

DEPARTMENT OF MECHANICAL ENGINEERING

WILLIAM MAXWELL REED SEMINAR SERIES

“Applied Computational Fluid Dynamics in Research and Flight Test”

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Abstract: This presentation will highlight the use of applied computational fluid dynamics (CFD) in research and flight test activities. Topics will cover the use of CFD for aerodynamic database generation, flight test and instrumentation modifications, and future multi-physics applications for characterizing airframe performance.

Bio: Daniel Reasor is the Airframe Team Lead of the Munitions Aerodynamics Sciences Branch at the Air Force Research Laboratory Munitions Directorate where he leads basic research efforts in experimental structural dynamics and efficient algorithms for coupled fluid-thermal-structure interaction. Prior to joining AFRL he was a modeling and simulation engineer the Air Force Test Center at Edwards AFB where he supported numerous flight test activities using high-fidelity CFD and computational aeroelasticity. He has published research on topics ranging from blood rheology, parachute fabric modeling, plasma synthetic jet actuators, subsonic/transonic aeroelasticity, flight test instrumentation, vortex dominated flows, and high performance computing. Daniel obtained his mechanical engineering B.S. and M.S degrees from the University of Kentucky and Ph.D. from the Georgia Institute of Technology.

Date: Friday, December 14th

Place: CB 114

Time: 3PM

Contact: Dr. Alexandre Martin 257-4462

Meet the speaker and have refreshments
Attendance open to all interested persons