

C-A SCHEDULED SHUTDOWN –WEDNESDAY FEBRUARY 4, 2004, 0700-1900HRS **RHIC SHUTDOWN 0700-1500HRS**

RESULTS – 1830HRS, FEB. 4, 2004

R. Zaharatos –Wednesday, Feb. 4, 2004

RESTRICTED ACCESS – AGS

BOOSTER – NO ACCESS

RESTRICTED ACCESS – RHIC, HEBT, and SEB A Tgt.

ATR CONTROLLED ACCESS

Operations Schedule for Maintenance Feb 4, 2004

Time	Job	personnel
0630:	Begin RA LOTO AGS.	2CAS
***** Note Equivalent LOTO for AGS FEB EXT BUMPS*****		
0700:	RHIC to RA all but dumps, RCA for dump survey. CAS to open STAR Breaker.	1HP,4CAS,1MCR.
0645:	After HP Completes RHIC survey, all RHIC to RA.	
0800:	Open 12 o'clock RHIC fence for cable pull	1CAS.
0800:	Open South Shield Door in AGS for CA. HP, Survey, Pump Room, Rigger, Vacuum Etc. access.	1GW, 2+HP.
0830:	RCA at AtR line for HP Survey.	1HP,1MCR.
0930	Close AtR after magnet draining complete.	
0930:	Upon RA survey completion, AGS to RA.	
1000:	When HP available, survey TTB Xover for Access Control test.	1GW,1HP

1030: Close TTB Xover, turn on Booster.

1100: NSRL Access test.

1MCR.

1100: A Line to Restricted access with HP's permission. ACS Group to jumper A Primary line AGS interlock; A line remains on RA.

1500: Begin RHIC Sweeps with PHENIX, all but 10Z1, 12Z1 and 6Z1.

1730: Sweep AGS, leave CA gate watch as necessary.

1500-1900: Sweep 10Z1, 12Z1 when available.

JOBS STATUS CODES: C complete IP in-process RS reschedule
CAN cancelled * additions

RHIC JOBS

COLLIDER P.S. GROUP - ZAPASEK/BRUNO

RHIC Service Buildings

High Priority

Test Permit Module Quench input voltage. (All Complete)

- 1) We feed in known voltages of 0, 3 and 3.5 to quench input and verify the madc pet page display the correct value. Two signals per building and a total of 6 buildings. **(Wing and Rich C)**
- 2) **Rich C)**
- 3) Put tees in the correct locations for monitoring quench signals. **(Wing and Rich K)**
Test new Timing Resolver software with Joe.
- 4) This new version will calculate the delays of each signal after the trip. **(Wing and Joe P)**

6000A Quench Switches(All Complete)

- a. Check High voltage readback problem, one yellow and one blue. **(Wing and Rich K)**

Main Power Supplies (approximately 3 hours) (Carl and Fred and Mitch)

- 1) Set trip points on current monitors
- 2) Test out current monitor electronics.
- 3) Work on Reg. error problem on blue quad. This will require the links being up.
- 4) Check loose connections on OCC Main SCR's.

IR p.s.'s in service buildings(High Priority)(All Complete)

- 1) Replace aux contacts for bo3-qb8-ps (**Tom and Jeff**)
Look at y12-q7-ps. We got a "no ps/illegal stae fault on 1/27/04". Should have electricians check ac connections at 480V panel as well as us checking our end. This is set up with PK. (**Don and Gregg**)
- 2) Install one new relay in 5 types of Dynapower p.s.'s for aux contact problem. (**Joe and Brian**)

RHIC Tunnel

Correctors in Tunnel

Nothing as of now

Gamma-T's in Tunnel

Nothing as of now

Charlie -PLC Program(Complete)

Charlie may need to time to test and figure out why his last command buffer from the PLC is not working. Today (1/29/04) it looked like alcoves 1A,B,C, 3A,B,C, 9A, 11A, B,C all had this problem. (**Don and Charlie**)

Quench Detector Work(All Complete)

- 1) Change inductance tables for two signal in 4b-qd1 and do some ramps (**George**).
Snake QPA in alcove 9A
- 2) George and someone need to inspect one of the snake qpa's in alcove 9A.
Ice Ball checks on insulation
- 3) Ed Weigand's crew will check 2 locations with cryo where there may be ice problems with the insulation.

IR Supplies, OPA's AND Sextupoles p.s.'s Low Priority

- 1) Test all spare sextupole current regulators in one sextupole p.s. with a ramp.
- 2) Replace SSR2 relay in y8-q7-ps because the fans come on with the circuit breaker.(**Does not require the mains to be locked out**).
- 3) In 1010A label node card cable that goes to port 11 (from warm dipole p.s.) and replace this node card in rack R10AQD2. Ports 9 and 10 are bad.
- 4) In 1010A fix the voltage readback on the warm dipole p.s. so it is not negative. Flip wires at the iso-amp board. Measure current through free-wheeling diode during a shut-off for 1010A and 1012A warm dipole p.s..(**Don and Joe**).
- 5) Yi10-qb7 front panel AC on light no good. Replace it.
- 6) Check b12-dh0-qp controller card. CAS swapped it out on 1/17/04 and I want to make sure they did not miss anything.
- C 7) Install spare fiber optic card in yi2-qb9. Check jumpers.
- 8) In 1010A label node card cable that goes to port 11 (from warm dipole p.s.)
- 9) Check bo3-qb7 fan switches CAS replaced.
- 10) Keep an eye on bi9-tq4 fiber optic card (or curr reg card) . This p.s. had a 2 amp offset between the iref and wfg on 1/11/04
- 11) Check voltage lemo of yo9-dh0 and y12-dh0 and compare with buffer card reading. Voltage looks low on pet page.
- 12) AC Power line monitor problems at 12A and 8b. See PMViewer.

Other Lower Priority Jobs

ATR p.s.'s in service buildings

Try to put remote I/O alarm bit in for one PLC and try to test one PLC with Joe P to see if it works.

Keep an eye on but don't do anything yet.

Keep an eye on bi12-qs3, it tripped on an error signal fault on 12/3/03 at around 10:20AM. It also tripped once on 12/4, 2x on 12/6 and once on 12/9. This one had C623 cut out of it so I guess it does not fix the error problem.

1) Bi8-sx3-ps tripped on an error signal fault once on 12/31/03 at 22:50:11. Looks like a current reg error. Keep an eye on.

Controls Group Software(Morris)

- RS** 1. Security patches for agsrhichome(outside the firewall) web server
- C** 2. Development RAID host acnlin81 will be rebooted at noon after cabling is adjusted.
- C** 3. General FEC reboot.
- RS** 4. Beam Sync Trigger ADO software – minor changes in error reporting to allow for accurate archive system statistics to be kept.
- C** 5. New version of permit ADO will be tested in an attempt to fix problem with the hanging of FEC tasks
- RS** 6. RHIC A/C Dipole System – software to be tested with interleaved waveforms.
- C** 7. Postmortem/Loss Analysis Server to identify some recent failures
- C** 8. Madc software testing in 2b-ps3 to identify source of memory fragmentation in selected PS FEC's.
- C** 9. Release of new version of AGS Cycle Synchronizer software
- RS** 10 Test new features of software that interfaces to timing resolver.

RF Group – N. Laloudakis

- C** 1. Restore electrical work in 1004A.
Sect. 4
- C** 2. Replace drive cable for Yellow Landau Cavity.
- IP/RS** 3. Phase match Landau cavities. Yellow remains to be completed.
- C** 4. BS2 – replace QEI modules.

Vacuum Group – S. Gill

- C** 1. Sect. 1 – sublimate yo1-pw3.1 to pw3.3
- C** 2. Sect. 4 – check for completed TSP installations.
Set-up turbo station, check terminations, etc., degas & flash the TSP's in the stochastic kicker region
- RS** 3. Sect. 8 – continue Bi8 bakeout set-up and sublimate Bi-8 pw3.1-pw3.3
- C** 4. Sect.10 - check g10-tsp-pw1.1 transformer connection

- C 5. Sect. 11 – transport heating jackets to storage area
- IP/RS 6. Check/drain air-lines of water(none found). Done except for sect. 8-11
- C 7. Replace gauge controller CC card for bi1-cc-pc6
- RS 8. Check yo1-cc-3.1 analog voltages at the twinax connector for the MADC input
- IP 9. Check bi1-cc-pw3.1 analog voltages
- C 10 Sect. 4 – install up to 7m of solenoid at the 5” beam pipe space between Landau Cavity and Stochastic Cooling Kicker. Run p.s. cable to 1004A.
- IP 11 Install new p.s.’s for new solenoid in sect. 4.
- C 12 1008B – replace bi8-ip-pw3.3 ion pump controller.
- C 13 1004 – sublimate g5-pwx
- C 14 1006 – sublimate g6-pwx

Beam Components and Instrumentation – D. Lehn

Stochastic Cooling Sect. 4 & 11(8hrs.)

- 1. Pick-up tank in sect. 11
 - C a) Calibrate linear pots
 - IP b) Test inchworm controls
- 2. Kicker Tank -Sector 4
 - RS a) Calibrate linear pots
 - C b) Test through BPL

Gap Cleaning

- C 1. Check Chiller Reservoirs
- C 2. Reinstall Blue HV Pulser and test
- C SNS Electron Detector sect. 1&2 – verify set-up for testing
- C Jet Polarimeter – Match necessary detector cables

High Frequency Instrumentation – B. Sikora

- C 1. Sect. 1 & 2 moveable BPM Schottky Cavity and Two Meter Kickers – access for fine tuning required after beam start-up.
- C 2. QMM(Quad Monitor) – will also require access for tuning

Controls(Venegas)

- C 1. 1006B - Remove scope used to monitor the Yellow Quench Link.(Koropsak)
- C 2. 1002A and 1004B – Check out exact pulses being put on RHIC Eventlint (Michnoff/Koropsak)
- C 3. 1010A – Check out stop charge wiring for Abort Kickers(Schoenfeld)

Tunnel Maintenance

- RS 1. Water intrusion in Sect. 12 IR above Jet Target location(FES)

RHIC/FES Division – A. Pendzick

- C STAR - Access for experimenter.
- C Check flow switch on STAR P.S..(Water Sys. Grp.)

- C PHENIX - Experimenter access

- C BRAHMS - Experimenter access

- C PHOBOS - Experimenter access

Other RHIC Access Jobs

- IP/RS 1. Jet Target area(Electricians/Wade)
 - Install 100A Service Panel and conduit.
 - Install single phase 208vac service receptacle for chiller.
 - Install 4 duplex outlets for vacuum pumps.
 - Install 2 recept. for H2 generator circulators.
 - Run 5 cond. #6 from 100A service to 1012A Bldg..

- C 2. Move 8D8 Warm Magnet from sect. 12 to sect. 10(FES)
- C 3. Access Controls - replace bad relay sockets in RF Cavities at 4 o'clock
- IP 4. Install new warm magnet power supplies in 1010A and 1012A.
- C 5. Check noisy air-cond. unit in Alcove 9A.

AGS(external)

- C 1. Vacuum sys. E18 Hse. – LOTO EF for Snake work.
- RS 2. Vacuum – clear DNA read-backs for A10, E18, and H10.
- IP/RS 3. H10 DC Bump – install modifications with vendor and test into dummy load.(Zapasek/Adessi)
- C 4. I17 Gamma-TR – Check out why stop charge pulse is seen on ref. signal(Schoenfeld)
- C 5. Multipole Room Power Supplies – Check DAC outputs for noise in all P.S.'s. (Buxton)

AGS RING

- 1. E20 Snake Installation (LOTO of Woods Metals and Ion Pumps required).
 - IP/RS Complete the installation of water piping and perform pressure test(PE).
All water connections complete. Final pressure test, filling, and flow checks to be scheduled.
 - RS Run monitoring cables from E10 Hse..
 - C Install Snake on girder.(Riggers, Beam Comp., Vacu., Water Grp., Survey, and P.S. Grp.)
 - C Begin connecting DC cables. **All complete.**

- C 2. A10 through C20 in and out – Inspect areas for proposed relocations of: A20Harp/A20 Flying Wire/A20 Current Transformer, and A10 Tune Meter. (Bm. Comp.)

- C 3. RLRM – investigate problems at C8, D20, and G18(Bm. Comp.)
- RS 4. Replace E20 and F1 Loss Monitors and modify argon lines.(Bm. Comp.)
- C 5. Check E-16 ion pump and replace if required.(Vacu.)
- IP/RS6. Install new vacuum chamber storage rack in North Conj. Area. **Needs to be put together.**
- C 7. C15 Polarimeter – remove covers for modification

ATR

- C 1. Drain UQ6 magnet (Phillips)
- C 2. Check/drain water from air lines(Vacu)

SEB

Access Controls(Meany)

- C 1. Modify A TGT Chipmunk intlk..
- C 2. Bypass A TGT Gate Security.
- C 3. Remove all Security at A2 Exp..
- C 4. Remove C6/C8, C3 TGT Security
- RS 5. Switchyard inspection(Kobasiuk)

BOOSTER EXTERNAL

RS BPM's/ Inst. Grp.

- 1. Investigate A3(open) and C3(shorted)
 - 2. Filter assemblies above racks
 - 3. Install air filter assemblies.
 - 4. Repair exhaust fan on C Sect. Rack
 - 5. Phase match B4 cables
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- C 6. D6 Septum Powered test for beam interlock(Lockey/Savatieri)
- C 7. Vacuum – replace ion gauge controller ttb29-ig-039(930UEB)
- C 8. Update Gate Array in PSI for 930UEB Horiz. Quad.(Controls/Buxton)

LINAC/HEBT ACCESS

Access Controls

- C 1. Completion of annual re-certification(requires access to HEBT Gates).

Linac

- RS 1. Reinstall SEM 6 wires(HEBT 3)

Vacuum

- RS 1. Restore vacuum in HEBT 2 & 3