



2022 FPAW Fall Meeting  
Speaker & Panelist Biographies

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**Rex J Alexander***Five-Alpha LLC*

Rex Alexander has over four decades of military aviation, general aviation, and commercial aviation experience, and is a globally recognized subject matter expert on helicopter, vertical lift and eVTOL infrastructure. He is the founder and president of the aeronautical consulting firm Five-Alpha (5α) and has served as Infrastructure Advisor to the Vertical Flight Society since January 2019. Rex is co-chair of the US Helicopter Safety Team (USHST) Infrastructure Working Group, Chair of the National Fire Protection Association (NFPA) 418, Standard for Heliports, a member of ASTM International F38 WK59317 New Specification for Vertiport Design, a member of the Vertical Aviation Safety Team (VAST) Technology Working Group, a member of the Illuminating Engineering Society (IES) Technical Committee, a member of the Helicopter Association International (HAI) Vertical Flight Infrastructure Sub-Working Group, and serves as a platform instructor to the U.S. D.O.T. Transportation Safety Institute. He is an alumnus of Parks College of Aviation and a former US Army Warrant Officer and 'Aeroscout' Helicopter Pilot, Instructor Pilot and Standardization Instructor, having served both on active duty and in the Indiana Army National Guard.

**Sonia Alvidrez***FAA*

Ms. Alvidrez is Human Factors Engineer with over 20 years of experience in the field. She has been working for the FAA for 11 years with 6 of those years focusing on aviation weather. Ms. Alvidrez is in the Aviation Weather Division and is the lead for the Aviation Weather Demonstration and Evaluation (AWDE) Services Team. Ms. Alvidrez has a vast amount of expertise in conducting research, user assessments, cognitive task analysis, task analysis, operational testing, heuristic evaluations, focus groups, iterative design, and conducting cognitive walkthroughs. These methods are aimed at understanding job tasks and user needs which is critical to identify when designing/developing new tools to ensure the new tool is focused on supporting user needs. Ms. Alvidrez's career has been to ensure products adequately support users in their operational environment and are easy to use.

**Eric Avila***NATCA*

Eric Avila is the National Air Traffic Controllers Association national weather representative. In his position, he collaborates with his FAA counterparts on numerous NextGen weather programs such as NexGen Weather Processor. Working together, they are developing weather products that will aid air traffic controllers and air traffic managers in their daily operations. In 2022, Eric was recognized as the Raytheon Controller of the Year.

Prior to his transition to this position, Eric worked at the Houston Air Route Traffic Control Center (ARTCC) as an air traffic controller for 9 years. His previous experience includes working as a meteorologist for the National Weather Service for 9 years including 5 years at Houston ARTCC. In 2011, during his time as a meteorologist at Houston ARTCC, he was awarded the NOAA Administrator's award for his work in developing a web based tactical decision aid to visually display the Terminal Aerodrome Forecast. His experience working directly with air traffic management as a meteorologist gives him a unique perspective when helping to design NextGen weather systems.

**Bob Avjian**  
*MITRE*

Bob Avjian is a Principal Multi-Discipline Systems Engineer in MITRE's Center for Advanced Aviation System Development (CAASD). Bob provides air-traffic management system weather integration architecture subject matter expertise to projects within CAASD supporting FAA automation systems. Bob is the project lead for MITRE's support to FAA Cloud Services for Aviation Weather, Terminal Precipitation-on-the-Glass and the FAA PIREPs Modernization Strategic Plan and Roadmap project. Prior to joining MITRE, Bob spent over 30 years at Lockheed Martin as an electronics design engineer, systems architect and system engineer spanning defense systems, communications systems, satellite control systems, command and control systems and specifically air traffic management systems. His primary research focus is Air Traffic Management – Weather integration. Bob holds a B.S. – Electrical Engineering from Boston University and an M.S in Electrical Engineering from Johns Hopkins University. Bob is also an instrument rated Private pilot.

**Kodi Berry**  
*NOAA*

Kodi is the Program Lead for Forecasting a Continuum of Environmental Threats (FACETs) at the National Severe Storms Laboratory (NSSL). Her primary area of research includes how broadcast meteorologists use and communicate probabilistic information in a mock television studio environment. Before joining NSSL, Kodi was the Sea Grant Liaison to NSSL and the Cooperative Institute for Mesoscale Meteorological Studies (CIMMS) at the University of Oklahoma. She also managed and coordinated across all experiments that took place in the NOAA's Hazardous Weather Testbed. Kodi completed her undergraduate education in Meteorology at the University of Nebraska-Lincoln and graduate education at the University of Oklahoma.

**Frank Brody**  
*UCAR*

Frank Brody is Scientist with UCAR/COMET, focusing on developing remote training modules for use by Meteorologists. He also participates in International Development projects and supports other COMET initiatives. Frank has been with COMET since 2018. In addition, he worked for Booz Allen Hamilton consulting company from 2018-2021 as an Aviation Operations SME, supporting a variety of projects ranging from Advanced Air Mobility / Urban Air Mobility (AAM/UAM) to Offshore Wind Farm meteorological analyses.

Prior to working at COMET and Booz Allen, Frank completed a 40 year career with the NOAA/National Weather Service (NWS) in a variety of operational and management positions. He led NWS weather decision support to the FAA Air Traffic Control System Command Center (ATCSCC) from 2014 to 2017. In this role, he provided and directed meteorological decision support for ATCSCC, including forecasts, briefings, and interagency coordination. He was a member of the FAA Collaborative Decision Making (CDM) Weather Evaluation Team (WET), helping develop and improve aviation weather CDM processes and tools. Frank was Meteorologist in Charge of the NWS Spaceflight Meteorology Group (SMG) at NASA Johnson Space Center (JSC) in Houston, Texas from 1991 to 2014. In addition to leading support for Space Shuttle launches and landings, he led and provided weather decision support for NASA/JSC center closure decisions due to hurricanes, tropical storms, and winter weather.

Prior NWS assignments included working on the NWS Modernization and Restructuring at NWS Headquarters from 1989 to 1991, Lead Forecaster at the National Meteorological Center – now called National Centers for Environmental Prediction – from 1982 to 1989, and meteorologist/forecaster positions at NWS Forecast offices in Raleigh NC and Charleston WV from 1977 to 1982.

Frank Brody is a member of the American Meteorological Society and the National Weather Association. He has a B.S. degree in Meteorology from Pennsylvania State University.

### **Eric Brown**

*FAA*

Eric Brown is an Aviation Safety Engineer in the Aircraft Certification Services Division, Technical Innovation Policy branch for Performance and Environment. Eric moved this position in January of 2022 and leads activities related to flight in icing for Transport and Rotocraft projects. Eric worked in the Seattle ACO as an Icing and Environmental Control Systems (ECS) technical specialist prior to his current position. Eric instructs the icing and ECS portion of the Systems Job Functions class at the FAA academy. Eric joined the FAA in December of 2010 and has 14 years of aviation industry experience. In industry, he worked on multiple part 25 and part 33 flight test programs in addition to supporting the development of transport aircraft ice projection and ECS systems.

### **Henry Cathey**

*New Mexico State University*

Henry M. Cathey, Jr. is the Aerospace Division Director at the New Mexico State University's, Physical Science Laboratory (PSL) and serves as the Director of one of the seven FAA approved UAS Flight Test Sites. Responsibilities include support for high altitude scientific ballooning, Unmanned Aircraft Systems, and other suborbital efforts. With over 25 years at PSL, his core concentrations focus on research and new technology implementation. He has leadership experience in managing a staff of engineers, R&D efforts, test programs, projects, and flight campaign efforts. Current highlighted UAS efforts are focused on supporting UAS detection research in extreme cold conditions for our service members, and Counter UAS system testing which includes upcoming missions in Alaska in January. He leads PSL's UAS research for ASSURE, FAA UAS Center of Excellence focusing on sUAS DAA requirements for BVLOS operations, detection and operation of UAS near airports, UAS cyber security, Visual Observer testing, UAS applications for disaster preparedness and response, and leads FAA STEM minority outreach education focusing on UAV's as the central learning platform. He was an Associate Fellow of the American Institute of Aeronautics and Astronautics and past Chair of the AIAA Balloon Systems Technical Committee. In recognition of his support for the NASA Super Pressure Balloon development and through four deployment to Antarctica for mission support, in July 2015 he was awarded a NASA

### **Austin Cross**

*NWS*

*No Bio Received*

**Dave Cunningham**  
*DEN Airport*

Dave Cunningham is the Director of Operations at Denver International Airport (DEN) where he leads the Airside Operations, Terminal Operations and Ramp Tower teams. Dave began his career at the airport in 1997 with most of his time there being spent in Airside Operations. Prior to joining the airport, Dave spent ten years in various roles with four different airlines. Dave has partnered with the Denver/Boulder office of the National Weather Service on projects that include Tornado watch/warning areas surrounding the airport and a Probabilistic Snow Accumulation Forecast (PSA) that matches the airport's Snow and Ice Control Plan (SICP). DEN has a longstanding relationship and contract with NCAR/UCAR which includes research and development and use of their Maintenance Decision Support System (MDSS) along with a sub-contract for daily forecasts and 24/7 forecast support. Dave also works closely with the local FAA Air Traffic Control Facilities on coordination of the DEN SICP. Through these relationships and relationships with air carriers operating at DEN, Dave and his team are continuously looking for ways to improve safety and efficiency during winter operations.

**Stephanie DiVito**  
*FAA*

Stephanie DiVito is a Research Meteorologist for the Federal Aviation Administration at the William J. Hughes Technical Center in Atlantic City, New Jersey. She has a BS in Meteorology from Rutgers University and an MS in Aeronautics from Embry-Riddle Aeronautical University. She has supported the FAA's Aircraft Icing Research Program in the Aviation Research Division for the past eight years. Ms. DiVito manages FAA icing projects related to the diagnosis and forecasting of terminal area icing and high ice water content conditions typically associated with high-altitude ice crystal icing. She managed the FAA's In-Cloud Icing and Large-drop Experiment flight program and participated in a number of high ice water content flight programs. Ms. DiVito also supports research initiatives in ground icing and unmanned aircraft systems. She is also a member of the FAA Weather Community of Interest and leads the "Operations in Winter Weather and Icing" Special Weather Action Team.

**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.

**Judy Ghirardelli**  
NOAA

Judy Ghirardelli started working in the Meteorological Development Laboratory (MDL) of the National Weather Service (NWS) in Silver Spring, MD in 1994 as a contractor working on severe weather algorithms. She quickly transitioned to the Localized AWIPS MOS Program (LAMP) task which had the need for someone with a background in statistics. She joined the government workforce in 1995 as the MDL/LAMP (now Localized Aviation MOS Program) Task Leader. In this role, she oversaw the development and operational implementation of the LAMP system on multiple supercomputer platforms. In 2019, Judy was selected as the Chief of MDL's Decision Support Division, where she oversees tasks including LAMP, Storm Surge forecast guidance, Rip Current forecast guidance, the Weather and Society Dashboard, the Local Climate Analysis Tool, and new Artificial Intelligence/Machine Learning endeavors. She has over 25 years of experience providing decision support to NWS customers, forecasters, and stakeholders. She is a member of both the American Meteorological Society and the National Weather Association.

Ms. Ghirardelli earned a Bachelor of Science Degree in Mathematics from Davidson College and then worked in the insurance industry for 4 years as an Actuarial Analyst before realizing she loved meteorology more than actuarial science. She returned to school and earned a Master of Science Degree in Meteorology from the University of Maryland. She lives in Maryland with her husband, and they are currently getting used to being "empty nesters." When she isn't working, Judy enjoys reading, photography, gardening, and cooking.

**Steve Green**  
*Flight Operations Research*

Steven D. Green started flying at age 14, and soloed on his 16th birthday in 1972. He began his airline career flying a Convair 240 for Providence Airlines around the Great Lakes, then flew Fairchild Metroliners up and down the east coast through the 80s and then all over the world for TWA, Eos Airlines and American. He holds a B.S. in Aviation from Louisiana Tech University, He also holds an Airline Transport Pilot license from the FAA with type ratings for the Boeing 767, 757, 737, MD-80, EMB-145 and the Fairchild SA-227, as well as a Flight Engineer license with a turbojet limitation. He flew professionally for 41 years, operating at all levels of the industry including Part 135 commuter operations, Part 121 supplemental operations and Part 121 flag operations. Beginning in 1986, he has participated in numerous aircraft accident inquiries and investigations as a representative of the Air Line Pilots Association including TWA 800, TWA 843, Business Express N811BA, Simmons 4184, Comair 3272, AVAir 3378 and AVAir 3464.

Since 1994, he has been actively involved with icing issues, and has written a number of papers on the topic and delivered several oral presentations. Since 2004, he has actively consulted for both NASA and the FAA on the subject of airframe icing. He and his wife have lived in Vermont for 33 years, and have two grown sons. He retired from American Airlines in 2021 as a Boeing 737 captain.

**Jason Godwin**  
NWS

I was born and raised in South Louisiana, then went to the University of Oklahoma where I received a B.S. in Meteorology. I then went on to receive an M.S. in Meteorology from the University of Miami where my research emphasis was on ensemble forecasting and predictability of the spatial impacts

(e.g. rainfall distribution and radius of gale force winds) of tropical cyclones. I spent a few years in the private sector then joined the National Weather Service in 2017. I was at the WFO in Fort Worth, TX from January 2017 to April 2022 when I moved across town to the CWSU (though I started working some shifts at the CWSU in October 2021). My interests continue to lie in numerical weather prediction, ensemble forecasting, and their applications to the aviation weather space.

**David Hogg**  
*NOAA*

David Hogg serves as a Research Associate at the Cooperative Institute for Severe and High-Impact Weather Research and Operations (CIWRO) at the University of Oklahoma, as well as an affiliate and collaborator with NOAA's National Severe Storms Laboratory. In his role as a member of the Behavioral Insights Unit, Hogg seeks to foster relationships, identify collaboration opportunities, and in general bring together the emergency management practitioner community and the severe weather research community to identify and fill gaps across the hazards landscape.

Prior to joining CIWRO, Hogg's background included a mix of both research and practical emergency management experience, including most recently serving at the Project Manager for the National Agricultural Biosecurity Center and as the Emergency Management Coordinator for Kansas State University. His experience includes developing tools and leading projects for DHS, USDA, and numerous state and local governments. Hogg has a diverse background including experience in farming, ranching, nonprofit and volunteer management, emergency planning and response, and television severe weather coverage. He holds a B.S. in Geography from Oklahoma State University and an M.A. in Emergency Management and Homeland Security from Arizona State University.

**Stephanie Klipfel**  
*Delta Air Lines*

I began my Delta career in 2002 and now I am responsible for the team of meteorologists that work around the clock to support Delta's global flight operations. I work with many different teams to help identify weather risk and build processes to improve the safety of Delta's people or the efficiency of Delta's operation. I believe helping people understand weather, forecasts and potential risks, ultimately help them make better decisions. I've led a team to develop the Weather Impact Tool. This tool is used across Delta to help communicate forecast weather conditions that could potentially cause delays and cancellations. Additionally, in 2017, I was a Delta Air Lines Chairman's Club Honoree, an award given to top 100 employees who consistently demonstrate the "Delta Difference". I represent Delta at numerous weather-related industry groups and am a member of the American Meteorological Society. I have a Bachelor of Science degree in Atmospheric Science from the University of Kansas. Outside of work, I enjoy spending time with my husband and son, especially attending racing events and being outside.

**Matt Johnson**  
*Metro Aviation Inc.*

Matt Johnson is a Helicopter Single-Pilot IFR Captain, Part 135 Check Airman, Instructor, and Training Captain for Metro Aviation Inc. Matt also serves as a FOQA Gatekeeper and Weather Focal Point. Matt instructs newly hired Air Medical pilots, where he delivers a unique course entitled "Weather Product Acquisition, Interpretation, and Application for HAA Pilots." A course designed to

introduce pilots to the numerous available weather products utilized in making safe and efficient decisions. In addition, Matt is a regular columnist for Rotor Professional Magazine.

Matt is also a Designated Pilot Examiner for the FAA and issues certificates and ratings from Private to ATP, CFI, and CFI-I.

**Scott Landolt**  
*NCAR*

Scott Landolt has worked in the Aviation Applications Program at the National Center for Atmospheric Research for over 25 years. He supports three different FAA-funded research projects, including the Terminal Area Icing Weather Information for NextGen (TAIWIN), developing an artificial snow generation system for testing aircraft anti-icing fluids in support of aircraft ground icing operations, and assisting in the development of new standards for instrumentation to be used on the U.S. weather observing networks. He has extensive experience with sensor development and testing, served on the steering committee for the recent In-Cloud Icing and Largedrop Experiment (ICICLE), and regularly provides meteorological support to improve aircraft ground deicing operations in all types of winter weather conditions. Scott has also spent time in Antarctica conducting research related to snowfall measurement and is an affiliate professor at Metropolitan State University of Denver teaching the instrumentation, hazardous weather, and senior research courses.

**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.

**Victor Passetti**  
*FAA*

Mr. Passetti is the FAA Aviation Weather Division's (AWD) Weather Observation Improvements Project Lead. He is a Senior Research Meteorologist with the AWD Weather Engineering and Evaluation Branch at the William J. Hughes Technical Center (WJHTC). Prior FAA experience includes providing operational support to the Weather and Radar Processor program, conducting meteorological evaluations of AWRP turbulence and icing products, and performing test and evaluation of the Operational and Supportability Implementation System. Prior to joining the FAA, Mr. Passetti was a National Weather Service meteorologist that served in Flagstaff, AZ and Cleveland, Ohio. Mr. Passetti holds a Bachelors of Science degree in Meteorology with a minor in Geography from the Pennsylvania State University, and is a certified Program Management Professional (PMP).



**Marilyn Pearson**  
*CAE*

Marilyn Pearson is an ATP rated pilot in Single and Multiengine Land and Seaplanes; Commercially rated in Rotorcraft and Gliders, holder of a Remote Pilot Certificate with small UAS rating. Additionally, Ms. Pearson holds instructor ratings for single engine, multiengine, land and seaplane, glider, gyroplane, and instrument with over 40 years of experience as an aviation professional. Ms. Pearson served as a corporate and commercial pilot in several jet aircraft types before taking a position as an Aviation Safety Inspector with the FAA. Ms. Pearson 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 as the airshow coordinator. Ms. Pearson transitioned to a staff specialist at FAA Headquarters where she was tasked with developing regulatory procedures for 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 wrote the exemptions and waivers for the first BVLOS UAS operation, the first multiples UAS operation and the first part 137 agricultural UAS operation. She served as co-chair for the FAA Weather Community of Interest and lead for the UAS Special Weather Action Team. Ms. Pearson was awarded the FAA Administrator's Award for Excellence.

Ms. Pearson retired from the FAA and currently holds a position with CAE as a Global Regulatory Affairs Specialist in AAM/eVTOL/UAS where she serves on various industry committees and with Civil Aviation Associations recommending policy for new entrant aircraft, pilot training and simulator certification. Ms. Pearson is a member of the EASA RMT .0230 developing regulatory standards for VTOL-Capable Pilot Licenses and Type Ratings. Additionally, she is the co-chair for SAE International G-35, Modeling, Simulation and Training for Emerging Aviation Technologies and Concepts Committee developing industry consensus standards for Aircraft Certification, Training Device Qualification and Pilot Training and Licensing for new transport modalities. She is a member of ASTM F38, developing consensus standards for Low Altitude Wx SDSPs.

**Brian Pettegrew**  
*MITRE*

Brian Pettegrew began work with the University of Colorado-Boulder as a data analyst supporting the verification group at the NOAA Earth Systems Research Laboratory's (ESRL) Global Systems Division (GSD) following the completion of his PhD in Atmospheric Sciences from the University of Missouri-Columbia in 2008. While there, he quickly helped support and co-lead efforts by the FAA supporting the validation of aviation weather forecasts transitioning from research entities into an operational status. In 2012, he moved to Colorado State University's Cooperative Institute for Research in the Atmosphere (CIRA), supporting the NOAA National Centers for Environmental Prediction's (NCEP) Aviation Weather Center (AWC), one of the nine national forecast centers within the National Weather Service, as an Aviation Support Branch (ASB) scientist and developer fostering the transition of numerical weather prediction algorithms from external research entities into National Weather Service infrastructure and operations. While there, he ascended to a project lead, providing guidance to other CIRA scientists within ASB, while actively improving and enhancing the Research-to-Operations communications, engagement, and technical process between the FAA and the NWS. In 2021, Brian left the ranks of NOAA and joined the Center for Advanced Aviation System Development (CAASD) at the MITRE Corp where he currently helps to lead projects support safety and operations of flight through weather impact.

Brian earned a Bachelor of Science Degree in Chemistry in 2002 from Central Methodist College in Fayette, MO, and then moving on to earn a Master of Science (2004) and Doctorate of Philosophy (PhD; 2008) from the University of Missouri-Columbia.

### **Nathan Polderman**

*United Airlines*

Nathan is the Sr. Manager of Meteorology at United Airlines where he oversees all of United's weather decision support systems and service contracts. He is also the Program Manager for United's FAA-approved Enhanced Weather Information System (EWINS) and serves as the business lead for all corporate-level turbulence injury mitigation initiatives. Nathan has actively participated in and led numerous aviation weather industry groups since 2008, including as Chair of the Airlines For America (A4A) Meteorology Committee from 2019-2020, and is currently the airline industry representative for the inaugural FPAW Steering Committee. Nathan is an FAA licensed Aircraft Dispatcher and holds an M.S. degree in Atmospheric Science from Indiana University and a B.A. in Geography from Calvin University.

### **Mark Ratzer**

*NWS*

Mark Ratzer is a Senior Forecaster with 28 years of operational meteorology experience at the National Weather Service Forecast Office in Chicago, Illinois. Mark is WFO Chicago's Aviation Program Leader, and also works operational forecast shifts at the NWS Center Weather Service Unit (CWSU) at the FAA's Chicago ARTCC in Aurora Illinois. As an NWS operational forecaster, Mark's duties are widespread. His aviation experience includes routinely preparing TAFs for local airfields, including Chicago O'Hare and Chicago Midway airports. Mark regularly provides unscheduled briefings for local FAA tower facilities, the FAA Chicago TRACON and the FAA Chicago ARTCC Traffic Management Unit. Mark also occasionally fields questions from airline dispatchers and operations managers, with respect to weather impacts to their local area operations. During winter, Mark provides on-demand briefings for the City of Chicago's O'Hare and Midway airport operations, and serves as the NWS Chicago representative on the City of Chicago's O'Hare Snow and Ice Control Committee which focuses on airside snow removal operations at the airport. When working as a forecaster at the FAA Chicago ARTCC, Mark routinely produces turbulence, icing and convective forecasts for ZAU's airspace, and provides in-person briefings for the ZAU Traffic Management Unit and sector controller Area Supervisors. Mark also produces recorded video briefings which all controllers in the facility view at the start of their shifts. Mark holds a Bachelor of Science Degree in Atmospheric Science from Iowa State University.

### **Heather Reeves**

*NOAA/NSSL*

I'm a research scientist working for the Cooperative Institute for Severe and High-Impact Weather Research and Operations at NOAA/NSSL, where I've worked for the past 15 years. I lead the Transportation Applications Team, which is a small group of smart, super-fun people who are all passionate about how weather impacts the transportation sector. Most of our work centers around the development of decision-support capabilities for partners in the NWS, FAA, and DOTs. My favorite current project is one being led by my collaborator, Andrew Rosenow. We're looking at different methods for determining snow rates both from a forecasting perspective as well as nowcasting methods that use dual-polarized radar observations.

**Judith Reif**  
*JR Flight Services, LLC.*

Judith Reif has over 23 years in corporate/business aviation holding various positions from Part 91/135 scheduler, contract flight attendant and currently works for Gulfstream Aerospace as a Cabin Systems Specialist. She was the first contract flight attendant to serve as Chairperson of NBAA's Flight Attendant Committee and one of the first contract flight attendant's selected to the Gulfstream Customer Advisory Board/Cabin Operations Committee.

She holds a bachelor's degree in Environmental Science (Geography, Geology and Meteorology) from Western Kentucky University in Bowling Green, KY. She worked as a Meteorological Technician for WSMV-TV in Nashville, TN and is currently the Chairperson of NBAA's Weather Subcommittee. She is a member of the American Meteorological Society and also holds a Private Pilots Certificate.

**Andrew Rosenow**  
*University of Oklahoma*

Dr. Rosenow is a research scientist on the Transportation Applications Team (TAT), part of the Cooperative Institute for Severe and Hazardous Weather Research and Operations (CIWRO) at the University of Oklahoma. As a member of the TAT since 2016, Dr. Rosenow develops new algorithms and tools for decision support. His research focuses on winter weather, where he has worked towards improving understanding of the development, detection, and prediction of heavy snowfall. He also is working to improve the classification of winter precipitation types (snow/sleet/freezing rain/rain), and to assess the characteristics of winter weather that create significant impacts on transportation systems. He holds a Bachelor's degree in Meteorology from Valparaiso University, and Master's and Doctoral degrees in Atmospheric Sciences from the University of Illinois.

**Gordon (Gordy) Rother**  
*FAA*

Aviation Safety Inspector, Aircraft Dispatch Federal Aviation Administration, AFS 220 Air Carrier Operations Branch Mr. Rother has been with the FAA since September 2001. Currently works for Flight Standard, Air Carrier Operations Section and is supporting the Aviation Weather policy and procedures. 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 to 2011, he worked as a Safety Inspector in the MSP FSDO on the Mesaba Airlines and Sun 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.

**Danny Sims**  
*FAA*

Danny Sims is a Physical Scientist with the Federal Aviation Administration overseeing the Inflight Icing, and the Model Development and Enhancement weather research projects as part of the FAA's Aviation Weather Research Program. Prior to his current position, he was responsible for sustainment of the FAA Traffic Flow Management System (TFMS) used by FAA traffic flow managers to balance demand and capacity of the National Airspace System. Mr. Sims also led TFMS Weather Integration efforts, and supported test and evaluation of aviation weather products at the FAA William J. Hughes Technical Center. Prior to joining the FAA, Mr. Sims served as a weather officer in the US Air Force. He holds a BA in Environmental Science from the University of Virginia and a BS and MS in Meteorology from the Pennsylvania State University.

**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.

**John Steventon**  
*FAA*

John Steventon is an Aviation Safety Inspector currently working for Flight standards, Flight Technologies and Procedures Branch, Flight Operations Group (AFS-410E) supporting Aviation Weather policy and procedures. He works across several lines-of-business with Air Traffic, NOAA, NWS, AWC, NTSB and industry on weather related issues. He's a member of the FAA's Weather Community of Interest (Wx COI) and a Co-lead for one of the Wx COI's Special Weather Action Teams (SWATs) UAS SWAT. Mr. Steventon started with the FAA in 2010 in the FAA's Unmanned Aircraft Integration Office working UAS Public Aircraft Operations for public safety organizations across the country before moving to AFS-410E to work Aviation Weather. Mr. Steventon holds a commercial pilot rating, Rotorcraft Helicopter; instrument helicopter S70. Mr. Steventon is a retired

military pilot (1987-2010) with flight and operational experiences in both manned and unmanned aircraft operations in a multitude of weather environments ranging from the -55-degrees C of Alaska's Interior to the +55-degrees C of Iraq. Manned Aircraft Pilot Qualifications: UH-1H Huey (US Army), UH-60 A/L Blackhawk (US Army), Hughes OH-6A (Civil). Unmanned Aircraft Pilot Qualifications: MQ-1B Predator-A / MQ-1C Gray Eagle Unmanned Aircraft Systems (UAS) Standardization/Instructor Pilot (US Army), Scan Eagle UAS (FAA) and participated as a SME for several UAS Modeling & Simulation studies conducted at the FAA Technical Center Atlantic City, NJ.

### **Jennifer Stroozas**

*NWS*

Jennifer Stroozas has been the Warning Coordination Meteorologist at the National Weather Service's (NWS) Aviation Weather Center (AWC) in Kansas City, Missouri since May of 2021. In addition to leading aviation weather education and outreach, she works closely with aviation partners to provide and enhance aviation weather hazard services. Before coming to AWC, Jennifer served as the Meteorologist-In-Charge of the Center Weather Service Unit embedded within the FAA Air Route Traffic Control Center in Kansas City, Kansas. In that role, she led a team of aviation meteorologists providing impact-based decision support services directly to FAA partners. She previously served as the NWS Central Regional Aviation and Fire Weather Program Manager, Emergency Response Specialist, Incident Meteorologist (IMET), and operational meteorologist in the field. Jennifer's NWS career has focused on her passion for science communication and building strong partner relationships. Jennifer is a Wisconsin native and received her BS in Atmospheric and Oceanic Science from the University of Wisconsin. She is a proud mom of a grade schooler and considers Kansas City home since landing there in 2009. In her free time, you will find her spending time with her kiddo, at the gym, on her rower, or running on a trail. Her other hobbies include cooking and enjoying a wide genre of music.

### **Joe Vickers**

*AST*

Over 50 years in aviation, starting with his first flying lesson in 1969 at the age of 13. Almost 40 years airline operations control experience as an aircraft dispatcher and business leader. Joe is a retired Managing Director at United Airlines Network Operations Control Center where he was responsible for the day to day Operational Control activities of United's OCC. He coordinated UAL/CAL OCC mergers and Control Center design. Joe also worked in the control centers for Midway and Altair airlines. Joe is a graduate of Florida Institute of Technology and holds an MBA from the University of Illinois at Chicago. Joe is a Certified Flight Instructor holding Instrument Pilot and Multi-Engine ratings. Joe has represented the FAA as a Designated Examiner for Aircraft Dispatchers since 1995. A proud husband of 1, father of 2 and grandfather of 2.

### **Steve Weygandt**

*NOAA*

Dr. Stephen Weygandt is the Deputy Division Chief of the Assimilation, Scientific Computing, and Evaluation Division (ASCEND) within the Global Systems Laboratory (GSL) of NOAA. He also serves as the GSL FAA Program Manager, overseeing aviation-related research at GSL. He directs the development of data assimilation systems that provide initial conditions for the Rapid Refresh (RAP) and High-Resolution Rapid Refresh (HRRR) models and has helped transition multiple versions of

these models to NOAA operations since 2012. He also directs model verification and ensemble post-processing and is helping to lead the transition from the RAP and HRRR models to the new Rapid Refresh Forecast System (RRFS), which will replace the RAP and HRRR as a NOAA operational model in 2024. The RAP, HRRR, and RRFS are supported by the FAA Aviation Weather Research Program (AWRP). Dr. Weygandt serves as the GSL lead for the Model Development and Enhancement (MD&E) Product Development Team (PDT) under the FAA AWRP. The RAP, HRRR, and RRFS provide short-range weather guidance to many different users and are used as input for products addressing aviation weather hazards such as convection, icing, low ceiling and visibility, and turbulence. Dr. Weygandt also leads GSL efforts in regional satellite data assimilation, including use of direct broadcast radiance data and geostationary lightning mapper data. Dr. Weygandt has B.S. and M.S. degrees in meteorology from Penn State and a Ph.D. in meteorology from the University of Oklahoma.

### **John Williams**

*IBM*

Dr. John K. Williams is a Senior Technical Staff Member and Head of Weather AI Sciences at The Weather Company, an IBM Business where he leads a team of scientists and software engineers who use artificial intelligence and data science in conjunction with meteorological expertise to innovate and reduce to practice methods for creating and verifying state-of-the-art weather forecasts that routinely serve individuals and businesses around the globe, including via the Weather Channel mobile app and weather.com. Before joining The Weather Company in 2015, John worked as a Project Scientist in the Research Applications Laboratory of the National Center for Atmospheric Research where he led projects funded by the Federal Aviation Administration, the National Aeronautics and Space Administration and private industry to develop decision support systems related to aviation weather detection, nowcasting and forecasting, as well as renewable energy and energy demand forecasting.

John is a member of the Senior Leadership Team for the National Science Foundation's Artificial Intelligence Institute for Research on Trustworthy AI in Weather, Climate and Coastal Oceanography led by the University of Oklahoma. He previously served on the American Meteorological Society's Committee on Artificial Intelligence Applications to Environmental Science, including as Chair.

John earned his Ph.D. in Mathematics, M.S. in Applied Mathematics and M.A. in Mathematics from the University of Colorado and his B.A. (Honors) in Physics from Swarthmore College. Link to profile: <https://www.linkedin.com/in/drjohnwilliams/>