F. G. WALTON SMITH
PRINCIPAL CHARACTERISTICS

The Rosenstiel School operates a state-of-the-art research catamaran, specially designed for both shallow and deep water research. With an innovative catamaran hull, the vessel, named the **F. G. WALTON SMITH** in honor of the School's founder, is especially well suited for research in the shallow water environments of Florida and the Bahamas. The Alex G. Nason Foundation, Inc. provided the lead gift for construction of the vessel.

The 96-foot-long ship can reach speeds of over 12 knots and has a draft of only 5-1/2 feet. In its ten staterooms the vessel can accommodate 19 people, typically 14 scientists and 5 crew. Laboratory space aboard encompasses 800 square feet with an additional 800 square feet of multi-use space in the stern.

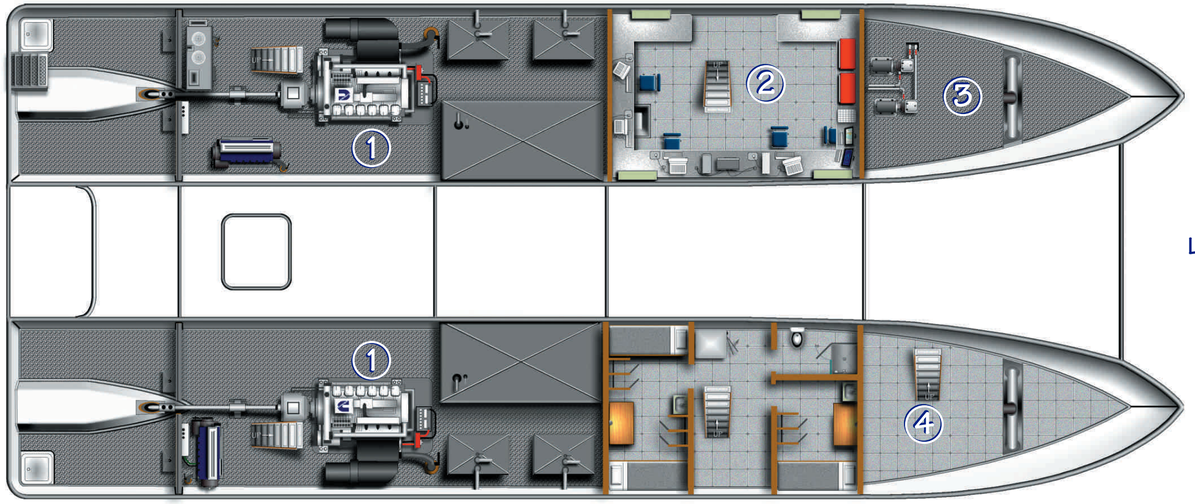
Constructed by Eastern Shipbuilding Group in Panama City, Florida, the catamaran boasts twin Cummins engines at 760 hp each, Servogear variable pitch propellers, a 3,000-gallon fresh water tank plus a reverse osmosis water maker, and 10,000 gallons of fuel storage. The vessel also has the capability of dynamic positioning for precise station keeping, using bow thrusters, controllable pitch propellers, and independent rudders. A moon pool between the hulls facilitates geologic drilling or coring operations; and a notched stern and A-frame enables the maneuvering of equipment into the water over the stern. Instrumentation aboard includes a transducer suite with an ADCP for measuring ocean currents, plankton nets for tows, and a CTD and rosette for seawater sampling.

Length	96’
Breadth	40’
Draft	5’ 6”
Gross Tonnage	97
Propulsion	Twin Cummins QSK 19 760hp each
Propellers	Servogear Variable Pitch
Electrical	Twin 80kw generators 208 vac, 3 phase, 110/120 vac, single phase UPS in laboratories
Fresh water	3,000 gallons plus Reverse Osmosis water maker
Fuel	10,000 gallons
Complement	19 berths, 5 crew, 14 science party
Speed	12 knots

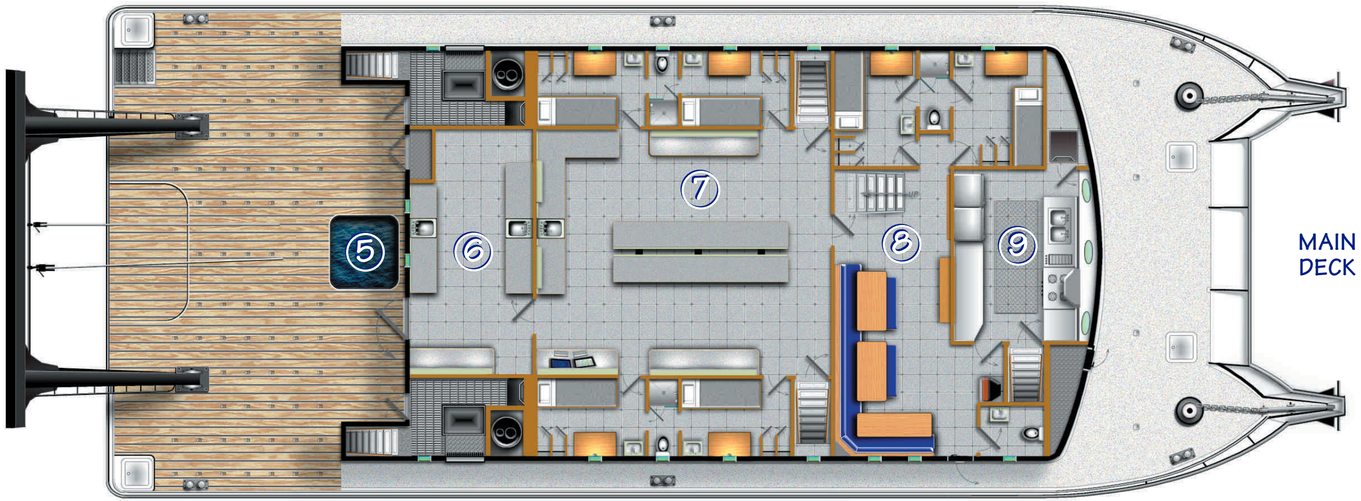
The Rosenstiel School’s Advanced Catamaran Research Vessel
F. G. WALTON SMITH

Rosenstiel School of Marine & Atmospheric Science
University of Miami
4600 Rickenbacker Causeway
Miami, Florida 33149
(305) 421-4000

RSMAS UNIVERSITY OF Miami
ROSENSTIEL SCHOOL
OF MARINE & ATMOSPHERIC SCIENCE



LOWER DECK



MAIN DECK

Key

1. Engine Room
2. Electronics Shop
3. Aux. Mechanical Space
4. Galley Storage
5. Moon Pool
6. Wet Lab
7. Dry Lab
8. Dining Room
9. Galley
10. Winch/DP Control
11. Captain's Stateroom
12. Bridge

Special Features and Capabilities of the Vessel

-Dynamic positioning (DP) for precise station keeping using bow thrusters, controllable pitch propellers, and independent rudders and controlled by a Kongsberg Simrad DP system which is tied to a TSS POS/ MV 320 Position, Attitude, Heading, and Vertical Reference Sensor;

-A transducer suite that includes ADCP transducers for measuring ocean currents, a 7 x 3.5kHz transducer array for sub-bottom profiling, and a 12kHz transducer for deep water bathymetry;

-A moon pool between the hulls for drilling or coring operations;

-A notched stern to facilitate handling equipment into the water using the A-frame;

-Specially designed transom stairs to facilitate diving operations;

-An A-frame, a conductor wire winch, a hydro wire winch, two cranes on the after end of the upper deck, space for vans, space for small boats, tie downs on both decks on 2 foot centers;

-Sea water flowing systems with pick ups at the bow and space in the wet lab for instrumentation that would typically include a thermosalinograph, a partial CO_2 monitor, a nutrient monitor, fluorometers, and a dissolved oxygen monitor;

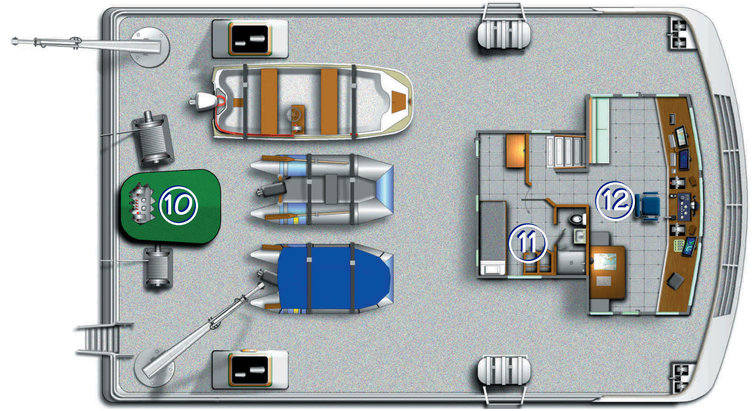
-Meteorological sensors include wind speed and direction, air temperature, relative humidity, barometric pressure, and solar radiation;

-Over-the-side systems include a Sea Bird CTD system with a fluorometer on a 12 bottle rosette;

-A W. S. Ocean undulating system that allows continuous, underway vertical sampling through a pre-set section of the water column. It can be equipped with a variety of sensors;

-Vessel control stations are located in the bridge, on the upper deck wings, and at the after control station on the upper deck;

The vessel was built to USCG Sub chapter T specifications and has an ABS International Load Line.



UPPER DECK & BRIDGE