



# A Historic National Vision for Spacepower

September 9, 2019 **Peter Garretson** *War on the Rocks*

**Related Categories:** Democracy and Governance; Military Innovation; Science and Technology

Does the United States have a vision of future spacepower grand enough around which to organize a new space force? This week, Air Force Space Command publicized its Space Futures Workshop report. This report is important for a number of reasons, and likely will become a foundational document for a new space force, and an historic document for U.S. spacepower.

First, its timing is important. It comes at a time when the U.S. Congress is debating a proposal by President Donald Trump for a space force — an entirely new armed service. This is the first report that places the need for such a service in truly strategic context. The credibility of its authors, its plain-speak overview, and clear conclusions are likely to be influential on Congress.

Second, the fact that this was approved by Air Force Space Command leadership and released publicly as an Air Force-owned document is indicative of a new boldness at Air Force Space Command that can thrive in the aftermath of Heather Wilson's restrictive tenure as secretary of the Air Force. It shows that under Acting Secretary of the Air Force Matt Donovan, Air Force Space Command leadership is creating room for new ideas. It is the first indication that the Air Force has "gotten the message" and no longer swerving to avoid the president's intent.

Third, the report is important because of its content. It constitutes the first indication of a paradigm shift within the U.S. military about the value and role of military space. Those attentive to the Space Force debate will be aware of an ongoing argument between what has been characterized as the "brown-water school" (thinkers who see the principal value of military spacepower as a function that serves terrestrial warfighting) and the "blue-water school" (thinkers who see the principal value of military spacepower as a support to expanded commerce in space). But this is the first time any official document has so clearly reflected the assumptions of the blue water school. The claim is not that Air Force Space Command has adopted a blue-water paradigm — that has clearly not yet happened — but rather that its assumptions have now become part of the conversation within Air Force Space Command about its own strategy and future. This report showcases the thinking of a broad community at a critical time. It is, in fact, a solid foundation for a space force strategic doctrine, and a strong argument for why America needs a space force.

This is the first time an Air Force Space Command high-level strategy document has acknowledged the broader space industrial plans of the U.S. Secretary of Commerce, boldly stating, "The U.S. must recognize that in the world of 2060, space will be a significant engine of national political, economic, and military power" and openly discussing "space-based internet, in-space transportation, in-space propellant manufacture, lunar and asteroid mining, space-based solar power-beaming, orbital and lunar tourism" as potentially significant new industries which might be self-sustaining. Such statements will excite young minds with the promise of a bold future, and can help in recruiting. With the new emphasis on space education, and the lack of good resources, this report — already making its way around U.S. professional military education institutions — is likely to become part of their curriculum.

It is the first time we have seen Air Force Space Command openly consider potentially new roles and missions in the context of the ambitions of "space barons" such as Jeff Bezos and Elon Musk, imagining (and preferring) a future where "space is a major contributor to the human economy, people live and work widely in space, and the U.S. coalition leads in civil, commercial, and military aspects of that future and have shaped the norms of behavior, rules, and laws that moderate space activities to reflect our concepts of a liberal international order." This is the first time such thoughts have been articulated outside an extremely narrow community of scholars at Air Command and Staff College and National Defense University.

Fourth, the report is significant because of how it was produced. Strategic planning in the military is too often characterized by closed-door insularity where we talk to ourselves, and consider only the opinions of our own service or military community. But to their credit, Air Force Space Command convened an exceptionally diverse group of thinkers, including voices from NASA, the intelligence community (the National Reconnaissance Office), public interest and space advocacy organizations, industry, and importantly, the entrepreneurial "NewSpace" community responsible for so much of current innovation and the renewed excitement about space.

Tom Barnett, author of the *Pentagon's New Map* once remarked, that while most U.S. defense planners thought of "future wars in the context of war," he thought about "war in the context of everything else." Whereas previous Air Force Space Command documents considered military spacepower only in the context of war, this document considers military spacepower in the context of everything else. It speaks not just to an internal audience but to the broadest possible audience of Americans and allies concerned about the future of geopolitics.

For those of us associated with the blue-water school, it gives us confidence that whenever a group of people study the space domain as a totality and valued in-and-of-itself, especially if it is in the context of a long-term vision, and involves a set of expertise from the broader society — including the voices of civil and commercial actors — it is likely to arrive at blue-water conclusions. Air Force Space Command should be commended for seeking such diversity of thought.

Fifth, the credibility of the report is important. While anybody can be wrong about the future, it would be hard to assemble as credible a group. A look at the list of the participants is a who's who of interagency technical and policy space experts from across Air Force Space Command, NASA, and the National Reconnaissance Office. With such intellectual firepower, it will be difficult to dismiss the report.

Sixth, it provides an indication to Congress and the President of where thought leadership is — and is not — flourishing. This is really a top-level policy report. As such, it would have been appropriate for it to have come from the Secretary of the Air Force's Space Policy Staff. Such a report should have been accomplished proactively at the first inkling of interest from Congress in a Space Corps in June of 2017; or put on the analytic agenda as recommended to the former secretary of the Air Force and former Space Policy Staff directly in September of 2017 by Air University President, and spacepower advocate Steve Kwast. That it did not come from the Space Policy Staff makes the report that much more significant. Since the very first Air Force Chief Scientist Theodore Von Karman's visionary report "Where We Stand," to the first Air Force Chief of Staff, one role of a chief scientist has been to open the aperture to prevent blind-spots for their commander. In this case, Gen. John "Jay" Raymond has been well served by his science advisor.

Last and most crucially, its conclusions and recommendations are important. The report provides a meaningful national vision for space, not just a vision for the Air Force or Air Force Space Command. While the early Air Force played a huge role in both our vision for national airpower and spacepower, those strategic muscles have atrophied significantly. This report marks the first time in my professional memory — about 30 years — that an Air Force space document, or even an Air Force document, has provided a meaningful input to a broader national security strategy conversation.

Among the most important conclusions of the study are several bold statements. It states that the United States "should establish space settlement and human presence as a primary driver of the nation's civil space program to determine the path for large-scale human space settlement and ensure America is the foremost power in achieving that end." Toward that end, it articulates an interagency framework, tying in NASA with the Departments of Commerce, Energy, and Transportation aimed at "a coordinated strategy to develop U.S space commerce and to incorporate space commodities and resources into the larger U.S and global economy." The report does not shy away from applying American aims for a rules-based, democratic international order to space. And finally, it lays out a critical rationale for military spacepower: "a military force structure that can defend this international space order and defend American space interests, to include American space settlements and commerce."

These remarkable statements evidence a stunning expansion of official U.S. strategic thought on the space domain. It represents a quantum leap in the strategic consciousness of our military space professionals about the value and purposes of military space power and the utility of a space force, and its links with broader instruments of economic and political power as part of a comprehensive strategy. Hopefully the National Space Council, the White House, and Congress are listening.

*Peter Garretson is an independent strategy consultant who focuses on space and defense, and a senior fellow in Defense Studies with the American Foreign Policy Council (AFPC). He was previously the director of Air University's Space Horizons Task Force, America's think tank for space, and was deputy director of America's premier space strategy program, the Schriever Scholars. All views are his own.*