

CRUISE PLANNING MANUAL R/V F.G. WALTON SMITH

JANUARY 2024

UNIVERSITY OF MIAMI

**ROSENSTIEL SCHOOL of
MARINE, ATMOSPHERIC,
& EARTH SCIENCE**



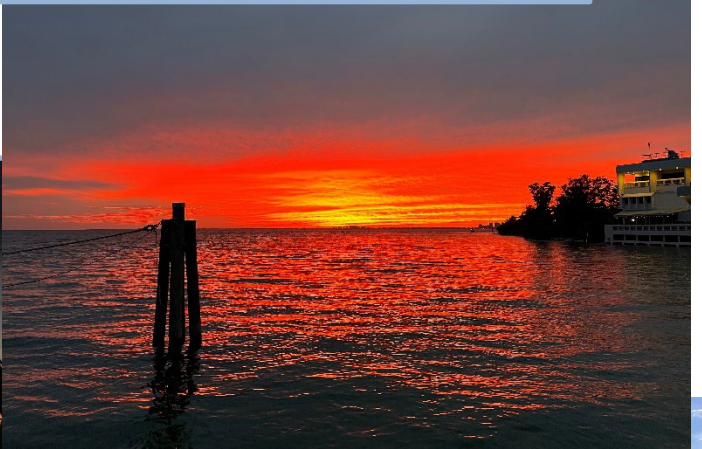
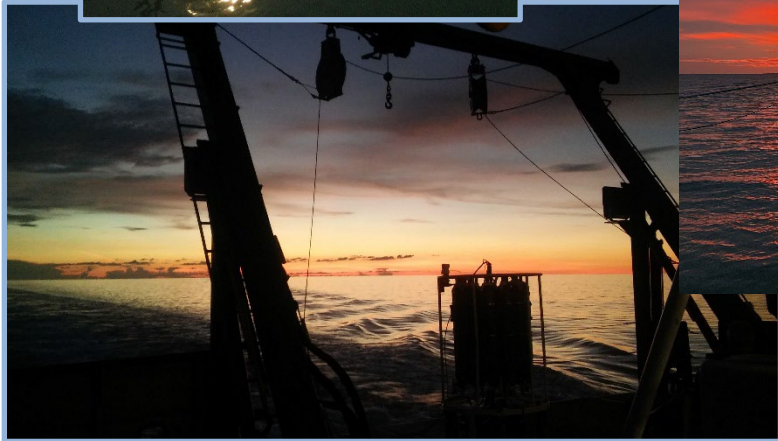


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SECTION A - INTRODUCTION

1. GENERAL INFORMATION

Research vessel (R/V) F.G. Walton Smith is owned and operated by the University of Miami's Rosenstiel School of Marine, Atmospheric and Earth Science (Rosenstiel School). R/V F.G. Walton Smith is a Coastal/Local Class vessel of the U.S. Academic Research Fleet (ARF) and is a UNOLS designated operator.

This cruise-planning manual has been developed to provide the ship's user with the arrangement and operational capabilities of R/V F.G. Walton Smith. The manual defines the various procedures, policies, regulations, safety, and lifesaving precautions for embarked personnel. All ship users should review this manual regarding the specific requirements of the proposed project. As well, it is encouraged you review the UNOLS 11th Edition Research Vessel Safety Standards (RVSS) which can be found on the UNOLS website at

<https://www.unols.org/document/document/rvss-11-updated-nov-2021-corrected-june-2023>

The RVSS provides the safety standards followed aboard R/V F.G. Walton Smith (RVWS).

If there are any items required for a project that are not outlined in this manual or in the RVSS then please contact any of the personnel listed in the Directory of Marine Operations Personnel. Comments and/or corrections that will help clarify any of this manual or make it more user friendly are welcome.

The main goal of R/V F.G. Walton Smith's support personnel is to provide you with the very best platform and equipment to accomplish the scientific goals of the project. We are here to support your project and give you an exceptional research cruise experience.

Welcome Aboard,

Don Cucchiara
Manager, Marine Operations

2. DIRECTORY OF ROSENSTIEL SCHOOL MARINE OPERATIONS

ROSENSTIEL SCHOOL MARINE OPERATIONS CONTACTS

Email: maropsadm@miami.edu

Phone: 305-421-4832

Don Cucchiara	Manager	dcucchiara@miami.edu
Jocy Morejon	Office Manager	jmorejon@miami.edu
Clay Dundas	Captain (RVWS)	c.dundas@miami.edu
Denis Ilias	Marine Technician	dilias@miami.edu
Jason Nunn	Diving Safety Officer	jason.nunn@earth.miami.edu

Marine Operations

Ship Time Requests
Scheduling
Cruise Plans
Ships Configuration Form
Foreign Clearances
Ship's Agent
Shipping/Receiving & Logistics

Primary PI Contact
Daily Ship Communications
Ship Time Requests
Secondary PI Contact
Financing & Billing
Insurance
Cruise Reports & Responses

Marine Technicians

Scientific Equip & Computers
Acoustic Sounders & Recorders
Voice/Data Communications

Scientific Instrumentation
Data Logging

Diving Safety Office

Diving Technical Assistance
Diving Equipment

Compressor & Air Banks
Certification & Dive Plan Approval

OTHER SUPPORT

Sean O. Wilson, Radiation Safety Officer

Email: sow10@miami.edu
Authorization
Protocol

305-243-6360
Plan Approvals
Information and Instructions

Jennifer Agramonte-Garcia, UM Risk Management

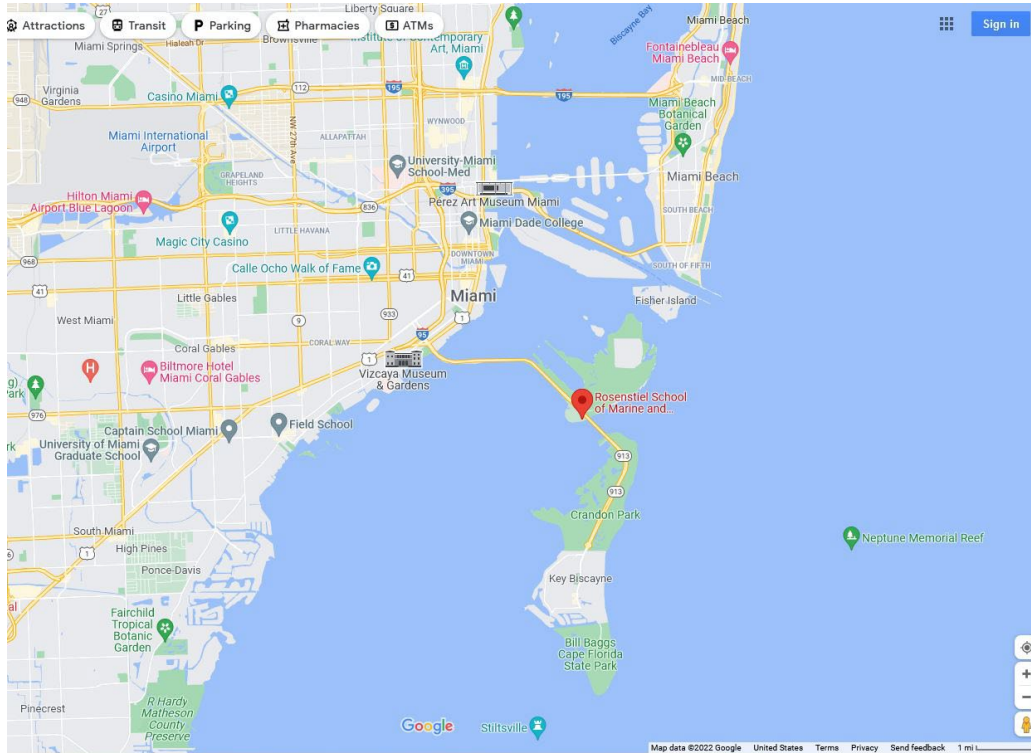
Email: jagramonte@miami.edu
Insurance Requirements

305-284-3163
Participant Authorization

3. LOCATION, LOCAL SERVICES, and MAILING/SHIPPING LOGISTICS

Location

The map below shows the local Miami area and where the University of Miami's Rosenstiel School of Marine and Atmospheric Science campus is located (red teardrop, centered on map). The Rosenstiel School campus is on the southeast corner of Virginia Key, next to the Miami Seaquarium. The address is 4600 Rickenbacker Causeway, Miami, FL, 33149-1031. Rosenstiel School serves as the homeport for R/V F.G. Walton Smith.



If you are flying to the area, the closest airport to the Rosenstiel School campus is the Miami International Airport (MIA airport code) which is located 13 miles northwest of the Rosenstiel School campus (upper left corner in map above). An alternative airport is Fort Lauderdale/Hollywood International Airport (FLL airport code) which is located 32 miles north of Rosenstiel School campus. Both airports can provide regular taxi service as well as Uber and Lyft service to campus. Car rentals are available at each airport.

If driving by car to Rosenstiel School, the Rickenbacker Causeway is a toll road. The tollbooth offers payment only with an electronic toll collection unit called SunPass or a “toll by plate” option. We recommend the option of renting a SunPass unit from the car rental company.

After the toll plaza, in approximately 3 miles, the Rosenstiel School campus will be located on the right-hand side (2nd traffic light after going over the bridge). Upon

entering the campus, please stop at the white Campus Safety hut (to your left as you enter the campus) for a parking pass and directions to the ship.

Local Services

The area around the campus offers all the amenities that can be expected when in a large city. The closest area for shopping and dining is the town of Key Biscayne, located approximately 4 miles southeast of the Rosenstiel School campus. There is an abundance of the same services offered in the nearby communities of Brickell (5 miles northeast) and Coconut Grove (8 miles southwest).

There are many options for lodging in the area. The closest hotel is the Hilton Garden Inn Miami Brickell South, 2500 Brickell Avenue, 305-854-2070

(https://hiltongardeninn3.hilton.com/en/hotels/florida/hilton-garden-inn-miami-brickell-south-MIAKBGI/index.html?SEO_id=GMB-GI-MIAKBGI)

This is the closest hotel to the Rosenstiel School campus (3 miles) however; there are not many amenities close to this location. We recommend staying in the community of Coconut Grove with its many hotel choices and an abundance of restaurants, nightlife, cinemas, and many other amenities (most within walking distance of each other).

Hotels in the Coconut Grove area include:

Hampton Inn, 2800 SW 28th Terrace, Coconut Grove, 305-448-2800

<http://www.hamptoninncoconutgrove.com/>

Courtyard by Marriott, 2649 South Bayshore Drive, Coconut Grove, 305-858-2500

<http://www.marriott.com/hotels/travel/miagv-courtyard-miami-coconut-grove/>

The Mutiny Hotel, 2951 South Bayshore Drive, Coconut Grove, 305-441-2100

<http://www.providentresorts.com/mutiny-hotel/>

The Sonesta, 2889 McFarlane Road, Coconut Grove, 305-529-2828

<https://www.sonesta.com/us/florida/miami/sonesta-coconut-grove-miami>

Mailing/Shipping Logistics

Arrangements must be made with Marine Operations for the receiving, shipping, and storage of equipment and/or material for your upcoming cruise. Contact Marine Operations to ensure proper handling and storage of all your equipment.

Marine Operations has limited storage space on campus thus, it is requested you do not ship equipment too far ahead of time. Freight deliveries are accepted Monday to Friday from 0900 to 1600. Prior arrangements must be made for shipments received outside these hours.

Forklift and crane equipment are available for shipments with individual items weighing no more than 8,000 pounds. For individual items weighing over 8,000 pounds, it will require outside services (forklift, crane, and dockage services) for loading and unloading. The project will be responsible for any additional charges (forklift, crane, dockage, etc.) incurred when loading/offloading heavy loads.

For mail and freight deliveries/pickup, please use the following information:

All mail and overnight deliveries should be addressed to:

University of Miami/Rosenstiel School
Marine Operations (hold for "Your Name")
4600 Rickenbacker Causeway
Miami, FL 33149-1031
305-421-4832

All freight deliveries should be addressed as follows:

University of Miami/Rosenstiel School
Marine Operations
4600 Rickenbacker Causeway
Miami, FL 33149
305-421-4832
For R/V F.G. Walton Smith Cruise # XXXXX
Hold for: _____ [P.I.'s NAME]

All shipments must be prepaid. No CODs can be accepted.

SECTION B - CONFIGURATION AND EQUIPMENT

1. GENERAL

The University of Miami took delivery of R/V F.G. Walton Smith in January 2000 from Eastern Shipbuilding Group at Panama City, Florida, designed by Timothy Graul Marine Design. R/V F.G. Walton Smith operates under the Code of Federal Regulations, 46 CFR Subchapter "U" (Uninspected Vessels) and carries a USCG letter of designation as an oceanographic research vessel.

2. R/V F.G. WALTON SMITH CHARACTERISTICS

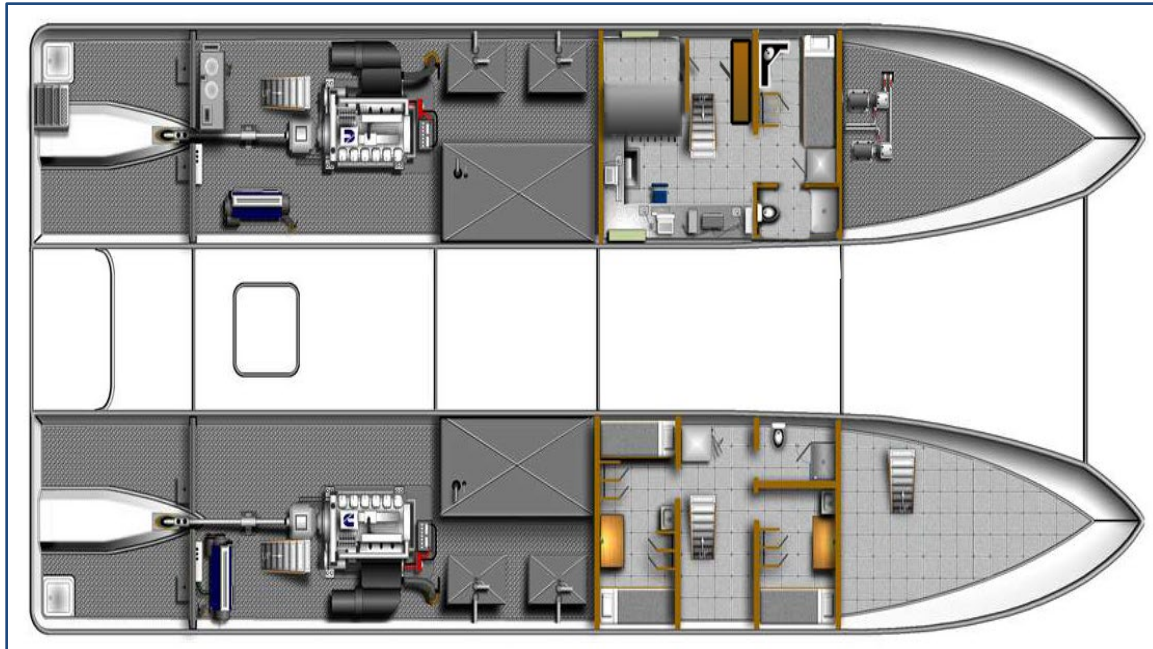
Design	Aluminum hulled catamaran
Length	96' / 29.26 m
Breadth	40' / 12.19 m
Draft	7' 0" / 2.13 m
Gross Tonnage	97 GRT; 325 GT ITC
Propulsion	Twin Cummins QSK 19 – 750 hp each
Propellers	Servogear variable pitch
Electrical	Twin 80kw generators 208 VAC, 3 phase, 110/120 VAC, single phase UPS in laboratories
Fresh water	3,000 gallons (11,500 L) - Reverse Osmosis water maker
Fuel	10,000 gallons (37,854 L)
Complement	19 berths – 7 crew & 12 science party
Speed	8.7 average knots cruising

3. OUTBOARD PROFILE



4. DECK PLANS & PHOTOS

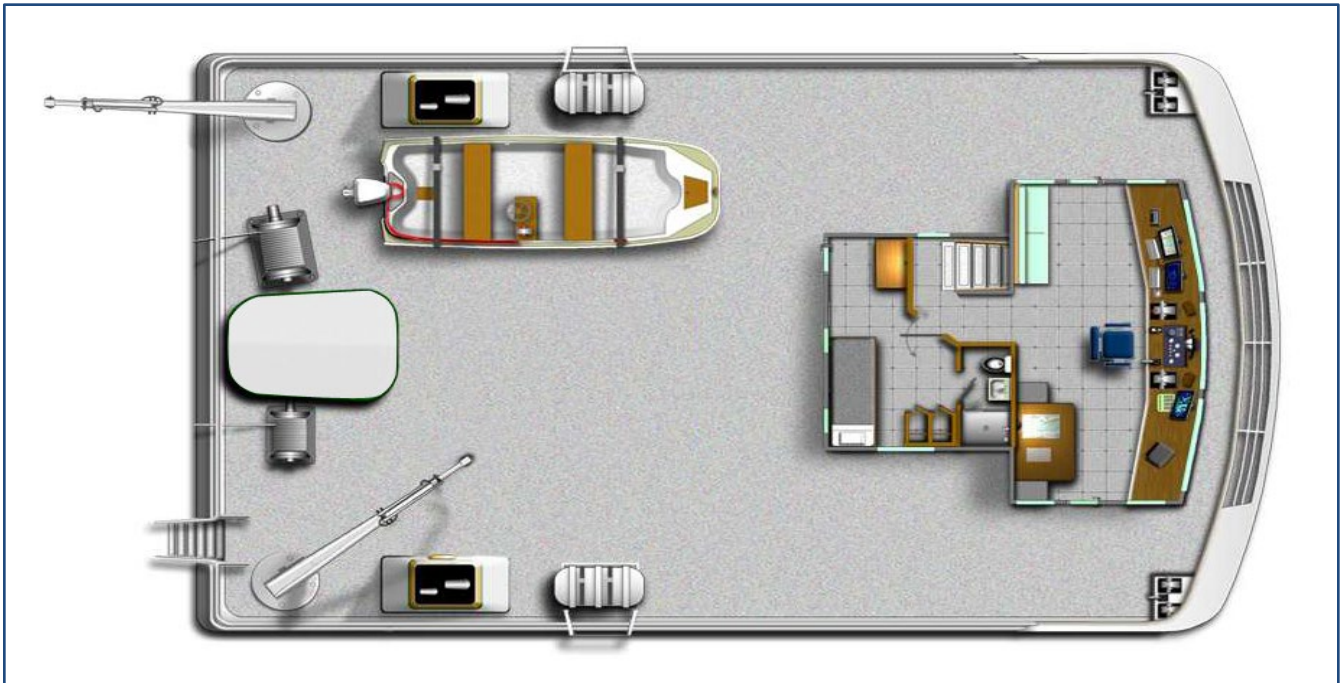
LOWER DECK



MAIN DECK



01 DECK (UPPER DECK)



AFT DECK



MESS DECK



STATEROOM



5. WINCHES AND WIRE

Two Hawboldt SPR-2840/S winches are installed on the aft 01 deck. The winches are hydraulically operated by electronic controls from the aft control station (winch cab located on the 01 deck) or a mobile control box, which allows operation of the winches from the 01 deck, the main deck, the wet lab or dry lab.

TENSION MEMBER SPECIFICATIONS

Location	Type	ABL	SWL	Length**
Port Winch (Hawboldt SPR-2840/S)	Wire rope 3/8", 3X19	13,570 lbs.	2,714 lbs.	3,00 0m
Starboard Winch (Hawboldt SPR-2840/S)	Cable .322" EM	9,810 lbs.	1,962 lbs.	4,552 m

WINCH SPECIFICATIONS & PERFORMANCE

Hawboldt Industries		Model: SPR-2840/S
LAYER	PULL* (lbs)	SPEED (m/min)
1 st (Bottom) Layer	7000	54
4 th Layer	6310	60
Mid Layer	4870	77
Top Layer	3660	103

Assigned Breaking Load (ABL) were from most recent break tests – January 30, 2024.

Safe Work Load (SWL) is limited by the breaking strength of the tension member at a Factor of Safety = 5.0. $SWL = ABL/FS$

**Current length will lessen with routine testing, cutbacks and for other various reasons.

Other winches can be obtained through the UNOLS Winch Pools. Information about those winch pools can be found at:

[East Coast Winch Pool](http://winchpool.whoi.edu/) - <http://winchpool.whoi.edu/>

[West Coast Winch Pool](https://scripps.ucsd.edu/ships/west-coast-winch-pool) - <https://scripps.ucsd.edu/ships/west-coast-winch-pool>

Please contact us for additional information or if a different wire/cable is required.

6. SHIPBOARD CRANES

The shipboard cranes are mounted on the aft 01 deck on the port and starboard sides. The cranes are positioned to service operations on the aft main deck and 01 deck. The cranes have a maximum capability of 4,500 lbs. at a 5' radius. At full extension, or 20.5' the maximum capability is 3,300 lbs. The maximum capabilities of all components of this and other vessel systems have been carefully reviewed and are available. For the shipboard cranes, this includes the base or pedestal, crane arm, crane winch, crane wire and ball end.



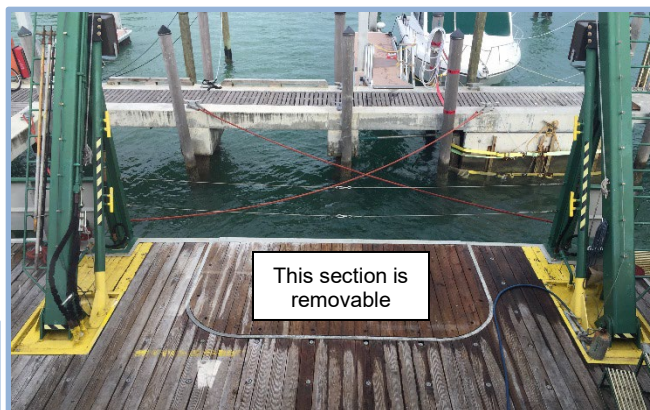
7. STERN "A" FRAME

The main deck hydraulic A-frame on the stern is designed for a maximum capability of 10,000 pounds in the deployed position. The maximum capability is 5,000 pounds while luffing, or when not in the fully deployed stops. There is a hydraulic Pullmaster winch on the A-frame to assist in handling instruments, moorings, etc. over the stern. It has a maximum capability of 5,000 pounds. Limitations are by the maximum capability of the cable. Vertical and horizontal clearance is 20 feet.



8. UNIQUE VESSEL FEATURES

The aft main deck has a unique “notched stern” design (pictured right). During routine operations, this section is covered. With the notched stern cover removed, it facilitates the deployment of larger instruments requiring use of the stern A-frame.



The aft main deck is also equipped with a “moon-pool”. This is located between hull’s pontoons (pictured left) and can be opened for transducers or other equipment needs.

Both features of R/V F.G. Walton Smith must be discussed and requested during pre-cruise planning and noted in the Cruise Configuration form.

Vessel control stations are located on the bridge, on the bridge wings, and at the aft winch control station on the 01 deck. These stations are utilized during underway operations. This improves communications with deck crew and science participants during deployments.

9. OTHER EQUIPMENT

POSMV

The POSMV precisely measures position, attitude, heading, heave, and velocity. The data from the POSMV can be made available to the science party upon request.

ADCPs and Science Echo Sounders

The vessel has 2 wells for Acoustic Doppler Current Profilers, or ADCPs to provide ocean current measurements. The two Teledyne RD Instruments transducers are the

600 kHz Workhorse Mariner and the 75 kHz Ocean Surveyor. The ADCPs measure high precision currents in varying ocean depths, up to 800 m. A 1200 kHz Workhorse Mariner is also available for the swivel pole system, shallow water currents <30 meters.

A Knudsen Engineering 7 X 3.5 kHz transducer array is available for sub-bottom profiling. Two (2) Knudsen MiniSounders, 28 kHz and 200 kHz, are available for scientific observations. These science depth sounders are also available to the bridge for additional navigation purposes.

Swivel Pole System

The vessel is equipped with a swivel pole. The pole allows users to mount various transducers to the end. Once the transducer is in place the swivel pole is lowered into



the water. We have many transducer mounting plates available. Please provide ample notice if any pole mounting is desired for shared use equipment, or science supplied systems. Max ship speed when pole system deployed: 5 kts

Sea Surface Flow-Through System

A sea surface flow-through system is available in the wet lab. (Laboratory spaces are described in the next section.) This PVC-based system collects seawater from an intake at the bow. Several sensors are installed in the suite for underway data collection. Two connections are available for science-supplied instrumentation in the manifold in the wet lab.

The following instruments are installed in the bow flow-through system:

- Sea-Bird Electronics Thermosalinograph (SBE 45 MicroTSG)
- Sea-Bird Electronics Digital Oceanographic Thermometer (SBE 38)
- Dual Turner Designs C3 multi-sensor platforms with a combined total of (2) chlorophyll, (2) CDOM, phycoerythrin and turbidity sensor channels

Meteorological Suite

The meteorological suite includes wind speed and direction, air temperature, relative humidity, barometric pressure, solar radiometers (TUVB, IR & Shortwave) and PAR sensors (Photosynthetically Active Radiation - for use with the CTD profiler).

R.M. Young, Eppley Laboratories and Biospherical Instruments are some of the manufacturers of the meteorological suite of instruments. .

Over-the-side systems

- Sea Bird 911*plus* CTD system
 - auxiliary sensors include fluorometer, transmissometer and dissolved oxygen
 - Twelve 10L Niskin bottles on a Sea-Bird Carousel for water sampling
- 1m MOCNESS (Multiple Opening Closing Net Environmental Sensing System)
 - compliment of up to 9 nets with two mesh sizes, 153 μ and 335 μ

10. LABORATORIES

DRY LAB – The dry lab consists of 480 sq. ft. of air-conditioned space. Most bulkheads are fitted with Unistrut to allow for repositioning of lab equipment. Bench tops around the perimeter of the lab were stainless steel while the central table is Formica laminate. Electric services include 110 VAC and UPS 110 VAC. Other services include hot and cold fresh water, PVC uncontaminated seawater, and an ice machine that can produce flake ice. The centrally located dry lab offers direct access to the galley (forward), staterooms (port & starboard), and wet lab (aft).





WET LAB – The wet lab consists of 200 sq. ft. of air-conditioned space located just aft of the dry lab. There is direct access to the aft main deck. Bulkheads are fitted with Unistrut to allow for repositioning of lab equipment. Electric services include 110 VAC and UPS 110 VAC. Other services include hot and cold fresh water, uncontaminated seawater (PVC), and scientific grade, ultra-pure, de-ionized water (greater than 18 megΩ).

Portholes allow visual access to the aft main deck for safety purposes and observation. Freezer and refrigerator space is available in the wet lab. Additional or non-standard freezer or refrigerator requirements should be included in the Cruise Configuration Form. Non-standard requirements should be addressed as early as possible during pre-cruise planning.

11. NAVIGATION SYSTEMS

✓ *Positioning Systems*

- Bridge:
 - Raytheon RayPlot 320 WAAS GPS receiver
 - Furuno GP90 GPS associated with Furuno FA-100 AIS
 - Applanix POS/MV OceanMaster

✓ *Position Plotting System*

- Nobletec Timezero Unlimited Navigation Software.

✓ *Echo Sounders*

- (2) Furuno FCV-620 50/200 kHz located on the bridge
- Scientific Echo Sounders also available to bridge (Section B.9)

✓ *Radars*

- Furuno model FAR-2228-BB “Black Box” ARPA Radar – X Band up to 96 miles with 18 inch flat screen color display; Azimuth stabilized with GPS input and radar repeater in winch cab
- JRC JMA 5312 ARPA Radar – X Band up to 96 miles; Azimuth stabilized with GPS input

✓ *Gyro Compass*

- S.G. Brown model Meridian system consists of a transmission unit, master compass, power adapter and static converter.

- ✓ *Autopilot*
 - Simrad AP70 with input from POS/MV
- ✓ *Wind Speed And Direction*
 - RM Young Windbird

12. COMMUNICATIONS

All shipboard communication equipment supports scientific projects and the safe operation of the ship. The Captain is responsible for all ship-transmitted communications.

Voice Communications

- ✓ *VHF Radio*
 - Two Standard Horizon Explorer NMEA 2000 GX1850 25 Watt Tx/Rx
 - One Standard Horizon 25 Watt transceiver in winch cab
 - Two 5 Watt handheld transceivers are available
 - All VHF channels are available, Channel 16 monitored at all times
 - User-provided boats must supply their own VHF transceivers
- ✓ *Cellular Service*
 - The scientific party is encouraged to bring their own cellular equipment.
- ✓ *Fleet Broadband Satellite System*
 - Voice and data can be transmitted via this backup system. Limited to use for ship's business and scientific projects requirements. Excessive use may be billed to the project.
- ✓ *Iridium Satellite Phone*
 - Iridium EuroCom satellite phone service is available for voice, fax, and data communication. Service is available from coastal waters to 200 miles offshore and throughout the Bahamas and the Caribbean. Limited to use for ship's business and scientific projects requirements.

Data Communications

- ✓ *HiSeasNet Satellite System (HSN)*
 - A continuous shore-side data link is provided. Access to the system is through a wireless access point located in the Dry Lab. Bandwidth is limited so multiple, simultaneous users slow the connection speed.
 - Web based email accounts are accessible via this system.
 - Costs for this service are included in the vessel daily rate.
- ✓ *US Based LEO provider (piloting program)*
 - "Global" access for users with a 5 TB monthly data usage limit.
 - Typical speeds 5-20 Mbps Ship-to-Shore and 20-100 Mbps Shore to Ship.
 - Service reduced after 5TB monthly quota is exceeded
 - Capable of hosting video conferencing, live streaming, etc...
- ✓ *Fleet Broadband Satellite System*
 - Data access to this system is provided through a hardwire connection in the Chief Scientist's cabin. This system serves as a backup to the HSN System. Costs for system are based on the amount of data transferred.

✓ *AT&T Wi-Fi Connection*

- A Wi-Fi router is also available for all users but is limited to cellular range. If the ship is docked or near shore, the connection is much faster, reliable and can accommodate multiple users with ease.

13. WORKBOATS

The workboat aboard R/V F.G. Walton Smith is a 16 ft. foam collar (center console) aluminum RHIB with a 90 HP Yamaha outboard.



Additional boats may be provided depending upon the availability at the time of the request. Additional boats may be stored on the aft main deck or on the 01 deck.

Other workboats available are:
21' rigid inflatable workboat w/ 120 HP outboard or 15' Boston Whaler (center console) w/ 40 HP Yamaha outboard.

14. USER-PROVIDED BOATS

All boats not provided by Rosenstiel School's Marine Operations department must be outfitted to the following standards and in accordance with the Code of Federal Regulations statute, 33 CFR 174,175:

- Vessel must possess a current state registration
- There shall be a type I or II personal flotation device (PFD) for each person aboard
- All user-provided boats 16 ft. and over are required to carry one (1) type I or II PFD for each person on board plus one additional type IV PFD

In addition, the following items must be aboard user-provided boats:

- working VHF transceiver
- adequate paddle/oar
- adequate anchor with at least 100 feet of line attached
- sound signaling device (either horn or whistle)
- flares
- distress flag
- working navigation lights

R/V F.G. Walton Smith PFDs cannot be used on user-provided boats. UM Marine Operation's outboard motors cannot be used on any user-provided boat.

SECTION C - TECHNICAL SUPPORT

1. EQUIPMENT USAGE

Oceanographic Instrumentation is often procured via a National Science Foundation (NSF) award. NSF purchased equipment is considered “Shared-Use” for all R/V F.G. Walton Smith participants as well as other UNOLS member institutions, the academic fleet and may be available to projects supported by other funding agencies. Consult the RVWS Configuration and Cruise Plan for available equipment and detailed information of equipment available.

2. MARINE TECHNICIANS

While aboard R/V F.G. Walton Smith, a Marine Technician (tech) will be available to you up to twelve (12) hours per day. A portion of the vessel’s daily rate includes the cost of a tech. These tech rates are negotiated annually via the NSF Oceanographic Technician Support Grant. The rate remains the same for all vessel users, regardless of funding agency. Additional tech support beyond the normal 12 hours per day requires written approval from the Chief Scientist. Costs may be billed separately to the respective project.

The tech’s primary responsibilities include maintenance and repairs to shared-use equipment (per NSF guidelines), vessel mounted instrumentation and deployed instrumentation. Techs often act as liaison between the vessel crew and the scientific party, with particular attention to over-the-side operations. Assistance is provided to the scientific party, as needed, with support of the ship installed scientific data collection system, communications, and shipboard computers and/or network. The techs do not support routine watch standing, routine operation of winches or underway sample collection. However, it is their responsibility to train inexperienced science participants in the proper, safe handling and usage of the equipment.

Marine Operations will determine the minimum number of techs assigned to any particular cruise, based on equipment requests outlined on RVWS’ Configuration Form and Cruise Plan. Typically, one tech is assigned to a cruise.

SECTION D - DIVE OPERATIONS

1. RESEARCH DIVING

Scientists and/or researchers conducting diving operations from R/V F.G. Walton Smith must operate under the rules as set forth in the UNOLS [Research Vessel Safety Standards](#) (RVSS), Chapter 11, Diving Operations. Scientists and/or researchers must also operate under the auspices of a formal research diving program that is recognized by the UM/Rosenstiel School Diving Control Board as meeting the minimum standards of the American Academy of Underwater Sciences (AAUS) policies and procedures manual. If a non-UM scientist or researcher intends to conduct scientific diving during their expedition, and their home institution does not operate a formal diving program, participants must comply with the University of Miami's diving policies and procedures. A copy of these policies and procedures are available from the UM Dive Office and online at the [UM Dive Office website](#).

All personnel intending to dive must read and accept the University of Miami's Diving Safety Manual. A Dive Plan must be submitted to the UM Dive Safety Officer at least 30 days prior to cruise departure. The Diving Safety Manual and Dive Plan forms are available at the [UM Dive Office website](#).

Visiting scientists from institutions whose diving program is an organizational member of the AAUS will be allowed to dive with a UM program, or from a UM vessel, upon submitting a letter from their respective institution's Dive Officer stating each participant:

- is currently authorized with their institution's program;
- holds a current dive physical;
- holds a current CPR & First Aid and Oxygen Provider certification;
- has been diving within the past six months;
- has proof of insurance for hyperbaric oxygen therapy;
- has a letter of self-insurance stating the diver is covered by the home institution's workman's compensation program; and
- is approved to dive by the institution's Diving Safety Officer

The UM/Rosenstiel School Diving Safety Officer reserves the right to request additional information or requirements.

Visiting scientists from institutions that lack a formal diving program, or are not organizational members of the AAUS, must complete the Basic Diver Checkout Procedure, Section 4.41 in the UM/Rosenstiel School Diving Safety Manual.

All policies, procedures and forms are available from the UM Dive Office and online at the [UM Dive Office website](#).

SECTION E - HAZARDOUS MATERIALS

1. RADIOISOTOPES

All Radioisotope experiments must be conducted in a controlled Radioisotope Van (Rad Van). The van must be loaded on the 01 deck of R/V F.G. Walton Smith. Careful adherence to all radioisotope procedures is imperative. Monitoring must be completed routinely during the cruise. UNOLS' has a Radioisotope Awareness Program for all scientific personnel. For more details on the program, please visit the [UNOLS Radioisotope Awareness Program website](#).

Authorization: A statement is required from the Principal Investigator's home institution's health physicist, or authorized representative, for radioisotope use stating the investigator is certified to possess and use the isotopes involved in the proposed project. Only approved investigators may work with radioisotopes.

Experimental protocol: A detailed protocol of the proposed experiment must be provided. Specify such details as manipulation procedures, planned location for work, arrangements for isolation and contamination monitoring procedures of the nuclides to be used and their amounts, forms and concentrations. Explanatory figures and diagrams should be included. Please fill out [Form RC-17](#).

Statement of Use: Following the cruise, a statement of use must be sent to University of Miami's (UM) Radiation Control Center (contact information below). This statement must show amounts of nuclides: 1) taken aboard the ship, 2) disposed of upon returning to port, and 3) unused and removed from the ship by the investigator.

Waste disposal: Investigators will provide a statement of the procedure to be followed for collecting, storing, and disposing of all radioactive waste generated during the experiments. UM is specifically prohibited from disposing of ANY radioactive waste at sea under the terms of its State of Florida license. Therefore, all waste must be returned to shore for disposal by the investigator's home laboratory or at the UM provided prior arrangements were made with the UM's Radiation Control Office.

Monitoring: A comprehensive series of radiation safety wipe samples (100 cm²) must be collected by the investigator both before and after radioisotope use. The entire area should be thoroughly tested and measured using the Liquid Scintillation Counter provided in the van.

The location of the wipe test samples should be indicated on a map of the working area. The results of wipe testing must be forwarded to the UM Radiation Control Center within 3 days after the end of the cruise.

In addition to the monitoring required of the investigator, the UM's Tritium Laboratory conducts pre-cruise and post-cruise monitoring procedures. This includes a SWAB test, a more sensitive test than general wipe tests. SWAB testing indicates contamination

using a range varying from trace levels for successive projects, up to human health hazards. Previous SWAB tests are available upon request. In any case, investigators are responsible for proper monitoring and clean up.

Costs associated with cleaning Rad Van or vessel spills, or contamination will be billed to the PI. Non-reported spills or improperly monitored and/or cleaned work areas may result in the revocation of the responsible person's authorization from conducting further radioisotope projects aboard the vessel, as well as any UM facility.

Send all required information to Sean O. Wilson, UM Radiation Safety Officer
<https://ehs.miami.edu/services/radiation-control/index.html> (with a copy to Marine Operations):

RADIATION CONTROL CENTER

Sean O. Wilson, M.S. DABR
University of Miami / RSO
Radiation Control Center
1600 N.W. 10 Ave
Rosenstiel Med. Sci. Building 1081(A)
Miami, FL 33136
Phone 305-243-6360
Email: sow10@miami.edu

UM MARINE OPERATIONS

Marine Operations
University of Miami / Rosenstiel School
4600 Rickenbacker Causeway
Miami, FL 33149-1031
Phone: 305-421-4832
Email: maropsadm@miami.edu

2. EXPLOSIVES, UNDERSEA SONIC EMITTERS AND DRAGGED DEVICES

Explosives: The use and handling of explosives is restricted to persons possessing proper training and certification. Explosives *cannot* be loaded or unloaded in the Port of Miami. Loading explosives in U.S. ports is supervised by the U.S. Coast Guard's Captain of the Port. The Captain of the Port for the port you are departing from requires the following, at least 8 weeks prior to departure:

1. Explosive handling facilities for loading
2. Date of Loading
3. Supplier and copy of explosive order
4. Carriers certificate for packing
5. Unit quantity of each type of explosive and hazardous material
6. Unit packaging dimensions and weight
7. Unit identification as listed in 46 CFR 146-149
8. Magazines to be provided, material dimension and weight
9. Magazine markings
10. Name of certified shooter
11. Shooting safety procedure

Undersea Acoustic Transducers: The National Geospatial-Intelligence Agency (NGA) is the point of contact for ship operations that use sonic emitters, towed devices, explosive charges, or deploy moored instrumentation. These items could pose a hazard to the

safe navigation and operation of submarines, or to surface vessels, particularly those engaged in fishing, towing or other research work. The Principal Investigator must contact the NGA at least 2 weeks prior to departure of their cruise aboard R/V F.G. Walton Smith. The NGA disseminates the information through the “US Notice to Mariners” which corrects navigational charts and publications, both domestic and foreign. The agency also disseminates Broadcast Warnings in support of the Global Maritime Distress and Safety System (GMDSS) to ensure timely distribution of information for the safety of life at sea, as well as directly to appropriate naval commands. Providing the information to the US Coast Guard’s *Aids to Navigation Office* in the appropriate district, as well as to local Naval Commanders, in some cases, may improve the level of notification and coordination between offices. Visit the [NGA Maritime Safety Information](#) website for more details and filing information.

3. MATERIAL SAFETY DATA SHEETS

Federal Occupational Health and Safety Administration (OSHA) rules require chemical manufacturers, importers and distributors to properly label hazardous chemicals for use, storage and emergency procedures. Principal Investigators must provide a list of all chemicals to be used during their cruise. Any hazardous material brought aboard R/V F.G. Walton Smith must be accompanied by the appropriate Material Safety Data Sheets (MSDS). A copy of the MSDS must be provided to the Captain for informational purposes in the event of an emergency. In addition, the Chief Scientist must brief all persons on board who will be exposed to such materials (called “Right to Know”) in the general physical and health hazards involved, appropriate protective measures, clean up procedures, and potential injuries resulting from exposure to the material. All MSDS’s will be posted in the dry lab and/or wet lab as appropriate.

4. LITHIUM BATTERIES

The UNOLS Research Vessel Safety Standards (RVSS), Chapter 9, Scientific and Shipboard Hazardous Materials, address issues regarding lithium battery handling, usage, storage, and disposal aboard UNOLS vessels. In response to the RVSS call for every ship in the UNOLS fleet to develop vessel-specific Lithium Battery Safety Procedures, we have done exactly that. If you plan to bring lithium batteries aboard R/V Walton Smith, please refer to our [Lithium Battery Safety Procedures](#). Each chief scientist must be familiar with the procedures and be prepared to comply with all requirements. As requirements start at the Cruise Planning stage, we strongly recommend that you read the document in its entirety as soon as you begin planning the mission.

5. MARINE MAMMAL PROTECTION ACT

All vessels must comply with the Marine Mammal Protection Act and Endangered Species Act. Low and mid-frequency sonar and other acoustic studies have been identified as having potentially severe impacts to marine mammals. If you plan to conduct acoustic research, please visit the UNOLS website for [permit and permission](#)

[resources](#). The UNOLS website also has many links to NSF and NOAA guidelines for permitting and clearances.

SECTION F - VESSEL OPERATIONS

1. CREW

R/V F.G. Walton Smith is operated by an experienced, competent, and safety-oriented crew. The crew is comprised of the Vessel Master (aka Captain), Engineer, Mate, Assistant Engineer/Ordinary Seaman, Steward and Marine Technician. Only the Captain and Mates are qualified to operate the vessel. All are experienced in oceanographic research and many science disciplines. The Chief Scientist is requested to report and discuss any problems with equipment, personnel and/or procedures with the Captain as soon as they are identified. The Mate can also address most issues in the Captain's absence or off-watch period.

2. OPERATING HOURS

While underway, R/V F.G. Walton Smith can operate 24 hours/day, 7 days/week.

3. OPERATING DAYS

Operating days include all days, or any part thereof, which the vessel spends away from the port of embarkation. For safety, departures and returns to/from ports are normally accomplished during daylight hours. Departures and arrivals from the Rosenstiel School's pier are also subject to tide conditions. Chief Scientist's must request the required number of operating days via a UNOLS' Ship Time Request that can be found on the [UNOLS Marine Facilities Planning website](https://MFP.us) (<https://MFP.us>)

4. STAGING/LOADING & UNLOADING

R/V F.G. Walton Smith can LOAD/UNLOAD in almost any port. Loading may begin as early as 0800 on the day prior to the scheduled departure day. The laboratories and deck areas will be available for equipment set up when the prior cruise's scientific equipment is offloaded.

If loading continues beyond 1600 of the scheduled day of departure, along with required crew rest then this may prohibit departure that day. Special loading requirements can be met provided they are included in the UNOLS Ship Time Request and the Rosenstiel School Cruise Configuration forms. Most importantly, communicating these and other pre-cruise needs to Marine Operations as the departure date nears will augment a seamless and timely departure.

5. MEALS AND CLEANING

R/V F.G. Walton Smith provides three meals per day while at sea and in any port away from the Rosenstiel School campus. While at sea, meals are served at times posted on the Mess Deck. Depending on the workload, 2 meals a day (brunch and dinner) may be served while in port other than at the Rosenstiel School campus. Mealtimes may fluctuate to accommodate operations. If a time change is desired, please notify the Captain as early as possible.

It is our goal to provide healthy, nutritious meals and snacks for all. While most dietary requests can be accommodated (i.e., dietary restrictions, vegetarian meals, allergies, etc.) advance notice is greatly appreciated for planning purposes. Special requests must be submitted to Marine Operations two weeks prior to the cruise departure.

The Chief Scientist is responsible for assigning specific duties to the scientific party for areas to be cleaned which include scientific staterooms, heads/showers and labs. Cleaning supplies are available upon request from any crewmember.

A washer/dryer aboard is available for personal items. Laundry detergent is provided.

6. GARBAGE AND TRASH

In accordance with Federal regulations, R/V F.G. Walton Smith has a Waste Management Plan for control of all waste material. All members of the scientific party should become familiar with the plan.

- All plastics will be separated and held onboard for the duration of the voyage. Upon return, these will be disposed of or recycled in accordance with local regulations.
- During operations beyond 12 nautical miles from shore, organic garbage (food “slops”) may be disposed of overboard. A “slop” container is kept in the galley. The Steward will familiarize you with our routine food waste.
- During operations within 12 nautical miles from shore, all garbage will be held onboard. Upon return to port, the garbage will be disposed of in accordance with federal, state, and local regulations.
- It is illegal for any vessel to dump plastic trash of any kind, anywhere in the ocean or navigable waters of the United States.

The crew will review this Waste Management Plan with all embarking personnel during the initial Safety Briefing at the start of the cruise. Please refer to the Pollution Prevention placards posted in the mess area and throughout the vessel.

7. BERTHING

R/V F.G. Walton Smith is designed to carry up to 12 scientists and 7 crew. Additional crew for increased scientific operations will require a reduction in the available scientific berths. The Chief Scientist is responsible for assigning berths for the scientific party. The maximum science party complement is 12 and is dependent on gender balance such that no individual is forced into a mixed gender accommodation. Berthing for the scientific party can be made available the night before the scheduled departure date, but please check and confirm this option with Marine Operations first.

Depending on the vessel's turnaround time, there may be times when scientists from the previous cruise remain on board for an additional day.

You will more than likely be sharing a small stateroom with at least one other, and it is best to get off to a good start by following these guidelines:

- Keep your personal things neat and contained;
- Clean your linen regularly and keep your bunk made;
- Keep your room clean and in order;
- Before inviting a guest to your room, make sure your cabin mate has no objections.

Please see the berthing plan on [R/V F.G. Walton Smith Cruise Planning](#) website. Prior to the start of your cruise (3-5 days), please save a copy with your name-berthing plan and email a copy to maropsadm@miami.edu

8. SAFETY AND RESPONSIBILITIES

Safety is a culture that is strictly abided by aboard R/V F.G. Walton Smith. The command and crew do not take safety lightly. They strive to eliminate all possible accidents, or potential hazards. Awareness of one's surroundings is key in this sometimes challenging and dangerous environment. All accidents and/or injuries must be reported to the bridge as soon as possible.

The Captain, by Maritime Law, has ultimate authority over all persons assigned to or embarked on the ship. The Captain has full responsibility for the safety of the vessel and all personnel aboard. The Captain is vested with the authority to take whatever action he/she deems necessary to preserve and maintain the safety and integrity of the vessel and all personnel, including but not limited to handling of small craft, diving and/or snorkeling activities, weather, navigation hazards and machinery malfunctions. Enforcement of policy, safety standards, and compliance with the laws of the territorial waters, in the vessel's area of operation, is the sole responsibility of the Captain.

Violations or circumvention of safety standards or local laws may cause termination of the cruise and immediate return of the vessel to port. The Captain has the authority to determine violations or circumvention. The Chief Scientist is required to advise the Captain of all-special permit licenses, clearances, etc. issued to the project regarding

the collection of data or other scientific activities.

It is the Chief Scientist's responsibility to notify participants of the following required reading for all embarked scientific personnel on a UNOLS vessel. The UNOLS' Research Vessel Operators Committee (**RVOC**) **Safety Standards – Appendix G** highlights safety matters aboard research vessels. Prior to arrival, the Chief Scientist should request all scientists sailing view the [Safety Training for Science Parties - Appendix G](#) that is available on the UNOLS website. Copies of the manual are aboard the vessel and available for reading.

The Captain is required to provide information, orientation and demonstrations of the safety equipment and emergency procedures aboard the vessel. See the Safety Briefing document on [R/V F.G. Walton Smith Cruise Planning](#) website. A safety briefing will be held either before or very shortly after departure combined with a fire or abandon ship drill. **All embarked personnel are required to participate.** Life jackets must be worn at all drills. Assignments for all drills and emergencies are listed on the station card located on each bunk.

Emergency drills will likely occur during your cruise. Science party members are notified in advance to avoid disruption of the program. Anyone who must continue working may be excused by prior arrangement with the Captain through the Chief Scientist. While on board, keep in mind that you may be called upon without warning to assist during your off-watch period, and an emergency can occur at any time.

SECTION G - PRE-CRUISE REQUIREMENTS

1. SHIP TIME REQUESTS & SCHEDULING

To obtain ship time aboard R/V WALTON SMITH, each scientific project must complete a UNOLS Ship Time Request which can be found online at the [UNOLS Marine Facilities Planning website](https://MFP.us) (<https://MFP.us>)

It is prudent for scientists to submit their ship time requests early. Support for all projects is based upon the initial information provided in the ship time request therefore it is important to complete the request to the best extent possible at the time of completion. This information is reviewed by the UNOLS's office, Ship Scheduling Committee, Marine Operations, and agency Program Managers.

Ship scheduling for R/V WALTON SMITH is managed by Rosenstiel School Marine Operations and coordinated with other institutions through the UNOLS' Ship Scheduling Committee. Please do not hesitate to contact Marine Operations with any questions before submitting your Ship Time Request or with questions about scheduling. R/V WALTON SMITH's schedule may shift due to weather, funding, and/or to accommodate unexpected oceanographic events. PI's will be notified of these possible changes and an agreed upon solution will be formulated and agreed to.

2. CONFIGURATION FORM & CRUISE PLAN

The Configuration Form & Cruise Plan (or Config Form) is designed to inform Marine Operations and the ship's crew about the requirements for the project. The form can be found online at [R/V F.G Walton Smith Cruise Planning](https://www.unols.org/shipboard-civility) website. The Config Form has the most substantial impact on the success of the cruise. This form addresses instrumentation, dive operations, small boat usage and other information that can assist in identifying potential issues. The PI's are encouraged to submit the Config Form as soon as received by Marine Operations, preliminary drafts are encouraged. If some relevant project information is unknown, an updated version can be submitted later. Early submissions allow preparation of equipment, and in many cases, allow modifications and/or additions of new equipment. The final version must be submitted no later than 45 days prior to the cruise's departure. The date of submission may be used to resolve equipment request conflicts. Portable equipment is designated as "Shared Use" and may be requested by other UNOLS' member institution, vessel or a Rosenstiel School supported project.

3. UNOLS CIVILITY VIDEOS

Prior to sailing we ask that all scientists view the UNOLS Civility videos. Crew members are asked to view the videos every 4-6 months or when newly hired. The Federal Agencies and UNOLS are striving to improve civility and eliminate harassment in the workplace, in particular those places associated with the performance of shipboard oceanographic research as scheduled both at sea and ashore. A three-module program was created aimed at ensuring that all parties involved in research at sea aboard the U.S. Academic Research Fleet (ARF) are treated with respect and civility, as well as resources for when things don't go as planned.

UNOLS Ship Civility Videos

<https://www.unols.org/shipboard-civility>

Module I: Shipboard Civility (~11 min)

Module II: Shipboard Civility (~12 min)

Module III: Univ. of Miami Compliance Services (pdf)

4. COVID-19 GUIDELINES

Due to the current pandemic, we have safety protocols in place. Prior to boarding the ship for a cruise, we ask that all personnel be fully vaccinated and show a negative PCR test result within 1-3 days of departure.

We are following the *UNOLS Updated COVID Guidance-21june2023* Guidelines for cruise preparation and sailing. This update reflects updated recommendations from the telemedicine provider and medical advisor, George Washington Medical Faculty Associates. The guidance addresses the need for booster shots to help personnel maintain their resistance to COVID-19. The definition of fully vaccinated now includes

the original double/single dose vaccination, depending on which vaccine was used (Pfizer, Moderna, or J&J), and a booster

See link below for the details on the full guidelines.

<https://www.unols.org/sites/default/files/2023-06/unols-updated-covid-guidance-21june2023.pdf>

Travel Recommendations

For crew and science party who travel to meet the ship

- Travel to port should be conducted in private vehicle when possible.
- Travelers are strongly encouraged to wear an N-95 or KN-95 mask when traveling on public transportation. This can help minimize interaction during travel.

We have rapid antigen COVID-19 tests on board to use during a cruise in case anyone starts to feel sick or exhibit symptoms to verify if they are positive for COVID-19. In case of a positive test, we plan to isolate that person in a stateroom and then assess the situation.

5. UNOLS CRUISE PERSONNEL MANIFEST

The UNOLS Cruise Personnel Manifest form will now be filled out online at the [UNOLS Marine Facilities Planning website](https://MFP.us) (https://MFP.us) - Cruise Participant section. This section can be filled in by the Chief Scientist/Principle Investigator (need account for MFP.us) or Marine Superintendent. This form should be completed 7-14 days prior to departure. The template can be found at [RV F.G. Walton Smith Cruise Planning](#) website (listed on the left-side column) or downloaded from the [MFP Cruise Participant](#) section, +Add Participant, Import From Template, Excel File Template. The personnel manifest serves as a record of all scientific personnel aboard the cruise. The Excel File Template can be filled in and then imported into the Cruise Participant section. Entries can also be entered individually. The minimum information needed would be First Name, Surname, email, Role (drop down menu), Organization, Gender (optional - drop down menu).

The Rolling Deck to Repository (R2R) program will be able to access the Cruise Participant list and use the info for their records. R2R is part of the vessel's standard operating procedures, data gathering and data management program.

6. FINANCING

Principal Investigators holding Federal agency grants or contracts may be awarded ship time where costs are included in the Ship Operations Grant or in contracts between those agencies and the University of Miami. Other investigators should include ship costs, as determined by Rosenstiel School Marine Operations, within their grant budget. Commercial users will operate under a Time Charter Agreement. Rates for this agreement will be negotiated at the time the agreement is executed.

7. FOREIGN OPERATIONS

Principal Investigators are required to consult the [U.S. Department of State's Marine Scientific Research Authorization](#) website for the proper procedures for requesting foreign clearances. Marine Operations will assist with the securing of clearances, *but it is the responsibility of the Principal Investigator to secure this clearance*. It is important the Principal Investigator submits the necessary information in time to allow the State Department to comply with the specific lead-time required by the host country, which may be seven months or more, in advance. Once your clearance is obtained, please submit that appropriate clearance documents to Marine Operations, so the necessary permits can be obtained.

8. PERSONNEL INSURANCE REQUIREMENTS

The Principal Investigator and/or the Chief Scientist determine the makeup of the scientific party. Scientific party personnel must have an association with the scientific program as a researcher, research assistant, technician, observer, or student. All participants in a cruise aboard R/V F.G. Walton Smith are required to supply a certificate of insurance, Governmental Travel Orders, or a letter from their employer certifying coverage for Worker's Compensation. It is the responsibility of the Principal Investigator and/or the Chief Scientist to ensure compliance with the University of Miami's insurance requirements.

University of Miami/Rosenstiel School students are insured and able to embark on R/V F.G. Walton Smith. Participants from other U.S. institutions embarking on R/V F.G. Walton Smith must be covered by their home institution's Worker's Compensation insurance.

All self-employed personnel or volunteers participating on a cruise on R/V F.G. Walton Smith must be employed by the Chief Scientist's or Principal Investigator's home institution.

To comply with these requirements, self-insured institutions may use the proposed letter format that can be found at [RV F.G. Walton Smith Cruise Planning](#) website (click on *UM Certificate of Insurance Form*). Please submit all certificates and/or letters to Marine Operations two weeks prior to the cruise's departure date. Insurance coverage shall be provided for all the named individuals on the cruise and for the duration of the cruise. Marine Operations will communicate with UM Risk Management for approval. Please contact Marine Operations with questions or concerns.

9. CUSTOMS AND IMMIGRATION

Scientific personnel joining or departing the vessel in a foreign port are responsible for providing their own passports and obtaining required visas for the countries through which they will be traveling. Visit the [U.S. Department of State website](#) for details on visa requirements (in and out of a particular country), passports and international travel

requirements. If you are to join a vessel in a foreign port, be sure to check with the embassy or consulate of that country if there is any doubt about required paperwork (visa, medical records, etc.) and what items may be taken into that country.

Before departing the United States, it is imperative that each person embarking have the required documents for entry back into the United States. The documents required for reentry can be found on the [U.S. Customs and Border Patrol's website](#) .

All scientific personnel are responsible for obtaining inoculations and the associated records required for entry into foreign countries and return to the United States.

Upon return from a foreign port, all vessel personnel, including the scientific party, are required to remain aboard the vessel, without any contact with persons ashore, until U.S. Customs and Border Protection (CBP) officials clear the ship. Individuals are responsible for declaring to CPB all articles purchased or acquired in foreign ports during the cruise. Any person leaving the ship prior to the first return to an U.S. port after a foreign port call must take all dutiable articles with them.

If you are carrying scientific material, be sure to have the required documents from your Institution stating what the articles are, their intended use, and that they meet the proper export regulations.

It is recommended that all personal items of high value and foreign manufacture (items like cameras, watches, computers, etc.) be registered with CBP prior to departure from the United States. To register these items, obtain a [CBP's Certification of Registration for Personal Effects Taken Abroad](#) (CBP form 4457) and follow the instructions provided.

10. MEDICAL PROFILE

Please bring a completed Medical Profile form in a SEALED ENVELOPE with your name on the outside of the envelope when sailing on board RV F.G. Walton Smith. The form will be given to the Captain upon arrival and will only be opened in case of a medical emergency. At the end of the cruise, the envelope will be given back to each person unopened. Please see [R/V F.G. Walton Smith Cruise Planning](#) website for this form to fill out.

11. SAFETY BRIEFING

Prior to departing on a research cruise, all scientists and crew should view the Safety Briefing on [R/V F.G. Walton Smith Cruise Planning](#) website.

SECTION H - WHILE ABOARD

1. RESPONSIBILITIES OF CHIEF SCIENTIST

The Chief Scientist is responsible for the coordination of the entire scientific mission while at sea. The Chief Scientist may be the Principal Investigator or may be a member of the scientific party.

The Chief Scientist must work and communicate with the Captain on a daily basis as to the plan of the day and execute the operations necessary to complete the project. The Chief Scientist, in coordination with the Captain, needs to solve any problems that may arise during the cruise. Problems are not limited to the scientific objectives but encompass all phases of the ship's operation and performance.

The Chief Scientist governs the personal conduct of the scientific party; however, the Captain has the final responsibility and authority for the operation of the ship and wellbeing of all aboard.

2. PERSONNEL RESPONSIBILITIES

Chief Scientists

Chief Scientists are

- Responsible for the behavior of all members of the scientific party;
- Must ensure that all members of the scientific party are aware of the ship's and Captain's guidelines;
- Take action to ensure compliance; and
- Report any possible violations to the Captain.

Sexual Harassment

The University of Miami is committed to providing an environment free from all forms of discrimination including sexual harassment. Sexual harassment is not tolerated. Sexual harassment includes physical or verbal abuse of a sexual nature including graphic commentaries about an individual's body, sexually degrading remarks used to describe an individual, or unwelcome propositions and physical advances of a sexual nature. The University of Miami's policy is to promote a cooperative work environment in which mutual respect exists for all.

The social atmosphere at sea is very different from that on shore. When people work and live-in close proximity for lengthy periods, personal and professional boundaries may become blurred. The usual shore-based distinctions between "at work" and "at home" become meaningless aboard ship. In general, while aboard you should be sensitive to the altered social conditions and atmosphere in which all must work and live. It is encouraged all sea-going personnel recognize the unique circumstances of shipboard life and take practical steps to prevent sexual harassment from occurring.

In the event that a member of the scientific party or crew feels that their personal rights have been abused, the individual may find it appropriate to speak with the ship's Captain and/or the Chief Scientist about the potential harassment. In the case of overt sexual harassment, it is the aggrieved person's right and obligation to report the offense. Failure of a supervisor to take immediate & appropriate action when inappropriate conduct existed – whether it was known or should have been known - will place that supervisor in serious jeopardy should future legal action be warranted. As an assault upon the individual's rights and dignity, it is clearly inconsistent with, and unacceptable to, the standards of the University of Miami.

In addition to sexual harassment being illegal, it is also against the law to retaliate against someone for complaints or participation in an investigation of sexual harassment. Retaliation is against the University's policy. Retaliation against any person who, in good faith, reports alleged harassment, or who knowingly makes false and malicious complaints of sexual harassment, may be subjected to appropriate discipline.

Dangerous Items

Sharp objects, guns, firearms, martial arts or self-defense items, explosives, flammable materials, or disabling chemicals are not permitted aboard R/V F.G. Walton Smith.

Fresh Water

Fresh water can be limited, especially when operating in waters that might restrict the use of the ships' water making equipment. Please make every effort to conserve water.

Smoking

Smoking is not permitted in any interior space aboard. Smoking is permitted only on the aft deck. Please be aware there is no smoking in areas such as near fuel stations and flammable storage areas. Take note of "No Smoking" signs in critical areas. Do not throw tobacco waste overboard; proper receptacles are available on the aft deck.

Nighttime or Foul Weather

At night, or when in foul weather, you must use extra caution moving about the vessel. Do not go out on deck alone. If you must go out on deck alone, inform another crewmember or scientific party.

Bridge

Please request permission to enter the bridge anytime the vessel is underway. Preparing for departure, during anchoring, or while entering a harbor or channel are busy times on the bridge therefore, please refrain from entering the bridge during those times. When entering the bridge at night make sure that you do not introduce unwelcome light, which can interfere with the watch standers night vision.

Engine Room

Never enter the engine room area without the company of a crewmember. It is a noisy, hazardous environment and it is easy for inexperienced personnel to be injured.

Illness

Please do not expect to sail if you are ill. The chance of infecting others with a contagious sickness like a cold or the flu (influenza) is great. The Captain is entrusted with ensuring the safety and well-being of everyone aboard and has the authority and responsibility to deny passage to anyone that is suspected of being ill.

Portable Freezer

A dedicated portable freezer is available on-board R/V F.G. Walton Smith for the storage of breast milk. This facility has been established to support and accommodate the unique needs of lactating mothers among our scientists and researchers on various projects.

Drugs and Alcohol

It is the policy of the University of Miami to provide a safe working environment. In order to do so, the University has established policies and procedures regarding the use and possession of intoxicants including drugs and alcohol. The possession or use of alcoholic beverages or illegal drugs while aboard R/V F.G. Walton Smith is prohibited.

The Captain is empowered to conduct searches of personal effects, as well as any space aboard vessel, based on reasonable suspicion that illegal substances may be present. R/V F.G. Walton Smith complies with United States federal regulations governing possession and/or use of illegal or controlled substances.

Alcoholic beverages are not allowed aboard R/V F.G. Walton Smith. No one may bring, possess, or consume alcohol onboard. Do not report for duty while under the influence of alcohol - whether the vessel is in port or at sea. Based on reasonable suspicion, the Captain is authorized and empowered to search any part of the vessel at any time for alcoholic beverages.

Any person in violation of this policy is subject to immediate removal from the ship as well as additional actions that may include, but are not limited to, administrative actions involving the person involved, their research group, their employer, their funding agency, and UNOLS.

In the event liquor is purchased in a foreign port, it must be surrendered to the Captain to hold until the ship arrives at the next port and an individual's departure.

3. MOVING ABOARD

While R/V F.G. Walton Smith is located at the Rosenstiel School dock, the scientific party will normally be allowed aboard the evening prior to the scheduled sailing date. Please confirm with Marine Operations prior to your arrival. It is the responsibility of the Chief Scientist to assign and post a berthing plan for the scientific party.

When you arrive at the dock with your personal gear to go aboard the vessel, check in with the Chief Scientist who will give you your stateroom assignment. Now is the time to

secure all your gear so that it will stay in place under sea conditions, not after the rolling and pitching begins. This is also the time to familiarize yourself with the emergency station card next to your bunk. This gives the number of your lifeboat station for boat drills and the place to which you report for fire and emergency drills. Get your gear settled and stowed away before you go on to explore other aspects of your new environment.

If you brought aboard or are responsible for laboratory equipment or other scientific gear, see that it is aboard and secured. Seek the advice and help of the crew if you have any questions.

A few points while aboard:

- ✓ Bed linen, towels and washcloths will be provided and exchanged weekly
- ✓ Please stow your personal gear in the storage provided in staterooms
- ✓ Meals service times will be posted in the crew's mess
- ✓ Do not take food to your stateroom
- ✓ Bring sunscreen, sun protection gear, non-slip closed toed shoes and foul weather gear
- ✓ There is a TV with a DVD player on the mess deck. We welcome favorite movies, books, or music to share.
- ✓ While some items may be available, please bring personnel items, over-the-counter medications, treats, or specific items (i.e. particular juices, gum, tea bags, supplements, flavored coffee creamer, whatever you cannot live without).
- ✓ A dedicated portable freezer is available for lactating mothers that need storage of breast milk.

4. FOR YOUR SAFETY

After finding your stateroom and stowing your personal gear please do the following:

- ✓ Locate your life jacket.
- ✓ Locate the inflatable life rafts.
- ✓ Locate all escape routes, doors & hatches.
- ✓ Locate fire extinguishers throughout ship.
- ✓ Locate work vests and hard hats.
- ✓ Locate the First Aid Kits.

R/V F.G. Walton Smith carries a complete inventory of medical supplies appropriate to a vessel her size. The crew is trained to handle most common medical emergencies. However, not every situation can be predetermined; therefore, it is very important all operations are conducted with the utmost focus on safety to prevent potential accidents and injuries.

5. EMERGENCY SIGNALS

Abandon Ship

The signal for abandon ship is seven short blasts followed by one long blast of the

ship's whistle and general alarm. When this signal is heard, report to your designated life raft station. There the Mate in charge will explain the procedures for launching and embarking into the life rafts. The rafts will not be launched during a drill.

Fire and Emergency

The signal is one long blast on the ship's whistle and general alarm bell, lasting for ten seconds or more. During this drill, members of the science party muster in the designated area. Attendance will be taken and reported to the bridge.

Man Overboard

If someone falls overboard, throw a life-ring into the water towards the person. Keep your eye on the person at all times and point towards the person. Shout "MAN OVERBOARD, STARBOARD (or PORT)," and call the bridge on the sound powered phone or squawk box to inform them without losing sight of the person if possible. If you hear someone hail "Man Overboard," pass the word to the bridge.

6. GOOD SAFETY HABITS

It is strongly recommended that you let someone know where you will be at all times. The disappearance of someone for several hours can be cause for major alarm, which is easily avoided by telling your roommate or co-worker. Do not go out on the deck alone in rough weather or at night. Rough seas and/or darkness make it almost impossible to find someone who has fallen over the side.

Sensible clothing is a part of good safety habits. NEVER go barefoot. Sandals of any kind are not safe. Wear shoes with non-skid soles, especially on deck. Safety-toe shoes are recommended if you are working on deck with heavy gear. Loose or floppy clothing, long hair, and/or jewelry may be caught in machinery resulting in an injury. Work vests and hard hats are required for personnel working around moving loads and overboard/recovery operations.

Wear a hat and sunglasses (use sunblock) if you are sensitive to the sun. Its effects are more intense at sea. Have medication for seasickness. If you are prone to it, start taking the medication twenty-four hours before the ship leaves the dock. Caution to women -- certain classes of these medications should not be taken during pregnancy. Consult with your doctor.

The Captain is in charge of the ship's hospital and general medical care. If you can anticipate the possibility of having a medical problem, or if you are dependent upon a specific medication, discuss this with the Captain before the cruise departs. S/He may deem it wise to stock a spare quantity of any medication(s) necessary to your basic good health. In the event of major medical emergencies, the ship will obtain advice via the telemedicine medical advisory service from George Washington Maritime Medical Access. Evacuation for medical care to shore will be undertaken if indicated.

Be aware that lines and wires can part under tension. Do not stand under or near a line

or wire while it is under heavy strain. STAY CLEAR. Never step inside the bight (loop) of a line or wire. Respond immediately to directions from the crew. They are trying to preserve the safety of all, not prevent you from going somewhere.

When a crane is in operation, be aware of the location of its load at all times and stay out from underneath. If you are working on deck while a crane is in operation, you are required to wear a safety hardhat. When working at or near the side of the ship or stern, work-vests must be worn. These are provided by the ship.

The disposal of plastics in any form is prohibited on the waterways of the world. The ship's waste management procedures are posted. Learn the procedures and follow them.

SECTION I - POST CRUISE REQUIREMENTS

1. SHIPBOARD CLEAN-UP PROCEDURES

At the conclusion of each cruise, all areas used by scientific party must be cleaned as described:

- ✓ *Wet/Dry Labs:* Remove all scientific equipment, empty all trash into proper receptacles, wipe down bulkheads with damp cloth and dry with clean rags, sweep and mop deck, wipe off benches, cabinets, clean sinks and faucets.
- ✓ *Staterooms:* Strip bunks of linens, deposit towels and linen in furnished laundry bags, wipe down furniture and bulkheads, fold blankets and put them at the foot of the bunk.
- ✓ *Heads and Showers:* Clean toilets and wipe down outside of bowl; clean sinks, mirror, soap dish, and faucets; wipe down shower bulkheads and deck; sweep and mop deck; and empty wastebasket.
- ✓ *Passageways, stairs:* Sweep and mop.
- ✓ *Scientific Freezers and Refrigerators:* Once all samples are removed wipe down inside and outside of all units used during the cruise.

The crew will furnish all cleaning equipment and supplies. The Captain is responsible for the inspection of these areas prior to the departure of the scientific party. A clean vessel was provided - please respectfully do the same for the next scientific party.

2. OFFLOADING

R/V F.G. Walton Smith is normally offloaded on the day of arrival in port. The ship's crane will be available to assist in the offloading of heavy scientific gear. The crew will operate the ship's loading equipment during the offloading process. Please do not depend on the crew to assist in the offloading of small, hand-carried science gear as they will likely be preparing the vessel and conducting maintenance for the next cruise.

3. DISEMBARKING

The scientific party is expected to leave the vessel within a reasonable period after arrival at the dock. If more time is needed, the Chief Scientist must consult with the Captain on the kind of extension is needed.

4. UNOLS' POST CRUISE FORMS AND REPORTS

The Chief Scientist is requested to complete a UNOLS Post Cruise Assessment Report (PCAR) at the completion of the cruise. This form is used by UNOLS to assess the degree of success achieved in accomplishing the cruise's scientific objectives from the PI or Chief Scientist's perspective. The online form can be found at the [UNOLS Marine Facilities Planning website](https://MFP.us) (<https://MFP.us>)

Once completed the form is disseminated to UNOLS, the funding agency of the cruise, Rosenstiel School's Marine Operations and Rosenstiel School's Marine Technology Group as well as serving as a historical record of the cruise. We respectfully ask that any major issues you encountered during your cruise be addressed and discussed with the Captain or Manager prior to report completion. It is our goal to provide a safe, efficient, and pleasant experience aboard R/V Walton Smith. Communication is vital to vessel and procedural improvements. Contact Marine Operations for the proper cruise number.

All forms and resources listed or referenced in this manual are available from UM Marine Operations or at [R/V F.G. WALTON SMITH Cruise Planning](#) website.