

PHENIX WEEKLY PLANNING

TECHNICAL SUPPORT 20-0



12/16/2010
Don Lynch

2010 Shutdown (Overview)

Start Date End Date

TECHNICAL SUPPORT 2010

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

Done

Done

Shutdown Startup Tasks

Done

Done

Gas system maintenance, repair and upgrade

Done

Done

PHENIX Infrastructure maintenance, repair and upgrade

Done

Done

Remove RPC Prototypes

Done

Done

Remove HBD

Done

Done

Remove RXNP

Done

Done

Remove/Reinstall BBC

Done

Done

Remove Re-install MPC

Done

Done

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)

Done

Done

MuTr maintenance, repair and upgrade

Done

Done

Install VTX

Done

Done



This Week:

Complete EC roll-in

DC East/West maintenance and repairs

Begin End of shutdown tasks including Pink/Blue/White sheets

Final VTX Survey

Install RPC1 Prototype Electrical and gas support

Future upgrades support

Next Week

Complete DC East/West maintenance and repairs

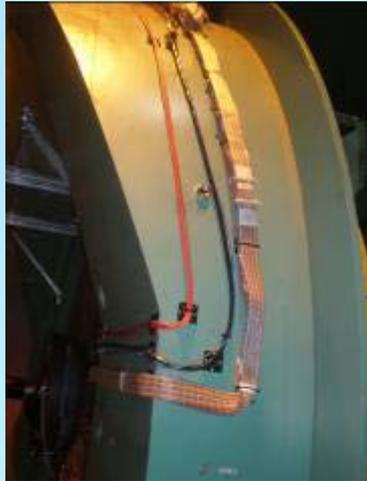
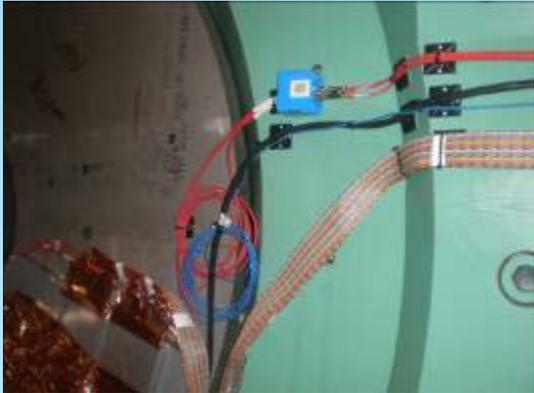
Continue end of shutdown tasks including Pink/Blue/White sheets

RPC and VTX final touch up and commissioning

Future upgrades support

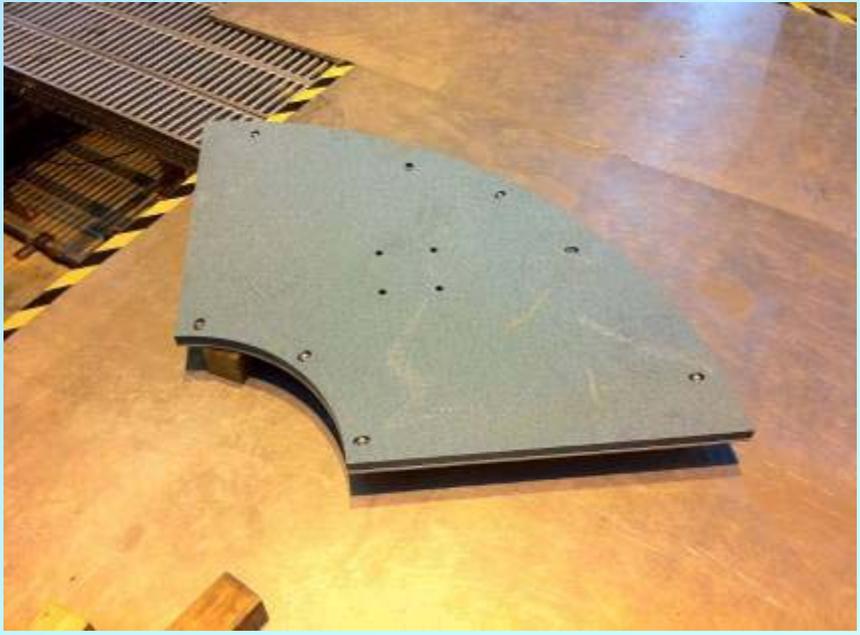
RPC1 Prototype, Installed

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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			Done
VTX	Assemble west 1/2 detector	Done			Done
VTX	Design survey theodolite support brackets for CM lead shield	Done			Done
VTX	Route fibers rack room to CME Rack	Done			Done
PHENIX	Bakeout/activate NEG for new BP	Done			Done
PHENIX	Leak check new BP	Done			Done
VTX	Test west 1/2 detector	Done			Done
VTX	Survey east barrels 1-4	Done			Done
PHENIX	Re-run MuTrigger fiber from MMS to rack room	Done			Done
VTX	Fabricate survey support brackets	Done			Done
VTX	Bring Support structure to Chem Lab - Done	Done			Done
VTX	Install survey support brackets	Done			Done

Remaining Shutdown Tasks, Continued

TECHNICAL SUPPORT NO-0

<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			Done
VTX	Survey west 1/2 detector	Done			Done
VTX	Re-install bridge water manifold and cable trays	Done			Done
VTX	Chiller platform 480V power	Done			Done
VTX	Assemble east 1/2 detector	Done			Done
PHENIX	Re-install MuTr station 2 channel air distribution	Done			Done
VTX	Prepare thermocouple map	Done			Done
VTX	Test east 1/2 detector	Done			Done
VTX	Install NOVEC piping from chiller platform area to VTX area	Done			Done
VTX	Receive extension rails/design/modify for installation	Done			Done
VTX	Survey east 1/2 detector	Done			Done
PHENIX	Install access to inside MMS	Done			Done

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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			Done
VTX	Survey/align east and west detector	Done			Done
VTX	Modify strongbacks for basket lift	Done			Done
VTX	Install extension rails	Done			Done
RPC3S	NRTL cable trays	Done			Done
VTX	Transport west 1/2 detector to IR	Done			Done
VTX	Install west 1/2 detector	Done			Done
VTX	Assemble and install NOVEC distribution manifolds near VTX	Done			Done
RPC3S	Re-install shielding	Done			Done
VTX	Install humidity sensors	Done			Done
PHENIX	Remove bakeout equipment	Done			Done
PHENIX	Survey and align MMS, CM and new BP	Done			Done

Remaining Shutdown Tasks, Continued

TECHNICAL SUPPORT 20-0

<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	Done			Done
PHENIX	Install power upgrade to bridge	Done			Done
RPC3S	Finalize cable tray/Cable installation	Done			May need minor adjustments, etc
RPC3S	Final piping	Done			May need minor adjustments, etc
VTX	Install west 1/2 detector Bias, LV and signal cables	Done			Done
VTX	Install one Chiller for QA testing (on ground)	Done			Done
VTX	Connect west 1/2 detector to NOVEC cooling	Done			Done
VTX	Survey/align west 1/2 detector	Done			Done
VTX	Transport east 1/2 detector to IR	Done			Done
RPC1&Abs Proto	Installation plan	Done			Done
RPC1&Abs Proto	WP	Done			Done
PHENIX	Re-install BBCs cabling/cooling pipes	Done			Done
PHENIX	Re-install BBCs	Done			Done
PHENIX	AH South exit chiller platform installation	Done			Done
VTX	Install 3 chillers on chiller platform	Done			Done

TECHNICAL SUPPORT 2010

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VTX	Install east 1/2 detector	Done			Done
VTX	Route 100 LV cables from bridge rack to near VTX	Done			Done
VTX	Route 260 duplex/simplex fibers from CME rack to near VTX	Done			Done
VTX	Route 7 Belden 16 pair cable trunks from CME rack to near the VTX	Done			Done
PHENIX	Install East Vertical Lampshade on MMS	Done			Done
RPC3S	Thermostats	Done			Done
PHENIX	Gas mixing house R-134A shed addition R134A bottle warmers	Done			Done
PHENIX	MuTr and MuTrigger remaining subsystem tasks and tests	Done			May need a few more tests
VTX	Install interlock PLC on bridge	Done			Testing/ commissioning in progress
VTX	Route 100+ thermocouple extensions from PLC box to near VTX	Done			Done
VTX	In situ QA electronics test on east 1/2 detector	Done			Done
RPC3S	Re-install FCAL and any other disrupted subsystems	Done			Done
RPC1&Abs Proto	Installation fixtures design and fabrication	1 Done			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	Install east 1/2 detector Bias, LV and signal cables	Done			Done
PHENIX	Re-install MPCs	Done			Done
PHENIX	WP for DC repairs	Done			Done
VTX	Survey/align east 1/2 detector	Done			Done
VTX	Final VTX survey	Done	1 day	1 PHENIX tech, designer, 2 surveyors	Done
VTX	Final BP survey	Done	1 day	1 PHENIX tech, designer, 2 surveyors	Done
RPC1&Abs Proto	Installation	Done			Done
PHENIX	Prep EC for move to IR	12/16/2010	1 day	3 PHENIX techs	In Progress
PHENIX	Remove manlifts, decking and 12 ton crane from IR to run storage	12/14/2010	1 day	3 PHENIX techs	After BBCs & MPCs & VTX installed
PHENIX	Move MuID collars to IR	12/16/2010	1 day	3 PHENIX techs	In Progress
PHENIX	Move EC to IR	12/16/2010	1 day	3 PHENIX techs	After Prep
VTX	Connect east 1/2 detector to NOVEC cooling	12/17/2010	2 days	2 PHENIX techs	In Progress
PHENIX	Re-attach cables, gas piping, water piping and fibers to CM and MMS	12/17/2010	2 weeks	3 PHENIX techs	In Progress

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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	Close access to MMN	12/17/2010	1 day	1 PHENIX tech	> MuTr/ Trig < flam gas
RPC3S	RPC gas controllers final installation and RPC subsystem commissioning	12/17/2010	1 week	1 PHENIX tech, RPC Group	As soon as convenient
PHENIX	Fold down EC platforms and install dumb waiter	12/17/2010	1 day	2 carpenters, 2 riggers	After EC in IR
PHENIX	Re-install EC cables, fibers, water and gas piping	12/17/2010	4 days	3 PHENIX techs, 2 scientists, 1 electrician	After EC in IR
PHENIX	Wire dumb waiter	12/23/2010	1 day	Electrician	After dumb waiter installed
PHENIX	Install MuID collars	12/23/2010	1 day	3 PHENIX techs	After EC in IR
PHENIX	DC repairs	12/23/2010	3 days	1 PHENIX tech, PHENIX scientists A/R	After EC cables, etc. installed
PHENIX	Pink sheets, blue sheets, white sheets	12/23/2010	2 weeks	2 PHENIX techs, PHENIX scientists A/R	After DC Repairs
PHENIX	Chiller platform fire detection and suppression	12/23/2010	1 week	1 CAD plumbers, 1electrician	ASAP after platform is installed

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	Assemble shield wall	12/24/2010	4 days	1 rigging crew	After EC rolled in
PHENIX	Start flammable gas	12/27/2010	1 day	1 PHENIX tech	After shield wall in place
FoCal Proto	Design plan	12/30/2010	2 weeks	PHENIX ME	In Progress
FoCal Proto	Installation plan	12/30/2010	2 weeks	PHENIX ME	In Progress
PHENIX	Install plug door	12/30/2010	1 day	1 rigging crew	After shield wall built
PHENIX	Close shield wall	12/30/2010	1 day	3 PHENIX techs	After pink/blue/white sheets
PHENIX	Install safety interlocks	12/30/2010	1 day	CAD safety	After shield wall closed
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	12/31/2011	3 days	3 PHENIX techs	If Time Permits
PHENIX	End of shutdown party	1/7/2011	1 day	All of PHENIX	After shutdown completed

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>
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	In progress
FoCal Proto	Support structure fabrication	>1/1/2011???	2 weeks	2 PHENIX techs, CS	After Design is complete
FoCal Proto	Electronics, cooling, gas support design	>1/1/2011???	3 days	PHENIX ME, Designer	In progress
FoCal Proto	Electronics, cooling, gas support fabrication	>1/1/2011???	1 week	2 phenix TECHS	In progress
FoCal Proto	Electronics, cooling, gas support installation	>1/1/2011???	3 DAYS	3 phenix TECHS	During run 11
FoCal Proto	Support structure installation	>1/1/2011???	2 DAYS	3 phenix TECHS	During run 11
PHENIX	Design CM alignment stops	postponed			For 2011 shutdown
PHENIX	Fabricate CM alignment stops	postponed			For 2011 shutdown

2010 Building Maintenance Issues

TECHNICAL SUPPORT 2010

- 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)
- Roof leaks in laser room and IR (southeast corner)
- Flooding in AH/ Driveway heaving [Lake PHENIX]
- New HVAC in Control Room and Conference Room
- New projector for conference room



12/16/2010

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: Action items:
 - Assure the new VTX detector DCM2 boards are fused (Boose Dec 20, 2010)
 - Review to assure all Weiner power supplies are NRTL equivalent compliant and affix respective labels (Giannotti Dec 20, 2010)
 - Provide the new flammable gases leak rates (Pisani, Dec 20, 2010)
 - Provide the gas usage quantities (Pisani Dec 20, 2010)
 - Carry out the pink sheeting of all racks. (Haggerty / Giannotti Dec 20, 2010)
 - Carry out the Blue Sheeting (CAS, Phillips Dec 24, 2010)
 - Provide updated sweep procedures (Sampson Dec 20, 20)
 - Carry out operational tests of the VTX cooling systems (??? Dec 24, 2010)
 - Provide documentation of the heating blanket and electrical connections reviewed by BNL fire engineering (Pisani Dec 24, 2010)

General:

- Update the PHENIX ECR. (Craner, Dec 24, 2010)
- Update the PHENIX work plan (Cirigliaro, Dec 24, 2010)
- Carry out a magnetic safety review (Phillips Dec 24, 2010)
- A walk through of the PHENIX detector prior to introduction of flammable gas. (Makdisi / Etkin Dec 24, 2010)
- Update the documented work procedures. (Lynch Continuing from last year)
- Establish trained PHENIX watch shifts. (O'Brien, Dec 24, 2010) (Done)
- Update the PHENIX emergency procedure (Makdisi Dec 24, 2010)

- 1. Focal Prototype Review: Not enough info yet. Design and technical support are ongoing
- 2. BNL Standards for Ethics - Required Training Due by 12/31

Where To Find PHENIX Engineering Info



Ready to Roll

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

