



# Biography

## Mr. Akbar Sultan

*Director, Airspace Operations and Safety Program (AOSP)  
NASA Aeronautics Research Mission Directorate (ARMD)*

Mr. Sultan is responsible for NASA's aviation operations and safety research portfolio of more than \$120 million across four research centers. The Airspace Operations and Safety Program (AOSP) works with the Federal Aviation Administration (FAA) and industry and academic partners to conceive and develop Next Generation Air Transportation System (NextGen) technologies to further improve the safety of current and future aircraft moving through the National Airspace System.

NextGen activity includes research to enable service oriented architecture and integrated demand management operational efficiencies in the surface, terminal, en route, and oceanic operational domains for traditional aircraft, unmanned aircraft systems (UAS), and future autonomous systems. The program is also responsible for aviation safety research in the areas of aircraft state awareness, prevention of aircraft loss of control, verification and validation of complex systems, prognostic safety through data mining, and real-time system-wide safety assurance. A key focus is on developing and demonstrating enhanced systems that will enable routine access to the airspace by emergent users of UAS, especially in support of evolving urban air mobility concepts.

Sultan is the NASA co-lead on the NASA/FAA Research Transition Teams, which are organized to enable efficient and effective transition of NASA research into FAA implementation roadmaps.

He is also the NASA liaison to the multiagency NextGen Interagency Planning Office, and leads the program's international collaboration activities.

Sultan has 20 years of professional experience in aerospace and air traffic management research and development.

Previously, Sultan was a NASA liaison to the Joint Planning and Development Office in the ongoing development of NextGen, where he led the development of NextGen operational improvements. He also served as the Software Configuration, Release, and Verification and Validation Manager for the Terminal Radar Approach Control automation system at NASA's Ames Research Center in California. There he was responsible for gaining FAA certification for NASA prototype systems in operational field trials.

Sultan received two Bachelor of Science degrees, in Mechanical Engineering and in Aeronautical Science and Engineering, from the University of California Davis, and a Master of Science in Aerospace Engineering from San José State University.



Image Credit: NASA/Keegan Barber