Georgia Tech Aerospace Engineering
Daniel Guggenheim School of Aerospace Engineering

"The Manned UAV: Where is the Revolution Headed"

John S. Langford
Chairman and Chief Executive Officer
Aurora Flight Sciences Corporation

Friday, November 30, 2012 -- 3:30pm -- Guggenheim (G442)

Abstract:
Where is the UAV revolution headed? One possibility is that it's not about manned versus unmanned, but about degrees of autonomy. Highly automated systems will put a wide range of new aircraft types into the National Airspace System, controlled by operators with a wide range of skills and experience. A step on this road is the "optionally piloted aircraft", some of which are flying today. This talk will review recent progress in unmanned air vehicles, examine some of the challenges of integrating robotic systems in the NAS, and explore the future potential of OPAs.

Bio:
John S. Langford is the Chairman and CEO of Aurora Flight Sciences Corporation, which he founded in 1989.

Langford is a native of Atlanta, Georgia. He received his Bachelors degree in Aeronautics (1979), Masters in Aeronautics and Defense Policy degrees (1985 & 1983) and Ph.D. in Aeronautics and Public Policy (1987) from MIT.

Prior to Aurora, Langford worked for the Institute for Defense Analyses in Alexandria, Virginia. While at MIT, Langford organized and led a series of human-powered aircraft projects, culminating in the Daedalus Project, which in 1988 shattered the world distance and endurance records for human-powered flight with a 72 mile flight between the Greek islands of Crete and Santonini. Earlier, Langford worked for the Lockheed Corporation as an engineer on the development of the F-117 stealth fighter, and as an intern at the White House Office of Science and Technology Policy.

Langford has been awarded the DeFlorez Prize from MIT (1979), the Kremer Speed Prize from the Royal Aeronautical Society (1984), the Young Engineer of the Year award from the AIAA National Capital Section (1989), the National Tibbets Award for outstanding contributions to the SBIR Program (1996), the Barry M. Goldwater Educator Award from the AIAA (2000), and the President's Award for Exceptional Service from the National Association of Rocketry (2008). He was chosen as one of Virginia's Outstanding Industrialists for 2004 by the Commonwealth of Virginia, and was named Virginia's Small Business Person of the Year for 2004 by the U.S. Small Business Administration. Langford co-founded Athena Technologies in 1998 and served as CEO and Chairman. Athena was sold to Rockwell Collins in 2008.

Langford is a Fellow in the American Institute of Aeronautics and Astronautics (AIAA), and a Fellow in the Royal Aeronautical Society (RAeS). He has served on academic advisory boards at MIT, the University of Maryland, and Mississippi State University. He has served on the Board of Directors of the National Aeronautics Association (NAA) and the Board of Governors of the Aerospace Industries Association (AIA). He has been a long-time aeromodeller, with membership in the National Association of Rocketry and the Academy of Model Aeronautics. He is a member of the Association of Unmanned Vehicles (AUVSI) and the Council on Competitiveness.

Langford serves on the NASA Advisory Council (NAC) and is chair of the Subcommittee on Unmanned Air Systems. He has served on several study committees for the National Research Council.