

Target group schedule for A1n/d2n target coil rotation

3/13/2020-3/20/2020

❖ Preparation before Friday 3/13:

- Prepare new cell
 - Austin density measurement (Todd)
 - Cell mounting preparation (including RTDs, pNMR coil) (Arun)
- Parts (cable, optics,...) preparation (Junhao)
- Make lists of cables to be disconnected, make labels (Junhao/Murchhaha)

❖ Friday

- 8:00 – 10:00 Radcon survey.
Before entering the hall we should perform the following tests from the counting house (Mingyu/Murchhana)
 - AFP Loss in Transverse
 - Cross calibration of L/T
 - Temperature Tests
 - *Cross calibration position dependence? (Bill will check if this is needed)
 - *pNMR tests? (Mingyu)
- 10:00
 - Put Hall in Laser controlled access (JP)
 - Remove panels, 2 or all? Tech? RADCON (RADCON swipes and test)
 - replace photodiode (Junhao) RADCON
 - EPR/NMR calibration, both L and T (Junhao/Todd)
 - Check photodiode/mount effect on NMR (Junhao)
 - Take out of laser controlled access (JP)
- 13:00
 - Open enclosure completely, if not already (techs/RADCON)
 - Disconnect gas lines for reference cell and cooling jets for target windows, leave cooling jets on for the beam line windows. Includes connections at the pivot and gas panel. (Todd)
 - Disconnect all cabling which affects coil rotation (Junhao/Mingyu)
 - Label all cables at both ends
- 19:00
 - Remove RTDs (Bill/ Arun)
 - Remove Target Ladder (Bill/ Arun)
 - Remove Target Cell (Bill/ Arun)
- 22:00
 - Target field measurement/check, especially for vertical field (Bill?)

❖ Weekend

- Mostly Tech work but one expert should be present

Starting at 8 am Saturday

- Dismount beam line windows, put in nitrogen bag
- Disconnect remaining gas lines
- Match mark locations of vertical correction coils
- Lower correction coils and RF coils
- Check everything is clear to rotate
- Rotate main coils 45 degs. CCW looking down
- Install correction and RF coils (using match marks)
- Remote ladder to top platform and move optics table on platform
- Target group (Sunday)
 - Install new Kepco (Bill)
 - Connect Main coils and corrections coils (Bill/Junhao)
 - Testing power supplies (including new Kepco) and setting fields (Bill/Junhao)
 - Field measurement/checking (Bill?)

❖ Monday

- Alignment group, Target group (Murchhana)
 - Survey coil locations
 - Adjust as necessary
 - Survey alignment laser mounts
 - Set up Compass (Murchhana)
 - Survey Compass
 - Remote ladder to top platform and move optics table on platform (if not already done)
 - Set up and perform Compass measurement, (Murchhana and target group swing/owl)

❖ Tuesday

- Compass measurements (Target group/Alignment group)
 - Continue compass measurements if not completed (Murchanna)
 - Survey compass results (if measurements complete early enough)

❖ Wednesday

- Morning (Alignment group, Techs)
 - Survey compass results (if not done on Tuesday)
 - Remove optics table, Install large ladder
- Afternoon-swing (target group)
 - Install
 - Gas lines (Todd/Techs)
 - Cabling (Junhao/Mingyu)
 - Target cell (Arun/Bill)
 - Target ladder and (Arun/Bill)
 - Reference cell (Todd)
 - RTDs (Bill)

- Heating up oven, alignment check (Arun)
- Check out instrumentation (Junhao/Mingyu)

❖ Thursday

- Laser alignment (JP/Junhao/Murchhana)
 - Put hall in laser controlled access
 - Laser alignment
 - Laser polarization check/adjustment
 - Set up for pumping in reverse directions (0 and 270)
- Spin up
- EPR calibrations in L and T (Melanie/Junhao)
- AFP loss study
- Check pNMR (Mingyu)

❖ Friday

- Close up enclosure (Techs)
- Out of laser controlled access
- Ready for beam