Weekly Report – week of March 14, 2011
Fabrication and Assembly of ERL hardware
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Cryogenics: The installation of the cryogenic transfer lines along with wiring of level and temperature sensors to support the ERL and VTF cryo refrigerator continues.

Laser: Work continues with the C-AD controls group on pulse measurement issues. We are still working with the Utilities group to improve environment stability. Circuit development and timing stabilization studies for SRF photocathode experiments. The Lumera Laser engineer will visit BNL to repair and perform laser realignment

FPC conditioning: The Navy FPC's are being tested this week at low power (80KW).

Photocathode: A copper substrate sample has been coated with antimony in the deposition system. The copper substrate shows better thickness uniformity. A sample which will be half SS and half copper will be installed into the deposition system for further studies.

Gun Cryomodule: The gun cavity string mock-up continues. String assembly tooling is being refined throughout this process. Work is underway to prepare a portable clean room to aid in the clean assembly of the FPCs.

PASS System: The modification that has been implemented to allow operations of the 1MW Klystron and the FPCs in the ERL Block enclosure has been completed. The PASS system for the LBH is operational and is in the process of having a contactor added to interlock the RF power supply. The VTF PASS system will continue to make progress as man-power is available and schedule permits.

Mezzanine: The modifications to the mezzanine have been scheduled to be performed there week of March 28th. Under-mezzanine VTF clean room procurement documentation is complete and PO is written.

Large Grain Gun: A schedule and task list has been compiled and is under review for the assembly, fabrication and testing of the large grain gun.

5-cell cavity/cryomodule: The paperwork continues for the G-5 test safety review.

ERL injection line: Vacuum envelope is in preparation to final review, correction magnets are under design.

ERL Extraction line: Magnets are being fabricated, beam dump pressure vessel code compliance under evaluation, vacuum/instrumentation layout needs to be reviewed and finalized.

ERL Tech Support Area: The EEBA area continues to move forward. Design drawings and cost estimates have been completed. The bid packages for the construction of the enclosure and refurbishment of this area have been postponed due to CR funding issue.