

GROUND VEHICLE SURVIVABILITY & PROTECTION (GVSP)

FLOOR INTERFACE TECHNOLOGY ACCELERATOR (FITA)

The Floor Interface Technology Accelerator (FITA) is a leg impact system used to evaluate the performance of energy absorbing floor materials, simulating an underbody blast. It could be adapted to test any component that requires being subjected to accelerative forces. The FITA consists of a rigidly mounted seat with a pneumatically-actuated piston that pushes against the foot of the occupant or resistive object. This test allows engineers to quickly evaluate the performance of the test item prior to more extensive testing on other Occupant Protection Laboratory (OPL) test fixtures or in live-fire events.

FITA is located within the (OPL), a full-service test facility with the resources, capabilities, equipment, and partnerships needed to perform dynamic impact/impulse testing on components, subsystems, or systems within six distinct testing capabilities. The OPL provides offsite testing support and coordination for a multitude of different types of survivability testing.

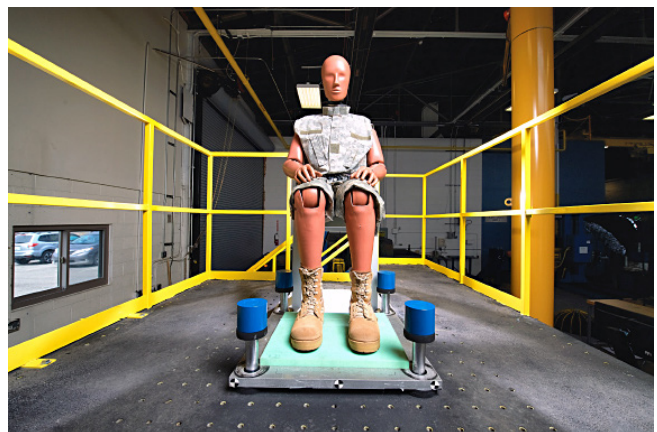
- Impactor velocity at 525 psi is approximately 14m/s
- Impactor velocity at 1,000 psi is approximately 18m/s
- Chair for dummy positioning
- Foot platform size: 2'x 2'

AVAILABLE INSTRUMENTATION

- 5th, 50th, and 95th Hybrid III ATD
- Accelerometers: 7264 style, 2K range or other upon request
- Load Cells: upon request
- High Speed Video: 5,000 fps



Floor Interface Technology Accelerator



ATD Seated In Position