

Appendix L

Army Watercraft and Port Equipment

This Appendix discusses the various Army watercraft and port equipment, their uses, characteristics, and so forth.

LOGISTICS SUPPORT VESSEL

L-1. The LSV (see Figure L-1) is a 273-foot self-deploying ship with a cruising range of 8,200 nautical miles at 12.5 knots. It is capable of receiving cargo from a ship anchored in the stream and transporting that cargo to shore for discharge over the bow ramp. Because of its shallow draft, the LSV can carry cargo from deep drafted ships to shore ports or areas too shallow for larger ships.

L-2. CHARACTERISTICS:

- **Length overall:** 273 feet.
- **Beam:** 60 feet.
- **Displacement (weight):** 4,199 long tons.
- **Deck area:** 10,500 square feet (up to 24 M1 Main Battle Tanks or 25 [50 double stacked] 20 foot ISO containers).
- **Payload:** 2,000 tons (equivalent payload capacity of 86 C-141s).
- **Range:**
 - **Light:** 8,200 nautical miles at 12.5 knots.
 - **Loaded:** 6,500 nautical miles at 11.5 knots.

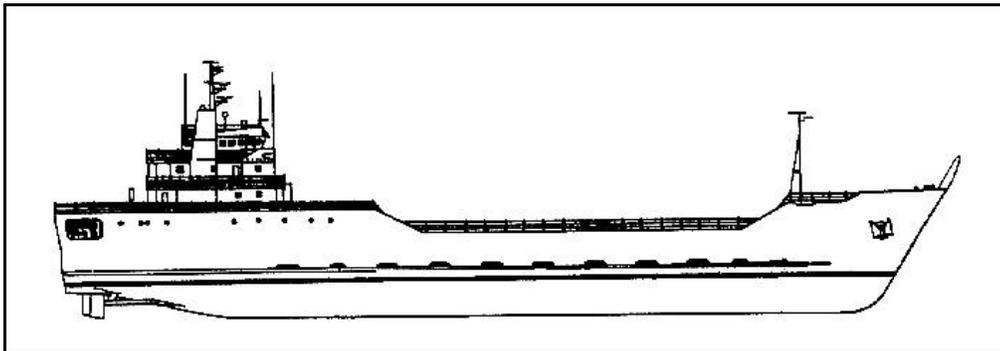


Figure L-1. Logistics Support Vessel

L-3. The LSV provides worldwide transport of general and vehicular cargo. It provides intratheater line haul of large quantities of cargo and equipment. Tactical resupply missions can be performed to remote underdeveloped coastlines and inland waterways. It is also ideally suited for the discharge and/or back load of sealift, vessels such as LMSRs. It can transport cargo from ship to shore in LOTS operations including those in remote areas with unimproved beaches. All wheeled and tracked vehicles, including Main Battle Tanks, dozers, container handling equipment, and so forth can be transported in LOTS operations. It has both bow and stern ramps for RO/RO cargo, and a bow thruster to assist in beaching and beach extraction. It can also be used for unit deployment and relocation.

LANDING CRAFT, UTILITY 2000

L-4. The LCU (see Figure L-2, page L-2) is a 174-foot self-deploying ship with a cruising range of 10,000 nautical miles at 12 knots. It is capable of receiving cargo from a ship anchored in the stream and transporting that cargo to shore for discharge over the bow ramp. Because of its shallow draft, the LCU can carry cargo from deep drafted ships to shore ports or areas too shallow for larger ships.

L-5. CHARACTERISTICS:

- **Length overall:** 174 feet.
- **Beam:** 42 feet.
- **Displacement (weight):** 575 long tons (light)/1,087 long tons (loaded).
- **Deck area:** 2,500 square feet (5 M1 Main Battle Tanks or 12 [24 double stacked] 20 foot ISO containers).
- **Payload:** 350 tons (equivalent payload capacity of 15 C-141 loads).
- **Range:**
 - **Light:** 10,000 nautical miles at 12 knots.
 - **Loaded:** 6,500 nautical miles at 10 knots.
- **Draft:**
 - **Light:** 8 feet.
 - **Loaded:** 9 feet.

L-6. The LCU 2000 moves containers, general or vehicular cargo. This includes missions in LOTS operations in remote areas with austere shore facilities or unimproved beaches. The LCU 2000 is also suitable for the intratheater movement of cargo and unit equipment along coastlines or inland waterways. It can also be used for unit deployment and relocation. It has a bow ramp for Roll-on/Roll-off cargo, and a bow thruster to assist in beaching and beach extraction.

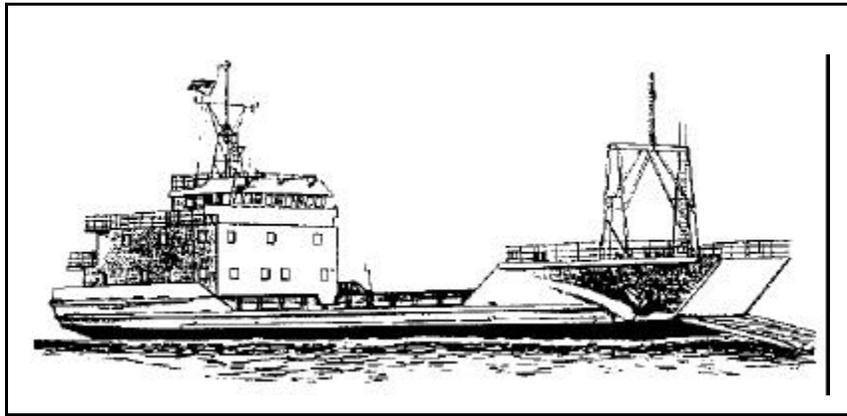


Figure L-2. LCU 2000

LANDING CRAFT MECHANIZED (LCM-8) MOD 2

L-7. The Mod 2 (see Figure L-3) will function as a C2, personnel transfer and a light salvage/firefighting vessel. The Army will modify existing LCM-8's for this purpose.

L-8. The Mod 2 will perform many key support functions in conditions through Sea State 3. The LCM-8's proven record of performance provides a solid platform for this modification. As a C2 platform, the Mod 2 will provide the critical link between ship and shore operation centers. It will transport Army stevedores from shore to ship/ship to shore in a protected environment. It will also be used as a MEDEVAC vessel, diver support platform, and limited firefighting and light salvage boat. The Mod 2 will function in shallow inlets, rivers and surf zones. It will retain its ability to land on an unimproved beach.

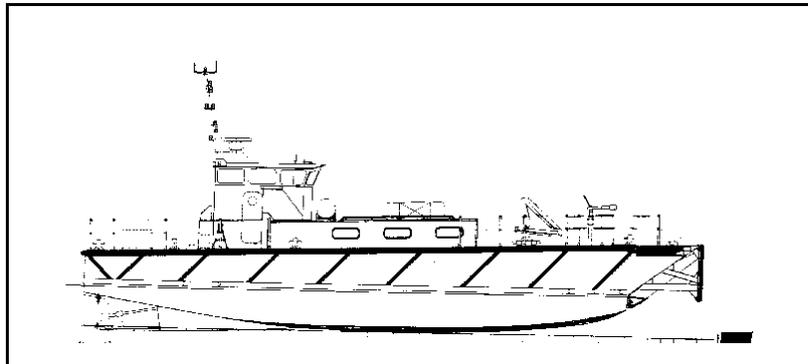


Figure L-3. LCM-8 Mod 2

L-9. The Mod 2 is an afloat C2 platform used to direct and monitor cargo discharging and loading of Army watercraft. Army watercraft including landing craft, amphibians, modular causeways and harbor craft provide the critical link between the offshore arrival of combat power on strategic sealift and placing that power ashore in a combat configuration. The Mod 2 will perform a multifaceted role in-theater opening and force sustainment operations.

MODULAR CAUSEWAY SYSTEM

L-10. The main building block for the MCS is the modular causeway section. These sections are 24 feet x 80 feet platforms configured from ISO compatible floating pontoons. The sections can be disassembled and shipped via military/commercial assets capable of handling 40-foot containers.

L-11. Causeway sections are assembled to configure three sub-systems:

- Floating causeway.
- Roll-on/roll-off discharge facility.
- Causeway ferry.

L-12. The mission of the MCS is to provide a rapid means of transporting rolling stock, containerized and breakbulk cargo from ship to shore during LOTS. MCS will be used in areas with undeveloped port facilities or where established ports are denied, unavailable, or inadequate. The FC consists of standard causeway strings that are attached end to end to form a bridge/ramp from the shore, seaward. This system will be used to overcome a shallow gradient or reef barrier. An RRDF is also composed of standard causeway sections and provides the interface between RO/RO vessels and the lighters that will move rolling stock to shore. The CF is composed of one powered section and three causeway sections. This system is used to carry rolling stock and containers from ship to shore.

MODULAR CAUSEWAY SYSTEM ROLL-ON/ROLL-OFF DISCHARGE FACILITY

L-13. RRDF is assembled from six modular causeway sections. It is assembled and secured along side a strategic sealift roll-on/roll-off ship. It is capable of supporting the weight of the ship's discharge ramp and the heaviest rolling stock in the Army's inventory. The RRDF consists of:

- Six modular causeway sections.
- One combination beach and sea end section.
- Two warping tugs.
- One lighting, fendering and anchoring system.

L-14. The RRDF is composed of standard modular causeway sections and provides the interface between RO/RO vessels and the lighters that would move rolling stock to shore during LOTS operations. The RRDF will be used in areas with undeveloped port facilities or where established ports are denied, unavailable, or inadequate.

MODULAR CAUSEWAY SYSTEM CAUSEWAY FERRY

L-15. CF is assembled from two nonpowered modular causeway sections and one powered causeway section to form a self-propelled barge 24 feet x 240 feet (see Figure L-4). The CF is constructed of Modular Causeway Sections and can be deployed aboard container ships and other cargo type vessels. The CF consists of:

- Two modular causeway sections.
- One powered modular causeway section.
- One combination beach and sea end.

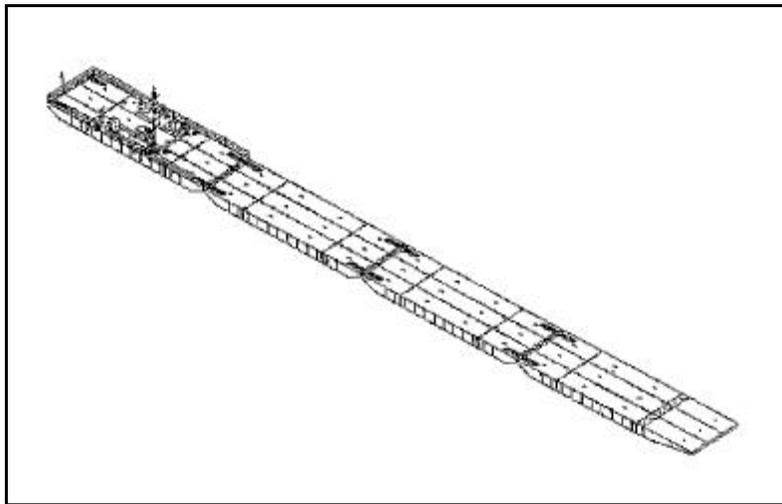


Figure L-4. Modular Causeway System Causeway Ferry

L-16. The CF is used for the movement of rolling, breakbulk, and containerized cargo from an ocean going vessel directly to the shore-side logistics operation or to a fixed or semipermanent pier. It will support RO/RO and LO/LO operations. The CF would be used in areas with undeveloped port facilities or where established ports are denied, unavailable or inadequate.

BARGE DERRICK

L-17. The BD is a non-self-propelled, 115 long ton capacity-floating crane. It is the only heavy lift-floating crane in a FC Company. It is capable of lifting a main battle tank from the centerline of a non-self-sustaining strategic sealift ship. It is also capable of lifting equipment from the well decks of prepositioned lighters stored aboard HLPS characteristics:

- **Capacity:** 115 Long Tons.
- **Reach:** Variable.
- **Transportability:** Prepositioned and towed by the Army 128 foot Large Tug.
- **Crew:** 15 (1 officer; 14 enlisted).

L-18. **Accommodations:** For all crewmembers The barge derrick loads and discharges heavy cargo from ships and other vessels. Heavy lift cargo includes main battle tanks lifted from the centerline of a non-self-sustaining sealift vessel. The BD will be employed in theater water terminals and offshore sites.

CONTAINERIZED MAINTENANCE FACILITY

L-19. The CMF will be comprised of maintenance modules that provide support maintenance to US Army watercraft. The modules will form a shore-based complex, which will fully integrate and encompass the unit mission providing a cohesive, responsive maintenance operation in the immediate area of watercraft operations.

L-20. The CMF will be housed in standard ISO expandable containers. This modular maintenance system will have a sufficient number of shelters to contain the following capabilities:

- Welding/Machine Shop.
- Engine Rebuild/Component Rebuild Shop.
- Stock/Bench Stock and General Storage
- Detachment HQ, Productions and Quality Control.

L-21. The CMF will be deployed in a tactical environment and operated out of the same container in which it is transported.