

**\*\* SPEAR/Beamline Maintenance list for Tuesday 1/20/04 \*\*****Guidelines for the SPEAR 8 hour maintenance/down period.**

- Beam dumped at 06:00 for maintenance.
- Access ~06:30
- Lock & Tag as necessary upon entry.
- Remove L&T upon leaving!
- Check in with Operations prior to access and after access.
- Inform SPEAR operations of status maintenance task at end of each day.
- The Accelerator Systems Managers MUST be involved with all activities related to their systems.
- SPEAR Operations & Accelerator System Managers MUST confirm that systems are ready for operations prior to 14:00 on Tuesday

**\*\* SPECIAL instructions:****\*\* ES&H Reminders:**

- Lock Out Tag Out as necessary
- Outside contractors complete SLAC Pre-Work Hazard Analysis Form

	<b>BL:</b>		
1.	BL8: Install lead shielding covers. replace mirror mover motor belts Install new mirror mover covers	Curtis, Brehmer, et al	2 hr
	<b>Controls:</b>		
1.	Swap the SPEAR RF station niCpu030 CPU board with a PPC.	Allison	9:30- 11:00
	<b>Electrical:</b>		
1.	Insertion Devices: 1) Fix the short in the trim coils for BL4 & BL7. 2) Modify BL9 Motor Driver chassis.	SW,TD,FR SW, TD	2 hr 3 hr
2.	1) Install coax cable in B117 for the Current Monitor fan out chassis to patch panel. (1 HR) 2) Replace a BNC connector on front panel of Current Monitor fan out chassis. (.5 HR)	Wallters	1 hr 1 hr
3.	a) Install parallel processor crate 2 & 4 b) Install power supplies 2 & 4.	Johnson, Wallters, Wachter	4 hr
4.	BPM system wiring BPM system ID check Set up and check test tone signal to the ring.	Wachter	4 hr 4 hr 4 hr
5.	Replace 07G-QF1-PS. The power supply has been tripping on primary overcurrent (IP). The spare is in B15, inside cage 169A.	Rafael, Taylor	2 hr

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	<b>LCW:</b>		
1.	Readjust the flowsitches and the metering valves on the BM1 and BM2 circuits to avoid excessive flow and tripping below the minimum flow specified on 1 single branch of the vacuum chamber circuit.	MSG, Dellorco	3 hr
2.	<p>HCW system conductivity meter: conductivity is reading only 500 micro siemens, but it tests (using a hand-held tester/sample) at 2000 micro siemens. We will continue to monitor the conductivity manually until the system is working. The conductivity is stable and does not change rapidly.</p> <p>Unions on both sides of the sensor tee so it can be removed. Marty O'Donoghue will get the system adjusted/calibrated.</p>		
	<b>MECHANICAL:</b>		
	<b>SPEAR:</b>		
1.	Mechanical inspections, to include checking mechanical magnet bus connections for signs of overheating, magnet coils for signs of overheating and LCW leak inspections, check pneumatic system pressure settings.	Woodcock	1-hr
2.	Install Insertion device chain covers..BL7	DiMattia, Woodcock	7-hrs
3.	<p>BL 5 preliminary checkouts</p> <p>1. Verify operation of EPU  Electrical Tom Dao  Mech Dave Ernst</p> <p>2. Verify we have sufficient data to realign Horizontal Drive assembly in Y, and X, review tooling for EPU alignment</p> <p>3. Clean and grease BL-5 perform as much of the check out as possible this should include checking vertical gap setting limits etc.</p> <p>4. Review procedure for swapping out V-groove base plates and gather any special equipment and tools</p>	MSG, EDM	4 hr
	<b>RF:</b>		

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1.	Check/secure matching post on the 1st Magic Tee waveguide assembly - remove a section of waveguide adjacent to this Magic Tee and inspect it internally.	Klystron, McIntosh	4 hr
2.	LCW - Adjust setpoint for the overpressure switch.	Nzeadibe/Park	1 hr
3.	RF HVPS Continue investigation of fiber optic cable.  Test the operation of a software program on the rf station. This requires no beam, but also no access into spear. We propose to run this after spear is closed for the day	Ratkovsky  Sebek	1 hr after ring is secure
	<b>Vacuum:</b>		
1.	SP3: Ring in-alcove walkthrough, visually inspect ring and BL vacuum systems.	Pak, Wiertel, Neal	.5 hr
2.	SP3: Install or inspect IP ball plunger stops at Straight Sections 9 and 10	Jacobson	1 hr
3.	Electrical: a) SP3: Continue investigating ion gauge readout problems. b) SP3: Continue investigating ion pump PS analog read back problems. c) Thermocouples - investigate 01G-TPP1 and 07G-TRP3 no readings	Pak, Ortiz  Ortiz, Avilla-Kintz	8 hr  4 hr
4.	SP3: Vacuum bellows t/c placements--ID locations, review installation techniques, review routing and connection to reference plane, determine reference plane availability.	Kurita, Jacobson, Morales, et al	2 hr
5.	SP3: Continue vacuum system system component labelling.	Pak	2 hr
6.	BL's: Update BL Functional Diagrams	Jacobson, Neal	3 hr
7.	BL5 SGM: Continue SGM BL installation activities close to the ring wall.	Jacobson	5 hr
8.	Injector BTS, Booster side: Investigate vacuum pressure increase at 58-CG1.	Nalls	3 hr
9.	Injector BTS, SPEAR side: Identify vacuum flange joints between the vacuum break to the SPEAR/Booster concrete wall.	Nalls, Trautwein	1 hr

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10.	Injector enclosure: Move a leak detector over the ring with the crane.	Nalls	1 hr
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