



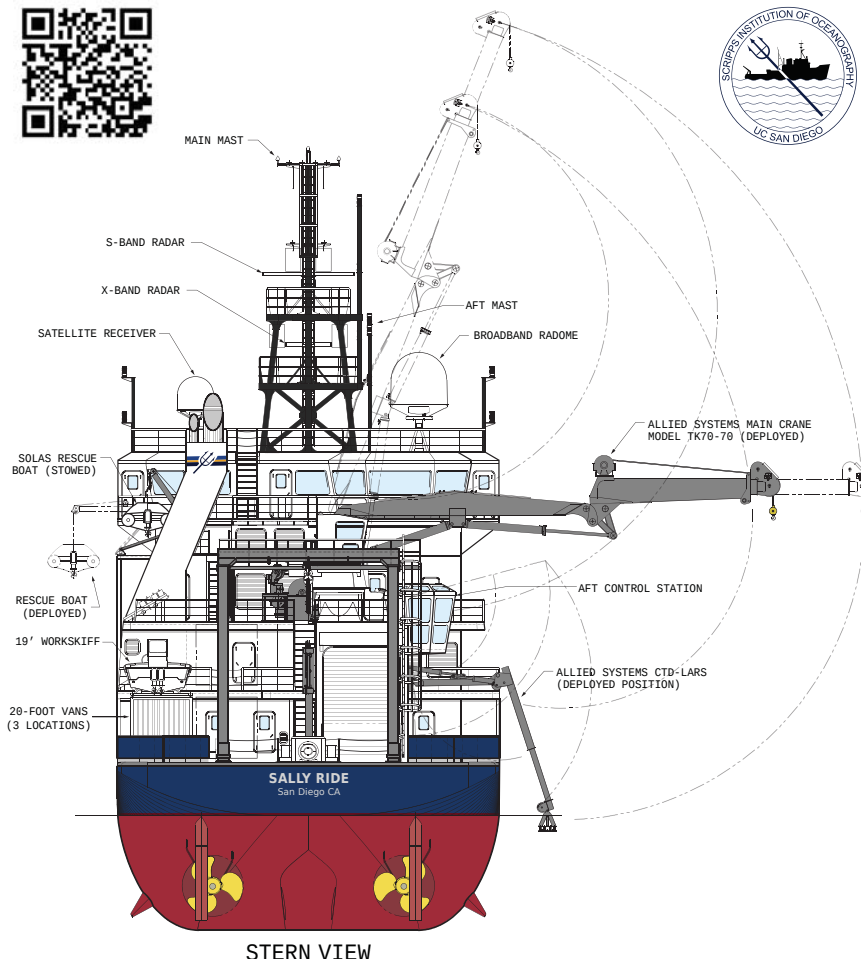
RESEARCH VESSEL

Sally Ride

Advancing the state-of-the art for scientific discovery at sea

Owned by the United States Office of Naval Research and operated by Scripps Institution of Oceanography, R/V *Sally Ride* is an Ocean Class Auxiliary General Oceanographic Research (AGOR) vessel designed to perform multidisciplinary oceanographic research worldwide, from littoral environments to the deepest ocean, from the tropics into first-year sea ice. Aboard R/V *Sally Ride*, new systems will permit improved over-the-side operations, station keeping, trackline maneuvering, and acoustic system performance to support demanding scientific tasks. Designed to be reliable, cost effective and flexible, the Ocean Class AGOR will capably support the evolving needs of U.S. scientists for decades to come.

<http://scripps.ucsd.edu/ships>



STERN VIEW

R/V *Sally Ride* Specifications

Length: 238 feet Beam: 50 feet Draft: 15 feet
 Gross tonnage: 3,043 long tons
 Transit speed (for planning): 10.5 kts Maximum speed: 12.8 kts
 Dynamic positioning & trackline following: ± 5 m in SS5
 Endurance: 42 days at 10.5 knots (fuel) Range: 10,545 nm
 Ice strengthening: independent ops in first-year ice (ABS Ice Class D0)
 Superior maneuverability and reliability from variable-speed
 controllable pitch propellers and bow and stern thrusters

Room on Board

Accommodation: 20 crew, 25 scientists
 Laboratory space: 2,035 ft² Main deck working area: 3,036 ft²
 Science storage volume: 5,017 ft³ Science payload: 250 long tons
 Portable vans: 3 20-foot containers aft, 1 container forward

Scientific Equipment

Deep Water Multibeam Survey System: Kongsberg EM122
 Shallow Water Multibeam Survey System: Kongsberg EM712
 Acoustic Doppler Current Profilers:
 Teledyne RDI Ocean Surveyor 38 kHz and 150 kHz
 Teledyne RDI Mariner Workhorse 300 kHz
 Sub-Bottom Profiler: Knudsen 3260, 16-element Massa 3.5 kHz Array
 Echosounder: Knudsen 3260 with 12 kHz single-beam transducer
 Fisheries research sonar: Kongsberg EK80 with five frequencies (split
 beam transducers at 18, 38, 70, 120 and 200 kHz)
 Acoustic synchronization unit: Kongsberg K-Sync, 8 channels
 Motion sensors: Kongsberg Seapath 330+, IXSEA PHINS
 Underway salinity & temperature: Seabird thermosalinograph
 Underway temperature profiling: Turo expendable bathythermograph
 Seawater sound speed: Calculated from thermosalinograph (surface)
 and Turo XBT system (vertical profiles)
 Underwater navigation system: Kongsberg HiPAP 501 (30 kHz, range
 to 4,000 m) and HiPAP 101 (12 kHz, range to 10,000 m)
 Long baseline transponder navigation: Kongsberg HiPAP
 Supply of submersible transponders: Kongsberg cNODE (12 & 30 kHz)
 Scientific wave radar: Rutter WAMOS II-300 Wave Monitoring System
 measures and displays ocean wave spectra in real time
 Flow-through uncontaminated seawater system, instrumented for
 meteorological and sea surface measurements
 Shipboard data system: Wired and wireless shipboard network
 Satellite broadband: Redundant satellite internet connectivity

Support Equipment

Main crane: Allied TK70-70 telescoping knuckleboom, 10,000 lbs at 70
 feet extension (sea state 4), 22,000 lbs at 70 feet (sheltered ops)
 CTD handling system: Allied CTD-LARS
 Starboard overboard handling system: Allied
Handling systems reach to waterline for improved safety and load control
 Portable crane: Allied TK10-40 telescoping knuckleboom, 2,000 lbs at
 30 feet extension
 A-Frame: Allied, 30,000 lbs dynamic working load
A-Frame lowers forward to deck for access to sheaves at sea
 CTD/hydro winches: Dual Markey CAST6 with motion compensation
 and rend & recover modes, each with rated full drum capacity of
 14,000 m 0.322" electro-mechanical (EM) cable, 12,000 m 0.375"
 3x19 torque-balanced wire rope, or 10,000 m 0.393" EOM
 (electro-optical-mechanical) cable
 Main winch: Markey traction winch with rated line pull 25,000 lbs at
 45 m/min and dual storage drums, each with rated full capacity of
 12,000 m 9/16" 3x19 torque-balanced wire rope, 10,000 m 0.680"
 EM cable, or 10,000 m 0.681" EOM cable.