - **Cyber Connectivity & Increased Bandwidth**
 - **Space**
 - **Space-Based Infrared**
 - **Extremely-High Frequency & GPS-III satellite systems**
 - **Low Observable (LO) Technology**
 - **Remote Piloted Vehicles**



ASB Way Ahead

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- ***Institutional:*** Industry “best operating practices” can help drive DoD institutional change
- ***Conceptual:*** Industry alignment with this new concept better supports DoD’s future vector
- ***Materiel:*** ASB calls for overlap where needed but with a shared investment strategy

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