



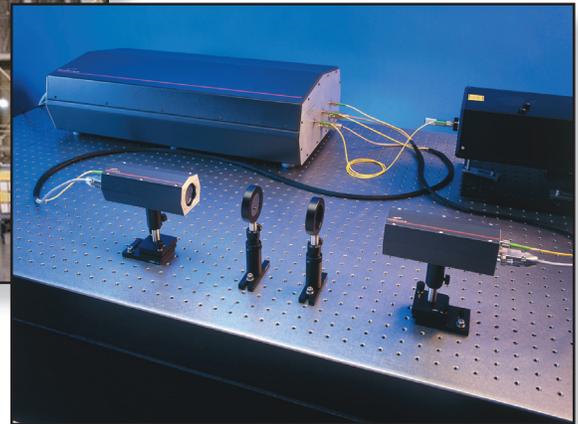
Air Force Research Laboratory | AFRL

Science and Technology for Tomorrow's Air and Space Force



Success Story

T-RAY TECHNOLOGY CONTRIBUTES TO SPACE SHUTTLE RETURN TO FLIGHT



The Propulsion Directorate's T-Ray Technology program is making significant contributions to assist the National Aeronautics and Space Administration (NASA) achieve a milestone to return the space shuttle to flight. The directorate's in-house researchers and Picometrix, Inc. of Ann Arbor, Michigan, developed the T-Ray 2000™ system under the Small Business Innovation Research program.



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Accomplishment

The T-Ray 2000 system is a commercial terahertz radiation system that performs far-infrared spectroscopy, sensing, and imaging. NASA plans to use the T-Ray 2000 units to inspect the space shuttle external fuel tanks' spray-on foam insulation (SOFI). This system earned both the prestigious Research and Development 100 Award and Photonics Spectra's Circle of Excellence Award.

Background

NASA's Langley Research Center purchased one system for use in their Nondestructive Evaluation Laboratory. Five additional units were ordered for nondestructive inspections of the space shuttle external tank SOFI at their Michoud Assembly Facility in New Orleans, Louisiana.

Propulsion
Emerging Technologies

Additional Information

To receive more information about this or other activities in the Air Force Research Laboratory, contact TECH CONNECT, AFRL/XPTC, (800) 203-6451 and you will be directed to the appropriate laboratory expert. (04-PR-21)