

Weekly Report – week of February 7, 2011  
Fabrication and Assembly of ERL hardware  
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**Cryogenics:** The final set of cryogenic transfer lines, which connects the ERL cryogenic modules (SRF Gun Cavity and 5 cell cavity) is under manufacturing at the cryogenic equipment vendor and is scheduled for delivery end of July for installation in August. The main liquid nitrogen delivery line is also part of this procurement. This liquid nitrogen cryogenic line supplies LN2 to the cryogenic plant and to the

**Photocathode:** Modifications of the UHV cathode transporter, aimed at enabling precision insertion of a cathode into the gun are being designed. A new antimony source has been ordered, it is suspected that the current source which was used for CsSbK2 photocathode preparation does not provide antimony.

**Gun cryomodule:** The ballast tank is permanently mounted to the plate and the cryolines running to the tank are welded in place. Those line welds were pressure tested and inspected this week. With that done the MLI blankets and the heatshield can be permanently mounted. At that point the top plate will be ready for the string assembly.

**SRF gun 1:** The gun helium tank has been welded, leak checked and certified at JLab and has been shipped to BNL for mock-assembly to verify that all parts fit.

**SRF gun2:** Preparations of parts for vertical testing is in progress.