

Aviation Seminar:

Safety of Aircraft Design: How Certification Builds Trust in Aviation Safety

Commercial Aviation has achieved an exceptional level of safety not because all risks are eliminated, but because multiple safety layers work together to anticipate, control and recover from failures. This seminar uses real-world examples to explore how aircraft design contributes to this system and how certification provides assurance that the design meets the required level of safety. It will examine the relationship between safety objectives, safety requirements and the design process, as well as how aviation learns from adverse experience and maintains aircraft safety throughout its lifecycle. It will furthermore explore how certification enables the introduction of new technologies and concepts while maintaining confidence in their safety, and how international cooperation and harmonization of certification standards allow aircraft to be trusted and operated around the world. The objective is to give the audience an understanding of certification not simply as a regulatory process, but as a fundamental mechanism through which the aviation system builds and maintains trust in aircraft safety.

Speaker Bio:

Rachel Daeschler is an aviation certification and safety leader with more than 30 years of experience in aircraft airworthiness, safety oversight, and regulatory policy. She currently serves as Advisor to the Executive Director for National Aircraft Certification at Transport Canada. Previously, she was Certification Director at the European Union Aviation Safety Agency (EASA), where she led a directorate of more than 270 specialists responsible for aircraft certification, oversight of design organizations, and certification policy development across Europe. During her career, she has contributed to the certification and validation of major aircraft programs, and led key safety initiatives involving accident follow-up, cybersecurity, safety intelligence, and the introduction of emerging aviation technologies. Rachel is graduated engineer from Ecole Polytechnique and Ecole Nationale de l'Aviation Civile (France).