

## **NSTX Weekly Report (Jan. 06, 2006)**

FY2006 weeks of research operations

Planned: 11 weeks

Completed: 0 weeks

### **Engineering Operations (A. von Halle, C. Neumeyer)**

The NSTX outage continued this past week with the ongoing activities to install and commission the new lithium evaporator system (LITER). Final alignments of the LITER drive assemblies on NSTX are in progress, and the new control racks and electrical power for that system have been installed and tested. Leak checking of the vacuum vessel continues, with plans to start the bake-out of the vessel late this coming week. The re-installation of the TF bus systems is proceeding on schedule and is near completion.

The NSTX test cell will remain in free (card reader) access through most of the coming week. Test cell access will be restricted during the vacuum vessel bake-out, scheduled to start sometime on Thursday, January 12th. (A. von Halle)

### **Research Operations (M. Bell)**

#### Diagnostic Operations (R. Kaita)

- The three infrared cameras have been installed on the NSTX and tested in preparation for calibration during the upcoming bakeout of the vacuum vessel. These cameras image the upper and lower divertor region and the center stack. This effort is being performed jointly with personnel from the Oak Ridge National Laboratory, the Lawrence Livermore National Laboratory, and the Princeton Plasma Physics Laboratory
- Vendor personnel are performing a detailed checkout of the lasers for the multipoint Thomson scattering diagnostic today.

#### Boundary Physics Operations (H. Kugel)

- The controls testing of the MGP for operation during bakeout was initiated.
- The Bellows Motion Drive for LITER was received, and preparations for installing its support brackets on the Umbrella structure were started. The fabrication of LITER cartridge-A was started. The LITER oven main body and front snout heaters were completed, and the fabrication of the exit heater was started.