

Airspace Design, Civil-Military Coordination, and Operational Safety in the National Capital Region

Committee

James P. Bagian

Chair

James P. Bagian (NAE/NAM) is an engineer and physician. He is Professor in the Medical School and the College of Engineering and the Executive Director of the Center for Risk Analysis Informed Decision Engineering at the University of Michigan. He is a veteran NASA astronaut and flew on two Space Shuttle missions including as the lead mission specialist for the first dedicated Life Sciences Spacelab mission. He also served as the Chief Flight Surgeon and Medical Consultant for the Space Shuttle Columbia Accident Investigation Board and was an investigator for the Space Shuttle Challenger tragedy. He has a particular interest in advancing systems-based solutions to enhance safety, quality, and efficiency. Over more than 30 years, he has chaired and served on numerous NASEM study committees and was a member of the Board on Human-Systems Integration, Space Studies Board, and Board on Army R&D. He retired as a Colonel in the U.S. Air Force reserve and has logged more than 1,500 hours flying propeller and jet airplanes and helicopters. He was elected to the National Academy of Medicine and the National Academy of Engineering for his contributions to the integration of engineering and medical knowledge. He is a Fellow of the Aerospace Medical Association and a recipient of the NASA Space Flight Award (1989 & 1991), NASA Exceptional Service Medal (1992 & 2018), USAF Air Medal, the Sikorsky Helicopter Rescue Award, the American Astronautical Society's Melbourne W. Boynton Award (1992 & 2010), the Society of NASA Flight Surgeon's W. Randolph Lovelace Award for significant contributions to the practice and advancement of aerospace medicine (1992), and the Aerospace Human Factors Society Paul T. Hansen Award for outstanding contributions in the field of Aerospace Human Factors (1996). Dr. Bagian earned a B.S. degree in mechanical engineering from Drexel University and a doctorate in medicine from Thomas Jefferson University.

Nancy J. Currie-Gregg

Member

Nancy Currie-Gregg is the Director of the Texas A&M University Space Institute and holds appointments in Aerospace Engineering and Industrial and Systems Engineering, specializing in human-system integration, safety engineering, and risk management. She also serves on the Board of Directors for the Texas Space Commission. A former astronaut, she has spent the majority of her career supporting NASA's human spaceflight programs, logging 1,000 hours in space as a mission specialist on four missions. Following the Space Shuttle Columbia tragedy, she led the Space Shuttle Program Safety and Mission Assurance Office and later served as Principal Engineer and Chief Engineer with the NASA Engineering and Safety Center. Dr. Currie-Gregg is a member of the Board on Human-Systems Integration and chaired the NASEM Committee for a Peer Review of FAA Research on the Effect of Passenger Seat Pitch and Width on Aircraft Cabin Evacuation Efficiency. Her awards and honors include the U.S. Government Presidential Rank Award for Meritorious Senior Professional; NASA's Exceptional Service Medal, Distinguished Service Medal, Outstanding Leadership Medal, and four Spaceflight Medals; the Defense Superior Service Medal with Oak Leaf Cluster, Legion of Merit, and Defense Meritorious Service Medal with Oak Leaf Cluster. A retired U.S. Army Colonel and Master Army Aviator, she accrued more than 4,000 flight hours in both rotary- and fixed-wing aircraft. Dr. Currie-Gregg holds a bachelor's degree in Biological Sciences with honors from The Ohio State University, a Master of Science in Safety Engineering from the University of Southern California, and a Ph.D. in Industrial Engineering from the University of Houston.

John D. Drexler

Member

Captain John Drexler retired from United Airlines after 35 years as a B767/B757 Captain and more than 40 years in the aviation industry. He had previously served as a B737 Captain and B727 flight engineer for Continental Airlines as well as a Be1900 and Be99 pilot for Business Express and Precision Airlines earlier in his career. During his air transport career, he accumulated more than 20,000 flight hours. Prior to becoming an air transport pilot, he was an air traffic control specialist at the LaGuardia Air Traffic Control (ATC) tower from 1982 to 1985. Active in the Air Line Pilots Association (ALPA), he was Director of ATC Procedures and liaison to the National Air Traffic Controllers Association (NATCA) for ALPA's Air Traffic Services group. In addition, he served as the ATC coordinator for the Continental/United central air safety committees. As ALPA's Air Traffic Services representative to the International Federation of Air Line Pilots' Associations (IFALPA), he contributed technical papers on commercial space and controller-pilot data link communications. He served frequently as pilot/controller panelist at NATCA's Communicating for Safety Annual Conference and in 2019 he was awarded the ALPA Presidential Citation for outstanding efforts in advancing air safety. During his career, he also acted as an accident investigator for United Airline's Central Air Safety Committee where he participated on the National Transportation Safety Board's ATC group investigations of Colgan Air flight 3407, loss of separation incidents, and weather advisory matters at the Houston and Denver ARTCCs. He also worked alongside NATCA on issues of lost communications and as a representative for IFALPA on emergency descents. Captain Drexler holds a B.S. degree in Aeronautics and Management from Dowling College.

Matthew Glavy

Member

LtGen Matthew “Jerry” Glavy retired from the U.S. Marine Corps in 2024 after serving as Deputy Commandant for Information from 2021 to 2024. In June 2023, he assumed the additional duty of Director of Marine Corps Intelligence. He previously served as Commander, Marine Corps Forces Cyberspace Command from 2018 to 2021, and as the first Commander, Marine Corps Forces Space Command from 2020 to 2021. In these roles, he played a pivotal role in establishing the Marine Corps space component and integrating space and cyber capabilities into expeditionary operations. A career Marine aviator, he began flying the CH-46 Sea Knight tandem-rotor transport helicopter. He deployed in support of Operations Desert Shield and Desert Storm, and later commanded Marine Medium Helicopter Squadron 265 (REIN) with the 31st Marine Expeditionary Unit during Operation Iraqi Freedom. He also commanded Marine Helicopter Squadron One (HMX-1), serving as Presidential helicopter pilot aboard Marine One and leading global presidential support missions. He later served as Commanding General of the 2nd Marine Aircraft Wing, responsible for the readiness and global deployment of 14,000 Marines and Sailors and 500 aircraft. He currently serves on the Center for Strategic and International Studies (CSIS) Commission on the Generation of a Cyber Force. LtGen Glavy is a graduate of the Amphibious Warfare School, Marine Corps Command and Staff College, and Marine Corps War College. He holds master’s degrees in Military Studies and Strategic Studies, and a B.S. in Systems Engineering from the United States Naval Academy.

Seth Guikema

Member

Seth Guikema is Professor in the departments of Civil and Environmental Engineering and Industrial and Operations Engineering at the University of Michigan. He is also an Adjunct Professor in the Department of Safety, Economics, and Planning at the University of Stavanger, Norway. His academic specialty is risk analysis, predictive machine learning, agent-based modeling, stochastic simulation, and decision analysis. Prior to joining the faculty of the University of Michigan in 2015 he was an Assistant Professor in the Civil Engineering department at Texas A&M University and Associate Professor in the Department of Geography and Environmental Engineering at Johns Hopkins University. He is a Fellow of the Society for Risk Analysis (SRA) and was president of SRA in 2020. He previously served as the chair of the Foundations of Risk Analysis and Engineering and Infrastructure specialty groups and served a term on the SRA Council. He founded and now serves as the editor for the Natural Hazards area for Risk Analysis and previously served as editor for the Mathematical Modeling area for Risk Analysis. Dr. Guikema earned a B.S. in Civil and Environmental Engineering from Cornell University, M.S. in Civil and Environmental Engineering from Stanford University, M.Eng. in Civil Engineering from University of Canterbury (New Zealand), and Ph.D. in Engineering Risk and Decision Analysis at Stanford University.

Joseph M. Kolly

Member

Joseph Kolly retired from MITRE Corporation as Director of the Integrated Systems Innovation Center, where he oversaw the work of MITRE's multimodal transportation research portfolio, including the Integrated Demonstration and Experimentation for Aeronautics laboratory. Before that he was Chief Scientist for NHTSA for 5 years where his primary focus was in the areas of automated vehicles, vehicle safety defects, safety data analysis, risk management, and safety culture. He spent the bulk of his career at NTSB where he has served as an investigator on numerous major investigations in all modes of transportation, including research and testing to investigate the cause of the explosion of the fuel tank of TWA Flight 800. He was later named chief of the Vehicle Performance Division, where he was responsible for the NTSB's vehicle dynamics, simulation and animation work. In 2005, he was appointed deputy director of the Office of Research and Engineering. He became director in 2009. In this position, he oversaw NTSB's Materials Laboratory, Recorders Laboratory, Vehicle Performance and Safety Research Divisions. Before joining NTSB, he was a senior research scientist at Calspan/University at Buffalo Research Center, where he managed research and testing programs in the fields of hypersonic fluid dynamics, thermodynamics, heat transfer, and optics. Dr. Kolly earned a Ph.D. in mechanical engineering from the State University of New York at Buffalo and a B.S. in mechanical engineering from the State University of New York at Binghamton. Kolly's former employer, MITRE Corporation, receives non-competitive funding from the Federal Aviation Administration.

Michael J. McCormick

Member

Michael J. McCormick is Associate Professor and Air Traffic Manager Program Coordinator at Embry-Riddle University. Before joining Embry-Riddle he retired as Vice President of Management Services in FAA's Air Traffic Organization (ATO), where his portfolio included labor, contracts, budget, strategic planning, and organizational effectiveness. Previously, he served as Executive Director responsible for day-to-day operations of tower and approach control services. During his career, he provided air traffic control services at the Philadelphia International Airport tower and radar approach control and he managed the New York and Washington Air Route Traffic Control Centers. He also served as an ATO's specialists in Tactical/Special Operations Airspace Security and as Transportation Attaché for the United States Department of State, Embassy Baghdad, Iraq. Before joining FAA as an air traffic control specialist, he served in the U.S. Marine Corps as a Nuclear Weapons and Chemical Munitions Technician. From 2016 to 2018, he served on the National Academies Committee on Aviation Safety Assurance. He received the Secretary of Transportation Gold Medal, the Department of Transportation War on Terrorism Medal, and US Ambassador Certificate of Merit for his service in Iraq. Additionally, he is the recipient of the Secretary of Transportation's 9-11 Medal for his actions on September 11, 2001. Dr. McCormick holds a B.S. in aviation management from Southern Illinois University Carbondale, M.B.A. from West Chester University, and Ph.D. in Public Policy from George Mason University. McCormick provided press interviews about the collision over the Potomac River in January 2025.

Wesley A. Olson

Member

Wesley A. Olson is Lead of the Transportation Safety and Resilience Group at MIT Lincoln Laboratory. The group develops surveillance and decision-support architectures and technologies to enable future transportation systems. He leads the development of technologies to improve aviation safety. Since 2010, he has led the development of the next-generation airborne collision avoidance system, ACAS X. He is also involved in other research and development efforts to safely integrate new airspace entrants, such as large and small unmanned aircraft systems, as well as Advanced Air Mobility (AAM) aircraft. He serves as a technical advisor to the U.S. panel member on the ICAO Surveillance Panel and the Airborne Collision Avoidance Subgroup. He provides technical leadership on several RTCA special committees (SC147 and SC228). Prior to joining MIT Lincoln Laboratory, he served for 22 years in the U.S. Air Force, where he held positions including associate professor and deputy head of the Department of Behavioral Sciences and Leadership at the United States Air Force Academy, and deputy director for operations at the Air Force Flight Standards Agency. He is a rated pilot with 3,500 flight hours in the C-5, C-21, and TG-7 aircraft, and holds an FAA Air Transport Pilot rating. Dr. Olson received his Ph.D. and M.S. degrees in engineering psychology from the University of Illinois and a B.S. degree in human factors engineering from the United States Air Force Academy.

Dr. Olson is currently leading an RTCA working group that will provide recommendations on lowering the collision avoidance altitude cutoff. He participated as a witness on a panel on Overview of Collision Avoidance Technology at the NTSB investigative hearing in August 2025.

Amy R. Pritchett

Member

Amy R. Pritchett is a Professor and Head of the Department of Aerospace Engineering at the Pennsylvania State University. Previously, she was on the faculties of the Schools of Aerospace Engineering and Industrial and Systems Engineering at the Georgia Institute of Technology. While at Georgia Tech, she served via the Intergovernmental Personnel Act as the director of NASA's Aviation Safety Program in 2008 and 2009. Her research focuses on the intersection of technology, expert human performance, and aerospace operations, with a particular focus on designing to support safety. Her research topics have included human-autonomy teaming, flightdeck design, collision avoidance systems and air transportation. She is a fellow of the AIAA and HFES. She has chaired and served on many NASEM committees, including chair of the Committee on Emerging Trends in Aviation Safety, chair of the Committee for a Study of FAA Air Traffic Controller Staffing, and chair of the Committee on Lead Emissions from Piston-Powered General Aviation Aircraft. She was a member of the Committee on Assessing the Risks of Unmanned Aircraft Systems Integration and Committee of the FAA Research Plan on Certification of New Technologies into the National Airspace System. In addition, she served as a member of NASEM's Aeronautics and Space Engineering Board. She is a licensed pilot in airplanes and sailplanes. Dr. Pritchett earned an ScD, SM, and SB in aeronautics and astronautics from MIT.