

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

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BIOGRAPHIES OF PRESENTERS

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Steve Ableman*Federal Aviation Administration (FAA)*

Steve Ableman 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.

Jennifer Belge*National Oceanic and Atmospheric Administration (NOAA)*

Jennifer Belge works as a meteorologist and project manager in the in the Office of Observation at NOAA's National Weather Service (NWS). She joined NOAA in April 2009 after earning her Master's degree in Applied Meteorology from Plymouth State University. Jennifer began her work at the National Environmental Satellite Data and Information Service (NESDIS) Satellite Analysis Branch (SAB) where she served both as a 24x7 satellite analyst and as Project Manager for the International Charter for Space and Major Disasters during the 2010 Deepwater Horizon Oil Spill disaster. Her work included tasking, acquiring, and assuring the appropriate processing and distribution of vast international public and commercial satellite assets while also creating real-time geospatial products to support mitigation efforts. Jennifer recently served as the Program Coordination Officer (PCO) during a 1 year detail where she represented the NESDIS Line Office to ensure adequate coordination with NOAA Headquarters. As the PCO, Jennifer supported the NOAA Administrator and served as the focal point for coordination and preparation of NOAA program reports, calendar events, and management meetings. In her current position at the NWS, Jennifer leads the Multi-Radar, Multi-Sensor (MRMS) operational implementation project which includes coordinating with the National Severe Storms Lab as MRMS fully transitions into operations as well as planning for future improvements to the project.

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.

Barrett Caldwell*Purdue University*

Barrett S. Caldwell, PhD is a Professor in Industrial Engineering (and Aeronautics & Astronautics) at Purdue. His PhD (Univ. of California, Davis, 1990) is in Social Psychology; his two BS degrees are from MIT (1985). His research program is known as the Group Performance Environments Research (GROUPER) Laboratory. GROUPER research highlights human factors engineering approaches to information flow, task coordination, and team performance in settings from healthcare to spaceflight to STEM education. These studies provide guidance for design, evaluation, and innovation for *how people get, share, and use*

information well. Prof. Caldwell has published over 150 scientific publications and has been recently funded by sources including CERIAS, FAA, and NASA. He is a Fellow and Past Secretary-Treasurer of the Human Factors and Ergonomics Society (HFES), a Purdue University Faculty Scholar, and Director of the NASA-funded Indiana Space Grant Consortium.

Jessica Cruitt

Embry-Riddle Aeronautical University

I am currently a Human Factors PhD student in my final year at Embry-Riddle Aeronautical University, where I study under the Applied Training Science Lab. My primary research focus is aeronautical decision making, training, and assessment. Most recently, I have worked on an FAA sponsored WTIC grant, an Office of Naval Research sponsored grant looking at the implementation of a live, virtual, and constructive training system to train F/A-18 combat pilots, and a project looking at weather related decision making in the helicopter emergency medical industry. Upon graduating with my degree, I plan to continue to researching under aviation, decision making, and training.

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.

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.

Gabriel Elkin*Massachusetts Institute of Technology Lincoln Laboratory (MIT/LL)*

Mr. Elkin was recently appointed as an Assistant Group Leader in the Air Traffic Control Systems Group at the Massachusetts Institute of Technology Lincoln Laboratory in Lexington, Massachusetts. He oversees research and development efforts in the areas of advanced weather radar technology, weather forecasting and decision support, and cyber security. Earlier in his career, he led the development and technology transfer of major upgrades to the Airport Surveillance Radar Model 9 (ASR-9) and the Terminal Doppler Weather Radar (TDWR). He has 20 years of experience supporting FAA sponsored R&D.

Mr. Elkin has also supported a broad spectrum of government sponsored research during his career at the Laboratory, spanning Homeland Security and Disaster Preparedness, Missile Defense, and Space Situational Awareness. Mr. Elkin served two tours over the span of seven years at the Laboratory's remote field site at the Ronald Reagan Ballistic Missile Defense Test Site (RTS) located at the US Army Kwajalein Atoll installation in the Republic of the Marshall Islands. He was the Site Manager from 2012-2015. Here, his research efforts were focused on development of net-centric distributed command and control technologies, advanced sensor technologies, and decision support.

Mr. Elkin has a B.S. in Applied Mathematics and Computer Science from Union College, and a M.S. in Computer Science from Boston University."

Chris Ermatinger*Federal Aviation Administration (FAA)*

Chris Ermatinger joined the FAA's Aviation Weather Division as an Operations Research Analyst in October 2014. His current duties include analytic validation of weather forecast performance requirements for traffic management.

Prior to his work at the FAA, Chris held the position of Senior Analyst at Metron Aviation. During his 14-year career at Metron Aviation, he researched improvements to traffic management initiatives. His work contributed to the development or refinement of traffic flow management staples such as Slot Credit Substitutions, Unified Delay Programs, Airspace Flow Programs, and Adaptive Compression through the use of interactive modeling and simulation. While there Chris also contributed to analyses that measured the impact and efficiency of US traffic management initiatives, estimated the operational contribution of EUROCONTROL's Network Manager, and helped to develop plans to increase capacity at three major South African airports.

Bryce Ford*SpectraSensors*

Bryce Ford is the SpectraSensors VP of Atmospheric Programs and is based in Bethesda, Maryland. He leads the Water Vapor Sensing System (WVSS-II) product line, used in Partnership programs between National Meteorological Services and the aviation industry, supporting the WMO AMDAR program.

Bryce brings 37 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 served on RTCA SC-206-SG4 developing aircraft meteorological datalink standards, 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.

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 weather-related projects revolving around NextGen, traffic flow management (TFM) and strategic planning, and supports the FAA NAS Infrastructure Portfolio Manager on weather-related items.

Prior to joining MITRE, Matt spent 34 years at Delta Air Lines working in a variety of operational and management roles, primarily in Delta's Operations Customer Center (OCC). In between Delta and MITRE, he worked for 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 with specialties in Operations and System Safety from Embry-Riddle Aeronautical University, and is an experienced aviation meteorologist, FAA-licensed aircraft dispatcher, operations manager and ATC coordinator.

Kory Gempler
FedEx

Kory Gempler – Kory studied meteorology at Northland College (WI) and started his career at Kavouras, Inc. in 1993. After 5 years of extensive forecasting with focus on aviation meteorology, he accepted a position in the FedEx Flight Department as an aviation weather forecaster. In 2013, he accepted the position as Manager of the FedEx Meteorology department. Over the last 6 years, he has served on the CDM-WET, Vice Chairman of the A4A Meteorology Work Group (2014), and Chairman of the MWG (2015).

Van Gurley
Metron, Inc.

Mr. Gurley is a Senior Manager in the Advanced Mathematics Applications Division at Metron, Incorporated, an applied mathematics and scientific consulting firm in Washington, DC. He leads a number of efforts in predictive analytics, data fusion, and mission planning for the FAA, Office of Naval Research, and DARPA. Prior to joining Metron, Van completed a 26 year career in the United States Navy rising to the rank of Captain while serving as a submarine warfare officer and naval meteorology and oceanography specialist. Final active duty assignments included Military Deputy/Executive Assistant for the Oceanographer of the Navy and head of global operations for all Navy meteorology and oceanography activities. In these assignments, he developed and implemented new strategies to integrate environment-related operational impacts in warfighting decision-making. Van has MS and OE degrees from MIT and the Woods Hole Oceanographic Institute as well as a BS in physics from the University of Florida.

Christopher Hart
National Transportation Safety Board (NTSB)

Member Christopher A. Hart was sworn in as Chairman of the National Transportation Safety Board on March 17, 2015. He was originally sworn in as a Member of the Board on August 12, 2009 and designated by the President as Vice Chairman on August 18, 2009. In August 2013, President Obama nominated him for a second term as Board Member and after Senate confirmation of his nomination, the President, in October 2013, designated him for a third term as Vice Chairman. He has served as Acting NTSB Chairman since April 26, 2014.

Hart joined the Board after a long career in transportation safety, including a previous term as a Member of the NTSB. Immediately before returning to the Board in 2009, Member Hart was Deputy Director for Air Traffic Safety Oversight at the Federal Aviation Administration (FAA). He was previously the FAA Assistant Administrator for System Safety.

He served as a Member of the NTSB from 1990 to 1993. After leaving the Board, he served as Deputy Administrator of the National Highway Traffic Safety Administration, before moving to the FAA in 1995.

From 1973 until joining the Board in 1990, Member Hart held a series of legal positions, mostly in the

private sector. He holds a law degree from Harvard University and Master's and Bachelor's degrees in Aerospace Engineering from Princeton University. He is a member of the District of Columbia Bar and the Lawyer-Pilots Bar Association.

Hart is a licensed pilot with commercial, multi-engine, and instrument ratings. Hart's family has a tradition of accomplishment in the field of transportation. His great uncle, James Herman Banning, was the first African-American to receive a pilot's license issued by the U.S. Government in 1926.

Rick Heuwinkel

Federal Aviation Administration's (FAA)

Rick Heuwinkel is the Manager of the Aviation Weather Division in the Federal Aviation Administration's (FAA) NextGen Office. In this role, he manages the four branches within the Aviation Weather Division that are collectively responsible for planning and developing the weather capabilities necessary to support implementation of the Next Generation Air Transportation System (NextGen). This includes overseeing the FAA's Aviation Weather Research Program (AWRP), the Weather Technology in the Cockpit (WTIC) program, Reduce Weather Impact program, and Multi-Phased Array Radar (MPAR) program, as well as developing aviation weather policy and harmonizing NextGen weather standards with the International Civil Aviation Organization (ICAO) and the Single European Sky ATM Research (SESAR) Joint Undertaking.

In this current position, Mr. Heuwinkel facilitates cross-agency collaboration to eliminate redundancies in aviation weather projects, supports the integration of weather information into decision support tools, and focuses aviation weather research initiatives to meet NextGen requirements and operational improvements. He works cooperatively with other FAA lines of business, including the Air Traffic Organization and Aviation Safety, the National Weather Service, and various other government agencies to achieve NextGen goals.

Mr. Heuwinkel has spent the past 26 years with the FAA working on aviation weather programs. Prior to joining the FAA, he spent 10 years in policy and program planning at the National Oceanic and Atmospheric Administration (NOAA). Mr. Heuwinkel received a Masters degree in Political Science and Economics from Iowa State University and an MBA from Stanford University. He served as an officer in the U.S. Army and holds a commercial pilot's certificate.

Ian Johnson

Federal Aviation Administration (FAA)

Ian M. Johnson is an Engineering Psychologist with the Federal Aviation Administration (FAA) Weather Research Branch of the Aviation Weather Division. He currently serves as the Human Factors Lead and General Aviation subject matter expert on the NextGen Weather Technology in the Cockpit (WTIC) program. He has over 15 years' experience in Human Factors Engineering/System Safety of various cockpit display systems and user interfaces. Experience ranges from lead Human Factors Engineer, technical contributor, Staff Human Factors Engineer of Presidential Helicopter program to Project Manager Aviation Analyst Human Factors Specialist. He is a contributing member of RTCA special committees 206 & 233 and SAE G-10 weather information systems group. Ian holds a Bachelor of Science degree in Human Factors Psychology, a Masters of Aeronautical Science in Human Factors in Aviation Systems and a Masters of Aeronautical Science in Aviation/Aerospace Safety Systems from Embry Riddle Aeronautical University. Ian is also a Ph.D. student and holds a Private Pilot Certificate for Single and Multi-Engine Airplane.

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.

Claudia McKnight
MITRE CAASD

Claudia McKnight is the ATM-Weather Integration task manager and a Lead Aviation Systems Engineer in MITRE's Center for Advanced Aviation System Development (CAASD). She is a retired US Coast Guard and US Army pilot (fixed and rotary wing) with 24 years of experience. Claudia has been employed with MITRE since 2008. Her primary focus is on ATM-Weather Integration research and analysis.

Tim Myers
Metron Aviation

Mr. Myers is a senior analyst at Metron Aviation where he began working in 2001. He has served as an operations analyst, software developer, and project manager in his areas of expertise including weather impact modeling, NAS-wide simulations, optimization models, web-based application development, and data visualization on projects supporting FAA, NASA, and EUROCONTROL objectives. He is the lead author of numerous conference and journal papers, is a senior member of AIAA, holds a PMP credential from PMI, earned a private pilot certificate, and graduated from James Madison University with a degree in Physics.

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.

Steven Pritchett*National Oceanic and Atmospheric Administration (NOAA)*

Mr Pritchett is the Program Manager for the National Weather Service Aircraft Observations Program. Mr Pritchett has been a Meteorologist for 37 years for the National Weather Service and has experience as a weather forecaster at several NWS field offices; and has worked as a Program Manager on a number of NWS programs including the MADIS product improvement and transition from Research to Operations project. Mr Pritchett has been named a recipient of the NOAA Administrators Award for 2015.

Chris Provan*Mosaic ATM, Inc.*

Chris Provan is a Principal Analyst at Mosaic ATM. He has participated in research, development, and field evaluations of numerous TFM and airport surface decision support capabilities, including GPSM. His areas of research have included automated TFM decision making, optimization of surface and terminal area operations, and probabilistic airport and airspace capacity prediction. Most recently, he has focused on applying predictive modeling and machine learning across a diverse range of industries as Chief Data Scientist for Mosaic Data Science. Mr. Provan received an M.S. in operations research from Cornell University.

Warren Qualley*Harris Corporation*

Warren Qualley works as the Senior Weather Expert in Harris Corporation's Environmental Solutions group in the Space and Intelligence Systems Division. He has 35+ years of aviation meteorology experience, having worked the majority of his career in the American Airlines System Operations Control department. His role as Manager of Weather Services at AA has led Qualley to his current leadership roles in numerous areas of aviation weather: chair of the International Air Transport Association's (IATA) Flight Operations Support Task Force since 1999; co-chair of the UCAR Community Advisory Committee for NCEP (UCACN) and its liaison to the NWS' Aviation Weather Center; chair of the American Meteorological Society's Committee on Open Environmental Information Services; member of NOAA's Science Advisory Board's Environmental Information Services Working Group; member of the FAA's Collaborative Decision Making Weather Evaluation Team; and member of NBAA Weather Sub-committee. Qualley has previously served on numerous other industry, government and academic groups and has been an invited speaker at many national and international conferences and at university classes and community organizations. Qualley was elected a Fellow of the American Meteorological Society in 2014. He lives and works in the Washington, D.C., area.

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.

Karen Shelton-Mur*Federal Aviation Administration (FAA)*

Karen Shelton-Mur works as an Aerospace Engineer in AST's Space Transportation Development Division (AST-100). She leads and manages AST's space and terrestrial weather program to enhance operational safety of current and future launch vehicle licensees or permittees. She is active in the space weather enterprise where she works with government and commercial stakeholders to develop strategic initiatives and policy, and conducts educational outreach activities.

Karen also works in airspace integration; specifically as part of the Joint Space Operations group, a joint effort between the ATO and AST to help seamlessly integrate commercial space activity into the National Air Space. She coordinates with launch and reentry vehicle operators and launch site operators and assists ATC facilities in developing airspace agreements and airspace management plans for launch and reentry operations.

Karen is a member of the following committees:

- University Center for Atmospheric Research (UCAR) Committee for NCEP (UCACN) and reports on activities related to the NOAA's Space Weather Prediction Center.
- American Meteorological Society's Science Technology Advisory Committee (STAC) for Space Weather.
- National Space Weather Policy's Committee for Space Weather (CSW)
- Range Commander's Council – Meteorology Group

Military experience: Ms. Shelton-Mur began her career in the Air Force Air Weather Service as a weather observer, providing weather support during Space Shuttle operations at the Trans-abort landing site in Moron AB, Spain. After Active Duty, she joined the 111th Weather Flight in the Texas Air National Guard in 1993. Upon moving to Washington, she joined the District of Columbia Air National Guard in 2003, and currently serves as the Commander of the 121st Weather Flight with the rank of Lt Col.

Education: Bachelor of Science – Meteorology from Texas A&M University (College Station, TX, 1995)
Master of Science – Meteorology Texas A&M University (College Station, TX, 1998)

Danny Sims*Federal Aviation Administration (FAA)*

Danny Sims recently began working 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. 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.

Matt Strahan*No bio received*

Christine Taylor
MIRTE Corporation

Christine Taylor is a Principal Simulation and Modeling Engineer at the MITRE Corporation. Her primary research focus is in the development of decision support systems for traffic flow management and specializes in the application of optimization approaches in complex systems. She holds a B.S. from Cornell University and M.S. and Ph.D. degrees in aeronautical engineering from the Massachusetts Institute of Technology.

Matt Taylor
WSI

Matt manages federal and channel/partner business in WSI's aviation group. This includes leading the sales of our Total Turbulence product, that offers unique turbulence forecasts and alerts, as well as bringing to market a flight planning engine technology. 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 WSI.

Kent Tobiska
Utah State University

Dr. Tobiska is the Director of the Utah State University Space Weather Center (SWC), President and Chief Scientist of Space Environment Technologies (SET), and President of Q-up, LLC. His long-term research focus has been the analysis of solar XUV to FUV data that has led to the creation of an internationally distributed hybrid solar irradiance platform (SIP). He invented the world's first operational computer code for solar irradiance forecast while serving as a senior scientist at Northrop Grumman/Logicon. At SET, he extended this expertise as a PI into operational space weather systems producing solar irradiances, geomagnetic indices, and radiation environment dose rates. At SWC, he has led the effort to disseminate operational information layers in HF communications and GPS accuracies into broader technology systems. At Q-up, he has organized the activity to commercialize ionospheric communications and navigation products. Through his career at NOAA Space Environment Laboratory, UC Berkeley Space Sciences Laboratory, Jet Propulsion Laboratory, Northrop Grumman, SET, SWC, and Q-up, he has been a USAF and a NASA Principal Investigator (PI) in the LWS, SOHO, JSDAP, and UARS programs, a Co-Investigator (Co-I) on the NASA TIMED, Galileo, and ESA component of the International Space Station (ISS) SOL-ACES instruments. He has been the COSPAR C1 Sub-Commission (Thermosphere & Ionosphere) Chair, the COSPAR International Reference Atmosphere (CIRA) Task Force Chair, and is a Session Organizer for 2002, 2004, 2006, 2008, 2010, 2012, and 2014 COSPAR scientific sessions. He serves as lead U.S. delegate to ISO for the space environment and developed the ISO solar irradiance standard; he is the AIAA Atmospheric and Space Environment Technical Committee (ASETC) Committee on Standards (CoS) chair. He actively participates on the AMS annual Space Weather Symposium organizing committee and on the Research-to-Operations Working Group for the National Research Council Decadal Survey. He has authored/co-authored over 165 peer-review scientific papers as well as 10 books and major technical publications. Dr.

Tobiska is an Associate Fellow of the American Institute of Aeronautics and Astronautics and a member of American Geophysical Union, Committee On Space Research, American Meteorological Society, and U.S. Technical Advisory Group for ISO TC20/SC14.

Everette C. Whitfield
Federal Aviation Administration (FAA)

Everette C. Whitfield is assigned to the Federal Aviation Administration (FAA), NextGen Aviation Weather Division (AWD). As Manager of the New Weather Concept Development Branch, he leads the Reduced Weather Impact - Weather Forecast Improvements (RWI-WFI) program, which addresses improved weather prediction and use of weather information in the NextGen NAS. RWI-WFI includes initiatives to:

- (1) Automate the translation of weather information into potential constraints on the NAS for incorporation into collaborative and dynamic decision-making.

- (2) Identify weather phenomena impact on core airports.
- (3) Identify and analyze opportunities to mitigate avoidable weather delays.
- (4) Explore methods to provide air traffic managers post event weather analysis capability.
- (5) Align weather needs with planned NextGen operational improvements.

Additionally, Everette directs the division's Safety Risk Management (SRM) Program. As SRM Manager, he ensures proposed NAS changes (initiated within AWD's area of responsibility) are thoroughly evaluated for safety hazards. Correspondingly, he ensures identified hazards are mitigated and/or accepted by the appropriate authorities prior to insertion of the capability and/or procedure into the airspace transportation system.

Michael Wiltberger

National Center for Atmospheric Research (NCAR)

Dr. Wiltberger works as research scientist within the High Altitude Observatory, whose main area of research is the modeling of the space weather impacts, including the effects on HF communication, GPS systems, and electric power grid. This work focuses on efforts to develop new models, analysis of model results, and dissemination of research results through peer review journals and presentations at meetings.. He has served as a panelist on numerous NASA and NSF review panels, as Chair of the NSF Geospace Environmental Modeling Steering Committee and as Vice Chair of the Solar Wind-Magnetosphere Interactions Panel of the 2010 NRC Decadal Survey for Solar and Space Physics. He is the author or co-author of over 100 publications in refereed scientific journals.