The Navy’s 30-year Shipbuilding Plan – Challenges To Making It A Reality

Brief to National Defense Industrial Association

24 October 2007
The Navy Today

• Global War on Terrorism
  – A Direct Navy Issue!
    • Over 28,000 Marines and 19,500 Navy personnel in CENTCOM AOR for GWOT support
    • Naval medical personnel in Iraq to support Marine forces
    • CSG and ESG provide continuous on station operational & combat support
  – Indirect Navy commitment
    • Global engagement and partner nation support
    • Stability operations in Philippines and elsewhere
    • Humanitarian assistance and disaster relief throughout the world

• Maritime Presence, Domain Awareness and Supremacy
  – Navy’s core competencies!
    • Worldwide presence with purpose – deterrent shield against major combat operations across the globe
    • Transitioning from legacy to revolutionary platforms
    • World Class people
    • Heavy investment in transformational technology
    • Platforms and people postured for short duration high intensity conflicts

The Navy’s role increasingly important in global security environment
Changing Security Environment

Steady-State

- Homeland Defense
- Consequence Management
- Global Deterrence
- War on Terror / Irregular Warfare
- Interdiction
- Counterinsurgency Stability Ops

Surge

- Conventional Campaigns
- Information Ops
- WMD Elimination
- Major Combat / Strike, Stability Ops, Reconstruction Cons. Management

Regional Deterrence

- Transnational Deterrence
- Active Partnering & Tailored Shaping
- Train & Equip
- Information Ops

Active Partnering with USG Agencies

Variables:

- Frequency
- Number
- Scale / Intensity
- Concurrency
- Duration
- Policy Environment
- Partner Capabilities

Evolving security threat demands transformation
Challenge facing Navy Shipbuilding

Navy Goals
- Sustain Combat Readiness
- Build a Fleet for the Future

Transformation
Strategic Guidance
Current War Operations
Future Force Structure
Readiness Manpower

How do we keep pace and maintain relevance in tightened fiscal environment?

Fiscal Realities
- Limited TOA
- Cost of OIF/OEF/GWOT
- Entitlement Growth in out years
- Competing Government Demand

New ships require major investment
Required Balance

30-year Shipbuilding Plan must be
- Transformational
- Affordable
- Stable

Plan must balance required capability with affordability and industrial base
Transformation to 21st Century Navy

Warfighting requirements inevitably evolve and an adaptable force is a must
LCS Will Fill Today’s & Tomorrow’s COCOM’s Demand Signals

Theater Security Cooperation
- Counter Drug Ops
- GWOT
- Establish Regional Partnerships
- Enhance Hemispheric Stability and Security

Theater Security Cooperation
- Gulf of Guinea
  - Sub-Saharan Navy Cooperation
- HOA
  - Counter Terrorism
  - Counter Piracy
- Persian Gulf
  - Counter Terrorism
  - Regional Engagement
  - Oil Platform Protection

Theater Security Cooperation
- Southern Philippines
  - Counter Terrorism
- Establish Regional Partnerships
- Enhance Hemispheric Stability and Security
First MCM Mission Package
Delivered 14 September 2007
Maintaining Industrial Base

Considerations

• Enduring requirement to maintain shipbuilding capability
  – Impacts shipbuilding plan
• Maintenance of 313-ship force structure
  – 8-10 ships per year
  – Stable and predictable
• Plans will provide
  – Longer production runs
  – Fewer design changes
• Intended to yield
  – Labor pool stabilization
  – More efficient production
  – Cost reduction

The Nation must maintain a viable shipbuilding industrial base
Industrial Partnership

Navy

• Limiting design changes
• Using common hull forms for multiple ship types
• Standardizing engineering plants across ship types
• Using common combat systems across multiple ship types
• Longer production runs
• Matching steady state requirements with procurements
• Incorporating gap following lead ship to integrate learning
• Stabilizing shipbuilding plans

Industry

• Improved production planning
• Economies of scale
• Long term learning
• Improved quality
• Easier modernization
• Quicker introduction of new technologies
• Shortened production times
• Reduced procurement costs

The Navy will do its part but must have industry support to achieve success
Shipbuilding Affordability

- Based on historical figures (FY05$) ~$11B invested annually for new construction yields ~260 ship Navy over long term
- Warfighting requirement about 313 ships requires ~$13.4B annual investment
- Challenges:
  - Ship cost growth
  - Retirement rate
  - New designs
  - Capability gaps
  - New mission requirements

Historical SCN Investment

Resulting Force Size

Affordability is a continuing challenge
Affordability – Primary Challenge

**Navy Actions**

- Performing Long range force level requirements analysis
  - Ship service lives 25-50 years
- Incorporating production study recommendations
  - RAND Study
  - NAVSEA Affordable Future Fleet Study
- Incorporating risk analysis in budgeting
- Modeling procurement options
  - 30-year shipbuilding plan

*The Navy will design a future force that is both capable and affordable*
Navy is committed to controlling the costs of its ships to ensure long-term affordability by enforcing budget discipline for each ship type.

Navy Capabilities Board (NCB) and Resources, Requirements, and Review Board (R3B)

New ships will be built with cost as a design requirement
- CG(X)
- GWOT platforms

New capabilities are vital to an effective force - but how much is enough?
Force Structure Changes

• Current force was largely designed to fight Cold War threat which required costly high-end multi-mission capability
• Current and future threat requires different mix
  – High-end ships to fight and win against future major combat operation threat
  – Larger number of less sophisticated ships to deliver GWOT-level capability in more places
  – Net effect is a larger fleet at lower average per-ship cost
  – Future ship design is less manpower intensive, freeing manpower resources to pay for shipbuilding

The Navy will design a future force that is both capable and affordable
Challenges to Plan Becoming Reality

- Normal challenges in accurately predicting the future
  - Warfighting requirements
  - Economic environment
  - National will
- Increasing budget requirements to support other higher priority defense requirements
- Time required to build a new force
  - Ships being built today will be operational in 2050

Significant challenges must be overcome if plan is to become a reality
Summary

• The Navy’s 30-yr shipbuilding plan will:
  – Address the evolving warfighting requirements to ensure the force we build today is relevant in tomorrow’s global security environment
  – Maintain legacy ships to ensure they reach their expected service lives
  – Establish a viable strategy for acquiring the ships we need when we need them
  – Control costs, minimize design changes and execute optimum procurement methods to ensure the force we build will be affordable

• Industry can contribute by:
  – Relentlessly driving to reduce production costs while maintaining quality
  – Improving manufacturing and production techniques
  – Developing designs that are easily modernized
  – Shortening construction times

Together we can face these challenges and build the right Navy for the Nation
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BACK UPS
Littoral Combat Ship

Lockheed Martin Team
Lockheed Martin
Gibbs & Cox
Marinette Marine
Bollinger Shipyards

General Dynamics
Bath Iron Works
General Dynamics AIS
Austal USA
BAE Systems
MAPC
L3

Competition leads to better ships
LCS Mission Package Capability

Mine Warfare
- VTUAV
- USV
- RMS
- MH-60S

Antisubmarine Warfare
- USV
- MH-60R
- RMS
- Towed Array
- MULTISTATIC

Surface Warfare
- VTUAV
- MH-60R/S
- NETFires
- 30mm Gun

Installed in Mission Module Spaces

A 21st Century Ship for Asymmetric Threats