

News - Local - The Bayonet
Friday, Oct. 22, 2010

Latest technologies unveiled at 2010 Robotics Rodeo

By Vince Little - The Bayonet

MY YAHOO!

SHARE [f](#) [t](#) [e](#)

E-MAIL

PRINT

COMMENTS (0) |

TEXT SIZE: [-](#) [+](#)

FORT BENNING, Ga. — The Army got a glimpse of the future last week at the 2010 Robotics Rodeo.

More than 50 companies from across the country showcased their technologies Oct. 12-15 at Fort Benning's McKenna Urban Operations Complex. The Maneuver Battle Lab and U.S. Army Tank Automotive Research, Development and Engineering Center co-hosted the second annual event, which drew about 1,000 visitors over four days.

The Robotics Rodeo was split into two phases, but neither involved a competition. The Robotic Technology Observation, Demonstration and Discussion, or RTOD2, took place Oct. 12-13 and was used as a formal evaluation period for Soldiers and government experts only. The public could check out the Extravaganza, held on the final two days.

Innovators participated in task-based events and open robotics demonstrations aimed at motivating the industry, educating developers and gaining insight into the current state of ground robotics technology and artificial intelligence, organizers said. From an Army standpoint, the event was an opportunity for scientists and engineers from government and industry to get linked up with Soldiers who might someday employ the robots and unmanned systems on the battlefield.



American Android Corp.'s Multi-Arm Unmanned Ground Vehicle examines a bag Friday during a demonstration at the 2010 Robotics Rodeo.

/The Bayonet

[CLICK FOR MORE PHOTOS](#)

Among the gadgets on display was a voice-commanded system launched in 2006 by Think-A-Move. The SPEAR Speech Control System allows users to activate multiple functions and improve situational awareness through hands-free, heads-up direction. It's designed for unmanned ground vehicles and air systems.

Elsewhere, the Multi-Arm Unmanned Ground Vehicle, developed by American Android Corp., attracted numerous looks at the rodeo. Company officials said it features three cameras and three arms with nine joints each that allow 29 degrees of freedom, ~~and the robot is capable of lifting objects up to 110 pounds.~~

American Android president David Handelman said the MA-UGV's movement is fluid and simple to control, while semiautonomous behaviors keep cameras focused on the mission at hand. It allows multi-arm mobile manipulation for tasks such as bag inspections, door breaching, tool handling and maintenance.

"It optimizes the combination of human and robot interfaces," he said. "This is our coming-out party. Our control technology has been decades in the making, but this is the most practical and exciting application of it so far. It's all sort of coming together at this point and we're finding a place for it in the world."

Mr. Gordon Franken, a robotics engineer with American Android, said the Fort Benning event provided a perfect avenue to the "real users."

"It's been the right venue for us to get in touch with the people we want to talk to — and for them to reach out and speak with us," he said.

Quick Job Search

Enter Keyword(s): <input type="text"/>	Enter a City: <input type="text" value="Columbus"/>
Select a State: <input type="text" value="Georgia"/>	Select a Category: <input type="text" value="All Job Categories"/>

[Advanced Job Search](#) | [Search by Category](#)

[SEARCH](#)

Ledger-Enquirer Top Jobs »

Muscogee Manor Center Currently accepting applications
Muscogee Home
US-GA-Columbus

MAGNOLIA MANOR OF COLUMBUS
Recreational Therapist , FT Minimum 2
Magnolia Manor

[» See More Top Jobs](#)

Several robots at the rodeo were operated by hand-held, game-control devices, which offer huge cost savings and easy use because most young Soldiers grew up playing Xbox 360 and PlayStation video games, industry representatives said.

Mr. Brian Hart, president and CEO of Black-I Robotics Inc., said he and his wife, Alma, had personal motivation for getting into the military robotics business. Their son, PFC John Daniel Hart, was killed in 2003 during an ambush in Iraq while serving with the 173rd Airborne Brigade.

Immediately afterward, the couple began lobbying for greater funding of body and vehicle armor, he said. At the time of PFC Hart's death in October 2003, there were only 400 armored Humvees out of 35,000 in the Army fleet. Five years ago, Mr. Hart started the company with his brother, Richard, and Mr. Arthur Berube.

At the Robotics Rodeo, they showcased the "Land Shark," a 700-pound robot that can be mounted on a Humvee or pickup truck. With an arm that extends more than 11 feet vertical, it's capable of disabling car bombs and picking up improvised explosive devices weighing more than 200 pounds, Mr. Hart said.

"Never send a man to do a machine's job," he said. "Robots should be weaponized and used for surveillance. ... But if we can't make them robust and affordable, the PFCs and lance corporals never get it. That's who needs to have it, not just bomb squads." He said roadside bombs aren't a "temporary phenomenon but a long-term issue," so practical robotics has a place in the Army. "Everything that's been at this show is expendable, repairable and affordable. You can't replace a human being," Mr. Hart said. "The technology is definitely here. We just got to get the cost down a little."