Ridgetop Group, Inc.
6595 North Oracle Road
Tucson, AZ 85704
Phone: 520.742.3300
Fax: 520.544.3180
www.RidgetopGroup.com

FOR IMMEDIATE RELEASE

Ridgetop Group's SJ BIST Solder Joint Fault Monitor to be Flight-Tested by NASA Research Center

TUCSON, Ariz.—May 17, 2010

Electronic prognostics technology leader Ridgetop Group, Inc. announced that the NASA Dryden Flight Research Center in Edwards, Calif., will begin rigorous flight-testing this year of its SJ BIST™ (Solder Joint Built-In Self-Test™) technology. NASA Dryden has built a new Solder Joint Health Monitoring Testbed, incorporating Ridgetop's technology, that it will operate in flight.

Ridgetop Group developed SJ BIST to monitor the health and degradation of selected solder joints in electronic circuit boards. In independent laboratory tests conducted by major aerospace and automotive firms, SJ BIST was proven to detect and report instances of high resistance in electronic control systems, including intermittent opens, with 100% accuracy. Such intermittencies, when occurring in critical systems, can cause catastrophic failures.

According to NASA Dryden Instrumentation Engineer Michael M. Delaney, NASA Dryden plans to conduct the flight tests in 2010 on board one of its F-18 research aircraft, such as the F/A-18 #852 shown in the illustration.

NASA Dryden Flight Research Center Photo Collection
http://www.dfrc.nasa.gov/gallery/photo/index.html
NASA Photo: EC00-0355-12 Date: December 29, 2000 Photo by: Lori Losey

NASA Dryden's F/A-18 #852 in flight.

"NASA is testing the true advancement in electronics reliability that SJ BIST provides – the ability to detect electrical fault anomalies caused by total fractures of solder joints," said Ridgetop Group Division Manager Phil Davies. "SJ BIST also enables ownership cost savings through reduction of Could Not Duplicate or No Trouble Found maintenance troubleshooting issues."

With real-time, in-service solder joint monitoring, Ridgetop's SJ BIST solution predicts the eventual failure of any application and package type that uses digital read/write input/output (I/O) ports. Exemplary applications are those using field programmable gate arrays (FPGAs), microcontroller units (MCUs), microprocessor units (MPUs), and application-specific integrated circuits (ASICs); and exemplary packages are grid arrays such as plastic-type ball grid arrays (PBGAs, PGAs, BGAs), columnar grid arrays (CGAs), and ceramic columnar grid arrays (CCGAs).

Ridgetop initially developed SJ BIST under a Department of Defense Small Business Innovation Research (SBIR) contract from the Naval Systems Air Command (NAVAIR) Joint Strike Fighter Program.

About NASA Dryden

Located at Edwards Air Force Base in California, the Dryden Flight Research Center is NASA's primary center for atmospheric flight research and operations. NASA Dryden is critical in carrying out the agency's missions of space exploration, space operations, scientific discovery, and aeronautical research and development (R&D).

About Ridgetop Group

Ridgetop Group, Inc. is the world leader in providing advanced electronic diagnostics and prognostics solutions, design services for harsh environments, and built-in self-test (BIST) solutions for mission-critical applications. Founded in 2000, Ridgetop has built an impressive list of commercial and government customers in North America, Europe, and Asia.

For more information, please contact Phil Davies, Director, Sales and Marketing at 520-742-3300, phil.davies@ridgetopgroup.com, or visit our website at www.RidgetopGroup.com.

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