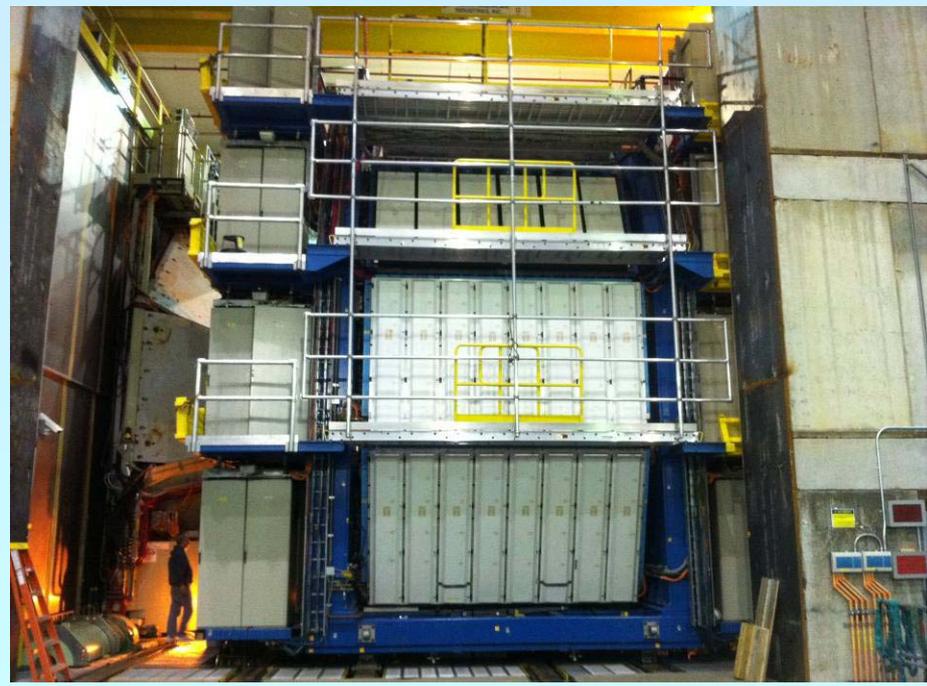


# PHENIX WEEKLY PLANNING

TECHNICAL SUPPORT



12/22/2011  
Don Lynch

## This Week

TECHNICAL SUPPORT NOTES

- Continue RPC1 N & S commissioning
- Complete VTX/FVTX cabling & fiber installation
- Remove manlift and plates from IR - Done
- Move MuID collars to IR - Done
- Move 12 ton rolling cart to AH winter home - Done
- Roll in EC - Done
- Prep EC for run (platforms, ladder, dumb waiter, electric, fiber, gas)
- Begin VTX/FVTX Commissioning
- Complete preparing EC and IR for Pink/White/Blue sheets
- Continue prep for run 12
- PHENIX annual safety review
- Shielding in RPC3 area (install rails and extended shield)

## Next 2 Weeks

- Continue RPC1 N & S commissioning
- Complete VTX/FVTX cabling & fiber installation
- Pink/White/Blue sheets
- Continue prep for run 12
- Shielding in RPC3 area (install rails and extended shield)
- Prep for Cosmic Ray Tests
- Begin building shield wall
- Move MMS to run position
- Install MuId collar
- MuTr S flowmeter upgrade
- Install MPC electronics Racks ????

TECHNICAL SUPPORT 2011

- CM alignment stops
  - Reinstall BBC South
  - MPC S troubleshooting
  - Upgrade AH crane
  - RPC3 Shielding
  
  - RPC Hodoscope
  
  - Prep for EC roll in
    - EC prep
    - Remove manlifts and plates
    - Preposition MuID collars
  - reinstall MMS east vertical lampshade
  - CM alignment & BP Survey (Final after VTX/FVTX installed)
  - MPC electronics rack upgrade installation
  - Roll in EC
  - Prep IR for run
  - IR run prep, Pink/Blue/White sheets
  - New and upgraded full detector commissioning
  - Run 12 cooldown
- 
- Design & Fabrication Done,  
Installation when convenient
  - Done
  - Done
  - After 1/17/2012
  - Large Blocks placed
  - Rail extensions for garage  
in progress
  - Mech Installation Done
  - Cabling by 12/31
  
  - Done
  - Done
  - Done
  - Done
  - Done
  - 1/3/12
  - Done
  - In Progress
  - 12/22-1/6/2012
  - In progress to 1/16/2012
  - 1/17/2012

TECHNICAL SUPPORT 2011

- FVTX/VTX Chiller leak/contamination improvements Done
- FVTX west assembly and QA tests Done
- FVTX west pre-survey Done
- VTX pixel/strip pixel repairs Done
- VTX west re-assembly & QA tests Done
- FVTX east assembly and QA tests Done
- FVTX west integration with VTX west Done
- Move FVTX east to Chem lab Done
- FVTX east pre-survey Done
- VTX east reassembly and QA tests Done
- FVTX east integration with VTX east Done
- FVTX/VTX east half survey Done
- FVTX/VTX west half survey Done
- FVTX/VTX complete alignment survey in Chem. Lab Done
- Install FVTX fibers from rack room thru AH/sill to CM Done
- Final FVTX/VTX QA tests and thermocouple wiring Done
- Move west FVTX+VTX half to 1008 Done
- Move east FVTX+VTX half to 1008 Done
- Install FVTX/VTX west detectors (mechanical) Done
- FVTX racks ready Done
- Survey FVTX/VTX west detectors (mechanical) Done
- Install FVTX racks on bridge Done
- FVTX/VTX west cable routing, plumbing, QA tests Done
- Install FVTX/VTX east detectors (mechanical) Done
- Survey FVTX/VTX east detectors (mechanical) Done
- FVTX/VTX east cable routing, plumbing, QA tests In progress
- FVTX/VTX final electrical/fiber/plumbing/monitoring installation In progress

RPC Tasks

TECHNICAL SUPPORT REPORT 2011

- Install and test RPC1 North including all cables and plumbing Done
- Build 1 new rack, upgrade existing RPC1 prototype rack and install on Bridge Done
- Move CM north to run position Done
- Install scaffolding in station 1 south Done
- Modify BBCS cable routing Done
- Install RPC1 S Done
- RPC3 HV Distribution modifications, gas distribution modifications, PS calibration HV and services testing Done
- Remove hanging platforms Done
- RPC1 north and south commissioning In progress
- Remove all scaffolding Done

TECHNICAL SUPPORT NOTES

- Station 1 North Upgrade (remove, recapacitate, clean, reinstall) Done
- Station 2 North (north and south sides) and South (south side only) upgrade - remove dry air headers, modify headers, install terminator boards, reinstall modified headers Done

MuTr North & South Station 3 Re-cap clamps

- Install work platforms (north and south for capacitor clamp installation to lower octants of station 3) Done
- Install new capacitor clamps in lower octants Done
- Install new dry air manifolding to Cap clamp headers Done
- Remove work platform & steps from MMS Done
- Re-install MMS east vertical lampshade Done
- Remove work platforms from MMN Done

# Electronics Group Tasks

2011 Shutdown

TECHNICAL SUPPORT 2011

- MPC electronics replacement
  - Build racks 12/20
  - Install & wire racks 12/22
  - Test 12/31
- RPC hodoscope installation
  - Run cables 12/31
  - Test 12/31
- RPC1 Wiring
  - Install cables Done
  - Test Done
- Run 12 restoration of detectors
  - EC rewire (power/cable/fiber) 12/20
  - CM restore magnet power, cooling 12/20
  - WC upgrades 12/20
  - Pink/White/Blue Sheets 1/6/12
- VTX restoration
  - Reinstall cables, fiber, cooling, monitoring 12/22
- FVTX installation and cabling
  - Racks: assemble, test, install on bridge Done
  - Fiber: install, terminate and connect 12/21
  - LV sensor and wedge: fabricate, install, terminate and connect 12/21
- Other ??? 1/17/2012

Miscellaneous Gas & Cooling System Tasks

TECHNICAL SUPPORT 2011

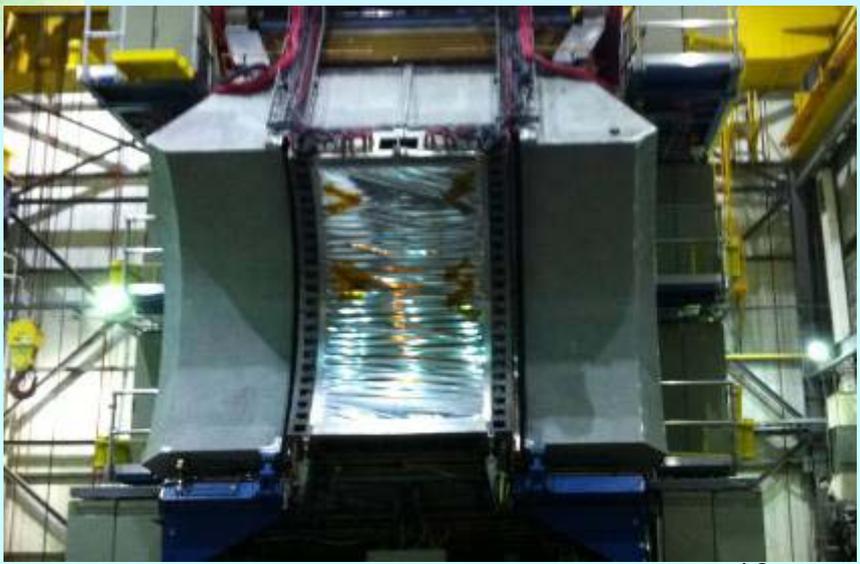
- Replace MuTr flowmeters (north and south) north done, south by - 12/31
- Replace tygon lines (80 lines) from the cooling manifolds to the detector with 1/4" ID teflon tubing. Lines ready for installation
- Insulate whatever Big Wheel chiller lines in the IR that we can get to to reduce sweating in the IR. AH lines are done
- Build a system to clean the Novec during the run. In progress
- Pixel cooling upgrade for 10° C without impacting strip-pixel cooling. Ready for installation
- Replace all cooling RTD transmitters Parts here ready for installation
- Upgrade Mutr, MuID and DC/PC computers in GMH by 12/15 Done
- RPC station 1 gas panels: (north and south) Done
- RPC Station 1 supply lines and exhaust (connecting to existing lines). Done
- Plumbing new supply for R134A, incl. heat tape and insulation. Done
- MuID panel circulation. Class one div 2 fans. Design in progress?
- Dry air for Mutr HV work. (north and south) Done
- Dry air filters to be replaced before run starts. Done
- Other ???

RPC1N

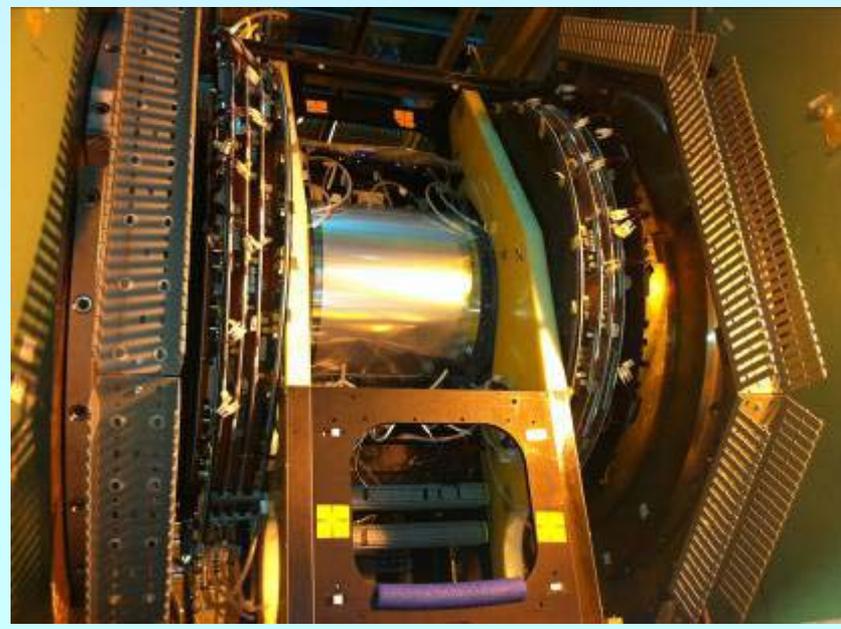
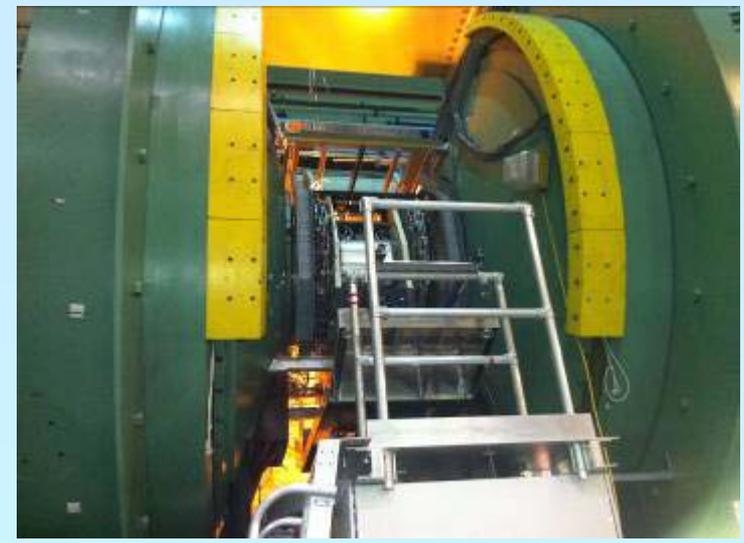
TECHNICAL SUPPORT NO. 1



DCW

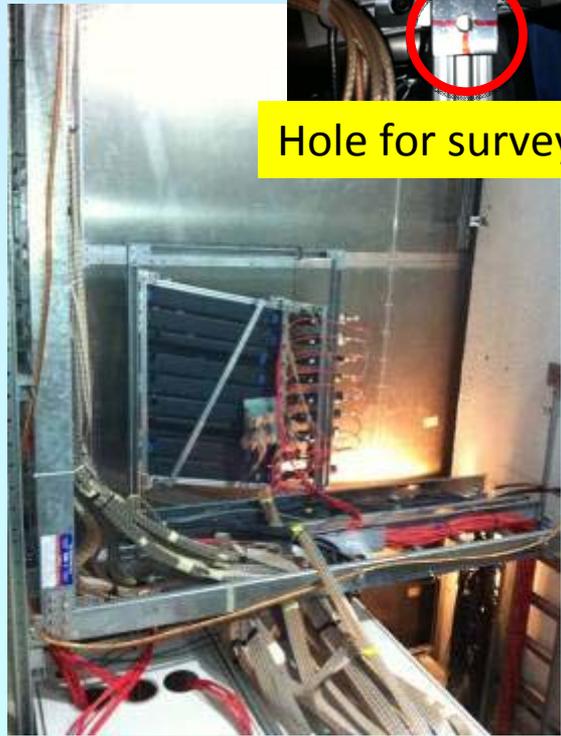


TECHNICAL SUPPORT NO. 1

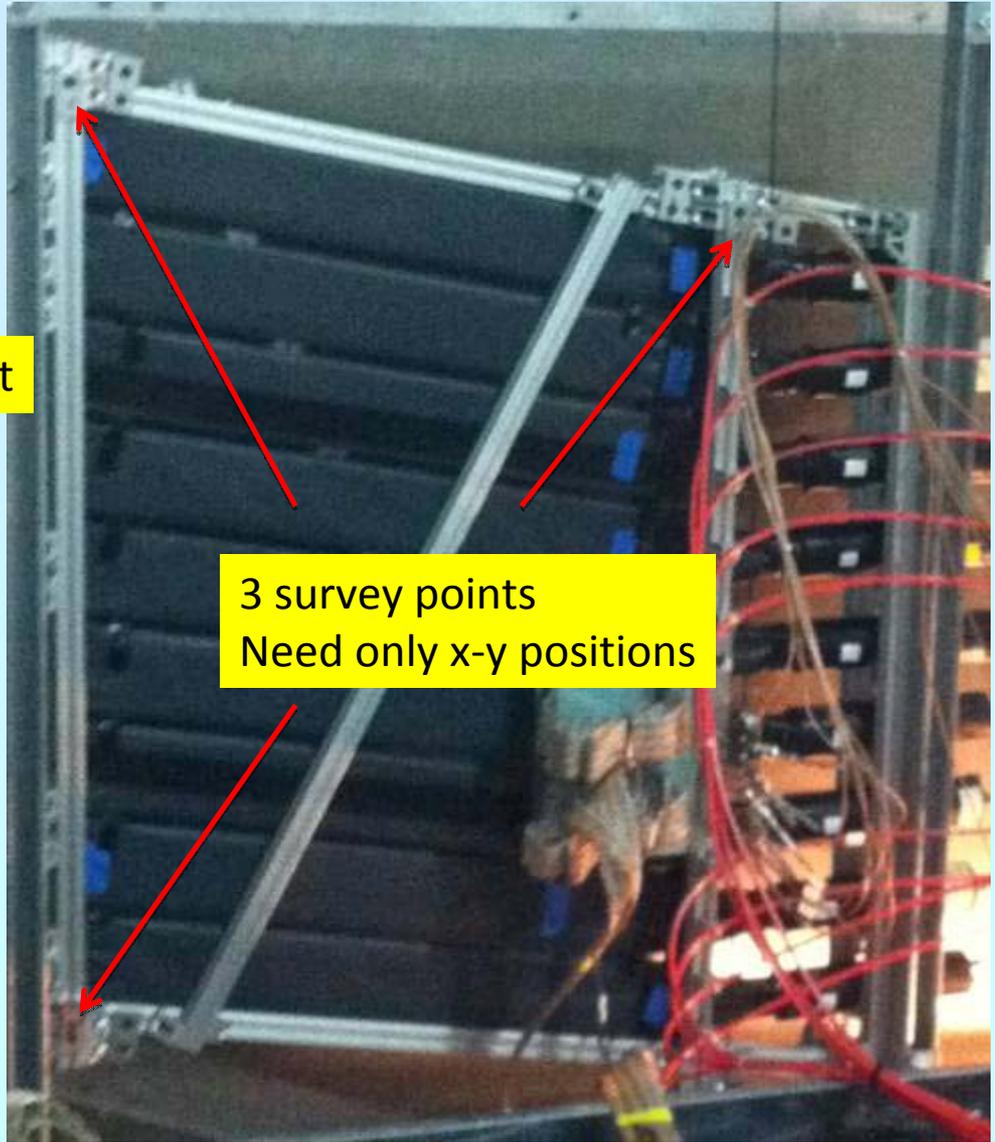


# North Hodoscope

TECHNICAL SUPPORT NO--



Hole for survey point



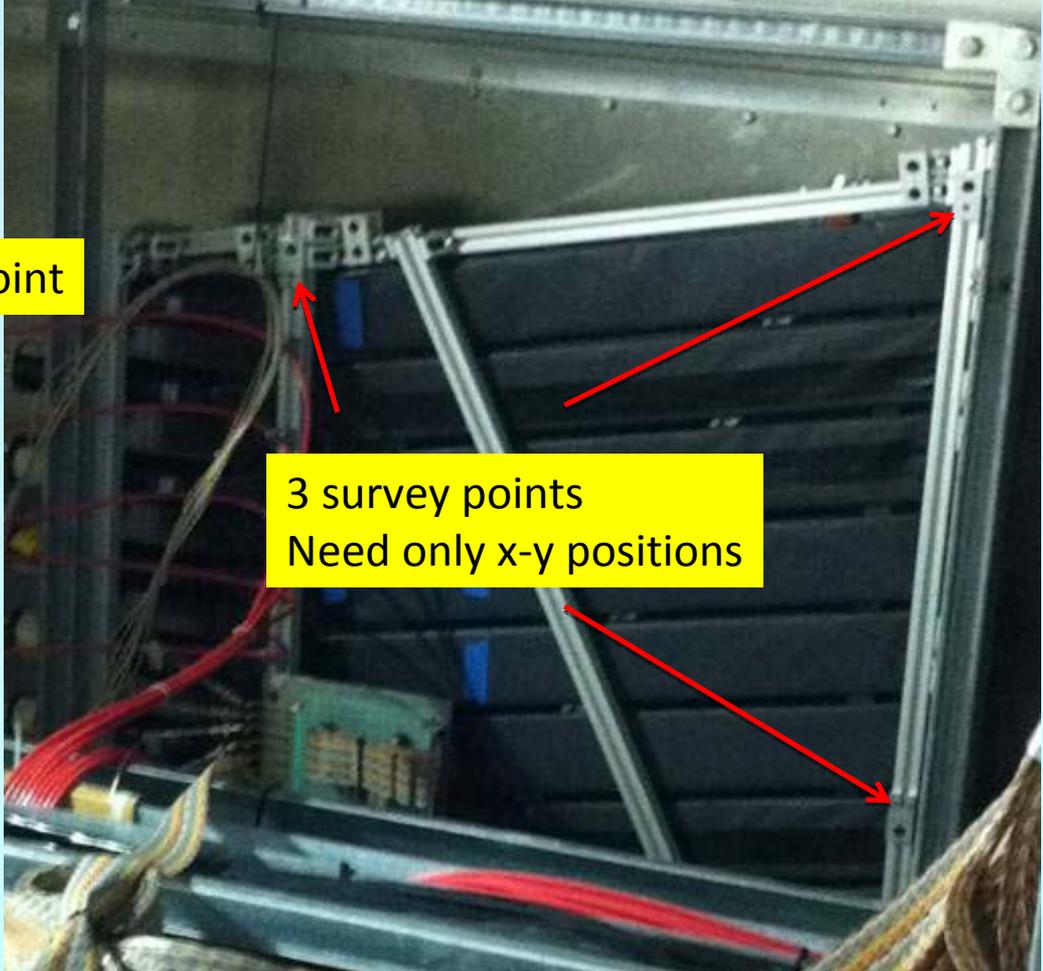
3 survey points  
Need only x-y positions

# South Hodoscope

TECHNICAL SUPPORT NO. 1



Hole for survey point



3 survey points  
Need only x-y positions

TECHNICAL SUPPORT NO--



MPC  
new  
electronics  
racks

# Infrastructure Issues

TECHNICAL SUPPORT NO. 1

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



- Flooding in AH/ Driveway heaving



- Electronics test/assembly room-to-parking lot door (does not open/close/lock properly - needs to be replaced)

TECHNICAL SUPPORT NO--

From Ray Karol:

- Both north and south tunnels will be ODH1 at the start of run 12. Anyone needing access (e.g. RPC3's) will need a film badge, ODH1 web training, ODH practical training, and physicals up to date. Tunnels are now ODH0 - web training up to date required for tunnel access.

Per John Maraviglia of CAD: The practical training for ODH1 (which for most of us expires soon and will need to be retaken before run 12 cooldown in order to be able to access either the north or south tunnel and RPC3;'s) will be given in Snyder Hall, building 911 on one of the following days:

12/16/11 (Tomorrow) at 11:15 AM  
 The class takes about a ½ hour.

There will be additional classes scheduled in early January for those who can't make these 3 sessions.

- PHENIX annual safety review Today after this meeting: Rob, Paul, Steve and Don to present.



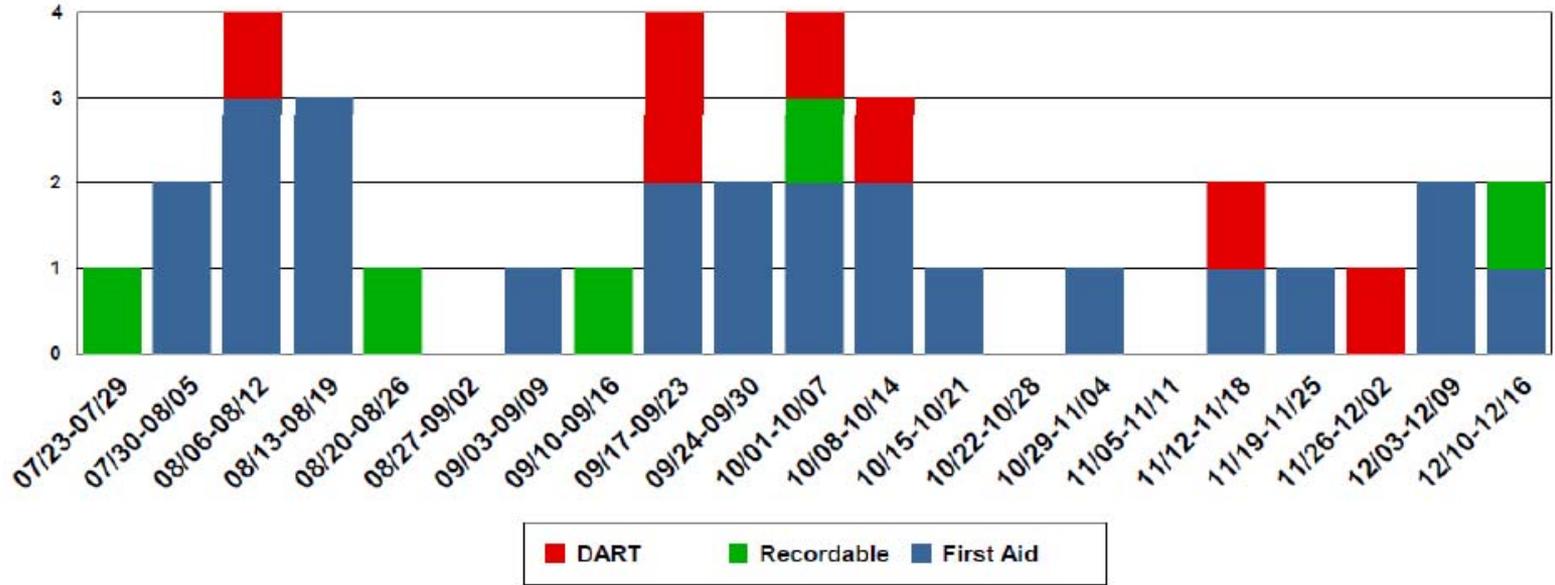
## More from Ray Karol:

- A reminder that you can reduce winter and other slipping hazards by buying shoe covers at the following websites. Make sure that you only use the covers in the areas that they are intended for as described at the website. Use your group account to order:

<http://www.jordandavid.com/>  
or  
<http://yaktrax.com/>

- A reminder that you may never move any installed Chipmunk anywhere at the facility without first calling the Access Controls Group.
- Bright visible vests have been given to the STAR and Phenix experiments. Users must wear these vests at night to prevent being hit by a vehicle. You are basically invisible at the RHIC roads at night because there are no streetlights and no sidewalks. Protect yourself by wearing these vests. Please return them when you return to your experiment so your co-workers can be protected.
- With the holidays coming and long weekends, please make an extra effort to verify that all unoccupied buildings are locked during non-working hours. No doors should be blocked open. We have had vandals come on site in the recent past. Protect our investments and our reputation.
- Human Performance "rule to live by": Surround yourself with inferiors and losers. Not only will you look good by comparison, but they will look up to you, and that will make you feel better.

### Injuries Per Week As of 12/16/2011



**Injury Status:**

FY12 YTD: DART – 4, TRC – 6, First Aid – 11  
 FY11: DART – 27, TRC – 42, First Aid – 45  
 FY10: DART – 19, TRC – 33, First Aid – 52

Recent Injuries		
12/15/11	Recordable	A contractor received an electric shock to his right hand. He received minor electrical burns to his hand and was treated with a prescription cream at the OMC, making this case recordable. More information will be given pending the investigation.
12/14/11	First Aid	An employee was exiting a van and the keys that were hanging off his belt got caught in the track of the van door. He lost his balance and fell out of the van onto a gravel surface. He sustained abrasions to the palms of both hands. The following day, he received first aid treatment at the OMC and returned to work.

TECHNICAL SUPPORT NO.

Recent Events		
12/14/11	SC-4	Suffolk County Department of Health Services notified BNL via a Notice of Violation letter that the third quarter 2011 potable well water sampling report for radiation was not received.
12/9/11	SC-3	Building 555 was evacuated due to propane odor reported in the renovation construction area. The odor was due to residual propane in a line opened by contractors. Prior to the work, the propane system had been double isolated and LOTOed upstream. Fire rescue responded to the event, evacuated the building and closed the system shut-off valve at the propane tank.
11/23/11	SC-BNL	During post work testing of a fan motor installation, a phase rotation check was performed by pushing the local "start" push button. The motor did not immediately shutdown by pressing the "stop" PB due to an unknown time delay built into the control circuitry. Workers had to go to another building to secure the motor by opening the circuit breaker. The workers were able to observe the fan motor rotation and were not in harm's way even though the fan cage was removed. Based upon today's post job review of the work package with the workers, C-AD Access Controls group, and North Complex team members the Facility Complex Manager has determined this event to be categorized as a Management Concern (SCBNL). Additional information and corrective actions will be included in the final report.

# Where To Find PHENIX Engineering Info



Happy Holidays



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)

