CesrTA Machine Studies Task Overview

I. Experiment Description

Experimental Topic	**Electron Cloud Comparison with August Data: TEWave**
Classification[1]	**EC, INST(TEW)**
Coordinator/ Experimenters	**JPS**
Primary Goals	**Compare TEWdata from August, October and November**
Description[2]	**2.1 GeV Conditions: Positrons** **Data will be taken using** • **TE Wave detector at L3** • **If possible, also connect TEWave at 15E** **Data with multibunch trains 10b and 20b positrons vs. current to at least 80mA total.** **Then at 80mA total take data vs. Chicane magnet field.**
Special Needs/Requests	Will want to "steal" BPM at 15E - access required before/after data taking.

Prerequisites[3]	Personnel	Description
Hardware Setup	JPS	"steal" BPM at 15E to take data there at the same time.
2.1 GeV e+ injection	???	Need positron injection

Time Requested[4]	No. Shifts	Principal Tasks
8 hrs (e+)	1	For L3 TEWave studies

---

[1]   Machine Studies Classifications:
- EC – Electron Cloud
- LET – Optics Correction and Low Emittance Tuning
- IBS – Intra-beam scattering studies
- xBSM – x-ray Beam Size Monitor
- INST – Instrumentation (BPM development, RFA development, other)
- MDEV – Machine Development (includes injection configuration, injection tuning, custom orbit setup, instrumentation preparation, etc.)
- MREC – Machine Startup (recovering conditions after down period or access)

[2]   Attach additional pages for experimental description if needed

[3]   Indicate other machine work that is required in preparation for this machine studies experiment.

[4]   Indicate the principal shift topics and estimated number of shifts required

II. Machine Studies Assignments

Reserved for Project Management Team Use		
Topic ID		
Priority[5]		
Shift Assignments	**Date**	**Shift**

---

[5]   Priority Scale:
1.   Critical – results are necessary for preparation for subsequent down/run periods
2.   Very high – results are strongly desired for achieving program milestones or in preparation for subsequent down/run periods
3.   High – results are of immediate interest but not require
4.   Moderate – results should be pursued at the first convenient opportunity
5.   Low – results are not presently a high priority for either project milestones or planning