

PHENIX WEEKLY PLANNING



Technical Support 2008

12/30/2008

Don Lynch



IR Configuration for remainder of shutdown

October	November	December	January
5 12 19 26	2 9 16 23 30	7 14 21 28	4 11 18 25
<DONE>			

Run Position 10/20 - 10/31
(CM & MMS moved north WC west)

Station 1 south access 11/3-12/12
(MMS moved south WC west)

<DONE>

Station 1 north access 12/15-12/31
(CM moved south, WC west)

<Current IR Configuration>

East Carriage Install 1/2-1/15
(CM moved north, EC & WC opt.)



Run Position 1/16-1/19
(MMS moved north, EC & WC opt)



Ready for run 9 1/19-2/1
(MuID Collars Installed, EC & WC opt.)



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October November December January
5 12 19 26 2 9 16 23 30 7 14 21 28 4 11 18 25

Station 1 north access 12/15-12/31 <Done>
(CM moved south, WC west)

Remove Sta 1 S <Done>
And Sta 2/3 N scaffolds

Move CM south <Done>

Install MMS lampshade 12/18-12/21 <Done>
Install MMN lampshades 12/18-12/31

Install MMN Crossovers & supports

Continue HBD, MuTrigger FEE
& RPC prototype cabling & commissioning



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Prep for run 9

January 2009

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

- Move CM to run position ready for EC roll in
- Connect and leak test bridge manifold
- New subsystem commissioning
 - C-A carpenters fold EC platforms
 - Move MuID collars to IR
 - Remove Plates, cart & move Manlift
 - Disconnect EC shutdown connections
 - Roll in-to IR and North to run pos.
 - PHENIX techs reconnect water, elect., gas, fibers
 - C-A Carpenters restore scaffolding, Re-install lift & ladder, re-connect gas sniffers
 - Mike Rau re-install lift wiring, Re-connect TOF blower
- DC East & West repairs (permits needed)
- Blue Sheet/Pink sheets/White Sheets
- Pre-run Commissioning
- Assemble shield wall
- Start watch shifts
- Shield wall roll in
- Start of Run 9 (Cooldown)

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Other On going Tasks

Fan Tray Maintenance (fill in)

RPC3 Prototype install (11/15-1/31)
(Remaining tasks: run HV, signal and gas lines.)

RPC Factory Support (continuing)

Dark Current test stand

Storage Racks with humid. Cntrl

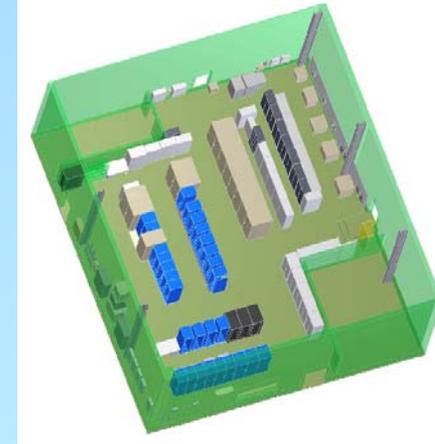
Burn-in test stand

Tilt & Elevating transport table

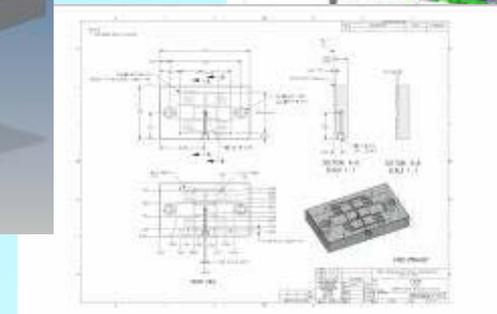
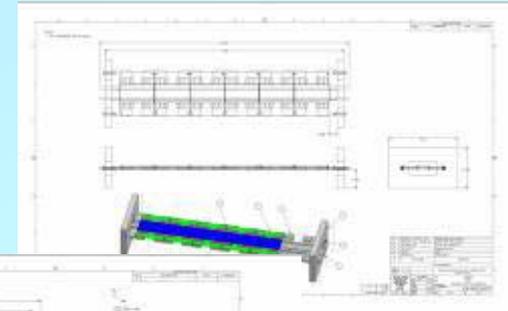
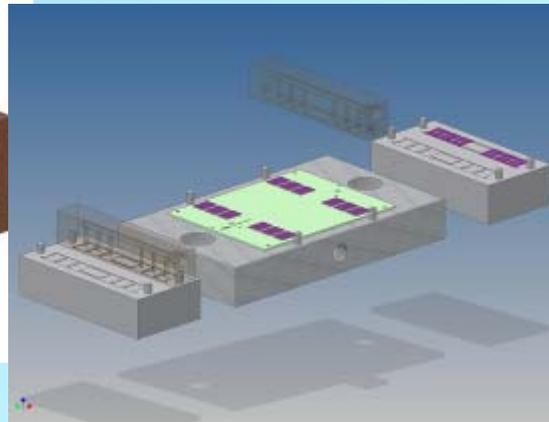
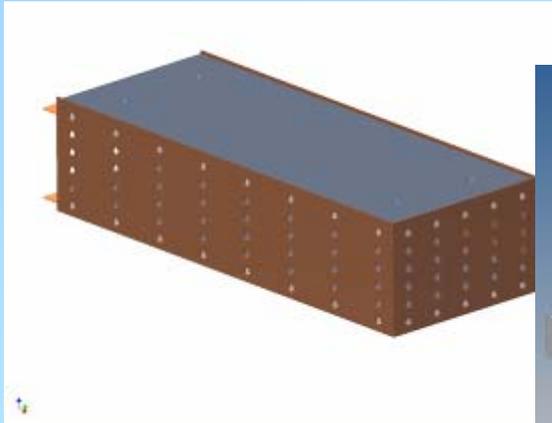
Prep for 2009 Shutdown
(as time permits)



Rack room electronics, etc.
NCC prototype design support
VTX fabrication tooling design
VTX installation design
FVTX design/engineering support



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12/18/08

Here is a list of the important items required to be completed E&FI:

- Control Room Annunciator System - complete wiring and program the electronics for the additional 48 alarm window box unit. Frank & Paul - 2 days **Wiring is complete. Programming of electronics and pre-op testing needed - 1 day.**
- PHENIX Notifier Fire Alarm System - Tie in two wire communication network cable into the five (5) new racks (IR Muon Trigger racks North & South, 2 Rack Room Muon Trigger racks, Tunnel rack for RPC. Program the fire alarm panel to recognize these new racks). Frank & Paul-two days.
- Install and power the Gas Mixing House SF6 detector/monitor. **Detector unit mounted-not powered.** Wire into the PHENIX Safety Monitor and control System (SMCS). Test and verify safety/alarm actions for the unit using R134A gas. Frank & Paul-two days.
- Energize the HBD heater and temperature monitor system. Re-test & verify heater control and pre-amp temperature readout points for HBD East and West. Frank, Paul & Mike Lenz-one day
- Connect the Remote Monitor & Control (RMC - ADAM System) communication cable into the five new racks. Pre-test control and readout functions for these racks prior to "PINK" sheet testing. Frank & Steve Boose-one day.
- Perform a full "dry" run of all SMCS logic actions prior to performance of the CAD witnessed "BLUE" sheet test. Frank & Paul-two days.

Lower Priority items:

- Troubleshoot and repair Muon Trigger optical data cables.
- Install and test temperature and flow interlock instruments for protection of the new Control Room Duct Heater.

Shutdown '08 Electrician Work

- * Run Power to new MuTrgr FEE racks on MMS. *by 10/31 Wiring completed...temporary power to be provided for South FEE tests*
- * Re-wire ToF Rack power distribution bucket in Gas Mixing House. This is to correct minor wiring errors. *Done. Mixing house UPS's installed and working.*
- * Walk down PHENIX Electrical Distribution Panels/Breakers and update changes on the electrical one-line drawings. *Complete by 12/31.*
- * Install power and signal cable tray (ceiling suspended) for new DCM rack row - north of existing DCM racks. *To Be Scheduled*
- * Assist in signal and LV cable installation for MuTr/RPC upgrades as necessary. *Installation of RPC prototype rack needed*
- * Repair Duct heaters for Control Room. *Temporary 15 KW Heater installed. To be completed?*
- * Upgrade power capacity of Central Magnet power distribution for future bridge rack loads.
- * Remove existing 15KVA transformer and install 45KVA unit.



Lower priority; not required for run 9, to be scheduled when manpower available and operations & projects inconvenience are minimized

1008 Building Maintenance Issues

- Roof leak in utility bathroom at northwest corner behind tech offices.
- Roof leak over door between rack room and assembly hall.
- Trailer bathroom slop sink (for Custodians).
- Heat wrap tape for trailer bathroom toilet drains to prevent freeze/clogging in winter.
- New duct heater (This item is in progress and should be completed soon)
- Improved Rack Room AC performance (This item has been addressed time and again but unsatisfactorily. Currently the AC fails periodically and is repaired only to fail again. On-condition maintenance is not adequate...an engineered solution is needed.)



RPC3 Prototype Installation

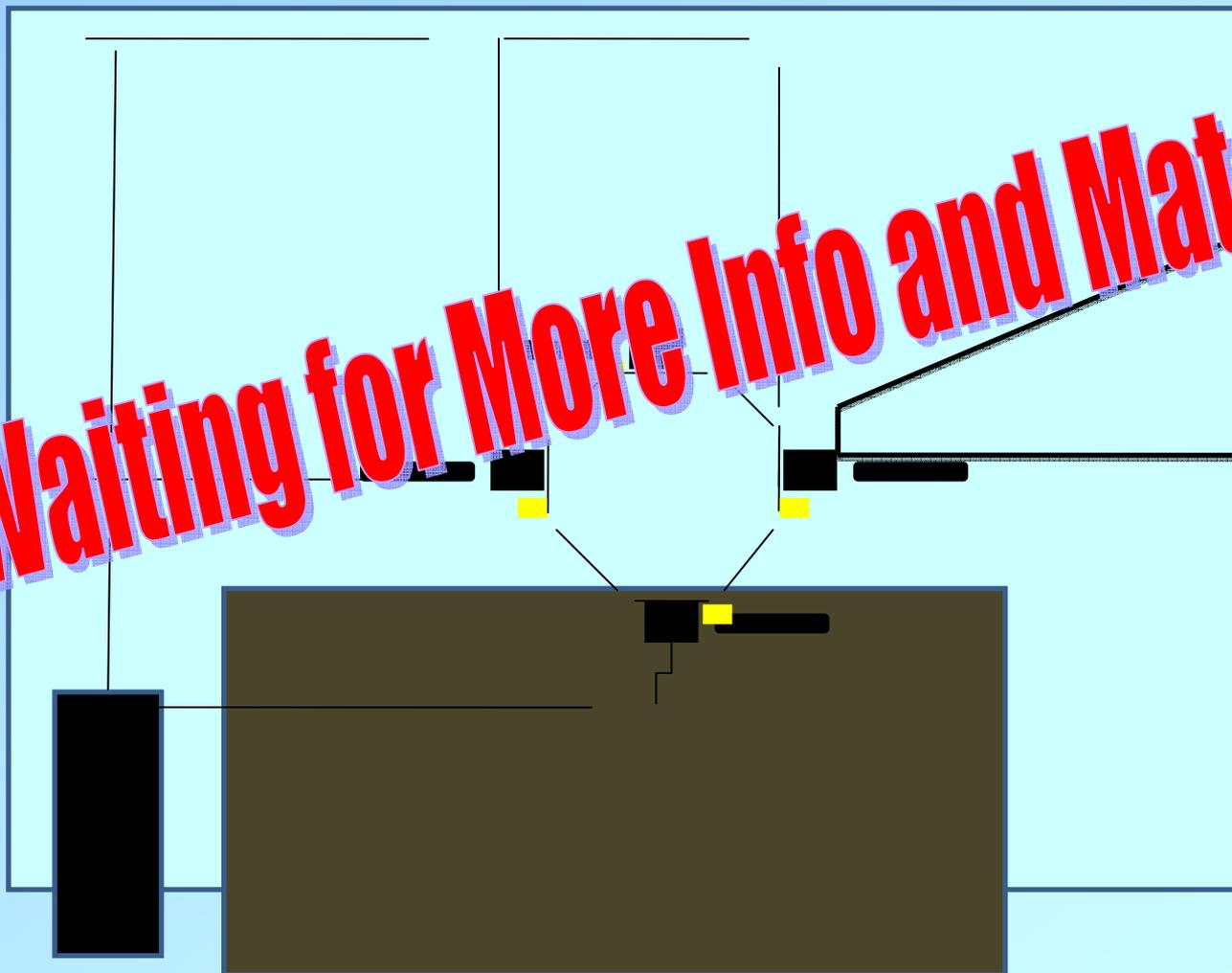


12/18/08

RPC3 Prototype
scintillators

Waiting for More Info and Materials

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RPC3 Prototype Installation: Scintillators

- 4 pairs of scintillation counters
- each pair consists of 2 ~1" thick scintillators; active area ~ 2" x 2" ; Length ~10" with phototube and shielding; light guide cylinder ~ 1" dia. With 1" dia PMT's; Weight is ~ 4 lb per pair.
- TLD's: Change and read weekly (quantity and location TBD)
- To be positioned in South tunnel uniformly distributed around the beam pipe at approximately 3, 6, 9 and 12 O'clock at a radially convenient location which overlaps the RPC3 prototype
- Z location is south of RPC3 as close as possible but at most 12" away (for the 3 O'clock pair, others to match z-position)
- Detectors require 2.5 kV to be run from IR.
- 16 channel signal, also to be run from IR
- Rack support is TBD

Nothing New This week.
Repairs to be performed during '09 Shutdown

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Commissioning Underway

RPC Factory Change in Scope

Waiting for Minutes & Action Items:

Factory work permit revised draft submitted for review.

Revision to Gas Ops - Rob

Revision to HV & LV Ops - Paul

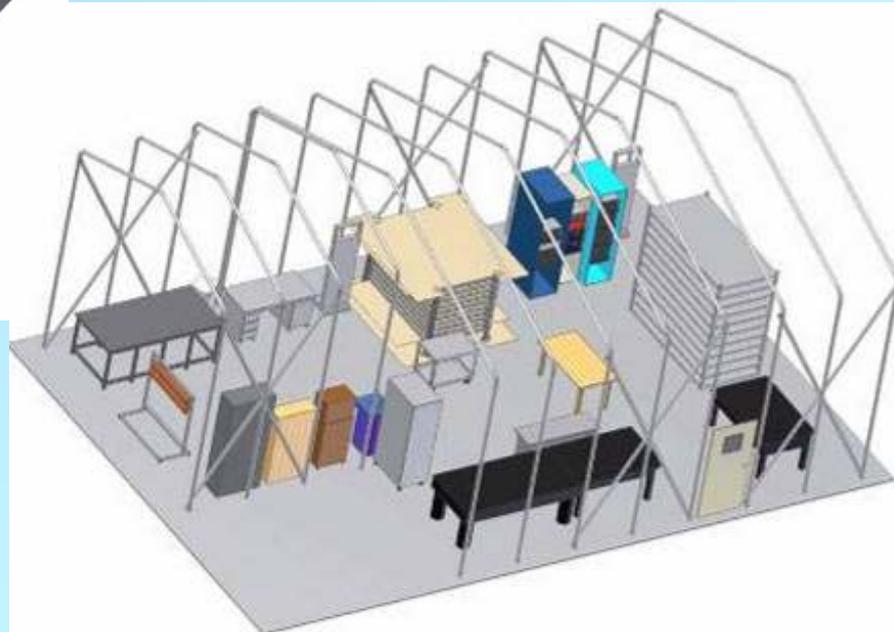
Revision to safety system checkout - Paul

Revision to assembly and test plan - Don

Revision to $\frac{1}{2}$ octant, module & gap storage plan - Don

RPC Factory Support

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RPC Factory

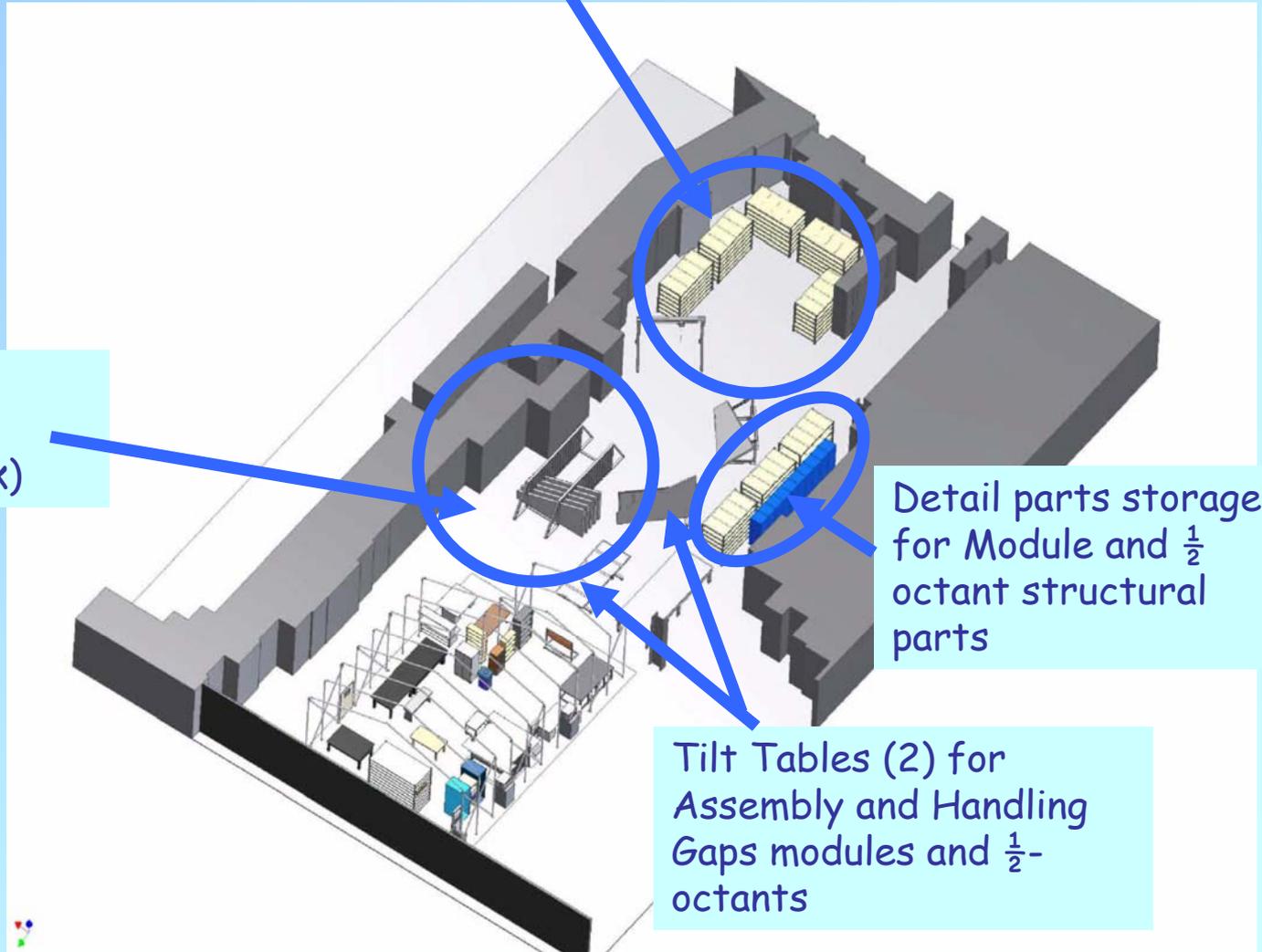
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Module and Gap Storage with humidity Control

Burn-in test stand (bicycle rack)

Detail parts storage for Module and $\frac{1}{2}$ octant structural parts

Tilt Tables (2) for Assembly and Handling Gaps modules and $\frac{1}{2}$ -octants



Dark Current Test Stand under construction



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Also working on:

- a burn-in test stand for $\frac{1}{2}$ octants



- additional storage for gaps modules and structural detail parts
- transport table/cart

New ODH1 Rules for RHIC tunnel (Does not include IR but does include RPC 3 area)

ODH Web training TQODH1 (All should take this as soon as possible ~ 15 minutes)

POM and escape pak training

Medical physical (may be waived)

Rad worker 1 also required during run.

PHENIX personnel to be trained: Carter, John T., Frank, Sal, Paul, Steve, Don, (Mike Rau).

RPC Personnel?

Others?

(It is not clear whether or not we will be able to escort untrained personnel)

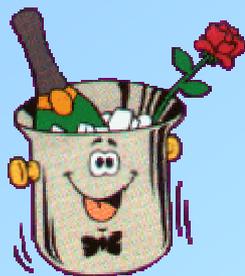
*** Training Update has been sent out -- Everyone in pretty good shape.

Where To Find PHENIX Engineering Info



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Be Safe.. See you next year!



Links for the weekly planning meeting slides, long term planning, pictures, videos and other technical info can be found on the web site:



http://www.phenix.bnl.gov/WWW/INTEGRATION/ME&Integration/DRL_SSint-page.htm