

**Summary BIO — Mark Glauser:** Professor of Mechanical and Aerospace Engineering, College of Engineering and Computer Science; Professor of Physics, College of Arts and Sciences, Syracuse University

Glauser, along with his co-workers, post-docs, graduate and undergraduate students, conducts major experimental, computational and theoretical efforts to apply low-dimensional models to turbulent and transitioning flows for understanding and control. Flows studied have ranged from high speed aerospace type applications to those around thermal breathing manikins within the micro-environment. Work includes developing closed-loop flow control methods based on the use of Proper Orthogonal Decomposition (POD) and Stochastic Estimation for various turbulent flows including; that over a NACA 4412 airfoil, high speed (high subsonic and supersonic) turbulent jets for noise reduction/enhanced mixing, 3D separated flow control over turrets for improving aero-optics and for improving efficiency and reducing noise on large wind turbines and more recently flow field measurements around UAV quad copters. Glauser has or is currently serving as: a member of the US Army Science Board (2013 – present) where he co-chaired a 2015 study on the Future of Army Aviation, a 2016 study entitled ‘‘The future armor/anti-armor competition’’, a 2017 study focused on the Army’s role in Multi Domain Battle, a 2018 study focused on Multi Domain Battle that includes aspects of joint, all of government, allies, etc. and is currently co-chairing a 2019 study focused on Next Generation Armor/Anti-Armor; a member of the NASA Langley Fundamental Aerodynamics Peer Review Panel (2014, 2009); a member of the ARO Mechanics program oversight board (2017 - present); Associate Editor, AIAA Journal (2007 – 2016); Program Manager for the Turbulence and Internal Flows Program at the US Air Force Office of Scientific Research (AFOSR) from 1996-1999; meeting Chair for the 56<sup>th</sup> APS Annual Meeting of the Division of Fluid Dynamics, November 2003; Technical Chair for the AIAA Summer Fluid Dynamics Meeting, June 2006; an ABET evaluator for Aerospace Engineering programs since 2004; and from 2013-2015 an ABET EAC member. Glauser has obtained more than 12.7 Million dollars in research funding as PI or Co-PI from AFOSR, NSF, NASA, EPA, DoE, Dantec, GE, United Technologies, Spectral Energies, Clear Science Corp. and others. His current funding as PI totals approximately 1 Million dollars from AFOSR and Spectral Energies LLC/AFRL/Lockheed. Glauser has published more than 120 peer-reviewed publications and conference proceedings and has presented more than 100 invited presentations and keynote talks worldwide. Over the past 30 years he has mentored several post docs and more than 40 Ph.D. and MS students. Glauser recently returned full time to the faculty after serving for 8.5 years as Associate Dean for Research and Doctoral Programs within the College of Engineering and Computer Science, where he was responsible for overseeing the college’s research activities and coordinating the development of its future research portfolio. Glauser is a Fellow of; the American Institute of Aeronautics and Astronautics, the American Society of Mechanical Engineers, the American Physical Society, and the Institute of Physics (UK). In 1995 he was a Fulbright Scholar in Poitiers France. Glauser received his BS (1982) and his Ph.D. (1987) from the Department of Mechanical and Aerospace Engineering, the University at Buffalo SUNY.

