



In Brief With Boston Dynamics' President Dr. Marc Raibert



We tracked down the man of the hour, Dr. Marc Raibert, President, Boston Dynamics, to get a quick update on the SandFlea, RHex and the Legged Squad Support System (LS3), the successor to BigDog. The LS3 will be capable of carrying up to 400 pounds of equipment and fuel supplies for missions covering 20 miles and lasting a duration of 24 hours. It will use computer vision to follow a leader or GPS to travel to specific locations. The project, led by Boston Dynamics is being funded by

DARPA and the US Marine Corps and will take 30 months to develop. Dr. Marc Raibert will be speaking at the Military Robotics Summit taking place August 27-29, 2012 in Washington, DC. To find out more information, or to register visit: <http://bit.ly/J3m8hk>

IDGA: BigDog is the most advanced rough-terrain robot. What lessons have been learned since BigDog was created? How much closer are you to the goal of designing a robot that can go anywhere people and animals can go?

Dr Raibert: We learned a great deal building BigDog and doing experiments with it in the field. As a result of that work DARPA and the US Marine Corps funded us to develop the Legged Squad Support System (LS3). We just got the first model of LS3 working earlier this year and as part of a phase II effort, which just got started, we plan to do field testing of LS3 in conjunction with the Marines late this year and throughout next year.

IDGA: Tell us a bit about some of the latest robots you are working on. What are some of the advancements that have been made in the SandFlea, RHex and Atlas over previous rough terrain robotics systems?

Dr Raibert: In addition to LS3, which I just mentioned, SandFlea and RHex are both working their way through the advanced development and fielding process. RHex went through ATEC testing this past spring and is being tested in Afghanistan right now. SandFlea is part way through ATEC testing and we expect field testing to begin in a few months. These robots are examples of how advanced R&D focused on advanced mobility and dynamic control can make their way into useful applications that will help the warfighter.

IDGA: What are the technological capability requirements of rough terrain robots?

Dr Raibert: Existing conventional robots are quite limited in their mobility. As a result, dismounted soldiers are forced to operate without vehicle support on missions that take them into rough-terrain. Robots with advanced mobility, such as legged robots like BigDog and LS3, or other dynamic configurations such as RHex and SandFlea, offer new levels of mobility and new capabilities for warfighters.

To learn more about Military Robotics Summit, view the event brochure [here](#), the home page [here](#), or content center with more exclusive pieces [here](#).