

International Symposium on Artificial Intelligence - Machine Learning in Safety Critical Systems

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PROFILE



Mr. Tom Ferrell

Lead Assurance Group
Joby Aero

Tom Ferrell currently leads the Digital Development Assurance Group for Joby Aero. In this capacity, he is responsible for overseeing Joby's compliance activities for DO-178C, DO-254, and ARP 4754A, the three overarching development assurance guidelines for demonstrating the acceptability of software, airborne electronic hardware, and systems for use on Joby's aircraft. In addition, his group oversees Joby's approach to aircraft cybersecurity, as well as looking ahead to how future autonomy may be shown to be safe as part of the certification process. It is this last role, that has led to his participation in this proposal.

Over his career, Tom has had extensive experience in working with the FAA on aircraft certification projects, policy development, and training development. The certification work, accomplished over thirty years as an FAA Designated Engineering Representation (DER), has spanned a wide range of aircraft types (general aviation, commercial transport, rotorcraft, and airships). Tom participated in authoring DO-178B, DO-278A, DO-178C, DO-330, and the associated technical supplements to DO-178C and is also a member of S-18, responsible for ARP4754A and ARP4761. Most recently, Tom has been working closely with members of the FAA's Policy and Innovation group and the Small Airplane and Rotorcraft branches to arrive at an acceptable means of compliance for the emerging Urban Air Mobility (UAM) market.

Tom holds two master's degrees, an MA in American History from George Mason University (2008) and a MS in Information Technology Management from Rensselaer Polytechnic Institute (2000). Tom's undergraduate degree is a BS in Electrical Engineering from Northern Illinois University (1989).