



**Mr. Trevor J. Foster**

COO

Aerospace Engineer

Co-Founder

Trevor Foster is a founding partner and Chief Operations Officer for Empirical Systems Aerospace, Inc.

Trevor's responsibilities within the company have him wearing many hats ranging from detailed design, fabrication, and project management to the expansion and growth of new facilities including the establishment of scalable cost-effective manufacturing capabilities.

Since co-founding Empirical Systems Aerospace in 2003, Mr. Foster has been actively involved within the Aeronautical/Aero-space community. He was a pioneer in the development of the NASA CoLab 2nd Life experiment serving to find ways to engage new and young engineers. He served on the Board of Directors for the California Space Authority from 2007 to 2010. He helped to support and organize the NASA Regolith Centennial Challenges. Mr. Foster continues to provide assistance to local students through internships and guidance.

As an engineer Mr. Foster has successfully aided his customers by furthering the development of their concepts and exceeding expectations. He developed a shrouded counter-rotating wind turbine that took advantage of high velocity air to improve efficiency. For the NASA Centennial Challenges, he designed and fabricated a solar powered demonstration robotic 'digger'. He took a struggling back-packable Aerostat design, and through design and testing achieved a viable product capable of providing persistent visual or radio coverage to areas of lost coverage.

He, additionally, has provided technical business development support for UAV payload selection and performance. Including the development of a cloud-based interactive database. Mr. Foster has also had experience organizing and managing projects at Empirical Systems Aerospace. He was the project manager for a team working in conjunction with Lockheed Martin ADP on a sub-scale VTOL flight demonstrator program. He has been manager for a program building small UAS and support equipment for Lockheed Martin MFC. Including maintaining a near JIT inventory system. Mr. Foster was the PI for ESAero on the NASA HEIST 'LeapTech' Wing that was conducted under Empirical System's Phase III SBIR, Design and Fabrication of a Hybrid Electric Integrated System Testbed (HEIST). This project has evolved into one of his current major roles as a PI for ESAero, as Prime, on the development and integration of the most recent NASA X-Plane (X-57), 'Maxwell'. He also worked on the design and fabrication of a test-stand for multiple 5,200kw electric motors for the purpose of investigating failures modes for feedback into a prognostics and health management tool. From these programs, Mr. Foster has generated extensive knowledge in the area of instrumentation, electric motor/motor controller, traction power systems, and battery systems.

Mr. Foster is a member of AIAA, AFA, GAMA, and Tripoli. He additionally holds a B.Sc. and M.Sc. in Aerospace Engineering, from the California Polytechnic State University at San Luis Obispo.