Hall C G*en* Meeting Oct 23, 1997

I Renee Hutchins

i New Insert- with Hockey Puck Target Cells for rotational symmetry. A fairly detailed report on the design and status was given. Current plans call for "Torlon" cavities. R. Carlini sang the praises of Be0 as an option (D. Day will talk with some venders and try to discern the viability). The question of target length correction was also raised (since this is a simple geometrical effect UVa should calculate the number for various likely rasters).

II Don Crabb

i Reported on the repair of the target's helium cryostat. The repaired cryostat has been leak checked (cold) and seems to be O.K.. J. Mitchell voiced concern about alignment of the flanges at the bottom of the cryostat from which the magnet is suspended. Measurements will be made on Tuesday 10-27-97. UVa will calculate an alignment tolerance.

III Hung Guo Zhu

i Gave report on his work with the neutron detectors at UVa. In particular the "background" under the timing peaks was discussed. It would appear to be associated with the "OR's" in the trigger logic and can be eliminated with software cuts. Gets sigma of 156 ps for bars and roughly twice that for paddles. He is also investigating the neutron detector geometry with MCEEP.

IV R. Carlini

i Several weeks ago it was suggested that money was available from the lab for University groups. UVa filled out a "wish list" for a share of this money. Roger claims that the list is in Larry's Pocket and any critical items on the list could be purchased now from normal Hall C funds. The NH_3 and a network analyzer were deemed critical.

V Tom Eden

i The tails on the timing peaks are correlated with low pulse height and short pathlength events. Timing walk is clearly visible in the data and will be corrected. There was still some discussion about the peak shape. D. Day stated that we still need a "clear" plan for detector characterization which addresses all the known implications for our physics.

VI Benni Zihlmann

i $\approx$ 188 fibers have been placed in the mounting plastic and are ready to go.

ii Benni presented his work on the replay code. Basically the SOS portion of the code will be eliminated and replaced by neutron arm analyzer. This work has started.

VII Mahbub Khandaker

i Has started repairs of Hall A bars and will begin assembly of the rest of the bars soon. Would like at least one more work bench (J. Mitchell). D. Day requested new inventory list (Mahbub and Tom Eden).

VIII Heinz Anklin

i When the symmetry of the target solenoid field is properly handled the horizontal deflection of the beam in the magnet is negligible and the incoming and outgoing vertical deflections are approximately equal.

ii HMS collimator is incorporated in MC code.

IX Joe Mitchell

i It would appear that the minimum scattering angle in the polarized target setup maybe much larger than the 12.5 degrees of the normal setup, possibly as large as 16.5 degrees. This has many implications and we will try to get firmer numbers.

ii There will be a meeting on helicity control schemes at JLAB on November 14th at 2.00 PM.

iii P.Brindza provided a list of known design job and has asked that we check it. (J.Mitchell, D.Day and D.Crabb).

X **Summary of action items from previous meeting**

i Timing peak distribution study. Correlation of large time events with pulse height ? Peak shape relative to Gaussian ? - T.E.

ii Linear Amp for amplitude studies. -D.B.D.

iii HMS timing information for T.E. - J.H.M.

iv Kinematics information for H. A. - J.H.M.

v Resolve discrepancies about BZ_1 strength.- J.H.M. and H.A.

vi Adverse effects of thick detector ? - J.H.M., T.E., B.Z.

vii Reproduce detector optimization results. -D .B.D.

XI **Summary of action items for next meeting**

i Be0 as an alternative ? Target Length variation for nominal raster in Hockey Puck design. D.B.D. and R. H.

ii Alignment measurement J.H.M. Alignment tolerance D.B.D.

iii New bench for EEL 125 J.H.M. New detector inventory M.K. and T.E.

iv Better information on minimum scattering angle J.H.M.

v Check Brindza's design list J.H.M., D.B.D., D.C.