

USSPACECOM

Commercial Integration Strategy



DEPARTMENT OF DEFENSE

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Success in future conflicts extending into outer space hinges on the seamless coordination of U.S., Allied, and commercial partner space operations. In an era of intense global competition, commercial capabilities, services, and expertise are essential to our integrated space enterprise and provide significant advantages over adversaries. U.S. Space Command's 2024 Commercial Integration Strategy describes how the Command efficiently and effectively integrates commercial solutions and partners to bolster the security of space, Joint and Combined forces, and the Nation.

Refining the Command's 2022 Commercial Integration Strategy, this update aligns with the Department of Defense's Commercial Space Integration Strategy and complements the Services' organize, train, and equip responsibilities. Commercial integration plays a foundational role in advancing the Command's *Strategic Vision 2027*, reinforcing our focus areas: prepare and posture, counter threats, strengthen relationships, and expand our warfighting advantage.

As we implement the strategy, the Command will follow Secretary of Defense's charge to overcome "legacy practices and preconceived notions of how the commercial sector can support national security." It is important that each member of the Command understands the critical importance of commercial integration and the key activities and priorities we will pursue to achieve our goals. Through this integration, our commercial partners will learn how they can best support the Command's mission.

Technological change is accelerating, and our adversaries are not standing still. We must forge strong partnerships with industry to maintain our leadership and secure a lasting advantage in space. By creating an integrated space enterprise with the commercial sector playing a pivotal role, we will be prepared to prevail when needed, and ensure space remains a domain of security and prosperity.

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General, USSF Commander

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Introduction

United States Space Command (USSPACECOM) published its first Commercial Integration Strategy (CIS) in 2022, setting forth a framework for how the Command collaborates, integrates, and partners with industry. Since that publication, the commercial space sector has matured and expanded – improving its ability to support USSPACECOM's mission sets. Additionally, the Department of Defense (DoD) and the United States Space Force (USSF) have published commercial space integration strategies, providing the opportunity for USSPACECOM to update and focus its own commercial integration approach.

Today's operating environment presents numerous concurrent and accelerating challenges across the globe and extending well into the Command's area of responsibility – 100 kilometers above mean sea level and beyond. A growing threat nexus of strategic competitors, namely the People's Republic of China (PRC) and Russia, threaten the space domain, national security, and USSPACECOM's ability to safeguard and secure national interests and those of Allies and Partners. The proliferation of government, civil, and commercial space actors contribute to an increasingly competitive, congested, and contested space domain.

Given these complexities, our government cannot secure the space domain unilaterally. Space is a team effort and partnership with the rapidly expanding commercial space sector is not only necessary, but one of the Command's key asymmetric advantages. The innovative capabilities, expertise, and efficiencies of the commercial sector present opportunities for USSPACECOM to mitigate capability gaps, sustain space operations and improve resilience, and expand technological advantages over potential adversaries.

To fully seize these opportunities, this strategy addresses how, when, and to what extent the Command effectively engages with commercial industry and incorporates commercial solutions into plans, exercises, and operations. This strategy adopts an approach across three distinct ways:

- 1. Identify & Advocate: Partner with the DoD, Services, and interagency to prioritize and advocate commercial capabilities to meet USSPACECOM requirements.
- 2. Incorporate & Operationalize: Integrate and accept proven hybrid U.S., Allied, Partner, and commercial formations into operational architectures and plans to support operations and enhance interoperability for mission success.
- 3. Inform & Protect: Implement information sharing protocols and space domain awareness measures to alert commercial entities of threats and share Tactics, Techniques, and Procedures (TTPs).

The approach synchronizes commercial integration priorities and efforts across the Command and with the broader national security space enterprise, while mitigating risks and supporting the organize, train, and equip responsibilities of the Services. Ultimately, successful commercial integration builds combat-credible integrated space power and contributes to a safe, secure, and sustainable space domain.

This strategy aligns with and supports U.S. national policy and strategies to include the DoD Commercial Space Integration Strategy (2024), USSF Commercial Space Strategy (2024), National Military Strategy (2022), National Defense Strategy (2022), National Security Strategy (2022), United States Space Priorities Framework (2021), DoD Tenet Derived Responsible Behaviors in Space (2023), and National Space Policy (2020).



Context

The commercial space sector continues to expand with numerous startups and established companies receiving substantial government and private investment. New launch systems, satellite constellations, and space exploration missions benefit from this influx of funding. Satellite internet services have expanded global high-speed internet access, bridging the digital divide in remote and underserved regions. Earth observation and remote sensing capabilities have also seen significant enhancements, with private companies deploying advanced satellite constellations that provide high-resolution imagery and real-time data for applications in agriculture, climate monitoring, and disaster response.

Commercial space companies have also played an increasingly vital role in military operations, providing critical support through satellite communications, reconnaissance, space domain awareness, and launch capabilities. Throughout the Russia-Ukraine war, commercial satellite constellations proved instrumental in maintaining communication channels and providing timely intelligence to military forces. Emerging commercial technologies and services demonstrate the potential to quickly deploy, maneuver, and replace satellites to enhance the resilience and responsiveness of U.S. space architectures. Commercial advancements in Artificial Intelligence and Machine Learning (Al/ML) have the promise to automate routine space operations tasks and enable rapid decision making throughout all phases of conflict.

Meanwhile, our strategic competitors have prioritized their military space and counterspace capabilities to deny and target U.S., Allied, and Partner capabilities and forces. Both the PRC and Russia have on-orbit, non-destructive capabilities for potential use to disrupt the space systems of the United States and its Allies and Partners. They have also deployed kinetic counterspace capabilities that can target space systems in all orbital regimes. Since its invasion in 2022, Russia's actions in Ukraine demonstrate its readiness to use counterspace and cyber capabilities against military and commercial space systems to achieve its objectives.

A collaborative approach to ensure commercial integration efforts are synchronized and complementary is necessary for outcompeting and deterring potential adversaries. The DoD's Commercial Space Integration Strategy establishes the foundational principles, priorities, and approaches to guide Department-wide commercial integration efforts.¹ The strategy also categorizes the 13 national security space mission areas into government primary mission areas, hybrid mission areas, and commercial primary mission areas but does not preclude "integrating commercial space solutions as opportunities arise for any mission area." USSPACECOM's CIS aligns with the Department's guidance and applies it to the Command's Unified Command Plan (UCP) and Title 10 responsibilities.

¹ The DoD defines commercial integration as "the incorporation of commercial space solutions into U.S. defense planning, operations, missions, and architectures."

² DoD Commercial Space Integration Strategy, Department of Defense, 2024, p. 5.



Approach

USSPACECOM has both supported and supporting roles for integrating commercial capabilities within the national security space ecosystem. Since the first CIS, the Command has advanced in integrating commercial partners and capabilities into standard command activities and processes. Most notably, USSPACECOM, the National Reconnaissance Office (NRO), and National Geospatial Intelligence Agency (NGA) signed a Commercial Space Protection Tri-Seal Strategic Framework to define collaboration on protecting commercial remote sensing space assets vital to intelligence collection, and S4S has expanded both the Commercial Integration Cell (CIC) and Joint Commercial Operations (JCO) Cell, adding international contributions that leverage Allied commercial capabilities.

This updated strategy builds on these successes to further strengthen our commercial partnerships. USSPACECOM's strategic approach to commercial integration pursues four goals, accomplished through three ways. These ways span directorate and component responsibilities and complement the Services' functions to acquire and sustain military space systems. The strategy also highlights the Command's activities and priorities for each strategic way. Activities describe current efforts, while initiatives highlight future areas of emphasis. The strategy takes a synchronized space enterprise approach to commercial integration to achieve resilient and combat-credible integrated space power.



Way 1: Identify & Advocate

USSPACECOM does not select, fund, or sustain military space programs of record. Instead, the Command will identify requirements for commercial capabilities and technologies that fill Campaign Plan and Operational Plan (OPLAN) identified gaps through operational approaches on a one-to-three-year time horizon. The Command will coordinate with the Office of the Secretary of Defense (OSD), the Services, the U.S. Intelligence Community, and Allies and Partners to prioritize, evaluate, and vet commercial solutions.

To support longer term institutional resourcing decisions, USSPACECOM will advocate proven and novel technologies that enable the Command to fulfill its mission requirements, some of which may be available commercially. This advocacy takes the form of operational requirements and priorities transparently communicated with companies and the Services through the mechanisms listed below and are led by the designated Offices of Primary Responsibility (OPRs).

Current Activities:

- Request Services accelerate fielding specific commercial capabilities through USSPACECOM's Integrated Priority List (IPL) and Science & Technology (S&T) IPL. [OPR: J8]
- Facilitate and attend commercial industry conferences, symposiums, reverse industry days, and S&T summits.
 USSPACECOM uses these engagements to publicly communicate the Command's operational needs and requirements and shape commercial research and development initiatives. [OPR J8]
- Identify, analyze, and sponsor the development of leading-edge S&T capabilities to address joint warfighter
 priorities and operational gaps, and establish a process to facilitate the dissemination of information on
 these capabilities. USSPACECOM participates in DoD research and experimentation programs such as the
 Defense Innovation Accelerator, Rapid Defense Experimentation Reserve, and the Coalition Warfare Program.
 [OPR: J8]
- With Service support, leverage additional funding sources and partner with DoD innovation units to sponsor emerging and innovative commercial capabilities through Small Business Innovation Research, Small Business Technology Transfer, and Strategic / Tactical Funding Increase programs. [OPR: J8]

Future Initiatives:

- Identify opportunities to leverage U.S. and non-U.S. commercial space contributions (commodities and services) in coordination with the Services, with more detailed priorities published in the annual Memo to Industry. USSPACECOM priorities for commercial capabilities nest with the DoD space mission areas. [OPR: J8]
- Evaluate AI/ML, cyber defense, quantum computing, and other advanced technologies that will greatly impact the future battlespace, increase decision-making speed, and reduce manually intensive staff functions. [OPR: J8]
- Partner with DoD innovation units and industry to sponsor prototypes and progressively maturing capability demonstrations, resulting in a leave-behind system for military use and Service capability acquisition and sustainment. [OPR: J8]
 - Work with Services to implement an expedited process to accept, integrate, and operate private sector-developed prototypes and USSPACECOM experimental commitments.
- Conduct more events at classified levels with commercial industry to develop solutions to USSPACECOM requirements. [OPR: J8]
- Advocate Service funding to identify, implement, and integrate commercial space capabilities that help achieve
 operational objectives. [OPR: J8]

Way 2: Incorporate & Operationalize

USSPACECOM will seamlessly incorporate commercial partners and capabilities into globally integrated activities to enhance interoperability for mission success. The Command seeks innovative ways to access commercial data and services across the interagency and between Allies and Partners to achieve unified action.

Successful operational and technical integration will improve resilience by diversifying supply chains and the increasing variety of solutions available to address mission requirements. USSPACECOM will operationalize commercial capabilities for subordinate units through deliberate planning, data sharing agreements, and joint and combined exercises. These activities will enable integrated space enterprise campaigning and operations across the competition continuum.

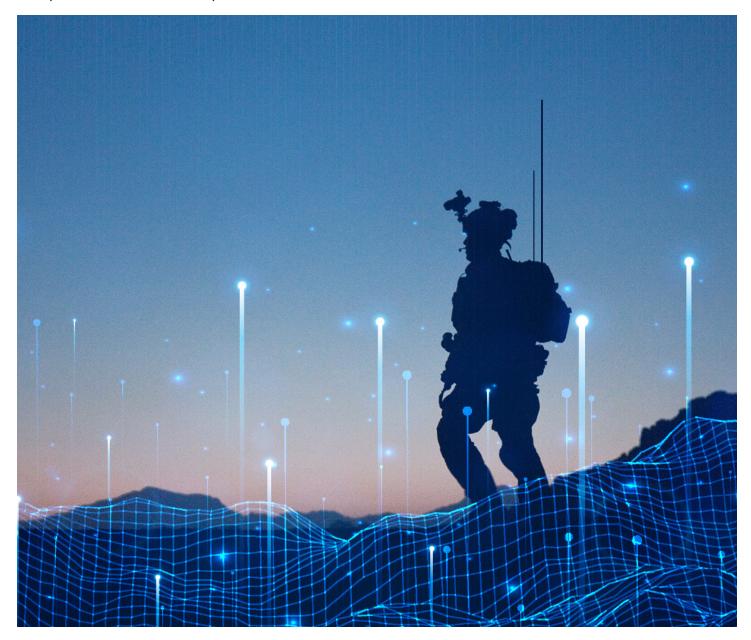
Current Activities:

Provide operational direction for commercial activities through orders to Functional and Service Component
Commands. The Combined Joint Force Space Component Commander (CJFSCC) delivers space-enabled
capabilities to the Joint Force by synchronizing, planning, integrating, enabling, employing, and assessing
operations and activities. The CJFSCC synchronizes the CIC and JCO's space operations via the component's
chief commercial capability integrator, the Commercial Integration Office (CIO). [OPR: J3]

- The CIC delivers optimized space effects across all dimensions by synchronizing actions between
 government and commercial mission partners and sharing operationally relevant information.
 Situated within the Combined Space Operations Center, the CIC vision boasts a partnership of mutual
 trust that delivers an operational advantage ensuring freedom of use and resilient space operations
 to mitigate mission impacts.
- The JCO leverages the commercial space data marketplace in support of Combatant Command operational missions. The CJFSCC synchronizes the JCO's space operations, including Allies and Partners, as part of the National Space Defense Center. USSF Space Systems Command purchases data and provides data, analytics, and infrastructure support in concert with the Air Force Research Laboratory. The JCO is more than a place for integration and initiative, it is also a hub for innovation that must be fostered and cultivated.
- Incorporate commercial partners and capabilities into USSPACECOM plans, OPERATION OLYMPIC DEFENDER (OOD), and other security cooperation activities with Allies. [OPR: J5]
 - The USSPACECOM Campaign Plan sets priorities, focuses efforts, and guides execution of the Command's operations, activities, and investments. The plan considers and incorporates commercial partners and capabilities throughout its objectives, tasks, and effects to enhance military spacepower and enable force projection for the DoD.
 - The USSPACECOM OPLAN provides direction through all levels of conflict to achieve national interests, deter aggression, and defeat adversaries. The OPLAN incorporates commercial partners, provides USSPACECOM additional options, and expands the overall strength of the U.S. space enterprise during times of crisis.
 - OOD is a multinational effort to integrate space operations, improve mission assurance, enhance resilience, and synchronize efforts among its members. Each participating nation determines their OOD contributions.
- Use Operational Contract Support (OCS) to augment subordinate units with commercial capabilities. [OPR: J4]
 - "OCS is the process of planning for and obtaining supplies, services, and construction from commercial sources in support of Combatant Commander-directed operations, as well as Combatant Commander-directed single-Service activities, regardless of designation as a formal contingency operation or not."
 OCS allows USSPACECOM to contract a full range of services with commercial entities to fill gaps during contingencies. By leveraging the appropriate Service Component to manage and fund the commercial contracts, USSPACECOM ensures innovative technology and space support availability to the Joint Force.
- Emphasize cybersecurity and risk management with all commercial vendors to ensure controlled access to commercial services. [OPR: J6]
- Integrate commercial data analytics, including AI/ML, to more efficiently, effectively, and quickly understand the operational environment and make decisions. **[OPR: J6]**
- Incorporate commercial partners in exercises and wargames as a deliberate part of campaign design, planning
 efforts, execution, and lessons learned/data collection processes, to include collaboration with the CIC, JCO,
 and commercial space-based capability providers. [OPR: J7]
- Provide enterprise-wide awareness on USSPACECOM commercial activities through the J8-led Commercial Integration Working Group (CIWG). Spark initiatives and innovation through the CIWG to integrate commercial capabilities in pursuit of campaign objectives. [OPR: J8]

Future Initiatives:

- In coordination with the CIO, develop a resourcing and operational framework that creates a roadmap for CIC and JCO expansion to include new partners and mission areas. [OPR: S4S]
 - Submit and formalize programmed funding requests that broaden and deepen collaboration with current and future commercial partners.
- Continue to encourage the JCO's innovative culture. Seek to replicate innovation in other areas as appropriate. [OPR: S4S]
- Enhance commercial space service exchanges and interoperability with Allies and Partners. [OPR J5]
- Strengthen coordination and collaboration with Allied CICs, particularly those of OOD partner nations.
 [OPR J5]
- Maximize commercial partner participation in exercises to refine TTPs and plans. [OPR: J7]
 - Develop guidelines and methods, along with a rigorous legal review and vetting process, to enhance commercial participation in wargames and exercises and address contracting and unfair advantage concerns.
- Develop prioritized requirements to support the USSF Commercial Augmentation Space Reserve (CASR) framework, providing additional mechanisms for integrating commercial partners within USSPACECOM operations across the competition continuum. [OPR: J8]



Way 3: Inform & Protect

USSPACECOM will implement information sharing protocols, agreements, and space domain awareness measures to provide threat alerts and mitigation options to reduce risks and ensure the resilience of U.S., Allied, and Partner space-enabling infrastructure. Information sharing agreements and memorandums establish mechanisms with commercial entities, enhancing space domain awareness to resolve anomalies and counter hostile acts.

The UCP directs USSPACECOM to protect and defend "U.S. and, as directed, allied, partner, and critical commercial space operational capabilities within the AOR [area of responsibility]." When directed, USSPACECOM will protect prioritized commercial space assets to ensure the Joint and Combined Force and the Nation have access to critical space capabilities throughout all phases of conflict.

Commercial entities operating on behalf of the U.S. Government will reinforce global norms in the space domain by adhering to the Tenets of Responsible Behavior in Space. Responsible conduct in space enhances domain stability by setting and reinforcing behavioral norms.

Current Activities:

- Support threat information sharing by executing the Commercial Space Protection Tri-Seal Agreement with the NRO and NGA for contracted commercial electro-optical and synthetic aperture radar partners. This proof of concept using existing authorities will inform a broader commercial information sharing framework.
 [OPR: S4S]
- Initiate and manage Space Situational Awareness (SSA) agreements between DoD and commercial partners to facilitate information sharing. **[OPR: J5]**
- Assess, with commercial partners, the inclusion of on-orbit, network, and terrestrial segments onto the USSPACECOM prioritized Critical Asset List (pCAL). [OPR: J3]

Future Initiatives:

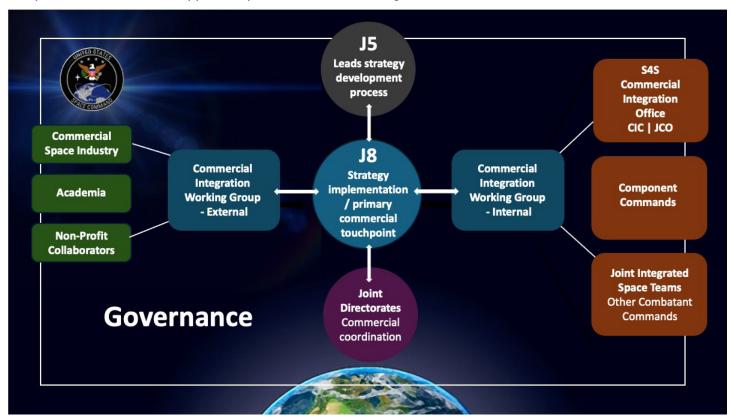
- Advocate the Office of the Director of National Intelligence for national policy and guidance on threat information sharing with commercial partners. [OPR: J2]
- In coordination with the interagency, develop requirements and concept of operations for commercial on-orbit protection and defense, and coordinate with other Combatant Commands for network and terrestrial segment protection. [OPR: J3]
 - Incorporate the pCAL into future development of the Command Defense Design and Campaign Plan/ OPLAN. [OPR: J3]
- Institute policies and procedures and sponsor secure areas and classified networks to enable sharing of space and cyber threat information at multiple classification levels with commercial mission partners. [OPR: J3]
- Facilitate the transition of applicable SSA agreements to the Office of Space Commerce within the Department
 of Commerce, beginning with locational data before moving to advanced services; DoD will maintain focus on
 space domain awareness agreements related to U.S. national security interests, to include military-to-military
 relationships. [OPR: J5]

⁴ Unified Command Plan, 25 April 2023, p. 15



Governance

Establishing a governance process will ensure continuous application of USSPACECOM's commercial approach. This governance process will increase the organization's understanding of activities and mechanisms to manage commercial capabilities and demonstrate how the Command's commercial integration contributes to more complete awareness and supports improved decision-making.



The J5 will revisit this strategy, as directed, to align with the Department's approach, synchronize with Service strategies, and achieve USSPACECOM objectives. Directorates will track and report on their respective objectives and key results (OKRs) – activities and initiatives – in accordance with the Command's Strategic Plan. These OKRs, along with OSD and Joint Staff commercial space integration processes, enable continuous strategy assessment.

The Command communicates its priorities through an annual, J8-produced, Memo to Industry. This memo provides important updates from the Command and enables industry to identify opportunities to connect their products and services with the Command's top ten requirements.

The J8 facilitates strategy implementation through the CIWG, which provides enterprise-wide awareness on USSPACECOM commercial activities and sparks initiatives improving the Command's efforts to integrate commercial capabilities in pursuit of campaign objectives. The J8 coordinates two CIWG sessions – one internal and one external. The internal CIWG is a collaborative touchpoint with USSPACECOM stakeholders including directorates, components, operations centers, and DoD organizations. The external CIWG communicates USSPACECOM activities and priorities to the greater space community and industry. The J8 will review and update the CIWG Charter to reflect changes to the strategy.

Risk and Mitigation Measures

Risk is an inherent part of any military endeavor, and commercial integration is no exception. Deliberate risk analysis empowers USSPACECOM leaders to make risk-informed decisions.

Overreliance: Excessive dependence on single-source solutions opens the doors to two risks — that an adversary could deny a crucial commercial capability, and that perceptions of U.S. actions may cause commercial companies to break contractual obligations and cease providing services to the U.S. Government. USSPACECOM will mitigate this risk through adherence to the DoD Commercial Space Integration Strategy's principle of balance and by supporting the Services' efforts to institute contractual language that ensures commercial vendor commitment to support DoD operations across the competition continuum.

Overextension: The proliferation of commercial solutions in national security space architectures could result in an inability for USSPACECOM to protect and defend all capabilities. To mitigate this risk, the Command develops and maintains prioritized critical asset and defended asset lists for given scenarios. This ensures USSPACECOM deliberately considers what the Command must protect, which assets provide sufficient military value to protect, at what point there are insufficient resources to protect, and how to inform our commercial partners.

Immature Technologies: Technology demonstrations can make integrating commercial solutions appear an easy answer to a Command keen to address its challenges and close its gaps. However, commercial products and services do not always perform at the level to which their creators would like. To mitigate this risk, the Command will perform due diligence in evaluating technology readiness levels and prototypes.

Market-based Solutions: The commercial market is inherently risky, and the shareholder value maximization motives of its actors do not always align with the U.S. Government's objectives. Vetting and monitoring is paramount to protect capabilities from business failure, acquisition, or change of ownership. Vendor threat mitigation efforts identify and mitigate risks associated with companies that oppose the interests of the United States, our Allies, or our Partners, or pose a threat to national security.

Security Vulnerabilities: Physical and cyber security risks are inherent in both commercially developed and government purpose-built systems. To mitigate these risks, USSPACECOM's requirements documents will explicitly communicate security needs, and the Command and its commercial partners will share best practices to collectively address vulnerabilities.

USSPACECOM will continue to identify, assess, and mitigate risks associated with commercial integration. The Command accepts residual and anticipated risk because of the significant and asymmetric advantages commercial space capabilities provide to the space enterprise and national security.



Conclusion

USSPACECOM is responsible for ensuring the availability of space capabilities to the Nation, the Joint Force, and its Allies, and for protecting and defending these assets. The commercial space sector has a critical role in realizing this responsibility and provides the United States a clear asymmetric advantage against global adversaries who are increasingly active in the space domain.

As laid out in this strategy, USSPACECOM will identify and advocate prioritized commercial novel and proven capabilities to efficiently and effectively fill identified gaps that meet operational requirements.

The Command will incorporate these capabilities within its space architectures and operationalize commercial capabilities for subordinate units through deliberate planning, data sharing agreements, and joint and combined exercises to support operations and enhance interoperability for mission success.

Finally, USSPACECOM will implement information sharing agreements and protocols to establish mechanisms with commercial entities, enhancing space domain awareness to resolve anomalies and counter hostile acts. Command-developed options and processes protect prioritized commercial space assets, when directed, to ensure continued access to critical capabilities.

Through unity of effort, the Command's pursuit of these ways will optimize integration and innovation. With its commercial partners, USSPACECOM will provide a safe, secure, stable, and sustainable space domain.



Terms and Definitions

Air Force Research Laboratory (AFRL) – the primary scientific research and development center for the Department of the Air Force (DAF). AFRL plays an integral role in leading the discovery, development, and integration of affordable warfighting technologies for our air, space, and cyberspace force. AFRL provides a diverse portfolio of science and technology ranging from fundamental to advanced research and technology development.

Campaign – a series of related operations aimed at achieving strategic and operational objectives within a given time and space. (DoD Dictionary. Source: JP 5-0)

Campaign Plan — a joint operation plan for a series of related major operations aimed at achieving strategic or operational objectives within a given time and space. (DoD Dictionary. Source: JP 5-0)

Coalition Warfare Program (CWP) — leverages U.S. and foreign investments to conduct cooperative research, development, test, and evaluation projects with foreign partners and supports DoD's goals. Through an annual, competitive process, CWP selects projects that increase coalition capabilities in support of operational, technological, or political objectives. CWP projects enable project teams to move a technology into the next stage of development or prepare for transition to operational forces.

Combined Joint Force Space Component Commander (CJFSCC) – the S4S Commander, who possesses joint authorities conferred to the position, conducts joint space operations on behalf of USSPACECOM Commander.

Combined Space Operations Center (CSpOC) — located at Vandenberg Space Force Base, California, under the tactical control of the Combined Joint Force Space Component Commander (CJFSCC) and executes the operational command and control of space forces to achieve theater and global objectives; continuously coordinates, plans, integrates, synchronizes, and executes space operations; provides tailored space effects on demand to support combatant commanders; and accomplishes national security objectives with the right effect at the right place and the right time.

Commercial Augmentation Space Reserve (CASR) Framework — ensures DoD has access to commercial space capabilities throughout the competition continuum through pre-negotiated contractual agreements which would be activated in times of crisis or conflict.

Commercial Integration – the incorporation of commercial space solutions into U.S. defense planning, operations, missions, and architectures.

Commercial Integration Cell (CIC) – delivers optimized space effects across all dimensions by synchronizing actions between government & commercial mission partners and sharing operationally relevant information. The CIC vision boasts a partnership of mutual trust that delivers an operational advantage ensuring freedom of use and resilient space operations.

Commercial Integration Office (CIO) – focuses USSPACECOM and USSF collaboration with Allies, Partners, and commercial mission partners in Service Support Elements to augment space system capacities, supplement capability gaps, improve technological solutions, and when necessary to support the fight and win.

Defense Innovation Acceleration (DIA) — is a strategic initiative led by the Office of the Secretary of Defense to accelerate innovative capability prototypes that address cross-Service/cross-domain military needs within a 24-to-36-month timeframe. The program focuses on providing prototype systems in support of multi-component experimentation, informing programs of record, and validating requirements.

Integrated Priority List (IPL) — an annual document which identifies capability gaps that may adversely affect the Command's mission, prioritized across Service and functional lines. In partnership with the Services, the Command may then associate technology transition projects, that directly support mature capability development, with the highest priority gaps. The resulting internal planning document is called the Science and Technology Integrated Priority List. IPLs are the official submissions of prioritized capability gaps to the Joint Staff for review.

Joint Commercial Operations (JCO) Cell – a function of USSPACECOM that uses unclassified information and services provided by commercial vendors for space domain awareness operations. Ally and Partner nations participate in JCO combined operations under the authority of OOD.

OPERATION OLYMPIC DEFENDER (OOD) — a multinational effort intended to optimize space operations, improve mission assurance, enhance resilience, and synchronize efforts among current participating nations: Australia, Canada, France, Germany, New Zealand, the United Kingdom, and the United States. The purpose of OOD is to strengthen like-minded nations' abilities to deter hostile acts in space, strengthen deterrence against hostile actors, and reduce the spread of debris orbiting the earth. OOD provides the strategic framework within which the U.S. DoD and OOD participating nations will operate, secure, and defend the space domain, as well a mechanism for combined space operations.

Operation Plan (OPLAN) – a complete and detailed plan containing a full description of the concept of operations, all annexes applicable to the plan, and a time-phased force and deployment list. (DoD Dictionary. Source: JP 5-0)

Rapid Defense Experimentation Reserve (RDER) – a Secretary of Defense-established initiative to expand multi-DoD component experimentation in a structured, multi-year campaign of learning to accelerate new capabilities to fill critical joint warfighting capability gaps. RDER facilitates the Department's efforts to introduce capabilities matched to joint warfighting concepts, transitioning these systems and approaches more quickly.

Science and Technology IPL (STIPL) – defines the technology-based capabilities needed from the defense research and development enterprise, including international cooperative science and technology.

Small Business Innovation Research (SBIR) – a program enabling small businesses to explore their technological potential and provide the incentive to profit from its commercialization by partnering with Space Force units.

Small Business Technology Transfer (STTR) – as SBIR program's counterpart, STTR offers an opportunity for university teams (undergraduate, graduate, doctorate, post-doctorate, and faculty/staff) who have formed companies and partnered with a university or non-profit entrepreneurial development organizations to do business with the USSF.

Space Systems Command (SSC) – the USSF field command responsible for acquiring and delivering resilient war fighting capabilities to protect American strategic advantage in, from, and to space. SSC manages the space acquisition budget for the DoD and works in partnership with joint forces, industry, government agencies, academic, and Allied organizations to accelerate innovation and outpace emerging threats.

Strategic Funding Increase (STATFI) — contracts ranging from \$3 million to \$15 million over 48 months, designed to bridge the "Valley of Death" between SBIR/STTR Phase II efforts and Phase III scaling efforts, facilitating delivery of strategic capabilities for the DAF. The program initiates relationships between the U.S. Air Force and Space Force end-users and acquisition professionals, private-sector innovators, and investors. STRATFI require various levels of

matching funding and avenues for defense and/or industry matching, depending on the program sought.

Tactical Funding Increase (TACFI) – contract awards ranging between \$375,000 and \$1.9 million over 24 months, designed to bridge the "Valley of Death" between SBIR/STTR Phase II efforts and Phase III scaling efforts, facilitating delivery of strategic capabilities for the DAF. The program initiates relationships between the U.S. Air Force and Space Force end-users and acquisition professionals, private-sector innovators, and investors. TACFI require various levels of matching funding and avenues for defense and/or industry matching, depending on the program sought.

Tenets of Responsible Behavior in Space – the five tenets proposed by the USSPACECOM Commander, approved by the Secretary of Defense in July 2021, and updated in February 2023. These include, "operate in, from, to, and through space with due regard to others and in a professional manner; limit the generation of long-lived debris; avoid the creation of harmful interference; maintain safe separation and safe trajectory; and communicate and make notifications to enhance the safety and stability of the domain."

