Last Updated: 28 July 2006

Hall A "LEDEX" RunPlan
2nd Low-Energy Beam Period (E_o = 362 MeV): Aug. 20 – Sep. 1, 2006
E05-004

PROCEDURES FOR "SPECIAL" ELASTIC SEQUENCE with Q = 0.200 GeV

1. Ensure Spectrometers/Triggers/BPM/etc. Prepared Properly

- Change electron HRS **momentum & angle** settings to those specified for the Q=0.200 GeV measurement: **$\theta_{e'}$ = 32.57°, $p_{e'}$ = 0.3612 GeV/c.**
- Make sure the other spectrometer (the Luminosity Monitor) is still set in its fixed position/setting, and ready to take data: : **θ = 28.30° and p = 0.3538 GeV/c**
- Small 2 msr Collimator will be (should be!) already bolted in place on both spectrometers.
- Will use Singles Triggers (T3 for HRS-L, T1 for HRS-R) - Prescale for singles trigger on current measurement elastic-electron spectrometer should be **set as LOW as feasible**; prescale for singles trigger on Luminosity spectrometer should be set for about 1 kHz DAQ rate. T2 and T4 triggers are needed for trigger efficiency (and rate of T2, T4 should ≈ T1, T3 rates); make sure to keep sufficient amount of these triggers, too. Keep deadtimes less than 10%.
- Make sure HRS-L and HRS-R DAQ's are **SYNCH'd** Order of STARTING DAQ's for each RUN is: start HRS-R, then start HRS-L; Order of STOPPING is: stop HRS-L , then stop HRS-R.

- Check beam position on BPMs (few-tenths of mm on each); set Raster ON: ASK MCC for "6 x 4.5" (± ≈ 3 mm in X and Y)
- See notes on Kin-Table about expected rates, and "rules" about setting currents (min ≈ 0.5 μA, max ≈ 10 μA).

2. Sequence of Runs for this Kinematic Point

Momentum Setting #	Target	# Counts Wanted	Purpose
1 (0.3612 GeV)	Ta	~100 k	Pointing / Kin-Fit
	C	3 runs × 1 M	eD prod. / Kin-Fit
	Al (4 cm dummy)	100 k	eD prod. (bgnd) / Kin-Fit
	LD_2	3 runs × 1 M	eD prod. @ **δ=-3%** / Kin-Fit
2 (0.3513 GeV)	Ta	~100 k	Pointing / Kin-Fit
	C	3 runs × 1 M	eD prod. @ **δ=+3%** / Kin-Fit
	Al (4 cm dummy)	100 k	eD prod. (bgnd) / Kin-Fit
	LD_2	3 runs × 1 M	eD prod. / Kin-Fit
	LH_2	3 runs × 1 M	eD prod. @ **δ=-3%** / Kin-Fit
3 (0.3413 GeV)	LH_2	3 runs × 1 M	eD prod. / Kin-Fit
	LD_2	3 runs × 1 M	eD prod. @ **δ=+3%** / Kin-Fit
	Al (4 cm dummy)	100 k	eD prod. (bgnd) / Kin-Fit