

## Spradlin Bio:

TJ Spradlin is a mechanical engineer with the Air Force Research Laboratory at Wright-Patterson Air Force Base focusing on aircraft structural integrity and engineered residual stress. He received his B.S. and M.S. degrees from the University of Tulsa where he researched composite systems to repair high temperature pipe line. He completed his Ph.D. 2011 at Wright State University where he focused on laser peening process simulation and the effects of spot pattern sequence on component fatigue life. TJ currently works in: fracture mechanics focusing on residual stress effects and crack front morphology; large scale aircraft structural testing and stress analysis; and residual stress measurement using contour method, conical slit X-ray diffraction, and energy dispersive diffraction techniques.