TECHNICAL MANUAL

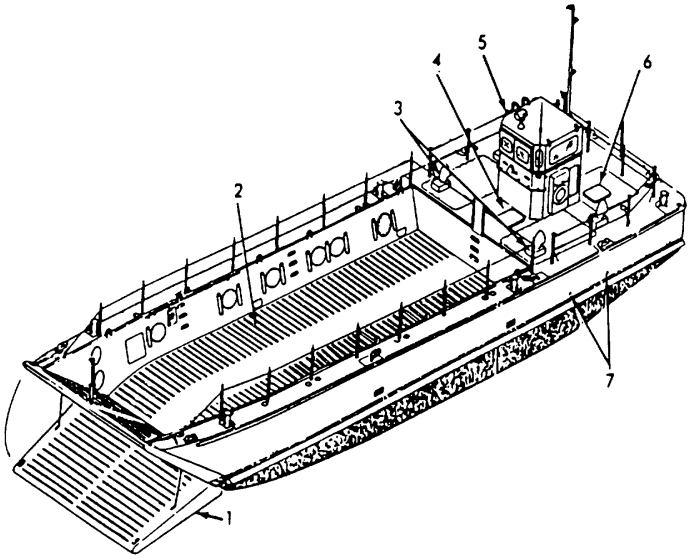
OPERATOR, UNIT AND INTERMEDIATE (DIRECT AND GENERAL SUPPORT) MAINTENANCE MANUAL

LANDING CRAFT, MECHANIZED

STEEL, DED, OVERALL LENGTH 74 FEET,

MOD 1, MARK VIII, NAVY DESIGN LCM-8

HULL NUMBERS 8500 THROUGH 8519 (MARINETTE MARINE CORP.)
NSN 1905-01-169-0938.



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HEADQUARTERS, DEPARTMENT OF THE ARMY
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REPORTING ERRORS AND RECOMMENDING IMPROVEMENTS

You can help improve this manual. If you find any mistake or if you know of a way to improve the procedures, please let us know. Mail your letter, DA Form 2028 (Recommended Changes to Publications and Blank Forms), or DA Form 2028-2 located in the back of this manual direct to: Commander, U.S. Army Troop Support Command, ATTN: AMSTR-MCTS, 4300 Goodfellow Boulevard, St. Louis, MO 63120-1798. A reply will be furnished directly to you.

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CHAPTER 1

INTRODUCTION

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SECTION I. GENERAL INFORMATION

1-1. SCOPE.

This manual is for your use in operating and maintaining the landing craft, design LCM-8, MOD 1. The manual provides information on the operation, lubrication, and maintenance of the equipment. Also included are descriptions of main units and their functions in relationship to other components.

1-2. MAINTENANCE FORMS and RECORDS.

Department of the Army forms and procedures used for equipment maintenance will be those prescribed by DA PAM 738-750, The Army Maintenance Management System (TAMMS).

1-3. REPORTING EQUIPMENT IMPROVEMENT RECOMMENDATIONS (EIR's)

If your Landing Craft needs improvements, let us know. Send us an EIR. You, the user, are the only one who can tell us what you don't like about your equipment. Let us know why you don't like the design or performance. Put it on an SF368 (Quality Deficiency Report). Mail it to us at: Commander, US Army Troop Support Command, ATTN: AMSTR-QX, 4300 Goodfellow Boulevard, St. Louis, MO 63120. We'll send you a reply.

1-4. DESTRUCTION of ARMY MATERIAL to PREVENT ENEMY USE.

Procedures to be followed when capture or abandonment of the Landing Craft is imminent, are covered in TM 740-244-3.

1-5. PREPARATION for STORAGE or SHIPMENT. Procedures to be followed will be found in TM740-90-1.

1-6. LIST OF ABBREVIATIONS.

ABV. BL	Above base line (lowest part of keel)
CG	Cleaning Gear
Condtn	Condition
Conn	Connector
Compt	Compartment
Distr	Distribution
D.O	Diesel Oil
Eng	Engine
Exh	Exhaust
Fdn	Foundation
FE	Fire Extinguisher
Gen	Generator
Gov	Governor
G.P.M.	Gallons Per Minute
Htr	Heater
Hyd	Hydraulic
Inbd	Inboard

1-6. LIST OF ABBREVIATIONS (Continued).

Ind.....Indicator

Isln .....Isolation

Lt.....Light

Outbd .....Outboard

Plths .....Pilothouse

P/S. .....Port/Starboard

P.S.I. .....Pounds Square Inch

Pt .....Parts

Rcpt.....Receptacle

Rm .....Room

RMHS.....Remote Magnetic Heading System

R.P.M. .....Revolutions Per Minute

S.P. .....Sound Powered

Stbd.....Starboard

SW .....Salt Water

SWTC .....Switch

Sys. .....System

Vent.....Ventilation

VL.....Vertical Ladder - U up - D down

SECTION II. EQUIPMENT DESCRIPTION AND DATA

1-7. EQUIPMENT CHARACTERISTICS, CAPABILITIES, AND FEATURES.

a. General. The LCM-8, MOD 1, Landing Craft is a welded steel, twin - screw type craft. It is used to transport cargo, troops, and vehicles from ship-to-shore, shore-to-shore, or in retrograde movements. It may be utilized for lighterage and utility work in harbors. It is intended for use in rough or exposed waters and is capable of operating through breakers and grounding on a beach, remaining upright and tight, and retracting from the beach under its own power. The craft is propelled by two twin-engine propulsion units, and is capable of a speed of nine knots when fully equipped. The maintenance paragraphs of this manual contain detailed descriptions of the components of the LCMs.

b. Main Deck. The main deck is aft, with the pilothouse centrally located on the deck. The engine room hatch is located in the deck forward from the pilothouse and the lazarette hatch is located in the deck aft from the pilothouse. The deck contains a bolted cover plate over each engine to facilitate engine removal and installation.

c. Cargo Well and Ramp. The cargo well is forward. Dimensions are 42 ft. long and 15 ft. wide. The ramp is lowered and raised by a winch located forward in the hull. The winch is powered by a hydraulic motor and is normally controlled from the pilothouse.

d. Engine Room. The engine room is below the main deck between the cargo well and the lazarette. Hydraulic system tanks are located in the engine room. Craft manufactured by the Marinette Marine Corporation also have a steering system expansion tank in the pilothouse. Bilge pumps, bilge system valves, and oil/water separator are located in the engine room.

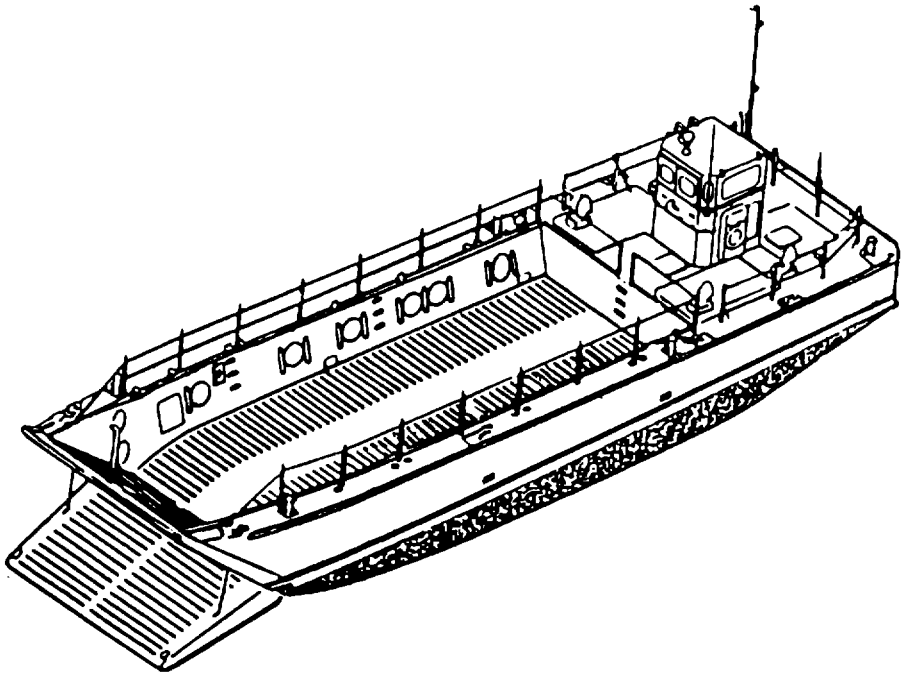
e. Lazarette. The lazarette is aft below the main deck. It contains the two diesel fuel tanks, fuel shutoff and steering cylinders, steering linkage, and ball valves and counterbalance valves. Space for ammunition stowage is provided in the lazarette.

f. Starting and Control Systems. Two starting systems are provided for the diesel engines. Each outboard engine has an electric starter and each inboard engine has a hydraulic starter. If either starting system should fail, the other systems can be used to start both engines. Separate hydraulic systems are provided for steering and for the ramp hoist.

g. Pilothouse. The pilothouse is topped by a detachable canopy. A searchlight is located on the canopy roof. Front and side windows open to provide ventilation. Windshield wipers are mounted on the front windshield.

1-8. LOCATION AND DESCRIPTION OF MAJOR COMPONENTS.

Refer to figure 1-1 for the location and description of major components.



1. RAMP - Used to load and off-load troops, vehicles and other cargo. The ramp is controlled from the Pilothouse.
2. CARGO WELL - Used to carry troops, vehicles and other cargo from ship-to-shore or shore-to-shore.
3. ENGINE ROOM VENTILATORS - Provides an exit for engine fumes to escape from the engine room.
4. ENGINE ROOM HATCH - Provides an entry to engine room.
5. PILOTHOUSE - Contains all of the controls for operating the craft.
6. LAZARETTE HATCH - Provides an entry to the lazarette.
7. EXHAUST PORTS - Used to expel engine exhaust fumes from hull.

Figure 1-1. Location and Description of Major Components.