Force Structure

VADM Terry Etnyre
25 October 2006
"This is a different world we're in today. It's unconventional instead of conventional; it's asymmetric instead of symmetric; it's irregular instead of regular; and it is so different for us that we need to...learn to fight this battle as effectively as we were successful with respect to the Cold War."

Secretary Rumsfeld, April 2006
Issues and Challenges

• Uncertain threats
  – MCO...The Long War...Tomorrow's Focus?

• Define Requirements
  – Prevent Requirements Creep

• What is the Right Mix?
  – Capabilities must meet the threat

• Resources
  – Must Control Costs
## Future Fleet: 313 Ship Navy

<table>
<thead>
<tr>
<th>Type/Class</th>
<th>Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aircraft Carriers</td>
<td>11</td>
</tr>
<tr>
<td>Surface Combatants</td>
<td>88</td>
</tr>
<tr>
<td>Littoral Combat Ships</td>
<td>55</td>
</tr>
<tr>
<td>Attack Submarines</td>
<td>48</td>
</tr>
<tr>
<td>Cruise Missile Submarines</td>
<td>4</td>
</tr>
<tr>
<td>Ballistic Missile Submarines</td>
<td>14</td>
</tr>
<tr>
<td>Expeditionary Warfare Ships</td>
<td>31</td>
</tr>
<tr>
<td>Combat Logistics Force</td>
<td>30</td>
</tr>
<tr>
<td>Maritime Prepositioning Force (Future)</td>
<td>12</td>
</tr>
<tr>
<td>Support Vessels</td>
<td>20</td>
</tr>
<tr>
<td><strong>Total Naval Force</strong></td>
<td><strong>313</strong></td>
</tr>
</tbody>
</table>

*Balances Capability with Affordability*
The Right Mix

Other Total = CVN, MPF, Submarines, MCM
Capable and Affordable: LCS

- Access to the world’s littorals
- Spiral Development
- 50 knot maximum speed
- Reconfigurable Mission Modules
- Optimally Manned Crew
- Entering the Fleet in 2007

LCS will have an immediate impact in the Global War on Terror
LCS Design Concept

- Fast, Maneuverable, Shallow Draft Hull
- Total Ship Computing Environment
- Air & Watercraft Capability
- Core Systems
- Core Crew
- C4I Navigation
- Self Defense Radar
- Vehicle Control
- Maint & Support

LCS

- SEAFRAME
- MIW
- MISSION PACKAGE

Core Capabilities
- MIW
- ASW
- SUW

Mission Systems
- Mission Modules
- Mission Crew

Focused Capabilities

Mission Systems
- Radar
- Maint. & Support
- Fuel
- VTUAV
Affording the Future Fleet

- Navy Strategic Plan
  - Focus on Capabilities
  - Build to the Requirement

- Modernization
  - Prevent early retirement

- Sea Enterprise
  - Transformation
  - Navy Enterprise Construct

*Meeting warfighting requirements at an affordable price and acceptable level of risk*
Modernization

Mission Life Extension Upgrades
**CG Baselines 2,3,4**

- **BMC4I**
- **CEC (Variant)**
- **SGS A/C (B/L 2)**
- **CDLMS (B/L 2)**

- **AIR DOMINANCE**
  - 7 PH 1C computer program
  - COTS computing plant
  - Radar and Display upgrades
  - VLS Modifications

- **FORCE PROTECTION**
  - ESSM
  - CIWS BLK 1B
  - SPQ-9B (ASMD)
  - SARTIS
  - SQQ-89A(V)15 (B/L 3 & 4)

- **GUN WEAPON SYSTEM**
  - (2) 5 inch/62 Guns
  - MK-160 Gun Computing System
  - OSS

- **HM&E**
  - All Electric Mods
  - Smart Ship Upgrades
  - Structural Modifications
  - Quality of Service Upgrades

- **B/L 2=CG52-58**
- **B/L 3=CG59-64**
- **B/L 4=CG65-73**

- **DDG-51 Class**
  - **AIR DOMINANCE**
    - CIC Display Upgrades
    - Open Architecture Computing Plant
    - VLS Mods (ESSM)
    - AWS CR-3 Computer Program
    - Multi-Mission SIGPRO
    - SPY-1D Transmitter Upgrades
    - Multi-Mission BMD
    - IABM (SIAP)
    - SM6/NIFC-CA (IOC FY14)
    - FCS STAMO Upgrades
    - CEC
  - **FORCE PROTECTION**
    - CIWS-1B
    - NULKA
    - SEWIP
    - SSTD (ATT) – IOC FY13
    - MK 54 Torpedo/DFCI
    - SQQ-89A(V)15 w/MFTA

- **HM&E**
  - Full IBS Upgrade
  - MCS/DCS Upgrades
  - GEDMS
  - Wireless Communications
  - Digital Video Surveillance
  - Quality of Life Upgrades
  - Advanced Galley
  - Mission Life Extension Upgrades

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*Getting full service lives from existing ships is a critical enabler in affording our future.*

*Avoiding early-retirement requires commitment to keeping these ships relevant.*
CNSF Mission: Deliver trained, highly effective, and technologically capable Surface forces that are certified across a full spectrum of warfare areas...

Today’s SURFACE FORCE

Surface Warfare Enterprise
- Personnel
- Maintenance/Modernization

SURFOR TRANSFORMATION
- Training
- Logistics

Warships Ready For Tasking

SURFACE FORCE of the Future
Navy Enterprise Construct

Output = Readiness / Cost
For each process, measure output vs. demand, and measure cost

Productivity is Key
Strategic Cost Management

Variance analysis for course corrections

<table>
<thead>
<tr>
<th>Cost Area</th>
<th>Targeted %</th>
<th>Actual %</th>
<th>Variance %</th>
<th>Corrective Plan</th>
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<tbody>
<tr>
<td>RD/TE/IE</td>
<td>14</td>
<td>21</td>
<td>7</td>
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<tr>
<td>Procurement</td>
<td>32</td>
<td>14</td>
<td>18</td>
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<tr>
<td>O&amp;M</td>
<td>32</td>
<td>35</td>
<td>3</td>
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<tr>
<td>Manpower</td>
<td>22</td>
<td>30</td>
<td>8</td>
<td></td>
</tr>
</tbody>
</table>

The Inspiration - Shipbuilding Plan

Ship Driven Costs
- Weapons
- Crew and shore support
- Maintenance
- Modernization
- Consumables

Inspiration

Cost Analysis

Continuing Improvement

Capturing the gains

Disciplined Cycle

Generate and implement the opportunities

Savings

<table>
<thead>
<tr>
<th>Initiative</th>
<th>Start Date</th>
<th>Estimated Completion</th>
<th>Champion</th>
<th>Estimated Value</th>
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<tbody>
<tr>
<td>1 Decoll Engine Program</td>
<td>Aug '06</td>
<td>TBD</td>
<td>TBD</td>
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<tr>
<td>2 CCECRAN</td>
<td>Oct '06</td>
<td>TBD</td>
<td>TBD</td>
<td></td>
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<tr>
<td>3 R&amp;D Productivity</td>
<td>May '07</td>
<td>TBD</td>
<td>TBD</td>
<td></td>
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<tr>
<td>4 Requirements</td>
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<td>TBD</td>
<td>TBD</td>
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<tr>
<td>5 CaliCenter</td>
<td>Nov '06</td>
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<tr>
<td>6 PBL</td>
<td>Feb '07</td>
<td>TBD</td>
<td>TBD</td>
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</tbody>
</table>

Cost targets guide our resource management

Gap Identification

Specific Action Plans

Cost Model
A Fleet for the Future

- 30 Year Shipbuilding Plan
  - 313 Ships
  - Provides Structure and Stability
  - Balances Capability and Affordability

- Affording the Future
  - Control Costs
  - Modernization
  - Enterprise Approach

**Balanced, Rotational, Forward Deployed, and Surge Capable**
Discussion