



Biography

Kate M. McMurtry

*Deputy Director, Integrated Aviation Systems Program (IASP)
NASA Aeronautics Research Mission Directorate (ARMD)*



Image Credit: NASA / Genaro Vavasis

Kate McMurtry is the acting director for the Integrated Aviation Systems Program within ARMD at NASA Headquarters in Washington, DC. She supports the overall planning, management, and evaluation of the directorate's efforts to conduct experimental flight research, and to test the most promising concepts and technologies from across the ARMD portfolio at an integrated system level.

McMurtry is responsible for day-to-day operations in the program office, including coordinating with NASA and industry personnel to ensure that program efforts are aligned with ARMD strategy and complementary to other ARMD initiatives.

Prior to her deputy director role, Kate served as the branch chief of operations engineering at NASA's Armstrong Flight Research Center in California and was responsible for the technical authority for airworthiness of flight vehicles throughout maintenance and project lifecycles. She served in two temporary detail positions at Armstrong during her ten-year supervisory role in the branch. First, she fulfilled an acting Center Chief Engineer position responsible for the airworthiness and safety review of Armstrong and Jet Propulsion Lab aircraft flight operations. Later she served as the Acting Deputy Director for Safety and Mission Assurance.

Earlier in her Armstrong career, McMurtry was an operations engineer responsible for the airworthiness, research requirement development, hardware design and integration, environmental testing, and flight test planning for the Center's F-18 and F-15 research aircraft. Notable project work includes leading the F-18 Full Scaled Advanced System Testbed (FAST) which enabled the safe and successful flight test evaluation of state-of-the-art adaptive control technologies for safe flight in the presence of adverse conductions such as structural damage, control surface failures, or aerodynamic upsets. As the lead operations engineer of the F-15 supersonic research testbed, McMurtry contributed to the success of experiment validation efforts to include flow field characterization for inlet technologies, supersonic natural laminar flow for wing concept demonstrations, and aerostructural efficiency determination for experimental aeroelastic modeling and control. She became certified and performed in the role of mission controller for all associated projects.

Prior to her time with NASA, McMurtry commissioned through the Air Force Reserve Officers' Training Corps (ROTC) program and served in the U. S. Air Force at Edwards Air Force Base, California. While active duty, she worked as a developmental engineer for the Airborne Laser Program in the role of High Energy Laser Integrated Team Lead. In the role she supported the chemical batch process development necessary to enable the megawatt-class chemical laser, System Integration Lab testing, and then the operational test of low power beacon and tracking lasers which preceded the successful fire of the high-energy laser in flight. She earned the Air Force Commendation Medal, National Defense Service Medal, and Global War on Terrorism Service Medal upon service completion.



Biography

Kate M. McMurtry (continued)

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Kate received her Bachelor of Science in Chemical and Petroleum Engineering from the University of Pittsburgh yet found her true interest in aeronautics while serving with the Air Force and NASA. This sparked her pursuit and achievement of a private pilot certification (single-engine land and single-engine sea). She continued her formal education with a Master of Business Administration and a Master of Arts in Management and Leadership, both from Webster University. McMurtry is a Federal Executive Institute alumna and is the recipient of the NASA Outstanding Leadership Medal and four Group Achievement Awards.