PHENIX
WEEKLY PLANNING

11/7/2008

Don Lynch

Technical Support 2008

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

Run Position 10/20 – 10/31 <DONE>
(CM & MMS moved north WC west)

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

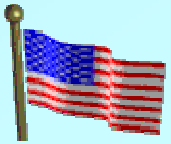
Station 1 north access 12/15-12/31
(CM moved south, WC west)

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.)

Note: Tue. Nov. 11 is a Lab Holiday (Veterans Day)



Remember those who have served.

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Shutdown '08 Schedule

PHENIX

October November December January

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

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

Move MMS south 11/3 <DONE>

Install sta 1. S Scaffolds 11/4-11/7

HBD Installation (west) 11-6-11/7
(east) 12/17-12/31

MuTrigger FEE 11/10-11/14 <DONE>
Sta 1 S chasis install

Sta 1S chasis 11/3-11/14 <DONE>
Water & air (2&3 S Done)

Install/test cards 10/2-11/30
sta 2&3 N and sta 1, 2 & 3 S

Install Lead absorber 11/17-11/21

Install FEE S rack platform 11/17-11/21
And racks

FEE S Cabling & Testing 11/24-11/29

MuTr sta 1 S Decaps 12/1-12/12

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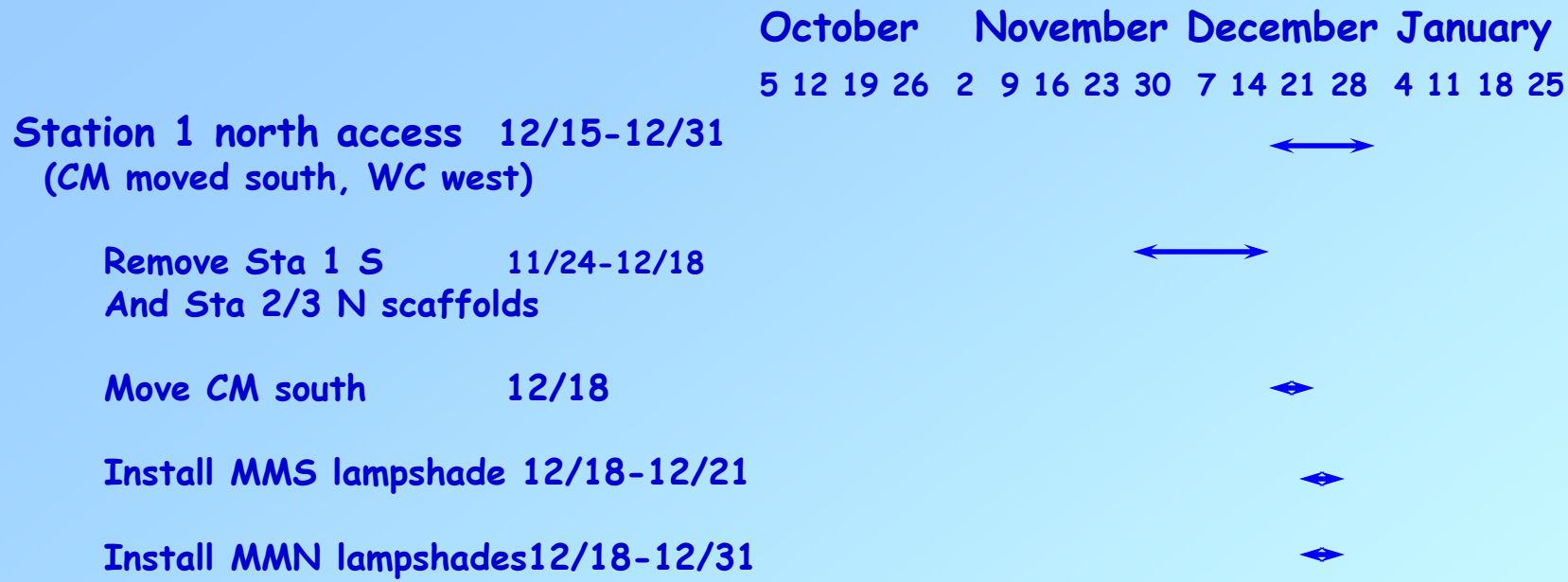
Shutdown '08 Schedule



Shutdown '08 Schedule

October November December January

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

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

Install EC 1/2-1/15

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

Move MMS North 1/16

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

DC East/West Repairs 1/16-2/1

Install MuID Collars 1/19-1/21

Pink/Blue/White Sheets 1/16-2/1

Close Shield Wall 126-1/30

Cryo Start Up, Start Physics 2/1-2/18

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Shutdown '08 Schedule

PHENIX

October November December January

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

Other On going Tasks

Fan Tray Mainteance (fill in)

RPC3 Prototype install (11/15-11/30)
(including assembly at factory,
Moving tunnel shielding, modify
Crystal palace & vapor barrier,
RPC3 install, rack, install
scintillators,services & testing)

RPC Factory Support

Dark Current test stand

Storage Racks with humid. Cntrl

Prep for 2009 Shutdown
(as time permits)

Gas Mixing house UPS by 11/30

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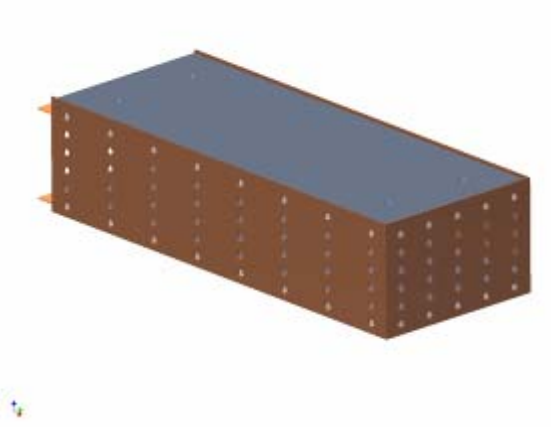
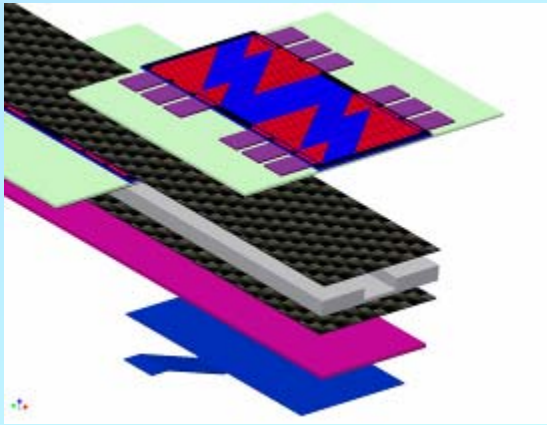
Shutdown '08 Schedule

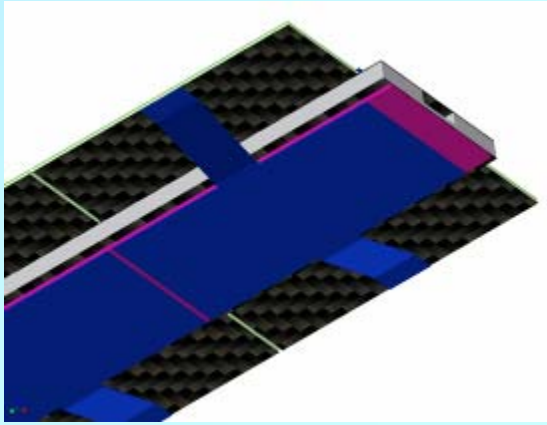
	October				November				December				January			
	5	12	19	26	2	9	16	23	30	7	14	21	28	4	11	18	25
Rack room electronics, etc.	←																→
Build new storage 10/1-11/15 crates	←								→								

NCC prototype design support
HBD support
VTX fabrication tooling design
VTX installation design
FVTX design/engineering support

→ As Required







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Shutdown '08 Electrician Work

PHENIX

*Run Power to new MuTrgr FEE racks on MMS. *by 10/31* Start work Monday 10/27

*Re-wire ToF Rack power distribution bucket in Gas Mixing House. This is to correct minor wiring errors. *By 10/31/08*

*Install new UPS in Gas mixing house. *By 11/30*

*Walk down PHENIX Electrical Distribution Panels/Breakers and update changes on the electrical one-line drawings. *Complete by 11/30/08.*

*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. *MuTrgr North Done, MuTrgr South & RPC Prototype to be scheduled*

*Repair Duct heaters for Control Room. *Temporary 15 KW Heater installed. 4 more week parts lead time for duct heater repair – CAD work.*

*Upgrade power capacity of Central Magnet power distribution for future bridge rack loads.

*Remove existing 15KVA transformer and install 45KVA unit.

*Install new (larger size) power cable from rack room to Central Magnet distribution breaker panels. REMOVE THIS ITEM----SCHEDULE NEXT YEAR

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

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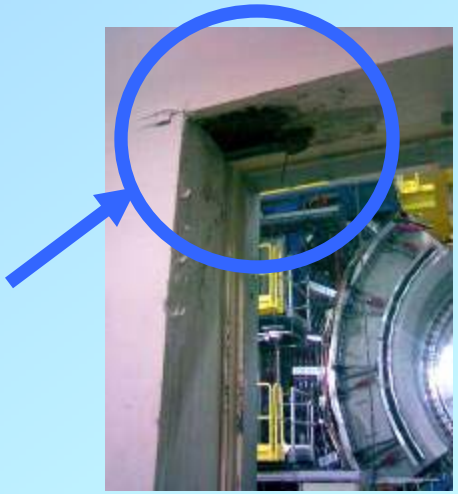
1008 Building Maintenance Issues



- 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 (In progress)
- Improved Rack Room AC performance

Scaffolding Crates

Existing Crates for Sta 2/3N scaffolds are severely rotted and need to be replaced with weather resistant materials.

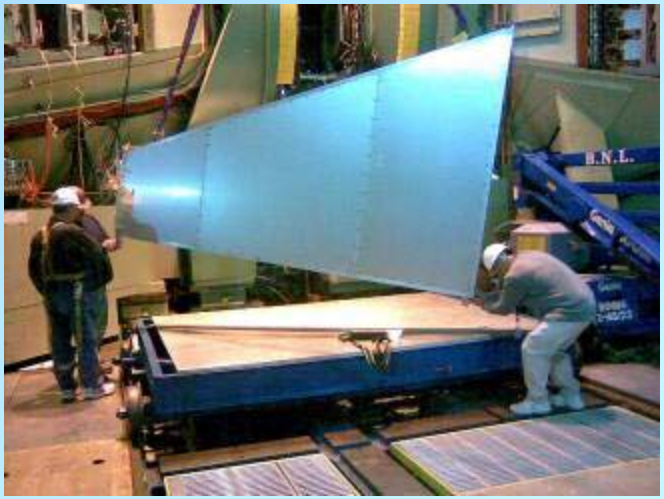
Sta. 1 scaffolds do not have storage crates. These need to be built of similar materials. All dimensions of crates are available.

MuTrigger FEE South & RPC Prototype Racks

Both Racks ready for installation

MuTrigger FEE North Sta. 2 & 3 PC Board installation and cable connections continue

RPC2 Prototype Installation

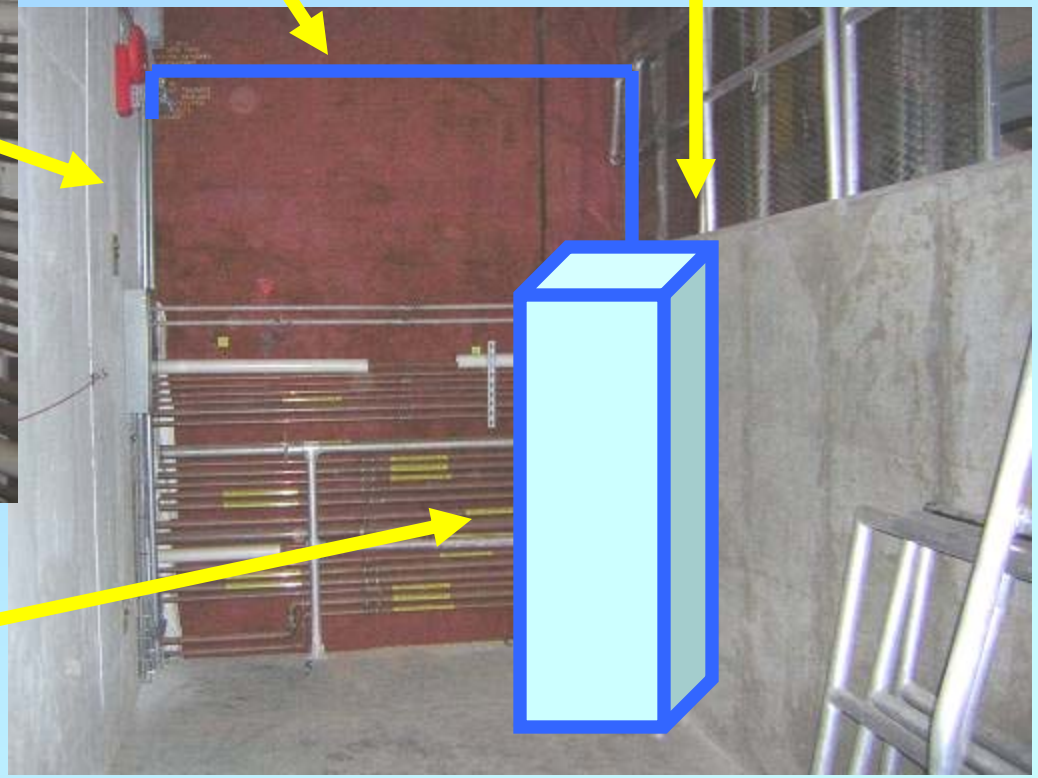


RPC prototypes will be ready for installation as follows: RPC3 11/15, RPC2: Done

RPC2 Prototype Rack

Power bridges across to Rack

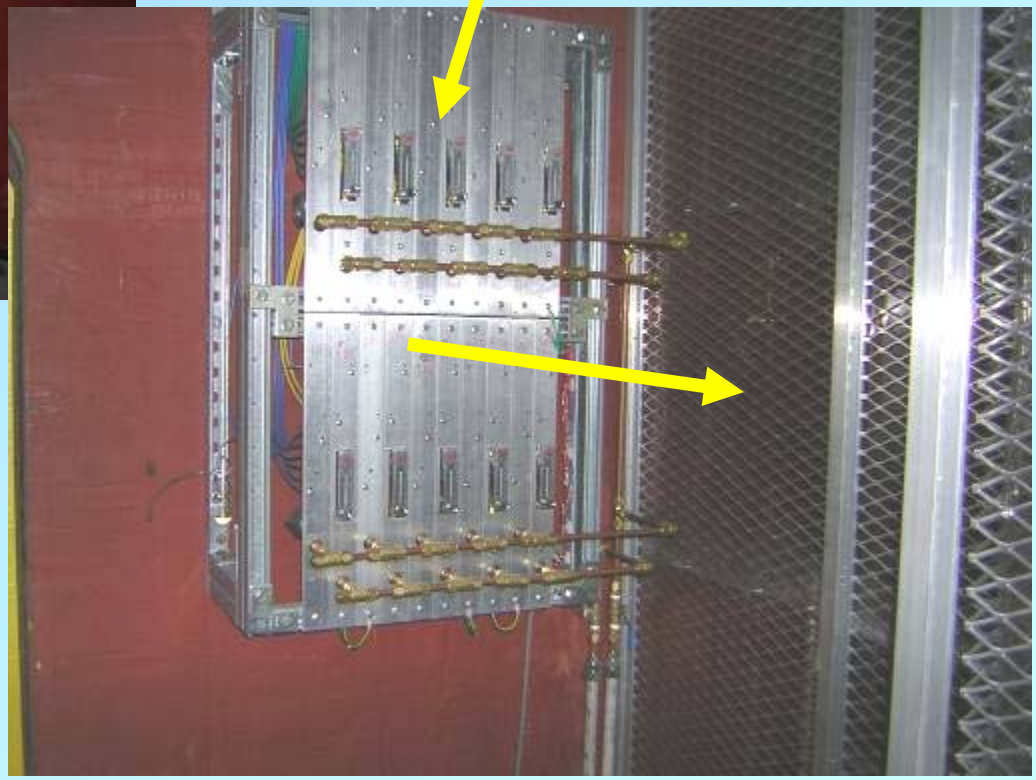
Cable tray runs on edge of pedestal floor to rack



Rack goes here

RPC2&3 Prototype Installation

Gas flow rack and gas lines to be taken off MuID steel and moved to crystal palace wall



Cables go under magnet to west side of pedestal

PC1 East Broken Wire Repair

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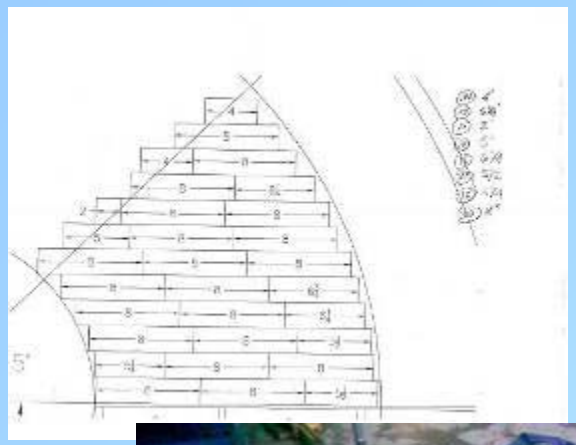
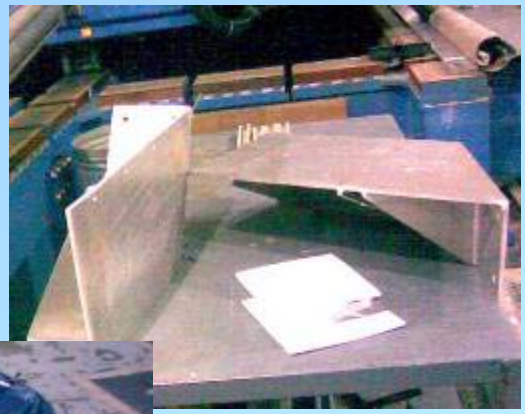
RPC Absorber





All Lead cut, painted and ready for installation

RFQ placed with CS

J. Scott will deliver 120 2x4x8 rad clean and painted lead bricks, on skid to 1008 by 10/15

Don, Jimmy, Kenny, Carter, John and Mike L. must take TQ-LEAD1 (web course) by 10/15

Checking into lead cutting at SUNYSB

Work permit req'd

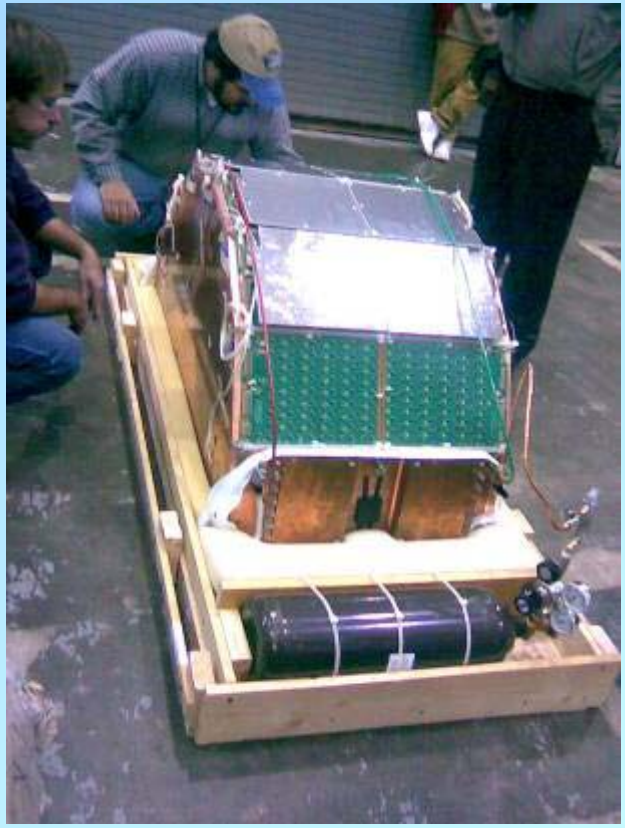
The Prodigal detector returns!
Let's slaughter the fatted calf!

HBD

HBD Installation Schedule:

West (Bill): 11/6 (Done?)

East (Ted): 12/16 (tentative)



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MuTr FEE upgrade status

Tsutomu Mibe (KEK)
for the onsite upgrade team

Status of ADTX board production

- All 220 boards were produced and arrived at BNL.
- Final QA in progress (Sean, Ken'ichi)

Installation of FEE-ADTX cables and ADTX boards

- Cables
  - Station 2
    - Completed
  - Station 3
    - Octant 1,2,3,4,5,8
    - Two more octants to go
- ADTX boards (Jimmy)
  - Station 2 Octant 1,2,3,4,5
  - Station 3 Octant 1,2,3,4,5

North Station 2 Octant 6,7,8

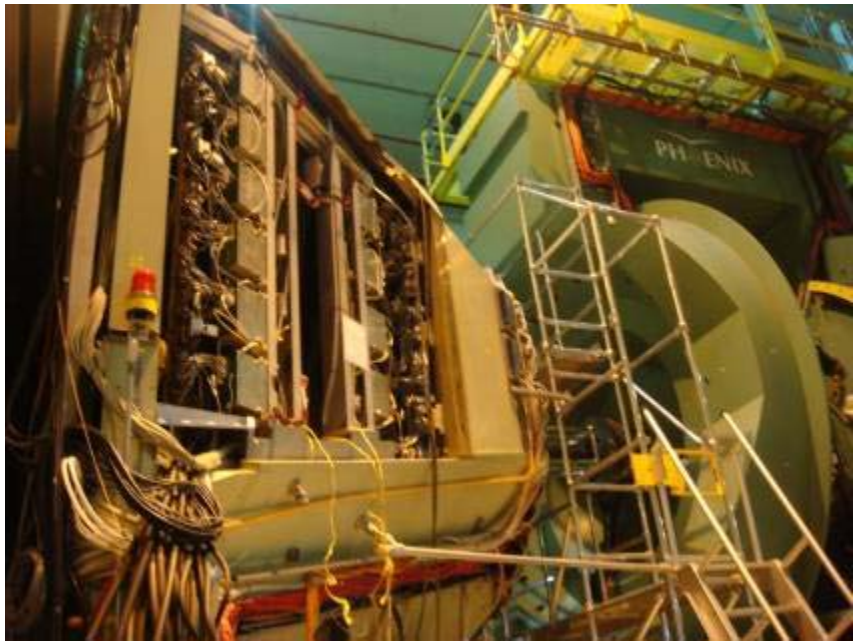
North Station 3 Octant 2

Remaining tasks for completion of North arm installation

- FEE-ADTX cable installation (1 day)
- ADTX boards QA (2-3 days)
- ADTX board installation (2-3 days)
- Noise hunting at S3O6
  - ??? days
- Data taking with our local DAQ system (1wk+)
  - Update for multiple board readout

Installation to South arm

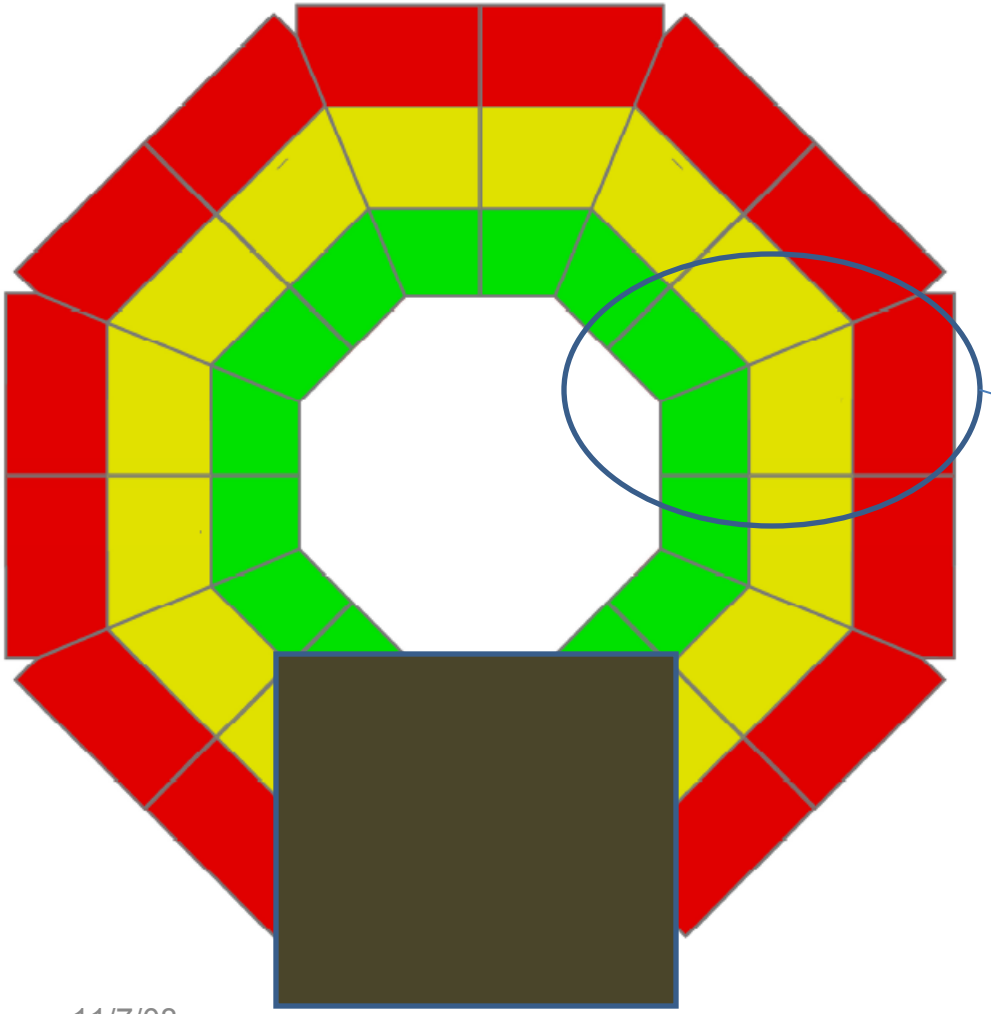
- Infrastructure
  - Bundling of optical cables and LV cables is in progress (Eric)
  - Cable routing (1 day)
  - LV distribution check (1 day)
- Installation of FEE-ADTX cables (1-2 days)
- Installation of ADTX board (1 day)

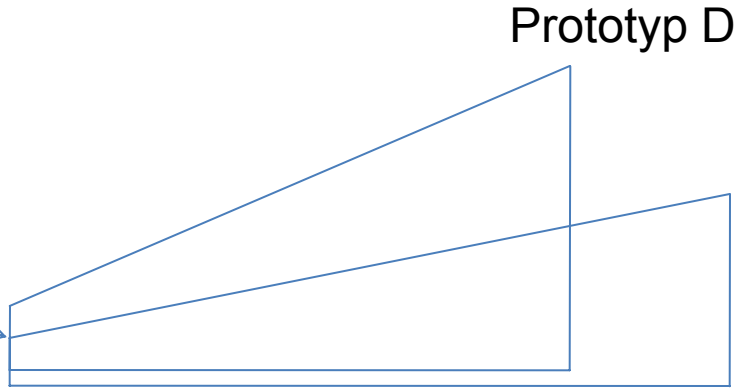


RPC3 Prototype Installation: Scintillators

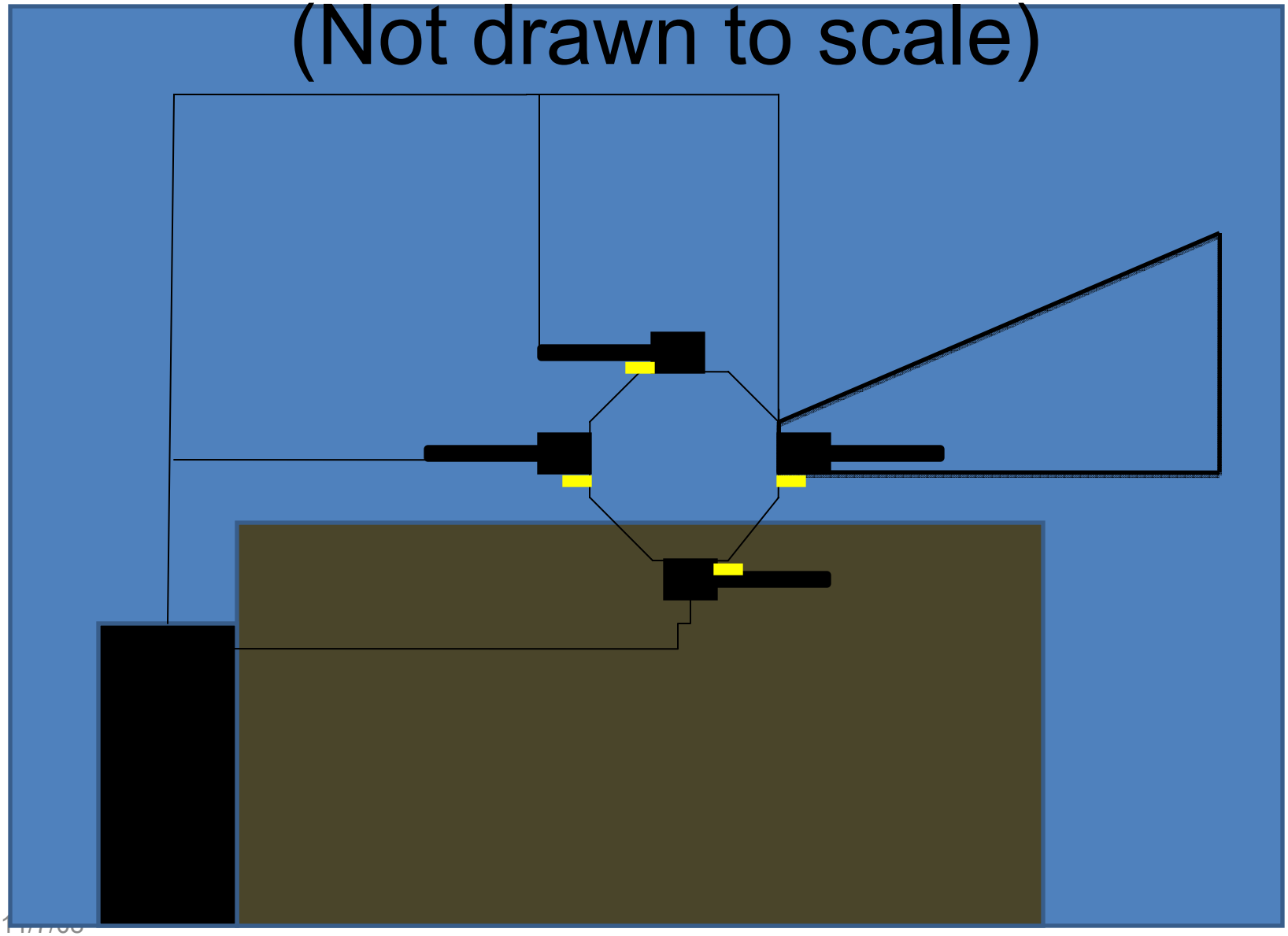
- 4 pairs of scintillation counters
- each pair consists of a ~1" thick and a ~1/2" thick scintillator
- active area ~ 2" x 2" ; Length ~10" with phototube and shielding
- Weight is ~ 4 lb per pair.
- To be positioned in South tunnel uniformly distributed around the beam pipe at approximately 3, 6, 9 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

Orientation: Position of Prototype

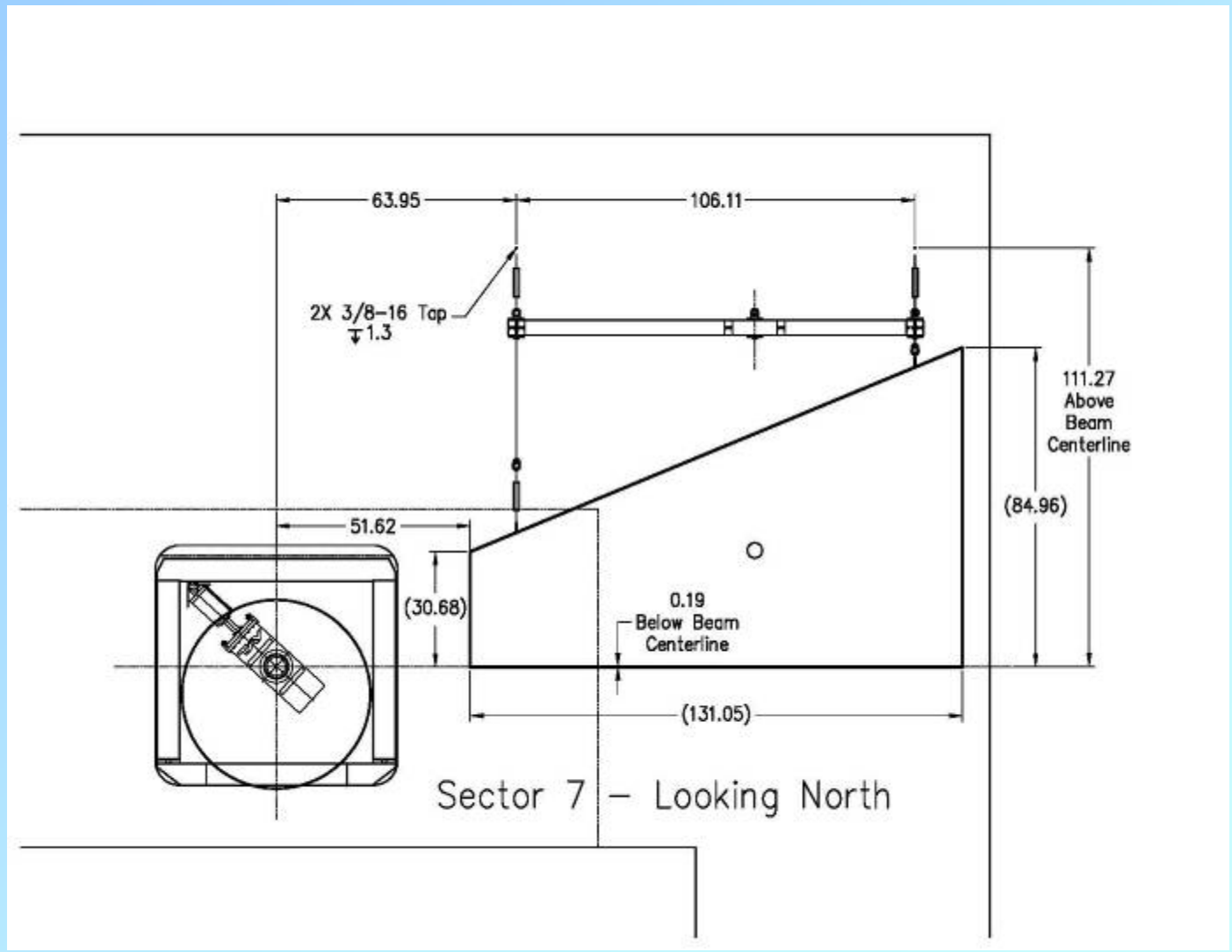




Position rel. to detector (Not drawn to scale)

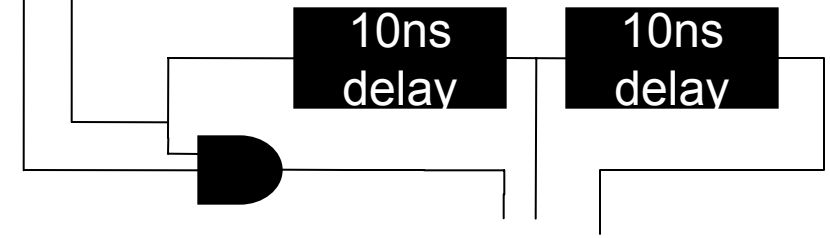


RPC3 Prototype Mounting Scheme (from C. Pearson)



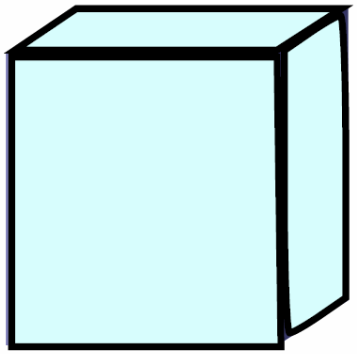
Scintillating Counters

- 4 pairs of scintillating counters
- Each pair consists of two 1” thick scintillators
- ->16 Channels: Coincidence and one scintillator single count gated with 10 ns and 10, 20 ns delay
- PMT: Philips xp2008 (1.5” diameter)
- Scintillator Pilot 452 2x2x1 inch^3
- TLDs: Change & readout every week



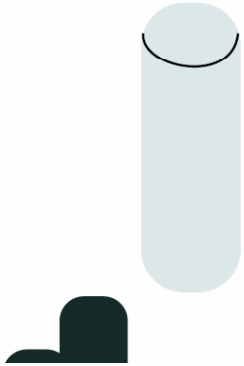
Pilot 425 scintillator

(all eight scintillators are two inches tall, two inches wide and one inch thick)



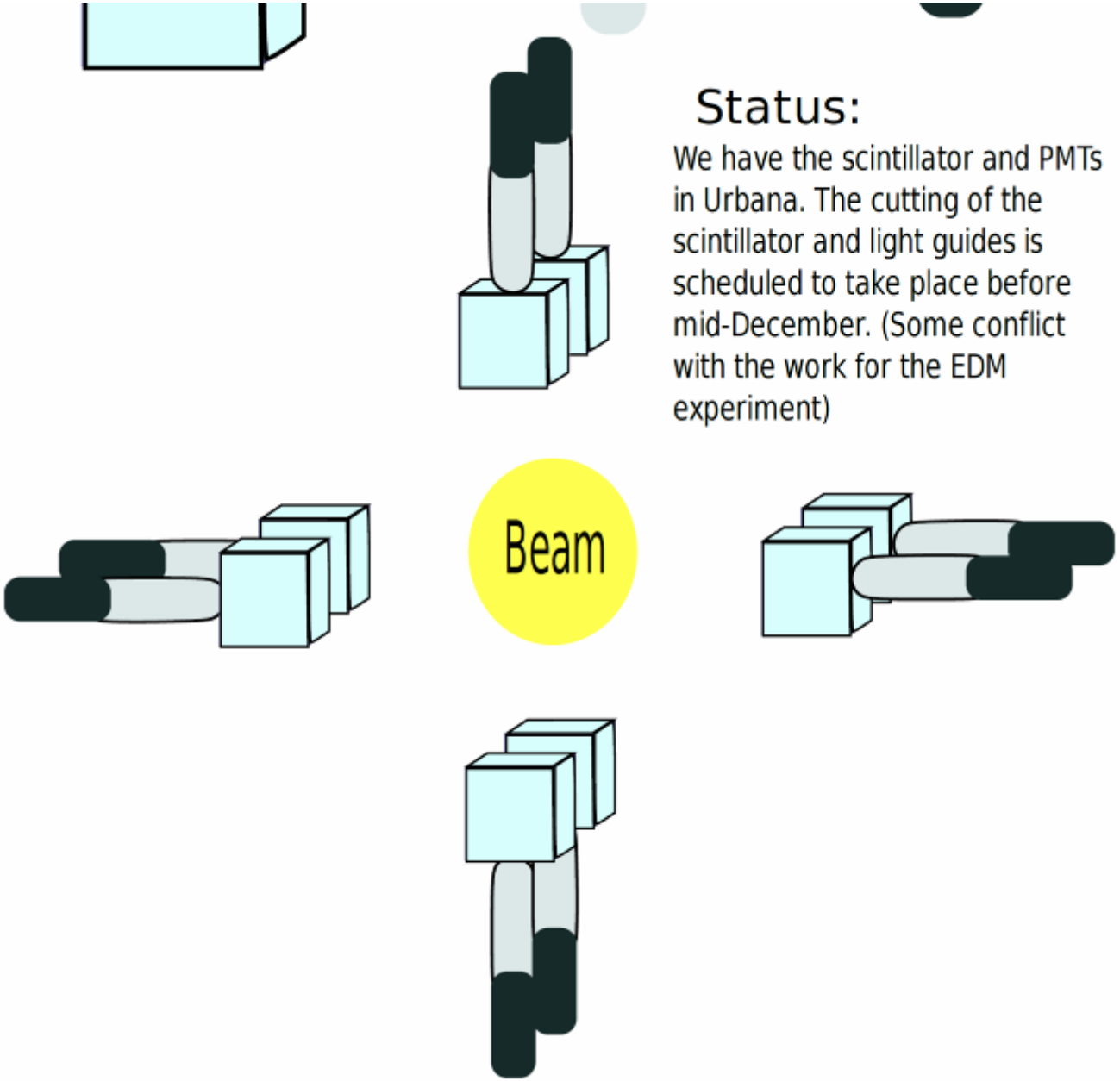
Light Guide

(all eight light guides are cylinders that are one inch in diameter)



Philips XP2008UB/10 PMT

(all eight PMTs are about one inch in diameter)


Status:
We have the scintillator and PMTs in Urbana. The cutting of the scintillator and light guides is scheduled to take place before mid-December. (Some conflict with the work for the EDM experiment)
Beam

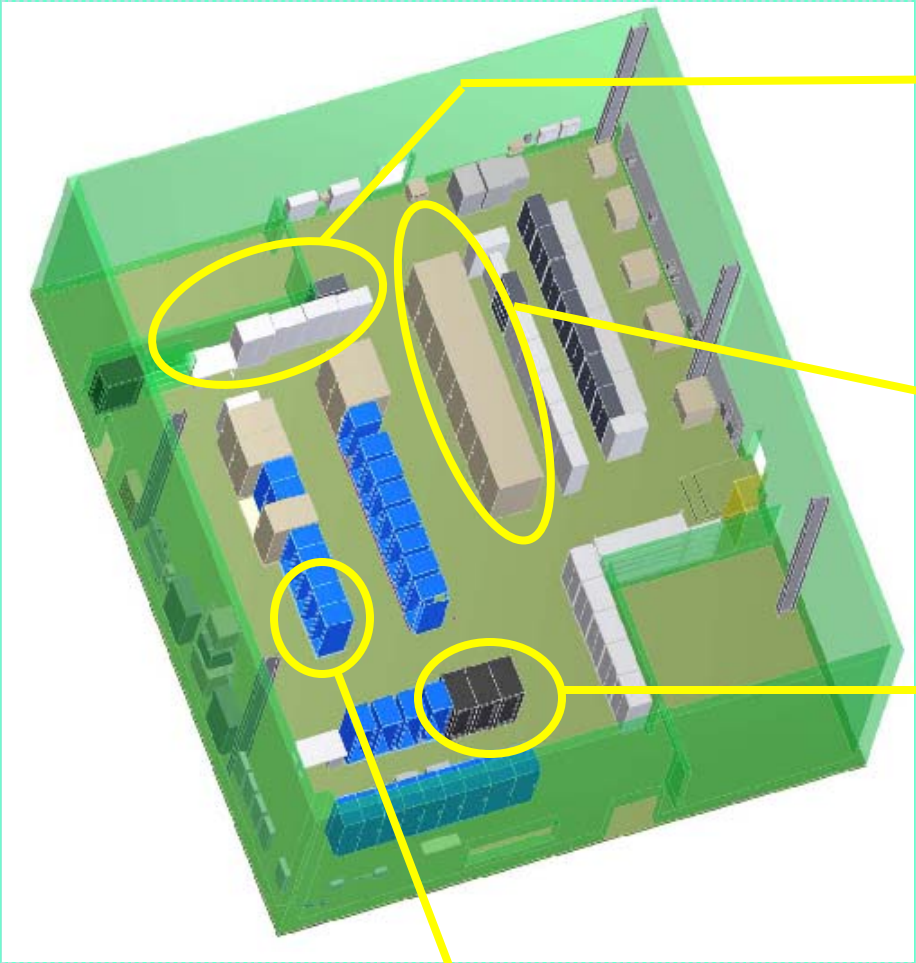
Counter Location

6 o’clock, west

Organization & Timeline

- Scintillator & PMTs in Urbana
- Cutting of Scintillator and Lightguides is scheduled to take place before mid December
- Then: Ship to BNL & test, Installation by Charlie Pearson
- Electronics provided by Phenix
  - Discussion with John Haggerty: Scalers in tunnel, readout via ADAM system

Proposed Reorganization



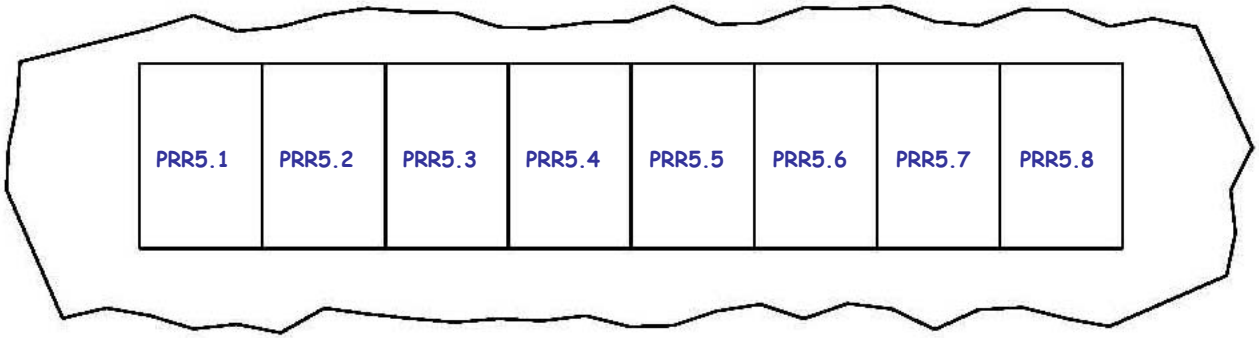
Relocated file & storage cabinets, & desk

Added 2 DCM racks to east end of row 5 and 2 DCM racks to west end of row 5

Moved 2 large black racks from row 4 and added a third large black rack to row 2

Moved tall blue (open) rack from north end of row 2 to east end of row 3 and added another of the same to row 3

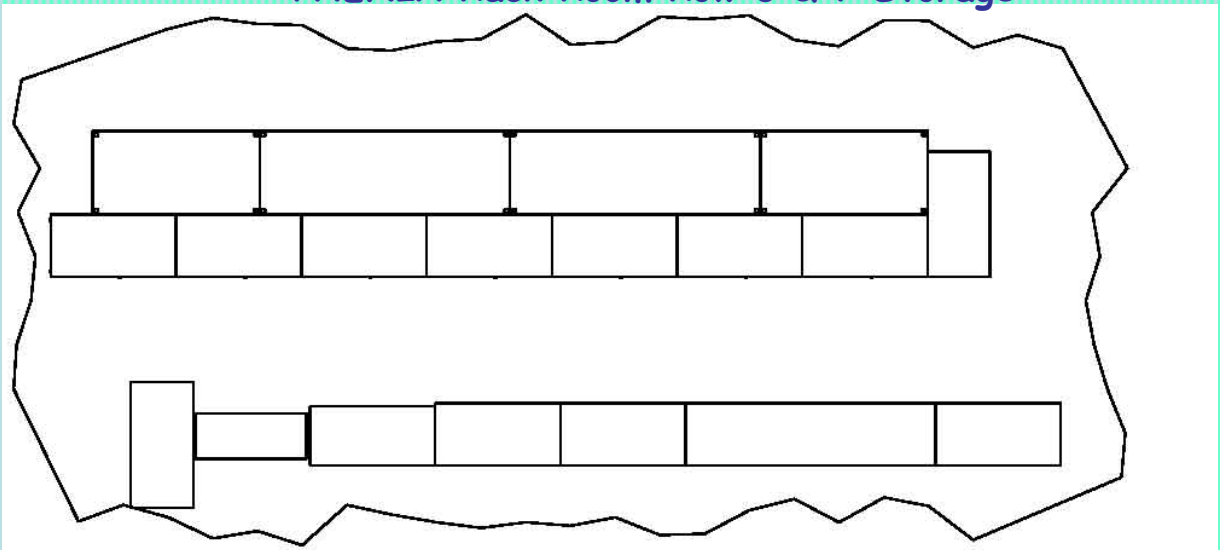
PHENIX Rack Room Row 5



DETAIL F
SCALE 1 / 25

Need to tee off supply and returns for 2 racks in each of these 2 positions

PHENIX Rack Room Row 6 & 7 Storage



DETAIL G
SCALE 1 / 25

Safety, Security, etc.

Human Performance Awareness: Identify the Roadblocks to Safety

1. ***"Accidents are just going to happen."***
   It's surprising how many intelligent managers, supervisors, and employees have this barrier. This fatalistic belief creates an obstacle to organizational learning about safety. This attitude of hopelessness stifles creativity and improvement in the organization's safety process. At C-AD our goal has been zero injuries for years and this attitude and acceptance of this goal has significantly reduced injuries of our staff.
2. ***"It won't happen to me."***
   This barrier is a 180 degree reversal of the previous one. This attitude prevents employees from taking responsibility for safety. This mental barrier to safety puts everyone around in danger – the employee, co-workers and sometimes users or members of the public.
3. ***"I have enough experience or skill to take shortcuts."***
   The egotistical nature of this barrier causes individuals to resist coaching, feedback, and training that can help them work safe. The danger of this obstacle is that it often exists in the minds of more senior or experienced workers who set a poor example for those who are less experienced. It's difficult to detect this barrier. When employees make excuses for not following the BNL/C-AD safe work practices, this behavior sets a poor example for less experienced workers and this "attitude" lingers in the newer workers for a long time.
4. ***"I'll do it just this once."***
   These words may be the last words that you will ever think. How often have you said this yourself or heard others say it? This phrase should be a big red flag to **STOP** and assess the situation.
5. ***"Zero is impossible."***
   This is the biggest of all safety barriers. This statement is an indicator that a huge barrier to an injury-free workplace exists. Ask yourself why you'd work where it's not possible to work without injury. This barrier affects individuals and the entire organization because it shuts down efforts to strive towards a zero injury culture.

Where To Find PHENIX Engineering Info

All in a day's work

Technical Support 2008

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