SPECIAL EVENTS

Tuesday, October 30

Opening Plenary Session

9:00 – 11:30 a.m.

Keynote Speakers:

Improving Aircraft Energy Management

Bob Witwer
Vice President of Advanced Technology
Honeywell Aerospace

Bob Witwer is the Vice President of Advanced Technology for Honeywell Aerospace, where he is responsible for defining the technology strategy and developing the pre-TRL6 technology for all of Honeywell Aerospace's products; propulsion engines, auxiliary power units, air management systems, electric power systems, flight controls, avionics, and sensors. Bob has over 30 years of aerospace experience, including leadership roles on the A320 Flight Management System, Boeing 777 Airplane Information Management System, and Honeywell Primus Epic avionics system. He is on the Industrial Advisory Board for the Arizona State University College of Innovation and Technology and a board member of the Arizona Technology Council.

Integrated Vehicle Energy Technology (INVENT), the Future of Energy Optimized Aircraft

Don Winter
Vice President of Flight & Systems Technologies
The Boeing Company

Don has been employed at Boeing and its predecessor companies for 33 years. He holds BS and MS degrees in Physics from the University of Missouri and an MBA from Washington University. He began his aerospace career with Rockwell Science Center in 1976, before joining McDonnell Douglas a year later.

Don held a number of avionics design and systems engineering assignments on the Tomahawk cruise missile program from 1977 to 1988. He joined the Mission Planning Division of McDonnell Douglas Missile Systems Company in 1988, serving in program management roles on the Tomahawk Mission Planning Upgrade and (UK) Automated Mission Planning Aid (AMPA) programs, 1988-91. In 1992 he was named Deputy Program Manager for the USAF Air Force Mission Support System (AFMSS). In 1995, he joined the Production Aircraft Advanced Design organization as Manager - Mission Systems, and founded the Common Operational Flight Program initiative, which later served as the foundation for the Bold Stroke advanced avionics program. He led Contract R&D programs under the Phantom Works (PW) Open Systems Architecture technology thrust from 1998 to 2001, when he became director of the overall thrust. He then led the PW Network Centric Operations thrust, focused on the development of key technologies and tools for network enabling Boeing systems and products, from its inception in 2003 through mid-2005. Don then assumed leadership of the Integrated Command and Control (IC2) business within Boeing Integrated Defense Systems. In 2006, Don returned to Phantom Works (now Boeing Research and Technology) to lead the Engineering and Information Technology organization, a global team of nearly 1,000 engineers and scientists performing leading edge research in domains ranging from aeronautics and propulsion to electronics, sensors and advanced information technology. In January of 2010, Don restructured his organization as Flight and Systems Technologies, increasing the emphasis on core flight sciences and elevating cyber security technology as a key emphasis area.

Don has authored numerous technical publications and serves, or has served, on advisory boards at the University of Cambridge, University of California-Berkeley, Vanderbilt University and Washington University. He also serves as a Board member for the Innovate St. Louis IT Coalition, an organization of civic leaders promoting St. Louis as a favorable business environment for IT companies. He is a national advocate for the formation of a research program on Cyber-Physical Systems spanning government, academia and industry.

Joint Strike Fighter (JSF), the First More Electric Fighter Aircraft

Alton D. Romig., Jr.
Vice President and General Manager of Advanced Development Programs (ADP)
Lockheed Martin Aeronautics Company

Dr. Alton D. Romig, Jr., PhD is Vice President and General Manager of Advanced Development Programs (ADP) for Lockheed Martin Aeronautics Company. In this capacity, he sets the strategic direction for the capture of new technology business and leads the management of the world-renowned Skunk Works®, the pre-eminent leader in aerospace innovation for nearly 70 years.

As the head of the Skunk Works®, Dr. Romig has the responsibility for the strategic and operational success of the product and technology front end of the Aeronautics Company business line. He leads the organization in the development of advanced systems concepts, product improvements and derivatives, advanced projects and programs, while supporting major program campaigns and capture opportunities across Aeronautics and the Lockheed Martin corporation.

Prior to joining Advanced Development Programs in January 2011, Dr. Romig spent more than 30 years with Sandia National Laboratories, which is operated by Lockheed Martin Corporation. While at Sandia, he held a variety of management assignments including Chief Technology Officer and Vice President for Science, Technology, and Partnerships; Chief Scientific Officer for the Nuclear Weapons Program, and ultimately Executive Vice President, Deputy Laboratories Director, and Chief Operating Officer responsible for all aspects of Laboratory business

Dr. Romig is a member of the National Academy of Engineering and the Council on Foreign Relations. He has served on numerous advisory councils and boards, including: the Intelligence Science Board; the Air Force Studies Board; the Standing Advisory Committee to the Special Operations Command; and the Standing Committee on Technology Insight. In 2011 he was named as a Senior Member of the American Institute of Aeronautics and Astronautics (AIAA.)

Dr. Romig received his Bachelor of Science, Master of Science and Doctorate degrees in Materials Science and Engineering from Lehigh University.

Adaptive Engines, Systems, & Avionics for Future Aircraft

Frank Flores
Vice President, Engineering
Unmanned Systems
Northrop Grumman Aerospace Systems

Frank Flores is vice president, Engineering, for Unmanned Systems at Northrop Grumman Aerospace Systems, a premier provider of manned and unmanned aircraft, space systems and advanced technologies critical to our nation's security.

Flores is responsible for managing and deploying people, processes, tools and test resources in support of Unmanned Systems programs, along with development of design and support engineering processes, tools and procedures that maximize collaborative development across the enterprise.

Since joining Northrop Grumman in 1978 at the legacy TRW Company, Flores' career has spanned a wide range of roles from functional management to business development to program management positions. Most recently, he was sector vice president, Engineering and Programs at the former Integrated Systems sector. During his career, Flores has contributed to the successful development of satellite communication systems; avionics communications systems for advanced fighters; and terrestrial radio systems.

As one of the founders of the Radio Systems organization at Northrop Grumman, Flores was instrumental in establishing Northrop Grumman's software-defined radio technology as the baseline on the F/A-22, Comanche and F-35 Joint Strike Fighter programs.

Flores holds a Bachelor and Master of Science in electrical engineering from the University of Southern California. His graduate work focused on communications systems design. Flores is also a graduate of the University of California, San Diego, Executive Program for Scientists and Engineers. He is a Six Sigma Green Belt.

Northrop Grumman is a leading global security company providing innovative systems, products and solutions in aerospace, electronics, information systems and technical services to government and commercial customers worldwide.

SPECIAL EVENTS

Tuesday, October 30

Award Luncheon
Garrett Lecture
11:30 a.m. – 1:00 p.m.

Luncheon Speaker:
From Fordsons to Jets: A Designer's Journey
Paper # 2012-01-2155

Bernard L. Koff
(Retired)
Executive Vice President of Engineering and Technology
Pratt & Whitney

Bernard L. Koff is a pioneer whose leadership in the gas turbine industry for 60 years has produced a host of innovative breakthroughs in design and development. With General Electric and Pratt & Whitney, from which he retired as Executive Vice President of Engineering and Technology, his contributions impacted the design and development of over half of all jet engines flying. His patents and highly regarded technical papers cover the entire spectrum of jet engine design and manufacturing technology.

The score of honors and awards he has received are among the highest that his industry can bestow and include the ASME/AIAA/SAE Daniel Guggenheim Medal, Air Force Association Theodore von Karman Award, AIAA Reed Aeronautics Award (it's highest), AIAA Air Breathing Propulsion Award, AIAA Engineer of the Year, AIAA & SAE Littlewood Lecture Award, ASME Tom Sawyer Award, SAE Franklin Kolk Award, the GE Perry Egbert Award and the P&W George Mead Medal.

He was also awarded positions of Fellow and Honorary Member of the ASME, Fellow of both the AIAA and SAE and member of the National Academy of Engineering.

Welcome Reception
Exhibit Hall
5:30 – 6:30 p.m.
Sponsored by:

Honeywell

SPECIAL EVENTS

Wednesday, October 31

Award Luncheon
McFarland Award
11:30 a.m. – 1:00 p.m.

Luncheon Speaker:

787 More-Electric Systems Architecture and Future Trends

Dan Murray
Chief Engineer, Electronic Systems
Boeing Commercial Airplanes

Dan Murray is chief engineer of Electronic Systems for Boeing Commercial Airplanes. In this role within the Airplane Systems organization, he is responsible for product definition, product integrity, production support and strategy for Avionics, Cabin Systems, Electrical Power and Subsystems, Network Systems and Software across Boeing Commercial Airplanes Engineering.

In his career, Murray has led various core and airplane program systems teams within Boeing Commercial Airplanes. Murray spent five years on the 787 Dreamliner program in various leadership assignments including engineering director of 787 Systems and engineering director of Systems for 787 Derivatives and Mission Improvement. Murray started work on the 787 program at program launch as senior manager of 7E7 Avionics & Common Core Systems. Prior to that, he spent four years on the 777 program as senior manager of 777 Systems and Equipment. He assumed overall systems leadership for the 777-300ER/200LR development program in March 2003. Earlier in his career Murray worked in a variety of system development roles with the Avionics Systems organization within Boeing Commercial Airplanes, including 757/767, 747-400 and 777 Flight Management Computer Systems. His development focus on those programs included flight crew interface design, air-ground datalink communication, navigation and guidance.

Murray joined the Boeing Company in 1984, and has a Bachelor of Science degree in Aerospace Engineering from Virginia Tech. He and his wife Mary have four sons. His hobbies include tennis and coaching youth sports.