**Minutes of March 2 2020 ArgonCube2x2 Installation Meeting**

* Attendee: Jim, Tom, Andy, Min Jeong, Gary, Min Jeong, Steve and Ting
* Safety walk-through observations and responses
  + Steve responded the 5 observations from the safety walk through done at Feb 14.
  + Correction/notifications were made for point 1,2,3,5 - garbage overflowing, ladder use safety, chrome plated wrench sockets and loose garden hose.
  + We need to design replacement handrails to address observation #4
* Replacement handrail for minos catwalks
  + The old ones can not be found anymore. We need to design a set of replacements
  + It looks like we are missing handrails on both east and west. East side is for sure. Need to confirm the status on west side
  + Jim is in the process of design a replacement set.
  + Safety requires the rail to handle 200 lbs load.
  + Jim to report back on design status
* MINOS electronics disassembly
  + Steve gave a detailed plan on the disassembly -- see his slides
  + He has a list of things we will save (in green color ) and we will discard (red color)
  + Cables to be saved: Ethernet cables, serial cables from VME crate and computer, HV cables from distribution cards
  + We also want to save Alner PMT boxes, cable trays, wiener PS, LeCroy HV PS, BiRA RPS and switchboxs, and racks
  + Optical cables from scitillator to PMT boxes need to be cut or disconnected in order to allow detector planes be removed
  + Cable trays need to be removed as they are attached to the racks
  + Steve to complete the HA for approval
  + We have some discussions on when and where to move the racks:
    - Storage space or staging area for those racks are a concern.
    - We can either use MSB or MSB upstream space
      * MSB will be quite crowded during plane removal stage
      * upstream MINOS hall will be freed after plane removal
    - Jim has special tool/crane basket to transfer 4 racks at a time through shaft
    - We will discuss this more. Likely, we will leave the racks on catwalk and move them after MINOS planes being removed.
  + We will need more discussion on manpower requirement: students/postdoc and electrical technicians
* Magnetic coil disassembly
  + Jim and Tom propose to cut the coil frame to 10ft pieces before taking them out through shaft
    - The 60' long frame will cut lose from both downstream and upstream end first so they can be pulled out from insertion hole
    - We will pull out the top piece from the plane insertion and cut them into 10ft pieces
    - We will do the cutting using an electrical reciprocating saw Tom has
      * The saw is from UNITEC model 512150070 -- Tom brought the manual to the meeting
      * The saw weights less than 8kg
      * The saw can handle easily the frame which as a cross-section about 9"
      * Tom claims the saw Has little back-kicking
      * We can support the cut piece either by hooks from crane or a table jack
      * The saw is being used at the lab for other project
    - Tom and Jim will write a new HA to replace HA2130 which will discuss more next time
* AOB:
  + We discuss the need to cover the storage rack as more modules are to be put there soon for argonCube use
  + We expect to start save modules starting module set 5 (MS5)
    - Howard will select the starting set and let the crew know
    - we will save 22 modules from tracker section, 10 e-cal modules and 8 or more h-cal modules
  + Next meeting is March 16 which we focus on HAs from MINOS electronics disassembly and magnetic coil removal.