

PHENIX WEEKLY PLANNING

TECHNICAL SUPPORT 20-0



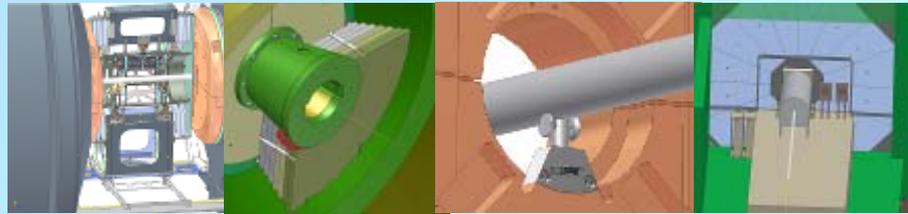
11/18/2010
Don Lynch

2010 Shutdown (Overview)

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Design, Eng'g, fabrication, procurement and site preparation tasks in support of shutdown tasks

	Start Date	End Date
	In Progress	12/1
Shutdown Startup Tasks	Done	Done
Gas system maintenance, repair and upgrade	In progress	12/1
PHENIX Infrastructure maintenance, repair and upgrade	In Progress	12/1
Remove RPC Prototypes	Done	Done
Remove HBD	Done	Done
Remove RXNP	Done	Done
Remove/Reinstall BBC	In Progress	12/3
Remove Re-install MPC	In Progress	12/3
RPC3N & MuTrigger unfinished business	Done	Done
Remove current BP, install new BP	Done	Done
DC/PC maintenance and repair (mid summer)	Done	Done
Install RPC3S (including Absorbers)	In Progress	12/1
MuTr maintenance, repair and upgrade	In Progress	11/24
Install VTX	In Progress	12/1



Post Run 10 Tasks

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Task	Start Date	End Date
AH Crane 110 switch for lockout	Postponed	To summer '11

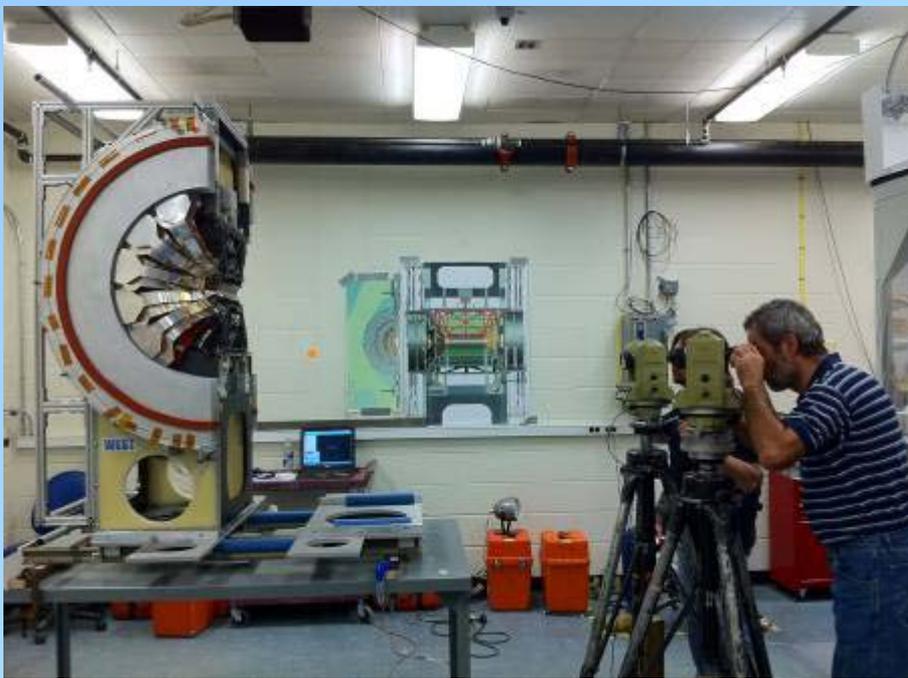
This Week:

- Survey MMS, CM and beampipe
- Complete Survey of VTX East
- Continue VTX Cabling and Piping
- Continue RPC3S services
- Install VTX West
- Continue restoring services to CM and MMS
- Future upgrades support

Next Week

- Install MPC North
- Install BBC North
- Install VTX East
- Continue RPC3S services.
- Continue restoring services to CM and MMS
- Final VTX Survey and alignment
- Future upgrades support

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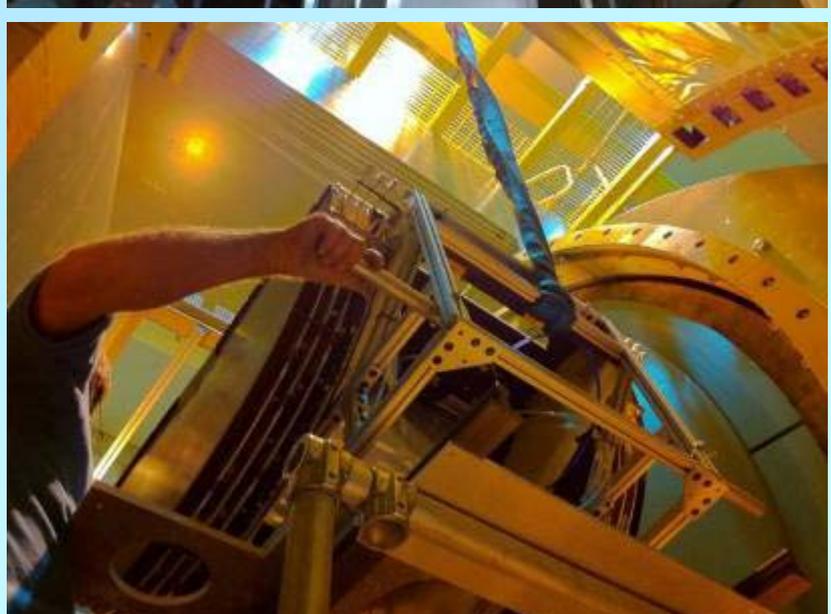
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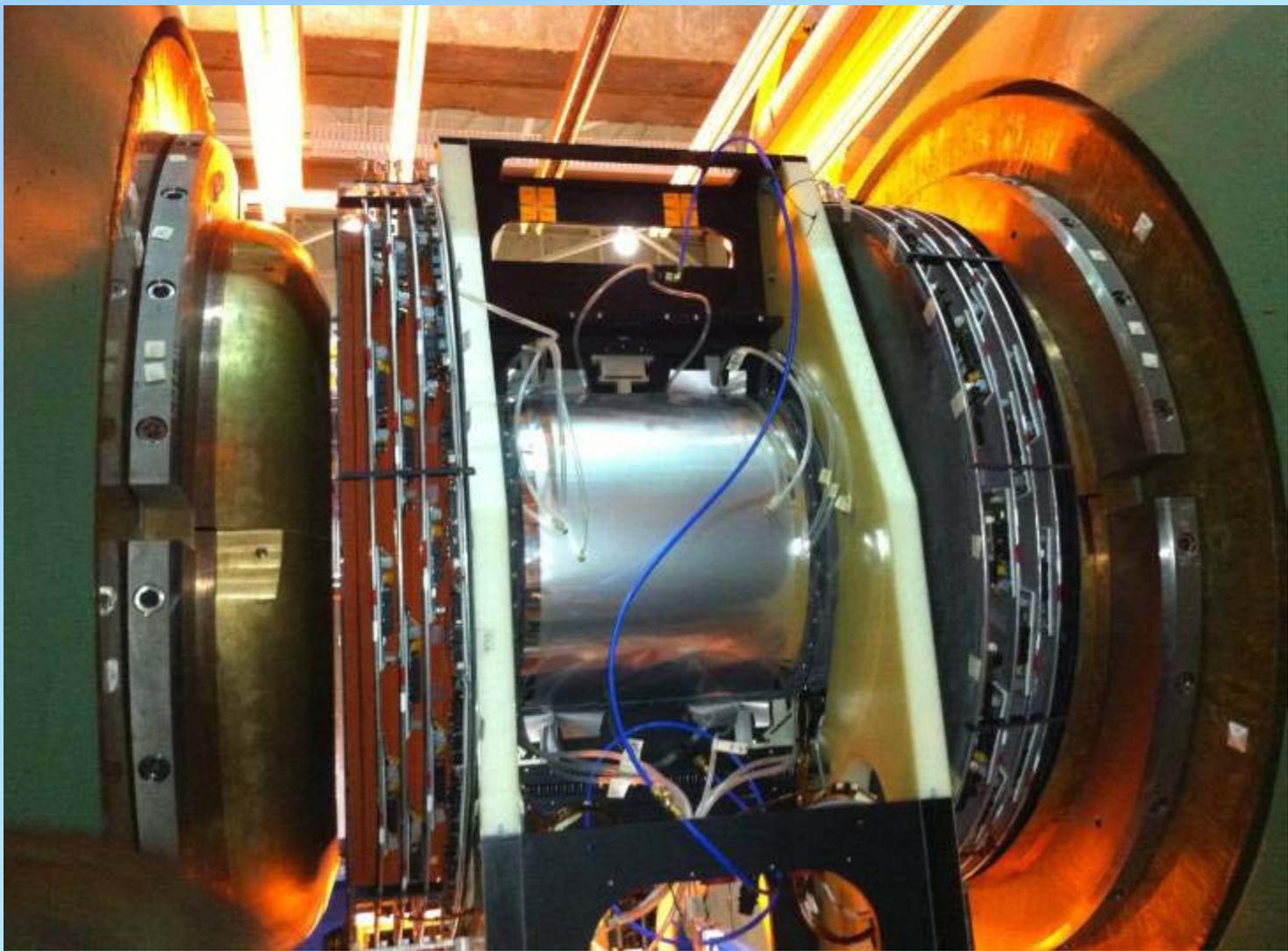
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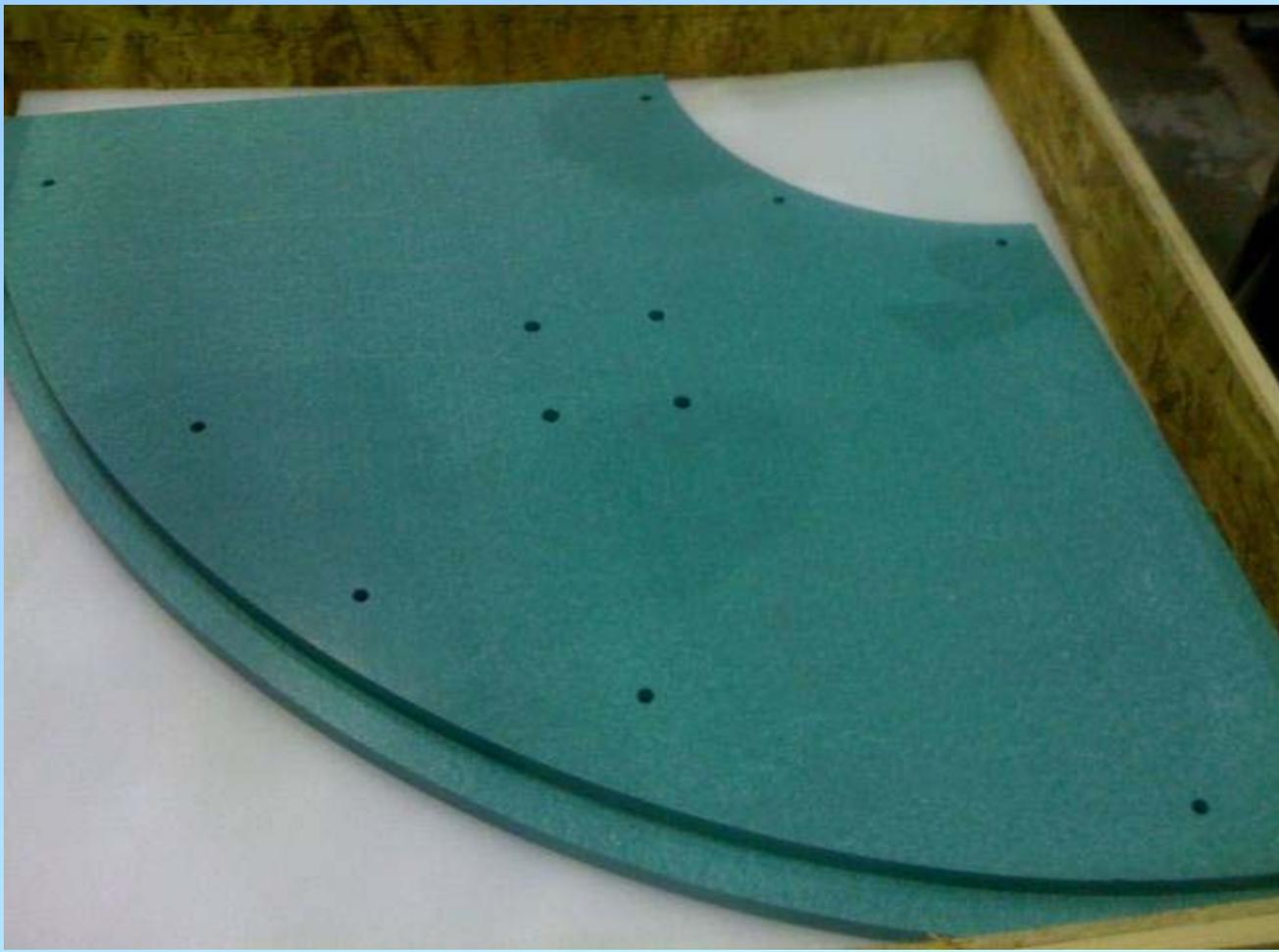
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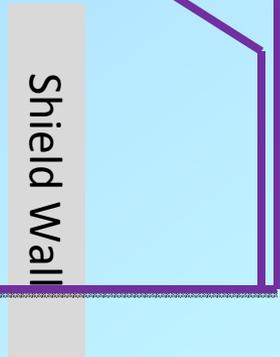
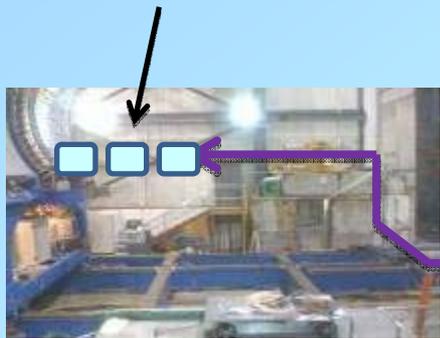
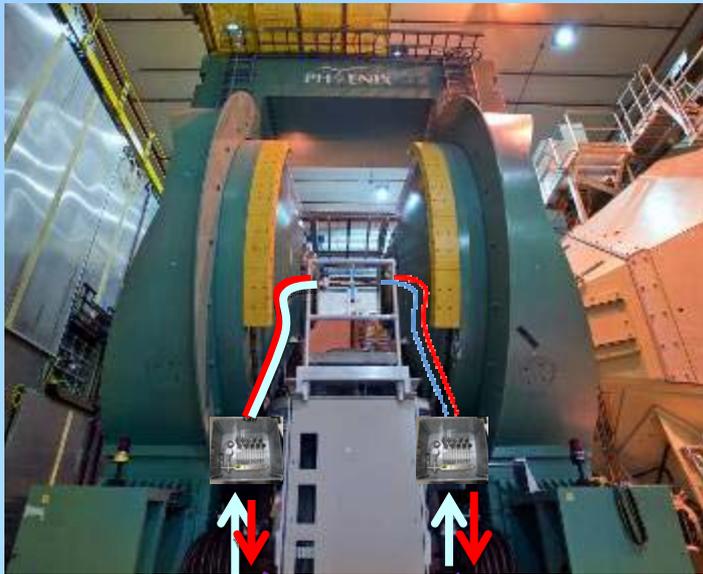
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Borated Poly Absorbers, (Lead Absorbers are below, not seen in picture)

Cooling system installation progress, cont'd

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Dry Gas Supply--N₂

- Supply to IR already in place
- Each Half will get two supply lines
- One for each manifold box

Plan to flow 10-50cc to boxes

Guessing 2-6 lpm per flowmeter for detector dependent on obtaining some kind of positive pressure (0.25" W.C.").

Question to VTX

-Can a small tygon line (or 2) be run close to the center of the detector (inside one barrel layer) to supply a very low flow of N₂ to the inside? Even 10ccm would be helpful. Anywhere inside would help.

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Remaining Shutdown Tasks

<u>Project</u>	<u>Task</u>	<u>Completion Date</u>	<u>Task Duration</u>	<u>Personnel reqmts</u>	<u>Notes</u>
PHENIX	Chiller cooling water	Done	1 day	2 CAD techs	Done
VTX	Assemble west 1/2 detector	Done	1 day	2 PHENIX techs, designer VTX grp	Done
VTX	Design survey theodolite support brackets for CM lead shield	Done	1 day	1 PHENIX dsgr	Done
VTX	Route fibers rack room to CME Rack	Done	3 days	3 PHENIX techs	Done
PHENIX	Bakeout/activate NEG for new BP	Done	2 weeks	2 PHENIX techs, 2 CAD vac techs	Done
PHENIX	Leak check new BP	Done	1 day	2 CAD vac techs	Done
VTX	Test west 1/2 detector	Done	1 day	VTX group	Done
VTX	Survey east barrels 1-4	Done	4 days	1 PHENIX tech, designer, 3 surveyors	Done
PHENIX	Re-run MuTrigger fiber from MMS to rack room	Done	1 day	3 PHENIX techs	Done
VTX	Fabricate survey support brackets	Done	1 day	1 PHENIX Tech	Done
VTX	Bring Support structure to Chem Lab - Done	Done	1 day	2 PHENIX techs	Done
VTX	Install survey support brackets	Done	1 day	1 PHENIX tech	Done

Remaining Shutdown Tasks, Continued

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<u>Project</u>	<u>Task</u>	<u>Completion Date</u>	<u>Task Duration</u>	<u>Personnel reqmts</u>	<u>Notes</u>
RPC3S	Build TVB wall	Done	1 week		Done
VTX	Survey west 1/2 detector	Done	1 day	1 PHENIX tech, designer, 3 surveyors	Done
VTX	Re-install bridge water manifold and cable trays	Done	1 day	2 PHENIX techs	Done
VTX	Chiller platform 480V power	Done	1 day	PHENIX EE, electrician	Done
VTX	Assemble east 1/2 detector	Done	1 day	PHENIX tech, designer, VTX grp	Done
PHENIX	Re-install MuTr station 2 channel air distribution	Done	1 day	2 PHENIX techs	Done
VTX	Prepare thermocouple map	Done	1 day	2 PHENIX tech, designer	Done
VTX	Test east 1/2 detector	Done	1 day	VTX Group	Done
VTX	Install NOVEC piping from chiller platform area to VTX area	Done	1 week	2 PHENIX techs	Done
VTX	Receive extension rails/design/modify for installation	Done	1 day	1 PHENIX tech	Done
VTX	Survey east 1/2 detector	Done	1 day	1 PHENIX tech, designer, 3 surveyors	Done
PHENIX	Install access to inside MMS	Done	1 day	2 Phenix techs	Done

Remaining Shutdown Tasks, Continued

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<u>Project</u>	<u>Task</u>	<u>Completion Date</u>	<u>Task Duration</u>	<u>Personnel reqmts</u>	<u>Notes</u>
VTX	Mate east and west 1/2 detectors	Done	1 day	PHENIX tech, designer, VTX Grp	Done
VTX	Survey/align east and west detector	Done	2 days	PHENIX tech, designer, 3 surveyors	Done
VTX	Modify strongbacks for basket lift	Done	Done	1 PHENIX tech, designer	Done
VTX	Install extension rails	Done	1 day	2 PHENIX techs	Done
PHENIX	Veterans Day Holiday	Done	1 day	No Work	Done
RPC3S	NRTL cable trays	Done	1 day	PHENIX EE	Done
VTX	Transport west 1/2 detector to IR	Done	.5 day	2 PHENIX techs, VTX Group	Done
VTX	Install west 1/2 detector	Done	.5 day	6 PHENIX techs, VTX Group	Done
VTX	Assemble and install NOVEC distribution manifolds near VTX	Done	2 days	2 PHENIX techs	Done
RPC3S	Re-install shielding	Done	3 days	1 rigging crew	Done
VTX	Install humidity sensors	Done	1 day	1 PHENIX tech	Done
PHENIX	Remove bakeout equipment	11/18/2010	1 day	2 PHENIX techs, 2 CAD vac techs	In Progress
PHENIX	Survey and align MMS, CM and new BP	11/18/2010	3 days	1 PHENIX tech, 2 Surveyors	In Progress

Remaining Shutdown Tasks, Continued

TECHNICAL SUPPORT 2010

<u>Project</u>	<u>Task</u>	<u>Completion Date</u>	<u>Task Duration</u>	<u>Personnel reqmts</u>	<u>Notes</u>
PHENIX	Annual PHENIX Safety Review	11/18/2010	2 days	1 ea PHENIX ME, EE, Scientist	Lynch, Pisani, Giannotti
PHENIX	Install power upgrade to bridge	11/19/2010	1 day	Electrician, PHENIX tech	In Progress
VTX	Route 100 LV cables from bridge rack to near VTX	11/19/2010	2 days	3 PHENIX techs	As soon as possible
VTX	Route 100+ thermocouple extensions from PLC box to near VTX	11/19/2010	1 day	3 PHENIX techs	Concurrent with LV routing
VTX	Route 260 duplex/simplex fibers from CME rack to near VTX	11/19/2010	1 day	3 PHENIX techs	Concurrent with LV routing
VTX	Route 7 Belden 16 pair cable trunks from CME rack to near the VTX	11/19/2010	1 day	3 PHENIX techs	Concurrent with LV routing
RPC3S	Finalize cable tray/Cable installation	11/19/2010	1 week	Electrician, PHENIX Tech, RPC Group	In Progress
RPC3S	Final piping	11/19/2010	1 week	1 phenix TECH	In Progress
VTX	Install west 1/2 detector Bias, LV and signal cables	11/19/2010	1 week	2 PHENIX techs	Immediately after survey
VTX	Install one Chiller for QA testing (on ground)	11/19/2010	2 days	2 PHENIX techs	ASAP ready for QA testing
VTX	Connect west 1/2 detector to NOVEC cooling	11/19/2010	1 day	2 PHENIX techs	Immediately after survey

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Remaining Shutdown Tasks, Continued

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<u>Project</u>	<u>Task</u>	<u>Completion Date</u>	<u>Task Duration</u>	<u>Personnel reqmts</u>	<u>Notes</u>
RPC3S	Thermostats	11/19/2010	1 day	1 electrician	As convenient
VTX	Survey/align west 1/2 detector	11/19/2010	3 days	PHENIX tech, 2 surveyors, designer	Immediately after installation
VTX	Transport east 1/2 detector to IR	11/19/2010	.5 day	2 PHENIX techs, scientists A/R	After west QA
VTX	Survey/align east 1/2 detector	11/23/2010	1 day	PHENIX tech, designer, 2 surveyors	after installation
RPC1&Abs Proto	Installation fixtures design and fabrication	11/24/2010	3 days	PHENIX ME, Designer	In Progress
RPC1&Abs Proto	Installation plan	11/24/2010	2 weeks	PHENIX ME	In Progress
RPC1&Abs Proto	WP	11/24/2010	3 days	PHENIX ME	In Progress
VTX	Install interlock PLC on bridge	11/24/2010	2 weeks	PHENIX EE, electrician, 1 PHENIX Tech	As soon as PLC is ready
PHENIX	Re-install BBCs cabling/cooling pipes	11/24/2010	1 week	2 PHENIX techs	Concurrent with survey
PHENIX	Re-install BBCs	11/24/2010	1 week	2 PHENIX techs	Req CM moves
RPC3S	Re-install FCAL and any other disrupted subsystems	11/24/2010	2 days	2 PHENIX techs, 1 PHENIX EE	As convenient
VTX	Install east 1/2 detector Bias, LV and signal cables	11/24/2010	1 week	2 PHENIX techs	after survey
PHENIX	WP for DC repairs	11/24/2010	2 days	ME	As convenient

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Remaining Shutdown Tasks, Continued

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<u>Project</u>	<u>Task</u>	<u>Completion Date</u>	<u>Task Duration</u>	<u>Personnel reqmts</u>	<u>Notes</u>
PHENIX	Thanksgiving Holiday	11/25-26/2010	2 days	No Work	Give Thanks
PHENIX	Re-install MPCs	12/2/2010	1 week	2 PHENIX techs	with BBC installs
PHENIX	Design CM alignment stops	11/30/2010	1 week	ME, designer	As time permits
PHENIX	Fabricate CM alignment stops	11/30/2010	1 week	CS	After design
PHENIX	Re-attach cables, gas piping, water piping and fibers to CM and MMS	11/30/2010	2 weeks	3 PHENIX techs	In Progress
PHENIX	MuTr and MuTrigger remaining subsystem tasks and tests	11/30/2010	2 weeks	1 PHENIX techs MuTr/Trig Groups	As convenient
PHENIX	Move MuID collars to IR	11/30/2010	1 day	3 PHENIX techs	After BBCsMPCs
PHENIX	Prep EC for move to IR	11/30/2010	1 day	3 PHENIX techs	After BBCs & MPCs & VTX
PHENIX	AH South exit chiller platform installation	11/30/2010	1 week	2 Carpenters	Install when rec'd
PHENIX	Close access to MMN	11/30/2010	1 day	1 PHENIX tech	> MuTr/ Trig < flam gas
RPC3S	RPC gas controllers final installation and RPC subsystem commissioning	11/30/2010	1 week	1 PHENIX tech, RPC Group	As soon as convenient
VTX	Connect east 1/2 detector to NOVEC cooling	11/30/2010	2 days	2 PHENIX techs	Immediately after survey
VTX	Install 3 chillers on chiller platform	11/30/2010	1 day	2 PHENIX techs	> platform is installed
FoCal Proto	Design plan	11/30/2010	2 weeks	PHENIX ME	In Progress
FoCal Proto	Installation plan	11/30/2010	2 weeks	PHENIX ME	In Progress

Remaining Shutdown Tasks, Continued

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<u>Project</u>	<u>Task</u>	<u>Completion Date</u>	<u>Task Duration</u>	<u>Personnel reqmts</u>	<u>Notes</u>
VTX	In situ QA electronics test on east 1/2 detector	12/1/2010	2 days	PHENIX scientists A/R	As services are installed
VTX	Final VTX survey	12/2/2010	1 day	1 PHENIX tech, designer, 2 surveyors	After east QA
VTX	Final BP survey	12/2/2010	1 day	1 PHENIX tech, designer, 2 surveyors	After east QA
PHENIX	Remove manlifts, decking and 12 ton crane from IR to run storage	12/3/2010	1 day	3 PHENIX techs	After BBCs & MPCs & VTX installed
PHENIX	Move EC to IR	12/3/2010	1 day	3 PHENIX techs	After Prep
PHENIX	Wire dumb waiter	12/6/2010	1 day	Electrician	After dumb waiter installed
PHENIX	Install MuID collars	12/6/2010	1 day	3 PHENIX techs	After EC in IR
PHENIX	Fold down EC platforms and install dumb waiter	12/7/2010	1 day	2 carpenters, 2 riggers	After EC in IR
PHENIX	Re-install EC cables, fibers, water and gas piping	12/7/2010	4 days	3 PHENIX techs, 2 scientists, 1 electrician	After EC in IR
PHENIX	DC repairs	12/10/2010	3 days	1 PHENIX tech, PHENIX scientists A/R	After EC cables, etc. installed
PHENIX	Assemble shield wall	12/10/2010	4 days	1 rigging crew	After EC rolled in

Remaining Shutdown Tasks, Continued

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<u>Project</u>	<u>Task</u>	<u>Completion Date</u>	<u>Task Duration</u>	<u>Personnel reqmts</u>	<u>Notes</u>
PHENIX	Install plug door	12/10/2010	1 day	1 rigging crew	After shield wall built
PHENIX	Close shield wall	12/10/2010	1 day	3 PHENIX techs	After pink/blue/white sheets
PHENIX	Gas mixing house R-134A shed addition R134A bottle warmers	12/15/2010	1 day	1 PHENIX Tech	Get CAD approval then order. Install when convenient
PHENIX	Pink sheets, blue sheets, white sheets	12/24/2010	2 weeks	2 PHENIX techs, PHENIX scientists A/R	After DC Repairs
PHENIX	Chiller platform fire detection and suppression	12/24/2010	1 week	1 CAD plumbers, 1electrician	ASAP after platform is installed
PHENIX	Install safety interlocks	12/24/2010	1 day	CAD safety	After shield wall closed
PHENIX	Start flammable gas	12/24/2010	1 day	1 PHENIX tech	After shield wall in place
PHENIX	End of shutdown party	12/30/2010	1 day	All of PHENIX	After shutdown completed
PHENIX	Close out all 2010 shutdown WP's	12/31/2010	1 day	1 PHENIX ME	After shutdown completed
RPC1&Abs Proto	Electronics & Gas Support Installation	1/1/2011???	3 days	3 PHENIX techs	Not Scheduled

Remaining Shutdown Tasks, Continued

TECHNICAL SUPPORT 2010

<u>Project</u>	<u>Task</u>	<u>Completion Date</u>	<u>Task Duration</u>	<u>Personnel reqmts</u>	<u>Notes</u>
RPC1&Abs Proto	Installation	1/1/2011???	3 days	3 PHENIX techs	Not Scheduled
FoCal Proto	ESRC review	1/1/2011???	2 weeks	PHENIX ME	Not Scheduled
FoCal Proto	Support structure design	1/1/2011???	3 days	PHENIX ME, Designer	Not Scheduled
FoCal Proto	Support structure fabrication	1/1/2011???	2 weeks	2 PHENIX techs, CS	Not Scheduled
FoCal Proto	Electronics, cooling, gas support design	1/1/2011???	3 days	PHENIX ME, Designer	Not Scheduled
FoCal Proto	Electronics, cooling, gas support fabrication	1/1/2011???	1 week	2 phenix TECHS	Not Scheduled
FoCal Proto	Electronics, cooling, gas support installation	1/1/2011???	3 DAYS	3 phenix TECHS	Not Scheduled
FoCal Proto	Support structure installation	1/1/2011???	2 DAYS	3 phenix TECHS	Not Scheduled

2010 Building Maintenance Issues

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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)

Nothing New This Week

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]



PHENIX Procedure Review Current Status:

148 Procedures Identified

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

9 CAD procedures relevant to PHENIX, all are available and available on the CAD web site

42 Procedures in Progress (1 of these soon needs updating)

11 Proposed/Draft Procedures (never previously formalized) (3 are ready for review)

Nothing New This Week

Web retrieval of latest procedures now available from PHENIX Internal:

http://www.phenix.bnl.gov/WWW/INTEGRATION/ME&Integration/DRL_procedures.htm

TECHNICAL SUPPORT 2010

1. Annual PHENIX Safety review this afternoon after this meeting
Don, Rob, Paul
2. RPC1 Prototype & Borated Poly/Lead Absorber Review
Detector and absorber info sent to YMakdisi. Need installation plan
3. Focal Prototype Review
Not enough info yet
4. BNL Standards for Ethics - Required Training
5. From Lab Protection Div: At your next staff meeting please reminder all the members of your staff to:

Ensure that their vehicle registration is current on any vehicle they plan to bring to work

Ensure that their vehicle sticker is displayed on all vehicles

Where To Find PHENIX Engineering Info



West is in!

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

