

SAFETY AWARENESS ABOARD R/V SHEARWATER

In preparation for your trip aboard R/V *Shearwater*, please review the following introductory comments regarding safety and the use of personal protective equipment aboard the vessel. If you have any questions about the following information, it is important that you address those questions with your Project Lead and *Shearwater*'s Operations Coordinator, LT(jg) Libby Mackie, *prior to* the day of departure. R/V *Shearwater* is located in Marina 4, End tie, Santa Barbara Harbor.

General Safety Considerations

Safety considerations aboard a vessel at sea are entirely different from those encountered at home or in the "average" workplace. Although R/V *Shearwater* is typically quite stable, it is important to note that the way in which any vessel behaves at sea is sometimes unpredictable. You should maintain a secure hold on the vessel with **at least one hand at all times**, especially when moving about the vessel. When transiting from the harbor to your working grounds and later back to the harbor, it is best practice to remain seated for as much of the transit as possible. If you think you may be prone to sea-sickness, you might want to consider taking over-the-counter motion sickness medication, as directed by the manufacturer. Read the directions carefully, as some motion sickness medications are most effective when taken the *day before* departure, and all medications have side effects.

Berthing: R/V *Shearwater*'s berthing is limited and as such, with the open-berthing spaces we have aboard, we do our best to keep gender separation, but that is not always possible. There are privacy curtains on all permanent bunks. Changing should be done taking into consideration other people onboard, and should usually be accomplished in the bathroom (marine head) onboard, or alone behind the closed curtain of one of the berthing spaces. When entering a berthing space where the curtain is closed, please knock first.

Chain of Command and Implied Consent: When you come aboard the R/V *Shearwater*, be advised that you are consenting to comply with the Standing Orders of the vessel, posted signs, and the instructions of the crew. The Captain has the final authority and responsibility to make decisions on the safe operations of the vessel. All operations aboard the vessel are conducted by willing parties, and each person aboard the vessel has the right not to participate if he/she feels it is unsafe, short of an emergency. The management of the site also has authority to stop, or with consent of the captain, change or initiate operations. A copy of the Standing Orders is available on the bridge, or via email if requested.

Fitness and Health: Please take some time to consider your own fitness and state of health before coming aboard. You will likely encounter erratic rocking and rolling of the vessel while it is out at sea, and need to be able to safely move about the vessel and up and down the ladders. The vessel often takes spray over the side and decks may become slippery, making movement about the vessel more difficult than on land. An additional consideration concerning health is the remote nature of the Channel Islands. The *Shearwater* can operate as much as six hours from professional medical care and carries only basic first aid supplies and an AED. Please keep this in mind when considering whether to bring medications you have been prescribed. In the event of an emergency, you will be required to don a life vest and board an inflatable life boat from a height of four feet. Please consider these factors when determining whether or not to come aboard. Also, be considerate of the fact that you will be in close proximity to your shipmates for long periods of time. Feel free to discretely inform the captain of medical conditions you feel might impact your own or other's safety at sea.

Safety Briefing: Prior to departure, you will be required to attend a complete safety briefing with a vessel crewmember, to orient you to the layout of the vessel and the safety equipment carried aboard. The briefing will also address those safety requirements that are specific to your planned operations. Your

undivided attention is required during the briefing, as that will be the perfect time to ask questions or communicate any last-minute concerns that you may have regarding your trip.

Personal Protective Equipment: The use of Personal Protective Equipment (PPE) is required whenever you are involved with operations that are being conducted aboard R/V *Shearwater*. The safety briefing provided at the start of your trip will include information on the specific safety equipment requirements for your planned mission(s). The following non-negotiable safety equipment rules apply to all operations, at all times.

- 1) **Closed toed, closed heel shoes** *must be worn aboard* the *Shearwater*. The only exception is on extended research trips and only inside the cabin. Dive booties are allowed during dive operations, but closed-toe shoes should be donned as soon as operations are complete. Steel toed boots are highly recommended for any operations involving lifting.
- 2) **PFDs must be worn during all operations** with the safety chains down, line handling while underway, launching and riding in the skiff, launching and recovering equipment over the side, and especially working from the swim step. A full wetsuit (zipped up) may substitute for a PFD during dive operations.
- 3) **Hardhats must be worn** during all operations involving lifting equipment, and will be supplied by the boat.
- 4) **Hearing protection** is required whenever noise levels exceed the Occupational Safety and Health Administration's (OSHA) 8-hour Time Weighted Average (TWA) for exposure to noise(s) over 80 Decibels. (Common, household devices that produce comparable noise levels include doorbells, ringing telephones, and coffee grinders.) The crew will provide specific guidance on those locations where hearing protection is necessary.

PPE such as hardhats, work vests, hearing protection, work gloves, safety glasses (both indoor and outdoor), and steel-toed rubber boots are carried aboard the vessel, and all embarked personnel will have access to PPE as necessary. Crewmembers will direct you to the locations in which PPE is stored when appropriate. Channel Islands National Marine Sanctuary (CINMS) strongly recommends, however, that you identify the safety requirements specific to your mission(s) and consider purchasing any required specialized equipment prior to departure. Most people are both safer and more comfortable in gear that fits them properly.

Weather Considerations: The weather in the Channel Islands can vary greatly, even within the span of a few hours. Conditions in Santa Barbara Harbor are often deceptively calm, while offshore is quite rough. A risk analysis is conducted by the crew before getting underway to determine whether operations can be conducted safely and considers a wide range of factors. A good rule of thumb is, operations during small craft advisories are more often than not, cancelled. Operations or transits during Gale warnings are avoided in all but the most extreme circumstances.

To confirm that you have reviewed and understand these safety considerations prior to departure, please e-mail your **name, project title, and project date(s)** to *Shearwater*'s Operations Coordinator, LT(jg) Libby Mackie (elizabeth.mackie@noaa.gov). Please feel free to include any safety-related questions that you may have in the body of your e-mail message. Thank you for helping us to maintain safer, more efficient operations aboard R/V *Shearwater*, and we look forward to welcoming you aboard!