

PHENIX WEEKLY PLANNING

PHENIX
WEEKLY
PLANNING
7/2/2009
11:00 AM



No Meeting this week due to July 4th holidays. Slides have been updated. Next planning meeting will be on July 9th

7/2/2009
Don Lynch

This Week 6/29-7/3

Last week of Run 9

Fabrication of RPC Installation components proceeding on schedule

Work Permit preparation

RPC inspection fixtures designed and sent to CS

Ordering equipment for shutdown projects continues

RPC TVB specification preparation

PHENIX TECHNICAL SUPPORT NOON

Next Week 7/6 - 7/10

TECHNICAL SUPPORT NOON

- | | | |
|--|------|-------|
| • Remove interlock from Shield Wall (1 hr) | 7/6 | 7/6 |
| • Purge Flammable gas from IR detectors | 7/6 | 7/7 |
| • Disassemble and stow Wall & Base (3 -4 days) | 7/6 | 7/9 |
| • Fabricate Base Locking/Installation fixture | 7/6 | 7/10 |
| • Fabricate RPC3 N survey fixture | 7/6 | 7/10 |
| • Fabricate RPC3 adjustable $\frac{1}{2}$ octant cradle | 7/6 | 7/10 |
| • cleaning and testing of MuTracker HV splitter boxes | 7/6 | 7/10 |
| • Install MuTrigger FEE Sta 2/3 cable Management and cable runs behind MMS | 7/6 | 7/28 |
| • Move PHENIX-North tunnel shielding, remove PHENIX-North vapor barrier and crystal palace, repair/replace area lighting | 7/6 | 7/31 |
| • Move MuID piping, piping supports out of Gap 5 to temporary store area | 7/6 | 7/31 |
| • Move MuID cables and cable tray out of Gap 5 to temporary store area | 7/6 | 7/31 |
| • Start Design supports for Beampipe upgrade | 7/6 | 11/30 |
| • Design & Fabrication support for VTX | 7/6 | 11/30 |
| • Design support for FVTX | 7/6 | 11/30 |
| • Design support for FOCal | 7/6 | 11/30 |
| • Fan Tray replacements (as time permits) | 7/8 | 11/30 |
| • Remove ladder & dumb waiter from EC (1/2 day) | 7/10 | 7/10 |

7/02/2009

Expected IR Configuration During Shutdown '09

- 7/6 - 7/17 Run configuration EC and WC can be moved east/west ~3 ft
- 7/17-7/22 MMS moved south, CM in run position EC & WC can be moved east/west ~3 ft
- 7/22-7/28 MMS north, Run configuration EC and WC can be moved east/west ~3 ft
- 7/28-10/1 MMS south, CM in run position, EC in AH WC in west position (against wall), scaffolding in station 1 and station 2/3 south
- 9/25-11/10 MMS, CM & WC positions TBD, EC in AH
- 11/10-12/1 MMS & CM in run position, EC and WC can be moved east west ~3 ft

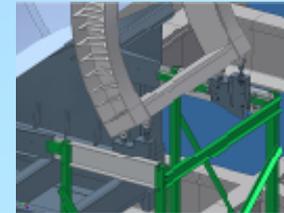
These dates are approximate and subject to change

TECHNICAL SUPPORT NOON

June Schedule

Task

- MMS Sta 1 & 2/3 scaffolding concept, design, acquisition, fabrication
- Design of PC1 East repair fixture
- Order RPC3N racks and rackcomponents (2 racks)
- PC1 East repair fixture: order raw materials, order off-the-shelf components & hardware, receive and inspect components
- Prep RPC3 N racks for installation
- End of Run Party (Rain Date 6/24)
- Complete RPC3 N Support drawings for RPC3N base, pitch support, lifting fixtures, $\frac{1}{2}$ octant 7&8 vertical support and work above MuID steel platform, send to CS
- Fabricate RPC3 N base, pitch support, lifting fixtures and $\frac{1}{2}$ octant 7&8 vertical support
- All Mutrigger cables and connectors ordered
- All RPC & MuTrigger cable tray ordered



Start Date End date

Done Done

Done Done

Done Done

5/1 8/1

5/1 8/14

Done Done

Done Done

5/20 7/10

6/1 7/1

6/1 7/1

June Schedule

Task

Start Date End Date

- | Task | Start Date | End Date |
|--|------------|----------|
| • All MuTrigger FEE plumbing hardware ordered | Done | Done |
| • Move tilt table to RPC factory | Done | Done |
| • Aerogel: shutdown work planning
(None yet defined) | 6/1 | 7/1 |
| • BBC: shutdown work planning (None yet defined) | 6/1 | 7/1 |
| • DC: shutdown work planning (None yet defined) | 6/1 | 7/1 |
| • EMCal: shutdown work planning (None yet defined) | 6/1 | 7/1 |
| • HBD: shutdown work planning (None yet defined) | 6/1 | 7/1 |
| • MPC: shutdown work planning (None yet defined) | 6/1 | 7/1 |
| • MuID: shutdown work planning (None yet defined) | 6/1 | 7/1 |
| • MuTr: shutdown work planning | 6/1 | 7/1 |
| • PC: shutdown work planning
(PC1 repair only work defined yet) | 6/1 | 7/1 |
| • RICH: shutdown work planning (None yet defined) | 6/1 | 7/1 |
| • RXNP: shutdown work planning (None yet defined) | 6/1 | 7/1 |
| • TEC: shutdown work planning (None yet defined) | 6/1 | 7/1 |
| • TOF: shutdown work planning (None yet defined) | 6/1 | 7/1 |

PHENIX TECHNICAL SUPPORT NOON

June Schedule

TECHNICAL SUPPORT ROOM

Task

Start Date End Date

- TOF West: shutdown work planning
(None yet defined) 6/1 7/1
- Gas System: shutdown work planning
(None yet defined) 6/1 7/1
- DAQ & general electronics: shutdown work
planning 6/1 7/1
- Safety System: shutdown work planning
(None yet defined) 6/1 7/1
- 1008 Utilities: shutdown work planning
(None yet defined) 6/1 7/1
- 1008 Facility Issues: shutdown work planning
(None yet defined) 6/1 7/1
- Rack room re-organization plan 6/1 7/1
- MMS sta 1 & 2/3 pre-assembly 6/1 7/1
- Receive and test MuTrigger FEE's 6/1 7/24
- Receive MuTrigger FEE's cable and connectors,
prep and bundle for installation 6/1 7/24

June Schedule

TECHNICAL SUPPORT ROOM

Task	Start Date	End Date
• Prepare specs for RPC3N thermal vapor barrier	6/15	6/19
• Review PHENIX RPC3 N plans for CAD support and prep (incl barrier) (2 days)	6/15	7/1
• Review PHENIX RPC3 N lifting fixture design and run acceptance test in RPC Factory (3 days)	6/15	7/15
• Plan and install 2 new PHENIX gas pad expansion pads	6/15	9/4
• Order tilt table lifters	6/16	6/16
• Get list of RPC3N installation hardware and place orders	6/16	6/16
• Complete RPC3N lifting fixture engineering analyses and submit to CAD Eng'g and LSC	Done	Done
• Evaluate & accept PC1 spare module	Done	Done
• Review RPC3 N support base grout requirements with masons	Done	Done
• Review placement of thermal/vapor barrier in relation to ODH fans 8EF0 and 7EF3	Done	Done



June Schedule

TECHNICAL SUPPORT ROOM

- | Task | Start Date | End Date |
|--|------------|----------|
| • Review beampipe protection in RPC3 N&S lift areas | Done | Done |
| • Review RPC3 above MuID work platform Carpenters | Done | Done |
| • Order Tent/ Burn-in test stand cover | 6/17 | 6/17 |
| • Order portable AC (9,000 BTU) for burn-in test stand | 6/17 | 6/17 |
| • Meet with Frank Karl to discuss RPC3N survey | 6/17 | 7/1 |
| • Assemble HV, experimental gas and N2 gas distribution and install tent | 6/17 | 7/15 |
| • Receive $\frac{1}{2}$ octant cases from UIUC | Done | Done |
| • Finalize gap 5 N cable and pipe reorganization | 6/18 | 6/19 |
| • Install electric circuits to burn-in test stand for AC and heaters & to storage racks for humidity control | 6/18 | 7/1 |
| • Revise and Issue RPC3N Installation procedure from concept. | 6/19 | 6/19 |
| • Field Fit $\frac{1}{2}$ octant retaining arm/clamps design to fit | 6/19 | 6/26 |
| • Fan Tray replacement evaluation and Priority plan | 6/19 | 6/26 |



June Schedule

Task

Start Date End Date

- | Task | Start Date | End Date |
|---|------------|----------|
| • Order & receive parts for MuTrigger FEE cable Management | 6/19 | 7/2 |
| • Prepare Work Permit for MMS access (MuTrigger FEE & MuTr decapacitations) | 6/19 | 7/13 |
| • Prepare Work Permit for MMN access (MuTrigger FEE & MuTr decapacitations) | 6/19 | 7/13 |
| • Assemble Dummy $\frac{1}{2}$ octant and test with tilt table and Burn-in test stand field fit | 6/19 | 7/13 |
| • Order & receive parts for gap5 N cable management | 6/19 | 7/24 |
| • Evaluate Gap 5 grout at Factory | 6/22 | 6/26 |
| • Design concept for Base locking/Installation fixture for RPC3N | 6/22 | 7/1 |
| • Design RPC3 adjustable $\frac{1}{2}$ octant cradle | 6/22 | 7/1 |
| • Design RPC3N Survey fixture | 6/22 | 7/1 |
| • Submit Work Permits for RPC3 N | 6/26 | 6/26 |



7/02/2009

July Schedule

TECHNICAL SUPPORT NOON

Task



Start Date End Date

- July 4th Holiday - no work
- End of Run 9
- Remove interlock from Shield Wall (1 hr)
- Purge Flammable gas from IR detectors
- Disassemble and stow Wall & Base (3 -4 days)
- Fabricate Base Locking/Installation fixture
- Fabricate RPC3 N survey fixture
- Fabricate RPC3 adjustable $\frac{1}{2}$ octant cradle
- Install MuTrigger FEE Sta 2/3 cable Management and cable runs behind MMS
- Move PHENIX-North tunnel shielding, remove PHENIX-North vapor barrier and crystal palace, repair/replace area lighting
- Move MuID piping, piping supports out of Gap 5 to temporary store area
- Move MuID cables and cable tray out of Gap 5 to temporary store area
- Design supports for Beampipe upgrade

Start Date	End Date
7/2	7/3
7/6	7/6
7/6	7/6
7/6	7/7
7/6	7/9
7/6	7/10
7/6	7/10
7/6	7/10
7/6	7/28
7/6	7/31
7/6	7/31
7/6	7/31
7/6	11/30

July Schedule

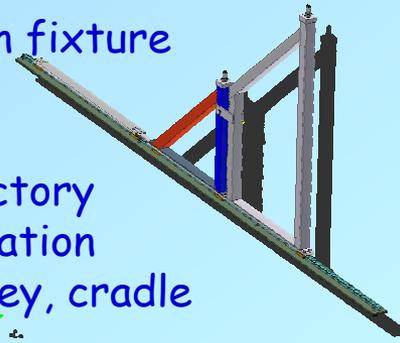


Task

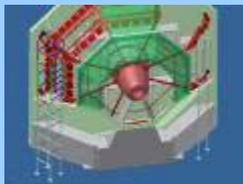
Start Date End Date

TECHNICAL SUPPORT NOON

Task	Start Date	End Date
•Design & Fabrication support for VTX	7/6	11/30
•Design support for FVTX	7/6	11/30
•Design support for FOCal	7/6	11/30
•Fan Tray replacements (as time permits)	7/8	11/30
•Remove ladder & dumb waiter from EC (1/2 day)	7/10	7/10
•Receive RPC3 N lifting fixture parts at factory	7/13	7/13
•Fold up EC platforms (1/2 day)	7/13	7/17
•Test base RPC3 N locking/installation fixture	7/13	7/17
•Test base RPC3 N survey fixture	7/13	7/17
•Test RMC higher comm speed on EC	7/13	7/17
•Simulated RPC installation at RPC Factory (practice/tests) commission all installation components base, locking/install, survey, cradle	7/13	7/31
•Remove MuID collars	7/15	7/15
•Receive complete RPC3 N base, pitch support, lifting fixtures & 1/2 octant 7&8 vertical support	7/15	7/15
•Test and commission RPC3N lifting fixtures at factory with S. Kane/designee as witness	7/15	7/15
•Move MMS South	7/17	7/17
•Disconnect EC and Move to AH	7/20	7/22



Task



July Schedule

Start Date End Date

Task	Start Date	End Date
•Open MMN hatch and O2 check atmosphere	7/20	7/24
•Install ladder/access platform and work platforms for work above MuID steel (3 days)	7/20	7/24
•Move MuID plumbing rack on pedestal away from gap 5	7/20	7/30
•Move MMS North	7/22	7/22
•Install IR floor plates, 12 ton cart & manlift	7/22	7/22
•Move MuID collars to AH	7/23	7/23
•Remove 4 MMS lampshades (2-3 days)	7/24	7/28
•Reinstall ladder and dumb waiter on EC in AH and fold down EC platforms (1 day)	7/24	7/31
•ID/label gap 5 N cables & pipes and move out of gap 5	7/27	7/30
•Troubleshoot MUTrigger FEE's in MMN	7/27	8/31
•Troubleshoot MUTr decaps in MMN	7/27	8/31
•Move MMS South	7/28	7/28
•Install Station 1 Scaffolding (3 days)	7/28	7/30
•Inspect Station 1 Scaffolding (1/2 day)	7/30	7/31
•Install MuTrigger Station 1 S FEE cable management	7/30	7/31



T
E
U
I
C
A
L
S
C
A
P
O
R
T
N
O
O
N

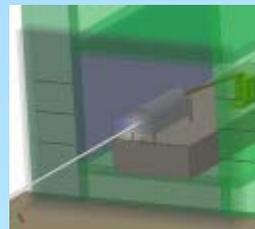
August Schedule

Task

Start Date End Date

TECHNICAL SUPPORT NOON

Task	Start Date	End Date
• Reconnect EC utilities for shutdown mode	8/3	8/7
• Survey tapped holes on MuID5 steel and survey east and west RPC3 N support bases (3 days)	8/3	8/14
• Drill and tap MuID gap 5 steel top and north	8/3	8/14
• Install RPC3 N support base & grout (4 days)	8/3	8/14
• Install Station 3 N pitch control (unistruts rails) on pedestal and east and west gap 5 north walls and attach to support bases (tall column)	8/3	8/14
• Install MMS station 2/3 scaffolding	8/3	8/14
• Install Station 1 FEE's & Electronics and connect cables	8/3	8/28
• MuTr decapacitations & MuTr FEE trouble-Shooting in MMS Sta 1&3	8/3	8/28
• MuTr Rack 2 troubleshooting	8/3	8/28
• Vendor install Ar dewar & vaporizer	8/3	8/28
• Install rails and fences on gas pad	8/3	8/28
• DCM rack electric prep	8/3	8/30
• MuTr HV and FEE test and evaluation as MuTrigger FEE's & RPC's are installed	8/3	11/30
• Set up PHENIX "stage" for Summer Sunday Tour	8/5	8/7
• Tear down and remove PHENIX "stage" for Summer Sunday Tour	8/10	8/11

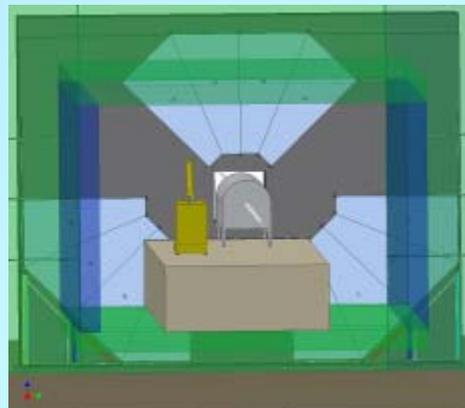
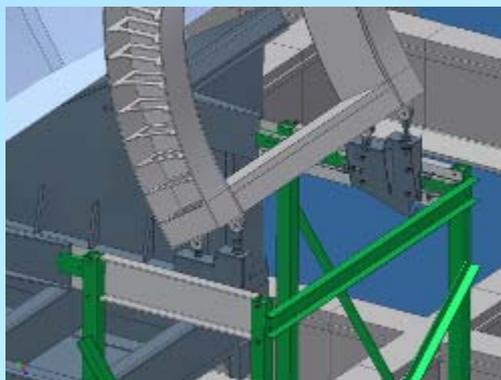


August Schedule

Task

Start Date End Date

- Erect PC1 repair tool 8/12 8/14
- First $\frac{1}{2}$ octant ready for installation 8/17 8/17
- Disassemble DC/PC1 cables & piping 8/17 8/28
- Install Station 1 MuTrigger FEE air & water and test 8/17 9/11
- Install new gap5 N cable & pipe supports, cables and piping and leak test piping 8/17 9/30
- Install RPC3 N $\frac{1}{2}$ Octants (16 days) 8/17 9/30
- Final leak test new Ar dewar/vaporizer and Closeout job 8/28 9/4
- Move DC on EC to access PC1 east 8/31 9/4
- Install Empties racks on gas pad 8/31 9/4
- Install MuTrigger FEE station 2/3 FEE's & Electronics & connect cables 8/31 9/25



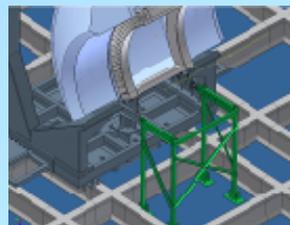
7/02/2009

PHENIX

September Schedule

T
E
C
H
N
I
C
A
L
S
C
A
P
O
R
T
N
O
O
N

Task	Start Date	End Date
• Close MMN Hatch and closeout WP	9/1	9/1
• Rack room re-organization	9/1	11/30
• Labor Day Holiday - no work	9/7	9/7
• Remove failed PC1 east module	9/8	9/11
• Install spare PC1 east module	9/8	9/11
• Install 2 RPC3 N racks (1/2 day)	9/8	9/18
• Test PC1 spare and verify operation	9/14	9/17
• Install MuTrigger FEE station 2/3 air & water plumbing and test	9/14	10/9
• Move DC on EC back to normal position	9/18	9/18
• Reconnect cables and piping on DC and PC1 East	9/21	9/25
• Remove station 1 south scaffolding	9/21	9/25
• Install rack components in RPC3 N racks	9/21	9/30
• Final verification tests on PC1 east repair	9/28	9/30



October Schedule

- Disassemble and store PC1 east repair fixture 10/1 10/2
- Attach cables to RPC3 N racks and to Detector $\frac{1}{2}$ octants 10/1 10/9
- Install new PHENIX north tunnel thermal/vapor barrier replacing crystal palace (1 week) 10/1 10/30
- DCM rack supply & Return plumbing 10/5 10/16
- Remove MMS Sta 2/3 scaffolding 10/12 10/23
- Commission RPC3 N racks and detectors 10/12 10/30
- DCM rack internal plumbing 10/19 10/30
- Reinstall MMS lampshades (2 days) 10/26 10/30



PHENIX TECHNICAL SUPPORT NOON



7/02/2009

2009 Building Maintenance Issues

- Roof leaks in utility bathroom at northwest corner behind tech offices and over door between rack room and assembly hall.
- Heat wrap tape for trailer bathroom toilet drains to prevent freeze/clogging in winter.
- 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.)
- Icy conditions at mixing house north stairs
- Mixing House loose board ?



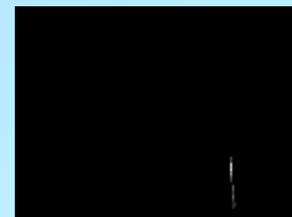
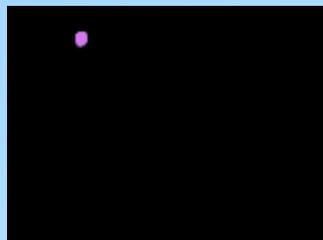
Safety, Security, etc.

Last week's EMS/OSH registration audit for the lab was successful. Auditor's never did reach PHENIX, but I am confident that if they had we would have been prepared and satisfied the auditors with our commitment to safety, quality and environmental responsibility.

If you're at home reading this remember to stay safe over the July 4th weekend, use barbeque equipment responsibly, avoid illegal fireworks and use legal pyrotechnics responsibly and safely.

PHENIX LABORATORY

Where To Find PHENIX Engineering Info



This week is 4th of July week - Today and Tomorrow are Lab Holidays
No Thursday meeting. Those of you taking the week off, enjoy and we'll
See you on July 6 when the wall comes down.

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

