

National Science Foundation Wire Pool

Policy for the loan of tension members

Introduction

Tension members are frequently requested by research vessels in the UNOLS fleet. With NSF approval tension members are distributed for long term use with the understanding that they will be properly maintained by the institution that receives them and that their use and maintenance will be documented in the Wire Pool database. In these situations, the responsibility rests squarely with the institution that receives the tension member.

On occasion, tension members are loaned for shorter term use. In those situations, the responsibilities for maintaining and documenting the cable history are shared between the borrower and the Wire Pool. This document seeks to define the responsibilities which must be adhered to when a tension member is borrowed from the Wire Pool.

Loan requests

Requests to borrow a tension member from the Wire Pool shall be submitted in writing to the Wire Pool manager. The request should include the following:

- Requestor's name, and contact information including an email address and phone number
- The preferred type of tension member and minimum length required
- The maximum length the winch drum can accommodate
- If the wire is to be used by a third party (as in the case of a loan to a Winch Pool): the users name, PI's name if different and project name
- Name of the vessel on which the tension member will be used
- Cruise dates
- Date the tension member is needed by the borrower
- Date the tension member will be returned to the Wire Pool

Tension members will be loaned by the Wire Pool on a best effort basis. The Wire Pool will seek NSF approval if a suitable Wire Pool tension member is identified.

If a tension member is to be used on a Winch Pool winch, the Winch Pool will be considered the borrower. Otherwise, the borrower will be the individual designated as the requestor on the loan request.

Break tests

It will be the responsibility of the Wire Pool to conduct a break test on a sample from the working end. A break test should be conducted if one has not been done in the past 12 months or if a previous test will be more than a year old when the tension member is returned. The Wire Pool will notify the borrower if a break test is required. It is the responsibility of the borrower to send a sample from the working end after the tension member is spooled onto the winch. The most recent break test will be provided to the borrower.

Electrical and optical testing

The Wire Pool currently has limited expertise and capability for testing the electrical and optical properties of cables. The Wire Pool will provide results obtained from megohmmeter testing but it is the responsibility of the borrower to test the electrical and optical properties to make sure the cable will be suitable for the intended application.

The borrower is to provide a post-cruise report on the electrical and optical properties of the borrowed cable at the time of its return. It is the responsibility of the borrower to provide this information to the Wire Pool.

Returning a tension member to the Wire Pool

The borrower should notify the Wire Pool as early as possible if the tension member cannot be returned to the Wire Pool by the date indicated on the loan agreement.

At the conclusion of its use, the tension member is to be off-spoiled by the borrower and returned to the Wire Pool. The Wire Pool will end-for-end the length during which the cable will be inspected, lubricated, and stored for the next user. When logistically possible, every effort should be made to complete these post-cruise activities at the same time the borrower is removing the cable from the winch.

Wire use log

When the cable is returned to the Wire Pool it should be accompanied by a wire log containing the following information:

- Minimum sheave diameter used in the wire train from winch to water
- Number of deployments
- For each deployment:
 - Maximum payout
 - Maximum tension
 - Wire out at maximum tension
- When applicable, the post cruise report on the electrical and optical properties

The Wire Pool is responsible for entering the information provided into the Wire Pool Database.

By accepting a loaned cable from the Wire Pool, the borrower is agreeing to comply with these stipulations.