



ARMAMENT INTEGRATION FACILITY

LABORATORY INFORMATION FACT SHEET

CONTACT US:

Technology Transfer Office

Email: usarmy.pica.devcom-ac.mbx.t2@army.mil

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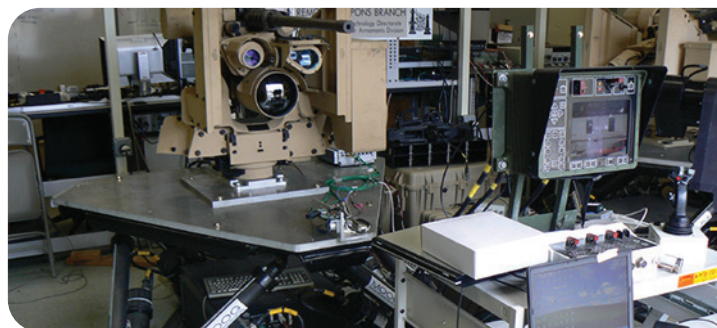
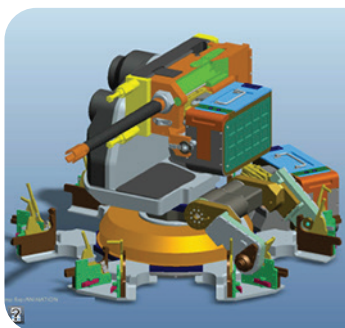


The Armament Integration Facility (AIF) aids in the development, prototyping, integration and testing of remote weapon systems.

TECHNOLOGY/FACILITY DESCRIPTION:

The AIF conducts system integration, weapon integration, Remote/Robotic Armament System (RAS) integration kit design, test engineering and component design/analysis. The facility integrates control systems, mechanical/electrical systems, communication architecture and radio frequency (RF) communication

for robotic armaments. Weapon integration includes automation of manned weapon interfaces, weapon safety, remote/robotic platforms, supervised autonomy and automated ammunition handling. The AIF creates RAS mount designs for platform mounts/adapters. Test engineering includes experimental test plan development, fixture/instrumentation design and the analysis and reporting of findings. Examples of component design/analysis tools include solid modeling, CREO, MATLAB, 6 DOF platforms and ADAMS.



EQUIPMENT AND EXPERTISE AVAILABLE:

- Systems Integration
 - Control Systems
 - Mechanical/Electrical
 - Communication Architecture
 - RF Communication for Robotic Armament
 - Supervised Autonomy for Armament Systems
- Weapon Integration
 - Automation of Manned Weapon Interfaces
 - Embedded Weapon Safety
 - Remote/Robotic Platforms
 - Automated Ammo Handling
- RAS Mount Design
 - Vehicle Mounts/Integration Adapters
 - Platform Impact (e.g. Space, Weight and Power)
 - Platform Dynamics
- Test Engineering
 - Experimental Test Plan Development
 - Fixture/Instrumentation Design
 - Formal Reports
- Component Design/Analysis
 - Solid Modeling, CREO, Solidworks
 - MATLAB
 - 6 DOF platforms
 - ADAMS