

NSTX Weekly Report (January 4, 2008)

FY 2008 NSTX plasma operations

Planned: TBD

Completed: 0 weeks

PPPL was closed for the holidays from Dec. 24, 2007 to Jan. 1, 2008.

There will be an NSTX Physics Meeting on Monday, 1/7 at 1:30 PM in LSB318. Bick Hooper of LLNL will give a talk entitled, “**SSPX - Physics Results from Experiment and Simulation.**” The general theme is that experiment and full-device, resistive-MHD simulations (NIMROD) together are successful in generating significant, new physics understanding of the MHD characteristics of the spheromak. (S. Kaye)

Engineering Operations (A. von Halle, C. Neumever)

Conditioning of the three refurbished neutral beam ion sources continued over the holiday period, and all three are now capable of extracting beam at various levels. Conditioning of the sources will resume in parallel with NSTX coil system power testing in mid-January. Alignment of the MPTS lasers continued this past week in preparation for both Rayleigh and Raman scattering calibrations scheduled for next week. Also this week, progress was made on installing the new EBW radiometer and the Biased Electrode and Probe system, mounting sensors to monitor RWM error field coil polarities, and commissioning upgrades to the CHI voltage monitoring system.

The NSTX test Cell will be in restricted access throughout next week during the MPTS calibrations and machine area scrubs.

Research Operations (M. Bell)

Diagnostic Operations (R. Kaita)

- The major activity involving NSTX diagnostics during the last week concerned the alignment of the multipoint Thomson scattering (MPTS) laser. This is in preparation for the Rayleigh and Raman scattering calibrations next week.
- Other diagnostic work included the installation of the electron Bernstein wave (EBW) radiometer antennas and the replacement of a power supply in an integrator chassis for magnetic sensors. These will be calibrated during the NSTX magnetic field test shots later this month.