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

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BIOGRAPHIES OF SPEAKERS AND PANELIST

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Cyndie Ableman

National Oceanic and Atmospheric Administration (NOAA) National Weather Service (NWS)

Cyndie Abelman is currently the NOAA Aviation Weather Program Manager as well as the NWS Aviation Weather Services Branch Chief. In her current position, she leads the aviation weather program for NOAA/NWS. Prior to this position, she worked for NWS Aviation Service Branch and was the Meteorologist in Charge at the NWS Office at the FAA Academy in Oklahoma City, OK. Cyndie's 20+ years in the NWS have included a variety of field and regional headquarters positions including weather observer, forecaster and regional program manager.

Steve Ableman

Federal Aviation Administration (FAA)

Steve Abelman manages the Aviation Weather Research Team within the FAA's Aviation Weather Group. 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) efforts to populate the 4-D Weather Data Cube. 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.

Mark Andrews

Metron Aviation, Inc

Mark Andrews attended and graduated from Waterford Township (Michigan) High School and the University of Michigan, where he graduated with a Bachelor's of Science degree in Atmospheric and Oceanic Science.

Mark entered the US Air Force where he served as a commissioned officer for 21+ years in a number of assignments:

- Officer In Charge, US Severe Weather Warning coordinator.
- Pacific Air Force Headquarters weather briefer and operations planner.
- Air Force Institute of Technology Masters program at the Florida State University, earning a Master's degree in Meteorology
- Staff Meteorologist, supporting development of B-2 bomber, the F-117A and F-22 stealth fighters

- Commander Tonopah Test Range, Nevada, supporting 3 operational F-117A fighter squadrons
- Air Force Pentagon weather lead for Defense Meteorological Satellite Program.
- Director, Joint Typhoon Warning Center Guam
- Commander of the 3rd Weather Squadron, Fort Hood, Texas, supporting two combat Army Divisions

Upon retirement from the Air Force as a Lieutenant Colonel, Mark joined NOAA to serve as:

- NOAA's Aviation Weather Program Manager
- NextGen Joint Planning and Development Office Weather Working Group Federal Co-Chair.
- In this role Mark has brought together representatives from the Departments of Defense, Commerce, and Transportation, NASA, and Industry to agree upon and develop a series of foundational weather documents related to the implementation of NextGen weather capabilities, including a concept of operations, descriptions of Operational Improvements and Enabling Capabilities, inclusion of weather activities into the NextGen Integrated Work Plan, and sponsored policy-development teams which led to agreements between FAA and NOAA on NextGen Weather roles and responsibilities
- US Representative to the World Meteorological Organization's Commission for Aeronautical Meteorology and consultant to FAA led International Civil Aviation Organization's Meteorology Group meetings

Joined Metron Aviation, Inc in 2011 as a Principle Weather Subject Matter Expert

- Developing weather translation and integration system concepts for NextGen, including Collaborative Airspace Constraint Resolution (CACR)
- Policy consultant to JPDO
- Use of probabilistic weather information in automated ATM decision support tools

National Awards received:

- Air Force's Outstanding Staff Meteorologist (Bud Long Award)
- Air Force's top climatologist (Zimmerman Award).
- US Vice-President's "Hammer" Award
- NASA HQ National Aviation Safety & Security Award
- DOC SES Candidate Development Program graduate

Randy Baker

UPS Airlines

Grew up in Lawrence, Kansas where the weather bug bit him at an early age. Graduated from Kansas University with a B.S. in meteorology with honors in 1985. Worked for a private weather company in Kansas City until 1986, then taught Meteorology courses for pilots at TWA Airlines 1986-1990. In 1990 he went to work for UPS Airlines and since 1994 an operational forecaster with main weather focus on snow/ice storms, dense fog, thunderstorms, strong winds, volcanic ash, and hurricanes/typhoons.

In 1994 he initiated the first high-rate Ascent and Descent automated reports from commercial aircraft, which now operate on over 150 UPS aircraft, plus on several other airlines around the world. Randy has been a member of the Air Transport Association Meteorology Work Group since 1988, and served as National Weather Association Councilor 1999-2000. He is still involved in various aviation industry committees.

Stan Benjamin

National Oceanic and Atmospheric Administration (NOAA) Earth System Research Lab (ESRL)

Stan Benjamin leads the development of the hourly updated weather forecast models used by NOAA as guidance for aviation forecasting, including the Rapid Update Cycle (RUC), the Rapid Refresh (RR - upcoming RUC-replacement in 2011), and the 3km storm-resolving High-Resolution Rapid Refresh (HRRR). Stan is chief of the Assimilation and Modeling Branch in the NOAA Earth System Research Lab (ESRL) Global System Division. Stan and colleague Steve Weygandt guide the work of several other scientists on the development and testing of RUC/RR/HRRR, and his group works closely with the NOAA National Centers for Environmental Prediction (NCEP), NCAR, Univ. of Oklahoma, MIT/Lincoln Labs, and others labs. Stan also guides the development of a new NOAA global model (FIM – <u>http://fim.noaa.gov</u>, one of a few NOAA global model alternatives) with colleagues at ESRL.

Stan holds a B.A. degree in math (Albion College, Michigan) and M.S. and Ph.D. degrees in meteorology from Penn State University.

Geoff Bing

XCELAR

Geoff Bing is the Director of Government Programs, based out of the Washington, DC Metro Area. He is a graduate of Ohio State's Aviation Program and is a licensed Commercial Multi Engine Pilot and Flight Instructor. He has over 20 years experience working with Federal, State and Private Organizations in the development of Aviation Weather Programs.

James H. Block

Telvent/DTN

Jim is a Certified Consulting Meteorologist (CCM) with over 30 years of experience in commercial and aviation meteorology. Jim is the Chief Meteorological Officer at Telvent (now a part of Schneider Electric), and is responsible for all of the weather products and content used by Telvent's 100,000 business and professional customers. He is also the Product Manager for all of Telvent's aviation products, including display, data, forecasts, and alerting for its global aviation clients. He is Fellow of the American Meteorological Society, and is a past president of the National Council of Industrial Meteorologists.

Shirley Burgess

Federal Aviation Administration (FAA)

Shirley Burgess is the FAA's Chief System Engineer for EnRoute and Oceanic Services. Currently, she is also supporting the standup of the ATO Program Management Office (PMO). She joined the FAA in 2003 and is responsible for working with other FAA Lines of Business to transform current National Air-Space (NAS) System operations into the NextGen future. Specifically she is responsible for: the EnRoute and Oceanic Segmentlevel Enterprise Architecture; Collaborating with Operations on proposed NextGen Operational Improvements, Concepts and their impacts; Developing NextGen Transition strategies, examining how Research and Development can leverage future functions; and Standing up a Lessons Learned Database. During the past three years, Ms. Burgess has developed a collaboration tool (Wiki) used to engage a wide-ranging perspective that helps to mitigate risk associated with the transition to NextGen. Particular focus has been on how Weather information can enhance NAS functions and better integrate into Decision Support Tools. Ms. Burgess holds a BS degree in Mathematics with graduate studies in Computer Science. Ms. Burgess is a Certified Information System Security Professional.

Captain Joe Burns United Airlines

Captain Joseph D. Burns is the Managing Director of Technology and Flight Test at United Airlines. At United, he previously 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 on both the A320/319 and B-727 fleets, served as ALPA LEC Safety Chairman, and has flown A-320/319, B-737, and B-727 in line operations for UA. He is currently flying Captain on the A319/320. He is type-rated in A320, A319, B-727, DHC-8, BE-1900 and BE300 aircraft.

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 Metroliner Pilot for Air Midwest.

He is currently a member of the FAA's NextGen Advisory Council Subcommittee (NACSC); on the Executive Advisory Board for Position, Navigation, and Time (GPS); an Advisory Board Member for the National Center for Atmospheric Research (NCAR/UCAR); Board Member for EMS Technologies, Inc. (Nasdaq: ELMG), Board Member for Optical Detection Systems, Inc., Board Member and is the Chairman of the Board of ATN Systems, Inc., Chairman of the Board for Agile Defense, LLC., and Board Member for Sensurion, LLC. Additionally he is 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. Captain Burns was also a Board Member for AirDat, LLC. - a Loeb and Holmes Capital Partners joint venture.

His engineering experience includes President of Inertia Technology, developing AWOS and Flight Sensor Systems, Chief Pilot and systems engineer for Coffeen, Fricke, and Associates (Lenexa, KS), Chief Systems Engineer for Ericsson, Inc.'s Fiber Optic

Network Communications Division (Overland Park, KS), and Engineering Manager for Sprint's Telenet/UniNet Division.

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

Sherrie Callon

Federal Aviation Administration (FAA)

I come to Washington from a detail in the Eastern Service Area as the Senior Advisor to the Manager, Tactical Operation, Southern Region. I have completed 6 months of my 1 year detail supporting the research and development team for several Nextgen concepts. My permanent position is at Jacksonville ARTCC as a Supervisor, Traffic Management. I have been responsible for the overall traffic management within Jacksonville Center for over 10 years. I have over 25 years of Air Traffic Control experience and have had the opportunity to support a wide range of programs including SME (subject matter expert) for Time based Metering, CDM (Collaborative Decision Making) workgroup for Trajectory Based Operations, Advanced Navigation development and traffic flow analysis.

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.

Dan Citrenbaum Federal Aviation Administration (FAA)

Dan Citrenbaum is a Senior Operations Research Analyst with the FAA's Investment Planning and Analysis (IP&A) Organization. For most of his 18-year FAA career, he has been the benefits team lead for several large FAA acquisitions in the surveillance, automation and weather domains. Within the IP&A organization, Dan has also been very active with aviation modeling and simulation initiatives and database development. Prior to the FAA he served as an Operations Research Analyst with the Department of the Army specializing in logistics and cost analysis. Dan is currently on a part-time detail to the Aviation Weather Group as the acting project lead of the Aviation Weather Metrics Program.

Dan holds a B.S degree in Management Science/Statistics from the University of Maryland and an M.S in Operations Research from George Washington University.

Lara Shisler Cook Mosaic ATM

Lara Shisler Cook is a Principal Analyst with Mosaic ATM, managing the Traffic Flow Management area of research. She has 14 years experience supporting research and development activities for the FAA and NASA in Air Traffic Management, most recently focusing on the integration of weather in ATM decision making. Prior to that, Ms. Cook worked as an Operations Research Analyst for two major carriers, passenger and cargo. She received an M.S. in operations research and management science from George Mason University in Fairfax, Virginia. Her B.S. in mathematics was received from The College of William and Mary in Williamsburg, Virginia.

Rick Curtis

Southwest Airlines

Rick has been at Southwest Airlines for fourteen years and serves as Chief Meteorologist for the Southwest Airlines Operations Coordination Center. He graduated with a B.S. in Meteorology from Lyndon State College. He concentrates on strategic weather forecasting, weather information integration into operational planning, weather instruction, and weather related strategic planning efforts at Southwest Airlines.

Past experience includes Account Management and Product Development at Sonalysts Inc. of Waterford, CT, Director of Weather Services at Surface Systems Inc. (SSI) of St. Louis, MO, and various technical and marketing positions at WSI Corporation of Andover, MA.

While at SSI, Rick led a team of meteorologists' focused on forecasting efforts relating to airport operations and highway maintenance activities.

Rick was a 2011 recipient of the American Meteorological Society award for "Outstanding Contribution to the Advance of Applied Meteorology", and a winner of the Southwest Airlines President's Award in 2005, He is a member of both the American Meteorological Society and the National Weather Association.

Ernie Dash AVMET

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. The Air

Force then offered him the opportunity to become a meteorologist and sent him to Texas A&M. 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 among many assignments was the program manager for the Air Force tactical terminals for receiving direct readout of the Defense Meteorological Satellite Program. He 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 in 1989. One of his initial tasks was to draft the requirements and demonstrate the operational concepts for an uplink-only broadcast weather data link service. Through that task, he co-edited publication of the RTCA document DO-232, *Operations Concepts for Data Link Applications of Flight Information Services*, March 14, 1996. More recently, he has been actively involved in developing NextGen weather support concepts including leading a team that drafted the JPDO NextGen Weather Concept of Operations, V1.0, May 13, 2006 and providing major contributions to the RTCA document DO-324, *Safety and Performance Requirements for Aeronautical Information Services and Meteorological Data link Services*, December 8, 2010.

Ernie continues today as a consultant supporting the FAA ATO Weather programs.

Rich Deininger

iJet Onboard

Rich Deininger, Chief Scientist for Satcom and Weather, with a PhD from MIT in Meteorology where he was also a UCAR Fellow, Richard has over 27 years of multidisciplinary experience in complex systems. This experience includes system synthesis and design of satellite systems in the government sector and the commercial sector of Teledesic (an early Ka-band satellite communication pioneer), space and terrestrially based wireless communication networks, including their operational support systems, and over the last 10 years, aviation weather and air traffic management systems including related software. With system engineering focus, additional roles have included deep analytic analysis, program management, technical and strategy formulation, and business development. Over the last six years, Rich has been the industry co-lead for the U.S. based Next Generation Air Transportation System (NextGen) Weather Work Group's Information Technology and Enterprise Services team whose members are drawn from the aeronautical industry, the U.S. FAA, National Weather Services and DOD.

In his current role at iJet Onboard Rich is responsible for providing subject matter expertise for iJet's satcom and aviation weather products. These include aircraft weather reporting and graphical weather to the flight deck.

Thomas H. Fahey, III

Delta Airlines

Tom is currently employed as Manager Meteorology and Radio at Delta Air Lines, Inc. and also contracts independently as a meteorology consultant. In 1974 he received a Bachelor degree in Geology with Math and Physics minors from College of St. Thomas; in 1981 a Master of Science in Meteorology from University Wisconsin, Madison; and in 1997 a Mini MBA Program from University of St. Thomas.

Fahey Meteorological Consulting

- Operational Aviation Meteorology
- Development and Presentation of Aviation Meteorology Training Modules
- Forensic Meteorology

Delta Air Lines & Northwest Airlines

- Forecaster: Produced weather products (1977-1990).
- Product Development: Implemented new forecast products & procedures (1988-1990).
- Union President: Negotiated & represented the Meteorology Union (1982-1988)
- Management: Directed weather offices (1990- Present).
- Contract Management: Added duties administrating sale of weather products and services outside of NWA (2000-Present).
- Accident Investigation Team: Meteorology representative (2004-Present)
- Operations Control: Added duties supporting both safety & efficiency (2006-Present)
- Merger Integration Team: Meteorology Lead (2008-2010)
- Manager Radio Operations and Radio Integration Team Lead (2009-2010)

Both Delta and Northwest have had a long tradition of providing weather information, including tailored reports and forecasts of turbulence, mountain wave activity, wind shear as well as other atmospheric based aviation hazards such as volcanic ash. Tom has both conducted and supervised projects that resulted in new and/or improved methods for producing and distributing weather hazard information. Tom has also initiated and oversaw development of a 2nd set of weather products focused on operations at hub airports. Over the last decade Tom expanded the scope of weather services to include contracts with other airlines. In 2009 Tom lead the effort of the integrating the copyrighted Turbulence Plot (TP) System into the merged Delta organization.

Aviation Industry Recognition and Recent Activities

- 2001, Aviation Week & Space Technology's Aviation Laurels Award Recipient for role in development of Collaborative Convective Forecast Product (CCFP).
- 2007-08, Industry Co-Chair Ground Deicing Work Group, Weather Sub-Committee
- 2007-09, IATA Rep on the ICAO Meteorological Warnings Study Group (METWSG)
- 2008-09 IATA Representative on the ICAO Aerodrome Meteorological Observation and Forecast Study Group (AMOFSG)
- 2006-10 Industry Lead, Collaborative Decision Making (CDM) Weather Eval. Team
- A joint Government, Industry & Research community effort to address primarily Air Traffic Management convective wx related issues as well as other weather issues
- 2010-2011 IATA Representative on the ICAO Int'l Volcanic Ash Task Force (IVATF)

Jaime Figueroa

Federal Aviation Administration (FAA)

Mr. Jaime Figueroa currently serves as the manager of the Aviation Weather Group within the NextGen and Operations Planning Organization. Prior to this assignment he was the manager of the Runway Incursion and Safety Portfolio Team within the Advanced Technology Development and Prototyping Group.

In his 19 years with the Federal Aviation Administration (FAA), Mr. Figueroa has worked on a broad array of Communications, Navigation and Surveillance / Air Traffic Management and Information Technology programs. Prior to joining the FAA, Mr. Figueroa worked for 8 years with the Department of Defense (DOD).

Mr. Figueroa earned a Bachelor's Degree in Electrical Engineering from the University of Puerto Rico and a Master's of Science in Information Technology from University of Maryland University College.

Additionally, Mr. Figueroa graduated from the Advanced Management Program and obtained a Chief Information Officer (CIO) certification from the National Defense University, Information Resource Management College (IRMC). He also has earned a Project Management Institute (PMI) Project Management Professional (PMP) certification.

Bryce L. Ford

SpectraSensors, Inc.

Bryce L. Ford joined SpectraSensors in February 2010 as Vice President of Atmospheric Programs, leading the new SpectraSensors office in the Washington DC metro area. Bryce brings over 27 years of experience in the global Weather community serving in various roles including Program Management, Business Development, Functional Management, Systems Engineering and Software Engineering.

Prior to SpectraSensors, Bryce served at Lockheed Martin for 10 years as a Sr. Business Development Manager and Engineering Project Manager for Meteorological and Hydrological programs in domestic and international markets. Prior to this he served at Harris Corporation for 16 years in various roles supporting FAA, Defense, and Commercial customers with weather information systems and weather data services.

Bryce is a Council Member of the association of the HydroMeteorological Equipment Industry, HMEI, and represents HMEI on the World Meteorological Organization CBS ET-AIR expert team. Bryce has served on the Board of Directors for an international Joint Venture company in Beijing China and in 2008 he was invited by the U.S. NWS to support the U.S. Government Delegation to the 60th WMO Executive Council. Bryce began his career in 1978 at the Boeing Company in Wichita KS, after graduating from Eastern Illinois University with a B.S. in Physics.

Matt Fronzak

MITRE/CAASD

Today: Matt is a Lead Multi-Discipline Systems Engineer in the NAS Operations department (F065) at The MITRE Corporation in McLean, VA. He has worked for MITRE in this capacity since June, 2009.

Education: Matt graduated from the University of Massachusetts – Lowell in June of 1978 with a Bachelor of Science degree in Meteorology. He returned to school in 2005, and attained a Master of Aeronautical Science degree from Embry-Riddle Aeronautical University in December, 2008.

Prior Work History: Beginning in October, 1974, Matt started a nearly 34 year career with Delta Air Lines. More than 30 of those years were spent working in or supporting the operational and operations control departments at Delta.

From July, 1978 until his retirement in August, 2008, he worked as an operational meteorologist, an aircraft dispatcher, a sector manager, an ATC sector manager and a member of the Flight Control management team on two separate occasions.

During his first stint in Flight Control management, Matt also served as the Chairman of the IATA North Atlantic/North American (NAT/NAM) Regional Coordination Group (RCG) from 1994-1996. During that same period, he was a founding member of the ICAO NAT Implementation Management Group (IMG).

Matt's final management stint spanned the period from 2000-2005. During that time, he was responsible for Delta's Meteorology and Radio departments, the Navigation Database Group and all Flight Control automation.

He returned to a line position (Sector Manager – ATC) early in 2005 to have enough time to attend graduate school. During this same period, he became a member of the REDAC Weather/ATM Integration Work Group (WAIWG and contributed to that group's report to its parent committee.

Shortly after his retirement from Delta, Matt began work as a Principal Systems Marketing Manager for Rockwell Collins in Cedar Rapids, IA., During his seven months there, he was named co-chairman of the Weather Integration Sub Team #1 (WIST #1) which wrote a significant portion of the FAA's Weather/ATM Integration Plan.

Daniel Fuka

Cornell University

Daniel Fuka has a MS in Engineering, followed by 20 years of corporate research and development in the atmospheric and biological sciences, with a focus on computational complex problem solving. He is finishing his PhD/midlife crisis in Biological and Environmental Engineering with Atmospheric Sciences as a minor field. Mr. Fuka's most recent position was with Rockwell Collins, providing numerical weather forecast integration

and product research and development for all the weather related member companies under the recently acquired Air Routing Group umbrella.

Judy E. Ghirardelli National Oceanic and Atmospheric Administration (NOAA) National Weather Service (NWS)

Ms. Ghirardelli earned her Bachelor's of Science Degree in Mathematics from Davidson College in Davidson, NC. After graduating she worked as an actuarial analyst responsible for ratemaking for both personal and commercial lines of insurance. In 1992, she decided on a career change and chose to pursue a career in meteorology. She earned her Master's of Science Degree in Meteorology from the University of Maryland in 1994, and began working for the Meteorological Development Laboratory (MDL) of the National Weather Service in Silver Spring, MD upon graduation.

Judy Ghirardelli is the Task Manager for the Localized Aviation MOS Program (LAMP). She oversees the development and operational implementation of the LAMP system, which provides objective probabilistic and deterministic forecast guidance of sensible weather with a focus on aviation elements. The newest LAMP efforts have been producing gridded guidance for aviation. She has been working with statistical forecast guidance in MDL for the past 17 years.

T.K. Gwin

Colorado Division of Aeronautics

T.K. has worked for the Colorado Division of Aeronautics for over 12 years. Prior to that his positions he held included Shuttle Landing Facilities Operations Office for NASA at Kennedy Space Center and Airfield Manager and Chief of Base Operations at the Air Force Flight Test Center, Edwards Air Force Base in California. T.K. has been involved in aviation weather instruments and products throughout his 35 years of Aviation Management.

Albert Homans ARINC

EXPERIENCE

Mr. Homans manages various programs at ARINC for the FAA, NOAA, and airline customers. He is responsible for the operational and technical support to weather and information systems programs and to data link services, including the management of software development efforts, interface with internal organizations and customers, business development efforts, and proposals.

Before joining ARINC, Mr. Homans held positions in engineering and program management with major corporations. He has managed hardware and software design, development, fabrication and test of communications and data handling systems, ground support equipment, and ground support software for major NASA spacecraft.

He managed several programs for special aircraft communications systems for international customers.

EDUCATION

MBA, Loyola College, Baltimore, MD

M.S., Electrical Engineering, Air Force Institute of Technology, Wright-Patterson AFB, Ohio B.S., Mechanical Engineering, Ohio University, Athens, Ohio

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. Mr. Johnston is the Contract Officer Technical Representative for the Center Weather Service Unit Operation that provides weather information at each of the FAA's twenty-one Air Route Traffic Control Centers and is also the FAA lead for the Collaborative Decision Making Weather Evaluation Team with the Aviation Industry. 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.

John Kosak

National Business Aviation Administration (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. Flying around the Great Lakes is where John first gained both a healthy respect for and general interest in aviation weather. While John's life veered away from aviation for a short period, he used this time to acquire his Aircraft Dispatcher License, which allowed him to join a fractional aircraft company that was growing exponentially at the time. While at this fractional company, John worked in numerous aspects of the business including logistics, dispatch, flight planning, operations training and operations management. After seven years working in Part 91 and Part 135 operations, John joined the National Business Aviation Association's GA Desk at the FAA's Air Traffic Control System Command Center in Warrenton, VA. As an Air Traffic Management Specialist working for NBAA members, John helps 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 operators throughout the NAS. After 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.

William Leber

Lockheed Martin

William S. Leber Jr. is a Senior Manager for Business Development at Lockheed Martin. He is currently coordinating ongoing efforts in Airport Surface Management and other CATM domains. He has been a participant in the Collaborative Decision Making (CDM) efforts since the early 90's where he was a contributor to the development and implementation of numerous CDM initiatives. He has 25 years of air traffic management experience coordinating with FAA and other ANSP's in the Atlantic and Pacific regions. He was a Chief Flight Dispatcher and worked for Northwest Airlines for 27 years.

He is a currently a member of the Research Engineering and Development Advisory Committee - NAS Operations Subcommittee where he was Co-Chair of the Weather -ATM Integration Work Group. He is a former Chair of the CDM Future Concepts WG and was Co-Chair of ATA's overall CDM effort from 2001 to 2004 and is a former President and Cofounder of the Airline Dispatchers Federation, a non-union professional association. He holds a B.S. in Aeronautical Administration from St. Louis University and Aircraft Dispatcher and Pilot certificates.

Tenny Lindholm

National Center for Atmosphere Research (NCAR) Research Applications Laboratory (RAL)

Education:

B.S., U.S. Air Force Academy, Aeronautical Engineering (1970)

MBA, Southern Illinois University (1974)

M.S., Air Force Institute of Technology, Physics (1982)

M.S., Ohio State University, Human Factors and Operations Research (1986)

Experience: Tenny has over 4000 hours of flying time in 12 types of aircraft, ranging from gliders, and Air Force fighter aircraft to the C-5A transport. As the lead for two cockpit development teams—for the Air Force C-5B and C-17A—Mr. Lindholm was responsible for evaluating and integrating pilot input with the efforts of manufacturer design teams and flight test groups. He was also the Test Director responsible for planning and conducting simulator and flight tests of the new technologies associated with these aircraft. Mr. Lindholm has extensive experience matching user needs with various display functions and technologies, both in the cockpit and with ground users of advanced weather information. As the current Manager of Aviation Programs at the NCAR Research Applications Laboratory, he integrates the needs of varied weather information users with the activities of scientists and engineers, and commercial weather vendors, to ensure efficient matching of capabilities and requirements. Mr. Lindholm has been working all aspects of the uplink and downlink of weather information since 1993 through NASA programs, the RTCA, and industry. He served as lead for the FAA Oceanic Weather Product Development Team and previously led the NASA/AWIN Oceanic Convective Nowcasting Demonstration program.

Tenny is now active in the Joint Planning and Development Office (JPDO) Weather Integration Subteam, and participates in an industry, government, DoD, and R&D community team that is defining a concept of operations for weather information in the cockpit.

Tenny's previous career was as a pilot, flight examiner, and test pilot in the U.S. Air Force, where he served for 21 years.

Publications: Tenny is the principle or co-author of over 25 publications on operations research; flight deck human factors; weather information needs and product development; cockpit displays; aircrew training; and weather integration into and decision support concepts for air traffic management. He is also a contributing author of the 1st/2nd editions of the Handbook of Aviation Human Factors, relating to weather information display concepts.

Gary S. Livack

Federal Aviation Administration (FAA)

Gary S. Livack is currently employed by the Federal Aviation Administration as an Aviation Safety Inspector / Operations, and is currently assigned to FAA's Washington, DC Headquarters. Mr. Livack has worked on various projects to enhance flight crew situational awareness, including aerodrome, terrain and obstacle data bases and alerting systems, aerodrome mapping data bases, traffic data link systems, notably ADS-B, and MET / AIS data link services.

Mr. Livack is a member of several RTCA and SAE G-10 technical committees, including RTCA's SC-186 special committee on ADS-B, SC-206 on Aeronautical Information and Meteorological Data Link Services, SC-217 on airport mapping, terrain and obstacle data bases, SC-223 on Airport Surface Wireless Communications and on SAE G-10 committees on MET & AIS data link human factors.

Mr. Livack holds an aeronautical engineering degree from the University of Virginia, and an MBA from Arizona State University. Prior to joining FAA, Mr. Livack served on active duty as an Air Force project manager and flight test engineer. In 1972, he came to Washington DC as a Presidential Intern to help plan the then new National Air and Space Museum, which opened for business July 4, 1976. He was later employed by GAMA, the General Aviation Manufacturers Association, where he was responsible for their safety and energy committee related activities.

Tom Lloyd

JetBlue Airways Corporation

Tom Lloyd is Manager, Meteorology & Route Optimization at JetBlue Airways and the Industry Co-Lead for the CDM Weather Evaluation Team. Tom's responsibilities at JetBlue include oversight of weather products, policy and procedure, supervision of the Air Traffic Coordination desk, and working with the FAA on en route and terminal air traffic matters.

Prior to joining JetBlue in 2007, Tom was head of System Operations Control for Skyway Airlines/Midwest Connect, and previously a Flight Dispatcher. Tom studied Meteorology at St. Cloud State University.

Eric Lugger

Landmark Aviation, LLC

Mr. Lugger has more than forty years of experience in the military/general aviation industry. He is a retired U.S. Army Aviator helicopter pilot, Aviation Safety and Aircraft Maintenance officer. Mr. Lugger has performed more than five hundred aircraft accident investigations, reconstructions and conducted materials failure analyses on aircraft and locomotive components. He is Director of Safety with Landmark Aviation, a large provider of FBO ramp services, airplane charter and maintenance facilities through 50 national/international operating locations. Landmark Aviation is the most progressive full service industry leaders in safety initiatives: examples are Safety/Quality Management Systems (SQMS), Line Oriented Safety Audits (LOSA), Internal Evaluation Program (IEP) and an operational Aviation Safety Action Program (ASAP). Eric has been actively a champion in assisting the FAA Flight Standards Service and Air Traffic Organization with the development of the HEMS tool graphical low atmosphere weather depiction product. He has a mechanical engineering background and an MS in materials science.

Thomas MacPhail

Federal Aviation Administration (FAA)

Thomas MacPhail works for the FAA in NextGen and Operations Planning, as the Research Transition Coordinator for the Aviation Weather Group. Prior to assuming these duties, Tom worked for the National Weather Service for almost 8 years; most recently as liaison to the FAA's Air Traffic Control System Command Center in Herndon, VA and before that as aviation forecaster at the Alaska Aviation Weather Unit in Anchorage, Alaska. Tom began his meteorology career in the USAF in 1978 after graduating from the AF Institute of Technology's basic meteorology program at Texas A&M University. He then served in several weather-related command and staff positions during his 21-year AF career before retiring from active duty in 1998 at the rank of Lt. Colonel. He then pursued broadcast meteorology in Anchorage as Chief Meteorologist for CBS-affiliated KTVA and their partner Fox station. Tom won several broadcast awards and was also nominated and nationally elected to the Council of the American Meteorological Society. He holds a BS degree in biochemistry from the University of Massachusetts in Amherst (1977) and an MA in Computer Resource Management from Webster University (1988).

Joe Marshall

Northrop Grumman Corp

Joe Marshall is the Director of the Northrop Grumman Environmental Center of Excellence in Bellevue, NE, and the Business Development Manager for the Environmental Operating Unit, Bellevue, NE. In his current position, Mr. Marshall is the Market Area Manager for Northrop Grumman weather programs supporting the Air Force and Army, and also serves as the Deputy site manager for the Environmental Operating Unit.

Mr. Marshall retired from the United States Air Force after a distinguished career in FAA certified aircraft operations. Since joining Northrop Grumman in 2000, he has held assignments of increasing responsibility in program management to include the USSTRATCOM Information Technology Services contract which managed the full spectrum of network enclaves and communications for USSTRATCOM, encompassing specialized security networks, cross-platform data domain storage, and enterprise-class server farms.

From 2005 to present he has directed the efforts of the Environmental Operating Unit team in research and development for the integration of weather impact and effects into aircraft operations, at an enterprise level.

Mr. Marshall is a graduate of Southern Illinois University and a member of the FAA Joint Program Development Office (JPDO) Aircraft and Avionics Working Group and a liaison to the JPDO Weather Working Group.

Bob Maxson

National Oceanic and Atmospheric Administration (NOAA) Aviation Weather Center (AWC)

Captain Robert W. Maxson, NOAA (ret.) is the Director of the NOAA Aviation Weather Center located in Kansas City, Missouri, which issues aviation forecasts both domestically and world-wide.

From 2005 through 2008, he was a research pilot with the National Center for Atmospheric Research (NCAR), operating C-130 and Gulfstream V aircraft in support of the weather and atmospheric research communities. A former director of the NOAA Aircraft Operations Center, Captain Maxson managed all NOAA aircraft activities as well as conducted hurricane surveillance missions with the NOAA G-IV jet aircraft. He holds multiple aircraft type ratings, and received the Department of Commerce Bronze medal for missions flown into Hurricane ISABEL.

Captain Maxson is a graduate of the Florida Institute of Technology and the United States Naval Postgraduate School.

John McCarthy

Aviation Weather Associates, Inc.

Dr. John McCarthy is the President of Aviation Weather Associates, Inc., of Palm Desert, CA. Until June 2007, he was the Chief Scientist of the Weather Integrated Product Team of the Next Generation Air Transportation System (NexGen), Joint Program & Development Office, and continues that role for the FAA Aviation Weather Office.

Prior to this, he was Manager for Scientific and Technical Program Development at the Naval Research Laboratory in Monterey, CA, from October 1997 until October 2002. Additionally, Dr. McCarthy served as Research Professor of Meteorology at the Naval Postgraduate School in Monterey, 2001-2002. During his tenure at NRL, Dr. McCarthy has developed programs in improving ceiling and visibility forecasting, Flight Operations Risk Assessment System (FORAS), and a broad program effort to improve short-term weather information to Navy battle group, entitled "NOWCAST for the Next Generation Navy."

Dr. McCarthy the founding Director of the Research Applications Program (RAP) at NCAR, from 1981-1994. As Director of RAP, he directed research associated with aviation weather hazards including NCAR activities associated with the Federal Aviation Administration (FAA) Aviation Weather Development Program, the FAA Terminal Doppler Weather Radar Program, and a national icing/winter storm research program. Previously, he directed NCAR activities associated the many aspects of NCAR's contribution to the identification of microbursts and the eventual removal of microbursts as an aviation hazard, through primarily Doppler radar detection systems. Additionally, Dr. McCarthy was the principal meteorologist associated with the development of the FAA Wind Shear Training Aid.

Prior to Dr. McCarthy's NCAR tenure, he was an Assistant Professor of Meteorology at the University of Oklahoma, Norman, starting in 1973. In 1976 he was promoted to Associate Professor with tenure. Simultaneously to his OU appointments, he was an Associate Scientist with the NOAA National Severe Storms Laboratory in Norman.

Dr. McCarthy received his B.A. in Physics from Grinnell College (1964), his M.S. in Meteorology from the University of Oklahoma (1967), and his Ph.D. in Geophysical Sciences from the University of Chicago (1973). He is a private pilot holding single-engine land, glider, and instrument ratings. He has received six major safety awards. He has been an official member of the crew as an observer on more than 500 commercial jet transport flights.

Joseph Miceli Airline Dispatchers Federation (ADF)

Currently I am the President of the Airline Dispatchers Federation (ADF), a non-labor organization representing the professional interests of the dispatch profession. Leading this all-volunteer corporation, ADF constituency is comprised of Licensed 121 Aircraft Dispatchers, Operational Control Personnel from 103 Aerospace Companies including Major Airlines, Express Carriers, International Members, Private Pilots, Students, and Airline Personnel. Prior to becoming President I was Executive Vice President for 4 years aiding and collaborate with all parties involved insuring FAA Part 121 rules continue to evolve around our Aircraft Dispatchers and the PIC (Pilot in Command). As a member of the Executive Board, I regularly attend JPDO and NEXTGEN meetings. As part of ATMAC (Air Traffic Management Advisory Committee), I attend meetings in Washington DC with other aviation professionals including officials within the FAA offering suggestions and solutions.

Aside from ADF activities, I have been employed with United Airlines (ORD) for the last 22 years and have been Aircraft Dispatcher for 15 years. My 22 years of operational experience involves being an ADI (Aircraft Dispatch Instructor) teaching UALs current and future dispatch prospects also instructing Recurrent Training keeping our dispatcher current, as ATC Coordinator I work with the ATC Command Center (ATCSCC) collaborating and solving daily traffic initiatives for our airline throughout North America, I'm a qualified dispatcher Domestically, North Pacific (Polar Ops), South Pacific, Atlantic, South America, CRAF (Civil Reserve Air Fleet), AMC (USAF Air Mobility Command), Part 121 Flag and Supplemental Part 91 Aircraft Dispatcher, Ramp Tower Operator (ORD), Load Planner, and Operational Employee in UAL's OCC.

Educated at a local Community College studying Business Management, I am a Private Pilot and currently reside in the western suburbs of Chicago.

Alfred Moosakhanian

Federal Aviation Administration (FAA)

Alfred is currently the Aviation Weather Services Dissemination Manager in the Technical Operations Weather Organization. He is a PMP and FAA Senior Level Certified Program Manager that currently manages NextGen Network Network Enabled Weather (NNEW), Weather and Radar Processor (WARP), Next Generation Weather Radar (NEXRAD), and Juneau Airport Wind system (JAWS).

Previously, he served as the En-route Weather programs manager that included FIS Data Link (FISDL), Corridor Integrated Weather System (CIWS), and WARP. He has 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.

Michael Pat Murphy

National Oceanic and Atmospheric Administration (NOAA) National Weather Service (NWS)

17 years operational meteorology experience in both private sector and National Weather Service. Currently the Warning Coordination Meteorologist Aviation Weather Center (National Weather Service), Kansas City, MO. I have worked at the Aviation Weather Center for nearly 6 years, and am certified to issue all domestic aviation products. I have over 15 years experience issuing various NWS aviation weather products. As the Warning Coordination Meteorologist I am essentially the Quality Assurance Manager for AWC, as well as the main liaison between the AWC and all our domestic and international customers, partners and user group representatives.

David Pace

Federal Aviation Administration (FAA)

David Pace is a meteorologist employed by the FAA in the Policy and Requirements Team of the NextGen Aviation Weather Division. His principal responsibilities are concerned with weather in the Next Generation Air Transportation System (NextGen) and in particular the integration of weather into Air Traffic Management decisions. Other duties include interfacing with weather efforts in the European Organization for the Safety of Air Navigation (aka EUROCONTROL), membership on the Joint Planning and Development Office Weather Working Group Executive Panel, and Chairmanship of the American Meteorological Society Committee on Aviation, Range, and Aerospace Meteorology. Prior to joining the FAA as an employee, Mr. Pace spent 15 years as a contractor supporting FAA weather programs. Most of that time, his work was with the FAA Aviation Weather Research Program, supporting the management of weather research at various national laboratories. He is also a retired US Air Force weather officer.

Mark Phaneuf

AvMet Applications, Inc.

Mark Phaneuf is Vice President and Technical Lead at AvMet Applications International, a small consulting firm with expertise in aviation and aviation weather. AvMet provides its customers with in-depth, practical, technical, and operational expertise in a wide variety of areas including aviation, meteorology, weather systems, systems engineering, modeling and simulation. Mark has led many projects in support of AvMet's FAA customers in Weather Policy and Standards and Traffic Flow Management Weather Programs as well as the Collaborative Decision Making (CDM) group. He supports many ICAO working groups and RTCA working groups. Mark has over 24 years of aviation experience and holds a Bachelors degree in Aviation Management from The Ohio State University. He is a commercially licensed and instrument rated pilot, and a retired military flight crewmember with over 5000 hrs combined military and civilian time.

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 from ARINC in January 2011. He is currently 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. He has been actively providing industry with updates on WTIC research results to stimulate new research ideas and to provide industry with advance guidance information related to weather technology in the cockpit.

Warren Qualley

Harris Corporation

Warren Qualley works as the Senior Weather Expert for Harris Corporation's Mission Critical Networks group. He has 30+ years of operational 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) Meteorological Task Force since 1999; representative focusing on the Aviation Weather Center on UCAR's 2010 NCEP Review Team and its follow-on group, the UCAR Community Advisory Committee for NCEP (UCACN); the FAA's Collaborative Decision Making Weather Evaluation Team; the JPDO's Weather Working Group's Executive Committee, Policy Team and Integration Team; a member of NOAA's Science Advisory Board's Environmental Information Services Working Group; the Steering Committee of the AMS' Commission on the Weather and Climate Enterprise. Qualley has served on numerous other industry, government and academic groups and he has been an invited speaker at many national and international conferences and has spoken to numerous college classes and community organizations. Qualley works and lives in the Washington, D.C., area.

Mike Robinson

AvMet Applications

Mike Robinson is the Manager for Weather Integration Research and Development at AvMet Applications. He joined AvMet in 2010. Prior to that Mike was a Technical Staff Scientist with MIT Lincoln Laboratory. Over the past 10+ years, Mike's primary areas of research have included:

- Weather-ATM translation and integration,
- Weather-ATM functional task analysis, problem identification, and concept development,
- Weather-ATM decision support evaluation, metrics, and benefits assessments, and operational user training.

Mike has been the project lead on 11 separate weather-ATM field evaluation campaigns and has spent over 400 hours in air traffic facilities observing operations and decisionmaking during significant weather impact events.

Mike has a Master's Degree in Meteorology from Texas A&M University.

Calvin Smith

Federal Aviation Administration (FAA)

Currently employed by Flatirons Solutions Corporation supporting FAA ATO Terminal Requirements (AJT-2C1). Retired air traffic controller after 32 years working in Flight Service, Tower and Approach Control facilities. Private pilot with instrument rating. Supporting FAA projects in Terminal weather system and procedures, information display system for controllers, and Terminal NextGen applications.

Nick Stoer

Nicholas Stoer & Assoc.

Mr. Stoer is president of Nicholas Stoer & Associates of Chester, MD. The firm operates as an independent aviation, management and policy consultant. On behalf of clients his engagements have included financing alternatives for the Federal Aviation Administration (FAA), aircraft safety and certification issues, ATC automation and weather display systems for air traffic controllers, aviation security issues, satellite navigation technology trade-offs, National Weather Service modernization issues, aviation weather research issues, information systems proposals, outsourcing of air traffic control towers, and instrument landing systems and related equipment for airports. Since 2003, as a consultant to the National Center for Atmospheric Research (a National Science Foundation FFRDC) he has been active in work groups of the interagency Joint Planning and Development Office, which developed concepts for the Next Generation Air Transportation System (NextGen). In 2008 he was an expert consultant to the National Weather Service on aviation weather issues under direct contract to that agency. Also in 2008 he supported Aviation Weather Associates of Palm Desert, CA, on aviation weather policy issues for the FAA Aviation Weather Office. Mr. Stoer's knowledge gained through more than 30 years of experience in U.S. Federal policy-level and executive leadership positions allows him to effectively meet the needs of clients on a wide range of subjects: legislation, public policy analysis, new business development and government contract acquisition and regulatory issues.

Prior to establishing a consulting practice, Mr. Stoer retired in 1995 as the Chief Financial Officer (ABA-1, Assistant Administrator for Budget and Accounting) of the FAA. From 1986 to 1991, he served as FAA's Budget Director (ABU-1). At the FAA, Mr. Stoer advised five Administrators and testified before Congress on the FAA's budget, program and legislative policies and proposals. He overhauled the agency's budget process, prepared the first FAA annual report under the Chief Financial Officer's Act, championed installation of new financial and budget systems, and introduced activity based costing. He held leadership positions on the FAA's key management, research and capital investment committees. Throughout his career he has dealt extensively with technology issues, staffing models for large workforces (FAA, Coast Guard), and with corporatization proposals for the FAA. He has traveled extensively in the U.S. and overseas (United Kingdom, Canada, Australia, China and elsewhere) on FAA-related issues.

Before joining the FAA in 1986, Mr. Stoer had 17 years of experience as a Senior Budget Examiner at the White House Office of Management Budget (OMB), which allowed him to develop comprehensive knowledge about cutting-edge science and transportation programs. Chronologically, at OMB he dealt with policy issues and budgets of NASA, Federal Transit Administration, Federal Railroad Administration, Amtrak, U.S. Coast Guard, FAA and other transportation-related agencies. His OMB work included review of budget, research and legislative proposals, contracting and outsourcing issues, major computer and capital investment acquisitions, interpretation of OMB guidelines, and defense and analysis of agency programs before the Director of OMB and White House officials. He continues to interact with OMB officials, the Office of Science and Technology Policy and congressional staff on appropriations and authorizing committees. Mr. Stoer is the past president of the American Association for Budget and Program Analysis (AABPA), a professional association for Federal and State budget and program officials.

Mr. Stoer earned an MBA in Finance and Investments from The George Washington University (1973) and a BA in Political Science and German from the University of Maryland (1966). He completed resident courses at the FAA Executive School, Williamsburg, VA, the Federal Executive Institute, King's Point, NY, and the Army Language School, Monterey, CA. Early in his career Mr. Stoer held positions at the Atomic Energy Commission and the National Security Agency. He served in the U.S. Army for three years, stationed in Berlin, Germany. He is a member of the AABPA, the Air Traffic Control Association, the American Association of Airport Executives, and the Aero Club of Washington. He and his wife live on Kent Island, Maryland, where he is active in community and Chesapeake Bay environmental issues. He is also a Master Gardener.

Mr. Stoer's Awards:

- 1995 FAA Distinguished Career Service Award from Administrator David Hinson
- 1995 Clifford Burton Medallion Award from the Air Traffic Control Association
- 1994 Senior Executive Service Presidential Rank Award from Transportation Secretary Federico Peña.
- 1993 FAA Superior Achievement Award from Acting Administrator Joseph Del Balzo
- 1993 Outstanding Service Award. American Association for Budget and Program Analysis
- 1982 OMB Outstanding Service Award from Director David Stockman.

Captain Robert P. "Rocky" Stone. Jr.

United Airlines (UAL)

Captain Rocky Stone is the Chief Technical Pilot for United Airlines. Rocky currently flies as a Boeing 777 Captain. He has previous experience at United flying the B727, B737, B757, and B767. Prior to joining United, Rocky was an experimental test pilot in the US Air Force, with pilot assignments in the F-15, T-38, A-7, and F-4. Rocky earned his B.S. degree in Aeronautical Engineering from the Massachusetts Institute of Technology and a M.S. in Systems Management from the University of Southern California. Rocky is the co-chair of RTCA Special Committee-186, responsible for developing technical and operational standards for Automatic Dependent Surveillance – Broadcast (ADS-B). Rocky is a member of the "ADS-B in" Aviation Rulemaking Committee (ARC), and co-chairs the operations working group of the ARC. Rocky is also co-chair of RTCA Special Committee-206 on Aeronautical Information Services (AIS) Data Link.

Kevin L. Stone

National Oceanic and Atmospheric Administration (NOAA) National Weather Service (NWS)

Kevin L. Stone is a meteorologist in the Aviation Services Branch of the Office of Climate, Water and Weather Services at National Weather Service Headquarters. He joined NWS in June 2011 as the lead for the Traffic Flow Management Weather Requirements Working Group, a joint effort between NWS and the Federal Aviation Administration to develop and implement solutions to meet current and emerging weather requirements in support of the FAA's management of air traffic flow in the National Airspace System.

Mr. Stone began his meteorological career as an enlisted weather observer with the United States Air Force in 1983 and four years later received his commission as an officer. He served in a wide variety of assignments from supporting Air Force fighter aircraft operations overseas to direct support of Army ground and aviation combat units, to serving as the commander of an operational weather squadron. In 2010, Mr. Stone culminated his 27 year Air Force career as a group deputy commander, assisting oversight of three operational weather squadrons performing regional forecast operations in support of Air Force and Army operations at military installations and operating areas throughout the continental United States.

Mr. Stone holds Master of Science degrees in Meteorology from the Naval Postgraduate School and in Military Operational Art and Science from the Air Command and Staff College, and a Bachelor of Science degree in Meteorology from the University of Massachusetts-Lowell.

Roger Sultan

Federal Aviation Administration (FAA)

Roger M. Sultan is a FAA Aviation Safety Inspector/Operations in AFS-430, Future Technologies Branch. Mr. Sultan works at FAA HQ in Washington, DC. FAA responsibilities include NextGen Aviation Weather Policy and TCAS/NextGen Collision Avoidance Systems Policy.

Mr. Sultan holds a degree in Aeronautical Science from Embry-Riddle Aeronautical University. Prior to joining the FAA, Mr. Sultan was a pilot at United Airlines flying the B-727, B-737, and A320. Mr. Sultan also previously flew DC-9s at TWA as well as Jetstream 32s and Jetstream 41s at Trans States Airlines. Mr. Sultan's previous general aviation experience includes flying Cessna Citation IIs in Part 135 Operations as well asflight instructing for several years.

Matthew 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 where he currently works as an Air Traffic Controller. Matt is also currently the NATCA Weather Representative, serving on the JPDO Weather Working Group and the CDM Weather Evaluation Team.

Jason Tuell

National Oceanic and Atmospheric Administration (NOAA) National Weather Service (NWS)

Jason Tuell is currently the Chief, Meteorological Services Division in the Office of Climate, Water and Weather Services in the National Weather Service. His Division is responsible for the Policy and Requirements for Aviation, Public and Fire Weather, Marine and Coastal Services and Tsunami Forecasts and the National Weather Service Operations Center.

Dr. Tuell has held many other positions in the National Weather Service. He joined National Oceanic and Atmospheric Administration's (NOAA) National Weather Service (NWS) in 2002 as Chief of the Development Branch. During his tenure, he oversaw the development of many product improvement projects including the Advanced Weather Interactive Processing System (AWIPS), Next Generation Weather Radar (NEXRAD) and Automated Surface Observing System (ASOS) Programs. Dr. Tuell also led the planning and management of AWIPS Tech Infusion project. Prior to his current position, Dr. Tuell was Chief of Science Plans Branch in the Office of Science and Technology in was responsible for the science and technology planning for the National Weather Service. Dr Tuell also served as the Weather Information Database (WIDB, also known as the 4-D Cube) Program Manager for NOAA's contribution to the Next Generation Air Transportation System.

Dr. Tuell holds a Bachelor of Science in Physics from Worcester Polytechnic Institute and a Doctor of Philosophy in Atmospheric Science from Georgia Institute of Technology.

Bill Watts

Delta Air Lines

Consultant

Managing joint FAA, NCAR, NASA and Delta team for airborne turbulence

Delta Air Lines, Atlanta, GA

Director – Flight Operations – Technical Support Managed aircraft and other technical issues for the airline. Provided tactical and strategic plans for airspace capacity. Managed security functions for aircraft operations

Fleet Acquisition Team

Provided recommendation for 20 year fleet to senior management

MD-88/90 & B727 Program Manager Managed technical and training issues for two aircraft fleets

Jim Wetherly

Federal Aviation Administration (FAA)

Mr. James Wetherly is currently the Technical Advisor for Implementation Strategies within the NextGen Performance and Outreach organization of the FAA. He is responsible for leading complex analysis and approaches to support the implementation of NextGen. Since 2009, he has also served as the FAA Co-Chair for the JPDO's Air Navigation Service working group providing focus to important strategic initiatives.

Jim started his career in the FAA in 1992 as an automation system engineer within the NAS System Engineering Division. In 1996, he joined the Air Traffic Management Integrated Product Team as the technical lead for Traffic Flow Management research and development. In this capacity he served as the first CDM Working Group co-chair; a cross cutting team of Industry and Academia charged with researching and solving key air traffic congestion problems. Several significant delay reduction techniques and capabilities where researched and successfully deployed as a result of this early collaboration. Today the CDM model philosophy and process continues to support important

Today, the CDM model, philosophy and process continues to support important improvements in data sharing, collaboration and operational decision making.

Jim has held key technical and management positions within the System Operations Program Directorate where he was responsible for the continued evolution of the traffic flow management system. He orchestrated the TFM modernization acquisition and guided the transition of key decision support capabilities from research into operational implementation.

Jim started his career as an engineer responsible for integration of command, control and surveillance systems aboard surface combatants for the Navy in 1987. Before joining the FAA, he worked for the National Weather Service as part of the operational support organization. He holds a Graduate Degree in Operations Research from The George Washington University (1995) and a Bachelor of Science in Electrical Engineering from The Pennsylvania State University (1987).

Heidi Williams

Aircraft Owners and Pilots Association (AOPA)

Heidi Williams is the Senior Director of Airspace and Modernization for the Aircraft Owners and Pilots Association "AOPA." Having spent the past 19 years in the aviation industry, she has a strong general aviation background as both a pilot and aviation advocate. Her focus is on government policies affecting pilots, air traffic, airspace, and the future aviation system.

Heidi started her career at AOPA in Aviation Services in April 1999. She has since served as the Manager of the Air Traffic, Regulatory and Certification Policy Department, Director of Air Traffic Services, Senior Director for Airports and in July 2009 was named Senior Director for Airspace and Modernization.

In her current position, Heidi handles a host of issues on behalf of general aviation including airspace and air traffic policies, modernization initiatives, special use airspace and

regulatory changes to existing airspace. She also manages aeronautical charting and aviation weather initiatives for the Association.

A graduate of Embry-Riddle Aeronautical University, Heidi holds a BS in Aeronautical Science and is a commercial instrument rated pilot and Certified Flight Instructor.

Mark D. Zettlemoyer

National Oceanic Aviation Administration (NOAA) National Weather Service (NWS) Liaison to the Federal Aviation Administration (FAA) Joint Program Development Office (JPDO)

Mark D. Zettlemoyer is the NOAA/NWS Liaison to the FAA in the Joint Program Development Office (JPDO), representing NOAA interests in the development of the nation's Next Generation Air Transportation System, or NextGen. Mr. Zettlemoyer recently retired from the Air Force's Directorate of Weather, where as the Chief, Integration, Plans, and Requirements, he and his division planned weather and space environmental support for the Air Force Weather (AFW) functional area and oversaw integration of technology and weather into command and control (C2) and modeling systems.

Mr. Zettlemoyer received a Bachelor of Science degree in Meteorology from the Pennsylvania State University in 1983, and was commissioned on 28 May 1983 through the Penn State AF Reserve Officer Training Corps (ROTC) program. He completed his Master of Science degree in Meteorology at Florida State University in 1990, where his thesis examined the propagation of measurement uncertainty through an atmospheric He earned an additional Master's Degree in National Security and transport model. Strategic Studies from the Navy War College, Newport, Rhode Island, in 1997. Operational assignments included stints as a forecaster and leading forecast operations at Moody Air Force Base (AFB), Valdosta GA, Shaw AFB, Sumter SC, Wright-Patterson AFB, Dayton OH, Fort Rucker, near Dothan AL, the Joint Typhoon Warning Center, Pearl Harbor HI, and the 17th Operational Weather Squadron, Hickam AFB, Honolulu HI, where his forecasters supported flying operations across the Pacific. Staff assignments included weather support to AF acquisition and training programs (Wright-Patterson AFB and U.S. Joint Forces Command, Norfolk VA), and leading the Air Force Weather Agency's environmental modeling efforts as its Director, Air and Space Science.