



POLICY FORUM ON SPACE SETTLEMENT

A Pre-Conference Event of the
International Space Development Conference

Sheraton Pentagon City Hotel
Arlington, VA

June 5, 2019
9:00 AM – 5:15 PM

SPEAKER BIOGRAPHIES
In alphabetical order

Robert Aillon, Chief Executive Officer, Leviathan Space Industries
Presenter: **Effective Space Taxation Policy Today Can Increase Investment in Space Settlements**

Bio

Robert Aillon is the founder and CEO of Leviathan Space Industries LLC. He is currently leading the initiative to develop a Private Spaceport in the Ecuadorian coast, while building strong relationships with schools and universities in promoting STEM programs and research. This year LSI is coordinating the first Ecuadorian seeds to be sent to the International Space Station for a joint project with a local high school to spend six months in the MISSE Platform. He is envisioning its first launch in the 2020s, looking to provide an accessible site to lower the entry barriers for space access.

Alfred Anzadala, NSS Executive Vice President, Chair of NSS Policy Committee
Presenter: **The Amazing Utility of Customary International Law for Space Development**

Bio

Al (aka Alfred/Alfredo) Anzaldúa is a retired U.S. State Department diplomat and 30 plus-year veteran of space advocacy. As a U.S. Foreign Service Officer, he carried out diplomatic and science/environment work, primarily in Latin America, the Caribbean, and Washington D.C. Al is Chair of the National Space Society (NSS) International Committee, Deputy Chair of the NSS Policy Committee, and Officer and Board member of the Tucson L5 Space Society. He has authored a series of articles on space-development issues in the Space Review, the Reflector, Ad Astra, and other publications, including the 5th volume of the Aerospace Technology Working Group Book published by the Secure World Foundation, et al. As a member of the NSS Policy Committee, Al is often the lead author NSS policy papers. Al also has given frequent presentations and exhibitions on space-related subjects dating back to 1985.

Jason Aspiotis, CEO, Finsophy

Presenter: **Public-private capital solutions in support of long-term Space development and settlement**

Bio

Jason Aspiotis, Founder and CEO of Finsophy Public Benefit Corporation (www.Finsophy.com), is a financial industry entrepreneur and strategist for socio-economic development of the Space frontier. Jason has 16 years of total experience in the Space industry, finance, financial technology (FinTech) and business development. His company Finsophy is developing mission-aligned financial solutions to some of humanity's biggest endeavors: transformation to clean energy and green infrastructure, proliferation of social equality, and the economic development of the Space frontier. Finsophy has recently launched SpaceVault (www.SpaceVault.com), the world's first savings account in support of long-term private financing of the commercial Space industry. Jason is involved in numerous private and government initiatives developing strategic and long-term public-private financial infrastructure in support of Space development while leveraging latest advancements in FinTech, financial regulation innovation, and emerging blockchain infrastructure.

Greg Autry, Director, Southern California Commercial Spaceflight Initiative

Moderator: **Changes to international Law to Enable Space Settlement Development**

Bio

Dr. Greg Autry is an Assistant Professor, Lloyd Greif Center for Entrepreneurial Studies, University of Southern California Marshall School of Business. Dr. Autry is an educator, writer and technology entrepreneur. Dr. Autry researches entrepreneurship in context of commercial space. He served on the NASA Agency Review Team and as the White House Liaison to NASA. Dr. Autry authored An Analysis of U.S. National Competitive Advantage in Human Orbital Spaceflight Markets, for the FAA Office of Commercial Space Transportation (AST) and he currently serves on the Commercial Space Transportation Advisory Committee (COMSTAC) at FAA AST. His articles on space, technology and trade have been featured in the San Francisco Chronicle, LA Times, Washington Times, and Space News and he is a regular contributor at Forbes. Dr. Autry serves as the Chair of the ISDC 2019 conference.

Jim Crisafulli, Chair, Aerospace States Association Space Committee, Chair, National Space Society Lunar Affairs Subcommittee

Presenter: **An International Lunar Decade: Paving the Way for Sustainable Space Settlement**

Bio

A native of Los Angeles, Jim Crisafulli pursued joint undergraduate studies in Physics and Zoology at Harvey Mudd College and Pomona College in Claremont, California. Following a two-year assignment with the Peace Corps as a secondary school physics teacher in Fiji, he returned to Claremont Graduate University to obtain a Master's Degree in International Studies, with special emphasis on the technologies and economies of Asia/Pacific societies.

In 1978, Jim was awarded an international research fellowship with the East-West Center in Honolulu, where he continued to pursue graduate work at the University of Hawaii to investigate technology development issues affecting Asia/Pacific communities. He subsequently held positions as an economic development specialist and program director for the Honolulu

Community Action Program (HCAP) and the Economic Development Corporation of Honolulu.

In 1988, Jim joined the Hawaii State Government to serve as Space Program Projects Manager for the State Office of Space Industry (until its closure in May, 1995), and subsequently served as Science & Technology Officer and Research & Development Coordinator for the State's Dept. of Business, Economic Development & Tourism (DBEDT), helping to launch and manage the Hawaii State Office of Aerospace Development, which established the Japan-U.S. Science, Technology & Space Applications Program (JUSTSAP), the Pacific International Space Center for Exploration Systems

(PISCES), and other programs facilitating the development, testing and evaluation of innovative technologies, as well as professional training and aerospace education programs, to advance future robotic and human missions to the Moon, Mars and beyond. In recognition of these contributions, Jim received the Governor's Award for Distinguished State Service as the 1993 State Employee of the Year.

Following retirement from State Government in 2017, Jim continues to work with municipal, state, and federal agencies, private corporations, and international institutions (through both the Aerospace States Association and the National Space Society) to promote public-private partnerships and multinational alliances to help reduce the costs, enhance the benefits, and accelerate timetables for future space missions, with an emphasis on promoting development of an International MoonBase Alliance and International Lunar Research Park in Hawaii.

Hoyt Davidson, CEO, Near Earth LLC

Moderator: **Potential Government Incentives for Private Funding of Space Settlements**

Bio

Hoyt Davidson is the founder and Managing Partner of Near Earth LLC, an investment bank focused on the satellite industry, commercial space and aerospace/ defense. Clients include major companies in those industries, private equity and hedge funds, and early stage entrepreneurial firms seeking private equity capital. He received a Physics degree from MIT and then spent six years at Lockheed as a Senior Research Engineer, before returning to MIT for an MBA and heading to Wall Street. In the 1990s, at DLJ and later Credit Suisse, he co-founded the Space Finance Group, the first coverage group focused on the commercial satellite industry, and raised over \$25 billion for companies such as PanAmSat and XM Radio. In 2002, he left to start Near Earth LLC, to continue helping space-related companies grow. He also serves on and the Boards of Pacific International Center for Space Exploration Systems and NanoRacks LLC, and formerly served on the NASA Advisory Council.

Tony DeTora, Former Senior Professional Staff, House Committee on Science, Space, and Technology

Presenter: **Proper Role of Government in Space Settlement Development**

Bio

Tony served as Senior Professional Staff for the House Committee on Science, Space, and Technology until January 2019. Prior to that, he was Senior Policy Advisor for Science, Space & Technology issues to Congressman Dana Rohrabacher, former Vice Chairman of the House Science Committee, former Chairman of the Space Subcommittee. In 2014, Tony was a candidate for U. S. Senate from Virginia. Tony previously held a number of positions, most recently Business Manager and Senior Analyst, at PoliSpace – an entrepreneurial space consulting firm at the nexus of technology, the government and commerce. His other positions have included Finance Director for a number of political campaigns; Executive Director of the Space Frontier Foundation; and Vice President of ProSpace America, where he ran the March Storm lobbying event for five consecutive years, helping secure passage of critical legislation including the Commercial Space Launch Amendments Act of 2004. He holds a BS in Aerospace Engineering and an MBA in Aviation Management from Embry-Riddle Aeronautical University, where he also worked extensively for the University President, and served on the Board of Trustees.

James Dunstan, General Counsel, TechFreedom

Panelist: **Policy Leaders' Reaction to Forum Proposals**

Bio

James E. Dunstan is the founder of Mobius Legal Group where he has spent 35 years assisting clients on issues of high technology, communications, and space law. Jim represents a significant number of burgeoning outer space companies: he drafted and negotiated the first commercial lease for the Russian Mir space station on behalf of MirCorp. Jim assisted in negotiating with the Russian Space Agency and NASA to shoot the first television commercial onboard the International Space Station (ISS). He helped arrange for the first pitch of the 2002 baseball World Series to be conducted onboard ISS. He has also been involved in export issues (ITAR) related to experimental hardware launched on Russian rockets and

on a number of international interplanetary missions. He has assisted a number of clients in crafting Space Act Agreements with NASA. In 2016 Jim co-chaired the regulatory and policy team for a major study supported by Air University on Ultra Low Cost Access to Space (ULCATS) which included an analysis of multi-agency regulatory approach to licensing commercial space activities and recommendations for changes in those systems.

Dr. Martin Elvis, Astrophysicist,

Presenter: **Crowding at lunar sites of interest: Possible ways forward**

Bio

Dr. Martin Elvis is a highly cited astrophysicist (with nearly 30,000 peer citations) who has used most large space based observatories to publish some 400 papers on supermassive black holes, seen as quasars, out to the edge of the universe over the course of many years. Lately, concerned about the growing cost of space telescopes, he has turned to researching the astronomy needed to enable asteroid mining, with a view to cutting those costs in the long run. He has published widely on issues related to asteroid mining and the space economy. He is unduly proud that he is (probably) the first professional astronomer to visit the Harvard Business School on business. He obtained his PhD in X-ray astronomy in 1978 in the UK, and has worked at the Center for Astrophysics | Harvard & Smithsonian ever since on a series of space X-ray telescopes, culminating with the Chandra X-ray Observatory. He is a fellow of the American Association for the Advancement of Science, a Member of the Aspen Center for Physics, and is past-Chair of the Hubble Space Telescope Users' Committee and of the High Energy Division of the American Astronomical Society. Asteroid 9283 Martinelvis is named after him.

Al Globus, Senior Research Engineer, San Jose State University

Presenter: **What is a Space Settlement on the Moon, Mars and Free Space?**

Presenter: **Near Term Research Priorities that will Enable Space Settlement**

Bio

Al Globus worked at NASA Ames on space settlement, asteroid mining, Hubble, space stations, X37, Earth observation, TDRSS, cubesats, lunar teleoperation, spaceflight effects on bone, molecular nanotechnology, and space solar power publishing dozens of papers on these and other topics. He founded and has run the annual Space Settlement Contest for 7-12 grade students for over 25 years. The contest attracted 10,000 kids in 2018. Most recently, he found a way to build O'Neill-style space settlements with two or more orders of magnitude less mass and place them close to Earth, making launch from Earth practical.

Jeff Greason, Chief Technical Officer, Electric Sk, Chairman, Tau Zero Foundation

Bio

Jeff Greason (GRAY-son) is an entrepreneur and innovator with 22 years' experience in the commercial space industry. He is the CTO of Electric Sky, developing long-range wireless power for propulsion and other purposes; and Chairman of the Tau Zero Foundation, developing advanced propulsion technologies for solar system and interstellar missions. He has been active in the development of commercial space regulation and served on the Augustine Commission in 2009. Jeff was a cofounder of XCOR Aerospace and served as CEO from 1999 to early 2015, leading development of 11 different rocket engines and two piloted rocket aircraft with 60 flights, including demonstration of 7 flights in 1 day and \$900 cost per flight. Previously, he was the rocket engine team lead at Rotary Rocket, and an engineering manager in chip technology development at Intel. He holds 25 U.S. Patents. He is also a Governor of the National Space Society.

Sean Hadley, Associate Director, New Jersey Education Association

Presenter: **Working Around a Gridlocked Congress: The Unexplored Frontier of State Government Support for Space Activities**

Bio

Mr. Hadley is an attorney and Associate Faculty at Rutgers University, where he teaches law, public policy, and political science. He is also Associate Director at the New Jersey Education Association where he specializes in federal policy and legislation. His expertise includes state and local government finance, U.S. regulatory affairs, and education.

Mr. Hadley's public policy experience spans the state and national level. In Washington, DC, Mr. Hadley represented the National Governors Association and worked for the U.S. Senate Minority Leader. On the state level, Mr. Hadley has held numerous roles representing government officials, and serving in appointed regulatory positions. He is also certified as a Political Action Committee Treasurer. In addition to his law degree, Mr. Hadley holds a Masters of Science Degree in Public Policy from the Bloustein School of Planning and Public Policy at Rutgers University (1998), where he was a fellow at the Eagleton Institute of Politics.

Michelle L.D. Hanlon, Associate Director of the Air and Space Law Program, University of Mississippi

Presenter: **Code of Behavior in Space**

Bio

Michelle is an Associate Director of the Air and Space Law Program at the University of Mississippi School of Law and its Center for Air and Space Law. She is also a Co-Founder and President of For All Moonkind, Inc., a nonprofit corporation that is the only organization in the world focused on protecting human cultural heritage in outer space. For All Moonkind has been recognized by the United Nations as a Permanent Observer to the United Nations Committee on the Peaceful Uses of Outer Space. Michelle provides advice and counsel in respect of all aspects of air, space and cyber law through the consulting firm of ABH Aerospace, LLC. She serves as the Co-Chair of the Cultural Considerations Working Group of the Moon Village Association and Vice-Chair of the Legal and Economic Subcommittee of the National Space Society. She is also an Advisor to the Creative Destruction Lab, a startup incubator affiliated with the University of Toronto. Michelle received her B.A. in Political Science from Yale College and her J.D. magna cum laude from the Georgetown University Law Center. She earned her LLM in Air and Space Law from McGill University where the focus of her research was commercial space and the intersection of commerce and public law. Prior to focusing on space law, Michelle was engaged in a private business law practice. Her legal career commenced with the restructuring of sovereign debt for a number of South and Latin American countries and evolved into the negotiation and implementation of cross-border technology mergers and acquisitions. Her subsequent solo practice advised entrepreneurs across four continents on all aspects of bringing their innovative ideas to market: from basic corporate formation to financings and buyouts.

Chris Hearsey, Founder & CEO, OSA Consulting, LLC

Presenter: **Closed for Operations: Non-Interference Zones and the Cadence of the New Space Race**

Bio

Christopher Hearsey is an aerospace executive, research scientist, and space law and policy scholar who has worked in the aerospace and nonprofit industries for over ten years. Chris formerly served as the Director of DC Operations and Corporate Counsel for Bigelow Aerospace. Following a run for Congress in 2018, Chris founded OSA Consulting, LLC and the educational nonprofit The Space Court Foundation Inc., which is currently supporting the development of a YouTube show about space law titled Stellar Decis that will launch in summer 2019.

Chris holds a BA in Mathematical Economics and Political Science from Temple University, a MS in Legal Theory from The American University, a MS in Space Studies from the University of North Dakota, and a JD from the University of Mississippi with a concentration in air and space law (honors). Chris earned a

fellowship at the National Air and Space Museum studying space history and served as a special assistant in the Office of Space and Advanced Technology at the US Department of State where he worked on President Obama's National Space Policy and served on the US delegation to the UN Committee on the Peaceful Uses of Outer Space

Josh Izenberg, Co-Founder and COO, Off-World, Inc., Pro Bono Counsel

Presenter: **What is a Space Settlement on the Moon, Mars and Free Space?**

Bio

Josh Izenberg is Co-Founder and COO of Off-World, Inc., a revolutionary off-Earth infrastructure company, and is the Principal of IzenbergLaw PLLC. He serves as Challenger Center's Pro Bono Counsel and is a member of the advisory boards of three local technology startups. Prior to his current roles, Mr. Izenberg was a General Counsel of the aerospace and defense businesses at Alliant Techsystems (ATK), a Fortune 500 provider of aerospace, defense and sporting products. Before ATK, Mr. Izenberg was General Counsel at Versar and Deputy General Counsel at Alion Science and Technology. Mr. Izenberg started his legal career as an Associate in the Corporate & Securities Group at Baker & McKenzie LLP.

Mr. Izenberg received an MBA with honors from Georgetown University, where he finished second in his class, and he holds a law degree from the University of Toronto, and a B.Sc. in Computer Science with Great Distinction from McGill University in Montreal, Canada. Mr. Izenberg is an alumnus of the 1997 Space Studies Program at the International Space University and was a Founding Delegate of the United Nations' Space Generation Forum and the Space Generation Advisory Council.

Jim Keravala, Chief Executive Officer, OffWorld

Presenter: **What is a Space Settlement on the Moon, Mars and Free Space?**

Bio

Jim is co-founder and Chief Executive Officer of OffWorld, building an industrial robotic workforce to undertake mining, manufacturing and construction on planetary surfaces and in space. The robotic

workforce forms a solar system platform that will enable the construction of space based solar power stations, propellant depots and entire settlements leveraging a new industrial AI that OffWorld is developing.

He brings 30 years of experience and visionary leadership in innovation in multidisciplinary areas such as aerospace engineering, space systems, robotics and machine intelligence, manufacturing and construction, computer science, synthetic biology and molecularly precise control systems. Jim is a prolific technologist and an accomplished entrepreneur able to constantly identify new acceleration ramps in the technological landscape.

Jim started his career in the space launch industry managing launch programs overseeing over a dozen successful orbital launches on Russian, European and US launch vehicles. Modular satellite design, integration engineering and program management were part of this process. Jim also architected major space programs including new space agencies and launches at Surrey Satellite Technology and as cofounder of Shackleton Energy, space propellant depots utilizing requiring lunar mining and a continuous supply of fuel in space. Jim studied aerospace engineering, spacecraft engineering and physics at University of London, Surrey University, Aachen Technical University and International Space University, was previously faculty at Singularity University and is on advisory boards and Board of Directors of a number of space institutes including Board Member of the National Space Society, The International Moonbase Alliance and the Moon Village Association.

Dr. Alanna Krolikowski, Assistant Professor of Political Science, Missouri University of Science and Technology

Presenter: **Crowding at lunar sites of interest: Possible ways forward**

Bio

Dr. Alanna Krolikowski is Assistant Professor of Political Science at the Missouri University of Science and Technology (Missouri S&T), where she specializes in policy for science, technology, and innovation. Her research focuses on global policy efforts relating to new activities at 'technological frontiers' in outer space, on China-U.S. trade in high-technology items, and on China's pursuit of scientific and technological modernization. Dr. Krolikowski has authored several academic articles and other research publications, including inSpace Policy, Global Policy, New Space, and the Journal of International Relations and Development, and twice testified for the U.S.-China Economic and Security Review Commission.

Dr. Tony Milligan, Faculty, Department of Theology and Religious Studies at King's College London

Presenter: **Crowding at lunar sites of interest: Possible ways forward**

Bio

Dr. Tony Milligan teaches Ethics and the Philosophy of Religion with the Department of Theology and Religious Studies at King's College London. He is the author of Nobody Owns the Moon: The Ethics of Space Exploitation (2015); the co-editor of the collection The Ethics of Space Exploration (2016); co-editor of the recent European White Paper Astrobiology and Society in Europe (2018), and one of the four series editors for Springer's Space and Society series.

Laura Montgomery, , Ground Based Space Matters, LLC

Presenter: **Does the Outer Space Treaty Prevent Human Settlement of Mars?**

Bio

Laura Montgomery teaches space law at Catholic University's Columbus School of Law. In her private practice she specializes in regulatory space law, with an emphasis on commercial space transportation and the Outer Space Treaties. She provides expert opinion on the Commercial Space Launch Act, its implementing regulations governing the launch of launch vehicles, the reentry of reentry vehicles, the operation of launch and reentry sites, and the financial responsibility and liability requirements of those regulations. In 2017, she testified to the Space Subcommittee of the House Committee on Science, Space, and Technology, and to the Senate Committee on Commerce, Science, and Transportation's Space Subcommittee on Space, Science and Competitiveness on matters of regulation and international obligation. She has published articles on human space flight and launch safety, and writes and edits the space law blog GroundBasedSpaceMatters.com.

James Muncy, Principal, PoliSpace

Moderator: **How Current Space Law Encourages and Inhibits Space Settlement Development**

Panelist: **Policy Leaders' Reaction to Forum Proposals**

Bio

James A. M. Muncy is the founder and president of PoliSpace, an independent space policy consultancy that helps space entrepreneurs and company executives succeed at the intersection of business, space technology, and public policy. PoliSpace provides its clients business strategy, policy research and advocacy, legislative relations, and communications services, including several leading space companies and the largest trade association in the U.S. commercial spaceflight industry. Working in space policy for over 35 years, for the past two decades Muncy has worked both inside Congress and for industry to enact into law several major revisions to the Commercial Space Launch Act of 1984, the organic law which guides the Department of Transportation in licensing and promoting the U.S. commercial space transportation industry.

Aaron Oesterle, Acting Executive Director, Space Frontier Foundation

Presenter: **Making Space Settlement a National Goal**

Moderator: **Proper Role of Government in Space Settlement Development: Quarterback, Cheerleader, Coach, or Owner?**

Bio

Aaron Osterle's passion for space started when, at the age of five, he saw a television show on the planets. That show ignited a passion for space, and resulted in him becoming a professional space activist. Aaron is the Executive Director of the Space Frontier Foundation. He served as Vice President at PoliSpace, working with the company principle James Muncy. PoliSpace clients cover all different parts of the commercial space industry, sub-orbital spaceflight, space launch, commercial space stations, and deep space missions.

Aaron also serves on its board of directors of the Space Frontier Foundation as the Policy Director. Much of this work focused and built around the basic philosophy of using space to directly create opportunities for every individual person. I have developed concepts and organized activities that advocate for issues such as Earth Orbit commercialization, lowering launch costs, and enabling deep space activity.

Rand Simberg, Consultant on space technology, business, regulation and policy,

Presenter: **Extending Real Property Rights To Celestial Bodies**

Bio

Rand Simberg is a recovering aerospace engineer with over a third of a century of experience in the space industry. Early in his career, he accumulated over a decade of experience in engineering and management at the Aerospace Corporation in El Segundo, California and Rockwell International in Downey, California. Since leaving Rockwell in 1993, he has been a consultant in space technology and business development as well as a technology entrepreneur. He also advises on regulatory and market issues pertaining to commercial and personal spaceflight.

Mr. Simberg holds multiple engineering degrees from the University of Michigan, Ann Arbor and a Masters degree in Technical Management from West Coast University in Los Angeles. He has written many pieces for Popular Mechanics, Fox News, USA Today, PJMedia, National Review, Reason magazine, The Weekly Standard, The Washington Times, and TCSDaily, among others. He has also written extensive essays on space policy and technology for the quarterly journal, The New Atlantis. He is author of the book *Safe Is Not An Option: Overcoming The Futile Obsession With Getting Everyone Back Alive That Is Killing Our Expansion Into Space*.

Dale Skran, Chair, NSS Policy Committee

Presenter: **Making Space Settlement a National Goal**

Bio

After 17 years with Bell Labs (AT&T, Lucent Technologies), Dale Skran worked in several companies including Ascend Communications (VP of Enterprise Engineering), Sonus Networks (Director of Engineering), and CMWare (Founder, CEO, COO, and VP of Engineering). He was also a negotiator/manager (Rapporteur) at the UN (International Telecommunication Union) where he led the development of international Internet standards for video conferencing and voice services (VoIP).

Dale is the Chair of the NSS Policy Committee as well as NSS Executive Vice-President. In addition, Dale is one of two NSS representatives to the Alliance for Space Development, and sits on the ASD Board of Directors. One of his major work areas is supporting the Space Exploration Alliance Washington Blitz in February, the March Storm, and the NSS Home District Blitz in August. He also chaired the Space Policy Track at the 2014 ISDC. During 2013-2014 he gave a talk titled *NewSpace* to a variety of audiences. Additionally, he has written a number of articles for *Ad Astra*, including *A Summer in Newspace* (Winter 2013).

Patrick Sullivan, Deputy Director, Regulation and Policy, Office of Space Commerce, U.S. DoC
Keynote: \$1 Trillion Space Economy to Support Space Settlement

Bio

Patrick is responsible for developing policy and regulatory recommendations on behalf of the U.S. Department of Commerce to advance the US space commerce economy. Working across agencies and commercial sectors, he is engaged with policymakers and private stakeholders to examine current regulatory structures, existing laws and federal rules, and methods by which a streamlined, unified commercial space regulatory framework might alleviate government burdens and justify responsible US-based investment, innovation, and activity.

Patrick began his policy and legal career as a legislative director for two members of Congress. He then attended Catholic University Columbus School of law and graduated with a specialization in telecommunications and regulatory law. After serving FCC Chairman Powell as legal intern, Patrick served as a regulatory counsel and advocate in law firms, trade groups, and technology corporations. Patrick reentered public service a few years ago, assisting FirstNet and NTIA in developing legal interpretations, federal policies, and rules to help FirstNet abide by its enabling statute and build out a broadband network dedicated for first responders. In July, Patrick was asked to apply his experience in establishing regulatory frameworks to the field of space commerce on behalf of the Department.

Nathaniel Snyder, JD Candidate 2020, The University of Mississippi School of Law
Presenter: **Advancing Space Settlements with the U.S. Commerce Department**

Bio

Nathaniel Snyder serves as a Space Policy Fellow in a U.S. Congressional office, as well as pursuing his J.D. at the Center for Air and Space Law at the University of Mississippi School of Law. He is a 2L student editor for the Journal of Space Law.

Rick Tumlinson, Founding Partner, SpaceFund
Presenter: **Declaration of Human Rights in the Universe**

Bio

Rick Tumlinson has been called a godfather of the NewSpace movement of Elon Musk, Jeff Bezos and Richard Branson. He led the team that took over the Russian space station Mir as a commercial facility, signed up the first citizen astronaut to fly to the space station, was on the founding board of the X-Prize, and helped start the Lunar Orbiter project that first found water on the Moon. A space policy expert who has been a witness 6 times before the US Congress, Rick has spent 30 years fighting for US and international policies to support the human settlement of space. He co-founded the Space Frontier Foundation, Deep Space Industries, the EarthLight Foundation, New Worlds Institute and is currently raising capital for SpaceFund, a new tokenized venture fund for space start-ups.

Robert Walker, CEO, MoonWalker Associates / Member of Congress, 1977-1997
Luncheon Keynote: Where We Are Headed?

Bio

- Member of Congress 1977-1997
- Chairman of the House Committee on Science, Space and Technology 1995-1997
- Republican Chief Deputy Whip 1989-1995
- Chairman of the Republican Leadership 1995-1997
- Chairman of the Commission on The Future of the United States Aerospace Industry 2001-2002
- Member of the Presidential Commission on the Implementation of United States Space Policy 2002
- Member of the Presidential Commission on United States Postal Reform 2004
- Member of the Aerospace Corporation Board of Trustees 1999-2016
- President, CEO and Executive Chairman of Wexler | Walker 1997-2018
- National Chairman of the Gingrich for Presidential Campaign 2012
- Senior Advisor for Space to the Trump Campaign 2016

Frank White, Author, *The Overview Effect*, *The Cosma Hypothesis*
Presenter: **The Human Space Program: A Central Project for Humanity**

Bio

Frank White is a magna cum laude graduate of Harvard College, a member of Phi Beta Kappa, and a Rhodes Scholar. He earned an M.Phil. in Politics from Oxford University.

Frank's best-known work, *The Overview Effect: Space Exploration and Human Evolution*, is considered by many to be a seminal work in the field of space exploration. A film called *Overview*, based largely on his work, has had nearly 8 million plays on Vimeo.

White considers himself to be a space philosopher, and has long advocated developing a new philosophy of space exploration. His book on this topic, *The Cosma Hypothesis: Implications of the Overview Effect*, will be published in March 2019. In it, he asks the fundamental question, What is the purpose of human space exploration? Why has the evolutionary process brought humanity to the brink of becoming a spacefaring species?

White has taught in the Harvard Extension School since 1995 and is, for the first time, teaching Introduction to Space Studies this year.

Steve Wolfe, Deputy Executive Director, SpaceCom

Forum Chair

Moderator: **Policy Leaders' Reaction to Forum Proposals**

Bio

Steven Wolfe is Deputy Executive Director for SpaceCom, Space Commerce Conference and Exposition. Steve develops all content for SpaceCom. He directs the Global Spaceport Alliance and the SpaceCom Entrepreneur Summit activities. He serves on the board of the Global Entrepreneurship Network – Space and Board of Editors for the *Journal of Space Philosophy*. Steve was a legislative aide for the late Congressman George E. Brown, Jr., where he served as executive director of Congressional Space Caucus. Steve drafted the Space Settlement Act of 1988 for Cong. Brown. The bill was signed into law by President Ronald Reagan as part of the NASA Authorization bill. Steve is the author of *The Obligation: A Journey to Discover Human Purpose on Earth and in the Cosmos*.

James Wolff, Esq., Vice President, Orbital Assembly Corp.

Presenter: **Emerging Space Law Trends and Space Directives Analysis**

Bio

Mr. Wolff is admitted to the Appellate Division, First Department of New York State. He received his undergraduate degree from Johns Hopkins University and his Juris Doctorate from New York Law School. He is an experienced litigator and transactional attorney practicing in New York City. His interests are in corporate law, business development, emerging intellectual property, finance, complex international trade agreements, and arbitration and mediation. He manages an extensive corporate portfolio of startup technology companies in robotics, 3d printing, and commercial space. He is the co-founder of Deep Space Industries, and serves as an executive in companies such as United Frontiers Corp., Space Initiatives Inc., Gateway Spaceport Foundation, Immortal Data Corp., Food by Print LLC, and D-Shape 3D Printing Corp., E-cans Recycling Corp., and others. He volunteers as an Executive board member at-large for the United Nations Association, serving on the Southern District Division of New York committee working on sustainable development goal related issues and advocates for UN participation in space settlement. In 2016, he spoke on Public Private Partnership trends at the MIT Sloan Business School in Massachusetts, and has lectured on Space Law and Policy for accredited Continuing Legal Education programs in New York. He also frequently lectures on emerging legal trends including blockchain and digital currency at institutions such as the New York Bar Association, the Brooklyn Bar Association, the Westchester Bar Association, the New York County Lawyers Association, the New York State Society of Certified Professional Accountants, and more.

Sam Ximenes, CEO, WEX Foundation and Exploration Architecture Corp

Presenter: **A Space-STEM Education Model for Developing a Global Space Settlement Workforce**

Bio

Sam Ximenes is a Space Architect with over 30 years' experience in the aerospace industry with NASA, DoD, and international space programs. He has held executive management positions at Lockheed Martin, L-3 Communications, and Futron Corporation with responsibility for business strategies for growth and development of their respective business units in advanced programs and technology insertion for space systems. While at Grumman Corporation he led systems integration and habitation efforts of international partner laboratory modules for the NASA Space Station program. He is currently CEO of XArc Exploration Architecture Corporation, a space architecture consulting firm he founded in 2007. The firm specializes in commercial spaceport development and design, and space systems development for space exploration initiatives for planetary surface systems for habitation and human settlement. He was a member of the design team for Spaceport America, and United Kingdom spaceport site assessments, and led the effort developing the economic and business case for viability of Houston Spaceport for the City of Houston. He is also Founder and Board Chair of WEX Foundation, a non-profit organization for advancing careers in space exploration through Space-STEM education.