



A. General Description

Design The RB-M is designed by Camarc LTD. Of Sussex, England. Camarc has incorporated design criteria from other successful hi-speed aluminum water jet boats currently in operation.

Manufacturer The manufacturer of the 45’ RB-M is Marinette Marine Corporation of Marinette, Wisconsin, in coordination with Kvichak Marine Industries of Seattle, Washington.

Missions The RB-M is an aluminum, self-righting, high-speed, multi-mission capable boat, operable from Coast Guard shore stations. The RB-M is able to respond rapidly to Coast Guard missions, or conduct planned patrols and training. The primary roles of the RB-M are:

1. Search and Rescue.
2. Recovery of persons from the water.
3. Transfer of persons and equipment from boat to boat.
4. Towing of disabled craft.
5. Transfer of persons to and from Coast Guard helicopters.
6. Medical assistance.
7. Fire fighting and rescue assistance.
8. Recreational Boat Safety (RBS).
9. Marine Environmental Protection (MEP).
10. Enforcement of laws and treaties (ELT).
11. Port Security and Safety (PSS).
12. Defense Operations/Contingency Preparedness (DO).

Boat Specifications

The following provides a list of all 45’ RB-M boat specifications:

Physical characteristics

Hull Length	43’9” (w/o fenders)
Length Overall	44’9” (w/ fenders)
Hull Beam	13’8” (w/o fenders)



Beam Overall	14'8" (w/ fenders)
Freeboard	
Bow	4'9"
Amidships	1'11" (Rescue Recess)
Aft	2'11"
Draft	3' 4"
Highest Points:	
Mast Up	20'8.25"
Mast Down	13'1"
Engines	Twin Detroit Diesel Series 60, In-line six cylinder, 4-cycle electronically controlled (DDEC) Engines
Rated Horsepower	825 BHP at 2300 RPM
Reduction Gear	Two Twin-Disc MG-5114-SC, 1.02:1 reduction ratio
Fuel Type	Diesel
Fuel Capacity	
100%	520 GAL
95% (usable)	495 GAL
Electrical Generation	Two Auragen VIPER Induction Power Source (IPS) Generators, Belt driven by the diesel Engines, providing 240/120 VAC and 24 VDC power, Regardless of engine speed.
Jet Drives	Two Kamewa Rolls Royce FF Series 375 S Water Jets
Displacement	
Hoisting condition	36,700 LBS
(boat, full fuel, outfit; no crew or cargo)	
(Hoisting condition + 4 crew members @ 210 LBS ea)	



Trailer Information	The 45' RB-M was not designed for transport on a boat trailer. Over-the-road delivery should be performed by a licensed commercial shipping company.
Potable Water Capacity	5 GAL

Operating Characteristics and Parameters

Maximum Personnel (including crew)	24 (210 LBS each)
Maximum Seas, Operations	8'
Maximum Seas, Survivable	12'
Maximum Winds, Operations	30 KTS
Maximum Winds, Survivable	50 KTS
Range (@ 30 KTS in Calm Water)	250+ NM
Maximum Operating Distance from Shore	50 NM
Maximum RPM	2300 RPM
Maximum Speed	40+ KTS
Cruising RPM	1800 RPM
Cruising Speed	30 KTS
Towing Capacity	100 Displacement Tons
Ice Breaking Capability	Thin surface ice and slush to idle speeds

NOTE 

Unit commanders shall comply with the minimum boat crew requirements when dispatching boats for Coast Guard operations in accordance with Volume I of the U.S. Coast Guard Boat Operations and Training (BOAT) Manual, COMDTINST M16114.32 (series). See Chapter 4 of this handbook for additional Crew Requirements.