

SPACE POLICY INSTITUTE Spring 2010 Newsletter

Dr. John Logsdon Meets with President Obama and Previews New Book

Like others on the Space Policy Institute faculty, Professor Emeritus John M. Logsdon spent much time the past several months commenting to the national and international media about the proposed change in U.S. strategy for human space flight unveiled by the White House on February 1. Professor Logsdon was one of the approximately 250 guests invited to be present at Kennedy Space Center on April 15 as President Barack Obama voiced his personal commitment to the new strategy and announced support for a the creation of a emergency rescue craft for the International Space Station and a heavy-lift launch vehicle.



Dr. John Logsdon shakes hands with President Obama after his speech at Kennedy Space Center

Professor Logsdon signed a contract with wellknown publisher Palgrave Macmillan to publish his book "John F. Kennedy and the Race to the Moon." He is putting the finishing touches on the manuscript before submitting it to the publisher on June 1. The book should appear next spring, in time for the 50th anniversary of Kennedy's May 25, 1961 speech announcing his decision to send Americans to the Moon. Professor Logsdon gave a preview of his book to a session of the George Washington Space Society on February 25. In other news, Professor Logsdon was named a member of the Exploration Committee of the NASA Advisory Council, and attended the committee's first meeting on April 26-27 in Houston. ♦

The Space Policy Institute holds Joint Symposium on Human Spaceflight and the Future of Space Science

In light of shifting priorities in NASA's human spaceflight program, the Space Policy Institute and the University Space Research Association hosted a joint symposium in January to look at the collective future of human spaceflight and space science. The symposium was held in January and featured a number of distinguished speakers. Among them were: Dr. Scott Pace, the director of the Space Policy Institute; Dr. Richard Obermann of the House Subcommittee on Space and Aeronautics: Mr. Jeff Bingham of Science. the Senate Commerce. and Transportation Committee; Dr. Stephen Katz of the National Institutes of Health; Dr. Pascale Ehrenfreund of the Space Policy Institute; Mr. Tom Cremins of NASA's Program Analysis and Evaluation Office; Dr. Len Fisk of the University of Michigan; and Dr. Christopher Chyba of Princeton University. Symposium notes and individual presentation slides from the event can be obtained by clicking on 'Events' at the SPI website: http://www.gwu.edu/~spi/ ♦

SPI Students Attend STS-130 Launch at Cape Canaveral

Thanks to an invitation from NASA administrator Charlie Bolden, students from the Space Policy Institute attended the February night launch of Space Shuttle Endeavour. Current space policy student Laura Delgado wrote the following piece for SpacePolicyOnline.com on her experience:

The sense of frustration when the STS-130 launch was scrubbed on Sunday morning made me quite skeptical that it would actually happen 24 hours later. Arriving at around 3:00 am Monday at the Kennedy Space Center's Banana Creek Viewing Site, I sat down inside of the Apollo-Saturn museum just below the incredible Saturn V moon rocket suspended above me, and waited. Half an hour before launch the crowd that had congregated to witness the event – many wearing NASA shirts or pins, stocking up on memorabilia at the store, and warming up for the crisp Florida weather that welcomed us had already wandered outside. As we waited anxiously we tried (and failed) to take a decent picture of the lighted launch pad, and the tinylooking Shuttle framed against a dark backdrop and crowned with clouds.

A few minutes before the 4:14 am mark, we all cheered: the weather looked good and visibility was not compromised: the launch was a 'go.' From then on, time flew quickly. The 9-minute countdown clock had started, attention from it diverted only while the U.S. anthem was being sung. We then bellowed the 10 second countdown, crossing our fingers and hoping that nothing would go wrong.

Suddenly, the dark backdrop disappeared and it seemed the sun was rising. Creeping up slowly, the ball of flame was followed by a resounding blast as the Shuttle reached Mach 1 speed, looming like a rising star. It was beautiful. The landscape changed so much in a matter of seconds, and the image of light and power impressed me deeply. The crowd was whooping and clapping, many of us involuntarily shouting words (in Spanish too, at least for me), as we watched the Shuttle swivel and swerve to the left. The 'sun' became a comet then a receding star, finally a tiny lighted spot that could have been mistaken for any other in the sky. In a few moments it was gone, and just then I reminded myself that there were people inside of that vehicle, and that their journey was just beginning.

While what I know about rockets and space launches was thus confirmed, it still seemed impossible to grasp what I had just witnessed. When I departed for the hotel I realized that this launch was particularly noteworthy: the last scheduled night launch and only four more launches to go — the last flights of the Space Shuttle. During my stay in Cape Canaveral I could not help but note the deep commitment and long-lived excitement that residents in the area attach to this vehicle, and I reflected on the impact that policies can have in places hundreds of miles away from Washington. The people I met that night had seen not one but all the shuttle launches did not fail to exude the same excitement when they spoke about this one or the next one: the Space Shuttle has truly been an integral part of the life of many.

Regardless of one's own views of the proposed changes to NASA and the long debate over when the Space Shuttle should be retired, having the opportunity to experience the launch impressed me both with awe, pride, and a twinge of sadness. Perhaps the future of U.S. human transport to space looms brighter and we may get to see the night sky lit up many more times as other brave people travel to the International Space Station and beyond, but for now it is clear that the STS-130 launch was not only historic, but also a milestone heralding the end of an era. ◆

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Students from the Space Policy Institute pose in front of Space Shuttle Endeavour hours before its mission to the International Space Station

Dr. Colleen Hartman Assesses NASA Budgets in Her Latest Publication

Dr. Hartman's most recent articles analyze the NASA space and Earth science budgets as well as the overall NASA budget by using a detailed statistical analysis of past trends. Her most recent publication is entitled "Projections for future funding of NASA and NASA science activities: Reassessing the Obama FY 2010 budget request," published in the *American Institute of Physics Proceedings*, January 2010. In addition, Professor Hartman has been called upon at the National Academy of Sciences for her input on a variety of NASA-

related studies. Most recently, she was appointed a member of the American Meteorological Society Committee on Climate Change, Improving Communications (CCIC) where she continues to work to improve communication between scientists, stakeholders, and the general public on issues of climate change.

This semester, Professor Hartman presented a colloquium to graduate students entitled "NASA's Exploration of the Universe" and brought a copy of the Mars rover Sojourner to campus. Dr. Hartman also conducts yearly field trips to the Goddard Space Flight Center so that graduate students may see flight hardware firsthand.



Dr. Colleen Hartman gives students and guests a tour of the Solar System

Dr. Hartman continues to advise the Associate Administrator for Space Science at NASA Headquarters as well as provide expert testimony to the National Academy of Sciences on interagency cooperation. Professor Hartman co-chairs the Mars Exploration Program Analysis and Review Team (MART) along with Dr. Noel Hinners, retired Vice President of Lockheed Martin. This team provides NASA Headquarters with detailed analysis of plans for the United States' exploration of the red planet. NASA named Dr. Hartman co-chair of the international Mars Exploration Review Team. This new team will provide an important component of the Nation's vision for a joint, international exploration of Mars, including obtaining and returning a sample of Mars to the Earth. Dr. Hartman also serves on organizing committees for Women in Astronomy and for NASA's 2009 conferences in astronomy and

science. Professor Hartman has also helped to edit the Women in Astronomy CD 2010. ♦

GW Moot Court Team Wins the North American Manfred Lachs Space Law Competition

On Saturday, April 10, 2010, the team from George Washington University won the North American round in the annual Manfred Lachs International Space Law Competition. The team members from the GW Law School were Liana Yung, Christa Laser, and Michael Saretsky (alternate). SPI Professor Henry Hertzfeld is the faculty advisor. In additional to winning the competition they also won the prize for the best brief.



Members of the GW Moot Court Team pose at the award ceremony after winning first place in the North American Competition. Pictured left to right: Ms. Laser, Dr. Hertzfeld, and Ms. Yung.

This is the third time in the past six years the GW team has won the North American round, and the team looks forward to competing against the winners from Asia and Europe in the International Competition to be held in September in Prague. Both of the past GW winning teams won the subsequent International Competitions in 2005 and 2007. ♦

Dr. Pascale Ehrenfreund Publishes New Work on International Space Cooperation

Dr. Pascale Ehrenfreund and Nicolas Peter from the European Space Policy Institute have

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developed action plans and guidelines for a future sustainable global space exploration platform. In a paper published in November 2009 in the journal of *Space Policy*, they examined how a global task force, supported by interactive teams and cross-cultural experts, could evolve from structures that are currently in place and establish space exploration as a truly global endeavor into an overall effort supported by the public.

Dr. Ehrenfreund et al. have also investigated new concepts for managing global space exploration in the framework of cross-cultural management, an element often neglected in the planning of large endeavors. In a paper published in *Acta Astronautica* in January 2010, she elaborated methods for cross-cultural management to balance cultural differences, negotiation styles, management styles, and communication tactics to tackle efficiently a long-term space exploration program.

Graduate student So-Young Chung and Pascale Ehrenfreund addressed policy aspects of astrobiology and investigated synergies between space exploration and Earth science. In a paper published in *Advances in Space Research* in January 2010 the authors discussed a concept for networks that can provide interchange of research insights, space applications, new policies and international laws that help to bridge the space- and Earth-centric communities.

Dr. Pascale Ehrenfreund has fulfilled the duties of Proiect Scientist for the O/OREOS (Organism/Organic Exposure to Orbital Stresses) Flight Project currently under development by NASA Ames Research Center's Small Spacecraft Division that is scheduled for flight in late summer of 2010. She also recently served as Steering committee member of the National Academy Decadal Survey in Planetary Science.

SPI Hosts Event on National Space Strategy

In February the Space Policy Institute hosted an event in conjunction with Secure World Foundation, National Space Studies Center, and Astroconsulting International on devising a National Space Strategy. The two-day event was a workshop that brought together a diverse cross section of panelists from across the space community. To read the executive summary and the full report drafted from the workshop, click on 'Events' at the SPI website: http://www.gwu.edu/~spi/. ◆

GW Space Society Hosts Guest Speaker Series

The GW Space Society was especially busy this spring semester hosting a variety of distinguished guest speakers. In February the Society hosted an event with Professor Emeritus Dr. John Logsdon to discuss his upcoming book, "John F. Kennedy and the Race to the Moon." In April, the Society hosted Dr. Colleen Hartman, who presented a dazzling tour of the Solar System. Later in April, the Society welcomed entrepreneur and former cosmonaut-in-training Esther Dyson. Ms. Dyson completed training at Star City, Russia as a backup to spaceflight participant for Charles Simonyi for his 2009 trip to the International Space Station.



From left to right: SPI graduate student Kirk Woellert, Eleanor Aldrich of AIAA, Esther Dyson, and SPI graduate students Megan Ansdell, Stephanie Wan, and Dan Hendrickson

Finally, the Society wrapped up the semester with a talk by Professor Leon Fuerth, former national security advisor to Vice President Al Gore. Professor Fuerth discussed his experiences with bringing the Russian Space Agency into the International Space Station project. The GW Space Society would like to thank everyone who made it out to this semester's events and looks forward to another exciting semester of events in the fall. ◆



Professor Leon Fuerth discusses his experience with negotiating Russian involvement into the International Space Station

Visiting Scholars come to SPI

The Space Policy Institute is pleased to host a pair of international scholars for independent study this summer and another one in the fall. Mr. Koji Umehara was recently the Deputy Director at the Space Development and Utilization Division for the Japanese Ministry of Education, Culture, Sports, Science and Technology (which overseas the Japan Aerospace Exploration Agency, JAXA). He is currently studying prospect for U.S.-Japan Space Cooperation while at the Space Policy Institute. Dr. Hongvul Paik is also now studving at the Institute and is the former President of the Korean Aerospace Research Institute (KARI). Later this fall PhD student and Fulbright Scholar Alanna Krolikowski will be joining the Space Policy Institute from the University of Toronto. She is currently a PhD student in international relations working on patterns of U.S.-Chinese aerospace cooperation.

News from the Director:

This has been another busy semester for the Institute and me. Over the spring break, I was in Tokyo meeting with a wide range of Japanese



government, industry, and academic representatives to discuss Japanese space policy and prospects for future international cooperation. I gave presentations at the University of Tokyo and the Japanese space agency, JAXA. The following week I was in Abu Dhabi to speak at the Map Middle East 2010 conference. Ambassador Ciro Arevalo of Columbia, chairman of the UN Committee on the Peaceful Uses of Outer Space, joined me as a plenary speaker.

I participated in a panel of the 25th Annual National Space Symposium in Colorado Springs on the future of NASA, moderated a panel on space communications at the SpaceOps 2010 conference in Huntsville, Alabama and also a panel of the Space Law and Policy Conference here in Washington, hosted by the International Academy of Astronautics (IAA) and the International Institute of Space Law (IISL). I have been serving as a co-chair of an IAA working group on human space flight that includes representatives from Russia, Europe, China, Japan, and the United States. We hope to have a final report out by the end of this calendar year. I'm also still serving on a National Research Council committee on "Impediments to Interagency Cooperation on Space and Earth Science Missions" and we hope to complete our report this summer.

Continuing a long-standing personal and professional interest, I am working on a variety of space communications and navigation technical, policy, and regulatory issues in support of NASA and other U.S. government agencies. This has also created some student opportunities and Stephanie Wan has been supporting international GPS outreach activities for NASA Headquarters. ♦

Extra! Extra! Space Policy Institute in the News

In the past few months you may have seen a member of the Space Policy Institute on CNBC, CSPAN, and MyFoxDC, heard us on National Public Radio and SIRIUS XM, or read a quote in the Associated Press, The New York Times, Wall Street Journal, Washington Post, USA Today, Technology Review, Houston Chronicle, Cleveland Plain Dealer, Florida Today, Aviation Week, New Scientist, Voice of America, Space.com, Popular Scientist, and Popular Mechanics. ♦

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Alumni: we are looking to update our records. Please contact the Space Policy Institute at:

Space Policy Institute Elliott School of International Affairs 1957 E Street NW, Ste. 403 Washington, DC 20052 202.994.7292 spi@gwu.edu

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