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## FOR IMMEDIATE RELEASE

## Ridgetop Group Awarded Design Tool Contract by U.S. Air Force

TUCSON, Ariz. — August 27, 2012

Ridgetop Group, Inc. announced today that it was awarded a contract by the U.S. Air Force Research Laboratory (AFRL) for the development of a "Power System Robustness Assessment Tool for All-Electric Aircraft." This contract was negotiated under a Phase II Small Business Innovation Research (SBIR) program, and extends over a two-year performance period.

This innovative design tool will fill a key requirement in helping designers optimize the reliability of electrical and electronic systems within the aircraft. In addition to avionic systems, hydraulic control technology is being replaced by electrical counterparts to reduce aircraft weight and to improve performance. The complex routing of electric power sources to their loads through the aircraft requires careful load distribution, with circuit protection measures and consideration for varying levels of redundancy. As the internal systems degrade with age and usage, a more accurate determination of robustness is required. Robustness considers the degree of degradation module-by-module, and provides a means of assessing the overall operational readiness of the aircraft to meet system safety, reliability, maintainability, and energy optimization requirements in each design stage. The Principal Investigator, Dr. Byoung Uk "Tim" Kim, received his Ph.D. in Electrical and Computer Engineering from the University of Arizona and works in Ridgetop's Advanced Research Group.

According to Sonia Vohnout, Director of Advanced Diagnostics & Prognostics Division, "Conventional reliability measures such as mean time between failures (MTBF) have been found to be inaccurate when analyzing complex systems and the effects of environmental stresses on them. We are pleased to receive Air Force support for the development of this critical tool. We have worked with a number of aerospace firms over the years and we anticipate continued interest from both military and commercial aircraft manufacturers. We will be working closely with these firms to make sure that our tool meets their usability requirements. We anticipate large potential in this product that will contribute significantly to our continued growth."

## **About Ridgetop Group, Inc.**

Established in 2000, Ridgetop Group is a Tucson, Arizona-based firm that produces electronic solutions for harsh environments and challenging applications. The firm is qualified as an aerospace supplier under its AS9100C certification, and became a Category 1A Trusted Supplier under the DoD's Trusted Foundry Program in 2010. A privately held firm, Ridgetop operates two divisions in Tucson, and has a related subsidiary firm based in Europe near the European Space Agency facilities.

For more information, please visit Ridgetop's website at<u>www.RidgetopGroup.com</u> or contact information@ridgetopgroup.com.