

## APPLICATION FOCUS

### ► Navigating safely through the vision of technology

Never has the Azonix service byline "Navigating safely through the vision of technology" been more literally demonstrated than through the use of MP2030C for Bridge Wing Displays on the US Navy CG47 Class ships.

The MP2030C is Azonix' fourth-generation, ultra-rugged computer display that has passed MIL-S-901D, Grade A shock tests. This Grade A display has survived the barge explosion and hammer test and is the most full-featured military computer display available today for both indoor and outdoor use in direct sunlight, severe weather conditions, and extreme temperatures.

CGs perform many maneuvers that could pose extreme danger to equipment and personnel. Better monitoring and display equipment creates a greater margin of safety in this application when fueling and docking.



The MP2030C replaced obsolete displays that were not as weather-resistant and were difficult to modernize or service. The ready upgrade path of the MP2030C mitigates the cost of obsolescence common with other display equipment.

The long service life and low maintenance expense on the MP2030C result in a low cost of ownership for enhanced capabilities and benefits.

This Bridge Wing Display application includes:

- **Docking guidance** - collision avoidance, maneuvering assistance
- **Refueling maneuver control** - enables precision positioning for efficient and safe refueling underway

- **Location/azimuth monitoring** - overall better feedback for better navigation

The MP2030C was chosen for this application because the system surpassed all other competing equipment in these features:



- **Sunlight visibility** - The high brightness of the large LCD display is automatically adjusted for ambient light conditions. The screen does not go black in direct sunlight. It brightens to be plainly visible even at an angle and viewed from several feet away. It also adjusts for nighttime operations.
- **NEMA 4 fully sealed enclosure** - The MP2030C uses low-heat components and built-in features that disperse heat directly through the enclosure without being open to outside air.
- **Weather/EMI/RFI resistance** - The system is resistant to lightning, extreme weather (ice/sleet/sun), and extreme temperatures (operating from 0°C to 50°C) in direct sunlight.

The MP2030C meets EMI/RFI requirements to MIL-STD-461E and has exceptional MTBR and long service life under extreme environmental conditions, making it overall an outstanding investment in technology for this safety- and efficiency-enhancing technology.

The system is modular in design, with quick I/O connection. Technical personnel are easily trained on installation, use and maintenance.

## Shows



**Navy League Sea-Air-Space**

**April 3-5, 2006, Booth #3400B**

Marriott Wardman Park, Washington, DC

**AUSA, October 9-11, 2006**

Washington Convention Center Washington D.C. (with Crane Defense)

For more information, please contact:

**Russ Allen**, Director of Business Development, Military

978.670.6300 • Cell: 978-973-1397

HMI Solutions is a newsletter dedicated to the application of leading HMI, computer and display technology in Armed Forces applications.

# HMI solutions

**CRANE**

**AZONIX CORPORATION**

A DIVISION OF CRANE CO.

# Product Expo

# Comment

## ▶ TC2500C - Rugged Thin Client Portable

The **TC2500C Thin Client** provides sophisticated operator interface in rugged locations. The system is portable and features ultra-fast install and startup. The TC2500C is in use in hundreds of U.S. stationary and mobile installations in locations around the world where vibration, shock, EMI/RFI and extreme environmental conditions are present.



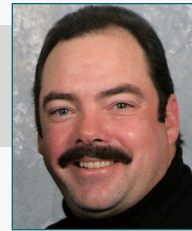
- **Vibration/weather/EMI/RFI resistant**
- **NEMA 4 sealed enclosure**
- **Wireless radio options**

Rapid deployment and reliable duty in the field are absolute standards for military computers. The TC2500C provides a highly rugged thin client interface with low ownership cost.

TC2500C systems are transportable and have raised the level of

operator interface available in such applications as gen set monitoring, embedded computing, temporary base installation, and as an embedded display in larger equipment installations.

The TC2500C is truck/desktop/rack/trailer mountable and offers advantages to system design that employs mobile operator interface and HMI for temporary or permanent bases. Its accuracy, modular design, I/O versatility and rugged, long service life make many new HMI applications feasible. It has quick connect I/O options and wireless capability, making the system one of the most versatile interfaces available for rugged military duty.



## Welcome to HMI Solutions

*Russ Allen, DBD - Military*

As we move into 2006, Azonix would like to thank our customers for our most successful year in 25 years that we have been producing rugged HMI equipment. I would like to introduce myself as the new Director of Business Development for our military customers, and extend my wishes to work with you in meeting your needs in the coming year and beyond.

I've spent my thirty year career working with the Department of Defense and defense contractors. With my six years as a Navy shipboard engineer and twenty-four more working for providers of rugged products for military applications, I am pleased to join the Azonix team, who bring exciting new technologies to our military, along with a tireless passion for customer service.

Azonix ultra-rugged computers and displays serve in mission-critical shipboard applications. In service on CVN's, CG's, and FFG's, they perform operator interface and monitoring for a variety of shipboard systems including propulsion control, maneuvering, machinery control and more. ProPanel systems also aid our ground forces in bringing sophisticated HMI to bases and temporary installations in the most rugged environmental extremes.

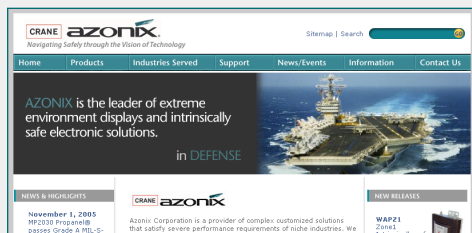
Azonix is a division of Crane Co., a Fortune 500 company supplying equipment to the Department of Defense and defense prime contractors. Gen. Donald G. Cook, USAF (ret.) sits on the Crane Board of Directors. Please contact me directly with any challenge or question regarding HMI integration into any system you are running or developing.

**Russ Allen, Director of Business Development - Military**

## AZONIX NEWS & EVENTS

### Website Redesigned

▶ Azonix is proud to announce the release of our new website design on January 25, 2006. A year in the making, the company has worked to provide a highly informational, easy-to-use reference for our products and services, with detailed product views and overall ProPanel platform information.



The new site design groups information on application areas, such as Zone 1 operator interface, and Military case studies, wireless technology, etc. Surf's up! Surf on over and bookmark the new site for quick future reference to leading technology for HMI in Military applications.

[www.azonix.com](http://www.azonix.com)

## Amazing Facts

- MacArthur landed on Red Beach, Philippines on Oct. 22, 1944 exactly on the 100 year anniversary of a Baptist prediction of the return of Christ.
- The Lockheed SR-71A set a world speed record for jet aircraft in 1976 @ Mach 2.1
- The USS Bainbridge frigate built in 1962 was nuclear-powered.
- The ProPanel MP2030C will remain fully operational after taking a hit from 30 bowling balls dropped together from a height of 5 feet.

tell us the fact that is wrong and receive a complimentary copy of *Defending Freedom* (published by the Navy League - value under \$25) email your entry to: [quiz@azonix.com](mailto:quiz@azonix.com) (see [www.azonix.com/quiz](http://www.azonix.com/quiz) for details)

# HMI solutions

**CRANE AZONIX CORPORATION**

AZONIX CORPORATION • 23 OLDE MILL COURT • LITITZ, PA 17543  
800.967.5558 • [WWW.AZONIX.COM](http://WWW.AZONIX.COM)

©2006 ALL RIGHTS RESERVED. PRO PANEL® IS A REGISTERED TRADEMARK OF AZONIX CORP.