

g2p/GEp Beam Transport Meeting Minutes

Attendees: T. Michalski, E. Folts, C. Curtis, Z. (Vick) Chen, R. Lauzé, A. Dela Cruz, K. Slifer, D. Williams, P. Kjeldsen,

The following is a summary of issues discussed during the g2p/GEp Beam Transport Meeting:

- Minimal progress on the beamline in the hall. Neil's crew is busy buttoning up the accelerator arcs. Expect to get to the SR bunker later in the week.
- One of the harp forks met with an untimely accident and 2 more forks have been ordered. The good one is being configured for the upside down girder (horizontal). To vacuum check then pre-alignment/fiducialization.
- FZ magnets also need LCW hooked up – Neil is aware of this.
- Goal to get the upside down girder in place and hooked up by the end of August. Can we do it?
- Kick-off meeting held to review what needs to be done for Return to Operations. Yves and Eric have the responsibility to get all the documents and procedures in order. No further action other than getting status.

STATUS:

OPTICS:

- Nothing new to report.

MAGNETS:

- Nothing new to report.

BEAM TRANSPORT:

- Region 1 – nothing new to report.
- Region 2 – nothing new to report.
- Region 3 – awaiting parts.
- Arms and girders – Design is complete. 3 procurements under way.
- Harps – all parts are here. Tony has one harp wired and will get to vacuum group today.
- Viewer – nothing new to report.

RAD CON:

- Nothing new to report.

SOFTWARE:

- Needs the Harp Controller chassis to get this started. This is the long pole in the SW tent (and on the entire beamline effort).
- Issue raised with not being able to do on-board calibration of the BPM receiver. Update – spoke with Omar Garza and this will be done with an external oscillator.

VACUUM:

- Awaiting Harp for upside down girder.

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INSTALLATION:

- Will get PS bunker built later in the week.

ALIGNMENT:

- Harp alignment/fiducialization plan set (same as previous superharps). Entails relating wire position versus encoder value.
- Awaiting harp, then upside down girder assembly.
- Many 6MSD tasks (planned and unplanned) are starting to stack up, so let's get alignment activities done sooner than later.

EES – I&C:

- Harp Controller (board and chassis) is complete.. Dave reported that Chad's availability is in question. This will be elevated at the 6MSD planning/reporting meeting on Wednesday PM. Update – this was done and is being seen as a caution item.
- BPM board is getting a final spin. Expect to have it complete by end of September. No schedule issues since the SW and FW are all but complete.
- Transport BPM modules are on track for installation and test by end of September.

EES – DCP:

- Need to do wiring to magnets for Klixons.
- Finishing up design for FZ magnet beacon boxes.

EES – SSG:

- Nothing new to report.

TARGET/DUMP DESIGN ACTIVITIES:

- Power sources in place for both the SR and the Calorimeter.

PHYSICS

- Nothing to report.

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Action Items:

Action Item #	Date Added	Action Item	Responsible Individual	Due Date	Date Closed
11	9/28/10	Define the settings for chicane magnet current monitoring.	Y. Roblin	TBD	
36	1/11/11	BPM testing with new electronics in North Linac – ½ done	J. Musson / D. Williams	???	
55	8/22/11	Channel assignments for trim magnets to SW.	Vick Chen	8/31/11	8/23/11
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Design Decisions:

Date	Decision Item
8/31/10	The transport line exiting the FZ2 will have no vacuum connection to the target chamber. A beryllium window will terminate that line.
8/31/10	M20 BPM's were decided to be used on the transport line exiting the FZ2.
9/14/10	The Target will only be set at 80° and 90°, not 70°, per Al Gavalya.
9/14/10	The gap between the beam tube end and the target window was discussed. It should be minimized – consider 1 cm as a maximum gap. Re-opened during 9/21/10 meeting – look at using helium bag. Will use helium bag – issue closed.
9/30/10	The requirement for BPM accuracy is 0.1mm – per discussion at BPM requirements meeting and subsequent analysis/e-mail from K. Allada.
12/6/10	Use 5.5" M15 antenna style BPMs in articulating arm!
12/6/10	JP committed to a 2 cm raster, if need be, to accommodate threading the beam through the articulating arm.
1/11/11	Decision to use harps in tune mode rather than low current.
4/5/11	We will not accommodate a special 1.1 GeV run with the target at the pivot. There will be no change to the FZ2 stand design and no need to reposition the chicane. Evaluation of 1.1 GeV beam through 2.2 GeV chicane position to be performed.
4/18/11	It was agreed that we will be moving the target up 9cm for the 1.1, 1.7, and 2.2 GeV runs when the target is in the 87cm upstream location. For the 1.1 and 1.7 GeV runs, the target magnet will be at 2.5 T, versus the 5 T for all other runs. Issue resolved without having to raise the target.
4/26/11	Decision to use 4'x4' platform for Al magnet and address any safety issues – rather than alternative to use existing stand in BSY which requires rework.