SALSA On Ice Report: 01-07 November 2017

SALSA Drillers on Ice: Dar Gibson, Graham Roberts, Dennis Duling, Joshua Mehlin, Justin Burnett, Ed Krula, Anatoly Mironov, Bob Zook

Other team members on Ice: Bob Zook, Ryan Venturelli

Drill Team Update by Justin Burnett

November 1:
• Arrived on ice (Justin Burnett)
  o In brief and bag retrieval
• Located and setup hot water drill control computers for overnight battery charge

November 2:
• Morning Spent in Core training sessions, and environmental field safety training.
• Afternoon spent locating, unpacking and transporting drill control enclosures and motor controllers to Reel Container Unit
• Sorted through PLC control inventory in command and control unit.
• Set up PLC and RCU control enclosures in Crary lab, started RCU enclosure UPS charging overnight

November 3:
• Identified the following drill control computer problems:
  o Drill control computer 1 (Nickname: Arnold)
    ▪ Drill control software (Rockwell Software View Client SE), fails to load, reading the following error: “The product you are using requires personalized information which could not be retrieved. Please contact Rockwell Technical support”
      o Attempted to contact EAD Controls, the vendor for this software, via email and phone during business hours. Received no helpful response
    ▪ Windows 7 Enterprise license has become invalid. This is likely the result of an infield reinstall performed in 2015 after system crash
      o Updated license succesfully
  o Drill control computer 2 (Nickname: Danny)
    ▪ Drill control software fails to start load The product registration has expired
      • Online activation of the product was denied. This is due to a field reinstall taking place in 2015, where the old product serial number was never released in Rockwell’s database.
November 4:

- Day begins by calling EAD Controls (software and controls vendor) for technical support regarding the two different critical failures of Rockwell Software View Client SE, on both control computers
  - No one answered, nor returned a call despite being given specific instruction on how to do so. No email response was received in this time either.
- Called Rockwell Technical support directly (This is normally the responsibility of the vendor, EAD).
  - In response to the inactive license on Computer 2, the existing license was released.
    - Activation file was downloaded and installed. The control software now seems to work as expected. Connected drill control computer to PLC, and verified communication and proper function.
    - This issue is documented by Rockwell Support Ticket # 4006643866
  - In response to the system killing error “The product you are using requires personalized information which could not be retrieved. Please contact Rockwell Technical support,” the support center advised that this is a known problem, addressed in knowledge base technote 471166
    - This issue is documented by Rockwell Support Ticket # 4006644022
    - Downloaded the recommended patches (several) to be completed overnight (these were large files)
- Discovered main PLC (Command and Control Panel, EP1) has faulty 24V power supply. Retrieved power supply form HPU1 enclosure stored in SSC DNF storage.
  - Replaced and checked out panel voltages

November 5:

- Installed rollup patch suite to Drill Control Computer 1. Observed control software successfully load.
- Verified both control computers successfully connect to PLC
- Noted Drill Control Computer 1 (Arnold), failed to load RSLinx network utility
  - Attempted backup/restore procedure, this had no effect on the system function
  - Suspect persistent Ethernet adaptor hardware troubles. Unable to successfully resolve issue, but the computer is communicating with the PLC network and appears to be capable of full system control

November 6:

- Morning was spent hanging the remaining drill control enclosures.
  - The primary control enclosure needs to be installed in the RCU building, with new networking and power cabling, as it was previously located in the C&C module which will not be traversed.
  - Identified an unused 120VAC circuit and began hardware and cable routing
- Afternoon was spent in Antarctic Field Safety Training course
• The rest of the day into the evening was spent helping Bob Zook unpack and inventory the Deep SCINI equipment

November 7:

• This day was dedicated to an all-day sea-ice training course