Magnets

- Solenoid and Torus recovered after multiple failures on 4/1/2018.
  - ✶ Failure 1: Torus fast dump caused by Ethernet/IP module failure.
    - Ethernet/IP module failure caused I/O Fault on PLC controller.
    - I/O Faults will cause PLC to stop its program, in turn causing a fast dump.
    - Torus PLCs recovered after power cycling remote and local PLC chassis.
  - ✶ Failure 2: Solenoid fast dump caused by induced voltage in Solenoid coil 5 from Torus's fast dump.
    - Induced voltage tripped QD1:Ch1-upper
    - SOE module gave no indication of trip sequence as module still displayed old trip data because of an issue with the module's reset.
  - ✶ Failure 3: Torus FastDAQ cRIO failed; cause unknown.
    - cRIO not able to be connected over network or run program, but cRIO could boot in safe-mode (fourth time magnet cRIOs have had this failure).
    - cRIO replaced with spare 9067 model cRIO.
    - PR submitted for replacement 9045 model cRIO.
  - ✶ Failure 4: Solenoid FastDAQ cRIO died; cause unknown.
    - cRIO not able to be connected over network or run program, but cRIO could boot in safe-mode (fourth time magnet cRIOs have had this failure).
    - cRIO replaced with DSG's spare 9035 model cRIO.
    - PR will be submitted for new 9045 model cRIO.
- Differential probes and oscilloscopes connected to Solenoid Quench Detector (QD) #2 Channel 8 to monitor voltages at QD board.
  - ✶ Oscilloscope #1 monitors output to QD unit for QD #2 Channel 8.
  - ✶ Oscilloscope #2 monitors signal input to QD board for QD#2 Channel 8.
  - ✶ Webcam and oscilloscope network connections set up for remote monitoring.
    - Webcam hostname hallbcam09.jlab.org.
    - Oscilloscope assigned hostname hb-oscope with IP address 129.57.96.41