

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

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**Steve Abelman***Federal Aviation Administration (FAA)*

Steve Abelman manages the Aviation Weather Research Team within the FAA's Aviation Weather Division. Aviation Weather Research Team sponsored activities include the Aviation Weather Research Program (AWRP) and the Weather Technology in the Cockpit (WTIC) portfolio. Steve is also coordinating efforts to improve and streamline the process for transition of weather research to operations and is leading FAA efforts on a multi-agency initiative to coordinate and consolidate weather research initiatives for NextGen.

Prior to his transition to the FAA in February of 2011, Steve was the "contents" lead for National Weather Service (NWS) NextGen activities. Steve was the NWS lead for development of the 4-D Weather Functional Requirements for NextGen Air Traffic Management and lead outreach activities to promote NextGen within the NWS.

Steve worked for 4 years as the Manager of Aviation Training and Standards for Weathernews in Norman, Oklahoma. Steve also worked for American Airlines as a shift meteorologist and training coordinator for nearly 15 years.

**Louis Bailey***The Boeing Company*

Louis Bailey has 20 years of aviation domain experience. His technical and operational expertise includes the development and deployment of new products and services related to air traffic management, flight efficiency, weather services, and flight management systems (FMS). His experience spans the entire product life cycle including flight test, crew training, development of system and software design specifications, hardware requirements, and certification. His particular area of emphasis has been airspace and operational flight efficiency, weather services, and guidance and performance.

Louis has been a Systems Engineer and innovator with Boeing for 10 years. His primary duty is Principal Investigator for the Flight Efficiency Technologies, but also supports advanced weather initiatives. He is a licensed Commercial Pilot with Multi-engine Instrument rating and a graduate of the US Army Airborne and Air Assault schools.

**Randall Bass***Federal Aviation Administration (FAA)*

Randy Bass has worked for the FAA since June, 2012, leading the Convective Weather Research Program (CWRP) and Advanced Weather Radar Techniques (AWRT) program in the Aviation Weather Division. As the CWRP project lead he manages research and development programs to improve forecasting and mitigate effects of convective weather on all aspects of aviation and the National Airspace System. As the AWRT project lead he manages programs to develop weather radar-derived products and services for integration and use in aviation weather applications and air traffic management decision making tools and processes. He oversees budget, determines programs of record for funding, monitors end-to-end progress of research projects, and executes transition from research to operations of successful ventures.

Prior to his position at the FAA, Randy was a senior meteorologist for Exelis's Geospatial Systems division in Herndon, Virginia. He founded and led an environmental weather division that provided business development and support and services to internal programs and external customers. His projects ranged from development of a handling system for large environmental data files to

creation of a digital platform that accesses ground-based, open source cameras across the US and extracts weather information from the imagery on a customized level.

Mr. Bass retired from the Air Force in 2008 after 20 years as a weather officer. During his career, he commanded several base weather stations and provided weather support throughout the US and during contingencies overseas to a variety of aircraft such as the B-1, KC-135, A-10, U-2 and C-5. Randy also has considerable experience supporting the Intelligence Community and satellite operations. He has in-depth knowledge and experience with the cloud forecast process, atmospheric profiles used for imagery analysis, space weather effects and satellite anomalies, and operations support. He is an active member of the National Weather Association, the American Meteorological Society (AMS) and the AMS-DC local chapter. He earned the Certified Consulting Meteorologist designation from AMS in 2014.

### **Mike Bettwy**

*National Oceanic and Atmospheric Administration (NOAA)*

Mike Bettwy is currently the Warning Coordination Meteorologist for the National Weather Service Aviation Weather Center. In this role, he serves as the main liaison between the Aviation Weather Center and its customers, partners, and users of NWS aviation weather products and services. Mr. Bettwy has over 10 years of experience in operational aviation weather forecasting, research, and public affairs. Mike works closely with the aviation community both within the United States and internationally to ensure the production, dissemination and use of NWS aviation weather products and services meet user requirements and international standards, in support of safe and efficient flight. His work extends from modernizing legacy NWS aviation products, to collaboratively developing policy, procedures, and requirements for emerging information needs of NextGen.

### **Ed Bolen**

*National Business Aviation Association (NBAA)*

Ed Bolen became the president and CEO of the National Business Aviation Association (NBAA) in Washington, DC, on Sept. 7, 2004.

Prior to joining NBAA, Bolen was president and CEO of the General Aviation Manufacturers Association (GAMA) for eight years. Bolen joined GAMA in 1995 as senior vice president and general counsel. GAMA's board of directors elected him president and CEO in November 1996.

In 2001, Bolen was nominated by President Bush to serve as a member of the Commission on the Future of the U.S. Aerospace Industry. Established by Congress, the commission's objectives were to study and make recommendations on ways to ensure American leadership in aerospace in the 21st century.

Bolen was nominated by President Clinton and confirmed by the U.S. Senate to serve as a member of the Management Advisory Council (MAC) to the Federal Aviation Administration (FAA). He chaired the council from 2000 to 2004.

Bolen is the incoming chairman of RTCA, Inc., a not-for-profit corporation that functions as a Federal Advisory Committee to the FAA on matters related to communications, surveillance, navigation and air traffic management. He previously served as RTCA's vice chairman. He also serves on the Aviation Advisory Board of the MITRE Corporation, a federally funded research and development corporation.

Prior to his association career, Bolen was majority general counsel to the Senate Committee on Labor and Human Resources. He also served as legislative director for U.S. Senator Nancy

Kassebaum (R-KS) and was a key player in the passage of the General Aviation Revitalization Act of 1994.

Bolen received his Bachelor of Arts in economics from the University of Kansas. He is a graduate of the Tulane University School of Law and holds a Master of Laws degree from Georgetown University Law Center.

Bolen, a recreational pilot, is also a competitive tennis player and former captain of the University of Kansas varsity tennis team.

### **Frank Brody**

#### *National Oceanic and Atmospheric Administration (NOAA)*

Frank Brody is Meteorologist-In-Charge of the National Weather Service's National Aviation Meteorology Unit (NAM) at the FAA Command Center in Warrenton, VA. He leads a group of meteorologists that provide customized weather forecasts and decision support to the FAA for air traffic management throughout the United States. From 1991 to 2014, Mr. Brody was Meteorologist in Charge of the National Weather Service Spaceflight Meteorology Group (SMG) at Johnson Space Center in Houston, Texas. SMG provides weather decision support for NASA human space flight programs, and provides weather advisories and consultation for Johnson Space Center. He led weather support for 98 Space Shuttle missions during his tenure at SMG in Houston. From 1989 to 1991, he worked at National Weather Service Headquarters in Silver Spring, MD, helping plan the NWS modernization and reorganization that occurred in the mid-1990s. From 1982 to 1989, he was a forecaster at the National Weather Service's National Center for Environmental Prediction (NCEP) in Camp Springs, MD, specializing in Quantitative Precipitation Forecasting, including excessive rainfall and heavy snow. Previous assignments include weather forecaster positions at National Weather Service offices in Raleigh, North Carolina, Charleston West Virginia, and Washington DC. Mr. Brody is a member of two professional organizations: the American Meteorological Society (AMS) and the National Weather Association (NWA). He recently ended a 3 year term as an elected Councilor to the NWA. Mr. Brody earned a B.S. in Meteorology from the Pennsylvania State University in 1977. He is married with three grown children and one new grandson.

### **Bruce Carmichael**

#### *National Center for Atmospheric Research (NCAR)*

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.

**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.

**Rune Duke**  
*Aircraft Owners & Pilots Association (AOPA)*

Rune Duke joined AOPA in 2015 as Director of Government Affairs, Airspace and Air Traffic. He has a diverse background in aviation that includes prior experience as a military air traffic controller and as a manager of a general aviation airport. He is a commercially rated pilot, a Certified Member of the American Association of Airport Executives, and has a Master of Aeronautical Science degree in Aviation Operations from Embry-Riddle Aeronautical University. He participates in the RTCA Tactical Operations Committee, Performance-based Operations Aviation Rulemaking Committee, and represents AOPA in various forums. Rune remains an active pilot, flying out of Frederick every chance he gets.

**Donald Eick**  
*National Transportation Safety Board (NTSB)*

Mr. Donald Eick is a Senior Meteorologist in the Office of Aviation Safety in the Operational Factors Division (AS-30), of the National Transportation Safety Board (NTSB) where he provides technical weather analysis and documentation for accident investigations in all modes of transportation. He has over 40 years of experience in aviation weather and has been with the NTSB since 1998. During that time has been involved in hundreds of general aviation, regional, majors, and international air carrier accident investigations.

He has also been featured in several documentaries on weather related aircraft accidents.

Mr. Eick was formerly with Trans World Airlines for 14 years, where he started as an instructor in flight operations teaching meteorology, regulations, and flight procedures in their Kansas City training center. He was promoted to the position of head of meteorology at TWA's Operational Control Center located at JFK International Airport in New York, where he was responsible for providing worldwide weather support to operational control and flight dispatch, and assisted in the daily operation of the airline. He received numerous awards and has been recognized for his outstanding performance and achievements in aviation weather support.

Mr. Eick has also an extensive aviation weather training background and provides instruction at the NTSB's Basic Accident Investigation Courses (BAIC) in the aviation and marine divisions, and special military programs.

Mr. Eick earned Bachelor of Science degrees from Embry-Riddle Aeronautical University in Aeronautical Studies and from Florida State University in Meteorology. He holds a private pilot, aircraft dispatcher, and weather observer certificates, and has completed his commercial and instrument ratings.

**James Enders**  
*Federal Aviation Administration (FAA)*

James Enders is the Air Traffic Control System Command Center (ATCSCC) Manager for Quality Control. Mr. Enders works closely with the Deputy Directors System Operations to review ATCSCC and National Traffic Management performance and serves as the System Operations Organizational representative on the FAA Safety Round Table and the FAA Administrator's Top Five Safety initiative. Mr. Enders was appointed to this position in April, 2014 as a rehired annuitant, having retired from the FAA in 2007 and worked in private industry prior to his return to the FAA family.

Mr. Enders began his career in 1982 and worked at Allentown Tower/TRACON (ABE), Pittsburgh Tower/TRACON (PIT) where he helped found the Traffic Management Unit, ATCSCC as a specialist, Washington National Tower/TRACON (DCA) as a Supervisor and Operations Manager, Potomac Consolidated TRACON (PCT) as the Traffic Management Officer, and then returned to the ATCSCC as a National Operations Manager and Training Manager. Mr. Enders served as a Senior Advisor to the Iraqi Civil Aviation Authority in 2005/2006.

Post-retirement Mr. Enders worked in private industry on a variety of aviation projects including Traffic Flow Management System (TFMS), radar and tower simulator systems, Flight Object, Terminal Flight Data Management (TFDM) and others in positions ranging from Subject Matter Expert to Project Manager to System Engineering 2020 (SE2020) Deputy Program Manager with CSC, Booz Allen Hamilton, and JMA.

Mr. Enders is a graduate of the Pennsylvania State University in 1975 with a BS in Law Enforcement, serving as a police officer for 9 years prior to joining the FAA.

**Faycel Farza**  
*NAV CANADA*

Faycel Farza is a registered Professional Engineer, registered Project Management Professional, holds a Master in Project Management and has over 25 years of engineering experience (over than 15 years in the Canadian air navigation industry with NAV CANADA). He has prepared and evaluated the technical portions of numerous procurement specifications, including the selection of the NAV CANADA AWOS. As part of his project management, he has also conducted design reviews, design acceptance tests, field tests and prepared overall installation requirements. He has also monitored and analyzed equipment performance and ongoing maintenance requirements for several projects such as ATIS, PATWAS, PIK, AWOS, DAWC and HWOS.

In addition to managing and implementing procurement projects, Faycel Farza has participated in the AWOS algorithms working group required to make NAV CANADA AWOS comply with Transport Canada CAR 804.01 (c) and to interface with several NAV CANADA systems such as MIDS, WADDS, CLDN, RVR, ADAPS-R, ODEX and HWOS. He was instrumental in conducting the tests to certify the NAV CANADA AWOS in the Canadian environment and to assure a fast deployment of the NAV CANADA AWOS software and hardware.

In April 2016, NAV CANADA participated in the Mini-Global 2 demonstration where Faycel Farza skills made the SWIM demonstration ready in time and successful. During the Mini Global

demonstration, data exchange between heterogeneous systems took place for 2 key operational scenarios between NAV CANADA and the FAA.

As a Manager of Weather and System Wide Information Management Faycel Farza is currently responsible for the lifecycle of the weather program and the new System Wide Information Management Concept (SWIM).

**Bryce Ford**  
*SpectraSensors*

Bryce Ford is the SpectraSensors VP of Atmospheric Programs and is based in Bethesda, Maryland. Since 2010 he has led the Water Vapor Sensing System (WVSS-II) product line, used in Partnership programs between National Meteorological Services and the aviation industry, supporting the WMO Aircraft Based Observations Program (ABOP).

Bryce brings 38 years of experience in the weather and aviation communities including executive management, program management, business development, functional management, systems and software engineering. Previously Bryce served at Lockheed Martin for 9 years as Business Development Manager and Engineering Project Manager for global meteorological/hydrological programs. He served at Harris Corporation for 16 years, supporting FAA, defense, and commercial customers with weather information systems and data services. He began his career in 1978 as a Boeing research engineer in Wichita, Kansas.

Bryce is a Councilman of the international association of Hydro-Meteorological Equipment Industry (HMEI), an associate-member of the WMO CBS Expert Team on Aircraft Based Observing Systems, and an associate-member of the WMO CIMO Expert Team on Aircraft-based Observations. He supports various RTCA activities developing aircraft meteorological datalink standards, was on the Board of Directors of a joint venture company in Beijing, China, and supported the U.S. NWS at WMO EC in 2008. Bryce holds a B.S. in Physics from Eastern Illinois University.

**Eldridge Frazier**  
*Federal Aviation Administration (FAA)*

Mr. Eldridge Frazier is currently the Lead Engineer for Weather Technology in the Cockpit (WTIC) Program. He has been with FAA for 7 years, and prior to FAA he was the Chief Engineer for the NASA Glenn Research Center Weather Accident Prevention (WxAP) Project.

He has over 25 years' experience in Department of Defense (DOD) and commercial aircraft systems program, project, and logistics management. His experience includes nine years hands-on avionics integration, aircraft modifications, aircraft power systems, compliance requirements, and FAA Supplemental Type Certificate (STC) documentation generation and coordination.

Mr. Frazier earned a Bachelor's Degree in Electrical Engineering from Auburn University, Auburn, AL. Additionally, he is the designated federal official for RTCA Special Committee 206, Aeronautical Information Services (AIS) and Meteorological Data Link Services.

**Jose Garcia-Rivera**  
*I.M. Systems Group*

Dr. Jose Garcia-Rivera is a Weather Forecast Modeling Scientist at I.M. Systems Group. He is currently working on the research, development and operations of the Enterprise Integrated Aviation Weather System (eIAWS). eIAWS products are aimed at providing tailored innovative solutions for air traffic management (ATM) decision-making and ATM-related applications, both in the United States and abroad.

Jose has a Ph.D. in Atmospheric Science from North Carolina A&T State University. His previous research work has consisted from numerical weather prediction (NWP) applications to tropical meteorology, more specifically WRF-ARW studies on tropical cyclone (TC) inner-core dynamics, eyewall replacement cycles, and TC-Cold-air damming interactions in the Carolinas.

**John Gulding**  
*Federal Aviation Administration (FAA)*

John Gulding currently serves as the manager for the Strategic Analysis and Benchmarking group within the FAA/ATO Office of Performance Analysis. Duties include producing performance reporting tools and developing the operational performance metrics used by senior ATO management. For FAA international projects, John works collaboratively with ANSPs seeking to develop similar metrics or benchmark results against US facilities. This includes the development of performance workshops and guidance material on operational aviation performance for CANSO and ICAO. John has over 26 years of experience in aviation planning which includes over 22 years with the FAA. In this time he has worked as a software developer, course instructor, and manager of aviation projects worldwide. This includes the development, implementation and training in the use of airport simulation models, NAS wide simulation models and environmental models which are used worldwide by governments, engineering firms and industry.

His education includes a BA in Mathematics from the University of Virginia and Masters in Operations Research from George Mason University.

**T.K. Gwin**  
*Colorado Department of Transportation (CDOT)*

T.K. Gwin started his aviation career serving 8 years in the Air Force ending in 1979. Upon leaving the Air Force he worked for the Department of Air Force as the Chief of Base Operations and Airfield Manager at the Air Force Flight Test Center, Edwards AFB. Until 1985. He was the first full time airport manager at Boulder Municipal Airport from 1985 through 1987 where he was recruited by NASA to be the Shuttle Landing Facilities Operations Officer at Kennedy Space Center. He left NASA in 1995 to return to Colorado and started working for the Colorado Division of Aeronautics in 1999.

**Steve Jangelis**  
*Air Line Pilots Association (AOPA)*

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."

### **Le Jiang**

*I.M. Systems Group, Inc.*

Dr. Le Jiang (BS, Atmospheric Science, Nanjing University, China, 1991; PhD, Earth System Science, University of Cincinnati, Ohio, 2001), worked as an aviation weather meteorologist at Beijing Capital International Airport from 1991 to 1996. After joining IMSG in late 2000, he worked through Physical Scientist, Lead Scientist, Program Manager, Director, and then Chief Scientist and Vice President of the company. He is currently overseeing IMSG's major federal programs with over 200 scientists, analysts, and software engineers supporting NOAA/NESDIS and NWS developing and improving environmental satellite remote sensing and numerical weather prediction capabilities and transitioning them from Research to Operations (R2O). These capabilities are serving the FAA, airlines, and airports for their operational-critical weather information needs. With interdisciplinary knowledge and rich experience in science-based application development, Dr. Jiang is currently leading IMSG's new initiative on Enterprise Integrated Aviation Weather System (IAWS™) that aims to significantly improve the current and next generation civil aviation operational safety and efficiency worldwide through more cohesive and precise weather support. In collaboration with the FAA and NOAA/NWS, Dr. Jiang organized and led the Aviation Weather Technology and Operational Decision Making International Training since 2010.

### **Kevin Johnston**

*Federal Aviation Administration (FAA)*

Kevin Johnston is the Chief Meteorologist for the Director of the Federal Aviation Administration's (FAA) System Operations. As such, he advises the Director on weather related issues associated with Air Traffic Flow Management Decision Making activities. He is also the Contract Officer Representative for National Weather Service support to FAA Air Traffic Control Facilities and the FAA lead to the Collaborative Decision Making (CDM) Weather Evaluation Team (WET).

Mr. Johnston moved into this position in November of 2008 after leaving the National Weather Service where he was the Aviation Services Branch Chief and NOAA Aviation Weather Program Manager from 2004-2008.

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

Mr. Johnston has a Bachelor Degree in Meteorology from the Pennsylvania State University. Mr. Johnston is married to the former Ms. Jenny Jepson and they have three boys, William Patrick, Daniel Joseph and Thomas Michael.

**Thomas Judge**  
*LifeFlight of Maine*

Thomas Judge is the Executive Director of LifeFlight of Maine. With an extensive background in pre-hospital emergency medical services and air medicine Tom has worked in the public and non-government sectors and has a wide background in the design and implementation of emergency medical care systems nationally and internationally. Former Board Chair of Maine EMS, the State Regulatory and Licensing Agency, Tom has served as a Helicopter EMS subject matter expert for the National Transportation Safety Board, the Institute of Medicine, the State of Maryland Expert Panel on the review of Trooper 2, the Government Accountability Office, recently completing a fifth appointment and ten years of service to on the US Federal National EMS Advisory Council.

He currently leads the Infrastructure work group for the US Helicopter Safety Team and has been a member of the International Helicopter Safety Team since its inception. He is the immediate past Chair of the Association of Critical Care Transport, former president of the Association of Air Medical Services, and a former Board Member for the Medevac Foundation International and has served on the International Scientific Committee for AirMed 2008 (Prague, CZ) AirMed2011 (Brighton, UK), and AirMed2014 (Rome, IT)

International work includes projects and presentations in Canada, throughout the UK and Ireland, Italy, Denmark, France, Czech Republic, Spain, Japan, Australia, and South Africa. Thomas was a 1996 Atlantic Fellow in Public Policy working in the NHS with postings at the Medical Care Research Unit/ University of Sheffield, the Scottish National Ambulance Service, and the King' Fund. He is a founder ambulance member of the Faculty of Pre-Hospital Care of the Royal College of Surgeons Edinburgh and serves as faculty for the National EMS Physician's Association National Medical Director Course.

Thomas has authored numerous articles on EMS and critical care transport and has served as faculty for numerous national and international meetings. He is particularly interested in patient safety, risk, governance, and the effects of health care policy and in the issues of access and equity in the provision of rural medical care. He continues to serve as a paramedic on the local volunteer rescue which developed the first community paramedic program in Maine.

**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.

### **Steve Levine**

*National Oceanic and Atmospheric Administration (NOAA)*

Research Meteorologist, Systems Research Group  
December 2010 – Present (5 years 8 months)

Contractor for National Weather Service - National Centers for Environmental Prediction - Environmental Modeling Center. Developed and implemented new mesonet observation quality control system. Developer for Real Time Mesoscale Analysis (RTMA) system. Respond to real-time feedback from NWS field offices and forecasters about RTMA. Maintain mesonet metadata, Import metadata into NWP models. Developed MySQL system to store observation, forecast and analysis data for verification and quality control. Use GIS systems (Google Earth) to display and analyze real time and retrospective weather data along-side model/analysis output. Examine and evaluate non-traditional data sources (wind farm data, RWIS station) for ingest and assimilation into RTMA and mesoscale NWP models. Develop and improve NCEP data ingest/processing system

Graduate Student Research Assistant, Florida Institute of Technology  
August 2009 – October 2010 (1 year 3 months) Melbourne, Florida Area

Wrote and implemented algorithm to sort and organize mesonet weather stations for quality control purposes using UNIX scripts, MySQL, Perl and Fortran 90.

**Alfred Moosakhanian**  
*Federal Aviation Administration (FAA)*

Alfred is the Manager of NextGen Weather Systems in the Program Management Organization (PMO). He is a PMP and FAA Senior Level Certified Program Manager. He currently manages Common Support services - Weather (CSS-Wx) and NextGen Weather Processor (NWP) programs. He manages the development of the advanced weather platforms for the NAS as well as the development of Weather Information Exchange Model (WXXM) and the International Civil Aviation Organization (ICAO) IWXXM for international adoption.

Previously, he served as the En-route Weather programs manager that included FIS Data Link (FISDL), Corridor Integrated Weather System (CIWS), and Weather and Radar Processor (WARP). He has over 30 years of engineering and management experience in the Industry and FAA working on numerous programs involving advanced Communications, Weather, and Automation technologies, from concepts to full scale development and system operation.

Alfred has MS in Electrical Engineering, MS in Engineering Management, and BS in Electrical Engineering.

**Mark Phaneuf**  
*Air Line Pilots Association (ALPA)*  
*No bio received*

**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.

**Colleen Reiche**  
*AvMet Applications, Inc.*

Dr. Colleen Reiche is a Senior Scientist at AvMet Applications, Inc. Her primary research areas include weather forecast performance evaluation and application to air traffic management (ATM), weather-ATM applied task analysis, concept development, and impact assessment, and weather-ATM decision support evaluation and benefits assessments. Colleen has a Ph.D. in Meteorology from Purdue University.

**Tom Reynolds**  
*MIT/Lincoln Laboratory*

Tom Reynolds is the Associate Group Leader of the Air Traffic Control Systems Group at MIT Lincoln Laboratory. He works on developing and analyzing advanced ATC systems and aircraft operational procedures to improve the efficiency and safety of the air transportation system. He has a PhD in Aerospace Systems from MIT.

**Mike Robinson**  
*AvMet Applications, Inc.*

Mike Robinson is the Chief Technology Officer at AvMet Applications, Inc. His main research areas of interest include weather-air traffic management (ATM) translation and integration, weather-ATM functional task analysis, problem identification, and concept development, and weather-ATM decision support evaluation, metrics, and benefits assessments.

Over the past 10 years, Mike has been the project lead on 12 separate weather-ATM field evaluation campaigns and has spent over 500 hours in air traffic facilities observing and evaluating the operational decision-making environment during significant weather impact events. He has been the technical lead for evaluating the operational utility and/or user benefits for more than 10 separate aviation decision support capabilities. Prior to joining AvMet, Mike worked as a technical staff scientist with MIT Lincoln Laboratory as well as a research analyst at the NASA Goddard Space Flight Center. Mike has a Master's Degree in Meteorology from Texas A&M University.

**Gordon (Gordy) Rother**  
*Federal Aviation Administration (FAA)*

Aviation Safety Inspector, Aircraft Dispatch  
Federal Aviation Administration, AFS 430 Future Flight Technologies Branch

Mr. Rother has been with the FAA since September 2001.

- Currently he works as the 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.

**Ashish Solanki**  
*Maryland Aviation Administration*

Mr. Ashish J. Solanki, A.A.E. has been with the Maryland Aviation Administration for the past 20 years. He presently serves as Director of the Office of Regional Aviation Assistance for the Maryland Aviation Administration. He is responsible for fostering and promoting safe aeronautics in Maryland. His duties include: licensing and regulating the 138 public and private landing facilities,

managing the State's \$3 million grants-in-aid program to public-use airports and supporting aerospace advocacy/education for the citizens of Maryland. As stewards of the state aviation system, focus remains on the improvement, development and protection of the airport infrastructure to meet the demands of the flying public. Safety, security and system preservation are the priorities of Regional Aviation.

Prior to his service to State of Maryland, Mr. Solanki was an aircraft dispatcher for a regional airline based at Dulles International Airport. He also provided Flight Instructor training to new and intermediate flight students. He holds a commercial-instrument certificate for single and multi-engine land aircraft as well as a flight instructor and dispatcher certificates with over 2,100 flight hours. He holds a Bachelor of Science from Florida Tech and a Master of Science from Embry-Riddle Aeronautical University. Mr. Solanki is recognized as an Accredited Airport Executive, an industry certification acknowledging expert knowledge, skills and experience in the management/operation of airports. Mr. Solanki serves on the National Association of State Aviation Official (NASAO) Board of Directors as the Association's Eastern Region Board member and serves on three separate NASAO committees (NextGen, Airspace and Unmanned Aircraft System).

### **Jeff Woods**

#### *National Air Traffic Controllers Association (NATCA)*

Jeff Woods is currently the NATCA Program Management Office (PMO) Representative. He has over twenty-five years of air traffic control experience and has worked in a variety of environments including military installations, towers, en route, and approach facilities. Throughout his tenure Jeff has been involved in special projects and assignments, such as being part of staffing the temporary tower in Lufkin, TX that was established in direct support of the Space Shuttle *Columbia* recovery effort in 2003. Jeff's current role affords him the opportunity to work across FAA internal lines of business and collaboratively with industry on a wide variety of new and existing technology initiatives.