PH I/COM-72/25

16.6.72

To: EEC

From: Omega Coordinator

Re: First Run of Omega

Between June 8th and June 12th Omega has had effectively 70 h of beam, in reasonable conditions (300 msec spill with structure; 400 msec structureless during a short breakdown of target 1). There was no field in the Omega magnet.

During this time, a satisfactory secondary beam was set up, in spite of problems with the somewhat unstable West Hall floor. Two Plumbicon cameras (out of 6) took stereo views of beam tracks and multiparticle events in three spark chamber modules. For 6 prong events, a spark efficiency of 86% was found (see figure). The analysis of the magnetic tape taken shows already that the spatial accuracy was better than $\pm$ 0.5 mm for beam track sparks.

Simultaneously, the $\Lambda\bar{\Lambda}$ group timed the hodoscopes, and the slow neutron group worked on the neutron counters. The communication between the on-line computers practically reached the stage where a magnetic tape containing data both from the triggering system and from the TV readout could be taken.

For the next run (June 23 - 26) we hope to operate all six cameras on nine spark chamber units, and to use meaningful triggers from the $\Lambda\bar{\Lambda}$, slow neutron and slow proton detectors (the latter has been working thus far at the SC). The July run will be with magnetic field.