

Dr. David M. Schuster
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Dr. Schuster has over 30 years experience in the aerospace industry with 25 of those devoted to the Aerosciences discipline. He began his career as a Scientist at the Lockheed Georgia Company developing and applying computational aerodynamics tools to a wide range of problems and flight simulations. He developed Euler/Navier-Stokes Computational Fluid Dynamics (CFD) methods for application to problems in multiple-component and powered high-lift systems, airframe propulsion integration of hypersonic vehicles, and high-performance fighter aircraft design and high angle-of-attack maneuvering. He also performed wind tunnel investigations to validate these methods. He was principal developer of one of the first computational aeroelasticity methods to employ high-level viscous CFD to perform aeroelastic simulations of aircraft in complex aerodynamic environments.

He came to the NASA Langley Research Center in 1991 as a researcher in the Aeroelasticity Branch. Here he led the Theoretical Aeroelasticity Group developing and applying computational aeroelasticity tools and validating them through unsteady aerodynamic and aeroelastic testing in NASA's Transonic Dynamics Tunnel. He has applied his expertise to the Hyper-X first flight accident investigation and subsequent return to flight, the NASA/Navy/Air Force Abrupt Wing Stall Program, the Space Shuttle Protuberance Air Loads (PAL) Ramp aeroelastic investigation and removal effort, and numerous other projects in the aeronautics and space arenas.

In 2007, Dr. Schuster was selected as the NASA Technical Fellow for Aerosciences in the NASA Engineering and Safety Center. Here he has Agency responsibility for the Aerosciences Discipline leading a team of technical experts from across the Agency, Government, industry, and academia to review, assess, and solve some of the Agency's most difficult aerosciences problems. He has led or supported numerous investigations of Space Shuttle aerosciences issues, and other problems in NASA's Space Operations, Science, Exploration, and Aeronautics missions. He was the aerodynamics lead for the NESC's Max Launch Abort System development and test flight.

Dr. Schuster earned his Bachelor of Science Degree in Aerospace Engineering from the University of Cincinnati, and his Master of Science and Doctorate Degrees from the Georgia Institute of Technology. He is an Associate Fellow of the American Institute of Aeronautics and Astronautics. He has received a Nova Award for Technical Excellence, Lockheed Martin Corporation's highest award and is a NASA Outstanding Leadership Medal recipient.