

Minutes, 12/03/03 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:

- Data analysis of the new and old BPM data is proceeding. The goal is a better understanding of the ability to separate p and pbar signals.
- There will be a review of the technology choice for the Tevatron BPM upgrade on December 15 or 16. More details to follow.
- Work on the wbs continues.

2. Subproject Leader Reports:

Jim Steimel:

- Jim is working on the anatomy of a closed orbit document. This will include an explanation of the effects of filters and noise and digital filters. Also how to disseminate information to the end-users, e.g. T39.

Mike Martens:

- Mike is working on getting the accelerator up and running.
- For the present BPM system the newly-measured and understood offsets are implemented and used. The helix can be opened wider now than before the shutdown. All BPM's are working.

Vince Pavlicek:

- Looking at Jim's spreadsheet, effort and time estimates. Will have feedback.
- Work continues on the BLM interface. The prototype has been (is) connected to a BLM crate. We would like to capture information about the BLM work (schematics, description, test results, etc.) and include them in the projects documentation.
- Echotek would like to visit December 8 or 9. (Will be December 8 at 2:00.)

Margaret Votava:

- In fact-finding mode about BPM and BLM devices.
- Looking at data buffering requirements.
- Working toward a specification for the front-end software. Also trying to understand the diagnostics and calibration system(s).

Brian Hendricks:

- Looking at BLM applications and data structures. The new data format will force some changes in the BLM applications.

Rob Kutschke:

- Rob is looking at the damper board data from before and after the shutdown. Julia Yarba is assisting this work and some nice results were shown at the meeting.
- Rob mentioned that the damper board records one essentially full turn of "raw" data every 10 seconds or so and this is useful to see.
- Rob showed $A-B/A+B$ for p and pbar ends for the Sept 3 or Sept 4 store. There was still a big reflection on the proton side.
- Further analysis will be done. The goal is to look for p and pbar signals before and after the helix is turned on to see that the p and pbar move in opposite

directions by an equal amount, more or less.

- Rob and Julia will also look at recent data.

3. AOB.

Dedicated hardware discussions continue, mostly in the Monday at 11 and Thursday at 1:30 timeslots in the Penthouse.