16th Annual Expeditionary Warfare Conference

N853  Amphibious Warfare Branch

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Amphibious Warfare (N853)

Amphibious Fleet Transformation

- Capability Driven Recapitalization
- Supports Larger/Heavier USMC Footprint
- Full Service Life Ship Modernization
- Supports Joint Strike Fighter Ops
- Supports MV-22 Osprey Ops
- Improved Command & Control
- Improved Self-Defense
- Increased Survivability

Operations from 1-5 miles off beach

Sea-Based Operations from 12+ miles
"The future will be more complex, where all conflict will range along a broad spectrum of operations and lethality, where even near-peer competitors will use irregular or asymmetric tactics, and non-state actors may have weapons of mass destruction, mines, or sophisticated missiles." - Secretary of Defense Gates
Competition for Expeditionary Warfare

Future demand will only increase!

- COCOM requirements for MEUs are increasing:
  - Based on Global Force management Allocation Plan (GFMAP) baseline data
  - Demand (FY12): 4.44 MEUs
  - Sourced (FY12): 2.54 MEUs

- Increased demand for independent Amphibious ship surge deployments:
  - Demand (FY12): 4.41
  - Sourced (FY12): 0.93

- Unique asset interoperability:
  - AFSB / MCM requirements

- Ship maintenance / upgrade availability periods

"Since 2007 the COCOMs cumulative requests for Naval forces have grown 86% for ARG/MEUs and 53% for individual deployed amphibious ships." NOC 2010
Amphibious Combatant Fleet Transformation

1990 62 Ships:
- LHD
- LHA
- LPH
- LPD 4
- LSD 36
- LSD 41
- LST 1179

1990 LKA 113

2011 28 Ships:
- Requirement for 38 ships, risk accepted at fiscally constrained 33 ship force structure
- LHA / LHD
- LPD 4
- LHD / LHA (R)
- LPH
- LPD 17
- LSD 41 / 49
- LSD (X)

2021 33 Ships:
- LSD 41 / 49
Amphibious Combatant Recapitalizations

- Capability-Based Assessment (CBA) completed covering:
  - LSD and LHA/D recapitalization
  - Projected USMC lift requirements (2024s timeframe)
  - USMC air/ground vehicles are becoming heavier/larger
- CBA studied Replacement options
  - For LSD Recap
    - LPD 17 design (repeat or modified repeat)
    - New design (small--similar to LSD 41/49 size)
    - New design (large--carry 100% of lift requirement)
  - For LHA/D Recap
    - LHA(R) Flight 0 (existing LHA 6 design)
    - LHA(R) Flight 1 Min (with well deck)
    - LHA(R) Flight 1 Full (expanded beam/reduced island w/ well deck)
    - LHD 8 Restart
    - New design (carry 100% of lift requirement)

CBA approved in March 2011 and is basis for follow-on efforts:
- LHA(R) Flight 1 Capabilities Development Document revision
  - Study to identify Flight 1 ship design completed
- LSD(X) Initial Capabilities Document.
LPD 17

- LPD 17 class are flexible, multi-mission ships
- Functionally replaces LPD 4, LSD 36, LKA 113, and LST 1179 Ship classes
- LPD 17 missions include:
  - Forward Presence,
  - Deterrence,
  - Sea Control,
  - Power Projection,
  - Maritime Security
  - Humanitarian Assistance / Disaster Response
LHA 6

- LHA 6 provides flexible, multi-mission platforms
- LHA 6 is a modified LHD 8 design
- Increased aviation capacity to better accommodate JSF/MV-22
- Provide adequate weight and stability margins for 40 year service life
LCAC SLEP

- Preserves amphibious warfare triad (LCAC / EFV/MV-22)
- Allows execution of Operational Maneuver From The Sea (OMFTS) and Ship to Objective Maneuver (STOM)
- Deferred requirement to fund next generation LCAC from FY00 to FY10
- Challenges
  - COTS obsolescence, Technology Insertion
  - Growth work increasing due to the degraded condition of the craft entering SLEP availabilities

**SEP 11: 33 of 72 SLEPs complete**
**Ship to Shore Connector (SSC) / LCAC 100**

**Mission:** Land Surface Assault Elements of USMC from ship to shore

**Description:** Landing Craft Air Cushion (LCAC) replacement

**Platforms:** Air Cushion Vehicle; Same footprint as LCAC SLEP

**Employment:** Ship to shore surface connector in support of STOM and MPF(F)

- **Mission:** conduct ship-to-shore movement in support of surface assault elements of the MAGTF

- LCAC replacement possesses same footprint as LCAC SLEP

- Detailed Design and Construction Contract Award Pending FY12.
LCU (RECAPITALIZATION)

- AMW OAG has ranked this as a top five Fleet need over the last three years
- Current LCU 1600 craft have an average age of 40 years and suffer from obsolescence and increased maintenance costs
- Way Ahead
  - Brief to Naval Capabilities Board for approval to initiate ICD Oct 11.
  - Anticipate ICD completion Jan 12.
  - Analysis of Alternatives (AoA)Summer FY12
LSD MID LIFE

- Return ships to capable Fleet Asset status; able to meet amphibious mission requirements through 2038
- Objective is to
  - Improve declining material condition and readiness,
  - Replace obsolete equipment and
  - Reduce total ownership costs through technology insertion
- USS HARPERS FERRY (LSD 49) EDPMA began in Jul. Seventh LSD Class ship to undergo modernization
- USS ASHLAND (LSD 48) and USS TORTUGA (LSD 46) will swap homeports (Norfolk/Sasebo)
LHD MID LIFE AND JSF INTEGRATION

- Essential modernization and mission improvements to reach 40 yr service life
- Nine identified ship changes required for JSF on LHDs funded with fielding plans in place
- Six cornerstone alterations – nine separate SCDs – identified
- Enabler ship alterations
  - MV 22 service and shop mods (hangar and stowage)
  - Fuel Oil Compensation (stability)
- JSF Integration
  - JSF External Environment mitigation pending technical analysis
Enhanced MPSRON

Current Practices

- Transfer of equipment at sea in non-anchorage depths
- Delivery of equipment and supplies through restricted access environments
- Selectively offloadable, tailorable force packages
- Afloat warehousing, delivering unitized loads from ship to objective
- Employable in emergent, partnership and combat across complete ROMO

FLEXIBILITY THAT PERMITS INFLUENCING EVENTS ASHORE OR AT SEA, PARTICULARLY WHEN DENIED ACCESS OR A FOOTPRINT ASHORE
MPF Alternative Posture
2 MPSRONs FOS/1 MPSRON ROS

Overview

- DoN submits to SECDEF Afloat Preposition alternative
- OSD approves (RMD 7000) 25 Jan 2011 Transfers 1 of 3 MPSRONs to a Reduced Operating Status (ROS-5).
- Tethers ROS-5 MPSRON on East Coast
- Two MPSRONs remain forward positioned in USPACOM - Full Operating Status (FOS)
- 1 LMSR (current TRANSCOM asset) to replace 2 legacy ships

Assessment

- POM-12 efficiency realized by reducing MPF Program O&M costs.
- FOS MPSRONs supports presence, crisis response, OPLAN and CONPLAN responsiveness in PACOM and CENTCOM
- ROS MPSRON in addition to supporting MCO provide surge capability to EUCOM, AFRICOM, and SOUTHCOM
- Provides operational flexibility for all CCDRs
- Reorganization must be completed by 1 Oct 2012 (FY13 funding supports 2 FOS/1 ROS)
Enhanced Maritime Prepositioning Squadron

- The Enhanced MPSRON will have an added capability for vehicle and equipment at sea transfer between ships and deliver y ashore from over the horizon through restricted access environments, and provide persistent sustainment from ship to objective.

- MLP will provide a surface interface between Large Medium Speed Roll-on/roll-off (LMSR) ships and LCACs. Total MLP procurement is three, two were awarded in FY11 and one is planned for FY12.

- T-AKE will contribute to prepositioning the Baseline MEB’s supply stocks and sustaining the forces operating ashore. As a floating warehouse it will minimize the logistic footprint ashore and support vertical replenishment of unitized sustainment direct from ship to the operating forces ashore. Total of three T-AKEs will be transferred from the CLF in FY12/13.
Questions?