U.S. Space Policy: What Has Changed

Remarks to the Institut Français des Relations Internationales (IFRI)/ Secure World Foundation Conference on

"The Continuing Story of Europe and Space Security"

Brussels, Belgium
October 4-5, 2010

Marcia S. Smith
President
Space and Technology Policy Group, LLC

I want to thank IFRI and the Secure World Foundation for inviting me to be here today to give an overview of President Obama's new U.S. National Space Policy.

I don't work for the Obama Administration. In fact I don't work for the U.S. Government at all. I did work for Congress for over 30 years, but never for the Executive Branch. I am an independent space policy analyst, so I have no stake in one Presidential administration's space policy versus another, except of course as a U.S. citizen. So my comments today are entirely my own.

Since this seminar is on Europe and Space Security, my comments are mostly focused on that aspect of the policy, but the policy does cover all U.S. space activities – international and domestic, national security, civil and commercial – and I will say a few words about two domestic issues that I think may be of interest to you.

I apologize for reading this speech – I don't usually do that -- but as the first speaker I want to help Laurence keep the conference on schedule so have timed this to last for no more than 20 minutes, leaving 10 for questions, and if I don't read it I just know I will digress and we'll be here all afternoon!

What's changed in U.S. space policy?

First and foremost is the tone. President Bush's 2006 policy was criticized in the U.S. and abroad for its nationalistic tone, some even called it belligerent. It definitely conveyed that the United States felt that it had the high ground in space, planned to keep it, and while international cooperation is fine in some circumstances, we did not need help from anyone else.

Well, times have changed. It is not just the election of a new President with a different philosophy, but events in space and on Earth have had a profound impact on how the U.S. government views space activities.

The Chinese antisatellite test against one of its own spacecraft in 2007 not only re-emphasized the vulnerability of satellites to direct attack, but the resulting debris imperils everyone's satellites. It led to condemnation more for the mess it made than for the militaristic implications of the test itself.

The unintentional collision of a U.S. commercial Iridium communications satellite (Iridium 33) and a defunct Russian Cosmos satellite (Cosmos 2251) in 2009 brought space debris and space situational awareness to the forefront of concern for everyone who operates satellites, both governments and commercial companies.

A third change was the financial collapse of 2008-2009 from which most countries are still recovering. That brought to the fore the realization that to achieve great things in space, the United States Government would need more partnerships, with other countries and with the private sector.

Thus, the new Obama policy shifts its tone towards building a global sense of responsibility for sustaining the space environment so all can use it, and for partnerships in using and exploring space.

The paradigm shift became evident long before the policy was released. In October 2009, in a speech to the U.N. First Committee, the U.S. alternate

representative, Garold Larsen, expressed what has become a common refrain in U.S. space policy circles today, that space is "congested, competitive, and contested."

Over succeeding months, national security officials began speaking about how the United States cannot do everything on its own. For example, General James Cartwright, vice chairman of the Joint Chiefs of Staff, spoke in Washington in May and said:

"Reality is that we don't fight alone, we don't deter alone, we don't assure alone. Everything is done in partnerships. Everything is in coalitions. … We [think we] have to have the only capability; we have to fill every rung on the ladder with the best capability in the world. We can't afford it, nor can we do it. There are other very capable nations out there very willing to partner up. We've got to make sure that our strategy is inclusive….You cannot afford to do everything yourself. We are not an island."
So that is a major thrust of the new U.S. policy. Working together with like minded countries in using space, and treating space as a global commons for which all are responsible.

A policy, of course, is just words on paper – the real point is how it is implemented and I imagine Dick Buenneke from the U.S. State Department will be talking about what the U.S. government is doing in that regard later in this symposium. But perception is key, and the Obama policy clearly wants to convey that the United States is willing not only to talk, but to listen, and to find mechanisms for ensuring space sustainability.

And in a real sense, implementation will have to happen on an international basis. If other countries don't agree that space sustainability is a critical need, the U.S. cannot do it alone.

"Sustainability" has become the keyword and while it is not defined in the policy, that just means that it leaves room for all the stakeholders to discuss what it is and what's needed to achieve it. So all of you in this room could have as much influence on the implementation of these aspects of the policy as experts in the U.S., and of course Europe deserves a lot of credit for the draft Code of Conduct that will be discussed later in this symposium.

It is important for everyone to note, however, that the United States did not break with past policy that allows the United States – in the words of this

policy -- to "deter, defend against, and if necessary, defeat" anyone who wants to interfere with our space systems. In fact, there is much in the policy that is similar to what has been in past policies. It really is the tone that's different. I'd like to give you a couple of examples.

The Bush policy said:

"The United States considers space systems to have the right of passage through, and operations in space, without interference. Consistent with this principle, the United States will view purposeful interference with its space systems as an infringement on its rights." (emphasis added)

The Obama policy makes the same point, but in a friendlier and more inclusive way:

"The United States considers the space systems of all nations to have the right of passage through, and conduct of operations in, space without interference. Purposeful interference with space systems, including supporting infrastructure, will be considered an infringement of a nation's rights." (emphasis added)

Same point, but inclusive.

Much has been made of the Obama Administration's willingness to discuss space arms control, unlike the Bush Administration's harsher stance. But there ARE caveats to the new policy.

The Obama policy says:

"The United States will pursue bilateral and multilateral transparency and confidence building measures to encourage responsible actions in, and the peaceful use of, space. The United States will consider proposals and concepts for arms control measures if they are equitable, effectively verifiable, and enhance the national security of the united states and its allies." (emphasis added)

So it is not a blank check. And Frank Rose of the State Department told the Conference on Disarmament in July that the U.S. continues to support only "a non-negotiating, or discussion, mandate" with regard to a space arms control treaty. As he said, the U.S. seeks transparency and confidence

building measures "to strengthen stability in space and to mitigate the risk of mishaps, misperceptions, and mistrust."

The United States also continues to reserve its right to develop and use space control measures if necessary.

The Bush policy said:

"The United States considers space capabilities … vital to its national interests. Consistent with this policy, the United States will: preserve its rights, capabilities, and freedom of action in space; dissuade or deter others from either impeding those rights or developing capabilities intended to do so; take those actions necessary to protect its space capabilities; respond to interference; and deny, if necessary, adversaries the use of space capabilities hostile to U.S. interests."

The Obama policy says:

"The United States will ... consistent with the inherent right of self defense, deter others from interference and attack, defend our space systems and contribute to the defense of allied space systems, and, if deterrence fails, defeat efforts to attack them."

It goes on to say that the Secretary of Defense shall:

"Develop capabilities, plans and options to deter, defend against, and, if necessary, defeat efforts to interfere with or attack U.S. or allied space systems."

In this case, I don't think the tone is different – don't mess with our stuff – but it is more inclusive, bringing in our allies as well.

But responsible use of space, shared interests among all users of space, the need for improved space situational awareness so we can all avoid collisions and their debilitating results, and increased international cooperation are the focuses of the new policy.

International cooperation in space has, of course, been part of U.S. law and policy since the 1958 National Aeronautics and Space Act that created NASA. It is a major focus of this policy and, in fact, one of the few

criticisms I've heard of the Obama policy in the U.S. is that it goes too far in that regard – that it is not a policy to ensure U.S. leadership in space.

I don't agree with that interpretation, but it's an interesting viewpoint. The policy itself seems to have a message aimed outward to the global space community not to the American public. The word leadership does appear in the policy a number of times, but it is not the predominant theme.

This is U.S. national space policy, after all. The policy actually begins with a page and a half discussion of the benefits of the space program. It's the first time I've seen such as extensive discussion of those benefits in a Presidential space policy and I imagine it is an effort to explain the relevance of the space program to everyday lives. But even that part seems aimed broadly at the world, not just the United States.

The President issued a statement the day the policy was released that talks about leadership in almost every paragraph that I believe was his attempt to communicate directly to the American people, but to be honest, even in space policy circles, I don't know many who have read it, which is too bad. It's quite uplifting.

For the U.S. to have a space program at all, it obviously must have support from the taxpayers and their representatives in Congress and there are many elements that affect U.S. domestic policy in addition to the global aspects.

I want to briefly mention two of these that I think that may be of particular interest to this audience. Both involve programs that are enabled by international cooperation, but it is the U.S. domestic parts that are undergoing changes in the Obama Administration.

The most contentious space debate in Washington these days is about a partnership between NASA and the private sector on the future of the human spaceflight program. The White House announced in February that it wants to rely on the private sector instead of NASA to build a new space transportation system to take people to and from low Earth orbit.

It is the most controversial aspect of the President's domestic space policy, even more so than his decision to forego the Bush Administration's plan to return astronauts to the Moon by 2020. President Obama considers the Moon a "been there, done that" destination and wants to go to an asteroid

instead by 2025. Until then, the International Space Station (ISS) – which President Bush did not intend for the U.S. to support beyond about 2015 – is back to center stage as the focus of the U.S. human spaceflight program and that of our partners – Europe, Russia, Japan, and Canada – for many years to come.

But it is the President's faith in the private sector to build crew space transportation systems – called "commercial crew" – that are as safe as anything NASA would build, but less costly, and ready sooner – that has gotten so much attention. His plan is to use $6 billion in taxpayer dollars over 5 years to jump start at least two companies to develop commercial crew systems to take astronauts to and from ISS and presumably space tourists to and from space. One company, SpaceX, has boldly promised that it can do that within three years of getting a NASA contract.

Congress questions whether a venture that is so dependent on taxpayer dollars is really commercial, but more importantly, it is much less confident than the President about the private sector's ability to live up to such promises.

They do not want to put all of our eggs into that basket. Last week they passed a bill that requires that the government build a system also, as a backup to commercial crew, with the government promising that it will not compete with any private sector systems that emerge.
How anyone thinks we can afford multiple government and commercial systems when we could not afford one government system is a mystery to me and we still have to see what the appropriators do. We have a very complex system in Congress that involves authorizations and appropriations. The bill that passed last week was an authorization, which sets policy and recommends funding. But it does not actually provide any money.

Money is only provided to agencies through the appropriations process. Congress has not passed any of the appropriations bills for the fiscal year that began on Friday. The government is operating on what is called a Continuing Resolution at last year's funding levels until December and it would not be surprising if that gets extended into next year.

I will be happy to explain more about the congressional process to anyone who is interested, but the bottom line is that Congress has vigorously considered the President's human spaceflight policy and disagrees with part

of it. They do not want to rely on the private sector alone to build a safe, timely, cost effective crew transportation system. The government must also build a new system. The vote was bipartisan, so regardless of the outcome of the elections next month, that will be the law of the land once the President signs the bill as he is expected to do in the next several days.

But the money part is not completed yet. The authorization bill recommended about half of what the President requested for three years for commercial crew, so even if the appropriators provide all that was recommended, it may not be enough to attract the private sector to take the White House up on this offer. Stay tuned.

The other part of domestic policy that bears watching is the President's call for more interagency partnering. NASA and DOD are not the only agencies involved in space. Many others use satellite data, are engaged in policy aspects of space, or have their own space programs. One of the key agencies in that regard is the National Oceanic and Atmospheric Administration (NOAA) in the Department of Commerce that operates U.S. civil weather satellites.

The President's policy calls for more cooperation among these agencies. Sounds good, but the showcase interagency program for the past 16 years has been a "converged" weather satellite system for military and civil purposes called NPOESS being built by NOAA and DOD. The White House announced in February, however, that it is giving up on a converged system– basically, NPOESS is getting divorced. That decision is codified in the new national space policy.

NPOESS suffered repeated schedule delays and cost overruns. An independent review found that the fundamental problem is that DOD and NOAA have such different cultures that they cannot work together effectively. There were other problems, of course, but the inability of the two agencies to work together is cited as the underlying problem. Congress seems OK conceptually with the divorce, but is stunned by the cost: $20 billion total for the sunk costs in NPOESS plus the costs of the two new systems -- one for DOD and one for NOAA. We will see how that turns out as well. And this strategy all depends on Europe continuing to agree to provide the third set of satellites needed to make the polar orbiting weather satellite system complete.

From a domestic space policy standpoint, NPOESS illustrates that good intentions do not always lead to desirable outcomes. The words look good on paper, but one must proceed with eyes wide open.

There are many other aspects of the policy. Unfortunately time is too short to cover all of that today.

In summary, as I said, this is an outward looking policy aimed at international cooperation and responsible behavior in space, but at its heart is, necessarily, a policy for the U.S. space program. President Obama's statement drives home the message of, as he says, "the boundless possibilities of the future." He connects the space program with economic prosperity despite, or perhaps because of, the financial circumstances in which we find ourselves today. The closing section of his statement is a rallying call for support of the space program and while it may be aimed at the U.S. public, hopefully it resonates in every space-faring country:

"In short, this policy, while new, reflects the standards of leadership we have set since the dawn of the space age, and ideas as old as America itself. We do not fear the future, we embrace the future. Even in times of trial, we do not turn inward, we harness the ingenuity and talents of our people, we set bold goals for our nation, and we lead the world toward new frontiers. This is what has ensured our prosperity in the past. And that is what will ensure our prosperity in this new century as well."

Thank you, and I'll be happy to answer as many of your questions as I can.