

# Creating a Separate Space Force

## Challenges and Opportunities for an Effective, Efficient, Independent Space Service

**W**ith the passage of the 2020 National Defense Authorization Act, the U.S. government will launch a Space Force. Prior to this legislation being enacted, the U.S. Space Force Planning Task Force asked the RAND Corporation to analyze several challenges involved in transitioning to the new service. RAND researchers examined questions about what activities should transfer to the Space Force, whether it can sustain the necessary career fields, and what challenges it will face.

### Transferring Activities to the Space Force

Taking into account the goals of effectiveness, efficiency, independence, and identity, the following activities should be transferred to the Space Force:

- **Operations and training:** The majority of space operational units (and associated space intelligence and training units) in the Department of Defense should be moved into the Space Force. Some space control units may reside in their current services until the Space Force's space control missions are further clarified.
- **Acquisition:** The majority of space acquisition organizations (including the Space Development Agency) should be consolidated in the Space Force. Decisions about transferring the Missile Defense Agency's space acquisition activities require more in-depth analyses.

### KEY QUESTIONS

- What activities within the Department of Defense should be transferred to the Space Force, given the goals of effectiveness, efficiency, independence, and sense of identity for the new service?
- Can the Space Force sustain the necessary career fields?
- What other challenges will the Space Force face as it stands up and grows into its role?

- **Headquarters:** Headquarters, Space Force, should include key functions that are essential to the independence and identity of the service (i.e., operational concepts and doctrine development; requirements development and advocacy; planning, programming, budgeting, and execution; and legislative liaisons and public affairs).

The above transfers will likely create new seams between the Space Force and the other services and the organizations it supports. The services will need to retain appropriate organic space expertise and establish liaisons and new relationships with the Space Force to support their unique needs and requirements. The full report provides detailed unit-by-unit and function-by-function recommendations for transfers to the Space Force.

## Sustaining Career Fields

The Space Force will need people skilled in space operations, space intelligence, space acquisition, and other STEM disciplines. The new service will face two challenges to building and maintaining such a workforce:

- **Difficulty sustaining small career fields:** Given the relatively small numbers in the Space Force, it will be challenging to have uniformed personnel spend their full careers there. Analysis suggests that, although some career fields will be organic to the Space Force, many will be manned by Air Force officers on assignment. For the subset of Air Force career fields that requires substantive space knowledge to serve effectively in the Space Force, the Air Force will need to develop a “space track” to ensure the additional training and development necessary for officers who will serve in the Space Force. This will require close coordination between the two services to ensure that there are healthy career fields that support the needs of both.
- **Shortfalls in general officer throughput:** For the same reasons as above, the Space Force will likely need to draw about one-half of its general officers from the Air Force or other services for the foreseeable future.

The full report provides example analyses for key career fields and outlines an appropriate approach for the remaining analytic requirements.

## Further Challenges

This is not the first time the U.S. military has created a new organization separate from other defense organizations. The Air Force, the Marine Corps, Cyber Command, Special Operations Command, and the Coast Guard had similar origins. Lessons from those cases suggest additional challenges the Space Force will need to address, such as the following:

- **Become more than a force enabler:** History suggests that, if the Space Force is limited to being a force enabler rather than directly engaging in combat, then it will have difficulty demonstrating its effectiveness, justifying its existence as a separate service, and developing a distinct identity.
- **Maintain leverage within the defense community:** The small size of the Space Force relative to other services will result in it having less bureaucratic and political leverage in the defense community, potentially leaving the service vulnerable to second-tier status and possible reincorporation.

## Recommendations

The analysis suggests that the Space Force (and, in some cases, other services) should pursue the following actions to increase its likelihood of developing into a successful organization:

1. **Define and clarify space warfighting missions:**
  - a. Develop and promulgate a coherent space warfighting theory, both to indoctrinate Space Force personnel and to foster the development of a distinct identity and culture.
  - b. Develop weapon and support systems to bring substance to theory and to help make the Space Force a true warfighting service.
2. **Control resources and public relations:**
  - a. Advocate for a separate total obligation authority (TOA) for the Space Force. The secretary of the Air Force should allocate an annual TOA target, within which the Space Force could build its own program and budget.
  - b. Advocate for the creation of distinct Space Force offices for legislative liaisons and public affairs. To survive over time, the Space Force will likely need a strong public constituency.



The secretary of the Air Force should give the Space Force authority to advocate for its own positions, independent of the rest of the Department of the Air Force.

**3. Find creative ways to manage career fields and develop senior leaders.**

- a. In career fields in which substantive space knowledge and skills are required but the career fields are not large enough to be organic to the Space Force, partner with the Air Force to develop “space tracks” to prepare Air Force officers in those career fields who will be serving in the Space Force.
- b. Work with Congress to draw from the Air Force and other services the approximately 50 percent of the general officers that the Space Force will not be able to generate organically.

**4. Work closely with other services and organizations to define and manage new relationships.**

- a. Retain appropriate space expertise within the Air Force, the Army, the Navy, and the Marine Corps. The Air Force, in particular, will need some of its own space expertise to ensure the integration of Air Force and Space Force operations and to support its own space needs.

- b. Establish liaisons and new relationships with the Air Force, the Army, the Navy, and the Marine Corps to effectively support unique service requirements.

- c. Increase space representation at combatant commands to ensure that the Space Force can represent its independent perspectives and provide effective support.

- d. Craft formal agreements to specify and tailor services that the Air Force will provide to the Space Force.

**5. Establish a formal monitoring and evaluation process to adapt to changes in organizational priorities and external factors.**

- a. Adopt an adaptive approach to planning. The Space Force should establish an approach to planning that aims for robustness across a range of futures rather than optimality for a single (hoped-for) future, as well as the ability to adapt with agility to the inevitable changes in planning assumptions.

- b. Implement a formal monitoring and evaluation process as soon as possible to track “before” and “after” performance metrics.

- c. Establish decision rules for acting when necessary, based on information from the monitoring and evaluation process.

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This research brief describes research conducted in RAND Project AIR FORCE and documented in *A Separate Space: Creating a Military Service for Space*, by Michael Spirtas, Yool Kim, Frank Camm, Shirley M. Ross, Debra Knopman, Forrest E. Morgan, Sebastian Joon Bae, M. Scott Bond, John S. Crown, and Elaine Simmons, RR-4263-AF, 2020 (available at [www.rand.org/t/RR4263](http://www.rand.org/t/RR4263)). To view this brief online, visit [www.rand.org/t/RB10103](http://www.rand.org/t/RB10103). The RAND Corporation is a research organization that develops solutions to public policy challenges to help make communities throughout the world safer and more secure, healthier and more prosperous. RAND is nonprofit, nonpartisan, and committed to the public interest. RAND's publications do not necessarily reflect the opinions of its research clients and sponsors. **RAND**<sup>®</sup> is a registered trademark.

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