



Space Force defenses must stretch to the moon

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With the stand-up of the U.S. Space Force and initial operating capability of U.S. Space Command, it is time to revise the Unified Command Plan (UCP) to reflect the geographic responsibilities of U.S. Space Command, and align their formal responsibilities with the expectations of the American people.

Ideally the new Defense secretary would direct this on his own. But if he is checked by bureaucratic forces inside the Pentagon intent on limiting the instrument of spacepower to mere support of terrestrial forces, then either Congress or the administration could short-circuit military resistance with external direction.

The UCP should follow the recommendation that U.S. Space Command's "area of responsibility" (AOR) start at 100 kilometers above Earth and span Cis-Lunar space to 450,000 kilometers. This is the volume of space that includes the moon, its orbit and its gravitational influence.

The moon is important because it is the nearest body with significant resources. The South and North poles in particular are important because of their access to constant sunlight and vast quantities of water ice which can enable trade, logistics and maneuver. The Moon's gravitational influence is important because there are certain points (called Lagrange, Libration or "L" points) where the gravitational forces of the Earth and Moon balance to enable constant station-keeping with low energy, and allow easy maneuver from these locations to other important orbits. Those points will be critical in securing both economic and military advantage in the growing Cis-Lunar economy.

Specifying the Cis-Lunar AOR is important for three reasons:

First, this aligns the DoD's strategic map with other important actors. It is the same map being used by our competitors. It is the same map being used by the Department of Commerce and NASA. It is the same map being used by the titans of the new space industries.

Second, military space professionals have historically only considered the space from geostationary orbit down to Earth. Changing the map is a necessary first step in creating a unique military space culture. The expansive map of Cis-Lunar encourages broader thinking. It allows space professionals (and American policymakers above them) to examine space as an independent instrument of national power and its own domain of commerce and security, and not just as a tool of terrestrial warfighter support. Maps structure the mind, and thinking of space as a place is necessary to shifting space professionals from thinking focused on providing a service to thinking about strategic presence and superior position. It also helps remind both space professionals and other military officers of the vastly (and vastly different) scales on which space initiatives are played.

Third, the Cis-Lunar map is the context in which the first major initiative and counter-initiative of great power competition will play out, and where U.S. Space Command and the new U.S. Space Force will need to design their own peacetime military offensive to secure a position of advantage.

There are other important benefits as well. This map will make it easier for military space forces to integrate with Congress, NASA, Department of Commerce, Department of State, Industry and others to develop a whole-of-nation space strategy. Such a strategy will be critical if the United States will remain superior in space against the challenge from China, Russia, and other emerging space powers.

Space is certainly a place, and one of the benefits of being a geographic combatant command are significant. The 100km altitude line also provides a clear demarcation of responsibility for coordination with other AOR's.

Importantly, it means that the new U.S. Space Command has the power on the Joint Requirements Oversight Council (JROC) — the body that gets to decide what are valid requirements to spend taxpayer dollars on — to specify what other services may need to acquire to support the space AOR. If, for example, the Air Force needed to purchase airborne lasers, or the Army or Navy to purchase anti-satellite lasers or missiles to defend against the threat of a space blockade.

It also gives them the ability to lay out supporting actions, such as might be required within a terrestrial AOR to use Navy, Army, Air Force or special forces direct action to suppress adversary space forces in a conflict. The clarity of being a geographic combatant command makes such a supported/supporting relationship easier.

Such capabilities are important to secure the interests of American spacepower because, for the next couple decades, the balance of space denial capabilities will reside in the Army, Navy, Air Force, special forces and clandestine services — and the terrestrial combatant commands in which those forces reside and are controlled. For the U.S. Space Command to secure its own AOR, it will need to request and be supported by those terrestrial services. In fact, we should count on the reality that for any serious conflict, U.S. Space Command will be the “supported command” for the first phase of conflict where both powers either are signaling their seriousness or are attempting to render the other deaf and blind in the first minutes and hours.

Because a possible great power conflict would certainly begin in space — and more importantly preventing such a conflict will depend upon creating a credible deterrent posture — we don’t want to disadvantage ourselves by putting U.S. Space Command in a subordinate status where it does not have adequate bureaucratic power within the Pentagon to push for weapons systems and counter-space support. We must demand the next UCP sets up the U.S. Space Command as a geographic combatant command. A max-effort counter-space flight would certainly be transregional, multi-functional, and multi-domain, requiring coordination among many actors. But while some question the relevance of geographic combatant commands, what they enable is continuity and focus of operational expertise in a specific geographic AOR. That focus ensures indications and warning and enables a deterrent or winning posture.

Merely making U.S. Space Command a geographic command without extending the full breadth of Cis-Lunar space would be to leave the majority of a potential campaign area out of the commander’s imagination. A failure to prepare or surveil the flank could be disastrous. A failure to consider the long-term potential of coercion of our celestial lines of commerce could likewise prove costly. As a result, we must demand that the next UCP specifies a Cis-Lunar AOR.

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