

# Dedicated MLR Surface Capability

Our Navy's Army needs its own Navy

by Mr. Thomas Russell

**W**hen one hears the term “logistics trains,” it often conjures up images of a convoy of large trucks rolling on improved surface roads. This reflects a legacy mindset. It is a mindset characterized by the employment of status quo capability in a sustained land conflict. The future operating environment will require a much different capability. The characteristics of this environment will include wide expanses of contested maritime space dotted with remote islands that are sparsely populated or even uninhabited. Our ability to maneuver and sustain FMF operations will require us to embrace capability that is not anchored to the land but one that can leverage other domains. Of particular importance to this environment will be our ability to embrace the surface domain.

The retail-level work of the Marine Littoral Regiment (MLR) will involve frequent movement of multiple independent maneuver units operating under contested conditions. The nature of the future operating environment will require much of this movement to be accomplished across the surface domain. This will necessitate distribution capabilities designed to persist, or stand-in, and survive within the weapons engagement zone. From a watercraft perspective, this translates to vessels that mirror the size of normal commercial clutter, are of low cost, have high speed, and possess a shallow draft.

OPNAV N95 established a Light Amphibious Warship program in early 2020 to produce a Medium Landing Ship (LSM) designed to be the direct-

*>Mr. Russell is a retired senior Marine Corps Officer and is currently serving as the Deputy for the Futures Branch of Installations & Logistics at Headquarters Marine Corps.*

support platform that will enable the major movements of MLR capability. This vessel has been designed as a stand-in platform from its inception. The LSM will be beachable and will have a length between 350–400 feet. It will have a shallow draft of 11 feet, the ability to operate in excess of 22 knots, and a range in excess of 6,500 nautical miles. It will have approximately 12,000 square feet of storage space and will be able to accommodate 75 embarked personnel.<sup>1</sup> The LSM’s target cost will be dramatically less than traditional amphibious shipping. These vessels will be categorized as warships, and they will be crewed by sailors. This will be the MLR’s force employment platform and will be instrumental in subsequent maneuver and sustainment of MLR operations. Nine of these vessels are to be allocated to each MLR.<sup>2</sup> During sustained operations, five of the nine vessels are likely to be active while four are likely to be either en route to or returning from replenishment.

To augment the maneuver and sustainment mission of the MLR, the combat logistics battalions will need to distribute small capabilities and provide resupply support throughout the operating environment to enable the effectiveness and resiliency of the MLR maneuver units. An Ancillary Surface Connector (ASC) will do the work of a

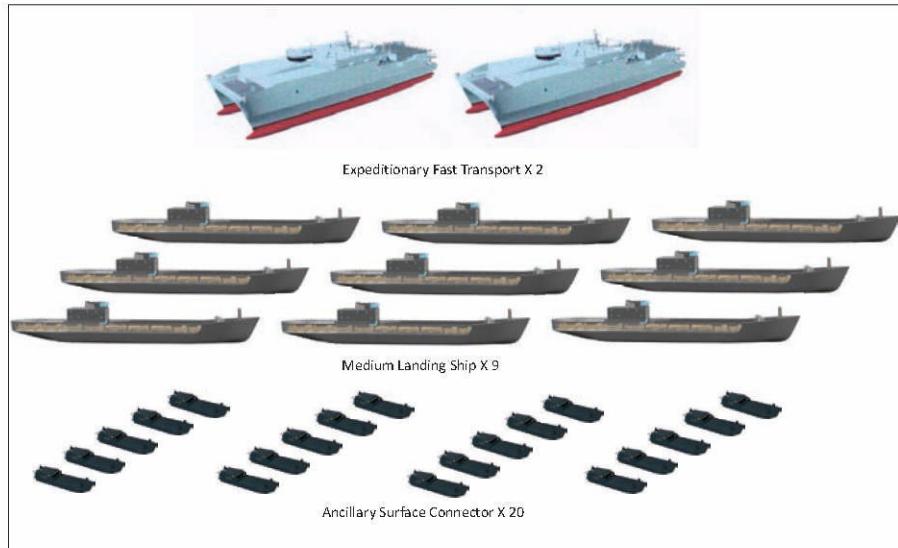
heavy truck across the surface domain. The ASC will be a lightweight, 79-foot landing craft capable of reaching speeds in excess of 32 knots, maneuvering a cargo capacity of up to 35 short tons, possessing an extremely shallow draft, and capable of operating ranges greater than 650 nautical miles.<sup>3</sup> These small vessels will assist the LSM with the many distribution micro mission that do not warrant the exclusive tasking of an entire warship. They will expand our operational access to a host of key maritime coastal beaches that may not be accessible to an LSM. ASCs will not operate independently and will need to be associated with on-station LSMs for replenishment and refueling. This watercraft needs to be an organic asset to the combat logistics battalions, operated by a coxswain and maintained by a mechanic wearing MARPAT digital utilities. Although no concept of employment has been developed for this capability, perhaps each active on-station LSM vessel will need up to four of these craft to support all the movement and sustainment needs of the multiple independent maneuver units operating from a host of expeditionary advanced base sites.

The workhorse surface vessel of the MLR will need auxiliary support. The LSM and its associated ASCs will accomplish the lion’s share of the retail work needed at the ragged edge, but they will require replenishment. A direct support auxiliary vessel with stand-in characteristics needs to be allocated to the MLR to provide an umbilical cord between the LSM and legacy shipping operating outside of the weapons engagement zone. The Expeditionary

Fast (EPF) Transport ship is the ideal platform to provide this auxiliary support.

The EPF is a shallow draft, all aluminum, relatively affordable commercial-based catamaran capable of intra-theater personnel and cargo lift providing combatant commanders high-speed sealift mobility with inherent cargo handling capability and agility to achieve positional advantage over operational distances. The EPF has a length of 338 feet, a beam of 94 feet, and a draft of 12.5 feet. The vessel can reach a top speed close to 40 knots and has a range of up to 4,000 nautical miles at 20 knots. The EPF has a landing pad that can be modified to accommodate a V-22, can haul up to 600 short tons of cargo, and can carry up to 312 passengers.<sup>4</sup> Nicknamed the “Vomit Comet,” the shallow draft and high-speed nature of the vessel make for a rough transit. The speed of the EPF is dramatically impacted by sea state. With a reinforced bow, the EPF can maintain 15 knots in sea state 4 and 5 knots in sea state 5.<sup>5</sup> The EPF is not a warship. It is categorized as an auxiliary vessel that is owned and operated by Military Sealift Command. It is crewed by civilian mariners. Military Sealift Command currently possesses thirteen of these vessels with three more under contract. A preliminary consideration has indicated that each MLR will need two of these vessels as a bridge capability until the LSM arrives.<sup>6</sup> Perhaps in an auxiliary support role, this need will endure.

These surface capabilities will form the maneuver and sustainment foundation of the MLR in this future operating environment. They will provide organic employment of MLR capability and accomplish the essential frequent maneuver requirements required to persist and survive within contested space. Figure 1 displays the notional surface capability dedicated to each MLR. Assuming there are three MLRs and accounting for additional platforms to ensure appropriate availability, there may be as many as 8 EPFs, 35 LSMs, and 75 ASCs as an enduring, maneuver, and sustainment direct support watercraft inventory positioned across the INDOPACOM Area of Responsibility.



**Figure 1. MLR complement of watercraft. (Figure provided by author.)**

This surface capability will enable the independent operation and sustainment of numerous small units scattered across a wide maritime expanse necessary for the successful conduct of Expeditionary Advanced Based Operations. These capabilities will make swaths of key maritime terrain accessible and exploitable by the MLR. The need for these vessels is continuous throughout campaigning and critical to an enduring Stand-in Force.

the surface domain. For it is this domain that will allow us to maneuver, control sea lines of communications, deceive the adversary, exploit remote island terrain and support a tactical maritime defense-in-depth. When the next generation of Marines hears the term logistics trains, it very well might conjure up the smell of sea spray, a tinge of motion sickness, and success in the future operating environment.

#### Notes

1. Shon Brodie, Maritime Expeditionary Warfare Division, “Light Amphibious Warfare Update,” (brief, Quantico, April 2022).

2. Ibid.

3. III MEF, “Littoral Platform Experimentation Program,” (brief, Okinawa, March 2021).

4. Information available at [https://www.NAVSEA.navy.mil/Home/Team-Ships/Expeditionary-Fast-Transport-\(EPF\)](https://www.NAVSEA.navy.mil/Home/Team-Ships/Expeditionary-Fast-Transport-(EPF)).

5. Information available at <https://www.globalsecurity.org/military/library/budget/fy2015/dot-e/navy/2015jhsv.pdf>.

6. Karsten Heckl, *Need for Littoral Maneuver Bridging Solution in Support of Stand-In Forces*, (Quantico: July 2022).

Reproduced with permission of copyright owner. Further reproduction  
prohibited without permission.