Solenoid I&C Meeting

Date: December 2, 2016 Time: 8:30AM – 9:00AM

Attendees: Mark Lester, Nick Sandoval, Ruben Fair, Scot Spiegel, Tyler Lemon

I. Discussed Cryo-con unit grounding issue and three solutions.

- 1. Cryo-con units and cable shields were not grounded.
- 2. Cryo-con support contact recommends grounding all sensor cable shielding.
- 3. <u>Solution 1</u>: Ground cables that are in place in Hall B by connecting drain wire of each individual cable at terminal block ground and isolating Cryo-con unit in rack.
- 4. <u>Solution 2</u>: Replace cables in Hall B with cables that were bought with Cryo-con unit that have metals connectors that will connect to terminal block ground.
- 5. <u>Solution 3</u>: Attach ground wire from rack rail to back of Cryo-con unit, grounding the unit and connectors attached. Cables in place in Hall B have connectors that are tied to its shielding.

II. Determined Solution 3 (from above) will be the course of action.

- 1. Mark Lester will install ground wires to all eight Cryo-con units used for Hall B Magnets.
- 2. We will monitor signals before and after ground wire installation to ensure there are no negative effects on signals monitored in Cryo-con.
- 3. If this does not solve issues, Solution 2 (from above) will be used.

III. Discussed Cryo-con clip error

- 1. I was not able to replicate clip error with Cryo-con unit.
- 2. Clip error could be caused by lack of ground reference (issue resolved) or by loose connections at terminal block.
- 3. I am stopping my investigation of error and will monitor Cryo-con signals.
- 4. If clip error remains after grounding, I will restart debugging error.