

MEDIA RELEASE | July 27 | 2010

NSW company wins \$57 million contract to trial robot technology with US Marines

NSW Treasurer and Minister for State and Regional Development Eric Roozendaal today announced a Sydney company has won a \$57 million contract with the United States Marine Corps to trial advanced robot technology for training soldiers in live firing exercises.

In a major win for NSW technology, Marathon Robotics' "Rover" system (*pictured right*) will be tested by the US Marines for advanced marksmanship training.

"This is a great example of world-beating NSW technology," Mr Roozendaal said.

"The NSW Government has assisted with technology development along with the Australian Government, and has provided export support through Industry & Investment NSW."

The Rover – or Autonomous Robots Networked for Live Fire Training (ARNLT) system – will be tested by the US Marine Corps Systems Command in Orlando, Florida.

If successful, this \$A57 million trial could see the Rover system taken on board as a live fire training platform by the US Defense Department.



Marathon Robotics, based at the Australian Technology Park at Eveleigh, was founded by three PhD students from the University of Sydney.

The Marathon Robotics system uses free-ranging robots protected by armour plating to train marksmen.

"These robots are programmed to mimic human behaviour to provide a realistic, challenging and interactive training scenario for marksmen," Mr Roozendaal said.

"They can turn on the spot, quickly change direction, navigate in and out of buildings, react quickly to avoid obstacles, and even run for cover when one of their buddies is hit by a bullet.

"This system can run day and night and in all weather, and promises to revolutionise the business of marksmanship training."

The NSW Government helped the development of the robotics technology through its support of the ARC Centre of Excellence for Autonomous Systems, and in May hosted a visit by the US Marine Corps to assess the technology.

Now the NSW Government is helping Marathon Robotics target worldwide exports through Industry & Investment NSW and its Australian Technology Showcase (ATS), export and Innovation Pathways programs.

Marathon Robotics anticipates the creation of up to 30 jobs over the next three years on the back of international technology sales.

In this year's State Budget, the NSW Government announced it would target high-value defence industries under a \$75 million defence attraction package.

The funding package will create a hi-tech defence hub at Macquarie Park in North Ryde and provide \$25 million to secure new defence projects, generating 1,500 new jobs.

Marathon Robotics CEO Dr Alex Brooks said the Rover system was developed at the ARC Centre of Excellence for Autonomous Systems in conjunction with the Australian Department of Defence.

"The Rover uses a global positioning system (GPS) and a scanning laser rangefinder for navigation, positioning, and obstacle detection and avoidance," Dr Brooks

"Sitting atop the robotic platform is a human-sized 3D mannequin made from durable plastic to withstand hundreds of shots. When a mannequin is hit it drops backwards before resetting itself automatically.

"High-speed wireless ethernet is used to communicate with a central control station and with other robots. This allows remote monitoring, interactive control, and multi-robot coordination.

"On-board intelligence allows the robots to react quickly to unexpected situations.

"Importantly, the Rover system has strong potential not only for armed forces training worldwide but also for law enforcement and security agencies."

The NSW Government is helping Marathon Robotics target its technology to a range of international export markets including Europe.