7.9.3 OVERBOARDING EQUIPMENT

Originator:	Approved By:
Ernest C. Wegman	J. L. Coburn, Jr.

1. Purpose

The purpose of this procedure is to set forth standards to ensure safe overboarding equipment on WHOI operated vessels and to define responsibilities to ensure that there are no injuries or loss of equipment during overboarding operations on WHOI vessels.

2. Scope

This procedure covers the design, installation, and maintenance and inspection of overboarding equipment on WHOI vessels.

3. Definitions

Overboarding is defined as the use of the overboarding equipment, sometimes referred to as “working over the side”.

Overboarding equipment is defined as all mechanical gear involved in removing equipment from a location on deck and lowering into the water. There are three general categories of this equipment:

A. Permanent ship’s equipment - is defined as machinery such as crane, winches, capstans, blocks and rigging regularly associated with the ship and maintained by the ship’s force.
B. Institution or WHOI scientific equipment - is defined as machinery such as winches, cranes and blocks owned by WHOI groups other than the Marine Department and not regularly associated with a particular ship but often used on WHOI vessels. SSSG, DSL or Mooring Lab equipment are examples.
C. Temporary scientific equipment - is defined as machinery such as winches, cranes and blocks used on the ship for a short period of time such as the duration of a scientific program. This machinery is not owned or maintained by Marine Operations.

MWL, SWL and MWL are interchangeable terms. MWL (Maximum Working Load) will be the term used in this item. The MWL is defined as the maximum mass or force that a piece *of* equipment is authorized to support in general service when the pull is applied in-line.

RLV (Rated Load Value), and Resultant Safe Working Load are terms that mean the same as MWL.

4. Responsibility

The safety of all persons on board the ship is ultimately the responsibility of the Master. It is the responsibility of each ship's Master to be familiar with the requirements of 46 CFR 189.35 (Weight Handling Gear) and to ensure compliance while the equipment is on the ship. Specific responsibilities of the Master may be designated to other officers on board the ship. The designated person and designated responsibilities are to be listed below in the Procedures section for each ship. It is the responsibility of those on board to know their jobs via this procedure.

It is the responsibility of the Master to ensure that all overboarding activities are done in a safe manner.

It is the responsibility of the Chief Engineer to maintain the overboarding machinery in a safe and reliable condition. A log is to be kept in SafeNet of all maintenance, failures and repairs.

It is the responsibility of the Chief Mate to maintain in safe and working condition and test as per Permanent Ship's Equipment below, the blocks and loose equipment. A log is to be kept in SafeNet of all testing, maintenance, failures and repairs.

A. Permanent Ship's Equipment

Design - It is the responsibility of the Master to ensure that the correct equipment is used in each application and the MWL is not exceeded. It is the responsibility of the Port Engineer to ensure that all new equipment is designed, built and installed to the proper specifications.

Testing - It is the responsibility of the Master to ensure that all Weight Handling Gear is tested and logged in SafeNet in accordance with 46 CFR 189.35.

Blocks, loose equipment - Each block, sheave or other piece of running gear not permanently attached to a large piece of deck machinery such as a crane is to have a permanent marking or label attached to it in order to identify that piece. The purpose is to allow a permanent record of testing and/or maintenance of that piece and the record to be kept in the SafeNet Equipment Log. Other important information such as MWL of each piece will be stored in the SafeNet Equipment Log. Each piece is to be tested on a biannual schedule to 1.25% of the MWL.

B. Institution or WHOI Scientific Equipment
Design - It is the ultimate responsibility of the Master to ensure that the correct equipment is used in each application and the MWL is not exceeded. It is the responsibility of the Marine Operations Coordinator to collect information proving the suitability of the equipment well in advance of planned use. It is the responsibility of the person designated by the Master (usually the Chief Mate) to ensure that the equipment is installed as planned and in a safe manner.

Testing - It is the ultimate responsibility of the Master to ensure that all Weight Handling Gear is tested and logged in accordance with 46 CFR 189.35. It is the responsibility of the group that owns the machinery to prove the testing to the Master prior to installation on the ship. In outports or occasions of a fast turnaround, the Marine Operation Coordinator will be responsible for insuring in a timely manner that proper testing has been done.

C. Temporary Scientific Equipment
Design and Testing - It is the ultimate responsibility of the Master to ensure that the correct equipment is used in each application and the MWL is not exceeded. New scientific gear is regularly produced and is expected to be used on board WHOI ships as new demands are made by science. It is the responsibility of the Marine Operations Coordinator to be familiar with CFR 189.35 and all applicable rules such as ABS and to assess each new piece of gear to ensure that the proper engineering and testing has been done prior to delivery to the ship. The Marine Operations Coordinator shall ensure that an engineering analysis is conducted ON each particular application to ensure that all components, scientific equipment and ship's equipment are suitable for the job.

5. Record Keeping

SafeNet is the official location for logging and recording all testing, maintenance and relevant information with the exception of the Wire Log, which may be handwritten and kept on the bridge. A temporary written log may be kept to supplement the SafeNet log but it will not be recognized as an ISM log.

6. Procedures

General Safety Gear- Hardhats are to be worn by any person involved in crane operations and work vests are to be worn by any person working near the rail where

the risk of falling overboard exists. Safety harnesses are to be worn when the Master deems it necessary for safety.

Always notify the bridge prior to putting anything over the side of the ship.

Ship's stability should always be considered prior to any overboarding operation.

Maintain a Wire Log to record each use of each of the overboarding wires on each ship. This log is to include the following information; (a) maximum wire paid out for each cast and (b) maximum tension applied to the wire on each cast.