Work on the SSD for the summer of 2007

Version 2 - March 19, 2007

The assumption for this document is that the SSD will be reinstalled if the SVT is removed from the detector.

Scenario I. The SVT Cone is removed from the detector.

1. Remove the SSD and cables (Three days to do this. Need a SUBATECH Engineer. Getting this effort will take time and planning. It is absolutely essential to preserve the SSD for future use.) We want to train a BNL technician at the same time to understand the SSD cabling.

2. Test each ladder and make possible repairs (several weeks)

3. Replace the two worst ladders with the two spare ladders.

4. Reinstall Detector (1.5 weeks. Need SUBATECH engineer. This includes testing time with DAQ. Need experienced expert for testing.

5. Check cooling system. Look for kinks. Maximize airflow on reinstallation. The SVT cables probably produce the present problem with the cooling. (There was no cooling problem before the pole tip was reinserted.) It will be much easier to this task without the SVT cables and cooling.

Scenario II. The SVT is NOT removed from the detector.

1) Check cooling system. Look for kinks. Maximize airflow.
2) If the SVT is not being used, remove cables which restrict airflow
3) If move cone out, we can make minor repairs to the ladders.
4) Can access the ADC boards without moving the cone.

Things to be done in any case

1) Fix L2 abort problem. Need 1 DAQ expert, FPGA expert and someone to run and test the SSD. Probable time to do the task 1 month. Can we send a spare DAQ system to SUBATECH?
2) Need expert to start working on prototypes for the DAQ1000 upgrade of the detector
3) Minor changes in the Slow Control interface to simply maintaining the detector.
4) Move Slow Control interface for compressor from SVT to SSD.
5) Prevent the SSD from operating, if air compressor is not on and working. (Check to see if this is already implemented.)

6) Obtain spares for the CAEN crates and controllers.

If the SSD is not used next year (this is not a case that we want to plan for)

1) We need to find a safe place to store the SSD so that it will not be disturbed
    a. Temperature controlled
    b. People controlled – limited access
    c. Dust and dirt controlled
    d. Place where SSD personal can work on detector
2) We need to train people on installing the detector
3) R&D on DAQ1000 must be done