Abstract Submitted for the DPP05 Meeting of The American Physical Society

**Overview of Target Fabrication in Support of Sandia National** Laboratories DIANA SCHROEN, ERIC BREDEN, JOSEPH FLORIO, JOSHUA GREGORY, SUZI GRINE-JONES, RANDY HOLT, WOJTEK KRYCH, KATHER-INE NELSON, NICOLE PETTA, CHRIS RUSSELL, Schafer Corporation, JO-HANN SEAMEN, Sandia National Laboratories, GARY SMITH, JUSTIN STOLP, JONATHAN STREIT, Schafer Corporation — Sandia National Laboratories has succeeded in making its pulsed power driver, the Z machine, a valuable testbed for a great variety of experiments. These experiments include ICF, weapon physics, Equation of State and astrophysics. There are four main target types: Dynamic Hohlraum, Double Pinch Hohlraum, Fast Igniter and Equation of State. The target sizes are comparable to projected full power NIF sizes. For example capsules up to 5 mm have been fielded. This talk will give an overview of the work with the focus on the many advances in target assembly, foam target types and characterization of components and assemblies. For example, the 14 mg/cc foam with an embedded capsule (used in Dynamic Hohlraum experiments) can now be shaped or doped and its radiographic characterization has been improved for both resolution and speed of analysis. This work was funded under the auspices of the Department of Energy, Contract No. DE-AC03-01SF22260.

> Diana Schroen Schafer Corporation

Date submitted: 27 Jul 2005

Electronic form version 1.4