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Fall 2020 Newsletter

Recent Events

Due to the unfortunate on-going COVID-19 pandemic, the Space Policy Institute was forced to postpone in-person events planned for the fall of 2020 and spring of 2021. Nevertheless, the SPI faculty have been participating in virtual events and continuing to share their expertise with the space community world-wide.

Space-related courses within the Elliott School's M.A. in International Science and Technology Policy continued through on-line teaching through the fall semester. The Institute hopes to resume normal, in-person operation in the fall 2021 semester, pending decisions by George Washington University.

In December, the Space Policy Institute organized a widely-attended virtual panel discussion moderated by SPI graduate student George V. Leaua and titled "Romanian Space: The role of medium-size nations in the 21st century space." The event was co-sponsored by the Space Generation Advisory Council, and featured distinguished speakers such as Dr. Marius-Ioan Piso, Head of the Romanian Space Agency and rotating Chair of UN COPUOS for 2020-2021, and Dumitru-Dorin Prunariu, the first and only Romanian Cosmonaut and champion of space diplomacy. The two were joined in discussion by two young and promising Romanian space leaders, Alexandra Jercaianu and Rares Bisag. His Excellency Dr. Ion Jinga, Permanent Representative of Romania to the United Nations offered the closing remarks. The audio transcript of this webinar can be found on the SPI website by following this link.



SPI graduate George V. Leaua (top left), His Excellency Dr. Ion Jinga, Permanent Representative of Romania to the United Nations (top right), Rares Bisag, Romanian space entrepreneur (bottom left), and Adrian Tudorache, Romanian Embassy in Washington, DC (bottom right).

Faculty and Staff News

Professor Emeritus John M. Logsdon experienced a quiet six months, staying home to avoid Covid-19. Dr. Logsdon put his study of recent presidential decisions regarding human space explorations on hold, since it requires access to various archives around the country. Dr. Logsdon gave virtual talks to a variety of audiences: GWU students in the International Science and Technology Policy Master's program, International Space University students in the Space Studies Program, Fellows at CalTech's Keck Institute for Space Studies and GW's Society of the

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Emeriti. Dr. Logdson also did interviews and participated in podcasts for a variety of media outlets, such as Russia Today, Cheddar, and the Canadian podcast Star Spot. Perhaps the highlight of this semester was the publication of Dr. Logsdon's introduction to Julie Swarstad Johnson's and Christopher Cokinos's Beyond Earth's Edge: The Poetry of Spaceflight, a collection of space-themed poems.

Professor Pascale Ehrenfreund, in her role as President of the International Astronautical Federation IAF, organized this year's 71st International Astronautical Congress, the CyberSpace Edition in a virtual format that allowed the global space community to access the exciting 3-days space conference program free of charge. More than 13,600 registered participants from 135 countries joined the IAC 2020, leaving a remarkable legacy. In the fall semester she has given Keynote talks at the European Forum Alpbach, the International Space University, the Galaxy Forum Europe 2020, the European Rover Challenge 2020, the Satellite Innovation 2020 Virtual conference. the International Astronautical Congress 2020-Cyberspace Edition, the UNOOSA World Space Forum 2020, the NewSpace European ExpoForum 2020 and the 1st Space & Industrial Economy 5.0 Sevilla Virtual Summit. She is a member of the World Economic Forum Global Future Council on Space and serves as president of the International Astronautical Federation and chancellor of the International Space University.

Adjunct Professor Dr. Peter Hays recently published a paper titled "What Should the Space Force Do? Insights from Spacepower Analogies, Doctrine, and Culture," in Matthew Hersch et al., War and Peace in Outer Space: Law, Policy, and Ethics (Oxford: Oxford University Press, 2020). Dr. Hays also

coauthored a number of articles on topics such "Developing a **Foundational** Doctrine: Fostering Spacepower Independent and Space-Minded Culture and Identity," "Getting the Most Deterrent Value from U.S. Space Forces," "A Roadmap for Assessing Space Weapons," "Organizing for Defense Space: Balancing Support for the Joint Force and Independent Space Operations," and others. Dr. Havs also offered a number of presentations for a variety of audiences, such as the D Group (UK) meeting on Building a National Space Strategy, Secure World Foundation's Summit for Space Sustainability, the Air War College Space Seminar, and the Space Competition and Conflict seminar at the University of New South Wales. Professor Hays continued to teach his course "Space and National Security," through virtual learning at the Elliott School of International Affairs, for graduate students in Science and Technology Policy and Security Studies.

Adjunct Professor Dr. John. J. Klein taught 30 undergraduates virtually during the fall semester course "Space Policy," while still successfully having guest speakers and group presentations in the all online format. He published the articles "The Role of Space in Deterrence" and "Assured Access to Space: Strengthening NATO's Space Deterrence Strategy," along with the op-ed "To deter attacks on satellites, U.S. needs a strategy to identify bad actors." In September, Dr. Klein was a panelist for the MITRE Space and Great Power Competition virtual event, participated in the RAND Responsible Space Workshop, spoke with Air Force and Space Force acquisition professionals about the implications of space strategy. and supported the U.S. Space Force's Schriever Wargame capstone event.

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Student News

During the Fall 2020 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' Aerospace Security Project, the Aerospace Corporation, Astroscale, and SpaceX, among others.

First year student Joshua Ingersoll presented his research on the global stage as part of the International Astronautical Congress' 71st Conference. During this "Next Generation Plenary" session, Mr. Ingersoll along with four other colleagues discussed how Public-Private Partnerships (P3's) are being implemented in the aerospace industry and how moving forward they can be beneficial to achieving our goals in space. Josh's experience with P3's stemmed from his recent research in collaboration with DARPA and Airbus-OneWeb Satellites focused on the integration of Optical Inter-Satellite Links (OISL's) into future satellite megaconstellations. Josh's research culminated in both the Next Generation Plenary presentation as well as a paper published as part of the 34th Annual Small Satellite (SmallSat) conference and can be found here. Second year student Tyler Way actively participated in the space agenda 2021 report designed to recommend policy priorities for the incoming Biden Administration. Tyler also briefed government officials on emerging technologies in the space sector.

We are very proud of our space policy students who graduated this December with their M.A. in International Science and Technology Policy. The space policy graduates this fall were: George V. Leaua and Sam SR. We wish each of them the best of luck in their future endeavors.

Message From the Director



To say the least, this has been an interesting and challenging fall semester. I am truly grateful to all of our faculty, staff, students, and friends who have dealt extremely effectively with the effects of the conditions brought about by the Covid-19 virus pandemic.

Classes have been effectively taught on-line and I have not received any complaints at all. We miss our offices, our classrooms, and inperson contact with each other and with our students. The spring semester will be similar and we anxiously look forward to at least a modest return to normal later this year.

I have, nonetheless, had a busy fall. I am pleased that we have welcomed 11 new space policy students in August and expect at least 4 for the spring 2021 semester. This is a continuation of a trend over the past several years of the increasing interest and importance of space and space policy to our nation and to the World.

I was an organizer and moderator of an American Bar Association panel in September on orbital debris mitigation, and a panelist on a Heritage Foundation symposium in October on future challenges for outer space.

And, continuing our productive relationship with both Bocconi University in Milan, Italy and the Secure World Foundation, we had a very interesting virtual panel in early December discussing the relevance of

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economic models to policies affecting space debris mitigation. This was held as the opening panel of the University of Maryland's CODER 2020 Symposium.

In addition, I have finished a draft chapter of a new book to be published later in 2021 on space law and planetary defense. The chapter focuses on future issues in liability when nations or private enterprises enter into planetary defense missions.

We are also quite pleased that Professor Scott Pace has returned to the SPI as of January 2021. In addition, we are also very pleased that Research Professor Pascale Ehrenfreund will be more active in her role at SPI this year. She has left her position as Chair of the DLR, but will continue her research and also remains President of the International Astronautical Federation (IAF).



Professor Scott Pace, while still on leave last Fall, continued his appointment serving as Executive Secretary of the National Space Council, working at the White House on all major U.S. space policy issues.

In August 2020, he co-led a U.S. delegation to Tokyo for the annual bilateral meetings of the U.S.-Japan Comprehensive Dialogue on Space. At the direction of the Vice President, he organized several meeting of the National Space Council, with the 8th and last meeting of the Council at Kennedy Space Center, Florida. At this meeting, an updated National Space Policy was announced the summarized the Administration's approach all space sectors, civil, commercial, and national

security. He oversaw the drafting and approval of new policies and Executive Orders on space nuclear power and propulsion, planetary protection, and cybersecurity or space systems.

Prof. Pace has worked with Congress, the OMB, OSTP and other agencies on annual budgets for space, and other matters. He and colleagues from the National Security Council supported the maturation of the U.S. Space Force, which marked its first birthday in December, 2020. He has also made presentations to a wide variety of industry, academic, international, and other groups.

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