

Biographies

Reappointments



General Lester Lyles, USAF, Retired (Chair)

To serve as a Special Government Employee

Professional Background: Retired from the United States Air Force after a distinguished 35-year career, most recently as Commander, Air Force Materiel Command, Wright-Patterson Air Force Base, Ohio. Prior to that he served as Air Force Vice Chief of Staff and Chief Technology Officer, and Director of the Ballistic Missile Defense Organization at the Department of Defense. Experience running large, high-technology organizations involved in aeronautical and astronautical research,

development, and acquisition.

Awards & Service: Chairman of the NASA Advisory Council, member of the Air Force Scientific Advisory Board, was elected to the National Academy of Engineers in 2011, former Chair of the Aeronautics and Space Engineering Board of the National Academy of Engineering, former member of the President's Intelligence Advisory Board in the White House, the Defense Science Board, and the State Department International Security Advisory Board. His awards include the Defense Distinguished Service Medal, Distinguished Service Medal, Defense Superior Service Medal and Legion of Merit.

Education: B.S. in Mechanical Engineering from Howard University. M.S. in Mechanical & Nuclear Engineering from New Mexico State University, Las Cruces.



Mr. Salvatore T. "Tory" Bruno

President and CEO, United Launch Alliance (ULA)

Tory is the president and CEO of United Launch Alliance (ULA). Under his leadership, ULA has transformed into a competitive powerhouse that is shaping the future of space launch by making it more affordable, accessible and introducing revolutionary new capabilities to meet the challenges of the future.

Over the past 35 years, Tory has developed and fielded dozens of critical defense and space launch systems that form the backbone of America's national security and the nation's efforts in space exploration. He has a deep history in missile defense, strategic deterrence, and space launch. Tory is also an expert in several rocketry and hypersonic technologies and holds multiple related patents.

Tory is a tireless advocate for the industry, sharing his passion for space technology and his vision of a self-sustaining human presence beyond Earth. Tory is also a strong communicator on space. His social media presence is legendary worldwide and is an inspiration to many.

He holds a bachelor's degree in mechanical engineering from the California Polytechnic State University, in San Luis Obispo, California, and has completed graduate courses and management programs at Harvard University, Santa Clara University, the Wye River Institute, San Jose State University and the Defense Acquisition University.

Tory is an American Institute of Aeronautics and Astronautics (AIAA) Honorary Fellow, a former member of the Defense Innovation Board Space Advisory Committee, and serves as a member of the National Space Council Users' Advisory Group. Tory is also a recipient of the Air Force Association John R. Alison Award, the 2021 American Astronautical Society Space Flight Award recipient, an awardee of the Von Braun Trophy, a holder of the von Karman Medal, and a member of the Space & Satellite Professionals International Hall of Fame.



Mr. Theodore “Ted” Colbert
CEO, Boeing Defense, Space & Security

Boeing develops and operates space systems across all sectors – civil, national security, and commercial. This includes the soon-to-launch Space Launch System that will launch astronauts to the Moon as the rocket for NASA’s Artemis mission, the Starliner which will transport astronauts to/from the International Space Station (ISS), and the X-37B spaceplane.

Professional Background: On March 28, 2022, Mr. Colbert was named the President and CEO of Boeing Defense, Space & Security. Previously, Colbert was President and CEO of Boeing’s Global Services with responsibility for leading Boeing’s aerospace services development for commercial, government and aviation industry customers worldwide. Prior to that role, Colbert was CIO and Senior Vice President of Information Technology & Data Analytics. Prior to joining Boeing in 2009, Colbert was senior vice president of Enterprise Architecture at Citigroup.

Service: 2022 Black Engineer of Year Award; 2021 Capital CIO of the Year ORBIE award; 2020 & 2021 Most Influential Black Executives in Corporate America by Savoy Magazine; First recipient of Fisher Center prize for Excellence in Driving Transformation; 2017 Most Powerful Executives in Corporate America by Black Enterprise Magazine; 2017 Morehouse College Bennie Leadership Award for Excellence in Business; 2016 National Society of Black Engineers Golden Torch Legacy Award winner; 2015 Ebony Power 100 honoree.

Education: Dual Degree Engineering Program at the Georgia Institute of Technology and Morehouse College with degrees in Industrial and Systems Engineering and Interdisciplinary Science.



Ms. Gwynne Shotwell
President and COO, SpaceX

SpaceX is a leading global commercial space launch, space transportation, and telecommunications services company. SpaceX has successfully conducted more than 200 launches to space for NASA, DOD, and commercial companies, including 8 crewed missions to orbit for NASA and private individuals since 2020. SpaceX operates the Starlink high-speed, low-latency satellite broadband system providing global coverage to more than 1 million households across all 7 continents with more than 3,500 satellites in orbit today and thousands more slated for launch in the near future.

Professional Background: Ms. Shotwell joined SpaceX in 2002 as VP of Business Development prior to becoming the company's President and Chief Operating Officer. Before SpaceX, she spent more than 10 years at the Aerospace Corporation, holding positions in Space Systems Engineering, Technology and Project Management.

Service: Served on the United States Export Import Bank's Advisory Committee, the Federal Aviation Administration's Management Advisory Council, and the Board of Trustees at Northwestern University. Elected as a Fellow with the American Institute of Aeronautics and Astronautics.

Education: B.S. and M.S. (with honors) in Mechanical Engineering and Applied Mathematics from Northwestern University. She has authored dozens of papers on a variety of space related subjects.



Dr. Robert H. Smith
CEO, Blue Origin

Blue Origin is an aerospace manufacturer and sub-orbital spaceflight services company. Blue Origin's efforts include flying astronauts to space, producing reusable liquid rocket engines, developing an orbital launch vehicle, and building a commercial space station.

Professional Background: Served in a variety of leadership roles at Honeywell Aerospace, including as the Vice President of Advanced Technology, the Chief Technology Officer and Vice President of Engineering & Technology, and the President of the Mechanical Systems & Components business. Prior to that he served as Executive Director of the Space Shuttle Upgrades Development Program for United Space Alliance, and at the Aerospace Corporation where he served as a guidance, navigation & control analyst, and a program manager for a number of Department of Defense and national security programs. Bob also led Aerospace Corporation's NASA business and was the site manager for their Houston operations.

Education: B.S. in Aerospace Engineering from Texas A&M, M.S. in Engineering and Applied Mathematics from Brown University, PhD in Aerospace Engineering from the University of Texas-Austin, MBA from MIT's Sloan School of Management



Mr. James D. Taiclet

President and CEO, Lockheed Martin Corporation

James (“Jim”) D. Taiclet is chairman, president and chief executive officer of Lockheed Martin Corporation. He became chairman in March 2021 after joining the company as president and CEO in June 2020. Taiclet has been a director on the Lockheed Martin board since January 2018.

Prior to joining **Lockheed Martin**, Taiclet was chairman, president and chief executive officer of American Tower Corporation, one of the largest global real estate investment trusts (REITs) and a leading independent owner, operator and developer of multitenant communications real estate. Under his leadership, the company’s market capitalization grew from approximately \$2 billion to more than \$100 billion. Taiclet guided the company’s transformation from a primarily U.S. business to the only truly global player in its industry, with significant assets and operations in 19 countries around the world.

Before he led American Tower, Taiclet served as president of AlliedSignal (subsequently Honeywell Aerospace Services), a company that conducts worldwide aircraft engine and component overhaul and repair, parts sales and distribution, space operations, and technical services. Preceding his tenure at AlliedSignal, he served as vice president, Engine Services at Pratt & Whitney, where he was responsible for leading both military and commercial jet engine overhaul and repair.

Taiclet began his career as a U.S. Air Force officer and pilot, logging over 5,000 flying hours (most of which in a Lockheed C-141B StarLifter) as an aircraft commander, instructor pilot, and unit chief of Standardization and Evaluation. His rotational assignments included stints with the Joint Staff and Air Staff at the Pentagon. Taiclet served in the Gulf War during which, among other missions, he piloted one of the first transport aircraft to bring U.S. forces into Saudi Arabia for Operation Desert Shield.

As a distinguished graduate of the U.S. Air Force Academy, Taiclet earned bachelor’s degrees in engineering and international relations. He also holds a master’s degree from Princeton University, where he was awarded a fellowship at the Princeton School of Public and International Affairs.

He is a member of the Council on Foreign Relations, the National Space Council’s Users Advisory Group (UAG), and the Business Council. In June 2022, the U.S. Secretary of Commerce appointed Taiclet private sector co-chair of the U.S.-India CEO Forum. He is an associate fellow of the American Institute of Aeronautics and Astronautics (AIAA). Taiclet serves on the board of directors of Catalyst and Mass General Brigham. He also serves on the board of trustees of Brigham and Women’s Hospital.



Ms. Mandy Vaughn

CEO & Founder of GXO, Inc

To serve as a Special Government Employee

Professional background: Mandy founded GXO, Inc. in 2021 to accelerate the pace of change across the space industry. The goal is supporting new commercial space ventures quickly navigate the startup environment to start delivering capabilities and missions that matter for commercial and government customers.

She was selected to serve on the National Space Council’s User Advisory Group when it was re-instituted in 2018, where she helps to streamline coordination and cooperation across the U.S.’ space enterprise.

Mandy is formerly President & CEO of VOX Space. Mandy originally joined Virgin Orbit, VOX Space’s parent company, in 2015. As Senior Director of Business Development and Mission Management, she supported business development on the LauncherOne program for both government and commercial customers and served as mission manager for customers including OneWeb and NASA, in addition to spearheading the creation and registration of VOX Space.

Prior to joining Virgin Orbit, Mandy was with General Dynamics Mission Systems’ Space and Intelligence Systems Directorate, where she was responsible for the space control and space protection investment portfolios and analog-to-digital transitions for a variety of SIGINT payload families. She successfully initiated development programs for the next-generation space-based GPS receiver and managed the internal investment of GPS payload development efforts.

Prior to joining General Dynamics, she was a developmental engineer and program manager in the Air Force and a Director with Kinsey Technical Services. She primarily supported programs in the Space Superiority Systems Directorate (SMC/SY) at Los Angeles AFB, CA and earlier the ICBM system program office at Hill AFB, UT. In the Space Superiority mission are, she was the ground segment lead and chief engineer on the Space-Based Space Surveillance program, and then supported a multiple of Space Situational Awareness and command and control programs supporting integration of requirements and demonstrations between the DoD and the intelligence community. She supported the NRO AS&T and DIA Directorate of Science and technology in a variety of collection campaigns that spanned various collection systems phenomena to demonstrate new systems and operational concepts for critical space operations.

Mandy has a BS in Mechanical Engineering and an MS in Aeronautics and Astronautics, both from MIT.



Ms. Kathy Warden

Chair, Chief Executive Officer, and President, Northrop Grumman Corporation

Northrop Grumman is a technology company, focused on global security and human discovery. Their pioneering solutions equip their customers with capabilities they need to connect, advance, and protect the U.S. and its allies. Driven by a shared purpose to solve their customers' toughest problems, their 90,000 employees define possible every day.

Professional Background: Warden was elected chairman of the Northrop Grumman Board of Directors in 2019 and has served as CEO and president since January 1, 2019. She was elected to the company's Board of Directors in 2018.

Prior to becoming CEO and president, Warden served as president and chief operating officer, responsible for the operational management of the company's four sectors as well as its enterprise services organization. She also led the integration of Northrop Grumman's Orbital ATK acquisition. Previously, she served as corporate vice president and president of Northrop Grumman's Mission Systems and Information Systems sectors.

Warden has extensive experience in operational leadership and business development in government and commercial markets. Prior to joining Northrop Grumman in 2008, Warden held leadership roles at General Dynamics and the Veridian Corporation, she was a principal in a venture internet firm, and she spent nearly a decade with the General Electric Company working in commercial industries.

Service: Warden currently serves on the Board of Directors of Merck & Co., Inc. and Catalyst. She serves as vice chair of the Greater Washington Partnership as well as the Aspen Cyber Security Group. Warden is an active member of both the Aerospace Industries Association and the Business Roundtable. She is also the recipient of the prestigious 2022 Deming Cup for Operational Excellence.

Education: Warden earned a bachelor's degree from James Madison University and a master's degree in business administration from George Washington University.

Appointments



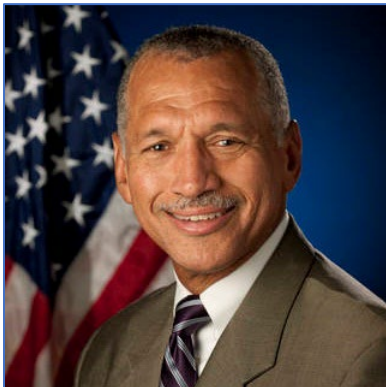
Mr. Rajeev Badyal

Vice President of Technology and Head of Project Kuiper at Amazon

Project Kuiper is an initiative to launch a constellation of Low Earth Orbit satellites that will provide low-latency, high-speed broadband connectivity to unserved and underserved communities around the world.

Professional Background: Previously served as SpaceX's VP of Satellites, in charge of its Starlink division. Prior to joining SpaceX, Mr. Badyal held senior engineering positions at Microsoft Corporation and Hewlett Packard. Has thirty years of experience, overseeing diverse and mission-critical aspects of technology and space businesses, including production, quality and safety, regulatory compliance, and business development.

Education: MS in Electrical and Computer Engineering from Oregon State University.



Mr. Charles F. Bolden

Former NASA Administrator

To serve as a Special Government Employee

Professional Background: NASA Administrator under President Obama. During his tenure, NASA initiated and developed the Commercial Cargo and Commercial Crew programs, beginning the current era of commercialization in space. He oversaw the agency's transition from 30 years of Space Shuttle missions to a focus on full utilization of the International Space Station and established the Space Technology Mission Directorate to develop next-gen technologies for future space missions. Prior to this he served a 34-year career with the Marine Corps as a Naval Aviator. In the Marine Corps, Bolden flew more than 100 combat missions while stationed in Thailand. He subsequently joined NASA's Astronaut Office where his roles included Safety Officer, Chief of the Safety Division, and lead astronaut for vehicle test and checkout. He traveled to space four times aboard the Space Shuttle. His flights included deployment of the Hubble Space Telescope and the first joint U.S.-Russian shuttle mission, which featured a cosmonaut as a member of his crew. Bolden serves today as the CEO of the Charles F. Bolden Group, specializing in space/aerospace exploration, national security, leadership, education (STEM+AD) and health initiatives.

Education: B.S. in Electrical Science from the U.S. Naval Academy, M.S. in Systems Management from the University of Southern California



Lance Bush, Ph.D.

President and Chief Executive Officer, Challenger Center

Challenger Center is a global nonprofit science, technology, engineering, and math (STEM) education organization created by the families of the 1986 Space Shuttle Challenger 51-L tragedy. With a goal to inspire more students, Dr. Bush has led the growth and expansion of the organization, which has reached 6 million students with its experiential education programs. Challenger Center uses spacethemed role-playing strategies to bring classroom lessons to life and cultivate critical 21st Century skills like teamwork, problem solving, and communication. Challenger Center engages every student in STEM, working to inspire the STEM workforce of the future. Under Dr. Bush's leadership, Challenger Center was recognized with the National Science Board's Public Service Award for promoting a public understanding of science and engineering.

Professional Background: Began career as NASA engineer in group that designed the next generation human space transportation including low earth orbit and lunar vehicles, managed the ISS Commercial Development program, and co-founded and served as the Chairman of the ISS Multilateral Commercialization Group comprised of the five partner space agencies (Canada, Europe, Japan, Russia and the United States) and 16 countries. Represented the United States as a delegate to the United Nations Committee on Peaceful Uses of Outer Space. Served as the Chief Strategic Officer at Paragon Space Development Corporation, a space vehicle design and build company, including work on the Lockheed Martin Orion and the SpaceX Dragon.

Service: Member of National Space Council's Users Advisory Group, Founder and Board Member of Space Generation Advisory Council; Associate Fellow of American Institute of Aeronautics and Astronautics; Governing Member of International Space University; Advisory Board for Center for Integrated STEM Education; Advisory Council for Innovation Collaboration; Member of the Cosmos Club Previously, Chair of the Board and President of Sea Space Symposium, Board Member of International Space University, Chair of Education for World Space Congress, and VP of Education for American Astronautical Society.

Education: B.S. in Aerospace Engineering and Ph.D. in Technology Policy and Management from the Pennsylvania State University, M.S. in Mechanical Engineering from Old Dominion University, and Space Studies Program (SSP) from International Space University



Bridget Chatman
Chair, Women in Aerospace (WIA)

Women in Aerospace (WIA) is a charitable organization dedicated to expanding women’s opportunities for leadership and increasing their visibility in the aerospace community. WIA connects women in aerospace professions, raise their visibility within the sector, promote their advancement, and attract other women to its ranks. WIA has over 2,000 individual members, representing 250 companies and 80 corporate members.

Professional Background: In 2022, Ms. Chatman became the first African American Chair of the Board of Directors for Women in Aerospace. Chatman has 28+ years of experience in corporate strategy, transformation, business development and capture leading Fortune 500 company’s aerospace initiatives supporting NASA and FAA missions. Ms. Chatman currently serves as the Vice President, Business Development Transformation for SAIC. SAIC is a premier Fortune 500® technology integrator driving our nation's digital transformation. Other roles at SAIC included Vice President of Diversity, Equity, Inclusion & Belonging where Chatman developed and accelerated programs, policies and processes to advance DE&IB initiatives. Chatman is a founding member and former Chair of the Washington Exec Diversity, Equity and Inclusion Council, and developed several initiatives and mentoring programs for women in aerospace and STEM careers.

Service: Ms. Chatman is a Silver Star member of Alpha Kappa Alpha Sorority Inc. and a recent 2022 honoree of Washington Business Journal Top 25 Diversity In Business Award. Chatman volunteers in many organizations supporting women and underrepresented communities around the Washington DC metro area.

Education: Chatman has a bachelor’s degree in marketing and statistics from the University of Illinois at Chicago, an Executive Certificate in Economics from the University of Oxford and a Diversity, Equity and Inclusion and Human Resource Policy certificate from Cornell.



Nancy Colleton

President, Institute for Global Environmental Strategies (IGES)

Institute for Global Environmental Strategies is a diverse set of professional educators, communicators, and scientists devoted to leveraging earth observation resources to better understand our home planet and communicate the impacts of climate change to the world.

Professional Background: Nancy leads numerous initiatives that promote better understanding of the changing planet. Her recent work focuses on studying innovative private sector applications of USG Earth observation data, which provide governments, businesses, and consumers new critical decision-making capabilities in areas such as climate, natural disasters, health, air quality, water quality, and GHG monitoring. She has been quoted and published in *The Washington Post*, *The Boston Globe*, *The Huffington Post*, *Physics Today* and numerous other publications. In addition, Nancy has a long history of working in the conservation area to help amplify the importance of space-based observations as well as citizen engagement to promote the understanding and protection of nature.

Service: Nancy serves on the Fairfax Water Board of Directors, is an advisor to We Don't Have Time, and recently finished two extended terms as an active member of the International Union for Conservation of Nature (IUCN) US Board. She's chaired the IUCN's Commission on Education and Communication where—along with World Commission on Protected Areas chair—led the 2016 launch of the #NatureForAll global campaign that now includes more than 570 organizations in 80 countries. Ms. Colleton was a key organizer behind the 2003 Earth Observations Summit, which led to the establishment of the Group on Earth Observations, facilitated the Alliance for Earth Observations, and co-chaired the Environmental Information Services Working Group of the National Oceanic and Atmospheric Administration (NOAA) Science Advisory Board (2009—2016).

Education: Ms. Colleton holds a BA degree in Communications from Hood College.



Karina Drees

President, Commercial Spaceflight Federation

Commercial Spaceflight Federation (CSF) is a space industry association representing the commercial space industry, particularly for commercial launch companies, satellite manufactures, spaceports and in-space companies.

Professional Background: Karina Drees is President of the Commercial Spaceflight Federation (CSF), representing 90 organizations providing thousands of high-tech jobs nationwide, promoting the development and maturation of the commercial space industry, pursuing ever higher levels of safety, and providing value to the American taxpayer. Its members inspire young people to pursue careers in science, technology, engineering, mathematics, and related professions. Prior to CSF, Drees was CEO and General Manager of Mojave Air & Space Port (MASP), a general aviation airport and licensed spaceport in California.

Service: Drees currently serves as Chair for the FAA’s Commercial Space Transportation Advisory Committee (COMSTAC).

Education: Drees has a BS from Arizona State University and an MBA from the MIT Sloan School of Management. She also completed the International Space University’s Summer Session Program in Beijing, China.



Eric Fanning

President & CEO, Aerospace Industries Association

The Aerospace Industries Association (AIA) is an American trade association representing over 300 manufacturers and suppliers of civil, military, and business aircraft, helicopters, space systems, aircraft engines, missiles, material, and related components, equipment, services, and information technology in the United States.

Professional Background: Eric Fanning is President and Chief Executive Officer of the Aerospace Industries Association (AIA), the leading advocacy organization for the aerospace and defense industry with nearly 350 companies in its membership – ranging from multinational prime contractors to family-owned businesses.

Fanning joined AIA after serving as the 22nd Secretary of the Army where he provided leadership and oversight of our nation’s largest military service. He previously served as Chief of Staff to the Secretary of Defense, Acting Secretary of the Air Force and Under Secretary of the Air Force, and Deputy Under Secretary of the Navy/Deputy Chief Management Officer. He is the only person to have held senior appointments in all three military departments and the Office of the Secretary of Defense.

Service: During his more than 25 years of distinguished government service, Fanning worked on the staff of the House Armed Services Committee, was Senior Vice President of Strategic Development for Business Executives for National Security, was Deputy Director of the Commission on the Prevention of Weapons of Mass Destruction Proliferation and Terrorism, and was associate director of political affairs at the White House. His awards include the Department of Defense’s Medal for Distinguished Public Service (twice awarded), the Department of the Army’s Decoration for Distinguished Civilian Service, the Department of the Navy’s Distinguished Public Service Award (twice awarded) and the Department of the Air Force’s Distinguished Public Service Award and Decoration for Exceptional Civilian Service.

Education: Fanning holds a bachelor’s degree in history from Dartmouth College.



Professor Dan Hastings

Head of the Department of Aeronautics and Astronautics, Massachusetts Institute of Technology (MIT)

The MIT Department of Aeronautics and Astronautics endeavors to create an aerospace field that is a diverse and inclusive community, pushing the boundaries of the possible to ensure lasting positive impact on our society, economy, and environment. Some of the department's core capabilities include the design of aerospace vehicles and real-time aerospace

Professional Background: Dr. Hastings is the Cecil and Ida Green education professor and department head of aeronautics and astronautics at the Massachusetts Institute of Technology. He served as MIT's dean of undergraduate education from 2006 to 2013. Hastings earned a bachelor's degree in mathematics from the University of Oxford, England and a master's degree and a Ph.D. in aeronautics and astronautics from the Massachusetts Institute of Technology.

Dr. Hastings' research has spanned five areas: laser material interactions, fusion plasma physics, spacecraft plasma environment interactions, space plasma thrusters, and space systems analysis and design. He has published more than 120 papers, has written a book on spacecraft-environment interactions, and has chapters in several other books. He is a fellow of three professional societies: the American Institute of Aeronautics and Astronautics (AIAA); the International Astronautical Federation (IAF); and the International Council on Systems Engineering (INCOSE). He is a member of the National Academy of Engineering (NAE). Hastings' citation from the NAE reads, "For contributions in spacecraft and space system environment interactions, space system architecture, and leadership in aerospace research and education."

Additional national awards include the Air Force Exceptional Service Award (2008), the QEM Giant in Science Award (2005), the NRO Distinguished Civilian Award (2003), the AIAA Losey Award (2002), the National Guard Bureau Eagle Award (1999), and the Air Force Distinguished Civilian Award (1999 and 1997).



Dawne Hickton

Chair and CEO, Cumberland Additive, Inc.
To Serve as a Special Government Employee

Professional Background: Dawne is the Chair and CEO of Cumberland Additive, Inc., an innovative specialty metals additive manufacturing company specializing in new technologies for printing hard metals for aerospace, space and defense.

She is also former Jacobs Corporate Executive Vice President & President of Critical Mission Solutions focused on providing support to NASA and other aerospace entities. Prior to joining Jacobs, Dawne served as the CEO of Pittsburgh-based RTI International Metals working with the metal industry and unions to provide titanium to the government and private companies.

Service: During her time as CEO at RTI International Metals, Inc., she was twice recognized by STEMconnector, a consortium of businesses that connects thought leaders on issues related to science, technology, engineering, and math (STEM). She was named one of the top 100 CEO's in STEM and, separately, she was named one of the top 100 Women in STEM. She is the founder of the international organization, Women in Titanium which provides mentoring and scholarships to young women in the material sciences. Dawne is a Trustee for the University of Pittsburgh and is a past Chair of the Federal Reserve Bank of Cleveland.

Education: Dawne earned a Juris Doctor degree from the University of Pittsburgh and is a graduate of the University of Rochester. She is married with six children and resides in Pittsburgh, PA.



Daniel L. Jablonsky

President and Chief Executive Officer, Maxar Technologies

Daniel L. Jablonsky was appointed to the role of President and Chief Executive Officer of Maxar Technologies and to the Company's Board of Directors on January 13, 2019.

Previously, Mr. Jablonsky had served as President of DigitalGlobe since October 2017, when the company became part of Maxar Technologies. He joined DigitalGlobe in 2012 as Senior Vice President, General Counsel and Corporate Secretary, and also held the role of General Manager, International Defense & Intelligence from 2015 to 2017.

Prior to DigitalGlobe, Mr. Jablonsky was a shareholder at the law firm of Brownstein, Hyatt, Farber, Schreck, LLP from 2011 to March 2012, where he practiced corporate and securities law. From 2010 to 2011, Mr. Jablonsky served as the Interim Co-General Counsel of Flextronics International Ltd., and from 2007 to 2010, he held the role of Senior Corporate Counsel, Securities and Mergers & Acquisitions at Flextronics. Mr. Jablonsky previously was in-house counsel at UBS Financial Services, Inc., served in the enforcement division of the U.S. Securities and Exchange Commission, and practiced corporate and securities law with O'Melveny & Myers LLP. Mr. Jablonsky holds a Bachelor of Science in Mechanical Engineering from the United States Naval Academy and a Juris Doctor degree from the University of Washington School of Law. Prior to law school, Mr. Jablonsky was a surface warfare officer and nuclear engineer in the U.S. Navy.



David A. Kaufman, Ph.D.
President, Ball Aerospace

Ball Aerospace is a U.S. manufacturer of spacecraft components and instruments for commercial, civil, and national security space missions. Ball Aerospace designed and manufactured the optical subsystem, which includes the 18 gold-plated hexagonal primary mirror assemblies, for the James Webb Telescope.

Professional Background: Dave Kaufman is a Ball Corporation Senior Vice President and the President of Ball Aerospace. Previously, Dr. Kaufman served as Chief Operating Officer of Ball Aerospace. Prior to that, he was Vice President and General Manager of Ball's National Defense strategic business unit, where he transformed the business from a subsystem and demonstration hardware provider into a full-service mission systems partner on programs of national importance.

During his 3-decade industry career, Kaufman has served in leadership positions for a variety of space system programs including DARPA's Orbital Express NEXTSat/CSC and the USAF Space Test Program Standard Interface Vehicle. He began his aerospace career as a thermal engineer at Hughes Space & Communications Co. in El Segundo, CA, and was awarded two patents for his research and development work.

Kaufman is an Associate Fellow of the American Institute of Aeronautics and Astronautics, and actively engages with the broader aerospace and defense community.

He received a B.S. in mathematics from Willamette University, a B.S. in mechanical engineering from Stanford University, and a M.S. and Ph.D. in mechanical engineering from the California Institute of Technology.



Patrick Lin, Ph.D.

Director of the Ethics + Emerging Sciences Group, Cal Poly

California Polytechnic State University (Cal Poly), San Luis Obispo, the Ethics + Emerging Sciences Group is a non-partisan organization focused on the risk, ethical, and social impact of emerging sciences and technologies.

Professional Background: Patrick Lin, Ph.D., is the director of the Ethics + Emerging Sciences Group, based at California Polytechnic State University, San Luis Obispo, where he's a philosophy professor. His research focus is on technology ethics, broadly construed to include law and policy, especially the ethics of frontier development (esp. outer space and the Arctic), robotics (esp. military systems and autonomous driving), artificial intelligence, cyberwarfare, human enhancements, nanotechnology, military technologies (incl. nonlethal weapons), and other emerging technologies.

He currently holds other appointments at: Stanford Law School's Center for Internet and Society; Czech Academy of Sciences' Karel Čapek Center for Values in Science and Technology; Center for a New American Security's Task Force on AI and National Security; World Economic Forum; Foundation for Responsible Robotics; and the 100-Year Study on AI.

Previous affiliations include: Stanford's School of Engineering; US Naval Academy's VADM Stockdale Center for Ethical Leadership; Dartmouth College's Department of Philosophy; Australia's Centre for Applied Philosophy and Public Ethics (CAPPE); University of Notre Dame's Emerging Technologies of National Security and Intelligence (ETNSI) initiative; University of Iceland's Center for Arctic Policy Studies; New America Foundation's Cybersecurity Initiative; and the United Nations Institute for Disarmament Research (UNIDIR).

Dr. Lin has published extensively in technology ethics, from scholarly articles to popular media essays in *The Atlantic*, *Wired*, *Slate*, *Forbes*, *Washington Post*, *Wall Street Journal*, and other respected publications. His books include *Robot Ethics* (MIT Press, 2012), *Robot Ethics 2.0* (Oxford University Press, 2017), *What Is Nanotechnology and Why Does It Matter?* (Wiley-Blackwell, 2010), and others. His funded reports include: "Ethics of Hacking Back" (National Science Foundation, 2016), "Enhanced Warfighters: Ethics, Risk, and Policy" (Greenwall Foundation, 2013), "Ethics of Human Enhancement: 25 Questions and Answers" (National Science Foundation, 2009), "Autonomous Military Robotics: Risk, Ethics, and Design" (Office of Naval Research, 2008), and others. He has published in leading academic journals such as: *Ethics & International Affairs*, *Artificial Intelligence*, *Journal of Military Ethics*, *Astropolitics*, and others.

Dr. Lin has worked with or delivered briefings and invited talks to government, military, industry, and academic organizations, including United Nations, US Department of Defense, CIA, DARPA, US National Institutes of Health, US National Academies of Sciences, Cal-EPA, Google, Apple, Sony, IBM, Tesla, Nissan, Bosch, Daimler Benz, Stanford, Harvard, UCLA, US Naval Academy, US Air Force Academy, US Army War College, and many others.

Lin earned his B.A. from UC Berkeley and Ph.D. from UC Santa Barbara, with a background in biosciences.



Ron Lopez

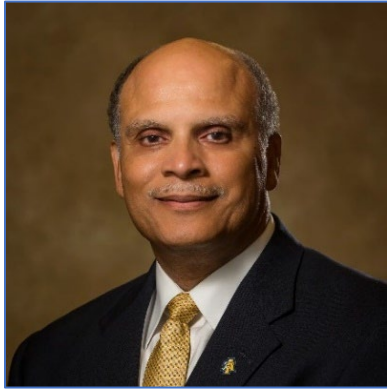
President and Managing Director, Astroscale U.S.

Astroscale U.S. is a private orbital debris removal company developing satellite end-of-life and active debris removal services to mitigate the growing and hazardous buildup of debris in space. Astroscale's on-orbit services will allow satellites to be safely refueled, repaired, reused, and moved into new orbits.

Professional Background: Ron joined Astroscale U.S. in April 2019. He started his career as an Intelligence Officer in the United States Air Force, serving as the focal point for Space Situational Awareness capability development at Air Force Space Command's Space Control Division. He then joined Boeing and worked on various programs as a Systems Engineering Manager within Boeing Research & Technology and Phantom Works and led business development activities for the Network & Space Systems division throughout Asia.

Service: Over half of Ron's career has been spent working and living in Japan, and he is an active member of The Maureen and Mike Mansfield Foundation's U.S.-Japan Space Forum.

Education: Ron earned a Bachelor of Science from The United States Air Force Academy in 1993.



Harold Lee Martin Sr., Ph.D.

Chancellor, North Carolina Agricultural and Technical State University (A&T)

North Carolina A&T is the largest public, historically black land-grant research university by enrollment since 2014. They hold numerous research grants from NASA and were selected in 2021 to be a member of the United States Space Force University Partnership Program.

Professional Background: Before his election as Chancellor of A&T, Martin served as Senior Vice President for Academic Affairs for the University of North Carolina System. He also served as the Chancellor of Winston-Salem State University and in a number of posts at A&T including Vice Chancellor for the Division of Academic Affairs, Dean of the College of Engineering.

Service: Dr. Martin has been instrumental in establishing and fostering strategic partnerships such as the Joint School of Nanoscience and Nanoengineering at the Gateway University Research Park and playing a significant role in Opportunity Greensboro, the city's alliance between the seven colleges and universities and the business community. Martin lends himself to service on various boards including the American Council on Education, the Association of Public and Land-Grant Universities, Southern Association of Colleges and Schools Review Advisory Board, He is a member of Tau Beta Pi (The Engineering Honor Society), Eta Kappa Nu Association, The Honor Society of Phi Kappa Phi, Beta Gamma Sigma and Alpha Phi Alpha Fraternity Inc.

Education: Martin received his B.S. and M.S. degrees in electrical engineering from A&T and a Ph.D. in electrical engineering from Virginia Polytechnic Institute and State University.



Dr. Kate Marvel

Senior Climate Scientist, Project Drawdown

Professional Background: Kate Marvel is a senior climate scientist at Project Drawdown, the world's leading resource for climate solutions. Dr. Marvel spent seven years as a research scientist at the NASA Goddard Institute for Space Studies and Columbia University; before that she held positions at Lawrence Livermore National Laboratory and Stanford University. A former cosmologist, Dr. Marvel received a PhD in theoretical physics from Cambridge University where she was a Gates

Scholar. She serves on the chapter leadership team of the US Fifth National Climate Assessment, has given a TED talk, appeared on Meet the Press and The Ezra Klein Show, and testified before the US Congress. She's written for Scientific American, Nautilus Magazine, and the On Being Project. Dr. Marvel's book *Human Nature* will be published by Ecco Press in 2023. Prior to Columbia University, Dr. Marvel worked at Stanford University, the Carnegie Institution, and Lawrence Livermore National Laboratory. Her work has identified human influences on present-day cloud cover, rainfall patterns, and drought risk. She is also interested in future climate changes, particularly climate feedback processes and the planet's sensitivity to increased carbon dioxide. Dr. Marvel's research centers on climate modeling to better predict how much the Earth's temperature will rise in the future.



Roosevelt “Ted” Mercer Jr.

Major General (MG), United States Air Force (Ret.), Virginia Space CEO & Executive Director

The Virginia Commercial Space Flight Authority, commonly known as Virginia Space, is a part of the Commonwealth of Virginia focused on bringing commercial spaceflight to Virginia and providing education in aerospace technologies across the Commonwealth. They operate the space launch site in Virginia whose launches include NASA cargo to the International Space Station.

Professional Background: Prior to joining Virginia Space, MG Mercer was the director of the NextGen Office of Collaboration and Messaging at the Federal Aviation Administration. MG Mercer served in the US Air Force for more than 32 years.

Service: MG Mercer is the Vice Chairman of the board, National Strategic Research Institute for the University of Nebraska; Chairman of the Military Advisory Board of Directors for Bellevue University; member of the Board of Trustees for the Rochester Institute of Technology, Rochester, NY; and a member of the National Association of Governing Boards.

Education: MG Mercer received a BA in urban planning from the University of Puget Sound; MS in counseling from the University of Oklahoma; post-graduate Executive Programs at Syracuse University, National Defense University, and Harvard University’s John F. Kennedy School of Government; and a concentrated Executive Financial Development Program at the Wharton School of Business.



Dr. Marla Pérez-Davis

Former Director of NASA John H. Glenn Research Center
To serve as a Special Government Employee

Professional Background: Dr. Pérez-Davis served as the director of the NASA John Glenn Research Center in Cleveland, Ohio. Prior to becoming the director, Dr. Pérez-Davis served as Glenn’s deputy director of the Research and Engineering Directorate. She has held several key leadership positions within NASA dating back to 2007 to include the chief of the electrochemistry branch.

Service: Dr. Pérez-Davis is the recipient of numerous awards including the NASA Outstanding Leadership Medal, and the Presidential Rank Award for Meritorious Executives. She was also the recipient of the Great Minds in STEM 2021, Hispanic Engineer National Achievement Awards Corporation Engineer of the Year Award; 2015 Crain’s Women of Note; the Top 25 Elite Business Women, Hispanic Business Magazine; Women of Color Technology Award for Career Achievement; and the Hispanic Engineer National Achievement Santiago Rodriguez Diversity Award.

Education: Pérez-Davis, a native of Puerto Rico, earned her bachelor’s degree from the University of Puerto Rico; a Master of Science degree from the University of Toledo and a doctoral degree from Case Western Reserve University in Chemical Engineering.



Dr. Sian Proctor

Geoscientist and Astronaut
Maricopa Community College District

The Maricopa County Community College District is a community college district in Arizona with its headquarters in Tempe. It is one of the largest, serving more than 220,000 students each year in Maricopa County, Arizona

Professional Background: Dr. Sian Proctor is a geoscientist and astronaut. Since 1999, she has been a full-time professor teaching geology, sustainability, and planetary science at South Mountain Community College (SMCC) in Phoenix, Arizona. She has served as the Faculty Developer at SMCC and the Open Educations Resource Coordinator for the Maricopa Community Colleges.

She is a continuing NASA Solar System Ambassador and has served on the Explore Mars Board of Directors, JustSpace Alliance Advisory Board, Students for the Exploration and Development of Space (SEDS) Advisory Board, and the National Science Teaching Association's Aerospace Advisory Board. In 2019, she was the science communication outreach officer on the ship JOIDES Resolution with Expedition 383 and spent 2-months at sea with researchers investigating climate change. She was a 2017 National Oceanic and Atmospheric Administration (NOAA) Teacher at Sea, a 2016 Astronomy in Chile Educator Ambassador (ACEAP), and a 2014 PolarTREC Teacher investigating climate change in Barrow, Alaska. She is a Major in the Civil Air Patrol and serves as a member of the Arizona Wing Aerospace Education Office.

Dr. Proctor has a B.S. in Environmental Science, an M.S. in Geology, and a Ph.D. in Curriculum and Instruction: Science Education. She did her 2019-20 sabbatical at Arizona State University's Center for Education Through Exploration creating virtual field trips. She did her 2012-13 sabbatical at the Federal Emergency Management Agency's (FEMA) Emergency Management Institute developing their science of disasters curriculum.

She believes that when we solve for space, we also solve issues on Earth. She was the mission pilot for SpaceX Inspiration4, the first all-civilian orbital mission. She is the first African American woman to pilot a spacecraft and the first African American commercial astronaut. She is also one of The Explorer's Club 50: Fifty People Changing the World.



Robbie Schingler

Co-founder and Chief Strategy Officer, Planet

Planet currently operates over 200 imagery satellites in space today providing daily coverage over the entire land mass of the world. Planet holds contracts with the intelligence community to allow their imagery to be used for national security purposes. NASA also signed a contract with Planet allowing all U.S. Federal Civilian scientific researchers and National Science Foundation funded researchers to have access to their archive of Earth observation data to support climate and other research.

Professional Background: Robbie Schingler is the Co-Founder and Chief Strategy Officer (CSO) of Planet Labs PBC. Robbie has committed his life to preserving the sustainability of Earth and the security of human life across the globe. With a vision of using space to help life on Earth, Robbie has helped grow Planet into a mission driven company serving over 30,000 users and 700 customers in more than 40 countries. As CSO of Planet, Robbie was integral to establishing Planet as a publicly traded Public Benefit Corporation in December 2021 (\$PL). He leads the company's long-term strategic trajectory, including mergers and technology partnerships, spearheading Planet's acquisitions of VanderSat in 2021, Boundless in 2019, and BlackBridge in 2015. Robbie also manages the Space Systems Division, supporting the development of space technologies and mission operations. Previously, he was Managing Director of Planet Europe from 2016-2017 and currently serves on the Board of both Planet PBC and Planet Federal.

Prior to Planet, Robbie spent 9 years at NASA, where he helped build the Small Spacecraft Office at NASA Ames and acted as Chief of Staff for the Office of the Chief Technologies at NASA Headquarters. While there, he co-founded the NASA CoLab and Open NASA initiatives, cultivating transparency, open innovation, and public participation within NASA. Robbie received an MBA from Georgetown University, focusing on social entrepreneurship and international business. He also spent a year at the International Space University in Strasbourg, France receiving an MS in Space Studies, concentrating on spacecraft cooperation for education and science, and he received his BS in Engineering Physics from Santa Clara University.



Melanie Stricklan

Co-founder & CEO, Slingshot Aerospace

Slingshot Aerospace builds space data, simulation, and analytics products that help worldwide commercial, civil and defense organizations make space operations safer and accelerate space sustainability.

Professional Background: In 2017, Melanie Stricklan combined her military experience and love of space to co-found Slingshot Aerospace. Prior to founding Slingshot, she proudly served in the United States Air Force for 21 years, during which she logged over 1500 flight hours onboard ground surveillance aircraft, commanded experimental spacecraft missions, and led the development of space control technologies for the Department of Defense.

Awards and Service: Serves on Commercial Space Transportation Advisory Committee (COMSTAC). Named one of Inc. Magazine’s 2019 Top 100 Female Founders in the United States. She also serves on the Engineering Advisory Council for the University of Texas - Austin.

Education: B.S. in Aeronautics from Embry Riddle Aeronautical University and a M.S. in Space Operations Management with an emphasis in Space Systems Engineering from Webster University.



Dr. Jeremy Williams

Head of the Climate Corporation and Digital Farming, Bayer Crop Science

Climate Corporation uses satellite imagery and precision navigation through GPS to provide farmers and agriculture companies digital tools and data science to help farmers and companies sustainably increase productivity.

Professional Background: Jeremy Williams serves as Head of Climate LLC, Digital Farming Solutions and Commercial Ecosystems for the Crop Science division of Bayer, where he leads a diverse team that develops digital tools to help unlock the next wave of Ag innovations. Based in Creve Coeur (St. Louis, Mo.), Jeremy is also a member of the Crop Science Executive Leadership team.

Previously, Jeremy served as a member of the Research & Development Leadership Team as SVP, Head of Plant Biotechnology for the Crop Science division of Bayer. In that role, he led a global team to enable a robust plant biotechnology pipeline developing highly effective solutions to strengthen a plant's resistance to insects, diseases, and other environmental stresses.

Service: Jeremy has 20 years of diverse biotechnology and agrochemical R&D experience. He came to Bayer Crop Science in 2018, having served in several R&D leadership roles at Monsanto including as head of chemistry R&D. He began his career as one of the founding scientists at Divergence Inc, a St. Louis-based startup, where he held a variety of scientific research and leadership roles, including Vice President of Discovery Research, prior to the company's acquisition by Monsanto in 2011. He is a co-inventor of several patents held by Divergence and its collaborators and was named a Senior Monsanto Fellow in 2016. Jeremy is passionate about Inclusion and Diversity, and previously served as the President of the African Americans in Monsanto business resource network and as a sponsor for the WiSE Guys ally network. He is currently a member of the GROW Cabinet. Prior to Climate Corporation, Jeremy served as a member of the Research & Development Leadership Team as senior vice president and head of Plant Biotechnology for the Crop Science division of Bayer. Jeremy has 20 years of diverse biotechnology and agrochemical R&D experience. He came to Bayer in 2018, having previously served in several R&D leadership roles at Monsanto including as head of chemistry R&D. He began his career as one of the founding scientists at Divergence Inc, a St. Louis-based startup, where he held a variety of scientific research roles.

Education: Jeremy graduated from Washington University with a Ph.D. in Molecular Biophysics and from Swarthmore College with a Bachelor of Arts in Biochemistry and French. He lives in St. Louis, Missouri with his wife Rachel Presti and their children Deryck (17) and Isabelle (14). His hobbies include science fiction & fantasy, wine and taekwondo. He and his family love to travel for vacation.



Katrina Harden Williams
Middle School Teacher, Ames, Iowa

Ames Middle School: The school enrolls 33% economically disadvantaged students. The school's minority student enrollment is 33%. The student population is made up of 50% female students and 50% male students.

Professional Background: Mrs. Katrina Harden Williams has been an educator over the past 28 years in higher education and public-school education. For the past three years she has served as a middle school teacher in Ames, Iowa. She was also an Academic Advisor at Iowa State University and a former Director of the Mathematics Laboratory at Spelman College. Katrina is currently working toward a doctoral degree with her sights on continuing to make larger contributions to math education, as a professor.

Service: Katrina is the inaugural AIAA-American Institute of Aeronautics and Astronautics 2022 Trailblazing STEM Educator Award winner, a 2021-2022 Iowa's Fierce and Fearless STEM Teacher Recipient and a Code.org Computer Science (CS) Discoveries Iowa educator. Katrina was also an invited speaker for several Iowa State University initiatives: the PWISE-Program for Women in Science Engineering Go Further STEM Conference & ASTEM and Educational Professional for the Science Bound CyCLIMB-Challenge, Learn, Inspire, Master and Believe, SHPS-MAES-Society of Hispanic Professionals-Mexican Americans Engineering and Science Youth Keynote Speaker events. She is a parent and educational advocate with many organizations: Jewels Academy in Des Moines, Iowa, AIPCA-Ames International Partner Cities Association, the Iowa Healthiest State Initiative: Make It OK Back The Black steering committee member, the SCCAN-Story County College Access Network and ITAG- Iowa Talented and Gifted and gladly serves as a certified group facilitator with SENG-Supporting Emotional Needs of the Gifted (on-line and in-person). Katrina is also a MCPC-Morehouse College Parent Council servant leader for Region 6: Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota, and Wisconsin.

Education: Katrina received her Bachelor's degree in mathematics from the University of Arkansas at Little Rock in Little Rock, Arkansas and a Master's degree in Applied Mathematics from Clark Atlanta University in Atlanta, Georgia. Katrina is a proud member of EDGE-Enhancing Diversity in Graduate Education. She holds certifications to teach mathematics on the secondary level in multiple states, is a certified gifted educator and certified SPED-Special Education educator and driver's education instructor.