### How to startup the TPC control screens on the Main console (usually Chaplin.starp.bnl.gov, lower left)

- 1.) Check that Exceed is running. If not, re-start it from the start menu or quick launch tab.
- 2.) Select desktop number 1
  - a. Look in lower right hand corner and click on "1" (from selection of 1-9)
- 3.) Open putty and log on to sc5.starp.bnl.gov
  - a. Select sc5.starp.bnl.gov
  - b. Hit "Load" button
  - c. Hit "Open" button
- 4.) Login as 'sysuser'
  - a. Password is in the Shift Leaders log book
- 5.) Type 'tpc\_top' in the sysuser@sc5 terminal window
  - a. TPC Controls Top Level window control program will start
  - b. Shrink the terminal window
  - c. Note that medm window may already be shrunk. This is OK but note where it is because you will have to close it in order to stop tpc\_top.
- 6.) Open "Anode" window from the TPC Controls Top Level window
  - a. Slide the anode window over to the right hand display
- 7.) Switch to desktop 2 ... Red and Black window at top of page should say "Cathode"
  - a. Open cathode window from the TPC Controls Top level window
    - b. Slide the cathode window over to the right hand display
- 8.) Repeat for Gating Grid[3], FEEs[4], Laser[5], Gas System[6], Interlocks[7], VME Status[8], Other[9]
- 9.) The TPC control system is setup properly. Operate the TPC controls as required. See the TPC Manual and notebook for details. Also see the Laser Manual (loose leaf pages in plastic sleeves)

Note: the TPC Control Screens can be run from any computer with an X window manager. In particular, it can be run from Chaplin, Astaire, or Sirius. Use any system that works. Default is Chaplin.

# How to startup the TPC Alarm Handler (usually on Sirius.starp.bnl.gov, upper right)

- 1.) Select desktop number 1
  - a. Look in lower right hand corner and click on "1" (from selection of 1-9)
- 2.) Click on the "Shortcut to Alarms\_group" icon (which should already be on the desktop)
  - a. If the icon is missing, you can make a new one. It points to c:\alarms\alarms\_groups.exe
- 3.) The alarm handler is ready to run. Operate the alarm controls as needed.

Note : the TPC Alarm Handler can be run from any computer where it is installed. It is installed on Sirius, Astaire and Chaplin; however, only one instance of the alarm handler should be running at a time. Do not run multiple copies on multiple machines. The Alarm Handler is usually left running on Sirius.

### How to start Electronic Postit Notes – TKEasyNote

If the program isn't already running, start TK8 Easynote. It allows you to create an electronic postit note. The notes can be saved and they will re-appear after startup ... but they may only appear on desktop #1. To move a note to a different desktop, close all unwanted notes by clicking on the 'x' in the upper right hand corner of each unwanted note. Then go to the new desktop and click the TK8 icon in the quickstart tray (lower right hand corner) and select "open closed notes". Arrange these notes on the new desktop, and repeat this process until all notes are on the proper desktops.

Update April 28, 2009	мх	M X
Ramping HV (Anode)	Please record anode trips in the white "STAR TPC Anodes notebook".	crates after an Arcnet failure can take a long time. Be patient it may take several
Outer Inner		minutes.
1000 500 (pedestal)	Record time and which	
1200 1000	sector/RDO tripped.	If this fails, try rebooting from
1300 1100		the slow controls console. If
wait 2 minutes		this fails, call an expert.
1390 1135 (physics)		· · · · · · · · · · · · · · · · · · ·

# Post these notes on the Anodes screen (usually desktop #1)

### April 23, 2009 - Anode Voltages

The TPC anode voltages on the inner sectors are set lower than in previous years. The autoramp has been adjusted so the inner sectors are set to 1135 volts. The Outer sectors remain the same at 1390 volts.

м×

It may be necessary to lower the voltage on one or more bad channels even further. If you lower a voltage, please take them down in steps; lower the Inner Anodes in 35 volts steps and the Outer Anodes in 45 volt steps.

Please ensure that the anode voltages have the following settings:

All Inner sector wires -- 1135 V All Outer sector wires -- 1390 V

Exceptions to this list:

18-4 Disable Jim Thomas

The following changes must be done manually:

7-6 1345 wl

(Work on the exceptions list after the autoramp is complete. If the channel trips before the autoramp completes, then disable the channel before the autoramp starts and bring it up from zero by hand.)

Detector operators may add to the list, shown above, as needed. If you decide that a channel must be lowered below the April 23 settings, please list the new value here and include your initials. Also, include a note about the change in the electronic log. Post these notes on the Cathode Screen (usually desktop #2)

	M X
	To enable the HV, you may need to click the red double-box (over the word Cathode), then reset the interlocks, before clicking the HV button.
After a gas sysetm alarm, the cathode HV will go off. The red button will turn green (next to the square HV button). Press the HV button to turn it back on. Note that red means 'on' and green means 'off'. Set the cathode demand voltage to zero before you do this.	Very rarely, the Cathode will still fail to reset and then there is one more secret rest button It lives under the green box at the top of the scrren " TPC Cathode Supply Control Panel". Click on the small square to the right of the green box. This opens a new panel where you can click 'reset' then 'enable'.

Post these notes to the GG Screen (usually desktop #3)

	M X
Always leave GG on, unless requested to turn it off by the shift leader.	Turn off the Gating Grid before rebooting the VME crates. Sometimes the GG will freeze. If this happens, reboot the VME crates anyway.
A good reason to turn it off is due to trigger tests or calorimeters tests. Otherwise, it should be left on.	Note that the GG uses two VME crates. If the GG fails, check that both VME crates are on and functioning properly.

The FEE screen may have various notes. For example: "Be sure to turn off the FEE supplies when ramping the magnet up or down" or "Turn off S6-N5 until further notice". Also, put a note with the StripGas display screen on the auxiliary TPC screen (to the right).

X

M \*\*\*\*\*\*\* Be sure to turn off the FEE supplies when ramping the magnet up or down. \*\*\*\*\*\*\*\*\*\*\* 03/07/2009 Turn off S6-N5 until further notice. April 6, 2009

Also turn off 11-1 and 4-1 until further notice

April 8, 2009 S5-N5 was also put off and masked out in the DAQ

May 22, 2009 MWPC-bottom line is "dbcheck", but this is normal for the 2009 run.

June 4, 2009 Turn OFF S-18 N-1 until further notice. Tonko.

М. If you examine the strip charts and/or change their settings, please return them to 'scrolling' mode by toggling the button furthest to the right (panning/scrolling).

X

Hover the mouse over a button at the bottom of the strip chart to see what it does.