



“*Combined with embarked Marines, amphibious warships provide our nation with both a forward presence and a flexible crisis response force. These power projection platforms give decision-makers immediately responsive combat options.***”**

General Michael Hagee
Commandant of the Marine Corps
February 2004

The Operational Need

The U.S. Marine Corps has been crucial in handling current conflicts. The amphibious Navy requires the lift to get the Marine Corps and other joint forces to the fight and to sustain them once there.

Expeditionary lift is the space available to transport troops, vehicles and cargo, and to launch and recover amphibious craft and air assets. It is measured in the number of Marine Expeditionary Brigade (MEB) Assault Echelons (AEs) that can be supported.

Expeditionary lift is key to the Expeditionary Strike Group (ESG). The ESG is made up of amphibious ships, cruisers, destroyers and submarines. The ESG allows Navy and Marine Corps forces to launch Marines and landing craft, as warships and submarines provide defense at sea and project fires inland.

ESGs empower the Navy’s fleet to more effectively traverse the seas, providing highly mobile, self-sustaining forces that are able to undertake missions across the entire spectrum of operations.



“The ESG is a very highly agile and mobile team that is exceptionally lethal and can perform the entire spectrum of warfare simultaneously.”

Rear Admiral Robert Conway, Jr.
Commander, ESG 1
August 2003

The Amphibious Warfare Branch (N853) is, first and foremost, the Navy’s resource sponsor for current and future amphibious ships. Responsibilities on behalf of the Director include oversight of requirements development and acquisition of the ships and craft needed in support of Expeditionary Warfare and USMC lift. Current programs include: LHA(R), LPD-17, LHD-8, Maritime Preposition Force (Future), Joint High Speed Vessel (JHSV) and the Ship-to-Shore Connector (LCAC replacement program).

In addition, N853 resources and advocates requirements that support in-service Amphibious Ships to include needed sustainment and modernization alterations on the LPD-4, LSD-41/49 and LHA/LHD class ships. Also, N853 advocates Naval Surface Fire Support (NSFS) requirements in conformance with N853’s Title X responsibilities.

The N853 Branch is also working certain C41 issues such as the Amphibious Assault Direction System (AADS, formerly KSQ-1), the Supporting Arms Automated Coordination Center (SACC-A) and the Joint Mission Planning Tool for Expeditionary Strike Group Staffs.

EXPEDITIONARY WARFARE DIRECTORATE

N853

Amphibious Warfare Branch



OPPORTUNITIES FOR INDUSTRY

As N853 works to supply the Navy and Marine Corps with the most capable naval platforms, advances in technology will be incorporated to enhance their warfighting ability. Industry can assist and capitalize on the N853 mission by developing the needed technologies that will make Seabasing possible.

Areas being investigated include: new hulls designed for faster transit speed; ship designs that optimize cargo, troops and vehicle-lift capability; and, innovations that improve habitability and lower the total ownership costs of amphibious ships. Other areas of exploration and development include Command, Control, Communications, Computers, and Intelligence (C41) suites that will be interoperable across the joint spectrum, and surface interface technologies to conduct at-sea transfer of cargo and equipment in higher sea states.

Industry can assist by developing these needed technologies, proposing other innovations, and by participating in upcoming experimentation, demonstrations, and program-sponsored industry days. Contact:

Director, Expeditionary Warfare (N85)
2000 Navy Pentagon
Washington, DC 20350-2000



Amphibious Warfare Today

Centerpiece of the Expeditionary Strike Group

Centerpiece of the ESG



The Expeditionary Strike Group is centered on proven flexibility and combat power of a combined amphibious ready group and Marine Expeditionary Unit (Special Operations Capable). The expeditionary strike group also adds the robust strike and force protection capabilities of a cruiser, destroyer, frigate, and attack submarine that provide an organic air

defense, under sea warfare, and strike capability. With these added capabilities, the expeditionary strike group can operate independently in low-to-medium threat environments, giving the Combatant Commander a wider variety of options in more dynamic environments. As the expeditionary strike group matures and with the addition of the LHA(R), designed specifically to operate the MV-22 Osprey tilt rotor aircraft and the short takeoff and vertical landing variant of the joint strike fighter, the expeditionary fighting vehicle, the vertical takeoff and landing tactical unmanned aerial vehicle, and the DD-1000 with its advanced gun system, the ability of this strike group to remain over the horizon, conducting operations from the sea base, and projecting combat power well inland will be further enhanced. When facing powerful regional threats with serious anti-access capabilities, independent strike groups and surface action groups will combine with combat logistics groups, maritime prepositioning groups, and Marine Expeditionary Brigades to form a powerful Expeditionary Strike Force. This force is capable of operating in high threat environments and of conducting the full range of combat operations.

Capable, Flexible, Versatile

Today's amphibious forces are a much more capable, flexible and versatile force than their predecessors in order to conduct a wider range of operations, from presence to deterrence to forcible entry operations. To conduct amphibious operations in a high threat environment, the Navy-Marine Corps team will combine as an amphibious force to carry out the mission.

Amphibious Warships



8 Wasp-Class Amphibious Assault Ships



5 Tarawa-class Amphibious Assault Ships



8 Whidbey Island-class Dock Landing Ships



4 Harpers Ferry-class Sock Landing Ships



11 Austin-class Amphibious Transport Docks



LPD-17 USS San Antonio

Amphibious Warfare of the Future

Enabling Unprecedented Speed, Access and Persistence



The United States amphibious forces today are at a transformational cusp in the operational art of amphibious warfare. This transformation is being driven by our national strategies that direct an active defense to rapidly and decisively counter aggression. To this end, and with our largest amphibious ships having been commissioned beginning in 1989, new platforms are being developed. The LHA Replacement, LHA(R), is the next step in developing the "Big Deck Amphib." The LHA(R) is designed to accommodate the Marine Corps's future Air Combat Element (ACE), including F-35B Joint Strike Fighter (JSF) and the MV-22 Osprey. She will also provide additional cargo stowage capacity, and enable a more flexible command-and-control capability.

Next-Generation Amphibious Ships

The *San Antonio*-class amphibious dock ships will be vital to the Navy's and Marine Corps' operational flexibility, and will significantly increase amphibious lift capacity. The first ship of the class, USS San Antonio (LPD-17), was commissioned in 2006. The LPD-17 class replaces four classes of legacy amphibious ships (*Anchorage*-class dock landing ships • *Austin*-class amphibious transport docks • *Newport*-class tank landing ships • *Charleston*-class amphibious cargo ships), many of which have already been decommissioned.

San Antonio-class ships will be able to operate advanced systems, such as the MV-22, Expeditionary Fighting Vehicle (EFV), Landing Craft, Air-Cushioned (LCAC), and Landing Craft-Utility (LCU), incorporating significant advances in ship self-defense, survivability, habitability and networking.

The LHD-8 (*Makin Island*) which will replace aging LHAs in 2007. Built on the existing LHD hull, the ship will feature numerous and significant improvements over its predecessor, including a gas-turbine propulsion system and a new electrical auxiliary system eliminating steam service.

The LHA(R), which will replace remaining LHAs, is expected to enter service beginning in 2012. The LHA (R) will be able to accommodate advanced air-and surface-assault landing craft and will incorporate the latest in ship technologies, and advanced weapons and C4ISR systems. These ships also will feature a modular design that allows them to be reconfigured economically, as technology and requirements advance during the course of their service lives.

The Maritime Prepositioning Force (Future), or MPF(F), will replace the platforms in a current MPF squadron with "operationalized" platforms. These ships are to be designed as integral elements of the Seabase, and to provide greatly enhanced capabilities across a range of operations, from joint forcible entry operations, to humanitarian assistance and disaster relief. An MPF(F) squadron will contain enough equipment for a Marine Expeditionary Brigade, Naval Support Element, and an Expeditionary Medical Facility.

