



Navy SBIR/STTR Success



Advanced Personal Communicator (APC) and the Shipboard Wireless Maintenance Assistant (SWMA)

The use of SWMA technology for capture, processing and analysis of maintenance data reduces manpower task requirements an average of 30%.

Topic Number: N01-093

SBIR Investment:
\$696,923

Phase III Revenue:
\$6,749,414

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About the Technology:

The Shipboard Wireless Maintenance Assistant (SWMA) is a rugged, handheld wireless device providing critical on-demand, onsite logistics and maintenance information to shipboard and supporting personnel. SWMA incorporates the latest in start-of-the-art technology for acquisition, display, and integration of operational, maintenance, and information management data, critical to meeting the demands of sustained operational and high intensity logistics support operations. It accomplishes this in a wireless configuration, providing capabilities that were not previously available in the logistics and maintenance support areas. The SWMA technology evolved from the original Advanced Personal Communicator (APC), which was Cybernet's innovative solution to providing problem-solving collaboration between personnel during any given repair session. The SWMA platform includes a high-performance computer in a tablet/PC form factor, bringing tablet/pad technology to the end user in a highly ergonomic package.

Naval Benefit

Today's Sailors are operating in very demanding, time-sensitive environments, requiring state-of-the-art maintenance and logistics tools. SWMA technology is not only timely, but is also focused exactly where it needs to be on the valid mission-operational needs of the Sailor. SWMA enhances productivity, and gives the Sailor operating in intense environments, the tools required to ensure combat readiness. SWMA is critical technology for the Navy's Integrated Ship Control System, and enables the Navy to meet its objectives of improving readiness, ensuring operational effectiveness, improving Sailor productivity and reducing Naval manning requirements.

Transition

The SWMA was developed under Phase I and Phase II SBIR contracts with the U.S. Navy as a prototype wireless mobile shipboard maintenance system for Sailors. SWMA is now an active, ongoing Phase III product and project that provides full MIL810F rugged portable stations and test modules; worksite support through portable digital displays for graphical data such as schematics; wireless access to maintenance databases; an integrated set of diagnostic tools; and real-time sharing of duplex audio and video between technicians and remote experts. SWMA technology is currently in use on PEO SHIPS, PEO CARRIERS, and within the Army's Warfighter Focus program (WFF). Additionally, Cybernet has optimized this technology for maintenance and logistics, offering an assortment of modular diagnostic tools to expand the capabilities of the hardware to fit the job such as cameras, oscilloscopes, barcode readers and RFID scanners.



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