

**0800 – 1000 hrs**

**“Establishing Policies to Enhance Test and Evaluation Support to Acquisition Programs”**

**Panel Moderator:**

**Robert (Bob) Arnold**

Bob is a passionate, lifelong, test and evaluation professional with 48 years of experience in industry and government. He is currently the Technical Advisor for the 46<sup>th</sup> Test Wing at Eglin Air Force Base, Florida. In this capacity, he provides technical guidance to all echelons of the Wing, and serves as the final review authority for technical directives and reports. He leads investment programs and ensures that test and evaluation capabilities are modernized to support future customer/warfighter needs.

Bob began his career in industry (with then Ling Temco Vought Aerospace, Dallas, TX) conducting A-7 and F-8 ground and flight testing at company, Air Force, and Navy facilities and ranges. In previous positions with the Air Force, he led A-10 and F-15 weapon test programs at Edwards Air Force Base, California. At Eglin, he has managed test and evaluation programs involving practically every type of weapon and aircraft in the Air Force inventory. He formed the corporate planning directorate for the new Air Armament Center at Eglin and led strategic planning for test and evaluation. He has been instrumental in preserving core test and evaluation capabilities and for strengthening cooperation and partnerships among the military Services and with industry. Bob received a BS in Aerospace Engineering from the University of Florida and a MS in Systems Engineering from the University of Southern California. He is a graduate of the Air War College and the Federal Executive Institute. Bob has been an active contributor to ITEA and other organizations in advancing the state of the art in test and evaluation. He currently serves on the ITEA Board of Directors for the Emerald Coast Chapter and on the Executive Committee for the Range Commanders Council. His many awards include industry Engineering Achievement Award, major command Certificate of Merit and Civilian of the Year, and most recently the Air Force Association’s Lewis Brereton Award.

**Panel Speakers:**

**Maj Gen David Eichhorn**

Maj. Gen. David J. Eichhorn is the Commander, Air Force Operational Test and Evaluation Center, Kirtland Air Force Base, N.M. General Eichhorn reports directly to the Air Force Chief of Staff regarding the test and evaluation of more than 76 major programs valued at more than \$650 billion being assessed at 12 different locations. He directs the activities of more than 625 civilian and military people, as well as 225 contractors. As a member of the test and evaluation community, General Eichhorn coordinates directly with the offices of the Secretary of Defense and Headquarters U.S. Air Force while executing realistic, objective and impartial operational testing and evaluation of Air Force, coalition and joint warfighting capabilities.

General Eichhorn entered the Air Force as a distinguished graduate through the Reserve Officer Training Corps in 1976. In earlier assignments he served as an experimental test pilot, and his commands include two flight test squadrons, a test group, a test wing, the Arnold Engineering Development Center and the Air Force Flight Test Center. A certified acquisition professional, he served at the Electronic Systems Center as the Vice Commander, where he was previously assigned as Director of Advanced Command, Control and Communications Systems as well as Director of Advanced Aircraft Systems. He has also served as Director of the Aeronautical Enterprise Program Office and Deputy Program Executive Officer for Aircraft at the Aeronautical Systems Center. At Headquarters Air Force Materiel Command he was Deputy Director of Plans and Programs, and Director of Air,

Space and Information Operations. General Eichhorn has flown the B-52D/H, B-1B, F-111 and T-38, serving as an instructor pilot and aircraft commander. He has accumulated more than 6,100 hours in more than 47 aircraft types.

### **Ricky L. Peters**

Ricky L. Peters, a member of the Senior Executive Service, is the Director of Test and Evaluation, Headquarters U.S. Air Force, Washington, D.C. He is responsible for policy, resources and oversight of developmental and operational testing, and is a focal point for foreign materiel acquisition and exploitation. He oversees an Air Force test infrastructure valued at over \$4 billion. He also leads the programming and execution for the U.S. Air Force test portfolio with an annual budget of \$1.9 billion and 14,600 personnel.

Mr. Peters, a native of New Lebanon, Ohio has served in numerous leadership positions to include the Air Force Research Laboratory, Aeronautical Systems Center, Arnold Engineering Development Center and Air Force Materiel Command. He began his career with the Air Force in 1980 as an aircraft survivability test engineer followed by assignments in laser hardened materials, modeling and simulation, and aeronautical sciences research. He has led teams investigating future aircraft concepts, inlet and propulsion integration, and computational fluid dynamics. Mr. Peters also led a program for the Federal Aviation Administration to determine the quantity of explosives required to bring down a commercial aircraft. He has a strong background in civilian personnel and was instrumental in developing the Laboratory Personnel Demonstration Project. Prior to his assignment in AF/TE, he was Deputy Director of Air, Space and Information Operations, Headquarters Air Force Materiel Command.

### **Maj. Gen. Kenneth D. Merchant**

Maj. Gen. Kenneth D. Merchant is Commander, Air Armament Center, and Air Force Program Executive Officer for Weapons, Air Force Materiel Command, Eglin Air Force Base, Fla. The center is responsible for the development, acquisition, testing, deployment and sustainment of all air-delivered weapons. Additionally, AAC plans, directs and conducts test and evaluation of U.S. and allied air armament, navigation and guidance systems, and command and control systems. The center supports the largest single-base mobility commitment for AFMC and the second largest in the Air Force.

General Merchant was commissioned in 1980 through the Air Force ROTC program at Grove City College, Pa., where he earned a bachelor's degree in engineering management. He has been a program manager on numerous weapon system development and production programs, including the F-22, E-3, Air Force One, KC-10, E 4, Wind Corrected Munitions Dispenser, Sensor Fused Weapon, Joint Standoff Weapon, Low Altitude Navigation and Targeting Infrared System for Night, GBU-15 and the AGM-130.

The general has also served as Air Staff Program Element Monitor for the Advanced Medium Range Air-to-Air Missile, and executive officer to the Commander, Pacific Air Forces. He directed an Area Attack Systems Program Office, Contractor Logistics Support Aircraft Materiel Systems Group, and Battle Management Command, Control and Computer Systems Wing. His commands include the Airborne Warning and Control System and Airborne Early Warning Control Systems Group as well as the 551st Electronic Systems Wing at Hanscom AFB, Mass. Prior to his current assignment, he was Director of Logistics, Headquarters Air Mobility Command, Scott AFB, Ill.

**1000 – 1200 hrs**

**T&E Days Second Panel**

**“Building and Maintaining Test Capabilities in Uncertain Times”**

## **Panel Moderator:**

### **Eileen Bjorkman**

Eileen A. Bjorkman, a Senior Level executive, is Chief Technologist, Air Force Flight Test Center, Edwards Air Force Base, California. She provides leadership and final review of the technical aspects of the center's overall program as well as consultant advice and technical guidance to agencies within and outside the center. In collaboration with the center commander, Ms. Bjorkman establishes test and evaluation technical policy and procedures, and provides technical expertise and direction to the AFFTC work force. She also formulates testing philosophy and testing approaches to assure scientific validity, effectiveness and efficiency in accomplishing ground and flight tests. Ms. Bjorkman served nearly 30 years as an Air Force officer, retiring as a colonel. During her military career she served as a flight test engineer, instructor and test squadron commander. She was a senior non-rated aircrew member and flew more than 700 hours as a flight test engineer in over 25 different aircraft, primarily the F-4, F-16, C-130 and C-141. She also held multiple staff and director positions involving modeling, simulation, analysis and joint testing. She has a B.S. in Computer Science from the University of Washington and both B.S and M.S. in Aeronautical Engineering from the Air Force Institute of Technology.

## **Panel Speakers:**

### **Dennis O'Donoghue**

Dennis O'Donoghue, an experimental test pilot, is vice president of Boeing Test & Evaluation, part of the Engineering, Operations & Technology (EO&T) organization of Boeing. In this role, he is responsible for laboratory and flight test operations, in support of validation and certification of Boeing commercial and defense products.

O'Donoghue leads an organization of about 6,500 engineers, pilots, mechanics and technicians. The group is responsible for test and evaluation of new Boeing aircraft, modification and upgrades to existing aircraft, and test support to certain Boeing businesses.

O'Donoghue's first Boeing assignment was in 1996 as the lead test pilot of the X-32B STOVL Joint Strike Fighter Concept Demonstrator Aircraft program. In this role, he was heavily involved in all aspects of design, development and flight test of both the X-32A and X-32B. During the summer of 2001, he commanded the first flight and flew the first hovers and first vertical landings of the X-32B. Subsequent to the JSF program, he was assigned as deputy project pilot for the Sonic Cruiser and the 7E7/787 programs. In this capacity, he was involved in all aspects of the design of the aircraft, with particular emphasis on development, simulation and validation of flight controls and the pilot-vehicle interface. In November 2004, he was promoted to chief pilot, Production Test Operations, with responsibility for production flight test of all Boeing transport category aircraft. O'Donoghue left Boeing in July 2005 to serve as director of Flight Operations and chief test pilot of the Eclipse 500 Very Light Jet (VLJ) program at Eclipse Aviation Corporation. On his return to Boeing in July 2006, he briefly served as vice president of Flight Operations for Commercial Airplanes before becoming the leader of Commercial Airplanes' Flight Operations, Test and Validation organization. He assumed his current responsibilities in January 2009.

Prior to his Boeing career, O'Donoghue was a NASA research test pilot at Lewis Research Center, Cleveland, Ohio. He conducted exploratory flight tests, airborne science projects and space support missions on various aircraft platforms including the DC-9, DHC-6, G-159, Lear 25, OV-10, T-34, and YAV-8B Harrier.

O'Donoghue's military experience includes 12 years of active duty as a U.S. Marine Corps fighter pilot and test pilot. He flew operational missions in the A-4M, AV-8A and AV-8B Harrier aircraft, and engineering flight tests on

the AV-8B and F-14 Tomcat. In 1994, O'Donoghue transferred to the U.S. Air Force Reserve where he flew the C-130, C-141 and C-17. He commanded both the 728th Airlift Squadron and the 446 Airlift Wing, stationed at McChord Air Force Base, Wash. He retired from the Air Force Reserve in September 2005 at the rank of Colonel. O'Donoghue holds a bachelor's degree in mechanical engineering from the U.S. Naval Academy, a master's degree in aviation systems from the University of Tennessee Space Institute, and an MBA from the University of Washington. He is a graduate of the U.S. Navy Test Pilot School, and is a Fellow of the Society of Experimental Test Pilots as well as the Royal Aeronautical Society. He has logged more than 6,000 hours in 81 different aircraft types including fixed-wing and rotary-wing vehicles, and holds type ratings in the B-737, B-757, B-767, B-777, B-787, DC-9, G-159, L-300, L-382, NH-T38, T-33 and AV-L39.

### **Jaiwon Shin**

Dr. Jaiwon Shin is the associate administrator for the Aeronautics Research Mission Directorate. In this position, he manages the agency's aeronautics research portfolio with an annual budget of about \$570M and guides its strategic direction. This portfolio includes research in the fundamental aeronautics of flight, aviation safety and the nation's airspace system.

Shin co-chairs the National Science & Technology Council's Aeronautics Science & Technology Subcommittee. Comprised of federal departments and agencies that fund aeronautics-related research, the subcommittee wrote the nation's first presidential policy for aeronautics research and development (R&D). The policy was established by Executive Order 13419 in December 2006 and will guide U.S. aeronautics R&D programs through 2020. The subcommittee finished writing the National Aeronautics R&D Plan in December 2007 and is currently writing the Research, Development, Test and Evaluation (RDT&E) Infrastructure Plan both of which were called for by the Executive Order.

Between May 2004 and January 2008, Shin served as deputy associate administrator for the Aeronautics Research Mission Directorate where he was instrumental in restructuring NASA's aeronautics program to focus on fundamental research and better align with the nation's Next Generation Air Transportation System (NextGen).

Prior to coming to work at NASA Headquarters, Shin served as chief of the Aeronautics Projects Office at NASA's Glenn Research Center. In this position he had management responsibility for all of the center's aeronautics projects. Prior to this he was Glenn's deputy director of aeronautics, where he provided executive leadership for the planning and implementation of Glenn's aeronautics program, and interfaced with NASA Headquarters, other NASA centers, and external customers to explore and develop technologies in aeropropulsion, aviation safety and security, and airspace systems.

Between 1998 and 2002, Shin served as chief of the Aviation Safety Program Office, as well as the deputy program manager for NASA's Aviation Safety Program and Airspace Systems Program. He assisted both program directors in planning and research management.

Shin received his doctorate in mechanical engineering from the Virginia Polytechnic Institute and State University, Blacksburg, Virginia. His bachelor's degree is from Yonsei University in Korea and his master's degree is in mechanical engineering from the California State University, Long Beach. His honors include the 2008 Presidential Rank Award for Meritorious Senior Executive, NASA's Outstanding Leadership Medal, NASA's Exceptional Service Medal, a NASA Group Achievement Award, Lewis Superior Accomplishment Award, three Lewis Group Achievement Awards, and an Air Force Team Award. He is a graduate of the Senior Executive Fellowship Program at the Kennedy School of Government at Harvard University. He has extensive experience in high speed research and icing, and has authored or co-authored more than 20 technical and journal papers.