

Minutes, 10/13/04 Tevatron BPM Upgrade Meeting  
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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.

- Abstracts for the PAC meeting are due on December 3, 2004. We had a short discussion of how many and what types of papers can and should be submitted for the TeV BPM upgrade. I think the consensus is that at least one (and probably more) papers should be presented. The project should discuss/coordinate to avoid duplication or to miss anything that we would like to see presented.

2. Reports from L2 Managers

Tim Kasza:

- Echotek testing. 74 boards have been received. Many of the boards have been run through the PREP tests. Tim showed the gain distribution for the first 42 boards. The average gain is 0.910 and the distribution extends from 0.895 to 0.945. (See AD doc DB #1381.) After some discussion we decided to accept boards with gains between 0.875 and 0.945 (0.910 +/- 0.035).

- Some boards had other problems, most with bad raw A/D results. This needs to be confirmed and classified. The project decided to spend more effort on these and less on testing new boards as they come in. We will review this next week.

- No new cable deliveries.

- The air dams are all here.

- The parts to upgrade/complete the two original Dawn crates are here. One of the crates is in the teststand and will have to be swapped out for upgrade.

- 427 pairs of filters have arrived. 10 out of the 40 filters tested failed the phase matching criteria. Upon a lot of further discussion this does not look bad enough to return those filters. The last 173 pairs of filters are expected soon. These will be sample tested and more statistics on matching will be available. The issue is not completely resolved.

Margaret Votava:

- 500 Hz readout has been achieved with 6 boards. Approximately 10% idle time is available.

- Working on turn by turn. Hope to have TBT within a couple of weeks.

- Discussed calibration and setup files. Wants to understand configurations and have some stability before December commissioning.

- Dave Slimmer will likely join the TeV BPM effort for some period.

Brian Hendricks:

- Had a meeting to discuss engineering diagnostics. Progress has been made and work is proceeding. Bob West and Luciano are working on some aspects of the diagnostics.

- Brian has made progress on the database infrastructure for the SDA data and it will be ready for the commissioning.

- Discussion about Dawn and the crate diagnostics. The lab is discussing various options with Dawn about the diagnostics, what is required by the bid/contract, what they might charge for certain capabilities, etc. Tune in next week for updates.

Vince Pavlicek:

- The timing card is close to being ready for fabrication. The few things remaining should be complete this week and this is being worked with procurement. Clearly this is a high priority and should proceed.

- The question of how to piggy back the transfer line timing board onto this order was raised. This will be pursued to enable the additional boards to be made as efficiently as possible.

- The filter board will go through an internal review, the PRR is updated, the final assembly drawings will be generated, and all of this will go to procurement soon. Again this should be a high priority.

- We decided to build 130 filter boards with all components. 20 boards will be assembled without the filters and attenuation. This gives us  $20 \times 8 = 160$  filters to use for commissioning and allows us to customize the 20 boards with any attenuation values that are required in some of the special locations around the ring.

- All 5 pilot filter boards should be fully assembled for use in the A3 commissioning and for test-stand use. The 5th (teststand) board may not need filters in all 8 channels. If possible sockets can be used to attach the filters (so they can be removed and attached to the final filter boards later).

Mike Martens:

- Mike is starting to write a user's manual for the TeV BPM system.

Rob Kutschke:

- Rob will be ramping up next week.

### 3. Technical Coordinator -- Jim Steimel

- A strawman plan for commissioning is the following:

A3-B3-C3-D3-E3-F2

B0-D0

A2-B2-C2-D2-E2

A4-B4-C4-D4-E4

A1-B1-C1-D1-E1

Last of all:

A0-F3-F4-F1

(27 Houses in total).

- We should install as much hardware as possible during the shutdown. Opportunities to get into the buildings will be much more difficult when the beam returns. Jim asked about rails, panels, cables, anything else that might be installed now - before end of November.

- Jim summarized his presentation from Monday.

- Jim proposed to reorganize the test stand area Thursday afternoon this week.

### 4. AOB.

- Will meet Thursday October 14 at 1:30 to discuss Echotek/filter progress.