

Abstract Submitted  
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**Magnetized Target Fusion Integrated Engineering Test Shot<sup>1</sup>** T. INTRATOR, J. SEARS, P.J. TURCHI, W.J. WAGANAAR, T. WEBER, G.A. WURDEN, LANL, J.H. DEGNAN, M. DOMONKOS, C. GRABOWSKI, E.L. RUDEN, W. WHITE, AFRL-Kirtland, D. GALE, M. KOSTORA, J. PARKER, SAIC, M.H. FRESE, S.D. FRESE, J.F. CAMACHO, S.K. COFFEY, V. MAKHIN, Numerex, R.E. SIEMON, S. FUELLING, B.S. BAUER, Univ. Nevada, A.G. LYNN, N.F. RODERICK, Univ NM — The LANL & AFRL collaboration has carried out the first engineering shakedown demonstration of a Magnetized Target Fusion (MTF) shot. We used a solid, cylinder aluminum flux compressor. The target plasma was created as a high density Field Reversed Configuration (FRC) with closed flux surfaces. After formation, the FRC was expelled to a compression region at 15km/sec. We show some initial data that characterize the target FRC, including some translation data from the Los Alamos FRC experiment FRXL and the FRCHX experiment at AFRL. Data from the implosion shot show that we achieved all our initial objectives. The solid liner realization of Magneto Inertial Fusion is only one of several magnetized, pulsed, fusion schemes that are being pursued.

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T. Intrator  
LANL

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