## **UWB Precision Asset Localization (PAL)**

Multispectral Solutions, Inc. (MSSI) was founded in 1988, by President and CEO Dr. Robert J. Fontana (Ph.D. Stanford).

MSSI is recognized worldwide as the industry leader in Ultra Wideband (UWB), an emerging wireless technology for communications, precision localization and radar applications. Throughout its nearly 15 year history, MSSI has developed a strong reputation for quality and innovation. Our clientele includes a wide variety of Government agencies, military organizations and commercial corporations.



The real-time inventory and tracking of assets is a problem that plagues both military and civilian operations alike. MSSI has developed an Ultra Wideband (UWB) precision asset tracking and location system that permits precise, 3-D localization of objects in a wide variety of operational environments.

Originally developed for DARPA and the U.S. Navy, the system has been successfully fielded onboard a Navy cargo ship to accurately track and identify ISO containers within the ship's hull. Achieving a positional accuracy of approximately one-foot, even in the presence of severe multipath (i.e., RF reverberation), the system far outperformed conventional spread spectrum implementations.

MSSI has partnered with PARCO Merged Media (Portland, ME) to develop an asset tracking system for the health care industry. The UWB geolocation system allows hospitals and emergency personnel to know the exact status and location of patients, caregivers, and essential equipment to resolutions of one foot. By their unique design, MSSI's UWB devices are especially well suited to RF spectrum-sensitive areas of the hospital. The system is also suitable to warehouse, sea freight, supermarket, retail store, robotic vehicle, manufacturing and security applications.

The UWB Precision Asset Geolocation (PAG) tag has a size of approximately 1.75" diameter and 1" height, and has an operational life of more than 5 years using a small button cell battery.

For further information on the UWB PAL system, or other licensing opportunities, please contact Mr. Rob Mulloy at (301) 528-1745 or rmulloy@multispectral.com.

20300 Century Blvd., Suite 175 Germantown, MD 20874-1749

> Phone: 301-528-1745 Fax: 301-528-1749 www.multispectral.com