



# Update from the National Science Foundation Wire Pool

Rick Trask, *NSF Wire Pool Manager*

# **The Wire Pool supports the tension member needs of the US Academic Research Fleet**

**Maintaining an Inventory**

**Coordinating Requests**

**Conducting Break Tests**

**Maintaining a Wire Database**

**Providing support to the RVOC Safety Committee**

# Inventory and Distribution of Tension Members



## Inventory

- One Wire Pool, 2 storage locations
- Inventory of commonly used tension members
  - Wire Ropes: ¼", ½", 9/16"
  - Cables: .322" EM, .680 Coax, .681" power optic
  - Synthetics: 9/16" Plasma HiCo

## Distribution

- Process requests for new and used tension members
  1. Field all requests (via email or on-line request form)
  2. Availability of requested tension member
  3. NSF approval
  4. Arrange for shipping to a domestic port



# TENSION MEMBER TESTING

Barbara Callahan  
Wire Testing Coordinator  
Assisted by  
Ellen Roosen





# Tension Member Testing

- Mandated by Appendix A of UNOLS Research Vessel Safety Standards
- The Wire Pool is funded to test your wire rope, cable and synthetics.
- Process for getting your wire tested & in the queue:
  1. Submit a break test request via the database.
  2. Send your sample with at least **one end terminated with the fitting used in the field.**



# Tension Member Testing



.322" Cable



9/16" 3 x 19 Wire



1/4" 3 x 19 Wire



.680" & .681" Cable



# Tension Member Testing



.322", .680", .681" Cables E-Kink Test



1/4", 3/8", 9/16" 3 x 19 Wire Rope  
Mandrel Wrap Test

- Evaluation
- Recommendation

# Wire Pool Database

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Database Administrator

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- **Manage wire and cable assigned to your Institution's vessel(s)**
  - Update wire status (e.g. 'In use' or 'Stored')
  - Manage Safe Working Load (SWL) information for cable and wire in use or onboard a vessel
  - Report events (lubrication, cutback/re-termination, splits, end-for-end, document uploads)
  - Submit break test requests and view results/recommendations
- **Other Features**
  - Request wire or cable from the Wire Pool
  - Add a tension member to a vessel (report a reel)
  - Break test request
  - Disposal request
  - Add new users (full access or read-only)
  - User-centric



# New Developments Currently Underway

- Wire Database originally developed using the platform Cold Fusion
  - No longer well supported
- Converting the database to the web development platform Django
  - Slightly different look
  - Same functionality
- Recently took possession of a new wire spooler built by Hawboldt Industries
  - Thanks to Jim Holick for funding and Aaron Davis for engineering expertise
  - Commissioning by the manufacturer planned for next month





# QUESTIONS ABOUT THE WIRE POOL?