



Experimental Design and Analysis Solutions (EDAS, Inc.) has just released the software portion of its new NSMS product NSMS-G4. NSMS which stands for Non-interference Stress Measurement System acquires blade time of arrival measurements to determine blade vibratory deflection levels and high cycle fatigue margins (HCF). Mr. William VanFossen, Vice President of Sales and Marketing says, "Adding this technology to our product line enhances our already robust line of vibration test products."

The design was derived as part of the Department of Defense (DoD) "Generation 4" (G4) development program undertaken to advance the art of NSMS. The NSMS design taken on by EDAS has been proven through over five years of testing at many DoD test facilities and is being transitioned to EDAS through a Cooperative Research and Development Agreement (CRDA) with the Arnold Engineering Development Center (AEDC) for technology transition of a laser-based vibration measurement system. Under the terms of the CRDA, EDAS will commercialize, support and partner with AEDC in the continued development of the technology. AEDC benefits through commercial support of the technology, leveraged development and royalties. Additionally, the United States Air Force assures full use of technology sponsored by a federal laboratory. "This is our second CRDA with AEDC and demonstrates our commitment to offering advanced technology products to our customers. NSMS, or tip-timing as it is sometimes called, provides many benefits to turbomachinery customers over traditional strain gage testing. ", says Dr. Kurt Nichol, CEO of EDAS.

The NSMS G4 acquisition hardware, which will be available in early 2008, accepts 24 channels of NSMS measurements from multiple rotors. The acquisition system includes monitoring software that provides easy to understand indicators of data quality and blade vibrations to ensure safe engine operation. The acquisition system will include the following components:

- 30 Channel Laser Box
- 30 Channel Detector Box
- 24 Channel Electro-Optics Signal Conditioning, Acquisition Computer, and Monitoring Software

The post processing NSMS G4 software has advanced algorithms to evaluate blade vibratory state for integral and non-integral vibrations. The processed data is stored in a format that is compatible with other EDAS post-test evaluation software, such as the EDAS-DV data viewer and DataDetective. The post processing software is available now for evaluating NSMS data acquired from other acquisition systems.

Contact EDAS at (615) 370-0081 for additional information, or email them at info@edasinc.com.

A licensed, professional engineering firm based in central Tennessee, EDAS is a provider of high-technology engineering services, dynamic data acquisition with real-time monitoring, data analysis and archival products that benefit our increasing customer base, world-wide. Certified to ISO 9001:2000 quality standards, EDAS is continually striving to bring the highest quality products to market. Visit our web site at www.edasinc.com for more information about our products and services. You deserve to be impressedSM!