## Abstract Submitted for the DPP17 Meeting of The American Physical Society

The advanced hohlraum research project<sup>1</sup> OGDEN JONES, M. TABAK, P. A. AMENDT, J. H. HAMMER, K. L. BAKER, T. F. BAUMANN, R. L. BERGER, M. M. BIENER, D. D. HO, S. H. KIM, B. G. LOGAN, D. A. MARISCAL, S. PATANKAR, R. L. WALLACE, Lawrence Livermore Natl Lab — We present results of a three-year study on alternate hohlraum designs. Several alternatives to cylindrical gas-filled hohlraums have been investigated. Proposed new hohlraum concepts utilize different hohlraum shapes, multiple laser entrance holes, and alternate materials such as metal foam walls. For each design we assess the radiation drive efficiency, the time-dependent drive symmetry, and laser-plasma interaction issues such as backscatter and crossed beam energy transfer. Results from supporting experiments on laser-heated foams are also summarized.

<sup>1</sup>Prepared by LLNL under LDRD 15-ERD-058

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Date submitted: 18 Jul 2017 Electronic form version 1.4