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The Urgent Need to Better Integrate America's Civil, National Security and Commercial Space Sectors

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For most of the Space Age, the United States could afford a convenient bureaucratic fiction: NASA was responsible for peaceful exploration and science, the Department of Defense was responsible for national security, and, with some important exceptions, the two operated on largely separate tracks.

That fiction has outlived its usefulness.

To be clear: The distinction between civil and military space still matters. NASA should not become an arm of the Pentagon, and no one in favor of closer cooperation should want it to. NASA's civilian identity, its scientific mission and the extraordinary international goodwill associated with the agency are national assets worth protecting.

But protecting NASA's identity is not the same thing as building a firewall around it. In the strategic environment we face today, there is a once-in-a-generation opportunity to enhance collaboration. Indeed, if we are to effectively compete with China, enhanced coordination is essential.

America's space enterprise has changed. It is no longer a collection of separate government programs orbiting comfortably above terrestrial geopolitics. It is infrastructure. It is commerce. It is communications, navigation, intelligence, weather forecasting, missile warning, banking, agriculture and transportation. Increasingly, it will also include logistics, servicing, power generation, manufacturing and sustained human activity beyond Earth.

Our primary competitor understands this convergence well. China does not organize its space ambitions according to Washington's traditional bureaucratic boundaries; its civil, commercial, scientific and military capabilities function as complementary elements of a single national strategy, integrated and controlled by the Chinese Communist Party (CCP). To be clear, we need not emulate China's political system to recognize the strategic advantage of thinking about space comprehensively.

The United States, by contrast, too often behaves as though an organizational chart were a law of physics. It isn't.

Cooperation Is Not Militarization

Whenever closer NASA-Pentagon cooperation is proposed, critics inevitably warn about the "militarization of space." Such alarmist rhetoric is increasingly anachronistic in today's environment.

Space is already indispensable to military operations. Adversaries are developing a panoply of counterspace capabilities precisely because the United States depends so heavily on satellites for vital missions. The U.S. Space Force (USSF) exists because policymakers across two administrations and both political parties concluded that space had become important enough to national security to warrant a dedicated military service.

Acknowledging those facts does not militarize NASA. Nor does asking whether a communications network, navigation architecture, nuclear power system, autonomous spacecraft, lunar logistics capability or in-space servicing technology might have applications across more than one mission.

NASA and the national security space community have cooperated since the beginning of the Space Age. Indeed, the 1958 National Aeronautics and Space Act anticipated and promoted civil-military coordination. Specifically, the Act called for "The making available to agencies directly concerned with national defenses of discoveries that have military value or significance, and the furnishing by such agencies, to the civilian agency established to direct and control nonmilitary aeronautical and space activities, of information as to discoveries which have value or significance to that agency."[1]

1 National Aeronautics and Space Act of 1958 (Unamended), https://www.nasa.gov/history/national-aeronautics-and-space-act-of-1958-unamended/

Over the decades, the NASA-DOD relationship has spanned launch, communications, research and development, weather, navigation, human spaceflight and other areas. In 2020, NASA and the newly established U.S. Space Force (USSF) formally reaffirmed their intent to collaborate on human spaceflight, space policy, space transportation, scientific research, planetary defense and safe space operations.[2]

So, the question is not whether NASA and the USSF should cooperate – they already do. The real question is whether the scope and structure of that cooperation are adequate for the world we are entering. We believe more can and should be done in this area.

The Moon Changes the Equation

Consider the Moon. For NASA, Artemis is properly about exploration, science, international partnership and establishing a sustained human presence beyond Earth. Those goals should remain central. But it strains credulity to imagine that a permanent human and economic presence around the Moon will somehow stay insulated from geopolitics.

Cislunar communications will matter. Precision navigation and timing will matter. Space domain awareness will matter. Power will matter. Logistics and transportation will matter. Autonomous operations will matter. The ability to repair, refuel or reposition on-orbit spacecraft will matter. Many of these capabilities will be dual-use whether policymakers like the phrase or not.

China intends to land taikonauts on the Moon before 2030 and has already outlined plans for a permanent research station near the lunar south pole. NASA's Artemis III crewed landing, meanwhile, is currently targeted for 2028 – a schedule that has slipped before and could slip again. The comfortable decade-plus head start Americans once assumed is now measured in a few years, and it is far from guaranteed.

We should therefore ask now – not ten years from now – how America's civil, commercial and national-security programs fit together in cislunar space.

That does not mean planting military bases on the Moon. It means recognizing that the infrastructure supporting American astronauts, companies and allies will inevitably carry strategic implications. Ignoring those implications will not make them disappear.

The Rules Get Written by Whoever Gets There First

Some in Washington will be tempted to treat this as a problem agile diplomacy can and will eventually solve – that some future treaty, modeled on the Antarctic system or the Outer Space Treaty itself, will settle the rules of the road in space before things get messy. That temptation should be resisted.

The People's Republic of China does not treat international law as a constraint on its ambitions; it treats it as a vocabulary to be used selectively, when convenient, and set aside when it is not. For example, Beijing built artificial islands on contested reefs in the South China Sea, militarized them despite explicit assurances it would not, and then simply rejected the 2016 international tribunal ruling that found its expansive claims had no legal basis. It continues to act with impunity in those waters today, secure in the knowledge that possession is easier to defend than a legal brief.

There is no reason to expect different behavior from China on and around the Moon.

The disagreement between the West and the PRC is not a simple technical dispute. It is a clash over whether a rules-based order built on open access, transparency and peaceful use should govern the next domain of human activity, or whether it should be governed solely by the needs of the Chinese Communist Party. There is no treaty waiting to be signed that will paper over this fundamental disagreement.

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2 "Memorandum of Understanding Between the National Aeronautics and Space Administration and the United States Space Force," September 21, 2020, https://www.nasa.gov/wp-content/uploads/2015/01/nasa_ussf_mou_21_sep_20.pdf?emrc=a97009

Which is exactly why precedent will matter so much. In a domain with no enforceable rulebook, the first party to establish a durable, functioning presence effectively writes the operating rules for everyone who follows — where safety zones sit, whether or how resources are shared, whose communications and navigation architecture other missions must plug into. Getting there first is not a matter of national pride. It is how the rules get set.

Beijing's 'Commercial' Companies Are a National Strategy

Much of Washington's China-watching community still assumes a rough mirror image of the American system: a government space agency here, private companies there, with some overlap. That assumption does not hold in modern China.

China's policy of "military-civil fusion" allows the state to draw on commercial technology and capacity without the acquisition rules, security reviews or contractual friction that shape how the Pentagon works with American industry. As noted in a recent CSIS study[3], China's leaders have promoted a wave of nominally private launch and satellite companies – the sector has grown from roughly a dozen firms a decade ago to several hundred today — while steering capital toward them through state-linked investment and, more recently, relaxed listing rules originally designed to help other strategic industries raise money quickly. In 2025, the agency that oversees military-civil fusion went further, requiring commercial space operators to report facility data and operational status to central authorities, giving China's military and intelligence services a direct window into the sector's activities and even greater authority and influence over their operations.

It is worth noting that this approach is identical to how CCP leaders treat other industries of strategic importance to the intensifying U.S.-China competition.

These companies are not simply chasing profit. They are a prime mechanism for accelerating state ambitions at commercial speed while preserving a measure of deniability and flexibility that a purely state-run program would not have. China's plans for the International Lunar Research Station – a joint venture with Russia that has attracted more than a dozen partner countries – depend on exactly this blended model, mixing state-owned primes, military-linked research institutes and commercial contractors into a single national push.

Washington should not try to replicate China's model; a genuinely independent commercial sector is one of America's real advantages. But American policymakers need to stop assuming that Chinese "commercial" space activity means what the word means to us. It doesn't.

Own the Infrastructure or Live by Someone Else's Rules

This is where the stakes become concrete. The first durable infrastructure in cislunar space (to include Lagrange points) and on the lunar surface – communications relays, positioning and timing networks, power systems, logistics depots – will not simply support whoever built it. It will shape what everyone else in the neighborhood can do, and on whose terms. (Lagrange points are positions in space where the gravitational forces of two large masses and the orbital motion balance out, creating stable or semi-stable "parking spots" for smaller objects like spacecraft.)

If American, allied and U.S. commercial systems provide that backbone, future missions – scientific, commercial and military, American and allied alike – will have every incentive to interoperate with an open architecture built on transparency and shared access. If Chinese state-linked systems provide it instead, future missions, including America's, may find themselves navigating, communicating and operating on infrastructure controlled by a government that has shown little patience for rules it did not write and little regard for partners it does not need.

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3 Kari Bingen, Aidan Powers-Rigg, and Chantal Li, "Blurred Orbits: Inside China's Commercial Space Expansion," Center for Strategic and International Studies, July 29, 2026, https://www.csis.org/analysis/blurred-orbits-inside-chinas-commercial-space-expansion

That is not a hypothetical to worry about in the 2030s. It is a design decision being made now, in the architecture choices NASA, the Space Force, the National Geospatial-Intelligence Agency, the National Reconnaissance Office, and U.S. commercial companies are making for lunar communications, navigation and more. Get it right, and the United States and its allies anchor an open cislunar and lunar commons for the rest of humanity for the foreseeable future. Get it wrong, and future generations inherit a lunar environment where the rules, the standards and the switches are controlled from Beijing.

Commercial Space Has Already Blurred the Lines

The U.S. commercial space revolution makes the old, rigid bureaucratic divisions even harder to defend. The same launch company can fly NASA astronauts, national security payloads and commercial satellites. The same satellite communications architecture can serve civil, commercial and defense customers. The same advances in artificial intelligence, propulsion, robotics, navigation, nuclear power and autonomous operations migrate rapidly across markets.

The U.S. Government is no longer the sole architect of the space enterprise. Increasingly, it is a customer of capabilities developed by private companies serving multiple customers at once.

That should force Washington to think differently. Instead of asking, "Is this NASA's responsibility or the Pentagon's?" we should increasingly ask, "What capability does the United States need, who is best positioned to provide it, and how can multiple users take advantage of it without compromising their respective missions?"

That sounds obvious. In Washington, it can be revolutionary.

What Should Change?

We propose several practical steps. First, the President should establish a standing civil-national security space coordination body at the White House, chaired by a senior presidential designee, with senior representation from NASA, the Departments of Commerce, Defense, State and Transportation, and other relevant agencies. This should not become another ceremonial interagency committee. Instead, give it a real mission: identify shared requirements, expose unnecessary duplication, flag gaps before they become crises, and determine where government and commercial investment can serve multiple national objectives at once. Most importantly, the group should develop a plan and associated budget and promote a streamlined regulatory environment to assure U.S. and allied infrastructure becomes the standard for enabling operations to, from, and in cislunar space and on the Moon's surface.

Second, demand results. The Administration should provide Congress with an annual report – with classified and unclassified versions – detailing what NASA and the national security space community accomplished together during the previous year. Highlight real results. What capabilities were shared? What duplication was avoided? Which timelines were accelerated? What commercial capability was adopted? What further actions are needed to remove legal, regulatory or budgetary barriers to enhanced collaboration? Sunlight has a wonderful ability to concentrate bureaucratic attention.

Third, Congress needs to get into the same room. NASA authorization and oversight, commercial space policy, Department of Defense space programs, and Intelligence Community activities are handled by different committees with different constituencies and different budget authorities. While that division is understandable, it also prevents Congress from seeing the national space enterprise as a whole. Regular joint hearings or structured consultations among the civil space, Armed Services, Intelligence and appropriations committees would be a useful start.

Fourth, NASA and the Department of Defense should launch closely coordinated initiatives where their interests plainly overlap: communications, navigation and timing, space domain awareness, nuclear power,

autonomous systems, in-space servicing and logistics, resilient launch infrastructure, cyber security, and interoperability standards. Coordinated efforts should not automatically translate into joint programs which can be cumbersome and overly bureaucratic. This is more about putting all requirements on the table and gaining clear understanding of who is in charge of which programs and adopting a "best athlete" approach. Commercial space companies should be at the table from the beginning, not invited in after the government has spent years designing a bespoke solution.

Fifth and finally, bring our allies and commercial partners into the discussion. One of America's greatest advantages in space is something China cannot easily replicate: a broad network of democratic allies, scientific partners and innovative and well-funded commercial companies eager to work with the U.S. Government. NASA's partnerships, the Artemis Accords, our defense alliances and commercial space relationships should be treated as reinforcing elements of American leadership rather than separate diplomatic universes.

One Space Domain, Different Missions

None of this requires merging NASA and the Department of Defense. They should remain separate and distinct institutions, with different missions, cultures, authorities and constituencies — and there are good reasons for those differences. But different does not have to mean disconnected.

For decades, Washington could tolerate a certain amount of bureaucratic separation because space itself was less crowded, less commercial, less strategically competitive (especially after the collapse of the Soviet Union) and less central to everyday life.

That world is gone. The United States now faces a competitor determined to overtake American leadership in space, a commercial sector advancing in some instances faster than traditional government acquisition systems, and an emerging cislunar environment where exploration, economics, technology and national security will increasingly intersect. Our government needs to catch up with the reality it helped create.

The objective should not be a "military NASA" or a "civilian Space Force". It should be something more ambitious: a unified American space strategy, executed by institutions with different missions but a clearer understanding of where their interests converge, and focused on promoting and enabling America's increasingly vibrant commercial space sector to help win the intensifying competition with China. The bureaucratic walls separating civil and national security space were never impenetrable. We should not pretend they are sacred.

In this new era of intensifying space competition, the countries that integrate their capabilities and sectors most effectively will have an enormous advantage over those that organize themselves around yesterday's distinctions or rigid Communist Party orthodoxy.

America can – and must – win this competition. The stakes could not be higher.

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