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Material Strength Hohlraum Development[1] STEPHEN POLLAINE, RAYMOND SMITH, BRUCE REMINGTON, DAVID BRAUN, HYE-SOOK PARK, GILBERT COLLINS, Lawrence Livermore National Laboratory — We have demonstrated Omega hohlraums that remain open past 80 ns. These hohlraums deliver a drive that is uniform over a 1 mm^2 area (1). We also demonstrated hohlraums on Janus, a 2-beam 800 J facility at LLNL, with a uniform area 500 μm in diameter. These hohlraums drive ICE configurations, in which the hohlraum radiation drive shocks up an ablator, which then unloads across a vacuum gap to quasi-isnetropically drive a metal foil. We have also devised a new technique to measure M-band radiation preheat. These hohlraums will be extended to NIF in 2008. (1) R.F. Smith, S.M. Pollaine, S.J. Moon, H.S. Park, K.T. Lorenz, P.M. Celliers, J.H. Eggert, G.W. Collins, "High planarity x-ray drive for ultra-fast shockless-compression experiments," accepted Physics of Plasmas (2007)

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