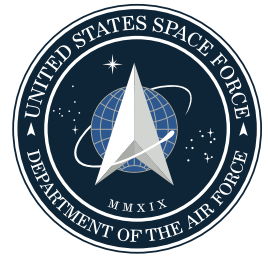


SPACE FORCE VECTOR



2025



FOREWORD

Guardians,

When our Service was established in December 2019, we were charged with forging a service purpose-built to secure our Nation's interests in, from, and to space. We have accomplished so much since then, but our transformation remains incomplete.

As we grow to meet the demands of a rapidly changing domain, it occasionally becomes necessary to take stock of our journey: where we have been, where we are today, and where we are going. So, rather than a plan or a strategy, I felt it was important to provide our Guardians with a “vector” for what I consider to be the most essential elements of our work. Make no mistake, I chose the word vector deliberately. While the Space Force will continue to evolve as new technologies and missions emerge, one thing remains constant: our pursuit and attainment of space superiority. Our vector defines the direction and magnitude in which we must proceed. Within this document, you will find insight into the way the Space Force conducts the four service-level activities of Force Design, Force Development, Force Generation, and Force Employment to achieve our formative purpose, Space Superiority. They are the primary levers through which we will transform into a warfighting service.

Our vector is realized through the Service's doctrine documents, strategies, and concepts, to include the [Space Force Doctrine Document-1](#), [Space Warfighting Framework](#), [Commercial Space Strategy](#), [International Partnership Strategy](#), and soon-to-be-published [Objective Force](#). Likewise, this document highlights [Competitive Endurance](#), our theory of success around which Space Force activities are organized to achieve Space Superiority. In short, this document connects the puzzle pieces, the numerous initiatives organized around our service-level activities, to convey the complete picture: a service purpose-built to secure our Nation's interests in, from, and to space.

If every Guardian can internalize the concepts contained herein, I am confident that we will accelerate our transformation into a warfighting service; a Service that embodies warrior ethos, outpaces our adversaries, and protects our Joint Force and our Nation from space-enabled attack. We must act quickly and with urgency, but the difference between haste and efficiency is understanding. Guardians must know why they do things before they can truly excel.

I encourage all Guardians to consider the information compiled here and to discuss it within their formations. We owe it to ourselves, the Joint Force, and the Nation to finish what we started—our way of life depends on it.

Semper Supra! ▲

B. Chance Saltzman, Gen, USSF
Chief of Space Operations

OUR FORMATIVE PURPOSE

Preserving U.S. freedom of action in an increasingly contested space domain requires a military force specifically organized, trained, and equipped for that purpose. This simple observation motivated the establishment of our Service. While the development and integration of space capabilities has tremendously enhanced the efficiency and effectiveness of the Joint Force, it has also created a strategic dependence: the U.S. military is sized and built around the assumption that spacepower will be available when needed. In the past, this has been achieved without the need to contest and control the domain. However, that is no longer the case.

Today, the Joint Force depends on space capabilities to project power and provide protection from space-enabled attack to achieve battlefield objectives. Military services are traditionally organized to contest and control specific domains with military force. To that end, the Space Force was established to gain and maintain superiority in the space domain on behalf of the Joint Force and our Nation. Contesting a physical domain is a complex endeavor—it takes a purpose-built service to do so effectively. Specifically, to achieve domain superiority, a military force requires domain-centric doctrine, force elements, tactics, systems, equipment, maintenance, sustainment, intelligence, command and control, testing, training, and education. It also requires servicemembers who have a deep understanding of military operations specific to their domain.

For space in particular, this is a difficult task given the extreme speeds, distances, technical challenges, and unique environmental conditions involved. The Space Force, like all services, must therefore recruit the right kind of talent and build the right expertise through career-long development unapologetically focused on the application of military force in its domain. This specialization allows the Space Force to cultivate the skills, experience, and mindset required to effectively contest and control the space domain in the face of a thinking adversary. In short, the Space Force must align its people, its institutions, and its resources in the singular pursuit of domain control, cementing Space Superiority as the formative purpose of the Space Force.

The transformation of the Space Force is not unlike an effort to convert a Merchant Marine formation into a warfighting Navy. Taking advantage of a benign environment to efficiently deliver services is important, but when that environment becomes contested, the protection of those services requires an organization capable of securing the domain. Today, space is an increasingly contested warfighting domain and thus the Space Force must transform from a service provider into a highly skilled warfighting organization.

Once achieved, Space Superiority enables domain access and exploitation, ensuring the Space Force can continue to deliver the game-changing capabilities that make space so integral to the modern way of war and the Joint Force's success. While this philosophy is core to our Service, we have never conducted a war in space and therefore lack the clarity that comes from combat experience. For this reason, the Space Force must remain adaptable, intent on assessing and evolving alongside our domain. While the details may shift, we know the direction in which we must travel and the velocity along our course. Ultimately, our vector is to embody our transformation into a warfighting service, build combat readiness within each mission area, and design, develop, and employ the capabilities we need to secure Space Superiority for the Joint Force and our Nation. ▲

OUR THEORY OF SUCCESS

To organize our efforts, the Space Force has published a theory of success, which we call *Competitive Endurance*. The logic of *Competitive Endurance* aggregates assumptions, guiding principles, and conclusions to describe how the Space Force will gain and maintain space superiority. It is intended to align Guardians with shared purpose and common understanding of the Service's larger strategy. Our Theory of Success is a guide that helps identify the equipment we need to buy, the concepts we need to develop, the tactics we need to validate, and the skills we need to train.

The goal of *Competitive Endurance* is to ensure our ability to achieve Space Superiority while also maintaining the safety, security, and long-term sustainability of the space domain. We will achieve this ideal end state through three core tenets:

- 1.) **Avoid Operational Surprise.** Space forces must be able to detect and identify any perturbations in the operational environment to maintain our strategic advantage. This requires a space domain awareness enterprise capable of executing surveillance and reconnaissance operations, generating intelligence of adversary force disposition, capabilities, and intent, and leveraging cooperative reporting to enable timely and actionable decision making.
- 2.) **Deny First-Mover Advantage.** At present, space is an offense-dominant domain, incentivizing unwarned attacks. To negate this, space forces must make first strike in space impractical and self-defeating, discouraging such action from the outset. This requires resilient and disaggregated architectures that can deter, defeat, absorb, and quickly recover from enemy action.
- 3.) **Responsible Counterspace Campaigning.** While the first two tenets are necessary to protect space capability and enable power projection, space forces must also be able to deny adversary spacepower to prevent space-enabled attack against the Joint Force. To that end, space forces must conduct military activities in space that can disrupt, degrade, or destroy enemy space capability. Critically, this must be achieved without generating hazardous debris that might imperil our own space operations.

Through these three tenets, the Space Force, in collaboration with our allies and partners, can guard against adversary counterspace activities while denying them the strategic advantage, deterring the hostile use of spacepower. Space is inherently global and the consequences from a conflict that extends into space are significant and numerous. To that end, we must strike a careful balance of power projection in space – ensuring that our adversaries are neither desperate enough, nor emboldened enough, to pursue destructive combat operations in space. Guardians must therefore cultivate the capability and fortitude to endure a long-term state of competition, which is vastly preferable to crisis or conflict in the domain. ▲

SERVICE-LEVEL ACTIVITIES

To achieve our formative purpose and implement *Competitive Endurance*, everything we do—doctrine, organization, training, materiel acquisitions and sustainment, leader development, personnel management, facilities, and policy (DOTMLPF-P)—must be purpose-built to contest and control the space domain. The Space Force will not execute in isolation—joint, international, commercial, and industry partners are critical to maintaining our space advantage.

Derived from the core tenets of *Competitive Endurance*, our priorities are to deliver comprehensive domain awareness, deploy resilient mission architectures, and develop the capacity to hold an adversary's space assets at risk. We will assess our strategic capabilities in comparison with our enemies and adversaries, measure our current capabilities against assumed strategic risk, and provide technological and operational solutions to bridge those gaps. This will enable us to sustain a competitive advantage through Force Design, Force Development, and Force Employment. The Space Force also emphasizes Force Generation, an element specific to how we generate and sustain combat-ready forces through our unique Space Force model tailored for employed-in-place forces. Old ways of doing business will not produce the results we need, and we must therefore optimize the design, development, generation, and employment of combat-ready forces. ▲

FORCE DESIGN

Force Design is the service-level activity by which the Space Force determines the *force we need*. By forecasting the operational environment five to fifteen years into the future, the Force Design process leverages concept development, wargaming, experimentation, exercises, and mission analysis to inform new requirements, architectures, and operational concepts. The Space Force's output of the Force Design process is the *Objective Force*—the idealized capabilities, capacity, and force structure required for Guardians to accomplish their missions and defeat a thinking adversary over the next three Future Years Defense Programs (FYDPs). This includes all the things required for the force to be effective across the DOTMLPF-P planning process, such as manpower, simulators, test ranges, networks, and other materiel and non-materiel combat support. The Objective Force provides a living reference point for resourcing and planning, and it articulates the Space Force's intent and needs to our allies, international, civil, and commercial partners. Integrated by design, we will include key allies and international partners from the start of the force design process, leveraging their expertise and unique perspectives in concept development, wargaming, and capability area design. Our Objective Force will account for the space capabilities that our allies and international partners can bring to bear as well as the commercial capabilities and services that we can leverage to meet requirements. The difference between the *force we need* (i.e., the Objective Force) and the *force we have* (i.e., the Fielded Force) represents operational risk.

The Space Force will build a comprehensive Force Design process to ensure our long-term advantage in space. Three primary units will work across the enterprise, with tight feedback loops among them. The Concepts and Technology Delta will forecast the future operating environment, to include relevant technology and threats, and will propose operational concepts that achieve

service objectives. The Wargaming Delta will refine and validate these concepts with modeling, simulation, and experimentation. The Space Warfare Analysis Center will conduct detailed mission analysis on validated concepts, ultimately quantifying the forces required to constitute the Objective Force.

While the Objective Force articulates the force we believe the Space Force will need to be effective 15 years into the future, that does not mean that it will take 15 years to field the Objective Force. In fact, there are elements of our current Fielded Force that we will continue to leverage now and well into the future. Instead, the Objective Force is a dynamic concept that iterates in response to new learning, changing threats, resourcing, and technological advancement. The Objective Force serves as a guidepost to ensure unity of effort across the enterprise.

To support the Force Design process, the Space Force must enhance and streamline capability delivery activities across the lifecycle, including Science and Technology (S&T) investment; requirements and architecture definition; fiscal planning, programming, and budgeting; testing and verification; and ultimately fielding capabilities to produce combat credible forces.

In addition to designing our Objective Force, the Space Force will:

- Define the mechanisms and processes by which the CSO will execute the statutory responsibilities of the Force Design Architect for Space of the Armed Forces.
- Institutionalize the Joint Space Requirements Integration Cell as the primary agent for accounting for all Joint Force space requirements.
- Publish USSF priorities for S&T efforts and ensure the S&T community directly links projects to operational needs and eventually programs of record.
- Formalize and document Space Force DOTMLPF-P planning process.
- Continue to operationalize the USSF Commercial Space Strategy.
- Enhance and streamline our Capabilities Development activities including enhanced requirements development and improved collaboration with operational test and evaluation (OT&E) efforts to focus test activities.
- Digitize documentation associated with capabilities development to accelerate evaluation and advocacy for proposals. This effort must include digital models to enable rapid and consistent assessment of proposals and solutions. ▲

FORCE DEVELOPMENT

Force Development is the service-level activity by which the Space Force enhances and optimizes the force we have (i.e., the Fielded Force). Through Force Development, we progress towards the Objective Force, balancing the needs of today against those of the future. This process mitigates the risk that emerges from never having exactly what we think we need to address current and future requirements, in other words, deviations between the Objective Force and the Fielded Force. Force Development activities adapt our processes, equipment, and thinking to better account for projected operational challenges, and encompasses elements such as talent management, education, training, tactics development, test and evaluation, acquisition, and resourcing.

Our Force Development initiatives encompass both capability development and personnel development. Capability development initiatives focus on improving our acquisitions strategy, allied and partner integration, and the delivery of fully burdened requirements. Personnel development initiatives focus on equipping Guardians with the shared values, skills, and experience required to thrive in an incredibly challenging and dynamic warfighting environment. Said differently, the Space Force must develop space-minded warfighters ready and able to meet the highly technical demands of our operations. *Space Force Doctrine Document-1* codifies the Service's foundational purpose, who we are, and how we employ spacepower.

One key element of understanding who we are is role clarity—ensuring Guardians understand what is expected of them. For example, we expect officers to be our leaders and planners with broad understanding across all the disciplines of spacepower. We expect our enlisted corps to be our primary “on-console” warfighters—weapon system experts with deep technical knowledge in their tools. Finally, we expect civilians to support every aspect of the Service, providing stability, specialization, expertise, and corporate knowledge across the enterprise.

To institutionalize these roles, the Space Force is redesigning Guardian training, education, and development. As a concerted effort to address the interdependences across our Service's operational disciplines, the Officer Training Course is an Initial Skills Training for all new officer accessions, which grounds junior officers in foundational Service knowledge. We are likewise working to tailor enlisted education because we can no longer rely on other Services for generalized initial qualification training. From their first day, we need our enlisted experts to build expertise in combat operations. For our civilian Guardians, the Space Force is pursuing a flexible approach to span careers in operations, engineering, program management, and intelligence. Specific to acquisitions, the Space Force is developing a new and unprecedented course, Acquisition Initial Qualification Training (AIQT), for its acquisition professionals. The AIQT course will cover all required training previously provided through the Program Management Practitioner and the Engineer and Technology Management foundational curriculum, enhancing it with space-specific training, senior acquisition mentor participation, industry engagements, and hands-on experiential learning.

A unique tool available within this element of Force Development in the Space Force is the Space Force Personnel Management Act, which grants the service authorities to create full- and part-time positions for Guardians. This merges “Active Duty” and “Reserve” personnel into a single component, composed of Guardians with the capacity to move between full and part-time roles as circumstances and Service needs allow. These authorities allow the Space Force more flexibility in the way it develops and manages Guardians, providing them with more opportunities while allowing the Service to retain crucial talent. The Space Force will integrate part-time Guardians no later than July of 2026.

The Space Force must align all aspects of Force Development to educate, train, and equip a workforce purpose-built for warfighting in the space domain. In addition to redesigning initial skills training, new career paths, and integration of part-time Guardians, the following initiatives will drive the Force Development the Service needs to complete its transition into a warfighting service.

- Deliver comprehensive space domain awareness capabilities.
- Advance space-based technology associated with space control and Golden Dome.

- Increase launch operations tempo at our national spaceports.
- Mechanize the software acquisition pathway process.
- Design and implement a Captain's Leadership Course focused on providing Space Force Company Grade Officers the space-focused education they need to take on greater responsibilities.
- Document Objective Squadron requirements in order to assist planning as new missions drive new manpower and organizational requirements.
- Expand and document Advanced Training Requirements needed for Combat Mission Ready qualifications.
- Implement a modern Human Capital Personnel Management System (IT and databases) necessary to optimize Space Force Talent Management.
- Shift to competency-based assignments (formal qualifications and certifications) and away from traditional specialty-code career field management. ▲

FORCE GENERATION

Force Generation is the service-level activity that builds, sustains, and reconstitutes force elements to conduct prompt and sustained operations. Force Generation leverages the Fielded Force to present capability to Combatant Commanders.

Every military service has a process by which they generate and present combat-ready forces to the Joint Force, which ensures the Joint Force knows what to expect from the forces they receive. It is the Service's responsibility to present force elements that deliver repeatable, predictable, and consistent effects at scale.

Space forces present a unique challenge for presentation because most of them are employed in place. Prior to the Space Force, all space forces were 100% committed—always in operation and supporting the combatant commands. While efficient, this was not effective for building combat readiness. The simple reality is that day-to-day operations do not build the readiness required for a high intensity fight, and procedural currency is not the same as advanced training to defeat a thinking adversary. To rectify this deficiency, the Space Force established the Space Force Generation (SPAFORGEN) process. This rotational model creates dedicated time for advanced training and readiness activities, separate from routine operations. Crews alternate among Prepare, Ready, and Commit phases, ensuring Guardians can prepare for conflict while continuing to satisfy Combatant Command requirements. In parallel, the Space Force is increasing efforts to manage, track, and report status of the four elements of readiness, allowing for targeted intervention where needed.

To enhance the readiness activities enabled by SPAFORGEN, the Space Force is working to field an Operational Test and Training Infrastructure (OTTI). This modern training capability will simulate threats and replicates stressing conditions, providing a testbed for system performance and tactics validation. Likewise, to enforce unity of command for readiness, the Space Force has established new organizational structures to align and integrate all elements of readiness under

a single commander. Mission Deltas (MDs) aggregate the responsibility, authority, and resources for all aspects of unit readiness to include acquisition, cyber, intelligence, and space operations, and engineering and force development activities.

To complement the MDs, the Space Force will also strengthen *unity of effort for capability development* by implementing System Deltas (SYD) in Space Systems Command (SSC). SYDs will directly support MDs by developing, acquiring, and fielding capabilities that satisfy operational needs. Organizing the Space Force so MDs in Combat Forces Command have a clear SYD counterpart in SSC will streamline the feedback and focus the reach-back support between capability development and readiness generation.

While there are no perfect organizational structures, the key is to arrange the organization to maximize performance around what matters most and to minimize the integration challenges that organizational seams naturally create. To this end, the Space Force will optimize around our missions rather than the functions that support them, maximizing unity of command and unity of effort for a given mission area. We will train and exercise with our allies and international partners to expand our combined awareness, analysis, actions, and assessment of activities in space. With coordinated readiness organization from SYDs to MDs building readiness in SPAFORGEN cycles, the Space Force will generate forces composed of true space warfighters. At the direction of Combatant Commanders, these force elements will serve as part of a larger Joint Force. When called upon, Guardians will be ready to fight and win because we have invested time and energy into their readiness. In addition to the Force Generation efforts discussed above, the Space Force will also implement the following Force Generation initiatives.

- Finish design and implementation of Space Force Input Tool for the Defense Readiness Reporting System to capture the Space Force-unique elements of our readiness and ensure maximum transparency of units' readiness level.
- Develop and utilize appropriate training venues to optimize individual, unit, and large force readiness opportunities.
- Redesign equipment tables and Weapon System Sustainment activities to directly connect to combat readiness.
- Conduct foundational intelligence activities necessary to support threat-based test and training activities and realistic threat replication.
- Conduct cyberspace operations to operate and defend information technology integral to military space activities. ▲

FORCE EMPLOYMENT

Force Employment is the service-level activity that encapsulates the planning, force management, and decision making required to fulfill military objectives with the Fielded Force. Put simply, Force Employment is what we do today with what we have now. This includes the day-to-day tactical missions Guardians conduct under the operational control of a Service Component Commander as well as the operational-level planning and strategic-level decision making that occurs under the Combatant Commanders' authorities.

For the Space Force, a critical tenet of Force Employment is to normalize spacepower for effective integration into the Joint Force. The primary mechanism for doing this is Component Field Commands—service organizations that integrate into Combatant Commands to deliver timely and relevant space effects and expertise in support of Joint operations. The Space Force is on track to establish Service Components in all Combatant Commands, the result of which will be a Space Force better postured to employ forces and expertise at the direction of Combatant Commanders to deter conflicts and win wars.

In addition to our Service Components, normalizing our force presentation also means integrating all activities within individual force offerings. Specifically, our units must integrate intel, cyber, and space, engineering, and sustainment elements into *combat formations* capable of operating as *distinct units of action*. Therefore, the Space Force will present four types of *combat formations* to the Joint Force: *combat deltas*, *combat squadrons* (i.e., for employed-in-place activities), *combat detachments* (i.e., for deployable activities), and *force elements*. These are the units of action that conduct Combatant Commander-directed operations. The cross-functional nature of these formations requires personnel from multiple mission squadrons to generate, present, and sustain one unit of action.

When combat units of action are placed under the operational control of a Space Force Service Component Commander in support of a named operation, the resulting formation is a Space *Mission Task Force* (SMTF). Every SMTF is comprised of a commander (i.e. the COMSPACEFOR), an element that performs command and control on behalf of the commander, and combat formations that conduct military space operations. The SMTF elevates and normalizes space operations by ensuring that the senior ranking Space Force commander in a joint force reports directly to the Joint Force Commander and has all the combat capability and expertise to execute the mission.

To fully employ the Space Force within the Joint Force, we must normalize how we speak about space activities and capabilities and how we integrate them into Joint Force operations. This starts with the way that we describe the unique systems we operate and the critical activities and missions that we execute as part of the Joint Force. When we are successful, Joint Force and Combined commanders will have the knowledge, understanding, and wherewithal to employ the critical space capabilities only Guardians are trained and ready to operate.

Finally, as reliance on space increases and new missions emerge, the Space Force must employ space capabilities and deliver space effects in new and innovative ways. For example, we must embed allies and international partners in each other's operational planning and campaigns and maximize the use of exchange and liaison programs. We must leverage our commercial partners and provide the Joint Force with access to planning products that fulfill operational needs, making them available for wide dissemination in support of diverse contingency requirements. In order to continue normalizing space activities and capabilities into joint operations, the Space Force will also pursue the following Force Employment initiatives.

- Continue to mature the definitions and descriptions of our Core Functions, Mission Areas and Mission Sets and ensure they are accounted for in Joint Professional Military Education and other courses that educate the joint force.
- Deliver new missions to include Ground and Air Moving Target Indication (MTI).

- Implement Weapons System designators that normalize the description of our capabilities for the Joint Force.
- Reinforce Tactical Development cycles to ensure operational lessons are captured and training and tactics are refined based on threat assessments and real-world activities.
- Continue to educate, emphasize, and strengthen Space Force use of Mission Command as our command and control method.
- Design, train, and field Space Planning Elements as a surge capability to support Service Components for exercises and real-world contingency activities.
- Support development and utilization of Unit Prep Messages to enable tailored Combat Training in support of combatant command requirements. ▲

CONCLUSION

The Space Force must recognize that we cannot take our old structures and processes, rename them, and expect different outcomes. Since we know we need new outcomes, we must invest our time, energy, and effort into developing and optimizing new structures and processes to achieve them. We need these new concepts to become the warfighting service that our Nation needs.

Our formative purpose is Space Superiority, ensuring our freedom of action in space while denying the same to our adversaries. To achieve space superiority, we will organize our activities around Competitive Endurance and its three tenets. Specifically, we will align the four service-level activities—Force Design, Force Development, Force Generation and Force Employment—to ensure our ability to access, control, and exploit our domain.

It is critical that every action we take produces tangible results that address the requirements and challenges that Guardians face today. It is equally important that we ensure sustainable growth and development of our force, building the capabilities and talent our Nation needs. Done right, our efforts will complete our transformation into a warfighting service, deliver combat-ready forces to the combatant commands, and field the capabilities we need to secure Space Superiority for the Joint Force and our Nation in a rapidly evolving operating environment. We cannot predict the future of the Space Force, but we know the direction in which we must travel and the speed at which we must change. This is our vector. ▲



UNITED STATES SPACE FORCE