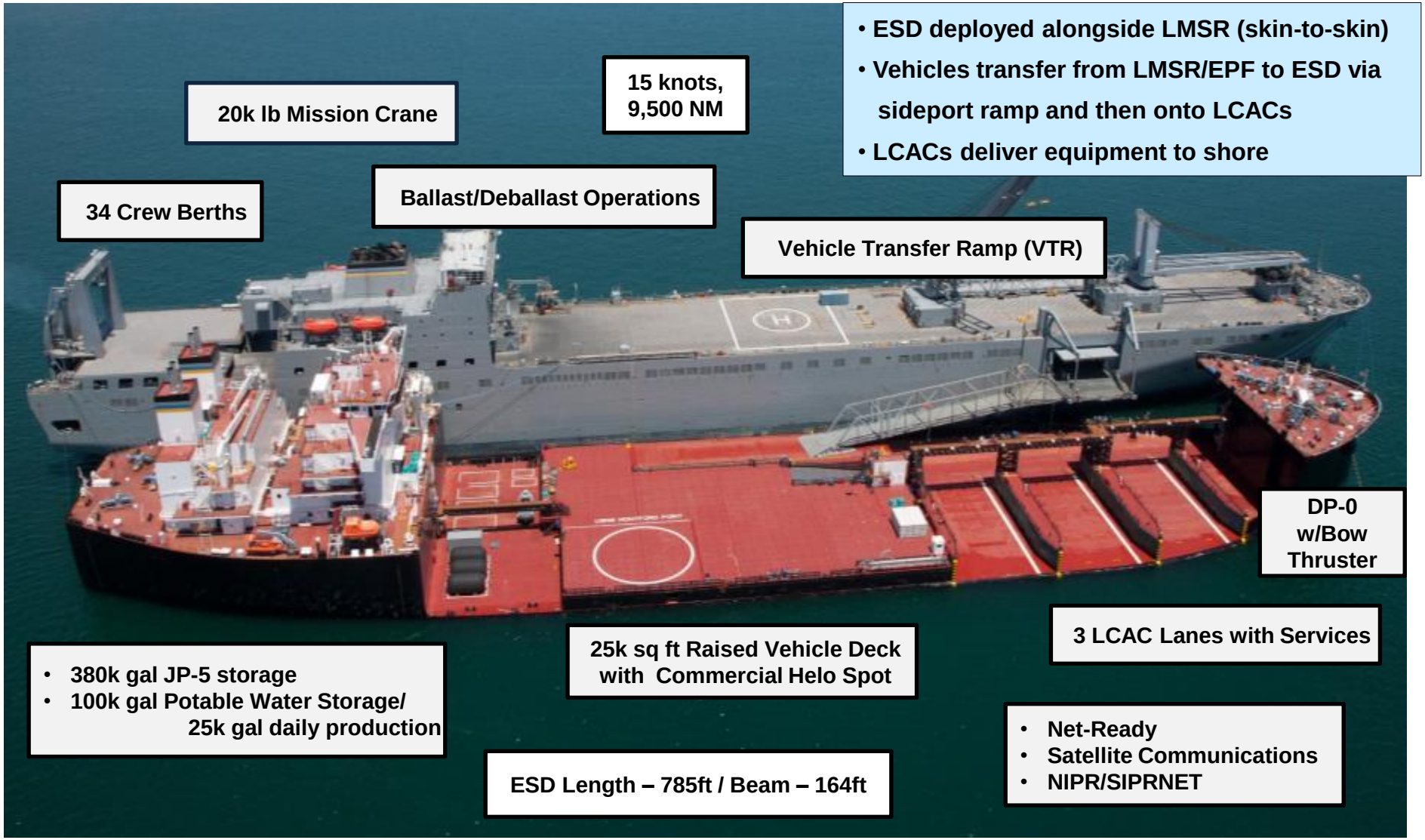
PMS 385
Strategic and Theater Sealift Program Office

Expeditionary Warfare Conference
October 28, 2015

CAPT Henry W. Stevens III, USN

USNS MONTFORD POINT (ESD 1) Capabilities (Expeditionary Transfer Dock – ESD formerly MLP)



Last verified: 15 Sep 2015

ESD and EPF (formerly Joint High Speed Vessel) Moored

ESD Deliveries

USNS MONTFORD POINT (ESD 1)
- Start of Construction: June 24, 2011
- Keel Laying: January 19, 2012
- Launch: November 13, 2012
- Christening: March 2, 2013
- Delivered: May 14, 2013

USNS JOHN GLENN (ESD 2)
- Start of Construction: April 17, 2012
- Keel Laying: December 4, 2012
- Launch: September 15, 2013
- Christening: February 1, 2014
- Delivered: March 12, 2014

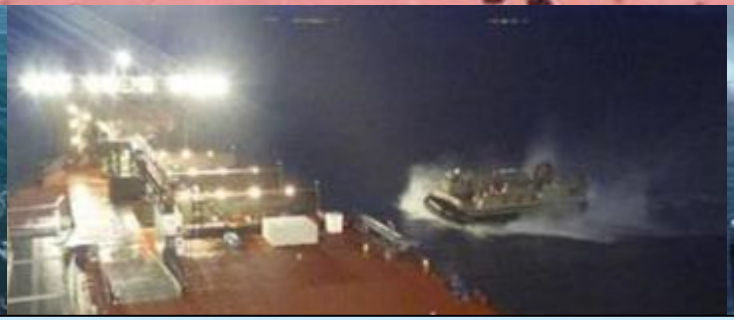
Delivered on time, on budget with no starred cards from INSURV

USNS MONTFORD POINT (ESD 1)
IOT&E completed Oct 2014



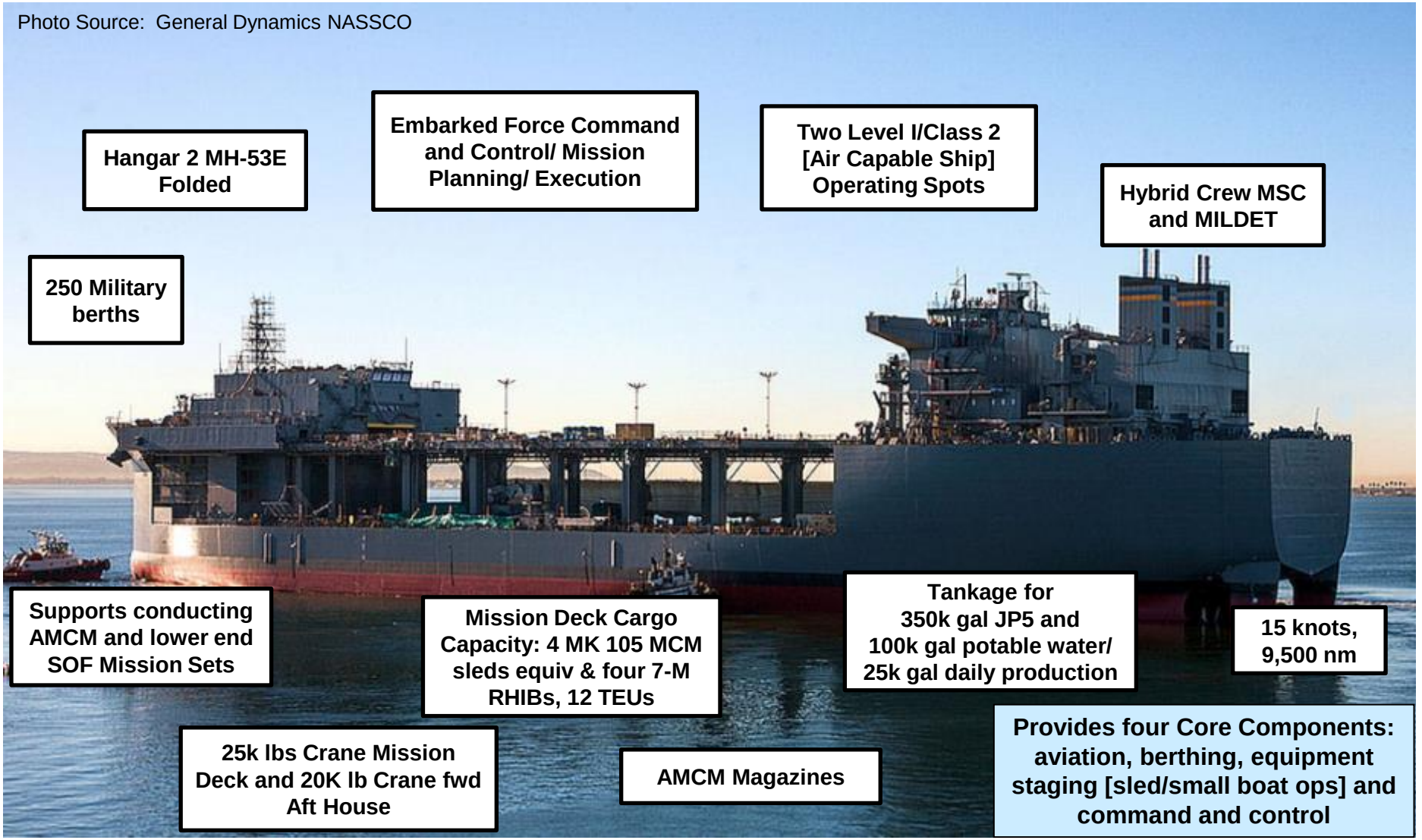





Expeditionary Transfer Dock
(ESD - formerly MLP)
Operations

USNS LEWIS B. PULLER (ESB 3) Capabilities (Expeditionary Mobile Base – ESB formerly MLP AFSB)



Last verified: 15 JAN 2015

USNS LEWIS B. PULLER (ESB 3)

Photo Source: General Dynamics NASSCO

Underway for Builders Trials April 8, 2015

Start of Construction:
Feb 2013

Keel Laying:
Nov 2013

Float Off:
Nov 2014

Delivery:
Jun 2015

EPF in the Fleet
(Expeditionary Fast Transport– EPF formerly JHSV)








EPF 1-5 In Service; 6-10 deliveries planned every 6 months

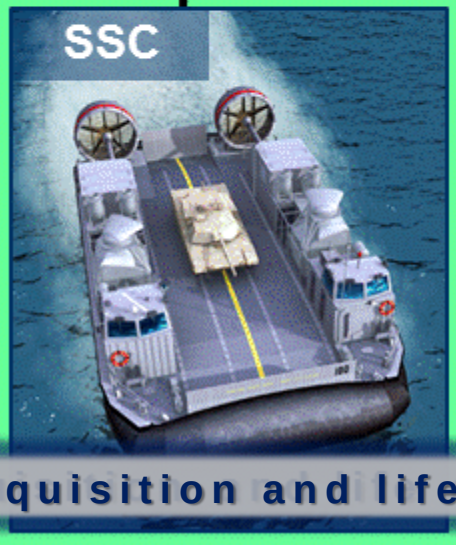
20th Annual NDIA Expeditionary Warfare Conference 28 October 2015

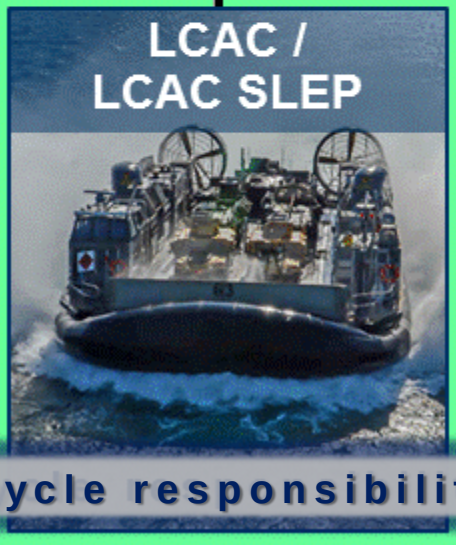
Tom Rivers
Program Manager
PEO Ships (PMS377)

Programs

acquisition responsibilities

Pre-Systems Acquisition | **Systems Acquisition** | **Sustainment**





acquisition and lifecycle responsibilities

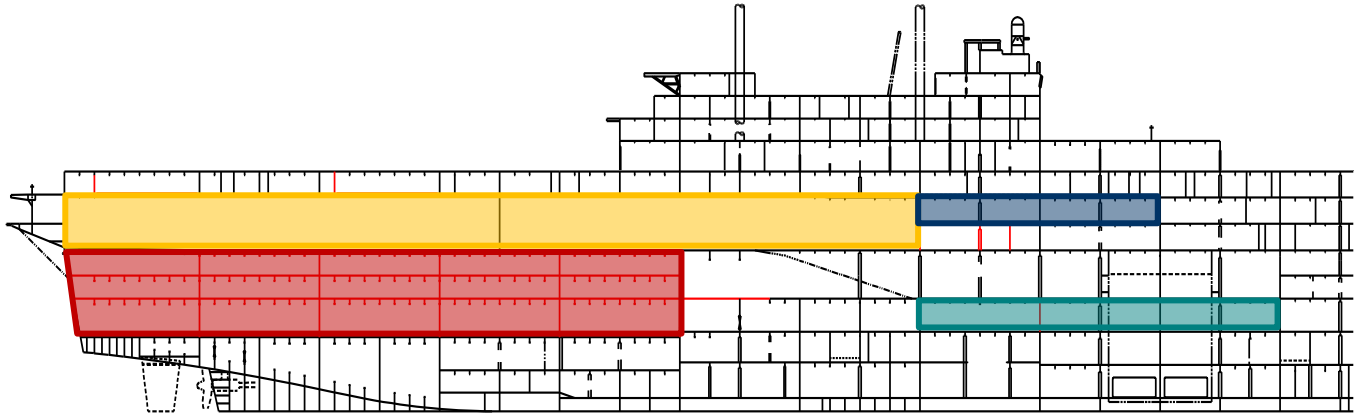
Big Deck Evolution

LHD 8	LHA(R) FLT 0 (LHA 6/7)	LHA(R) FLT 1 (LHA 8)
2009	2014/2018	2024 (Planned)

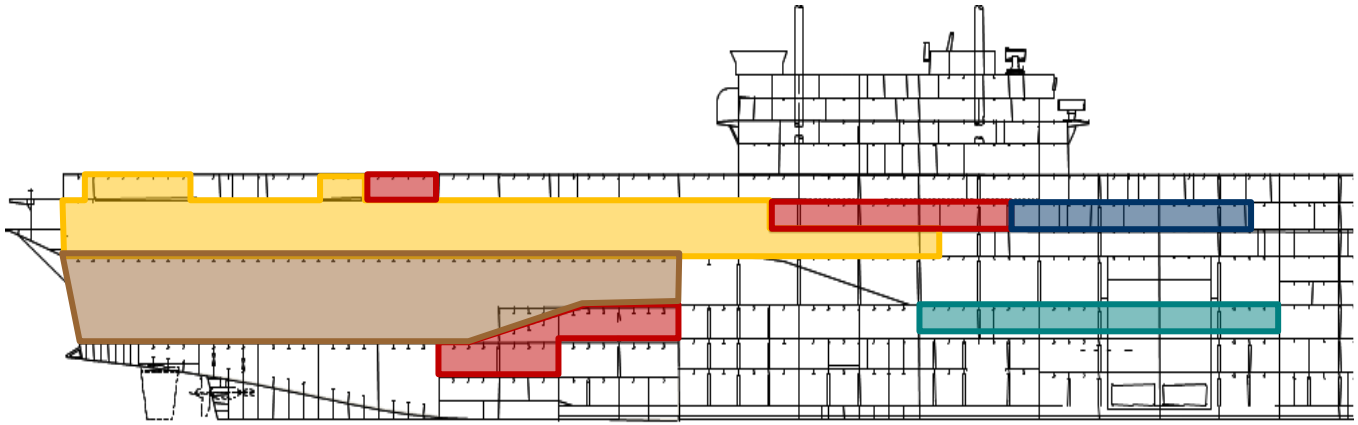
All Electric & Hybrid Propulsion (Gas Turbine/Electric)

LHA (R) Flt 0 vs. Flt 1 Comparison

Hangar Enhancements	Aviation Shops and Storerooms	Medical Resized	Shops	2 LCAC/SSC Well Deck

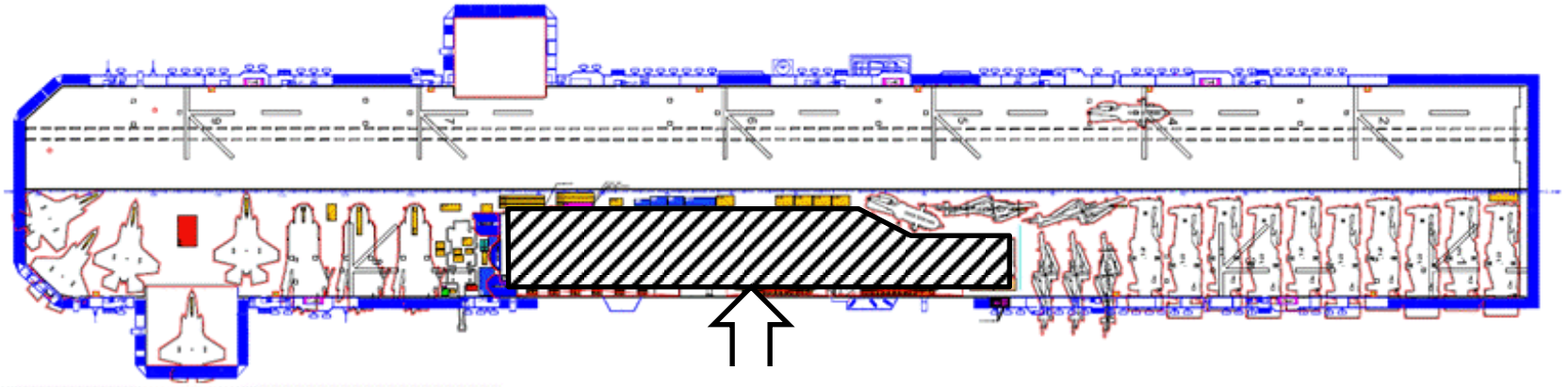


Flight 0



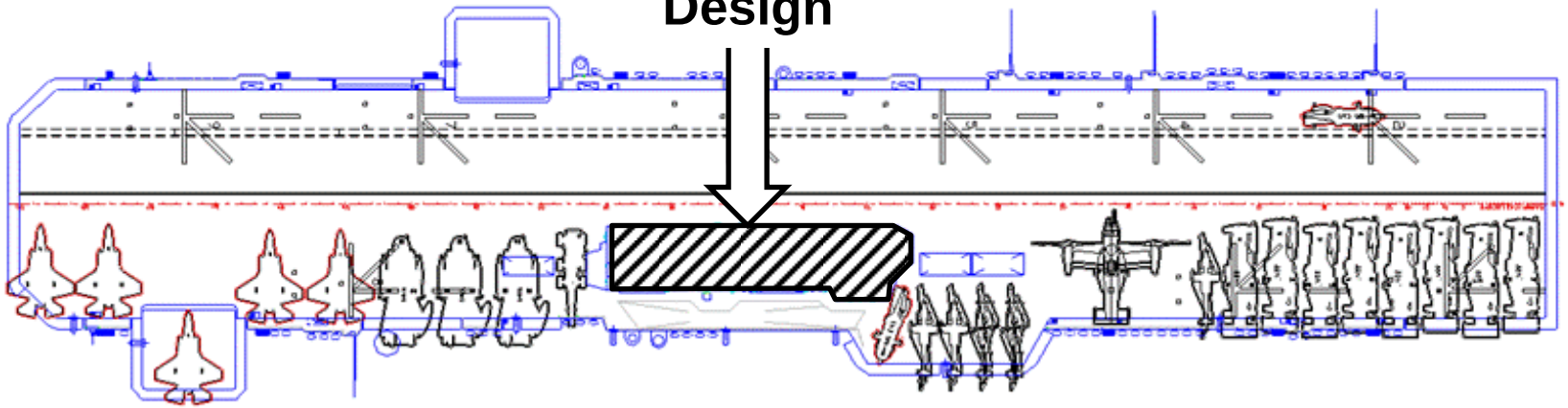
Flight 1

LHA(R) Flt 0 & Flt 1 Top-side View



LHA(R) Flt 0

Reduced Island Design



LHA(R) Flt 1

LHA(R) / JSF Integration

Cornerstone Alterations

- Power
- Maintenance/Logistics
- Weapons & Missions Support

External Environment Alterations

- Flt Deck Structure & Coatings
- Weapons Systems
- Antennas
- Peripheral Services & Systems

SLEP Program Elements

BUOYANCY BOX REFURBISHMENT
- Address Corrosion Problems
- 20-Year Service Life
- Incorporates Hull Upgrades and Improvements

ROTATING MACHINERY REFURBISHMENT
- Extends Useful Life of Equipment
- Reduces Maintenance

C4N REPLACEMENT
- Introduces Open Architecture
- Introduces Modern COTS Equipment
- Provides Precision Navigation
- Provides Common Tactical Picture
- Provides Common Suite Interoperability

ENHANCED ENGINES
- Provides Additional Power
- Reduces Fuel Consumption
- Reduces Maintenance

DEEP SKIRT
- Reduces Drag
- Increases Performance Envelop
- Reduces Maintenance
- Increases Obstacle Clearance

LCAC Fleet Modernization Elements

BUOYANCY BOX
- Limited Compartment Painting
- Selected Hull/Engine Module Repairs
- Thicker Aft FO/Waste Oil Tanks

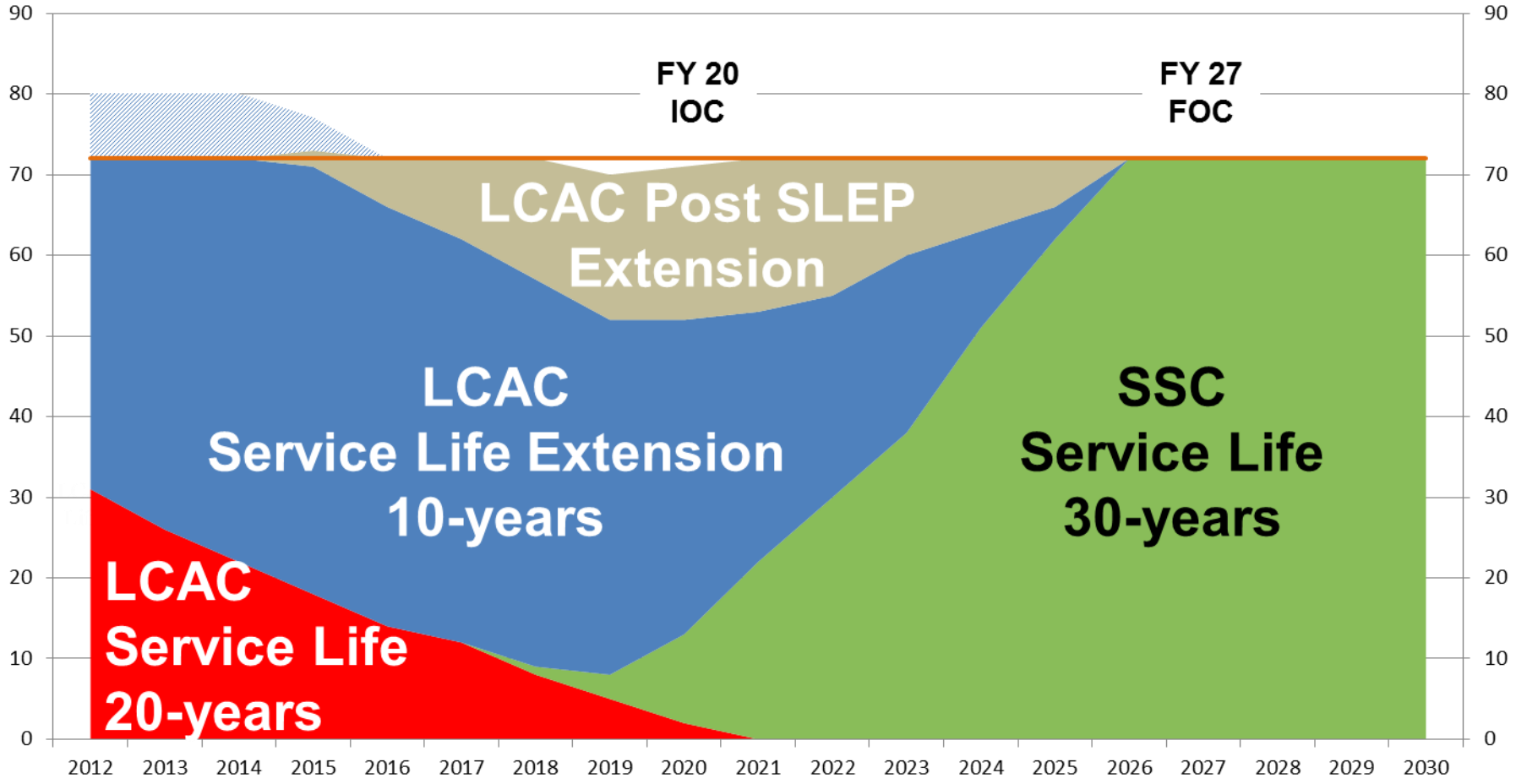
HULL, MECHANICAL & ELECTRICAL
- Air Conditioning
- Light Weight Armor
- Stators/Shrouds
- Misc. Auxiliary Systems

C4N UPGRADES
- AN/ARC-210 & 220 Radios
- SLEP Navigator Suite to Replace NDI
- BM E Radar on Legacy Craft
- AADS/EPLRS
- Motorola MOM XTS-5000
- DAGR/GAS-1 Antenna (ADAP 2011+)
- AN/APX-123 IFF 2012+

ENGINES/ AUXILIARY POWER UNIT (APUs)
- Water Wash System
- APU Corrosion Reduction
- Fuel Coalescer Power

DEEP SKIRT REPAIR

LCAC Sustainment and SSC Introduction



SSC Design Characteristics

More Lift + Lower Fuel Consumption + Less Maintenance

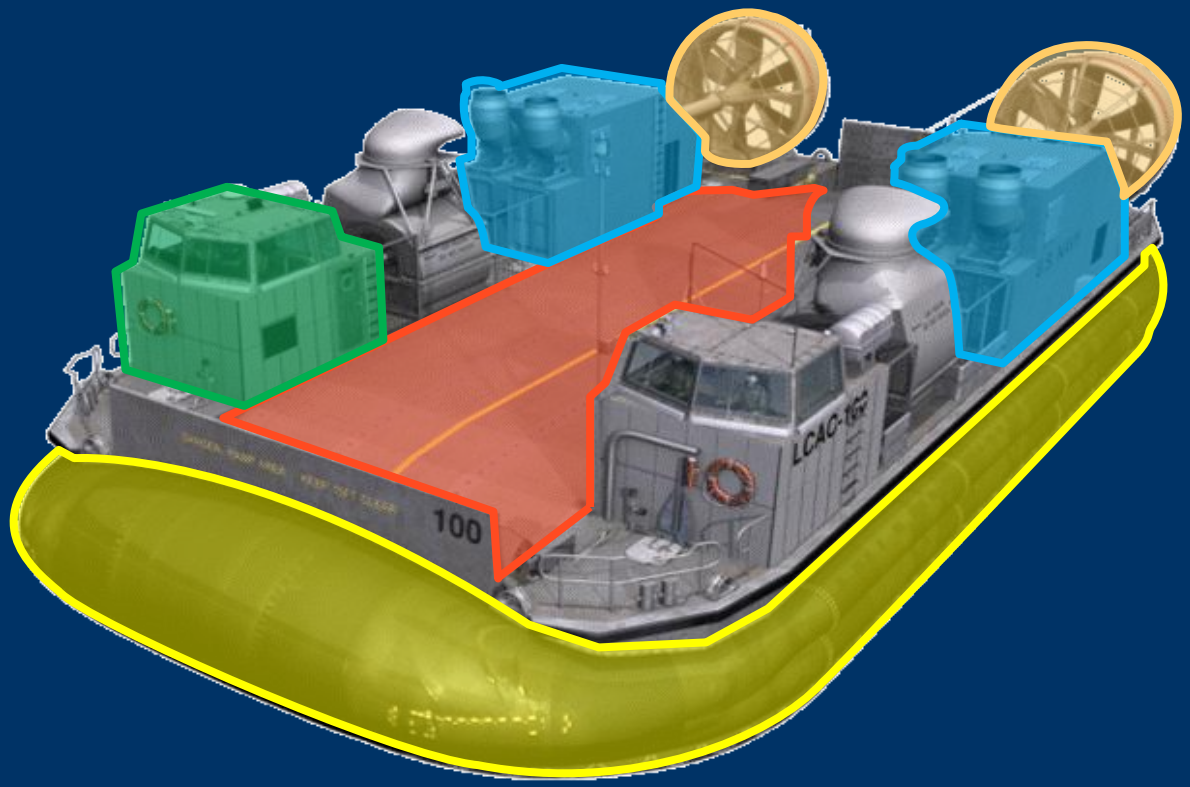
Advanced Skirt

Cargo Deck Sized for M1A1 Tank

Pilot / Co-pilot Arrangement

Fuel Efficient Engines

Efficient Propellers



LCU 1610

- **32 LCU 1610 craft in service; average age is *45 years old***
- **The LCU 1610 *designed service life was only 25 years***

LCU 1617 built in 1959

LCU 1617, is now 56 years old

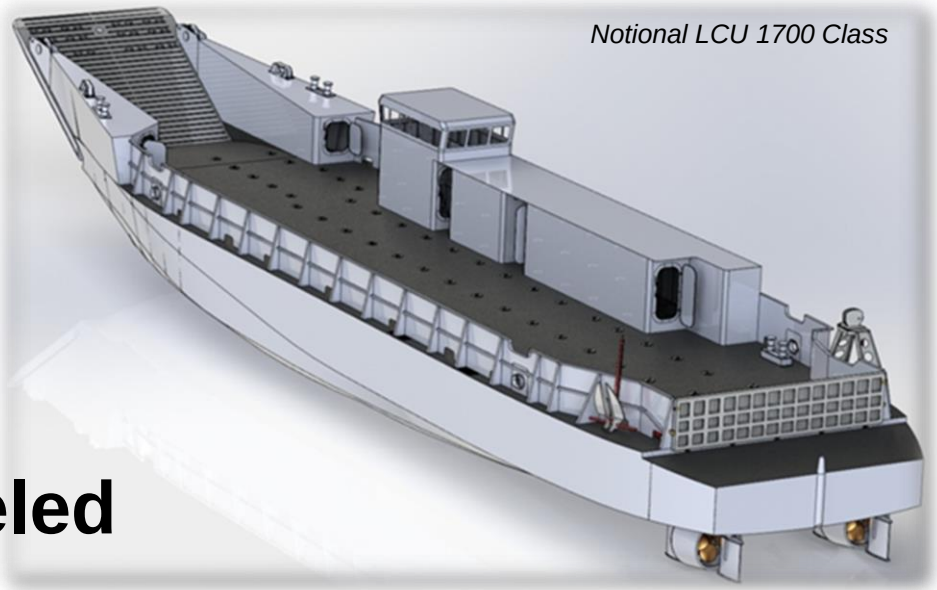
LCU 1617 still serves today

- **Block system obsolescence**
- **Increasing maintenance costs**
- **Payload derated due to age/service life**
- **Corrosion repairs**

LCU Corrosion

SC(X)R / LCU 1700

Notional Capabilities

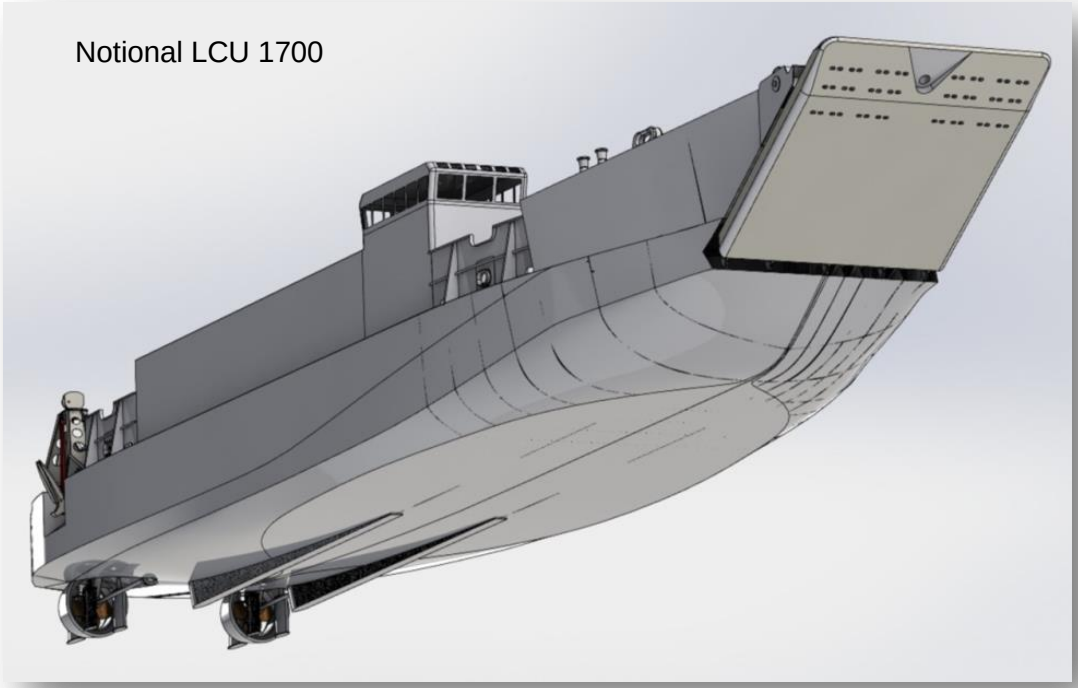

Notional LCU 1700 Class

- **Payload: up to 170 ST**
- **Personnel transport**
- **Range: 1,200 NM unrefueled**
- **Speed: 11 knots maximum, 8 knots endurance**
- **Independent operation capable up to 10 days**

GOAL = RESTORE / RECAPITALIZE LCU 1610 CAPABILITIES

LCU Ruggedness

LCU Planned Improvements



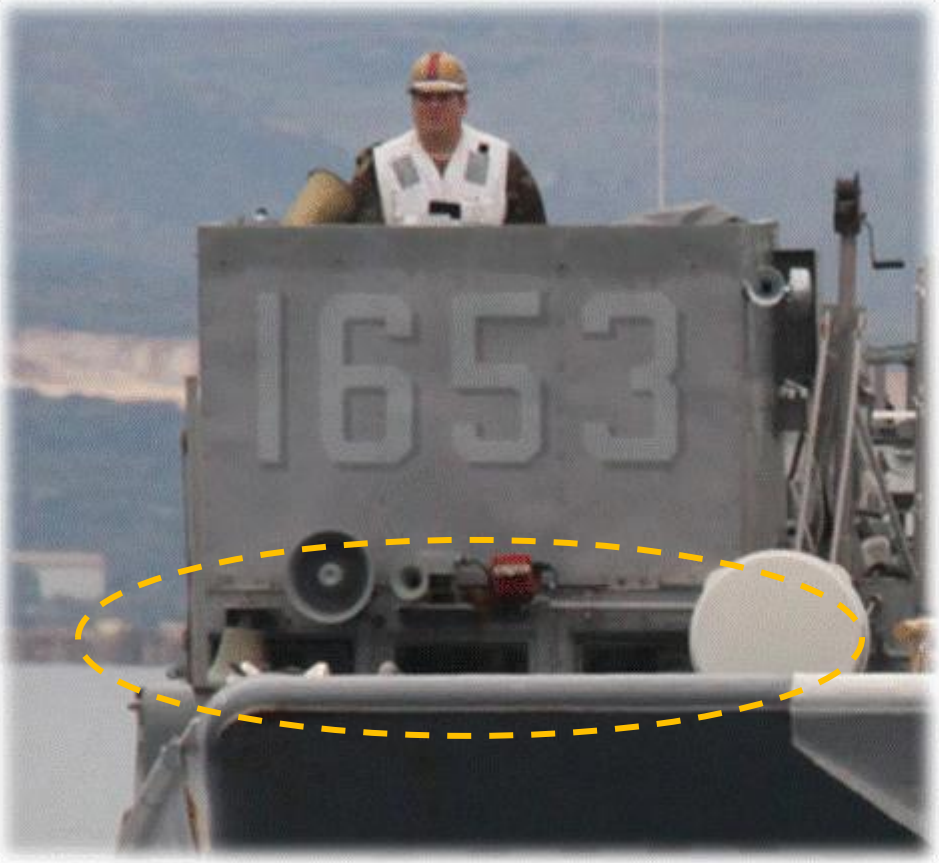
Habitability

Stability

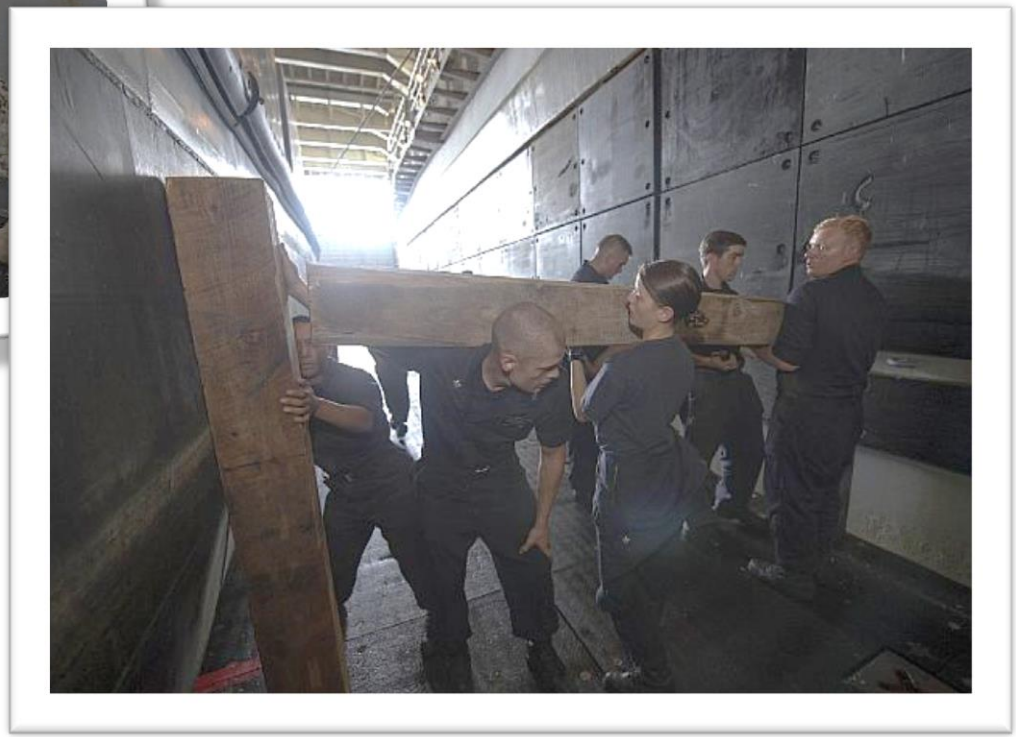
Maintainability

IT'S A WORKBOAT
SIMPLE, RUGGED AND RELIABLE…
…AND NEEDED!

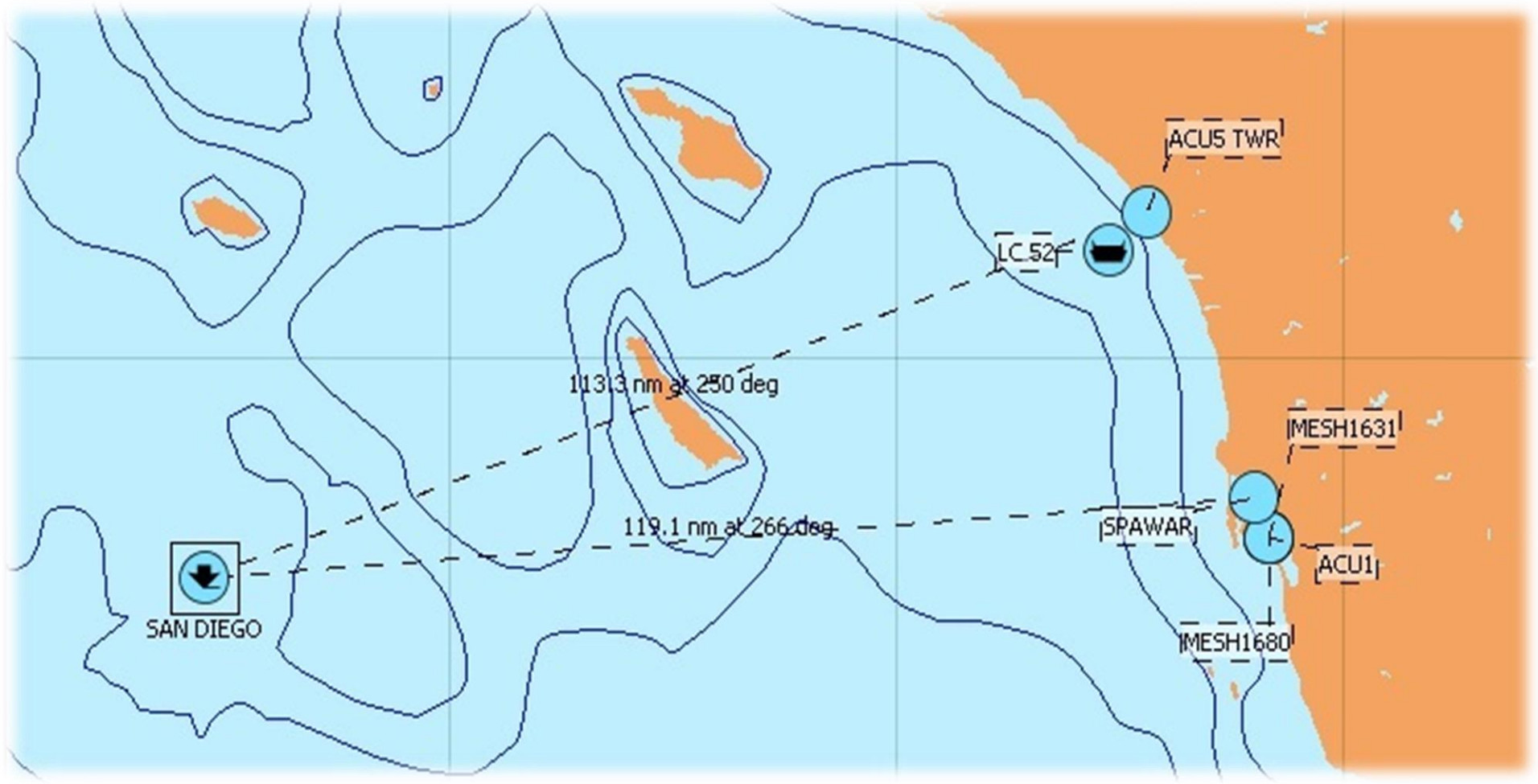
LCU 1600 vs. 1700



LCU Shoring in Well Deck



Amphibious Assault Direction System



AADS

Challenges

- **Affordability**
- **Obsolescence**
- **Maintainability**

PMS377…
Serving the needs of the Navy-Marine Corps Team since 1966

LPD 17 and LX(R) Overview

Marianne Lyons
Deputy PMS 317 Program Manager
LPD 17/LX(R) Shipbuilding Program

LPD 17 Class History

1988 Conceived at the end of the Cold War to replace the aging LPD 4 class and three other amphibious ship classes. (41 ships).

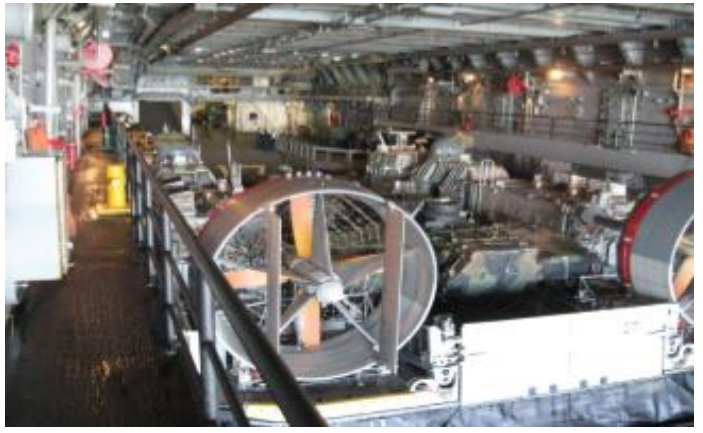
1994 PMS 317, LPD 17 Program Office, established.

1996 Operational Requirements Document Approved. Contract awarded on December 17th.

2005 LPD 17 delivered to the Navy. Hurricane Katrina strikes shortly after LPD 17's crew moves aboard.

Where We Are

- ✓ LPDs 17 to 25 delivered. LPD 20 forward stationed in Japan.
- ✓ Future USS John P. Murtha LPD 26 and USS Portland LPD 27 under construction at HII.
- ✓ Planning in progress for LPD 28, 12th ship of the Class.
- ✓ Eight LPDs have deployed 15 times to date with the longest deployment lasting 321 days.



LPDs: Mission Flexible

- ✓ Flagship for anti-pirate operations off of Somali.
- ✓ Two times supported terrorist capture operations in Med.
- ✓ Haiti Earthquake and Hurricane Sandy relief operations.
- ✓ Orion spacecraft recovery platform.
- ✓ New “normal mission” as force multiplier in Split, Disaggregated, and Maritime Interdiction Operations.

Continuous Improvement

- ✓ Partnership with Huntington Ingalls Industries to achieve higher level of completeness and quality at ship delivery; and greater stability in build plans for follow-on ships.

- ✓ Each successive LPD receiving fewer INSURV trial cards during Acceptance Trials and exhibiting increased levels of material readiness at delivery.

LPD 23 at Sailaway and LPD 24 on Acceptance Trials.

Follow On Improvements

- ✓ Working closely with the in service fleet to fold in recommendations and production initiatives for follow on ships and backfit to existing LPDs.
- ✓ LPD 28 - Integrating technically feasible affordability initiatives into the design to reduce costs and sustain mission capability.
- ✓ Seeking to reduce costs in the following areas:

Top Cost Driver Areas:

- *Outfit, General Arrangements, Habitability, Modularity and Flexible Infrastructure*
- *Machinery and Auxiliary Equipment*
- *Structures, Shock and Survivability*
- *Electrical, Control Systems, Networks and Design Environment*
- *IWS/C4I GFE systems affordability deep dives*

LX(R) Program Description

- ✓ **LX(R) to numerically replace the LSD 41/49 Classes as they reach the end of their service life**
  - Lead ship procured in FY20 and the follow-on ships sequentially commencing in FY22.
  - Lead ship expected to deliver in FY26.

- ✓ **LX(R) requirements refined through the AoA studies**
  - Embarkation capacity requirements have grown, e.g., anti-IED armor increasing vehicle size and weight.
  - LX(R) operational capabilities are based on conducting independent, split and disaggregated Amphibious Readiness Group (ARG) operations with an embarked Special Purpose Marine Air-Ground Task Force, in addition to “traditional” missions supporting the ARG/Marine Expeditionary Unit (MEU) and Amphibious Task Force (ATF)/Marine Expeditionary Brigade (MEB)

LX(R) AoA Affordability with Industry Engagement

- ✓ *General Dynamics and Huntington Ingalls Industries* engaged in study effort to:
  - Help Navy refine the Analysis of Alternatives (AoA) - Industry input on material, labor and overhead estimates;
  - Identify top labor, material and total cost drivers at system and/or subsystem level; and
  - Identify cost reduction initiatives.
- ✓ Effort resulted in:
  - LX(R) platform, based on a derivative of LPD 17 design, provides sufficient capability and capacity at the cost targets.
  - USN and USMC warfighters concurrence - concept provides the right level of capability and capacity, "without sacrificing capability."

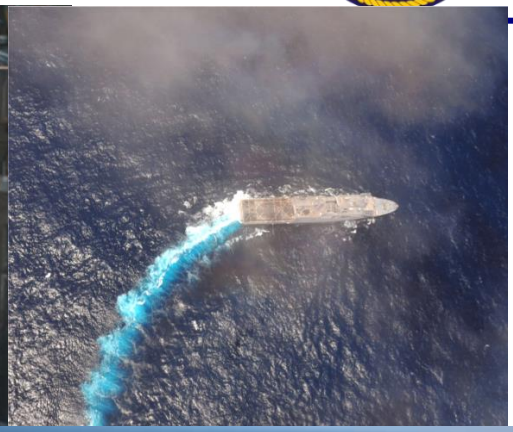
Detailed Requirements (KPPs & KSAs) defined in LX(R) Capabilities Development Document (CDD)

Where We Are Headed

- ✓ LPD 28. Congress appropriated $1B in FY15 for LPD 28 combined with AP in FY13; remainder of ship to be funded by Navy in PB16. Waiting on final appropriation bill.

- ✓ LX(R).
  - Eleven LX(R) ships will surpass the capability of the twelve ships in the LSD 41/49 Classes as they reach the end of their service life
  - AoA complete and LPD 17 derivative design approved at a Gate 2 in Jan 15
  - CDD is in Joint Staffing
  - A competitive lead ship design/construction award is planned for FY20.

Capable Ships At An Affordable Price



U.S. Navy Boat Program

25’ FP Small

11m NSW RIB

7m STD RIB (USFFC)

8m Support Craft (NSW)

8.5m EOD MERC

60’ Diver Support Boat

11m STD RIB (USFFC)

11m Surface Support Craft (NSW)

WB Medium

51’ Riverine Command Boat

11m EOD RIB (SPAWAR)

110’ Range Training Support Craft

78’ MK VI Patrol Boat

Mr. Mike Kosar
Program Manager
PEO Ships (PMS325)

Mr. John Lighthammer
Principal APM
PMS325G

U.S. Navy Boat Program

- Boat & Craft acquisition and life cycle services to Fleet Forces, CNIC, NECC and Other Customer enterprises
- Typical missions include AT/FP operations; SAR; Maritime Interdiction/VBSS; personnel/cargo transport; environmental control, firefighting, and dive support
- Average Budget at $70M OPN for approximately 106 boats across 19 contracts (average based on last 7 years)
- Annual LCM budget of approximately $10M O&MN
- Current boat acquisition programs include:
  - MK VI Patrol Boat
  - Ship's 7m & 11m Rigid Inflatable Boats
  - Diver Support Boats & Naval Dive Support Training Center UB
  - Navy Special Warfare Short & Long Range Support Craft
  - Underwater Construction Team Boats
  - Force Protection and Fleet Harbor Security Boats
  - Range Training Support Craft
  - Oil Spill Response Boats
  - SUPSALV Boom Handling Boat
  - Special Mission Boats (EOD 11m RIB)
  - Fleet Survey Team Workboat


8.5m Multi-Use EOD Response Craft


Riverine Command Boat (RCB)


11m RIB


Workboat Medium


MK VI PB

U.S. Navy Boat Program

- GSA Sales/Exchange
- Boat Disposal
- Boat Refurbishment

- Requirements Definition Assistance
- Market Survey
- Best Value Determination

Continuity

- Issue and Track Boat
- In Service Technical Support
- Fleet Liaison and Support

- Production Oversight
- Trials & Test Support
- Receipt Inspections

FY15 Navy Boat Procurement Data

- **19 Contracts or Delivery Orders for 91 Total Boats**
  - 10 Boats for NECC and 10 Boats for NSW
- **Conducted 18 Boat Trials across 13 Builders**
  - 4 Trials for NECC Boats and 2 Trials for NSW Boats
- **Accepted 87 Boats and Issued 83 new Boats into the Fleet**
  - NECC – 7 Accepted and 4 Issued to Fleet
  - NSW – 12 Accepted and 12 Issued to Fleet

Coastal Riverine Force Expeditionary Security

Mission

Conduct maritime security / force protection operations worldwide in the near coast, inshore areas

Coastal Riverine Force	MKVI Patrol Boat (85 ft)
	Coastal Command Boat (65 ft)
	Force Protection Patrol Boat (34 ft & 25 ft)
	Riverine Command Boat (51 ft)
	Riverine Patrol Boat (38 ft)
	Riverine Assault Boat (33 ft)

34-ft Force Protection Large

85 -ft MKVI Patrol Boat – IN PRODUCTION

51-ft Riverine Command Boat

Coastal Riverine Force
MK VI Patrol Boat

MK VI Patrol Boat (MK VI PB)

Mission: Mission includes Mine Counter Measure (MCM) , High Value Asset (HVA) shipping escort and Visit, Boarding, Search, and Seizure (VBSS operations), Theater Security Cooperation (TSC), and Security Force Assistance (SFA).

User: NECC/CRG Quantity: 12

Builder: Safe Boats Intl Contract: FFP

Key Characteristics

- Hull Material: Aluminum w/ ballistic protection
- Length X Beam: 84.8' X 20.5'
- Maximum Speed: 35+/25+ Kts (Max / Cruse)
- Range: 600+ nm
- Propulsion: MTU 16V2000
- Weapons: Stabilized Small Arms Mounts (Qty 4) Fwd/Aft MK 38 Mod 2 Mounts; Fwd/Aft Multiple Machine Gun fnds.

Procurement and Delivery Status:

- Patrol Boats 1 & 2 Issued to Fleet (Sept. 2015)
- Patrol Boats 3 & 4 accepted by Navy
- Patrol Boats 5,6 & 7 Currently in Production
- Remaining Boats w/ PB 12 delivering 2QFY18

Explosive Ordnance Disposal Expeditionary Security

Mission - Mobile Diving and Salvage and EOD applications conducting maritime Mine Countermeasures (MCM), Countering Improvised Explosive Devices (IEDs),

Explosive Ordinance Disposal	EOD Mine Countermeasure (5.6M - 11M RIBs)
	Multi-Use Explosive Ordnance Response Craft - 8.5M MERC
	Workboat/Utility Boat
	Underwater Construction Team (36ft)

36-ft UCT Work Boat

8.5m Multi Purpose EOD Response Craft – IN PRODUCTION

11m Expeditionary Mine Counter Measure RIB

Explosive Ordnance Disposal 8.5m MERC

8.5m Multi Purpose EOD Response Craft

Mission: Mobile Diving and Salvage and EOD applications

User: NECC/EOD/MDSU Quantity: 9 New

Builder: Brunswick Contract: FFP

Key Characteristics (Center Console)

- Hull Material: Fiberglass hull
- Length: 27’9”
- Beam: 9’10”
- Maximum Speed: 30kts in calm water
- Fuel Capacity: 198 gal
- Propulsion: Mercury Verado 150 HP
- Accommodations: Two crew, 5 passengers, 26 max persons
- Weapons: N/A

Procurement and Delivery Status:

- Contract Award April 2015.
- All Boats to be delivered by Dec 2015.
- New competitive 5-year, IDIQ contract in FY16 to buy approximately 5 boats per year thru FY21.