



Contact: Steven Graves  
(781) 461-8251 Ext. 350  
[sgraves@acumentrics.com](mailto:sgraves@acumentrics.com)

## **Earl Industries and Acumentrics Develop Power Supply for US Navy**

### ***Rugged, Reliable UPS Solution for Critical Shipboard Systems***

*(Westwood, MA – December 1, 2011)* Limited space, weight allowances, and the need to access components of an integrated system required a new solution. Acumentrics, working with Earl Industries, modified an existing Rugged UPS to power an innovative, vertically mounted voice-data-video (VDV) network node for the Nimitz Class Aircraft Carrier.

Due to the ever changing demands of communications and surveillance systems for military applications, it is imperative that power source suppliers like Acumentrics maintain strong engineering capabilities and nimble manufacturing processes. This along with the company's ISO9001:2008 certification meant that Acumentrics was the top choice to assist Earl Industries in fulfilling its contract.

According to Keith Hubble, MilCOTS Department Manager, Earl Integrated Power & Controls. "From the very beginning the Acumentrics team has been incredibly responsive to our requirements as well as the specifications of the contract." He went on to say that, "It has been an excellent experience, leading to a sound, trusting business relationship we plan to maintain for a long time."

While Acumentrics has fielded many shipboard UPS systems, the specifications for the VDV contract required significant modifications. After implementation of the adaptations, the newly designed unit was successfully tested and certified to MIL-STD-1399 and MIL-STD-461.

Physically, it had to conform seamlessly to the overall system and into a shock mount enclosure. The battery also needed to be user replaceable from the vertical orientation when the enclosure was in the "rack out" position.

In terms of changing internal components, the inverter portion of the Rugged UPS had to be integrated between the server and modem. This was accomplished through two alterations. First, the team developed a 1U battery pack that would mount in the vertical position. Next, a redesign of the chassis to eliminate the space of the existing battery

compartment to save room and provide cabling and connectors to tie into the separate battery pack. Other features were added including multiple AC inputs for redundancy.

“Our relationship with Earl Integrated Power & Controls is a prime example of how Acumentrics can work closely with a partner to modify an existing product to meet demanding specifications,” said Steven Graves, vice president of sales and marketing at Acumentrics. “It was a collaborative effort, not without challenges. In the end, we delivered a certified product, on-time, which met all of our customers needs and further strengthened the relationship between our companies.”

### ***About Earl Integrated Power & Controls***

Earl Integrated Power & Controls, a division of Earl Industries, is a leader in the design, fabrication and installation of Mil-Spec solutions based on commercial-off-the-shelf products and open standards. It also designs and manufactures rugged Hybrid Renewable Power solutions for United States Expeditionary Forces, and Power Distribution and Security Systems for the United States Navy. The company installs and supports its products globally.

### **About Acumentrics**

Acumentrics Holding Corporation, headquartered in Westwood, Massachusetts, consists of two wholly-owned subsidiaries: Acumentrics RUPS (Rugged Uninterruptible Power Supplies) and Acumentrics SOFC (Solid Oxide Fuel Cells). The RUPS subsidiary is a trusted market leader in rugged AC and DC power sources for harsh and combat environments as well as heavy-duty industrial applications. RUPS products provide clean power conditioning and battery backup when reliability is mission-critical. In business since 1994, Acumentrics is a preferred supplier of US-made power electronics to most of the world's largest prime defense contractors.

The SOFC subsidiary develops and manufactures a line of clean, reliable electric power generators with DC or AC outputs up to 10kW. These electrical power generators apply a proprietary tubular, ceramics-based fuel cell technology to serve remote, off grid and military applications. Acumentrics generators efficiently convert commonly available propane, natural gas or liquid fuels directly to electricity without combustion.

Acumentrics Holding Corporation is an ISO 9001:2008-certified company. For more information, please visit [www.acumentrics.com](http://www.acumentrics.com), or call 800-332-0277 or +1-781-461-8251.