Winch Monitoring for Increased Safety
...And Compliance with Appendix A

Installation Update

Presented by

Tom Rezanka
Managing Director

MEASUREMENT Technology
NORTHWEST
Equipment Installed

- **Group Purchase**
  - 9 vessels
    - 25 instrumented sheaves or blocks
    - 30 LCI-90i displays

- **Independents**
  - 8 vessels
    - 27 instrumented sheaves or blocks
    - 51 LCI-90i displays
Work In Progress

- Pelican
  - Computer interface

- Walton Smith
  - New force transducers ordered

- Nathaniel B. Palmer
  - Equipment delivery April 29th
  - No installation
    - Tech trained at MTNW

- SCRIPPS
  - Upgrade
    - Standardize to fleet wide firmware
    - New Horizon, Sproul: May 18th
    - Melville: June 8-10th

- Thompson
  - Upgrade spare
Calibration Results

- All winches except one were calibrated to Appendix A tension specifications

- All winches calibrated for payout

- Tension calibration tools
  - Analog dial dynamometers are most common
  - Digital dynamometers are a better choice
    - Tied to deck with cleats
  - Calibration weights the best and safest
    - Concrete/railway wheels/water bags
Sample Data

- R/V Wecoma, Oregon State University
- CTD Winch
- Wire = 0.322”
- Calibration Full Scale 5000 lbs
  - Load Pin full scale of 17,682 lbs
  - Only using 28% of sensor’s range

<table>
<thead>
<tr>
<th>DYNAMOMETER</th>
<th>LCI-90i LBS</th>
<th>ERROR LBS</th>
<th>% ERR (FS)</th>
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<td>2</td>
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RUN AVERAGE %: -0.04
For additional information, please contact:

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