

SAE INTERNATIONAL

# OAI/SAE WEBINAR BIOS

SAE's Unmanned Aircraft Systems  
(UAS) Standards Program Webinar  
May 5, 2021



## David Alexander – Director, Aerospace Standards – SAE International



David Alexander has been with SAE International and its affiliates for 15 years and is based in London, UK. In May 2016, he assumed the role of Director, Aerospace Standards. In this role, David is responsible globally for the operation of the SAE Aerospace and Systems Management Standards programs comprising of over 7,500 industry standards maintained by more than 180 technical committees. This includes the management support for the SAE Aerospace Council and SAE Executive Standards Committee and involves leveraging standards to work across the SAE International portfolio.

Supported by SAE staff in London, Paris, Brussels, Shanghai and across the US, program activities include relationships with industry, associations, aviation authorities and government stakeholders around the world and strategy for standardization in areas as diverse as artificial intelligence, electric aircraft, additive manufacturing, human factors and quality.

Prior to joining the SAE Aerospace Standards operation, David worked on the Nadcap accreditation programme through SAE's affiliate organisation PRI, and he holds a BA (Hons) degree from the University of Manchester.

## Ritesh Ghimire – Sr Aerospace Engineer – FAA UAS Integration Office

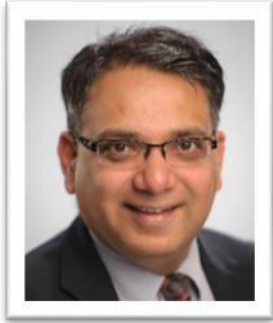


Ritesh Ghimire has been actively supporting the U.S. FAA, UAS industry, the ANSI, and leading the outreach of the ANSI UAS Roadmap V2 to support FAA's global leadership and harmonization of the industry standards. As the custodian of the ANSI UAS Roadmap, he is working to accelerate the development of the standards needed for type certification of UAS, and to facilitate the safer, secure and faster integration of UAS into the National Airspace System. He is the recipient of the ANSI's 2020-2021 Leadership and Service Awards in Meritorious Service Award category.

Ritesh, a U.S. Army veteran and a Senior Aerospace Engineer who earned both a B.S. and M.S. in Aerospace Engineering, has been working at FAA UAS Integration Office for seven years developing U.S. UAS policies. He works closely with the ANSI, the UAS industry, DOD, NASA, ICAO, EASA and UAS policy makers in other nations to harmonize the U.S. UAS policy globally. He worked at the FAA Atlanta Aircraft Certification Office on type certificate and supplemental type certificate projects for transport and small category aircraft. Prior to joining the FAA, he worked at Hawker Beechcraft, National Institute for Aviation Research, and the U.S. Army.

Ritesh has been supporting Boeing MQ-25 UAS and Kaman K max Optionally Piloted Aircraft certification as the UAS Integration Lead. He is the FAA lead at all SAE UAS activities that include SAE G-34 / EUROCAE WG-114 Artificial Intelligence in Aviation, SAE S-18 / EUROCAE WG-63 Aircraft and System Development and Safety Assessment, SAE S-18UAS Autonomy WG / EUROCAE WG-63 SG-1, G-32 Cyber Physical Systems Security, G-31 Electronic Transactions for Aerospace, HM-1 Integrated Vehicle Health Management, DDSG, among others. He is also involved in EUROCAE WG-117 / RTCA SC-240 Topics on Software Advancement, EUROCAE WG-118 SG-5 Recorder for UAS and RPAS, among others. He was involved in the certification of UAS from Boeing (MQ-25, Cargo Air Vehicle and Aurora Diamond), General Atomics, Northrop Grumman, Lockheed Martin, Google-Titan, etc. He completed the first UAS Partnership for Safety Plan. He was the architect of the Phase-II and -III of the FAA Pathfinder for Beyond Visual Line of Sight technologies. He was also part of the FAA team to develop Part 107 rule.

## Dr. Parimal Kopardekar (PK), Director, NASA Aeronautics Research Institute (NARI)



Parimal Kopardekar (PK) serves as the Director of NASA Aeronautics Research Institute (NARI). In that capacity, he is responsible for exploring new trends, collaborations and partnership needs related to aviation enterprise. He also serves as NASA's senior technologist for Air Transportation Systems and principal investigator for the Unmanned Aircraft Systems Traffic Management (UTM) project. He is the recipient of many awards, including NASA Government Invention of the Year, Exceptional Technology Achievement Medal, Outstanding Leadership Award, Engineer of the Year Award, and Samuel J. Heyman Service to America's Promising Innovation Award. PK was named among 25 most influential people in drone industry. He is Co-Editor-in-Chief of Journal of Aerospace Operations and Fellow of the American Institute of Aeronautics and Astronautics. He also serves as an adjunct faculty and teaches undergraduate and graduate courses related to operations management and supply chain management.



Mark Roboff is CEO of SkyThread.aero, a new aerospace venture building the future of digital connectivity for the aerospace/aviation industry. Previously, Mark was General Manager for Digital Transformation, Aerospace & Defense at DXC. Mark has over 15 years' experience in AI and AI related technologies—both as a software engineer and as a business development and technology executive. Mark is a recognized thought leader on AI for the A&D and Travel/Aviation industries, with focus to driving AI solutions in engineering, flight operations, and aftermarket.

Mark is also chair of the SAE-G34/EUROCAE WG-114 Joint International Committee for AI in Aviation, and is leading 500+ aerospace engineers, software developers, data scientists, safety experts, and regulators to define a means of compliance for AI certification. Mark is also a member of the Prognostics and Health Management (PHM) Society.



Paula Olivio is an Artificial Intelligence Researcher at Embraer. She is a Ph.D. Candidate in Computer Engineering (ITA, 2019), and she holds a master's degree in Computer & Aeronautical Engineering (ITA, 2013) and she holds a Bachelor's degree in Computer Engineering (FSA, 2007). Paula has over 10 years' experience in AI and IVHM (Integrated Vehicle Health Management) and Data Science related technologies for new applications to aeronautical ecosystems. Her current project is the investigation of AI/ ML technologies through proofs of concept (PoCs), to some aircraft safety-critical systems with the vision for autonomous vehicles. In recent years, Paula had worked in an international committee, like the AVSI (aerospace vehicle systems institute) for the vision to the certification process for safety-critical systems with ML-based solutions.

Paula is also the vice-chair of the SAE G-34/ EUROCAE WG-114 Joint International Committee for AI for aviation and is leading 500+ aerospace engineers, software developers, data scientists, safety experts, and regulators to define a means of compliance for AI certification.



Dr. Ravi Kumar G. V. V. is Associate Vice President and Head Advanced Engineering Group (AEG) of Engineering Services, Infosys. He has led many innovation and applied research projects over the past 25 years. His areas of expertise include mechanical structures and systems, knowledge-based engineering, composites, artificial intelligence, robotics, autonomous systems, AR, VR and Industry 4.0. He is involved in the development of commercial products like AUTOLAY (CADDs-COMPOSITES) - a spin-off Indian LCA (Tejas) program, Nia Knowledge - a knowledge-based engineering platform and KRTI 4.0 - an operational excellence framework. He contributed to many Industry 4.0 implementation projects and played a key role in the development of Industry 4.0 maturity index under the umbrella of Acatech, Germany.

*He is also involved in various initiatives of the World Economic Forum (WEF) fourth industrial revolution technologies in production. He is a member of the HM-1 and G-31 technical committees and Chair of G-31 technical committee of SAE International contributed to aerospace standards development.*

*Dr. Ravi Kumar has published over fifty technical papers, four patents - two granted and two filed. He has a PhD and an MTech in Applied Mechanics from IIT Delhi, and a BE (Honors) from BITS Pilani, India. He won many awards including James M. Crawford Executive Standards Committee Outstanding Achievement award from SAE International and Corporate Excellence Award from American Society of Engineers of Indian Origin.*

## Rhonda Walthall – Technical Fellow – Collins Aerospace Systems



Rhonda Walthall is a Technical Fellow at Collins Aerospace Systems in Charlotte, NC, a division of Raytheon Technologies Corporation (RTX). In her role, she focuses on Design for Prognostics and Health Management (PHM) and supporting women in STEM roles. She is an industry recognized leader in the development of industry standards and best practices for PHM solutions. She holds four PHM-related patents and numerous publications.

Rhonda earned her BS degree in Aeronautical & Astronautical Engineering (AAE) from Purdue University and her MBA from Pepperdine University. She is a member of the Purdue University AAE Industrial Advisory Council and was recognized as an Outstanding Aerospace Engineer in 2020.

Rhonda is a Fellow of the PHM Society and member of the Board of Directors. She is a member of the SAE International Board of Directors and the Audit & Risk Committee and has participated in the development of SAE technical standards for PHM since 2004. She is a member of Women in Aviation International, Society of Women Engineers, and Toastmasters International.

Rhonda is the co-editor of *“Flight Paths to Success: Career Insights from Women Leaders in Aerospace.”*





Christopher Sundberg, GICSP is a Product Cybersecurity Engineer in the Corporate Technology Office for Woodward, Inc. Mr. Sundberg is responsible for security architecture, secure development lifecycle, and product security compliance across a wide variety of cyber-physical devices sold by Woodward, Inc.

Mr. Sundberg's work history spans over 30 years concentrating on wireless communication and embedded systems development.

Mr. Sundberg has actively participated in the development of the SAE G-32 Cyber-Physical Systems Security standard, serving on the Software Assurance sub-group, curator for the G-32 Weekly Security Items newsletter, as well as liaison to a number of other SAE committees (SAE G-34 / Eurocae WG-114- Artificial Intelligence (AI) in Aviation, G-31 Electronic Transactions for Aerospace, S-18 Aircraft and System Development and Safety Assessment Committee).

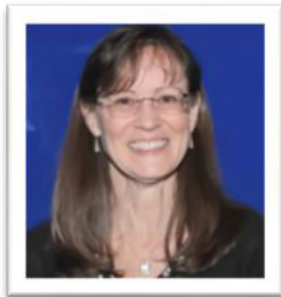


Dr. Richard Hassler joined the College of Aeronautics and Engineering as an assistant professor specializing in aeronautics and mechatronics technology and is a career educator in secondary and post-secondary education. His professional achievements include industry certifications in production robotics, hydraulics, automation systems, and is an FAA Certified Flight Instructor with a commercial pilot's certificate, an instrument rating for both single and multi-engine aircraft and is Part 107 remote pilot certified. Dr. Hassler holds a Bachelor's degree in Specialized Studies from Ohio University and a Doctorate in Educational Leadership and Change from Fielding Graduate University.

### Certifications:

- FAA: Commercial Pilot, Remote Pilot (Part 107 sUAS), Flight Instructor (CFI)  
FANUC Certified Educational Robotics Trainer (C.E.R.T.)
- FANUC HandlingTool and Operation Programming
- Yaskawa/Motoman FS100 Basic Programming with Material Handling
- Yaskawa/Motoman FS100 Basic Programming with Material Handling – Trainer
- Certified Rockwell/Allen Bradley Automation – PLC Trainer
- Certified Parker Hannifin Hydraulics Trainer

## Becky Lemon – Industry Program Manager – SAE



Rebecca Lemon is Industry Program Manager at SAE. She has 34 years of project and association management experience at SAE where she has held positions of increasing responsibility in various business units including meetings/ events, sales/marketing, ground vehicle standards, exhibits/sponsorships, and aerospace standards.

In her current role, she has responsibility for business development, program management, support service solutions, and related committee activities including aerospace standards development. Becky manages several programs including the Aerospace Engine Supplier Quality (AESQ) Strategy Group, International Aerospace Quality Group (IAQG), International Aerospace Environmental Group (IAEG) and SAE's G-23 Manufacturing Management Committee. She holds a Bachelor of Science degree in Business Administration from Robert Morris University.