Some commentary about the National Space Council's inaugural meeting (Part 1)*

By Mike Snead

In President Trump, pro-spacefaring Americans have a president who, for perhaps the first time since President Kennedy, advocates for America to return to being—using a phrase from Kennedy's 1962 speech at Rice University—the "world's-leading spacefaring nation." Reconstituted by President Trump's recent executive order, the National Space Council will be where Trump's political rhetoric becomes reality in the form of policies, proposed legislation, and federal priorities for civil, commercial, and national security space operations—what lumped together is often referred to as America's space enterprise.

As I noted in an earlier article on the reconstitution of the National Space Council (see <u>"Forming an American Spacefaring Advisory Group to the National Space Council"</u>, The Space Review, September 11, 2017), if America is to be bold in undertaking this space enterprise, the National Space Council must be bold in developing a recommended course of action for President Trump to undertake. Consequently, the Council's actions warrant careful public scrutiny and thoughtful criticism by pro-spacefaring Americans seeking to return America to its former status as the world's leading spacefaring nation.

Early space enterprise strategic planning work

On October 5, the first meeting of the reconstituted National Space Council was held at the Udvar-Hazy Center of the National Air and Space Museum in Chantilly, Virginia (see "Moon, milspace, and beyond", The Space Review, October 9, 2017). This meeting was chaired by Vice President Mike Pence and was attended by multiple cabinet secretaries and senior members of President Trump's administration. The meeting, which was televised on C-SPAN and webcast by NASA TV and the White House, lasted two and a half hours. Because of the length, number of speakers, and broad range of topics, what was discussed is, perhaps, best reviewed by reading a transcript. I have prepared such a transcript, organized into 106 segments with the segments linked to the location in the video. The transcript, over 21,000 words, is available here. (I will refer to parts of this transcript in this commentary using the segment number with a link to that segment.)

As has been widely reported, Vice President Pence announced at the council meeting that American astronauts will, once again, venture beyond low Earth orbit with the Moon being the first destination. [Segment 27] At the meeting, Vice President Pence indicated that NASA has been working for several months on a plan for returning American astronauts to cislunar space. He tasked NASA with finalizing this plan for presentation to President Trump for approval. [Segment 29].

In addition to this planning effort by NASA, General H.R. McMaster, the Assistant to the President for National Security Affairs, is leading another important early planning effort, as he discussed at the end of the Council's meeting. [Segment 105] He is working to define a "space strategic framework", apparently intended to be used to guide much of the Council's activities. From General McMaster's remarks:

First, our strategic framework seeks to ensure U.S. leadership, preeminence, and freedom-of-action in space, and, I think, based on the discussion today, will actually

^{*} This article was published in The Space Review on October 16, 2017.

emphasize across all domains more in the document as well. But, to ensure that preeminence for decades to come.

Second, while the strategic framework promotes an America-first approach, it is consistent with what the panelists have said and what you have said many times, Mr. Vice President, that America-first doesn't mean America alone. To the contrary, we will secure the benefits of space, not only for ourselves, but for and with our friends and allies as an essential part of this of this framework.

Third, the framework defines our vital interests in space—and again we may modify this about how space relates to vital interests and other domains as well, based on Dr. Griffin's and other emphasis on the cross-domain aspects—but we want to ensure unfettered access to and freedom to operate in the space domain; to advance the security, economic prosperity, and scientific knowledge of the nation. And I think that parallels really the composition of the three panels today.

And, then, fourth, as Dennis Muilenburg mentioned, the framework also outlines four primary objectives in pursuit of our vital interests. This is the beginning of an integrated strategy to guard against what Admiral Ellis said is, you know, we don't want this strategic vacuum. These are the four objectives:

First, to strengthen the safety, stability, and sustainability of space activities. I think, based on Dr. Griffin's comments, we might add "resilience" there as well.

Second, to deter and, when necessary, defeat adversaries' space and counter-space threats that are hostile to the national interests of the United States and our allies. We may not start it, again, but we'll finish it, will be the last.

Consistent with what we've heard from the great panelists today, we will, as a third objective, partner with the U.S. commercial sector to ensure that American companies remain the leading providers of traditional and innovative space technologies, goods and services on the international space market.

And, then, fourth, the fourth objective to maintain and extend U.S. human presence and robotic explorations beyond Earth to transform knowledge of ourselves, our planet, our solar system, and the universe.

Vice President Pence directed that this space strategic framework be finalized and submitted to the President for review and approval within 45 days of October 5—by around Thanksgiving. Obviously, major portions of the space strategic framework will be classified, as General McMaster indicated. But, broad areas of civil, commercial, and, even, national security space activities should be unclassified and available to the public prior to presidential action. After all, we are talking about the broad framework of a national spacefaring enterprise that will extend generations into the future.

Transparency, prior to and after presidential action, should be standard practice for the council

The transformation of America into a true human spacefaring nation will be the work of several generations—just as happened with building the railroads of the 1800s and the auto and airline infrastructure of last century. When Americans landed on the Moon in 1969, this was just a year after the opening of 2001: A Space Odyssey—a highly-technical depiction of a near-future spacefaring

America. The first Moon landing was but 22 years—a single generation—after Chuck Yeager broke the sound barrier in 1947. The movie was set 30 years in the future. The aerospace technologists that worked extensively on the movie depicted what they thought the nation should be able to accomplish by that time. Yet, poor policy decisions and implementation plans became roadblocks to that exciting future. This culminated with the retirement of the space shuttle in 2011 without a better replacement ready to take its place. Vice President Pence lamented this past in his opening remarks at the Council meeting: "Across the board, our space program has suffered from apathy and neglect." [Segment 1] Past national space policies, developed out of public view over multiple presidential administrations, have brought us to this disheartening point. A different, more public approach to space policy development is obviously needed. In short, we need transparency.

Vice President Pence should open the unclassified planning activities of the National Space Council to public review and comment prior to decision memoranda being prepared for presidential action. In particular, NASA's plan for returning to cislunar space and the unclassified portions of General McMaster's space strategic framework should be made available for public review and comment prior to going to President Trump.

To facilitate greater public engagement, the National Space Council should develop a public-outreach effort including a website, a library of policy-related information, and periodic webinars and C-SPAN presentations. Key unclassified draft documents should be posted for public review and comment as is done with proposed regulations. We need to avoid later being told, in effect, if only someone had said something back when the policy was being prepared.

National Space Council's Advisory Group

Along with the announcement of the reconstitution of the National Space Council was the mention of the formation of an advisory group. In my previous Space Review article, I noted the need for broad public engagement. In closing the Council meeting, Vice President Pence clarified details about the Advisory Group. [Segment 106]

I think today we proved that many of the best ideas that will shape American space policy will come from outside the halls of government. And I can assure all of those present that we're going to continue to avail ourselves of the very best and brightest American minds as we develop policies for presentation to President Trump.

I'm pleased to report in that vein that very soon, the President has directed us to relaunch the National Space Council's Advisory Group to foster close coordination, cooperation, and technology information.

This group will bring together a broad range of truly exceptional Americans—men and women who are committed to advancing and renewing American leadership in space.

In the days ahead, NASA will enter a notice into the Federal Register to kick off the process of recruiting candidates for the group. And the President will make a selection, based on the recommendations of the National Space Council, for who is appointed to that. And we encourage any citizens who have an interest to avail yourself of the opportunity to express that interest going forward.

The members will all be private citizens, but their work for this council will be of the highest public service.

I am encouraged by Vice President Pence's broad invitation for Americans to participate. As of the writing of this article, I have not yet found the call for Advisory Group volunteers in the Federal Register. Having organized and participated in space-related technology planning activities, such advisory groups can be very helpful in defining a bold, but executable plan for undertaking America's transformation into a true human spacefaring nation.

What is not apparent is why it appears that NASA's plan for a return to the Moon and the space strategic framework will be finalized prior to the formation of the Advisory Group. This appears to cast the group as a rubber stamp, constrained by the choices now being made without the experience, expertise, and perspective the Advisory Group will provide.

Conclusion

I recommend that interested Americans review the video and transcript of the meeting. The organization of the transcript, with the links to the relevant parts of the video, make this easy to do.

The three panels at the meeting covered a wide range of topics. My review of the discussions raised additional concerns that I will address in Part 2 of this commentary.

Mike Snead is a professional engineer and Associate Fellow of the American Institute of Aeronautics and Astronautics (AIAA). He is president of the Spacefaring Institute[™] (spacefaringinstitute.com) and writes the Spacefaring America blog (spacefaringamerica.net). He has formed the LinkedIn group Space Solar Power to advocate for space-based sustainable energy and the coming American spacefaring industrial revolution. He can be reached through the contact form on the Spacefaring Institute web page or through LinkedIn.