

SIKULIAQ Technical Activities

AICC January 15th 2020

USCG Seattle



Photo Curtsey @iceinmotion

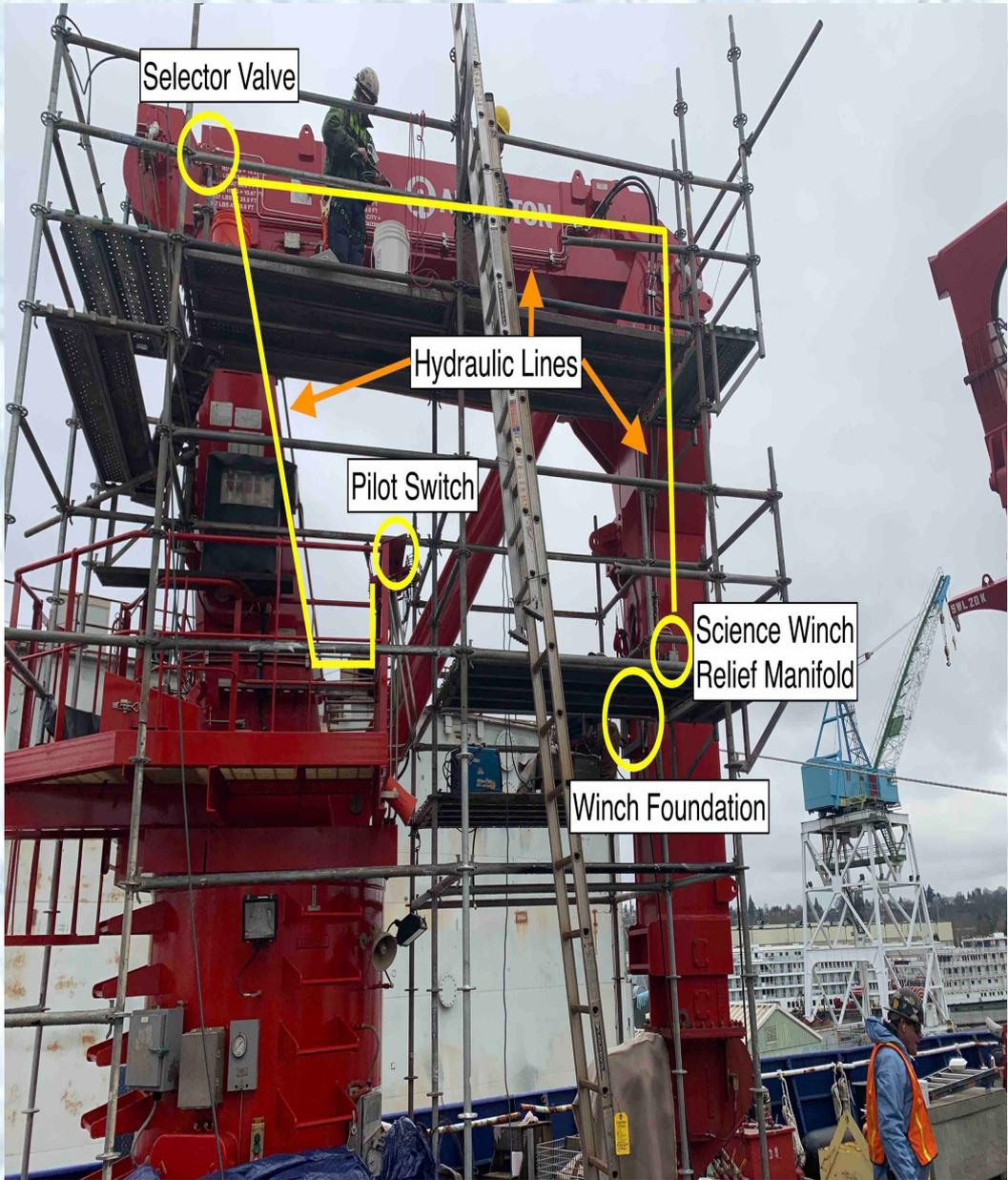


2019 – Shipyard Portland Oregon

- Rapp Traction Winch Take Up Drum Modification for Fiber Optic Slip Rings
- Lubrication of Tension Members
- Upgrade of EK60 to EK80 (GPTs replaced with WBTs)
- Installed EK80 Calibration Down Riggers
- Added 4-24 Hz Transducer to the Centerboard
- Modification of Starboard Crane for Underwire Winch installation
- Sonar Ice windows were removed and arrays inspected

- Reorganization of Network Topology
- Added Load Balancing across HSN and GX
- Built new SDAR USB Pocket Drive Copying Computer
- Installed new MapServer Hardware
- Upgraded MapServer with the latest Debian OS and Open Street Maps
- Updated the archive multibeam layer with data from NGDC and JAMSTEC
- Installed Thales Vessel Link (Iridium Certus)





2019 – Sailing Season

- Patch Test EM302 and EM710
- Added a second HSN C-band Antenna During Port Call in San Diego
- Commissioned Secondary HSN C-Band Antenna During Seward in Port
- Calibrated EK80
- Installed SeaTel Arbitrator
- Repaired Guide Wheel on CTD LHS
- Added Underwire Winch to Starboard Crane
- Upgraded 9/11 CTD with Auxiliary Serial Channel
- Testing IP Radios for Ship Operations



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2020 – Technical Plans

- Install new Traction Winch Sheaves
- Install .681 Fiber Optic Cable on RAPP Traction Winch Take Up Drum
- Lube Tension Members
- Add remote Joy Stick for RAPP Winch Operations
- LHS trolley Alignment/Groom – RAPP
- Repair Docking Head Hydraulic Cylinders – RAPP
- Service Brake Bands and Cylinders on Rapp Drum Winches
- Expand Wireless to Support TCP/IP Radios
- Install UHF-TCP/IP Bridge
- Upgrade Underway Raspberry PI Infrastructure

- Change over to Tekron Time Servers
- Include GNSS Raw Phase Data into SIKULIAQ Data Distribution
- Include Bridge Cam Data into SIKULIAQ Data Distribution
- Replace long and short wave Radiometers (ott hydro met?)
- Submit Proposal to NSF for Network Refresh and VM Cluster

**Spooling on .681 Cable onto SIKULIAQ
West Coast Winch Pool
January, 11 2020**

