Section 4 NATIONAL LASER USERS FACILITY NEWS

During the second quarter of FY86, two series of NLUF experiments were run on OMEGA and the NLUF steering committee met to review proposals for FY87.

NLUF experiments during this quarter carried out by J. Seely, U. Feldman, and C. Brown (Naval Research Laboratory) and W. Behring (NASA-Goddard Space Flight Center) continued investigations of the XUV and x-ray spectroscopy of high-Z ions. In one series of shots on Au-coated targets, the Fe I, Co I, Cu I, and Zn I isoelectronic sequences of Au (Z-79) were recorded. This is a considerable extension of previous work in which these transitions had been observed only for elements with atomic number Z = 66 and below. In other experiments during this period, spectra from Bi and U targets were also obtained.

In a collaborative effort with LLE scientists, **D. Duston** (SDIO/NRL) and A. Hauer (LANL) conducted the first series of experiments on dielectronic satellites of Ar x-ray line emission from compressed targets. The glass targets used in these experiments were fabricated at LANL and were fueled with Ar and D_2 and overcoated with several microns of CH. Time-integrated as well time-resolved spectra of the x-ray emission were obtained; these data are now being analyzed.

On 28 February 1986, the NLUF Steering Committee met to review 15 proposals submitted for the FY87 funding cycle. The Committee reviewed and ranked the proposals for facility time and DOE funding. Proposals for consideration for the FY88 funding cycle are due by 15 December 1986.

For more information regarding proposal guidelines and the resources available at the National Laser Users Facility, please contact:

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