



News

For Immediate Release

For more information, contact:
Bruce G. Montgomery, President
Bruce.Montgomery@SyntonicsCorp.com
1.410.884.0500 x201

Wireless Strain Gage Technology Advances to Phase II

COLUMBIA, MD. November 1, 2006 . . . Syntonics LLC, based in Columbia, Md., announced today it was awarded a Phase II STTR (small business technology transfer) contract to prototype a wireless strain gage system that can be used to test and monitor compressor blades in a jet turbine engine. Syntonics is teamed with the ElectroScience Laboratory of The Ohio State University for this work. The Air Force Office of Scientific Research is managing this two-year project for the Air Force Research Laboratory at Wright Patterson AFB.

The goal of the project is to prototype an externally powered strain gage that wirelessly transmits its measurements to a data collection system. Strain gages are used to measure the deformation of stressed parts. An earlier Phase I STTR project demonstrated the feasibility of a system design that combines microwave techniques; innovative power, instrumentation and antenna designs; and existing thin-film technologies. The technology would be broadly useful for wirelessly testing and monitoring all types of rotating machinery. Current technology generally requires connecting wires to each strain gage, which can be difficult and expensive when numerous gages are used, especially on rotating machinery. Although some bulky wireless data relay devices exist, today's technology is entirely unsuited for fast rotating machinery like a turbine engine.

"Continued Air Force funding for this project validates our technical approach," said Bruce Montgomery, president, Syntonics, "We continue to believe that a thin-film wireless strain gage has significant commercial potential and the Air Force's support will make possible real progress towards that goal. Our business model of winning technology development projects that lead to commercially successful products is working: we introduced two new products this year based on earlier DOD SBIR projects."

Syntonics is a defense electronics company that produces the FORAX RF-over-fiber communication systems for military radios and develops innovative antennas for specialty military applications. For more information on Syntonics and its products, please see the company's website at www.SyntonicsCorp.com.