Ali Bahrami
Associate Administrator for Aviation Safety

Long-time aviation executive Ali Bahrami became the FAA’s Associate Administrator for Aviation Safety on July 10, 2017. Previously, he was vice president for civil aviation at Aerospace Industries Association, a Washington, D.C., based trade association that represents the nation’s leading aerospace and defense manufacturers and suppliers.

As associate administrator, Mr. Bahrami leads the organization responsible for setting safety standards and overseeing all parts of the aviation industry — airlines, manufacturers, repair stations, pilots, mechanics, air traffic controllers, flight attendants, and any person or product that operates in aviation. These programs have a direct impact on every facet of domestic and international civil aviation safety.

The Aviation Safety Organization’s programs are carried out by 7,400 employees located in the Washington headquarters, regional offices, and 125 field offices throughout the world. The organization’s annual budget is more than $1.4 billion.

Mr. Bahrami first joined the FAA as an engineer in 1989, and from 2004-2013 served as manager of the Transport Airplane Directorate. He directed the U.S. validation of the Airbus 380 through successful collaboration with the manufacturer and the European Aviation Safety Agency. He also directed the FAA certificaiton of the Boeing 787 and the 747-8 passenger and freighter models. Mr. Bahrami came to the FAA following a 10-year stint at Douglas Aircraft, where he was a senior engineer. There he was the lead engineer responsible for aerodynamic and structural loads analysis on large commercial airplanes, such as the MD-80 and the MD-11.

Earl Lawrence
Executive Director, Aircraft Certification Service

Earl Lawrence serves as the FAA’s Executive Director of the Aircraft Certification Service (AIR), which is responsible for type certification, production approval, airworthiness certification, and continued airworthiness of the United States civil aircraft fleet, including commercial and general aviation activities. Mr. Lawrence overseas a professional workforce of more than 1,300 employees working throughout the U.S. and at two international offices in Belgium and Singapore.

Prior to his current assignment, Mr. Lawrence was director of the Unmanned Aircraft Systems (UAS) Integration Office. The UAS Integration office is responsible for the facilitation of all regulations, policies, and procedures required to support the FAA UAS integration efforts. The office serves as a central point of contact for the international aviation community on UAS issues. He also represented the FAA on the Senior Steering Group of the UAS Executive Committee focusing on coordination and alignment of efforts among key federal government agencies.

Mr. Lawrence previously served as the manager of the FAA’s Small Airplane Directorate in Kansas City, Missouri, where he managed airworthiness standards, continued operational safety, policy, and guidance for small aircraft, gliders, light sport aircraft, airships, and balloons. Before joining the FAA in 2010, Mr. Lawrence was the vice president of industry and regulatory affairs for the Experimental Aircraft Association (EAA) in Oshkosh, Wisconsin. In that position, he managed EAA’s government affairs offices in Oshkosh and Washington, D.C., as well as EAA aircraft maintenance and flight operations. A pilot since 1987, Mr. Lawrence holds a commercial multi-engine pilot certificate as well as an airframe and powerplant mechanic certificate with an Inspection Authorization. He owns and flies a Piper Twin Comanche.
NTSB Auditorium, 420 10th Street, SW, Washington, D.C. 20024
October 24, 2019
8:00 AM - 4:30 PM

Welcome and Opening Remarks
8:00 a.m.
Earl Lawrence, FAA Aircraft Certification Service Executive Director

Keynote Address: A Call to Action to Improve Safety
8:10 a.m.
Ali Bahrami, FAA Associate Administrator for Aviation Safety

Plenary Session A: Examining the Issue
8:45 a.m.
Thomas Stafford, Manager/Lead, Commercial Jet Engine Safety Review Team, FAA
James Gray, Aerospace Engineer-Engine & Propeller Standards Branch, FAA
Chris Parker, Section Manager, Transport Standards Branch, FAA
Chad Shackford, Aircraft Evaluation Group, FAA

Purpose: FAA representatives will present the results of their analysis of engine and airframe-engine integration related accidents and incidents from 2014-2018. They will reflect on the broader safety trends, and identify potential areas of interest associated with manufacturing defects and escapes, uncontained engine failures, ice crystals, maintenance and critical inspections, ETOPS, and more. Topics also will include fleet safety/data management and safety management systems.

Panel 1: Airframe-Engine Regulatory Issues Affecting Design, Production, and Oversight
10:30 a.m.
Stephen F. Clark, Senior Chief Engineer, Boeing Commercial Airplanes Propulsion and Fuels
Johann Hervault, Senior Manager, Head of Propulsion Systems Integration Dept, Airbus Operations
Sarah Knife, Chief Consulting Engineer, Product Safety, General Electric
Keith Morgan, Technical Fellow, Certification & Airworthiness, Pratt & Whitney
Belinda Swain, Head of Airworthiness Assurance and Regulation, Rolls-Royce Plc
Dave Hempe, Regulatory Operations, Deputy Executive Director, FAA

Purpose: This panel will facilitate a discussion on regulations, guidance, and directives, including certification, continued operational safety, production, oversight, and reporting requirements. The panel will deliberate on the adequacy of existing policy and guidance and certification, production, oversight processes, and areas for additional study.

Outcome: This session is intended to be an open dialogue between all participants that will provide an opportunity to capture stakeholder feedback.

Break
11:15 a.m.

Lunch
11:30 a.m.

Panel 2: Operational & Maintenance Regulatory Issues and Oversight
1:00 p.m.
Cory Boese, Senior Manager, Powerplant Program Engineering, Southwest Airlines
Dag Johnsen, Director, Tech Ops, Powerplant Engineering, United Airlines
Jon Oberdick, Managing Director, Powerplant Product Team, American Airlines
Todd Martin, Manager, Power Plant, Alaska Airlines
Tim Shaver, Director, Office of Safety Standards, FAA

Purpose: This panel will facilitate a discussion on regulations, guidance, and directives, including fleet data, fleet monitoring, safety trends, safety management systems, and critical inspections. The session will touch on the impact of new technology, common operational and maintenance issues, safety management systems, best practices, and regulatory challenges.

Outcome: This session is intended to be an open dialogue between all participants that will provide an opportunity to capture stakeholder feedback and best practices.

Break
2:15 p.m.

Collaborative Questions and Answers Session
2:15 p.m.
Joint FAA and Industry Panel Representatives

This session will be a chance for panel participants to discuss questions and issues that were submitted throughout the panel presentations. We see this as an opportunity to collectively engage in answering questions that were identified earlier in the summit.

Plenary Session B: Integration and Working Together
3:15 p.m.
Gaetano (Tom) Sciorlino, Deputy Director, Compliance and Airworthiness Division, FAA
Dave Hempe, Regulatory Operations, Deputy Executive Director, FAA
Tim Shaver, Director, Office of Safety Standards, FAA
Thomas Stafford, Manager/Lead, Commercial Jet Engine Safety Review Team, FAA

Purpose: This session will be a chance for all summit attendees to talk about their takeaways from the day’s discussions. We want to leave with mitigation strategies, best practices, and recommendations for how we can work together to improve airframe-engine safety. We see this summit as a beginning toward relationships that will encourage increased safety for the flying public.

Recap and Closing Remarks
4:15 p.m. - 4:30 p.m.
Earl Lawrence, FAA Aircraft Certification Service Executive Director
PANELIST BIOGRAPHIES

Cory Boese
Southwest Airlines
Cory Boese works as Southwest Airlines’ Powerplant Programs senior manager. He leads Southwest’s powerplant team to define the configuration and maintenance specifications of the airline’s powerplant fleet and provide 24/7 technical support to Southwest’s Technical Operations Department. He joined Southwest in 2012. Mr. Boese began his 23 year aviation career as a KC-130 military plane aerial navigator in the U.S. Marine Corps. Mr. Boese later worked as an operations agent at FedEx ground operations; powerplant test and performance engineer at Northwest Airlines; and a structural integrity engineer at Cessna Aircraft Corporation. He also worked as an engineering supervisor for six years in the nuclear power industry at Xcel Energy. Mr. Boese earned his bachelor’s degree in aerospace engineering and mechanics from the University of Minnesota.

Stephen (Steve) Clark
Boeing Commercial Airplanes
Steve Clark is the senior chief engineer for Boeing Commercial Airplanes propulsion and fuels. He is also a Boeing principal senior technical fellow. During his 35 year career with Boeing, Mr. Clark has worked on a range of commercial and military aircraft programs. He started at Boeing as a propulsion analysis engineer on the Condor High Altitude Unmanned Air Vehicle. In the 1990s, he developed auxiliary power and main propulsion systems for the F-22 and X-32 fighter aircraft. Subsequently, Mr. Clark moved to the Boeing Commercial Aircraft Propulsion Systems Division as part of the 777-300ER/LR propulsion system certification program. He later served on the Boeing Engine Audit Team. Recent assignments have included propulsion and fuels chief engineer positions on the Boeing 787 and KC-46 aircrafts. Before he joined Boeing, Mr. Clark served as a U.S. Navy officer on a gas turbine-powered destroyer and later as a member of the Pacific Fleet Propulsion Examining Board. He is a U.S. Naval Academy graduate and has advanced degrees in mechanical engineering and engineering management from the University of Washington and Washington State University, respectively.

James Gray
FAA
James Gray works as the focal for risk methodology, continued operational safety, and safety analysis in the FAA Engine and Propeller Standards Branch. Before he was promoted to the standards branch, Mr. Gray worked in the engine certification office, where he managed continued operational safety issues across multiple engine manufacturers. He joined the FAA after working for General Electric as an engineer in life management and then later in engine performance. He has a bachelor’s degree in mechanical engineering and a master’s degree in manufacturing engineering from Boston University.

David (Dave) W. Hempe
FAA
Dave Hempe is the deputy executive director for regulatory operations for the Aircraft Certification Service (AIR), where he has championed safety management and streamlining the certification process. Before his promotion in August 2015, Mr. Hempe managed AIR’s Design, Manufacturing, and Airworthiness Division for about 13 years. He oversaw the development of federal aviation regulations, national directives, policy, procedures, advisory material pertaining to continued operational safety, type certification, design approvals, production approvals, airworthiness certification, authorization, and oversight of designated representatives of the administrator. Prior to 2002, Mr. Hempe served as deputy manager of the Aircraft Engineering Program Manager, program manager on various Part 21 (a section of federal regulations) areas, and was a structural engineer for the Los Angeles Aircraft Certification Office, including the structural program manager for the MD-90 airliner program; Mr. Hempe began his career with the Douglas Aircraft Company in 1985 as an engineer scientist working on projects, such as the T-45 military jet, and the DC-10 and MD-11 airliner loads, dynamics and structural areas. He earned a bachelor’s degree in aerospace engineering from St. Louis University.

Johann Hervault
Airbus
Johann Hervault leads Airbus’ Propulsion Systems Integration Design Office, where he is responsible for the Airbus fleet’s propulsion systems integration, both for in-service aircraft and those under research and development. He also has been serving as Airbus’ senior expert on propulsion safety and airworthiness for more than 10 years. Mr. Hervault joined Airbus in 1987 and has actively participated in the safety assessment of various aircraft systems, in particular propulsion. Mr. Hervault, for example, has been the propulsion safety leader for the A340/A330 airliners. Since the start of the A380 airliner’s development, Mr. Hervault has led the propulsion certification and safety team for the project. As an Airbus expert, he has chaired and participated in several international committees, dealing with propulsion certification, safety and accident prevention. He was part of the first team that launched the FAA Continued Airworthiness Assessment Methodologies (CAAM) program in 1991, and participated in various propulsion systems safety and airworthiness rulemaking efforts. He was promoted to his current position in 2014.

Dag Johnsen
United Airlines
Dag Johnsen is United Airlines’ director of powerplant engineering and brings more than 30 years of experience in airline engineering to the summit. He started his career at Continental Airlines as a program engineer for auxiliary power units, and engine programs, such as the CF6 and GE90. Mr. Johnsen transitioned to engineering leadership in 2004, becoming Continental Airlines’ manager of systems engineering. Mr. Johnsen has been involved in several industry initiatives, such as the B787 Systems Preliminary and Critical Design Review. He participated in the Boeing B777 HSG-3 Maintenance Steering Group, developing the B777/GE90 engine maintenance program. He was also part of the Boeing Maintenance Error Decision Aid (MEDA) development, a joint industry working group to track and analyze operator maintenance induced errors. He has presented several topics at aerospace and industry conferences throughout his career, including coauthoring an industry paper on “Experience with the Electronic Oil Debris Monitoring System of the General Electric GE90 Gas Turbine Engine on the Boeing 777 Aircraft”. He earned a bachelor’s degree in aerospace engineering from Northrop University in California. He is also a licensed pilot and enjoys recreational flying.
Sarah Margaret Knife  
General Electric Aviation  
Sarah Margaret Knife works as chief consulting engineer for safety and reliability for General Electric Aviation. In that role, Dr. Knife leads industry in partnership with government regulators to develop safety policies, regulations and strategies at the national and international level. She also negotiates safety-related regulatory requirements/means of compliance, promotes prioritization and effectiveness, and works to minimize unintended burdens to businesses. Dr. Knife advocates for safety management systems (SMS) across businesses, communicating concepts, roles and responsibilities at all levels, enabling compliance with the International Civil Aviation Organization’s SMS tenets. She also leads General Electric’s engineering divisions in addressing critical factors driving safety and reliability issues; supports proactive design/process improvements and develops corrective actions. Before she joined General Electric, she worked for Boeing and Rolls-Royce. Dr. Knife earned her bachelor’s degree in physics at Victoria University of Manchester and a doctorate degree in aeronautics from Cranfield University, both in the United Kingdom.

Todd Martin  
Alaska Airlines  
Todd Martin is the current Powerplant Engineering/Engineering ETOPS Program Team Leader for Alaska Airlines. Mr. Martin and his team work to manage engine and auxiliary power unit safety, regulatory compliance, as well as configuration and reliability initiatives for all fleets at Alaska Airlines. With nearly 30 years of aircraft/engine maintenance and engineering experience, Mr. Martin’s resume includes tenures as an aviation maintenance technician, maintenance leader, and engineer.

Keith R. Morgan  
Pratt & Whitney  
Keith R. Morgan serves as a certification and airworthiness technical fellow at Pratt & Whitney, providing certification and continued airworthiness related leadership and guidance throughout the company. Mr. Morgan also chairs the US Aerospace Industries Association (AIA) Propulsion Subcommittee and the Aviation Rulemaking Advisory Committee Transport Aircraft and Engine Subcommittee. He is a member of the International Coordinating Committee of Aerospace Industries Associations (ICCAIA) Airworthiness Committee. Altogether, he brings more than 40 years of experience and expertise to this summit. Mr. Morgan received his bachelor’s degree in mechanical engineering from Syracuse University and his master’s degree in management from Rensselaer Polytechnic Institute, both in New York state.

Jon Oberdick  
American Airlines  
Jon Oberdick works as the managing director for the Powerplant Product Team at American Airlines, where he is responsible for the technical and production oversight of American Airlines’ engine programs. During the 31 years he has worked at US Airways and American Airlines, 24 of those years in management, Mr. Oberdick has worked in a range of aircraft maintenance technical arenas. They have included new aircraft acquisitions; structural repairs and modifications; avionics upgrades; aircraft recovery and accident investigations; fuel and icing programs; engineering and day-to-day support of line maintenance. He has served on such boards as the FAA Airworthiness Assurance Working Group; Airlines for America Airworthiness Committee; and the Airlines for America Engineering Maintenance and Material Council. Before joining the airline industry, Mr. Oberdick worked as an engineer at Lockheed and General Dynamics. He earned a bachelor’s degree in civil engineering from Penn State University and master’s degree in business administration from Robert Morris University in Pennsylvania.

Christopher (Chris) Parker  
FAA  
Chris Parker manages the FAA Transport Standards Branch’s Propulsion & Mechanical Systems Section, where he oversees the development of transport airplane standards, policies, and guidance for wheels, brakes, fire control, hydraulic systems, cabin pressurization and ventilation, oxygen systems, and engine and airframe ice protection systems, noise, fuel systems, engine operating characteristics, and engine installations. Mr. Parker joined the FAA in September 2009 as a Propulsion Section engineer in the Seattle Aircraft Certification Office Branch (Seattle ACO). He served a year as the propulsion focal on the Boeing 787 No-PNL process, streamlining the FAA issue paper process, and developing bilateral relationship and validation process improvements with Canada and the European Union. Mr. Sciortino was promoted to deputy director in February 2018 after working for about six years as the New York Aircraft Certification Office manager. Previous FAA assignments include serving as an FAA international field representative, working out of Brussels, Belgium. He managed FAA priorities and policies throughout Europe and the Middle East, including playing a major role in the implementation of the bilateral agreement between the United States and the European Union. He joined the FAA in 2001 after working as an FAA Designated Airworthiness Representative, as vice president for operations for an aircraft completion center, a chief inspector/systems analyst for a scheduled air carrier, and as a forensic/inspector for an on-demand charter and sightseeing operator in New York City.

Gaetano (Tom) Sciortino  
FAA  
Tom Sciortino serves as deputy director for strategic initiatives in the FAA Aircraft Certification Compliance and Airworthiness Division. He brings 43 years of aviation experience to the summit, including 18 years with the FAA, and as a licensed airframe and powerplant mechanic. Currently, he oversees 11 aircraft certification offices across the United States. His accomplishments include co-developing the Organization Designation Authorization (ODA) Scorecard, introducing the ODA No-PNL process, streamlining the FAA issue paper process, and developing bilateral relationship and validation process improvements with Canada and the European Union. Mr. Sciortino was promoted to deputy director in February 2018 after working for about six years as the New York Aircraft Certification Office manager. Previous FAA assignments include serving as an FAA international field representative, working out of Brussels, Belgium. He managed FAA priorities and policies throughout Europe and the Middle East, including playing a major role in the implementation of the bilateral agreement between the United States and the European Union. He joined the FAA in 2001 after working as an FAA Designated Airworthiness Representative, as vice president for operations for an aircraft completion center, a chief inspector/systems analyst for a scheduled air carrier, and as a forensic/inspector for an on-demand charter and sightseeing operator in New York City.

Chad Shackford  
FAA  
Chad Shackford works as an FAA aviation safety inspector in the Transport Aircraft Evaluation Group. He is responsible for evaluating new aircraft and technologies during the certification process. He leads the FAA Flight Operations Evaluation Board (FOEB), which develops the Master Minimum Equipment List (MMEL) and the FAA Flight Standardization Board (FSB), which develops the training requirements in the FSB report for new aircraft and equipment. He joined the FAA in 2008 as an aviation safety inspector/flight procedure policy specialist. He later worked as an aeronautical information specialist in the FAA’s weather operations department. As a weather operations specialist, Mr. Shackford’s career took him from flying under $100K Denali flight operations, to corporate, to corporate flight instructor, to commercial airline pilot, and instructor. He earned a bachelor’s degree in aviation technology from Purdue University in Indiana.
Timothy (Tim) Shaver
FAA
Timothy W. Shaver is the director for the Office of Safety Standards in the Federal Aviation Administration’s Flight Standards Service. The Office of Safety Standards consists of eight divisions responsible for policy and guidance regulations, aircraft evaluation, air transportation, aircraft maintenance, general aviation and commercial safety, safety analysis and promotion, international programs, flight technologies, and regulatory support. Under Mr. Shaver’s leadership, the office supports certificate oversight, surveillance, and stakeholders’ management decisions. Previously, Mr. Shaver was the Aircraft Maintenance Division manager until he was promoted deputy director for the Office of Safety Standards. He joined Flight Standards as the Aircraft Maintenance Division’s Avionics Branch manager in 2009 after working in the FAA Aircraft Certification Service’s Avionics Systems Branch. Before he joined the FAA, Mr. Shaver spent 14 years at a part 121 air carrier working in various capacities, including as an avionics airworthiness manager, avionics engineer, and radio and electrical mechanic. Mr. Shaver started his aviation career serving eight years as a guidance and control technician in the U.S. Air Force performing in-shop and on aircraft troubleshooting, repair, inspection and maintenance.

Thomas (Tom) Stafford
FAA
Tom Stafford leads the Congressionally mandated FAA Engine and Airframe-Engine Integration Team, which is hosting this summit. He joined the FAA in September 2002 as an engineer in the Seattle Aircraft Certification Office (SACO). He later became a program manager in the FAA International Branch, where he oversaw the validation of Airbus and Gulfstream products and led a multi-year FAA shadow evaluation of the Civil Aviation Administration of China. Mr. Stafford was promoted as a front line manager in the SACO and served as a special assistant at FAA Aircraft Certification headquarters in Washington D.C. Before he joined the FAA, Mr. Stafford worked for Boeing in Seattle, where he began his commercial aviation career as an engineer in 1990. He was assigned to product development, where he researched and designed an energy-absorbing aircraft interior safety device that Boeing patented. During his time at Boeing, Mr. Stafford also became a Boeing structures designated engineering representative (DER) for the FAA. He later joined the Boeing Space and Communication Division where he acted as a stress engineer and airworthiness focal on the U.S. Air Force 747-400 Airborne Laser Program responsible for establishing the airworthiness of the flying test bed. He earned a bachelor’s degree in mechanical engineering from Washington State University.

Belinda Swain
Rolls-Royce
Belinda Swain heads Rolls-Royce’s airworthiness assurance and regulation division. She joined Rolls-Royce in 1985 after studying physics at Oxford University. She has since worked on many Rolls-Royce defense programs, in both development and service support, including the EJ200 engine for the Eurofighter Typhoon. She was chief engineer when the aircraft entered service. As chief engineer for a number of defense products, Ms. Swain played an active role in developing safety management within Rolls-Royce. In 2000 she led the Rolls-Royce’s support of the Air France Concorde accident investigation and the return-to-service program. In 2011 she became head of airworthiness for Rolls-Royce, leading the civil and defense airworthiness and accident investigation team and growing the team to support the entry into service of the Trent XWB, Trent 1000 TEN and Trent 7000 engines. In her current role, she serves as vice-chair of the AeroSpace and Defence Industries Association of Europe (ASD) Airworthiness Committee and an ASD representative on the European Aviation Safety Agency Stakeholder Advisory Body, and is an active industry contributor on regulatory matters.