SHMS Hodoscopes and Time of Flight System

KAYLA CRAYCRAFT, University of Tennessee at Knoxville, SIMONA MALACE, Thomas Jefferson National Accelerator Facility — As part of the Thomas Jefferson National Accelerator Facility’s (Jefferson Lab) upgrade from 6 GeV to 12 GeV, a new magnetic focusing spectrometer, the Super High Momentum Spectrometer (SHMS), was installed in experimental Hall C. The detector stack consists of horizontal drift chambers for tracking, gas Cerenkov and Aerogel detectors and a lead glass calorimeter for particle identification. A hodoscope system consisting of three planes of scintillator detectors (constructed by James Madison University) and one plane of quartz bars (built by North Carolina A&T State University) is used for triggering and time of flight measurements. This presentation consists of discussion of the installation, calibration, and characterization of the detectors used in this Time of Flight system.

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