

# *Status of MI PP RICH*

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Fermilab

- On Sunday March 14,2004 MI PP had a smoke alarm. Three smoke detectors had tripped. The one the RICH, Relay Rack 18 and Relay Rack 20.
- Upon further investigation, it was found that the cause of the smoke was in the RICH PMT box.
- We are investigating the extent of the damage.
- RICH readout system seems OK.

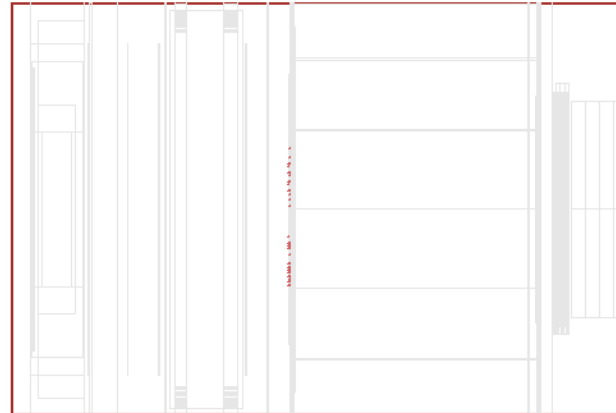
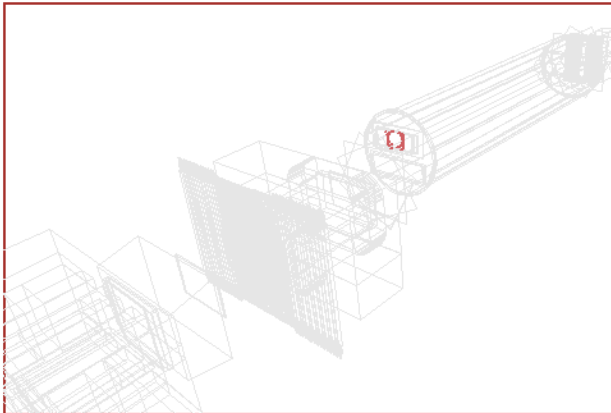
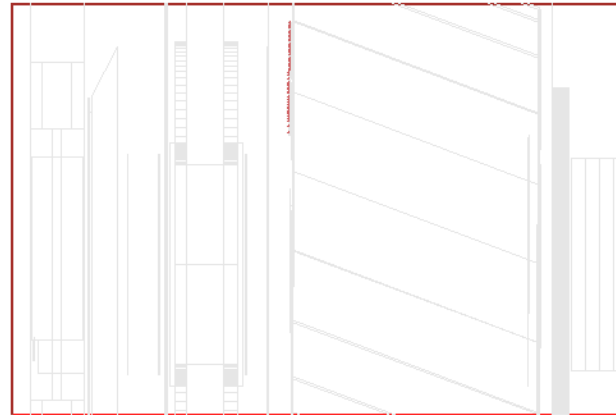
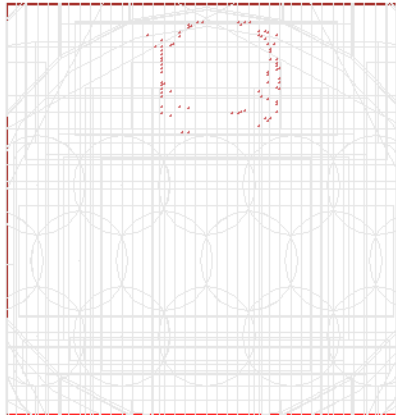
# ***RICH was being read out successfully. We see rings.***

MIPP (FNAL E907)

Run: 4337  
SubRun: 0  
Event: 33

Fri Mar 12 2004  
07:07:47.991455

Version: 0  
Trigger: d



15-Mar-2004

Rajendran Raja, All Experimenters Meeting, Fermilab

9

22-Mar-2004

Rajendran Raja, All Experimenters Meeting, Fermilab

2

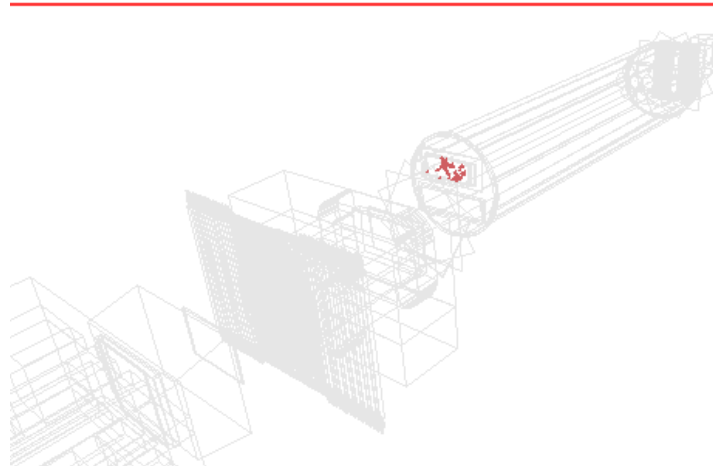
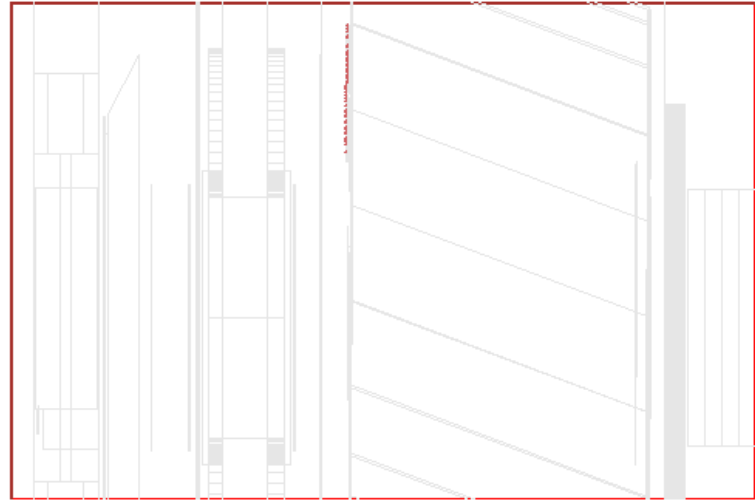
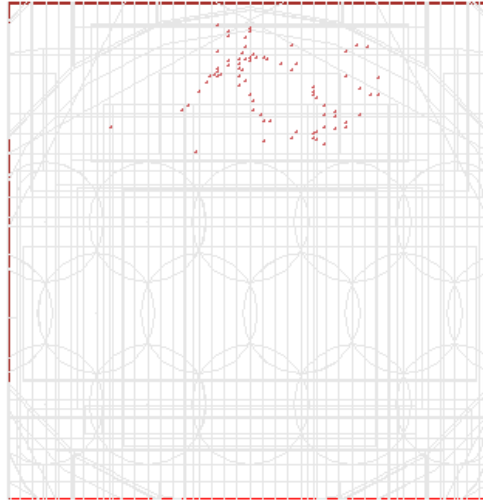
# *RICh rinas*

IPP (FNAL E907)

Job: 4337  
JobRun: 0  
Event: 45

Date: Mar 12 2004  
Time: 07:48.095883

Version: 0  
Trigger: d



# *MIPP RICH*



# *RICH HV supplies*

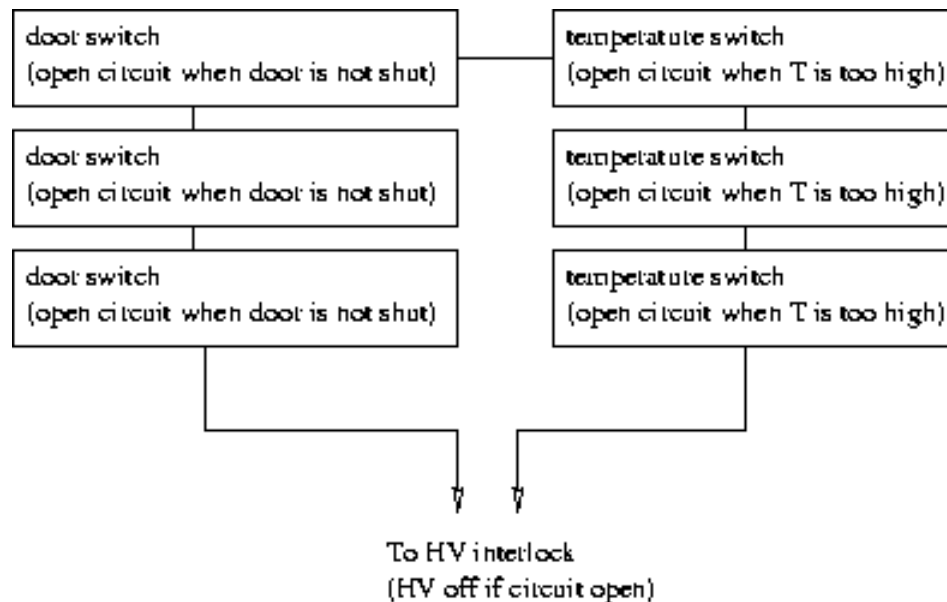
- Current trip limits  
3x100mA, 2x140 mA. Trips work.
- Interlocked with RICH
- Interlocks work
- Put out 900Watts for ~3000 phototubes



# ***RICH Interlocks***

- As far as temperature interlock is concerned, quoting Sasha Kozhevnikov:

Normally HVPS are powered through HV interlock box, which has two interlock inputs from interlock chain inside PMT box. Chain consists of 3 door switches and 3 thermo-switches hidden somewhere between PMT bases. Chain need to be closed for interlock to operate (You could use 50 Ohm BNC terminators for that). When this chain become open, main circuit breaker on the front of the box will trip.



# Cooling



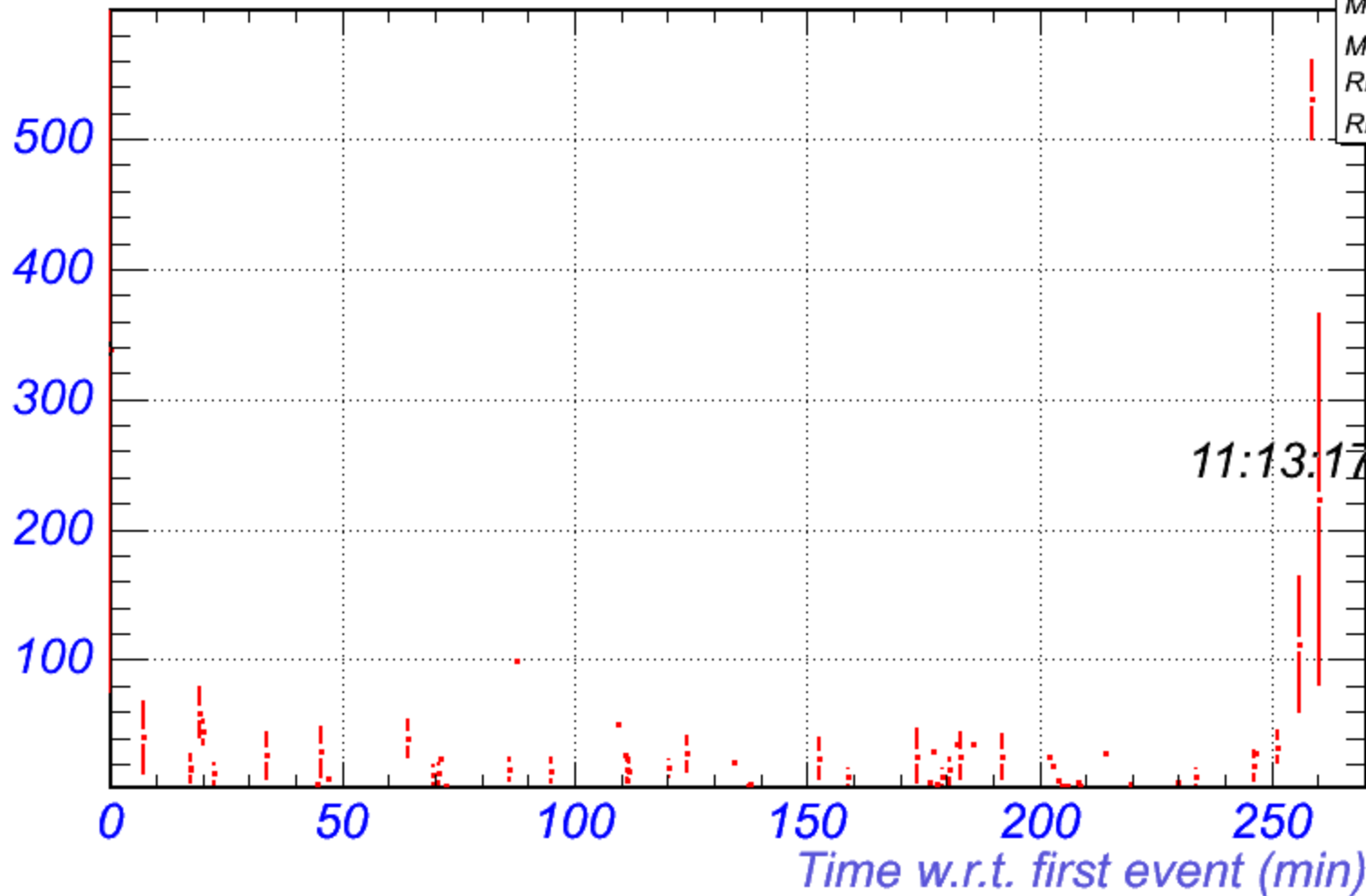
- Goes to heat exchanger. Cooling hooked up under guidance of mech engineer. It was redone recently with better hoses. In the process it seems to have been connected in reverse order. Also mixing fans were not connected.

# ***RICH history***

- The HV was turned on March 2, 2004. All HV was set at 1400 V to begin with. This was 50-500 V below nominal.
- There was some sort of power glitch a week later. May be unconnected.
- Last event taken on March 14, 2003 at 11:13:11 AM.

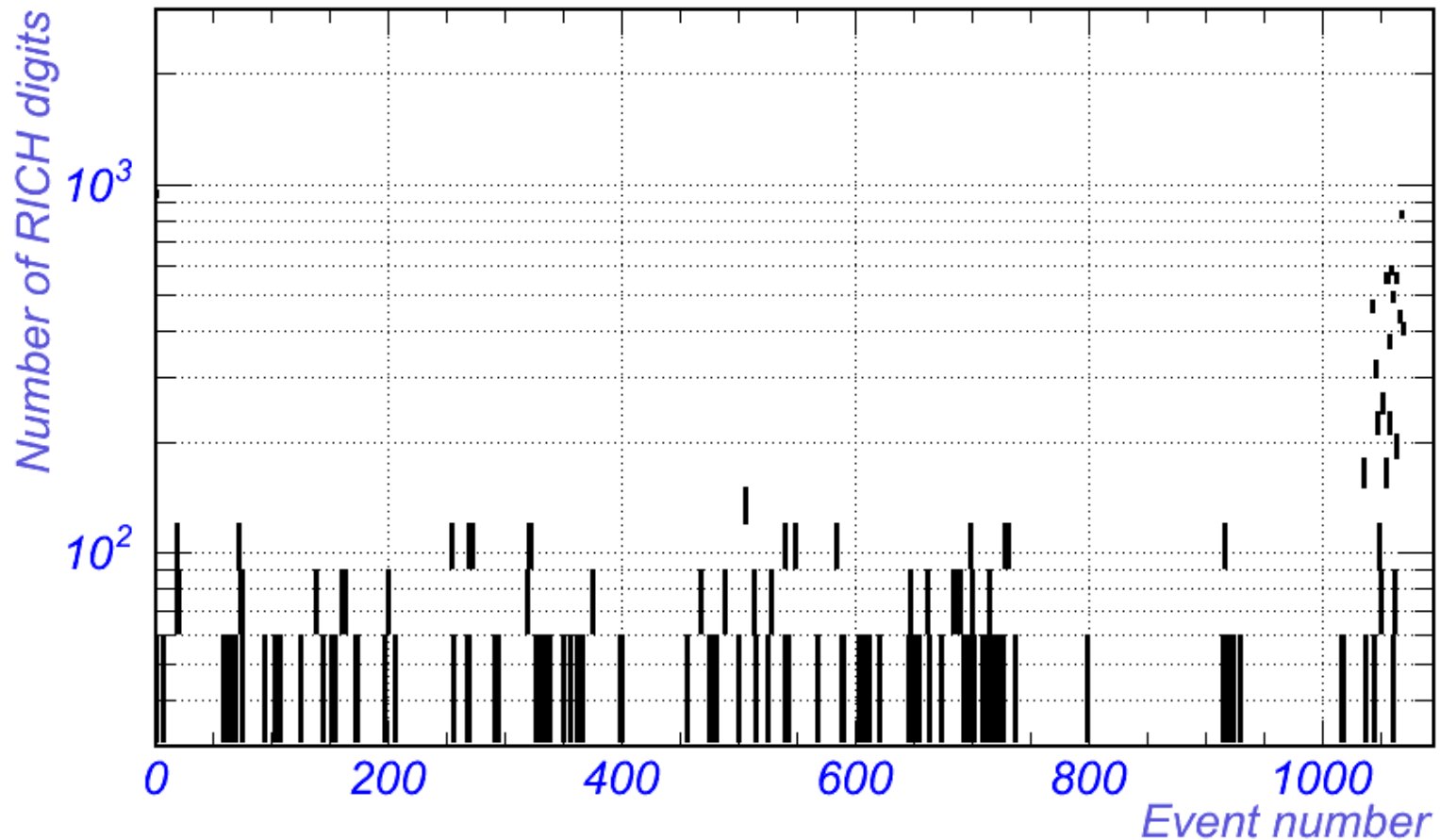


# Number of RICH digits vs. time



# *RICH history*

Number of hits per event



# *Questions & Answers*

- All our readout electronics OK.
- Why did the Klixons not fire and kill the HV?
- How much damage has been suffered by the bases?
- How much damage has been suffered by the phototubes?
- The blowers were working. Did the cooler lose power before the incident?