

INTERNATIONAL ASTRONAUTICAL CONGRESS

Will Space Cooperation be Sacrificed to Geopolitics?

by William Jones and Marsha Freeman

Oct. 27—The 2019 International Astronautical Congress (IAC) was held this year in Washington, D.C. from October 20 through October 25, the first time in 26 years that it has been held in the U.S. Capital. The Congress was originally organized by the International Astronautical Federation (IAF), an association founded in 1951 by a number of space scientists including Wernher von Braun, Eugen Sänger, and others, in order to establish a dialogue among scientists around the world and to lay the basis for international space cooperation, including between representatives from both East and West during the period of the Cold War, when other cooperation was non-existent. The co-organizers of the IAC today are the International Academy of Astronautics and the International Institute for Space Law.

Every year the IAC gathers members of the global space community to give them an opportunity to present their latest research and to keep each abreast of what is happening in other areas of space research. Each year the Congress is held in a different country. The return of the IAC to Washington coincided, not by chance, with the celebration of the 50th anniversary of the Apollo Moon landing, as well as with the announcement that the United States will be returning to the Moon.

A great deal of excitement was generated among the 5,000 people attending this year's Congress.

NASA, which during the Obama Administration had only a small representation in the giant exhibit hall where countries and companies can show their wares, was front and center this year. NASA Admin-



EIRNS/Bill Jones

Vice President Mike Pence addressing the 2019 International Astronautical Congress in Washington, D.C.

istrator Jim Bridenstine, one of the most enthusiastic of the participants, was to be seen everywhere, holding press conferences and participating in panels.

Pence Strikes a Strident Note

And yet a distinct note of dissonance was introduced into the general enthusiasm of the gathering by the Vice President of the United States, Mike Pence, the head of the White House National Space Council. After giving a short run-down of the U.S. plans for space, Pence then adopted a more strident, ideological tone. He quoted President Trump, who had simply stated, "It is America's destiny ... to be the leader amongst nations on our adventure into the great unknown." Pence, however, added his own particular twist to the Presi-



NASA/Bill Ingalls

Vice President Mike Pence during the IAC opening ceremony.

dent's straightforward formulation:

But to be clear, our vision is to be the leader *amongst freedom-loving nations* on the adventure into the great unknown.... The United States of America will always be willing to work closely with like-minded freedom-loving nations, as we lead mankind into the final frontier.

As more nations gain the ability to explore space and develop places beyond Earth's atmosphere, we must also ensure—we must also ensure that we carry into space our shared commitment for freedom and the rule of law and private property.

But space law remains an area still to be developed, as nations begin to plant colonies on the Moon, which nobody owns.

Pence's definition of "freedom-loving nations" undoubtedly excludes China, although he didn't name China specifically. Perhaps other unnamed countries also don't meet his criterion of "freedom-loving."

China's Absence Raises Questions

Following Pence's remarks, the Congress held its Heads of Agencies panel in which the leaders of the major space agencies—the U.S., the European Space Agency, Russia, Japan, China, and India—present their plans for the future. And, lo and behold, there were no Chinese representatives present! Following Pence's speech, this raised questions from the audience, questions that were asked on a publicly viewed app displayed on a large screen directly behind the panel.

While the absence of China was carefully avoided in the panelists' presentations, it could hardly be avoided during the Q&A. The moderator said that the Chinese were absent due to a "scheduling conflict"—which few believed.

The general suspicion was that the State Department had either refused to issue visas or had delayed so long that it was impossible for them to get here in time. Chinese delegates to the 2002 IAC in Houston had been stopped at the Canadian border on their way to the conference.

Representatives of the International Astronautical Federation insisted that they had worked early and hard to get the Chinese to the conference. But while some of the Chinese delegation did finally arrive by the third day of the conference, the head of the delegation, Wu Jianhua, did not receive a visa. The Chinese Foreign Ministry issued a protest at the "weaponizing" of the visa process.

NASA Administrator Jim Bridenstine was defensive when asked about the Pence statements and China's absence. When *EIR*'s Washington Bureau Chief, Bill Jones, asked him about the strident nature of Pence's comments at a press conference following the Heads of Agencies panel, and whether the Vice President was perhaps looking for tougher restrictions on U.S.-China space cooperation than those already placed on human space cooperation by the controversial Wolf Amendment, Bridenstine simply referenced the Wolf



EIRNS/Bill Jones

NASA Administrator Jim Bridenstine discussing the challenges and opportunities in space explorations at the IAC.



NASA/Joel Kowsky

Apollo 11 astronaut Buzz Aldrin delivers remarks during the International Astronautical Federation World Space Award ceremony at the IAC.

Amendment as the only restriction on U.S. cooperation with China in space.

Bridenstine was buttonholed by a group of journalists after the press conference and asked by a reporter from China Radio International why the Chinese delegates were not at the Congress. Bridenstine said he was as surprised as everyone else by their absence. “I came to the Congress expecting to see them here,” he said. Bridenstine added that he would have gladly intervened at the State Department if he had thought there was a problem with their getting visas. But on whether there had been any hold-up for political or other reasons, he simply noted that it was “above my paygrade.”

EIR was told by a manager at Russia’s Energia Space and Rocket Corp. that the Russian space agency Roscosmos and Energia were told by the Russian government that they should not send their highest-level representation, after a female Russian Duma member had been stopped and interrogated at an airport for several hours by the FBI.

But both the American hosts and their Russian counterparts were intent on conducting a successful Congress. The IAC retrospective session on Apollo was an important antidote to the cited remarks of the Vice President. Buzz Aldrin was the only Apollo 11 astronaut at the conference, but Neil Armstrong’s son was present, representing his father, as was Michael Collins’ grandson. An IAC joint award was bestowed on Aldrin, Armstrong and Collins for the success of the Apollo mission.

In his own comments both before and at the end of the Congress, Aldrin refuted the chauvinist views of the Vice President, calling for a “grand alliance” of the space-faring nations—the United States, Russia, China,

Europe’s ESA, Japan, and India—to return to the Moon and go beyond. Aldrin clearly spoke for the outlook of President John Kennedy and the Apollo generation of astronauts, and received great acclaim from the audience.

Space and the Developing World

The inclusiveness of the IAF was evident in a panel of the Heads of Agencies of the Emerging Countries, including South Africa, Angola, Brazil, Thailand, and the United Arab Emirates (UAE). The UAE is “going like gangbusters” on space with its own astronaut program, and will be the host of next year’s IAC—the first time a Congress is to be held in an Arab country. The UAE has also set up a space university.

The representative from Angola said that his country would be participating in an upcoming space summit in Portugal and is working to find less expensive ways of building small satellites, which are also used for distance education in that vast country.¹

Valanathan Munsami, the CEO of the South African National Space Agency (SANSA), reported that South Africa was looking fifty years ahead in developing its program. SANSA is also working hard to develop an African Space Agency, and is working with 24 other African countries, eight of which are already involved in space in some way. The objective now, Munsami said, is to get the other African countries involved as well.

Carlos Augusto Teixeira de Moura, president of the Brazilian Space Agency, said that while there is space cooperation on a multilateral level, for instance, in BRICS (Brazil, Russia, India, China, and South Africa), yet because of the difference in development between the five countries, and due to political difficulties, it is sometimes much easier to work on a bilateral basis. He reported that Brazil already has a cooperative program with Argentina to study the oceans.

Fostering the ‘Artemis Generation’

As noted, Administrator Bridenstine was highly active at the Congress, making public appearances on every possible occasion when he was not at meetings with other space officials. At an open press conference in the exhibition hall, Bridenstine fielded questions from younger members of the “Artemis generation.” One eight-year-old boy asked when children could start flying in space. An amused Bridenstine said that this

1. For a [discussion](#) of Angola’s CanSat program, see “LaRouche’s Ideas Presented to Conference in Ivory Coast and Angola,” *EIR* Vol. 46, No. 26, July 5, 2019, pages 14-16.

will eventually occur, and that even entire families will be able to go into space. A seven-year-old girl, perhaps with astronaut ambitions, wanted to know whether NASA had chosen the woman who would be going to the Moon. A smiling Administrator said that the decision was still to come.

Bridenstine was asked if he were not concerned about getting the required funding from Congress. He said that he would work with whatever means he is given to reach the goal of returning to the Moon. He was also asked if the Trump impeachment fervor in the Congress would affect the funding, to which he responded:

I don't know, but our task will span generations and is not a partisan issue. I saw 500,000 people on the Mall celebrating Apollo, and they were happy people! ... My job is singular. I want a program that will make Americans proud.

In reply to another question, he returned to this issue. "We are getting strong support from the American people and our international partners. We are going to the Moon. This is our job, and this is our time."

One reporter asked, perhaps with China in mind, "Will we cooperate with other nations landing on the Moon?" Bridenstine answered that the United States is committed to cooperation. "The goal is to have many countries living together on the Moon."

Despite the uncertainty of the level of funding that the Congress will appropriate in this year's budget for the return to the Moon, NASA is moving ahead with the Artemis program.

This month, the companies that were selected last May to conduct studies on designs for landing systems will submit their designs and/or prototypes of human lunar landers. These public/private partnerships are expected to save time and money in providing the capability for the most complex activity of the lunar mission.

And on October 25, coincidentally the final day of the IAC, NASA announced it will be sending a rover to the South Pole of the Moon—a region unexplored by the U.S., and the target for the 2024 landing. When President Obama cancelled the manned lunar return of the Constellation program, the robotic precursor science missions were also cancelled. Some of these must now be reinstated before sending crew.

The VIPER (Volatiles Investigation Polar Exploration Rover), which is planned to be delivered to the lunar surface in 2022, will create a detailed map of the water ice at the South Pole. During its 100-day mis-



EIRNS/Bill Jones

NASA Administrator Jim Bridenstine updating IAC on the Artemis Moon-Mars program.

sion, it is expected to provide a picture of the highest concentrations of ice, and their depth.

On the final day of the conference, two panels returned to the essential theme of this Apollo 11 anniversary year: "Space: The Power of the Past, the Promise of the Future."

The week before the IAC, the Association of Space Explorers had met. Its only requirement for membership is to have flown in space. After the meeting, the more than 120 astronauts and Russian cosmonauts attending went to speak in schools in Houston. A few then came to Washington for the IAC.

On an IAC panel with American and European astronauts and a Russian cosmonaut, a proposal was put forward that the International Space Station be nominated for the Nobel Peace Prize.

At the end of the last day, there was a session titled, "The Apollo Program and the Rockets that Took Humanity to the Moon." Each presentation reviewed a different aspect of the Saturn V rocket program, an important subject, since without the Saturn V, there would have been no flights to the Moon.

A paper by Jody Singer of the Marshall Space Flight Center reported that in 1969, von Braun told reporters that "the exploration of the entire Solar System is a major goal of mankind which will continue to be pursued indefinitely."