

Abstract Submitted  
for the SHOCK11 Meeting of  
The American Physical Society

**Characterization of Detonation Products of RSI-007 Explosive**

TIMOTHY AGER, CHRISTOPHER NEEL<sup>1</sup>, LALIT CHHABILDAS<sup>2</sup>, USAF — PDV and VISAR have been employed to characterize the detonation products of a production quality RSI-007 explosive. The explosive was part of an exploding foil initiator (EFI) detonator assembly in which the explosive was contained within a Kovar (Fe-Ni-Co alloy) cup. The free surface of the Kovar serves as the witness plate for the interferometry measurements. Detailed shock reverberations are recorded on the witness plate and the isentropic release path of the explosive is inferred through the velocity history. Two separate window materials are bonded to the Kovar cup in subsequent experiments and are used to further determine the release state in different pressure regimes.

<sup>1</sup>Presenter

<sup>2</sup>member

Timothy Ager  
USAF

Date submitted: 17 Feb 2011

Electronic form version 1.4