

# Joint Seabasing Components



**Carrier Strike Group**

**Expeditionary Strike Group**



**Maritime Prepositioning Group**



**Combat Logistics Force Ships**

**Coalition Force and Sister Service Ships**



- Sea Base**
1. Carrier Strike Group (CSG)
  2. Expeditionary Strike Group (ESG)
  3. Maritime Prepositioning Group (MPG)
  4. Combat Logistics Force (CLF)
  5. Connectors: Joint High Speed Ship (JHSS), Joint High Speed Vessel (JHSV), Assault Connectors (JMAC, EFV)
  6. Coalition Force and Sister Service Ships

**Connectors**



# Amphibious Warfare Ships

LHD



LSD



LPD 17

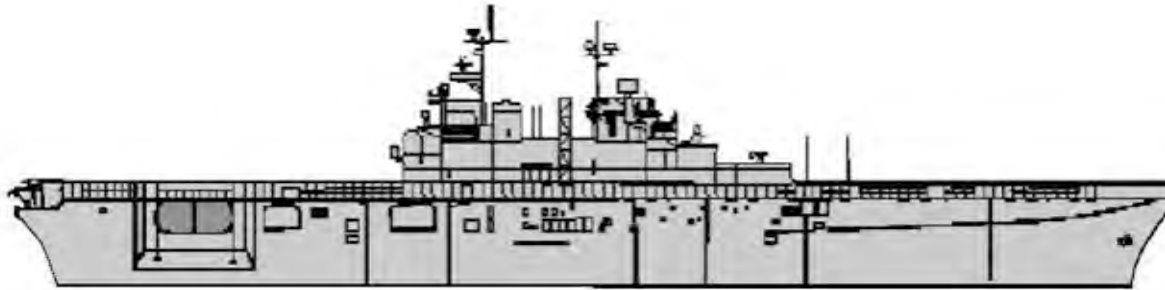


LPD



# LHA Replacement

Replaces LHA Class (begins decommissioning in 2006-2011)



- **Length:** 844 feet, Beam: 106 feet
- **Displacement:** ~45,000 long tons (fully loaded)
- **Speed:** Approximately 22 knots
- **Aircraft \*:** Accommodates MEU Aviation Combat Element; 9 operating spots
- **Aviation Fuel:** 1.6 M gallons
- **Aviation Maintenance:** Supports MV-22 & JSF
- **Embarked Landing Force:** 1,687; surge capacity 1,877

\* Subsequent ships ("Flight 1") will have reduced island to accommodate more aircraft

# LPD 17 *San Antonio* Class

Replaces LPD 4 Class (begins decommissioning in 2005)



- **Length:** 684 feet, Beam: 105 feet
- **Displacement:** Approximately 24,900 tons full load
- **Speed:** In excess of 22 knots
- **Aircraft:** 4 CH-46 *Sea Knight* helicopters or equivalent
- **Armament:** 2 Bushmaster II 30 mm Guns; 2 Rolling Airframe Missile launchers.
- **Landing Craft/Assault Vehicles:** 2 LCACs or 1 LCU; and 14 Expeditionary Fighting Vehicles (EFV)
- **Embarked Landing Force:** 699; surge capacity 800
- **First ship (*San Antonio*) delivered Fall 2005**
- **Total buy: 9 ships**

# LPD-17 San Antonio Class (Amphibious Transport Dock)

## Platform



## Program Status

- LPD 17 Commissioned, 14 Jan 2006, Homeported in Norfolk, VA
- LPD 18 Commissioned 5 March 07, Home ported in San Diego
- LPD 19 successfully completed Acceptance Trials Sept. 07

Functionally replace LPD 4, LSD 41, LKA 113, LST 1179 and LCC Ship classes

## Description

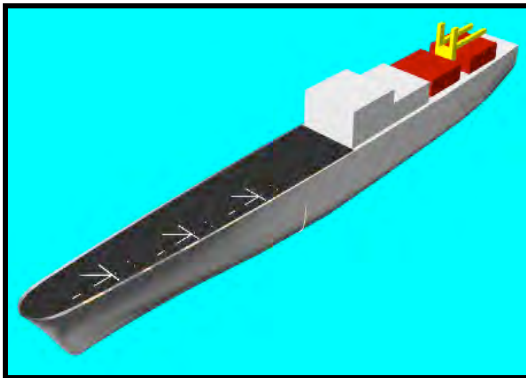
Displacement (Full)	24,900 lt
Speed	24.5 kts
Length	684 ft
Beam	105 ft
Draft	23.0 ft (Full Load)
Crew	360 Sailors /3 Marines
Troop Lift	66 Officers; 41 (>E7); 597 (<E6); 95 Surge
Med Capability	2 Med OR; 4 Isolation Ward; 24 Bed Wards & Casualty Overflow
Surface Interface Well	1 (2 LCAC or 1 LCU); 14 EFV
Flight Deck	2 Ops Spots/4 Exp Spots
Hangar Bay	1 MV-22 or CH-53K
Vehicle Square	25,000 ft <sup>2</sup>
Cargo Cube	35,000 ft <sup>3</sup>
Cargo Fuel (JP5)	215,000 gal

## Issues

- Program of Record is for 12 ships but only 9 are currently funded.
- 9th ship (LPD-25) to be delivered in FY-12
- Marine Corps requires 10<sup>th</sup> & 11<sup>th</sup> LPD-17 to meet 2.0 MEB AE lift requirement
  - #1 on USMC FY09 unfunded program list
  - #2 on USN FY09 unfunded program list
- LPD-17 hull form may be used for LCC(R) and LSD(X) platforms based on Navy Single Hull initiative.

# High Speed Surface Connectors

**Joint High Speed Sealift**

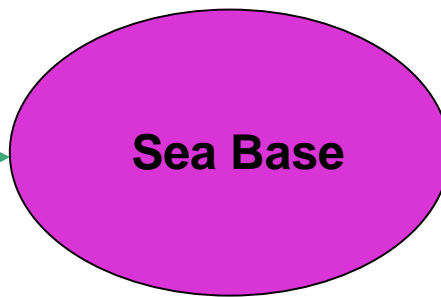


(Inter-Theater Connector)

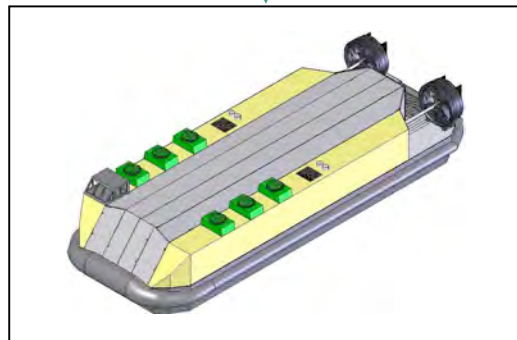
**Joint High Speed Vessel**



(Intra-Theater Connector)



**Joint Maritime Assault Connector**



(Ship-to-Shore Connector)

# Joint High Speed Sealift (JHSS)

Mission: Strategic sealift, close non-self deploying aircraft and organizational-level squadron equipment; projected fielding FY16.



# Joint High Speed Vessel (JHSV)

Mission: Provide high-speed, medium-payload, intra-theater lift; projected USN fielding FY11, Initial Operating Capability FY13.

- Primary mission areas include: operational / littoral maneuver; support Combatant Commander's Security Cooperation Plan and real-world GWOT missions; and Force Closure / Seabasing Support.



# Joint High Speed Vessel (JHSV)

## JHSV Capabilities & Characteristics

- Shallow draft (< 15'), high speed (> 35 kts loaded)
  - Ability to enter small, austere/degraded ports unassisted
- Self-deploying between theaters
- 600-700 ST payload, 1200 NM range, 35 kts, Sea State 3
  - Smaller payloads = greater range, larger payloads = less range
- Seating for 312 Marines (Co (rein)); berthing for 104 Marines
- 20-22,000 sqft mission deck/cargo bay (M1A2, MTRV compatible)
- Slewing ramp (astern to 40 degrees forward)
- Level I, Class 2 flight deck for H-60s, H-46s, UH/AH-1 helicopters
  - Fuel only, no services
- 20 ST crane for TEU movement, small boat launch & recovery
- Net Ready C4 system (plug and play)
- **JHSV is not a combatant, operates in a permissive environment**
  - **MSC standard for AFTP capabilities**

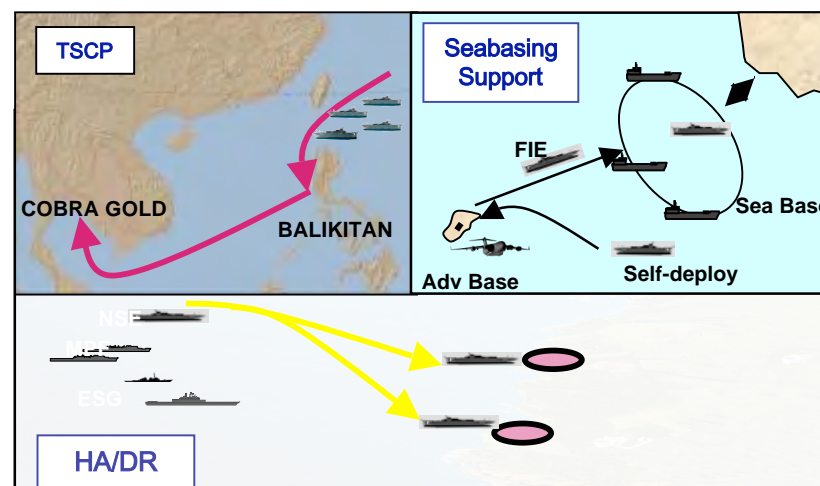
## JHSV Quantity and Basing

- 8 JHSVs funded (5 Army, 3 Navy), 2 addl USN JHSVs in PR09
- Phase 1 Preliminary Concept Design Contract awarded 31 Jan 08
- Phase 2 Detail Design & Construction Contract to be awarded in Sep '08
- **Quantity funded does not equal quantity required**
- Acquisition objective TBD by MS B (Aug '08)
  - PACOM, AoA, MCCDC studies suggest 16 JHSVs needed across DOD
- **7 JHSV equivalents meet USMC requirements**
  - Based on MARFOR TSCP, GWOT, intra-theater lift requirements
  - Requirement quantified in "vessel days per year" v. specific # of JHSVs
  - Assumes 180 days operational availability (Ao) per year per JHSV
  - Does not explore overlap between USN, USMC requirements
- Notional basing scheme (JHSVs swing between theaters as needed)
  - PACOM = 3 (Hawaii, Guam, Okinawa)      CENTCOM = 2 (Bahrain)
  - EUCOM = 1 (Rota)      CONUS = 1 (Norfolk)

## Possible JHSV Candidates

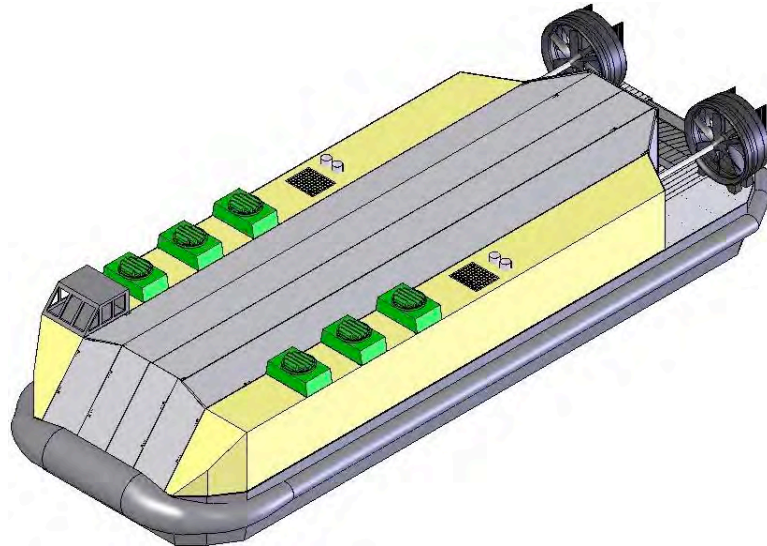


## USMC JHSV CONOPS (The "Intra-Theater Connector")



# Joint Maritime Assault Connector (JMAC)

Mission: Serve as tactical assault connector; transport equipment from Sea Base to/over the beach and between sea base platforms. Fleet introduction in FY15.



# MPF(F) Squadron Composition

6 Apr 2006

## 2 LHA

NEW BUILD



Length: 844 ft	Beam: 106 ft	Draft: 28.2 ft	Displacement: 45K LT
Per Sqdn: 2	Speed: ~20 knots		Range ~9,500 nm
Crew: 285	Stand Det: ~99	MAGTF: 1,490	NSE: ~590 Berths: 3,052
Acft Stow: 55	Acft Op Spots: 9	JP-5: 1.6 Mil gal	Water: 400k Gal/200K gal Per day
Sqft: 11,600	CuFt: 160,000		Well Deck: N/A
TEU: N/A	Med: 4 OR & 16/45 Beds		Stern Ramp: N/A

## 3 MLP

NEW BUILD  
/DESIGN

Artist Rendition/Notional Configuration  
FLO/FLO Technology focused



Length: 817 ft	Beam: 141 ft	Draft: TBD	Displacement: TBD
Per Sqdn: 3	Speed: ~20 knots		Range ~9,500 nm
Crew: 64	Stand Det: 10	MAGTF: 594	NSE: ~128 Berths: ~1,458
Acft Stow: 0	Acft Op Spots: 1	JP-5: ~1.2 Mil gal	Water: ~168K Gal/TBD gal Per day
Sqft: ~11,253	CuFt: ~935		Mission Deck: 6 (LCAC)
TEU: N/A	Med: Sick Call		Stern Ramp: N/A

## 1 LHD

NEW BUILD



Length: 844 ft	Beam: 106 ft	Draft: 27 ft	Displacement: 42K LT
Per Sqdn: 1	Speed: ~20 knots		Range ~9,500 nm
Crew: 285	Stand Det: ~99	MAGTF: 1,656	NSE: ~670 Berths: 2,946
Acft Stow: 42	Acft Op Spots: 9	JP-5: 607 K gal	Water: 400K Gal/200K Gal Per Day
Sqft: 23,500	CuFt: 125,000		Well Deck: 3 LCAC
TEU: N/A	Med: 6 OR & 60 Beds		Stern Ramp: 72 ST

## 3 T-AKE

NEW BUILD  
MODIFIED DESIGN

Artist Rendition/Notional Configuration



Length: 689 ft	Beam: 105 ft	Draft: 29 ft	Displacement: 39K LT
Per Sqdn: 3	Speed: ~20 knots		Range ~9,500 nm
Crew: 123	Stand Det: 6	MAGTF: ~10	NSE: ~55 Berths: 194
Acft Stow: 1	Acft Op Spots: 1	JP-5: 1.3 Mil gal	Water: 52.8K Gal/28K gal Per day
Sqft: N/A	CuFt: 1,108,592		Well Deck: N/A
TEU: 61	Med: Sick Call		Stern Ramp: N/A

## 3 T-AKR

NEW BUILD  
MODIFIED DESIGN

Artist Rendition/Notional Configuration



Length: 950 ft	Beam: 106 ft	Draft: 34 ft	Displacement: ~55K LT
Per Sqdn: 3	Speed: ~20 knots		Range ~9,500 nm
Crew: 30	Stand Det: 48	MAGTF: 705	NSE: ~62 Berths: ~845
Acft Stow: 0	Acft Op Spots: 2/4	JP-5: 380.4K gal	Water: 33.5K gal/24K gal Per day
Sqft: ~201,799	CuFt: ~166,716		Well Deck: N/A
TEU: 45	Med: Sick Call		Stern Ramp: 80 ST

## 2 Legacy



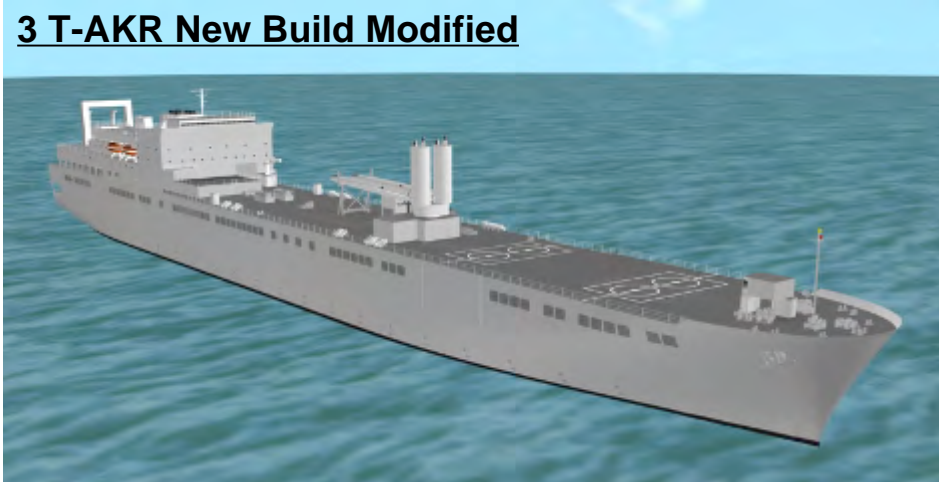
Length: 673 ft	Beam: 106 ft	Draft: 34.6 ft	Displacement: ~46K LT
Per Sqdn: 2	Speed: 17.7 knots		Range 12,900 nm
Crew: 30	Stand Det: 16	MAGTF: 71	NSE: ~10 Berths: 127
Acft Stow: 0	Acft Op Spots: 1	JP-5: 1.4 Mil gal	Water: 99K Gal/ 25K Gal Per day
Sqft: 152,185	CuFt: N/A		Well Deck: N/A
TEU: 546	Med: Sick Call		Stern Ramp: 62 ST

# LMSR

## (Large Medium-Speed Roll-On Roll-Off)

### Platform

#### 3 T-AKR New Build Modified



### Program Status

- Increment 3
- CDD staffed 1st Qtr FY09
- MS B FY12
- Procurements
  - 1- (FY10) delivery FY17
  - 2- (FY14) delivery FY18
  - 3- (FY15) delivery FY19

### Description

Displacement	55K It
Speed	~20 kts
Length	950 ft
Beam	106 ft
Draft	34.0 ft
Crew	30 Standing Det: 48
Troop Lift	1,612
Cargo Cube	
Surface Interface	0
Med Capability	Sickcall

### Issues

- Program of Record is for 3 ships
- Last ship to be delivered in FY19
- New build ships with Seabasing modifications
- Limited TEU handling capability

# LHA-6 Class (Amphibious Assault Ship)

## Preliminary Design Platform

LHA-6



## Program Status

- **LHA 6 (LHA(R) Flight 0), a transformational ship to replace the LHA 1 class of amphibious assault ships.**
  - Will have the flexibility to operate in the traditional role as the flagship for an ESG as well as potentially playing a key role in the MPF(F); provides the flexibility to operate and be a vital part of the Sea Base.
- **Program to enhance amphibious aviation capability-meet increased demand created by JSF-MV22.**
  - Compliments the MEU, 1:1 Future composite ACE (6 F-35B, 12 MV-22B, 4 CH-53K, 4 AH-1Z, 3 UH-1Y, and 2 MH-60 SAR)
  - Or a JSF platform to host 22 F-35B aircraft.
- **LHA-6/7/8 planned w/o well-deck**
  - Procurement of LHA-7 (FY10) and LHA-8 (FY14) are currently programmed as MPF(F) big decks
- **Contract awarded June 07; operational FY12.**

## Description

Displacement, Full (LHD)	44,971 lt
Speed	22.2 kts
Length	844 ft
Beam	106 ft
Draft	28.82 ft (Full Load)
Crew	102 Officers; 78 SNCO; 1024 Enlisted
Marine Detachment	1,687 troops; 184 surge
Med Capability	2 Med OR; 24 Ward
Surface Interface Well	0
Flight Deck	9 CH-53K Spots
Elevators	1 Port (37 ½ t); 1 Starboard (37 ½ t)
Hangar Bay / High Bay	30,542 ft <sup>2</sup> / Two 7 Frame High Bay (49 ft)
Vehicle Square	19,112 ft <sup>2</sup>
Cargo/Ammo Cube	145,963 ft <sup>3</sup>
Cargo Fuel (JP-5)	1,300,000 gal

## Issues

- **LHA-7 design decision (RIC & Well Deck) pending for FY-10 ship. Ship will be an MPF(F) big deck.**
- **Expeditionary Role as Amphibious Warfare Ship to support the Strategic Planning Guidance and providing Operational Availability (Ao) to support 2.0 MEB Assault Echelon (i.e. 10 LHD/LHA(R)).**

# LH(X)

## Concept Platform



## Program Status

- Program to enhance amphibious capability and bring back what was learned with LHA 6 design.
- Meet increased demand of MAGTF growth and demand created by JSF-MV22-CH53K.
- LH(X) is slated for an FY24 procurement
  - FY29 Operational

## Concept Platform



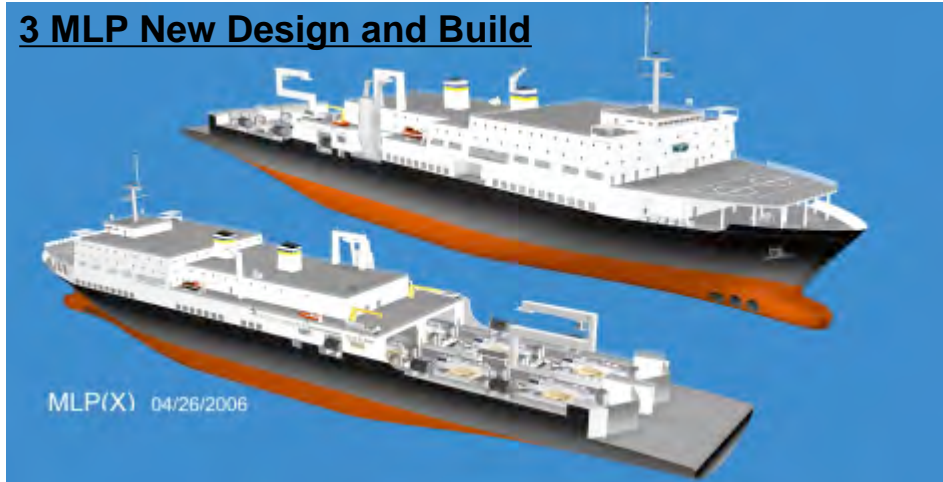
## Issues

- Goal for LH(X) will be designed to reincorporate the Well Deck, and retain as much of the aviation enhancements achieved from LHA(R) as possible (expanded hangar/high bay, space arrangements)
- RIC: Part of “spiral design” concept
  - Eliminates need for flight restrictions on spot 5 & 6 increasing clearance btw A/C and ship’s island; MV-22 currently cannot land on spots 5 & 6 on the LHD and LHA-6
  - Increases deck capacity 20% over LHA-6 (9 more H46 equivalent spots) which equates to an increase to the standard MEU ACE:
    - 4 more MV-22B or
    - 3 more F-35B or
    - 3 more CH-53K

# MLP (Mobile Landing Platform)

## Platform

### 3 MLP New Design and Build



## Program Status

- Increment 1
- CDD currently being staffed
- Milestone B FY10
- Procurements
  - 1 (FY08) Delivery (FY15)
  - 2 (FY12); Delivery (FY16)
  - 2 (FY13); Delivery (FY17)

## Description

Displacement	TBD
Speed	20 kt
Length	817 ft
Beam	141 ft
Draft	TBD
Crew	64 Standing Det: 10
Troop Lift	~2180
Surface Interface Points	2
Med Capability	Sickcall

## Issues

- Program of Record is for 3 ships
- Key Sea Basing Enabler
- Use of Float On Float Off (FLO/FLO) Commercial technology
- TEU handling Capability added
- **Vehicle Transfer System (VTS) is new technology**



# T-AKE

## (Dry Cargo/Ammunition Ship)

### Platform

#### 3 T-AKE New Build



### Program Status

- Increment 1
- CDD currently being staffed
- Milestone B TBD
- Procurements
  - 1 – (FY09) delivery FY12
  - 2 – (FY10) delivery FY13
  - 3 – (FY11) delivery FY14

### Description

Displacement	39K lt
Speed	~20 kts
Length	689 ft
Beam	105 ft
Draft	29.0 ft
Crew	123 Standing Det: 6
Troop Lift	~197
Cargo Cube	
Med Capability	Sickcall

### Issues

- Program of Record is for 3 ships
- Hot assembly line
  - Lewis and Clark first ship of class for Combat Logistics Force (CLF)
- Last ship to be delivered in FY-14
- Second and third MPF(F) T-AKE's to be funded in POM10