

Run 6 Prep

Preparations for Run 6

Don Lynch

February 13, 2006

Run 6 Prep

- Clean up water in dry air supply lines to BBC and MuTr
- Reinstall BBC
- Install MPC
- Prep and roll in EC
- Complete IR stainless piping and flow control for HBD
- Disassemble and stow TOF West installation fixtures and work platform
- Reconnect EC services
- Build shield wall
- Install shield wall
- Pink sheets and blue sheets
- Build lift table extensions
- Repair DC
- Beam in blue ring
- Safety Walkthru
- Start watch shifts

Completed Tasks



Run 6 Prep

Completed Tasks



Run 6 Prep

Remaining Tasks

- MPC test and fix
- MPC dry air supply manifold
- RXNP detector PMT magnet tests
 - Fabricate test fixture
 - Run tests
- BLM test
 - Fabricate fixture
 - Install for run
 - Un-install when HBD is installed
- Start flammable gas
- Start of Run party
- Beam in yellow ring
- Start recording physics
- New LN2 Dewar for BBC cooling gas (replacing dry air)
- Install HBD (~March-April prototype or ~May $\frac{1}{2}$ final design)

Run 6 Prep

RXNP PMT in magnetic field tests

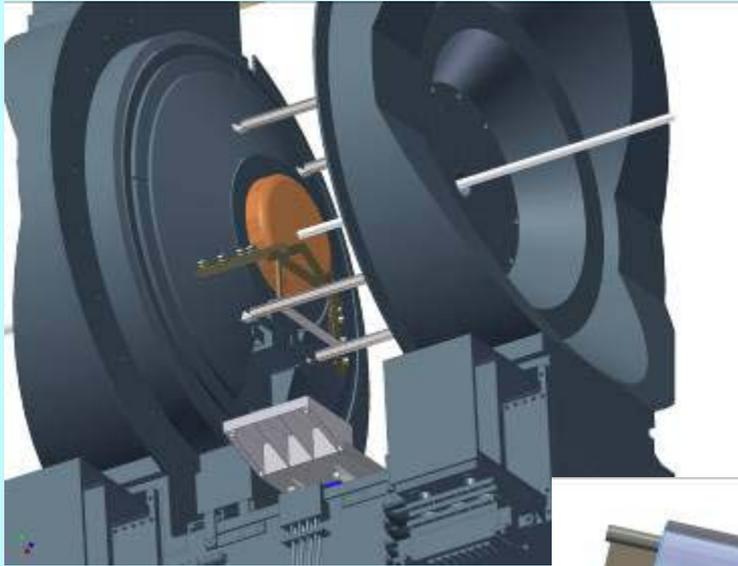
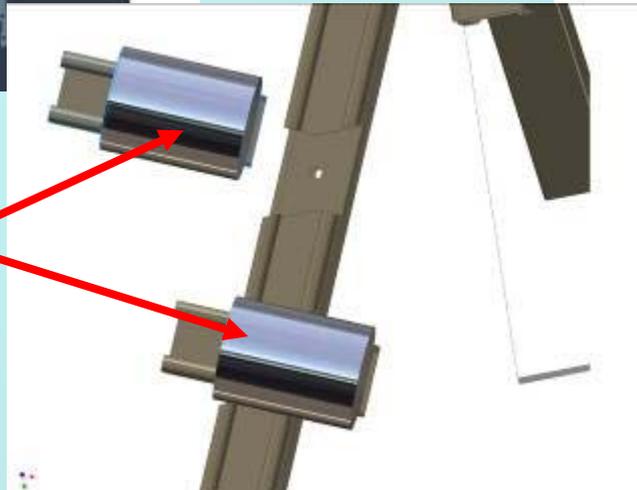
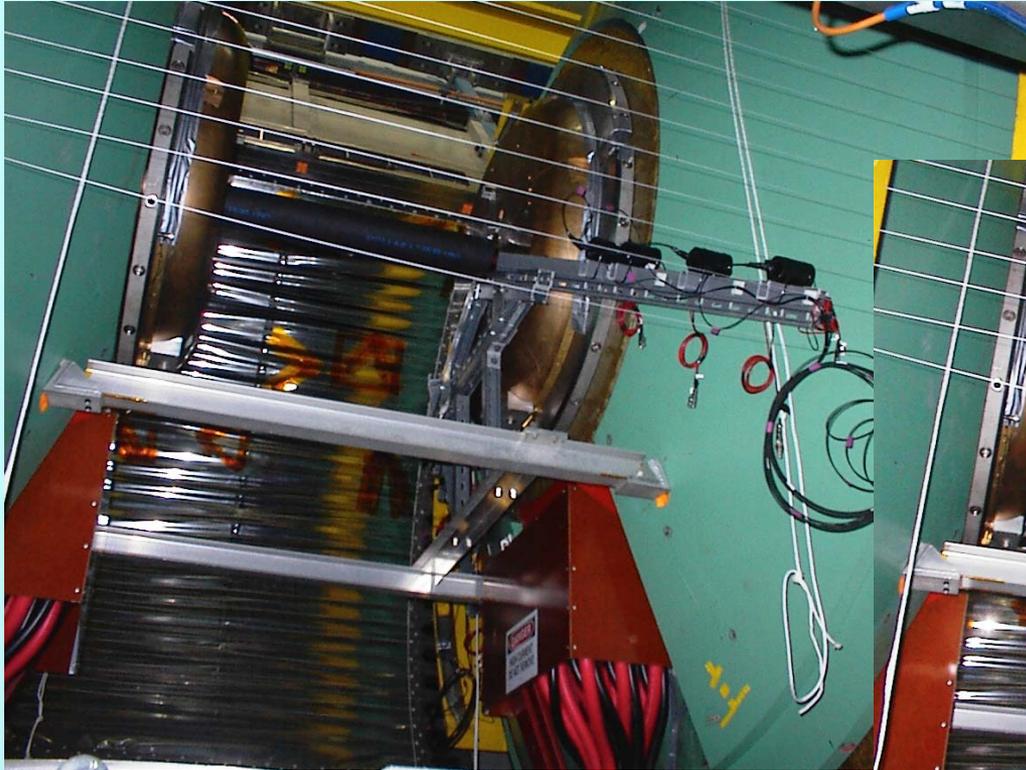


Photo-multiplier Tubes
(PMT's)



Run 6 Prep

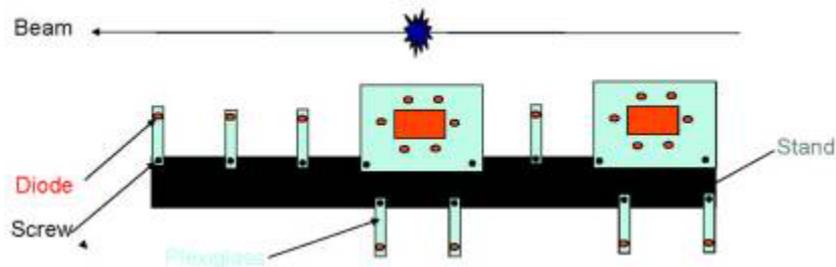
RXNP PMT in magnetic field tests



Run 6 Prep

- 3 BLM's
- 2 Chipmunks
- 2 stripixel detector samples
- 16 diodes (8 small, 8 large)
- 2 thermorecorder buttons

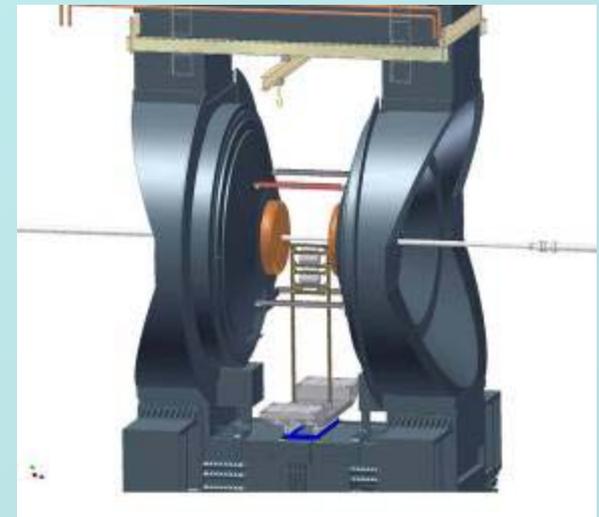
Idea for Mechanical Support of the Sensors/Diodes for Radiation Tests at IR



30cm / 8 diodes = every 3.75 cm you have one diode

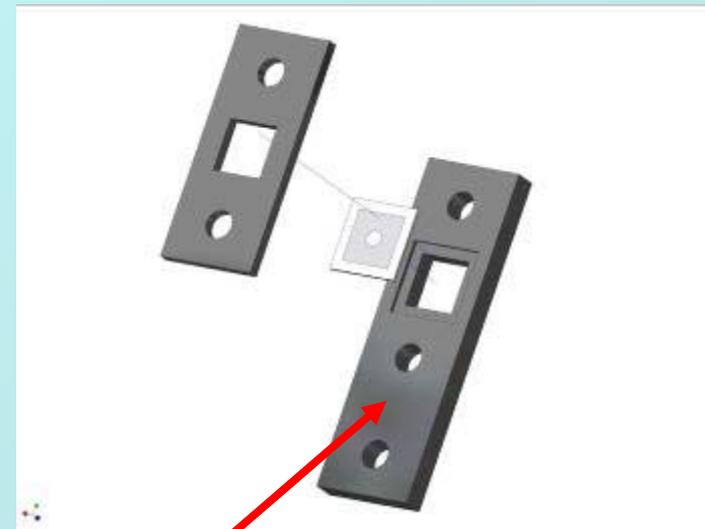
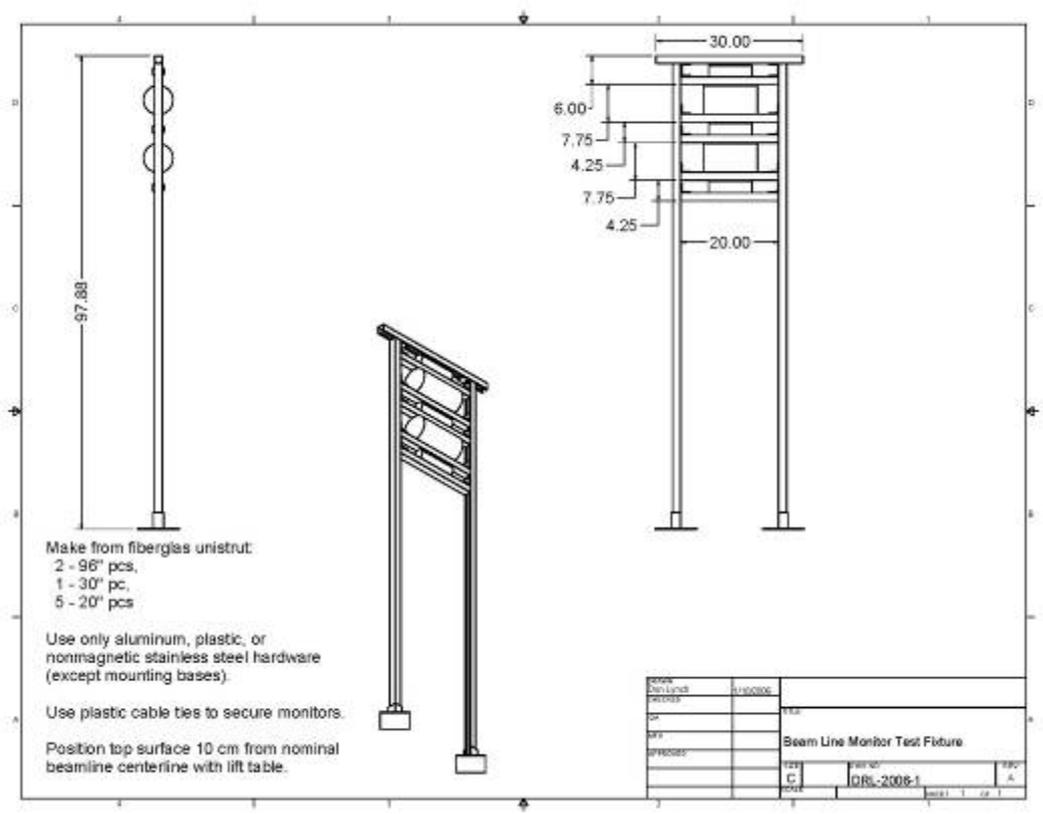
* 30 cm is the length of the silicon strip frame

Beam Loss Monitor Tests



Run 6 Prep

Beam Loss Monitor Tests



Diode Holder

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LN₂ Supply

- Acquire ASME NB certified 6000 gal LN₂ Dewar
- CA internal cryo and mechanical safety review
- Modify gas pad layout to accommodate dewar
- Install dewar on pad



LN₂ dewar to be located on south side of pad beyond CO₂ unit shown here

Run 6 Prep

LN₂ Storage Dewar for BBC

Acme Cryogenics 6000 Gallon vessel



23' long x 10'4" high, 7' wide
footprint 219psig MAWP, we would
set MOP to 125psig.

Original Mfr.:

Linde, NB #6363 ser.#206

Remanufactured by Chart

Run 6 Prep

LN₂
Supply

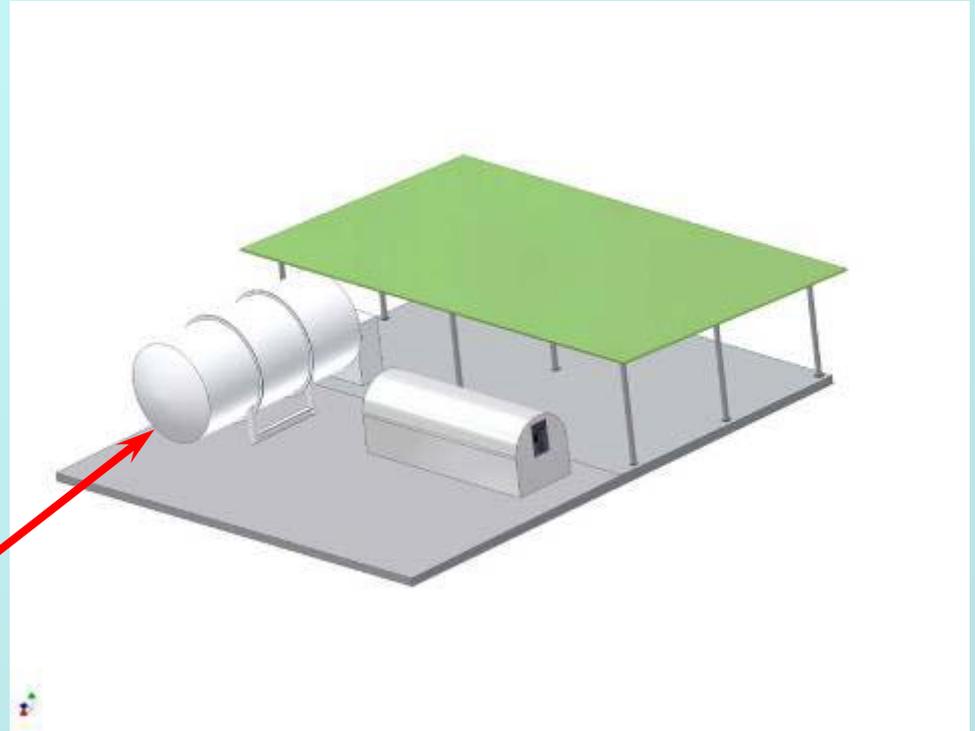
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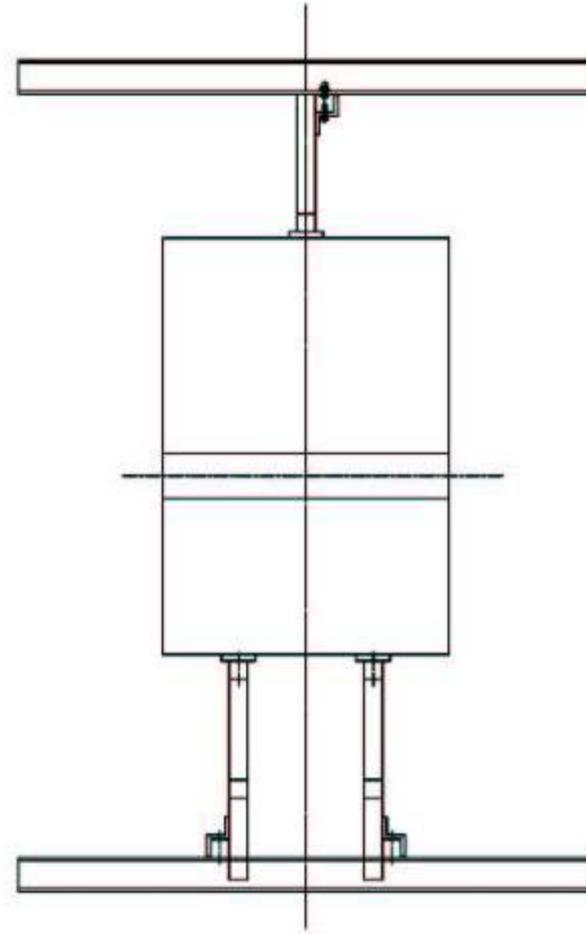
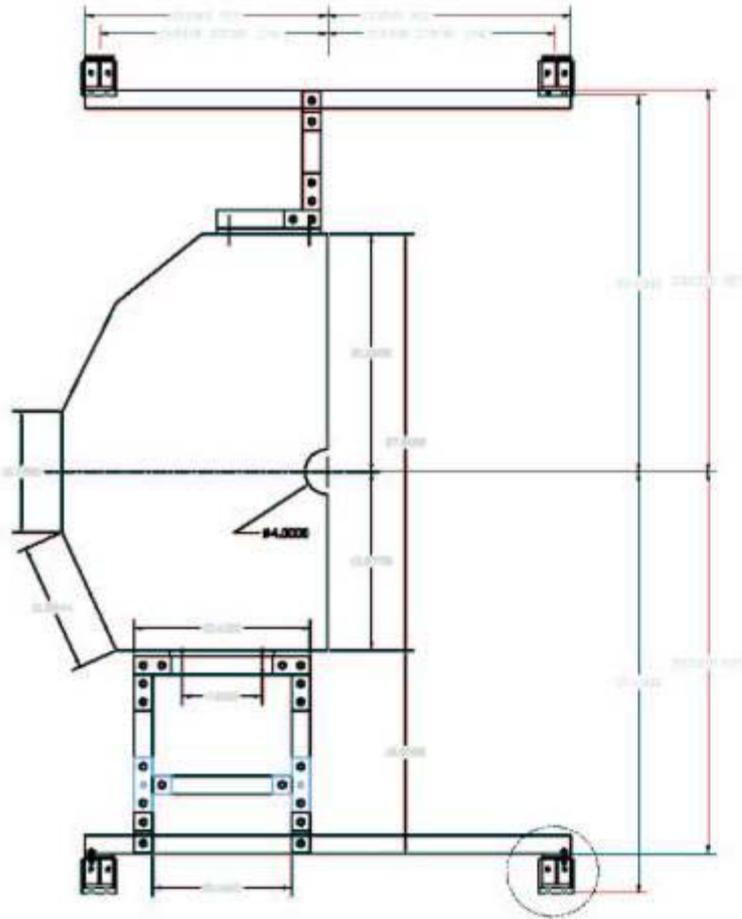
LN₂ Storage Dewar for BBC



LN₂ Vessel to go here

Run 6 Prep

HBD Prototype Mounting



Prototype can not use final design mounting due to differences in location of connectors and other basic design differences.

Final HBD design is not yet fixed.

Prototype mounting to be fabricated from fg unistrut.

Run 6 Prep

Shutdown 2006

We expect a short shutdown with a full plate of work

- June '06: end run 5, prep for start of shutdown, prep EC for move to AH
- July '06: TOF West installation, HBD installation
- Aug. '06: MPC North installation, RXNP installation
- Sep. '06: Detector subsystems maintenance, roll EC in, prep for run 6
- Oct. '06: Start of Run 6