

APPENDIX B
SHIPBOARD SURVEY SAFETY PLAN

**GMI Shipboard Survey Safety Plan and Procedures
NJDEP Baseline Survey Research Cruise
January 2008 – December 2009**

SHIPBOARD FACILITIES AND CONSIDERATIONS

We are fortunate to be aboard the R/V *Hugh R. Sharp*. Please follow link below to familiarize yourself with the vessel.

<http://www.ocean.udel.edu/marine/rvhugh/index.shtml>

At initial boarding of the research vessel, you will receive a briefing on the specific protocols/procedures of the vessels and there will be a safety overview which will review the protocols for fire and abandon-ship procedures.

The ship will provide all linens, towels, and pillows; depending on the time of year, it may be prudent to bring additional blankets and/or cold weather gear. This survey will be conducted year-round in acceptable sea states.

I. CHAIN OF COMMAND

Members of the scientific party, including Marine Mammal Observers (MMOs), report directly to the Chief Scientist. The Chief Scientist represents the scientific party responsible for communicating with the vessel's staff and has sole authority to act on behalf of the NJDEP and GMI Program Manager. Any and all sensitive or operational communications from the scientific party to the ship's staff needs to pass through the Chief Scientist. The Chief Scientist is responsible for any change in operating procedures or any out of the ordinary matter. If you have a problem, please see the Chief Scientist. Please do not at any time try to resolve the situation yourself by approaching the ship's personnel directly.

II. FOOTWEAR

Closed-toe shoes are mandatory while traveling throughout the ship. Thongs or other open-toe sandals are permitted only while on the flying bridge (wear closed-toe shoes to and from this location) or in the living quarters.

III. DRUGS, ALCOHOL, AND SMOKING

Drugs and Alcohol

There is a zero tolerance policy on the possession of drugs and alcohol on this survey cruise.

Smoking

Smoking is prohibited in all interior spaces on the ship. Smoking is only allowed on the weather decks and only in designated areas.

IV. EMERGENCY CONTACT

In the event of an emergency on land, please provide a family member or friend the following list of contacts.

Hugh R. Sharp - Main Office:

Sharyn Bressler

Staff Assistant

Phone: 302.645.4320

Email: sharyn@udel.edu

Cruise Planning, Scheduling, and Budgets:

Matthew Hawkins

Director of Marine Ops

Office Phone: 302.645.4341

Cell Phone: 410.924.2472

Email: hawkins@udel.edu

Cruise Planning and Logistics:

Captain Bill Byam

Master

Office Phone: 302.645.4343

Cell Phone: 302.381.0346

Email: byam@udel.edu

Cruise Planning and Technical Support:

Timothy Deering

Oceanographic Coordinator

Office Phone: 302.645.4338

Cell Phone: 302.249.6149

Email: deering@udel.edu

V. INTER-PERSONAL RELATIONS

Social Considerations

People working and living together on a ship creates an unusual environment. There is minimal privacy and space for individuals spending an extended amount of time together in an isolated setting. Thus, in this environment, otherwise minor incidents can sometimes escalate unnecessarily. Be aware that your personal feelings may intensify at sea and try to keep things in perspective.

Problems

Sometimes challenging and difficult situations arise while out to sea. If you have difficulty working with someone and/or feel threatened or discriminated against, please alert the Chief Scientist of your situation. Any situation will be kept confidential; your comments will only be used to resolve the issue. Please inform the Chief Scientist as soon as an issue arises so that she can help resolve the issue and prevent an exacerbation of the problem. It is of utmost importance to the Chief Scientist and the Chief Officer (CO) that scientists are comfortable and happy working while living aboard the ship.

Policies on Harassment and Drug and Alcohol Use

The following is the general policy information for all ships leased by GMI.

All persons boarding the vessel give an implied consent to conform to all safety and security policies and regulations which are administered by the CO. All spaces and equipment on the vessel are subject to inspection or search at any time. Additionally, the following is prohibited aboard any U.S. Government vessel: possession and/or use of intoxicating alcoholic beverages, illegal drugs, controlled drugs without a prescription, sexual harassment, or use of shipboard spaces for purpose of sexual liaison. Violators may be removed from the vessel at the earliest opportunity.

Possession or Use of Alcohol or Illegal Drugs

Possession or use of alcohol, illegal drugs, or prescription medications without a prescription on board any GMI vessel by any member of the embarked complement is strictly forbidden and will not be tolerated. When violations of this policy are discovered, the following procedures will be adhered to:

- * The alcohol will be confiscated and immediately disposed of in the presence of a witness.
- * Drugs will be confiscated and placed in a secured location until the vessel reaches home port or another port of call, at which time the offense will be reported, and the drugs turned over to the appropriate authorities for action.
- * Disciplinary or corrective action will be taken in accordance with the applicable Table of Offenses and Penalties.

Sexual Harassment

Sexual harassment will not be tolerated aboard GMI vessels. This applies to all persons, male and female, including members of the operating crew and any embarked scientific personnel or other personnel. Sexual harassment is sex (gender) discrimination that involves unwelcome sexual conduct, which can include both verbal and physical behavior. Some examples of such behavior are as follows: pressure for dates or sex; sexually suggestive looks, comments, or gestures; sexual jokes; displaying material of a sexual nature; and deliberate touching. Conduct is unwelcome if it is unsolicited and an individual finds it undesirable and/or offensive. All instances of sexual harassment should be immediately reported to your CO, the Chief Scientist, and project manager.

Smoking Restrictions

Aboard GMI ships, personnel who smoke may do so only on the weather decks in designated areas. There is no smoking permitted on the interior of any GMI ship. Smokers are expected to observe particular care in disposing of cigarettes or smoking materials. Use ashtrays or butt kits located around the ship for this purpose. Smoking is prohibited:

- * on any part of the weather decks when the vessel is fueling or taking on flammable cargo,
- * in the vicinity of any gasoline engine undergoing repair,
- * in the vicinity of any compressed gas cylinder carrying a flammable gas sticker, which may be stored on deck for the use of the embarked science party, and
- * during certain types of scientific missions or in the immediate vicinity of sensitive science mission equipment.

Underway Shipboard Emergencies

Fire

Fire at sea, no matter how small, can become a life-threatening situation. At sea, everyone aboard ship, be they crew, scientist, or passenger, is a member of the fire department. When the General Alarm sounds, everyone has a specific emergency billet assignment and each person is relied upon by all

others aboard to carry out that assignment. Be aware of your emergency responsibilities so that carrying them out becomes second nature. Firefighting at sea is a team effort.

Emergency billet assignments are posted on the Watch, Quarter, and Station Bill. These are posted at convenient places throughout the ship. Additionally, each person is provided with a "bunk card" which lists his/her individual emergency billet assignments.

The signal for fire or emergency is a 10 second continuous ringing of the General Alarm bell and a 10 second continuous sounding of the ship's whistle. This alarm will be followed by an appropriate announcement on the general announcing system. When you hear the signal, immediately proceed to your fire and emergency billet station. Firefighting and emergency equipment is distributed throughout the ship. All hands should familiarize themselves with the locations of this equipment, as well as the Damage Control Lockers and their contents.

Abandon Ship

Abandoning ship in the open sea is an action of last resort. All reasonable efforts required of mariners for the saving of their ship must clearly have failed before any decision to abandon the vessel will be taken. Only when there is no reasonable chance of saving the ship will the order ever be given to abandon it. The decision to abandon ship is made only by the CO, or in the CO's incapacity, the senior member of the chain of command.

The signal to abandon ship is seven (7) or more short blasts on the ship's whistle and General Alarm, followed by one (1) long blast.

When the order is given to abandon ship, all hands will proceed to their assigned life raft muster stations. Each shall bring his/her protective survival clothing, survival suit, personal floatation device (life jacket), and other equipment assigned in abandon ship billet. Once the order to abandon ship has been given, the life raft Officers in Charge (OIC) will muster their respective parties and dispatch the assigned crew members to the life raft locations to launch their respective life rafts. Once launched, the remaining personnel will have to act in concert to haul the deployed rafts alongside the main deck embarkation stations. Orderly seamanlike actions at the embarkation stations will assure the rapid and efficient abandoning of the ship.

Man Overboard

Except for uncontrollable fire at sea, there is perhaps no more personally terrifying situation for a member of the ship's complement than being lost overboard. There are two basic man overboard scenarios: witnessed and unwitnessed.

1. Witnessed Man Overboard--Actions of the Witness

Upon observing a person going overboard, the witness shall take the following actions:

1. Call out for assistance and throw a life ring buoy into the water, preferably one equipped with a strobe light. Pass the word to the Bridge by any means possible.
2. Wait about one minute and throw a second life ring buoy (at night --one equipped with a strobe light) into the water. This will create a visual range for the OOD and the lookouts, aiding the search effort.
3. Keep the victim under surveillance if at all possible but do not delay passing the word to the Bridge.

2. Unwitnessed Man Overboard

Underway, until proven otherwise, when a crew member is unaccounted, it will be presumed that the individual has been lost overboard. This situation then becomes a search and rescue problem of a far

more complicated nature. The time of the casualty will be unknown, or at best, only grossly estimated. The ship's navigation record, as contained on the Marine Operations Abstract or Dead Reckoning Abstract, will be crucial for search planning, as will the hourly weather observations entered into the Weather Log. Initial actions will be to notify the Marine Operations Center Director of the situation and to notify the nearest Rescue Coordination Center for assistance. Search operations will be conducted with the advice and guidance of SAR professionals.

Drills at Sea

Emergency drills at sea will be held in accordance with the requirements of NC Instruction 5100.1B. Reporting for drills, in accordance with the billets assigned in the Watch, Quarter, and Station Bill, is mandatory for all hands, including the embarked science party, unless the absence is specifically authorized by the CO, XO, or Safety Officer.

For Abandon Ship drills, unless otherwise advised, all hands are required to wear life jackets and carry their survival suits when reporting to their life raft muster stations. All personnel shall be attired in, or bring to the muster, clothing that fully covers legs and arms, a hat, socks, and shoes. Signals to call all hands to emergency stations shall be identical to those that are used for actual emergencies. When a drill is held, the OOD will always state "This is a drill. This is a drill." followed by an appropriate announcement on the general announcing system.

The signals are as follows:

Fire and Emergency	Continuous ringing of the General Alarm bell for 10 seconds and continuous sounding of the ship's whistle for 10 seconds [Image]
Abandon Ship	7 or more short blasts on the ship's whistle and General Alarm bell, followed by one prolonged blast [Image]
Man Overboard	3 prolonged blasts on the ship's whistle and General Alarm bell [Image]
Dismissal from Drill	3 short blasts on the ship's whistle and General Alarm bell [Image]

Working on deck

The following safety regulations will be observed when working on deck:

- * Life vests or floats coats will be properly worn when handling equipment over the side, deploying equipment over the side, and on all launches (whether alongside the ship, launching, or recovering).
- * Safety belts and lines will be worn by those handling equipment over the side.
- * Hardhats will be worn by all those involved in recovery or deployment of equipment and boats.
- * Proper footwear should be worn at all times (Open toe shoes are NOT proper work footwear).
- * Ship's equipment is to be operated only by qualified members of the ship's complement.

Seasickness

Information on sea sickness and treatments available will be provided by the Medical Officer. Those requiring preventative treatment should see the Medical Officer prior to sailing.

One of the least pleasant aspects of sea duty is the possibility of seasickness. An individual's susceptibility to seasickness is highly variable. If you've experienced motion sickness in cars, planes, or amusement park rides, you may experience seasickness during the cruise. Regardless, most people feel

some level of illness or discomfort when they first go to sea. Seasickness is a result of an imbalance in the inner ear (where the human balance mechanism resides) caused by the erratic motion of the ship through the water. Inside the cabin of a rocking boat, for example, the inner ear detects changes in linear and angular acceleration as the body moves with the boat. But since the cabin moves with the passenger, the eyes register a relatively stable scene. Agitated by this perceptual incongruity, the brain responds with a cascade of stress-related hormones that can ultimately lead to nausea and vomiting. Its effect can be magnified by strong smells (like diesel fumes or fish). It usually occurs in the first 12-24 hrs after sailing, and typically dissipates when the body becomes acclimated to the ship's motion (getting one's "sea-legs"). Rarely does anyone stay ill beyond the first couple of days at sea, regardless of sea state, but this can occur. There are several over-the-counter medications available to prevent or minimize motion sickness. These need to be taken about an hour before sailing and as needed at sea; as always, you should follow the instructions for the medication you are taking. All of these medications tend to dehydrate the body, so fluid intake is important. If you should get seasick, take comfort in the fact that recovery is usually only a matter of time, and the survival rate is 100%. Each ship has a trained medical officer who can treat severe cases of sea-sickness. However, all that is usually required for a complete recovery is some sensible eating/drinking and some patience. Here are a few tips and considerations regarding seasickness:

- * Vomiting offers relief. Make an effort to continue eating items like crackers, dry toast, dry cereal, etc. (avoid anything greasy, sweet, or hard to digest). Keeping something in your stomach suppresses nausea, or, if vomiting, eliminates painful "dry heaves". Antacid tablets help some people.
- * Maintain fluids. Seasickness and related medications cause dehydration and headaches. Try to drink juices low in acidity, clear soups, or water, and stay away from milk or coffee.
- * Keep working. Most people find that being busy on deck keeps their minds off their temporary discomfort. Also, the fresh air out on deck is often enough to speed up recovery.
- * Carry a plastic bag. This simple trick allows some peace of mind and eliminates some of the panic of getting sick. Do not vomit in sinks or trash cans. If you vomit "over the side", be aware of which way the wind and waves are coming. Going to the "lee" will ensure that an unpleasant experience doesn't become any more unpleasant.

Above all, don't be embarrassed or discouraged! If you get sick, chances are that others are sick too! No one --fishermen, ship's officers, scientists --is immune to seasickness.

Firearms and Other Weapons

Personally owned firearms are not permitted aboard the ship without the advance written approval of the CO. Any firearm permitted aboard the ship must be accompanied by any applicable permits. All firearms and their ammunition will be locked in the ship's weapon's locker until they are removed from the vessel. Firecrackers, fireworks and similar pyrotechnics will not be permitted aboard the ship. Sheath knives are not permitted aboard the ship with the exception of fishing fillet knives which are permitted. Folding knives are permitted to be carried aboard ship and their use is encouraged.

University of Delaware, Marine Operations – Contact Numbers

Revised: 01/15/07

Main Office	302-645-4320
Main Office Fax	302-645-4006

R/V HUGH R. SHARP:

		Comments
Alongside	302-645-4340	
Ship Cellular	302-448-5061	Within 30 nm of shore
INMARSAT Voice	011-874-764-471-442 Or dial: 1-800-551-7534	Dialed as international call. at prompt dial 485-837-5907 then 0-764-471-442
INMARSAT Fax	011-874-600-714-099 Or dial: 1-800-551-7534	Used for all Faxes. Dialed as international call. at prompt dial 485-837-5907 then 0-600-714-099

KEY PERSONNEL:

Name	Position	Office	E-mail	Cellular	Home
Sharyn Bressler	Staff Assistant	302-645-4320	sharyn@udel.edu	-	302-945-0106
Matthew Hawkins	Director, Marine Ops	302-645-4341	hawkins@udel.edu	410-924-2472	302-424-1852
Bill Byam	Master	302-645-4343	byam@udel.edu	302-381-0346	302-645-7837 843-842-4410
Jim Warrington	Chief Mate	302-645-4343	idw@udel.edu	302-373-9954	302-934-8193
Tim North	Chief Engineer	302-645-4343	tnorth@udel.edu	410-463-0205	410-476-4485
Tim Deering	Coordinator, Oceanographic Services	302-249-6149	deering@udel.edu	302-249-6149	-
Brian Kidd	Oceanographic Tech.	302-645-4336	kidd@udel.edu	302-249-1695	-
Wynn Tucker	Oceanographic Specialist	302-645-4324	tucker@udel.edu	910-547-5159	-