

Minutes, 10/01/03 Tevatron BPM Upgrade Meeting
Stephen Wolbers

This set of minutes, and all future minutes, are or will be deposited in the Beams Document Database as document number 792.

The agenda as announced consisted of:

1. Report from Steve and Bob.
2. Reports from L2 managers.
3. AOB.

1. Bob and Steve:

- A short report on the status of the project was written and sent to Jeff Spalding on Friday the 26th.
- A budget estimate is being prepared and will be sent to Vladimir Shiltsev on Friday October 3. The estimate is still a bit of a guess with fairly large uncertainties.
- There will be a damper board discussion (dealing with its suitability for the Tevatron BPM) on Monday, October 6 at 11 A.M.

2. Subproject Leader Reports:

Mike Martens:

- Mike is working on the requirements document and possible modifications to that document based on comments and suggestions coming from the requirements review.

There was a long discussion of the specific comments, as well as some discussion of whether a formal response is required.

It is not required that a formal response be given, unless such a response is requested. Nevertheless, many of the points raised by the reviewers were quite helpful and Mike will modify the requirements to clarify certain issues that were mentioned.

The question of the usefulness of having the BLM and BPM data be linked (read out together) led to a long discussion. This is something that will have to be specified and justified based on the use of the data and the ability to "link" the data even if it is collected separately.

We again had the discussion of how we will correct the BPM response in y when one does not know the x coordinate and vice versa. Each BPM will report a number, using the best information that it has. However, it seems likely that to take advantage of the improved resolution some sort of iterative procedure to correct positions using near-by BPMs and the lattice functions will be performed. This will be a topic of discussion as we move forward in the project.

Brian Hendricks:

- There are two jobs that Brian can work on in the project:
 - new diagnostics and calibration programs
 - ACNET device data structures

Brian will work on the second project for now (the first requires more knowledge of the hardware than we have). He is working with Margaret Votava (and others) to explore some proposals for the data structures. He will expand this work to the whole group soon.

- Steve has asked Brian to present some of the code structure of the BPMLIB to the group. For the moment everyone can find the code to look at :

http://adcon.fnal.gov/www/controls/user_libraries/ul_cbsaux/ul_cbsaux.html

Luciano Piccoli:

- Luciano is working with Margaret and Brian on the data format.

Vince Pavlicek:

- Vince worked with Bakul on the wbs.
- Working with Mark Bowden on a presentation of the suitability of the damper board for the Tevatron BPM.

Rob Kutschke:

- Rob presented many thoughts concerning the BPM software and issues related to the upgrade. These can all be found in his transparencies -- in the Beams Doc DB number 866.

http://beamdocs.fnal.gov/DocDB/0008/000866/001/TeVbpm_031001-1.pdf

- Highlights include :
 - The system must be functional throughout the upgrade.
 - Issues of metadata requirements were presented.
 - A plan for transitioning from the current to the new system has to be developed.

Jim Steimel:

- Time was short so Jim was not able to present at any length.
- Jim has been analyzing the front-end filter to decide what the requirements are. This will be written up and presented soon.

3. AOB.

- Tunnel work proceeds. An update from Fritz will be sent out separately.
- Next week's meetings include a Monday meeting to discuss damper boards and Wednesday either to continue the discussion and/or a project meeting.