Minutes, 6/08/05 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:

  Report from Bob and Steve
  Reports from subproject leaders
  Report from Jim Steimel
  AOB

1. Report from Bob and Steve

  - Reviewed the list of things left to complete the project, including:

   - Fix broken stuff, especially A1.
   - Vahid's reported strange behavior.
   - Complete safe mode
   - pbar measurements
   - calibrations and calibration DB
   - Diagnostics (docDB 1835)
   - Determine and implement overall scale and corrections for
       higher order terms or off-axis terms
   - Documentation.
   - Transition to operations (teststands, other items)
   - Close out project.
   - Publication (PRST AB)

  - There will be one more scheduled TeV BPM meeting (June 15).
Margaret promised to bring cake. So please come. Meetings after that
will be called as needed.

2. Reports from subproject leaders

Mike Martens:

  - Mike showed some plots that Vahid gave him showing what look like
outliers (many mm off) in some, but not all, of the vertical BPMs. The
data came from Roger's program. Bruce also sees some strange outliers
in turn by turn data.

  - Lots of discussion. Yuri and Eliana did not see it. Others have

not seen similar behavior. It would make sense to try to reproduce the problem soon and collect data (including I and Q) to see whether the source can be found.

   - pbar orbit measurements continue. There have been some problems with the program that collects the data and it would be good to get it running reliably. But in any case coefficients are being loaded each store. Some of the bad BPMs (pbar measurement) have been fixed.

Kurt Biery:

   - Kurt has been working on the A1 problem. So far tests have been run on the Echotek and timing boards (look OK). The front-end hangs after about 20 minutes. The crate voltages, etc. look OK.

   - After some discussion a plan was made to check the MVME processor, crate, etc. and to replace parts of the system as needed to try to repair it and put it back into working order.

Vince Pavlicek:

   - The hardware document (1065) is being updated and v9 should be out soon.

   - The replacement filters from Lark have come to the lab.

   - Timing card firmware is ready. Waiting for the changes needed for the diagnostic signal.

   - There are 3 spare terminator cards, at least one of which is not in a test crate. It should be given to Marv.

Tim Kasza:

   - Replacement filters are being measured.

   - Helped remove old BPM electronics last week.

   - 15 filter boards remain to be stuffed. We will go with the original plan - 1 will be a spare for the B0/D0 boards and the other 14 will be spares for the rest. Tim is rounding up the parts.

   - Tim, Jim, Ken, others should get together to consolidate/organize test stands for the long-term support of the TeV BPM system.

Rob Kutschke:

- Marc Mengel is working on the calibration system, including
pushing data into the DB, providing text files for Rob to look at. The
next step is to push the calibrations to one house (A3?), implement the
calibrations, make sure that it gives the correct results, all in
cooperation with Mike. Then on to the whole ring. All of the
corrections need to be properly documented!

   - Rob has Vahid's data and will be looking at it.

   - Rob showed some slides that showed the quality of the pbar measurements. In some
small number of BPMs the cables were swapped and many of those have been fixed. In
addition, the BPMs where the helix opens in the coordinate orthogonal to the measured
coordinate have poor quality measurements. That may be improved in the future. Rob's
slides will be part of a document that will go into Beams docDB.

Brian Hendricks:

   Brian's report came in email:

The biggest things that I know of are that I fixed the ACL logger_get
command for Rob (which he knows about), Bob West added a global display
of some of the parameters that Marv wanted on W25 (which Marv knows
about). I have a partial display of Marv's parameters on a Lex SA, but
it has not been completed.

3. Technical Coordinator - Jim Steimel

  - Worked on the A1 problem.

  - Organizing diagnostics document.

4. AOB

  - Nothing!