



## **F.G. Walton Smith Principal Characteristics**

Thanks to a gift from the Alex G. Nason Foundation, Inc., the Rosenstiel School has acquired a state-of-the-art catamaran, unrivaled worldwide for both shallow and deep water research. The new vessel, named the F.G. WALTON SMITH, in honor of the founder of the Rosenstiel School, signals a new era in scientific research. The Smith was built in 1999 and placed in service in February, 2000.

The 96-foot-long catamaran is capable of reaching speeds of over 12 knots and has a draft of only 5-1/2 feet, which enables it to explore heretofore inaccessible areas such as reefs, mangroves, grassbeds, and other shallow environments. The vessel accommodates 20 people in its ten two-person staterooms and encompasses 800 square feet of laboratory space, as well as an additional 800 square feet of multi-use space astern. 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 tank of fresh water 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. Other specialized instruments include a transducer suite that includes ADCP transducers for measuring ocean currents; a moon pool between the hulls for drilling or coring operations; and a notched stern to facilitate maneuvering equipment into the water using the A-frame.

Length

96'

Breadth	40'
Draft	5' 6"
Gross Tonnage	97
Propulsion	Twin Cummins QSK 19 760hp each
Propellers	Servogear Variable Pitch Electrical
Electrical	Twin 80kw generators 208 vac 3 phase, 110/120 vac single phase UPS in laboratories
Fresh water maker	3,000 gallons plus Reverse Osmosis water maker
Fuel	10,000 gallons
Complement	20 berths, 4 crew, 16 science party
Speed	12 knots

-Dynamic positioning 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.

-An A-frame, a conductor wire winch, a hydro wire winch, two cranes on the after end of the 01 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 CO2 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 01 deck wings, and at the after control station on the 01 deck

The vessel will be built to USCG Subchapter T specifications and will have an ABS International Load Line.

Deck Plans: [Upper Deck & Flying Bridge](#) • [Main Deck](#) • [Lower Deck](#) • [Aerial View](#)