

APL-UW Research Vessels

APL-UW has pier facilities on nearby Lake Union equipped with davits/hoists for loading the R/V *Robertson* and R/V *Henderson*; there are vehicles and forklifts available to transport heavy equipment. There are also various small boats available to support marine operations. Access to Puget Sound and deep water is available through a nearby system of locks.

The R/V *Robertson* was added to the APL-UW fleet in September 2008. The vessel features generous lab space on the main level, ample deck space, and operator's locator for good view of the deck and over-the-side operations, and bunk, galley, and head facilities. The A-frame, utility hoist, 12-ft wide folding swim step, and two hull wells allow multiple, flexible instrumentation deployment.

Specifications:

Length: 56'-8"

Breadth: 19'-0"

Draft: 5'-0"

Freeboard (aft): 4'-0"

Construction: Fiberglass w/ aluminum work deck

Speed: 0.5–10 kts

Operating area: Puget Sound, Strait of Juan De Fuca and the coastal waters of Washington, Oregon, and Vancouver Island

Range: 740 n mi

Fuel: 1200 gal

Water: 500 gal

Main Engine: 455 HP - John Deere 6125AFM

Bowthruster: 40 HP - 12" tunnel

Electrical System: 240 VAC, 3 PH., 60 Hz, 24 VDC

Generators: 55 KW and 20 KW - Northern Lights

UPS: 4000 Watt - Xantrex SW4024

Work deck: 418 sq. ft.

Swim step: 12'W x 3'D x 1' above WL (folding)

Bolt Pattern: 3/4"-10 deck bolt sockets on aft deck (2'x 2' pattern)

Deck Load: 6 LT (4' CG above work deck)

A-Frame: 6,000 lb. (12'H x 12'W)

A-Frame Winch: 6,000 lb with 50 ft. of 1/2" Spectra line

Crane: Morgan 40-3L with 23 ft. reach and 30,000 ft.lb. capacity

Utility Winch: Nordic 32 Series - 1000' of 1" line, 3,950 lb. full line pull

Anchor Winch: 1000' of 1/2" wire, 90' of 5/8" chain plus 145# Forjford

Stern Winches: (2) 1000' of 3/8" wire, 90' of 3/8" chain plus 90# Forjford

Hydraulic System: 21 GPM @ 2900 PSI

Air Compressor: 8.5 CFM @ 135 PSI (30 gal. tank)

Lab: 286 sq. ft.

Wet Wells: 19" and 10"

Berthing: 6 persons

Galley: Stove, refrigerator, and microwave/convection oven

Head: (1) marine head with sink and shower

Holding Tank: 200 gal. capacity



Fire Extinguishing: Fixed engine room and (8) hand held extinguishers

ADCP: RDI model WHVM-300

CTD: SBE 911 with SBE 32SC Carousel—(12) 2.5-liter bottles

Compass: JRC JLR-20 GPS compass

DGPS: Northstar 952XD

Electronic Chart: Nobeltec

AIS: Furuno FA-150

Radar: Furuno FR8062 (72nm range) Furuno 1832 (36nm range)

Autopilot: Simrad AP50

Depth: Furuno FCV-1100L (50/200 KHZ)

VHF: (2) Standard-Horizon GX1500S

Phone: Cellular base station w/ fax - 3 watt amp and ext. antenna

Data/Internet: 3G/4G Moble wireless router - Top Global MB6800

Wind: R.M. Young (05106MA)

Hailer/Intercom: Furuno LH3000

Liferaft: DBC 12 person (SOLAS B)

EPIRB: ACR Globalfix 406MHZ CAT. 1

Lif jackets: 18 type 1, 8 work vest, 12 survival suit, 4 exp. suit

The R/V Light was added to the APL-UW fleet in August 2018. The vessel was designed to be a versatile and efficient platform to test ocean science instrumentation and equipment under development at APL-UW. Dedicated to Russell Davis Light, the late head of the Ocean Engineering Department, this vessel embodies his professional values — to be the best prepared, hardest working, and most adaptable to adversity.

Specifications

Hull Form: Catamaran

Hull Material: Aluminum

Range: Inland waters of Puget Sound and Lake Washington

Wind Velocity: 35 knots, with gusts to 45 knots

Maximum Speed: 6.5 knots

Length Overall: 65' 9"

Length on Deck: 65'

Beam Molded: 25'

Depth Molded: 6' 9"

Draft Molded: 3' 2"

Propulsion Generator: 125 KW, 480- VAC, 60 Hz, 3-phase

Service Generator: 25 KW, 240 VAC, 60 Hz, 3-phase

Navigation Electronics: GPS, GPS Compass, Autopilot, Radar, Depth
Sonder, VHF Radio, Chart Plotter

Diesel Fuel Oil: 2000 gallons, 2 x 500-gallon tanks per hull

