

# Weekly Report for 10/07/2013

## MCR Operations

### Storage Ring Operations

- Performed single gap scans for a couple of beamlines so their X-ray BPMs could be restored to orbit control during the last two weeks. (Karen Schroeder)
- Assisted the MCR with diagnosing and recovering a problem that occurred after completing a steering (during previous week). (Karen Schroeder)
- Assisted MCR with turning beam over to users the previous week. Made adjustments to tunes, coupling as necessary. (Karen Schroeder)
- Investigated problem noted in the logbook that all vertical realtime feedback loops were opening (during previous week). Could not find any reasons in dataloggers. Passed information on to Emery who set up scripts to catch the data on DSP scopes. (Karen Schroeder)
- During first week of run, spoke with multiple users regarding some problems they were experiencing or may experience (4-ID retuned undulator, 21C:BM p.s. noise) (Karen Schroeder)
- Investigated beam losses and discussed with relevant groups. (Karen Schroeder)
- While looking at data trying to identify the cause of occasional elevated drive in S31-33 in the horizontal plane, found that S32B:P3 had unusually large position with offsets from last run. After discussion with Glenn Decker removed the BPM from both RTFB and OC. The removal had no affect on the elevated drive mentioned and no other reason found for the drive. (The BPM was located in a sector where snubbers were installed the last shutdown). (Karen Schroeder)
- MCR contacted me after they could not restart orbit controllaw after a beam loss. Found that multiple narrowband BPMs had large magnitude values in sum signal and agc. A reboot of IOCS17FB resolved the problem. The large values were the cause the beam loss as well. (Karen Schroeder)
- Provided information in relation to the elevated liquid helium pressures before after a beam loss and during studies. (Karen Schroeder)
- Found that an upgraded procedure noted the MCR would be monitoring and responding to alarms on the vibration sensors installed at multiple beamlines. Set the alarm severities and alarm levels prescribed in the procedure. Requested these alarms be added to the beam motion alarm handler and provided guidance. Updated guidance after feedback from Fystro. (Karen Schroeder)

### MCR Operations administrative/misc.

- Generated the downtime report for presentation by Flood to OPS Directorate (Karen Schroeder)
- Reviewed updated procedures (Karen Schroeder)

## APS Machine Studies

### Storage Ring Studies

- Produced the machine studies schedule the previous week due to unavailability of Sajaev. Updated the machine studies schedule with last minute additional studies. (Karen Schroeder)
- Performed gap scans to update Gap Feedforward Tables and returned the X-ray BPMs back to orbit control if they were removed because the beamline requested steering (Karen Schroeder)

## APS Machine Research and Development

## Storage Ring Research and Development

- Ran MARS scraper model with just titanium alloy TiAl6V4 as the beam facing surface material. Will model next with aluminum only. (Jeff Dooling)

## Linac Research and Development

- Continued working on getting the regen cavity to lase. Had assistance from J. Power (ANL/AWA). (Jeff Dooling)
- After alignment to verify uniform height throughout the regen cavity, tried operating in free running mode, but was unable to achieve lasing. (Jeff Dooling)
- Attended the PiP meeting and reported on the optical systems associated with the PC Gun drive laser. (Jeff Dooling)

## Miscellaneous

- Received my Heath Screening. (Jeff Dooling)
- attend ICALEPCS 2013 conference. (Hairong Shang)

## No Report Submitted

- Michael Borland
- Yong Chul Chae
- Louis Emery
- Randy Flood
- Kathy Harkay
- Stan Pasky
- Vadim Sajaev
- Nick Sereno
- Robert Soliday
- Chun-xi Wang
- Marion White
- Aimin Xiao
- Chih-Yuan Yao
- Yusong Wang
- Ryan Lindberg
- Yin-e Sun