## R/V Petrel - Specifications



Vessel Name: R/V Petrel

Builder/outfitters: SW Boatworks/Jersey Cape Yachts/Patriot Marine

Designer: Calvin Beal Jr. Hull Construction: Fiberglass

Owner: Stockton University

Classification: US Documentation and USCG Oceanographic Research Vessel documentation

Delivery Date: March 2016

Mission: Hydrographic survey, near-shore and estuarine oceanography, marine science education

Dimensions: Length: 36' Beam: 14' Draft: 4' Open deck ~150 ft<sup>2</sup> (11' x 14')

Deck weight limit: 4,000 lbs.

Main Propulsion: Single Cummins QSC8.3 @ 550hp/3000rpm

Marine Gear: ZF 286A 2.5:1 with trolling valve

Propeller: 27 x 33 x 2.25 4-blade from S&S Propeller N.Y.

Speed: 15 kt. Cruise with minimum forward motion down to 1-2 kt. (trolling valve)

Generator: Westerbeke 10KW, 30-amp service

Accommodations: One bunk, two full-length benches, enclosed head, microwave/coffeemaker. Sleeps up to

4 for extended trips and transit time (benches, bunk and bean bags). No private rooms.

**Electronics/Navigation/Positioning Equipment;** Furuno MFD 12 and MFD 8 complete navigation package (plotter, radar, and sounder). ACR Class A AIS system. Trimble/Applanix I2NS POS MV Wavemaster GNSS. Marine survey navigation provided by on-board computer utilizing HYPACK, CTI and QPS marine survey software programs.

Anchor tree; double anchor system; Patriot Marine (Waretown, NJ) and Good Anchor Windlass (Barnegat, NJ)

**Safety equipment;** 10-person life raft, EPIRB, Class A AIS system, SART, AED, immersion suits and all items required under United States Coast Guard under 46 CFR Subchapter U for Oceanographic Research Vessels.

**Lifting equipment**; Pullmaster PL5-12-211-6D winch with freefall. A-frame with 10' deck clearance (2000 lb. SWL).

## **Survey and sampling equipment:**

- Side mounted aluminum plates and davit sleeves for multiple over-the-side survey and lifting equipment needs (both port and starboard sides)
- High Tower Universal Sonar Mount
- Edgetech 6205 combined side scan/multibeam sonar for hydrographic survey
- R2Sonic 2024 multibeam echosounder
- Klein 3900 side scan sonar (25 and 100m cables available)
- Marine Magnetics Explorer marine magnetometer with side scan integration
- Seabotix LBV six thruster 300m inspection class ROV
  - o forward scanning sonar, video scaling laser, Tritech USBL navigation system
- Teledyne Sentinel V and RiverPro Acoustic Doppler Current Profilers
- YSI multi parameter sondes and CTD's
- AML X2 series sonde for sound velocity profiling
- Young modified Van Veen grab
- Biological sampling gear: patent tongs, dredges, trawl nets, plankton nets and other

The *R/V Petrel* is a Downeast-style lobster boat design, mono-hull with a large keel and a flat/wide design aft with an open transom. The *R/V Petrel* is well outfitted for hydrographic surveys, scientific diving, deployment of small mooring systems and buoys, sediment sampling, biological sampling, marine mammal surveys, avian surveys, fish trap surveys, shell planting and marine science education.

Stockton supports collaborating scientists, government agencies and consulting firms to meet their research, educational or general vessel of opportunity needs in New Jersey's coastal waters under the provisions provided by CFR 46 Subchapter U - Oceanographic Research Vessels. For more information contact the Marine Operations staff:

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