

#### Performance Support System



## Benefits of LandMARC Membership

- Input on next-generation research areas
- Notification of
  - short courses
  - conferences
  - workshops
- Access to published reports
- Internship program

## Join Our Team

To learn more about becoming a member of LandMARC, visit our website at [landmarc.gtri.gatech.edu](http://landmarc.gtri.gatech.edu).

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From data...

knowledge.

From knowledge...

performance.

**Mission** — LandMARC develops support systems that deliver quality information to decision-makers on- or off-equipment and off-site.

**The Logistics and Maintenance Applied Research Center (LandMARC)** helps commercial and government organizations enhance the performance of their existing systems, while reducing total operating costs.

Based at the Georgia Tech Research Institute, LandMARC includes members from industry, academia and government. Members' information technology needs help set the directions of the center's research. LandMARC scientists and engineers create solutions by applying multidisciplinary analysis, simulation and modeling technologies to existing systems.



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## Areas of Expertise

### Integrated Logistics

- Scalable, open architecture, tailored systems
- Electronic Performance Support System (EPSS) — for maintainers, logisticians, medical providers, environmental industries, emergency medical technicians and health care staff
- Integrated data environments — using XML, SGML, Java and database tools
- Human Computer Interaction (HCI) and usability analysis

### Predictive Diagnostics

- Programmable prognostics and health monitoring systems
- Integration of embedded sensors, data collection and diagnostic steering systems
- Evolutionary algorithm approach to data mining
- Stimulator development for avionics and electro-optics systems

### Supply Chain Management

- Web-based automated information systems — for total asset management
- Automated identification technology — for in-transit visibility
- Supply chain integration — for the Maintenance Repair Overhaul (MRO) environment
- Modeling and simulation techniques for Vision 2010 and beyond

### System Sustainment

- Programmable, PC-based, planning/data recording system — for optimizing maintenance task performance
- Automated obsolescence and system sustainment analysis tools (Sustain™)
- Development of new non-destructive testing (NDT) instrumentation and procedures

## Success Stories

### Maintainers Electronic Performance Support System™

- Job performance enhancement
- Interoperable interface
- Decision support

### Firefly

- Programmable flight data recorder
- Real-time data processing

### Wildcat

- Web-based RF ID and bar code tracking system
- Developed for the U.S. Army

### Sustain

- Obsolescence decision tool
- Cost, benefit, analysis model

### Model 3 UV Simulator

- On-platform testing
- Reduction of developmental and operational test and evaluation costs (DTE/OTE)



Emergency Medical Technicians