Section 3 NATIONAL LASER USERS FACILITY NEWS

The first quarter of FY90 user activity consisted of support for groups from the University of Maryland and the University of Florida. This consisted of meetings with LLE staff and diagnostic checkout on the OMEGA target chamber.

J. Moreno from the University of Maryland conducted a checkout of a time-dependent XUV spectrograph on the OMEGA target chamber. This instrument will be used to measure the XUV spectra at various times from an imploding glass microballoon. This is a McPIGS instrument that will be used in conjunction with SPEAXS to measure the time dependence of x-ray emission over a broad energy region. The targets for these measurements consist of glass microballoons with varying thicknesses of CH overcoats. These experiments are to be done during the second quarter of FY90.

C. Hooper from the University of Florida visited LLE to coordinate the investigation of argon-filled plastic microballoons. A series of targets with varying pressures and shell thicknesses are planned to study high-density implosions. This work is being done in collaboration with LLE scientists and relies on instrumentation fielded by LLE staff. A new batch of LLE-made plastic shells that are matched to the DPP's on the OMEGA target chamber are being manufactured and tested for retention of argon gas.

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