

NSTX Weekly Report (Oct. 22, 2004)

FY2005 Planned Operations: 14 weeks
Completed: 0 weeks producing 0 plasmas

Department, Project, Program (M. Ono, M. Peng, M. Williams, E. Synakowski)

- Josef Preinhaelter from the Institute of Plasma Physics in Prague, Czech Republic visited NSTX this week. He gave a seminar on electron Bernstein wave modeling in MAST plasma equilibria.

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

The NSTX outage continued this past week with the successful epoxy potting of a prototype TF flag and box assembly. Additional practice runs of the potting procedure have been performed, achieving full wetting of fiberglass roving with fill times under 10 minutes per box. Mechanical testing of a completed prototype is in progress. Also, testing of the high-friction coating to be applied to the contact surfaces of the TF flag boxes to hub plates continues, indicating a factor of three increase in the coefficient of friction as compared to untreated bolted metal surfaces. Dressing of the TF center bundle electrical contact surfaces is in progress. The installation of the Resistive Wall Mode (RWM) error field coils continues on schedule, and the new Switching Power Amplifier (SPA) to power these coils has arrived at PPPL. Winding of the new PF1A coil continues in the PPPL coil shop. In-vessel installation of the B_Z coils is in progress, and the integrators for these sensors are being upgraded for higher gain and better noise immunity. In-vessel diagnostic calibrations for the upcoming run could start as early as next week.

There are no NSTX test cell access restrictions this coming week. (A. von Halle)

Research Operations (M. Bell)

Diagnostic Operations (R. Kaita)

- The mandrels for the plasma current Rogowski coils have been received by the vendor for winding. This will begin at the start of next week, and delivery of the first coil is expected to be in about four weeks.
- Modifications for improved RF shielding and sturdier leads have been completed for all twenty-four in-vessel Mirnov coil modifications. They are in the process of being installed in NSTX.