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Shock Behavior of Galfenol JAMES CAZAMIAS, U.S. Army Research Laboratory, BRIAN WILMER, SURVICE Engineering, SCOTT TURNAGE, CYRIL WILLIAMS, U.S. Army Research Laboratory — A series of shock loading experiments were conducted on Galfenol ($Fe_{81.6}Ga_{18.4}$), a magnetostrictive iron-gallium alloy developed by the NSWCCD. Flyer plate experiments were performed on the material to generate HEL and spall data via VISAR wave profiles. A larger diameter plate was added to the targets along with PDV diagnostics to determine impact times in order to come up with an estimate for the hugoniot.

James Cazamias
Army Research Laboratory

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