NDE Challenges in Aerospace

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The aerospace industry has always presented significant challenges to quality assurance and nondestructive evaluation (NDE), because of the need for high performance with the lowest possible weight and very efficient structures. With the development of new materials (especially composites), more automated manufacturing methods, and improved assembly techniques, NDE operations are expected to provide more information with greater speed and accuracy and with reduced impact on overall cycle time. There is also a greater need to assess expected overall structural performance as a result of anomalies, rather than to just characterize the anomalies.

This presentation will discuss the design and fabrication challenges of advanced aerospace structures and will show how emerging NDE technologies will meet those challenges both today and in the future.