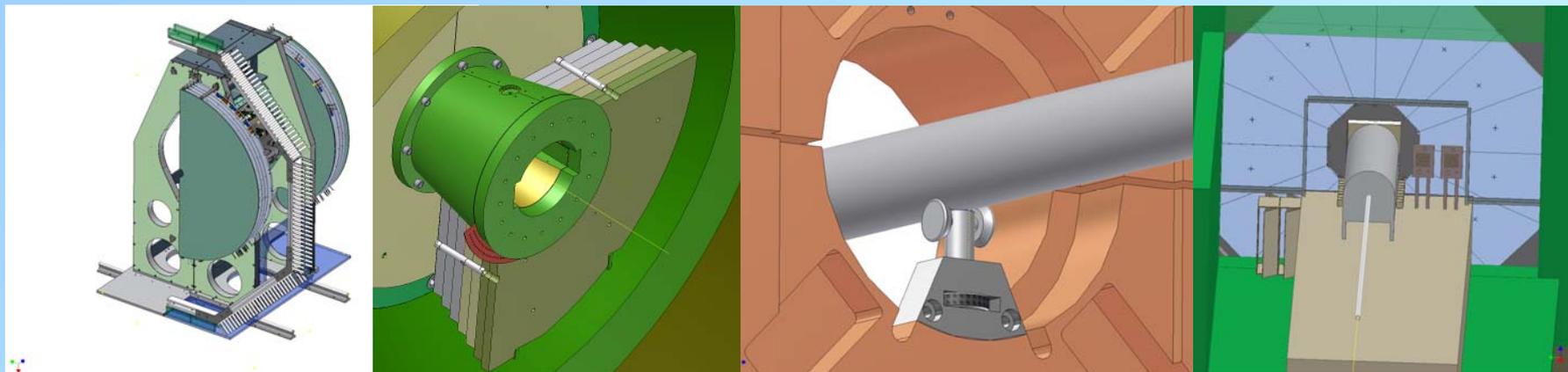


# PHENIX WEEKLY PLANNING

TECHNICAL SUPPORT NO-0



5/20/2010  
Don Lynch

# Ongoing Tasks for Run 10

TECHNICAL SUPPORT NO-0

Task	Start Date	End Date
Install rack components in RPC3 N racks	Done	Done
Attach cables to RPC3 N racks and to Detector $\frac{1}{2}$ octants	Done	Done
Commissioning Tests (HV, Mixed gas and Freon only)	5/27/2010	6/11/2010
Send mass flowmeters out for recalibration (DC/PC, MuID, TOF.W)	In Progress	6/30/2010
AH Crane 110 switch for lockout	In Progress	6/30/09

## This Week:

- Yesterday's Maintenance/access:
  - RPC final prep for commissioning tests: HV & XMIIt, Cable management, grounding issues with racks and cable trays fixed
  - RPC3N walkthru
  - ERT
  - HBD
- Run 10 tech support
- Future upgrade support as necessary
- 2010 summer shutdown prep continues:
  - VTX & BP assembly/installation parts & fixtures procurement & fabrication
  - RPC3 S assembly/installation fixtures parts & fixtures procurement & fabrication

TECHNICAL SUPPORT NO-0



## RPC3 N Commissioning

5/20/2010



VTX  
subassembly  
fixtures





RPC3S base guide rail assemblies



New Ar Dewar and PHENIX Empty Gas bottle storage slab

Walkthru on Monday: grounding issue



# List of Gas Lines (51 total so far)

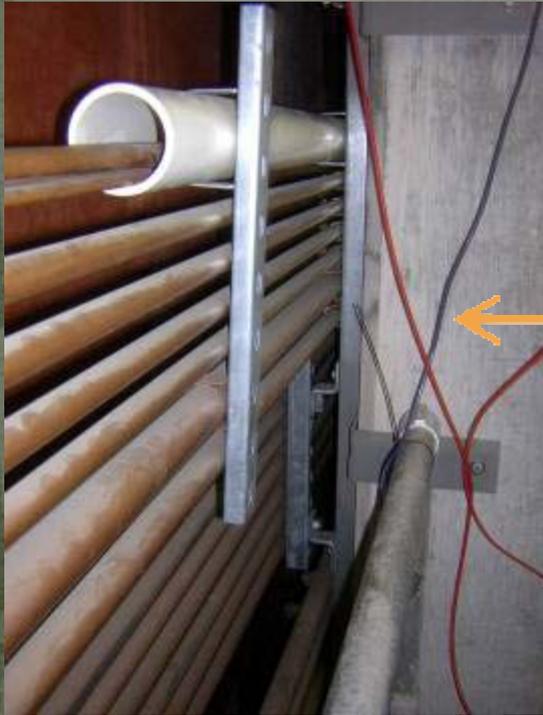
## "Front Row" in GMH Go to West Side in the IR

Rack purge air supply-----	1-1/8"
Detector Purge Air Supply-----	1-1/8"
North MuID Return-----	1-1/8"
MuID North Supply-----	1-5/8"
MuID North Purge Supply-----	1-1/8"
MuTr North Supply-----	1-5/8"
MuTr North Return-----	1-5/8"
DC/PC BVP Return (dead)-----	1-5/8"
Nothing-----	2-5/8"
Beam-Beam N2 Cooling-----	5/8"
Helium Bag Supply-----	5/8"
TOF West Supply-----	5/8"
West RICH Control #1-----	3/8"
West RICH Control #2-----	3/8"
West RICH Control #3-----	3/8"
West RICH Buffer Return-----	3/8"
West RICH Supply-----	1-1/8"
MuTr South Supply-----	1-5/8"
MuTr South Return-----	1-5/8"
MuID South Return-----	1-1/8"
MuID South Supply-----	1-5/8"
MuID South Purge Supply-----	1-1/8"

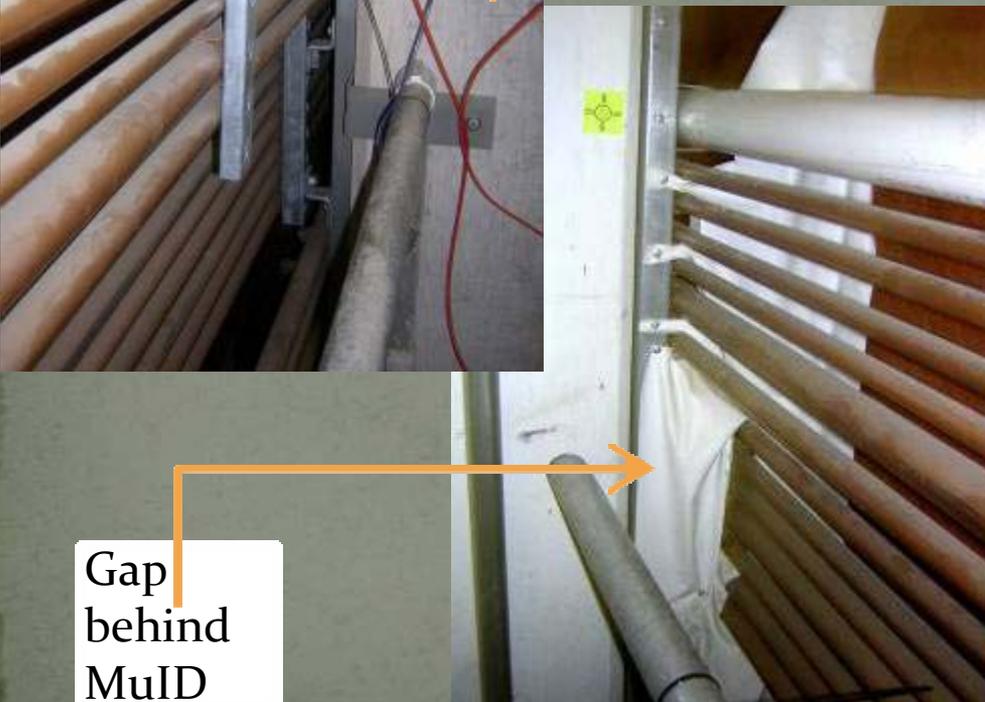
## "Back Row" in GMH Go to East Side in the IR

RPC-----	1/2"
East DC Supply-----	5/8"
West DC Supply-----	5/8"
Aerogel Nitrogen-----	7/8"
TRD Nitrogen-----	7/8"
Nothing-----	7/8"
West DC Return-----	1-5/8"
RPC Vent (Not Used)-----	1-1/8"
Nothing-----	5/8"
Nothing-----	3/8"
Nothing-----	3/8"
East DC Return-----	1-5/8"
TEC BPV Return (Dead)-----	1-1/8"
PC Supply-----	1-5/8"
TEC Supply-----	1-5/8"
DC/PC Return-----	2-5/8"
TEC Return-----	2-5/8"
East RICH Supply-----	1-1/8"
TEC CO2 Supply-----	5/8"
East RICH Control #1-----	3/8"
East RICH Control #2-----	3/8"
East RICH Control #3-----	3/8"
East RICH Buffer Return-----	3/8"

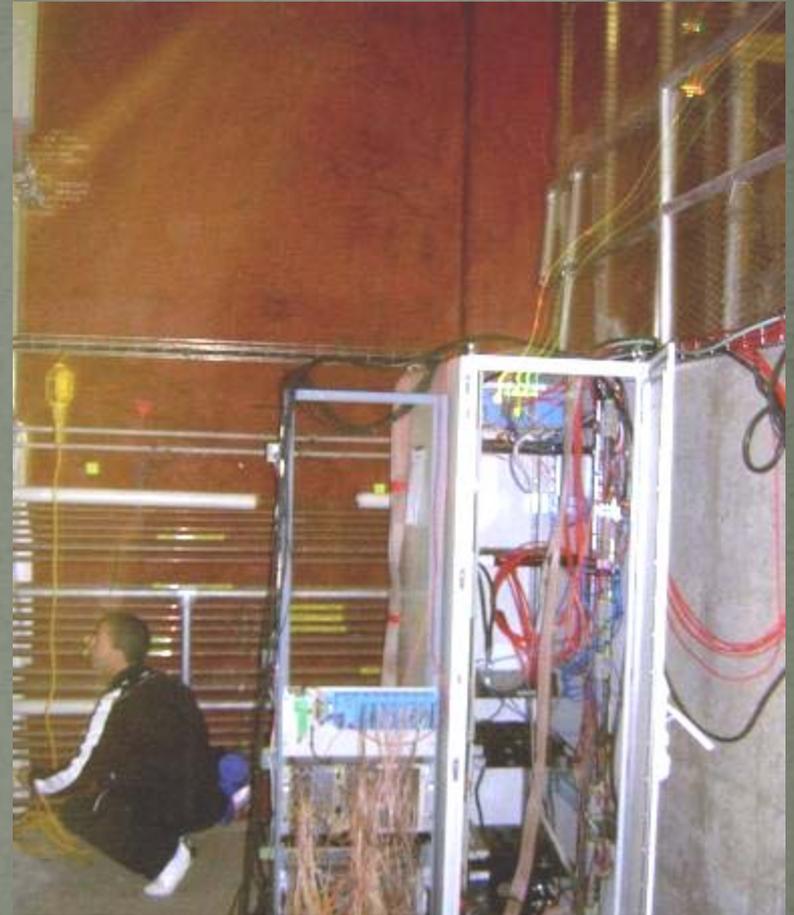
# South West in Tunnel



Pipes go  
under beam  
pipe



Gap  
behind  
MuID



All pipes have to be removed to  
install RPC.

5/22/2010 5/12/2010

### Novec Chiller

Vendor	Chiller	KiloWatts	Flow	Material	Del	Price Each
Advantage	M1-5W (BNL 49433)	7032@15F	12gpm @52psi	Cu,	6-7wks	\$9,365
Advantage	M1D-15W (BNL 49255)	22000@15F	36gpm@55psi	Cu	6-7 wks	\$17,000
Affinity	PWK-040K- BE37CBD2 (BNL 1335)	3000@16F	5 gpm@60psi	Cu	8-10wks	\$22,519
Affinity	PKW-060k- BE44CBD2 (BNL 1262-2)	6000@15F	8gpm@60psi	Cu	8-10wks	\$27,225
Affinity	Custom (BNL 1250)	6000@17F	10gpm@ 30psi	SS,Ni	12- 14wks	\$41,667

### Big Wheel chiller

Vendor	Chiller	KiloWatts	Flow	Material	Del	Price Each
Advantage						
Affinity	Custom FAA-032L- ED21CBD4 (BNL1343)	9800@68F	16gpm@35 psi	SS, NI	12-14wks	\$11658

# DC West Maintenance Probable Time Schedule

**Dates: July 26 - Aug. 13. 15 working days**

**Step 0. ¼ day**

General planning meeting

**Step 1. 3 days**

Start with DAQ running and HV “in hands”

Start gas flow 2.5-3 days

Disassemble electronics, installation of dummy grounds

Transportation boards to SBU, start board testing

**Step 2.**

Work on HV cards and HV problems, 2-3 days

?? Cut the mylar window for wire removal ??, 1-2 days

Final test with HV

Work on electronics and its test at SBU - 5-7 days

**Step 3.**

Start signal board and ASD/TMC boards mounting after HV work finished. 2-3 days

**Step 4.**

Final electronics assembling and testing. 3-5 days

## Next Week

No Scheduled Maintenance Access?

PHENIX Run 10 data taking ends

RPC3N cosmic ray test/commissioning begins

Track and prep for 2010 shutdown

Prepare for VTX, RPC3S, BP & absorber installation reviews

Fabrication for VTX support and Bigwheels

Design of installation tools and fixtures for VTX

Design of installation tools and fixtures for absorber

Future upgrades support

Run 10 support

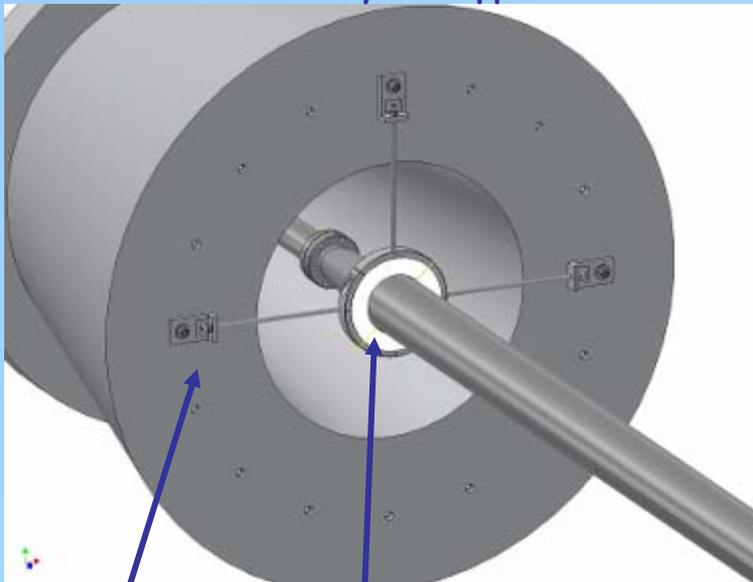
# 2010 Tasks

Start Date    End Date

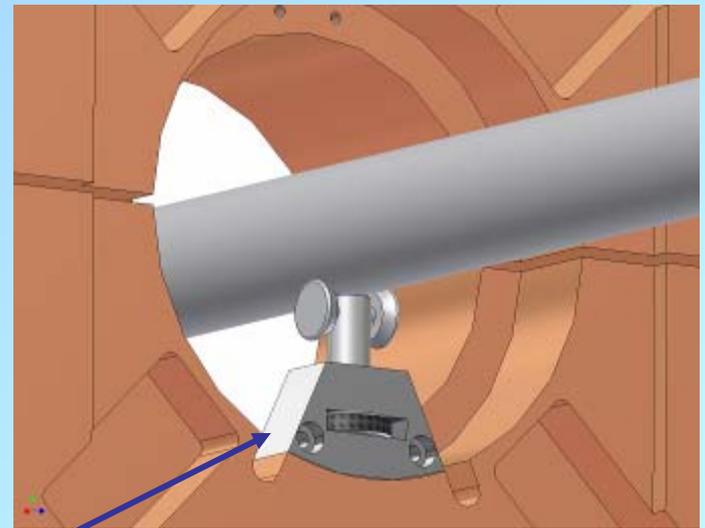
Run 10	In progress	6/21
VTX Installation Plan (Final)	In progress	5/31
RPC3S Installation Plan (Final)	In progress	5/31
Design support structure, alignment scheme for VTX	In progress	3/31
Specify and procure electronics racks and support equipment for VTX	In progress	5/31
Fabricate beam pipe supports	In progress	5/1
Beampipe NEG coating (CERN)	<b>In Progress</b>	<b>7/15</b>
Fabricate/procure parts for RPC3 S installation	In progress	5/1
Fabricate/procure parts for VTX installation	In progress	6/1
End of run 10	~6/14	6/23
End of Run Party	???	???
Prep IR for shutdown	6/1	7/1
Complete unfinished business for MuTrgr FEE & RPC3 North	6/23	8/1
Install Beam pipe	7/1	9/1
Install VTX	8/1	11/1
Install RPC3 South	6/23	11/1
2010 Shutdown Other Tasks	6/23	12/1

TECHNICAL SUPPORT 2010

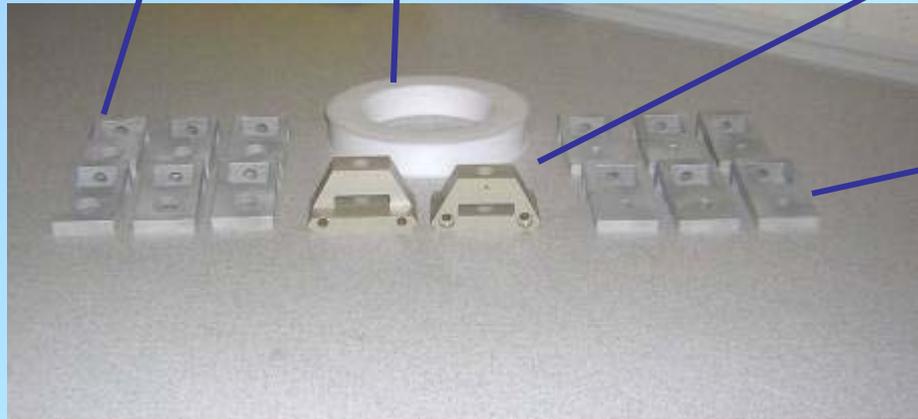
South BBC Cavity BP support



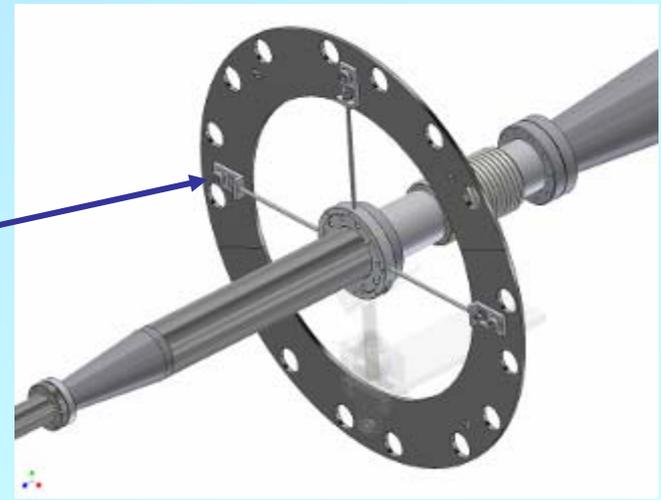
CM central BP supports (2 req'd)



TECHNICAL SUPPORT NO-0



BP support components from CS



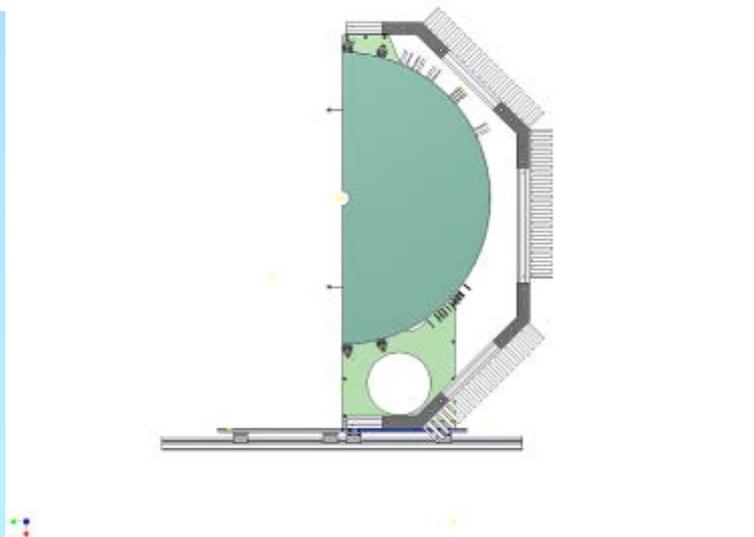
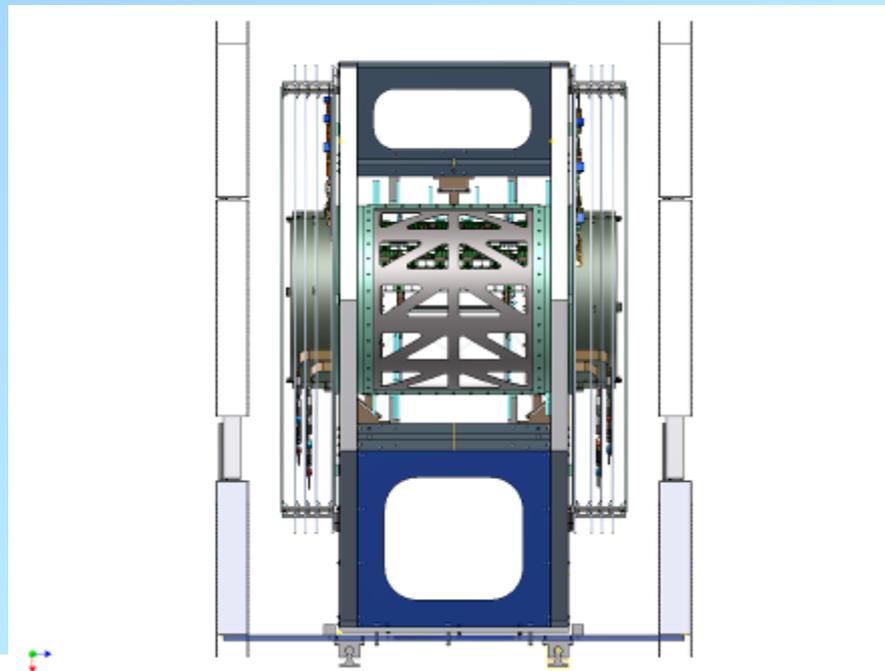
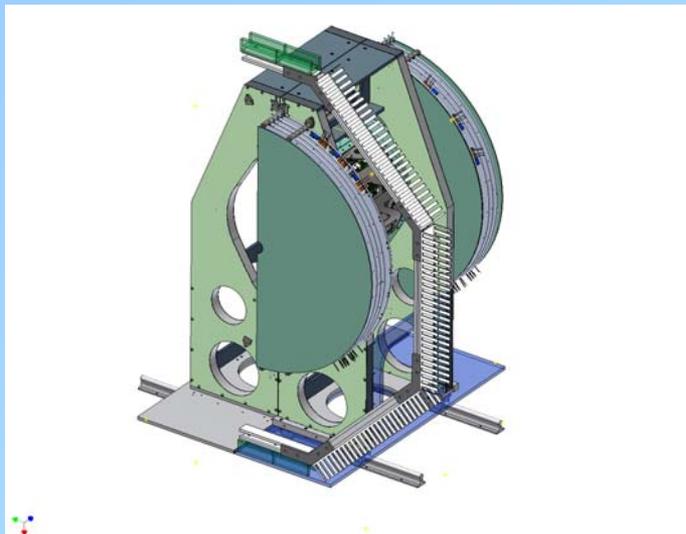
North MPC Cavity BP support

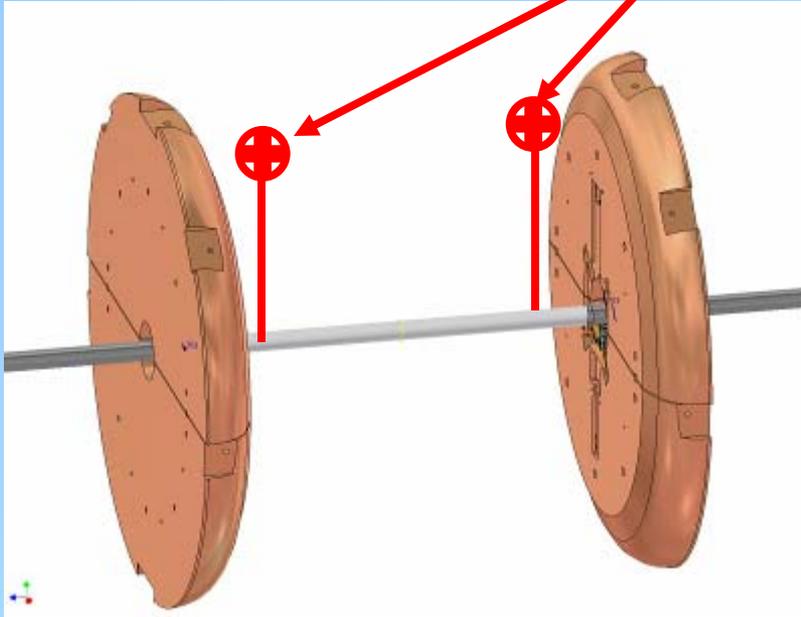


TECHNICAL SUPPORT NO-0

VTX Support Structure Base  
Assembly Design In Progress  
Fixtures being re-designed at  
PHENIX

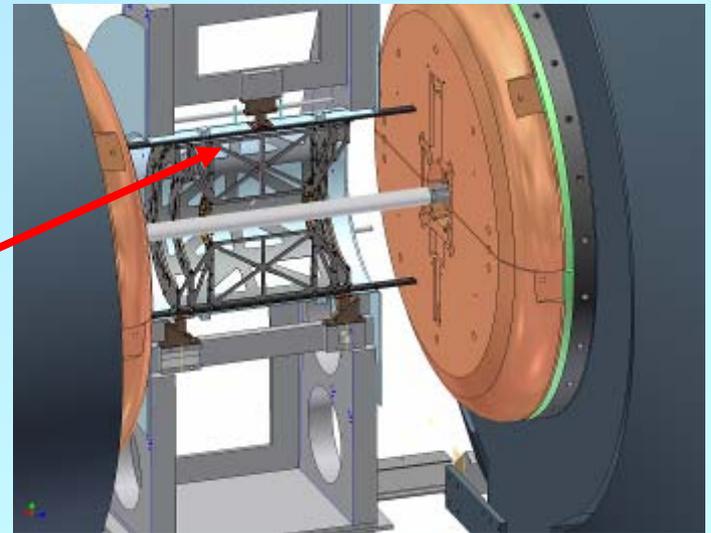
TECHNICAL SUPPORT NO-0



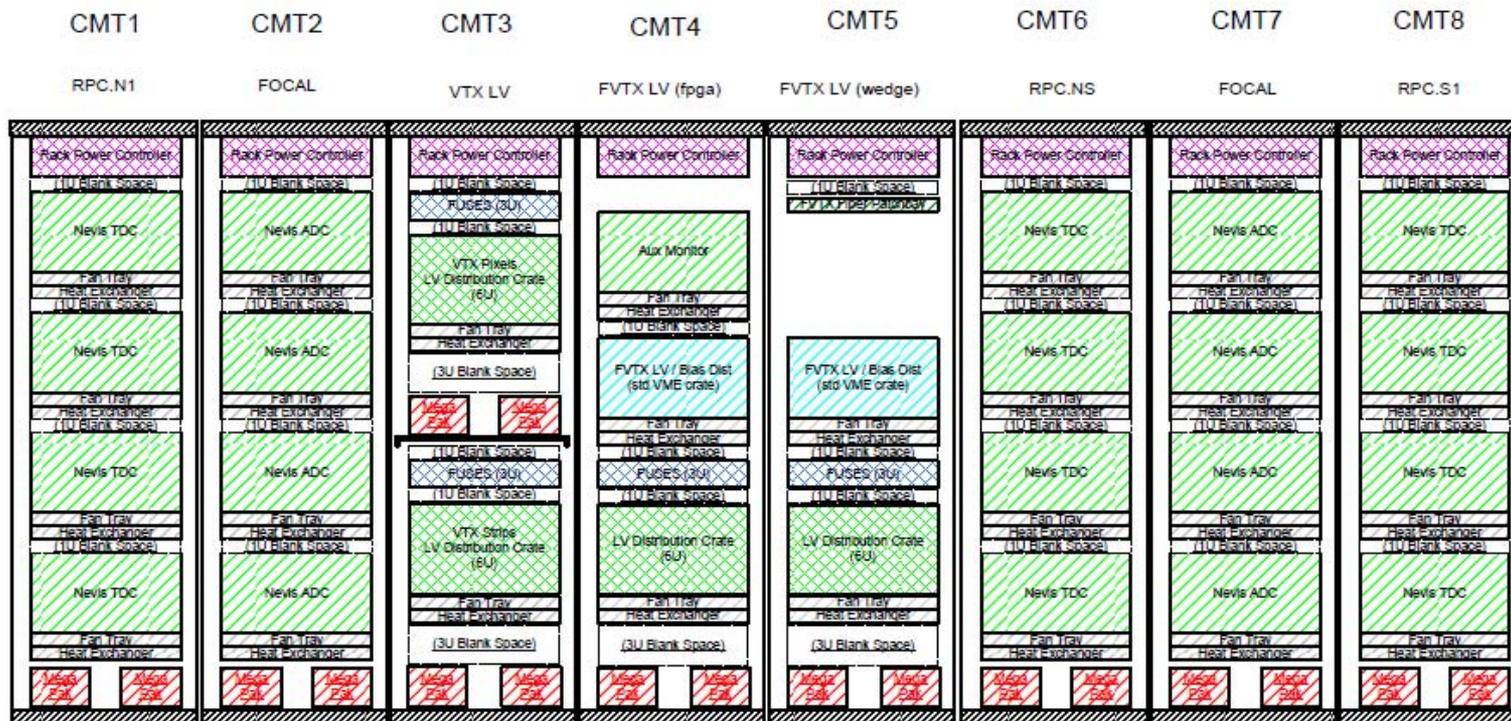


Survey Targets and fixtures TBD  
Must be able to align BP to req'd  
radial and angular accuracy  
without VTX and with VTX in  
clamshells open configuration.

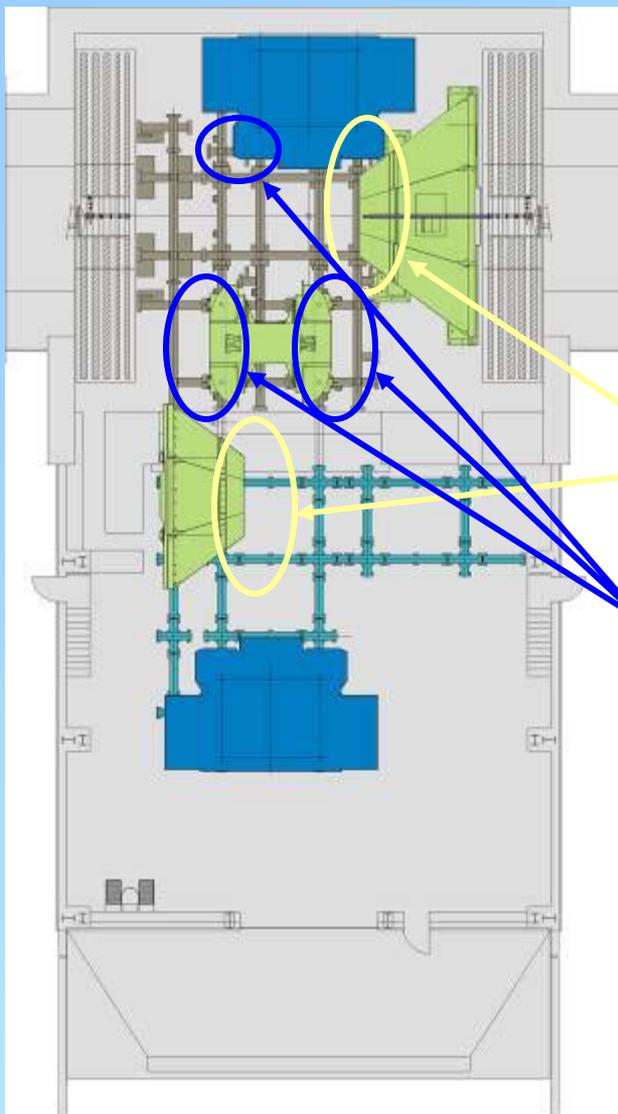
$\frac{1}{2}$  of VTX  
detector support  
structure



## PHENIX Bridge Racks



S. Boose  
3/26/2010



We expect the major PHENIX carriages and magnets to be in this configuration for most of August 2010. During this period the old PHENIX beampipe is removed, the north and south side of the CM is prepared for the absorber, the absorber is installed, work is done on MuTr and MuTrigger station 1, North and south and DC west.

Use standard scaffolding to access work in these areas

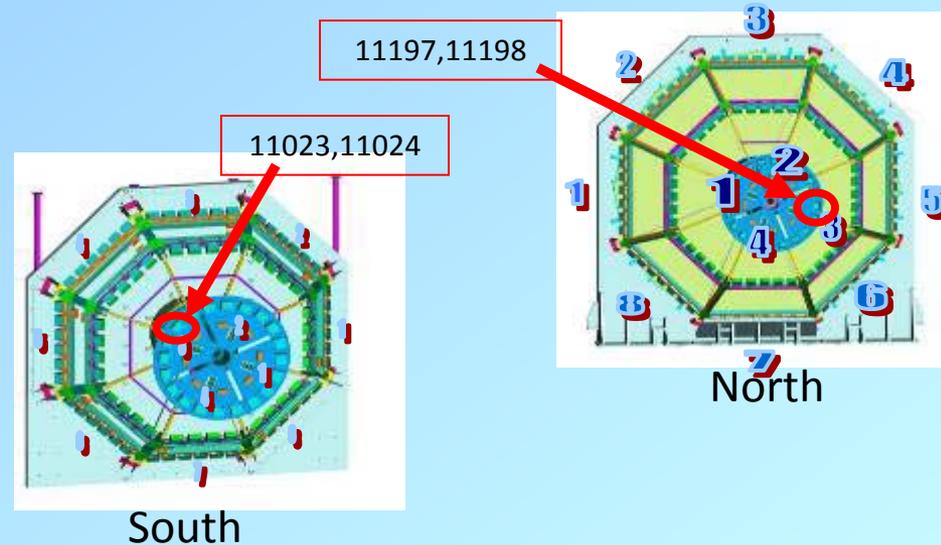
Use manlift(s) to access work in these areas

Work on EC, MuTr and MuTrigger Stations 2 and 3, and other subsystems in the EC and WC may also be performed during this period by subsystem experts, but PHENIX tech assistance will be extremely limited or not available and additional scaffolding (e.g. inside Muon magnets will not be available), and manlifts will not be available for these efforts.

# Shutdown 2010 - muTr FEE repairs

FEE - one FEM in each station-1

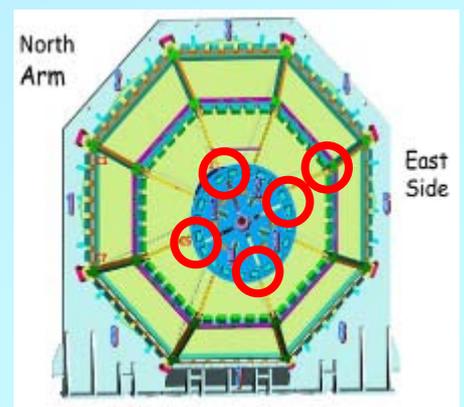
- 11023, 11024 - south S1 Q3 C2 (top); may be glink/clink RX module
- 11197, 11198 - north S1 Q3 C4 (bottom east); probably controller



## Shutdown 2010 - Calibration cable termination repairs

Calibration cable connections - fix terminations

- north S1 - O2 G1; O3,4 G3; O6 G3; O8 G2 - all infinite termination now
- north S1 - O3,4 G1,2 - 57 ohms (rest all 105 ohms)
- north S2 - O5 G1 -  $\frac{1}{2}$  gain of all others (probably can't reach)



# Shutdown 2010 - MuTr HV

- disabled but cannot be reached (S271-6, S311-0, S331-2, N222-6, N341-0)
- S381-5 high current - also can't be reached?

Nothing can be done w/o scaffolding

Station	Current	Voltage	Status
S271-6	0.00	0.00	Disabled
S311-0	0.00	0.00	Disabled
S331-2	0.00	0.00	Disabled
N222-6	0.00	0.00	Disabled
N341-0	0.00	0.00	Disabled
S381-5	1.50	1.50	High Current

Station	Current	Voltage	Status
S271-6	0.00	0.00	Disabled
S311-0	0.00	0.00	Disabled
S331-2	0.00	0.00	Disabled
N222-6	0.00	0.00	Disabled
N341-0	0.00	0.00	Disabled
S381-5	1.50	1.50	High Current

## Shutdown 2010 MuTr/MuTrigger - Other

muTrg, Itaru et al.

- south S3 O7 - threshold problem
- north S3 O1 - high noise (not reachable); S3 O4 - bad ADTX board

South arm disconnect/reconnect (fibers, power)

- lower glink/clink crates on top of eyebrow (to fit thru big IR door)
- move out/in; reconnect & test

Anode terminations

- station-1 gap-1 both arms - recap & terminate?
- station-2 all gaps, where we can reach w/o scaffolding (2 lower octants/arm) - terminate (under dry-air manifolds)?



TECHNICAL SUPPORT NO-0

# New Beampipe Pre-Shutdown Prep

TECHNICAL SUPPORT NO-0

<u>Task</u>	<u>Due By</u>	<u>NOTES</u>
Send BP transitions & spool to SAES for NEG Coating	Done	
Send beampipe to CERN for NEG Coating	Done	
Fabricate beampipe supports	Done?	In Progress
Design BP installation and survey tools/fixtures	5/31/2010	In Design queue
Memorial Day: Lab Holiday	5/31/2010	Enjoy the weekend
Choreograph removal of old beampipe and installation of new (final)	6/1/2010	In Progress
Test and inspect beampipe supports	Done	
Beampipe Installation Review (Final)	6/15/2010	
Receive bp back at BNL	7/31/2010	
Receive BP transitions & spool back at BNL from SAES after NEG Coating	7/31/2010	
Final acceptance and inspection bp and sections	8/6/2010	
Fabricate BP installation and survey tools/fixtures	8/6/2010	

## VTX Subassembly, Top Assembly, Installation and Integration Prep

TECHNICAL SUPPORT NO-0

<u>Task</u>	<u>Due By</u>	<u>NOTES</u>
Fabricate/prepare/procure assembly workspace, tools and fixtures	Done	
Mechanical re-design of BigWheels	Done	
Specify Cooling sensor & BigWheel system components	Done	
VTX Installation Plan	5/31/2010	
VTX Survey Plan	5/31/2010	Consult w/ F. Karl
Memorial Day: Lab Holiday	5/31/2010	Enjoy the weekend
Installation Review (ESRC)	6/15/2010	
Beampipe & VTX Installation Work Permits	6/15/2010	→
Design fixtures, techniques and mockups for installation, alignment and survey	6/15/2010	→
Specify components, assembly tools and fixtures, electronics for racks, cables, cable management etc.	6/15/2010	
BigWheel Fabrication & Procurement	7/15/2010	
Receive, inspect, test, rework and qualify components, assembly tools and fixtures, electronics for racks, cables, cable management etc.	7/15/2010	↓

## VTX Subassembly, Top Assembly, Installation and Integration Prep (cont'd)

TECHNICAL SUPPORT NO-0

<u>Task</u>	<u>Due By</u>	<u>NOTES</u>
Fabricate/procure detail components for installation, support and alignment, including station 1 work platforms	6/30/2010	
Fabricate fixtures, techniques and mockups for installation, alignment and survey	6/30/2010	
4 <sup>th</sup> of July Holiday	7/5-7/6/2010	Enjoy the long weekend
Receive & inspect components (installation, support, alignment & Survey)	8/15/2010	
Assemble Hemispheres	8/15/2010	
Mock installations/alignments, bench tests	8/31/2010	
Cooling system procurement	9/30/2010	

# RPC3 Pre Shutdown Prep

TECHNICAL SUPPORT NO-0

<u>Task</u>	<u>Due By</u>	<u>NOTES</u>
Prepare Installation Plan	5/31/2010	In Progress →
Design RPC Absorbers	Done	
Design Absorber Installation fixtures & tools	5/31/2010	
Memorial Day: Lab Holiday	5/31/2010	Enjoy the weekend!
Receive purchased parts	6/4/2010	In Progress →
Fabricate PHENIX parts	6/15/2010	In Progress →
Receive and inspect CS fabricated parts	6/15/2010	In Progress →
Prepare work permit for installation	6/15/2010	
Assemble, test and burn-in 1/2 octants	6/18/2010	In Progress →
Pre-Assemble base components at PHENIX	6/18/2010	
Fabricate Absorber Details	7/31/2010	RPC Group and PHENIX
Fabricate/procure Absorber Installation fixtures & tools	7/31/2010	

## Start of Shutdown

TECHNICAL SUPPORT NO-0

<u>Task</u>	<u>Due By</u>	<u>NOTES</u>
DAQ Tests	6/4/2010	
Purge Gas From Detectors	6/8/2010	
EOR Party	?????	Was 6/11
End of Run 10	~6/14/2010	
Remove BP Collar	6/18/2010	As early as possible after 6/1
Move MMS south	6/18/2010	As early as possible after 6/1
Prep EC for move to EC	6/18/2010	As early as possible after 6/1
Close North and South BP gate valves and lock closed for until new BP is installed	6/18/2010	
Open and disassemble wall	6/18/2010	
Remove EC ladder and fold platforms	6/25/2010	
Move EC to AH	6/28/2010	
Install cart	6/28/2010	
Move Collars to AH	6/30/2010	
Install decking	6/30/2010	
Install Manlift	6/30/2010	
Remove RPC2 Prototype, support brackets, cabling & Piping	6/29/2010	
Remove MMS east vertical lampshade	6/30/2010	

5/20/2010

# Beampipe De-installation

TECHNICAL SUPPORT 2010

<u>Task</u>	<u>Due By</u>	<u>NOTES</u>
4th of July Holiday & Floating Holiday	7/5&7/6/2010	Enjoy
Remove HBD's and HBD cables Remove RXNP's and cables	7/9/2010	Concurrent with Start of shutdown tasks
Remove MPC's	7/16/2010	Concurrent w MPC's
Remove BBC's	7/16/2010	Concurrent with BBC's
Position MMS for Vacuum break	7/19/2010	
Install Temporary supports for old BP	7/19/2010	Supports TBD
Break vacuum on north side of MMS	7/19/2010	
Remove south bellows	7/19/2010	
Move MMS north, remove spool and south3-5 transition	7/20/2010	
Move the MMS south & Prep MMS for move to AH	7/23/2010	Begin MMS prep with shutdown start
Move CM south, remove north bellows	7/23/2010	
Move old Be bp south into MMS and move CM north	7/23/2010	
Move MMS to shutdown park position	7/23/2010	
Remove old Be BP	7/23/2010	
Move CM south and east	7/23/2010	
Remove north 3 to 5 transition	7/23/2010	

5/20/2010

# New Beampipe installation

PHENIX

TECHNICAL SUPPORT NO-0

<u>Task</u>	<u>Due By</u>	<u>NOTES</u>
Prepare north 3 to 5 transition for installation with roller guides, bakeout wrap and thermocouples	7/23/2010	CAD
Prep CM North and South for Absorber and install	8/13/2010	(Install if absorber rec'd)
Install north 3 to 5 transition in MMN	8/13/2010	
Install new Be pipe in CM on temp supports	8/17/2010	
Move CM back to beamline & connect new Be BP to 1-5/8 transition and bellows and north 3-5 transition	8/17/2010	
Move CM to run position	8/18/2010	
Prealign Be/Alum pipe with transitions attached on new BP supports At MPC north, BBC south and north nosecone	8/19/2010	
Prepare south 3 to 5 transition for installation with roller guides, bakeout wrap and thermocouples	8/19/2010	
Install south 3 to 5 transition, bellows and 1-5/8 to 3" transition in MMS	8/20/2010	
Move MMS back into IR on beamline	8/20/2010	
Move CM south, slide Transition assembly in MMS north and connect to new Be BP	8/20/2010	
Move CM and MMS north and install south spool. Leak check. Move MMS South	8/27/2010	
Install temporary bakeout supports	8/27/2010	
Install bakeout blankets and monitoring	8/27/2010	
Labor Day Lab Holiday	9/6/2010	Enjoy
Bakeout New BP and activate NEG coating	9/10/2010	How Long?
Leak check BP	9/10/2010	
Re-install MPC's including Cables and services Re-install BBC's including Cables and services	9/24/2010	Concurrent efforts
Move CM to run position	9/24/2010	
Final alignment of new BP	10/1/2010	

5/20/2010

# VTX Installation, VTX Services and Electronics



TECHNICAL SUPPORT 2010

<u>Task</u>	<u>Due By</u>	<u>NOTES</u>
Install and align VTX rail attachment hardware to CM	10/1/2010	Install during bakeout? →
Install and align VTX rails parallel to beam line	10/8/2010	→
Install and align VTX rails perpendicular to beam line	10/8/2010	→
Install and align west half detector module	10/15/2010	→
Install and align east half detector module	10/22/2010	→
Install mechanical support structures for VTX services and electronics	10/29/2010	Concurrent Effort →
Install Cable trays	10/29/2010	→
Install racks	10/29/2010	→
Install chiller	10/29/2010	→
Install cables, plumbing	10/29/2010	→
Connect cables and plumbing	10/29/2010	V →
Thanksgiving and Black Friday Holiday	11/25 & 11/26/2010	Enjoy →
Test and commission	12/1/2010	↓

# RPC3 South Prep, Early Shutdown



TECHNICAL SUPPORT NO-0

<u>Task</u>	<u>Due By</u>	<u>NOTES</u>
Remove wiring, walkovers, FCAL and scintillator hardware that would otherwise interfere with installation	7/2/2010	PHENIX →
4th of July Holiday	7/5 & 7/6/2010	Enjoy →
Remove/relocate shielding	7/9/2010	Riggers →
Remove crystal palace & vapor barrier	7/16/2010	CAD →
Inspect Gap 5 south for legacy items/problems	7/23/2010	→
Address legacy items/problems as convenient prior to shutdown start	7/30/2010	→
Install lighting & relocate sensors as necessary	8/6/2010	Electrician →
Temporarily relocate, re-position or otherwise address interfering piping, cable trays	8/20/2010	PHENIX (w/ CAD Help?), Electrician →
Remove RPC prototype	8/20/2010	→
Pre-survey ½ octant reference points	8/27/2010	Surveyors →
Drill and tap ½ octant and rotating piston mounting points	8/31/2010	→
Build/install access and work platforms for walk on top of MuID steel including stairs from MMS eyebrow	8/31/2010	Carpenters →
Final cleaning and prep of gap 5 for grouting	9/3/2010	→
Labor Day Lab Holiday	9/6/2010	Enjoy →
Pre-installation orientation meeting with masons and riggers	9/7/2010	→
Position lifting equipment in tunnel	9/10/2010	Riggers →
Move east and west base structures into south tunnel and assemble on east and west sides of pedestal respectively. Include translation control fixtures	9/10/2010	Riggers & PHENIX techs →

5/20/2010

# RPC3 South Installation



TECHNICAL SUPPORT NO-0

Task	Due By	NOTES
Install and align base structures on east and west sides of gap 5	9/14/2010	
Prepare for grouting	9/15/2010	→
Install grout	9/16/2010	→
Install pitch control rails on pedestal and gap 5 east & west inner walls	9/17/2010	→
Install upper suspension support hardware	9/17/2010	→
Install $\frac{1}{2}$ octants, 2 at a time in accordance with work plan/work permit		
<i>Transport <math>\frac{1}{2}</math> octants 2 at a time from RPC factory to south tunnel on angled transport carts</i>		
<i>Transfer <math>\frac{1}{2}</math> octants from angled transport carts one at a time to temporary free standing and re-orienting roller fixture (fore and aft wheels and axel)</i>		
<i>Lift (and re-orient if appropriate) <math>\frac{1}{2}</math> octant and install into base structure, previously installed <math>\frac{1}{2}</math> octant or upper suspension hardware as appropriate per work plan</i>		
<i>Pre-align each <math>\frac{1}{2}</math> octant as installed</i>		
<i>Perform electrical integrity tests before proceeding to next pair of <math>\frac{1}{2}</math> octants</i>		
<i>After all <math>\frac{1}{2}</math> octants are in place and tested, join east and west halves of full south station 3 detector and align to survey markers</i>		

## RPC3 South Integration

TECHNICAL SUPPORT NOTES

<u>Task</u>	<u>Due By</u>	<u>NOTES</u>
Final survey	10/22/2010	Surveyors
Install new cable trays and piping supports	10/29/2010	Electrician, earlier if possible
Re-install MuID wiring and pipes	11/5/2010	
Install south thermal/vapor barrier	11/19/2010	CAD
Thanksgiving and Black Friday Holiday	11/25 & 11/26/2010	Enjoy
Re-install MuID gas rack	11/30/2010	
Commissioning and final acceptance tests	11/30/2010	RPC Group
Install RPC3 HV, LV and signal wiring and gas lines	11/30/2010	
Install RPC3 South gas distribution rack	11/30/2010	
Re-install shielding	11/30/2010	Riggers
Install RPC3 South environmental controls (heaters and thermostats)	11/30/2010	Electrician

# Shutdown 2010 Other Work

PHENIX

TECHNICAL SUPPORT NO-0

<u>Task support</u>	<u>Due By</u>	<u>NOTES</u>
RPC3 North unfinished business	7/15/2010	Electronics and cabling, grounding issues, environmental controls
MuTrigger FEE unfinished business	7/15/2010	MMS cable trays,
RHIC Summer Sunday Tour	8/15/2010	During bakeout
DC/PC maintenance/repair	11/15/2010	FEM and wire troubleshooting and repairs, major efforts will require longer shutdon
Thanksgiving and Black Friday Holiday	11/25 & 11/26/2010	Enjoy
PHENIX Survey Review	11/30/2010	
Procedure Updating	11/30/2010	
FVTX support	11/30/2010	As required
FoCal	11/30/2010	As required
Gas Mixing House maintenance & Repair	11/30/2010	
PHENIX Infrastructure maintenance, repair, upgrade	11/30/2010	TBD
Gas Pad expansion completion (grouting)	5/31/2010	
Gas Pad: new gas storage details	11/30/2010	
Gas Pad: New Ar Dewar	Done	
Gas Pad services new dewar support, maintenance and improvements	11/30/2010	

## Shutdown 2010 Other Work (Cont'd)

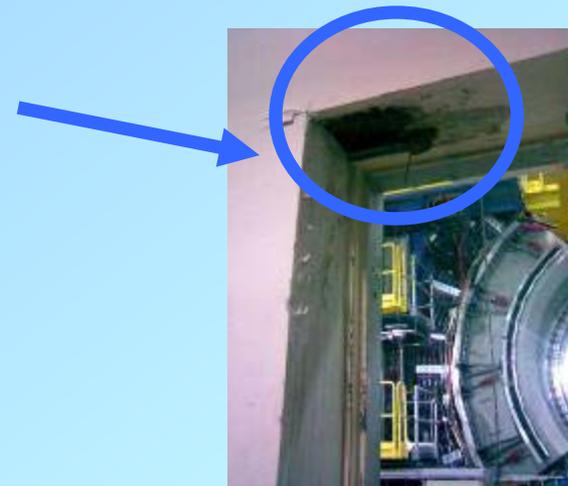
TECHNICAL SUPPORT NO-0

<u>Task support</u>	<u>Due By</u>	<u>NOTES</u>
AH Flood prevention improvements	11/30/2010	
IR Bridge Electrical service upgrade	11/30/2010	Support for 4 full racks in 2010, 4 more (8 total) in future
RPC Factory Support	11/30/2010	
Rack Room upgrade	11/30/2010	TBD
PHENIX Design Documentation	11/30/2010	
CM Crane	11/30/2010	
CM alignment stops	11/30/2010	TBD
Gas System maintenance, repair, upgrade	11/30/2010	
Other subsystem maintenance, repair/upgrade	11/30/2010	TBD
Future upgrade support	11/30/2010	RPC1, RPC absorbers, FVTX, FOcal, other TBD
Prepare for Run 11	11/30/2010	Normal end of shutdown tasks, typically taking 3-4 weeks
Run 11 Start	12/1/2010	
End of Shutdown Party	~12/3/2010	

# 2009 Building Maintenance Issues

TECHNICAL SUPPORT NO-0

- Roof leaks in utility bathroom at northwest corner behind tech offices, over door between rack room and assembly hall and over door between control room and elect. ass'y room.



- General maintenance for Trailer Offices (in progress)
- Trailer Office Modifications planning in progress (new exterior siding)
- Roof leaks in laser room and IR (southeast corner)
- Flooding in AH/ Driveway heaving [Lake PHENIX]



5/20/2010

## PHENIX Procedure Review Current Status:

147 Procedures Identified

84 Made Inactive (not currently in use, will require revision to re- activate if and when necessary, available for reference purposes)

10 CAD procedures relevant to PHENIX, all are current and up-to- date.  
(CAD web access to these documents is not up to date)

42 PHENIX approved procedures.

1 is currently under review

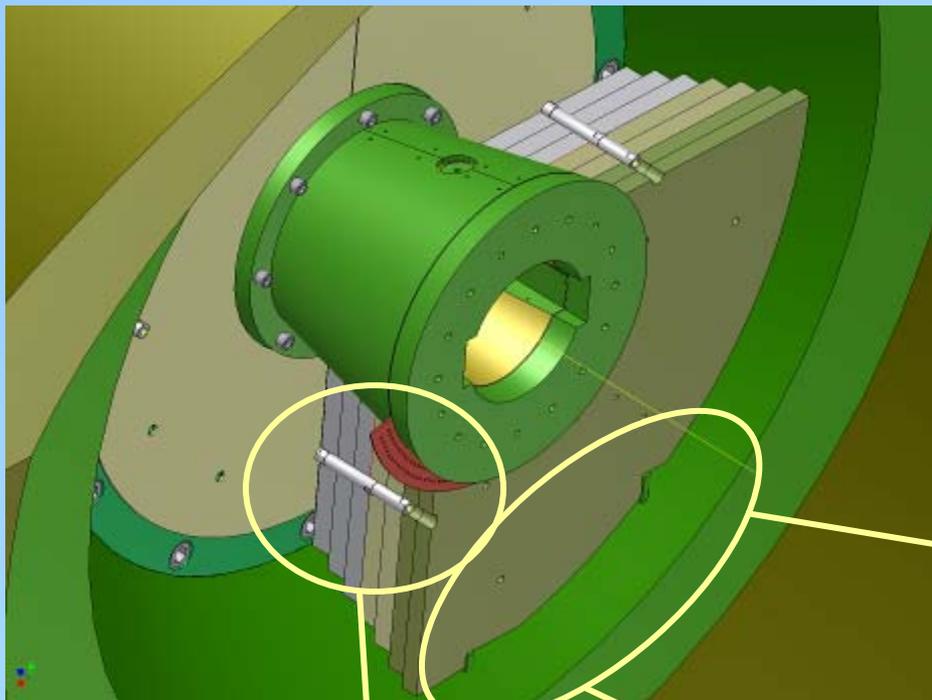
41 are current and up-to-date (2 updated this week)

11 Proposed/Draft Procedures (never previously formalized)

Web retrieval of latest procedures now available from PHENIX Internal:

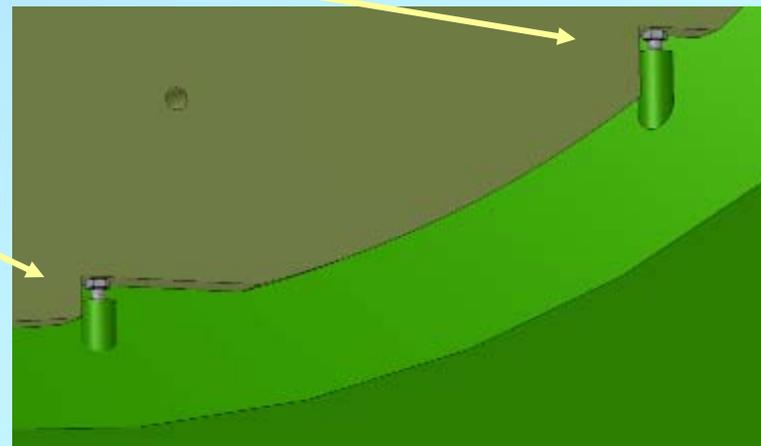
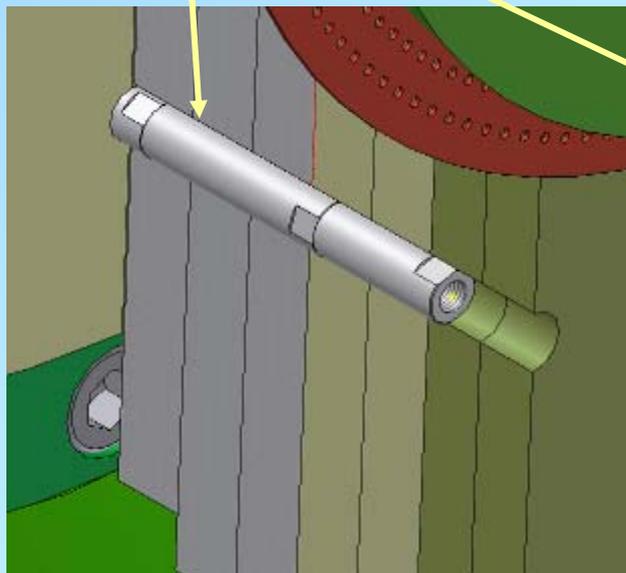
[http://www.phenix.bnl.gov/WWW/INTEGRATION/ME&Integration/DRL\\_procedures.htm](http://www.phenix.bnl.gov/WWW/INTEGRATION/ME&Integration/DRL_procedures.htm)

TECHNICAL SUPPORT NO-0



## RPC Absorber Final Design

- Welded & tapped vertical support bosses
- 3 stage positioning rod



## Safety, Security, Etc.

1. C-AD Access Card Inventory:
  - Blue Card: go to Ann Marie's office and get card read.
  - Pink Card: Read at any access gateDo this by 5/26
  
2. The Laboratory and C-AD will be undergoing a DOE Assessment of the Fire Protection System. Issues:
  - Control of common fire hazards and ignition sources (smoking, cutting welding, space heaters, electrical installations)
  - Adequacy of fire protection (sprinkler protection, design, placement, lack of obstructions)
  - Adequacy of fire extinguishers (placement, condition)
  - Control of chemical quantities (controlled areas, chemical limits)
  - Egress (blocked isles, walkways, doors, stairs)

Please review any of these items that may pertain to your work space.

### 3. Recent Safety Incidents

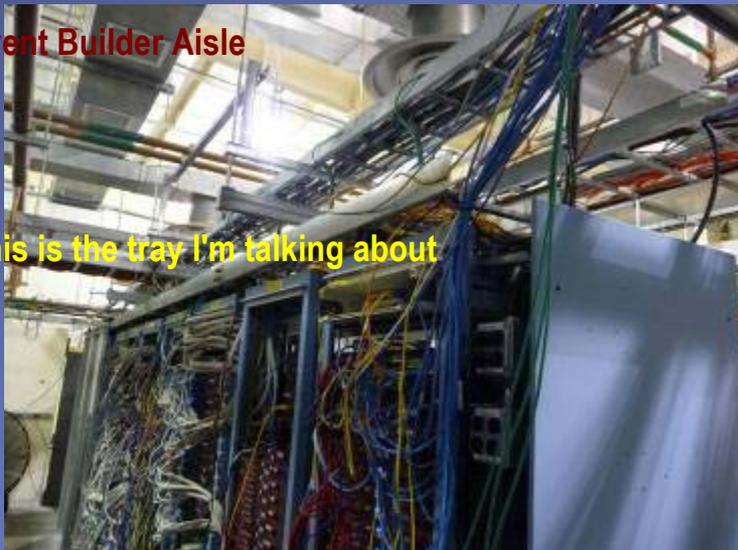
Contractor Injures Leg With Hammer Wednesday, April 21, 2010	DOE Reportable
Employee Experiences Hearing Loss Friday, April 16, 2010	DOE Reportable
Firefighter Injured Working on Non-Lab Vehicle Sunday, March 28, 2010	DOE Reportable
Employee Trips on Curb, Falls on Hands and Feet Tuesday, March 16, 2010	First Aid

# Rack Room Gutter Cleaning

- Soon we are replacing the main Event Builder Switch with our new flagship switch.
- Means a lot of cable pulling in the “Event Builder Aisle”
- In particular the cable tray on top of the rack has a lot of sediments which would benefit from a start from scratch

This is how it looks

- **The Event Builder Aisle**



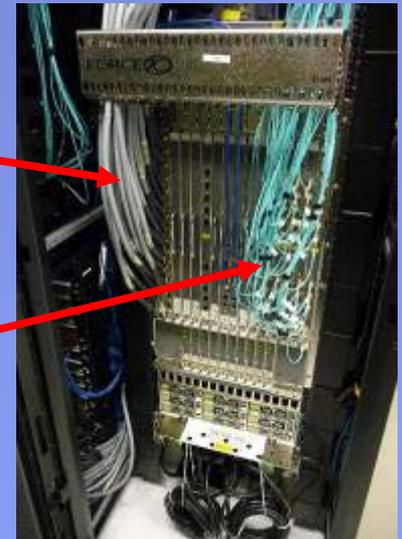
- **This is the tray I'm talking about**

Standard Gigabit ports

The future Switch

“MRJ-20” cable bundles with 6 Gig ports each go to patch panels (or directly to the machines) May make our cable distribution easier, bring a few bundles to the racks

10GbE ports



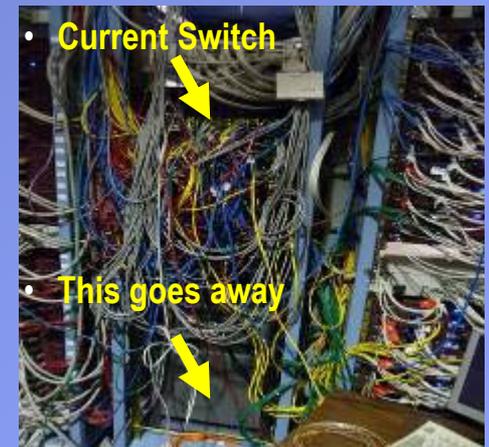
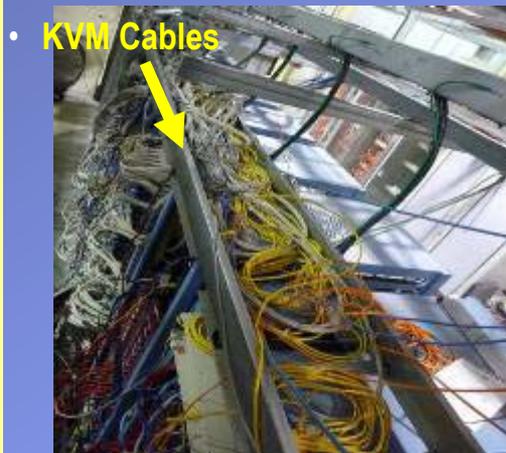
## Timeline

### The Task

- We'll rig up a few alternate connections to the first two racks to keep them alive (I do that)
- We disconnect all network cables (about 150 or so) and pull them out, roll them up without tangling them up, remove labels
- More than 100 are local to the rack row, about 50 go somewhere else
- There are fibers mixed in, they have to go out first
- Not by count but by bulk the KVM cables are the biggest, they stay, but it looks like many of them are on top
- From above this doesn't look like much, but on the ground it looks like a big deal

- When our run ends, we can get going (early June)
- Find some room to coil up the pulled cables
- Devise a good labelling scheme for the future
- Then think about putting the new stuff in
- 2 weeks? Reasonable?

### Tray from above and below



# Where To Find PHENIX Engineering Info

TECHNICAL SUPPORT 2010



Shutdown 2010 is on the horizon and coming fast

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

[http://www.phenix.bnl.gov/WWW/INTEGRATION/ME&Integration/DRL\\_SSint-page.htm](http://www.phenix.bnl.gov/WWW/INTEGRATION/ME&Integration/DRL_SSint-page.htm)

