Cover Photos

Top left: Shown in this photograph is the fourth-harmonic (263-nm) probe diagnostic system located on the upper deck of the OMEGA EP Target Area Structure. Senior Laboratory Engineer Jay Brown is shown inspecting the system.

Middle left: Installation of the single-line-of-sight time-resolved x-ray imager (SLOS-TRXI) diagnostic on the OMEGA target chamber. This was a joint project including General Atomics, Kentech Instruments, Lawrence Livermore National Laboratory, Sandia National Laboratories, and LLE. The system provides time-resolved x-ray images of the hot spot formed in cryogenic capsule implosions on OMEGA.

Bottom left: The 11 participants in the 2017 LLE Summer High-School Research Program are shown in the OMEGA EP Laser Bay. Two of the students were designated as "Scholars" in the prestigious nationwide Regeneron Science Talent Search for their work at LLE during the summer.

Top right: Graduate students and postdocs attending the Ninth Annual Omega Laser Facility Users Group Workshop. The workshop was attended by 110 researchers from five nations (U.S., U.K., France, Spain, and Hungary).

Middle right: The OMEGA and OMEGA EP Laser Systems require regular maintenance to ensure high reliability and effectiveness. Shown in the photograph is Laboratory Engineer Michael Scipione examining a brick of flash lamps on the OMEGA EP laser.

Bottom right: LLE designed and installed a novel Target Area System for the Dynamic Compression Sector (DCS) at the Advanced Photon Source located at Argonne National Laboratory near Chicago. The system includes a target chamber, target positioner, and optical train to deliver the DCS laser (also constructed by LLE). Dale Guy (left) and Robert Early (right) are shown working on the system.

Prepared for
U.S. Department of Energy
Albuquerque Service Center
DOE/NA/1944-1363

Distribution Category
October 2016–September 2017

Printed in the United States of America
Available from
National Technical Information Services
U.S. Department of Commerce
5285 Port Royal Road
Springfield, VA 22161
www.ntis.gov

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The work described in this volume includes current research at the Laboratory for Laser Energetics, which is supported by New York State Energy Research and Development Authority, the University of Rochester, the U.S. Department of Energy Office of Inertial Confinement Fusion under Cooperative Agreement No. DE-NA0001944, and other agencies.

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