

# Workshop on Aviation After a Year of Pandemic Economic, People, & Technology

## *Speaker Bios*

### **Session 1 (noon to 2pm Eastern)**

#### **Opening Remarks and Keynote Speeches**

**Moderator: John-Paul Clarke** is a professor of Aerospace Engineering and Engineering Mechanics at The University of Texas at Austin, where he holds the Ernest Cockrell, Jr. Memorial Chair in Engineering. Prior to joining the faculty at UT Austin, he was a faculty member at Georgia Tech, the Vice President of Strategic Technologies at United Technologies Corporation (now Raytheon), a faculty member at MIT, and a researcher at Boeing and NASA JPL. He has also co-founded multiple companies, most recently Universal Hydrogen – a company dedicated to the development of a comprehensive carbon-free solution for aviation. Clarke is a leading expert in aircraft trajectory prediction and optimization, especially as it pertains to the development of flight procedures that reduce the environmental impact of aviation, and in the development and use of stochastic models and optimization algorithms to improve the efficiency and robustness of aircraft, airline, airport, and air traffic operations. As indicated in his 2018 testimony to the Science Committee of the U.S. House of Representatives, he is particularly interested in leveraging his expertise to enable increasingly autonomous aircraft-enabled mobility, especially in urban and regional settings. His contributions to aerospace extend well beyond his research. Clarke is the founding chair of the AIAA Human-Machine Teaming Technical Committee, was co-chair of the National Academies Committee that developed the US National Agenda for Autonomy Research related to Civil Aviation, and has chaired or served on advisory and technical committees chartered by the AIAA, EU, FAA, ICAO, NASA, the National Academies, the US Army, and the US DOT. Clarke received S.B. (1991), S.M. (1992), and Sc.D. (1997) degrees in aeronautics and astronautics from MIT. His research and contributions to aerospace earned him many honors, including the 1999 AIAA/AAAE/ACC Jay Hollingsworth Speas Airport Award, the 2003 FAA Excellence in Aviation Award, the 2006 National Academy of Engineering Gilbreth Lectureship, and the 2012 AIAA/SAE William Littlewood Lectureship. He is a Fellow of the AIAA, and is a member of AGIFORS, INFORMS, and Sigma Xi.

**Dr. Carlos del Rio, MD** is a Distinguished Professor of Medicine in the Division of Infectious Diseases at Emory University School of Medicine and Executive Associate Dean for Emory at Grady. He is also Professor of Global Health in the Department of Global Health and Professor of Epidemiology at the Rollins School of Public Health. He is also co-Director of the Emory Center for AIDS Research (CFAR) and co-PI of the Emory-CDC HIV Clinical Trials Unit and the Emory Vaccine and Treatment Evaluation Unit. Dr. del Rio is a native of Mexico where he attended medical school at Universidad La Salle, graduating in 1983. He did his Internal Medicine and Infectious Diseases residencies at Emory University. In 1989 he returned to Mexico where he was Executive Director of the National AIDS Council of Mexico (CONASIDA, the Federal agency of the Mexican Government responsible for AIDS Policy throughout Mexico), from 1992 through 1996. In November of 1996 he returned to Emory where he has been involved in patient care, teaching and research. Dr. del Rio was Chief of the Emory Medical Service at Grady Memorial Hospital from 2001 - 2009 and Chair of the Department of Global Health from 2009 - 2019. Dr. del Rio's research focuses on the early diagnosis, access to care, engagement in care, compliance with antiretrovirals and the prevention of HIV infection. He has worked for over a decade with hard-to-reach populations including substance users to improve outcomes of those infected with HIV and to prevent infection with those at risk. He is also interested in the translation of research findings into practice and policy. His international work includes collaborations in the country of Georgia, Ethiopia, Vietnam, Mexico, Kenya and Thailand. He has also worked on emerging infections such as

pandemic influenza and was a member of the WHO Influenza A(H1N1) Clinical Advisory Group and of the CDC Influenza A(H1N1) Task Force during the 2009 pandemic.

**Dr. Kevin Michaels** is Managing Director of AeroDynamic Advisory, a specialty consulting firm focused on the global aerospace and aviation industries. He has 31 years of experience, including hundreds of consulting engagements for leading aviation and aerospace companies across the globe. Kevin is a globally recognized expert in the aerospace manufacturing and MRO sectors, and has significant expertise in business-to-business marketing, customer satisfaction, M&A advisory, technology assessment, cluster development, and strategic planning. His experience spans all major market segments, including air transport, business & general aviation, and military. Previously Dr Michaels was a Vice President with ICF International's Aerospace & MRO consulting practice from 2011 – 2016. He was a co-founder and partner with AeroStrategy from 2001-2011, until its acquisition by ICF. Previously, Dr. Michaels was Director – Strategic Development with Rockwell Collins Government Systems, and Principal with The Canaan Group, an aerospace consultancy. He began his career as a project engineer with aeroengine supplier Williams International. Dr. Michaels holds BS – Aerospace Engineering and MBA degrees from the University of Michigan, and MSc and PhD degrees in International Relations from the London School of Economics. He is a contributing columnist to Aviation Week & Space Technology and chairs the advisory board of the University of Michigan's Aerospace Engineering Department. In 2016, he joined the Board of Directors of aircraft parts distributor Kapco Global Proponent.

## **Session 2 (2:30pm to 4:30pm Eastern)**

### **Panel on Policy and Procedures (Government, Airlines, Airports, etc.)**

**Moderator: Dr. Vicki Hertzberg** is an internationally-recognized expert on "big data" and its impact on health care. She is widely known for her work measuring the social contacts in emergency departments and disease transmission on airplanes. Her research has been funded by the National Library of Medicine, National Institute of Neurological Disorders and Stroke, the National Institute of Environmental Health, and the National Institute of Allergy and Infectious Disease. Her work has been published in high-impact journals, including the Proceedings of the National Academy of Science, New England Journal of Medicine, PLOS One, and Pediatrics.

**Dr. Martin Cetron, MD**, is the Director for the Division of Global Migration and Quarantine (DGMQ) at the U.S. Centers for Disease Control and Prevention (CDC). Dr. Cetron holds faculty appointments in the Division of Infectious Disease at the Emory University School of Medicine and the Department of Epidemiology at Rollins School of Public Health. He received his B.A. from Dartmouth College in 1981 and his M.D. from Tufts University in 1985. He trained in Internal Medicine at the University of Virginia and Infectious Diseases at the University of Washington before joining the CDC's Epidemic Intelligence Service and becoming a Commissioned Officer in the U.S. Public Health Service (PHS) in 1992. His primary research interests are global health and migration with a focus on emerging infections, tropical diseases, and vaccine-preventable diseases in mobile populations. Dr. Cetron has co-authored more than 100 publications. Dr. Cetron has also been a leader in public health emergency preparedness and response activities at CDC and is a graduate of the Harvard School of Public Health & Kennedy School of Government's National Preparedness Leadership Institute. For over 20 years, he has conducted epidemiologic research globally, developed global health policy and led domestic and international outbreak investigations including high profile international emergency responses to emerging infectious disease outbreaks [Anthrax bioterrorism 2001, SARS epidemic 2003, U.S. Monkeypox 2003, Hurricane Katrina/ Rita 2005, H1N1 influenza pandemic 2009, Haiti Earthquake / Cholera Responses 2010-11, Japan Tsunami-Radiation 2011, H7N9 2013, and MERS CoV 2012-3, Coronavirus Response (2013), Unaccompanied Children Central America (2014), Ebola Response (2014) & Zika Virus (2015)].

**Arjun Garg** is an aviation lawyer at the law firm Hogan Lovells in Washington, D.C. He formerly served as the Chief Counsel and Acting Deputy Administrator of the Federal Aviation Administration (FAA) and also the Chief Counsel of the Federal Transit Administration. The onset of COVID-19 occurred during his FAA tenure. He helped the FAA navigate the resulting disruptions and drove dozens of regulatory actions to sustain the continuity of the U.S. air transportation system in response to the pandemic. He also participated in related discussions within the federal government, with other governments, and with industry. Prior to his work at the U.S. Department of Transportation, Arjun was a trial attorney at the U.S. Department of Justice litigating civil cases involving issues of constitutional and administrative law.

**Lauren Beyer** is the Vice President for Security and Facilitation at Airlines for America, the industry trade organization for the leading U.S. airlines. In this role, she is responsible for security, cybersecurity, cargo, and passenger facilitation issues. She oversees all aspects of interaction with the Department of Homeland Security (DHS) and other federal security agencies. Lauren previously served as the Director for Aviation and Surface Transportation Security at the National Security Council where she was responsible for directing and coordinating national aviation security policies. Prior to the NSC, Beyer held several positions at the Transportation Security Administration (TSA) including as Europe, Africa, Middle East Bureau Chief, managing engagement with transportation security stakeholders across these regions. Prior to joining TSA, she served in various roles at DHS including as a Senior Policy Advisor in the Visa Waiver Program Office, as well as serving as the DHS Liaison to the European Union Presidency, stationed in Budapest, Hungary and Warsaw, Poland. Lauren holds a B.A. in Government from the University of Texas at Austin and an M.A. in American Government from Georgetown University.

**Steve Mayers** is the Director of Customer Experience, ADA, and Title VI coordinator at Hartsfield Jackson International Airport. He oversees the guest experience, ADA and Title VI administration, volunteer and nonprofit program, and team member development program. For Mr. Mayers, successful management of the world's busiest and most efficient airport comes down to one matter: creating personable, pleasing, and memorable interactions every day. As head of the customer experience, he views the more than 100 million passengers as his guests and seeks to unite airlines, airport vendors, and local businesses to create the ultimate traveler experience from curbside to gate — and back. With more than 25 years of management and hospitality experience, Mr. Mayers has held leadership positions in some of the world's top companies, including Sandals Resorts, Wells Fargo, Radisson and Best Western Hotels & Resorts. Steve has earned the prestigious International Airport Professional (IAP) and Certified Member (C.M) designations from Airports Council International (ACI) and the American Association of Airport Executives (AAAE) respectively; he is a Federal Aviation Administration (FAA) Office of Civil Rights (OCR) award-winner. He received his undergraduate degree from Temple University's Fox School of Business and his MBA from Louisiana State University

### **Session 3 (noon to 2pm Eastern)**

#### **Panel on Aircraft Design and Flight Operations, Personnel, and Performance**

**Moderator: Dr. Valerie Manning** is Airbus' SVP of Training & Flight Operations Support, based in Toulouse, France. In this role she manages Airbus' flight, maintenance, cabin and structure training, its flight simulation business, its Navblue subsidiary, and its flight operations engineering, support and Training standards. Prior to taking this role, she was the SVP of Customer Support, responsible for the in-service relationships with airline, lessor, and MRO customers worldwide for operational, technical, safety, regulatory, and commercial topics. In that role Dr. Manning also led sales, marketing, consulting and contracts for the Airbus Services business, as well as the Customer Services regions around the world. Dr. Manning has held roles as the head of Airbus' Upgrade Services business, performing

modifications on the in-service Airbus fleet, managing the CTO office, and leading U.S. Mergers & Acquisitions. Dr. Manning was a consultant with McKinsey & Company and also consulted privately in multidisciplinary optimization and supersonic aircraft design. An active instrument-rated pilot and Flight Instructor in Europe, Dr. Manning graduated from Princeton University with a B.S in mechanical & aerospace engineering, and earned her M.S. and Ph.D. in aeronautics and astronautics from Stanford University. Dr. Manning served a full career as an officer in the United States Air Force, both on active duty and in the reserves.

**Dr. Wolfgang Wohlers** is Head of Engineering & Maintenance at Airbus since August 2018. He is responsible for all Engineering Support, Technical Data, Maintenance Programs, Ground Support Equipment and Service Bulletins - covering the full Airbus in-service fleet worldwide. Previously, Mr. Wohlers was in charge of Structure Engineering for all Daily and Major Repairs and for the Structure Repair Manual for Airbus aircraft types. Before that he was responsible for the fuselage repairs. A nominated Airbus Expert for Metallic Static Strength, Dr. Wohlers has been responsible for all numerical structure analysis methods in Airbus including Nonlinear Finite Element Analysis, Vulnerability and Crash Analysis, Optimization, Thermal Analysis and Multi-Body-Simulation. Before joining Airbus, Dr. Wohlers was an assistant professor at the university RWTH Aachen, where he earned his Masters and PhD.

**Dr. Howie Weiss** is a Professor of Biology at Pennsylvania State University's Huck Institutes of the Life Sciences. He is a Biomathematician and very recently moved to Penn State from Georgia Tech, who also held appointments at Emory in Public Health and PBEE. Bacteria and their viruses (phages) provide a way to study ecological and evolutionary processes in real time under the well-controlled laboratory conditions. Many of the questions that our group studies lie at the intersection of fundamental science and improving human and animal health. Dr. Weiss develops new approaches to mathematical modeling to better understand the role of the physical structure in how bacteria grow and evolve. To complement this computational work, he works closely with microbiologists, biochemists, virologists, physicians, veterinarians, etc. and combine mathematical models with experiments. In recent years he has taught courses in virus dynamics, population genetics, dynamics and bifurcations, advanced linear algebra, and stochastic processes.

**Capt. Bob Fox** (United) serves as ALPA's first vice president and national safety coordinator. He began his four-year term on Jan. 1, 2019. As national safety coordinator, Capt. Fox oversees the Association's Air Safety Organization, which manages the union's safety, security, pilot assistance, and jumpseat programs, and is the world's largest nongovernmental safety organization. Capt. Fox serves as the industry co-chair of the FAA's Flight Standards Transparency, Performance, Accountability, Efficiency Aviation Rulemaking Committee. He is the pilot representative for the U.S. Department of Transportation's Safety Oversight and Certification Advisory Committee, which advises the Transportation secretary on policy matters related to aviation safety. In addition to these responsibilities, Capt. Fox is a member of the ICAO Cooperative Oversight for Cross-border Operations Sub Group. Based in Washington, D.C., Capt. Fox flies the Airbus A320. Retired from the U.S. Navy, Capt. Fox conducted four operational deployments on the USS Kitty Hawk (2), USS Saratoga, and the USS Eisenhower aircraft carriers, flying the LTV A-7 Corsair and the McDonnell Douglas F/A-18 Hornet. Between these deployments, he conducted flight test work on the F/A-18 weapon systems. Capt. Fox is a graduate of the U.S. Naval Academy and the U.S. Naval Test Pilot School.

#### **Session 4 (2:30pm to 4:30pm Eastern)**

#### **Panel on Operations, Performance, and Personnel: Airports, Ground Transportation, and Air Traffic Management**

**Moderator: Andrew R. Lacher** is the Director of the Aerospace Systems Research Center at Noblis where he is responsible for research strategy related to aerospace and autonomous systems. Prior to that he was Senior Manager for Autonomous Systems Integration at Boeing NeXt and the Autonomy Integration and Adoption lead at The MITRE Corporation. Lacher is a recognized expert on assessing safety risks associated with unmanned and increasing autonomous vehicles. He has focused on the safe and secure integration of Unmanned Aircraft System (UAS) in civil airspace as well as methods to calibrate the trustworthiness of autonomous system. Additionally, he played a leading role of the definition of the Next Generation Air Transportation System and the development of Collaborative Decision- Making (CDM) concepts for Traffic Flow Management (TFM). Lacher was a strategic information technology consultant working with small airlines. Lacher earned both an M.S. in operations research and a B.S. in electrical engineering at The George Washington University.

**Jeffrey Brown** is the Aviation Chief Operating Officer for the Seattle-Tacoma International Airport (SEA), a position he held since February 2020. In that role he serves as a key advisor to the Aviation Managing Director on strategically important topics and decisions. He joined the Port of Seattle in 2016 as the Director of Aviation Facilities and Capital Programs. In that position, he led a team integral in the delivery of the airport's capital programs with responsibility for managing the Art Program, Facilities and Infrastructure, Aviation Planning, Capital Programming and Building Code Enforcement. Mr. Brown has approximately 30 years of experience in aviation planning, design and construction/project management, both, in the civilian and military sectors. His extensive knowledge in the aviation industry was obtained from his experience working at large airports located in Houston, Las Vegas, Atlanta and New York and smaller regional and general aviation airports in the Maryland and Virginia areas. Mr. Brown holds a B.S (Engineering) from University of the West Indies, M. S. from Columbia University, an (MBA) from CUNY – Baruch College, and recently completed the Executive Development Program at the University of Washington. Additionally, he is a licensed professional engineer, certified member of AAAE and certified project management professional.

**Dr. Ashok Srinivasan** is the William Nystul Eminent Scholar Chair and Professor at the University of West Florida and a Fulbright Fellow. He obtained his Ph.D. in Computer Science from the University of California, Santa Barbara (UCSB). He performed postdoctoral research at the University of Illinois at Urbana-Champaign and subsequently held faculty positions at IIT Bombay, UCSB, and Florida State University. His research has been funded by the National Science Foundation, Department of Energy, Department of Defense, etc. He currently leads project VIPRA, a multi-university interdisciplinary project on the spread of infections through air travel. This research was identified as one of the major scientific breakthroughs using the flagship Blue Waters supercomputer at the National Center for Supercomputing Applications and its results have been highlighted in around 300 news outlets around the world.

**Ambassador Vygaudas Usackas**, has joined the global multiservice provider Avia Solutions Group (ASG) as member of the Board of Directors as of September 2019. ASG provides full and comprehensive chain of services for aviation: aircraft leasing, ACMI, passenger and cargo charters, ground handling, MRO, pilot and crew training and IT solutions. The group operates in 60 countries and have 100 stations and offices around the world. Amb. Vygaudas Usackas, apart of being a Member of the Board of ASG, is also Chairman of the Board of Scandinavian based ground handling company Aviator Airport Alliance and member of the Board of Directors of London based global aircraft charter and cargo company Chapman Freeborn Group.



Prior of joining the ASG, Vygaudas Usackas made a distinguished diplomatic career serving as Lithuania's Chief Negotiator to join the European Union, ambassador of Lithuania to USA, Mexico and St. Court of James's, Foreign Minister as well as the European Union's ambassador to Afghanistan and Russia.

### **Session 5 (noon to 2pm Eastern)**

#### **Panel on Aviation Economics**

**Moderator: Dr. Parimal "PK" Kopardekar** serves as the director of NASA Aeronautics Research Institute (NARI) at NASA Ames Research Center. In that capacity, he is responsible for exploring new trends, collaborations and partnerships needs related to aviation enterprise. He also serves as NASA's senior technologist for Air Transportation Systems and principal investigator for the Unmanned Aircraft Systems Traffic Management (UTM) project. He is the recipient of many awards, including the NASA Government Invention of the Year, Exceptional Technology Achievement Medal, Outstanding Leadership Award, Engineer of the Year Award, and Samuel J. Heyman Service to America's Promising Innovation Award. Kopardekar was named among the 25 most influential people in the commercial drone industry by Commerical UAV News. He is co-editor-in-chief of the Journal of Aerospace Operations and a fellow of the American Institute of Aeronautics and Astronautics. He also serves as an adjunct faculty member at Colorado State University Global and teaches undergraduate and graduate courses related to operations management and supply chain management. He received his Ph.D. in industrial engineering from the University of Cincinnati.

**Brian Pearce** is IATA's Chief Economist. An economist with almost 40 years of international experience in several industries, he is also a Visiting Professor at Cranfield University's Department of Air Transport and a member of IATA's senior leadership team. He has been on panels of expert advisers for the UK Airports Commission, the UK Department for Transport and ICAO. He was formerly director of the Centre for Sustainable Investment at the think-tank Forum for the Future, head of global economic research at the investment bank SBC Warburg in Tokyo and then London and was Chief Economist at Ernst & Young's economic forecasting consultancy. He retires from IATA on 30 June but remains visiting professor at Cranfield.

**Dr. Ronald Epstein** is a top ranked sell-side equity research professional covering US and Global Aerospace, Defense and Industrial companies. He is a strategic thinker with deep industry knowledge, insight and perspective. Dr. Epstein is the number one ranked in the Institutional Investor All America Research Team for the last 5 years and top 3 for the last 10 years. He is an experienced public speaker and media commentator regularly appearing on CNBC, Bloomberg and other news media outlets. His work experience includes investment research, financial analysis, valuation, strategy, fundamental aerospace research, aerospace engineering, product development, computational fluid dynamics, and teaching university level engineering curriculum. He is a Distinguished Moderator for the US Technology Leadership Council and mentor for the Techstars Starburst Space Incubator.

**Kate Harback, PhD**, is the Associate Director of Economics at the Institute of Health Economics (IHE). As an economist, she has over 15 years of experience working on and leading work in applied microeconomics. In addition to health economics, her work has focused on the fields of transportation, computable general equilibrium, and environmental economics. Her work at IHE includes managing economic research for Alberta Health, leading IHE's portfolio of economic evaluation work on mental health interventions, as well as overseeing diverse projects for regional governments, nonprofits, and universities. Leveraging previous experience in aviation and transportation economics, she is leading the efforts focused on transportation within the Natural Sciences and Engineering Research Council of Canada (NSERC) funded One Society Network. From 2018 to 2021 she served as the Chair of the

National Academy of Sciences' Transportation Research Board (TRB) Aviation Economics and Forecasting Committee, and remains a member. Dr. Harback received her PhD in Economics from the University of Delaware, where she was awarded the Ryden Prize, the University's sole dissertation prize in the social sciences.

**Joel Otto** is a 35+ year veteran of the commercial aviation industry, and has held a variety of leadership positions across strategy, business and technical organizations. Throughout his career, Otto has had numerous leading roles in capturing new business and major programs on commercial and business aircraft platforms. Currently, Otto is leading development of growth strategies and revenue synergy opportunities that leverage and complement the broad product and service offerings of Collins Aerospace. Otto holds an MBA from the University of Iowa and Bachelor of Science degrees in Mathematics and Physics from Nebraska Wesleyan University.

### **Session 6 (2:30pm to 4:30pm Eastern)**

#### **Panel on Critically Needed Capabilities and Research and Next Steps**

**Moderator: Ilan Kroo** is a professor of aeronautics and astronautics at Stanford University. He worked as an Aerospace Engineer in the Advanced Aerodynamics Concepts Branch at NASA's Ames Research Center before joining the Stanford faculty in 1986. He subsequently started a software company and worked to develop new aircraft, including a small supersonic concept and an electric vertical flight aircraft. His research in aerodynamics and multidisciplinary design optimization includes the study of sustainable air transportation systems. He has participated in the design of UAVs, flying pterosaur replicas, America's Cup sailboats, and high-speed research aircraft. He is a fellow of the American Institute of Aeronautics and Astronautics. Kroo was elected to the National Academy of Engineering for new concepts in design methodology and the development of unconventional aircraft. He has a Ph.D. in aeronautics and astronautics from Stanford University.

**Dr. Vicki Hertzberg** is an internationally-recognized expert on "big data" and its impact on health care. She is widely known for her work measuring the social contacts in emergency departments and disease transmission on airplanes. Her research has been funded by the National Library of Medicine, National Institute of Neurological Disorders and Stroke, the National Institute of Environmental Health, and the National Institute of Allergy and Infectious Disease. Her work has been published in high-impact journals, including the Proceedings of the National Academy of Science, New England Journal of Medicine, PLOS One, and Pediatrics.

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