

**R/V HUGH R. SHARP**  
**University of Delaware**  
**2025**

**GENERAL DESCRIPTION:**

The R/V *HUGH R. SHARP* is an acoustically quiet, state of the art, general-purpose, regional class research vessel operated by the University of Delaware as part of the U.S. Academic Research Fleet (ARF) and the University-National Oceanographic Laboratory System (UNOLS). The vessel is outfitted with a full range of oceanographic equipment and instrumentation:

**COMMUNICATIONS:**

Voice and Internet/e-mail via: Cellular and Starlink (ARF/UNOLS Fleet system).

**MANEUVERING AND POSITIONING**

Kongsberg KPOS-DP11 Dynamic Positioning System, Twin Schottel Z-Drives, Tunnel Bow Thruster.

**ELECTRICAL POWER:**

480 Vac (3 $\Phi$ ), 208 Vac (1 $\Phi$  and 3 $\Phi$ )

**FIXED SCIENCE HANDLING EQUIPMENT:**

Starboard Trawl Winch: DYNACON, 3000m of ½” and 1500m of 9/16” 3x19 torque balanced wire rope; auto-render, SWT 10,280 lbs @ FS 2.5.

Port Trawl Winch: DYNACON, 1300m .681 fiber optic wire, SWT 16,800 lbs @ FS 2.5.

CTD Handling System: Caley Ocean Systems 4100m 0.322 cable, SWT 6,700 lbs @ FS 2.5.

Main Crane: Palfinger PK65002M (SWL 12,1256 LBS @ 28 ft; 3,800 LBS @ 67 ft)

Stern A-Frame: SWL 20,000 LBS @ center overboarding sheave

Clear Height: 18 ft    Clear Width: 11.8 ft    Reach outboard: 10.5 ft

SWL 12,800 LBS P/S upper “T” extensions

**SEMI-PORTABLE SCIENCE HANDLING EQUIPMENT:**

Hawboldt SPRE-2648/RS Mooring / Multipurpose Deck Winch (SWL 5,200 lbs. bare drum)

DYNACON 10010 Portable Deck Winch, 700m of 0.498”, 10 conductor cable.

DEME Portable Deck Winch, 800m of ¼”, torque balanced wire.

Knuckle Boom Crane (“AUV Crane”): DMW Marine (SWL 800 lbs), 15.5 ft reach.

Side Frame: SWT 11,600 lbs. (requires extra mobilization day)

**LAB AND DECK SPACE:**

Main Deck Aft: 1500 sqft

Clear Rail Length (Starboard): 53 ft

Dry Lab: 340 sqft

Wet Lab: 260 sqft

Vans: Two (2) 20-foot van locations P/S on main deck aft.

Isotope Van with Hewlett-Packard LSC

General-Purpose Van

AUV/ROV Van

Cold and “Clean” vans available upon request

**RETRACTABLE KEEL:**

Three (3) 24" x 24" transducer bays for ship and science use. Changeable alongside.

Flush with keel: 2.9 m below mean water line

1.0 m down: 3.9 m below mean water line

**SHIP'S STANDARD INSTRUMENTATION:**

Sound Guard real time noise monitoring and recording program with hull mounted transducers.

Acoustic Doppler Current Profiler (ADCP): RDI "Workhorse Mariner" 300kHz or Rio Grand BB 600kHz.

Surface Mapping System (SMS): The SMS records navigation, meteorological and sea surface data every 10 seconds.

CTD System: SeaBird Electronics 911 plus CTD, Rosette is a 12-bottle Sea Bird 32 Carousel, outfitted with an array of 10 liter bottles. 24 bottle carousel available.

Knudsen Chirp 3260 Deep Water Echo Sounder (3.5 and 200 kHz).

Applanix POS-MV v5 Positioning and Orientation sensor.

Kongsberg EM2040P Multibeam System mounted in retractable keel (additional day rate).

Kongsberg HiPap 200 Acoustic Positioning System.

"Scanfish" GMI MKII Undulating Towed CTD with SeaBird Electronics 911 plus CTD (additional day rate).

Profiling Light Meter (Biospherical)

Multicore

Smith MacIntyre Bottom Grab

Liquid Scintillation Counter (in 20-foot van)

"Clean" Sea Water Supply Available in Labs and Vans from dedicated science sea chest.

Lab-Grade Water Purifier

Gravity Corer (10 Foot)

Deck Incubation Tables

17-Foot Semi-Rigid Work Boat (SafeBoats) with 90hp engine

Modular Scientific Refrigerators and Freezers

Scientific Bow Tower and Scientific Antenna Mounts on Main Mast

**SCHEDULING:**

The R/V *HUGH R. SHARP* is scheduled through the UNOLS process. Preliminary schedules for the next calendar year are drafted the prior Spring - Summer. As the funding decisions for the various proposed projects become known the schedule is finalized. We are happy to accommodate additional cruises in the current year as the ship's schedule permits. We encourage all investigators to contact Marine Operations early in the planning stages of the project.

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