The R/V Pacific Storm was a commercial trawler gifted to the Marine Mammal Institute. It has been extensively refitted for research by private donations. Nearly all vessel upgrades and maintenance were undertaken in Newport, Oregon, by Curry Marine, Yaquina Boat Equipment, and 52 other local businesses.

The R/V Pacific Storm is an 84’ OA steel hulled vessel with a 24’ beam that is outfitted for year-round coastal service. The vessel can accommodate up to 7 people (beyond the crew) in three cabins for overnight and extended science missions up to 30 days duration. There are two showers and three heads. The vessel has excellent low-speed handling and positioning. A new 5-ton articulating A-frame on the stern can launch and recover small boats, moorings, and sampling equipment. Features include a dry-lab, knuckle boom with a 5-ton lifting capacity, and 30’ reach mounted slightly starboard of mid-ship that can service the entire back deck for loading/unloading supplies, boats, equipment, and other provisions. The aft deck area measures 27’ long by 23’ wide and can carry an inboard 22’ Zodiac Hurricane RHIB. Additional boats or other equipment can be located behind the wheelhouse on top of the lab area. A series of 1500-watt lights illuminating both the deck and the waters in front of the vessel provide the capacity for around-the-clock work.

Characteristics

Length: 84 foot
Beam: 24 foot
Average draft: 10 foot
Endurance: 30 days
Gross regulatory tonnage: 153 GRT
Fuel capacity: 15,000 gallons
Lube oil capacity: 100 gallons
Hydraulic oil capacity: 400 gallons
Minimum speed: 1.5 knots
Cruising speed: 8.5 kts
Maximum speed: 9.5 kts ~15 gallons/hr fuel consumption
Water Maker 2800-gal tank, reverse osmosis 900 gallons of fresh water daily
Galley: stove, oven, freezer, washer/dryer, eating area
Berths: 12 (7 for science party)

- Wheelhouse captain’s bed
- V-berth sleeps 4 crew forward of the galley with adjacent head and shower
- Below the back deck area there are 2 rooms with 2 bunks each, and 1 room with a set of bunks and a single bed, with two heads and one shower for the science party

Interior room air conditioning
Air compressor with attachments throughout the vessel
Fuel transfer pump for bringing diesel to the aft deck for refueling small vessels

Machinery/Generators/Electricity

Main engine Caterpillar 3412 (factory rebuilt 2007) 520 hp
Hydraulic engine Cummins 300 hp in-line 6 cylinder

- 2 – 60 gallon pumps
- 1 – 45 gallon pump
- 1 – 35 gallon pump
Generators
- John Deer 70-kw generator: 110/220VAC 3 phase
- Isuzu 30-kw generator: 110/220VAC 3 phase

Electrical Power
- AC: 110/220VAC single-phase and 220VAC 3 phase
- DC: 12/24/32VDC
- Lights run on 110V so there is always AC power available
- Circuits in dry lab
- Van/deck connections

Wheelhouse Equipment
Kongberg AIS 200
Furuno 1935 AIS Radar 48-mile range, Furuno 1832 Radar 36-mile range
Comnav 2000 autopilot with 2 Furuno GP 37 GPSs
Furuno SC502 satellite compass
Furuno FCV-292 600 watt dual-frequency (50/200) echo sounder
Dell computer with Nobeltec NavTrack plotting software
Lowrance chart plotter
VHF radios
Panasonic watch alarm
Web cam on back deck fed to wheelhouse

Winches, Cranes and Hydraulic A-Frame
5-ton knuckle crane (with 30’ reach 2,260#)
5-ton stern hydraulic A-frame with Gearmatic slow-speed winch
H-18 Pullmaster winch 18,000-pound pull high-speed reverse on top of lab
PL4 Pullmaster winch 4,000 pound pull on top of lab
Stabilizer poles are winch-deployed

Communications and Miscellaneous Equipment
Iridium Satellite phone
Verizon Internet with Wilson antenna booster, wireless internet on board when in range
6” x 20’ stainless steel pivoting transducer pole with standard 8-bolt 6” flange
Lab computer and printer, including email service
Washer and dryer
Prime RHIB is 6.4m Volvo diesel I/O; spare RHIB is available. Both boats can be carried on board.

Research History
Bering Sea surveys
Blue, Fin, Humpback, Gray and Sperm whale tagging off the U.S., Mexico and Costa Rica
High-resolution tectonics and seafloor mapping of California, Oregon, and Washington coasts
Core drilling operation off the Columbia River requiring three-point anchoring
R.O.V. operations off California, Oregon, and Washington coasts
A.U.V. operations off California, Oregon, and Washington coasts
Buoy recovery and anchoring
Autonomous glider deployment and retrieval
Deployment and monitoring of experimental bottom-mounted and mid-water devices