1027-76-72 Hanna E. Makaruk* (hanna_m@lanl.gov), P-22, Ms D434, Los Alamos National Laboratory, Los Alamos, NM 87545. *Metal Melting After Explosion- the first 30 Microsecunds.*

Metal (tin, copper, aluminum and steel) coupons after explosion are shred and/or melted by a pressure wave. Analysis of the series of Proton Radiography images from these events allows for tracking fragments and their shape evolution thus providing precise information which fragments were melted and which were not. It also allows for precise movement tracking for liquid and even sprays' boundaries. Solid fragments, fragments with high plasticity as well as formation of liquid surface instabilities are observed during first 30 microseconds. (Received February 14, 2007)