

Review of the Restart of the Hall C Polarized Target Magnet

Committee: Dave Kashy, Bill Merz, John Domingo

The review was held on Dec 18 in F224 from 13:00 to approximately 16:00

In response to the attached charge the committee found:

1. The failure of the magnet was investigated to the extent possible from the available diagnostic records. The committee feels that the cause of the failure is completely unknown.
2. On the basis of successful operation of the repaired magnet during late Dec 18 and up to present time, 14:00 Dec 19, the repairs seem to have been completely successful. The magnet was ramped to 50% of full current down to 40% and up to full operating current. The magnet was placed in persistent mode and the stability in this state was confirmed by measurement of the magnetic field. There was no detailed presentation of the modified operating procedure, but in order that the group could begin operation before the break, the following procedure was specified:
 - a. Only 4 “expert” operators are allowed to modify or ramp the magnet current. These are: Don Crabb, Donald Day, James Maxwell, and Jonathan Mulholland.
 - b. The ramp rates are limited as follows:

0 to 60	A	1.2 A/min
60 to 72	A	0.6 A/min
72 to 28.9 A		0.3 A/min
 - c. When in persistent mode the power supply is to remain on at the last setting.
 - d. The helium level in the magnet is to be continually monitored.
 - e. The EMF across the magnet terminals is to be monitored.
 - f. The CoO will be modified so that the magnet need only be off during work on the lower platform. It is to remain on during other access work.

These procedures are sufficient to allow the group to operate up to the time of the Christmas break. A more complete review of the modified control system and monitoring provisions will be required before the long experimental runs is allowed to start in Jan.

3. Item 3 of the charge is mute since the magnet can be operated at full current in a persistent mode.
4. A more complete review of the operating and monitoring procedure will take place in Jan.