Cindy Ashforth
Ms. Ashforth has over 25 years' experience testing and certifying composite structures, as both a certification manager and composite materials specialist. Her background includes student research at the air force research lab, testing and certification at propeller and general aviation manufacturers, certification and quality assurance at an aviation equipment manufacturer, and FAA program manager for international validation of transport aircraft. As one of the FAA's subject matter experts for advanced materials, she provides technical advice on rule making activities, writes guidance documents, and develops and delivers educational materials. She assists in certification projects to help apply consistent risk-based standards across all product types and contributes to continued operational safety activities related to advanced material applications. She writes requirements for FAA research on advanced materials and works closely with university and industry partners to promote standardization through industry organizations. Ms. Ashforth has a BS in Engineering Mechanics from the University of Wisconsin and a MS in Materials Science from Wright State University.

Matt Bush
Matt is the Director of Strategic Development at Parallax Advanced Research, which is a 501(c)(3) nonprofit established in 2011 that supports academic institutions across the State of Ohio and the Nation. Together with academia, industry and the government, Parallax accelerates innovation that leads to new breakthroughs; tackles critical global challenges; delivers new solutions; and develops groundbreaking ideas and speeds them to market. In his role, Matt supports the Ohio Federal Research Network, or OFRN, and its initiative *Sustaining Ohio's Aeronautical Readiness and Innovation in the Next Generation (SOARING).* OFRN leverages Ohio's unique aerospace assets to assist recipients in overcoming critical technical barriers and business challenges to enable more widespread adoption of unmanned aerial systems (UAS) into the national aerospace. Prior to Parallax, Matt was the Special Assistant to the Under Secretary of Defense for Policy and supported development of Secretary Esper's 2020 priority objective to focus the Department of Defense on China. Part of that effort was to work across the entire Department to develop tasks and associated metrics that would modify the Department's behavior. This shift included significant emphasis on the Defense Innovation/Industrial Base. Matt also led efforts at the Office of the Secretary of Defense to integrate industry and academia more effectively in a Whole-of-Nation competition strategy to support the U.S. in maintaining its global competitiveness.

Kimberly Caldwell
Ms. Caldwell is a senior leader in aerospace technology development, currently leading Spirit AeroSystems' Research and Development strategy, collaborations, and Intellectual Property strategy. She has over twenty years' experience in DoD and NASA aircraft technology development, with significant experience in advanced technology development in composite aerostructures with the Defense Advanced Research Projects Agency (DARPA), the Office of Naval Research (ONR), and the Air Force Research Laboratory (AFRL). She has demonstrated experience developing and leading R&D activities for tactical aircraft, hypersonic weapons, UAV materials technology demonstration, future sea-based aviation initiatives, as well as high altitude

aircraft programs. Ms. Caldwell received her Bachelor's Degree in Engineering Science and Mechanics from Virginia Tech and her Master's Degree in Aerospace Engineering from the University of Maryland.

Larry Foster

Larry Foster is the Technical Fellow for Composite Structures at Pratt & Whitney, a position he has held since 2010. Larry is responsible for overseeing design execution and technology development for composite components across all engine products, as well as the establishment of processes for composites design, analysis, and validation. He provides technical guidance, training, and mentoring to a team of 50 engineers. His composites research and development experience includes aircraft engine, spacecraft, and missile applications, and both polymer and ceramic matrix composites. He holds six patents related to composites design and manufacturing. Larry received a Bachelor of Science degree in Applied Mechanics from the University of California, San Diego in 1985 and Master of Science degree in Aerospace Engineering from Virginia Tech in 1991. He is a member of the American Institute of Aeronautics and Astronautics, the AIAA Structures Technical Committee, the Society for the Advancement of Material and Process Engineering, and the University of Maine Mechanical Engineering Advisory Board.

Jonathan Gatmaitan

Jonathan joined Honeywell in Sept 2020 as Senior Contracts Manager for the Honeywell Energy Systems Group. In this critical role, he is responsible for leading the Energy Contracts Group with their ESPC contracts with the Department of Energy and the Army Corps of Engineers. Jonathan has over 20 years of Government and Commercial Contracting experience in manufacturing, aerospace, and construction. Most recently, he served as Senior Manager, Contracts, for the Airframers and Engine Controls Contracts group of Collins Aerospace where he led a team of contracts professionals through the development and production phases of various Aircraft controls and components for future Vertical Lift Programs such as the FARA and FLRAA. Prior to Collins Aerospace, Jonathan worked on various Research and Development contracts for Pratt and Whitney Military Engines, Advanced Engine Programs where he negotiated contracts for the F135 Fuel Burn project, Air Dominance Adaptive Propulsion (ADAPT) Concept Design program, MQ-25 UAV program and the RD-180 Rocket booster, serving customers such as AFRL, NAVAIR and NASA. Jonathan has a BA from the Ateneo de Manila University, Philippines, an MBA from the University of Dallas, a Juris Doctor from the University of New Hampshire Franklin Pierce School of Law and an LLM from the University of Connecticut School of Law.

Ramy Harik

Dr. Ramy Harik, a Fulbright Scholar, is a tenured Associate Professor in the Department of Mechanical Engineering at the University of South Carolina and a resident researcher at the McNAIR Center for Aerospace Innovation and Research. He was an affiliated research scientist in Automated Fiber Placement at NASA Langley. His education joins Mechanical Engineering (Master of Engineering), Automated Manufacturing

Engineering Technology (Master of Science) and Industrial/Mechanical Engineering (Doctor of Philosophy). He mainly teaches courses in Smart Manufacturing, Manufacturing, Computer Aided Manufacturing (CAM), Composites and Computer Aided Design (CAD). Dr Harik is an Associate Editor of the CADA International and the SME Manufacturing Letters journals. He was granted more than 3 million USD in funding from NASA, Boeing, Toray, SC Department of Commerce, South Carolina Research Authority, Siemens, Fokker Aerostructures, Dassault Aviation (funded as a student) and several other agencies. He is the recipient of the UofSC 2021 Distinguished UG Research Mentor, the 2018 Samuel Litman Distinguished Professor award from the College of Engineering and Computing at the University of South Carolina, and the 2016 Outstanding Young Educator Award from Pi Tau Sigma Honor Society at the University of South Carolina. Ramy was listed amongst the Top 20 professors in Smart Manufacturing by SME's Smart Manufacturing Magazine in 2020. Dr. Harik was the chair of CAD'10, the ACE'15, ACE'16 and ACE'17 Technical Symposiums, the PLM'16 International Conference, as well as the technical chair for CAMX'2020.

Richard Holzwarth

Richard "Dick" Holzwarth accumulated more than 30 years of experience as an Air Force Research Laboratory Research and Development Program Manager. His technical area of expertise was related to advanced composite structures for aircraft. Many of the projects he managed were related to late-stage technology development, concentrating on overall risk-reduction for transition. As such, he has significant technical expertise related to airworthiness requirements and production manufacturing readiness. His breadth of experience includes small, focused, short term efforts developing highly innovative technologies for structural design, executed with small businesses through SBIR programs, to overall program responsibility for all-up manned flight test of primarily bonded aircraft structure. (USAF X-55A developed during the Advanced Composite Cargo Aircraft Program). Throughout his career, Mr Holzwarth managed over 100 R&D programs using both conventional and common contracting procedures and emerging innovative approaches such as other transactions. As program manager during acquisition, he has worked directly with multiple government agency contracting officers and is very familiar with many forms of contract acquisition mechanisms, funding requirements, and data requirements.

Hyonny Kim

Hyonny Kim is a Professor in the Department of Structural Engineering at the University of California, San Diego. He received his Ph.D. in the area of Solid Mechanics and Structures from the Department of Mechanical Engineering at UC Santa Barbara in 1998. Prior to his present post, he was an Assistant Professor in the School of Aeronautics and Astronautics at Purdue University (2001-2006) and had also gained valuable industrial experiences while working for Pratt & Whitney aircraft engine company (1995), and as co-founder of a small company designing and prototyping electric vehicle conversions (1994). Hyonny's areas of research interest are on the testing and failure analysis of composite materials and aerospace structures, with particular focus on impact, dynamic response, adhesive joining, and large-scale

structural behavior. Hyonny is a pioneer in the research of high-energy wide-area blunt impact events on aircraft structures, having studied that topic extensively under support from the FAA and in conjunction with major aircraft industry partners. Hyonny is a Fellow of the American Society for Composites where he had served as President from 2018-2019. He is also active in the executive committee of the International Committee for Composite Materials (ICCM) and participates in the Composite Materials Handbook 17 organization.

Kelly Kyes

Kelly Kyes is a senior intellectual property (IP) policy specialist for Boeing. Since 2011, she has represented Boeing on IP matters in aerospace and defense industry associations, such as the Aerospace Industries Association IP committee, which she currently chairs. Ms. Kyes provides IP support to Boeing teams developing technology, sourcing and partnering strategies, with a focus on U.S. government business. She is knowledgeable about a variety of contracting instruments and has authored and contributed to numerous aerospace and defense industry writings on IP and technology policy matters, with the goal of balancing government and industry interests, incentivizing private investment and enhancing access to commercial technologies. Ms. Kyes served as an industry member on the Government-Industry Advisory Panel on Technical Data Rights, established via Section 813 of the National Defense Authorization Act (NDAA) for FY 2016. She holds a bachelor's degree in communications from San Diego State University and a law degree from the University of San Diego School of Law.

Irma Rodriguez

Irma Rodriguez is the Partnership Coordination Lead in the Aeronautics Research Mission Directorate at NASA Headquarters. She is responsible for partnership related efforts with industry, academia, other government agencies and international organizations. From 2008 to 2012, she was the program integration manager for the Fundamental Aeronautics Program managing the budget formulation and execution process in coordination with the projects at the NASA Centers. She first came to NASA Headquarters in 1999 and was responsible for program analysis for the Constellation and the Advanced Space Technology Programs in the Exploration Systems Mission Directorate. She started her career with NASA in 1991 at Glenn Research Center in Cleveland, Ohio as a personnel management specialist and as such supported many organizations at the Center including administering the Performance Appraisal and Awards Program for the entire Center. Her background includes partnership coordination, budget analysis and human resources responsibilities. She has received numerous NASA Group Achievement Awards, NASA Group Honor Awards and NASA Special Act or Service Awards. Rodriguez received a bachelor's degree in industrial management from the University of Puerto Rico and a master of business administration from Cleveland State University.

John Russell

Dr. John Russell is the Chief of the Air Force Research Laboratory's Structures Technology Branch. In this role, he is the senior manager of an 18 person team that develops and transitions new airframe structures technology for safety, reliability, affordability, and efficiency in current and future Air Force weapon systems. To do this, he builds partnerships with customers across the Air Force, DoD, other government agencies, industry, and academia. In addition, he is one of the nation's leading experts in the composite materials. From 2000-2007, he was the Air Force program manager for the Composites Affordability Initiative, a public-private partnership to develop large integrated and bonded composites for military aircraft. From 2008-2014, he was the program manager for the Defense Wide Manufacturing Science and Technology program out of OSD. During that time, he launched the first of the Manufacturing USA institutes, America Makes. Dr. Russell has a Doctor of Science degree in chemical engineering from Washington University in St Louis. He is a fellow of SME, the Society for the Advancement of Materials and Process Engineering (SAMPE), and the Air Force Research Laboratory.

Marco Salviato

Marco Salviato is an Assistant Professor of Aeronautics and Astronautics at the UW. Before joining the UW in 2015, he was a research assistant professor in the Dept of Civil and Environmental Engineering at Northwestern University. His research focuses on multiscale computational modeling of advanced quasibrittle materials including unidirectional composites, two- and three-dimensional textile and braided composites, Discontinuous Fiber Composites (DFCs), and polymer nanocomposites. His models enable the understanding of material and structural size effects that are pervasive in composite aerostructures opening new avenues for the formulation of size-dependent design and certification guidelines. His theories are currently used by the Federal Aviation Administration, the Air Force Research Laboratory, and the Boeing company for the analysis and certification of composites parts made via additive manufacturing and automated fiber placement. The impact of his research has been recognized by a number of awards including the ASME Heythornwaithe Young Investigator Award "for excellence in mechanics" and the DESTech Young Composites Researcher Award by the American Society for Composites (ASC) for "outstanding contributions in the understanding of material and structural size effect in quasibrittle media."

Harvey Schabes

Harvey is Chief of the Technology Transfer Office (TTO) at NASA's Glenn Research Center. He manages Glenn's intellectual property portfolio and the Space Act Agreement process and ensures that Glenn technologies are made commercially available to benefit the national economy and the U.S. public. Harvey has 37+ years of NASA experience. He joined the TTO in October 2015 and served as the Senior Strategy Manager where he coordinated the overall Space Act Agreement area, as well as other key Office, Directorate, and Center-wide activities. Prior to joining the TTO, Harvey held numerous senior positions across the Center and has served as a researcher, project engineer, project manager, and a manager in both technical and administrative organizations during his tenure at the Center. Harvey joined NASA in

1983 as a research engineer developing new computer models for predicting the performance of new de-icing systems and performed extensive testing in the Icing Research Tunnel. He earned a Bachelor of Science degree in Mechanical Engineering from the University of Pittsburgh and a Master of Science degree in Mechanical Engineering from the University of Toledo. He has received numerous awards for his accomplishments and leadership including the NASA Exceptional Service Medal, and NASA Group Achievement Honor Award for both NASA's Business Systems Gap Analysis Team and the Competency Management Team.

John Tomblin

John Tomblin is the Senior Vice President for Industry and Defense Programs at Wichita State University (WSU) and the Executive Director of the National Institute for Aviation Research (NIAR). He is also a Sam Bloomfield Distinguished Professor of Aerospace Engineering. As Senior Vice President for Industry and Defense Programs, Dr. Tomblin leads and directs critical university initiatives, including but not limited to, industry and defense research and testing, innovative technologies and solutions, industry engagement, and other programs that advance WSU's mission to be an economic driver. As Executive Director of NIAR, Dr. Tomblin oversees eighteen laboratories in four locations encompassing over 1,300,000 square feet, 875 employees and a yearly budget of nearly $160 million. Under his leadership, NIAR has gained worldwide recognition in the area of composites and advanced materials; full-scale testing and structural teardown, advanced manufacturing, reverse engineering as well as greatly expanded its capabilities and footprint. NIAR currently has a number of DoD contracts and grants researching certification framework for enabling advanced materials and structural concepts for automated manufacturing, digital twin technologies for rapid sustainment of legacy aircraft and emerging materials for high-speed missile applications as well as multiple programs from DoD industrial suppliers and original equipment manufacturers. Dr. Tomblin received his Ph.D., master's degree and bachelor's degree from West Virginia University in Morgantown, WV. Dr. Tomblin joined Wichita State University in 1994 as a professor in the Department of Aerospace Engineering.

Anthony Waas

Anthony M. Waas is the Richard A Auhll Department Chair of Aerospace Engineering at the University of Michigan, Ann Arbor where he holds the Felix Pawlowski Collegiate Chair in Aerospace Engineering. He is also a Professor of Mechanical Engineering. Prior to that he was the Boeing Egtvedt Endowed Chair Professor and Department Chair in the William E. Boeing Department of Aeronautics and Astronautics at the University of Washington (UW), Seattle. His current research interests are: robotically manufactured lightweight composite structures, computational modeling of composite structures, 3D printed aero-structures, braided and woven textile composites – manufacturing, characterization and modeling, and data science applications in modeling of materials and structures. He was a lead collaborator (AFRL, GE Aviation and Lockheed) on the Air Force ICM2 project and has served as a consultant on the NESC Structures Technical Discipline Team. Professor Waas was the Felix Pawlowski Collegiate Chair Professor of Aerospace Engineering and Director, Composite

Structures Laboratory at the University of Michigan, from 1988 to 2014, prior to joining UW in January 2015. He assumed his current position in Fall 2018. Professor Waas is a Fellow of the American Institute of Aeronautics and Astronautics (AIAA), the American Society of Mechanical Engineering (ASME), the American Society for Composites (ASC), the American Academy of Mechanics (AAM) and the Royal Aeronautical Society, UK. He is a recipient of several best paper awards, the 2016 AIAA/ASME SDM award, the AAM Jr. Research Award, the ASC Outstanding Researcher Award, and several distinguished awards from the University of Michigan, including the Stephen S. Attwood award for Excellence in Engineering, one of the highest honors for an Engineering faculty member at the University of Michigan. He received the AIAA-ASC James H. Starnes, jr. Award, 2017, for seminal contributions to composite structures and materials, and for mentoring students and other young professionals. In 2017, Professor Waas was elected to the Washington State Academy of Sciences, and in 2018 to the European Academy of Sciences and Arts. He is also the recipient of the AIAA ICME Prize, 2020, and the ASME Warner T. Koiter Medal, 2020.

Edward Weinstein

Weinstein received his Bachelors of Engineering degree from the University of Pennsylvania and his Ph.D. from Rutgers University. He worked in counter-terrorism developing blast hardening schemes for aircraft, creating the first qualified blast hardened luggage container. Later, he worked on man-portable blast containment devices, hardening of bridges and buildings, and novel blast absorption materials. Much of this worked centered on composites and laminates. In 2012, Weinstein joined the Federal Aviation Administration as manager of the Structures and Materials Research Section. In this position, Weinstein oversees a broad range of research into composites, composite-metallic hybrid structures, advanced metallic technologies, and advanced fabrication technologies such as structural bonding. This work covers aging, repair, and damage tolerance on the material level to full-scale components.