

Minutes, 10/27/04 Tevatron BPM Upgrade Meeting
Stephen Wolbers

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The agenda as announced consisted of:

1. Report from Bob and Steve
2. Report from subproject leaders
3. Report from Technical Coordinator -- Jim Steimel
4. AOB

1. Report from Bob and Steve.

- Bob is looking at calibration issues, in particular the factor of 26 used to multiply $((|B|-|A|)/(|B|+|A|))$ to get from Echotek units to mm in space.

- Bob mentioned that Charlie Briegel is looking at the Tevatron-style Echotek board and had to make some unexpected makefile changes to link the new driver code. Margaret will talk to Charlie to understand.

2. Reports from L2 Managers

Tim Kasza:

- Time showed a photo of a crate+panels+cables in A3. This will be used to try out cable routing, connections, show people how the system will look for final approval, etc.

- Echotek testing. 136 boards have been received. 54 boards are either issued out or are ready for use. 50 boards are in the process of being tested. The 32 received on Tuesday will go into testing very soon. 15 boards are currently listed as "failed testing" for various reasons. Bob Webber will be working with Tim and others to classify/understand the failures and decide which boards should be returned to Echotek for replacement/repair. Mark Bowden will be our contact with Echotek on the exchanges.

- 600 pairs of filters have arrived (all of them!). Some more sample testing will be done. The results so far show some filters fail the tests -- mainly at the edges of the frequency spectrum and by small amounts. Up to now this is not seen as a worry.

- No new cables have arrived. Two shipments (2-foot and 6-foot cables) are shipping this week.

Vince Pavlicek:

- Four pilot filter boards are stuffed and ready for the test-stand and then for A3 for commissioning.

- The timing and filter board bids are out as of Friday October 22. Already receiving inquiries from vendors. The bid period is two weeks.

- Work continues on the timing board, finishing some programming, documenting production testing for the board, etc. Some discussions about how to add timestamps to the system have begun. More detailed discussions will occur at the Thursday meeting at 1:30.

- Nothing new from DAWN about the http/udp interfaces for the crate monitoring.

Margaret Votava:

- Luciano and Bill are working on the timing board.

- Turn by turn compatibility exists. Steve asked whether a real turn by turn test using fake input signals that move with time to mimic betatron or other oscillations has been done. This would be a nice test and it would be good to see a plot of the data coming from such a test.

Mike Martens:

- Jim asked Mike about the SDA requirements on the TeV BPM system. There was some discussion (Jean Slaughter also was there) about how SDA uses TeV BPM data. Jim will work with Mike and Jean to clarify.

Brian Hendricks:

- Brian is finishing up the SDA support.

- Worked with Luciano on timing board work.

- Bob asked about remote reboot of the VME crates. Vince will take on the responsibility of having someone talk to Craig McClure about what the AD standard is and/or how to implement something acceptable for operation of the system.

Rob Kutschke:

- Rob has learned from talking to Mark Bowden that taking square roots in the FPGA on the Echotek board is not a big problem and so there is no theoretical barrier to the scheme of computing closed orbits by averaging many turn by turn measurements.

3. Technical Coordinator -- Jim Steimel

- The B0 BPM connections should be made this week by Marv Olson.

- Jim is working on the "commissioning" outline that was presented last Thursday. Further discussion is set for Monday, November 1 at 11:00 A.M.

- Jim is thinking about changes to the teststands in FCC3 to prepare for commissioning A3 and then all the service buildings after that. He will coordinate any changes with the users of the teststands.

4. AOB.

- Will meet Thursday October 28 at 1:30 to discuss timestamps.

- Will meet Monday November 1 at 11:00 A.M. to discuss commissioning and modes of operation.

- Bob asked that diagnostics be given a fairly high priority in the commissioning activity.