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Optimizing low-adiabat ramped megabar drives for material strength experiments¹ MATTHEW HILL, AWE Plc, UK, T. LOCKARD, D. SWIFT, A. KRYGIER, C. HUNTINGTON, C. WEHRENBERG, A. ZYLSTRA, K. KILLEBREW LE GALLOUDEC, C. STAN, P. POWELL, J. MCNANEY, H.-S. PARK, LLNL, CA, USA — Reducing the heat load on material samples undergoing ramped compression to megabar pressures was the objective of a series of shots at the National Ignition Facility, utilizing improved simulation tools and combinations of ultra-low-density foams to optimize an existing 'reservoir release' platform. VISAR data from these shots will be presented which demonstrate the effects of modifying the structure of the reservoir, and the future development of this technique will be discussed.

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