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# **Amphibious Ships and Landing Craft Data Book**

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**U.S. Marine Corps**

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**Unless otherwise stated, whenever the masculine gender is used, both men and women are included.**

DEPARTMENT OF THE NAVY  
United States Marine Corps  
Washington, DC 20380-1775

29 August 2001

## FOREWORD

### PURPOSE

Marine Corps Reference Publication (MCRP) 3-31B, *Amphibious Ships and Landing Craft Data Book*, is for use in planning where generalized capabilities and measurements are required. In planning for operations where exact capabilities and figures are required, the individual ship's loading characteristics pamphlet (SLCP) must be consulted.

### SCOPE

The information contained in this MCRP was obtained from the individual SLCPs and from the Naval Sea Systems Command. The data is based on class averages. No broken stowage factors have been applied to square footage in embarked landing craft.


### SUPERSESION

This book supersedes Fleet Marine Force Reference Publication (FMFRP) 1-18, *Amphibious Ships and Landing Craft Data Book*, dated 6 August 1991.

### CERTIFICATION

Reviewed and approved this date.

BY DIRECTION OF THE COMMANDANT OF THE MARINE CORP

  
EDWARD HANLON, JR.  
Lieutenant General, U.S. Marine Corps  
Commanding General  
Marine Corps Combat Development Command

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## Amphibious Command Ship *USS Blue Ridge (LCC-19) Class*



*USS Mount Whitney (LCC-20) Pictured*

### Mission

The assigned mission of the amphibious command ship (LCC) is to function as the command ship for a joint task force as the command, control, communications, computers, and intelligence (C4I) platform, or for a naval component commander; numbered fleet commander; commander, amphibious task force (CATF); Marine expeditionary force (MEF).

### General Comments

This ship is designed primarily to fulfill command and control requirements for surface, subsurface, and air units engaged in amphibious assaults.

The *USS Blue Ridge* (LCC-19) is distinctive in appearance. The ship can communicate in frequency ranges from high frequency to super high frequency, including two satellite systems for high speed/high volume communication links. The various internal command areas are highly automated to monitor and process information regarding the progress of an amphibious operation. This is the only class of ship designed from its hull up to support the command and control needs of the CATF; commander, landing force (CLF); and tactical air control center (TACC).

### General Information

|                              |                       |
|------------------------------|-----------------------|
| Length (overall)             | 620 feet              |
| Beam                         | 180 feet              |
| Displacement (light load)    | 16,100 tons           |
| Displacement (full load)     | 18,646 tons           |
| Draft (full load)            | 29 feet               |
| Main engine (geared turbine) | 1                     |
| Boilers                      | 2                     |
| Shaft                        | 1                     |
| Shaft horsepower             | 22,000                |
| Speed                        | 23 knots              |
| Range at 16 knots            | 13,000 nautical miles |
| Staff accommodations         | 217                   |
| Crew accommodations          | 774                   |
| Ship's chaplain              | Yes                   |

**Landing Force Lift General Information**

|   |                   |
|---|-------------------|
| Officer accommodations                  | 56                |
| Enlisted accommodations (E-7)           | 42                |
| Enlisted accommodations (E-6 and below) | 111               |
| Vehicle square                          | 3,015 square feet |
| Cargo cube                              | 2,175 cubic feet  |
| Helicopter landing spot                 | 1                 |
| JP-5                                    | 123,510 gallons   |

**Command and Control Systems  
(Continued)**

|                                    |     |
|------------------------------------|-----|
| Tactical-Logistical Group          | No  |
| Helicopter Logistics Support Group | Yes |
| Helicopter Direction Center        | Yes |
| Helicopter Coordination Section    | Yes |
| Tactical Air Control Center        | Yes |

**Command and Control Systems**

|  |     |
|--|-----|
| Combat Information Center                          | Yes |
| Integrated Tactical Amphibious Warfare Data System | No  |
| Ship's Signals Exploitation Space                  | Yes |
| Flag Plot  | Yes |
| Landing Force Operations Center                    | Yes |
| Joint Intelligence Center                          | Yes |
| Supporting Arms Coordination Center                | Yes |

**Organic Craft**

|  |   |
|--|---|
| Landing craft, personnel, large (LCPL) | 2 |
| Utility boat                           | 1 |

**Weapons**

|  |
|--|
| Phalanx Close-in Weapon System (CIWS)                                  |
| MK-38 25mm Machine Gun   |
| M-2 .50 caliber Heavy Machine Gun (HMG)                                |
| MK-36 Chaff Rocket Super Rapid Booming Offboard Chaff (SRBOC) Launcher |

**Ships in Class**

| Hull Number | Ship's Name              | Home Port       |
|-------------|--------------------------|-----------------|
| LCC-19      | <i>USS Blue Ridge</i>    | Yokosuka, Japan |
| LCC-20      | <i>USS Mount Whitney</i> | Norfolk, VA     |

## Amphibious Assault Ship (General Purpose) *USS Tarawa (LHA-1) Class*



***USS Nassau (LHA-4) Pictured***

### Mission

The assigned mission of the amphibious assault ship (general purpose) (LHA) is to embark, deploy, and land elements of a Marine landing force in an amphibious assault by helicopters, landing craft, amphibious vehicles, and by combinations of these methods.

### General Comments

The LHA features include a full length flight deck, a landing craft docking well (well deck), large storage areas for vehicles and cargo, and troop berthing for a reinforced battalion. An Integrated Tactical Amphibious Warfare Data System (ITAWDS) provides computerized support in control of helicopters, aircraft, shipboard weapons, sensors, navigation, landing craft, and electronic warfare.

The flag spaces are designed to support the staff of the embarked Navy organization (amphibious squadron [PHIBRON] or an amphibious group [PHIBGRU] staff) and the Marine landing force staff (Marine expeditionary unit [MEU], Marine expeditionary brigade [MEB] or Marine expeditionary force [MEF]). The design of the LHA provides an optimum operational environment for ship's company, embarked

staffs, troops, and support personnel prior to, during, and after an amphibious operation.

### General Information

|                               |                       |
|-------------------------------|-----------------------|
| Length (overall)              | 820 feet              |
| Beam                          | 106 feet              |
| Displacement (light load)     | 33,536 tons           |
| Displacement (full load)      | 39,967 tons           |
| Draft (full load)             | 26 feet               |
| Main engines (geared turbine) | 2                     |
| Boilers                       | 2                     |
| Shafts                        | 2                     |
| Shaft horsepower              | 70,000                |
| Speed                         | 24 knots              |
| Range at 20 knots             | 10,000 nautical miles |
| Bow thruster                  | Yes                   |
| Staff accommodations          | 87                    |
| Crew accommodations           | 956                   |
| Ship's chaplain               | Yes                   |



### Landing Force Lift General Information

|  |                    |
|--|--------------------|
| Officer accommodations                             | 172                |
| Enlisted accommodations (E-7)                      | 59                 |
| Enlisted accommodations (E-6 and below)            | 1,672              |
| Surge accommodations                               | No                 |
| Vehicle square                                     | 28,700 square feet |
| Cargo cube   | 156,000 cubic feet |
| Helicopter landing spots                           | 9                  |
| Operational CH-46 equivalents                      | 43                 |
| JP-5   | 407,600 gallons    |
| Motor gasoline (MOGAS) (embarked bladder)          | 500 gallons        |
| Landing force operational reserve material (LFORM) | Yes                |

### Command and Control Systems

|  |     |
|--|-----|
| Combat Information Center                          | Yes |
| Integrated Tactical Amphibious Warfare Data System | Yes |
| Ship's Signals Exploitation Space                  | Yes |
| Flag Plot  | Yes |
| Landing Force Operations Center                    | Yes |
| Joint Intelligence Center                          | Yes |
| Supporting Arms Coordination Center                | Yes |
| Tactical-Logistical Group                          | Yes |
| Helicopter Logistics Support Group                 | Yes |
| Tactical Air Control Center                        | Yes |
| Helicopter Direction Center                        | Yes |
| Helicopter Coordination Section                    | Yes |

### Medical Capabilities

|  |         |
|--|---------|
| Operating rooms                        | 4       |
| Post-operative recovery/Intensive care | 17 beds |
| Isolation ward                         | 4 beds  |
| Primary care ward                      | 48 beds |
| Ship's doctor                          | Yes     |
| Ship's dentist                         | Yes     |

### Well Deck

The landing craft numbers listed below are the maximum number of each type of craft that can be stowed in the well deck exclusive of any other craft. Combinations of these craft may be stowed in the well deck.

|                              |                    |
|------------------------------|--------------------|
| Length (to island)           | 107 feet, 7 inches |
| Length (overall)             | 249 feet, 8 inches |
| Width                        | 76 feet            |
| Height                       | 26 feet, 8 inches  |
| LCAC                         | 1                  |
| Landing craft, utility (LCU) | 4                  |

### Cargo Handling Equipment

|  |   |
|--|---|
| Forklift (electric/4-ton)                        | 1 |
| Forklifts (diesel/6-ton)                         | 8 |
| Forklifts (rough terrain/10,000 pounds)          | 2 |
| Aircraft tow tractors (4¼-ton)                   | 6 |
| Aircraft spotting dollies (6-ton)                | 3 |
| Aircraft elevators (40-ton aft/ 20-ton portside) | 2 |
| Longitudinal pallet conveyor                     | 1 |
| Monorails (2 hooks, each with 3-ton capacity)    | 3 |

**Organic Craft**

|      |   |
|------|---|
| LCPL | 2 |
|------|---|

**Weapons**

|  |
|--|
| Phalanx Close-in Weapon System (CIWS)                                  |
| Rolling Airframe Missile (RAM) System                                  |
| MK-36 Chaff Rocket Super Rapid Booming Offboard Chaff (SRBOC) Launcher |
| MK-38 25mm Machine Gun   |
| M-2 .50 caliber Heavy Machine Gun (HMG)                                |

**Ships in Class**

| Hull Number | Ship's Name             | Home Port     |
|-------------|-------------------------|---------------|
| LHA-1       | <i>USS Tarawa</i>       | San Diego, CA |
| LHA-2       | <i>USS Saipan</i>       | Norfolk, VA   |
| LHA-3       | <i>USS Belleau Wood</i> | San Diego, CA |
| LHA-4       | <i>USS Nassau</i>       | Norfolk, VA   |
| LHA-5       | <i>USS Peleliu</i>      | San Diego, CA |

## **Amphibious Assault Ship (Multipurpose) *USS Wasp (LHD-1) Class***



**USS Essex (LHD-2) Pictured**

### **Mission**

The assigned mission of the amphibious assault ship (multipurpose) (LHD) is to embark, deploy, and land elements of a Marine landing force in an amphibious assault by helicopters, landing craft, amphibious vehicles, and by combinations of these methods. The LHD is assigned a secondary mission of sea control and power projection in which additional fixed-wing vertical/short takeoff and landing (V/STOL) aircraft and helicopters are deployed.

### **General Comments**

The LHD incorporates the original design features of the LHA. The ship can embark a large segment of a landing force with its equipment and supplies. The flag spaces are designed to support the staff of the embarked Navy organization (amphibious squadron [PHIBRON] or an amphibious group [PHIBGRU] staff) and the Marine landing force staff (Marine expeditionary unit [MEU], Marine expeditionary brigade [MEB]) or Marine expeditionary force [MEF]). An expanded and combined flag data display uses the latest in technology to enhance the commander's ability to control air, land, and sea assets.

The aviation facilities are capable of supporting a composite helicopter squadron or an AV-8B V/STOL squadron or combination of the two. When in its secondary mission, the flight deck can accommodate 20 AV-8B and 4 to 6 SH-60B (LAMPS III), thus enabling the commander to control the sea while projecting power.

### **General Information**

|                           |                   |
|---------------------------|-------------------|
| Length (overall)          | 844 feet          |
| Beam                      | 107 feet          |
| Displacement (light load) | 26,840 tons       |
| Displacement (full load)  | 40,532 tons       |
| Draft (full load)         | 26 feet, 6 inches |
| Main engines              | 2                 |
| Boilers                   | 2                 |
| Shafts                    | 2                 |
| Shaft horsepower          | 70,000            |
| Speed                     | 22 knots          |

**General Information (Continued)**

|                      |       |
|----------------------|-------|
| Bow thruster         | No    |
| Staff accommodations | 35    |
| Crew accommodations  | 1,231 |
| Ship's chaplain      | Yes   |

**Landing Force Lift General Information**

|   |                       |
|---|-----------------------|
| Officer accommodations                  | 173                   |
| Enlisted accommodations (E-7)           | 64                    |
| Enlisted accommodations (E-6 and below) | 1,656                 |
| Surge accommodations (officer)          | 19                    |
| Surge accommodations (E-7)              | 6                     |
| Surge accommodations (E-6 and below)    | 186                   |
| Vehicle square                          | 24,012<br>square feet |
| Cargo cube                              | 145,000<br>cubic feet |
| Helicopter landing spots                | 9                     |
| Operational CH-46 equivalents           | 42                    |
| JP-5                                    | 484,000<br>gallons    |
| MOGAS (embarked bladder)                | 500<br>gallons        |
| LFORM                                   | Yes                   |

**Command and Control Systems**

|  |     |
|--|-----|
| Combat Information Center                          | Yes |
| Integrated Tactical Amphibious Warfare Data System | Yes |
| Ship's Signals Exploitation Space                  | Yes |
| Flag Plot  | Yes |

**Command and Control Systems (Continued)**

|                                     |     |
|-------------------------------------|-----|
| Landing Force Operations Center     | Yes |
| Joint Intelligence Center           | Yes |
| Supporting Arms Coordination Center | Yes |
| Tactical-Logistical Group           | Yes |
| Helicopter Logistics Support Group  | Yes |
| Tactical Air Control Center         | Yes |
| Helicopter Direction Center         | Yes |
| Helicopter Coordination Section     | Yes |

**Medical Capabilities**

|  |         |
|--|---------|
| Operating rooms                        | 6       |
| Post-operative recovery/Intensive care | 18 beds |
| Isolation ward                         | 6 beds  |
| Primary care ward                      | 36 beds |
| Ship's doctor                          | Yes     |
| Ship's dentist                         | Yes     |

**Well Deck**

The landing craft numbers listed below are the maximum number of each type of craft that can be stowed in the well deck exclusive of any other craft. Combinations of these craft may be stowed in the well deck.

|                  |          |
|------------------|----------|
| Length (overall) | 322 feet |
| Width            | 50 feet  |
| Height           | 28 feet  |
| LCACs            | 3        |
| LCUs             | 2        |

**Cargo Handling Equipment**

|                            |    |
|----------------------------|----|
| Forklifts (electric 2-ton) | 10 |
| Forklifts (diesel 3-ton)   | 25 |

**Cargo Handling Equipment (Continued)**

|  |   |
|--|---|
| Forklifts (rough terrain/10,000 pounds)                | 2 |
| Aircraft tow tractors                                  | 5 |
| Spotting dollies                                       | 4 |
| Aircraft elevators (port/starboard 37½-ton)            | 2 |
| Aircraft crash crane (ACC) (35-ton maximum capability) | 1 |
| Monorail (1½-ton)                                      | 5 |
| Cargo elevators (6-ton)                                | 6 |
| Pallet conveyors (½-ton/300 pallets per hour)          | 2 |

**Organic Craft**

|   |   |
|---|---|
| LCPL                                      | 1 |
| 7-meter rigid hull inflatable boat (RHIB) | 1 |

**Weapons**

|   |
|---|
| Phalanx Close-in Weapon System (CIWS)   |
| NATO Sea Sparrow Missile System (NSSMS) |

**Weapons (Continued)**

|   |
|---|
| M-2 .50 caliber Heavy Machine Gun (HMG) |
| MK-38 25mm Machine Gun                  |
| Rolling Airframe Missile (RAM) System   |

**Ships in Class**

| Hull Number | Ship's Name                  | Home Port     |
|-------------|------------------------------|---------------|
| LHD-1       | <i>USS Wasp</i>              | Norfolk, VA   |
| LHD-2       | <i>USS Essex</i>             | Sasebo, Japan |
| LHD-3       | <i>USS Kearsarge</i>         | Norfolk, VA   |
| LHD-4       | <i>USS Boxer</i>             | San Diego, CA |
| LHD-5       | <i>USS Bataan</i>            | Norfolk, VA   |
| LHD-6       | <i>USS Bon Homme Richard</i> | San Diego, CA |
| LHD-7       | <i>USS Iwo Jima</i>          | Norfolk, VA   |
| LHD-8       | (Name/delivery date TBD)     | TBD           |

## Amphibious Transport Dock *USS Austin (LPD-4)* Class



*USS Trenton (LPD-14)* Pictured

### Mission

The assigned mission of the LPD is to transport and land troops and their essential equipment and supplies in an amphibious assault by means of embarked landing craft or amphibious vehicles augmented by helicopter lift.

### General Comments

The LPD is a general purpose amphibious ship with substantial lift capacities for troops, vehicles, landing craft, cargo, and bulk fuel. The LPD is capable of ballasting to permit loading and launching of landing craft and assault amphibious vehicles. Vehicles can move about the various decks by a series of power-operated ramps. The well deck can accommodate all types of landing craft currently in the amphibious force inventory. A limited number of helicopters may be transported on the flight deck as the LPD serves as a helicopter platform for landing embarked troops and their supplies. It also serves as a refueling station for helicopters of the landing force. Troops, vehicles, and equipment can be loaded/off-loaded by helicopter and landing craft simultaneously. Several LPDs are flag configured for MEU and PHIBRON size staffs.

### General Information

|  |                      |
|--|----------------------|
| Length (overall)                               | 570 feet             |
| Beam   | 84 feet              |
| Displacement (light load)                      | 9,128 tons           |
| Displacement (full load)                       | 16,905 tons          |
| Draft (full load)                              | 23 feet              |
| Main engines                                   | 2                    |
| Boilers  | 2                    |
| Shafts   | 2                    |
| Shaft horsepower                               | 24,000               |
| Speed  | 21 knots             |
| Range at 20 knots                              | 7,700 nautical miles |
| Bow thruster                                   | No                   |
| Staff accommodations<br>(flag configured only) | 60                   |
| Crew accommodations                            | 492                  |
| Ship's chaplain                                | Yes                  |

### Landing Force Lift General Information

|   |                    |
|---|--------------------|
| Officer accommodations                  | 68                 |
| Enlisted accommodations (E-7)           | 21                 |
| Enlisted accommodations (E-6 and below) | 620                |
| Surge accommodations (E-6 and below)    | 176                |
| Vehicle square                          | 14,000 square feet |
| Cargo cube                              | 51,000 cubic feet  |
| Helicopter landing spots                | 2                  |
| Operational CH-46 equivalents           | 4                  |
| JP-5                                    | 288,700 gallons    |
| MOGAS                                   | 21,900 gallons     |
| LFORM                                   | Yes                |

### Organic Craft

|              |   |
|--------------|---|
| Utility boat | 1 |
| LCPL         | 2 |
| 7-meter RHIB | 1 |

### Command and Control Systems

|  |     |
|--|-----|
| Combat Information Center                                | Yes |
| Integrated Tactical Amphibious Warfare Data System       | No  |
| Ship's Signals Exploitation Space (flag configured only) | Yes |
| Flag Plot (flag configured only)                         | Yes |

### Command and Control Systems (Continued)

|  |     |
|--|-----|
| Troop Operations and Logistics Center                      | Yes |
| Joint Intelligence Center                                  | No  |
| Supporting Arms Coordination Center (flag configured only) | Yes |
| Tactical-Logistical Group                                  | No  |
| Helicopter Logistics Support Group                         | No  |
| Tactical Air Control Center                                | No  |
| Helicopter Direction Center                                | No  |
| Helicopter Coordination Section                            | Yes |

### Medical Capabilities

|  |        |
|--|--------|
| Operating room                         | 1      |
| Post-operative recovery/Intensive care | No     |
| Isolation ward                         | 4 beds |
| Primary care ward                      | 8 beds |
| Casualty overflow                      | No     |
| Ship's doctor                          | Yes    |
| Ship's dentist                         | Yes    |

### Cargo Handling Equipment

|   |    |
|---|----|
| Forklifts (electric/2-ton)                    | 10 |
| Forklifts (rough terrain/6,000 pounds)        | 2  |
| Cargo and weapons elevator (8-ton)            | 1  |
| Pallet conveyors(1½-ton)                      | 3  |
| Monorails (2 hooks, each with 2-ton capacity) | 2  |
| Boat and aircraft crane (30-ton)              | 1  |

### Well Deck

The landing craft numbers listed below are the maximum number of each type of craft that can be stowed in the well deck exclusive of any other craft. Combinations of these craft may be stowed in the well deck.

|                  |          |
|------------------|----------|
| Length (overall) | 168 feet |
| Width            | 50 feet  |
| Height           | 20 feet  |
| LCAC             | 1        |
| LCU              | 1        |

### Weapons

|  |
|--|
| Phalanx Close-in Weapon system (CIWS)                                  |
| MK-36 Chaff Rocket Super Rapid Booming Offboard Chaff (SRBOC) Launcher |

### Ships in Class

| Hull Number | Ship's Name           | Home Port     | Flag Configured |
|-------------|-----------------------|---------------|-----------------|
| LPD-4       | <i>USS Austin</i>     | Norfolk, VA   | No              |
| LPD-5       | <i>USS Ogden</i>      | San Diego, CA | No              |
| LPD-6       | <i>USS Duluth</i>     | San Diego, CA | No              |
| LPD-7       | <i>USS Cleveland</i>  | San Diego, CA | Yes             |
| LPD-8       | <i>USS Dubuque</i>    | San Diego, CA | Yes             |
| LPD-9       | <i>USS Denver</i>     | San Diego, CA | Yes             |
| LPD-10      | <i>USS Juneau</i>     | Sasebo, Japan | Yes             |
| LPD-12      | <i>USS Shreveport</i> | Norfolk, VA   | Yes             |
| LPD-13      | <i>USS Nashville</i>  | Norfolk, VA   | Yes             |
| LPD-14      | <i>USS Trenton</i>    | Norfolk, VA   | No              |
| LPD-15      | <i>USS Ponce</i>      | Norfolk, VA   | No              |



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



**USS San Antonio (LPD-17) Pictured**

### **Mission**

The assigned mission of the LPD-17 class ships is to embark, transport, and land elements of the landing force in an assault by helicopters, landing craft, amphibious assault vehicles, and by a combination of these methods.

### **General Comments**

The San Antonio class LPD will provide greatly improved warfighting capabilities including an advanced command and control suite, a greatly increased lift capacity, including substantial increases in vehicle and cargo carrying capability, and advanced ship survivability features. These ships have been designed from the keel up to support the Marine Corps 'mobility triad'—the landing craft air cushion (LCAC) vehicle, advanced amphibious assault vehicle (AAAV), and MV-22 (Osprey tiltrotor aircraft)—making this class a key element of 21st century amphibious ready groups. It is also certified for the AV-8B aircraft. The LPD-17 class ships are scheduled to replace the older LPD-4 class.

The San Antonio class design integrates the latest in command, control, communications, computers, intelligence, surveillance and reconnaissance (C4ISR) capability. These capabilities are further enhanced by

additional, dedicated intelligence, mission planning, and command and control spaces. The shipboard wide area network (SWAN) developed for LPD-17 is a fiber optic shipwide large area computer network.

### **General Information**

|                          |             |
|--------------------------|-------------|
| Length (overall)         | 684 feet    |
| Beam                     | 105 feet    |
| Displacement (full load) | 25,296 tons |
| Draft (full load)        | 23 feet     |
| Main engines             | 4           |
| Boilers                  | 2           |
| Shafts                   | 2           |
| Speed                    | 22+ knots   |
| Bow thruster             | No          |
| Staff accommodations     | No          |
| Crew accommodations      | 493         |
| Ship's chaplain          | Yes         |

**Landing Force Lift General Information**

|   |                    |
|---|--------------------|
| Officer accommodations                  | 66                 |
| Enlisted accommodations (E-7)           | 41                 |
| Enlisted accommodations (E-6 and below) | 597                |
| Surge accommodations (officer)          | 11                 |
| Surge accommodations (E-7)              | 6                  |
| Surge accommodations (E-6 and below)    | 78                 |
| Vehicle square                          | 25,000 square feet |
| Cargo cube                              | 35,000 cubic feet  |
| Helicopter landing spots                | 2                  |
| Operational CH-46 equivalents           | 4                  |
| JP-5                                    | 215,000 gallons    |
| MOGAS                                   | 10,000 gallons     |
| LFORM                                   | Yes                |

**Organic Craft**

|               |   |
|---------------|---|
| LCPL          | 1 |
| 7-meter RHIBs | 2 |

**Command and Control Systems**

|  |     |
|--|-----|
| Combat Information Center                          | Yes |
| Integrated Tactical Amphibious Warfare Data System | No  |
| Ship's Signals Exploitation Space                  | Yes |
| Troop Operations and Logistics Center              | Yes |

**Command and Control Systems  
(Continued)**

|                                     |     |
|-------------------------------------|-----|
| Joint Intelligence Center           | Yes |
| Supporting Arms Coordination Center | Yes |
| Tactical-Logistical Group           | Yes |
| Helicopter Logistics Support Group  | No  |
| Tactical Air Control Center         | No  |
| Helicopter Direction Center         | No  |
| Helicopter Coordination Section     | Yes |

**Medical Capabilities**

|  |         |
|--|---------|
| Operating rooms                        | 2       |
| Post-operative recovery/Intensive care | No      |
| Isolation ward                         | 4 beds  |
| Primary care ward                      | 24 beds |
| Ship's doctor                          | Yes     |
| Ship's dentist                         | Yes     |

**Cargo Handling Equipment**

|   |    |
|---|----|
| Forklifts (electric/2-ton)                    | 10 |
| Forklifts (rough terrain/6,000 pounds)        | 2  |
| Cargo and weapons elevator (8-ton)            | 1  |
| Pallet conveyors (1½-ton)                     | 3  |
| Monorails (2 hooks, each with 2-ton capacity) | 6  |
| Boat and aircraft crane (30-ton)              | 1  |

### Well Deck

The landing craft numbers listed below are the maximum number of each type of craft that can be stowed in the well deck exclusive of any other craft. Combinations of these craft may be stowed in the well deck.

|                  |          |
|------------------|----------|
| Length (overall) | 188 feet |
| Width            | 50 feet  |
| Height           | 31 feet  |
| LCAC             | 2        |
| LCU              | 1        |
| LCM-8            | 4        |

### Weapons

|  |
|--|
| MK -41, 16 Cell Vertical Launch System (VLS) space and weight only |
| MK-144 Mod 0 Rolling Air Frame Missile (RAM) Launchers             |
| MK-26 .50 caliber Machine Guns                                     |
| MK-46 Mod 1 30mm Machine Gun                                       |

### Ships in Class

| Hull Number | Ship's Name            | Home Port     | Scheduled Delivery |
|-------------|------------------------|---------------|--------------------|
| LPD-17      | <i>USS San Antonio</i> | Norfolk, VA   | 11/04              |
| LPD-18      | <i>USS New Orleans</i> | San Diego, CA | 07/05              |
| LPD-19      | <i>USS Mesa Verde</i>  | Norfolk, VA   | 10/05              |
| LPD-20      | <i>USS Green Bay</i>   | San Diego, CA | 03/06              |
| LPD-21      | TBD                    | San Diego, CA | 11/06              |
| LPD-22      | TBD                    | San Diego, CA | 04/07              |
| LPD-23      | TBD                    | Sasebo, Japan | 07/07              |
| LPD-24      | TBD                    | San Diego, CA | 03/08              |
| LPD-25      | TBD                    | Norfolk, VA   | 10/08              |
| LPD-26      | TBD                    | Norfolk, VA   | 01/09              |
| LPD-27      | TBD                    | Norfolk, VA   | 09/09              |
| LPD-28      | TBD                    | Norfolk, VA   | 08/10              |

## Dock Landing Ship *USS Anchorage (LSD-36) Class*



*USS Mount Vernon (LSD-39) Pictured*

### Mission

The assigned mission of the LSD-36 is to transport and launch loaded amphibious craft and vehicles with their crews and embarked personnel in amphibious assaults by landing craft and amphibious vehicles. It can render limited docking repair service to small ships and craft.

### General Comments

Major spaces for carrying vehicles and/or cargo or conducting helicopter operations are the helicopter platform, the super deck, the mezzanine deck, and the well deck. The mezzanine deck, super deck, and helicopter platform are constructed so they can be removed and stored ashore should assigned operations dictate. Mezzanine decks are frequently removed, but super decks and helicopter platforms are rarely removed. Vehicles may be loaded via landing craft into the well deck or lifted aboard by crane to the super deck for transit via ramps to other decks for stowage. Vehicles stowed in the well deck should be at least 50 feet forward of any landing craft to minimize potential salt water immersion during ballasting operations.

### General Information

|                           |                       |
|---------------------------|-----------------------|
| Length (overall)          | 562 feet              |
| Beam                      | 8 4feet               |
| Displacement (light load) | 8,200 tons            |
| Displacement (full load)  | 13,680 tons           |
| Draft (full load)         | 20 feet               |
| Main engines              | 2                     |
| Boilers                   | 2                     |
| Shafts                    | 2                     |
| Shaft horsepower          | 24,000                |
| Speed                     | 22 knots              |
| Range at 12 knots         | 14,800 nautical miles |
| Bow thruster              | No                    |
| Staff accommodations      | No                    |
| Crew accommodations       | 426                   |
| Ship's chaplain           | No                    |

### Landing Force Lift General Information

|   |                    |
|---|--------------------|
| Officer accommodations                  | 25                 |
| Enlisted accommodations (E-7)           | 8                  |
| Enlisted accommodations (E-6 and below) | 303                |
| Surge accommodations (E-6 and below)    | No                 |
| Vehicle square (with mezzanine)         | 19,700 square feet |
| Vehicle square (without mezzanine)      | 8,800 square feet  |
| Cargo cube                              | 1,800 cubic feet   |
| Helicopter landing spot                 | 1                  |
| Operational CH-46 equivalent            | No                 |
| JP-5                                    | 31,500 gallons     |
| MOGAS                                   | No                 |
| LFORM                                   | No                 |

### Command and Control Systems

|  |     |
|--|-----|
| Combat Information Center                          | Yes |
| Integrated Tactical Amphibious Warfare Data System | No  |
| Ship's Signals Exploitation Space                  | No  |
| Flag Plot  | No  |
| Landing Force Operations Center                    | No  |
| Joint Intelligence Center                          | No  |
| Supporting Arms Coordination Center                | No  |
| Tactical-Logistical Group                          | No  |
| Helicopter Logistics Support Group                 | No  |
| Tactical Air Control Center                        | No  |
| Helicopter Direction Center                        | No  |
| Helicopter Coordination Section                    | Yes |

### Medical Capabilities

|  |        |
|--|--------|
| Operating room                         | No     |
| Post-operative recovery/Intensive care | 1 bed  |
| Isolation ward                         | 2 beds |
| Primary care ward                      | 8 beds |
| Casualty overflow                      | No     |
| Ship's doctor                          | No     |
| Ship's dentist                         | Yes    |

### Well Deck

The landing craft numbers listed below are the maximum number of each type of craft that can be stowed in the well deck exclusive of any other craft. Combinations of these craft may be stowed in the well deck.

|                           |          |
|---------------------------|----------|
| Length (overall)          | 436 feet |
| Width                     | 50 feet  |
| Height                    | 21 feet  |
| LCACs (with mezzanine)    | 2        |
| LCACs (without mezzanine) | 3        |
| LCU (with mezzanine)      | 1        |
| LCUs (without mezzanine)  | 3        |

### Cargo Handling Equipment

|                                       |   |
|---------------------------------------|---|
| Forklift (rough terrain/6,000 pounds) | 1 |
| Monorails (6-ton)                     | 2 |
| Boat and aircraft crane (20-ton)      | 1 |
| Boat and aircraft crane (60-ton)      | 1 |

### Organic Craft

|      |   |
|------|---|
| LCPL | 2 |
|------|---|

**Weapons**

|  |
|--|
| Phalanx Close-in Weapon System (CIWS)                                  |
| MK-36 Chaff Rocket Super Rapid Booming Offboard Chaff (SRBOC) Launcher |

**Ships In Class**

| Hull Number | Ship's Name             | Home Port        |
|-------------|-------------------------|------------------|
| LSD-36      | <i>USS Anchorage</i>    | San Diego, CA    |
| LSD-37      | <i>USS Portland</i>     | Little Creek, VA |
| LSD-39      | <i>USS Mount Vernon</i> | San Diego, CA    |

## **Dock Landing Ship *USS Whidbey Island (LSD-41) Class***



***USS Fort McHenry (LSD-43) Pictured***

### **Mission**

The assigned mission of the dock landing ship (LSD-41) is to transport and launch loaded amphibious craft and vehicles with their crews and embarked personnel in amphibious assaults by landing craft and amphibious vehicles. It can render limited docking repair service to small ships and craft.

### **General Comments**

The LSD-41 provides for greater storage space of weapons and equipment, improved facilities for embarked troops, greater range of operations, and the capability to embark either conventional landing craft or LCAC. The ships incorporate materials handling equipment including elevators, package/roller conveyors and forklifts, pallet transporters, and a turntable similar to that found on an LST. The turntable is located between the well deck and the helicopter deck forward of the boat deck to assist in the rapid turnaround of vehicles and equipment during loading/offloading operations.

### **General Information**

|                              |             |
|------------------------------|-------------|
| Length (overall)             | 609 feet    |
| Beam                         | 84 feet     |
| Displacement (light load)    | 10,560 tons |
| Displacement (full load)     | 15,165 tons |
| Draft (full load)            | 20 feet     |
| Main engines (geared diesel) | 4           |
| Boiler                       | No          |
| Shafts                       | 2           |
| Shaft horsepower             | 34,000      |
| Speed                        | 20+ knots   |
| Bow thruster                 | No          |
| Staff accommodations         | No          |
| Crew accommodations          | 413         |
| Ship's chaplain              | No          |

### Landing Force Lift General Information

|   |                          |
|---|--------------------------|
| Officer accommodations                  | 27                       |
| Enlisted accommodations (E-7)           | 13                       |
| Enlisted accommodations (E-6 and below) | 362                      |
| Surge accommodations (officer)          | 7                        |
| Surge accommodations (E-7)              | 7                        |
| Surge accommodations (E-6 and below)    | 88                       |
| Vehicle square                          | 11,831<br>square<br>feet |
| Cargo cube                              | 8,970<br>cubic feet      |
| Helicopter landing spots                | 2                        |
| Operational CH-46 equivalent            | No                       |
| JP-5                                    | 53,000<br>gallons        |
| MOGAS                                   | 766<br>gallons           |
| LFORM                                   | No                       |

### Command and Control Systems

Command and control systems on the LSD-41 are designed to support the command, control, communications, computer systems, and intelligence (C4I) requirements for own ship independent operations and in conjunction with an amphibious task force.

|  |     |
|--|-----|
| Combat Information Center                          | Yes |
| Integrated Tactical Amphibious Warfare Data System | No  |
| Ship's Signals Exploitation Space                  | No  |
| Flag Plot  | No  |
| Landing Force Operations Center                    | No  |
| Joint Intelligence Center                          | No  |
| Supporting Arms Coordination Center                | No  |
| Tactical-Logistical Group                          | Yes |
| Helicopter Logistics Support Group                 | No  |

### Command and Control Systems (Continued)

|                                 |     |
|---------------------------------|-----|
| Tactical Air Control Center     | No  |
| Helicopter Direction Center     | No  |
| Helicopter Coordination Section | Yes |

### Medical Capabilities

|  |        |
|--|--------|
| Operating room                         | 1      |
| Post-operative recovery/Intensive care | 1 bed  |
| Isolation ward                         | 2 beds |
| Primary care ward                      | 5 beds |
| Casualty overflow                      | No     |
| Ship's doctor                          | Yes    |
| Ship's dentist                         | Yes    |

### Cargo Handling Equipment

|   |   |
|---|---|
| Reaching and tiering forklifts (electric/2-ton) | 2 |
| Pallet jacks (electric/3-ton)                   | 2 |
| Forklifts (rough terrain/6,000 pounds)          | 2 |
| Cargo elevator (4-ton)                          | 1 |
| Bridge crane (15-ton [two 7½-ton hoists])       | 1 |
| Boat and aircraft crane (60-ton)                | 2 |
| Boat and aircraft crane (20-ton)                | 1 |
| Turntable                                       | 1 |

### Well Deck

The landing craft numbers listed below are the maximum number of each type of craft that can be stowed in the well deck exclusive of any other craft. Combinations of these craft may be stowed in the well deck.

|                  |          |
|------------------|----------|
| Length (overall) | 440 feet |
| Width            | 50 feet  |
| Height           | 27 feet  |
| LCACs            | 4        |
| LCUs             | 3        |



**Organic Craft**

|              |   |
|--------------|---|
| Utility Boat | 1 |
| LCPL         | 2 |

**Weapons**

|  |
|--|
| Phalanx CIWS                               |
| MK-38 25mm Machine Gun                     |
| Super Rapid Booming Offboard Chaff (SRBOC) |
| Rolling Airframe Missile (RAM) System      |

**Ships in Class**

| Hull Number | Ship's Name               | Home Port        |
|-------------|---------------------------|------------------|
| LSD-41      | <i>USS Whidbey Island</i> | Little Creek, VA |
| LSD-42      | <i>USS Germantown</i>     | Sasebo, Japan    |
| LSD-43      | <i>USS Fort McHenry</i>   | San Diego, CA    |
| LSD-44      | <i>USS Gunston Hall</i>   | Little Creek, VA |
| LSD-45      | <i>USS Comstock</i>       | San Diego, CA    |
| LSD-46      | <i>USS Tortuga</i>        | Little Creek, VA |
| LSD-47      | <i>USS Rushmore</i>       | San Diego, CA    |
| LSD-48      | <i>USS Ashland</i>        | Little Creek, VA |

## **Dock Landing Ship (Cargo Variant) *USS Harpers Ferry (LSD-49) Class***



***USS Harpers Ferry (LSD-49) Pictured***

### **Mission**

The assigned mission of the dock landing ship (LSD-49) is to transport and launch loaded amphibious craft and vehicles with their crews and embarked personnel in amphibious assaults by landing craft and amphibious vehicles. It can render limited docking repair service to small ships and craft.

### **General Comments**

The LSD-49 is the cargo variant (CV) of the LSD-41 ship. Its well deck is shortened to half the length of the LSD-41 to provide space for additional munitions and vehicle stowage. The LSD-49 has stowage space for 18 percent more vehicles and seven times as much stowage space for cargo as the LSD-41. It is not equipped with a well deck bridge crane and is not designed to perform LCAC organizational level maintenance. Its single 30-ton crane can offload only to the starboard side. Intraship, it has 12 forklifts, 3 lift platforms, 2 elevators, and 2 pallet transporters for rapid cargo movement.

### **General Information**

|                              |             |
|------------------------------|-------------|
| Length (overall)             | 609 feet    |
| Beam                         | 84 feet     |
| Displacement (light load)    | 11,328 tons |
| Displacement (full load)     | 16,740 tons |
| Draft (full load)            | 20 feet     |
| Main engines (geared diesel) | 4           |
| Boiler                       | No          |
| Shafts                       | 2           |
| Shaft horsepower             | 34,000      |
| Speed                        | Classified  |
| Range                        | Classified  |
| Bow thruster                 | No          |
| Staff accommodations         | No          |
| Crew accommodations          | 413         |
| Ship's chaplain              | No          |

### Landing Force Lift General Information

|   |                    |
|---|--------------------|
| Officer accommodations                  | 27                 |
| Enlisted accommodations (E-7)           | 18                 |
| Enlisted accommodations (E-6 and below) | 362                |
| Surge accommodations (officer)          | 7                  |
| Surge accommodations (E-7)              | 6                  |
| Surge accommodations (E-6 and below)    | 88                 |
| Vehicle square                          | 20,200 square feet |
| Cargo cube                              | 67,600 cubic feet  |
| Helicopter landing spots                | 2                  |
| Operational CH-46 equivalent            | No                 |
| JP-5                                    | 50,600 gallons     |
| MOGAS                                   | No                 |
| LFORM                                   | Yes                |

### Command and Control Systems

Command and control systems on the LSD-49 (CV) are designed to support the C4I requirements for own ship independent operations and in conjunction with an amphibious task force.

|  |     |
|--|-----|
| Combat Information Center                          | Yes |
| Integrated Tactical Amphibious Warfare Data System | No  |
| Ship's Signals Exploitation Space                  | No  |
| Flag Plot  | No  |
| Landing Force Operations Center                    | No  |
| Joint Intelligence Center                          | No  |
| Supporting Arms Coordination Center                | No  |
| Tactical-Logistical Group                          | Yes |

### Command and Control Systems (Continued)

|                                    |     |
|------------------------------------|-----|
| Helicopter Logistics Support Group | No  |
| Tactical Air Control Center        | No  |
| Helicopter Direction Center        | No  |
| Helicopter Coordination Section    | Yes |

### Medical Capabilities

|  |        |
|--|--------|
| Operating Room                         | 1      |
| Post-operative recovery/Intensive care | 1 bed  |
| Isolation ward                         | 2 beds |
| Primary care ward                      | 5 beds |
| Casualty overflow                      | No     |
| Ship's doctor                          | Yes    |
| Ship's dentist                         | Yes    |

### Cargo Handling Equipment

|  |   |
|--|---|
| Forklifts (electric/2-ton)             | 7 |
| Forklifts (rough terrain/4,000 pounds) | 3 |
| Forklifts (rough terrain/6,000 pounds) | 2 |
| Cargo lift platforms                   | 3 |
| Cargo elevators (4-ton)                | 2 |
| Boat and aircraft crane (30-ton)       | 1 |
| Cargo weapons elevator (12,000 pounds) | 1 |

### Well Deck

The landing craft numbers listed below are the maximum number of each type of craft that can be stowed in the well deck exclusive of any other craft. Combinations of these craft may be stowed in the well deck.

|                  |          |
|------------------|----------|
| Length (overall) | 180 feet |
| Width            | 50 feet  |
| Height           | 30 feet  |
| LCACs            | 2        |
| LCU              | 1        |

**Organic Craft**

|              |   |
|--------------|---|
| Utility Boat | 1 |
| LCPL         | 2 |

**Weapons**

|  |
|--|
| Phalanx Close-in Weapon System (CIWS)      |
| 25mm Machine Guns                          |
| Super Rapid Booming Offboard Chaff (SRBOC) |
| Rolling Airframe Missile (RAM) System      |

**Ships in Class**

| Hull Number | Ship's Name              | Home Port        |
|-------------|--------------------------|------------------|
| LSD-49      | <i>USS Harpers Ferry</i> | San Diego, CA    |
| LSD-50      | <i>USS Carter Hall</i>   | Little Creek, VA |
| LSD-51      | <i>USS Oak Hill</i>      | Little Creek, VA |
| LSD-52      | <i>USS Pearl Harbor</i>  | San Diego, CA    |

## Landing Craft Air Cushion (LCAC)



### Mission

The LCAC's mission is to land heavy vehicles, equipment, personnel, and cargo in amphibious assaults.

### General Information

The LCAC is the latest generation of amphibious assault landing craft. Combining the heavy lift capacity of the surface assault with high speeds of helicopter-borne assault, the LCAC adds a new dimension to the capabilities of amphibious forces. It is capable of traveling over land and water. At over-the-horizon (OTH) distances of 12 to 100 nautical miles, LCAC offers the military planner another method for attaining surprise when conducting amphibious operations.

The addition of air cushion technology adds high speed and long range to surface-borne amphibious operations. Additional flexibility is provided by LCAC's ability to operate independent of tides and hydrographic constraint. In some cases, the LCAC will have a significant ability to influence operations beyond the high water mark. Weather can affect LCAC operations, but it is less of a factor than for other ship-to-shore delivery means.

### Characteristics

|   |                    |
|---|--------------------|
| Length overall (off cushion)            | 81 feet            |
| Length overall (on cushion)             | 87 feet, 11 inches |
| Width overall (off cushion)             | 43 feet, 8 inches  |
| Width overall (on cushion)              | 47 feet            |
| Height (on cushion)                     | 23 feet, 8 inches  |
| Cargo deck length                       | 67 feet            |
| Cargo deck width (maximum)              | 27 feet            |
| Cargo deck                              | 1,809 square feet  |
| Troop capacity                          | 24                 |
| Bow ramp width                          | 28 feet, 4 inches  |
| Bow ramp angle                          | 14 degrees         |
| Stern ramp width                        | 14 feet, 10 inches |
| Stern ramp angle                        | 14 degrees         |
| Cargo capacity (design)                 | 60 tons            |
| Cargo capacity (overload)               | 75 tons            |
| Displacement (full load)                | 166.6 tons         |
| Displacement (capacity load)            | 181.6 tons         |
| Speed                                   | 40+ knots          |
| Range                                   | 200 nautical miles |
| Propulsion (turbo fan 40B gas turbines) | 4                  |
| Crew                                    | 5                  |

## Landing Craft Utility (LCU)



### Mission

The LCU's mission is to land heavy vehicles, equipment, personnel, and cargo in an amphibious assault.

### General Information

The LCU is a highly versatile craft; like others of the landing craft family, it has been adapted for many uses including salvage operations, ferry boats for vehicles and passengers, and underwater test platforms. It is a self-sustaining craft with the typical habitability features found aboard ships. Its welded steel hull provides high durability with deck loads of 800 pounds per square foot. Arrangement of machinery and equipment has taken into account built-in redundancy in the event of battle damage. The craft features two engine rooms separated by a watertight bulkhead to permit limited operation in the event that one engine room is disabled. An anchor system is installed on the starboard side aft to assist in retracting from the beach.

### Characteristics

|                            |                      |
|----------------------------|----------------------|
| Length (overall)           | 135 feet             |
| Width (overall)            | 29 feet, 6 inches    |
| Height (mast folded)       | 17 feet, 9 inches    |
| Cargo deck length          | 121 feet             |
| Cargo deck width (maximum) | 25 feet              |
| Cargo deck                 | 1,850 square feet    |
| Displacement (loaded)      | 437 tons             |
| Troop capacity (on deck)   | 400                  |
| Bow ramp width             | 14 feet, 3 inches    |
| Stern ramp width           | 18 feet              |
| Cargo capacity             | 143 tons             |
| Speed                      | 12 knots             |
| Range                      | 1,200 nautical miles |
| Propulsion (diesel)        | 2                    |
| Draft fore                 | 3 feet, 6 inches     |
| Draft aft                  | 6 foot, 10 inches    |
| Crew                       | 11                   |

Landing Craft Mechanized

LCM Mark 8 (LCM-8)



Mission

The LCM’s mission is to land personnel, supplies, and equipment in an amphibious assault or in direct support of maritime prepositioning force operations.

| Characteristics            | Steel             | Aluminum          |
|----------------------------|-------------------|-------------------|
| Length (overall)           | 73 feet, 7 inches | 74 feet, 6 inches |
| Width (overall)            | 21 feet, 1 inch   | 21 feet, 1 inch   |
| Cargo deck length          | 42 feet           | 42 feet           |
| Cargo deck width (maximum) | 14 feet           | 17 feet           |
| Cargo deck                 | 588 square feet   | 714 square feet   |

| Characteristics       | Steel             | Aluminum          |
|-----------------------|-------------------|-------------------|
| Displacement (loaded) | 105 tons          | 107 tons          |
| Troop capacity        | 200               | 200               |
| Bow ramp width        | 14 feet, 9 inches | 14 feet, 9 inches |
| Cargo capacity        | 60 tons           | 60 tons           |
| Speed                 | 12 knots          | 12 knots          |
| Propulsion (diesel)   | 2                 | 2                 |
| Draft fore            | 4 feet, 5 inches  | 3 feet, 10 inches |
| Draft aft             | 4 feet, 10 inches | 4 feet, 3 inches  |
| Crew (wartime)        | 5                 | 5                 |
| Crew (peacetime)      | 4                 | 4                 |

## APPENDIX: NAVY INACTIVE FLEET

### Amphibious Cargo Ship *USS Charleston (LKA-113) Class*



***USS El Paso (LKA-117) Pictured***

**NOTE:** All five LKAs have been decommissioned and layed up in the Navy Inactive Fleet as mobilization assets (Maintenance Category B) through FY09.

#### Mission

The assigned mission of the amphibious cargo ship (LKA) is to transport and land combat equipment and material with attendant personnel in an amphibious assault.

#### General Comments

The *USS Charleston* LKA provides considerable flexibility in cargo stowage methods. The cargo elevators servicing holds 1, 3, and 4 make all categories of supplies and all levels available simultaneously to either the main deck or the helicopter platform. Use of the ship's forklifts and pallet transporters speed the maneuvering of cargo in the holds and enable delivery to various debarkation stations via the main deck passageways, which run the length of the ship. The arrangement and quantity of booms and cargo elevators make it possible to simultaneously embark/debark vehicles and cargo. Vehicles in upper stowage spaces can be embarked/debarked through the hatches with cargo booms, while pallets are embarked/debarked in lower stowage spaces by elevators. The main deck hatch of hold 2 is

unobstructed and can be opened for embarking/debarking of vehicles without the delay of unloading landing craft stowed on the hatch. Hold 4 is well suited for high priority cargo because of its direct access to the flight deck or main deck via elevator number 5.

#### General Information

|                           |                      |
|---------------------------|----------------------|
| Length (overall)          | 575 feet             |
| Beam                      | 82 feet              |
| Displacement (light load) | 10,000 tons          |
| Displacement (full load)  | 20,700 tons          |
| Draft (full load)         | 25 feet              |
| Main engine               | 1                    |
| Boilers                   | 2                    |
| Shaft                     | 1                    |
| Shaft horsepower          | 19,250               |
| Speed                     | 20 knots             |
| Range at 16 knots         | 9,600 nautical miles |
| Bow thruster              | No                   |
| Staff accommodations      | No                   |
| Crew accommodations       | 409                  |
| Ship's chaplain           | No                   |



### Landing Force Lift General Information

|   |                |
|---|----------------|
| Officer accommodations                  | 15             |
| Enlisted accommodations (E-7)           | 6              |
| Enlisted accommodations (E-6 and below) | 205            |
| Surge accommodations (E-6 and below)    | No             |
| Vehicle square (square feet)            | 47,000         |
| Cargo cube (cubic feet)                 | 88,100         |
| Helicopter landing spot                 | 1              |
| Operational CH-46 equivalent            | No             |
| JP-5                                    | 52,600 gallons |
| MOGAS                                   | No             |
| LFORM                                   | Yes            |

### Command and Control Systems

|  |     |
|--|-----|
| Combat Information Center                          | Yes |
| Integrated Tactical Amphibious Warfare Data System | No  |
| Ship's Signals Exploitation Space                  | No  |
| Flag Plot  | No  |
| Landing Force Operations Center                    | No  |
| Joint Intelligence Center                          | No  |
| Supporting Arms Coordination Center                | No  |
| Tactical-Logistical Group                          | No  |
| Helicopter Logistics Support Group                 | No  |
| Tactical Air Control Center                        | No  |
| Helicopter Direction Center                        | No  |
| Helicopter Coordination Section                    | Yes |

### Medical Capabilities

|  |        |
|--|--------|
| Operating room                         | 1 bed  |
| Post-operative recovery/Intensive care | No     |
| Isolation ward                         | 4 beds |
| Primary care ward                      | 9 beds |
| Casualty overflow                      | No     |
| Ship's doctor                          | Yes    |
| Ship's dentist                         | No     |

### Cargo Handling Equipment

|                               |    |
|-------------------------------|----|
| Forklifts (electric/2-ton)    | 10 |
| Forklifts (diesel/3-ton)      | 2  |
| Pallet jacks (electric/2-ton) | 3  |
| Cargo elevators (2-ton)       | 5  |
| Cargo elevator (6-ton)        | 1  |
| Booms (15-ton)                | 8  |
| Booms (40-ton)                | 2  |
| Booms (70-ton)                | 2  |

### Organic Craft

|       |   |
|-------|---|
| LCM-8 | 4 |
| LCPL  | 2 |

### Weapons

|  |
|--|
| Phalanx Close-In Weapon System (CIWS), MK-16 20mm                      |
| 3-in-50 (Twin MK-33)   |
| MK-36 Chaff Rocket Super Rapid Booming Offboard Chaff (SRBOC) Launcher |

**Ships In Class**

| <b>Hull Number</b> | <b>Ship's Name</b>    | <b>Location</b>        |
|--------------------|-----------------------|------------------------|
| LKA-113            | <i>USS Charleston</i> | NISMF Philadelphia, PA |
| PALKA-114          | <i>USS Durham</i>     | NISMF Pearl Harbor, HI |
| LKA-115            | <i>USS Mobile</i>     | NISMF Philadelphia, PA |
| PALKA-116          | <i>USS St. Louis</i>  | NISMF Pearl Harbor, HI |
| HILKA-117          | <i>USS El Paso</i>    | NISMF Philadelphia, PA |

## Tank Landing Ship *USS Newport (LST-1179) Class*



***USS La Moure County (LST-1194) Pictured***

**NOTE:** The LSTs listed on page A-6, plus four in the Navy Inactive Fleet (Maintenance Category B), are in support of the Amphibious Lift Enhancement Plan (ALEP) to ensure adequate amphibious lift availability in a crisis. LSTs 1182, 1187, 1190 and 1191 will be retained as mobilization assets until FY09.

### Mission

The assigned mission of the LST is to transport and land amphibious assault vehicles, tanks, combat vehicles, and equipment in amphibious assaults.

### General Comments

The *USS Newport* LST employs higher speeds and trimmer lines than slower snub-nosed LSTs of World War II. It has a sharper clipper-ship bow topped by two huge derricks used to extend and retract its bow ramp. The 110-foot aluminum ramp has a 75-ton capacity and is extended and retracted by a semiautomatic system of sensing switches that operate power winches below decks. When extended, the ramp is attached to the main deck by a pivot post. The end of the ramp rests on a beach or pontoon causeway, depending on the water depth and the beach gradient. *USS Newport* LST is also the first amphibious ship to be fitted with an internal side propulsion unit located below the waterline in the vicinity of the bow. The bow thruster allows the bow to be pushed from side to side while the stern remains relatively stationary. This increased maneuverability has proven invaluable in restricted waters and especially during mooring and causeway marriages. The first stern gate used on an

LST is found in the *USS Newport* LST and allows loading and launching of amphibious assault vehicles (AAVs) as well as sterngate marriages with landing craft utility (LCU).

### General Information

|                           |                       |
|---------------------------|-----------------------|
| Length (overall)          | 522 feet              |
| Beam                      | 70 feet               |
| Displacement (light load) | 4,975 tons            |
| Displacement (full load)  | 8,450 tons            |
| Draft (full load)         | 20 feet               |
| Main engines (diesel)     | 6                     |
| Boilers (150 psi)         | 2                     |
| Shafts                    | 2                     |
| Shaft horsepower          | 16,800                |
| Speed                     | 22 knots              |
| Range                     | 14,250 nautical miles |
| Bow thruster              | Yes                   |
| Staff accommodations      | No                    |
| Crew accommodations       | 245                   |
| Ship's chaplain           | No                    |

**Landing Force Lift General Information**

|   |                    |
|---|--------------------|
| Officer accommodations                  | 20                 |
| Enlisted accommodations (E-7)           | 21                 |
| Enlisted accommodations (E-6 and below) | 273                |
| Surge accommodations (E-6 and Below)    | 72                 |
| Vehicle square                          | 16,500 square feet |
| Cargo cube                              | 4,500 cubic feet   |
| Helicopter landing spot                 | 1                  |
| Operational CH-46 equivalent            | No                 |
| JP-5                                    | 19,100 gallons     |
| MOGAS                                   | 7,200 gallons      |
| LFORM                                   | No                 |

**Command and Control Systems**

|  |     |
|--|-----|
| Combat Information Center                          | Yes |
| Integrated Tactical Amphibious Warfare Data System | No  |
| Ship's Signals Exploitation Space                  | No  |
| Flag Plot  | No  |
| Landing Force Operations Center                    | No  |
| Joint Intelligence Center                          | No  |
| Supporting Arms Coordination Center                | No  |
| Tactical-Logistical Group                          | No  |
| Helicopter Logistics Support Group                 | No  |

**Command and Control Systems  
(Continued)**

|                                 |     |
|---------------------------------|-----|
| Tactical Air Control Center     | No  |
| Helicopter Direction Center     | No  |
| Helicopter Coordination Section | Yes |

**Organic Craft**

|       |   |
|-------|---|
| LCVPs | 3 |
| LCPL  | 1 |

**Medical Capabilities**

|  |    |
|--|----|
| Operating room                         | No |
| Post-operative recovery/Intensive care | No |
| Isolation ward                         | No |
| Primary care ward                      | No |
| Casualty overflow                      | No |
| Ship's doctor                          | No |
| Ship's dentist                         | No |

**Cargo Handling Equipment**

|                                       |   |
|---------------------------------------|---|
| Forklifts (diesel/3-ton)              | 2 |
| Forklift (rough terrain/6,000 pounds) | 1 |
| Cargo booms (10-ton)                  | 2 |
| Turntables                            | 2 |

**Weapons**

|  |
|--|
| Phalanx Close-in Weapon System (CIWS)      |
| Super Rapid Booming Offboard Chaff (SRBOC) |

**Ships in Class**

| <b>Hull Number</b> | <b>Ship's Name</b>                         | <b>Location</b>        |
|--------------------|--|------------------------|
| LST-1184           | <i>USS Frederick</i> (Reserve Fleet)       | Pearl Harbor, HI       |
| LST 1182           | <i>USS Fresno</i>                          | NISMF Pearl Harbor, HI |
| LST 1187           | <i>USS Tuscaloosa</i>                      | NISMF Pearl Harbor HI  |
| LST 1190           | <i>USS Boulder</i>                         | NISMF Philadelphia, PA |
| LST 1191           | <i>USS Racine</i>                          | NISMF Pearl Harbor, HI |
| LST-1194           | <i>USS La Moure County</i> (Reserve Fleet) | Little Creek, VA       |

# GLOSSARY

## PART 1. ABBREVIATIONS AND ACRONYMS

|                  |   |                   |   |
|------------------|---|-------------------|---|
| AAAV . . . . .   | advanced amphibious assault vehicle   | LHA . . . . .     | amphibious assault ship (general purpose) |
| ACC . . . . .    | aircraft crash crane  | LHD . . . . .     | amphibious assault ship (multipurpose)    |
| AAV . . . . .    | assault amphibious vehicle  | LKA . . . . .     | amphibious cargo ship                     |
| ALEP . . . . .   | Amphibious Lift Enhancement Plan  | LPD . . . . .     | amphibious transport dock                 |
| C4I . . . . .    | command, control, communications,<br>computers, and intelligence                                  | LSD . . . . .     | dock landing ship                         |
| C4ISR . . . . .  | command, control, communications,<br>computers, intelligence, surveillance, and<br>reconnaissance | LST . . . . .     | tank landing ship                         |
| CATF . . . . .   | commander, amphibious task force  | MEB . . . . .     | Marine expeditionary brigade              |
| CIC . . . . .    | combat information center   | MEF . . . . .     | Marine expeditionary force                |
| CIWS . . . . .   | Close-in Weapon System  | MEU . . . . .     | Marine expeditionary unit                 |
| CLF . . . . .    | commander, landing force  | mm . . . . .      | millimeter                                |
| CV . . . . .     | cargo variant   | MOGAS . . . . .   | motor gasoline                            |
| HCS . . . . .    | helicopter coordination section   | NSSMS . . . . .   | NATO Seasparrow missile system            |
| HDC . . . . .    | helicopter direction center   | OTH . . . . .     | over-the-horizon                          |
| HLSG . . . . .   | helicopter logistics support group  | PHIBGRU . . . . . | amphibious group                          |
| HMG . . . . .    | heavy machine gun   | PHIBRON . . . . . | amphibious squadron                       |
| ITAWDS . . . . . | Integrated Tactical Amphibious<br>Warfare Data System   | psi . . . . .     | pounds per square inch                    |
| JIC . . . . .    | joint intelligence center   | RAM . . . . .     | Rolling Airframe Missile                  |
| JTF . . . . .    | joint task force  | RHIB . . . . .    | rigid hull inflatable boat                |
| LCAC . . . . .   | landing craft air cushion   | RRF . . . . .     | Ready Reserve Force                       |
| LCC . . . . .    | amphibious command ship   | SACC . . . . .    | supporting arms coordination center       |
| LCM . . . . .    | landing craft mechanized  | SLCP . . . . .    | ship's loading characteristics pamphlet   |
| LCPL . . . . .   | landing craft, personnel, large   | SRBOC . . . . .   | super rapid booming offboard chaff        |
| LCU . . . . .    | landing craft utility   | SSDS . . . . .    | Ship's Self Defense System                |
| LCVP . . . . .   | landing craft, vehicle, personnel   | SSES . . . . .    | ship's signals exploitation space         |
| LFOC . . . . .   | landing force operations center   | SWAN . . . . .    | shipboard wide area network               |
| LFORM . . . . .  | landing force operational reserve material  | TACC . . . . .    | tactical air control center (USN)         |
|                  |   | TACLOG . . . . .  | tactical-logistical group                 |
|                  |   | VLS . . . . .     | vertical launch system                    |
|                  |   | V/STOL . . . . .  | vertical/short takeoff and landing        |

## PART 2. TERMS AND DEFINITIONS

**ballasting operations.** Operations conducted by amphibious shipping to flood the ship's well deck allowing landing craft to enter the ship and load or unload personnel, vehicles and cargo. Although this method is time consuming, it is considered the safest method of embarkation.

**broken stowage.** The space lost in the holds of a vessel because of the contour of the ship and the shape of the cargo. Also, a factor applied to the available space for embarkation due to the loss between boxes, between vehicles, around stanchions, and over cargo. The factor will vary depending on the type and size of vehicles, type and size of general cargo, training and experience of loading personnel, type of loading, method of stowage, and configuration of compartments.

**flag spaces.** Billeting and office spaces aboard the LHA, LHD, and command configured LPD-4 Class amphibious shipping allocated to the CATF staff.

**helicopter platform.** A term used for amphibious shipping with the capability to support the landing of helicopters for the purpose of embarking or debarking troops and cargo and for refueling aircraft.

**mezzanine deck.** Applicable to the LSD-36 Class amphibious ship. A system of 14 portable/removable

sections installed between the well deck and the super deck for stowage of vehicles and cargo. When installed, ramps provide vehicle access from the well deck to the super deck and flight deck. Also referred to as "tween" deck.

**MEU (Marine Expeditionary Unit).** A Marine air-ground task force that is constructed around an infantry battalion reinforced, a helicopter squadron reinforced, and a task-organized combat service support element. It normally fulfills Marine Corps forward sea-based deployment requirements. The Marine expeditionary unit provides an immediate reaction capability for crisis response and is capable of limited combat operations. Also called MEU.

**sterngate marriage.** Weather conditions permitting, displacement landing craft are brought to the sterngate, secured, and allowed to lower their bow ramp to a dry well deck. Personnel and vehicles can be quickly loaded or unloaded over the ramp and the need for time-consuming ballasting operations are negated.

**super deck.** Applicable to the LSD-36 Class amphibious ship. Installed forward of the flight deck, it provides a stowage area for vehicles and cargo and can be accessed from the well deck via the mezzanine deck ramps or lifted aboard using the ship's cranes.