

## **LSD Bi-Weekly Resource Planning Meeting Agenda**

**5 December 2012**

- Glance Back / 2-Week Look Ahead / Change-Control Board (CCB) Report (10 min) – F. Pilat
- Safety Report (5 min) – M. Logue
- Special Topic (10 min) –Cryo Update – W. Oren
- Key Service Provider & Project Lead Reports (25 min)
  - S&A – C. Curtis
  - Safety Systems – K. Mahoney
  - Halls – J. Gomez for W. Akers
- Meeting Recap / Parting Shots (5 min) – F. Pilat

# Glance back and look ahead

Fulvia Pilat

LSD Resource Planning Meeting

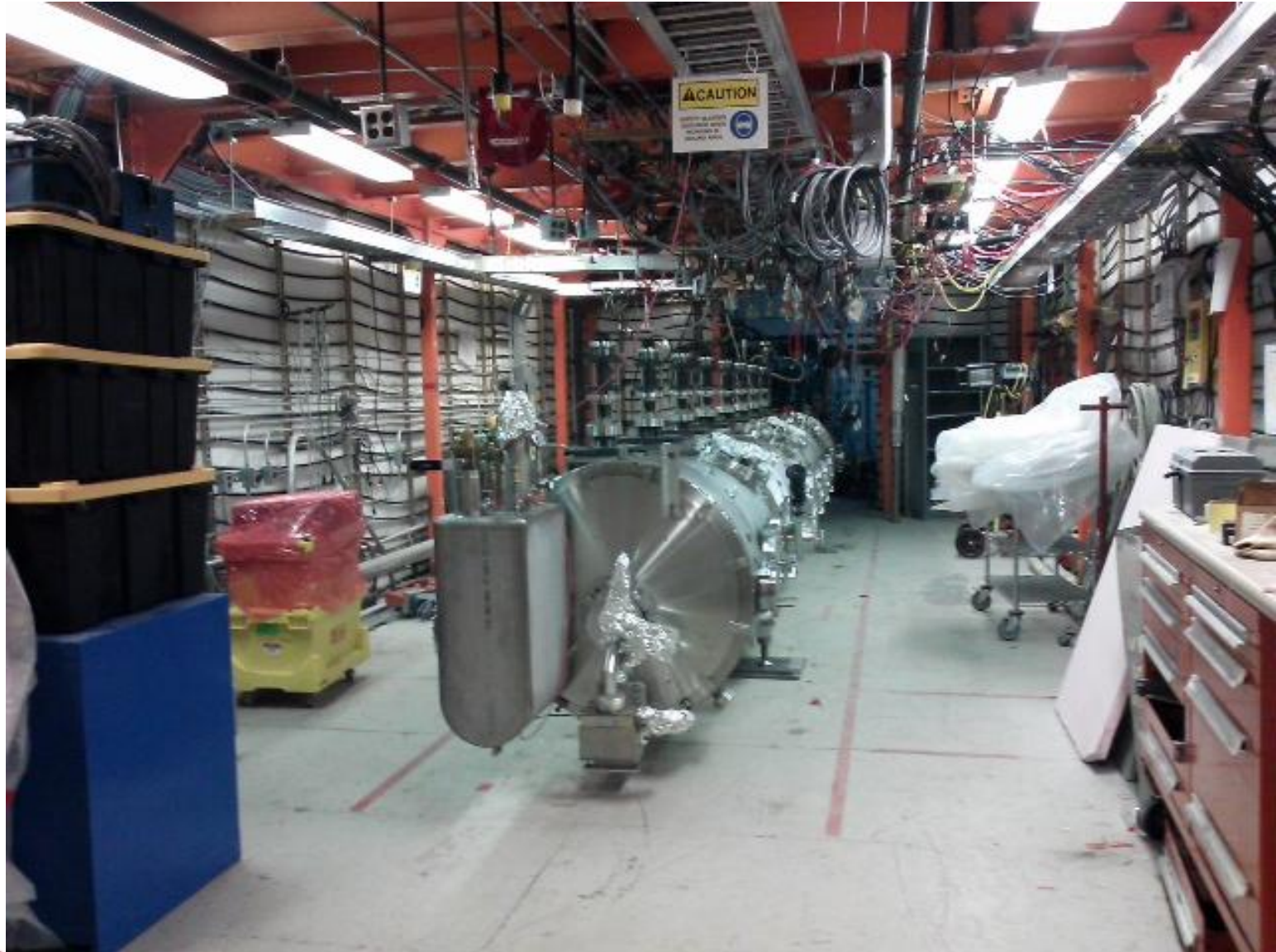
December 5, 2012

- **Part 1 of the LSD Director's Review** . November 16
- **Hall B** schedule review done on November 14
- **CTF cool-down** progressed well.
- **C100-6 moved to CMTF** Monday night, with goal to start cool-down Wednesday December 12.
- Working towards restarting **VTA** in progress
- Work progressing in Accelerator and Halls (de-installation)

# C100-6 lifted from TED



# C100-6 in CMTF



# Re-Baseline process

Original plan for the shutdown: re-baseline every 5-6 months

Re-baseline-1 Review: **November 16, 2012**

Re-baseline-2 Review: **April 2013** (include RECO/Commissioning plan)

Re-baseline goals:

- Revisit **LSD overall plan**, re-plan major activities and logic (beyond single CR' s)
- Update **scope of work**: add/remove activities captured by LSD schedule
- Look critically at **float**
- Analyze **resources**
- Define **priorities**

# Re-baseline-1: 2 stage Review

## ✓ Director Review November 16

### November 16 – December 17

- ✓ Get feedback from Review Committee (Report received, distributed, discussed, assigned action items to people)
  - Get November progress
  - Implement re-baseline in Primavera
  - Resource analysis
  - Decide on priorities as needed
  - *Do progress on new baseline schedule*

### Director Review December 17

- Present new baseline to Review Committee
- Get feedback, adjust as needed

# Timeline

◀ Nov 2012		~ December 2012 ~					Jan 2013 ▶
Sun	Mon	Tue	Wed	Thu	Fri	Sat	
	26	27	28	29	30	1	
				LSD Progress sheets out	Steve sends Risk draft to team		
2	3	4	5	6	7	8	
	12GeV Progress	12GeV Progress LSD Risk team to meet LSD Progress sheets due to PMI	12Gev Progress	12GeV Progress LSD core team to develop draft agenda for review	12GeV Progress & Implementation into LSD		
9	10	11	12	13	14	15	
	Dianne/Pat working on LSD Schedule cleanup Risk Registry Draft to Mont	Dianne/Pat working on LSD Schedule cleanup	Lsd re-baseline to team	LSD dry run	Pre-brief to Mont/reviewers		
16	17	18	19	20	21	22	
	Mont Review						
23	24	25	26	27	28	29	
30	31	Notes:					



# (Very) Draft Agenda for December 17

- Intro, response to Charges and Report Pilat
- Schedule, Re-baseline, Resource Analysis Napier
- Cryo plan (schedule and scope contingency) Oren
- Gradient mitigating plans Preble
- Halls Akers, Gomez
- Hall dumps Freyberger
- ESH&Q, response to report, ARR Logue
- Risk Registry Revisited Smith

# Look Ahead

- Part 2 LSD Re-baseline Review December 17
- Hall D solenoid cool-down, also December 17
- VTA operational (~mid December)
- Linac Cool-down (January 2013)
- MCC personnel move from bld. 85 to 87 (January 2013)



= Good Day!



= First Aid Injury

\*Click on symbol in calendar for details



= Recordable Injury

\*Click on symbol in calendar for details



= Other Noteworthy Events

\*Click on symbol in calendar for details

To Date:

First Aid: 16


Recordable: 3

DART: 2

# SAD ES&H Report December 2012



# December 2012 Events

	Date	Location	Event
	12/3/12	CMSA	While directing a forklift into a storage area, employee turned abruptly and felt a pain in his lower back.
	12/4/12	Hall C	Employee was picking up bolts and felt pain in his back.



== Good Day!



== First Aid Injury

\*Click on symbol in calendar for details



== Recordable Injury

\*Click on symbol in calendar for details



== Other Noteworthy Events

\*Click on symbol in calendar for details

To Date:

First Aid: 15







Recordable: 3

DART: 2

# SAD ES&H Report November 2012



# November 2012 Events

	Date	Location	Event
	11/6/12	EEL	My hand was cut trying to catch a falling girder that was leaned against a nearby door
	11/6/12	Hall D	While employee was working with a razor, he cut his thumb.
	11/13/12	Bldg. 98	While assisting with the move of a detector piece, employee turned his upper body and felt a pain in his lower back.
	11/26/12	Bldg. 86	While using a wrench against resistance the wrench pressed against the side of his left index finger. This caused persistent numbness down the finger.
	11/29/12	Bldg. 90	While cutting cable jackets, I cut my thumb
	11/30/12	Hall D Cryo Plant	While bending over to get a bolt, I hit my head on tubing fitting

**SLOW DOWN!**

# LSD – Cryogenics Status

W. Oren for the Cryo Dept.

December 5, 2012



# CTF Status

- Cooldown - **Complete**
- 10k liter dewar is **full** making room for more gas at CHL
- Christmas Power Outages:
  - Some power outages are planned for the Testlab that nominally will not effect CTF operations
  - We like that idea but are less then trusting.
  - A suggestion has been made to do “test” outages for any planned outage that will last >2hr to be sure CTF is not effected.
  - On-call staff will be scheduled in case of outages that effect CTF operations
  - Discussions are ongoing to get a better idea of schedules/coordination etc.

# CHL 1/Linacs

- Maintenance items – basically complete, small items remain
- System cleanups have started but only ~10% complete – a long way to go
- U-tube installation
  - N. Linac
    - staging u-tubes today, will begin installation Thursday
    - Can start cleanup thru CM's once u-tubes installed
  - S. Linac – u-tubes Thurs/Friday next week
- Cold tie-ins – underway with completion next week or shortly thereafter, remains a very tight schedule
- He inventory
  - CTF cold and full!
  - He trailers scheduled for delivery 12/6,10,17 and probably 12/19 with one more to follow in Jan. – will process ASAP
  - LHe final arrangements confirmation before X-mas

# CHL 1/Linacs

## – Concerns:

- 480V x-former blown – running on alternate feed, partial repair of unit by Wed next week. Spare rebuild X weeks off but not absolutely needed. Risks to operations need to be better understood i.e. when should we install spare?

# Hall D

- Piping – **Complete**, pressure tests are ongoing
- Cleanup – progressing on systems that pass pressure tests
- ODH analysis for refrigerator building – in Will and Dana's hands for proofing and signoff.
- Hoping to start warm gas flow to refrigerator through the Linac and tagger area by Friday??
- Cooldown – still aiming for Dec 17<sup>th</sup>

# Shutdown Work Summary

**Organization:** Alignment

**Name:** Chris Curtis

**Date:** 5 Dec, 2012

## Last Two Weeks

---

### Work That Went Better Than / As Expected:

- East recombinaer 2A alignment ongoing.
- QR magnets fiducialization mostly complete.
- South west quads aligned, dogleg magnets exercised and aligned.
- Stand alignment in 2R started.
- Re-alignment of selected east arc components started (cartridge optimization).
- Hall A Compton table aligned; Moller quads pre-aligned.

### Work That Went Slower Than Expected, Delays, and Issues:

- ZA pedestal alignment in east recombinaer – now complete.

## Ongoing Shutdown Work

---

**Upcoming Work (3-6 weeks from now)** ( green = no concerns; yellow = some concerns; red = serious concerns)

Project	Status	On Schedule?	Tasks	Comments/Concerns
12 GeV S/R	x <span style="background-color: #d9ead3;"> </span> <span style="background-color: #fff2cc;"> </span> <span style="background-color: #f4cccc;"> </span>		SW Extractor (2S / 2E) pedestal alignment	Next few days
12 GeV S/R	x <span style="background-color: #d9ead3;"> </span> <span style="background-color: #fff2cc;"> </span> <span style="background-color: #f4cccc;"> </span>		1R ZA step 2A alignment	
12 GeV S/R	x <span style="background-color: #d9ead3;"> </span> <span style="background-color: #fff2cc;"> </span> <span style="background-color: #f4cccc;"> </span>		1S step 2A alignment / doglegs	Continuing – fiducial data
12 GeV S/R	x <span style="background-color: #d9ead3;"> </span> <span style="background-color: #fff2cc;"> </span> <span style="background-color: #f4cccc;"> </span>		2R step 2A alignment	After stands are aligned

Project	Status	On Schedule?	Tasks	Comments/Concerns
Hall A	x		Moller / Compton alignment	Ongoing over the next few weeks, as parts are available
Hall C		x	Network survey ahead of SHMS rail installation	New year? Need to arrange a time to get in and do this
Accelerator	x		Cartridge optimization	Arcs and linacs
12 Gev Arcs	x		Final (2B) alignment in the arcs	EES have to complete hookups
FEL	x		Quad alignment	After mapping

**New Work Requests Requiring Schedule Changes:**

- 

**Significant Problems Pending (delays, technical issues, resource issues, scheduling):**

- 

**Staffing Outlook:**

- OK.



# Shutdown Work Summary

**Organization:** EES/Safety Systems Group

**Name:** Kelly Mahoney

**Date:** 5 December, 2012

## Last Two Weeks

---

### Work That Went Well:

- VTA installation progress
- CMTF recovery and partial certification
- North Stub PSS installation

### Work That Went Slower Than Expected, Delays, and Issues:

- Test Lab PSS Recovery delays impacting CEBAF 12GeV and Linac PSS upgrade.
- Tagger Vault ODH coverage for warm gas circulation will require TOSP and temporary monitoring.

Upcoming Work (3-6 weeks from now) ( green = no concerns; yellow = some concerns; red = serious concerns)

Project	Status	On Schedule?	Tasks	Comments/Concerns
Hall D ODH/5C Ramp ODH Monitoring.	X	Y	Complete Equipment Installation in Hall D. Complete Equipment Installation in 5C Line (HD Tagger Ramp). Program Safety PLCs. Commission System.	Equipment Installed. Infrastructure in place in 5C Ramp.
Tagger Vault ODH	X	N	Design and install fixed ODH monitoring system in the Tagger Vault. Alternate: TOSP and use of portable ODH monitors and alarms.	Installation of conduit/box duct delayed but starting this week. Must implement a TOSP to enable warm gas transfer through the Tagger vault.
Test Lab – CMTF	X	N	Recover PSS and ODH Systems. Re-establish AC power. Certify CMTF PSS.	PSS powered up. Static certification 95% complete (need CARMS and shield door). ODH sensors and alarms on-line; require gas test.
Test Lab – VTA	X	N	Recover VTA PSS. Install Dewar shield interlocks and HMI panel. Program PLCs. Certify new configuration.	Baseline PSS powered. Dewar shield controls installed. Final wiring under way. PLC and HMI programming in progress.
North Linac PSS Upgrade	X	Y	Upgrade PSS; Incorporate Hall D transport line. Install PSS components. Program North Linac PLCs. Support RF HPA commissioning.	Certification rescheduled for Jan '13. Cabling for tunnel devices in place. Installing PSS devices. Shield wall and personnel door installation this week.
CEBAF Linac PM	X	Y	Audit PSS Systems and start process of recommissioning. “Wake up” PSS.	PM started. New MCC PSS Display installed.



Project	Status	On Schedule?	Tasks	Comments/Concerns
MPS	X	Y	Order MPS components for FY'14 startup.	BLM HVPS on order. VME Card Build underway. Need to test substitute for 931B PMT.
Flood Recovery	X	Y	Continue assessment. Repair critical infrastructure.	Existing Hall ODH transmitters obsolete. Purchasing vendor stock for interim. Must evaluate new transmitter options.
FEL Support	X	Y	Support FEL startup and operations. Certify GTS PSS. Replace ODH sensors.	Supported GTS HV Tests. Ready for certification. FEL requests replacement of existing ODH cells with new long-life models used in new installations. (May free up transmitters for Hall C.)

## Safety PLC based ODH Monitoring and Alarms

- New for Hall D/Tagger (HDice retrofit)
- Electronics certified for use in safety applications
- Redundant alarming and fault monitoring
- Allows for zone based alarming
- Can add filtering, linearization, trending at local level
- Self test and alarm test functions
- Local panel controls for setup, diagnostics, maintenance
- Allows for direct link to EPICS



### **New Work Requests Requiring Schedule Changes:**

- 0L04 RF Safety Systems assessment and implementation.
- CEBAF PSS certification moved mid-January '13.
- HDIce facility upgrades will require extension of ODH system.
- FEL requests change to new model ODH monitors.
- Hall C Flood Recovery FY 13 work - ODH recovery by Feb., 2013. Stabilization of corrosion.

### **Significant Problems Pending (delays, technical issues, resource issues, scheduling):**

- Test Lab Recovery schedule now making progress but cumulative delay is impacting work in CEBAF.
- Hall D Tagger Classified as ODH 1. Requires additional ODH monitoring which will not be ready until February 2013. As part of TOSP, will install mobile monitors in Tagger Vault and Tagger Equipment building.
- ODH Transmitter model used in Halls A-C and FEL is obsolete. New model costs \$5x old. Need to evaluate alternatives including rad hardness of new units used in CHL, HDIce, and Hall D. Enough old units available to recover Hall C ODH monitoring.

## Staffing Outlook:

- Motely Crew doing OK. May request Holiday OT to catch up on North Linac PSS installation.



# Shutdown Work Summary

**Organization:** Hall A

**Name:** Folts

**Date:** 12/5/12

## Last Two Weeks

---

**Work That Went Better Than Expected:**

**Work That Went Slower Than Expected, Delays, and Issues:**

- Map Compton Dipole Additional work requested by Sirish Nanda

## Ongoing Shutdown Work

---

**Upcoming Work (3-6 weeks from now)** ( green = no concerns; yellow = some concerns; red = serious concerns)

Project	Status	On Schedule?	Tasks	Comments/Concerns
Moller Polarimeter quadrupole	<span style="background-color: #d9ead3;">X</span>	<span style="background-color: #fff2cc;">X</span> no	align, test	Ready for survey
Upside down girder	<span style="background-color: #d9ead3;">X</span>	no	Ready for magnet connections & alignment	This is a filler job
Raise Compton dipoles	<span style="background-color: #d9ead3;">X</span>	yes	# 2 ready for survey #3 hold for mapping	Proceeding (user scope creep)
Map Compton magnet	<span style="background-color: #d9ead3;">X</span>	Unscheduled work (Nanda)	Map #3 Compton dipole	Ready for mapping

**New Work Requests Requiring Schedule Changes:**

**Significant Problems Pending (delays, technical issues, resource issues, scheduling):**

**Staffing Outlook:**

- Just fine

# Shutdown Work Summary

Organization: Hall C

Name: Walter Kellner

Date: 12-07-12

## Last Two Weeks

---

Work That Went Better Than Expected:

Work That Went Slower Than Expected, Delays, and Issues:

## Ongoing Shutdown Work

---

Upcoming Work (3-6 weeks from now) ( green = no concerns; yellow = some concerns; red = serious concerns)

Project	Status	On Schedule?	Tasks	Comments/Concerns
6Gev	x <span style="background-color: #d9ead3;">green</span> <span style="background-color: #fff2cc;">yellow</span> <span style="background-color: #f4cccc;">red</span>	y	Laying out and drilling holes into the SOS shield hut in preparation for concrete cutting.	The SOS has been stripped. Cutting of the SOS shield hut will start Jan 7 <sup>th</sup> .
6Gev	x <span style="background-color: #d9ead3;">green</span> <span style="background-color: #fff2cc;">yellow</span> <span style="background-color: #f4cccc;">red</span>	y	Cleanup of the remaining concrete derby and dust will start on Tuesday the 13 <sup>th</sup> .	Waiting for a shipment of Poly-Down, a dust suppressant recommended by Jennifer Williams
6Gev	x <span style="background-color: #d9ead3;">green</span> <span style="background-color: #fff2cc;">yellow</span> <span style="background-color: #f4cccc;">red</span>	y	Lifting off and removing the remaining G-0 rails and fabricating a jig for breaking the SOS rail base plates of the floor.	

# Shutdown Work Summary

**Organization:** Hall D

**Name:** Tom Carstens

**Date:** December 5, 2012

## Last Two Weeks

---

**Work That Went Better Than Expected:** None

**Work That Went Slower Than Expected, Delays, and Issues:**

## Ongoing Shutdown Work

---

1. Continue pump/purge cycles on Cryo Distribution Box.
2. Design/Fab/Install Vacuum Control system.
2. Install/connect/test sensor wiring from controls rack to Solenoid.
3. Solenoid Power Supply:
  - Perform annual maintenance checks
  - Perform pre-operation checks
  - Test remote control programming
  - Run conductors to Solenoid
4. Position LN2/He heat exchanger and secure to platform.
5. Position GN2 heater and secure to platform.
6. Continue to install/leak check/test piping:
  - Install/leak check/insulate warm return line from Vapor Cooled leads
  - Fabricated piping between LN2/He heat exchanger and GN2 vent heater
  - Fabricate/install GN2 vent lines

7. Set up Cool-down and magnet test area in Hall.
8. Receive and position FCAL frame onto platform

**Upcoming Work (3-6 weeks from now)** ( green = no concerns; yellow = some concerns; red = serious concerns)

Project	Status	On Schedule?	Tasks	Comments/Concerns
Cool Down Solenoid Magnet	X		<ol style="list-style-type: none"> <li>1. Cool down to 80K with heat exchanger</li> <li>2. Cool down to 4k</li> </ol>	Joint operation with Cryo and Hall D
Test Solenoid magnet	X		<ol style="list-style-type: none"> <li>1. Power magnet to 1500A</li> <li>2. Verify Magnetic field</li> <li>3. Check for Anomalies</li> </ol>	
Start of gluing/testing BCAL light guides (3840 total)	X		<ol style="list-style-type: none"> <li>1. Glue light guides to BCAL staves</li> <li>2. Test staves</li> </ol>	Modified fixturing still untested meaning 12 weeks installation time is "best guess". Limited effect to overall schedule
Tagger Magnet	X		<ol style="list-style-type: none"> <li>1. Receive Tagger Magnet</li> <li>2. Install Tagger Magnet stands</li> <li>3. Install LCW for for Tagger and sweep magnets</li> <li>4. Install LCW manifold for power supplies in Tagger Service building</li> </ol>	