

③ John Sorensen (Pilot)

John Sorensen
Professional Resume
August, 2012

John Sorensen has over 40 years of engineering and technical management experience, primarily in the areas of design and analysis of dynamic systems with expertise in automatic control, traffic management, vehicle guidance, navigation, flight management, vehicle performance, and system modeling. His early career was devoted to spacecraft flight control and space booster (rocket) guidance. Since 1971, he focused on aviation system design. His work has also included significant contributions to the integration of air traffic management with airline flight dispatch and the flight deck. He had over 35 years of project management experience and led more than 100 technical projects from initiation to successful completion.

Sorensen is a (non-current) licensed private pilot, and is an Associate Fellow of the American Institute for Aeronautics & Astronautics. His education includes B.S. Aerospace Engineering, Iowa State U (1962); M.S. Engineering Mechanics, Iowa State U (1964); and PhD Aeronautics & Astronautics, Stanford U (1970). He is on the Board of Directors of four corporations.

In July 1985, Sorensen co-founded Seagull Technology, Inc. where he was Chief Executive Officer. Seagull was organized to conduct applied research and to develop special-purpose software products and computer-based prototype systems for the aerospace and transportation industries, and information technology applications. He led Seagull to become a well respected, high technology company, and in the process, he spun off two related successful companies. In 2005 Seagull was sold to Sensis Corp. of Syracuse, NY, where Sorensen became a Senior Fellow. (Sensis is a leading manufacturer of multi-lateration airport surveillance equipment.) Sorensen became an independent contractor in 2009.

Dr. Sorensen's technical and management contributions to aviation have included the following:

Air Traffic Management Automation. Sorensen managed and led ATM automation and decision support tool R&D projects for both FAA and NASA. These include investigation and/or development of (a) aircraft trajectory generation and prediction software for ATC automation algorithms, (b) new concepts for increasing National Airspace System capacity, (c) non-towered airport automation, and (d) advanced conflict detection and resolution algorithms. Sorensen supported the NextGen design efforts for the Joint Planning and Development Office, FAA.

Avionics. Dr. Sorensen managed several advanced avionics design and analyses projects over the years including work in area navigation (RNAV), digital flight guidance and control, flight management system (FMS), cockpit display of traffic information (CDTI), and digital data link applications. More recent projects included prototype development of the general aviation information management system and GPS-based attitude estimation instruments (low cost AHRS). The latter was sold to Garmin Corp., where it has been certified and placed into production as an integral part of the G-1000 flight deck for Cessna, Diamond, Honda, and Raytheon aircraft..

Flight Planning and Flight Operations. Dr. Sorensen was chief design engineer for developing an experimental flight planning system for NASA Langley, and an operational flight planning product for Pacific Southwest Airlines (purchased by US Air). He had overall responsibility for specifying the aircraft performance modeling, interface with multiple weather formats and navigation data bases, trajectory generation, and flight plan optimization. He provided principal FAA and NASA liaison with American, Delta, Northwest, and United Airlines for various projects involving integration of commercial transport operations with air traffic control.

To the Board of Directors, Truckee Tahoe Airport:

I am a resident of Truckee, a long time aviation enthusiast, and am interested in contributing to the Airport Community Advisory Team (ACAT) for the Truckee Tahoe Airport. I have spent the bulk of my technical and management career working in the aviation industry that I summarize in the attached resume. In particular, I believe I can provide expertise and experience with the application of technology to evolving the airport operations to be safer, more efficient, and environmentally friendly.

I could either contribute as a member of the ACAT or as a resource to be used by the ACAT when questions or issues related to application of various aviation technologies occur. I would be happy to discuss my background and experience with you at your convenience.

Sincerely,

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