

Abstract Submitted
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Nondestructive Evaluation of Aerospace Composites JEREMY JOHNSON, CHRISTOPHER STOIK, MATTHEW BOHN, Air Force Institute of Technology, JAMES BLACKSHIRE, AFRL/RXLP — Recent experiments will be presented demonstrating the utility of terahertz radiation for the nondestructive evaluation of delaminated, burned, and damaged fiber glass aerospace composites. Terahertz images of these prepared composites are presented using both the phase and amplitude of the terahertz radiation. The experimental setup has been demonstrated using both a reflective and transmissive terahertz geometry. A comparison of terahertz radiation for NDE will be made versus conventional NDE techniques such as x-ray tomography, ultrasound, eddy currents and optical coherence tomography. The specific application of this technique for NDE of aerospace composites will be discussed.

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