



US DEPARTMENT OF DEFENSE

# BLAST INJURY RESEARCH PROGRAM COORDINATING OFFICE

## Injury Models

### Instrumenting Under-Foot Blast Experiments

In collaboration with PEO Soldier and the Aberdeen Test Center, USARL developed and fabricated mannequins for evaluating pelvis protection for the Soldier Protection System (SPS). This new mannequin system has been used to evaluate candidate systems for SPS in under-foot blast experiments. In addition, USARL performed an injury analysis by using computer tomography (CT) scan data of the mannequins in conjunction with the Operational Requirement-based Casualty Assessment injury model to assess the potential of urogenital injuries. Overall, this technology could improve the ability to provide more effective blast protective systems by increasing the understanding of which types of under-foot threats that the SPS can protect against.