



**TO SUCCEED IN SPACE, THE US  
MUST BECOME THE PARTNER OF  
CHOICE**

BY THOM DIXON AND DAVID  
KIRICHENKO

*Thom Dixon ([thom.a.dixon@gmail.com](mailto:thom.a.dixon@gmail.com)) is Vice President for the Australian Institute of International Affairs NSW and a PhD candidate in the Department of Modern History, Politics and International Relations at Macquarie University.*

*David Kirichenko ([davishjr@gmail.com](mailto:davishjr@gmail.com)) is a researcher focused on understanding the strategic nexus between China, Russia, and the United States in global diplomacy and conflict resolution. He is a former Mosaic Taiwan fellow and an alumnus of the Yenching Global Symposium imitative.*

Space remains a [key defense vulnerability](#) for the US, and one that weakens US superiority in all other domains. To mitigate this vulnerability, it is essential that the US fosters a more competitive mindset in space. This will require substantial investment into the newly formed Space Force and much larger investment into NASA. It will also require a shift in the mindset of senior government officials to see space as a domain of national security, as well as an opportunity for economic growth across the short, medium, and long term. The result needs to be a more fluid and robust partnership between the government and private industry, helping to generate innovative solutions for problems the US will encounter in space, today and tomorrow. The result should be a direct linking of competitiveness in space to competitiveness globally, transcending the competition we're seeing unfold in areas such as the Indo-Pacific.

The US military undertakes four key missions if and when needed in times of conflict, in and through

space: superiority, denial, preservation, and assurance. These missions do not have static conditions defining success; rather, success must be considered its own dynamic path constantly requiring adjustment. US decisions today will enable, but also constrain, future strategic and operational maneuverability in the space environment.

[Superiority](#) remains the most difficult mission to define and attain. The US has a long history with the defeat and deter construct in other domains and theaters, and this construct can be applied to space. Yet a key question is whether the defeat and deter framework for success aligns with the structural conditions of the space environment. The use of space to achieve terrestrial political objectives does not yield clear cut conditions for success during times of peace; rather it yields operationally specific conditions dependent on often quite contrasting terrestrial objectives. Superiority in space will likely remain tied to a series of these dynamic conditions, each linked to the terrestrial objectives of highest priority. The Indo-Pacific, and Russian and Chinese competition in space in relation to Indo-Pacific strategic touchpoints, is an essential element of assessing and rating the success of the US space superiority mission.

With this in mind, ability [to deny](#) the space environment to others in times of conflict will remain the yardstick by which space power will be ranked for many years to come. Space denial is ultimately a multi-domain objective but can perhaps be defined as the ability to deny or compromise space-based information to an adversary when they most need it. As a strategic objective, denial must be coupled with preservation, and that involves more than the stewardship and custodianship of the civilian and military space environment. To outmaneuver adversaries in space, the US must regularly demonstrate the capability to field new satellite constellations on demand, in both the civil and military realms. To out-innovate, the US must constantly iterate the hardware and software of these constellations. Today's description of space environment risks as "highly reliant on highly vulnerable assets" only rings true for space powers without redundant satellite constellations ready to proliferate all orbits on demand. It is hard to imagine

how the US could engage in this “on demand space proliferation” without also engaging in large-scale public-private partnerships.

The mission of assurance, however, provides a very different challenge. Within the next five to 10 years, leading space powers, like China, Russia, [Japan](#), and the EU, will be able to provide competing geospatial data to their partners and customers – potentially creating spheres of interest linked to the underpinning space infrastructure of any given geography. If every space power can distribute a daily download of their [own curated version](#) of Earth, then it remains to be seen what will happen to the digital truth of geospatial information. Which country’s geospatial data will the world come to trust and rely on for their most essential services? Or will different truths hold for different geographies. This will be particularly important as geospatial refresh rates continue to decrease between competing commercial geospatial providers.

For the US to out-partner its adversaries in space, it needs to provide high levels of geospatial assurance at both the civil and military level. To out-partner Russia and China, it needs to provide this assurance across all countries within the Indo-Pacific. The US must also assure its partners and allies of its own [space situational awareness](#). If the US were to lose global confidence in its civil and military satellite data, it would seriously undermine its ability to prosecute superiority, denial, and preservation missions in space. Perhaps more importantly, it would seriously undermine the ability of the US to publicly declare the bad actions of adversaries in space. The recent innovations of fake news and deep fake capabilities are only indications of what a Balkanised internet with imperfect information flows can do. The US needs to prepare for the “truth” of the space environment to be just as contested a location.

Tomorrow’s space operations will no doubt share similar characteristics to recent terrestrial information and influence campaigns. A key question in the coming years will be, is Space Force ready for these kinds of operations, and are they prepared to train and equip those who will need to carry them out? The answer to these questions will communicate to all regional actors whether or not the US is ready to defend the Indo-Pacific from non-traditional

operations that seek to undermine confidence in a space-reliant order. That order currently relies on US-owned space assets but there is no guarantee that reliance will continue.

*PacNet commentaries and responses represent the views of the respective authors. Alternative viewpoints are always welcomed and encouraged. Click [here](#) to request a PacNet subscription.*