

Army's Voice in Space

Is there cause for concern?

By Gary Shugart

The Department of Defense (DOD) relies on space capabilities and services such as satellite communications; missile warning; position, navigation and timing; and intelligence information to conduct military operations. While the Air Force develops and acquires most military space systems, the Army is the largest DOD user of space capabilities and as such, has a vested interest in ensuring the Air Force considers Army requirements as it develops and fields space systems.¹

Excessive cost and schedule overruns along with system capability failures of space acquisition programs caused Congress to repeatedly order assessments of the military's organization and management of space activities. Continued congressional interest resulted in the 2018 National Defense Authorization Act (NDAA) directing specific changes in space organization.

Additionally, the 2018 NDAA directed the Deputy Secretary of Defense (DepSecDef) to conduct a review and identify a recommended organizational and management structure for the national security space components of the DOD, including the Air Force Space Command.² This should concern the Army as it aims to sustain support to soldiers performing tactical operations.

In response to 2018 NDAA direction, Deputy Secretary of Defense Patrick M. Shanahan provided an interim report to Congress on March 1, 2018, which previews the four major focus areas (research, development, acquisition and sustainment; organization and governance; joint warfighting; and workforce development) in the review of the organizational and management structure of DOD national security space components.³

The interim report discussion of organization and governance states, "The Department will decide how to improve the organization of the DOD space enterprise to increase performance. We will determine if organizational changes are needed at the Office of the Secretary of Defense and/or Military Department or Service levels, including whether the Space Corps concept should be implemented."⁴

The final report, due to Congress on Aug. 1, 2018, will include a space portfolio plan outlining the specific capabilities necessary for the DOD to compete with Russia and China in space.⁵ The space portfolio plan will allow DOD to identify key organizational and technology hurdles that must be addressed.⁶

Gen. John E. Hyten, commander of U.S. Strategic Command, in January 2017 testimony to the House Armed Services Committee, Strategic Forces Subcommittee, said the primary national security space challenge is that the Department of Defense is not structured to outpace real and present threats to the space enterprise.⁷ He identified two major difficulties. First, the United States has separate, non-aligned lines of operational, acquisition and resourcing authorities. Second, the nation has divided leadership in space acquisition decision-making that results in the slow evolution of the status quo.⁸

Hyten also stated he strongly believes the Intelligence Community and DOD should have separate space programs. To address these difficulties, Hyten made ten recommendations, summarized here.⁹

1. Eliminate the Defense Space Council and all other space oversight responsibilities currently spread throughout DOD. In their place, create a national security space Executive Committee to provide broad strategic guidance to a National Security Space Senior Steering Group co-chaired by the director of the National Reconnaissance Office (ideally dual-hatted as the under secretary of the Air Force) and the Air Force Space Command commander. Committee members would be the DepSecDef, the principal deputy director of National Intelligence and the vice chairman of the Joint Chiefs of Staff. The committee would be advised by the STRATCOM commander, the under secretary of defense for Acquisition and the Air Force chief of staff.
2. Normalize space functions within the DOD by formally designating the Air Force as lead service for all DOD space requirements allocation, architecture decisions, resourcing requests and acquisition activities.
3. Streamline programmatic authorities and responsibilities for space forces by designating the under secretary of Defense for Acquisition as the Defense Acquisition Executive with oversight authority for existing defense space programs. Clarify that planning authority for new space systems resides in AFSPC for DOD and the National Reconnaissance Office (NRO) for the Intelligence Community.
4. Designate AFSPC as:
 - a. The organize, train, equip, and acquire authority for Defense space and ground control segments [comparable to the NRO] to include:
 - 1) Major Force Program-12 (MFP-12) (Defense Only) authority.
 - 2) Authority to initiate, fund and terminate Defense space programs at the Air Force Space and Missile Systems Center (SMC) and the yet-to-be created Air Force Rapid Space Capabilities Office (AFRSCO) (see Hyten's recommendation 7).
 - 3) Authority to designate the Program Office Directors for Defense space programs in consultation with the SMC commander (Space Program Executive Officer (PEO)) and AFRSCO commander (AFRSCO PEO) [comparable to the NRO].
 - 4) Sole authority to coordinate commercial business arrangements (e.g., leases) for Defense space services [comparable to the National Geospatial-Intelligence Agency for commercial intelligence, surveillance and reconnaissance.].
 - 5) Service Acquisition Executive (SAE) authority over Defense space acquisitions [comparable to U.S. Special Operations Command].
 - 6) Maintain the SMC commander as part of AFSPC and the PEO for Space.

- 7) Have the AFSPC commander report directly to the Defense Acquisition Executive for defense space acquisitions [comparable to the Missile Defense Agency].
- 8) Consider a minimum tour length for the AFSPC commander to be five years [comparable to Naval Nuclear Propulsion and Navy Strategic Systems].
- b. The single authority to act as enterprise-wide Defense system architect and integrator for the overall space architecture. Although AFSPC currently has a small number of other service personnel assigned, the organization described above would likely require additional joint personnel involvement to ensure other service requirements are adequately addressed. Since nearly all the acquisition programs are Air Force, Hyten does not believe this needs to be a joint command, but additional joint manpower, in addition to those already in place, should be added to AFSPC.
5. Designate all services and defense agencies as organize, train, equip and acquire authorities for their forces' user terminals. The EXCOM would need to review resourcing decisions to ensure this segment remains synchronized with the rest of the enterprise space architecture.
6. Assign the AFSPC commander as the Joint Force Space Component Commander under STRATCOM to properly align operational space under a combatant command. This step happened in December 2017.¹⁰
7. Create an Air Force Rapid Space Capabilities Office as a direct report to the AFSPC commander. Its mission would be to quickly design and acquire major, new, affordable space capabilities. Initially, elements of the Space Security and Defense Program, Operationally Responsive Space Program Office and the current Air Force Rapid Capabilities Office would make up this office.
8. Affirm the STRATCOM commander as the single combatant command for space and designate him or her as executive agent for space requirements in Joint Requirements Oversight Council deliberations. Leave intact the approval role of the JROC for space requirements. Also assign the STRATCOM commander the role of coordinating authority for space.
9. Affirm the NRO director as the single organize, train and equip authority for the Intelligence Community space and ground control segments.
10. Eliminate the Principal Deputy Space Advisor position (previously known as the DOD Executive Agent for Space) and PDSA Staff (the Secretary of the Air Force is currently the PDSA and has a PDSA staff of joint personnel). The AFSPC commander should establish a Washington liaison office directed by a new deputy commander to work issues inside Washington, D.C., in a similar manner to the vice commander of U.S. Special Operations Command. Secretary of the Air Force Heather Wilson announced in January 2018 that she intends to make the deputy AFSPC commander a three-star general and move the position to the Pentagon.¹¹

Hyten's recommendations clearly have been heard by Congress with several of them reflected in the 2018 NDAA. Specifically, the 2018 NDAA:¹²

- Terminates the Defense Space Council.
- Designates the AFSPC commander, subject to the direction of the secretary of the Air Force, as the service acquisition executive for defense space acquisitions.
- Directs the DepSecDef to conduct a review and identify a recommended organizational and management structure for the national security space components of the DOD.
- States the AFSPC commander, in consultation with the DOD chief information officer, will be the sole authority for the procurement of commercial satellite communication services for the DOD.
- Appoints the AFSPC commander to a term of six years.
- Re-designates the Operationally Responsive Space Program Office to the Space Rapid Capabilities Office, reporting to the AFSPC commander.
- Terminates the PDSA position. The duties, responsibilities and personnel of the PDSA office are transferred to a single official selected by the DepSecDef, who cannot be the secretary of the Air Force or the under secretary of Defense for Intelligence.

These moves will generate concerns for the Army. The termination of the Defense Space Council makes it imperative the DepSecDef identify an organizational and management structure for DOD space that provides the Army an appropriate voice in DOD space acquisition. Additionally, with the AFSPC commander (in consultation with the DOD chief information officer) being the sole authority for the procurement of commercial SATCOM services for the DOD, the Army, as the largest user of space capabilities in DOD, will need the means to ensure its requirements are met.

If the Congress and DepSecDef follow Hyten's other recommendations, the Army will have additional concerns.

- It will be critical for the Army to be able to advise the Executive Committee, given its membership consisting of the DepSecDef, principal deputy director of National Intelligence and vice chairman of the Joint Chiefs. Will Army and Navy needs be equitably considered if the EXCOM is advised only by STRATCOM's commander, the under secretary of Defense for Acquisition and the Air Force chief of staff?
- Could the Army be required to transfer responsibility for the Wideband SATCOM Operations Centers to the Air Force if AFSPC is the organize, train, equip and acquire authority for all Defense space and ground control segments, to include MFP-12 authority and sole authority to coordinate commercial leases for Defense space services? Would there be an impact on leases for space services the Army relies on?

- Would the Army need to assign additional personnel to AFSPC to ensure Army requirements are adequately addressed with AFSPC as the enterprise-wide Defense system architect and integrator for the overall space architecture?

As Congress and the DepSecDef ponder future changes to DOD space organization, the Army will need to remain vigilant to ensure current and future warfighting capabilities of the land component are appropriately supported by space capabilities developed by the Air Force. For example, changes to the Global Positioning System signal can require a significant investment on the part of the Army to update a multitude of Army systems that use either timing or positioning data.

Additionally, future Army communications architectures need to be synchronized with the future satellite constellations to ensure enough bandwidth is available in the appropriate frequencies and that Army ground terminals are compatible with the broadcast waveforms.

Overall, changes in DOD space organization can bring value to the nation, but those changes will need to be fully coordinated with the Army to avoid generating negative impacts to ground forces.

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¹ U.S. Army Space and Missile Defense Command/Army Forces Strategic Command, “The Army’s Dependence on Space,” *STAND TO!* Feb. 23, 2017, <https://www.army.mil/standto/2017-02-23>.

² National Defense Authorization Act for Fiscal Year 2018, H.R. 2810, 115th Congress, 1st sess., 439.

³ Department of Defense, *Interim Report on Organizational and Management Structure for the National Security Space Components of the Department of Defense* (Washington: March 1, 2018), 5-6, <https://media.defense.gov/2018/Mar/07/2001887047/-1/-1/1/Interim-Report-on-Organizational-and-Management-Structure-for-the-National-Security-Space-Components-of-the-Department-of-Defense.PDF>.

⁴ *Ibid.*, 8.

⁵ *Ibid.*

⁶ *Ibid.*, 10.

⁷ U.S. House of Representatives, “Thoughts on National Security Space Organization, General John E. Hyten, Commander, United States Strategic Command” (Washington: House Committee on Armed Services, Subcommittee on Strategic Forces), 115th Congress, 1st sess., Jan. 11, 2017, 1.

⁸ *Ibid.*, 4.

⁹ *Ibid.*, 5-8.

¹⁰ Air Force Space Command Public Affairs, “AFSPC Commander Becomes JFSCC, Joint Space Forces Restructure,” Dec. 3, 2017, <http://www.afspc.af.mil/News/Article-Display/Article/1386530/afspc-commander-becomes-jfsc-joint-space-forces-restructure>.

¹¹ Sandra Erwin, “Air Force to Create Three-Star ‘Vice Commander’ Post to Manage Space Activities,” *Space News*, Jan. 16, 2018, <http://spacenews.com/air-force-to-create-three-star-vice-commander-post-to-manage-space-activities>.

¹² National Defense Authorization Act for Fiscal Year 2018, H.R. 2810, 115th Congress, 1st session, 436-8.