

## MICE Experiment Management Office

17<sup>th</sup> November 2015; 14:00 GMT

Phone details: <http://mice.iit.edu/phonebridge.html>

Present: ABr, KL, SB, CW, AN, CR, DR, EO, PMH, VB

### Notes

#### 1. Introduction: KL

- No notes; not sure any introductory remarks were made.

#### 2. Minutes and actions: All

- Comments on notes by email, otherwise taken as accepted.
- **Status of actions:**
  - **SB:** Initiate failure-mode analysis as input to MICE/ISIS Safety Committee discussion of operation of target with access to MICE Hall allowed. Not yet defined whether we seek access in “controlled entry” or “free”.
  - **Stands.**
  - **KL/DR:** Seek MC production manager.
  - **Stands.**

#### 3. S/w&C (and MAUS): DR

- **Tracker to global transformation**
  - See <http://micewww.pp.rl.ac.uk/projects/memo/wiki/2015-11-17-MEMO-CSw>;
  - Points noted:
    - An x- sign-flip has been observed in trackers the tracker reconstruction. Tests have isolated the flip to the code that creates space points from clusters. Geometry and mapping has been validated as good. Now seeking to understand s/w issue(s) that causes the flip.
- Other issues:
  - Momentum scale
    - Mis-match between momentum from TOF and that from the trackers is at the 15% level. Field used in reconstruction is close (within a few percent) to the measured value. Have now gone back to check tracker reconstruction. KL urged DR also to consider reconstruction issues and biases in the TOF.
  - MC processing
    - Sample processings have been performed done. Speed issue remains and will be addressed as a separate issue. Will be addressed once the reconstruction issues have been addressed.
  - Geometry:
    - The EMR geometry has now been fixed by R. Bayes and is being checked by F. Drielsma.

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#### 4. CAM status: PMH

- **Separation of controls network:**
  - DR, EO, CR, PH, PMH met to discuss micenet issues. List of required modifications has been made and agreed; PMH is completing a document summarizing the planned changes.
  - Controls devices will be given static IP addresses and crucial machines will be addressed using its IP address directly.
  - Redundancy, i.e. live machines to be used in the event of failure of a primary machine, will be maintained. A procedure to migrate the IP address should this be necessary will be defined.
  - Given potential impact of the changes a clear plan is needed so that people are warned of when the system is at risk.
    - a. Agreed that **PMH** will make the timetable.
- **IOC outage**
  - A number of IOCs in DL VME crates failed simultaneously. Crates were OK, but, the IOCs could not be restarted. Identified that the VME crates need to be replaced so that boot parameters are not lost.
  - Investigation of problem needs to be a high priority. **Action: PMH; bring forward test plan.**
- RF controls meeting:
  - Those present agreed to keep all controls protocols in EPICS. LabView will be used or high-level control.
- Single script is being produced to configure IOC PCs.
- PMH working on integrating read-back of channel magnets into RunControl.
- **Ordered task list:**
  - Expert layer
    - Functionality now in place; need now to agree passwords with the experts. Goal is to begin to roll this out at the next expert-led start-up (week of the 23Nov15). **MOM (EO)** will coordinate the identification of the passwords;
  - CDB entries for state machines:
    - Sub-system experts have not yet responded. **Agreed** that **PMH** send note reminding people to complete and return the spreadsheet.
  - Archiver data integrity check;
    - Return to this item later.
  - Dk solenoid monitoring:
    - Require the input on the state-machine so that the monitoring can be initiated.

#### 5. Commissioning and operations: SB

- See <http://micewww.pp.rl.ac.uk/projects/operations/wiki/20151116>;
- Points noted:
  - The recent 4 V.ms activation run produce a measurable activation in ISIS. Therefore, instruction is to stick at 2V.ms beam loss and, with D. Adams, seek to optimize particle rate using other means.
  - Another activation run is not thought to be necessary.

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- Online code versioning being robustified.
- 6. Physics coordinators report: CR**
- See [http://micewww.pp.rl.ac.uk/projects/memo/wiki/2015-11-17\\_memo-physics-report](http://micewww.pp.rl.ac.uk/projects/memo/wiki/2015-11-17_memo-physics-report)
  - Points noted:
    - Survey of upstream spectrometer solenoid, and measurement of the position of the tracker will be carried while the downstream PRY endplate is off for the work on the diffuser to be completed.
- 7. Response to RLSR/MPB: All**
- **KL** will send spreadsheet defining the tasks and deadline.
- 8. DONM**
- 01Dec15; 14:00
- 9. AoB**
- **KL:** Step I papers: CR, please include in future reports so that we can make sure journal keeps the momentum up.

### Summary of actions

- **SB:** Initiate failure-mode analysis as input to MICE/ISIS Safety Committee discussion of operation of target with access to MICE Hall allowed. Not yet defined whether we seek access in “controlled entry” or “free”.
- **KL/DR:** Seek MC production manager.
- **PMH:** define network intervention plan by which controls network will be separated on micenet and fixed IP-addresses will be used.
- **MOM (EO):** Liaise with system experts to define passwords so that the implementation of the expert layer can be expedited.
- **PMH:** Remind system experts to complete and return the spreadsheets needed to implement the CDB entries for the statemachines.