

LG 07/25/2006

Task List for HFT Test Installation at BNL August 2006

The following is a task list for the August installation of the infrastructure needed for the HFT test to be run in the September timeframe. This list is generated from the HFT September Test Description document which can be found at http://www.lbnl.leog.org/sept_test_description.pdf. The installation and final installation times and dates will be coordinated by Howard Wieman.

Space:

- Locate space on the platform for 1 control PC, 1 network controlled AC power switch (proximate to control PC).
- Locate space for cooling vacuum cleaner.
- Locate space in DAQ room for DAQ PC (proximate to the fiber optic patch panel)
- Locate space in cable tray or approved path to run cables from the detector to the platform.
- Space locations should be checked for suitability with Ralph Brown and appropriate subsystem managers.

AC power:

- Locate and install a network controlled power switch.
- Locate sufficient clean power for control PC, network power switch.
- Locate sufficient dirty power for cooling vacuum cleaner.

Network:

- Locate a subnet that is available for our use and has 4 available IP addresses. This network needs to have ports on the platform and in the DAQ room.
- Locate 4 network cables that of sufficient length to make the required connections (see the HFT September Test Description document).
- Install the network cables and test connectivity and function.
- Clear all cable runs and network connections with Ralph Brown and the STAR network coordinators.

TCD:

- Locate a TPC TCD cable in the vicinity of our insertion tube.
- After checking with Blair and Jack E., remove the terminator from the end and attach the extender cable.
- Place the terminator on the end of the extender cable.
- Be sure that the extender cable reaches to the positions of the motherboard / Stratix box both insides and outside of the magnet.
- Ask Blair to check the function of the TPC area.

Insertion tube:

- Test assemble the insertion tube without gluing it together.
- Test the insertion of an empty detector carrier with the push rod.
- If the assembly is functional as it is, glue the assembly together. If not, modify it until it is and glue it together.
- Align the insertion tube into the cone area and check with Ralph Brown and Howard Wieman as to the suitability of the location.
- Epoxy the tube into place using the glue ports on the feet.
- Locate an appropriate place for the shielding box containing the motherboard / Stratix board.
- Test fit the shielded box to that location and check for good cable runs to the detector and to the platform.
- Install the box, first checking with Ralph Brown as to location and attachment mechanism.

Power cables:

- Danny Padrazo has made 2 power cables. The short one is to be used for power when the motherboard / Stratix board is located inside of the magnet. The long one is to be used when the motherboard / Stratix board is tested outside the magnet. The power cables need to be attached to the appropriate MWPC power supply cable ends. The MWPC will need grounding cards inserted into the area where the power has been removed. Danny will be able to help with this. Check the length of these cables and install in the configuration needed. Check all cable runs with Ralph.

JTAG, Latch up and Serial Cables, vacuum hose:

- The JTAG, Latch up and Serial cables run from the motherboard / Stratix box to the platform control PC. There consist of CAT5 type cable, flat ribbon cable and USB extender cable. These cables should be run from the control PC on the platform through cable trays or in an approved manner (again, please see Ralph) to the location of the motherboard / Stratix box. They should be arranged so that they will reach both when the detector is mounted outside and inside the magnet. The vacuum hose should run from the location of the vacuum cleaner to the end of the detector assembly. It should be long enough to reach the detector when it is placed in either of the anticipated places. Check the route with Ralph.

Fiber Optic Cables:

- There is a fiber optic patch panel that runs between the platform and the DAQ room. Locate the ends that we can use (see Danny Padrazo) in both places. Measure the lengths of jumpers needed to reach from the DAQ PC in the DAQ room to the patch panel along an approved route (see Ralph, Jack E. and Jeff L.) to where we are locating the DAQ PC.
- Measure the same for what is needed to connect the patch panel on the platform to the motherboard / Stratix box. Locate or procure fiber optic jumper cables of the right length and install along approved routes. Test for functionality. Danny can help.

