THE VANDENBERG COALITION

Countering CCP Global Influence: China's Advancement in the Space Race

Bottom Line Up Front:

In recent years, Beijing has ramped up its efforts to challenge U.S. supremacy in outer space in order to enhance its technological and security capabilities. The CCP's space advancements have raised critical security concerns for both the homeland and U.S. forces abroad.

- Once dominated by America, space is once again a key front for great power competition as the CCP expands its global, orbital footprint. While the U.S. remains the leader in space for now, China has made records investments in space programs and achieved major milestones, including being the first country to land on the far side of the moon.
- The legal regime governing space activities remains ambiguous, with violations of established rules often difficult to enforce. Beijing has proven itself adept at using what rules there are to its advantage and at maneuvering to set future standards.
- The People's Liberation Army (PLA) uses its civil-military fusion strategy to develop counter-space capabilities and integrate artificial intelligence (AI) into its space missions. Washington must adapt to the reality that Beijing can increasingly target U.S. assets in orbit.

Background:

The United States remains the preeminent space power with robust satellite capabilities and a dynamic commercial space industry; however, the CCP has demonstrated its intent to match and surpass U.S. capabilities, including in intelligence, surveillance, reconnaissance (ISR), missile warning systems, and space-based navigation systems. Fundamentally, Beijing's space program amplifies the PLA's power projection and military operations. Chinese military strategists regard outer space as a likely arena for future conflict and believe space control will convey decisive battlefield advantages.

The CCP's space strategy also prioritizes generating and transmitting data such as GPS systems and enhanced communications networks. This work generates financial returns, supports a highly skilled workforce, and enhances the People's Republic of China's (PRC) space industrial base.

NASA remains the partner of choice globally and America's space industrial base continues to attract top scientific and technical talent. Losing America's competitive edge in space would expose U.S. military assets and undermine America's position in a critical economic sector.

Key Issues:

- **Emerging Capabilities:** China's Tiangong Space Station is now fully operational and the Defense Intelligence Agency has revealed that China's satellite fleet can conduct remote sensing, mapping, surveillance, and signals intelligence collection. Beijing is also developing multiple types of anti-satellite weapons capable of targeting, disabling, and destroying U.S. space assets. Washington still does not actively test its anti-satellite capabilities, despite China and Russia doing so. The United States faces political resistance to developing offensive space capabilities.
- **Civil-Military Fusion:** Whereas the United States government relies on private companies like SpaceX for space innovation rather than government initiatives, China uses a military-civilian fusion policy to leverage civilian and commercial resources to acquire advanced technologies for military ends, including in space. With the PLA overseeing both military and civilian space activities, China has quickly developed capabilities with dual-use applications and leveraged foreign expertise acquired through international commercial cooperative agreements for military ends.
- **Accountability & Cooperation:** America has taken steps to deter China's disruptive space behaviors and establish safe space practices, including by brokering the Artemis Accords, which have been signed by 29 nations. However, the PRC remains resistant to any space governance architecture which hinders its freedom of action. U.S. and PRC officials coordinate on some space issues; however, U.S. law restricts NASA's ability to collaborate with the Chinese on sensitive issues. Extensive cooperation is unlikely due to the CCP's lack of transparency.
- **Commercial-Government Partnerships:** SpaceX's activation of Starlink service in Ukraine following Russia's invasion and in Iran during the 2022 protests demonstrated the power of private space innovation for advancing foreign policy goals. Conversely, the attacks on Starlink by Russian hackers have renewed questions about the government's role in protecting non-government space assets. To remain dominant in space, Washington will need to identify the best pathways for leveraging private technological advancements and capital investment.