17th Annual FAA Commercial Space Transportation Conference

Speakers and Bios
Welcome

George C. Nield

Dr. George C. Nield serves as the Associate Administrator for Commercial Space Transportation at the FAA. He has over 30 years of aerospace experience with the Air Force, at NASA, and in private industry. Dr. Nield came to FAA from the Orbital Sciences Corporation, where he served as Senior Scientist for the Advanced Programs Group. His previous assignments include working as an Astronautical Engineer at the Space and Missile Systems Organization, a Flight Test Engineer at the Air Force Flight Test Center, and an Assistant Professor and Research Director at the USAF Academy. He was the Manager of the Flight Integration Office for the Space Shuttle Program at the NASA Johnson Space Center, and later worked on both the Shuttle/Mir Program and the International Space Station Program.

A graduate of the United States Air Force Academy, he holds an M.S. and Ph.D. in Aeronautics and Astronautics from Stanford University, and an MBA from George Washington University. He is also a Flight Test Engineering graduate of the USAF Test Pilot School. Dr. Nield is a registered Professional Engineer and a Fellow of the American Institute of Aeronautics and Astronautics.

NASA/FAA Human Spaceflight

William H. Gerstenmaier

William H. Gerstenmaier is the associate administrator for the Human Exploration and Operations Directorate at NASA Headquarters in Washington, DC. Gerstenmaier began his NASA career in 1977 at the then Lewis Research Center in Cleveland, Ohio, performing aeronautical research. Beginning in 1988, Gerstenmaier headed the Orbital Maneuvering Vehicle (OMV) Operations Office, Systems Division at the Johnson Space Center. He also served as Shuttle/Mir Program operations manager. In 1998, Gerstenmaier was named manager, Space Shuttle Program Integration, responsible for the overall management, integration, and operations of the Space Shuttle Program. In December 2000, Gerstenmaier was named deputy manager, International Space Station Program and two years later became manager. Named associate administrator for the Space Operations Directorate in 2005, Gerstenmaier directed the safe completion of the last 21 Space Shuttle missions that witnessed the completion of the International Space Station.

He is the recipient of numerous awards from NASA, AIAA, and many others.

Featured Speaker

Steven M. Palazzo

Congressman Steven M. Palazzo represents the 4th Congressional district of Mississippi and some of the finest people in the country. Like them, Steven believes in limited government, a strong defense, and the need for common sense solutions to today’s challenges. Born in Gulfport, Mississippi, Steven attended St. John's High School before earning his Bachelor’s and Master’s degrees in accounting from the University of Southern Mississippi. Steven and his wife started their own small business in 2001, giving them a unique perspective on what it means to create jobs and manage a budget. Over time, they have been able to grow their CPA firm into a successful agency that specializes in helping Americans living abroad with their income taxes. Steven was elected to the Mississippi State legislature in 2006. He used his background in business to push through a tax cut for Mississippians and authored a resolution reaffirming the 10th Amendment, which properly defines a limited role for the federal government by reserving power for the states. In 2010 Steven decided to run for Mississippi’s 4th Congressional District. It was a race no one thought he could win, but Steven met the
challenge head-on. He won the election with 52% of the vote defeating a Democrat who’d been in office for over 20 years. During the 2012 election, Steven was re-elected with 64% of the vote. Congressman Palazzo was sworn into office on January 5, 2011 and serves on the House Armed Services, Homeland Security, and Science, Space and Technology Committees where he is the Chairman of the Space and Aeronautics Subcommittee.

Space Launch and Operations Safety

Dr. Michael Romanowski is currently the Director of Commercial Space Integration. In this role he provides leadership and executive direction for the FAA Office of Commercial Space Transportation’s five operational divisions responsible for the evaluation and regulation of commercial spaceports, launches and reentries, and integrating these operations with the National Air Space. Immediately before joining the FAA’s Commercial Space office, Dr. Romanowski was the FAA’s representative to the White House’s National Science & Technology Council and its Committee on Technology. He was also the aviation advisor to the first-ever Chief Technology Officer of the United States. In these roles he focused on developing and advancing strategies and policies across the Federal Government, and with the private sector, that promoted innovation and that accelerated the benefits of federal investments in aviation and aeronautics. Prior to his White House assignment, Dr. Romanowski was the FAA’s Director of NextGen Integration and Implementation. He both created and led this organization, with responsibility for ensuring the integrated application, planning, programming and budgeting of the FAA’s NextGen air traffic management modernization portfolio, and managing its execution across all FAA lines of business. Before joining the FAA, he served as Vice President of Civil Aviation at the Aerospace Industries Association (AIA), where he headed all its activities on aviation issues and policy, including the areas of research and development, aviation infrastructure, and safety and security. Dr. Romanowski has broad experience in research, development, validation and fleet operations of aviation products. He served as the Director of Product Safety, Certification and Airworthiness at Sikorsky Aircraft with responsibilities spanning Sikorsky’s entire product line. Before joining Sikorsky, he held a similar role at Pratt & Whitney where his responsibilities covered all of Pratt & Whitney’s large commercial engines. Dr. Romanowski received his Ph.D. in Mechanical Engineering from Duke University. He also holds a Master of Science degree in Mechanical Engineering from Renssalaer Polytechnic Institute and a Bachelor of Science degree in Aerospace Engineering from Boston University.

Ronald C. Busch

Ronald Buschy is the SDA Chairman and Executive Director. He is also the Vice President of Network Engineering for Intelsat. He is responsible for the design and implementation of Intelsat’s satellite-based data networks, video distribution systems and transmit/receive facilities. He also is responsible for Intelsat’s global terrestrial network/fiber backbone, which is used for interconnecting Intelsat operations, business facilities and customer sites to Intelsat teleport gateways.
Dierdre Healy

Dierdre Healey is the Director, Mission Support Division, in the Office of Safety and Mission Assurance, NASA Headquarters. In this position, Ms. Healey leads safety and mission assurance activities in support of NASA’s spacecraft (including the International Space Station and space hardware developed for exploration programs and commercial space activities), science payloads, expendable launch vehicles, and aeronautics programs. In addition, she provides the Office of Safety and Mission Assurance primary interface with the NASA Mission Directorates, the Office of the Chief Technologist, and the Center Safety and Mission Assurance (SMA) organizations. Previously, Ms. Healey supported SMA activities for the Human Exploration and Operations Exploration Systems, where she led efforts to incorporate SMA policies and tenets into the Agency’s various Human Space Flight programs. Ms. Healey has more than 26 years of experience in space systems safety and mission assurance, program management, engineering, operations, and policy. Prior to joining NASA, she led development and operations of national and international space systems in the U.S. Air Force. Previous positions include Program Manager for the Inertial Upper Stage Rocket Booster Program; Director, Titan Program Operations and Integration; Deputy Program Manager, Launch Projects at Cape Canaveral Air Station; and many others. Ms. Healey has a Master’s degree in Government from Harvard University and a Bachelor’s degree in Aerospace Engineering from the University of Illinois.

Dan Murray

Daniel P. Murray is the Manager, Space Transportation Development Division, Federal Aviation Administration, Office of Commercial Space Transportation. Mr. Murray has over 18 years of experience in the space industry, including the past 11 years with the FAA’s Office of Commercial Space Transportation where he currently manages the Space Transportation Development Division. The Division is responsible for environmental reviews and airspace integration activities that support the evaluations of commercial launch and re-entry licenses and permits, as well as the issuance of Space Transportation Infrastructure Matching Grants and the development of other future activities. He serves as the co-lead of an FAA cross-organizational working group that addresses issues associated with integrating commercial space launch and re-entry operations into the National Airspace System. Mr. Murray holds a Bachelor of Science Degree in Aerospace Engineering from the University of Notre Dame and a Master of Science Degree in Aerospace Engineering from the University of Houston.

Audrey Schaffer

Audrey Schaffer is currently the Deputy Director for Space Policy Engagement in the Office of the Under Secretary of Defense for Policy. In that role, she is involved in a variety of international military and government space cooperation initiatives. She also supports the development and implementation of DoD space policy and strategy and works with other U.S. government departments and agencies to coordinate activities to implement National Space Policy. For the past several years, her focus has been on establishing international norms of behavior for responsible peacetime space operations. She plays an active role in the U.S. delegation to the UN Committee on the Peaceful Uses of Outer Space and supported the U.S. Expert to the UN Group of Governmental Experts on Space Transparency and Confidence-Building Measures. Prior to joining the Office of the Secretary of Defense, Ms. Schaffer was an Air Force Presidential Management Fellow (PMF), working in Washington, D.C. and Los Angeles, California. As a PMF, she rotated through assignments related to space policy, strategy, acquisition, and engagement, including the Policy and Plans Division of the Air Force Directorate of Space Acquisition, the Commander’s Action Group of Air Force Space Command’s Space and Missile Systems Center, and the Commercial Policy and Strategy Branch of the National Security Space Office. Ms. Schaffer holds a B.S. in Aerospace Engineering from the Massachusetts Institute of Technology and a M.A. in International Science and Technology from the George Washington University.
Legal Regulatory Issues

Frans von der Dunk

Prof. Dr. Frans G. von der Dunk is the Harvey and Susan Perlman Alumni / Othmer Professor of Space Law at the University of Nebraska-Lincoln’s LL.M. Program on Space and Telecommunication. He also is Director of Black Holes BV, Consultancy in space law and policy, based in Leiden. Previously, he was Director of Space Law Research at the International Institute of Air and Space Law at Leiden University. Prof. Von der Dunk was awarded the Distinguished Service Award of the International Institute of Space Law (IISL) of the International Astronautical Federation (IAF) in October 2004, and the Social Science Award of the International Academy of Astronautics (IAA) in October 2006. He defended his dissertation on “Private Enterprise and Public Interest in the European ‘Spacescape’” in 1998. He has over 120 publications, has given some 120 presentations at international meetings and was visiting professor at some 25 universities on subjects of space law and policy, international air law and public international law. He has organized many international symposia, workshops and other events, and has been (co-)editor of a number of publications and proceedings. As of 2006, he is the Series Editor of “Studies in Space Law.” Dr. Von der Dunk has served as adviser to the Dutch Government, several foreign Governments, the European Commission, the European Space Agency (ESA), the United Nations (UN), the Organisation for Economic Co-operation and Development (OECD), the Dutch National Aerospace Agency (NIVR), the German Space Agency (DLR), the Brazilian Space Agency (AEB), the Association of Space Explorers (ASE) and the Centre for Strategic and International Studies (CSIS), as well as various companies. He has acted as the Legal Task Manager in a number of studies on European space policy, Galileo and GNSS, satellite communications, the Global Monitoring for the Environment and Security (GMES) project and earth observation. Much of his recent work focused on such topical issues as space tourism, the legal status of the Moon and other celestial bodies, the ‘sale-of-lunar-estate hoax’, and planetary protection. He is Director of Public Relations of the International Institute of Space Law (IISL), Member of the Board of the European Centre for Space Law (ECSL), and Member for the Netherlands in the International Law Association’s (ILA) Committee on Space Law. He is a Member of the Editorial Board of ‘Space Policy,’ and AIAA Space Industry Deep Dive Survey

Brad Botwin

Brad Botwin currently serves as the Director of Industrial Studies in the Commerce Department’s Office of Technology Evaluation. In this capacity he is responsible for developing surveys and analyses, and implementing programs designed to ensure a technologically superior and competitive defense industrial base capable of meeting U.S. economic and national security requirements. Mr. Botwin’s programmatic responsibilities include: Assessments of U.S. Industrial Capabilities and Critical Technologies; Section 232 Investigations of the Effect of Imports on National Security; Foreign Availability Assessments; and Short Supply Determinations. Prior to assuming this position, Mr. Botwin served as Division Director for Industrial Capabilities in Commerce’s Strategic Analysis Division, with responsibilities for directing Production Assessments of Critical Sectors affected by foreign competition; Studies on Offsets in Defense Trade; and Reviews of the Impact of Foreign Investment in the U.S. Mr. Botwin has a degree in international affairs and economics from the American University and an MBA from the George Washington University with a concentration in international business and finance.

Congressional Staff Perspectives

Bailey Edwards

Bailey Edwards serves U.S. Senate Commerce Committee Ranking Member John Thune (R-SD) as Policy Director for Aviation, Science, and Space. In that role, Mr. Edwards advises the Ranking Member on the activities of the Committee’s Aviation Subcommittee and the Science and Space Subcommittee. Mr. Edwards leads a small team of staff coordinating hearings, legislation, and oversight activities. He previously served then-Senator Kay Bailey Hutchison (R-TX) as Senior Professional Staff when she was Ranking Member of the Commerce Committee, and he
managed the aviation policy portfolio. Prior to his service in the Senate, Mr. Edwards served on the staff of the U.S. House of Representatives Committee on Transportation and Infrastructure. He first served as Professional Staff on the Highways Subcommittee under Chairman Don Young (R-AK), contributing to the successful 2005 SAFETEA-LU Highway reauthorization effort, and later on the Aviation Subcommittee under Ranking Member turned Chairman John Mica (R-FL), contributing to the successful 2012 FAA Reauthorization effort, among other items.

Ann Zulkosky

Ann Zulkosky is a member of the professional staff of the U.S. Senate Committee on Commerce, Science, and Transportation in Washington, D.C. She completed a year as a National Oceanic and Atmospheric Administration Sea Grant Fellow for the Commerce Subcommittee on Oceans, Atmosphere, Fisheries, and Coast Guard. For her Master's Degree in marine environmental science, from the State University of New York at Stony Brook, she studied a class of chemicals that become more toxic as they degrade. Ms. Zulkosky's Ph.D. research focuses on the effects of pollution on the biota of coastal ecosystems. She is investigating the effects of pesticide exposure on non-target animals, which can draw attention to environmental problems before they become more widespread.

Megan Mitchell

Ms. Megan L. Mitchell is the Senior Policy Advisor for the Chairman of the Space Subcommittee in the House of Representatives. Megan previously worked for the FAA Office of Commercial Space Transportation, where she started in 2008. Prior to working at AST, she worked in the FAA Aircraft Certification Office in Anchorage, Alaska. Megan has her B.S. and M.S. in Aerospace Engineering from UCLA and Utah State University.

NASA Flight Opportunities Program

Laguduva "LK" Kubendran

Dr. Laguduva "LK" Kubendran is the Program Executive for the Flight Opportunities Program, and is the NASA Responsible Official for the Commercial Reusable Suborbital Research (CRuSR) activity. LK represents all suborbital activities within the NASA Space Technology Mission Directorate, and is responsible for the development of short-term and long-term strategic plans for maintaining, renewing, and extending suborbital facilities and capabilities, with a focus on the growth and development of the commercial suborbital industry. LK has held several leadership roles at NASA Dryden: Deputy Director for Safety & Mission Assurance, Director (acting) for Research and Engineering, and Deputy Associate Center Director (acting) for Operations. LK has also worked in the private sector.
Ron Young
Ron Young is NASA’s Level 2 Manager for the Flight Opportunities Program at Dryden Flight Research Center at Edwards Air Force Base, California. At DFRC, he has served in several capacities including: Associate Director for Research & Engineering, Chief of the Flight Instrumentation Engineering Branch, SBIR/STTR Technology Manager, Technology Transfer Office Manager, and the COTR for the DFRC Engineering & Technical Services contract. Ron has been on the engineering teams for several flight research projects that have spanned hypersonic, supersonic and subsonic flight regimes. He has been responsible for the development and operations of flight research instrumentation systems used in aerodynamic boundary layer studies, aero-thermal heating, advanced propulsion technologies, high angle of attack research and shuttle landing loads testing. Ron has earned BS and MS degrees from UC Davis in Electrical Engineering. Ron has worked at Dryden since 1975.

Space and Air Traffic Integration

Edward L. Bolton, Jr.
Edward L. Bolton Jr. is the Assistant Administrator for NextGen at the Federal Aviation Administration. The Office of NextGen (ANG) is responsible for leading the transformation of the national airspace system. Bolton leads a Federal workforce of more than 900 employees, and manages the $1 billion annual budget of the Next Generation Air Transportation System. Bolton joined the FAA in September 2013 after a career with the U.S. Air Force, most recently with the rank of Major General and the position of Deputy Assistant Secretary for Budget in the Office of the Assistant Secretary for Financial Management and Comptroller. He led a team of financial managers responsible for the Air Force’s $110 billion annual budget. He served as Commander of the 45th Space Wing and Director of the Eastern Range at Patrick Air Force Base in Florida, where he oversaw a $5 billion budget and 24 successful spacelift, shuttle, test and range missions. He commanded the 30th Range Squadron and the 30th Operations Group at Patrick Air Force Base in Florida, where he oversaw a $5 billion budget and 24 successful spacelift, shuttle, test and range missions. He commanded the 30th Range Squadron and the 30th Operations Group at Vandenberg Air Force Base in California. He also commanded the Satellite and Launch Control Wing and the Launch and Range Systems Wing. Bolton served as the Deputy Director for Systems Integration and Engineering as well as the Principal Deputy to the Chief Operating Office at the National Reconnaissance Office (NRO). His staff received numerous awards under his leadership, and his individual awards included the NRO Leadership Award for 2008 and the NRO Gold Medal in 2009. Bolton began his Air Force career as an enlisted cost and management analyst. He was commissioned in 1983 after completing a Bachelor of Science degree in electrical engineering from the University of New Mexico and graduating from Officer Training School. He also holds a Master of Science in systems management from the University of Southern California, Los Angeles and a Master of Science in national security strategy from the National War College, among other distinctions.

Featured Speaker

Michael G. Whitaker
The Honorable Michael G. Whitaker was sworn in as the Deputy Administrator of the Federal Aviation Administration on June 3, 2013. Deputy Administrator Whitaker is responsible for helping to ensure the safe and efficient operations of the largest aerospace system in the world. This includes over 45,000 daily operations as well as enforcing safety standards for all equipment and aerospace professionals within the aviation industry. Mr. Whitaker is a seasoned aviation executive. He is well versed in general and commercial aviation and has led collaborative efforts and joint ventures to promote aviation safety, performance and profitability. Mr. Whitaker also has vast finance and marketing experience. Before joining the FAA, Whitaker served as a Board Member and Business Development Consultant for InterGlobe Enterprises from 2011 to 2012. Prior to this, he was a Group Chief Executive Officer within InterGlobe Enterprises from 2009 to 2011. From 1994 to
2009, Whitaker served at United Airlines, most recently as Senior Vice President for Alliances, International, and Regulatory Affairs. Prior to that, he served at Trans World Airlines from 1991 to 1994, most recently as Assistant General Counsel for Regulatory and International Affairs.

New Developments in Commercial Cargo and Crew

Pam Underwood
Pam Underwood is an Aerospace Engineer with the FAA Office of Commercial Space Transportation at Kennedy Space Center, Florida. Her office is responsible for facilitating the partnership for commercial human spaceflight with the NASA Commercial Crew Program. Previous to her current assignment she worked for AST from their field office at Patrick AFB, Florida. Her responsibilities included facilitating the partnership for launch safety and representing AST to the common standards working group with NASA and the United States Air Force. She earned a B.S. degree in Aerospace Engineering from Embry-Riddle Aeronautical University, and a M.S. degree in Aerospace Engineering from Virginia Tech. Before joining AST, Pam worked as an Integration Engineer supporting the Solid Rocket Booster Element on the space shuttle program at Kennedy Space Center, and as a Wind Tunnel Test Engineer at the National Transonic Facility at NASA Langley Research Center.

Bill Claybaugh
Bill Claybaugh is the Senior Director, Human Space Systems, Orbital Sciences Corporation. He was formerly the Director, Studies and Analysis, Office of Program Analysis and Evaluation, and the Director, Reusable Launch Vehicle Program Office at NASA. He also served as the Director of NASA’s Office of Exploration. He holds a Master of Business Administration in Finance and Strategic Planning from Yale University.

Christopher Ferguson
Christopher Ferguson was named Director of Crew and Mission Operations in the Boeing Commercial Crew program, in December 2011. In that position, he has comprehensive oversight for crew Interface in the design of Boeing’s Commercial Crew Transportation System. He also plays a key leadership role in the development and testing of system concepts and key technologies for the Commercial Space Transportation (CST)-100 spacecraft and integrated launch and ground systems. Chris is a retired Navy Captain and a veteran of three shuttle missions, He has logged more than 40 days in space and 5,700 hours in high performance aircraft, and he was the deputy chief of NASA’s Astronaut Office.

Adam Harris
Adam Harris is the Vice President of Government Sales at Space Exploration Technologies and is responsible for implementing and overseeing SpaceX interactions with federal agencies. In concert with the SpaceX leadership team, Adam works to secure financial support for SpaceX business activities and programs. Prior to joining SpaceX, Adam most recently served as the Staff Director of the House Select Intelligence Oversight Panel on the Appropriations Committee. He also held the position of space budget analyst on the professional staff of the Defense Appropriations Subcommittee. Adam’s government experience includes serving as a Senior Advisor in the Office of the Director of National Intelligence and as a Professional Staff Member on the Senate Select Committee on Intelligence. He served as an officer for 8 years in the United States Air Force with assignments at Cape Canaveral Air Force Station, Wright-Patterson Air Force Base and the National Reconnaissance Office. Adam received his Bachelor of Science in astronautical engineering from the United States Air Force Academy and a Master of Science in aeronautical engineering from the Air Force Institute of Technology.
Philip McAlister

Philip McAlister is currently the Director of Commercial Spaceflight at NASA Headquarters where he oversees the management of NASA’s Commercial Crew and Cargo Programs. Prior to this assignment, he was in NASA’s Office of Program Analysis and Evaluation where he served as the Executive Director for the “Review of U.S. Human Spaceflight Plans Committee” (also known as the Augustine Committee). He also led NASA’s efforts on the U.S. National Space Policy. In 2010, he earned NASA’s Exceptional Service Medal. Prior to NASA, he was the Director of Futron’s Space and Telecommunications Division where he managed a group of twenty analysts involved in space industry analysis, market research, and technology assessments. Before joining Futron, he served as a Senior Manager during a ten-year career at TRW Corporation. Prior to that, he worked as a Technical Analyst for ANSER Corporation. Over his career, he has been involved in commercial, civil, and military space programs. He has participated in the development of new launch vehicles, the redesign of the International Space Station, and the advancement of several commercial space ventures. In addition, he is an experienced program/project manager and has managed multiple aerospace projects while in the government and private sectors. Mr. McAlister has an MBA degree from Averett University, an MS in Systems Engineering from George Mason University, and a BS in Physical Sciences from the University of Maryland.

Mark Sirangelo

Mark Sirangelo is the corporate vice president for Sierra Nevada Corporation’s Space Systems, a producer of satellites, space transportation vehicles, propulsion systems and space sub-systems. Mark was formerly the Chairman & CEO of SpaceDev, Inc. before its merger with SNC. Mark is the Chairman Emeritus of the Commercial Spaceflight Federation and the founding Chairman of eSpace, the Center for Space Entrepreneurship.

Human Space Flight Safety

N. Wayne Hale

Wayne Hale is currently a consultant for Special Aerospace Services of Boulder, Colorado. He consults with a number of high tech firms on safety, management, and corporate culture issues as well as performing specialized technical studies. Mr. Hale retired from NASA in 2010 as the Deputy Associate Administrator of Strategic Partnerships at NASA Headquarters in Washington, DC. Mr. Hale served in the senior leadership of NASA’s Space Shuttle Program from 2003 to 2008 including Launch Integration Manager at the Kennedy Space Center and then stints as Deputy Program Manager and finally as Program Manager during the post-Columbia return to flight effort. From 1988 to 2003, he was a Space Shuttle Flight Director for 40 Space Shuttle flights, and prior to that as an orbiter systems flight controller in Mission Control for 15 early Space Shuttle flights. Mr. Hale counts as the capstone achievement of his career the transformation of NASA Space Shuttle management culture to be one that emphasized safety and mission success. His tenure as Program Manager marked seven successful space shuttle flights and set the safety expectations for the fly out of the space shuttle program. Mr. Hale has received special honors and awards such as: three NASA Outstanding Leadership Medals; the NASA Exceptional Service Medal; Rice University Outstanding Engineering Alumnus; Purdue University Distinguished Engineering Alumnus and Outstanding Mechanical Engineering Alumnus, the Goddard Memorial Astronautics Engineer of the Year; and National Air and Space Smithsonian Museum Achievement Award of the Year 2007. Mr.
Hale holds a Bachelor of Science in Mechanical Engineering from Rice University and a Master of Science in Mechanical Engineering from Purdue University.

Ken Heyer
Ken Heyer has served since the summer of 2012 as Deputy Director in the Bureau of Economics at the United States Federal Trade Commission. In that capacity he supervises the work of approximately 50 Ph.D economists and provides economic analysis and recommendations to the Agency’s Front Office attorneys and its Commissioners. Prior to taking this position, Ken served for 29 years as an economist at the Antitrust Division of the United States Department of Justice. Ken has worked on investigations in a variety of industries, covering a wide range of antitrust issues—from merger analysis, to investigation of monopolization claims, to constructing and implementing appropriate and efficient remedies for competitive problems. In 1999 Ken became the first recipient of the Antitrust Division’s William F. Baxter award for outstanding contributions in the area of economic analysis. He has co-authored articles in the Review of Industrial Organization on economic activities at the Antitrust Division, and has published in the Antitrust Law Journal and in Competition Policy International on antitrust enforcement and policy issues. His most recent article, “Consumer Welfare and the Legacy of Robert Bork,” is forthcoming in the Journal of Law and Economics.

Jeff Greason
Jeff Greason has nearly 20 years’ experience managing innovative technical project teams at XCOR Aerospace, Rotary Rocket Company (RRC), and Intel Corporation. He is the president and a co-founder of XCOR, leading an engineering team that has developed 11 different long life, highly reusable, liquid-fueled rocket engines using nitrous oxide, liquid oxygen, and hydrogen peroxide oxidizers, with kerosene, alcohol, ethane, and other nontoxic propellants. Under Jeff’s leadership the company has also developed low cost liquid propellant piston pumps and two generations of piloted reusable rocket aircraft. The EZ-Rocket was flown 26 times, and the X-Racer flew 40 times, without a mishap. As part of his duties at XCOR, Jeff has had the final go/no-go decision responsibility on nearly 4,000 rocket engine test firings, 46 manned rocket flights, and he served as flight test engineer aboard one of the X-Racer flights. Prior to co-founding XCOR, he hired and managed the propulsion team at RRC, where he led technical development of the company’s rocket engines. As a recognized expert in FAA/AST reusable launch vehicle (RLV) regulations, Jeff supervised XCOR’s reusable launch vehicle licensing efforts through completion in early 2003. He also provided support to the Mojave Airport on their successful application as the first inland spaceport and commercial launch site for reusable launch vehicles. In July 2003, Jeff testified before the joint House/Senate subcommittee hearings on “Commercial Human Spaceflight.” He has maintained a close working relationship with AST since the 1998 Notice of Proposed Rulemaking on RLV licensing. Jeff has been a member of the Commercial Space Transportation Advisory Committee (COMSTAC) RLV working group since 2000 and now serves on the full COMSTAC. He is a co-founder and vice-chairman of the Personal Spaceflight Federation, a trade association for innovative launch companies. In 2009 he was named to the President’s Human Space Flight Review Committee (Augustine Committee). Jeff was named one of Time’s “Inventors of the Year” in 2002 for his team’s work on the EZ-Rocket. He holds 18 U.S. patents and graduated with honors from the California Institute of Technology.

Jim Muncy
A long-time leader in the space advocacy community, Jim Muncy co-founded the Space Frontier Foundation in 1988 and served as its Chairman of the Board for six years. Earlier he had served on the Board of Directors of both the National Space Society and the L5 Society. Muncy has worked in multiple facets of space policy and advocacy, beginning his career in space policy in 1981 as a staff advisor in the Office of Congressman Newt Gingrich, where he helped Mr. Gingrich co-found the Congressional Space Caucus and develop visionary space policy legislation and initiatives. Muncy later worked in the US House of Representatives, serving on the Professional Staff of the House Science Committee’s Space and Aeronautics Subcommittee. In addition to being Chairman Dana Rohrabacher’s staff designee, Muncy held the lead responsibility for issues and programs such as reusable launch vehicles, human space flight commercialization, military space technology, export control reform, range modernization, and future NASA programs.
In 2000, Muncy founded PoliSpace, an independent space policy consultancy, to help space entrepreneurs and intrapreneurs succeed at the nexus of business, public affairs, and technology. This work prepared him to lead two successful industry lobbying efforts in 2004 and 2005: winning enactment of the Commercial Space Launch Amendments Act of 2004 (P.L 108-492), and securing an amendment to the Iran Nonproliferation Act to allow NASA to buy commercial space goods and services with Russian content. Muncy holds an MS in Space Studies from the Center for Aerospace Sciences at the University of North Dakota and a BA from the University of Virginia, where he was an Echols Scholar.

Ken Reightler is currently the Robert A. Heinlein Distinguished Professor of Aerospace Engineering at the U.S. Naval Academy. Prior to joining the faculty in August 2012, he was Vice President, Engineering Services, for ATK Spacecraft Systems & Services, Beltsville MD. In that role, he was responsible for the overall management, strategy development, program execution, and business development of engineering services serving the NASA, defense, intelligence, and adjacent markets. Previously, Reightler spent fifteen years as an executive with Lockheed Martin serving in a variety of senior leadership roles. His positions included President, Lockheed Martin Space Operations; Vice President, Lockheed Martin Space Systems Company; Vice President and Program Manager, Consolidated Space Operations Contract (CSOC); and Vice President, Science, Engineering, Analysis and Test (SEAT) Operation. Reightler is a former NASA astronaut, and pilot of two space shuttle missions. He also held a number of senior management positions in the astronaut office at the Johnson Space Center. He also has a strong defense background serving as a Naval Aviator in both land and carrier based assignments. He is a graduate of the U.S. Naval Test Pilot School and served two tours at the Naval Air Test Center as a test pilot, project manager, and flight test instructor pilot. Reightler holds a BSAE degree from the U.S Naval Academy, a MSAE degree from the U.S. Naval Postgraduate School, and a MSSM degree from the University of Southern California.

As senior counsel for Boeing Network & Space Systems, Russ McMurry provides legal counsel for Boeing on all matters related to the company’s Space Exploration division, which provides human space flight products and services. Programs under his area of responsibility include the International Space Station, Space Launch System, Boeing Launch Services, the United Space Alliance Joint Venture, and Boeing’s commercial human space flight development. He joined Boeing Defense, Space & Security in 2005, specializing in missile and missile defense programs. Prior to joining The Boeing Company, Mr. McMurry served as a Navy JAG officer, engaged primarily in criminal trial practice. He subsequently worked as a procurement and fiscal law attorney for the United States Army. Mr. McMurry received a Bachelor of Arts degree Summa Cum Laude from the University of Alabama in 1983. He earned his law degree from the University of Alabama in 1985 and was selected as a Hugo Black scholar. McMurry is a member of the Bar Association in the States of Alabama and Florida.

George D. Zamka serves as the Deputy Associate Administrator for Commercial Space Transportation at FAA. He has over 29 years of aerospace experience with the United States Marine Corps and at NASA. Mr. Zamka came to the FAA directly from NASA where he served as an Astronaut and most recently as a Research and Instructor Pilot at the Johnson Space Center. He is a retired Colonel in the Marine Corps and as a pilot has more than 5,000 flight hours in, fighter, attack, test, research, and training aircraft in
more than 30 aircraft types, to include flying in combat. He was selected as an astronaut by NASA in June 1998 and served as Pilot on Space Shuttle mission STS-120 in 2007 and as Commander on STS-130 in 2010. He has more than 692 hours in space. He has received the Distinguished Flying Cross, Legion of Merit, Defense Meritorious Service Medal, Meritorious Service Medal, Navy Strike Air Medal (six), Navy Commendation Medal with Combat V, NASA Space Flight Medal (two), NASA Outstanding Leadership Medal, and various other military service and campaign awards. He was also awarded the Officer's Cross of the Order of Merit of the Republic of Poland.

Mr. Zamka is a Distinguished Graduate of the United States Naval Academy with a Bachelor of Science degree in Mathematics and received a Master of Science degree in Engineering Management from the Florida Institute of Technology. He also graduated from the United States Air Force Test Pilot School.

Kenneth Ham
Captain Kenneth Ham, USN is the Chair, Aerospace Department, US Naval Academy. He received a Bachelor of Science degree in aerospace engineering from US Naval Academy in 1987, and a Master of Science in aeronautical engineering from the Naval Postgraduate School in 1996; He was an F/A-18 test pilot at Naval Air Station, Patuxent River, Maryland prior to his selection as a NASA astronaut. He flew as the pilot of STS-124 and Mission Commander of STS-132, and has a total of 25 ½ days in space. His hobbies include sports, general aviation, snow and water skiing, and sky and scuba diving.

Commercial Space Transportation Advisory Committee

Mike Gold
Michael Gold is the current COMSTAC Chair. He also serves as Bigelow Aerospace's director of D.C. Operations and Business Growth. Mr. Gold is responsible for a broad array of activities at Bigelow Aerospace, including international business development, export control, media, corporate and federal relations, as well as NASA Space Act Agreement implementation, patent report maintenance, and general strategic planning. Before joining Bigelow Aerospace in a full-time capacity, Mr. Gold assisted the company as an attorney in the Washington office of Patton Boggs, LLP. While at Patton Boggs, Mr. Gold supported several clients in high-tech and education-related fields with a specialty in advanced aerospace ventures. Mr. Gold has also served as a state aerospace business development officer, an attorney in the Washington office of McGuire Woods, LLP, and as a summer law clerk at NASA Langley Research Center. Mr. Gold is a member of the District of Columbia and New York State Bar Associations. He graduated from the University of Pennsylvania Law School.

Michael Lopez-Alegria
Michael Lopez-Alegria is the current COMSTAC Vice-Chair. He is the President of the Commercial Spaceflight Federation, which has the mission of advocating for the commercial human spaceflight industry. He is responsible for the achievement of organizational objectives; development and implementation of strategic, tactical and action plans for business execution in pursuit of annual objectives; day-to-day management of employees, consultants, and management team. Mr. Lopez-Alegria is a Captain, U.S. Navy, (Retired) and a former NASA Astronaut. He was born in Madrid, Spain, and grew up in Mission Viejo, California. Mr. Lopez-Alegria received a Bachelor of Science degree in systems engineering from the U.S. Naval Academy and a Master of Science degree in aeronautical engineering from the U.S. Naval Postgraduate School. He is a graduate of Harvard University's Kennedy School of Government.
Livingston Holder

Livingston Holder is the Chair of COMSTAC’s Systems Working Group. He served as the Chairperson for COMSTAC from May 2000 until October 2003. He currently heads Holder Aerospace, Renton, Washington. Previously, he was the vice president of Space Systems for Andrews Space and Technology, also in Seattle. Prior to this position, Mr. Holder was the manager of the Aircraft, Spacecraft, Segments of the RESOURCE21 Program, The Boeing Company. Mr. Holder joined Boeing in 1988, holding various assignments, including program manager for the Sea Launch Program during its initial development in 1994. From 1995 to 1996, Mr. Holder led Boeing’s Future Space Transportation organizations, which included Boeing’s participation in the X-33/Reusable Launch Vehicle Program. As an Air Force Officer, he was a Titan III launch crewmember at Vandenberg AFB, California. He next served in the Office of the Secretary of the Air Force, Special Projects organization, Los Angeles AFS, California, on a major classified satellite program. During this period, he trained and qualified as a manned spaceflight engineer and Space Shuttle payload specialist. Mr. Holder holds a Master of Science degree in Systems Management from the University of Southern California. He received his Bachelors of Science degree in Astronautical Engineering from the U.S. Air Force Academy in 1978.

Russ McMurry

Mr. Russ McMurry is COMSTAC’s Vice Chair, Business/Legal Working Group. Please see his entry above for additional details.

Janet Karika

Janet C. Karika, Lt Col, USAF (Ret.) is the Chair of COMSTAC’s Operations Working Group. She is the Jacobs Director of Interagency Launch Programs for the NASA Launch Services Program (LSP). She is tasked to provide senior-level support to the NASA Launch Services Program to coordinate and facilitate program-wide partnerships and interchanges with the United States Air Force (USAF), the National Reconnaissance Office (NRO), and other government agencies, such as DARPA and the Missile Defense Agency (MDA). Previously, she served as the Jacobs Sverdrup senior engineering technical manager and executive advisor to the director of Space Acquisition, Secretary of the Air Force (SAF). She was a member of the National Space Transportation Policy Team and the Position, Navigation, and Timing Policy Team. She was the focal point in Washington, D.C., for U.S.-Russian Atlas V/RL-180 rocket engine program. Ms. Karika earlier served as TASC senior principal member of the Technical Staff, assistant for Launch Systems, Space Systems, Office of the Secretary of Defense (OSD). In this position, she was the principal advisor to the Office of the Secretary of Defense on space launch and range issues. She co-chaired the President’s Space Policy Coordinating Committee on National Launch Strategy and served as the OSD focal point for space launch program execution, budgeting, policy, and licensing for both government and commercial space launch programs. Ms. Karika holds a Bachelor of Science in Mechanical Engineering from the University of Central Florida, and a Master of Science in Mechanical Engineering from Arizona State University. In addition she was an In-Resident Student at Squadron Officers School, and has studied at the Air Command and Staff College, the Armed Forces Staff College, and the Defense Systems Management College.
Encouraging Innovation in Space Technology

Richard DalBello

Richard DalBello is the Assistant Director, Space and Aeronautics, Office of Science and Technology Policy, the Office of the President. He is the principal advisor on space and aeronautics to Dr. John Holdren, the Science Advisor to the President. In this position, Richard plays a key role in the development and implementation of the Administration’s domestic and international space policy and program priorities. Richard has a long history of government and private sector service. Prior to joining OSTP, Richard served as the Vice President of Government Affairs for Intelsat General. In that position, Richard was responsible for managing Intelsat General’s legal team, leading its government relations and public policy efforts, and representing Intelsat General before numerous U.S. and international policy and regulatory agencies. With more than 25 years of experience, Mr. DalBello is well-known in satellite communications and government circles. He served previously as president of the Satellite Broadcasting and Communications Association, and for more than three years as the president of the Satellite Industry Association. The SIA is the voice of the U.S. commercial satellite industry on policy, regulatory and legislative matters. Earlier, Mr. DalBello was General Counsel for Spotcast Communications Inc., and Vice President of Government Affairs, North America, for ICO Global Communications, a provider of mobile satellite communications services. He also served for four years as the Assistant Director for Space and Aeronautics in the Clinton White House's Office of Science and Technology Policy. Mr. DalBello earned a Bachelor’s Degree in Political Science from the University of Illinois, a Master's in Law from McGill University, and a Doctorate in Jurisprudence from the University of San Francisco.

Commercial Human Spaceflight Medical Issues

Melchor Antunano

Dr. Melchor Antuñano is the Director of the FAA’s Civil Aerospace Medical Institute. Dr. Antunano was born in Mexico City and is a graduate of the National Autonomous University of Mexico School of Medicine. He completed the Residency Program in Aerospace Medicine at Wright State University in Dayton, Ohio. He was awarded a post-doctoral research associateship by the U.S. National Research Council of the National Academy of Sciences at the USAF School of Aerospace Medicine in San Antonio, Texas. He is currently the Director of the FAA Civil Aerospace Medical Institute in Oklahoma City. He is credited with 568 professional presentations and invited lectures at national and international conferences in aerospace medicine in 37 countries, and with 57 scientific publications covering a variety of aerospace medicine topics. He is Past-President of the U.S. Aerospace Medical Association, the U.S. Space Medicine Association, and the Iberoamerican Association of Aerospace Medicine. He is a Fellow of the Aerospace Medical Association and the Aerospace Human Factors Association. He is Chancellor of the International Academy of Aviation and Space Medicine and member of the International Academy of Astronautics. He is an Honorary Member of the Austrian, Brazilian, Colombian, Greek, Mexican, Slovakian and Turkish Societies of Aviation/Aerospace Medicine. He is a faculty member at Wright State University School of Medicine, the University of Texas Medical Branch in Galveston, and the National University of Colombia School of Medicine. Dr. Antuñano has received 72 awards and recognitions for his academic, administrative, and research achievements.
Center of Excellence for Commercial Space Transportation

Ken Davidian

Ken Davidian has worked for the FAA's Office of Commercial Space Transportation (AST) in Washington, DC since 2008 and is currently the AST Director of Research and Program Manager for the FAA Center of Excellence for Commercial Space Transportation. Since 2010, Mr. Davidian has been the Chair of the International Astronautical Federation Entrepreneurial & Investment Committee and the American Astronomical Society Vice President of Strategic Communications. Between the years of 2008-2011, Mr. Davidian led AIAA Commercial Space Group. In 1983, Mr. Davidian started his career at the NASA Lewis Research Center, working for the Space Propulsion Technology Division in the area of analytical and experimental research on the performance of liquid rocket engines. Between 1997 and 1999, Mr. Davidian was assigned by NASA to work as the Assistant Director of Operations for the Summer Session Program at the International Space University in Strasbourg, France. Upon his return to NASA, Davidian worked in the Plans and Programs Office. In 2001, he left government service and entered the private sector in many positions. He has worked for Paragon Space Development Corp. as a consultant in the role of Director of Operations for CargoLifter Development, as Director of Operations for the X PRIZE Foundation, and then again for Paragon as corporate Program Manager. In 2004, Mr. Davidian moved to Washington, DC to work on NASA’s prize program, Centennial Challenges. He started as a contractor and then reentered civil service when he was hired by NASA Headquarters in 2007, as the Program Manager for Centennial Challenges. Mr. Davidian received his BS degree in Aeronautical and Astronautical Engineering from the Ohio State University in 1983, and an MS degree in Mechanical Engineering from Case Western Reserve University in 1987. He attended the International Space University Summer Session Program in 1989.

International Spaceport Development and Readiness

Derek Webber

Derek Webber is the Executive Director of Spaceport Associates based in Maine, USA, working on commercial space transportation policy, markets and regulation – including the use of space tourism revenues to help fund future space exploration. He directed three landmark studies in space tourism business planning, including the Futron/Zogby Study of Space Tourism Demand which in 2002 established the existence of a viable business for space tourism. He provided testimony to the President’s Commission on the Future of the US Aerospace Industry and is an active member of various Working Groups of the Federal Aviation Authority’s COMSTAC Committee, and is secretary to the new commercial space transportation subcommittee of the National Academy of Science’s Transportation Research Board. His career began as a launch vehicle and satellite engineer in the UK in what is now EADS/Astrium Space Systems. He became Head of Procurement at Inmarsat, (responsible for contracting for over a billion dollars worth of communications satellites and their launch vehicles), and later Managing Director of Tachyon Europe (providing satellite broadband and Internet access across the continent). He is author of “The Wright Stuff: The Century of Effort Behind Your Ticket to Space”. Mr Webber is currently serving as a judge for the Google Lunar X-Prize.

Maurice Adriaens

Maurice Adriaens began his career in 1989 as Head of the Research and Planning Department of the Agriculture, Livestock Farming & Fishing Department of the Government of the Netherlands Antilles. In 1998, he was approached by a political party to become the Minister of Traffic, Transport & Telecommunication of the Netherlands Antilles. He was minister until 2001. He then became a member of the Parliament of the Netherlands Antilles and later that year he also became a member of the Islands Council of the Island Territory of Curacao. In this year he also attended the Faculty of Law at the University of the Netherlands Antilles. In 2003 Maurice became Minister Plenipotentiary of the Netherlands Antilles in the Netherlands for one year. Between 2005 and 2007 he was again a member of the Parliament of the Netherlands Antilles and in 2007 he was a member of the Island Council as well.
In 2007 Maurice became for the second time the Minister of Traffic, Transport & Telecommunications for the Netherlands Antilles until 2010. He was part of the last cabinet of the Netherlands Antilles before the constitutional changes that year. In that same year he left politics and became Managing Director at the Curacao Airport Holding. Maurice has been an active campaigner for liberal markets in the fields of aviation and ICT. The owner of one of the first electric cars on the island, Maurice also is an active campaigner for the use of green technologies like solar, wind and also Sea Water Air conditioning on the island of Curacao. He holds a degree in Tropical Agriculture and Marketing form the University of Wadeningen, Holland, is happily married and has a daughter

Robert Feierbach

Robert Feierbach is the Head of S3 USA Holdings, Inc., (a Swiss Space Systems company). He is responsible for the overall company management based in Washington DC, and for the future R&D labs and flight & launch operations facilities in Colorado, Florida and California.

Mr. Feierbach, a well-recognized space industry expert, joined S3 with an impressive track record in groundbreaking satellite technologies and services around the world. During two and a half decades, he held executive leadership positions at Echostar Corporation in the Netherlands, SES-ASTRA in Luxembourg, EUTELSAT/ViaSat partnerships in France and USA, and Hughes Network Systems’ International Division. More recently, he served as Vice President of Business Development at SpaceX, the California-based private rocket launch company.

Mr. Feierbach is a North-American national. He holds a Bachelor’s degree in Computer Science and an MBA in International Management, and speaks seven languages fluently.

Rafael Harillo

Rafael Harillo Gomez-Pastrana is a Spaniard, born in Paris and living in Barcelona. He is a lawyer and space consultant, and a Partner Director of Stardust Consulting. Sr. Harillo is a Member of the International Institute of Space Law, the European Centre for Space Law (ECSL) of ESA, The Centro Espanol de Derecho Espacial (CEDE), and the Instituto Iberocamericano de Derecho Aeronautico y del Espacio y de la Aviacion Comercial. He is a graduate of the International Space University and Open University, London. Sr. Harillo is a regular participant in international conferences about space issues such as the Practitioners Forum ECSL-ESA; International Astronautical Congress; Symposium on Private Human Access to Space (Arcachone, France); Annual FAA Commercial Space Transportation Conference February, Washington D.C., and collaborator in different working groups about suborbital, spaceport and space activities. He has also has been a speaker at various international conferences and is the author of papers and articles about these issues. He holds a Private Pilot’s license.

Andrew Nelson

Andrew Nelson is Chief Operating Officer and VP Business Development for XCOR Aerospace, the Mojave, CA based developer and operator of the Lynx suborbital spaceplane and innovative piston pump-fed, reusable liquid rocket propulsion systems. Andrew is responsible for the business and operations functions of XCOR. In particular, Nelson is responsible for the development of international operations which are at the heart of XCOR’s go to market strategy. In this role, he is intimately involved on a daily basis evaluating metrics and developing strategies to spur and grow demand for commercial flight services including establishing spaceports and facilitating enlightened regulatory environments. Prior to XCOR, Andrew spent eight years on Wall Street working with technology entrepreneurs and their investors. Nelson also spent ~15 years in the aerospace sector starting as an engineer early GPS programs and at Cape Canaveral. He then moving to MITRE Corporation where he oversaw military avionics development projects and served as the DoD representative to the US Delegation to the International Civil Aviation Organization. After MITRE he worked at Booz Allen & Hamilton for over nine years where the last five years he led the International Aviation and Space
team from the Paris and London offices focused on aerospace strategy consulting for companies like Inmarsat, Aerospatiale, Boeing, Honeywell, and government clients such as the Australia, the UK, European Commission, ESA and Eurocontrol.

Karin Nilsdotter

Ms. Nilsdotter is the Chief Executive Officer of Spaceport Sweden AB. Spaceport Sweden is a pioneering initiative to establish commercial human spaceflight for space tourism, research, education and development in Sweden. Its vision is to become a world leading spaceport and hub for commercial human spaceflights and cross-industry innovation. Spaceport Sweden already offers aurora-viewing flights, parabolic Zero G flights, and centrifuge and flight simulator training. Ms. Nilsdotter is also involved in several other groups and projects to promote tourism in Sweden.