



US DEPARTMENT OF DEFENSE

BLAST INJURY RESEARCH PROGRAM COORDINATING OFFICE

Protective Equipment

Interceptor Body Armor Blast Injury Mitigation

The components of the Interceptor Body Armor system, to include the Soldier Plate Carrier System and the Improved Outer Tactical Vest, combined with the employment of hard armor protective inserts, have clearly demonstrated their benefit in mitigating blast injuries in theater. Research by Project Manager Soldier Protection and Individual Equipment (PM SPIE) Technical Management Division is underway to help understand the level to which a Service Member is protected by his body armor system when impacted by rifle and fragmentation threats. Sensor development and testing has been conducted to determine the direct measurements of the static and dynamic loading characteristics including force, pressure, and time responses, which is expected to more accurately correlate the ballistic performance of the system to actual injuries. Other ongoing research includes the measurement of forces found behind different types of personnel armor after a ballistic or fragmentation impact. PM SPIE directed and resourced Aberdeen Test Center to conduct numerous free field and shock tube blast overpressure tests during developmental testing of the vital torso protection subsystem of SPS.