

UNMANNED

What are unmanned ground vehicles

The Demo III robot is the Army Research Lab's newest experimental unmanned vehicle. The XUVs are a test bed for autonomous mobility research and experimentation directly relevant to military transformation efforts. The goal is for the vehicle to serve as a scout and conduct route reconnaissance. As the Demo III rolls through the terrain, it gathers data on its surroundings.

How does it work?

The soldier plans a mission for the robot through the operator control unit. If the vehicle runs into trouble, it can send a message back that it needs help. The soldier can then turn on the cameras (mounted on the vehicle), take a look around, execute a plan, and the robot will resume its mission.

What is the benefit?

Many missions are extremely dangerous. Sending Unmanned Ground Vehicles into dangerous areas reduces the threat to the individual soldier, which is extremely beneficial.

What does the future hold?

Since 1998, the lab's robotics program has been developing advanced technology for early insertion into the current and future force. Live experiments with the unmanned vehicles are part of the robotics program. These tests are giving soldiers hands-on experience with the technology of autonomous mobility while providing researchers with invaluable feedback about human factor issues and user needs, as well as ideas for advancing the technology.

Techno
Gizmo



Army Master Sgt. Frank French, Army Research Lab, uses the operator control unit to program a route for an experimental unmanned vehicle from inside the Humvee.