



LSD Review November 2012

Schedule Progress for October

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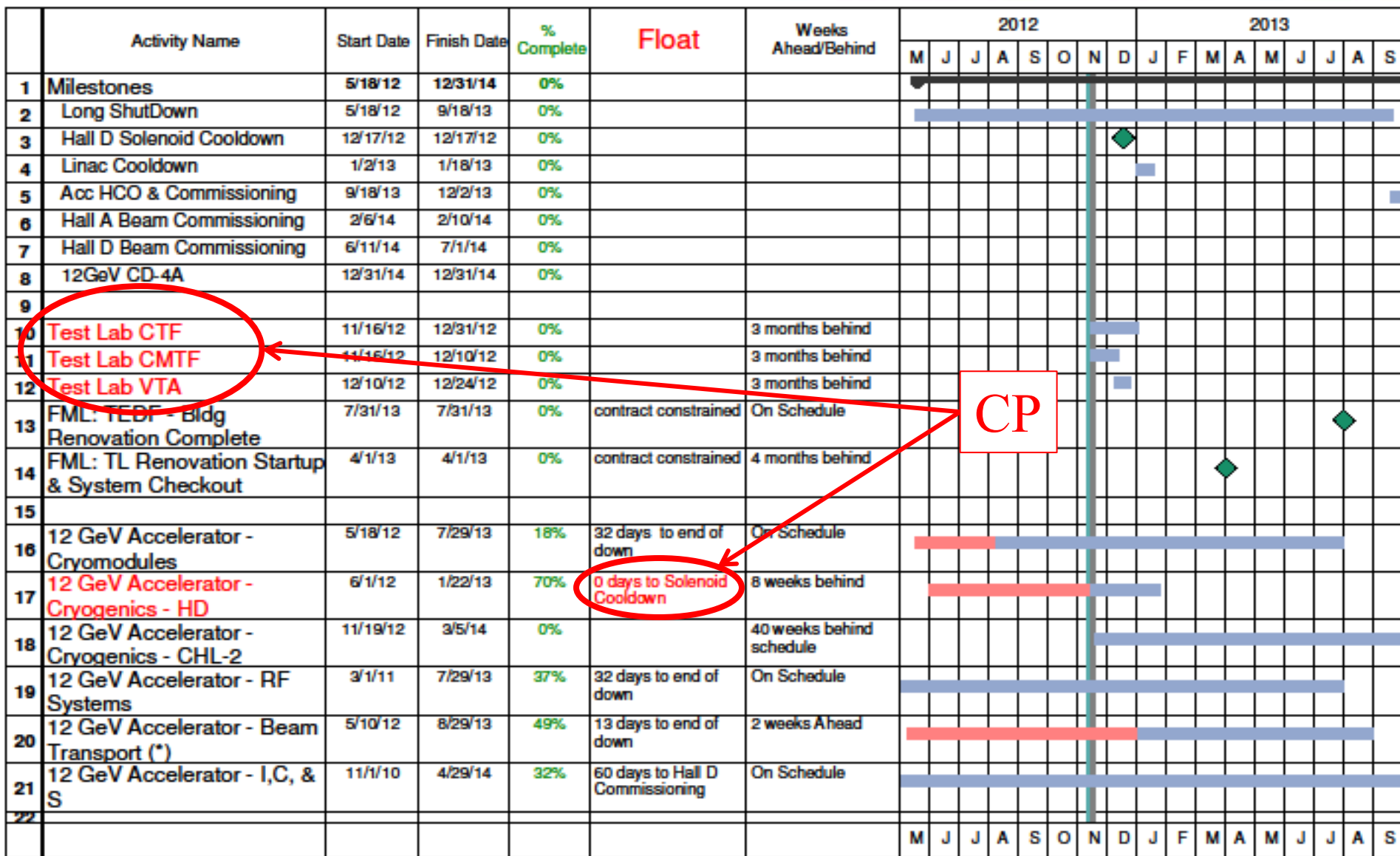
LSD Schedule

- Baseline achieved as of 11 May 2012 (12GeV* activities - as of end of April 2012).
 - *12GeV Hall C & 12GeV Hall B not in baseline
- Change Requests
 - LSD CR-01: FEL Admiral Schedule Updates
 - LSD CR-02: ACC Transfer Line Re-alignment
 - LSD CR-03: 12GeV CR: ODH Requirements for North Linac & Tagger
 - LSD CR-04: 12GeV CR: 1.8 Pre-Ops
 - LSD CR-05: FEL New Scope Changes (maint, ring resonator, franken gun)
 - LSD CR-06: 12GeV Hall C Installation Schedule
- # Activities: ~2300 activities
- Budgeted Labor Hours: 339,172

Files (Posted to Website)

- <https://www.jlab.org/TLSD/SCHEDULES>
- PDF & Excel version of schedule (baseline & progress)
- Progress Overview Schedule (High Level)
- Progress Schedule, Critical Path, & Resource Analysis File
- Resource Utilization File
- 8 Week Look Ahead – for the RPM Bi-Weekly
- 3 Month Look Ahead – for the Thursday LSD Team planning efforts
- Change Request Folder (CRs & Log)

LSD October Progress – Overview Schedule



LSD October Progress – Overview Schedule

	Activity Name	Start Date	Finish Date	% Complete	Float	Weeks Ahead/Behind	2012												2013											
							M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S							
23	Accelerator Maintenance	5/18/12	9/18/13	11%	140 days to end of down	On Schedule	[Gantt bar: red from May 2012 to Sep 2012, blue from Oct 2012 to Sep 2013]																							
24	Injector (R100) (*)	5/24/12	8/5/13	49%	31 days to end of down	On Schedule	[Gantt bar: red from May 2012 to Aug 2012, blue from Sep 2012 to Aug 2013]																							
25	Cryo Maintenance	8/23/12	12/20/12	58%	30 days to linac cooldown	8 weeks behind schedule	[Gantt bar: red from Sep 2012 to Dec 2012, blue from Jan 2013 to Dec 2012]																							
26																														
27	Hall A - Deinstallation (*)	5/18/12	10/2/13	19%	90 days to Hall A Beam Comm.	4 weeks behind schedule	[Gantt bar: red from May 2012 to Sep 2012, blue from Oct 2012 to Sep 2013]																							
28	Hall A - 12 GeV (*)	5/18/12	3/28/13	40%	120 days to Hall A Beam Comm.	On schedule	[Gantt bar: red from May 2012 to Sep 2012, blue from Oct 2012 to Feb 2013]																							
29	Hall B - Deinstallation	5/21/12	3/7/13	47%	5 days to constrained Mid Feb 2013 date	6 weeks behind schedule	[Gantt bar: red from May 2012 to Sep 2012, blue from Oct 2012 to Feb 2013]																							
30	Hall B - 12 GeV (*)																													
31	Hall C - Deinstallation	5/21/12	1/18/13	70%	20 days to constrained mid Feb 2013 date	10 weeks behind schedule	[Gantt bar: red from May 2012 to Sep 2012, blue from Oct 2012 to Dec 2012]																							
32	Hall C - 12 GeV	9/8/09	5/25/15	12%	(schedule is past the LSD)	On Schedule	[Gantt bar: blue from Sep 2009 to May 2015]																							
33	Hall D - 12 GeV (*)	5/1/12	4/3/14	17%	65 days to start of Hall D Beam Comm.	1 week behind schedule	[Gantt bar: red from May 2012 to Sep 2012, blue from Oct 2012 to Mar 2014]																							
34																														
35	FEL Run Time	1/24/13	6/7/13	0%	28 days to prep for Admiral installation	On Schedule	[Gantt bar: blue from Jan 2013 to Jun 2013]																							
36	FEL Admiral	2/27/12	9/12/13	17%	28 days to New FEL Ops w/ Upgraded Inj	7 weeks behind schedule	[Gantt bar: red from Mar 2012 to Sep 2012, blue from Oct 2012 to Sep 2013]																							
37																														
38	Facilities - CHL-1 Cooling Towers	3/1/12	1/25/13	75%	Contract constraints	On Schedule	[Gantt bar: red from Mar 2012 to Jun 2012, blue from Jul 2012 to Jan 2013]																							
39	Facilities - MCC HVAC/Roof	1/11/12	4/18/13	45%	Contract constraints	14 weeks behind schedule	[Gantt bar: red from Feb 2012 to Jun 2012, blue from Jul 2012 to Apr 2013]																							
40	Facilities - Counting House Renovation	4/20/12	4/15/13	50%	Contract constraints	On Schedule	[Gantt bar: red from May 2012 to Sep 2012, blue from Oct 2012 to Apr 2013]																							

CP



Critical Path – Float less than 22 days

- **12GeV CHL Hall D Transfer Line and Header (0 days float)**
 - Fabrication & Installation of cryogenic transfer line & can for solenoid →
1.8.1.3.3.2 Hall D Cryogenics Pre-Ops (Commission Solenoid Distribution can header → **Start Hall D Solenoid cooldown (17 Dec constrained date)**)
 - **What happened?** Shortage of qualified welders, multiple milestones for work group (Test Lab, Linac maintenance, Hall D solenoid, CHL cold cross-connects, CHL2 commissioning (vendor support))
 - **What's being done?** OT approved, welding support from other groups, & worked with the 12GeV project to set priorities and re-sequence work
- **Hall C De-installation (+20 days float)**
 - Removal work (QWeak, SOS Dipole, Shield Hut, Concrete Floor, C-Can /Platform) → **Relative to end of de-installation (mid Feb 2013: (12GeV installation of SHMS rails then SHMS carriage fabrication end of April))**
 - **What happened?** Flood
 - **What's being done?** Hall C Re-plan/Schedule update & more progress made on removal over the last few months

Critical Path – Float less than 22 days

- **Hall B De-installation (+ 5 days float)** → **Relative to end of de-installation goal of mid Feb 2013**
 - **What happened?** Manpower shortage
 - **What's being done?** Continuing to press on

Progress Analysis – Behind Schedule

- **Test Lab CTF/CMTF/VTA**
 - Behind 3 months
 - Constrained to construction contractor & limited access for recovery of JLab systems.
 - A delay of CTF start of operations past **26 November** will impact cooldown of CEBAF (inventory management), 12GeV CM production in test lab/CM Commissioning, Admiral & SRF work for others
 - → See Preble/Oren presentation
- **12GeV Cryogenics & Cryogenics Work Group Schedule**
 - Cooldown for solenoid - Behind 1 month with respect to Dec deadline (0 days float)
 - Extend Hall D Gas Lines - Behind 3 months
 - OT approved, working hard
- **Hall C De-installation**
 - Behind 2 months in some areas (20 days float relative to end of de-installation (mid Feb 2013))
 - Great progress in last few months on de-installation since flood
- **Hall B De-installation**
 - Behind 2 months in some areas, (5 days of float relative to end of de-installation (mid Feb 2013))
 - Manpower issues
- **FEL**
 - Admiral section of the schedule - Behind 7 weeks
 - Delays due to Admiral work in test lab, FEL making adjustments in schedule – not a concern

Resource Utilization Analysis

- Resources critically analyzed:
 - S&A
 - MSINST (installation, vacuum, mag meas)
 - Safety Systems Group
 - Elec Techs (I&C, RF, DC, Electricians)
 - RadCon Techs
- Physics Labor is not resource leveled in this effort
- Resource Charts available for all listed above, Cryo, SRF, Ops Software & Operators, Engineers, Hall Labor
- **Current Areas of Concern: S&A, Elec Techs**
 - S&A group is fully utilized & current delays for Hall support are helping now, but concerns that this work will soon pile up
 - Elec techs are fully utilized & new requests are being made

Resource Utilization Analysis

utilization factor – S&A (6 people)

