

ASNE Combat Systems Symposium

Balancing Capability and Capacity



RDML Jim Syring, USN

Program Executive Officer Integrated Warfare Systems

March 27, 2012

Report Documentation Page

Form Approved
OMB No. 0704-0188

Public reporting burden for the collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to a penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number.

1. REPORT DATE 27 MAR 2012			2. REPORT TYPE			3. DATES COVERED		
4. TITLE AND SUBTITLE Balancing Capability and Capacity						5a. CONTRACT NUMBER		
						5b. GRANT NUMBER		
						5c. PROGRAM ELEMENT NUMBER		
6. AUTHOR(S)						5d. PROJECT NUMBER		
						5e. TASK NUMBER		
						5f. WORK UNIT NUMBER		
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) USN, Program Executive Officer Integrated Warfare Systems, Washington Navy Yard, Washington, DC, 20374						8. PERFORMING ORGANIZATION REPORT NUMBER		
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)						10. SPONSOR/MONITOR'S ACRONYM(S)		
						11. SPONSOR/MONITOR'S REPORT NUMBER(S)		
12. DISTRIBUTION/AVAILABILITY STATEMENT Approved for public release; distribution unlimited.								
13. SUPPLEMENTARY NOTES The original document contains color images.								
14. ABSTRACT								
15. SUBJECT TERMS								
16. SECURITY CLASSIFICATION OF:				17. LIMITATION OF ABSTRACT	18. NUMBER OF PAGES 7	19a. NAME OF RESPONSIBLE PERSON		
a. REPORT unclassified	b. ABSTRACT unclassified	c. THIS PAGE unclassified						

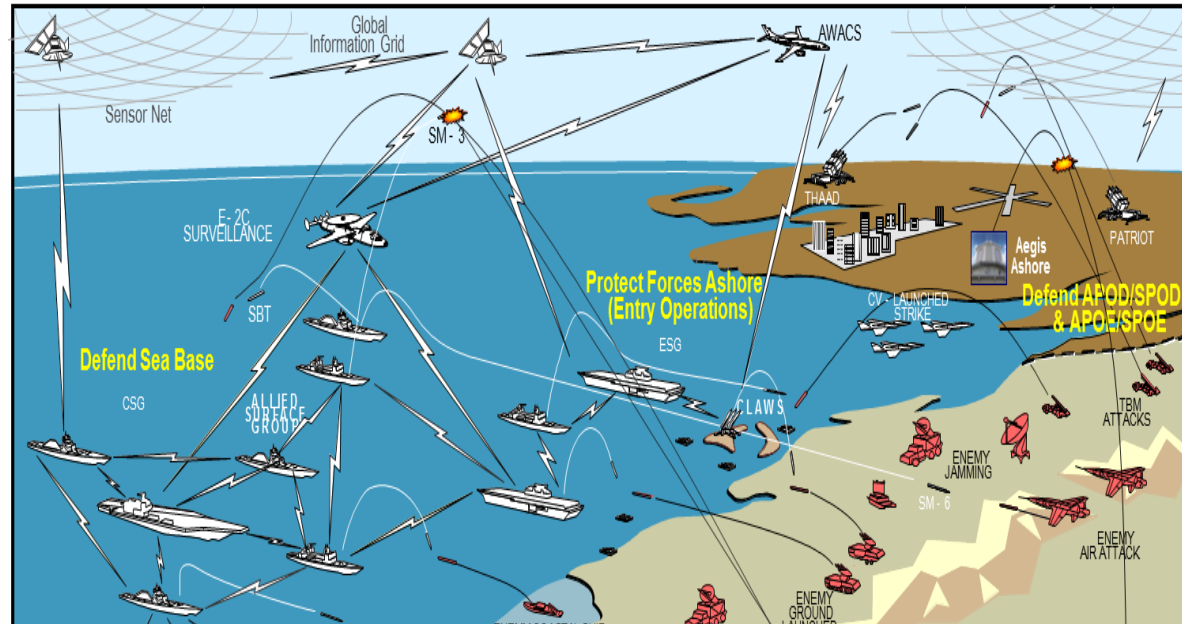


Balancing Capability and Capacity

◆ Capability

– Meeting COCOM Mission Requirements

- **IAMD**
 - » Self-Defense
 - » AAW
 - » BMD
- **Surface**
- **Undersea**
- **Strike**
- **Cyber Warfare**



◆ Capacity

– Force Size, Composition and Availability

- **System Wholeness**
 - » Interoperability
 - » Maintainability
 - » Training, ...
- **Affordability**





Rapidly Evolving Requirements Drive Navy Capability Advancements

Operational Environment

Humanitarian Assistance

Persistent ISR

Complex Threats
Employing Advanced Technology

Anti-Piracy

Disaster Relief

Torpedoes

Anti-Ship Ballistic Missiles

Advanced Super-Sonic Anti-Air & Anti-Ship Missiles

Mines

Over Land Defense

Space Based BMD Tracking

Multi-Ship Resource Coordination

Directed Energy

Capability Advancements

Integrated AAW & Situational Awareness

Area Air Defense In Clutter Environments

Improved Self-Defense

Enhanced Shipboard Sensors (Radar + ES/EA)

Cyber Defense

High Data Rate Battle Group Networks

Integrated Air and Missile Defense

UAV Integration

Rail Guns

Navy Missions Have Expanded → New Capability Requirements



Capability Trends

Current Systems

Individual On-board Mission Systems (AAW, BMD, USW, etc.)



Ships with AAW focus Or BMD focus



Rotating Radars On Carriers



Improved SPY-1 variants on CGs and DDGs



Independent Hard Kill and Soft Kill Systems



CM/Decoys for Soft Kill



Manually Operated Small Guns



Extended Battlespace Through EOR using SPY-equipped Ships



Future Systems

Increased Integration of On-board Mission Systems



SPY-1 MMSP Upgrade

MH-60R Integration



Integrated AAW and BMD



Phased Arrays on Carriers



AMDR-S

Advanced Phased Array Technology

Volume Search Radar



SEWIP

Integrated Hard Kill & Soft Kill

Improved Electronic Attack for Soft Kill

Automated Gun Systems for Small Boat Raids

MK38 Gun System



More Flexible EOR Expanding To Other Navy/Force Sensors

NIFC-CA SBT SM-3 BLK IIA



AEGIS Ashore



Combat System Capability Roadmap

Improved Mission Capability

Enabling Developments

Force Integration

Advanced Technologies



**Enabled by Advanced Technologies
And Increased Integration**



Challenges of Balancing Capability and Capacity

- ◆ **The Surface Navy is vital to global presence**
- ◆ **The challenge is doing more under fiscal constraints**
- ◆ **Discipline in management and engineering is an imperative for effectively Upgrading and Sustaining The Fleet**