

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

October 9, 2008

Orlando Convention Center
Orlando, Florida

BIOGRAPHIES OF SPEAKERS AND PANELIST

CONTENTS

Mark J. Andrews	2
Murray J. Auger.....	3
Randy Baker	3
James H. Block	4
Captain Joseph D. Burns	4
Mary Cairns.....	5
Bruce Carmichael.....	5
Mike Cetinich.....	6
Brian Collins	6
Bill Cook.....	7
Larry Cornman	7
Ernie Dash	7
Benn Deans	8
Donald Eick.....	8
Thomas H. Fahey, III.....	9
Tammy Farrar	10
Paul C. Fiduccia	10
John Footitt	11
Matt Fronzak	12
Adam Giraldes	12
Mike Gough.....	12
Steve Hansen.....	12
J. Heffernan.....	13
Paul Herzegh	13
Richard J. Heuwinkel.....	14
Al Homans.....	14
Mark Huberdeau	15
John Huhn.....	15
David Hughes.....	15
Jim Johnson	16
Kevin Johnston.....	16
Desmond Keany.....	17
Ken Leonard.....	17
Jerry Kranz.....	18
Eric C. Luggger	18
Captain Bob Maxson	18
John McCarthy	19
Tim Miner	20
Bill Phaneuf	20
Mark Phaneuf.....	20
Leo Prusak	21
Warren Qualley	21
Roy Rasmussen.....	21

Michael Robinson..... 22
Tom Ryan..... 22
Joe Sherry 22
Judson Stailey 23
Matthias Steiner 23
Captain Rocky Stone..... 24
Roy Strasser 24
Scott Stevens 24
Matthew Tucker..... 25
Steve Velotas 25
Steve Weygandt..... 25
John White 26

Mark J. Andrews*Joint Planning and Development Office (JPDO)*

Mark J. Andrews attended and graduated from Waterford Township (Michigan) High School in the spring of 1975. In the fall, he attended the University of Michigan, where he graduated with a Bachelor's of Science in Atmospheric and Oceanic Science in 1979.

After finishing college he was admitted into the Officer Training School, Medina Annex, Lackland Air Force Base, where he was commissioned a Second Lieutenant in the Air Force.

Mark's first assignment was to Air Force Global Weather Central, Offutt AFB, Nebraska, where he was assigned as Officer In Charge, CONUS Severe Weather Warning section. There he was responsible for providing advance severe weather warning advisories to over 500 CONUS locations.

Promoted to First Lieutenant in 1981, and then finishing out a 3 year tour, his next assignment took him to Hickam AFB, Hawaii, in 1982, where he served as the lead CINC-PACAF weather briefer and operations planner. While serving a three year tour there Mark was promoted to Captain in 1983. Upon the conclusion of this tour in 1985 he was competitively selected to attend the Air Force Institute of Technology Masters program at the Florida State University, where he graduated summa cum laude in 1987 with a Masters Degree in Meteorology, with special emphasis in satellite remote sensing.

Mark was then picked to move to Wright-Patterson AFB, Ohio, where he served as Staff Meteorologist, and supporting Special Access Required (SAR) programs from 1987 to 1991. There he acted as environmental lead engineer for over 15 separate SAR programs, to include the B-2 bomber, the F-117A and F-22 fighters, the Advanced Cruise Missile, and the Tri-Service Standoff Attack Missile. In 1989 he was selected as the Air Force's Outstanding Staff Meteorologist (Bud Long Award), and the Air Force's top climatologist (Air Force Zimmerman Award). Mark was also promoted to Major while at Wright-Patterson AFB in 1991.

Based on his SAR background, Mark was then selected to become Commander, Detachment 8, Air Weather Service, at Tonopah Test Range, Nevada, where he oversaw weather support to the 37th Fighter Wing (3 F-117A fighter squadrons) and the closure of the facility from 1991 to 1992.

After the successful closure, Mark was assigned to the Air Staff (Pentagon) in 1992, where he served a four year tour as the Air Force weather lead for Defense Meteorological Satellite Program (DMSP). Mark was selected to represent the Department of Defense in the formation of the Tri-Agency Convergence Transition Team (TACTT), which laid the ground work and supporting Memorandum of Agreements between the Secretaries of Commerce, State, and Defense for the merging of the civilian and defense polar-orbiting meteorological satellite programs. Mark was awarded the Vice-President's "Hammer" Award in 1996, for his work in overcoming agency concerns and saving an estimated 2 billion dollars by combining both programs. Mark was promoted to the rank of Lieutenant Colonel upon his departure from the Pentagon during May, 1996.

Mark was then selected to become Director of the Joint Typhoon Warning Center (JTWC), which provides tropical cyclone advisories and warnings to all U.S. Defense and State Department assets for an area encompassing over 53 million square miles (roughly 70%) of the ocean's surface. Under his command, the JTWC was recognized by the Director of the National Hurricane Center and the National Weather Service for shattering historical records for warning accuracy in 1997. The JTWC was also selected as PACAF's weather unit of the year-1997.

Mark concluded his military career serving as the Commander of the 3rd Weather Squadron, Fort Hood, Texas. In his role as the Staff Weather Officer to the Army's III Corps Commander, Mark's squadron provided support to two Army divisions. Mark was inducted into the Army's "Knowlton" Society, for excellence in supporting the Army's intelligence missions.

Upon retirement from the Air Force, Mark was hired by NOAA's National Weather Service in 2000 to serve as the aviation services chief and NOAA's Aviation Weather Program Manager, a position served in for four years prior to his selection to represent the Department of Commerce as the weather IPT lead.

While in the Service, Mark was awarded the Defense Meritorious Service Medal, the Meritorious Service Medal with one oak leaf cluster, the Air Force Commendation Medal with one oak leaf cluster, the Army Commendation Medal, the Air Force Achievement Medal, the National Defense Medal, and the Humanitarian Service Medal with one device.

Mark Andrews married the former Bella (Dina) C. Kandarakis, of Tallahassee, Florida, in 1987.

Murray J. Auger
Northwest Airlines (NWA)

Currently Director Flight Dispatch, Northwest Airlines.

I Worked in Operations Control Center for 26 years, 10 as a flight dispatcher.

I am Member of NWA's winter operations working group.

Murray has worked on various Aviation Rule Making committees (ARC). Currently on the takeoff and landing assessment ARC determining new Federal Aviation Rules for takeoff and landing on contaminated runways.

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 taught

meteorology courses thru 1994. He also made operational weather forecasts during each December peak season from 1990-1993, and then in 1994 was asked to help start up the UPS Meteorology Department. 1994-present: UPS 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 was a member of the Air Transport Association Meteorology Committee 1988-2003, and served as National Weather Association Councilor 1999-2000. He is still involved in various aviation industry committees.

James H. Block

DTN/Meteorlogix

Jim is a Certified Consulting Meteorologist (CCM) with over 25 years of experience in commercial and aviation meteorology. Jim is the Chief Meteorologist at DTN/Meteorlogix, and is responsible for all of the weather products for nearly 20,000 business and professional customers. He is presently serving on the American Meteorological Society's Intelligent Transportation Committee, and is a past president of the National Council of Industrial Meteorologists.

Captain Joseph D. Burns

United Airlines (UAL)

Captain Joseph D. Burns is the Managing Director of Flight Standards and Technology and Director of Operations for United Airlines. At United, he previously held positions as Director – Flight Standards, Director – Technology, Chief Pilot – FFDO Program, Manager – Automation Systems/MIS, Pilot Instructor on both the A320/319 and B-727 fleets, served as the Council 93 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 President's commission on Position, Navigation, and Time (GPS), on the Board of Directors for Optical Detection Systems, AgileDefense, LLC, and is the Chairman/CEO of ATNSI. Additionally he is Chairman Emeritus of the ATA Airline Operations Committee, Vice-Chairman of the Airborne Internet Consortium, and Chairman of the ATA - Air Traffic Control Council.

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.

Mary Cairns

*Federal Aviation Administration (FAA)
Air Traffic Organization (ATO)*

Mary M. Cairns is currently serving as the Solution Set Coordinator for Reduced Weather Impact (RWI), in the Next Generation Air Transportation System (NextGen) Integration and Implementation Office at the Federal Aviation Administration. In this position she leads the planning and coordination required to execute the NextGen RWI portfolio of activities, identifying resources, technical and schedule gaps, and facilitates the timely resolution to optimize the portfolio, ensuring effective transition from the existing NAS Architecture to NextGen. Prior to the FAA, Ms. Cairns served over 30 years with the National Oceanic and Atmospheric Administration, serving a variety of positions including the Assistant Deputy Federal Coordinator for DOT (FAA) Affairs, Aviation Weather Research and Services at the Office of the Federal Coordinator for Meteorological Services and Supporting Research, as well as Cooperative Education Student, Research Meteorologist, Branch Chief, Deputy Director, and Science and Operations Officer. Ms. Cairns has spent the majority of her career focused on the improvement of operational forecasts and services, with an emphasis on aviation. She has helped develop aviation-specific meteorological display systems, forecast at a National Weather Service Forecast Office and Center Weather Service Unit at the Denver ARTCC, and led efforts on national aviation weather requirements and policy. Her professional service has included serving on the American Meteorological Society's Aviation, Range, and Aerospace Meteorology and Weather Analysis and Forecasting Committees, and the National Weather Association's Aviation Committee. Ms. Cairns obtained her B.S. in Meteorology from San Jose State University, and her M.S. in Atmospheric Science from Colorado State University with an emphasis in mesoscale modeling. She is also a member of the American Geophysical Union. Ms. Cairns has authored over 50 publications, and made numerous presentations at AMS and NWA conferences, as well as other local and national workshops, meetings, and to senior management.

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 30 years of experience spanning a number of activities including university teaching, commercial research, government service, consulting, and academic research. His past 18 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 seven years he has been at the National Center for Atmospheric Research, where he has acted as the Program Manager for FAA Programs. These programs are 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.

Mike Cetinich
Jeppesen

Mr. Cetinich has been employed with Jeppesen since 1983. Mike is currently the Product Manager for Flight Planning, Weather and NOTAM Services at Jeppesen, a position he has held since 2006. Mike has P&L responsibility as well as strategic and tactical planning and product development for the Flight Planning, Weather and NOTAM product lines. Prior to Mike's current responsibilities, he was the Manager of Meteorology Operations from 1991 to 2000, responsible for the day to day operations as well as product development in this role. Mike was a software developer for the Meteorology department, maintaining and developing software for the production environment from 1986 to 1991. Initially, Mike was an Aviation Forecaster from 1983 to 1986.

Mike received a B.S. in Meteorology from San Jose State University in 1982, and attended graduate school at San Jose State University working towards a M.S. in Meteorology from 1982 to 1985. Mike has been a member of the American Meteorological Society (AMS) since 1983, and has authored papers that have appeared in the Bulletin of the AMS. Mike has also served on various RTCA, IATA and ICAO weather committees, and has given presentations at numerous industry meetings, including the AMS Annual Meeting, ICAO Safety Seminar, IATA Weather Committee Meeting, NASA ICNS Conference, NBAA and IOC Conventions, EAA Air Venture Annual meetings, and Civil Air Patrol meetings. Mike was a student pilot from 1981-1983. Mike also has traveled to Antarctica to study the weather and flight operations for the National Science Foundation.

Brian Collins
Southwest Airlines (SWA)

Education

- B.S. Meteorology, Northern Illinois University, 1987.
- M.S. Atmospheric Science, University of Illinois, 1990.

Experience

- Met Intern, National Weather Service, Apalachicola, FL (1987-1988).
- Project Meteorologist (Air Pollution Meteorology & Dispersion Modeling), Dames & Moore/Radian/URS Inc., Chicago, IL (1990-2001).
- Aviation Meteorologist (ITWS and CIWS Programs), MIT Lincoln Laboratory, Dallas, TX and Lexington, MA (2001-2006).
- Meteorologist, Southwest Airlines, Dallas, TX (2006-Present).

Bill Cook

*Federal Aviation Administration (FAA)
Air Traffic Control (ATC)*

William Cook is currently the FAA's Manager of the Future Plans Staff at the Air Traffic Control System Command Center in Herndon, Virginia. Bill was born and raised in Chicago, Illinois, and while currently residing in Virginia, still considers Chicago as home. He enlisted in the US Army in 1975 and began his aviation career there, performing duties as an Avionics Repairman. He served in various roles and locations around the world, finally retiring from the Army Reserve in 1996 as a Chief Warrant Officer 4 and Senior Army Aviator. Bill joined the FAA in 1985, working as a journeyman air traffic controller at Chicago Center. Since then he has held various support and management roles in Chicago and Washington DC, including Support Specialist, Operations Supervisor, Operations Manager, and National Traffic Management Officer.

In his current position, Bill acts as the Contract Official's Technical Representative (COTR) for the Interagency Agreement between the FAA and the NWS regarding Center Weather Service Units (CWSU).

Larry Cornman

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

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

Ernie Dash

SAIC

Ernie is an aviation meteorologist with 46 years experience supporting the Air Force for 27 years and now the FAA for 19 years. 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.

In 1989, Ernie began providing contract support to the FAA FIS Data Link program. One of his initial tasks was to draft the requirements and demonstrate the operational concepts for an uplink-only broadcast 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 led a team that drafted the JPDO NextGen Weather Concept of Operations, V1.0, May 13, 2006.

Ernie continues today as a consultant supporting the FAA FIS Data Link (FISDL) program office.

Benn Deans

*Federal Aviation Administration (FAA)
Air Traffic Organization (ATO)*

Donald Eick

National Transportation Safety Board (NTSB)

Donald Eick is a senior meteorologist and accident investigator with the National Transportation Safety Board (NTSB), where he has been for the last 11 years and has worked on over 400 aviation accidents, including the American Airlines flight 1420 thunderstorm encounter at Little Rock, Arkansas, Southwest Airlines winter storm/runway contamination at Midway, IL, Governor Carnahan accident in Missouri, US Air National Guard Sherpa and Scott Crossfield accidents in Georgia. He was formerly with Trans World Airlines (TWA) for 14 years, where he started as an instructor in flight operations teaching meteorology, regulations, and flight procedures. He was promoted to the position of head of meteorology for TWA at JFK in New York, where he was responsible for providing weather support to operational control and flight dispatch, and providing worldwide weather analysis and forecasting for the airline. He was the responsible for issuing all major winter and severe weather alerts for the carrier during that period. While at TWA he also represented the carrier to the working groups of the ATA, IATA, FAA, and NWS on weather related matters.

Don Eick also has been teaching aviation weather and dispatch topics during this period, teaching courses for the NTSB, TWA, and as a consultant to other Part 121 air carriers and corporate flight departments. He was also an instructor for Flight Safety International and Pan Am Training Institute teaching pilot weather and aircraft dispatch courses, and federal aviation regulations.

Don Eick has degrees in Aeronautics from Embry-Riddle Aeronautical University, and in meteorology from Florida State University. He holds a private pilot, commercial, instrument ratings, aircraft dispatcher, and weather observer certificates.

Thomas H. Fahey, III
Northwest Airlines (NWA)

Tom is currently employed as Manager Meteorology at Northwest Airlines (NWA) 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

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

NWA

- Forecaster: Producing weather products (1977-1990).
- Product Development: Developing forecast procedures (1988-1990).
- Union President: Negotiating & representing the Meteorology Union (1982-1988)
- NWA Management: Directing the NWA weather offices (1990-1999).
- Contract Management: Added duties administrating sale of weather products and services outside of NWA (2000-Current).
- Operations Control: Added duties supporting Systems Operations Control management (2006-present)

NWA has a long tradition of over 40 years providing forecasts of turbulence and wind shear using the copyrighted Turbulence Plot (TP) System. Tom has both conducted and supervised projects that resulted in new and/or improved methods for producing and distributing both turbulence and wind shear information as well as other atmospheric based aviation hazards such as volcanic ash. Tom also initiated and oversaw development of a 2nd set of weather products focused on operations at NWA's hub airports. Most recently Tom has expanded NWA weather services via contracts with other airlines and has lead efforts to develop new forecast products to support NWA System Operations Control processes.

Aviation Industry Recognition and Current Activities

- Feb 2001, Aviation Week & Space Technology's Aviation Laurels Award Recipient for role in development of Collaborative Convective Forecast Product (CCFP).
- 2006-08 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

- 2007, Chair, Air Transport Association, Aviation Industry Weather Work Group
- 2007-08, Industry Co-Chair Ground Deicing Work Group, Weather Sub-Committee
- 2007-08, IATA Rep on the ICAO Meteorological Warnings Study Group (METWSG)
- 2008, IATA Representative on the ICAO Aerodrome Meteorological Observation and Forecast Study Group (AMOFSG)

Tammy Farrar

*Federal Aviation Administration (FAA)
Air Traffic Organization (ATO)*

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

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

After leaving the Air Force, Tammy worked as an Editorial Assistant for the American Meteorological Society's (AMS) Journal of the Atmospheric Sciences. She began her current position as a Research Meteorologist for the Federal Aviation Administration's (FAA) Aviation Weather/Weather Policy and Requirements Group in January of 2008, and serves as the FAA's Turbulence Subject Matter Expert.

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

Paul C. Fiduccia

Small Aircraft Manufacturers Association (SAMA)

Paul Fiduccia is President of the Small Aircraft Manufacturers Association (SAMA), the national trade association representing the leading producers of experimental, kit-built aircraft and new-design certified small aircraft. SAMA also represents manufacturers of engines, propellers, avionics, and other components of small aircraft that are flown for personal and business use. SAMA's goal is to "expand the market for small aircraft" by supporting efforts to make their operation safer, more reliable, easier to operate, and more

affordable. For many years, Mr. Fiduccia has been involved in efforts to improve aviation weather forecasts and their dissemination because of the importance of this to achieving SAMA's goal.

Mr. Fiduccia has held various leadership positions in FAA, NASA and industry programs and various FAA and NASA research advisory and review committees that support SAMA's goal.

He holds a Mechanical Engineering degree from Purdue University and worked as an R&D engineer. He also has a law degree from Georgetown University, and before founding SAMA in 1990, he was a partner in a national law firm where he specialized in federal relations. Mr. Fiduccia has been an airplane owner and an active pilot for more than 35 years, and holds an ATP certificate.

John Foottit

Nav Canada

John Foottit received his BA degree in History from Carleton University in 1969, during the days when entrance requirements were low and anyone could find a job. Following completion of military pilot training he flew helicopters in the search and rescue, flight instructor, and army support roles. He is a 1984 graduate of the Canadian Forces Staff College.

After electing early retirement from the Air Force in 1987, he worked as a Civil Aviation Inspector with the Department of Transport, primarily in the aviation weather services area.

Upon commercialization of the Air Navigation System in November 1996, he accepted a position with Nav Canada's Head Office in Ottawa. He became the Manager of their Aviation Weather Services Branch in 1998. His responsibilities include:

Determining the operational weather information requirements of pilots, flight dispatchers, flight service specialists, and air traffic controllers and providing the appropriate products and services to satisfy them;

Managing a product and service contract with the Meteorological Service of Canada (MSC);

Managing Community Aerodrome Radio Station and Contract Weather Observation operations; and

Delivering flight planning services over the Internet.

Mr. Foottit has held Airline Transport Pilot Licenses for both helicopters and airplanes.

Matt Fronzak*Rockwell Collins*

Principal Systems Marketing Manager - Rockwell Collins (effective October 6, 2008)

Bachelor of Science in Meteorology, University of Massachusetts – Lowell (1978)

Candidate for Master of Aeronautical Science, Embry-Riddle Aeronautical University (2008)

33+ year career with Delta Air Lines as meteorologist, aircraft dispatcher, sector manager, ATC sector manager and a twice a member of Delta's Flight Control management team.

Chairman - IATA NAT/NAM RCG 1994-1996

Member - ICAO NAT IMG 1995-1996

Retired from Delta on August 1, 2008

Adam Giraldes*Airline Dispatchers Federation (ADF)*

President of the Airline Dispatchers Federation, a non labor, all volunteer professional organization representing the professional interests of the dispatch profession.

Have served on various industry and government panels and committees over the years representing the dispatch profession,

Licensed dispatcher working for United Airlines as a dispatcher, and air traffic coordinator.

Bachelor degree from University of Connecticut

Veteran, with 10 years of service in the U.S. Army as a non commissioned officer

Mike Gough*Federal Aviation Administration (FAA)**Air Traffic Organization (ATO)****Steve Hansen****National Air Traffic Controllers Association (NATCA)*

I currently serve as the Chairman, National Safety Committee for the National Air Traffic Controllers Association (NATCA).

I have 20 years ATC experience, which began by serving in the USAF with assignments at McClellan Tower, Sacramento, CA; Okinawa Approach Control, Okinawa, Japan; Eielson Tower, Fairbanks, Alaska; Tuzla Approach Control, Bosnia; and McChord Tower, Tacoma,

Washington. My military service was followed by a short assignment working for the Department of Defense at Eielson Tower; after which, I began my FAA career at Fairbanks Tower & Approach Control. Subsequently, I transferred to Albuquerque ARTCC where I currently work.

J. Heffernan

Helicopter Association International (HAI)

J. Heffernan joined the Helicopter Association International in March 2008, he has been a pilot since 1970 and his background combines twenty years as a military aviator with eighteen years as a civilian pilot primarily in the air transport and air medical fields.

Mr. Heffernan is both a designated Army and designated Naval aviator. Enlisting in the Marine Corps in 1966, he was commissioned in 1968 and during his military career was an Infantry and Armor Officer in Viet Nam and flew as a CH-53 aircraft commander during the evacuations of Phnom Penh and Saigon. He attended the Naval Aviation Safety Officer's Course in 1976 and has been active in both safety programs and accident investigation since then. He has been a Comptroller and served as a Pilot and Safety Manager of Marine Helicopter Squadron One during the administrations of President Reagan and Carter and developed an understanding of the business case for safety and extended operations in a zero defect environment.

As a pilot with CJ Systems Aviation Group, he served as a Line Captain in Air Medical Operations, Site Manager for the CJ Base at Duke University Medical Center, Director of Safety, and Vice President of Operations. He was a founding member and first Chairman of the Air Medical Safety Advisory Council (AMSAC) and a member of the FAA Part 135 ARC. As the CJ representative, he attended the weather summit in Boulder and has been a strong supporter of the HEMS Aviation Weather Tool.

Mr. Heffernan holds an Airline Transport Pilot certificate in Multiengine Jet Aircraft, a Commercial and Instrument certificate in Rotorcraft and has operated 38 aircraft models in over 5,000 flight hours.

Paul Herzegh

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

Dr. Herzegh serves as a Project Scientist within the Research Applications Laboratory of the National Center for Atmospheric Research in Boulder, Colorado. In this role he leads the FAA-sponsored National Ceiling and Visibility Research Team. Before joining RAL, Dr. Herzegh served as Manager of NCAR's Research Aviation Facility, and earlier roles as Manager of NCAR's Research Data Program and Associate Manager of NCAR's Field Observing Facility. Dr. Herzegh's research publications include topics on the cloud processes of winter storms and the use of polarimetric radar and aircraft in storm research. He received a Ph.D. in Atmospheric Sciences from the University of Washington, and a B.S. in Geology from Case Western Reserve University.

Richard J. Heuwinkel
Federal Aviation Administration (FAA)
Air Traffic Organization (ATO)

- Pilot
- 19 years in FAA
- 10 years in NOAA
- Present Position: Manager, Aviation Weather Policy & Requirements Group
Operations Planning Air Traffic Organization FAA
- Principal Duties:
 - Develop FAA/Federal policies on aviation weather services to the NAS
 - Assess and document pilot, dispatcher, controller, and airport operator users' requirements for aviation weather services.
 - Represent U.S. aviation weather interests to ICAO
 - Provide liaison between ATO and external stakeholders, especially NWS and industry
- Education:
 - Masters of Business Administration, Stanford University, 1974
 - Masters, Political Science and Economics, Iowa State University, 1967

Al 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

Certificate, Software Engineering, George Washington University, Washington, D.C.

Graduate Study, Electronics, University of Florida, Gainesville, FL.

Mark Huberdeau
MITRE/CAASD

Mark Huberdeau is the Program Manager of NAS System Operations at MITRE's Center for Advanced Aviation System Development (CAASD). In this capacity, he leads a team of aviation experts and analysts focused on improving system operation procedures, NAS efficiency and decision-support system integration. He has consulted in airline operations for the FAA and international clients, facilitated RNAV route development, and led the operational use of the Collaborative Routing and Coordination Tool (CRCT) as part of the FAA's Spring-2000 initiatives. Before joining MITRE, Mr. Huberdeau was employed by US Airways and held a variety of positions including manager of weather services, Airline Operational Control (AOC) duty officer, manager of international air traffic and airfield operations, dispatcher, flight crew training instructor, maintenance instructor, and mechanic. He holds the following FAA certificates and ratings; aircraft dispatcher, flight instructor, commercial pilot (single, multiengine airplane), ground instructor, and mechanic. Additionally, Mr. Huberdeau holds a M.S. in Systems Engineering from Johns Hopkins University.

John Huhn
MITRE/CAASD

John Huhn is a Senior System Development Engineer within MITRE's Center for Advanced Aviation System Development (CAASD). Among his various research tasks, John is a valuable member of the National Airspace System (NAS) tactical operations division. His extensive knowledge of meteorology and air traffic flow management affords him a unique perspective during his day to day analysis from the operational floor of the Air Traffic Control System Command Center (ATCSCC).

In addition to NAS tactical weather analysis, John is at the forefront of CAASD's research, exploring the integration of weather forecast capabilities into the Next Generation of Traffic Flow Management.

John holds a Bachelor of Science in Meteorology from Kean University and a Master of Aeronautical Science from Embry-Riddle University.

David Hughes
Aviation Week & Space Technology magazine

Dave Hughes is a Senior Editor with Aviation Week & Space Technology magazine, a publication of the McGraw Hill Companies. His current areas of coverage include avionics, air traffic control, aviation security, and information technology and homeland security. He has been with the magazine since 1987, starting as the bureau chief for the Northeast U.S. covering aviation and aerospace defense news in New England and Canada.

From 1996 to 2002 he served as the managing editor in Washington D.C., coordinating the efforts of a staff of Aviation Week writers in the U.S., Europe and Asia under the leadership of the editor-in-chief.

He served in the U.S. Air Force Reserve from 1972 to 1993. As a USAF pilot he has 2,300 hours in heavy jets including the C-5 and C-141. He also served in public affairs at Headquarters U.S. Air Force Reserve at the Pentagon before retiring as a Lt. Col.

Prior to joining McGraw Hill he worked as a newspaper reporter and public television script writer and in communications jobs in the aviation industry.

He was named the Aerospace Journalist of the Year in 2008 by the Royal Aeronautical Society and also received the award for the best avionics submission. He has received several McGraw Hill awards for editorial excellence over the years.

He lives in Washington, D.C. with his wife Krista and they have three sons. He is a 1970 graduate of Dartmouth (B.A.) with an ROTC commission. He earned an (M.S. Journalism) in 1971 at Northwestern.

Jim Johnson

*James Johnson Associates
No bio received*

Kevin Johnston

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

Kevin Johnston is the National Weather Service Aviation Services Branch Chief and NOAA Aviation Weather Program Manager. As such, Mr. Johnston establishes policy and procedures for the National Weather Service to meet FAA stated weather requirements for the National Airspace System. In addition, Mr. Johnston manages the \$17M Aviation Weather program within the NOAA Commerce and Transportation Goal.

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.

Desmond Keany*American Airlines*

Currently the Manager Flight Planning and Weather Support at American Airlines and have worked in the Dispatch/SOC environment for 31 years.

For much of my life I have worked for TWA including 11 years based in Paris/France and 7 years in Saudi Arabia.

Originally came to the airline business from Air Traffic Control.

I hail from Dublin/Ireland

Ken Leonard*Federal Aviation Administration (FAA)**Air Traffic Organization (ATO)*

Mr. Leonard is the Director of the FAA Aviation Weather Office (AWO). He reports to the Air Traffic Organization's Senior Vice President for NextGen and Operations Planning. The AWO manages the FAA's core Aviation Weather Research Program (AWRP) and new weather-related program initiatives in support of NextGen: NextGen Network Enabled Weather (NNEW), Reduced Weather Impact (RWI), and Weather in the Cockpit (WTIC). The office is also responsible for all technical and policy liaison on international aviation weather matters with ICAO and foreign governments as well as requirements. On aviation weather matters the office is also the FAA liaison to the Departments of Commerce and Defense and to NASA. Mr. Leonard is the principal FAA liaison to the JPDO Weather Working Group and serves as an adviser to FAA senior management on aviation weather and systems.

Until 2007 Mr. Leonard was the Acting Director for the Office of Technology Development. In this role, as well as previous positions as the Manager of Planning and Technology Scouting and Deputy Integrated Product Team Lead for Safe Flight 21 and Surface Technology, he has worked to identify, evaluate and mature abroad portfolio of promising new capabilities such as ADS-B, Runway Status Lights (RWSL), System Wide Information Management (SWIM) and Virtual Towers.

Previously, Mr. Leonard managed investment analysis teams that built business cases to determine the optimal solutions for satisfying FAA mission needs. In the 1990's he successfully led two of FAA's advanced weather programs, the Integrated Terminal Weather System (ITWS) and the Aviation Weather Research Program (AWRP).

Before joining the FAA, Mr. Leonard provided business and management consulting services to the Strategic Defense Initiative Organization, the Naval Sea Systems Command, the United States Synthetic Fuels Corporation, and various trade association clients.

Mr. Leonard has over twenty five years experience in industry and government, as a leader and contributor to a broad range of interdisciplinary project teams providing systems

analysis, research and development, and solution integration for transportation, defense, energy, and environment. He received his BA in International Affairs and has completed extensive graduate coursework in business, economics, and finance.

Jerry Kranz

*Federal Aviation Administration (FAA)
Air Traffic Organization (ATO)*

Mr. Jerry Kranz supports the Weather Sensors group of the FAA ATO Terminal Services organization. He has an educational background in computer science and electrical engineering and has 24 years of experience working with ground-based and airborne meteorological sensor systems. For the past 14 years he has worked with surface weather systems, especially the Automated Surface Observing System (ASOS), with both the FAA and the National Weather Service.

Eric C. Lugger

Air Methods Corporation

Eric has more than thirty-seven years of aviation experience in the military/general aviation industry. He is a former 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 a Corporate Safety Manager with Air Methods, the world's largest provider of helicopter and airplane air medical services through 263 national base operating locations. 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.

Captain 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 (NGATS), Joint Program & Development 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."

McCarthy was Special Assistant for Program Development to the Director NCAR Director, 1995-97. Prior, he was of Vice President of the University Corporation for Atmospheric Research, 1994-95.

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 was a founding and continuous member of the Federal Aviation Administration Research, Engineering, and Development Advisory Committee from 1983 to present. He is also a member of the Flight Safety Foundation ICARUS Committee. In January 2000, Dr. McCarthy was named a Fellow of the American Meteorological Society. Additionally, he has been an official member of the crew as an observer on more than 500 commercial jet transport flights.

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

Tim Miner*Allied Pilots Association*

Tim Miner is a 17-year pilot with American Airlines, Inc., and a volunteer member of the National Safety Committee of the Allied Pilots Association where he specializes in aviation meteorology and its impacts to safety. He has also served on the weather team at six NTSB aviation investigations. Prior to his acceptance at American, he was an active duty Air Force pilot who received graduate education at Ohio State University and was the Acting Head of the Geography Program at the US Air Force Academy in 1988, where he created the meteorology major and worked to create partnerships with the Air Weather Service and the emerging COMET program. After leaving active duty to fly for American, he remained an Air Force Reserve meteorologist where he rose to serve as the senior reservist in the Air Force Weather program between 2001 and 2006. He was named the National Weather Association's Member of the Year in 2002 and received that organization's Aviation Meteorology Award the same year for his work in computer education programs in meteorology for pilots around the world. He has published in academic journals and in popular aviation safety magazines in four countries. He is married to Dr. Cecilia Miner (Lt Col, USAF Ret.) who is an aviation meteorologist with the NOAA National Weather Service.

Bill Phaneuf*AvMet Applications, Inc.*

Currently, Contractor with AvMet Applications, Inc.

From early 2006 to July 2008, Supervisor for Airspace and Operations in the ALPA Engineering and Air Safety Department.

More than twenty-one years with ALPA dealing with Aviation Weather and All Weather Operations matters. Also responsible for Airport and Ground Environment issues. Prior to ALPA, served for three years as the Flight Safety Manager for United Air Lines.

Retired USAF Lt. Col. and Command Pilot. Commercial Pilot Instrument, Single Engine, and Multi-engine ratings 8,700 plus hours flying time.

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.

Leo Prusak

*Federal Aviation Administration (FAA)
Air Traffic Organization (ATO)*

Leo Prusak: Started with the Federal Aviation Administration in 1982 at Kennedy Tower as an air traffic controller. In 1986 transferred to the New York TRACON where he worked in two sectors and the traffic management unit. Subsequently Mr. Prusak has worked at FAA Eastern Region as a staff specialist and Branch Manager. In field operations work he has been the Air Traffic Manager of Teterboro, Newark, and LaGuardia Towers. Currently Mr. Prusak is the Air Traffic Manager of LaGuardia Tower and the District Manager for the New York/New Jersey/Connecticut metro area which includes LGA, JFK, EWR, and 18 other air traffic facilities. He has spent several years assisting in research and development work related to weather system integration and software with ITWS, CIWS, RAPT, and other air traffic management tools.

Warren Qualley

Harris Corporation

Warren Qualley works as the Senior Weather Engineer for Harris Corporation. He has 30 years of aviation meteorology experience, having previously worked as the Director of Aviation Services for Weathernews Americas from 2003 until early 2007 and as Manager of Weather Services for American Airlines from 1991 until mid-2003. He chairs the International Air Transport Association's Meteorological Task Force and is involved in many industry activities, most notably NextGen. Qualley has been an invited speaker at many conferences and has given talks to classes at the University of Oklahoma's School of Meteorology and other universities. Qualley now works and lives in the Washington, D.C., area.

Roy Rasmussen

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

Roy Rasmussen received a Masters and PhD from the University of California, Los Angeles in Atmospheric Sciences in 1980 and 1982, respectively, specializing in cloud physics. He is now at the National Center for Atmospheric Research (NCAR), where he is currently the FAA Winter Weather Research Team lead. He led the FAA funded effort to develop the Weather Support to Deicing Decision Making (WSDDM) winter weather nowcasting system that is currently being deployed commercially at a number of U.S. airports and was awarded the Government Technology Leadership award in Nov. 1999. He is currently involved with the design and development of a Liquid Water Equivalent system

to provide real-time snowfall rates to support ground deicing users. He has five patents and over 40 peer reviewed journal papers. His paper on the relationship between snowfall rate and visibility won the NCAR paper of the year in December 2000.

Michael Robinson

*Massachusetts Institute of Technology (MIT)
Lincoln Labs*

Michael Robinson is an associate technical staff member of the Weather Sensing Group at MIT Lincoln Laboratory. Working as part of the FAA Corridor Integrated Weather System (CIWS) and Route Availability Planning Tool (RAPT) projects, Mike has provided support for meteorological data analysis and weather tool development, acted as a primary trainer and liaison with the operational air traffic user group community (ensuring their needs and requests are considered in tool enhancements), and led analytical efforts deriving cost benefits attributed to these decision support tools. He has led a new, refined approach to assess FAA demonstration systems based on coordinated multi-facility, field-use assessment campaigns. Recently, Mike has been studying National Airspace System dynamics and air traffic flow management (TFM) characteristics in order to improve insight on how to better utilize convective weather decision support tools to increase TFM efficiency.

Mike holds B.S. and M.S. degrees in Meteorology from the State University of New York, College at Oswego, and Texas A&M University, respectively. Prior to beginning work at Lincoln Lab in 2001, Mike worked at the NASA Goddard Space Flight Center as a member of the Tropical Rainfall Measuring Mission (TRMM) Ground Validation team.

Tom Ryan

*Federal Aviation Administration (FAA)
Air Traffic Organization (ATO)
No bio received*

Joe Sherry

MITRE/CAASD

Joe Sherry has been with MITRE/CAASD for the past 16 years, providing the FAA with support in a variety of aviation weather and Air Traffic Management (ATM) areas. His main focus for the past decade has been the assimilation of weather into decision-making. Joe is one of the founding members of the Weather/ATM Integration community of interest, which for many years promoted integration through its annual workshops. Joe is currently providing weather and systems engineering support to the JPDO's Weather Working Group.

Judson Stailey

*National Oceanic and Atmospheric Administration (NOAA)
Office of the Federal Coordinator for Meteorology (OFCM)*

Jud Stailey is a Senior Coordinator in the Office of the Federal Coordinator for Meteorology (OFCM), where he currently focuses his work on weather radar and weather support to aviation and surface transportation. He served in the Air Force for 30 years as a weather officer, retiring in 2002. Originally a civil engineer, he attended the Air Force's basic meteorology program and later earned a masters degree specializing in weather radar, precipitation physics, and storm structures. During his Air Force career he commanded a weather detachment, a weather squadron, and the Air Force's climatology center. He served two tours of duty at OFCM as the Air Force representative, focusing his work on climate services, space weather, and atmospheric transport and diffusion. Before returning to OFCM in June 2008, Jud worked as a program manager for small company supporting NASA programs at the Goddard Space Flight Center and the Langley Research Center.

Matthias Steiner

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

Dr. Matthias Steiner is the Deputy Director for the Hydrometeorological Applications Program (HAP) of the National Center for Atmospheric Research (NCAR) Research Applications Laboratory (RAL). He heads the convective weather group and also holds a tenured scientist appointment at NCAR. Before joining NCAR in 2006, Dr. Steiner was at Princeton University for more than a decade, researching a variety of topics that straddle the interface between atmospheric and hydrologic sciences. His professional interests reach across hydrometeorology, cloud and precipitation physics, mountain meteorology, radar and satellite meteorology, and most recently aviation weather. Dr. Steiner received his degrees from the Swiss Federal Institute of Technology (ETH) in Zurich, Switzerland. He has been contributing to several interdisciplinary, national and international field experiments and programs, such as the Mesoscale Alpine Program (MAP), the Tropical Rainfall Measuring Mission (TRMM), and the Tropical Ocean Global Atmosphere (TOGA) Coupled Ocean-Atmosphere Response Experiment (COARE). His work has been published in the leading journals of major professional societies on three continents. Dr. Steiner served on a couple of recent National Research Council (NRC) committees, the Committee on Radar Meteorology of the American Meteorological Society (AMS), and chaired the Technical Committee on Precipitation of the American Geophysical Union (AGU) Hydrology Section. He is a member of the Precipitation Missions Science Team of the National Aeronautics and Space Administration (NASA), a Fellow of the Royal Meteorological Society, and was the recipient of the 2002 Editor's Award for the AMS *Journal of Hydrometeorology*.

Captain Rocky Stone*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 SC-186, responsible for developing technical and operational standards for ADS-B. Rocky also chairs the meteorology sub-group of RTCA SC-206 on Aeronautical Information Services and Flight Information Services Data Link.

Roy Strasser*WSI Corporation*

Roy Strasser graduated from Parks Aeronautical College of St. Louis University in 1975 with a BSc degree in Meteorology. In various positions, he has worked in the area of operational weather forecasting for nearly 30 years with 20 of those years spent with American Airlines in the capacity as both a forecaster and manager. For a short period of time Mr. Strasser worked as a consultant in the Washington D.C. area where he assisted the Federal Aviation Administration in the development of weather policies. In 2004 Mr. Strasser began working for WSI Corporation where he helped launch their Global Aviation Operations Center. At present he holds the position of Vice President of Meteorological Services which includes the additional areas of Energy, Agricultural and Road forecasting. He and his family live in the Seacoast area of New Hampshire.

Scott Stevens*Federal Aviation Administration (FAA)
Air Traffic Organization (ATO)*

Scott Stevens serves as a meteorologist in the FAA's Weather Policy and Requirements group where he is the program manager for the FAA's Weather Technology in the Cockpit program. Prior to joining the Federal Aviation Administration, Mr. Stevens served in the United States Navy where he held a variety of positions as a leader, manager, and a meteorologist. Some of his assignments follow: Served as a Meteorology and Oceanography Officer at the Naval Pacific Meteorology and Oceanography Command Center West / Joint Typhoon Warning Center, Guam; Served as a Meteorology and Oceanography Officer at the Fleet Numerical Meteorology and Oceanography Center, California; Served as the Officer in Charge of the Meteorology and Oceanography Detachment, Diego Garcia; Served as the Technology Services Department Head at the Naval Pacific Meteorology and Oceanography Center / Joint Typhoon Warning Center, Hawaii. Mr. Stevens holds an Associate of Arts degree from the University of Hawaii, a Bachelor of Science degree in Physical Oceanography from the University of Washington, and a Master of Science degree in Meteorology and Physical Oceanography from the Naval Postgraduate School in Monterey, California.

Matthew Tucker

National Air Traffic Controllers Association (NATCA)

I joined the US Army in June 1983 as an Air Traffic Controller; in 1987 I entered the FAA and was assigned to Baton Rouge ATCT as an Air Traffic Assistant then as an Air Traffic Controller in 1989. In March 2000 I became the Weather Liaison for NATCA in Washington DC. While in Washington I worked on all FAA weather projects as well as Serving on the CAST JSAT for Turbulence and the JSIT/JSAT for remaining Risks. In Feb 2003 I transferred to Jacksonville ARTCC, where I currently work as an Air Traffic Controller.

Steve Velotas

AeroTech Research

Mr. Velotas is the Vice President of Operations for AeroTech Research. He provides overall direction and guidance to the operational activities of the organization as well as day-to-day leadership and management to all company operations functions. At AeroTech, he has held the positions of Program Manager and Business Development Manager.

Previous to AeroTech, Mr. Velotas led evaluations of systems engineering projects in communications, command and control, and information technology for the United States Joint Forces Command's Joint Battle Center. He also served as a Naval Flight Officer on E-2C Hawkeye command and control aircraft, including two squadron tours, a joint tour to Riyadh, Saudi Arabia, and a tour as director of fleet information warfare support.

Mr. Velotas earned an M.B.A. in Information Systems from Old Dominion University and a B.S. in Aerospace Engineering from the U.S. Naval Academy.

Steve Weygandt

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

Dr. Stephen Weygandt is the Assimilation Development Section Head for the Assimilation and Modeling Branch, Global Systems Division, Earth System Research Laboratory of NOAA. In this capacity, Dr. Weygandt directs the development of data assimilation systems that provide initial conditions for the Rapid Update Cycle (RUC), Rapid Refresh (RR), and High-Resolution Rapid Refresh (HRRR) weather prediction models. These models are supported by the FAA Aviation Weather Research Program (AWRP) and Dr. Weygandt is a core participant in the AWRP Model Development & Enhancement Research Team (RT), and actively collaborates with several other AWRP RTs. The RUC runs operationally at NCEP and provides short-range weather guidance to many different users and automated products (dealing with hazards such as convection, icing, ceiling and visibility, turbulence, and others). The RR (slated to replace the RUC at NCEP in 2010) and the experimental HRRR run in real-time at NOAA ESRL.

Dr. Weygandt joined NOAA in 2000 and his work has focused on improving RUC, RR and HRRR forecast performance and working with forecasters and other users to best utilize

automated aviation guidance products. In 2003, Dr. Weygandt developed the RUC Convective Probability Forecast (RCPF), which provides probabilistic guidance to CCFP forecasters at AWC. Dr. Weygandt has nearly 25 years experience in numerical weather analysis and prediction, especially thunderstorms, and has co-authored numerous refereed and conference papers. He received B.S. and M.S. degrees in Meteorology at the Pennsylvania State University and a Ph.D. in Meteorology from the University of Oklahoma. At Penn State, he documented the impact of grid resolution on weather model forecast skill and at OU he used Doppler radar observations to initialize high resolution computer forecasts of severe thunderstorms. Dr. Weygandt currently serves on the American Meteorological Society Committee on radar meteorology.

John White

Air Line Pilots Association (ALPA)

John joined ALPA in May 2008 and is currently a Staff Engineer in the Engineering & Operations Section of the EAS Department. As such he provides technical support to ALPA accident/incident investigation teams and representation on government, industry, and professional groups that could impact the transport pilot community. John is currently a member on the Subcommittee on Aircraft Safety of the FAA Research Engineering and Development Advisory Committee (REDAC), and the Joint Planning & Development Office (JPDO) Weather Working Group Committee.

Prior to joining ALPA, John worked in the Federal Government for 34 years in numerous engineering and management positions. At the time of retirement, he was the Deputy Director of the Aviation Safety Program within the Aeronautics Research Mission Directorate at NASA Headquarters. As Deputy Director, he provided executive leadership to research teams located across multiple NASA Centers, and collaborated with the FAA and Industry on the research and development of new technologies intended to improve the overall safety of air transportation. While at NASA, John served for 4 years as Flight Test Director on NASA's transport research aircraft located at the Langley Research Center in Hampton, Virginia. During this time he supported numerous flight test activities to include a joint FAA/NASA flight test program that evaluated and demonstrated airborne wind shear detection systems. This program provided the FAA with technical information needed to establish certification criteria for current airborne wind shear detection and alerting systems. Before joining NASA, John was an Air Safety Investigator with the National Transportation Safety Board, during which time he led technical teams in over 30 accident investigations to include the reconstruction and analysis of the Space Shuttle Challenger. John began his Federal career with the Navy as a Flight Test Project Engineer at the US Naval Flight Test Center, Patuxent River, Maryland.

John earned a BS in Aerospace Engineering from the University of Virginia in 1974 and an MS in Systems Management from the University of Southern California in 1978. He has a private pilot rating and is a Flight Test Engineer graduate of the US Naval Test Pilot School.