LPD 17 and LHA(R) Program Status and Updates

CAPT Cedric McNeal
Amphibious Warfare Program (PMS 377)
Program Manager

12 Jan 2022
Agenda

• Amphibious Ready Group Ship Evolution

• LHA(R) Program
  – Overview of LHA 7 thru LHA 9 progress
  – Capability Snapshot
  – Major Changes: Flight 0 to Flight I

• LPD Program
Amphibious Readiness Group (ARG) Ship Evolution

ARG - Now
- LHD/LHA
- LPD 17 Flight I
- LSD 41/49

ARG - Future
- LHD/LHA > LHA(R) Flt 1
- LPD 17 Flight I
- LPD 17 Flight II

Enables Operational Maneuver from Sea

Offers Improvements in:
- Capacity for Larger/Heavier Aircraft/Vehicles
- Self-Defense
- Survivability
- C4I
- Flexibility (Split ARG)
- Quality of Life

Enables Ship-to-Objective Maneuver

Continuing to Deliver Relevant Amphibious Ships Critical to Enabling the USMC Mission
**LHA(R) Program Overview**

**DESCRIPTION / REQUIREMENTS**

**LHA(R) Program**
- Replaces LHA 1 (Tarawa) Class Amphibious Assault Ships; Maintains Fleet Expeditionary Warfare capability
- Designed for 21st Century aviation and expeditionary operations across the full spectrum of military actions
- Provides an affordable and sustainable amphibious ship building program

**PROGRAM STATUS**

**LHA 7: Flt 0 (LHA 6 and LHA 7) are aviation optimized LHD variants**
- Ship delivered 28 Feb 2020
- Post Shakedown Availability ended 23 Dec 2021
- Obligation Work Limiting Date (OWLD) 28 Feb 2022
- Anticipate TRIPOLI to be ready to deploy later this Spring

**LHA 8: Flt 1 (LHA 8 and LHA 9) modified Flt 0 with well deck added**
- Fabrication commenced 15 Oct 2018; keel laying completed ahead of schedule on 14 Mar 2019
- Detail Design complete; topside GFE integration challenges exist and a topside design change is in process
- Physical Progress: 43% complete (4 Nov 2021)
- Will be delivered in 2025 with JSF modifications incorporated

**LHA 9: Intended as a design/capability consistent with LHA 9**
- LLTM, Advance Engineering/Planning awarded on 30 April 2020
- Anticipate award of Detail Design and Construction contract in FY23
- Proceeding with efforts needed to support start of construction
LHA(R) Program

- Ensures amphibious fleet relevance into the 21st Century
- Enables aviation and expeditionary operations across the full spectrum of military action
- Key to forward presence, power projection, and crisis response

**Aviation Capabilities**

- F-35B Joint Strike Fighters (JSF) STOVL aircraft
- MV-22 Osprey VTOL tilt rotors
- CH-53K King Stallion helicopters
- UH-1Y Huey helicopters
- AH-1Z Super Cobra helicopters
- MH-60S Seahawk helicopters

**Medical Facilities**

- 2 OR surge to 4 OR
- 3 ICU Beds, 23 Ward Beds
- 2 Physicians + Flight Surgical Team
- Flight Physical
- Blood lab, Blood bank, X-Ray
- Dentist + Hygienist

LHA(R) = The Centerpiece of the American Power Projection at Sea
Major Changes from LHA(R) Flight 0 to Flight 1

- **FWD HANGAR HIGH BAY REDUCED TO 3 FRAMES**
- **AFT HIGH BAY REMAINS 7 FRAMES**
- **2 LCAC WELL & EXPANDED UPPER VEHICLE SPACE**
- **AVN STORE RMS**
- **AVN SHOPS ADDED**
- **REDUCED ISLAND**
- **AVN SHOPS**
- **MEDICAL MOVED FORWARD**
- **FLUSH DECK ELEVATOR ACCESS TO MAGAZINES AND MEDICAL**
- **SPONSON ADDED OUTBOARD OF ELEVATORS W/ AVN SHOPS ON 02 LEVEL**
- **REDUCED ISLAND**
- **SYSTEMS MOVED/REARRANGED ON PORT QUARTER FOR F-35B COMPATIBILITY**
- **STERN GATE FOR WELL DECK ACCESS**
- **ANTENNAE AND COMBAT SYSTEMS REARRANGED (COMpared TO LHA (R) FLT 0)) FOR REDUCED ISLAND AREA.**

**Stern Gate for Well Deck Access**

**2 LCAC WELL DECK**

**Hangar**

**Vehicle Stow**

**Cgo.**

**AVn Shops**

**Medical**

**Reduced Island**

**Flush Deck Elevator Access to Magazines and Medical**

**Spionson Added Outboard of Elevators W/ AVn Shops on 02 Level**

**Reduced Island**

**Systems Moved/Rearranged on Port Quarter for F-35B Compatibility**
LPD 17 Program Overview

• LPD 17 Program Profile (26 ships)
  – Eleven ships delivered and commissioned
  – Eleven ships transferred to In-Service
  – 28 completed or ongoing deployments
  – Three ships under construction
  – Flt II ships will replace LSD-41 class

• LPD 28 – First LPD with “stick mast”
  – 97% percent complete
  – Christened 21 August 2021
  – 2QFY2022 Delivery

• LPD 29
  – 63% percent complete
  – Launched 5 January 2022
  – 4QFY2023 Delivery

• LPD 30 – First Flt II ship
  – 15% percent complete
  – November 2021 Lay Keel Ceremony
  – 2QFY2025 Delivery

• LPD 31
  – Start Fab April 2022
• Ensures amphibious fleet relevance into the 21st Century
• Enables aviation + expeditionary operations across the full spectrum of military action
• Versatile and adaptable for forward presence, power projection, and crisis response

Aviation Capabilities

– 2 Flight Deck spots expandable to 4
– MV-22 Osprey VTOL tilt rotors
– CH-53E Sea Stallion helicopters (FLT I)
– CH-53K King Stallion helicopters (FLT II)
– UH-1Y Huey helicopters
– AH-1Z Super Cobra helicopters

Medical Facilities

– 2 OR
– 6 ICU Beds, 22 Ward Beds (Flt I), 18 Ward Beds (Flt II)
– 2 Dental OR

LPD 17 has proven to be critical in execution of the ARG/MEU mission
LPD Flight II (LPD 30) = LSD Replacement
(Major Changes from Flight I to Flight II)

- Force Protection Storeroom
- Air Dept Office & Storeroom
- Reduction in Troop Berthing (From 650 to 630)
- Aviation Armory
- N-30 Fire Insulation
- Aviation Ready Service Mag OP-4 Compliant
- Flight gear locker increase
- Modify Crane Capacity and Location
- CH-53K mods
- CCA Capable Boat and Cargo Crane
- Well Deck Mods for Ship to Shore Connector
- Boat Valley Rearrangement (space & tie downs for TEUs, mission boats, Quadcons)
- LPD Flt II is the Warship needed for Distributed Operations: Airport, Seaport, Hospital, C4ISR, and Survivable
- Blasting Cap Lockers in CAM
- New Rescue Boat Davit Design & Location
- Enlarge Flam Stowage
- Removed Bridge Ramp
- Increased corrosive storage
- Fire Detection & Alarm Systems for magazines
- PoR MCS Network Architecture
- Updated USMC Space Furnishing

LPD 30 will be the first of the Flight II LPDs delivered to the Navy