Minutes of the CC Meeting, 2 March 1998

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This document contains the minutes from the most recent meeting of the Hall A Coordinating Committee. Sentences appearing in *italicized text* contain related information which was not discussed or available during the CC meeting.

1 Introduction

The CC meeting was convened at 8:30 AM, Monday 2 March, 1998, Mike Finn presiding. Present were Mike Finn, Kees de Jager, Pascal Vernin, Pierre Bertin, and Jeff Templon.

2 Hall Status (K. de Jager)

2.1 Results since Last CC Meeting

The *e*-*d* elastic scattering measurement (91-026) was completed in mid-December. This experiment set an electron-scattering cross-section measurement record: a cross section of 3×10^{-41} cm^2/sr was measured (at a rate of 2 counts per day!) The data are essentially background free after application of cuts. The parity dress-rehearsal run was similarly successful, controlling instrumental asymmetries to better than 0.5 ppm.

2.2 Activity During Shutdown

The Hall saw no beam during January and February, but it did see plenty of other action.

- **polarized ^{3}He target** — the readiness review was conducted and was passed. A set of milestones was formulated to monitor progress towards first beam on target, and these are being carefully watched. The target is currently scheduled for installation in late August and first beam in late September.

- **HAPPEX** — the readiness review was conducted and was passed. Two concerns were identified by the review of HAPPEX, which are a) the polarized source and b) the Møller polarimeter. Both are currently receiving lots of attention (Parity is scheduled to begin 15 April)
- **Compton polarimeter** — installation completed, but controls integration not yet complete
- **Møller polarimeter** — shielding was added, and the detector and DAQ systems were completely overhauled. In this respect Eugene Chudakov has done a great job in taking over as the Local Møller Coordinator.
- **FPP** — straw chamber #3 was overhauled, as was the gas system. There were lots of miscellaneous maintenance projects. One worrisome FPP problem is an apparent erosion of the wire feedthroughs, which could result in poor gas isolation and/or loss of wire tension. This problem is being looked into.
- **Small Angle Checks** — The spectrometers were each successfully moved to scattering angle of 12.5 degrees. Such an angle is accessible to one spectrometer at a time, but not simultaneously — Q1's collide if the opening angle between the spectrometers is less than 25.08 degrees.
- **Arc Dipoles** — Two have been removed, and $\int B\ d\ell$ was found to be reproducible (*vs.* current) to the 1 part per 10,000 level.
- **Beamline Diagnostics** — arc scanners have been overhauled, and new scanners have been added immediately in front (upstream) of the scattering chamber.
- **the e-p system** is now ready for final commissioning.
- **cryotarget drive** — the source of the mishap with the target drive has been localized and solved. A calibration system is being worked on and will be installed in the Fall.
- **Spectrometer Vertical Positioning** — A temporary solution has been installed which accurately locates the spectrometer elevations relative to that of the scattering chamber. Survey is recommended before, once during, and after each experiment. The final system is being worked on and must be ready before the polarized-helium target installation, since in this case there is no scattering chamber.
- **S3** has been installed in HRSh.
- **DAQ** reaches new milestone of 2.5 kHz event rate with 20% deadtime.
- **scint PMTs** — many of the PMTs on the various scintillator detectors of the spectrometer detector stacks were found to be seriously degraded. They have been replaced, and a sample has been sent back to the manufacturer (they were all purchased from the same lot.)

- **Miscellaneous**
  - 200 new cables pulled to the second floor of the counting house!
  - seven new 19" racks installed for temporary equipment.
  - new safety-walkthrough procedure in place — **your access to Hall A will not be allowed** until you've completed this walkthrough.

2.3 Commissioning Run Goals

- Commission Møller
- Beam tests of Compton chicane
- checkout of spectrometer gas-Cerenkov detector
- checkout of $e - p$ system
- spectrometer optics checks
- Prototype Calorimeter for Real Compton Scattering — beam tests.

2.4 Planned Schedule

- March 12th — April 12th: VCS experiment
- April 14th — early July: high-intensity beam, moderate polarization (first HAPPEX, then G_{E_p})
- Early July — December: high-intensity beam, high polarization. Plan is to first finish G_{E_p}, and then to run 94-010 (GDH Sum Rule) until the end of the year.

What actually happens between now and the end of the year is very dependent on how well the polarized source functions! In case you missed this dicussion, visit the following link and read the scheduling memo: `http://www.cebaf.gov/exp_prog/experiment_schedule/footnotes.html`.

2.5 More Planning

Beamtime requests are due by March 17th. People who already have submitted a beamtime request for a particular time slot do not need to resubmit. These requests cover the time from July 1998 thru June 1999. The current planning for 1998 was outlined above; for early 1999, the tentative plans are:

- February — G_{M_n}
- April, May — HAPPEX
- June — open. The highest-rated experiment which could use this time is the $N \to \Delta$ experiment of Lourie *et al.*

The second half of 1999 is not covered in the current beamtime request. It is fairly certain that during the fall, there will be several months of running with the high-power helium cryotarget. The septum magnets for Hall A should also arrive around this time, so it is possible that the first run with septum magnets could take place in Spring 2000.

3 PAC Backlog

The large backlog of experiments in Hall A was discussed, especially in terms of the perceived high rate of new-experiment approval at the last two PAC meetings.

It is clear that the Jeopardy Rule will be with us for the forseeable future. The Jeopardy rule states that if an approved experiment has not run by either three years after approval, or three years after start of Hall operations (whichever is shorter), it must be reviewed by the PAC and can at that time either be reapproved or rejected.

There was lots of discussion about various issues. Consensus was reached on one point — spokespersons and/or collaborations should be very careful about investing lots of money or manpower on experiments rated B or lower. Those wishing to do so are advised to first go back to the PAC and attempt to get a higher scientific rating.

4 Upcoming Hall A Collaboration Meeting

The next full meeting of the Hall A Collaboration is scheduled for 2, 3, and 4 April (Thursday, Friday, and Saturday). The following activities are tentatively scheduled:

- equipment reports
  - polarized ^{3}He target
  - Compton polarimeter
  - Møller polarimeter
- experiment reports
  - E89-003 and E89-033
  - E91-026
  - VCS experiment
  - HAPPEX
- everyone's favorite, the Hall A business meeting
- a report from the Charter Review Committee (Hyde-Wright, Meziani, Roos)

- working-group sessions
  - third arm detectors (Brash, Jans)
  - physics at 8 GeV and beyond (Huber, Petratos, and Hyde-Wright)
  - Hall A Analysis
- A reception

There will be fewer working-group sessions than in the past. Many had complained that it was impossible to go to all the interesting talks due to many sessions in parallel. The session on physics at and above 8 GeV is particularly important this time around, as preparation for the workshop to take place at JLab in July. If you have something to contribute, please contact one of the organizers!

5 Next Collaboration Meeting

The next Collaboration Meeting is tentatively scheduled for the second week of August.

The CC meeting was adjourned sometime around 10:30 AM.

Respectfully Submitted, J. Templon, secretary.