

**3 Month Look Ahead  
&  
Long Shutdown  
Schedule Status**

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- End of Dec 2012 Progress
- 3 Month Look Ahead
- Change Request List

# Progress

- January progress sheets will be sent to PMs on 30 January and due back to PMI by 4 February.
  - 12GeV progress is planned for completion week of Feb 4<sup>th</sup>
- Progress as of end of December completed and posted to the website.
  - Activities that did not start as planned & didn't have an updated start date provided → default to first working day of Jan 2013
  - Let's review the analysis spreadsheet for Critical Path, Progress, & Resource Utilizations

# Progress & Resource Analysis

- **Critical Path (Activities with Float less than 22 days)**
  - Admiral - cavity refurbishment & testing through installation --> (-7 days float)
    - --> Relative to Mandatory finish on or before 30-Sept 2013 (or will impact other FEL work)
  - Hall B De-installation: North Clamshell removal (+1 day float)
    - --> Relative to end of de-installation (early Feb 2013)
  - Hall C De-installation: Removal work (+5 days float)
    - --> Relative to end of de-installation (early Feb 2013)
- **Schedule Progress (Activities planned to start per baseline but did not start (but if had float of >22 days --> no schedule impact))**
  - Hall C De-installation: Behind 1 weeks with minimal float
  - MCC Roof/HVAC - 1 month behind with submittal reviews & material ordering - float is relative to contract completion date
  - FEL: Admiral (cavity refurb) behind 1 month behind - negative float (-7 days)

# Progress & Resource Analysis

- **Resource Utilization – Problem Areas**
  - S&A
    - end of Jan - mid Feb: UF 1.5 to 2.0 (12GeV HC & beam transport) - no valleys available
    - April/May - UF 1.5 to 2.0 (mostly 12GeV Acc)
  - Mech. Inst group (inst, vacuum, mag meas)
    - 12GeV BT work: Jan – May: UF peaks of 1.5 to 2.0
    - Non-12GeV Work: end of Jan - May: UF 1.5 to 2.0 (12GeV HC, HA, IC&S, 11GeV Sep) - no valleys available
  - RF Elec Techs
    - Feb to Early April: UF 1.2 to 1.8 (CM Commissioning (12GeV/all), 11GeV Separator) - no valleys available

# 3 Month Look Ahead

- 3 month look ahead report available:

- <https://www.jlab.org/TLSD/SCHEDULES>

- Major Milestones & Outages:

- **Complete Hall B & C De-installation**

**Early/Mid Feb 2013**

→ Start 12GeV installation

- **CHL Milestones**

- Performance mapping complete (of warm compressors)

**early Jan**

- 4K coldbox cooldown

**early Jan**

- CHL #1 N/S Linac cooldown start/complete

**end of Jan**

- CHL individual runs & firing up Start

**mid/end of Feb**

- CHL 1 Cooldown - Hall C Start

**mid March**

# 3 Month Look Ahead – Major Activities

## • **12GeV Accelerator – Beam Transport**

- Inj OL/OR – Refurb dipoles (Jan); install dipoles & girders (by end of Jan); final align (by early March)
- WS – align & install stands, dipoles and girders (by early Feb)
- ER – dipoles, girders, lcw, final align (completed by end of March)
- WR – align & install stands, complete dipoles, girders, lcw (completed by end of March)
- ES – septa pedestals & align, complete dipoles, girders, vacuum (completed by early April)
- TR – remove stands & girders (Feb – March); install s& align stands (mid March); install dipoles & girders (by mid April)
- Extraction – install stands & align (by early March); refurb dipoles & measure dipoles (by early March)
- HA beamline – remove dipoles (Feb); install dipoles & girders (by early April)
- HB beamline – remove dipoles (by end of March);
- HC beamline – remove dipoles (by end of March)
- HD beamline – install pedestals & alignment (by end of March)
- Arcs 1 & 3 – LCW, cables, vacuum checks (by end of Jan); final alignment (west/east) (by mid April)

# 3 Month Look Ahead – Major Activities

- **12GeV Accelerator – CM, Power, I&C, Safety Sys, & Cryo**
  - Install CM #6 – NL23 & #8 – SL26 (end of Jan through mid March)
  - Trims & Shunt work continues
  - HPA installations – (Jan through early April)
  - Box supply – Arc 1 & HA installation (by end of April)
  - Cmmsn CHL Helium Plant - Warm He Comp Indiv Runs – (completed Jan)
  - CEBAF Linac Transfer Line Modifications (completed Jan)
  - Extraction RF components installation (by end of March)
  - Arc 10 BPMs hook up & checkout (by end of Jan)
  - Harps & viewers work continues
  - 5C Line ODH extension complete (by end of Jan)
  - Public address installation (complete by early March)
  - BLM hardware installation (by mid March); HD (by mid April)



# 3 Month Look Ahead – Major Activities

- **Acc Ops**
  - Various maint work
  - OL04/R100 cooldown (early Feb)
  - Complete WA interference reinstallation (by early Feb)
- **Cryomodule Re-Commissioning**
  - RF checkout of Inj, North, & South (Jan – end of March)
  - CM commissioning Inj, NL02-06, NL12-16, SL02-7, SL11-15 (Feb – early April)
- **11 GeV Separator**
  - RF Amp & components installation (mid Feb – early March)
- **Dogleg Upgrade**
  - Review planned for early Feb
  - (note: engineering, design, procurement (now – end of Sept))
- **OL04 Project**
  - PSS system verification (by early March)
  - Vacuum system installation (early March)
  - Electrical components in existing CPS & HPS installation (early March)
- **High Power Beam Dump**
  - Inspection & design work

# 3 Month Look Ahead – Major Activities

- **Hall A De-Installation**

- S& Align Dipole #2 & #3 (by end of Jan)
- Compton
  - Survey beamlines (end of March)
  - Install detectors (end of March)
- Upside down girder final alignment (Jan)
- Upstream beam girder 2A & 2B alignment (Jan)
- Moeller align new quads on support (Jan)

- **Hall B De-Installation**

- Remove North clamshell (by early Feb)

- **12GeV Hall B Installation**

- Mods of FWD carriage start (early Feb)
- Beamline modifications start (early March)
- Moeller Quads & table move (March)
- TOF Panel 1A – first 3 units ready for installation (by end of March)

# 3 Month Look Ahead – Major Activities

- **Hall C De-Installation**

- SOS removal (by early Feb)

- **12GeV Hall C Installation**

- SHMS rails installed (shield house) start (mid Feb)
- Cool HMS dipoles, Q1 & Q2 (end of Feb – end of March)
- HMS Q1 testing with power supplies (mid March)
- Cool HMS Q3 (end of March – early April)

- **12GeV Hall D**

- Solenoid work continues
- Fiducialize FCAL detector housing (mid Jan)
- BCAL light guide work continues
- Tagger stand alignment & installation (early March)
- Fiducialize goniometer (early March)
- Fiducialize Tagger Magnet at arrival (mid March)
- Tagger magnet installation complete (by early April)

# 3 Month Look Ahead – Major Activities

- **Conventional Facilities (FM&L)**

- CHL commission towers 1 & 2 (Jan)
- Counting House Renovation continues
- B68 extension construction continues
- MCC HVAC/Roof mobilization (next week) & completed by end of May

- **FEL**

- Maintenance repairs & ring resonator support → preparation for running
- Start of Run (mid Feb)
- Admiral cavity processing/qualification (by April)

# Upcoming NTF/Change Requests - (Jan. implementation)

1. From the resource validation review of the new baseline project schedules:
  - 6GeV Acc Maintenance – Roll Up (S. Suhring)
  - Some missing S&A activities for Hall A
  - Some missing MSINST work (general)
  - High Power Beam Dump – logic/details
2. Hall A, B, C, & D – Roll Up (Folts/LeRose, Tilles/Latifa, Kellner/Fenker, Carstens/Chudakov)
  - Detailed schedules currently in schedule. Plan to keep line items for activities with outside hall labor. Roll up details into something more manageable.
3. Any changes needed from Director's Review & CHL Water Pipe impacts

# Files (Posted to Website)

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