Abstract Submitted for the SES05 Meeting of The American Physical Society

Particle Identification for JLab Experiment E94-107 ARMANDO ACHA, P. MARKOWITZ, Florida International University, HALL A COLLABORATION — Experiment E94-107 at Jefferson Lab, Hall A took data on a waterfall target in June 2005. The particle identification for the experiment required separating kaons from large pion and proton backgrounds, and electrons from pion backgrounds. Particle identification (PID) of kaons, positive pions and protons in the left (hadron) High Resolution Spectrometer arm used two threshold aerogel Cerenkov detectors as well as a RICH detector. In the right (electron) arm a gas Cerenkov detector was used to distinguish electrons and negative pions. A lead glass preshower and shower detector was used to enhance the separation between electrons and negative pions. A timing coincidence between double layers of scintillators in each arm was used to identify kaons coincident with the electrons and reject background events. Details of the detector configuration and its performance will be presented.

Pete Markowitz Florida International University

Date submitted: 09 Aug 2005 Electronic form version 1.4