Section 3 NATIONAL LASER USERS FACILITY NEWS

National Laser Users Facility (NLUF) activity during the third quarter of FY88 supported the projects of J. G. Jernigan of the University of California at Berkeley (UCB), H. Griem of the University of Maryland, U. Feldman of the Naval Research Laboratory, and J. Apruzese of the Naval Research Laboratory. This support centered on planning for future experiments and diagnostic development of these groups.

J. G. Jernigan is continuing the development of a two-dimensional readout for active x-ray imaging. This group has taken delivery of a 256×256 amplifier array that is bonded to a pin diode array. This device was manufactured by the Hughes Research Laboratory and is an integral part of the next step in the active imaging work being done by the Space Sciences Laboratory at UCB. During Dr. Jernigan's visit to LLE plans were finalized for the installation of this readout array onto the back of an x-ray pinhole camera, which is to be fielded onto the OMEGA target chamber. F. Marshall of LLE is collaborating with the UCB group and will assist in the measurements on the OMEGA system.

OMEGA will be changed to line focus during July 1988 for experiments to be done by H. Griem, U. Feldman, and J. Apruzese. These individuals visited LLE in preparation for their upcoming experiments. The details of how the line focus targets would be aligned and what diagnostics would be needed were discussed. All of the line focus experiments will be done during this time to facilitate the operation of OMEGA. These experiments are to measure thermal transport, atomic spectroscopy, and electron interactions in linear plasmas.