



SURVIVABILITY



Kinetic Energy Active Protection System (KE APS) Army Technology Objective (ATO)

The U.S. Army Tank Automotive Research, Development and Engineering Center's (TARDEC's) Ground System Survivability KE APS ATO mission is to develop the Army's capability to protect manned ground vehicles (MGVs) against tank-fired KE threats.



Primary Focus

The KE APS ATO has four primary focus areas:

- Creating a payload capable of defeating a kinetic energy rod.
- Developing a fast and accurate fusing capability to cause the greatest effect on an incoming threat.
- Developing a fly-out countermeasure capable of reaching the intercept point and delivering a payload to defeat a threat within the engagement timeline.
- Advancing system-level, end-to-end modeling and simulation capabilities.

This collaborative effort leverages expertise across U.S. Army Research, Development and Engineering Command (RDECOM) and Future Combat Systems (FCS) One Team partners to bring critical capability to warfighters. Products developed under this program will be delivered to the FCS MGV program for integration onto the platform, providing increased survivability for Soldiers inside the vehicles from long-range-fired threats. This technology also can be applied to Current Force assets through a collaborative integration effort with the FCS MGV program. TARDEC has overall program management and systems engineering responsibility and coordinates activities across all RDECOM organizations.



Challenges

Challenges addressed for FCS and future combat vehicles are:

- Providing long-standoff threat-defeat capability for MGVs and crew.
- Characterizing performance against tank-fired, high-explosive, antitank rounds, as well as antitank guided missiles.

This program will culminate in the delivery of an interceptor capable of defeating tank-fired rounds with demonstrated performance. It will be an effective, integral solution to survivability for FCS vehicles and crew.