Abstract Submitted for the DNP19 Meeting of The American Physical Society

The Upgraded Hall A BigBite Spectrometer JOSH MCMULLEN, Northern Michigan University, ERIC FUCHEY, University of Connecticut, DOU-GLAS HIGINBOTHAM, Jefferson Lab — The recent 12 GeV upgrade to the Continuous Electron Beam Accelerator Facility (CEBAF) will allow for experiments in Thomas Jefferson National Accelerator Facilitys (JLAB) Hall A to probe deeper into the structure of the nucleon. The increased CEBAF beam energy expands the kinematic range in which high-precision measurements of the electro-magnetic form factor can be recorded. Crucial to these experiments is the use of Hall As BigBite Spectrometer to detect scattered electrons. While the BigBite detector package will be utilized in various configurations, an electromagnetic calorimeters will always serve as the primary trigger mechanism for these experiments. A detailed diagram of the trigger logic scheme will be shown along with brief summaries of the modules and timing information. The layout of the entire BigBite spectrometer package will also be shown along with descriptions of the various detectors.

Douglas Higinbotham Jefferson Lab

Date submitted: 05 Jul 2019 Electronic form version 1.4