Subject: List of Caley maintenance items

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To: "Stan Winslow" swinslow@soest.hawaii.edu

Stan, Here is the list of maintenance items for the Caley we discussed yesterday. I'll keep track of what's done and send an update before the March period.

## Parts needed before March 23:

- 1. 3PS load pin, ordered, scheduled to arrive March 16 from Texas [tension readout failed, load pin delivered with system not working].
- 2. MRU housing, contacted Prevco vendor in AZ, in stock should arrive late Feb.  $\,$
- 3. Replacement for the nylon fairlead, will work with Bear Machinery in Kaneohe.
- 4. Modify the lifting bail on our old CTD rosette frame to be compatible with docking with bottles installed, work with Mario or Bear.  $\,$

## Items to be finished in the March 23-31 maintenance period:

- 1. Install load pin and load cell amplifier, calibrate and verify tension readings.
- 2. Install a water tight housing for the motion reference unit (MRU) for heave compensation.
- 3. Install replacement fairlead.
- 4. Replace missing proximity switches for end of travel on the level wind.
- 5. Demonstrate heave compensation both pier side and at sea, if time permits we will test with the MRU relocated to the crane pedestal.
- 6. Test and demonstrate docking, tune up the auto rendering control to speed up the response of the wire to the motion of the crane.

## Items to be addressed after the March maintenance period:

- 1. Coordinate with Jeff Snyder to make a modified lifting bail for the HOTs rosette frame.
- 2. Line counter slipping when paying out in shallow water, discussed moving the line counter to the sheave by the knuckle or fabricating and installing another line counter between winch and crane.
- 3. Order and install a replacement winch motor with brake and encoder. looking at motors from Parker, Allen Bradley, Baldor.
- 4. Order spare sensors for the docking head LVDT, RVDT.
- 5. Order spare Eurocard amplifiers for valves on boom, slew, jib, and tele.
- 6. Eliminate or find suitable replacements for the discontinued Sun Hydraulics valves on the docking head.