

Experimental Safety Assessment Document (ESAD) for Hall A E05-102

April 8, 2009

The JLab E05-102 experiment *Measurements of A'_x and A'_z asymmetries in the quasi-elastic ${}^3\text{He}(e, e'd)$ reaction* is scheduled to run in Hall A from May 11, 2009 until June 14, 2009. The experiment is compatible with the base equipment in Hall A. Specifically, the experiment will use:

- the standard Hall A beamline
- the polarized ${}^3\text{He}$ target system as described in the Hall A OSP.
- the two High-Resolution Spectrometers (HRS) and their standard detector packages, as described in the Hall A OSP.
- the BigBite spectrometer and its detector system (hadron package), as described in the BigBite OSP.

In addition to the base equipment listed above, the E05-102 experiment will also use a neutron detector package. The neutron array is a simple detector comprised of scintillators and phototubes. The neutron detector will be moved during the experiment only by the Hall A technical staff.