

CBETA FFAG Magnets and girders  
Meeting notes, 11/01/2017  
Prepared by: R. Michnoff

Personnel Present: Steve Peggs, Steve Trabocchi, George Mahler, Scott Berg, Joe Tuozzolo, Nick Tsoupas, Peter Wanderer, Rob Michnoff, Karl Smolenski

Status of permanent magnet material order

- No recent update from the vendor
- Vendor should be contacted every week or 2 to confirm that delivery is still on track with vendor provided schedule.

Status of corrector magnet procurement

- Bid process has begun, bids are due 11/11/2017.
- The previous date to place this order with a vendor was 10/31/2017. This will be late by a few weeks.

Status of girder plate drawings and procurement

- 27 girders total are required, with 17 unique plate designs
- The goal is still to complete all of the girder plate designs by December 31, 2017.

Fractional arc test

- BNL central shops is fabricating the BDH magnet housings and fractional arc test girder plate.
- Delivery of the fractional arc test beam pipe is expected to be shipped to BNL from Cornell by 11/15/2017

FFAG girder interconnects

- Per meeting notes from last week: "Karl will work with Yulin to create a sketch of FFAG girder interconnects, specifically showing where bellows/sliding joints will be installed." This was discussed again and Karl agreed to do this. We should plan to review this at our meeting next week.

Magnet testing

- The disassembly/reassembly test has been performed. The results seem to be acceptable.
- Some of the preproduction magnets with unacceptable gaps between the two halves will need to be re-pinned. The goal should be to complete this within 1-2 weeks.
- The preproduction magnets will be tuned and surveyed using the production procedure that is under development by Stephen Brooks. The short survey arm provided by the C-A survey group will be used as part of this procedure. This work will help us more accurately determine the time required to perform the measure, tune, measure, survey procedure for each magnet.

- The goal needs to be to complete tuning and surveying (measure, tune, measure, survey) of one of the preproduction magnets by November 8<sup>th</sup>. The procedure (by Stephen Brooks) may require refining as part of this process.
  - The remaining 7 magnets should be tuned and surveyed by the end of November. Ensuring that each magnet can be tested in 1 day (to ultimately complete 2 per day with 2 measurement stations) needs to be a part of this process.
- Peter Wanderer is working on getting the second magnet measurement system designed and developed. It's expected to be available in early January.

Septum Magnets (in splitter 4, quantity 4 required)

- A design sketch has been prepared by Nick Tsoupas, but engineering design details have not yet begun. This needs to start very soon to allow the splitter beam pipe design to be completed and to ensure that the magnets will be available for final splitter installation in late 2018.