re² Robotics Engineering Excellence

**FOR IMMEDIATE RELEASE**

# Barrett Technology and RE2, Inc. Selected by DARPA to Lead the Autonomous Robotic Manipulator (ARM) Research Program

**CAMBRIDGE, MA and PITTSBURGH, PA** – March 16, 2010 **–** The Defense Advanced Research Projects Agency (DARPA) recently announced a new initiative to create robotic autonomous manipulators that mimic human arms and hands. DARPA will use RE2, Inc. and Barrett Technology, Inc, to provide the program's government furnished hardware, software, integration services, and manipulation expertise for this multi-year robotics research program. Both are leading U.S.-based manipulator companies with numerous years of expertise.

Barrett Technology will provide the ARM effort's manipulation hardware, including the Barrett WAM™ Arm and BarrettHand™. Barrett makes lightweight force-sensing arms that are specifically designed to operate near and with people by making its drives inherently backdrivable. RE2 will provide manipulator integration services, applying its manipulation expertise to integrate the Barrett technology with various sensing technologies and a mobile platform for selected teams to utilize throughout the program. The goal of the program is to surpass the performance of manipulation tasks currently performed by remote manipulation systems that are controlled directly by a human operator.

"We are thrilled to combine forces with such a capable team as RE2," adds William T. Townsend, CEO of Barrett Technology, Inc.

"DARPA's use of RE2 to lead the integration effort for the ARM program is a testament to our manipulation and robotics expertise," states to Jorgen D. Pedersen, president and CEO of RE2, Inc. "We are honored to be involved in this program and look forward to working with leading research organizations to advance the state of the art for manipulation."

For the ARM program, DARPA will select a set of teams that will be given identical government furnished hardware platforms and will be tasked to develop algorithms to maximize the manipulation capability. A three-phase program will develop the best autonomous software for performing complex manipulation tasks. DARPA's overall technical objective for the ARM program is to enable high-level control of "hands on" contact tasks, with the mobile manipulation system following a high-level script and performing low-level subtasks on its own. For example, autonomously control high-degree-of-freedom robotic arm(s), wrist(s) and hand(s) to grasp and manipulate objects to perform tasks, including mobile navigation, as necessary.

DARPA's goal of this effort is advancing the science of autonomous mobile manipulation, and both Barrett Technology and RE2 are proud of their involvement to help facilitate that effort.

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**About Barrett Technology, Inc.**
Barrett Technology, Inc. is the technology leader in manufacturing high-performance robotic manipulators for emerging applications requiring superior versatility. For more information, contact Bill Townsend at wt@barrett.com.

**About RE2, Inc.**
RE2 is a leading developer of Intelligent Modular Manipulation Systems. RE2's mission is to advance the state of the art of mobile manipulation. RE2's manipulation systems and components are scalable and modular. RE2's development efforts are focused on creating plug-n-play manipulation systems and end-effectors that are interoperable with existing and next-generation robotic platforms. For more information, please visit www.resquared.com, email info@resquared.com, or call (412) 681-6382.