





## DARPA: REDEFINING POSSIBLE DEBUTS AT MUSEUM OF SCIENCE AND INDUSTRY, CHICAGO

New temporary exhibit showcasing technological breakthroughs opens May 5, 2016

**CHICAGO (May 5, 2016)**—The United States' Defense Advanced Research Projects Agency (DARPA) is the focus of a new and first-of-its-kind exhibit at the Museum of Science and Industry, Chicago (MSI). *DARPA: Redefining Possible* highlights some of the remarkable innovations that have kept the United States at the forefront of technology. From robotics to GPS devices, the Internet to voice recognition software, this exhibit showcases the agency's history, rare artifacts and hands-on activities. The exhibit opens May 5, 2016 and runs through September 5, 2016, and is included in Museum Entry.

"This is the first time that DARPA is displaying their work to the public, and many people may not realize that they use DARPA-created innovations every single day," Director of Collections Kathleen McCarthy said. "MSI consistently displays and demonstrates the greatest advancements in technology, and we're excited to host this exhibit that puts DARPA's world-altering work on display."

DARPA was founded in 1958 in response to the Soviet Union's launch of Sputnik, the world's first artificial satellite. The agency was created to position America as a leader in discovering new areas of science and engineering relevant to national security.

In this self-guided exhibit, guests can learn more about the history of the agency alongside one-of-a-kind tech artifacts on display.

Museum guests will explore real artifacts as part of DARPA's past and continuing work including:

- Atlas, the 6-foot-2, 350-pound, high-mobility humanoid robot designed to navigate rough outdoor terrain and provide assistance after natural disasters.
- Spot, an agile autonomous quadruped that is the world's most technically advanced robotic dog.
- The DEKA Arm System, a sophisticated prosthetic arm that matches the size and weight of an average female arm, contains its own power supply and can be worn comfortably by its user.
- A large-scale model of the Sea Hunter, DARPA's recently christened 132-foot submarine-tracking ship, designed to cruise for thousands of kilometers and months on end without a single crew member aboard, alongside video of the vessel's first open-water speed trials.
- An intricate look at today's microelectronic chips, which help advance robotics and artificial intelligence research.
- An "air legs" exoskeleton device that provides the lower limbs of soldiers or others with rhythmic bursts of power to increase endurance and decrease injuries during long hikes with heavy loads.

• A look at the small, sophisticated electrode arrays used to help people with traumatic brain injury and assist in neurological control of prosthetic arms.

Hands-on activities allow guests to create their own robot in an interactive game. Create a virtual robot by mixing and matching parts to power and strengthen the 'bot, while learning how various sensors and limbs allow robots to complete a certain task. Learn more about innovations you might use daily, like the GPS in your car or the iPad you use at home, initially created by the agency. Activate areas on a smartphone that highlight technology first created by DARPA.

Throughout the exhibit, guests will also:

- Uncover how the modern-day cell phone operates, from lithium battery to processing design, voice recognition and high-performance display screens.
- Discover how military technology influenced today's video games, infrared night vision and more.
- Evaluate science fiction versus real technologies and explore how today's innovations differ from what is seen in popular culture.
- Learn about the engineers, scientists, mathematicians and others who work at DARPA and how the next generation of those careers will shape the future.

For more information on DARPA, visit www.darpa.mil.

The Museum of Science and Industry, Chicago (MSI), one of the largest science museums in the world, offers world-class and uniquely interactive experiences that inspire inventive genius and foster curiosity. From groundbreaking and award-winning exhibits that can't be found anywhere else, to hands-on opportunities that make *you* the scientist—a visit to MSI is where fun and learning mix. Through its Center for the Advancement of Science Education (CASE), the Museum offers a variety of student, teacher and family programs that make a difference in communities and contribute to MSI's larger vision: to inspire and motivate children to achieve their full potential in science, technology, medicine and engineering. Come visit and find your inspiration! MSI is open 9:30 a.m.–4 p.m. every day except Thanksgiving and Christmas day. Extended hours, until 5:30 p.m., are offered during peak periods. The Museum is grateful for the support of its donors and guests, who make its work possible. MSI is also supported in part by the people of Chicago through the Chicago Park District. For more information, visit msichicago.org or call (773) 684-1414 or (800) GO-TO-MSI outside of the Chicago area.