

Getting Serious About NewSpace in North Carolina

Contributed by Jeff Krukin
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Early this year I asked in an opinion piece in the Raleigh News & Observer, "Is North Carolina losing the commercial space race?" The answer was an unequivocal "Yes."

Now, thanks to the visionary leadership of Dr. J. Anthony Sharp, director of aviation science at Elizabeth City State University, and Bill Greuling, Vice President of the North Carolina Aerospace Alliance, our state has taken an important step toward getting in the race.

Why is this important?

Consider this snapshot from the North Carolina Department of Commerce's 2009 Aerospace and Aviation report. The state has:

- 26,000 people are employed in engineering fields
- 180+ aerospace manufacturing companies
- 135+ aviation service companies
- A solid aerospace supply chain
- Five military installations
- Aerospace and aviation programs at universities and community colleges.

Combine these assets with the emerging entrepreneurial/commercial space industry (NewSpace) and you have a recipe for:

New business for existing companies, an exciting field for entrepreneurs, and job growth and economic development that can be tied to targeted industry clusters and regions across the state. In addition, demand for aerospace and aviation education feeds workforce development. Finally, an emerging space industry offers support for Governor Perdue's All-American Defense Initiative (the Air Force and Marines have demonstrated tremendous interest in the NewSpace industry).

Our military-related industries are a particularly strong indicator of where NewSpace can have the greatest economic impact, and not just because of the military's interest in the commercial suborbital passenger and cargo vehicles being developed by Virgin Galactic, XCOR Aerospace, Blue Origins and others not located in North Carolina (why not?).

The 2009 North Carolina Defense Asset Inventory and Target Industry Cluster Analysis prepared by the N.C. Military Foundation identifies several markets that can serve NewSpace as well as the military. These include fuel and power sources, unmanned systems, performance materials, and RESET (maintenance, refurbishment, etc.).

The latter is especially relevant because it requires skills from non-space industries such as automotive parts repair. That's right; a hard-hit and struggling American industry can contribute to and benefit from NewSpace. Talk about job re-training -- from roadway to space runway!

As you can see, this isn't about the traditional NASA manned space exploration program that is withering on the vine due to insufficient funds, occasionally poor management and congressional interference. Instead, it's about customers (business, government, academia, individuals) buying products and services in the open market, with NASA expected to become a huge customer of commercial Earth-to-orbit launch services.

While there have been several efforts during the last few years to focus the state's resources on developing our aerospace and aviation industries, those efforts have been hampered by the lack of a single coordinating body and a multi-year strategy and funding commitment. And they have mostly ignored NewSpace while other states have expanded their efforts.

This is set to change on Nov. 12, when the NewSpace Commerce Forum is convened by Chancellor Willie Gilchrest at Elizabeth City State University. The participation of Deputy Secretary of Commerce Dale Carroll and the Department of Transportation's aviation director, Richard Walls, is a welcome recognition of the economic importance of this event. Speakers will include Bob Richards, CEO of Odyssey Moon, Jeff Greason, CEO of XCOR Aerospace, and representatives from the Federal Aviation Administration (commercial spaceport licensing), NASA (NewSpace support), North Carolina's aerospace industry and the military. More information may be found at www.nc-aa.org.

In 1903, North Carolina was the launch pad for commercial aviation. In the 21st century, we should be launching our own NewSpace industry. The difference between the two is only a matter of altitude.

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