



LIFECYCLE ELECTRONICS REPAIR AND TESTING  
**You know your equipment.  
We know how to make it last.**



## ADVANCED LIFECYCLE ELECTRONICS REPAIR AND TESTING (ALERT) LAB

As the industry expert for Printed Circuit Board (PCB) repairs, modifications, and testing, W R Systems, Ltd. (WR) substantially extends the life of essential systems and components, saving money and time for our customers.

For decades, WR's skilled ALERT laboratory team has provided test and repair of complex electronics assemblies for military maritime and commercial products. We have earned a reputation for fixing almost any part or system. In instances where we cannot repair, we design a solution in-house, or provide a form, fit, and function replacement based on current technologies. To ensure efficiencies and innovation, the ALERT lab is co-located with WR's Engineering Center of Excellence.

### Why replace, when you can repair with new circuitry?

We specialize in circuit card and miniature/microminiature (2M) repair of core technology service for shipboard systems, including: radios; transmitters; radar data distribution and navigation suite components and subassemblies; and sensors and controls.

### Services

#### Repair:

- Most electronic products, including PCBs, power supplies, displays, drives, and controllers

#### Modification:

- Implementation of Engineering Change Orders
- Analysis for application ruggedization and parts obsolescence
- Engineering services and technical refresh for aging circuitry

#### Testing:

- Test setups to assist in active troubleshooting down to the lowest replaceable component
- Development and implementation of rigorous acceptance test plans
- Quality diagnostics using Huntron Protrack and AN/USM-676 PinPoint In-Circuit Functional Tester

#### WR Designed Products:

- WRS-SPWH.03 (Special Purpose Wiring Harness)
- WRS-SPWH.03FC (Special Purpose Wiring Harness Field Change Kits)

- Power Management
- Propulsion Control
- HVAC/Fire Monitoring and Control
- Cargo Monitoring and Control
- Communication Systems
- Propulsion Control Systems
- Alarm Monitoring and Control Systems
- Ballast Water Management
- Anti-Heeling System
- Tank Level Gauging
- Navigation Systems
- Switchgear
- Engine Safety

#### Dedicated Resources

- In-house team of expert technicians
- Engaged engineering department
- Fully equipped laboratory facilities
- Advanced diagnostic equipment

#### Distinct Capabilities and Offerings


- The most advanced circuit card design, repair, re-engineering, troubleshooting, and fault isolation to the component level
- Design of new circuit card assemblies (CCAs)
- Full test and repair of Original Equipment Manufacturer CCAs
- Combined power and data harness for special applications
- Renowned obsolescence management and sustainment



WR is registered ISO 9001:2015 and appraised  
CMMI® Dev. Maturity Level 3



**CMMI DEV / 3**  
Maturity Level 3



**Request a  
Repair Estimate**

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