SVT Noise Test in Hall B

Brian Eng
Detector Support Group
SVT Noise Test in Hall B

• Line item on DOE schedule that must be completed before end of FY 2016
  - Required moving SVT and services from EEL clean room (EEL/124) to Hall B, then back again after test
  - Multiple groups involved: DSG, Hall B Physics, Hall B Engineering, Fast Electronics, ACE
DSG Activities

• De-cable SVT in EEL/124
• Moving equipment from EEL/124 to service cart
• Installation of N\textsubscript{2} purge in Hall B
• Cabling of SVT in Hall B
• Noise Test
• De-cable SVT in Hall B
• Move equipment from service cart to EEL/124
De-cable SVT in EEL/124

Brian Eng

Marc McMullen
Service Cart

- Designed by Hall B Engineering
- Required some modification by DSG
  - Cutting equipment trays
  - Drilling holes for cables
- Installed equipment

Marc McMullen  Brian Eng  Sahin Arslan
N$_2$ Purge Installation

Sahin Arslan installing piping

Mass Flow Controller and Regulator
Computer Setup in Hall B Counting House

- EPICS Slow Controls screens
- Interlock Screen
Cabling SVT in Hall B

Mindy Leffel

Sahin Arslan

Friday, September 16, 2016
Noise Test

• Gain scans with individual logbook posting and parallel program
• Cosmic run taken
  • 3M events @ 11.5 Hz trigger
De-cable SVT in Hall B

• Disconnect cables from crates
• Re-bundle by module
Reconfigure EEL/124 for testing
Lessons Learned

• No change in noise level in Hall B compared to EEL.

• Cable management on service cart not useful
  ✷ Replace Panduit with cable tie downs

• Some cable labels not accessible
  ✷ Cables have already had labels added at end connection

• Patch panel time consuming to reconnect
  ✷ Replacing jumpers with solder connection where possible
  ✷ Screw terminals good for debugging/testing, not so much for final use
    ✷ Already put in request for Hall B to provide funding to replace with connector PCB

• Successfully moved SVT to Hall B with no damage
  ✷ Hopefully won’t have to do it again until final move

Friday, September 16, 2016
Thank You