



2022 FPAW Spring Meeting
Speaker & Panelist Biographies

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Randall Bass*FAA*

Randy Bass has been at the Federal Aviation Administration since 2012 and currently manages the Weather Research Branch in the Aviation Weather Division. He leads the Aviation Weather Research Program and the Weather Technology in the Cockpit program, overseeing budget, determining programs of record, and executing transition of successful ventures from research to operations. Randy retired from the Air Force in 2008 after 20 years as a weather officer. He provided weather support to bases and military aircraft throughout the US, and spent almost half his career supporting the Intelligence Community and satellite operations. Mr. Bass earned his Bachelor's Degree in Meteorology from North Carolina State University and a Master's Degree in Meteorology from Texas A&M University. He obtained the Certified Consulting Meteorologist designation from the American Meteorological Society in 2014.

William H. Bauman III*FAA*

Dr. Bauman manages the Aviation Weather Division in the NextGen Organization at the Federal Aviation Administration. The Office of NextGen is responsible for championing the evolution of the National Airspace System. NextGen is a comprehensive suite of state-of-the-art technologies and procedures to aid that evolution.

Dr. Bauman leads major program segments including the Aviation Weather Research Program, Weather Technology in the Cockpit, Weather Observation Improvements, Weather Forecast Improvements, Weather Technology Transition, and other Air Traffic Organization weather projects.

Dr. Bauman has over forty years of experience in aerospace meteorology including twenty years as a meteorologist and Air Force officer, fourteen years in private industry managing government programs, and over six years in Federal civil service.

Before joining the FAA in 2017, Dr. Bauman was the programmatic lead for the National Weather Service aviation and space weather services programs serving as the Chief, Aviation and Space Weather Services Branch.

Prior to joining the National Weather Service in 2015, Dr. Bauman managed three aerospace and aviation program contracts including NASA's Applied Meteorology Unit and Space Florida's Weather Center at Kennedy Space Center and NASA's Short-term Prediction and Research Transition Center at Marshall Space Flight Center.

Dr. Bauman served as a weather officer in the United States Air Force from 1981-2001.

Dr. Bauman has received the FAA NextGen VANGUARD Award, NASA Silver Snoopy Astronaut Award, six NASA Group Achievement Awards, two NASA Space Act Awards, the National Weather Association Larry R. Johnson Special Award, and the Air Force Space Command Merewether Award.

Education: Ph.D., Atmospheric Science, North Carolina State University, Raleigh, NC, 1995. M.S., Atmospheric Science, North Carolina State University, Raleigh, NC, 1989. B.S., Meteorology, Lyndon State College, Lyndonville, VT, 1981.

Don Berchoff
TruWeather Solutions

Don Berchoff (Col, USAF Retired) is the CEO of TruWeather Solutions, which synthesizes complex weather data sets into simple decision insight for the Unmanned Autonomous System, ground transportation and logistics industries

He has 35 years-experience in weather, aviation and logistics systems during which he designed and led regional and global aviation weather operations centers, co-authored the FAA NEXGEN Weather CONOPS and led all ground operations at Manas Air Base, Kyrgyzstan (2007-2008.)

Don also led the NWS Science and Technology Directorate (2008-2012) and was responsible for the transition of over \$500M in new S&T infrastructure and software applications into NOAA operations.

Bruce Carmichael
NCAR (Retired)

Bruce Carmichael is retired from the National Center for Atmospheric Research, as Director of the Aviation Applications Program. He joined NCAR in 1991, after working for Stanford Telecommunication as Deputy Director of their ATC Division. Prior to Stanford he worked for Dynamac Corporation as Technical Director for their Aviation Division supporting the Navy at their Test Center at Patuxent River. Prior to Dynamac he worked as Head of Data Base Administration for the U.S. Census Bureau and taught for University of Maryland and for Florida Institute of Technology. He was a commissioned officer in the U.S. Public Health Service and a Member of the Technical Staff at Bell Telephone Laboratories. He earned a Ph.D. in Computer Science from the University of Maryland, an M.S. in Applied Mathematics from Northwestern, and a B.S. in Mathematics from the University of New Mexico. He is a 45-year long. Active pilot, holding a Commercial Instrument Rating.

Meredith Carroll
FIT

Dr. Meredith Carroll is a Professor of Aviation Human Factors and Director of the Advancing Technology-interaction and Learning in Aviation Systems (ATLAS) Lab at Florida Institute of Technology's College of Aeronautics. She has nearly 20 years of experience studying human/team performance and training in complex systems. Her research focuses on decision making in complex systems, cognition and learning, human-machine teaming, performance assessment and adaptive training. She has been funded by the Federal Aviation Administration (FAA), the Air Force Research Laboratory (AFRL), the Air Force Office of Scientific Research (AFOSR), the Office of Naval Research (ONR), and the Army Research Laboratory (ARL) to study different facets of these areas. She also worked at the Kennedy Space Center conducting user-centered design of International Space Station payloads, processing facilities and ground support equipment. She teaches a range of human factors courses aimed at giving students practical, hands-on experience in applying theories of cognition and learning to optimize performance in a range of situations from aviation to defense. She received her Bachelor's degree in Aerospace Engineering from the University of Virginia, her Master's degree in Aviation Science from Florida Institute of Technology and her Ph.D. in Applied Experimental Psychology and Human Factors from the University of Central Florida.

Christina M. Clausnitzer
FAA

Ms. Clausnitzer is an analyst in the Flight Operations Group, Flight Technologies and Procedures Division, Flight Standards Service. Her Division's mission is to improve flight operations, standardization, and aviation safety within U.S. and international airspace systems in support of the FAA's plans for the NextGen through regulations, standards, and policy at the intersection of flight operations, aircraft, airspace, airports, and flight procedures. Ms. Clausnitzer joined the FAA as an Air Traffic Safety Inspector in 2016 in the Air Traffic Safety Oversight Service.

Prior to joining the FAA, Ms. Clausnitzer served 23 years in the U.S. Air Force as a Command Pilot in the KC-135. Her Air Force assignments include: Deputy Commander, 100th Operations Group, RAF Mildenhall, UK; Commander, 909th Air Refueling Squadron, Kadena Air Base, Okinawa, Japan; Chief, Safety, 6th Air Refueling Wing, MacDill AFB, FL; Chief, Standards and Evaluations, U.S. Air Force Academy, CO; Chief, Aircrew Training Branch, HQ U.S. Air Force, Pentagon, Washington, DC; and multiple assignments as a KC-135 Evaluator and Instructor Pilot.

Ms. Clausnitzer holds an Airline Transport Pilot - Instrument certificates with ratings in the B-707, and B-720.

She holds a Bachelor of Science Degree from the United States Air Force Academy and a Master of Science Degree from Mercer University, GA and a Master of Arts Degree from the University of Colorado.

Jason Craig
NCAR

Jason Craig has been a software engineer for over 20 years at the National Center for Atmospheric Research (NCAR). Jason's work has concentrated on developing, running and preparing for operations aviation algorithms such as the The Global Weather Notification System, the NEXRAD Turbulence Detection Algorithm (NTDA), Graphical Turbulence Guidance Nowcast (GTG-N) Product, and the Cloud Top Height (CTH) and Convection Diagnosis Oceanic (CDO) products. Jason is the Engineering Lead for the Turbulence Product Development Team.

Mark Eden
ALPA

Captain Mark Eden has enjoyed a 39-year commercial aviation career focused primarily in the areas of airline Training, Safety, Human Factors, and Regulatory Compliance. In addition to flying for five FAR Part 121 Carriers, he has participated in the startup of three FAR Part 121 Air Carrier Certificates. Omni Air Express (now Omni Air International), Tulsa OK; Asia Pacific Airlines, Agana GU; and Lynx Aviation, Denver, CO. At all three startups he was primarily responsible development and FAA approval of all training and checking programs and served as either Director of Flight Standards and Training or Director of Training. He has flown as line captain and Check Airman-All Checks, Pilot and Flight Engineer, on the B-727, B-737, and Airbus A318/319/320/321, both domestic and international.

Captain Eden is the founding partner of International Aviation Services, a FAR Part 142 Training School.

Captain Eden is currently flying as a line captain at Frontier Airlines where he serves on the F9 ALPA CASC as the ASAP Committee Chairman, and has been DEN LEC Safety Chairman, and a FOQA

Gatekeeper. He is also a P2P volunteer and has been a CIRP volunteer. He currently works with both ALPA National AGE group as the US National ASL Coordinator and with ATS Group working on issues involving meteorological subjects including RTCA SC-206 and SC-230. He has attended ALPA Accident Investigation, Safety Risk Management, and Safety Leadership Training. He has worked as an Air Traffic Control liaison, SME on the Chicago Airspace Redesign, and assisted in the development of a number of RNAV Arrival and Departure Procedures.

Captain Eden is a graduate of the United States Army Rotary Wing Aviator and Army Aviation Safety Officer schools. In addition to his flying certificates and ratings, Captain Eden holds both FAA Airframe and Powerplant Mechanic Certificates. He has a degree in Economics and attended both Kansas State University and Embry-Riddle Aeronautical University.

When not engaged in flying related activities, he enjoys restoring antique aircraft, restoring, and racing vintage British sports cars with his two grown sons, and gardening under the supervision of his wife.

Michael Emanuel

FAA

Mr. Emanuel has been supporting the enactment of principal systems for the Federal Aviation Administration (FAA) for over 23 years in the areas of engineering, acquisition, and project management. He currently leads the Terminal Precipitation on the Glass Project, is a system engineering lead for the Surveillance Information and Broadcast Services program, and co-chairs with National Weather Services and United States Air Force the Interagency Council for Advancing Meteorological Services (ICAMS) - Future Weather Radar Working Group. During his tenure with FAA, Mr. Emanuel has supported the solution implementation of multiple elements of the National Airspace System including weather capabilities such as the Low Level Windshear Alert System, Runway Visual Range, the ASOS Controller Equipment Interface Display System, and Eddy Dissipation Rate performance standards. He is Federal Acquisition Institute and Project Management Level III certified, and holds a B.S. in Information and Computer Science from Stockton University, and an M.E. in Systems Engineering from the Stevens Institute of Technology.

Jim Evans

MIT LL

Jim Evans is a senior staff member in the Air Traffic Control Systems group at MIT Lincoln Laboratory whose principal responsibility is for initiating and contributing to research programs in improved aviation weather decision making and operational benefits analysis.

Dr. Evans's undergraduate and graduate education was at MIT. On finishing his PhD, he joined the newly established FAA ATC program at Lincoln. His first ATC assignment was supporting the FAA and DOD in international meetings and collaborative studies of the susceptibility of various candidate Microwave Landing Systems (MLS) to propagation challenges such as multipath and shadowing.

Subsequently, he led the Lincoln Laboratory programs for the FAA on major operational convective weather decision approach systems including the Terminal Doppler Weather Radar (TDWR), the Integrated Terminal Weather System (ITWS), and the Corridor Integrated Weather System (CIWS).

He is currently working on improving air traffic management (ATM) decision making in convective weather and, in providing better decision support for early detection and suppression of wind driven wildfires at the urban-wildland interface.

He has over 100 publications in the areas of weather and air traffic control and received outstanding paper awards at two USA/Europe Air Traffic Management R&D Symposia. In 2019, he received the third annual Aviation & Space Operations Weather Prize from APA, NATCA, ADF, AOPA, Airlines for America, NBAA, RCC and ALPA.

Matt Fronzak
MITRE

Matt Fronzak is Weather Portfolio Advisor and Principal Systems Engineer in MITRE's Center for Advanced Aviation System Development (CAASD). His primary focus is on foundational applied weather and air traffic management (ATM)-Weather Integration research and analysis. He is also involved in a variety of projects revolving around weather uncertainty and ATM decision-making. He is currently the chairman of the AMS Aviation, Range and Aerospace Meteorology (ARAM) committee and co-chairman of the Friends and Partners in Aviation Weather (FPAW) group.

Prior to joining MITRE, Matt spent 34 years at Delta Air Lines working in a variety of operational and management roles, primarily in the Flight Control department at Delta's Operations Customer Center (OCC). In between Delta and MITRE, he had a short stint with Rockwell Collins (now Collins Aerospace) as a marketing manager supporting that company's airborne weather radar products. Matt holds a B.S. - Meteorology from the University of Massachusetts, Lowell and a Master of Aeronautical Science from Embry-Riddle Aeronautical University with specialties in Operations and System Safety. He is an operationally experienced aviation meteorologist, an FAA-licensed and experienced aircraft dispatcher, and an experienced operations manager and ATC coordinator.

Richard J. Heuwinkel
FAA (Retired)

Prior to his retirement from FAA in January 2018, Rick was the Manager of the Aviation Weather Division in the Federal Aviation Administration's (FAA) NextGen Office. In that role, he managed the four branches within the Division that were collectively responsible for planning and developing the weather capabilities necessary to support implementation of the Next Generation Air Transportation System (NextGen). This included overseeing the FAA's Aviation Weather Research Program (AWRP), the Weather Technology in the Cockpit (WTIC) program, the Reduce Weather Impact program, and the Multi-Phased Array Radar (MPAR) program. It also encompassed developing aviation weather policy and harmonizing NextGen weather standards with the International Civil Aviation Organization (ICAO) and the Single European Sky ATM Research (SESAR) Joint Undertaking.

In that position, Mr. Heuwinkel facilitated inter and intra agency collaboration to leverage multiple aviation weather projects to support the integration of weather information into decision support processes and tools and to focus aviation weather research initiatives that define NextGen requirements and develop operational improvements. He harmonized other FAA lines of business, including the Air Traffic Organization and Aviation Safety, the National Weather Service, and various other government agencies to achieve NextGen goals.

Mr. Heuwinkel had been with the FAA for nearly 30 years working on aviation weather programs. Prior to joining the FAA, he worked for 10 years in policy and program planning at the National Oceanic and Atmospheric Administration (NOAA). Mr. Heuwinkel earned a Masters degree in Political Science and Economics from Iowa State University and an MBA from Stanford University. He served as an Officer in the U.S. Army Air Defense Corps and holds a commercial pilot's certificate.

Le Jiang
IMSG

Dr. Le Jiang started his career as an aviation weather meteorologist. He serves currently as the Chief Scientist and Vice President of I. M. Systems Group, Inc. (IMSG), overseeing the company's major federal programs with over 200 scientists, analysts, and software engineers supporting NOAA/NESDIS and NWS using environmental satellite remote sensing and numerical weather prediction models and transitioning Research to Operations (R2O) for the U.S. national and global environmental monitoring and numerical forecasting capabilities. These capabilities are serving the FAA, airlines, and airports for their operational-critical weather information needs. Dr. Jiang also led IMSG's aviation weather team, developing enterprise integrated solution for aviation weather needs supporting decision making.

Ian Johnson
FAA

Dr. Ian Johnson is an Engineering Psychologist with the FAA Weather Research Branch of the Aviation Weather Division. He currently serves as the Human Factors Lead and General Aviation subject matter expert on the Weather Technology in the Cockpit program. Dr. Johnson has over 20 years of experience in Human Factors Engineering/System Safety of various cockpit display systems and user interfaces. Experience ranges from lead Human Factors Engineer, Staff Human Factors Engineer of Presidential Helicopter program, and technical contributor to RTCA & SAE special committees. Dr. Johnson holds a Ph.D. in Psychology with an emphasis in Cognition and Instruction from Grand Canyon University, a Masters of Aeronautical Science in Human Factors in Aviation Systems, a Masters of Aeronautical Science in Aviation/Aerospace Safety Systems, and a Bachelor of Science Degree in Human Factors Psychology from Embry Riddle Aeronautical University, and an Associate of Science in Computer Technology from Orlando Technical College. Additionally, Dr. Johnson holds a certificate in General Aeronautical Engineering and is also a Single and Multi-Engine Airplane pilot.

Kevin Johnston
FAA

Kevin Johnston is a meteorologist in the Next Generation Air Transportation System Aviation Weather Division, Policy and Requirements Branch within the Federal Aviation Administration (FAA), moving into this position in June 2019. In this position, Kevin leads activities with the Weather Information Modernization and Transition program and activities with Unmanned Aircraft Systems. Prior to this position, Kevin was the Chief Meteorologist for the Director of FAA System Operations. As such, he advised the Director and Staff on weather related issues associated with Air Traffic Flow Management Decision Making activities. He was also the Contract Officer Representative for National Weather Service support to FAA Air Traffic Control Facilities and the FAA lead to the Collaborative Decision Making (CDM) Weather Evaluation Team (WET).

Kevin moved to the FAA in November of 2008 after leaving the National Weather Service where he was the Aviation Services Branch Chief and NOAA Aviation Weather Program Manager.

Kevin is a retired Air Force Lieutenant Colonel where he served over 21 years as a Weather Officer providing weather decision assistance to various Joint, Air Force, Army and Special Operations missions.

Debbie Kowalewski
ADF

Debbie Kowalewski has served as the secretary for the Airline Dispatchers Federation (ADF) since 2019. Prior to that she was the ADF V.P. of membership and the ADF UAL-PAFCA delegate. She has also served on the ADF summit & scholarship committees. The ADF is an all-volunteer organization (all working dispatchers) that represents and advocates for the professional interests of airline dispatchers.

Debbie has been at United Airlines dispatch since 2000. She is both a domestic and international dispatcher for the Atlantic and South America regions. She has also been an Air Traffic Control coordinator, an Adjunct Dispatch Instructor, and a Special Air Missions (SAM) dispatcher. In SAM dispatch, she did planning, dispatching & provided mission support for the U.S. Air Force's 89th, 201st & 76th Air Wings, including Air Force Two. She is also a Line Observation Safety Auditor (LOSA) observer for the UAL dispatch group.

Debbie holds a Masters of Aeronautical Science degree from Embry-Riddle & a B.S. in Aviation from Southeastern Oklahoma State University. In addition to her FAA aircraft dispatch certificate, she is a Certified flight instructor CFI & CFII, a commercial pilot with multi-engine and Instrument ratings, and holds an FAR107 drone pilot certificate.

Elizabeth Krajewski
Collins Aerospace.

Beth Krajewski is currently a value stream leader for Weather and Platform Services at Collins Aerospace. She is responsible for strategy and development of aggregated weather products and the platform business strategy. Beth came to Collins after over 20 years at WSI/The Weather Company working on operational solutions around weather and flight tracking for commercial aviation. Beth has a Bachelor and Masters in Atmospheric Science from The University of Massachusetts, Lowell.

William S. Leber
NWA, Passur Aerospace (Retired)

William S. Leber is a retired Airline Operations expert who spent most of his career with Northwest Airlines and Delta Air Lines. He was a participant in the Collaborative Decision Making (CDM) efforts since the early 90's where he was a contributor to the development and implementation of numerous AOC and CDM initiatives. He had 30+ years of air traffic management experience coordinating with FAA and other ANSP's in the Atlantic and Pacific regions. He was a Chief Flight Dispatcher and worked for Northwest Airlines for 27 years. He was a member of the FAA's REDAC - NAS Operations Subcommittee where he Co-Chaired the Weather - ATM Integration Work Group producing, 2007, The Weather ATM Integration Report. He was Chair of the CDM Future Concepts WG and Co-Chair of ATA's overall CDM effort from 2001 to 2004. He was a Co-Chair of the National Academies of Sciences, Engineering, and Medicine Committee to Review the FAA's Certification Research Plan. Published, 2015, Transformation in the Air: A Review of the FAA's Certification Research Plan for NextGen. He is a former President and Co-founder of the Airline Dispatchers Federation a non-union professional association. He holds a B.S. in Aeronautical Administration from St. Louis University and Aircraft Dispatcher and Pilot certificates. He also served Lockheed Martin's CATM Practice and PASSUR Aerospace as a Vice President.

Claudia McKnight
MITRE

Claudia McKnight (CDR, USCG Retired) earned her Honorary degree in Meteorology from the Fronzak-Huhn School of Meteorology in 2016. This was a painstaking process that involved “cheerfully putting up with countless hours of atmospheric geekage, attending multiple annual AMS meetings, and successfully presenting to rooms of weather-heads.” Prior to that, Claudia served 26 years in the military as an Army and Coast Guard helicopter pilot and maintenance officer. Since joining MITRE in 2008, she has worked on ATM-weather integration (i.e., the ketchup and mustard chart), aviation safety (the ASIAS program), and most recently in the area of small Unmanned Aerial Systems (sUAS) and advanced aerial mobility (AAM). She is very excited to be dipping her toe back in the weather domain as the need for weather in the lower atmosphere becomes more critical.

Alfred Moosakhanian
FAA

Alfred is a PMP and FAA Senior Level Certified Program Manager, currently serves as the Senior Technical Advisor for Aviation Weather and Aeronautical Systems and manager for Operational Weather System including Weather and Radar Processor (WARP), Corridor Integrated Weather System (CIWS), World Area Forecast System Internet File Service (WIFS), Weather Message Switching Center Replacement (WMSCR) and more. Previously, he served as the manager for NextGen Weather Systems that include Common Support services - Weather and NextGen Weather Processor. In addition, he is the Co-Chair for Weather Community of Interest (Wx COI) for the FAA.

Hok Ng
NASA

Dr. Hok K. Ng is a research aerospace engineer at NASA Ames Research Center. He specializes in algorithm development for air traffic management system. He has worked for the past 14 years on Aviation related researches and applications. His experience includes investigating computational approaches to improving the speed in generating wind-optimal (energy efficient) routes for air traffic at the national or global level, and developing trajectory optimization algorithms for tradeoff between climate impact and aircraft emissions. He earned his Ph.D. degree in Mechanical and Aerospace Engineering from University of California, Los Angeles. His current research interests include air traffic management and disruptions management for Urban Air Mobility and Unmanned Aircraft Systems.

James Olden
USAF

James Olden is the Current Operations Division Chief for the Office of the Deputy Assistant Secretary of the Air Force, Operational Energy, Washington, D.C. Mr. Olden directs development of operational energy policy to deliver optimal operations planning and execution solutions in support of the global United States Air Force Mission.

Mr. Olden hails from Fairhaven, Massachusetts and entered the Air Force in 1999 as a graduate of the United States Air Force Academy. He served in operational assignments as a pilot in the C-21A and C-17A, including as Formal Training Unit Instructor Pilot. Mr. Olden earned master’s degrees in aeronautical science and international relations and holds a defense energy certificate from the Naval Postgraduate School. He resides in Washington D.C. with his family.

Marilyn Pearson
CAE

Marilyn Pearson is an ATP rated pilot in Single and Multiengine Land and Seaplanes; Commercially rated in Rotorcraft, Gliders and part 107 with instructor ratings for single, multiengine, land, sea, glider, gyroplane, and instrument with over 40 years of experience as an aviation professional. Marilyn served as a corporate pilot in several jet aircraft types before taking a position as an Aviation Safety Inspector with the FAA. Marilyn worked as a Principal Operations Inspector in the Bradley Flight District Office (CT) for 15 years, providing oversight for all aspects of aviation, including parts 135 and 121 operations as well as serving as a National Resource Inspector in several aircraft and serving as the airshow coordinator. Marilyn transitioned to a staff specialist at FAA Headquarters where she was tasked in unmanned aircraft operations, serving on several rulemaking teams as well as developing guidance and policy for part 107 operations, issuing Advisory Circulars, waivers and exemptions for new entrant operations. She was a co-chair for the FAA Weather Community of Interest and lead for the UAS Special Weather Action Team.

Marilyn is retired from the FAA and now has a position with CAE as a Global Regulatory Specialist in AAM/EVTOL where she participates with National Aviation Associations recommending policy for new entrant aircraft, pilot training and simulator certification. She is the Co-Chair of SAE International G-35 Modeling, Simulation, and Training for Emerging Aviation Technologies and Concepts. Marilyn also serves on the EASA RMT .0230 VTOL/Drones and ASTM F38 Low Altitude Wx SDSPs.

Mark Phaneuf
ALPA

Mark Phaneuf is a Senior Staff Engineer with the Air Line Pilots Association, International (ALPA) providing technical staff support to the Engineering and Air Safety department in the areas of accident investigation, dangerous goods, cargo and weather. ALPA represents and advocates for more than 62,000 pilots at 38 U.S. and Canadian airlines, making it the world's largest airline pilot union to promote and champion all aspects of aviation safety throughout all segments of the aviation industry. Prior to ALPA, Mark was an FAA contractor for over 15 years with AvMet Applications and served as Chief Operating Officer. AvMet is a leading provider of aviation weather consulting and engineering services for the public and private sectors. AvMet provides its customers with in-depth, practical, technical, and operational expertise in a wide variety of areas including aviation, meteorology, weather systems, systems engineering, modeling, and simulation. Mark led many projects in support of AvMet's FAA customers in Weather Policy and Standards and Traffic Flow Management Weather Programs. Mark has over 30 years of aviation experience and holds a bachelor's degree in Aeronautical Science from The Ohio State University. He is a commercial pilot, and retired military aviator with over 7000 hours combined military and civilian time.

Gary Pokodner
FAA

Gary Pokodner graduated from Lehigh University as an electrical engineer. He has worked in design, reliability, development, test, and acquisition of avionics. Gary came to the FAA in January 2011 after working for ARINC for 25 years on military avionics acquisition programs. Since coming to the FAA, Gary has been the FAA's NextGen Weather Technology in the Cockpit (WTIC) Program Manager. In this role, Gary has been managing a portfolio of research projects with the overall objective of identifying and resolving gaps in meteorological (MET) information in Part 91, 135, and 121 cockpits and pilot weather training with the objective of enhancing operational efficiency and safety.

Stefano Prola*IATA*

18 years in the Italian Air Force as pilot. Experimental test pilot, flown F-104, Tornado and 30 different airplanes and helicopters. From 1997 to 2008 in the regional carrier of Alitalia, as Flight Safety officer and Chief Pilot. From 2010 until 2013 Vice President Flight Operations and Crew Training of a regional Italian Airline.

In IATA since 2014, in the Safety and Flight Operations European regional division. Type rated on A320 and ATR42/72 until COVID came.

Colleen Reiche*EY-Parthenon*

Dr. Colleen Reiche is a Senior Director at EY-Parthenon where she manages the Aviation and Weather portfolio as part of the Quantitative Strategy Group (QSG), formerly the small consulting firm of Quantitative Scientific Solutions ("QS-2"). She brings extensive technical experience supporting various clients in data analytics, aviation weather research, aviation new entrant assessments, technical program and project management, and stakeholder engagement. She specializes in combining qualitative and quantitative techniques to develop unique and customized solutions to provide her clients with meaningful and deep research and strategic insights.

Prior to joining EY-Parthenon with QS-2, Colleen lead various technical aviation and weather projects including market studies, weather product development and assessment, modeling and simulation, and statistical analysis for various institutions including Booz Allen Hamilton, AvMet Applications, and MIT Lincoln Laboratory. She received her PhD and M.S. in Atmospheric Science from Purdue University and her B.S. in Astronomy & Astrophysics from Villanova University.

Gordon (Gordy) Rother*FAA*

Gordon Rother currently works for Flight Standard, Air Carrier Operations Branch and is supporting the Aviation Weather policy and procedures. He recently worked for Flight Standards Aviation Weather Subject Matter Expert working with Air Traffic, NOAA, NWS, AWC and industry on weather related issues. From 2011 to 2015 he worked as a dispatch, navigation, Aircraft Performance, ETOPS and flight planning Subject Matter Expert in AFS-240. From 2009 Country Airlines certificate management teams. He was assigned team lead for the merger between Colgan Airlines and Mesaba Airlines. He started his career in the FAA in the Northwest Airlines Certificate Management office in 2001 where he worked through 2009. During that period, he instructed both the Dispatch Functions course and the Oceanic and International Operations course in Oklahoma City. He was involved in the merger of Delta and Northwest operations as an SME to the Joint Transition Team. Mr. Rother was also involved in the FAA Landing Performance Team investigating the Southwest Airlines flight 1248 overrun at Chicago, Midway Airport in December 2005. He participated in the development of FAA SAFO guidance for landing on contaminated runways. He was then assigned as the team lead to the 121 subcommittee for the Takeoff And Landing Performance Aviation rulemaking team. Mr. Rother came to the FAA in 2001 after 15 years of air carrier Dispatch and Management experience, which included both domestic and international operations. Mr. Rother held positions as Assistant Dispatcher, Dispatcher, Supervisor/Training Dispatcher, Chief Dispatcher and Director of Systems Operations Control for three 121 airlines, (Spirit of America, Mesaba Airlines, and Sun Country Airlines). He holds a Private Pilot SEL certificate and Aircraft Dispatcher Certificate.

Tom Ryan
AvMet Applications

Mr Tom Ryan has spent the last three decades working as a federal employee or as support to them. As a Fed he's worked in IT, construction, emergency preparedness, runway safety, and aviation weather. His most recent efforts have been working in aviation weather for the FAA's NextGen program and for Flight Standards. He retired from the FAA in 2019 but has kept at it in support of the Flight Standards weather program.

Mr Ryan was offered opportunities to manage projects and programs for the FAA. His success in bringing teams together to develop plans and bring them to fruition has been a source of great enjoyment to him and to his teams.

In working aviation weather he's participated in FPAW for about 15 years. As FPAW participants we're always searching for ways to provide value to this rather small community. This session on bringing in updates to various projects is a small contribution to that.

Joshua W. Scheck
NWS

Dr. Joshua W. Scheck is the Aviation Support Branch Chief at NOAA Aviation Weather Center (AWC). He leads around 20 employees responsible for aviation training, web development, transition of research and technology to operations, IT infrastructure, and data flow. After receiving a B.S. degree in meteorology at Northern Illinois University, Dr. Scheck earned his M.S. and Ph.D. degrees in meteorology from Saint Louis University. He became an NWS meteorologist in 2005, and began improving the organization's science-based services soon after that. He carried that experience into his current position in 2016, where Dr. Scheck also oversees the Aviation Weather Testbed as new aviation weather science and technology is developed, evaluated, improved, and transitioned to operations.

Joel Siegel
Booz Allen Hamilton

Joel Siegel is a Lead Associate at Booz Allen Hamilton in Washington, DC, working as part of their Domestic Resilience account. Joel began his career in aviation on his 10th birthday with his first flight lesson, earning his private pilot's license at the age of 17 and his instrument rating and sUAS certificates in 2020. He received his B.S. in Atmospheric Sciences from the University of North Carolina at Asheville in 2008 and his M.S. in Atmospheric Sciences at the University of North Dakota. While at UND, Joel took advantage of the dynamic weather in the Great Plains and advanced his hobby of storm chasing while continuing to fly. Joel furthered his career in aviation weather forecasting in 2012 when he began working for Rockwell Collins (now Collins Aerospace). In 2015, Joel relocated to Maryland, where he obtained his aircraft dispatcher license and worked to support operations as a dispatcher and meteorologist for business and general aviation operators. He actively supported research in civil aviation weather impacts, in addition to weather data collected from aircraft. During his time at ARINC, Joel became a key industry representative on one of the FAA's Collaborative Decision Making (CDM) groups, the Weather Evaluation Team. In September 2018, he joined Booz Allen Hamilton where he supported the FAA's Office of NextGen in support of the Weather Domain Architect in his role to ensure the success of future FAA weather projects. Currently, Joel supports the FAA's Air Traffic Organization UAS Leadership Team in safely integrating UAS into an already congested airspace system. Joel also leads Booz Allen's efforts researching weather impacts on sUAS, Urban Air Mobility operations, and other future technologies in the National Airspace System.

Philip J. Smith
Ohio State University

Philip J. Smith is a Professor in the Department of Integrated Systems Engineering at The Ohio State University. He is recognized as one of the leading experts in the country on Collaborative Decision Making and the design of distributed work systems. Dr. Smith has extensive experience in air traffic flow management, air traffic control, airline operations control, airport surface management and the design of distributed work systems in the National Airspace System. His publications include P.J. Smith and R.R. Hoffman (eds.) (2018). *Cognitive Systems Engineering: The Future for a Changing World*. Boca Raton, FL: CRC Press.

Matthias Steiner
NCAR

Dr. Matthias Steiner is a Senior Scientist with the National Center for Atmospheric Research (NCAR) serving as Director for the Aviation Applications Program of the Research Applications Laboratory (RAL). Drawing from three decades of scientific experience, he leads new initiatives and directs research and development efforts broadly aimed at mitigation of avoidable weather impacts on various sectors, with a particular focus on aviation. Dr. Steiner's vision, leadership, and substantial contributions toward mitigating weather impacts on the aviation industry reach deeply across the traditional boundaries of developing more accurate weather forecasts in order to integrate weather guidance in the decision-making process to better serve aviation operators. At present, Dr. Steiner is leading efforts to understand weather sensitivities and requirements for the rapidly growing interests in urban air mobility and using unmanned aerial systems for wide-ranging applications and safe integration into the national airspace system. Dr. Steiner has received multiple recognitions for excellent contributions to field programs, scientific missions, and outstanding publications. Most notable, Dr. Steiner is a Fellow of both the Royal and American Meteorological Societies.

Ralph Stoffler
Raytheon

Mr. Stoffler is an operational Meteorologist with over 40 years of experience. He successfully served 30 years in the United States Air Force supporting helicopters, RPAs, UAVs, bombers, fighters, cargo and surveillance aircraft. Highlights of his career include supporting the Air Force cargo mission across the Pacific, all Air Force weather operations in Europe and Africa, and a certified training instructor for Undergraduate Pilot Training in weather. Mr. Stoffler also directly supported the United States Army with the 2nd Armored Cavalry and United States Army Europe. He spent a significant time working with NATO and coalition partners of the United States. He received an honorary award from the Czech weather service. Mr. Stoffler retired with the rank of Colonel.

Mr. Stoffler worked an additional 10 years as a civilian in the DoD joining the Senior Executive Service. He served as the Director of Weather for the Air Force overseeing 4000 personnel, 2.2 Billion dollars in budget, a training school house and a number of acquisition programs. He had the opportunity to visit the South Pole to improve aviation safety in the Antarctica region and was part of a critical Arctic evaluation team in Greenland and Northern Alaska. Mr. Stoffler retired from the DoD in 2020.

Mr. Stoffler is currently employed by Raytheon Technologies as a Senior Solutions Architect with a focus on the weather mission.

He has a BS in Meteorology from the University of Oklahoma and an MS in Systems Management from USC. Mr. Stoffler is married to the former Waltraud Frank and has two sons, Michael and Christopher.

Antonio A. Trani,
Virginia Tech

Professor.

Co-Director, FAA National Center of Excellence for Aviation Operations Research (NEXTOR)

Dr. Trani has extensive experience in aviation simulation and computer modeling, aircraft performance modeling, airport design, safety modeling, and airport engineering and planning and research applications to transportation systems. Currently, he is a Professor of Civil and Environmental Engineering at Virginia Tech and directs the Air Transportation Systems Laboratory. He has been the Principal or Co-Principal Investigator on 72 research projects sponsored by the National Science Foundation, the Federal Aviation Administration (FAA), the National Aeronautics and Space Administration, and the National Consortium for Aviation Mobility, the Federal Highway Administration, and the Center for Naval Analyses. Dr. Trani has published 92 scholarly papers in aviation modeling and simulation, airport design, and multi-modal demand modeling. His research interests include aviation systems modeling and simulation, air transportation engineering, airport design and planning, airport noise and emissions modeling, air traffic control systems, and aviation demand modeling. In particular, he has led the development of large-scale models used to predict nationwide aviation demand and to study the impacts of aviation technology in the en-route, terminal, and airport operations. He has participated in developing 13 software models used by government, industry, and academia to study various operational aspects of the national airspace and airport systems – including benefit studies of weather in the cockpit technologies for the FAA.

Eugene B. Wilhelm, IV
MITRE

Mr. Wilhelm conducts systems engineering analyses for MITRE's Center for Aviation System Development (CAASD) related to Next Generation Air Transportation System (NextGen) development. Primary areas of focus have included: the integration of advanced weather information into ATM decision making and related automation tools; CAASD's Independent Assessment of NextGen objectives and progress; and CNS/ATM evolution options, for both ground-based and aircraft-based capabilities, to accomplish NextGen target state operations. As both a Senior Principal Engineer and an engineering manager, his primary responsibilities include the development of future concepts, architectures, and capabilities that will transition the National Airspace System to NextGen. This work includes definition, validation, and coordination, with the FAA and the aviation community, of advanced ATM operational concepts, and proposed decision support capabilities, e.g., for the integration of weather into ATM decision making. These development efforts also include the cross-domain integration of decision support capabilities and system engineering for the underlying infrastructures.

Mr. Wilhelm holds a B.A in Mathematics from the University of Virginia (Cum Laude), and an M.S. in Operations Research from George Washington University. He is a member of Tau Beta Pi Engineering Honor Society, and the Omega Rho Operations Research Honor Society.

Andrew B. Williams
USAF

Lieutenant Colonel Williams currently serves as the Chief of Joint Weather Policy for the Weather Directorate, Policy Division on the Air Staff (A3WP), at the Pentagon. In this role he engages with joint, interagency and international partners across the federal weather enterprise and internationally to represent the policy interests and implications for the Weather Career Field supporting Air Force, Army and Space Force requirements.

Lieutenant Colonel Williams was born and raised in Fort Smith, AR. He commissioned in 2005 upon completion of Saint Louis University's ROTC program. His most recent prior assignment was as Commander for the 28th Operational Weather Squadron, leading 118 total force Airmen providing 24/7 environmental intelligence support to operations in the USCENTCOM Theater. Prior to command, Lt Col Williams served as Operations Officer at the Air Force's largest operational weather squadron. He has additionally held assignments as the Wing Weather Officer for the 52d Fighter Wing at Spangdahlem AB, Germany, as Commander of Detachment 2, 3d Weather Squadron at Ft Riley, Kansas in support of the U.S. Army's 1st Infantry Division, and as Chief of the Meteorological and Oceanographic Division for Special Operations Command Central, coordinating METOC support actions across USCENTCOM's joint special operations forces. While assigned to the sub-unified command, he served his final year as Director, Commander's Action Group, responsible for planning the 2-star Commander's correspondence and key leader engagements both stateside and abroad.

Lieutenant Colonel Williams is a master meteorologist, military parachutist, and fully qualified joint officer. He has deployed four times during these assignments to USCENTCOM's CAOC, and to Operations ENDURING FREEDOM in Afghanistan, NEW DAWN in Iraq, and INHERENT RESOLVE in Kuwait at the initiation of the Operation.