APPLICATION STORY

The Navy's LCAC Service Life Extension Program & UEI's Rugged Systems

FINDING SOLUTIONS FOR THE LCAC SLEP

The Navy's Landing Craft Air Cushion (LCAC) are rugged amphibious vessels designed to bring warfighters, troops, and critical supplies ashore from surface ships. As part of the LCAC Service Life Extension Program (SLEP), the Navy needed a hardened system to mitigate obsolescence and increase dependability for 75 LCAC crafts in the fleet. A Command, Control, Computers, Communication and Navigation (C4N) SBC4 Control, Alarm and Monitoring System (CAMS) was needed, as well as crucial failsafe assurances and the ability to handle a variety of I/O signals. UEI offered a commercial-off-the-shelf (COTS) solution to meet the stringent requirements of the Navy.

THE IMMEDIATE CHALLENGES

1. Navy SLEP required a rugged and flexible COTS data aquisition (DAQ) and control system that could easily be rehosted and deployed.

2. The DAQ and control system had to run the hardened VxWorks operating system, support redundant Ethernet, and meet a specific list of required I/O for successful operation.

3. The system had to be tested to both MIL-STD-810 and MIL-STD-461 specifications.

UEI'S PATHWAY TO SUCCESS FOR LCAC SERVICE LIFE EXTENSION

☑ UEI was selected for our UEI-CAMS COTS embedded military rack system that included the required MIL-STD-1553 I/O, analog and digital I/O, RS-485, and more.

☑ The UEI-CAMS is a deployment of UEI's COTS UEIPAC 1200-MIL 12-slot I/O chassis. The unit includes 11 I/O boards selected specifically to match the LCAC application. Plus, with 2 independant ethernet ports, redundancy for fail safes could be achieved.

☑ UEI supported the VxWorks operating system, which was required by the Navy. All the drivers for the boards are provided in UEI's VxWorks BSP which is included with the UEI-CAMS.

END RESULT

UEI PROVIDED THE NAVY LCAC FLEET WITH RUGGED AND FLEXIBLE DAQ AND CONTROL SYSTEMS THAT ENSURE SYSTEM RELIABILITY AND LONGEVITY.

[WIN] UEI's rugged and dependable hardware met and exceeded expectations.

[WIN] UEI's 10-Year Availability Guarantee removes the worry of obsolescence and with UEI's hardware warranty, extendable to 10-years, the LCAC can operate for years to come.

[WIN] UEI's was tested to and met the MIL-STD specifications - TRL 9 designation achieved. UEI hardware is so dependable that the UEI-CAMs are still in use on the fleet today.

[BONUS] UEI solutions helped reduce maintence time by an impressive 75%.

ASK US HOW UEI CAN DO THE SAME FOR YOUR ORGANIZATION!

United Electronic Industries
AMETEK

sales@ueidaq.com • (508) 921-4600
249 Vanderbilt Ave, Norwood, MA 02062

ueidaq.com