Summary of Engineering Activities:

Transit 356T and Tie-Up Period JULY 2015

Mike Meiring

Tensiometer

- 1) Wiring diagrams for JR System installation as built were requested and received from vendor. P:\2-Engineering Files\VIT\WEIGHT INDICATOR
 - a) LCI90iGIM E01R0
 - b) RL05-25mm-STD
 - c) RL05 E01R0
 - d) Hall Effect2.pdf
 - e) Hall_Effect1.pdf
 - f) L-1084 System Overview.docx
- 2) Changed Counter supply, CNT V+ (GREEN) to TB6 (+12), TB62 as per wiring diagram.
- 3) Confirmed that both tensiometers, S/N 354 and S/N 355 were functional and ready to be calibrated.
- 4) In line reference scale was locally calibrated and certificate issued.

RIS

- 1) Pipe-Counter:
 - a) Replaced mounting bracket for Pipe-counter enclosure
 - b) Attached j-box to house sensor/cable terminations.
 - c) Lined-up optical sensors with reflectors and adjusted sensitivity.
- 2) Standpipe Pressure.
 - a) Replaced failed Pressure Txd.

Type: VIATRAN, #510BMSX1504

0-6000psi, 4-20Ma

Pin A +Pwr/Sgn

Pin B -Pwr/Sgn

Ordered new TXD from Viatran.

3) Tracer pump:

Complaints that Startech serial device in mud-pump room locks up Rigwatch. We have a "Black box" serial server on loan from Bill Mills to replace Startech. If successful, replace Bill's box.

SETP/SET

1) Confirmed both tools are serviceable for Exp-359. New batteries are available.

VIT

- 1) Removed, Pod S/N 02 from frame and returned wiring and devices to normal.
- 2) Confirmed Pod S/N 01 was wired and configured normal.
- Removed Frame j-box and drilled compression gland out to fit Cortland pigtail diameter.
- 4) Removed Winch- and Reel j-boxes from winch and frame and prepared for Cortland cable installation.
- 5) Confirmed Optical measuring and splicing equipment are serviceable for Cortland cable termination.
- 6) Suggestions from Siem regarding new Telemetry:
 - a) Cameras for re-entry and survey should have similar light sensitivities.
 - b) If bandwidth allows, then re-entry camera should be HD to.
 - c) Potential issue with Sonar operation. Could be operator related, but have to discuss with opposite crew. Training may be necessary.
 - d) Add thruster to turn frame.
 - Currently ship has to be maneuvered to change view direction of re-entry camera.
 - ii) Unwrap cable from pipe.
 - iii) Significantly ease navigation to re-entry cone.
- 7) Only one spare outlet available on current pod endcap and only one HD Cam outlet available. Kevin redesigned end-cap with 3 x HD Cam outputs and 7 x Standard outputs.
- 8) Ordered coaxial connectors for HD Cam pressure vessel.
- 9) Terminated the spare Opto/Electro connector and pigtail to Frame j-box. Terminated the used Opto/Electro connector and pigtail to test-box in Sub-Sea. New connector/pigtail assembly on order.

MDrive23 servo motor interface

1) Designed circuit for TAS including PCB to interface new servo motor control lines to Labview control application.