

Notes from the 06/27/06 MI BPM Upgrade Meeting
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These notes can be found in Beams docDB #1526.

Agenda as announced:

MI operation status, status of MI-40, MI30 BPMs - Dave C.
Installation/commissioning schedule for MI-20, BPM and BLM
Hardware status:
 Transition Board: checkout and testing
 Echotek vulnerability to large input signals?
 Echotek gains/version control
 Transition Board controller status
 Timing Board
Software status:
 Front-end software
 Safe flash mode
 Online software
 Status of full system tests
Validation
AOB

- The official installation order is:

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*   MI40, MI30, MI20, MI60S, MI60N, MI10, MI50   *  
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0. Next meeting will be held July 11.

1. MI operation status, status of MI-40, MI30 BPMs - Dave C.
 Installation/commissioning schedule for MI-20, BPM and BLM

- Dave described the MI40 and MI30 BPM installations. In general they working well and he is ready to see further installations. The MI60N installation will require that the "safe flash" mode work to see the reverse injection of protons from the Tevatron to MI in that location. There was some discussion of the exact meaning of what was needed (and with what timing), the details will be worked out.

- The 2.5 MHz TZBT data has some noise - may be related to pbar delays.

- After some discussion of availability of people and opportunities we decided to plan to install the MI20 system on Wednesday June 28 and

the MI60S system on Thursday July 6.

- The BLM is still decoupled from the BPM installations until we are informed otherwise.

- Discussion of save files for I43, especially for the timing delays. Some discussion of ethernet ports in MI30 and MI20 and testing before installation. And other details for smoother installation in the future.

2. Hardware status:

- Transition Board: checkout and testing

- Echotek vulnerability to large input signals?

- Echotek gains/version control

- Transition Board controller status

- Timing Board

- Bob Forster came and gave a long and detailed discussion of the transition board testing and discussions with LACE, the fabricator of those boards. Andrea and Bob went to LACE on Monday June 26 to talk with the vendor about these issues.

- Bob's talk (with many fine photographs) can be found in beams-doc-2312.

- Some statistics on 68 boards:

- 17 had assembly problems

- 35 had component problems

- 7 had both

- 9 passed with no problems

- Bob showed many photos of assembly problems of various kinds.

- The conclusion from looking at the information is that the work was not acceptable. Fermilab Procurement will be contacted with our conclusions on this vendor.

- Bob Webber gave a talk about 2.5 MHz gain settings (low-medium-high). His writeup can be found in beams-doc-2301-v2.

- Bob's proposal is to set the gains to avoid saturation of the Echotek and to do that to use the "medium" gain setting as defined in his note.

- A similar study needs to be undertaken for 53 MHz gains so that proper settings can be proposed and finalized.

- A proposed test of the Echotek's capability to handle large input signals (most likely due to transients at power-up or to incorrect gain settings in the transition board needs to be made soon. It should be made quickly (more and more boards are in production) and should be documented.

3. Software status:

- Front-end software

- Online software

- Status of full system tests

- Most issues were covered in discussions of MI40/MI30 and MI20 installation issues.

4. Validation - Rob Kutschke

- Nothing this week.

5. AOB

- Discussion of MI20 preparations, including testing ethernet in the building, getting channel assignments, timing delays, etc.

- Some discussion of Extra-wide BPM offsets and scaling.