

MIPO Jan 5th 2016, RAL Atlas POD 14.00/08.00 Chicago

CW, JB, MT, AB, AG, AN, PS, MP, PMH, JHC

Agenda

Actions.

All completed in last meeting notes.

Decay solenoid FuG power supply – SG

No change from last MIPO

Focus Coil/Hydrogen system - SW/JB

Current Status – JB

JB agreed last MIPO to remove FC from beam line to address H2 problem.

Repair offline and replace with FC1 with LiH.

Dismantling has started. Waiting on hydraulic lift to move FC2.

Check out FC2 offline-2days.

Parallel prep for FC1 insertion.

FC1 re-inserted and operational early to mid Feb. Not powered.

Damaged feedthrough on FC1 4×10^{-7} mbar l/sec, 4 replacements are on order, lead time 12 weeks.

Action on MT to investigate alternative connector.

FC2 feedthrough in H2 circuit.

FC1 feedthrough in vacuum circuit, either use large pump or block off pins.

Clarify 2 days not acceptable for LiH exposure to air. 2 hrs maximum.

Action AN to investigate H2 windows. Intention to place LiH within volume defined by H2 safety windows, then purge with N2.

- Vacuum environment/end caps. CW. Looking at options to procure
- H2 absorber - cooling. More detail this week.
- Solenoid alignment.

With FC2 out opportunity to re-align SSU/SSD.

JC - try to align flanges of modules.

AN upstream solenoid and FC bolted together OK

SSD was placed to allow bolt-up.

MP RAL have full set of drawings for bellows.

AN bellows problem is well known, fabricated bellow did not agree with A De Mello drawing.

Action on AN to provide survey data on bellows. MP should check structurally that bellows flanges are sufficiently strong to accept additional set of bolt holes.

Action on AN Tony Millington to survey SSU/SSD bolt circles and both sets of FC bolt holes.

No magnetic field planned in ISIS 15/04. – later KL added, FC1 will be tested/trained to full field in this time therefore require PRY complete.

JHC can we access jacking screws?

AN downstream is a problem for access.

Action CW to meet AN in hall and report back to MIPO.

AN transverse moves are easier.

CW offset bellows are an option.

Action CW to circulate pdf of adjustable bellows to MIPO.

Spectrometer solenoid – MP/AB

QD/QP.

FNAL intend to ship in 1 month, external dump circuits look big. Contactors, not yet decided. Trying to converge on passive system but may require contactors. SF return end this week and John Joseph. AB SF to circulate design plan 1st draft at end of week, may require 2-3 weeks of review. QPS electronics logic could be complete on shorter timescale. Sign off to start work in early Feb.

Full QPS April at earliest. 50/50 implies early part of run in april may be without field.

If we get suitable design, might have SSU/ECE late Feb, now wish list. 20% chance.

Repair Plan.

Cold Mass. Still developing program.

Identified US engineering oversight team for project, awaiting approval.

Waiting on final report for committee, still in editing.

CW, JB there are a few Magnet companies in Europe: ASG, OI, Tesla, and 2 smaller companies.

ASG are interested, but nothing written, details open for discussion, expect further contact possibly this week.

Tesla may meet on Friday.

MP will arrive Mon, thru following Mon.

JB could arrange ASG meeting that week, if desired. JB manufacture in 6 months, MP cold test is required, may extend past 12 months. JB wire availability is determining factor. MP package to go to vendor is not ready.

Will company do cold test?

JB, ASG may have cold test facility.

MP schedule has worst-case magnet, April 2017, to start commissioning, moved plus 6 months.

Bare bobbin cold test before closing helium volume to minimise overall risk.

This excludes some of the smaller suppliers.

MP, maybe not, as lab could do cold test, this has shipping implications.

DoE concerns are focused on total cost as opposed to timescale.

CW cost estimate impact?

MP cost is completeness driven, no new steps added since Dec review, but there are additions, and therefore increases in cost.

Cryostating.

Magnet Flushing.

HN note intend to flush all magnets.

PRY

JT has drawings, end of week.

Project Planning Meeting

12th Jan 16 in Hamilton Room, Coseners House.

CW to check, accommodation and reply to MP. No individual replies regarding accommodation. – KL has picked up communications and is acting.

Hall tasks Jan 2016

- <http://micewww.pp.rl.ac.uk/projects/operations/wiki/WorkPlanJanuary2016>

AOB.