

Standards Development for Wireless Communications for Urban Search and Rescue Robots*

Kate A. Remley¹, Galen Koepke, Elena Messina, Adam Jacoff
National Institute of Standards and Technology

¹ Corresponding author: ph. (303) 497 3652, email: remley@boulder.nist.gov
and

George Hough, Lieutenant
New York City Fire Department (FDNY),
Urban Search and Rescue (US&R) NY-TF1

In order to gather data in support of standards development for urban search and rescue robots, NIST is conducting a series of field tests to quantify the functionality and performance of various candidate robots. During these tests, manufacturers bring robots that may be appropriate for various urban search and rescue applications, and emergency responders put the robots through NIST-derived tests designed to measure their performance in key areas. During a set of field tests at the Montgomery County Fire Academy in Maryland in August 2006, members of the Electromagnetics Division and Intelligent Systems Division of NIST developed and carried out a uniform series of spectral analysis tests on each of the robots that participated in the event. We report here on results of this initial set of field tests of the wireless link.

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