



MANAGEMENT SYSTEM MANUAL

OCN 6.7 R/V Oceanus Winch Operations

Originator:	Approved By:
Lawrence T. Bearse	Albert F. Suchy

1. Purpose

The purpose of this procedure is to set forth the standards for winch operations and the qualification for training winch operators on the R/V Oceanus. In addition, this procedure sets forth standards for trawl winch operations and the qualification for training winch operators aboard R/V Oceanus.

2. Responsibility

The Chief Mate, working with the Bosun and other qualified winch operators, will ensure that all operators are trained in the procedures, limitations and uses of the various winches in use on Atlantis. The SSSG technician is responsible for the training and for establishing that members of the science party are qualified to operate winches on the vessel.

Trawl Winch operations are conducted with the approval of the Master. The maintenance of the Dynacon Winch structures and related hardware and sheaves are the responsibility of the Deck Department. Lubrication, mechanical, electrical and electronic issues are the responsibility of the Engine Department. The Marine Operations Coordinator is responsible for the wire spools. A record of wire use is maintained by the Officer of the Watch and is entered into the ships wire log. If the wire is transferred, retired, or removed from the ship, the wire records will be transferred accordingly.

3. General

The ship's trawl winch is a custom-built Dynacon Constant Tension Winch. The system is currently designed to handle a variety of wire spools. These presently include: (1) 9/16 trawl wire, (2) .680 coax conducting wire and (3) .680 fiber optic cable. The spools are changed out through access to the main deck hatch. The actual operation is straight forward and user friendly. The initial set up is a bit more involved, requiring a ship's engineer to bring an S/S Generator on line to accommodate the starting load as well as to set up the operating parameters. Once this is done, the control is transferred to the operating station.

Before any trawl winch operation takes place, a plan needs to be established and the pertinent information recorded on a "Trawl Wire Ops Set-Up Plan" (See Appendix I). The purpose of the plan is to provide situational awareness and information. The requisite relevant information is entered and a copy provided to the Bridge Watch Officer and the Winch Operator prior to commencement. Additionally, the Watch Officer is required to read and initial the "Trawl Winch Ops Memo" dated 8/29/99 written by Captain Bearse outlining pertinent operational precautions. The Bridge Watch Officer will determine if conditions are safe for deployment, taking into



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consideration such issues as traffic density, visibility, sea state, handling characteristics and any other relevant conditions that may be present. If in doubt or if there are questions, the Watch Officer will call the Master for clarification. If operations are to continue, the appropriate signals will be displayed and security calls broadcast as required.

Since the winch is capable of multiple tasks, the control microprocessor offers several important and convenient options and settings that are tied in to alarms. Among these options are: speed out/in and tension limits with high and low settings. Additionally, since the winch room is unattended, a full suit of Closed Circuit Cameras and VDU are provided for the control station and bridge for operational monitoring.

The trawl operations are usually deployed through the ship's A-frame. On occasion, deployment can be conducted off the starboard or port side with additional specialized support equipment and configuration.

Procedures for rigging, handling, overboarding and recovery are tailored to the individual tasks and, as in all procedures, designed to provide as safe an operation as is prudent and reasonable. Deck set up, rigging, overboarding and recovery will be at the direction of the Bosun, Deck Boss or Chief Mate who will instruct all participants and direct deck operations. A Deck Boss is the senior deck hand involved in an operation. Once deployed, control is typically transferred to the science group who, according to the agreed plan, will continue the operation striving to achieve the stated science objective(s).

When recovery operations are ready to begin, control reverts back to the Deck Operation. Once all equipment is safely aboard and secured, the Duty Engineer will be informed and will secure the winch unless operations are to continue.

The fantail deck area is secured to all non-essential personnel while all operations are being conducted.

All operations involving new equipment or overboard configurations are to be pre-approved by the Marine Operations Coordinator well in advance of the scheduled trip. Considerations are covered in Section OCN 07.9.2, Oceanus Overboarding Operations.

4. Maintenance

All maintenance conducted by the ship's crew will be recorded and the information will be entered in NS5.



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5. Reporting

Upon completion of the above requirements to the satisfaction of the Chief Mate, "Winch Operator" will be added to the Training Section of the crewmember's personnel record in NS5.

The Trawl Wire Ops Set-Up Plan shall be kept in the cruise plan file maintained by the Master. This file shall be maintained for one year.