



US DEPARTMENT OF DEFENSE

BLAST INJURY RESEARCH PROGRAM COORDINATING OFFICE

Protective Equipment

Affordable Protection from Objective Threats ManTech Program (Vehicle Underbody)

The ARL is executing an Affordable Protection from Objective Threats ManTech program developing manufacturing processes required to produce aluminum hulls capable of withstanding very large net explosive weight underbody blast threats. The manufacturing processes investigated include forging, forming, and advanced welding technologies. Lower hulls have been successfully fabricated using each of these manufacturing paths, and have been live-fire blast tested on a massive test fixture. One forged hull has been, and one formed hull will be, integrated into ballistic hull and turrets. Vehicles equipped with demonstrated technologies can withstand greater blast impacts than current systems with significantly less blast effects to vehicle occupants.