



Mr. Benjamin Schiltgen

CFO

Member of the Board of Directors,
Co-Founder

Mr. Schiltgen is one of the founding partners and current CFO and Member of the Board for Empirical Systems Aerospace, Inc. With a B.Sc. degree in Aerospace Engineering from California Polytechnic State University, San Luis Obispo, his responsibilities are multifaceted including business financial health and strategy, design group leadership and management, program management, and business management and development support.

During his time since founding Empirical Systems Aerospace in 2003, Mr. Schiltgen has worked on structural and performance analysis for FAA flight test certification programs, such as the Evergreen Supertanker and the Quiet Technology Gulfstream II/III. Using FORTRAN, Mr. Schiltgen developed takeoff prediction codes which provided FAA approved performance charts. He also provided flight test analysis for the SuperCaravan program. He has experience in creating customized software to perform propulsion and performance analysis/studies for various aircraft configurations, which provide powerful methods that aid in preliminary design. Identified as DoeTECH, Mr. Schiltgen has invested many years developing the Visual Basic based, fully customizable simulation tool. Since 2008, Mr. Schiltgen has been on the forefront of the development of hybrid electric distributed and non-distributed propulsion through the design, analysis, and integration of various propulsion systems on both classic and unique platforms. Mr. Schiltgen has been Principle Investigator on several NASA and AFRL SBIRs (Phase I and II). Other past lead HEDP related projects include significant efforts with General Atomics, Boeing Research and Technology (Commercial Applications and Revolutionary Configurations for Energy Efficiency), and NASA (N+2 through Subsonic Fixed Wing program). Mr. Schiltgen's work, such as Terminal Area Operations performance tool development for NASA/AFRL and hybrid electric helicopter design methodology for Electricore enabled ESAero to maintain on the cutting-edge of the hybrid electric and HEDP industry movement; foundational development in this arena culminated with the formation of the NASA X-57 program to which ESAero holds the prime contract. Design engineering and hardware fabrication, implementation, and flight have also been accomplished for customers ranging from Boeing, Lockheed and NASA to private entrepreneurs with leading-edge aerospace concepts. Most recently, technical and management efforts have shifted towards providing customer support for the rapidly expanding Urban Air Mobility market.

Mr. Schiltgen is a Subject Matter Expert on Hybrid Electric (HEDP) and TurboElectric Distributed Propulsion (TeDP) and participates in the NASA sponsored TeDP Workshops and NASA/AFRL "LEAPTECH", Transformative Vertical Flight Workshop (AIAA), and Aircraft Electric/Hybrid Electric Power and Propulsion Working Group (AIAA). He also continues to author technical papers in the field of propulsion design and performance under the umbrella of HEDP and maintains active involvement in AIAA and other domestic/international conferences and organizations. Additionally, Mr. Schiltgen has extensive experience in high end UAV and RPV components and the integration of electric systems into airframes. Much time has been spent in investigating and demonstrating, with focus on performance and failure limits, high power density electric ducted fans (EDF), motors, controllers, and power and signal carriers in airborne vehicles for several private companies.

Benjamin Schiltgen's Bibliography:

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