

National Business Aviation Administration (NBAA)
Friends/Partners in Aviation Weather Forum (FPAW)

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BIOGRAPHIES OF PRESENTERS

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Robert Baron*Baron Services**No bio received***Geoff Bing***Boschung America*

Geoff Bing is the General Manager of Boschung America based in New Castle, PA. He brings over 25 years' experience in aviation weather system and technology, including AWOS, RWIS, and RVR. Mr. Bing is currently working to adapt Boschung's Runway Contaminant Depth sensing technology to the FAA's recent implementation of the Runway Condition Assessment Matrix (RCAM) process for reporting the condition of runways during winter weather operations.

Elizabeth Blickensderfer*Embry-Riddle Aeronautical University*

Dr. Beth Blickensderfer is Professor of Human Factors at Embry-Riddle Aeronautical University, Daytona Beach Campus. She has over 15 years of experience in human-machine systems related research and development including experimental design, collecting and analyzing data (both qualitative and quantitative research methods), conducting task analyses, developing and assessing training strategies, developing behavioral human performance metrics, implementing simulation-based training, and measuring team performance. Dr. Blickensderfer has worked with a variety of domains and organizations including the U.S. Naval Surface Warfare and Naval Aviation, U.S. Marine Corps, U.S. Joint Forces, and the FAA. She has also worked with a variety of systems and technologies including unmanned aircraft systems, aircraft data communications/data link systems (for pilot-ATC communication), helmet mounted displays, NexRad weather radar displays, technologically advanced aircraft displays in general aviation, and a wide range of simulation based instructional systems. Prior to joining the faculty at ERAU, she worked as a Research Psychologist in the Human Systems Integration Branch at the Naval Air Warfare Center Training Systems Division in Orlando, FL managing and conducting 6.2 and 6.3 research and development programs. Dr Blickensderfer earned a M.S in Industrial/Organizational Psychology and a Ph.D. in Human Factors Psychology from the University of Central Florida.

My greatest contributions revolve around the translation of training science to actual training implementation. I've been intrigued by the gap between training research and practice for many years, and a portion of my research has been devoted to better understanding this gap, as well as implementing laboratory concepts in the field. While many researchers stay in the lab, and practitioners stay out of the library, my work offers examples of integrating research and practice. Most recently, this has been in the area of aviation weather for general aviation. In addition to the other complexities of flight, general aviation pilots are faced with interpreting complex weather displays and using this information to make decisions under stress. Our research has begun to identify key meteorological knowledge and skill necessary for effective piloting as well as developing valid training techniques to foster the knowledge and skills in time efficient manners. I have been the lead Human Factors psychologist on this interdisciplinary aviation weather team.

Chris Brinton*Mosaic ATM*

Mr. Christopher Brinton is the President and CEO, as well as a Senior Principal Analyst, at Mosaic ATM. Mr. Brinton has over 25 years of experience in the research and development of advanced concepts and automation for Air Traffic Management. During his career, Mr. Brinton has led and performed analysis, concept development, software development, and field trials that have advanced the state of knowledge about the National Airspace System, including numerous FAA and NASA research studies related to Traffic Flow Management, Dynamic Airspace, Remote ATC Towers, and computer vision and speech recognition applications to Unmanned Aircraft System operations in the NAS.

Mr. Brinton received a Bachelor of Science and Engineering degree in Mechanical and Aerospace Engineering from Princeton University and a Master of Science degree in Electrical Engineering from Stanford University. Mr. Brinton is an instrument-rated and commercially licensed pilot.

Captain Joseph D. Burns

Sensurion Aerospace

Captain Joseph D. Burns is the Chief Executive Officer of Sensurion Aerospace. He most recently left United Airlines as the Managing Director of Technology and Flight Test. While at United, he also held positions as Managing Director – Flight Standards, FAA Certificate Director of Operations, Director – Flight Standards, Director – Technology, Chief Pilot – FFDO Program, Manager – Automation Systems, Pilot Instructor, and ALPA LEC Safety Chairman. He recently served as International Captain on the Boeing 767, 757. He is type-rated in B767, B757, A320, A319, B-727, DHC-8, BE-1900 and BE300 aircraft. Captain Burns also served as a DHS/TSA Law Enforcement Officer while on duty at United.

Previous to United, Joe was the Director of Operations and Chief Pilot for USAir Express/Stateswest Airlines, a BAE-146 Pilot for USAir, B-727 Instructor and Pilot for Braniff Airlines, and Pilot for Air Midwest.

His engineering experience includes CEO positions at Sensurion Aerospace, Xcelar, Inertia Technology, Chief Pilot and systems engineer for Coffeen, Fricke, and Associates, Chief Systems Engineer for Ericsson, Inc.'s Fiber Optic Division, and Engineering Manager for Sprint.

He is currently on the Executive Branch Advisory Board for Position, Navigation, and Time (GPS); Board Member for Aspen Avionics; Board Member for Sensurion, Inc.; Member of the NextGen Advisory Council Subcommittee; Board Member Emeritus for EMS Technologies (NASDAQ:ELMG); Board Member and CEO Emeritus of ATN Systems, Inc.; Advisory Board Member for the National Center for Atmospheric Research (NCAR/UCAR); Chairman Emeritus for the ATA Air Traffic Control Council, Chairman Emeritus of the ATA Airline Operations Committee; former Vice-Chairman of the Airborne Internet Consortium; and former Board Member of the FAA's Free Flight Steering Committee; Optical Detection Systems, Inc.; and AirDat, LLC.

Joe holds an M.B.A. in Management from the Miami University distinguished Farmer School of Business and a B.S. in Aeronautics/Aeronautical Engineering from Miami University. He also holds multiple patents in Communications, Security, and Sensor Technology.

Bruce Carmichael

National Center for Atmospheric Research (NCAR)

Research Applications Laboratory (RAL)

Dr. Carmichael holds a M.S. from Northwestern University in Applied Mathematics and a Ph.D. from the University of Maryland in Computer Science. He has 40 years of experience spanning a number of activities including university teaching, commercial research, government service, consulting, and academic research. His past 29 years have been involved with the aviation industry in automation of maintenance processes, air traffic control, and weather information. He has been involved in system engineering of improved FAA systems to deliver weather information to users. For the past eighteen years he has been at the National Center for Atmospheric Research, where he has acted as the Director of the Aviation Applications Program. This program is working to improve weather information for pilots, dispatchers, and controllers, particularly related to the hazards of thunderstorms, turbulence, and icing. Dr. Carmichael is also an active commercial instrument-rated pilot.

Winston Carter

Flight Ops Dispatcher III

Winston is one of the senior Flight Operations Dispatchers for Gulfstream Aerospace's Flight Test Department. Winston has served a full term on the NBAA Schedulers and Dispatchers Committee on the Education Sub-Committee and currently serves as the Vice-Chair for the Schedulers and Dispatchers Advisory Council.

Having spent the last 20 years in business aviation, his tenure includes both FAA Part 121 airline and corporate dispatch within the Fortune 100. As a flight coordination manager, Winston led his department in obtaining the FAA Part 135 and 125 certificates. Winston holds a Bachelors Degree in Professional Aeronautics from Embry-Riddle Aeronautical University, and a Masters Degree in Administration with concentrations in Leadership and Transportation from Fairleigh Dickinson University. He is also a FAA Certificated Dispatcher and a NBAA Certified Aviation Manager, recently elected to the CAM Governing Board.

Larry Cornman

*National Center for Atmospheric Research (NCAR)
Research Applications Laboratory (RAL)*

Larry Cornman is a Project Scientist at the National Center for Atmospheric Research. His educational background includes undergraduate degrees in Mathematics and Physics from the University of California and a graduate degree in Physics from the University of Colorado. He started working at NCAR in 1983 in support of the FAA's Low Level Windshear Alert System (LLWAS). From 1983 to 1990, Larry was involved in the development of the Phase II and Phase III LLWAS algorithms and the Terminal Doppler Weather Radar (TDWR) algorithms. In 1989, he developed the TDWR/LLWAS Integration algorithms, for which he holds numerous U.S. and International patents. Since 1990, Larry's research focus has been on atmospheric turbulence. He has developed turbulence detection algorithms for remote sensors including ground-based and airborne Doppler radars, lidars and wind profilers; as well as developing a methodology for making *in situ* measurements of turbulence from commercial aircraft. Larry also has a significant amount of expertise in the aerodynamic impact of wind fields on aircraft, as well in the development of signal and image processing algorithms. He holds four U.S. patents in these areas. He has twice been the recipient of an Aviation Week and Space Technology magazine *Laurel Award*, a recipient of a NASA *Turning Goals into Reality* award, and was named to the 2003 *Scientific American 50* list as *Research Leader in Aerospace*.

More recently, Larry has been involved in research focused on the impact winds and turbulence has on UAVs. He has been supporting a NASA UTM project to provide turbulence forecasts for UAV operators. As part of this activity, Larry co-organized a NASA-NCAR workshop in July 2016 focusing on the impact of weather on UAS operations.

Tenille Cromwell

Airborne Product Support (APS)

Tenille is the Chief Pilot for Gulfstream Aerospace's Airborne Product Support (APS) program. She manages 16 pilots and the two aircraft that are continuously operating to meet the customer's needs. The mission of APS is to fly parts and/or people to fix Gulfstream aircraft in US, Canada, Mexico, Central America, South America and the Caribbean. Three shifts operate 24 hours a day 365 days a year. In addition to flying APS missions, APS pilots also perform executive transportation for Gulfstream's Leadership Team. Prior to joining Gulfstream, Tenille served in the Navy. She was an Instructor Pilot and Mission Commander in the E-6B (TACAMO), and was an Instructor Pilot in the T-1 (Hawker 400) for future military aviators. She earned her Bachelor's degree in business with an emphasis in entrepreneurship from the University of Southern California, an MBA from Georgia Southern University, and most recently attended Harvard's Kennedy School of Executive Education. She lives in Savannah, Georgia with her husband and three children: Peyton (12), Hallie (11), and Cliff (2).

Taumi Daniels

NASA Langley Research Center

Taumi Daniels received the B.S.E.E. degree from North Carolina State University; the M.S.E.E. degree from the Georgia Institute of Technology; and the Ph.D. degree in atmospheric science from Hampton University. For the past 30 years, he has been with the NASA Langley Research Center. His career includes work on wind tunnel instrumentation, flight avionics, and radar signal processing. He was the manager of the TAMDAR project and more recently has been working on other Aviation Safety related projects.

Stephen Darr*Dynamic Aerospace*

Mr. Darr has experience developing and implementing advanced analytical methods and aviation technology in the areas of safety and capacity, recently leading the technical development and implementation of a future safety risk assessment methodology for the Commercial Aviation Safety Team (CAST). He is currently leading the development of Minimum Aviation System Performance Standards for RTCA Special Committee 206, Aeronautical Information Services and Meteorological Data Link Services, in addition to other tasks. He has planned, conducted, and directed research for the FAA, NASA, airports, and commercial clients in safety and systems analysis, operations research, concept of operations development, investment decision-making, and strategic planning. He has experience in the development and implementation of advanced aviation technologies, and in aircraft design, construction, and operation. A commercial and military instrument-rated helicopter pilot with single and multiengine airplane ratings, Mr. Darr has extensive flight operations experience, including with human-powered aircraft and as a pilot in NASA and commercial technology trials. He was a member of the NASA cohort of the ADS-B Team that won the 2007 Collier Trophy. Mr. Darr retired from military service with significant command and staff experience in addition to aviation maintenance management experience.

Ernie Dash*AvMet Applications*

Ernie is an aviation meteorologist with extensive experience supporting Air Force operations and FAA weather programs. He's originally from Illinois and has a Bachelor's Degree in Engineering Administration from Millikin University in Decatur, Illinois. Compliments of the Air Force, he attended Texas A&M and became a meteorologist. Later on, he got a Master's in System's Engineering from the University of Southern California.

While in the Air Force, he became a satellite meteorologist and also participated in the initial drafting of Air Force requirements for a ground Doppler weather radar system which ultimately became the Tri-Agency (DOD, DOC, and DOT) NEXRAD program. Ernie retired in 1989 as the Commander of the 5th Weather Wing at Langley Air Force Base in Hampton, Virginia; and has stayed in the area as a resident of York County, Virginia.

Ernie began providing contract support to the FAA FIS data link program initiatives in 1989. One of his initial FAA tasks was to draft the requirements and demonstrate the operational concepts for a broadcast weather data link service. He has also been actively involved in developing several RTCA documents and he led a team that drafted the JPDO NextGen Weather Concept of Operations.

Ernie continues today as an AvMet consultant supporting the FAA Common Support Services-Weather (CSS-Wx) program.

Tom Fahey*Delta Air Lines*

Tom has an M.S. Meteorology degree from University Wisconsin, Madison & began his Aviation Meteorology career at Northwest Airlines in 1977. His responsibilities have included: forecasting, training, developing products & procedures as well as producing revenue via weather product sales. Most recently some areas of focus have included both Volcanic Ash risk and Ice Crystal Icing risk mitigation as well as access to and use of Automated Aircraft Weather Reports, and Weather in the Cockpit applications. Tom has also worked as a consultant and is currently Manager Meteorology at Delta Air Lines in Atlanta where he practices servant leadership with a team of 25 forecasters who cover the entire world, using Delta's FAA approved Enhanced Weather Information System (EWINS).

Tammy Farrar*Federal Aviation Administration (FAA)*

Tammy holds a Bachelor of Science degree in Atmospheric Sciences with a minor in Physics from the University of Arizona. She attended graduate school at Florida State University where she earned a Master of Science degree in Meteorology with an emphasis in Climatology.

She served for 11 years as a Weather Officer in the U.S. Air Force. Her positions included that of Special Projects Team Chief and Special Support Plans Officer at Air Force Global Weather Central in Omaha, Nebraska, and Wing Weather Officer for the 86th Tactical Fighter Wing and Command Briefer for the Commander in Chief, United States Air Forces Europe at Ramstein Air Base, Germany. Her military aviation weather experience includes staff and operational support to fighter and airlift units, exercise and special mission support, and accident investigation.

After leaving the Air Force, Tammy worked as an Editorial Assistant for the American Meteorological Society's Journal of the Atmospheric Sciences. She began her current position as a Research Meteorologist for the Federal Aviation Administration NextGen Organization's Aviation Weather Division in January of 2008, and serves as the FAA's Turbulence Subject Matter Expert and Lead for the Turbulence and Airborne Observations projects.

Tammy has twice held the position of Chapter Officer for local AMS chapters and is a member of Chi Epsilon Pi, the Meteorology Honor Society. She has also completed over 30 hours of graduate level coursework in Secondary Science Education through the University of Maryland and George Mason University.

Matt Fronzak*MITRE CAASD*

Matt Fronzak is the Weather Portfolio Advisor and a Lead Aviation Systems Engineer in MITRE's Center for Advanced Aviation System Development (CAASD). His primary focus is on foundational ATM-Weather Integration research and analysis. He also is involved in a variety of projects revolving around weather and air traffic management (ATM) decision-making.

Prior to joining MITRE, Matt spent 34 years at Delta Air Lines working in a variety of operational and management roles, primarily at Delta's Operations Customer Center (OCC). In between Delta and MITRE, he had a short stint with Rockwell Collins 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, and he is an experienced aviation meteorologist and FAA-licensed aircraft dispatcher.

Thomas Guinn*Embry-Riddle Aeronautical University*

Thomas Guinn is an Associate Professor of Meteorology and the Coordinator for both the B.S. in Meteorology and B.S. in Operational Meteorology programs at Embry-Riddle Aeronautical University in Daytona Beach, Florida. He joined the Embry-Riddle faculty in 2008 after completing a 22-year career in the U.S. Air Force as a weather officer, which included assignments in flight-support operations, research, climatology support, weather policy development, and strategic planning. Dr. Guinn received a B.S. in Meteorology from Iowa State University as well as an M.S. and Ph.D. in Atmospheric Science from Colorado State University, through Air Force Institute of Technology sponsorship. Dr. Guinn has taught graduate and undergraduate courses in aviation meteorology as well as undergraduate courses in synoptic meteorology, mesoscale meteorology, dynamic meteorology, and numerical weather prediction. His research interests include aviation meteorology, aviation weather education, as well as tropical cyclone dynamics. Dr. Guinn serves on the American Meteorological Society's Board on Higher Education and has a private pilot certificate.

Brian Haynes*Sensurion Aerospace**No bio received***Bruce Holmes***Skytelligence Group*

Bruce Holmes joined SmartSky Networks, LLC (www.smartskynetworks.com) in 2016 as Vice President and the Executive Director of their Skytelligence Group. Bruce is responsible for the hosting, development, and management of aviation apps that revolutionize the comfort, safety and efficiency of flying throughout the world's airspace. Aviation apps hosted in SmartSky's first air-to-ground 4G private network, leverage secure Internet connectivity between aircraft, pilots, the Cloud, airspace managers, and home base.

In 2007, Dr. Holmes retired from public service of 33 years with the National Aeronautics and Space Administration (NASA) as a member of the federal Senior Executive Service. While at NASA, he led two large public-private aviation technology partnerships developing capabilities for technologically advanced aircraft and airspace operations. Holmes served in the White House Office of Science and Technology Policy in aviation policy analysis, and helped found the U.S. Joint Planning and Development Office (JPDO), leading the development of the strategies for the Next Generation Air Transportation System (NextGen).

Dr. Holmes holds six patents and is the author of more than 100 technical papers. He is a flight instructor and commercial, jet-rated pilot of more than 50 years, a Fellow of the American Institute of Aeronautics and Astronautics and the Royal Aeronautical Establishment, and recipient of numerous industry and government awards. His academic background includes undergraduate and Doctor of Engineering degrees from the University of Kansas and post-graduate work as a Senior Executive Fellow at Harvard in the Kennedy School of Government.

Steve Jangelis*Air Line Pilots Association (ALPA)*

Captain Steve Jangelis is the Aviation Safety Vice Chairman and the Airport and Ground Environment Chairman for the Air Line Pilots Association, International headquartered in Washington, DC and also serves in the same capacity for the Delta Air Lines Master Executive Council Central Air Safety Committee in Atlanta, GA. He also serves as an Accident/Incident investigator for the Delta Central Air Safety Committee.

Steve currently is a Captain on the Boeing 717 based in New York City. He is type rated on the Douglas DC-9, Boeing 727 and Boeing 757/767 and was a Simulator Instructor, Captain and Line Check Airman on the Boeing 727 flying for both cargo and passenger operations.

While working towards his university studies, Steve worked as an Airside Field Operations lead at an Airport in the Midwest for 3 years.

Steve currently is the Co-Chairman of the FAA's Root Cause Analysis Team (RCAT) and serves as the ALPA representative to the FAA's Runway Safety Council and the FAA Research, Engineering, and Development Advisory Committee (REDAC) Subcommittee for Airports. Steve has also participated in Safety Risk Management panels on runway construction, airspace modifications and also participated as a simulator operational testing pilot for Data-Comm taxi installations, Final Approach Runway Occupancy Signal (FAROS) and SMGCS evaluations.

Rafal Kicingier*Metron Aviation, Inc.*

Rafal Kicingier is a Principal Analyst in the Technical Leadership and Innovation Department of Metron Aviation, Inc. His research interests include weather integration into air traffic management, traffic flow management planning, predictive analytics, and heuristic optimization methods. He has led numerous research and development projects for

NASA, FAA, and EUROCONTROL. Prior to joining Metron Aviation, Dr. Kicinger was a Research Assistant Professor at George Mason University specializing in modeling and simulation, multi-agent systems, and computational modeling of complex systems. He received his Ph.D. degree in Information Technology from George Mason University, Fairfax, VA in 2005 and an M.S. degree in Civil Engineering from Warsaw University of Technology, Warsaw, Poland in 1999

John Kosak

National Business Aviation Association (NBAA)

John Kosak received his Private Pilot's license in early 1991 while attending the Flight Program at Northwestern Michigan College in Traverse City Michigan where he also received his associate's degree. Flying within the Great Lakes region is how John first gained a healthy respect for, and growing interest in aviation weather.

While John's life veered from aviation for a short period, he used the time to acquire his Aircraft Dispatcher License in early 1999 and later that year he joined a fractional aircraft company that was growing exponentially. John worked in numerous aspects of the business including logistics, dispatch, flight planning, operations training and operations management. As one of the first FAA licensed dispatchers working at Flight Options, John became the ad hoc weather specialist. Working in the Flight Options Operations Control Center gave him an appreciation for how weather impacts everything from a single flight to the entire operation.

After seven years at Flight Options, John joined the National Business Aviation Association's Air Traffic Services at the FAA's Air Traffic Control System Command Center, now located in Warrenton, VA. As an Air Traffic Management Specialist working for NBAA members, John helps business and general aviation aircraft navigate the complex National Airspace System (NAS) and serves as a general aviation advocate during daily planning conference calls attended by Centers, TRACONS, Towers, and other operators throughout the NAS. In addition to daily duties at the desk, John also writes documents for the weekly NBAA Update e-newsletter and stories for the "Business Aviation Insider," the official Member magazine of the NBAA. He facilitates presentations about weather and traffic management at the annual NBAA Business Aviation Convention & Exhibition, the Schedulers and Dispatchers and the Business Aviation Regional Forums, and in online webinars. John also assisted with the concept and implementation of a national program called File Smart, aimed at helping pilots understand the benefits of filing early, filing accurately, and checking the NAS—including weather forecasts—before flying.

While completing Penn State University's Weather Certificate course, John became the NBAA general aviation representative on the FAA's Collaborative Decision Making Weather Evaluation Team (WET) in 2008. He began participating in the Friends and Partners of Aviation Weather (FPAW) meetings in the summer of 2010. Both of these groups work with government, industry, academic, and private sector companies to design better weather products as well as systems for delivering them to operators. John was one of the driving forces behind the NBAA implementation of a weather specific committee that will pursue the organization's members' interests while working with the FAA and the National Weather Service as well as the FPAW and WET groups. Recently he was promoted to Program Manager, Weather, for NBAA's Air Traffic Services.

When he is not working, John can be found giving tours of the National Air and Space Museum's Steven F. Udvar-Hazy Center where he is a Docent, photographing the action at air shows throughout the eastern US, or when he is not on the ice himself, photographing his favorite sport, ice hockey.

Tom Lahovski

Federal Aviation Administration (FAA)

Tom started in FAA Flight Standards in 1988 as an Air Carrier Operations Inspector in the Allentown, PA FSDO. Prior to that he flew C-130's on active duty in the US Air Force and Air Force Reserve. He was a National Resource for Flight Standards in the B-737 (100 through 400 series) and the DC-9 (10 through 88 series). He also was the Designated Pilot Examiner focal point for the Allentown FSDO, responsible for their designation, oversight, and renewal or termination. In 2007 he transferred to the Baltimore FSDO, where he was assigned to the Piedmont Airlines certificate. He became type-rated in the DHC-8 (100 through 300 series) at this time. In 2011 he transferred to FAA HQ in Washington, DC, in

Air Carrier Training and Checking. He joined the TALPA Work Group in November, 2013, with the responsibility of determining TALPA guidance for FAA field inspectors. In this capacity he became involved with the planning and implementation of TALPA Aviation Rulemaking Committee (ARC) recommendations.

Bruce Landsberg

Aircraft Owners and Pilots Association (AOPA)

Bruce Landsberg is the former President of the AOPA Foundation and the Air Safety Institute and led those activities for more than 22 years. During his tenure, the organization was nationally recognized with numerous awards for aviation safety leadership and educational program excellence. The Foundation assists AOPA to preserve the freedom of flight including safety programs, preserving airports, and growing the pilot population.

Bruce continues as Senior Safety Advisor to AOPA and the Air Safety Institute, writing periodic articles in *AOPA Pilot* magazine, as well as a popular blog. He continues his liaison duties to the FAA, NTSB, National Weather Service, and various industry groups.

A former U.S. Air Force officer, he holds a bachelor's degree in psychology and a master's degree in industrial technology from the University of Maryland. Prior to coming to AOPA, he held management positions with Cessna Aircraft Company and FlightSafety International.

Bruce has logged more than 6,000 hours as an Airline Transport Pilot (ATP) and holds Gold Seal flight instructor certificates. He has been an AOPA member for more than 40 years and is a proud aircraft owner flying from Mount Pleasant Regional Airport in the great state of South Carolina.

John Lanicci

Embry-Riddle Aeronautical University

John Lanicci is a Professor of Meteorology at Embry-Riddle Aeronautical University in Daytona Beach, Florida. He joined the Embry-Riddle faculty in 2006 after completing a 27-year career in the U.S. Air Force. Among his military assignments were two staff tours at The Pentagon; tours as a weather forecaster and chief of model development at A.F. Global Weather Central, Offutt AFB, Nebraska, an assignment as a research scientist and project manager at the A.F. Research Laboratory at Hanscom AFB, Massachusetts; and three command assignments, the last of which was as Commander of the Air Force Weather Agency (now the 557th Weather Wing), Offutt AFB, Nebraska. Dr. Lanicci received a B.S. degree (summa cum laude) in Physics from Manhattan College, Bronx, New York, in 1979; a B.S. degree (with highest distinction) in Meteorology from The Pennsylvania State University in 1980, and M.S. and Ph.D. degrees in Meteorology from Penn State in 1984 and 1991 through Air Force Institute of Technology sponsorship. In addition to his USAF command and staff experience, Dr. Lanicci spent three years on the faculty at Air War College, Maxwell AFB, Alabama, where he was also the college's Chief Information Officer, and six years as an adjunct assistant professor with Embry-Riddle's Worldwide campus program. Dr. Lanicci has taught undergraduate and graduate courses in synoptic and mesoscale meteorology, weather analysis and forecasting, aviation meteorology, and environmental security. His research interests include the integration of weather information into aviation decision-making, central Florida extreme weather events, and the effects of climate change on national and international security. Dr. Lanicci is Chair of the American Meteorological Society's Committee on Environmental Security, part of the AMS Commission on the Weather, Water, and Climate Enterprise.

Geoff Manikin

National Oceanic and Atmospheric Administration (NOAA)

Geoff Manikin is a research meteorologist in the Mesoscale Modeling Branch of the Environmental Modeling Center, one of the National Centers of Environmental Prediction (NCEP). Having joined EMC in 1995, Mr. Manikin co-leads the center's Model Evaluation Group (MEG) which assesses performance of the NCEP modeling systems and helps lead weekly webinars which provide recaps of high-impact weather events, reviews of model statistical performance, and information about upcoming model enhancements. He also co-leads a MEG Science and Technology Intergration team

that is making recommendations to EMC on how to populate an hourly high-resolution ensemble system in 2017. Mr. Manikin works closely with the Earth System Research Laboratory (ESRL) and NCEP Central Operations (NCO) to implement upgrades to the Rapid Refresh and High-Resolution Rapid Refresh models (RAP and HRRR) into operational, including the milestone initial launch of the operational HRRR in September 2014. Mr. Manikin has also worked on development of the North American Mesoscale (NAM) model, the Short-Range Ensemble Forecasting (SREF) system, the Real-Time Mesoscale Analysis, and the HYSPLIT dispersion model. He is heavily involved in product generation and post-processing and dissemination of NCEP model guidance and maintains several web sites to effectively display output. He holds a Bachelor of Arts in Economics from Cornell University and a Master of Atmospheric Sciences from the University of Illinois at Urbana-Champaign.

Tim Miner

American Airlines

Captain Timothy Miner is a rated Captain on the Boeing 737 for American Airlines and has served as the weather subject-matter-expert on the National Safety Committee of the Allied Pilots Association, the representing organization for the 15,000 pilots that fly for the world's largest airline, for most of the 26-years he has flown commercially. Besides serving as member of NTSB investigations, Captain Miner has participated in many industry groups for policy, research and data-link and cockpit-display development with RTCA, NASA and the FAA. Captain Miner began his dual aviation and meteorology careers as a trophy-winning pilot for the USAF. He served as the Acting Head of the Geography Program at the United States Air Force Academy where he initiated the Meteorology major at that school in 1989-90 and demonstrated the use of interactive digital education to the emerging METAR program at UCAR/NCAR. He joined American Airlines in 1990 as a pilot while continuing his military career in the USAF Reserves where he rose to become the senior reserve meteorologist as the Individual Mobilization Assistant (IMA) to the Director of Air Force Weather from 2000 to 2006. He was the National Weather Association's Member-of-the-Year in 2001 and the USAF Reservist-of-the-Year in 1997. He finished his 30-year military career as a Mobilization Assistant at the Air Warfare Center at Nellis AFB, NV. Captain Miner is the only currently serving "user" on the American Meteorological Society's Aviation, Range and Aerospace Meteorology (ARAM) Committee. He was the chair of the 2015 National ARAM Symposium. At American Airlines, he currently works as the APA representative on the airline's Turbulence Task Force in addition to flying. He is married to Dr. Cecilia Miner, a retired USAF weather officer who is now a scientist at the NOAA National Weather Service's Aviation and Space Weather Service's branch.

Doug Olsen

University of North Dakota

Mr. Doug Olsen serves as a Project Manager at the Center for Unmanned Aircraft Systems (UAS) in the Department of Aviation at the University of North Dakota's John D. Odegard School of Aerospace Sciences, and leads research projects on unmanned aircraft topics, in collaboration with industry, academia, and government agencies. Current efforts include industry partnerships on UAS applications for powerline inspections, for beyond line of sight command/control systems, for small UAS detect and avoid systems, and other initiatives. Mr. Olsen also supports the FAA-designated Northern Plains UAS Test Site in North Dakota, and leads research projects with NASA in integrating UAS safely into our airspace, including UAS Traffic Management (UTM) testing efforts. Mr. Olsen is a member of RTCA Special Committee 228, which is chartered by the FAA to establish UAS minimum operational performance standards for Command/Control and Detect and Avoid systems. Prior to joining the University of North Dakota, Mr. Olsen worked as an aerospace systems engineer on aircraft and spacecraft projects across the aerospace industry.

Joshua Paurus

Minneapolis-St. Paul International Airport (MSP)

As a Duty Manager at the Minneapolis-St. Paul International Airport (MSP), Josh manages the day-to-day activities of the Metropolitan Airport Commission's (MAC) Airside Operations staff and is responsible for the implementation of MSP's operational programs including Airport Inspection and Certification, Wildlife Hazard Management, Emergency Management, Runway Safety and Winter Operations.

Josh has 20+ years of experience at three airports in the field of airport operations. The past 15 years have been with the Airside Operations department at the Minneapolis/St. Paul International Airport. He is a graduate of the University of North Dakota with degrees in Airport Administration and Business Management. He is a licensed pilot and a Certified Emergency Manager.

Maria Pirone
Harris Corporation

Maria A. Pirone is senior business development manager for Environmental Solutions in the Space and Intelligence Systems segment of Harris Corporation. Space and Intelligence Systems offers complete Earth observation, weather, geospatial, space protection, and intelligence solutions from advanced sensors and payloads, ground processing, and information analytics.

Pirone is currently involved in business development in the area of climate and environmental systems and services within NOAA, and internationally. Her responsibilities include identifying high-impact, mission critical weather and climate opportunities requiring technology solutions.

Before joining Harris, Pirone was vice president of the Commercial Division at Atmospheric and Environmental Research, where she was responsible for product management, sales, and marketing of weather and climate forecast products for the energy, financial and insurance markets. Before that, she held senior management positions at WSI including director of strategic planning and director of global data products and services.

She is currently serving on the NAS Decadal Survey for Earth Science and Applications from Space - Panel on Weather and Air Quality, executive committee for the Alliance, and Millersville University's Master of Science in Integrated Scientific Applications program advisory board. Additionally, her involvement with the National Science Foundation, the National Academy of Sciences - National Research Council, the National Weather Service, the Federal Aviation Administration and the American Meteorological Society advisory committees and review teams has spanned almost three decades.

She served on the National Science Foundation Geosciences Advisory Committee, as private sector advisor to U.S. Permanent Representative for World Meteorological Organization (WMO) executive council meetings and 14th Congress and represented the U.S. at the 2nd WMO Conference on Women in Meteorology and Hydrology.

Pirone has a masters degree in business administration and finance and a bachelor of science degree in chemistry from Suffolk University. Her work has been published in science, financial, and business journals. She is a Private Pilot with Glider rating.

Gary Pokodner
Federal Aviation Administration (FAA)

Since graduating from Lehigh University as an electrical engineer, Gary Pokodner 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. Gary is the FAA's Weather Technology in the Cockpit (WTIC) Program Manager. In this role, Gary has been working to identify new research efforts related to bringing weather information into the cockpit to address near term needs and to enable various mid and far term NextGen concepts.

Judith Reif
JR Flight Services, Inc.

Judith Reif is the President of JR Flight Services, Inc. providing flight attendant and consulting services to the business aviation community. Judith holds a Bachelors degree in Environmental Sciences from Western Kentucky University. She worked as the Meteorological Technician for WSMV-TV in Nashville, TN in charge of coordinating weather data and computer graphics for 6pm and 10pm newscasts as well as educating children on severe storm

preparedness. After leaving television weather, she became the Flight Operations Coordinator for Wingedfoot Services LLC a Part 91 and 135 charter operator in Boca Raton, FL. In 2001, she became a corporate aviation flight attendant starting her own flight attendant and consulting service. In 2007, Judith became the first contract flight attendant to become Chairperson of NBAA's Flight Attendants' Committee and in 2014 joined NBAA's Weather Subcommittee. Having a passion for weather and aviation since childhood, she obtained her private pilot's certificate in 1997 and was the first female President of Sundowners Search and Rescue Club in Fort Myers, FL since its inception in 1965. Besides aviation, Judith is an avid scuba diver and beach lounge. She divides her time between Fort Myers, FL and the Dallas/Fort Worth, TX area.

Jeff Rex

Panasonic Avionics Corporation

Jeff serves as Director of Panasonic Avionics Corporation. In this role, he leads Panasonic Weather Solutions' efforts in business and product development for the company's advanced flight tracking, flight deck satellite communications and aviation weather solutions. Additional responsibilities within Jeff's group include the program management and certification of these solutions on commercial airline fleets worldwide.

Prior to joining Panasonic Avionics, Jeff served as Vice President Engineering & Product Integration with AirDat, where he was responsible for airline and aviation business and product development as well as the global certification and deployment of a proprietary weather sensing technology. He has also served as Vice President for L2 Aviation where he was responsible for the engineering, certification, integration, and overall program management of safety critical avionics systems on transport category aircraft for airlines, OEMs, and VIP operators.

Jeff graduated from the University of Colorado with a Bachelor's degree in Aerospace Engineering and a Master's degree in Engineering Management and is a certified Project Management Professional.

Godon (Gordy) Rother

Federal Aviation Administration (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 Branch 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 Simms

Federal Aviation Administration (FAA)

Danny Sims works in the Weather Research Branch of the FAA's NextGen Aviation Weather Division. He oversees several areas of the FAA's Aviation Weather Research Program including Model Development and Quality Assessments. Prior to his current work, he was located at the FAA's Air Traffic Control System Command Center overseeing the Traffic Flow Management System (TFMS), the automation platform used to manage the daily operations of the National Airspace System. He was responsible for maintaining operations and resolving issues for FAA air traffic control facilities, Department of Defense facilities, international partners, and commercial aviation entities. Mr. Sims began working with TFMS in 2004 and was instrumental in the integration of products such as the Corridor Integrated Weather System (CIWS) and the Route Availability Planning Tool (RAPT) into today's operational system. Prior to coming to FAA Headquarters, Mr. Sims was a Test Lead at the FAA's William J. Hughes Technical Center overseeing user and meteorological evaluations for a variety of aviation weather products. He worked closely with air traffic controllers, airline dispatchers, weather forecasters and the aviation weather research community. From 1984 to 1992, Mr. Sims was a member of the United States Air Force serving as a Weather Officer supporting United States Army infantry operations, and the development of new capabilities to support rocket launches and the dispersion of toxic chemicals. He holds a degree in Environmental Science from the University of Virginia and degrees in Meteorology from Penn State.

David Strahle

Regional Medical Imaging (RMI)

An avid pilot, Dr. Strahle has his commercial license, instrument rating, advanced and instrument ground instructor's license, flight and instrument instructor's license, and his ratings include multi-engine and seaplane. He has a bachelor's degree in Aerospace Technology from Kent State University, where he was director of the Air Force ROTC flight program. In 1969, he wrote a research paper describing the far-reaching benefits of transmitting weather to airborne aircraft including the initial steps of implementation. His paper won first place at the American Institute of Aeronautics and Astronautics research forum and his ideas were eventually published in Aero and Pilot magazines. His aerospace degree led to employment in the data processing division of IBM, which led to a greater interest in computers and medicine. As a radiologist performing fourth-dimensional MRI imaging, he has the unique ability to understand image cross-section analysis as it applies to radar cross-section returns. He is an expert on weather radar interpretation and regularly consults with government, private authorities and air crash investigators. Throughout the past 47 years, Dr. Strahle has continued to privately support and nurture the datalink programs including nationwide presentations to pilots on proper inflight interpretation of datalink NEXRAD radar images. The following link to AOPA's video release describes the DATALINK story <https://www.youtube.com/watch?v=bkXGXDM4mnQ>

Paul Suffern

National Transportation Safety Board (NTSB)

Paul Suffern is a senior meteorologist investigator for the NTSB. He has been with the NTSB since January 2011 serving in the Office of Aviation Safety. He has served as a meteorologist investigator in more than three hundred accidents, including Asiana flight 214 in San Francisco, Caribbean Airlines flight 523 in Guyana, Southwest Airlines flight 1919 in Chicago, and a few hundred of general aviation accidents in the United States. He is a member of the National Weather Association Aviation Meteorology Committee. Paul holds a B.S. in Meteorology and M.S. in Atmospheric Science from North Carolina State University. Before serving with the NTSB Paul worked as a forecaster for the National Weather Service in Juneau, Alaska.

Deborah Sutor*Association of Flight Attendants-CWA*

International Vice President Association of Flight Attendants-CWA, AFL-CIO

Deborah Sutor is a 27-year Flight Attendant with Envoy Air, formerly American Eagle, and became AFA's International Vice President on June 1, 2014.

Deborah's extensive experience within the AFA structure, holding numerous elected positions in local leadership and serving on various International committees, enables her to assist in furthering AFA's mission for economic and social justice for all Flight Attendants.

Tasked with leading AFA's training and leadership programs, Deborah brings valuable insight into the position and assists in cultivating and mentoring newly elected Flight Attendant union leaders.

"As aviation's First Responders, Flight Attendants have a crucial role in the safety and security of our nation's air transportation infrastructure. I am proud to work alongside dedicated Flight Attendants who have devoted their careers to raising the standards for all crewmembers. I am excited to be part of such a vital movement and will work tirelessly to ensure that we use our collective strength to make the requisite improvements that AFA members deserve," said Deborah.

Prior to her election as International Vice President, Deborah served as Master Executive Council Vice President for Envoy and was most recently instrumental in successfully navigating Flight Attendants through difficult bankruptcy negotiations.

A lifelong resident of Chicago, Deborah and her husband Steve have four sons and 2 grandchildren.

Matt Taylor*The Weather Company*

Matt Taylor, Business Development Director, The Weather Company - Aviation

Matt manages the aviation group's commercial aerospace business partnering, and federal clients including TWC's involvement with ADS-B and TFMS program. With TWC, Matt has led aircraft turbulence detection, flight planning, and cockpit weather technologies to market and continues to drive emerging technologies into operational practice for the benefit of aviation operations. Matt started his career as a weather officer in the Air Force and, just before joining WSI, managed a small business that provided decision support technology to global weather-affected industries with applications in aviation, space launch, energy/utilities, and military markets. With a Master's in meteorology and diverse aerospace-focused governmental and commercial background, Matt brings a range of technical expertise and industry know-how to TWC.

Jennifer Thropp*Embry-Riddle Aeronautical University*

Jennifer Thropp is an Assistant Professor in the Department of Graduate Studies in the College of Aviation at Embry-Riddle Aeronautical University (ERAU), where she teaches quantitative analysis, aerospace/aviation human factors, and mentors graduate student research. She has a Ph.D. in Applied/Experimental Human Factors Psychology and an M.S. in Modeling and Simulation. Her current research addresses human psychophysiological responses to aviation and spaceflight factors, as well as stress, cognition, attention, and workload in dynamic environments.

Mathew Tucker*National Air Traffic Controllers Association (NATCA)*

Matt joined the US Army in June 1983, where he served as an Air Traffic Controller. In 1987 he entered the FAA at Baton Rouge ATCT as an Air Traffic Assistant and then as an Air Traffic Controller in November 1989. In March 2000

Matt became the NATCA Weather Liaison working in Washington DC. While working as the Weather Liaison he worked on all FAA weather programs as well as serving on the CAST JSAT for Turbulence and the JSIT/JSAT for remaining Risks. In February 2003 Matt transferred to Jacksonville ARTCC, In August 2012 Matt Transferred to Atlanta ARTCC, the world's busiest air traffic control facility where he currently works as an Air Traffic Controller. Matt is also currently the NATCA Weather Representative, working on programs such as NEXTGEN Weather Processor (NWP) and the CDM Weather Evaluation Team, and is the International Federation of Air Traffic Control Associations (IFATCA) Representative to the ICAO MET-Panel.

Joe Vickers

Aviation Safety Technologies

Helping airlines and airports improve their Operational Control Processes through data analysis and recommending initiatives to enhance safety, increase efficiency and achieve better operational reliability.

Joe is experienced in Operations Control, process design, change management, IT program implementation, IT prioritization, control center design and construction, control center relocation, mergers of major airline operations, labor relations, program management, regulatory compliance and other areas.

A retired Managing Director for United Airlines where he oversaw development of consolidated business processes at United Airlines Network Operations Control Center and was responsible for day to day Operations Control activities of United's pre-merger OCC. Joe also held leadership positions in control centers for medium and small regional airlines.

Joe is a general aviation enthusiast who is a Certified Flight Instructor holding Instrument Pilot and Multi-Engine ratings. Passionate about teaching and personal development, Joe has served the FAA as a Designated Examiner for Aircraft Dispatchers since 1995. He has overseen the development of training, standards and QA/QC processes. Additionally, Joe develops, encourages and participates in formal and informal information sharing forums amongst industry peers.

David Vogt

Delta Air lines

Dave Vogt has worked in Delta's Operations/Customer Center for the past 11 years and is currently General Manager of Air Traffic Management for Delta Air Lines. In his current role, Dave supports the OCC as it relates to air traffic flow management functions and serves as Delta's representative to the FAA's Air Traffic and Systems Operations Divisions. In addition he serves as a member of the CDM Flow Evaluation Team and participates regularly in national and regional customer forums.

Previous to his current role he spent time as a Flight Superintendent (dispatcher) and as a Systems Operations Manager in Delta's OCC and worked on special projects related to dispatch training and the Delta-Northwest merger.

Dave has been in the airline industry for over 20 years and has also spent time working in Delta's Airport Customer Service division. He holds a bachelors and masters of business administration from the University of West Georgia.

Bill Watts

Delta Air lines

Bill Watts graduated from Georgia Tech, spent 5 years in the Air Force as a pilot, followed by 30 years of flying with Delta. He retired from Delta as Director of Flight Operations - Technology. At that point he was hired as a project manager to work on weather in the cockpit with turbulence being the lead product coordinating with NASA, NCAR and the FAA.

Steve Weygandt*National Oceanic and Atmospheric Administration (NOAA)*

Dr. Stephen Weygandt is the Assimilation Section Head within the Assimilation Development Branch, Global Systems Division, Earth System Research Laboratory of NOAA. In this capacity, Dr. Weygandt directs the development of data assimilation systems that provide initial conditions for the Rapid Refresh (RAP) and High-Resolution Rapid Refresh (HRRR) weather prediction models. The RAP and HRRR have run as a NOAA operational models since 2012 and 2014, respectively. These models are supported by the FAA Aviation Weather Research Program (AWRP) and Dr. Weygandt is a core participant in the AWRP Model Development & Enhancement Research Team, and actively collaborates with several other AWRP RTs. The RAP and HRRR provide short-range weather guidance to many different users and are used as input for automated products addressing weather hazards such as convection, icing, ceiling and visibility, and turbulence. Dr. Weygandt joined NOAA in 2000 and his work has focused on improving RAP and HRRR forecast performance and working with users to best utilize automated weather guidance products. 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.