1. **Purpose**
   The purpose of this procedure is to set forth the standards for winch operations and the qualifications for the winch operator. These guidelines shall be used while operating the winches and associated equipment on board the R/V Armstrong.

2. **Responsibility**
   The Master has delegated the responsibilities of deck operations to the Chief Mate. Such responsibilities include but are not limited to, ensuring that the winch operations are conducted under the control of a qualified winch operator. The Chief Mate, in working through the Bosun, shall have all winch operators qualified as set forth in this procedure.

   The winch operator is responsible for the proper operation of the winch and the safety of the personnel involved in launching or recovering equipment with the winches.

3. **General**
   The winch operator reports directly to the Mate on Watch. The Mate on Watch must be aware of, and supervise all work occurring over the side.

4. **Procedures**
   A. Prior to using the winch the operator will visually check:
      1. Inspect the winch checking for oil leaks
      2. Ensure that the level wind appears lined up properly (do not adjust without the Bosun, Chief Mate, or Captain)
      3. Ensure wire run is free from debris and possible fouling
      4. Inspect the wire drum particularly for loose or buried wraps
      5. Ensure all blocks and fairleads for proper rigging
   
   B. General winch operating guidelines:
      1. Confirm everyone is clear of the winch and wire pair lead before operating the winch.
      2. Bridge must give approval before launching or recovering any equipment.
      3. All personnel involved will have on appropriate personal protective equipment including hardhat, work vest and closed toe shoes.
      4. Be sure that those not involved remain clear of the area.
      5. Stop operations anytime of directions or hand signals are unclear.
      6. Do not run the winch unless sufficient tension is maintained on the wire to avoid loose wraps on the drum.
      7. Avoid sudden or abrupt winch starting or stopping.
8. Do not exceed the maximum winch speed. The Master establishes this for each cruise based on equipment weights and tensions.

9. Stay alert and attentive to the winch; do not get distracted with by-standers. Persons not directly involved in the operation shall not be allowed in the immediate vicinity of winch control booth/winch control station etc.

10. Record the maximum wire out and the maximum tension observed while controlling the winch.

11. Any time you are unsure of the safety of the personnel, or proper operation of the winch, stop operations and notify the mate on watch.

C. Requirements to be certified as a qualified Winch operator:

1. Orally demonstrate an understanding of the general operating guidelines and proper operation.

2. Complete and pass a written test administered by the Chief Mate.

3. Demonstrate an understanding of the pre-operation visual check.

4. Observe at least two launches or recoveries of equipment with the winch under the control of a qualified winch operator.

5. Demonstrate under the supervision of a qualified winch operator the proper and safe control of the winch during normal pay out and hauling back of wire.

6. Demonstrate under the supervision of a qualified winch operator the proper and safe control of the winch while both launching and recovering equipment in conjunction with the Stern Frame, SSHD, CTD LARS, or crane.

7. Demonstrate understanding hand signals used for launching and recovering.

4. Reporting

Upon completion of the above requirements to the satisfaction of the Chief Mate, recognition of having become designated as a qualified winch operator shall be entered in the individual's training record and personnel record in NS5.