



Ridgetop Group Inc

MRO Solutions

Aircraft Maintenance, Repair, and Overhaul (MRO) Engineering Solutions

Aircraft systems require regular monitoring and maintenance to prevent operational failures. As aircraft age, electronic and electromechanical systems wear out and require more frequent maintenance, repair, and overhaul. This raises the need for thorough MRO engineering solutions providing timely identification of maintenance issues and efficient inventory management. In addition, the industry needs efficient MRO solutions for newer, more demanding systems requiring less frequent but more complex services. Ridgetop offers exclusive MRO solutions to support MRO service centers and their customers.

Overview

Ridgetop is a leader in providing innovative solutions to the aerospace industry. As part of its engineering services, Ridgetop offers high-level technology and tools supporting MRO success. Ridgetop's technology addresses the growing need for new techniques and tools that provide higher quality and more effective MRO services.

Benefits

Our MRO solutions and skilled engineering team can provide valuable benefits to your operations through:

- Tools for providing fast identification and isolation of faults
- A technical team experienced in solving complex diagnostic and prognostic issues
- Cost-efficient solutions for increasing reliability
- Condition-based maintenance (CBM) solutions to reduce downtime and improve mission availability
- Seamless integration with the USAF's Versatile Depot Automatic Test Station (VDATS) platform
- Proven supplier of prognostics, diagnostics, troubleshooting, and anomaly detection

Exclusive MRO Offerings

Ridgetop has a broad range of expertise in identifying the root cause of problems based on electrical and mechanical symptoms, and we have developed products and technologies to support effective and efficient MRO services.

The **Sentinel Suite™** family offers several product lines of sensors, reasoners, and visualization software tools for advanced diagnostics and prognostics to minimize maintenance costs. Sentinel Suite includes:

- **Sentinel Power™** monitors, analyzes, and predicts impending failure in aircraft power systems. The Sentinel Power line includes Ridgetop's new CPT 1000™ instrument, an avionics troubleshooting tool for advanced power system testing and fault isolation.
- **Sentinel Motion™** wirelessly extracts degradation signatures from vibrating/rotating components, for example, from deep within helicopter transmissions.
- **Sentinel Interconnect™** detects interconnect degradation and intermittencies in PCBs, connectors, and wiring.

In addition to the rich set of tools available within Sentinel Suite, Ridgetop also offers:

- **Expert Troubleshooting and Repair System (ETRS™)**. A troubleshooting solution for identifying and reducing mean time to repair (MTTR) of "bad actors" in avionics and other electronic systems.
- **Robustness Assessment System**. Innovative Robustness Assessment for Design (RAD™) tool for aircraft electrical power systems (EPS) to meet system-level safety, reliability, maintainability, and energy optimization requirements at design time.
- **Engineering Services**. Ridgetop offers customized services to address specific maintenance depots' needs.
- **Testing**. Expert design analysis and testing services to identify physics of failure and root-cause analysis.
- **Reporting and Analytics**. Prediction methodologies and impending failure alerts support the maintenance decision-making process.





Why Ridgetop

With 14 years of experience delivering new technologies to systems integrators, OEMs, and government agencies, we have been able to identify and solve key issues in electrical and electronic systems. Our technology reduces the frequency of No Fault Found (NFF) and Could Not Duplicate (CND) conditions, and improves overall reliability and robustness.

- **Advanced Electronic Prognostics.** Ridgetop is a world leader in providing advanced electronic prognostics and health management (PHM) solutions.
- **Domain Experience.** Our highly trained and skilled engineering team has expertise in designing tailored solutions for complex systems.
- **Built-in Self-Test (BIST) Expertise.** The company has provided accurate and reliable BIST solutions for critical applications to major OEMs.
- **Physics of Failure.** Deep knowledge of physics of failure for electronics.

Relevant Certifications

Ridgetop Group is compliant with industry and aerospace management and quality systems standards.

- **Certifications.** We are certified in ISO 9001:2008 and AS9100C for engineering, research & development, electronic prognostics, and integrated circuit design.
- **Accreditations.** We are accredited by the U.S. Department of Defense as a Category 1A Trusted Supplier of Design Services for Integrated Circuits.



Worldwide Locations

Ridgetop Group Inc. has support and sales locations in Belgium, Japan, China, Taiwan, South Korea, India, and the United States.

For office locations and contact information, please call the corporate headquarters at +1 520 742 3300 or visit us on the web: www.ridgetopgroup.com

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