

## COMMENTARY

### Foreign Policy Opportunities for NASA

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Events of the past month have startlingly illustrated the globalization of space. During that time, a Russian satellite collided with an American satellite, creating a global cloud of debris that will affect space operations for thousands of years. Japan successfully launched its Greenhouse Gases Observing Satellite (GOSAT), Iran launched its first indigenous satellite, and not long after the first trip of the Secretary of State Hillary Clinton to China, the European satellite operator Eutelsat announced that it would launch a European satellite that does not contain any U.S. parts (a so-called ITAR-free satellite) on a Chinese rocket. This month was also rich in the U.S. space world. First, the FY2010 NASA budget, with an increase of \$2.4 billion associated with a new direction for the space agency, is good news. Indeed, NASA's first two priorities, climate change research and monitoring and space exploration, are the very topics that CSIS Space Initiatives has been supporting in recent years and the very areas that are ripe for global space cooperation.<sup>1</sup> These two fields are ideal for the United States to rebuild its leadership. NASA can “combat global climate change...inspire the world, make America stronger, and help grow the economy,” as President Barack Obama stated in his 2010 budget for NASA.<sup>2</sup>

However, a new direction and a bigger budget might not suffice without some major policy changes. Also this month, the loss at launch of NASA's Orbiting Carbon Observatory satellite, critically needed to monitor carbon in the atmosphere, as well as the delays of the next shuttle launch due to concerns with faulty valves, are symptomatic of a larger problem. This has some wondering whether the United States is currently, however slowly, ceding its leadership in space. This is, however, a difficult thing to demonstrate, for the same reasons it might be happening. Since 1999, the International Traffic in Arms Regulations (ITAR) regime has created a virtual wall around the United States, treating all space technology as weapons. The wall has been very efficient in keeping the United States isolated and separate from the ITAR-free world. It has been completely useless in stopping the progress of other nations and has promoted international partnerships that exclude the United States. Some space technology remains strategic and must be protected. Rocket technology is indeed missile technology, but this has always been regulated under the very stringent Missile Technology Control Regime (MCTR). However, a reformed ITAR does not have to mean that all countries have access to all space technologies. An effective export control system should be a two-dimensional structure that would consider both the sensitivity of the technology and the level of trust in the partner nation. Again, the current system, which does not trust anyone and considers all space technology equally sensitive, is outdated, inefficient, and crippling.

Under the current system, the U.S. industry has been confined to competing and cooperating mostly with itself, a little bit like Soviet aerospace companies during the Cold War. Because of this, people working in the U.S. space industry have had less opportunity to update their skills and knowledge, American companies have had fewer opportunities for benchmarking, and the products from these workers and companies are less compatible with items made outside the United States. Space capabilities in other parts of the world now come close to matching—in some cases, maybe even exceeding—American space capabilities. Much has been written about how damaging the overly stringent export controls have been to U.S. aerospace companies, especially to lower tier companies that do not have enough business within the ITAR wall and that are going out

<sup>1</sup> For more on the dual importance of earth observations and space exploration, see the Global Space Development Summit and the Beijing Declaration, [http://www.csis.org/component/option,com\\_csis\\_progi/task,view/id,1407/](http://www.csis.org/component/option,com_csis_progi/task,view/id,1407/). See also: Lyn Wigbels, G. Ryan Faith, and Vincent Sabathier, *Earth Observations and Global Change: Why? Where Are We? What Next?* (Washington, D.C.: CSIS, 2008), [http://www.csis.org/component/option,com\\_csis\\_pubs/task,view/id,4569/type,0/](http://www.csis.org/component/option,com_csis_pubs/task,view/id,4569/type,0/).

<sup>2</sup> National Aeronautics and Space Administration, 2010 Budget Fact Sheet, [http://www.whitehouse.gov/omb/assets/fy2010\\_factsheets/fy10\\_nasa.pdf](http://www.whitehouse.gov/omb/assets/fy2010_factsheets/fy10_nasa.pdf).

of business one by one. Little is written or said, however, about the development of foreign technologies and capabilities. Is it ITAR-induced ignorance or denial? Either way, this situation has not improved national security, and to some extent has triggered a downward spiral of paranoia.

Overly stringent export controls, however, are not the whole of the problem. While space capabilities were developing worldwide, NASA stuck only to the International Space Stations (ISS) international cooperation mode. Recent NASA leadership decided to ignore domestic and international capabilities alike to focus its effort on a new national space transportation system, resulting in additional self-isolation.<sup>3</sup> Although international cooperation is incorporated in the very laws that define NASA, these policy and programmatic choices have prevented the U.S. government from making use of civil space as an extraordinarily valuable foreign policy tool—from exercising smart power through space.

Just as a number of issues have contributed to the growing isolation of the U.S. space industry, a number of things need to happen to address the problem. In addition to ITAR reform, there is leadership. A NASA administrator must be appointed, and soon. Someone who is respected internally is vital, of course, so that the agency is not stalled in these critical times. Someone who is also respected on the international space scene would send the right signal right away. Further, a NASA administrator who makes U.S. leadership a priority, in cooperation with a new National Space Council and the secretary of state, will help strengthen existing international relationships, and possibly build new ones. Engagement at a policy level is needed to break NASA out of its isolation. Further, the decisions that the new administrator makes about future exploration will have international implications. Many of our partners are anxious to see what the United States will decide to do. And although the decisions about export controls will be made elsewhere in the U.S. government, the NASA administrator might lend an important voice. It is time to secure future U.S. leadership in space, and for that, we need a leader quickly.

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<sup>3</sup> Vincent Sabathier, G. Ryan Faith, and Ashley Bander, *Mid- and Long-Term Prospects for Human Spaceflight: Mitigating the Gaps* (Washington, D.C.: CSIS, 2009), [http://www.csis.org/component/option,com\\_csis\\_pubs/task,view/id,5302/](http://www.csis.org/component/option,com_csis_pubs/task,view/id,5302/).