MEASUREMENT TECHNIQUES FOR HIGH-EXPLOSIVES TESTING

Mr. Kiran Shah

Defense Threat Reduction Agency (CPTn 1680 Texas Street SE Kirtland AFB, NM (USA)

Dr. George Lu

Defense Threat Reduction Agency (CPTn 1680 Texas Street SE Kirtland AFB, NM (USA)

Carl D. Denton

Honeywell Technology Solutions Inc. P.O. Box 99 San Antonio, NM (USA)

The Defense Threat Reduction Agency (DTRA) performs high-explosive tests designed to determine the capabilities of new weapons or defensive systems to collect blast phenomena data. Tests are usually conducted by the armed forces of the United States and other countries. Counter-terrorism and intelligence agencies rely on high-explosives tests to gather useful data in the field and laboratory. Instrumentation design includes cable planning and layout; sensor calibration and fielding; data acquisition; and transmission and storage. All the instrumentation factors play major roles in the success of high-explosives test events. This paper details the techniques, instrumentation, software, etc. for performing high-explosives tests.