ICAO

DRONE ENABLE

5 — 7 DECEMBER 2023

ICAO Headquarters, Montréal, Canada

SPEAKER PROFILES

01. SPEAKER PROFILES

Welcome Remarks

Juan Carlos Salazar
Secretary General, International Civil Aviation Organization

Mr. Juan Carlos Salazar is the Secretary General of the International Civil Aviation Organization (ICAO). He was first appointed for a three-year term starting August 2021. His career in international civil aviation spans over 27 years in various advisory and leadership roles. Prior to his appointment as Secretary General, Mr. Salazar served as Director General of Aeronautica Civil of Colombia – Aerocivil. For the twelve years previous to joining Aerocivil, Mr. Salazar was a Senior Advisor to the UAE General Civil Aviation Authority. His professional experience also includes terms as the President of Latin American Civil Aviation Commission (LACAC), Secretary of the Colombian Civil Aviation Board and Director of its Air Transport Office, Director General of Air Transport at the Colombian Ministry of Transport, Corporate Secretary and Director of the Legal Department of Tampa Cargo (currently known as Avianca Cargo). Mr. Salazar is a lawyer and has earned advanced degrees from Harvard University (Master in Public Administration - MPA) and McGill University (Master in Air and Space Law - LLM). He is fluent in Spanish, English and French and speaks basic Arabic.

Keynote Speaker

Captain Sulaiman Almuhaimedi
Executive Vice President, Safety and Aviation Standards, General Authority of Civil Aviation, Saudi Arabia

Captain Sulaiman is a highly experienced pilot with a career spanning over 25 years, encompassing military, VIP, and commercial airline operations. With flying experience totaling over ten thousand hours, he has established himself as a skilled and knowledgeable pilot in his field. In addition to his pilot credentials, Captain Sulaiman is an expert in aviation safety. He currently serves as the Executive Vice President of Aviation Safety & Environmental Sustainability at the General Authority of Civil Aviation of the Kingdom of Saudi Arabia, and he is also the Chairperson of the Regional Aviation Safety Group for the MID region, demonstrating his deep knowledge and commitment to the industry.

Captain Sulaiman's educational background includes a bachelor's degree in aeronautical science from King Faisal Air Academy, as well as an MBA in Aviation Management from Coventry University. He has also received many professional trainings, such as Aircraft Accident Investigation and other areas. With his extensive experience and qualifications, Captain Sulaiman has undoubtedly made significant contributions to the aviation industry throughout his career.

ICAO Unmanned Aircraft Systems (UAS)/UAS Traffic Management (UTM) Update

Mark Wuennenberg
Technical Officer, Remotely Piloted Aircraft Systems Section, International Civil Aviation Organization (ICAO)

Mr. Wuennenberg is a 35-year veteran of the Royal Canadian Air Force with over 4500 flight hours. He has over three decades of experience working on regulatory and RPAS/UAS files, including operations, regulatory and standards development, airspace integration, airworthiness, training, safety management and flight authorizations. Mark has created foundational UAS regulations for the Canadian Armed Forces, the United States Air Force and NATO. Most recently Mark was a civil aviation inspector and UAS SME with Transport Canada and was instrumental in publishing the Canadian small UAS regulations. He holds an Airline Transport Pilots License and a Transport Canada RPAS pilot certificate. Mark is currently a Technical Officer in the ICAO RPAS Secretariat and the secretary of the ICAO UAS Advisory Group.

RFI Topic 1 Session 1

Steve Bradford
Chief Scientist, NextGen Office, Federal Aviation Administration (FAA)

Steve Bradford is the Chair of the Technical Review Board that monitors technical decisions related to investments and the Enterprise Architecture. He is the FAA lead for the FAA/NASA Research Transition Team process that supports collaboration between the FAA and NAS on ATM related activities. A current focus of the RTT process is collaboration on UAS-in-the-NAS supporting vehicles operating in ATM, and UAS Traffic Management supporting operation in uncontrolled airspace, and AAM. The RTT's depend on direct partnership with the UAS industry and provide many opportunities to look at new technology options for both new entrants and traditional manned aircraft operations.

He also has a leading role in NextGen's International engagement activities with SESAR Joint Undertaking and has led several co-operative international efforts with EUROCONTROL He was a member of the International Civil Aviation Organization's (ICAO) technical team that authored the Global Air Navigation Plan, the past US panel member to the ICAO Air Traffic Management Requirements and Performance Panel, and the Chair for the ICAO GANP Study Group.

Amit Ganjoo
Founder and Chief Executive Officer, ANRA Technologies

Amit Ganjoo is the Founder and CEO of ANRA Technologies with offices in London, Washington DC, Tallinn and New Delhi. ANRA is a global provider of end-to-end uncrewed aircraft operations and traffic management solutions for enterprises, operators, and airspace managers. He has over 20 years of aviation, telecom, robotic, and wireless experience in both the federal and the commercial space. He is an engineer and licensed pilot, a Board Member of GUTMA, Co-Chairs ASTM Standards Working Group for UTM and Co-Chairs ASTM UAM Interoperability Working Group. He was appointed by the U.S. Secretary of Transportation to the FAA Advanced Aviation Advisory Committee (AAAC).

Wei Dai
Research Associate & Ph.D. Candidate, Air Traffic Management Research Institute (ATMRI), Nanyang Technological University

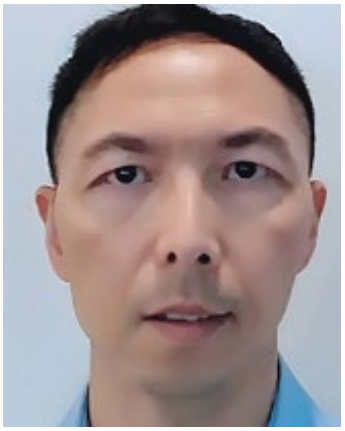
Wei Dai is a Research Associate and Ph.D. candidate with the Air Traffic Management Research Institute at Nanyang Technological University (NTU), Singapore. His research interest includes the evaluation and optimization of the efficiency and safety performances in UTM and UAM.

Daniel García-Monteavaro
Head of Drone Business Development, ENAIRE

Daniel García-Monteavaro (Aeronautical Engineer from the Polytechnic University of Madrid) works at ENAIRE, the public Air Navigation Service Provider in Spain. He has been in the air navigation sector for more than 20 years and since 2018 he is the Head of the Drone Business Development Department. From this unit he coordinates the definition, deployment and certification of ENAIRE's U-space platform, as well as the participation in national and European drone and U-space projects. He is also involved in regulatory activities and other actions related to the commercial development of U-Space services for UAS, both at national and international level.

Francisco Javier de Andrés
Senior team leader and project manager, INECO

Francisco Javier de Andrés Villarroya, Computer Science Engineer works at INECO. He is a senior team leader and project manager with 20 years of experience working in Air Traffic Control Systems Engineering on Tower and Air Control Centers environments. For 10 years now as Manager at INECO to ENAIRE/AENA and other international customers, he has had the opportunity to lead different projects in ATM and UTM. He is involved in different SESAR UTM projects (ENSURE, EUREKA, SPATIO..), system architectures and Drones applications. He is involved in U-SPACE Risk Models design and implementation.



"David" Bin Chen
General Engineer, Safety & Integration Division of the UAS Integration Office (AUS), Federal Aviation Administration (FAA)

David Chen is a General Engineer in the Unmanned Aircraft Systems (UAS) Integration Office of the United States' Federal Aviation Administration (FAA). With over 27 years of engineering and management experience, Mr. Chen serves as a subject matter expert on UAS command and control links, communications, cybersecurity, and automation in support of UAS policymaking, standards development, and enterprise solution development. Mr. Chen collaborates with industry, academia, and other national and international organizations through his service on multiple international standards development committees and ICAO to facilitate UAS Beyond Visual Ling of Sight operations, Aircraft to X communication, and UAS Traffic Management/Advance Air Mobility development, testing and implementations. Prior to joining the UAS Integration Office in 2014, Mr. Chen worked at the FAA's Technical Center since 2001 as a Program Manager/Senior Systems Engineer. He led multiple systems' development, deployment, and modernization supporting air traffic management at FAA air traffic control facilities. Before that, Mr. Chen worked in the industry on system safety and automation. Mr. Chen has two master's degrees in Engineering and Computer Science.

RFI Topic 1 Session 2

Barbara Pareglio
Senior Technical Director,
GSMA, Smart Mobility Lead

Since 2014, she has been the technical lead for several areas of focus within the GSMA such as 5G, IoT, automotive, aviation and more. Looking at how to best utilise new technologies and services from the constantly evolving mobile networks, like 5G-Advanced.

Barbara is also leading several activities and communities with the GSMA members, in particular the GSMA Drone Interest Group and the Aerial Connectivity Joint Activity, to investigate and help the mobile industry to create a trusted solution for commercial unmanned aircraft and beyond. Exploring features and capabilities of 4G and 5G needed for the aviation.

Daisuke Kubo
Associate Senior Researcher, Japan Aerospace Exploration Agency (JAXA)

Daisuke Kubo is a researcher working for Japan Aerospace Exploration Agency (JAXA). He has more than 20 years of experience in unmanned aircraft system including a variety of technology fields—flight dynamics, flight control, and operation technologies. The current research theme is low altitude manned and unmanned aircraft airspace integration. He is a director of Japan UAS Industrial Development Association (JUIDA)

Yinian Mao
Chief Executive Officer of Meituan UAS & Senior Vice President of Meituan, Shenzhen Meituan Low Altitude Logistics Technology

Dr. Yinian Mao is Head of Meituan Drone Delivery Unit and Vice President of Meituan. Dr. Mao has more than 15 years of industry experience from Meituan, Qualcomm, and Airlango Technologies. He received his Ph.D. degree from University of Maryland, and B.S.E. from Tsinghua University, both in Electrical Engineering.

Adrian Solomon
UTM System Architect, Thales Airspace Mobility Solutions

Adrian is recognized by the International Council on Systems Engineering (INCOSE) as a Certified Systems Engineering Professional (CSEP), and is currently part of Thales' Digital Aviation Solutions team focused on delivering UTM and ATM capabilities and services to customers around the globe.

Mr. Solomon has previous experience working with the FAA's NextGen organization on various projects including ICAO's Flight & Flow for a Collaborative Environment (FF-ICE) initiative, Air-to-Ground SWIM, as well as served in a technical advisory capacity to NextGen supporting the establishment and management of the UTM Pilot Program (UPP).

Mr. Solomon holds a Bachelor of Science degree in Systems Engineering from George Mason University in Fairfax, VA and a Master of Science degree in Engineering Management & Systems Engineering from The George Washington University in Washington, D.C.

Outside of work, Mr. Solomon enjoys playing the Guitar, writing music, and enjoying the outdoors with his family.

Addressing Unauthorized Unmanned Aircraft (UA) Operations (Workshop)

Billy Shallow
Director Security, Innovation and Airport IT,
Airports Council International (ACI)

In his role, Billy leads ACI World's Security, Innovation and Technology teams encompassing the World Airport Security Committee and the World Airport IT Standing Committee, advocating for the World's airports, raising standards and capacity building within these respective areas. His remit extends to ACI World's Smart security programme, focused on improving security detection, operational efficiency, and the passenger experience across the world's airports. Billy is the Permanent Representative to ICAO for security matters.

Before ACI, Billy worked at London City Airport for five years designing and implementing their security transformation programme. Billy then went on to lead consulting projects working at King Abdulaziz International Airport Jeddah, Brussels Airport, Birmingham Airport and Belfast City on security and optimization programmes.

A British national, with a passion for operational improvement, Billy is a lean six sigma black belt. He sits on ICAO's working group on innovation, as-well as a number of industry groups. He holds a University of London bachelor's degree in management and organizational analysis.

An aviation professional with 20 years of experience. A holder of a B.Sc. Degree in Electrical Engineering who started her career as an Aircraft Engineer and then progressed from engineering to operational, safety, and management positions within the airline industry. Within her current role, as the Global Head of Air Traffic Management at IATA, she leads the ATM team and drives global ATM strategies and policies, including the safe and efficient integration of new entrants into airspace / the ATM system.

Michał Witkowski
Aerodrome Operations Director,
Warsaw Chopin Airport

With over twenty-six years of experience in Aviation, Michał held different roles and positions, ranging from ground handling agencies through flight dispatch officer and operation director, accountable manager for a flight training organization, inspector in Polish CAA in the field of ground and flight operations, safety manager of Chopin Airport in Warsaw. Last few years Michał was a Vice President for Operational Standards at CAA of Poland. Since 2021, his current role is the Operational Director at Warsaw Chopin Airport at PPL S.A.

Dr. Eduardo Garcia
CANSO Senior Manager, Future Skies,
Civil Air Navigation Services
Organization (CANSO)

In his role as the CANSO Senior Manager for Future Skies, Eduardo is responsible for advancing CANSO's vision for future ATM services and the necessary innovations to make it a reality. He also coordinates the work of the CATS Global Council (https://www.futureskyvision.com/) to ensure a unified approach toward achieving their objectives.
Eduardo actively collaborates with ICAO on various topics, including new technologies and Advanced Air Mobility.
Before this, Eduardo served as the CANSO Manager for European ATM Coordination and Safety, where he coordinated CANSO Europe's positions on technical, operational, and safety matters. He has received notable awards, including the SESAR Distinguished Service Award for his contributions to the HALA! (Higher Automation Levels in ATM) Research Network and the “Safety Award in Mechanical Engineering” by the Institution of Mechanical Engineers in the UK.

Jim Bamberger
Branch Chief, Public Area Security & Infrastructure Protection, Transportation Security Administration (TSA), United States

Captain Jim Bamberger is currently the Public Area Security Infrastructure Protection (PASIP) Branch Manager for TSA. Additionally, Captain Bamberger is the Counter Unmanned Aircraft Systems (C-UAS) Capability Manager for TSA.

As the PASIP Branch Manager, Captain Bamberger provides leadership for program managers and technical experts for surface security technology and airport infrastructure protection programs. He collaborates with TSA offices, DHS, and other federal, state, and local law enforcement, security and intelligence organizations, and transportation agencies to evaluate advanced technologies and facilitate industry awareness to help address transportation security vulnerabilities.

UTM: Industry perspective

Michael Gadd
Head of Office of Airworthiness, Blue Bear Systems Research Ltd.

Mike has over 43 years aviation experience, and over 22 years in regulatory roles with the UK CAA and EASA. He has held technical lead and management roles across Uncrewed and Remotely Piloted Air Systems (UAS/RPAS), UTM, cyber, spaceplane and aircraft airworthiness/certification and safety management programmes. His many accomplishments range from the initial type certification and continued airworthiness of large transport category aircraft, to the approval of UAS BVLOS operations.

He has held chairmanship of the ICAO RPAS Panel and continues to support it and the AAM-SG towards the development of UAS, UTM and Advanced Air Mobility (AAM) regulatory frameworks. He also participates to the development of global technical standards and recommended practices through roles EUROCAE and ISO/BSI and to the advancement of processes and methods of safety assurance across air, land and sea domains, with specific reference to highly complex, new and novel technologies.

Eyal Zor
Co-Founder and Chief Executive Officer,
Airwayz

Eyal has a background as Airborne Aircrew ATC in the Israeli Air Force (Ranked Major in reserved), and former business experience in strategy consulting, and in the drone industry prior to founding Airwayz.

Jan-Eric Putze
Chief Executive Officer,
Droniq GmbH

Since 1st January 2019, Jan-Eric Putze acts as Chief Executive Officer (CEO) at Droniq GmbH, a joint-venture between DFS Deutsche Flugsicherung and Deutsche Telekom. Droniq is responsible for the provision, distribution and commercialization of drone and other unmanned aerial vehicle (UAV) related services in Europe.

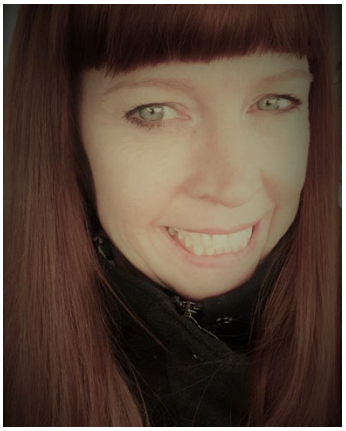
As President of the European initiative "Alliance for New Mobility Europe (AME)", which was founded in 2021, Jan-Eric Putze is also committed to the integration of drones in complex environments in Europe and promotes the development of a UAV market.

He is also an active commercial pilot and passionate flight instructor in general aviation.

Asam Khan
Chief Executive Officer,
Astra UTM

Asam Niaz Khan is an aviation technologist residing in Dubai since 1994, after having graduated from Columbia University in the City of New York with a Bachelors in Applied Physics (May 1991) and from Pennsylvania State University with a Masters in Nuclear Engineering (December 1993).

Asam, already an avid pilot with a Private Pilot's License and over 300 hours of Pilot in Command (PIC) time and has been involved for the last 10 years in RPAS related solutions and services. Since 2016 he has led a team of software professionals in building a comprehensive suite of tools and services that collectively constitute a Uncrewed Traffic Management (UTM) system and has seen successful deployments over 4 continents.



Alexandra Officer
Co-Chair, Operational Systems Integration Working Group, Civil Air Navigation Services Organization (CANSO)

Alexandra (Sandy) Officer is the National Manager, Remotely Piloted Aircraft System (RPAS) Operations and Solutions within NAV CANADA. Alexandra leads a specialist Air Traffic Services team of focused on the integration of RPAS. The National Manager's responsibilities range from the tactical aspects of RPAS operations to advancing the NAV CANADA strategic plan for RPAS. Alexandra oversees the execution of RPAS related operational requirements and facilitating the provision of digital services ultimately enabling RPAS integration with ATM.

Alexandra brings an extensive aviation background to the National Manager role, on a journey which began as a pilot and a successful career as an Air Traffic Controller (ATC). Alexandra moved onto roles related to solution development and technology provision for internal and external clients. This combination of aviation, systems and technology provide a strong base for enabling this new entrant and industry.

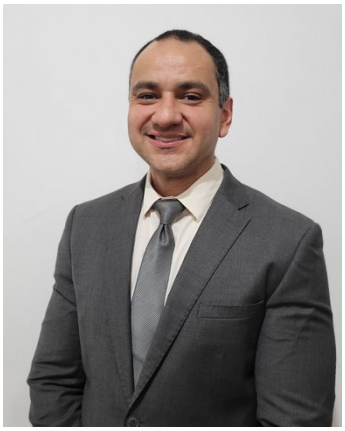
UTM: Regulators perspective

Joachim Luecking
Head of Unit for Aviation Safety, Directorate-General for Mobility and Transport, European Commission

Dr. Joachim Luecking has been the Head of Unit for Aviation Safety in the Directorate-General for Mobility and Transport of the European Commission since November 2016. In this role, he is responsible for implementing and developing European aviation safety policy, including oversight of EASA, as well as the Commission's international activities in the area. He also leads DG MOVE's work on drones and innovative air mobility.

Paul Hibberd
Branch Manager Emerging Technologies and Regulatory Change, Civil Aviation Safety Authority – Australia (CASA)

Paul Hibberd has held a range of legal and management positions in the Civil Aviation Safety Authority of Australia, including forming and leading CASA's Future Strategies Taskforce to develop an organisation-wide approach to undertaking regulatory preparations for emerging technologies, and as the senior manager responsible for CASA's emerging technologies coordination and RPA policy activities. Paul is Australia's representative on the ICAO AAM Study Group.



Robson Santos
Air Traffic Manager, the Department of Airspace Control (DECEA)

Robson Santos completed the air traffic controller course in 2003 and worked in TWR, APP and ACC, as well as worked in the prevention of aeronautical accidents, search and rescue, air defense and draft aeronautical charts. Graduated as an air traffic manager in 2015, he has been working in UAS management since 2019. He is currently working in the Unmanned Aircraft Systems Planning Division at Airspace Control Department (DECEA) and is advisor of the AAM-SG, in addition to being the current UTM implementation manager in Brazil.

RFI Topic 2 – Session 1

Leslie Cary
Independent Consultant, Former Chief, Remotely Piloted Aircraft Systems Section, International Civil Aviation Organization (ICAO)

Leslie Cary is an independent consultant with expertise in development of international aviation standards related to unmanned aviation and air traffic management.

She retired as Chief of the Remotely Piloted Aircraft Systems (RPAS) Section in the Air Navigation Bureau at the International Civil Aviation Organization (ICAO) in mid 2023. She served as Secretary of the ICAO Remotely Piloted Aircraft Systems Panel (RPASP) for four years. She also served as Secretary of the ICAO Unmanned Aircraft Systems Study Group for six years. Ms. Cary was responsible for managing the work programme and coordinating all developments related to UAS / RPAS within the ICAO framework, including UAS traffic management (UTM) and the introduction of Advanced Air Mobility (AAM). This involved working with Technical Panels, Study Groups, Advisory Groups and Task Forces and relevant external bodies on development of Standards and Recommended Practices, procedures and guidance material which will establish the basis for global interoperability and harmonization of RPAS, UAS, UTM and AAM.

Prior to joining ICAO in mid 2006, Ms. Cary was with the U.S. Federal Aviation Administration (FAA). She spent 14 years as an air traffic controller at Anchorage Air Route Traffic Control Center and six years at FAA headquarters facilitating implementation of various international ATM and CNS initiatives.

Justine Whitfield
Head of Products, Airways International

Almost ten years ago, Justine joined Airways supporting emerging aviation needs (High altitude balloons, rockets, UAs). In her current role as Head of Products, Justine leads a cross-functional team of software developers, product managers, and product specialists who draw on Airways' ANSP experience and the market, to develop and deliver solutions for aviation. The product portfolio includes AirShare for uncrewed traffic management, TotalControl for ATC simulation, and SureSelect for ATC candidate selection. Justine has a Masters of Commerce (MCom) and before aviation worked in various industries such as, Investment Banking, Payroll/HR solutions, and travel.

Phil Rakena
Operations Development Specialist,
ATS, Airways New Zealand

Phil Rakena is an aviation professional on Airways NZ's ATS Future Services team, with 35 years' experience in navigation and air traffic services. He develops strategy, delivers change management, and has been involved in a range of CNS/ATM initiatives, including UAS/UTM, PBN, Digital Towers, Surveillance, ATFM, Sectorisation, and ATS training. Phil led the PBN Implementation programme in New Zealand, chaired the CANSO PBN WG and was an advisor to the ICAO PBN SG. He has also played key roles in ATS crisis management (e.g. volcanic ash, earthquake, COVID-19), and previously held leadership roles with the RNZAF.

Brent Klavon
Chief Strategy Officer, ANRA Technologies

Brent Klavon is the Chief Strategy Officer at ANRA Technologies and is engaged in numerous international projects related to Advance Air Mobility. He is well versed in the nexus between policy, regulations, standards, technology, and social acceptance for new entrants into the existing air traffic system. Former US Navy pilot who is now a FAA certified Commercial Pilot and Remote Pilot.

Iain Coutts
Principal Aviation Consultant, Arcadis

Iain has worked in aviation and transport planning for almost 20 years. He joined Arcadis in 2014 as an aviation consultant and has worked on a diverse mixture of projects ranging from large international hub airports to general aviation airfields. He was previously the Aerodrome Safeguarding Manager at Edinburgh Airport. Iain is working on various AAM projects and is an advisor to the Advanced Air Mobility Institute.

Mincheng Zhang
Ph.D. Candidate, Air Traffic Management Research Institute (ATMRI), Nanyang Technological University and Mr. Mir Feroskhan, Assistant Professor, Nanyang Technological University

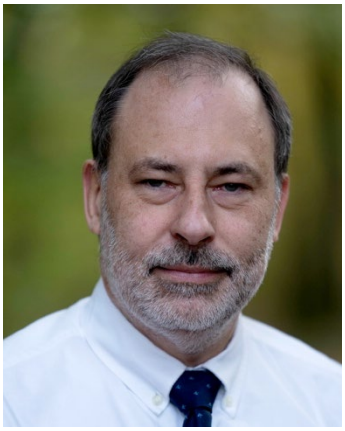
Mingcheng Zhang is a Ph.D. candidate at the Air Traffic Management Research Institute, Nanyang Technological University (NTU), Singapore. His research interests include tactical conflict resolution for Unmanned Aircraft System Traffic Management (UTM) in very low-level urban airspace.

RFI Topic 2 – Session 2

Moshe Cohen
Cofounder and Chief Executive Officer, Ciconia Ltd.

Moshe Cohen, Co-Founder and CEO at Ciconia Ltd, Decentralized Mid Air Collision Avoidance. Moshe, a Retired Colonel at the Israeli Air Force was a Cobra (AH-1) and Apache (AH-64) helicopters squadrons' commander.

After retiring he served in executive positions in several industries, low and hi-tech. Moshe holds Master degrees in Financial Management from the Naval Post Graduate School in Monterey Cal., and in Political Science from Haifa University.



Andrew Hately
UTM Concept Expert,
EUROCONTROL Innovation Hub

Andrew Hately is a senior researcher in the Drone unit at the EUROCONTROL Innovation Hub in France. He was the technical coordinator of the CORUS and CORUS-XUAM (CORUS extension for Urban Air Mobility) projects which produced updated editions of the concept of operation for U-space, Europe's UTM system. The CORUS-XUAM project also demonstrated how U-space supports UAM with six Very Large Demonstrations of Urban Air Mobility across Europe. He also participates in other U-space research projects including U-ELCOME and EUREKA. Andrew applies the results of research in supporting EASA's generation of acceptable means of compliance material, in standardisation groups and as a member of the ICAO Advanced Air Mobility Study Group. Andrew has worked in research at EUROCONTROL for more than a decade, on a wide range of topics including the ATM applications of Extended Projected Profile (EPP), the application of trajectory uncertainty in traffic prediction, ADS-B-In applications, Short Term ATFCM Measure (STAM) processes and tools, real time and model based simulation. Prior to research, Andrew developed flight plan processing software in EUROCONTROL's Network Management directorate.

Supreet Kaur
Lead Systems Engineer for the Data & Reasoning Fabric in the Aeronautics Directorate, National Aeronautics and Space Administration (NASA)

Supreet Kaur is a leader in systems engineering and project management with expertise in rapid design, integration, and validation of complex systems. She has a global education and work experience, and has conducted and published research in North America (NASA) and Europe (ESA). She is currently the Lead Systems Engineer for the Data & Reasoning Fabric in the Aeronautics Directorate at NASA Ames Research Center in Silicon Valley.

Lawrence Ley
Senior Portfolio Manager, Boeing Research and Technology, Boeing

Lawrence (Larry) Ley is currently Portfolio Manager Integrated Airspace Operational Efficiency Solutions for Boeing Research & Technology's Airspace Operational Efficiency Group. In this capacity, he delivers Boeing's significant manned and unmanned aircraft performance knowledge, on-board and ground communication, navigation & surveillance (CNS) technology and systems expertise, and airline operations understanding in support of air traffic management modernization initiatives and programs globally. His role to deliver integrated airspace optimization and capacity enhancement solutions, which advance ICAO Aviation System Block Upgrades (ASBU) and NextGen and SESAR Modernization roadmaps, resulted in Boeing's successful Unmanned Traffic Management RFI submission to ICAO.

Remote ID in the UTM Environment

Michael Goodfellow
Technical Officer, Global Interoperable Systems, International Civil Aviation Organization (ICAO)

Michael Goodfellow is a Technical Officer, Global Interoperable Systems in the Air Navigation Bureau of ICAO and currently serves as the secretary of ICAO's Trust Framework Panel. His aviation experience includes establishing multiple large-scale safety data management and analysis systems, data integration, emergency response planning and preparedness and flight data monitoring and analysis. He holds a Bachelor of Computer Science degree in Information Systems from Concordia University in Montreal, Canada.

Philip Kenul
Rear Admiral (retired), Chair, ASTM Committee F38 on Unmanned Aviation Systems, American Society for Testing Materials (ASTM) International

Philip Kenul is a Senior Vice President, TriVector Services and serves as Chair, ASTM Committee F38 on Unmanned Aircraft Systems developing UAS standards.

RDML Kenul (ret) served as a NOAA Corps officer focused on marine and aviation operations. RDML Kenul flew aircraft in support of aeronautical charting and trained with the Navy to become a WP-3D Orion aircraft pilot. He served as an Aircraft Commander with NOAA's Hurricane Hunters, as Director, NOAA Homeland Security Program Office, Commanding Officer, NOAA Aircraft Operations Center, and Director, NOAA Marine and Aviation Operations Centers responsible for NOAA's fleet of ships and aircraft. He has been directly involved with unmanned systems since the early start of these emerging technologies in NOAA.

RDML Kenul holds a bachelor's degree in biology from the State University of New York at Cortland and a master's degree in environmental and civil engineering from the University of Texas at Austin.

Drev Van Duren
Engineer, Senior Staff, Qualcomm

Drew has provided over 25 years of support to commercial and government customers in their efforts to secure safety-of-life, transportation, and national security systems. Through rigorous integration of system security design and core engineering disciplines, he has applied extensive cryptographic design, key management, and system security architecture design to automotive and aviation-related cyber-physical systems. Drew led security and privacy system design for the New York City Connected Vehicle pilot, and has provided extensive security support to RTCA, SAE, IEEE 1609, and ASTM standards groups. Today, he is leading development of an A2X ("aircraft to anything") communications security framework for ASTM F38.

Juan Vicente Balbastre Tejedor
Full professor at Universidad Politécnica de Valencia, European Organisation for Civil Aviation Equipment (EUROCAE)

Juan Vicente Balbastre Tejedor received the Dipl. Ing. and Ph.D. degrees from the Universitat Politècnica de València (UPV), Spain, in 1993 and 1996, respectively. In 1993, he joined the Communications Department of UPV where he currently holds a position of Full Professor. From 2008 to 2022, he was Director of the UPV Telecommunication Engineering School. His research activity has been focused since 2005 on aeronautical surveillance systems, especially MLAT and ADS-B. In 2018 he opened a new research line on U-space sytems and services, focused on conflict management and required CNS. He led more than 30 research projects and contracts and published more than 100 papers in journals and top-level conferences. Prof. Balbastre is chairman of EUROCAE WG-105 SG3 (UTM) and editor of EUROCAE standards ED-286A and ED-322 developed by WG-115 (C-UAS).

Andy Thurling
Vice President, Airspace Innovation, Drone UP

Andy Thurling is Vice President of Airspace Innovation at DroneUp where he leads the development and execution of airspace and UTM strategies; develops, influences, and shapes company policies and industry standards to support UAS airspace innovation; and leads on the DroneUp's path to commercial BVLOS at-scale. He was previously Chief Technology Officer at NUAIR and Director of Product Safety and Mission Assurance at AeroVironment. He is active in standards bodies such as ASTM and RTCA and internationally with EUROCAE, as a subject matter expert to JARUS, and ICAO on the Trust Framework Study Group. Andy is a Distinguished Graduate of the USAF Test Pilot School and has over 2300 hours of flight time in more than 35 aircraft types.

Dr. Stuart William Card
Chief Scientist, AX Enterprize

Dr. Stuart W. Card, after his Navy service (including training experiences operating aircraft, ships, and subs), has done 36 years of R&D in networks, storage, sensors, AI/ML, information theory, and trust. Existential threats of complex interdependent networks and autonomous cyber-physical systems motivate his work in UAS RID standards, causal AI/ML, and trustworthy networked autonomy.

Gabriel Cox
Chair, Remote ID Workgroup,
ASTM International

Gabriel has been leading the ASTM Remote ID workgroup consisting of industry and government stakeholders to bring a consensus Standard and Means of Compliance for UAS Remote ID (published as ASTM F3411 and F3586). He also served on the FAA's Aviation Rulemaking Committee for Remote ID. He is the creator of OpenDroneID.org, the open source project site supporting Remote ID solutions. Some of his most recent work in the industry was at Intel as an Aviation and Drone System Architect where he was leading many aspects of the future drone and high altitude survey products. He has a history of developing client, server, and cloud hardware and software solutions with a very strong background in systems architecture, networking, coding, and security. Prior to Intel, he provided leadership roles at several startups. Outside of product and standards development, Gabriel, along with his family, enjoy seafaring in their boat along with the adventures and privileges that come with being a licensed Private Pilot and Remote Pilot.

Performance-driven UTM capabilities to support the growing variety of operations and scalability

Benoit Curdy
Head of the Strategy and Innovation Unit, Swiss Federal Office of Civil Aviation (FOCA)

Benoit Curdy is the head of the Strategy and Innovation unit at the Swiss Federal Office of Civil Aviation (FOCA). He is currently leading the implementation of the Swiss U-Space. With a background in IT, Mr. Curdy actively contributes to several efforts related to UTM software interoperability in standard development bodies such as ASTM and EUROCAE. Additionally, he serves as a board member in the InterUSS platform, a Linux Foundation project that provides a forum for collaboration and development of standards-compliant, open-source solutions, including automated testing suites for UTM services. Before joining FOCA in April 2019, Mr. Curdy was the secretary-general of GUTMA, an international association based in Lausanne that brings together and represents UTM stakeholders worldwide.

Hendrik-Jan Van Der Gucht
Managing Director, Skeydrone

Hendrik-Jan holds master degrees in engineering and business administration and has spent his entire career in the aviation and air traffic management industry, occupying executive positions both within military and civilian organizations. About 4 years ago he was asked to start up and lead the company SkeyDrone, a joint venture of the Belgian ANSP skeyes and Brussels Airport Company.

Paweł Korzec
Chief Executive Officer, Droneradar

Pawel is the co-author of the PansaUTM system approved for operational use in Poland, integrated with civil and military ATC, and co-author of the CARS concept in the ICARUS project. Currently, Pawel deals with the issues of standardization of data models and interfaces as part of distributed integration, in accordance with Regulation 664. Co-author of the Droneradar Space project, promoting Data Driven SORA principle. Paweł is currently working with representatives of local governments to include Local Administration Units in the U-space management process.

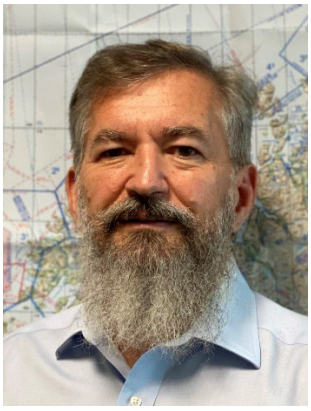
Don Berchoff
Chief Executive Officer, TruWeather Solutions, Inc.

Col (USAF-ret) Don Berchoff is the CEO of TruWeather Solutions, a micro-weather analytics company focused exclusively on UAS and e-VTOLs. An aviation thought-leader with 40 years-experience in weather, aviation and logistics, Don is focused on reducing micro-weather uncertainty for Beyond Visual Line of Sight operations, with a focus on "over-the-horizon" hard-to-detect weather hazards that will impact airframe use and effectiveness. He advocates for a P3 investment model to acquire weather measurements key to accelerated industry growth. He leads the ASTM F38 UAS weather group working on "ground-breaking" weather specifications for FAA consideration.

Long distance beyond visual line of sight (BVLOS) operations (safety aspects and lessons learned)

Jan de Regt
Senior Researcher, Flight Safety Foundation

Currently a senior researcher at Flight Safety Foundation, Jan de Regt was a coauthor of the long-term research roadmap for the In-time Aviation Safety Management System (IASMS) and is now working on roadmaps for other advanced aviation concepts. Jan began her engineering career with the US Naval aviation and then moved to the Federal Aviation Administration. Jan holds a BS in Electrical Engineering from the University of Virginia and a master's in Systems Engineering from Stevens Institute of Technology.



Bruno Boucher
Executive Vice-President Advisory,
Nordic Unmanned

Bruno Boucher is Executive Vice-President Advisory of Nordic Unmanned, a Norway based certified RPAS operator deploying a wide range of RPAS (between 2kg and 200kg) in various areas of the world mostly operating BVLOS. He has a Telecommunications Engineering degree from Laval University in Quebec, spent over 12 years at management level at Lufthansa Group in Germany and since 5 years manages regulatory and general RPAS business innovation, fleet evolution as well as consulting services out of his office in Norway. He also represents CAA Norway at the ICAO RPAS Panel since mid 2023.

Ansgar Kadura
Chief Services Officer,
Wingcopter

Ansgar Kadura is a Co-founder of and Chief Services Officer at Wingcopter. In this role he functions as the Accountable Manager for all commercial UAS operations of the company. Wingcopter especially focusses on delivering medical commodities and collecting laboratory samples in underserved populations around the world. Ansgar studied electrical engineering and management at Technical University of Darmstadt, Germany.

Zac Kennedy
Chief Regulatory Officer,
Swoop Aero

Zac Kennedy is the Chief Regulatory Officer at Swoop Aero and an Industry Fellow at Monash University. He brings a wealth of knowledge and experience in the aviation and aerospace sectors, having worked for the Australian Regulator, Qantas Airlines and most recently at Swoop Aero. Zac's approach is marked by a focus on enhancing operational efficiency, and his ability to lead multi-disciplinary teams has contributed significantly to the success of projects under his guidance. His work at Swoop Aero covers operations, safety, regulatory engagement, and program management, where his efforts have helped expand the company's reach and operational capabilities, allowing complex BVLOS operations/approvals in 16 countries.

Conor French
Chief Regulatory Officer,
Zipline

Conor leads legal, regulatory, and public affairs for Zipline, a company with a mission to transform the logistics system to serve all humans equally—no matter where they are. Zipline designs, manufactures and operates the world's largest on-demand and instant logistics system, which includes fully-electric, autonomous drones.

Prior to Zipline, Conor lead US legal, compliance and government relations for Funding Circle, the leading global SME lending platform, on its journey from startup to publicly-traded company and before that served as CEO of Indego Africa, a social enterprise and lifestyle brand that supports artisan women through economic empowerment and education. Conor began his career as a corporate attorney at Latham & Watkins.

Conor is a Presidential Leadership Scholar, a Truman National Security Fellow and a co-founder of several influential public policy organizations including the American Fintech Council, the Responsible Business Lending Coalition and the Alliance for Artisan Enterprise. He has been recognized as the Bay Area's top private company lawyer, on the US General Counsel Powerlist, and most recently by the Financial Times and National Law Journal for innovation and crisis leadership in COVID-19 pandemic response. Conor graduated from NYU Law and Georgetown and is admitted to the CA, DC, MA and NY bars.

Advanced Air Mobility activities at ICAO

Thomas Bombaert
Technical Officer, Remotely Piloted Aircraft Systems Section, International Civil Aviation Organization (ICAO)

Thomas Bombaert works for the International Civil Aviation Organization as Technical Officer within the Air Navigation Bureau (ANB). ANB is responsible for providing technical guidance to ICAO's Air Navigation Commission (ANC), the Council, and the Assembly. ANB provides technical expertise in aviation-related disciplines to States, industry and all elements of the Organization. Thomas is the Secretary of ICAO's Advanced Air Mobility Study Group (AAM SG) and supports the AAM work within ICAO.

Wrap-up DRONE ENABLE 2023 and closing remarks

Michele Merkle
Director, Air Navigation Bureau, International Civil Aviation Organization (ICAO)

Michele Merkle is serving as the Director of the Air Navigation Bureau at ICAO since July 2023. Michele has over 35 years experience working to improve the safety, capacity and efficiency of the global aviation system, providing systems engineering and human factors expertise in the development, evaluation and implementation of aviation systems and advanced concepts.

She has held a number of executive and managerial positions at the United States' Federal Aviation Administration (FAA) where she was responsible for modernizing the United States' Air Traffic Management System and integrating new entrants. She holds a Master's Degree in Industrial Engineering and Operations Research.

At ICAO, Michele is responsible for delivery of safety and air navigation strategic outcomes, integrating security and environmental requirements into developing ICAO SARPs and PANS. She brought about a culture of innovation at the FAA and is working at ICAO to help Member States and industry stakeholders tackle complex aviation challenges, help ICAO achieve greater operational efficiencies, and achieve One ICAO.

Pascal Luciani
Deputy Director, Air Navigation and Aviation Safety, International Civil Aviation Organization (ICAO)

Pascal Luciani is an engineer with 25 years of experience in transport in the civil administration of France and international organizations, 15 years of which in civil aviation.

Prior to joining ICAO as Deputy Director for Air Navigation and Aviation Safety, he served as Deputy Director for the French Safety Oversight Authority from 2018 to 2022. From 2014 to 2018 Pascal was the Aviation Counselor at the Permanent Representation for France with the European Union, covering all fields of aviation and was also responsible for Shipping. In 2008 he was tasked with creating the Sustainable Aviation Department, DGAC, France, which he headed from 2008 to 2013.

Pascal's experience in public service before joining the aviation sector includes Road Infrastructure and Road Safety (1997 – 2001), Port Infrastructure and Development (2001- 2005). He also served for two years as technical advisor for the Ministers of Environment and Transport (2005 – 2007). Pascal also headed the Modernization Mission in charge of supervising the merging of the Ministries of Transport and Environment in France (2007-2008).

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DRONE ENABLE

5 — 7 DECEMBER 2023

ICAO Headquarters, Montréal, Canada

SPEAKER PROFILES