

Minutes, 8/04/04 Tevatron BPM Upgrade Meeting
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The agenda as announced consisted of:

1. Report from Bob and Steve
2. Reports from teststand/A3
3. Report from Technical Coordinator -- Jim Steimel
4. AOB

1. Report from Bob and Steve.

- 2 1/2 weeks of beam left. We will continue to push to get a crate working to read out signals from two BPMs.

- The schematics for the front-end of the Echotek are needed to help understand/address the return loss, input impedance, and channel to channel gain differences. Bob Webber and Peter Prieto will help to understand and specify any changes to the current design once they see the schematics.

- Bob will call a meeting to get together a few people from the TeV BPM upgrade project and the transfer line BPM project to discuss commonality and strategy for the software.

- The timer card/clock fanout has 8 channels. Two cards can be used if more than 8 channels are required (e.g. the MI BPMs). Since each clock/fanout uses 2 VME slots this means that a 21 slot crate could have 1 slot for MVME, 4 slots for clock and the remaining 16 for EchoTek and/or filter boards.

- The project has new task numbers in all 4 Divisions -- project 26 in AD, and 56 in CD. All purchases go on project 26. All AD effort will be reported on project 26 and all CD effort on project 56. These details are not too important for most people except those who write requisitions. For effort reporting there will be a small change to CD (fabrication is split into two -- H/W and S/W). Bakul will help clarify this to people.

- Steve is working on the H/W and S/W MOU. The H/W MOU is circulating in CD. The S/W MOU is still being discussed and updated by Margaret, Brian and Steve. It will go to the whole project soon for

comments.

- Study time for commissioning has come up as an issue. We should discuss this internally and give some estimate to Ron Moore within the next week or so.

2. A3/teststand - Jim Steimel

- Margaret, Dehong, Luciano, Bill are all working on the teststand in FCC3, preparing to move modules to the crate in A3.

- The crate and crate controller were moved from FCC3 to A3 on Tuesday. An ethernet connection was made and communication to the crate was established. 2 Telck, 2 53MHz and 1 beam synch cables were laid but not all were connected. The proton signals from the two BPMs (A34 and A35) were disconnected from the old electronics, N to sma/smb connections were made and they and the antiproton cables are connected to analog filters. The two p channels of A34 are connected to the new Lark 10 MHz width filters. The remaining 6 channels are connected to the Lark 7 MHz width filters.

- During this week Jim Steimel will coordinate the activity with the accelerator. Next week Jim is away and Mike Martens will coordinate our work with AD/control room.

- Who has keys to the service buildings? Keys can be obtained from Main Control Room (probably) and it is good for them to know who is in the service buildings in any case.

3. Reports from L2 Managers

Mike Martens:

- Mike has put in a study request for the A3 BPMs.

- Mike will think about the TBT measurement using the new TeV BPM (this in response to a question from Steve about Roger Tokarek's program and how it will work with the new system).

Brian Hendricks:

- Modified libraries needed for the A3 test are ready for release.

- Lin Winterowd is working on T39 and making it useful for the new BPM electronics.

- Bob West is working on the diagnostics data structures.

Mark Bowden:

- Has asked EchoTek for front-end schematics but nothing received yet.
- The transient that is seen in the prep tests is still something that is not understood by EchoTek. Our claim is that we see different behavior on a Recycler board compared to a new board. EchoTek has no more Recycler boards and so cannot verify this claim. We have to decide how important this is, how to get useful information to EchoTek and whether we want to ship a board to EchoTek to get this debugged.
- EchoTek has built one new board and we should hear the results of their tests very soon.
- We need to plan to make final tests and specifications so we can conclude the prototyping and get to a final production board.

Tim Kasza:

- Stew Bledsoe is making changes to the filter board. The pin layout changed in one case and there is some footprint change for capacitors.

Rob Kutschke:

- Talked to Dehong and Luciano and will make changes to doc #1205.
- Rob wants to look at raw data (I and Q) from the A3 teststand as soon as possible. We should get all 8 channels data logged at 15 Hz.

3. Technical Coordinator -- Jim Steimel

- See A3 report above.

4. AOB