

MINUTES OF THE WEEKLY WA104 TECHNICAL MEETING – 18/10/2017

Convener at FNAL: Claudio Montanari

Present at FNAL: Bill, Steve Dixon, Dino Franciotti, Fernanda Garcia, Cat James, Alberto Scaramelli, Peter Wilson, Andrea Zani

Present on Vidyo Connection: Sandro Centro, Alberto Guglielmi, Gian Luca Raselli, Filippo Vercellati

The Indico page of the event is: <https://indico.cern.ch/event/673925/>

Montanari introduces the presence at FNAL of Scaramelli and Franciotti, arrived to help on technical infrastructure and matters like power and temperature distribution, i.e. how to distribute and remove the heat-power produced by the TPC electronics.

Montanari then reports that he had a discussion with M. Chalifour and J. Bremer at CERN concerning two main items: (i) adding a warm gas line to the system, to be able to re-pressurize the cryostats; and (ii) interferences on the north side of the building between the CRT and the cryogenics. The details of the discussion will be reported directly to Barry Norris and Mike Geynisman, in order to iterate on that. Finally Montanari recalls that Centro and Guglielmi will be at FNAL in two weeks from now, to have a discussion with Steve Bryce concerning the internal SBN organization.

Zani reports on the intervention performed of the cathode panels of the T600. The check on the screws holding the panels went well, and fallen screws were recovered and put back in place. A detailed inspection was also carried on, and minor issues were found and addressed already. In particular 4 PMTs on vessel #1 have the corresponding calibration optical fiber not pointing correctly towards the centre of the PMT window. Raselli will provide the layout of the PMT installation, to identify (in terms of serial number) the tubes interested by this. Zani finished by listing actions to be performed before sealing the man-holes:

- Install resistors on the race-tracks.
- Re-position the level meters at the top of the detector. They are used to measure the liquid level and tell us when to stop the filling (they were moved to allow detector insertion into the cold vessels).
- Remove the ladders used for access.

Montanari adds the two following operations to be carried out inside the vessels:

- Install the pipes needed for the liquid circulation.
- Help pulling out the cables connected to corner and horizontal wires.

Steve Dixon discusses logistics in the FD building. He summarises requirements for electrical and cryo power, as well as what is actually installed (with schematics to show the disposition of the hardware). James notes that CRT power is on the building (not detector) system. After that, he summarises the cooling and ODH requirements, as well as installed hardware. It is agreed to follow up on this with a tour of the building with Franciotti and Scaramelli, in order to check on what may be missing or to be changed.

Before closing, Montanari reminds that work on the integration of 3D models is always ongoing, concerning all subsystems (CRT, TPC, grounding, power, cryogenics). Few details still need to be clarified, concerning the power distribution: Montanari expects that Centro and Braggiotti will work soon on defining this.