The MINERνA Operations Report
All Experimenters Meeting

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July 8, 2013

MINERvA Shifts

- Running weekday day shifts for about 5 – 8 hours
  - Since the CROC-E installation, we had been having experts run the DAQ, but now were are having shifters running the DAQ using Run Control
  - All FEBs & PMTs (front end boards) operating
- We will run 24 hour shifts when start we get NuMI beam

DAQ Upgrade

- With old CROCs, the DAQ needed 3 computers. The CROC-E DAQ is fast enough that the DAQ needs only 1 computer
  - We are taking data with 1 DAQ computer
  - LI system requires 2 serial ports (2 LI boxes) but the DAQ computer only has one.
    - In the short term will use the 2d DAQ computer, which now does not take data, along with the DAQ computer to configure the LI system
    - In longer term, solution being discussed

New DAQ Computers

- We will be replacing 3 DAQ computers with 4 DAQ computers.
  - Right now, old DAQ computer in VETO rack takes data
- We installed 2 new computers in the DAQ rack.
  - Not turned on, we will get the ORC for turning them on this week. Then, they will be configured to run the DAQ.
- We will wait until the new computers in the DAQ rack can take data before we install the 2 new computers in the VETO rack.

Online Monitoring

- 4 new computers are ready for the 12th floor control room
  - All the online software will be installed on them this week.
  - We may only use one computer for the online monitoring
- Online monitoring of PED and LI
  - The DAQ now takes data so fast that it fills up the online monitoring que
    - This creates a problem for the stand alone PED and LI runs. For the moment we will slow them down
  - Not a problem with beam data as we only take beam triggers when every 1.7 seconds, eventually 1.3 seconds

PMTs

- Our PMT Box test stand in Lab G is full operational.
  - Tests cross talk & light tightness of PMT boxes
- Previously, we pulled tubes off the detector with the HV varying problem. (HV from
  - Took 3 PMT boxes with this problem & replace the base and inner cables
  - 2 pass test stand QC, third needs further investigation
- Jun 27, we replaced 2 PMT boxes
  - Important as training for people to replace PMT boxes on detector.
    - Steve Chappa, Roberto Davila, & Kevin Kuk
  - Need to finish testing last box to install it
- Then, use setup to test & repair other PMT boxes

Muon Monitor 4, MM 4

- The PPD division has given MM 4 electronics rack its ORC
  - Need to get AD signoff.
  - With ORC we can power up the crate and try to read it out.
    - It is one of the new SWIC scanners with ethernet readout
- All the readout & HV cables are installed in the alcove
  - Not yet cabled up, but will not take long to do this
  - Before we cable it up we want to finish the leak testing in the gas system in the alcove
    - The ORC required moving some of the gas lines
    - After the gas system is checked we will cable up the system.
    - Check for electronic noise in the system,
    - We have setup the electronics & cabling to hopefully have less noise than MM 1, 2, & 3.

MM 4 Gas System

- The gas system is being built at University of Texas, Austin
  - Want MM 4 to have same gas system as MM 1, 2, & 3.
  - 3 to 4 weeks to design and manufacture the parts
  - 1 to 2 weeks to install the system, get it working, and start flowing He.
  - We do not need to get into the Alcove to do this
- We can test MM 4 with nitrogen, before the gas system is installed
  - This is how they were tested at Austin.