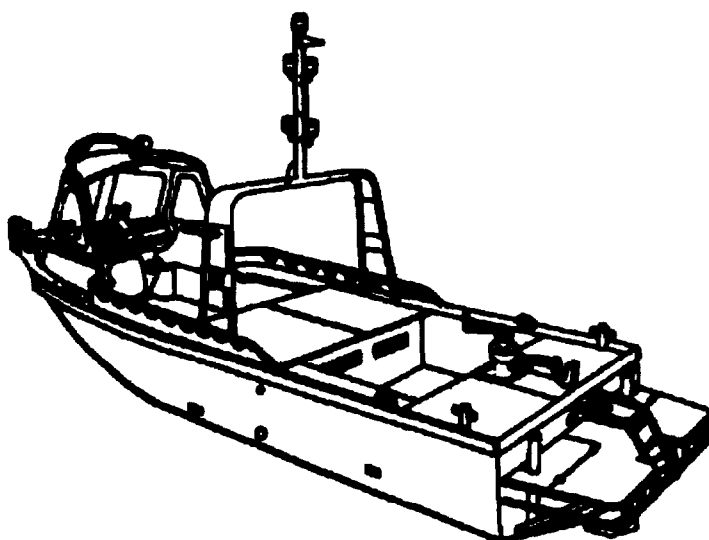


TECHNICAL MANUAL
UNIT
MAINTENANCE MANUAL



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BOAT, BRIDGE ERECTION,
TWIN JET, ALUMINUM HULL
MODEL USCSBMK1 (1940-01-105-5728)
MODEL USCSBMK2 (1940-01-218-9165)

DISTRIBUTION STATEMENT A: Approved for public release; distribution is unlimited.

*This manual supersedes TM 5-1940-227-20, dated 16 November 1981.

HEADQUARTERS, DEPARTMENTS OF THE ARMY
AND HEADQUARTERS, U.S. MARINE CORPS
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No. 5-1940-277-20

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WASHINGTON D.C., 29 APRIL 1994

UNIT MAINTENANCE MANUAL

BOAT, BRIDGE ERECTION, TWIN JET, ALUMINUM HULL
MODEL USCSBMK1 (1940-01-105-5728)
MODEL USCSBMK2 (1940-01-218-9165)

REPORTING ERRORS AND RECOMMENDING IMPROVEMENTS

You can help improve this manual. If you find any mistakes, or if you know of a way to improve these procedures, please let us know. Mail your letter or DA Form 2028 (Recommended Changes to Publications and Blank Forms), or DA Form 2028-2 located in the back of this manual directly to: Commander, US Army Aviation and Troop Command, ATTN: AMSAT-I-MP, 4300 Goodfellow Blvd., St. Louis, MO 63120-1798. You may also submit your recommended changes by E-mail directly to <mpmt%avma28@st-louis-emh7.army.mil>. A reply will be furnished directly to you. Instructions for sending an electronic 2028 may be found at the back of this manual immediately preceding the hard copy 2028.

Marine Corps users submit NAVMC 10772 Form to Commanding General, Marine Corps Logistics Base (Code 850) Albany, GA 31704-5000.

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This manual supersedes TM 5-1940-277-20, dated 16 November 1981.

CHAPTER 1

INTRODUCTION

Section I. GENERAL INFORMATION

1-1 SCOPE.

- a. Type of Manual: Unit Maintenance Manual.
- b. Equipment Name and Model Number: Bridge Erection Boat, Twin Jet, Aluminum Hull. The model numbers assigned to this equipment are USCSBMK1 and USCSBMK2.
- c. Purpose of Equipment: Support bridging and amphibious operations. May also be used as a general purpose workboat in support of diving operations and maritime projects, for inland water patrols, and as a safety boat for amphibious river crossings.
- d. Special Limitations on Equipment: When used to ferry troops or cargo, the safe carrying capacity is limited to a maximum of 12 fully equipped men or 4400 pounds (2000 kilograms).

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). Marine Corps personnel will prepare and maintain records and report forms as prescribed by TM 4700-15/1, Equipment Record Procedures.

1-3. REPORTING EQUIPMENT IMPROVEMENT RECOMMENDATIONS. If your boat needs improvement, let us know. Send us an Equipment Improvement Recommendation (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 SF 368 (Quality Deficiency Report). Mail it to us at Commander, U.S. Army Aviation and Troop Command, ATTN: AMSAT-I-MDO, 4300 Goodfellow Boulevard, St. Louis, MO 63120-1798. U.S. Marine Corps users are encouraged to submit EIRs in accordance with MCO 1650.17, or submit Quality Deficiency Reports in accordance with MCO 4855.10. Mail it to us at Commanding General (P840), Marine Corps Logistics Base, Albany, GA 31704-5000. We'll send you a reply.

1-4. WARRANTY INFORMATION. The Bridge Erection Boat, USCSBMK1, is warranted by Fairey Allday Marine Limited for 12 months. The Bridge Erection Boat USCSBMK2 is warranted by American Development Corporation for 12 months. The warranty starts on the date found in block 23 of DA Form 2408-9 in the logbook. Report all defects in material or workmanship to your supervisor, who will take appropriate action through your unit maintenance supervisor.

1-5. GLOSSARY.

Berth	Place at dock where boat is tied up or anchored.
Capstan	Manually rotated vertical cylinder for winding rope or cable.
Hydrojet	Propelling system that uses water.
MK1 (USCSBMK1)	Combat Support Boat, Mark 1. Original model of Bridge Erection Boat.
MK2 (USCSBMK2)	Combat Support Boat, Mark 2. Modified model of Bridge Erection Boat.
Raw water	River water.
Rub rail	Rubber bumper strip around boat hull.
Scoop	Movable metal cover that directs water stream that comes from jets.
Thermostarter	Glow plug used to preheat intake air for cold starting.
Vdc	Volts direct current.

Section II. EQUIPMENT DESCRIPTION

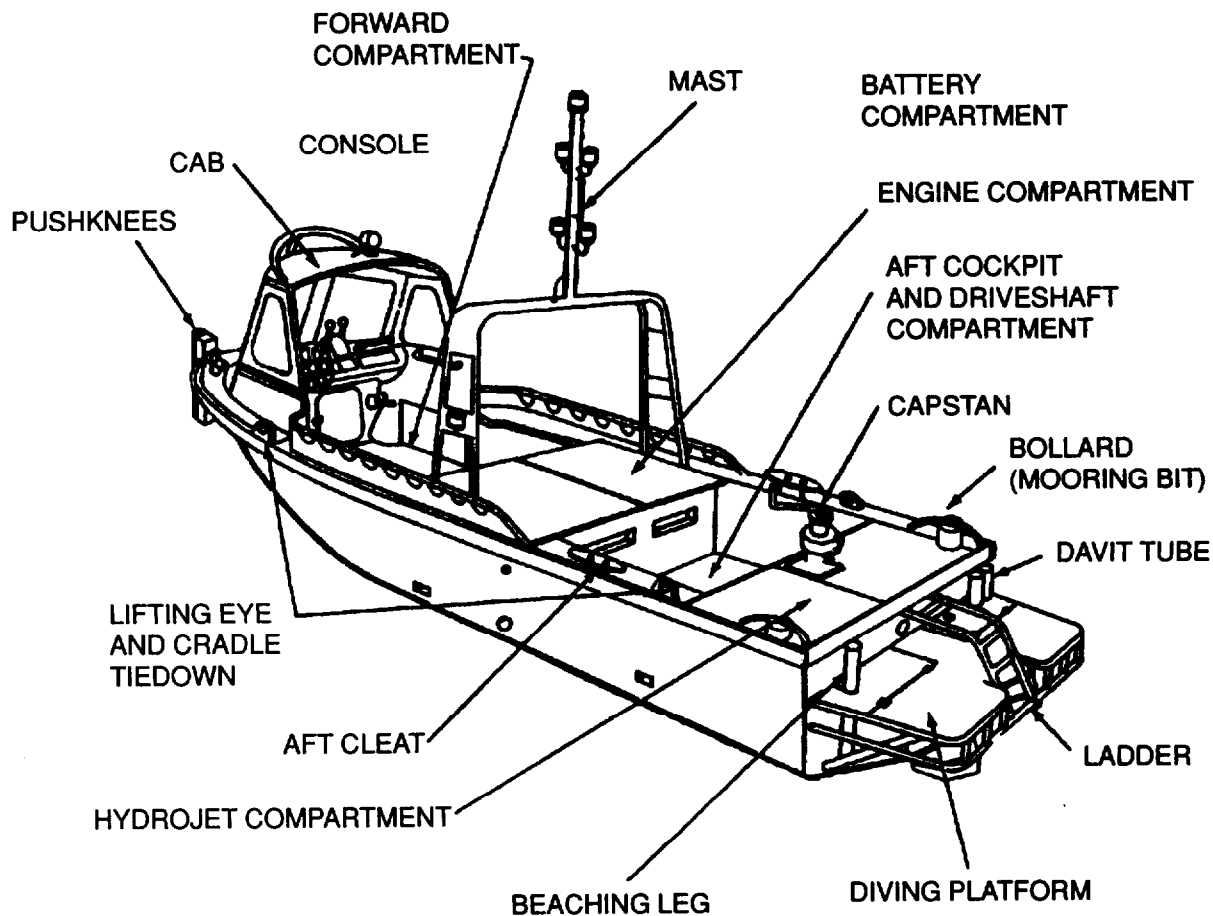
1-6. PURPOSE OF BRIDGE ERECTION BOAT. A transportable, hydrojet propelled, aluminum hull boat designed to maneuver components of floating bridges. The boat can also be used to propel rafts, support diving operations, assist in maritime construction projects, serve as a troop and cargo carrier, and patrol inland waters.

1-7. CAPABILITIES AND FEATURES.

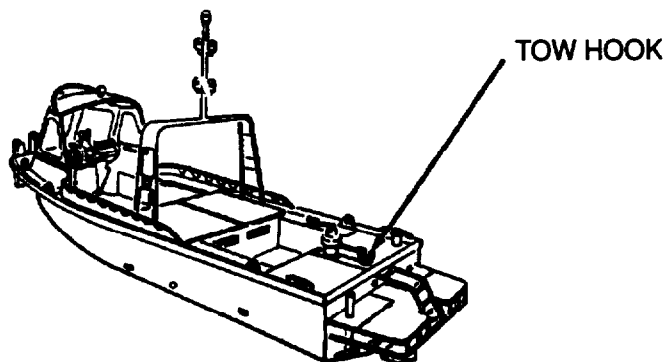
- a. Can rotate on its own axis at low engine speeds.
- b. All weather operational.

- c. Transportable by rail, road, and air. (See Technical Bulletin TB 55-46-1.)
- d. Positive flotation.

MK 1

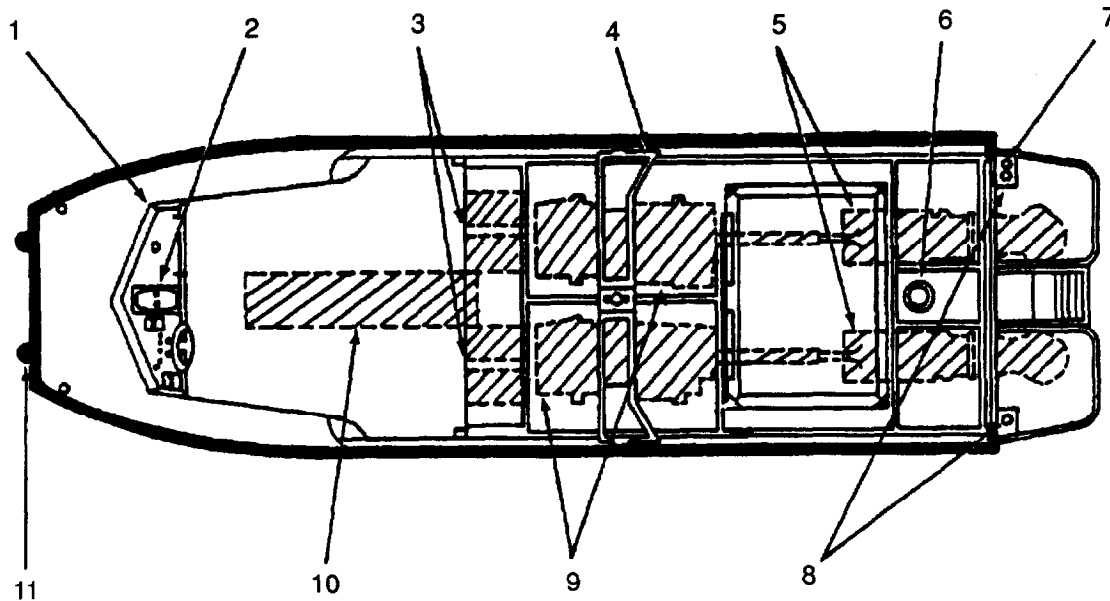


MK 2



1-8. LOCATION AND DESCRIPTION OF MAJOR COMPONENTS.

- a. Removable Cab (1). An aluminum frame with windows and aluminum roof that can be attached to the boat to provide protection for the crew during bad weather: The cab is provided with windshield wiper and a place for attaching searchlight.
- b. Control Console (2). Contains all the controls and indicators required for operation of the boat. In addition, it contains a hand operated bilge pump, a stowage compartment for technical manuals, and a stowage compartment for life preservers and other gear.



- c. Batteries (3). Provide electrical power for the operation of the boat.
- d. Removable Mast (4). Contains the navigation lights, towing lights, and anchor lights. May be lowered to rest on capstan or removed from the boat when lights are not required.
- e. Hydrojets (5). Consist of diesel engine driven hydrojet propulsion units with directional nozzles and scoops. The propulsion units propel the boat and steer it.
- f. Capstan (6). A two-speed hand-operated winching device used for towing, winching, and other work tasks.
- g. Davit Tube (7) (MK1 only). Allows the attachment of a davit (small crane) to the boat for use in diving operations. Not used in U.S. Army operations.
- h. Beaching Legs (8). Support the boat in an upright position when on a hard surface and not in cradle. The beaching legs are retractable.
- i. Engines (9). Provide power for driving hydrojet units.
- j. Fuel Tank (10). Provides fuel storage capacity for operation of boat.
- k. Pushknees (11). Provides the front of the boat with a flat vertical surface for pushing barges or maneuvering bridge components. The pushknees can be removed.

CAUTION

Do not beach boat on rock shores. Damage to keel and keel cooler may result.

- l. Keel Coolers (12) (MK2 only). Provide cooling for the engine, transmission, oil, and turbocharged air. Located on the bottom of the boat.