



Enhancing Military Space Power

USSPACECOM J8 Memo to Industry – FY25 (3rd) Edition, October 2022

STRATEGIC CONTEXT AND THE THREAT

U.S. Space Command (USSPACECOM) conducts operations in, from, and to space to deter conflict, and if necessary, defeat aggression, deliver space combat power for the Joint/Combined force, and defend U.S. vital interests with allies and partners. Space impacts virtually every aspect of our daily lives. Our competitors have demonstrated their intent to hold our space capabilities at risk. Therefore, we must always be prepared to defend our national interests, deter aggression, and support our allies and partners.

The U.S. commercial sector is driving technological advancements that provide our Nation and Allies a distinct advantage over our competitors and their disruptive actions that intentionally challenge our military effectiveness. USSPACECOM will continue to find ways to integrate innovative commercial capabilities into the Command's warfighting architecture in order to fill operational gaps, increase enterprise resiliency, and maintain the strategic advantage.

"Recognizing the right of nations to explore and use outer space, the United States will continue to use space for the security of the Nation and our allies. Should any adversary threaten to endanger the benefits we all derive from space, the United States will employ all elements of national power to deter and, if necessary, prevail over hostile activities in, from, and through space."

National Space Policy of the United States of America, 9 December 2020

COMMERCIAL INTEGRATION

The importance of Commercial integration is highlighted within the various strategic documents, to include: the 2020 National Space Policy (NSP), 2020 Defense Space Strategy (DSS), 2021 USSPACECOM Commander's Strategic Vision, 2022 National Defense Strategy (NDS), and the Unified Command Plan (UCP).

USSPACECOM seeks to supplement its own capabilities through a “whole of society” approach utilizing commercial solutions, as recently documented in the first ever USSPACECOM Commercial Integration Strategy (CIS).



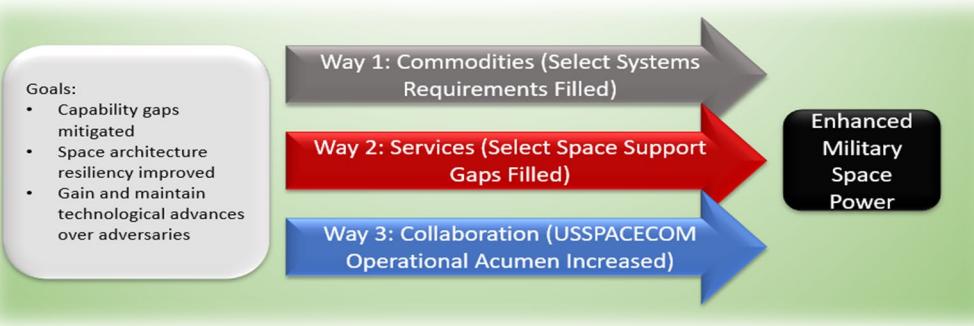
The purpose of the CIS is to establish a framework for how USSPACECOM will collaborate, integrate, and partner with commercial industry; set priorities and synchronize commercial integration efforts; mitigate capability gaps; improve space architecture resiliency; and gain and maintain technological and operational advantages over potential adversaries.

In accordance with the Goldwater-Nichols Act, USSPACECOM depends primarily on the Military Services to organize, train, and equip forces. This includes working directly with industry to deliver warfighting capabilities that support USSPACECOM's mission.

As a result, USSPACECOM actively collaborates with Military Services to leverage the power and innovation of industry, as well as the various Combatant Commands, government agencies, national laboratories, allies, academic partners, and innovative organizations (such as AFWERX, SPACEWERX, and Defense Innovation Unit).

DEFINING THE NEED

While still relevant for the development of exquisite assets, the traditional acquisitions process is often too lengthy to keep up with the rapid pace of space. Therefore, as outlined in our 2022 Commercial Integration Strategy, USSPACECOM employs three strategic ways - Commodities, Services, and Collaboration - to integrate commercial capabilities into the Command.



systems to include artificial intelligence (AI) / machine learning (ML) modeling and simulation systems, space control systems, and satellite communications (SATCOM) satellites and terminals.

Way 2 – Services. The government may own licenses to an output (data, bandwidth, imagery, etc.) but does not own the capabilities or platforms. Where appropriate, USSPACECOM seeks to integrate commercial capabilities, prioritizing: **operational intelligence (OPINTEL), Space Domain Awareness (SDA), COMSATCOM bandwidth, remote sensing, modeling and simulation, AI / ML, quantum computing and encryption, environmental monitoring, and alternate positioning, navigation, and timing (PNT).** Such services can be integrated into existing operations conducted by USSPACECOM.

Way 3 – Collaboration. Commercial partnerships enable information exchanges with industry partners so the warfighter can rapidly and accurately respond to on-orbit crises, fill gaps in the coverage of existing DoD sensors, share lessons learned, improve readiness and resiliency, and provide a comprehensive threat picture for the National Command Authority and other strategic leaders. USSPACECOM benefits from the expertise found throughout the commercial space enterprise and consistently searches new ways to collaborate with industry partners. To synchronize commercial integration efforts across the command, USSPACECOM is working to establish the Combined Joint Commercial Integration Office. This new office (Spring CY23) will be tasked with operationalizing the CIS and bolstering collaborative opportunities between industry, USSPACECOM, and its subordinate units.

USSPACECOM Priorities and Mission Needs include:

- **Integrated Space Fires and Protection**
- **Resilient, Timely Space C2**
- **Enhanced Battlespace Awareness**
- **Space Systems Cyber Defense**
- **Resilient Satellite C2 Architecture**
- **Global Sensor Management: Integrating Sensor Tasking and Data Retrieval**
- **Persistent and Resilient ISR**
- **Operational Intelligence**
- **Modernized, Agile EW Architecture**
- **Electromagnetic Battle Management**

"The space security environment is at a critical juncture. Our imperative is to pursue solutions that deter and overcome any threat to space and space-based capabilities we face. Many of these solutions are found in the partnerships we forge."

**General James H. Dickinson
Commander, United States Space Command**

WE CANNOT DO THIS ALONE

We invite industry to challenge and work with the Department of Defense towards building a truly effective team—with shared interests and goals—to preserve the space domain for the fight today and ensure access to and freedom to operate in space.

To engage with USSPACECOM on topics related to integration of commercial capabilities, please contact us via e-mail at usspacecom.j811.engage@us.af.mil.



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