

# NEWS RELEASE

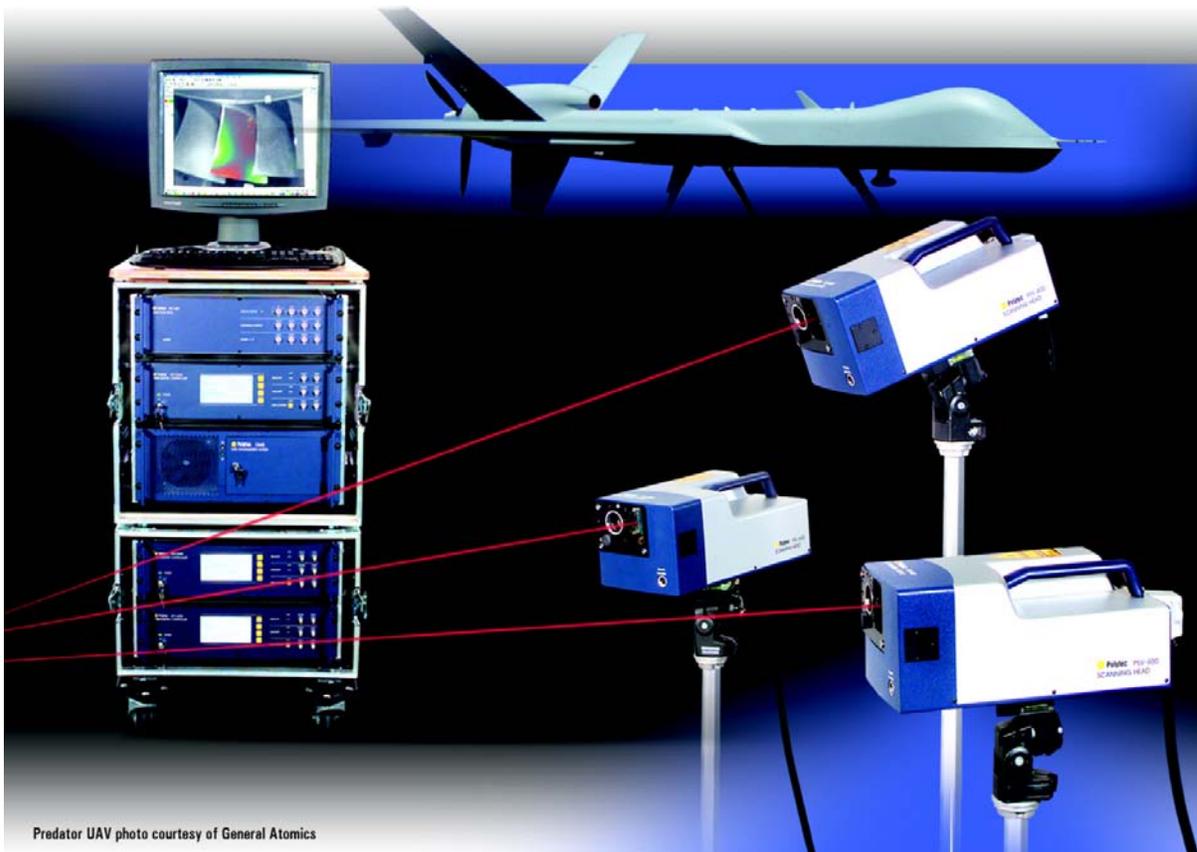


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## **AFIT Uses Polytec's 3-D Scanning Vibrometer To Measure Aerospace Structures**

**August 6, 2004 – Tustin, CA – Polytec, Inc.**, the leader in the design and manufacture of scanning laser vibrometers for experimental modal analysis, announces the newest application for the advanced **PSV-400-3D**. The Air Force Institute of Technology (AFIT), Wright Patterson AFB, Ohio will utilize this 3-dimensional scanning vibrometer to measure vibration characteristics of Unmanned Aerial Vehicles (UAV) and other intricate aerospace and vehicular structures. Polytec's first North American sale of this premier instrument to AFIT permits engineers to perform complete 3-D vector component analysis on complex structures.



Predator UAV photo courtesy of General Atomics

Simultaneous measurement using 3 independent sensor heads offers non contact vibration mapping at extremely high spatial resolution for aerospace, defense and automotive applications. By auto-positioning laser light instead of instrumenting tri-axial accelerometers (locating, attaching, wiring, phase-matching and eventually removing), the PSV-400-3D decreases setup time and simplifies data acquisition. This also improves measurement accuracy by eliminating mass loading and local stiffening while increasing sampling density and total points sampled to over 250,000. Other key features of Polytec's flexible system include intuitive animated data visualization and data compatibility with commonly used modal/FEM analysis programs.

The PSV-400-3D is an ideal experimental modal and structural analysis tool that utilizes the Doppler (frequency) shift of back-scattered laser light to determine the instantaneous velocity and displacement of a point on a vibrating structure. Important aerospace applications include measuring the vibration characteristics of intricate prototypes and preproduction products for design verification, characterizing manufactured or assembled airframe components for production and quality control, and evaluating aging aircraft structures for maintenance and repair.

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**Polytec, Inc.**, is a wholly-owned subsidiary of Polytec GmbH (Waldbronn, Germany). The company has delivered high-performance laser-based measurement solutions and products for R&D, industrial, medical, automotive, MEMS, semiconductor, photonics and aerospace markets for 30 years. Offering solutions in electro-optical instrumentation, Polytec's commitment to "advancing measurements by light" has earned the company numerous national and international awards. For more information, please visit [www.polytec.com](http://www.polytec.com)