Revised ATF Shift Plans

Rebecca Ramjiawan

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FONT Shift Plans Nov/Dec 2017

1 shift – Test operation of firmware, calibrate the IP kicker
Nominal Optics

1 shift – Perform 1-BPM feedback
Nominal Optics

1 shift – Perform 2-BPM IP feedback
Nominal Optics

1 shift – Perform 2-BPM IP feedback
High Beta Optics

(The next slide shows a further break down of the tasks to be completed in nominal optics and high beta optics)

Tasks for Nominal Optics

Three first shifts are nominal optics shifts, these are the tasks to split between the three shifts.

1. Troubleshoot any problems with the firmware and/or DAQ - parasitic
2. Test adding constant kick to stabilise at a specified location.
3. Perform kicker scans, determine effect of kicker droop – if small approx. as linear.
4. Gain scans to optimise gain setting.
5. Single loop feedback across different integration windows.
6. Put waist at IP.
7. Scan across ratio of gain pairs to optimise.
8. Optimise magnitude of gain pair. (Iterate between steps 8 and 9 as required).
9. Two BPM feedback across different integration windows.
10. Charge scan – effect of charge dependence of static erratic and how integrating over static erratic may improve feedback.
11. Random jitter scan. Possibility to adjust position and angle jitter independently.

Tasks for high beta optics

1. Set up high beta optics.

2. Scan across ratio of gain pairs to optimise.

3. Optimise magnitude of gain pair. (Iterate between steps 8 and 9 as required).

4. Two BPM feedback across different integration windows.

Tasks for Before Shift (Monday)

- Check LO levels (where? What should they be?) 0~3dBm
- Print list for and check current set up.
- Switch on kickers amplifier (serial server).
- Switch on FONT. (switch on serial servers, IP box)
- Turn on variable attenuators (plugged in locally, IP address 20.10.70.123)
- Can trigger board?
- Shouldn't need to re route clocks
- Check DAQ for readbacks.
- Check BPM movers (p 128)
- Check can add channel offset.
- Check current setup (band-pass filters) and reference delay.

Simulations

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Simulations

- I was having a lot of issues running the lattice files currently stored in the repository, so I contacted Glen White.

- Glen said that he didn't know what state the lattice files have been left in and they might not work. He recommended I contact the respective group leaders.

- He also mentioned there was no structure in place for a full start to end simulation and that piecing one together would be a lot of work.

- I have begun by contacting Kubo-san about the Main Linac but I am a little unsure who to contact for the other sections.