THE GEORGE WASHINGTON UNIVERSITY

Fall 2019 Newsletter

Recent Events Highlights

The second half of 2019 was an active period for the Space Policy Institute, which organized four major events and two book presentations. In early July, SPI organized a symposium on National Security Space in collaboration with the Aerospace Corporation's Center for Space Policy & Strategy. The symposium featured three sessions with speakers and discussions focusing on the role of the intelligence community, parallel policy issues of space and maritime cooperation, and national technical means of verification.



Prof. Henry Hertzfeld, Prof. John Logsdon. Astronaut Michael Collins, GW President Thomas LeBlanc, at the July 18, 2019 GW Space Policy & Diplomacy event.

On July 18th, SPI co-hosted a major event honoring the 50th anniversary of the Apollo 11 Moon Landing with the Smithsonian's National Air and Space Museum and the U.S. State Department titled "One Giant Leap: Space Diplomacy Past, Present, Future." Held in Lisner Auditorium, the event featured a discussion with Michael Collins, Ellen Stofan, and Charles Bolden, with John Logsdon as one of the moderators. Buzz Aldrin also participated in a separate short interview. Over 1500 people attended this event, which was the only public Anniversary celebration that had the two living Apollo 11 astronauts both present.



Prof. Logsdon interviewing Astronaut Aldrin and Astronauts Boldin and Collins.

In September, SPI, in collaboration with the Bocconi School of Management and the Secure World Foundation, organized a workshop: "Exploring the Hidden Economic Value of Space Applications." Discussions focused on how space technologies augment and advance private sector industries such as agriculture, transportation, and logistics. The examples of successful applications ranged from wine production in Italy to GPS/PNT usage in the United States and worldwide.

Another event with Bocconi was held at the Embassy of Italy and took place in late October alongside the IAC. Focusing on future lunar in-situ resources, the well-attended presentation evaluated the future economic, legal, and policy issues confronting governments and industry in the research, development, and eventual use of resources in space.

In November, SPI hosted a forum featuring Adjunct Professor John J. Klein's new book: *Understanding Space Strategy: The Art of War in Space*. On this occasion, distinguished members of the space industry, as well as

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academics, and students discussed the nature of space warfare.

In December, the Institute hosted another book forum featuring Alan Ladwig, author of: *See you in orbit? Our dream of spaceflight*. This interesting discussion focused on the past successes and difficulties intrinsic to human spaceflight as well as what is promised for future spaceflight.

Faculty and Staff News

Professor Emeritus John M. Logsdon continues to be very active in the space community and at SPI. He spent much of his time over the past six months involved in activities celebrating the 50th anniversary of the Apollo 11 mission and took part in the ceremonies at NASA's Kennedy Space Center commemorating the July 16 launch of Apollo 11. In addition to numerous radio, television, and print interviews and talks at various venues, he was a featured speaker at the Starmus Festival of Science, Space, and Music in Zurich, Switzerland in late June. On September 12 during the von Braun Symposium of the AAS in Huntsville. Professor Logsdon received the 2019 Frederick Ordway Award for "Sustained Excellence in Spaceflight History." In November, he gave a Smithsonian Associates talk based on his three books on the space policy decisions of Presidents Kennedy, Nixon, and Reagan. He also continues to serve as a member of the Board of Directors of The Planetary Society.

Professor Pascale Ehrenfreund remains on leave from GW while carrying out her duties as Chairman of the German Aerospace Center (DLR). In the summer of 2019, Dr. Ehrenfreund also lectured at the International

University Summer Program. Space In addition, she published peer-reviewed papers in the journals Astronomy and Astrophysics, Astrobiology and Nature Scientific Reports. In October 2019, she attended the International Astronautical Congress in Washington D.C. and at the end of the Congress officially began her duties as president of the International Astronautical Federation (IAF). As part of those duties, she presented the new IAF Global Advocacy Agenda 2019-2022 for facilitating global space governance. stimulating and propelling the global space economy, and fostering global space advocacy.

Adjunct Professor Peter Hays has been busy this semester participating in and presenting at several meetings and conferences. Dr. Hays gave a number of important talks including: "National Security Space Management and Organization Dynamics," at the Army-Navy Club; "Challenges and Opportunities for National Security Space," at GW in July; "Space and Missile Defense," at CSIS in September; "National Security Space: Organizational and Legal Issues," at the Fordham University Law Center in October; and "Out-Innovating in Building the Next Space Force," at the Center for Global Security Research in December. In October, Professor Hays also participated in both an Informal Consultation Group on the "Implications of the Commercialization of Military Space Services," and a Space Policy Workshop on "Space Deterrence and Diplomacy: What's Possible?"

Adjunct Professor Dr. John. J. Klein facilitated commercial and civil space participation during the U.S. Air Force Space Command-sponsored Schriever Wargame, in Montgomery, AL. In October, he participated in the UN Institute for Disarmament Research and Secure World Foundation informal consultation group to analyze the

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implications of the commercialization of military space services. In December, Dr. Klein presented at the Space Strategy and Strategic Competition Conference at the Center for Global Security Research, Lawrence Livermore National Laboratory, and he was a panelist speaking on "Outthinking Adversaries on the Military Space Mission."

Student News

In September, SPI organized a student field visit to the Federal Aviation Administration's air traffic control center in Warrenton, VA with the kind help of second-year graduate student Mohammad Kushan, who is currently working on Air Traffic Procedures for the FAA. During the trip, graduate students visited the mission control room and learned about the regulatory and licensing work of the AST directly from the Director of the FAA Office of Aviation Policy, Mr. Duane Freer. They also had an opportunity to see the new control center for monitoring the airspace around spaceports in the United States and to learn about the future difficulties additional launch activities may pose to air traffic control.

Numerous SPI graduate students and alumni participated in the International Astronautical Congress 2019 in October in Washington, D.C. Many presented research papers, attended sessions and exhibits, and served as IAC volunteers during the conference. The Institute itself also had a strong presence, contributing to IAC discussions and events as well as forming new ties with space researchers around the world.



SPI Students, Alumni, and Faculty at the IAC, Washington, D.C., October 2019.

During the Fall 2019 semester, space policy students held jobs and internships in many different government agencies, think tanks, and private companies. These included the Department of Commerce, Department of Defense, Department of State, the Center for Strategic and International Studies, the Aerospace Corporation, Astroscale, and SpaceX, among others.

Message From the Director



Prof. Henry Hertzfeld, Director, Space Policy institute

The last half of 2019 has been a very active and successful time at the Space Policy Institute. One of the highlights was receiving the University's approval to begin searching for a new senior level Professor dedicated to space policy. We appreciate this support and it is a true sign that GW and the space community have both benefited from the research and educational contributions that

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the Institute has made and will now continue to make for years to come.

We also enrolled a number of excellent new students this fall and from our applications for next year, expect to see that number grow. Our courses continue to be popular, not only with space policy students, but also with many students from other departments in the Elliott School and the university.

In addition to the events described in this newsletter, I was fortunate to participate in a number of other panels and lectures this past summer and fall. In June, I spent a week in Vienna at the UNCOPUOS Plenary meetings as a private sector representative to the meeting's U.S. Delegation. Unlike the somewhat tense atmosphere at COPUOS in 2018, this meeting accomplished more positive results, including the approval of the 21 Guidelines on Long Term Space Sustainability.

In July, I also had the privilege of speaking at an ISU space policy module held at the Florida Institute of Technology and participating in a Future Tense panel focusing on the legal landscape for new settlements.

At the IAC, I chaired two sessions on space economics and continued to serve as the Chairman of the IAF Space Economics Technical Committee. In the fall, as Co-Chair of the ABILA's (American Branch of the International Law Association) Space Law Committee, I participated in their annual student weekend events in New York. Finally, as a member of the ACCRES (NOAA Advisory Committee on Remote Sensing), I participated in the Committee's review and response to the proposed changes to their licensing regulations.

On behalf of the Institute, I want to wish all of our students, faculty, associates, friends, and supporters a successful and Very Happy New Year!

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