

## **FOR IMMEDIATE RELEASE**

### **Composiflex FlexPLY® test results demonstrate superior fatigue life while maintaining consistent performance after millions of load cycles**

#### ***FlexPLY® material from Composiflex offers lightweight alternative for aerospace components***

ERIE, PA (April 29, 2009) - - Composiflex, global supplier of highly-engineered composite products, has completed the first round of FlexPLY® material fatigue testing with notable results. Testing was accelerated by deflecting material coupons to induce a stress that is more than twice the design stress level.

After 40 million load cycles under accelerated test conditions, FlexPLY® material coupons showed no sign of mechanical failure. Further, modulus of elasticity was maintained within 5% of the starting condition, as evidenced by deflection measurements recorded during alternating stress cycling. By comparison, samples of competitive material exhibited radical changes in deflection and mechanical failure after fewer than half the cycles sustained by Composiflex material.

These results have important implications for aerospace applications. FlexPLY® fiberglass material offers a typical weight savings of approximately 25% as compared to aluminum, while providing a tensile strength that is as much as five times that of steel. Carbon fiber material is available for even greater weight savings and strength. FlexPLY® material exhibits low notch sensitivity and inherent damping. The material has been proven at cryogenic temperatures; alternate resin systems can be chosen to accommodate high temperature applications. Unlike metals, composites can be designed to provide anisotropic material properties; fiber orientation can be tailored to the specific load spectrum of the application.

FlexPLY® material is suitable for fabrication of components for high fatigue environments such as struts, leading edge elements, and torsional couplings. Active projects include landing gear components for unmanned aerial vehicles.

Certified to ISO 9001:2000 and AS9100 quality standards, Composiflex designs and manufactures FlexPLY® composite components in Erie, PA and will be exhibiting at the Paris Airshow in June.

About Composiflex: For nearly a quarter century, Composiflex has been an innovator in the design and manufacture of advanced high-performance composites. Specializing in custom designs, Composiflex serves the aerospace, military, ballistic protection, medical, industrial, and recreational markets. The company is characterized by its “art-to-part” projects made possible by its knowledgeable engineering staff, broad materials expertise, cost-effective rapid prototyping methods, and range of modern manufacturing technologies. Certified to ISO 9001:2000 and AS9100 standards, Composiflex conducts operations in Erie, PA, USA and is presently expanding its facilities by more than 60%.

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