SENATE COMMITTEE ON COMMERCE, SCIENCE, AND TRANSPORTATION: QUESTIONS FOR THE RECORD

HEARING ON REOPENING THE AMERICAN FRONTIER: PROMOTING PARTNERSHIPS BETWEEN COMMERCIAL SPACE AND THE U.S. GOVERNMENT TO ADVANCE EXPLORATION AND SETTLEMENT
JULY 13, 2017

Written Questions Submitted to Mr. Jeffrey Manber, CEO, Nanoracks

Submitted by Senator Dan Sullivan

Challenges Hindering DOD-Commercial Partnerships

Question 1. Earlier this year, in response to a provision that I included in the FY2017 National Defense Authorization Act (NDAA), the Department of Defense (DOD) released an Arctic strategy that among other points, highlights severe challenges caused by the limited satellite and terrestrial communications above 65 degrees north. When the DOD needs to quickly address gaps in capabilities, commercial partnerships can—where appropriate—play a key role in filling these needs.

What are the primary challenges that have hindered or prevented you from working with the U.S. government to fill critical gaps in U.S. space capabilities, like the domain awareness and communications gaps in the Arctic?

Answer. There are challenges to working with the U.S. government, but in more cases than before there is a mutual understanding that the commercial community can provide services, rather than hardware. And these services are economically efficient, and place the burden of risk not on the taxpayer but on the commercial organization. We are moving the scale of the needed public private partnerships more to the private sector. We at NanoRacks welcome that. But challenges remain. They are contractual and they are challenges of mindset. To many in the USG, small is still not desirable. Whether small hardware or smaller budget. It is changing, but it remains an obstacle. Also contractual. For a company like NanoRacks some of the key programs require an onramp that is thousands of pages long and require dedicated proposal writers who understand the jargon. During the Mercury and Gemini and Apollo days, some of the contracts were several pages long. We need a return to that. Here is what the USG needs. Please provide. If you don't provide, you don't get paid. If you do provide, here is the rate.

Internet Access in Rural Areas

Question 2. In Alaska, many places do not have any connectivity and many times are not even connected by road. It is costly to deploy telecommunications infrastructure, and while these communities are extremely innovative, a lack of connectivity hinders business growth and increased economic activity.

Commercial space provides the possibility of increased communications, including satellite-

based broadband internet, at a reduced cost. Especially if the cost of launches continues to decline, this could provide real benefits to consumers in extremely rural places like Alaska.

How can recent advances in commercial space help provide broadband-level internet to the most rural areas?

Answer. First off, commercial space offers a diversification of in-space opportunities. To be specific, this means that states like Alaska can have their own spaceport. How wonderful. We support the development of regional spaceports that meet the needs of the region. In this case, for Alaska, it is polar orbit launches that can accommodate small satellite constellations that meet much of the needs of the business and residential sectors. Commercial space offers off the shelf opportunities in satellite communications, satellite navigations, earth observation to monitor environmental issues and so on. There is now growing private sector capital available where there is a regional customer.

Question 3. Is latency still an issue?

Answer. As we understand, latency is still an issue.

Thank you for allowing us to respond. We welcome further dialogue on advancing commercial in-space services via the Alaska spaceport to meet the needs of the people of Alaska.