

Cover Photos

Upper Left: Image of the inside of the OMEGA target chamber during a shot taken as part of a collaborative National Ignition Campaign (NIC) experiment to develop an experimental platform for measuring shock timing in ICF capsules.

Lower Left: Gary Mitchell, Senior Manufacturing Engineer, is shown examining a finished Nd:glass slab to be used on one of the OMEGA EP power amplifiers.

Upper Right: Lee Shepler, a contract assembler, is shown assembling the off-axis parabola inserter (OAPI), which will be used to focus the OMEGA EP short-pulse beams onto targets placed in the OMEGA target chamber.

Center: A half-hohlraum target used on an LLE-directed indirect-drive experiment in support of the National Ignition Campaign.

Lower Right: Elizabeth Gregg, an LLE summer high school intern from Naples Central High School, is shown working on her project: optimization of fiber slicing.

Prepared for
U.S. Department of Energy
San Francisco Operations Office
DOE/SF/19460-723

Distribution Category
October 2005–September 2006

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
Price codes: Printed Copy A11
Microfiche A01

This report was prepared as an account of work conducted by the Laboratory for Laser Energetics and sponsored by New York State Energy Research and Development Authority, the University of Rochester, the U.S. Department of Energy, and other agencies. Neither the above named sponsors, nor any of their employees, makes any warranty, expressed or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights. Reference herein to any specific commercial product, process, or service by trade name, mark, manufacturer, or otherwise, does not necessarily constitute or imply its endorsement, recommendation, or favoring by the United States Government or any agency thereof or any other sponsor. Results reported in the LLE Review should not be taken as necessarily final results as they represent active research. The views and opinions of authors expressed herein do not necessarily state or reflect those of any of the above sponsoring entities.

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-FC52-92SF19460, and other agencies.

For questions or comments, Laboratory for Laser Energetics,
250 East River Road, Rochester, NY 14623-1299, (585) 275-5286.
Worldwide-Web Home Page: <http://www.lle.rochester.edu/>