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Aligning Defense Products to National Security Space Needs

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Abstract

The U.S. defense acquisition system has struggled to keep pace with security threats and rapid technology change, despite decades of reform efforts to integrate commercial innovation in military systems. Traditional acquisition approaches with long development timelines tied to predetermined and static system requirements do not meet the urgency or speed that military leaders and political decision-makers demand. Powered by software-driven business models and private capital, a cohort of defense tech companies have developed new approaches to meet both military and commercial needs with dual-use products. However, military users will always require a set of capabilities that differ in important and substantive ways from what the commercial market is able to deliver. This gap has contributed to a small but important new segment of the defense industrial base, companies that self-fund development of military-specific systems and capabilities in anticipation of government demand and funding. If the U.S. Space Force correctly signals its future demand and adapts its processes to incentivize this approach, these defense product companies could play an important role in delivering future warfighting capabilities. This paper explores the factors that contributed to the emergence of defense product companies and some of the challenges and opportunities to scale this model.

Aligning Defense Products to National Security Space Needs

In 2025, Palmer Luckey told *60 Minutes*, "the idea behind Anduril was to build not a defense contractor, but a defense product company" (60 Minutes, 2025). While describing one company's approach, this distinction also signals a broader shift in the way that companies are applying commercial approaches to military innovation. Rather than building solutions with government funding to meet government requirements, this business model relies on self-funded research and development to build systems and technologies that anticipate future warfighting needs. It represents both a departure from the traditional contractor approach and an evolution of more recent defense tech approaches. Whether the United States Space Force can incorporate the speed and innovation that defense product companies offer will significantly impact the future of military space capabilities.

Companies that secure U.S. military contracts to provide goods or services are part of the defense industrial base, but that commonality can mask substantial differences in funding, technology development, and market strategy. Three primary models have emerged.

- **Traditional defense contractors** receive government funding to develop systems according to predetermined military requirements. These companies design and build weapon systems through cost reimbursement or fixed-price contracts, with the government bearing most development costs and risk.
- **Dual-use companies** use private capital to develop technologies primarily for commercial customers, then adapt those technologies for military applications. Because

these companies build products to satisfy a large, diverse customer base, military customers have limited ability to direct or specify technology development.

- **Defense product companies** are a distinct model within the broader defense tech ecosystem. Like dual-use companies, they use private capital to self-fund development. Like traditional contractors, they design exclusively for military customers. Most notably, these companies develop products before government requirements exist, assuming both financial and technical risk while anticipating future military needs.

National security space is uniquely positioned to benefit from the defense product company model. Military space operations are less doctrinally mature than military operations in other domains. While the Space Force has begun defining operational concepts for both offensive and defensive counterspace operations, the service has not yet defined its associated capability and technology requirements. This creates opportunities for companies to anticipate future requirements, enabling product-led innovation. Space also creates overlapping demand for technologies that support commercial and military uses, with dual-use applications ranging from launch and propulsion to guidance and communication. However, counterspace capabilities require technologies that are unique to military applications. This creates a market gap between military and commercial demands, in which military needs are too specialized for dual-use companies but too uncertain for traditional defense contractors. Defense product companies can help bridge this gap by funding and developing innovative solutions to both current and future military space operations.

Defense product companies could serve a critical role in delivering future warfighting capabilities, particularly as the United States continues to explore ways to accelerate the speed of military capability delivery to keep pace with peer competitors. This paper explores the development of defense product companies and their role in military space acquisitions through four parts. First, it examines the evolution of defense product companies, including historical precedents from Northrop's F-20 and General Atomics' Predator. Second, it analyzes current defense product companies, with brief case studies of several leading firms. Third, it evaluates how recent changes to acquisition policy and Space Force planning efforts, including international partner engagement, might shape the future of defense product companies. Fourth, it considers risks to this emerging model, including oversight and integration challenges. The paper concludes with implications for the U.S. Space Force.

The Evolution: From Defense Tech to Defense Products

The emergence of defense product companies is the result of changes in acquisition policy, technology, funding, and warfighting. While traditional defense contractors have long self-funded research and development efforts to create or improve products for military customers, the government may end up reimbursing that spending in future contracts (Lofgren, 2022). Defense product companies represent a unique approach, yet past acquisition efforts were instrumental in pathfinding elements of this new approach. These historical examples help explain how the defense industry has evolved to allow the defense products approach, providing insights into the opportunities and risks that exist.

Great Expectations Unfulfilled: The F-20 Tigershark

Northrop's F-20 Tigershark fighter aircraft was a technically advanced, self-funded development effort designed to address the export market for lightweight fighters at a time when Cold War tensions continued to drive military spending in the United States and around the world. Building on the success of its F-5 program, which delivered a lucrative platform with sales of more than 2500 units to dozens of countries, Northrop invested $1.2 billion in the F-20 as a product for both the U.S. military as well as U.S. allies and partners (Martin and Schmidt, 1987).

It was also meant to avoid restrictive arms control policies, meaning that its primary competition would be foreign aircraft. However, the Reagan administration relaxed exports controls, putting the F-20 in direct competition with another advanced U.S. aircraft, General Dynamics F-16, for which the U.S. Air Force had already committed funding. Northrop's decision to self-fund the F-20 put it at a disadvantage in securing foreign customers, since foreign military sales of the F-16 lowered its unit cost for the Air Force (Dorr, 2014). Failing to convince either the U.S. government or foreign militaries to purchase the F-20, Northrop was forced to terminate the program and write-off the entire development cost without securing any customers.

The F-20 case illustrates the difficulty of anticipating how changes in government policy can affect demand, both domestically and internationally. It also shows the difficulty of shifting bureaucratic momentum once it has aligned behind a particular solution. Northrop's efforts to self-fund a solution may have reinforced exactly the kind of conservative, risk-adverse behavior that Pentagon has sought to disrupt: "After being burned enough times by the military's uncertainty, major defense companies are reluctant to invest much of their own money to develop new technologies and prefer to develop only what the government says it wants and is willing to pay them to build" (Brose, 2020, 234). This history raises the question of what conditions enable contemporary defense product companies to succeed where Northrop failed.

The MQ-1 Predator as the Archetype for Future Defense Products

The development, fielding, and operational use of General Atomics Predator unmanned aerial vehicle (UAV) for both intelligence, surveillance, and reconnaissance (ISR) and precision strike missions serves as a critical bridge from the traditional defense contractor approach to the rise of defense product companies. The platform's success—both in its assigned missions and in encouraging broader development of unmanned aerial platforms—required the timely convergence of funding, warfare, and policy changes that directly relate to contemporary defense product companies.

Funding. Beginning in the 1970s, the military services funded several different UAV programs. Many of these early efforts had only limited success, despite Pentagon spending of more $2 billion for system development and procurement between 1979 and 1997 (United States General Accounting Office, 1997). A mix of company self-funding and government support—through both the Defense Advanced Research Project Agency (DARPA) and the Central Intelligence Agency—combined to enable development of the Predator UAV's predecessor system, the GNAT 750; however, the company that produced the GNAT declared bankruptcy and sold the technology to General Atomics when it was unable to convert early progress into a major acquisition effort (Strickland, 2013). General Atomics continued self-funding system development because it, "believed in the revolutionary role of these unmanned technologies" (Schneider & Macdonald, 2025, 49). As a result, Predator UAV technology was ready when trends in warfare and policy shifts demanded new solutions.

Warfare. The Pentagon's increasing demand for UAVs through the 1990s and 2000s reflected significant changes to warfighting needs and new operational environments. As Schneider and Macdonald (2025) note, "Over the course of the 1990s, the United States opted into a series of lower-intensity conflicts in which policy makers (and defense practitioners) sought to achieve victory with minimal human cost… these low stakes conflicts provided the initial impetus for research, investment, and early experimentation with what would become the MQ-1 Predator unmanned aerial vehicle" (Schneider & Macdonald, 2025). Although beginning as an ISR platform, the Predator was armed with an AGM-114 Hellfire missile for operations in Iraq and Afghanistan after 9/11.

Policy. In 1994, the Pentagon used a novel acquisition approach to assess the Predator's utility before committing to large scale procurement. With this approach, the

Advanced Concept Technology Demonstration (ACTD), the Department was able to deploy prototypes of the Predator in Bosnia, providing a realistic assessment of the system's capabilities in an operational context (General Accounting Office, 1999). The ACTD was a specialized tool intended to rapidly field capabilities by demonstrating mature technologies with heavy user involvement and approval throughout the process (Thirtle et al., 1997). Users were able to provide feedback that directly impacted development efforts. The Predator UAV completed development during the 30-month ACTD, with the Air Force assuming operational control of the Predator demonstration assets in 1996 (General Accounting Office, 1997). This history shows the importance of aligning acquisition policy with both user needs and available solutions. For defense product companies, it also underscores the importance of demonstrations and prototyping to build confidence and support among users.

Characteristics of Defense Product Companies

While there is not a single business model or description that encompasses all business models, the companies that are pathfinding this approach share a combination of characteristics that differentiate them from traditional defense contractors, dual-use companies, and other defense tech companies. The primary differentiating characteristics relate to anticipatory research and development, financing and risk allocation, and product design. Defense product companies combine these characteristics in different ways. Moreover, their business models prioritize flexibility to pursue opportunities as they arise. New defense product companies are likely to find different ways to combine these characteristics to suit their product and market.

The primary characteristic of defense product companies is anticipatory research and development. By completing development work ahead of demand, the company can provide a complete or nearly complete product once customer demand materializes. The company can also work with potential customers throughout development to better understand and respond to customers' needs. This can have the added benefit of building customer trust and anticipation, priming the demand that's ultimately needed to close the business case.

The second characteristic is financing and risk allocation. Early-stage defense product companies depend on private capital, including venture capital, to fund initial product development efforts. This private capital enables risk taking and a longer interval before profitability is achieved. Private capital interest in defense tech and defense product companies has grown significantly over the last decade. Prominent venture capitalists have identified this interest as a counter to China's civil-military fusion strategy, specifically by enabling private capital to fund innovative solutions to military problems (Shah & Kirchhoff, 2024). However, since 2021, venture capital funding has declined partly due to government fiscal policy and rising interest rates (Chen et al., 2024). For many companies, access to capital is no longer the key constraint; they must now prove out their business model by achieving profitability (AIAA, 2025).

The third characteristic is product design. A key differentiator between defense product companies and the broader category of defense tech companies is a focus on developing software-enabled hardware, rather than just software. This difference carries several important implications. Most notably, hardware is more capital intensive than software. This creates a higher obstacle to profitability but also a stronger competitive advantage for companies that are successful. Focusing on hardware also expands opportunities to meet military-specific needs. The following case studies of three companies—Anduril, True Anomaly, and Epirus—briefly describe how each has implemented these characteristics into their business models.

Anduril

Since 2019, Anduril has grown significantly, expanding its product offerings into a broad portfolio of capabilities. These products are enabled and integrable within a common software platform, Lattice, that facilitates autonomy, command and control, and data fusion. Venture capitalist and Anduril co-founder Trae Stephens has said that the company's focus on software-enabled hardware was a deliberate strategy to avoid the challenges of selling software to the U.S. military (Lofgren, 2022b). Anduril has raised billions through multiple venture capital-backed funding rounds, leading to a 2025 valuation of just over $30 billion (Stone & Biswas, 2026). The company's first product for government buyers was the Sentry Tower, an object detection, identification, and tracking system deployed in the United States to support border patrol missions. The company has since created several other discrete products around this core technology, including the Seabed Sentry for persistent and real-time underwater sensing and communications (Anduril, 2026). The company has also expanded across domains, with UAV and space products also enabled by Lattice. Among defense product companies, Anduril exemplifies the broadest business model, building multi-domain capabilities to support a wide range of military users and missions.

True Anomaly

True Anomaly's has developed a business model tightly focused on the Space Force and its military-specific needs. The company's senior vice president for space defense, Stephen Kitay, described True Anomaly as a defense products company able to rapidly and affordably deliver capabilities designed operational concepts for space superiority (Center for Space Policy and Strategy, 2025). Like Anduril, its hardware systems are enabled by a common software platform, Mosaic, supporting both traditional space operations capabilities as well as those required for space control operations. The company's primary hardware product is Jackal, a multi-mission, multi-orbit space vehicle designed for maneuverability and configurability as well as high-volume production. Jackal's capabilities focus on those most applicable for future national security space operations, which co-founder Even Rogers described as, "the small number of things that make space-to-space engagements successful outcomes: sensing, autonomy, maneuverability, and payload-carrying capacity" (Clark, 2026). True Anomaly is a private company and has raised several hundred million dollars through venture capital-backed funding rounds. It's focus on the Space Force as its primary customer presents a challenge, as it will need to tightly couple its development with the service's needs; however, the potential growth of counterspace operations also presents significant opportunities with less entrenched competition than other domains.

Epirus

Epirus designs and manufactures directed energy systems for counter-UAV missions. The company privately funded research, development, and validation of its core system before winning U.S. Army contracts in 2023 and 2025 (Epirus, 2023; Maher, 2025). Like Anduril and True Anomaly, Epirus has raised funding through venture capital, yet it differs in its software approach. While the system allows for improved functionality through software updates, its hardware is designed to integrate within larger software platforms. Notably, Epirus has also identified potential commercial applications for some of its core technology, with potential applications for its radiofrequency technology to support commercial communications and for its power management technology to support commercial energy applications.

Converting the Demand Signal into Action

Since 2023, the Ronald Reagan Institute has published an annual "report card" for the National Security Innovation Base. The reports' grading system assesses both government and industry reforms, efforts, and initiatives to strengthen the United States' innovation and

technological edge. The reports generally show relatively small changes from year-to-year (e.g., improvements from “B” to “B+”). But in 2026, the Ronald Reagan Institute recorded its largest ever grade improvement, moving from a “D” to a “B-”, in its assessment of “customer clarity,” which the organization defines as the “demand signal for customer (government) innovation priorities, including funding and acquisition pathways to match the aspiration” (Ronald Reagan Institute, 2026).

Greater clarity has not substantially affected prime contractors’ dominance of Department of War contracts. The Reagan Institute’s 2026 report notes that while the Pentagon increasingly obligated funding to defense tech companies—both in relative and absolute terms—between fiscal years 2023 and 2025, those companies still receive less than 1% of total obligations. A 2025 Defense Innovation Board identified technical debt as one of the factors contributing to this mismatch between the Pentagon’s stated desire to incorporate new defense technology companies and its limited success to date (Defense Innovation Board, 2025). Specifically, many of these companies focus on advanced, software-intensive solutions that cannot be readily integrated within the Department’s outdated, legacy systems. A similar problem confronts military hardware acquisitions. Analyses of recent U.S. military action against Iran, Operation Epic Fury, have noted that nearly all the weapons the United States has used to date are decades old (Hoff, 2026). The Pentagon is requesting supplemental funding, largely to replenish munitions for these legacy systems.

The slow pace of change in Pentagon spending on defense technology and defense product companies is a product of many factors. Technical debt, overreliance on legacy platforms and systems, the software-intensive nature of some nontraditional vendors, and the relative immaturity of some defense product companies. Part of these companies’ business case is developing products to meet future demand. Thus, there is a lag between product development efforts and when government funding obligations should reasonably be expected, which partly explains the relatively high valuations of some of these companies compared to their government-related revenues. Military leaders, servicemembers, and Congress face strong disincentives to trying novel solutions or new approaches to deliver military capabilities, particularly for emergent threats that struggle to command the same attention as today’s challenges (Brose, 2020). To be a better buyer, the government must avoid defaulting to large development programs when current commercial technologies do not meet immediate needs (AIAA, 2025). The more appropriate comparison is where commercial technology will be when the development program is complete, typically five or more years in the future. The government can then help inform commercial innovation by clarifying its needs and anticipated demand. Solutions will have to be supported by policy and cultural change that promote informed risk-taking with a realistic assessment of both future needs and the rate of innovation among defense product companies

Acquisition Transformation and Space Force’s Future Force Structure

Acquisition Transformation

In 2025, the Pentagon announced a series of acquisition reform efforts that carry long-term implications for companies across the defense industrial base. Between August and November, Secretary Hegseth signed memos that announced major changes to the processes that govern military requirements, acquisitions, and related activities. These changes were intended to reflect the Department’s shift to a more assertive warfighting posture, while also addressing longstanding, systemic deficiencies that had contributed to schedule delays, cost overruns, and erosion of the United States’ military advantage. A critical step to achieving these goals is expanding the number and diversity of companies in the defense industrial base: “the Department will restore innovation, accelerate production, gain negotiating leverage, and more

effectively manage cost and schedule growth by promoting competition with lowered barriers to entry and diversification of prime and subcontractor sourcing without sacrificing quality" (Office of the Under Secretary of War for Acquisition and Sustainment, 2025). If successfully implemented, several of these reforms would benefit defense product companies seeking to capture military contracts and validate their business models. Three reforms are particularly relevant for defense product companies: requirements validation reform; creation of portfolio acquisition executives (PAE); and policies to encourage self-funded research and development and increased production rates.

Requirements Validation. The first reform memo, signed in August 2025, disestablished the existing Joint Capabilities Integration and Development System (JCIDS), shifting requirements validation authority from the Joint Staff to the military services (Hegseth & Feinberg, 2025). The reform is intended to streamline reviews and shorten the timeline between when a capability need is identified and validated. The slow pace of requirements validation has been a central criticism of the acquisition system because it delays development work to close a capability gap. But even for a defense product company that has little to no additional development work planned, a slow requirements validation process delays contract awards, and with it the company's revenue to fund future products.

Portfolio Acquisition Executive. The second reform memo, signed in November 2025, initiates a broad overhaul of the acquisition system, establishing rapid capability delivery as the Department's organizing principle for acquisitions (Hegseth, 2025). A key mechanism for accomplishing this goal is redesignating program executive officers (PEO) as portfolio acquisition executives (PAE) with expanded authority.

A perennial criticism of the PEO construct is that it aligns incentives around programs rather than capabilities. Because programs are difficult both to start and to change once underway, acquisition leaders are disincentivized to consider novel solutions or abandon a chronically underperforming program. In contrast, the PAE construct centers incentives around delivering a portfolio of related capabilities through multiple programs, rather than optimizing for individual programs. This both enables and incentivizes PAEs to execute cost, schedule and performance trades across acquisition programs. PAEs also have greater control over functional support—contracting, finance, systems engineering, etc.—to make decisions across the portfolio.

Portfolio management enables PAEs to strengthen competition by disaggregating capability requirements and combining solutions from different companies. This creates opportunities for defense product companies to provide specific solutions within capability portfolios and to compete for contracts even after losing initial development or production awards. Incumbents remain incentivized to maintain high performance because contract awards do not insulate them from competition for delivering the system or capability.

Self-funded Research and Development and Increased Production Rates. The Department's reforms include directives aimed at encouraging companies to increase their research and development spending and their production rates. While specific policies will be largely implemented through Department- and service-level guidance, the November 2025 memo identifies both strategic direction and specific policy changes. Defense product companies, having already invested private capital in military solutions, hold a substantial advantage over companies that wait for government funding before starting development activities.

At the strategic level, the reforms establish an acquisition priority for commercial products and offerings, defined broadly as "industry solutions funded by private investment that meet military needs" (Exec Order No. 14265, 2025). This definition encompasses both dual-use

commercial products and defense product companies' military specific solutions. The Department's Acquisition Transformation Strategy further clarifies that stabilizing demand signals and correctly aligning incentives will encourage industry investment (Office of the Under Secretary of War for Acquisition and Sustainment, 2025). In other words, by rewarding companies that self-fund innovation and capacity, the Department aims to drive a virtuous cycle of further private investment.

Space Force Planning for Emerging Missions

Since the Space Force was created in 2019, the service has been evolving its strategic planning processes to inform long-term capability goals. Most of the Space Force's current acquisition programs are either inherited from the Air Force or are previously planned replacements for existing systems. However, the combination of increasing budget authority, emerging threats, and expanding missions is now empowering the Space Force to adopt proactive planning approaches, considering both the future threats Guardians will confront and the capabilities they will need to counter those threats. With the Department's focus on speed to capability delivery and scale, the Space Force's efforts to design and communicate its future force structure become an essential acquisition function. These planning efforts provide critical signals of the service's needs and priorities, assisting industry in aligning its research and development activities.

U.S. policy has long rejected the common perception that space is an operational "sanctuary" (Dickey, 2020), the Space Force has, only recently, begun openly discussing the role of offensive space capability in supporting U.S. military objectives. In March 2025, the Space Force released its *Space Warfighting* framework, "[establishing] basic principles for the use of military power" to achieve space superiority, which includes both offensive and defense actions under the USSF "core function" of space control (United States Space Force, 2025). Figure 1 lays out the relationship between these terms and the categories of offensive and defensive action, as outlined by the framework.

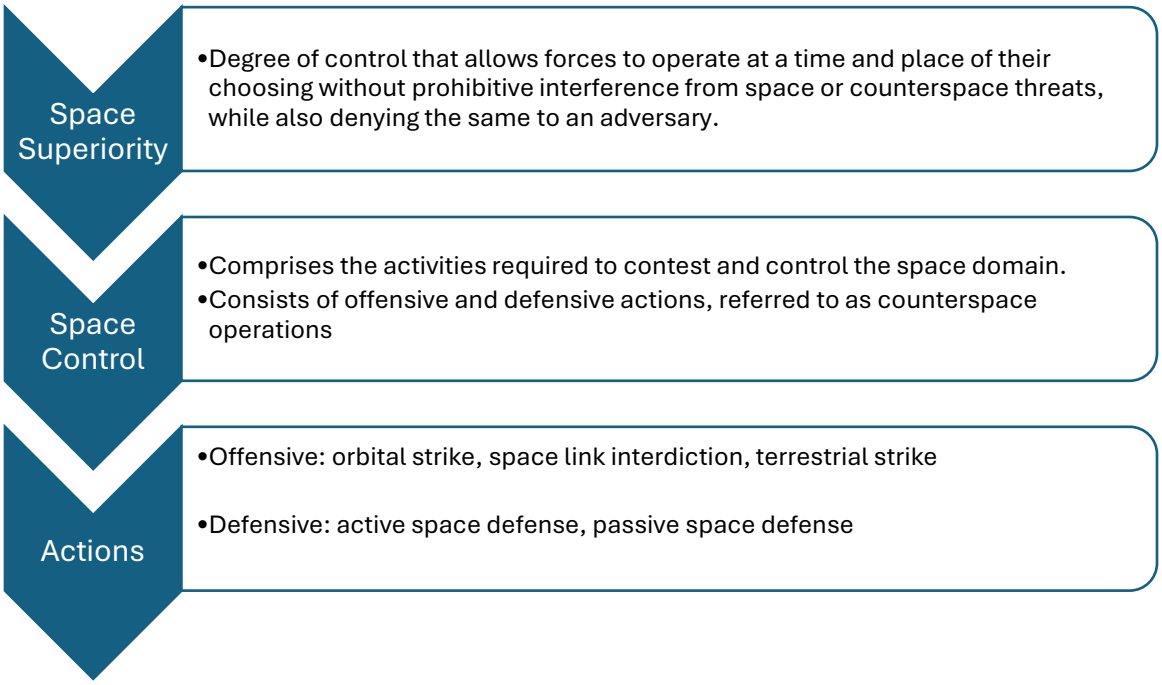

Figure 1. Space Warfighting Terminology

Observers have noted that this terminology place space operations on a similar lexical plane as other domains, for which strategists and practitioners have long used concepts of superiority and control to describe their objectives (Hadley, 2025). Detailing the actions that compose counterspace operations also reveals similarities and differences between military and commercial operations that separate defense product and dual-use companies. Table 1 shows the full list of counterspace actions, by category, identified in the strategy.

Table 1. Military-Specific Actions in Counterspace Operations

Offensive	***Defensive***
Orbital strike • **Pursuit** • **Standoff** **Space link interdiction** • **Electromagnetic attack** • **Cybernetwork attack** **Terrestrial strike** • **Ground-based fires** • **Maritime-based fires** • **Air-based fires** • **Space-based fires**	Active space defense • Escort • **Counterattack** • Suppression of adversary counterspace targeting Passive space defense • Threat warning • **Military deception** • Hardening • Dispersal • Disaggregation • Mobility • Redundancy

Note: Underlying information in the table is reproduced from the U.S. Space Force's *Space Warfighting* framework. **Bold** indicates that author's judgement of military-specific actions that lack a clear commercial application.

A more thorough analysis of these actions is beyond the scope of this paper; however, even a cursory review of these categories reveals important considerations for both defense product and dual-use companies. First, and unsurprisingly, explicitly offensive actions within counterspace operations lack a commercial application. Second, most defensive actions within counterspace operations have at least a potential commercial application. Because space is a distant and harsh environment that can be congested with both operational systems and debris, commercial space systems employ features like disaggregation, mobility, and redundancy to protect their investments and maintain services. Even less clear-cut examples, like escort and suppression of counterspace targeting are feasible given concerns that space systems may be targeted by malicious actors for criminal, military, or other purposes. However, the specific application of a defensive action may tip into a military-specific use case. For example, commercial companies may harden their satellites against radiation from space weather events, while the military will harden some satellites against radiation from a nuclear detonation.

Further refinement of these categories and innovation in related technologies can help further differentiate the boundaries that separate solutions from defense product and dual-use companies. As the Space Force continues to mature its future force structure and long-term operational goals, it can signal additional demands that are distinct from those of commercial space companies. In turn, those signals can help inform private investment in military-specific capabilities.

Addressing Challenges to the Defense Product Model

Oversight

As defense product companies become more prominent, the Space Force will need to ensure that effective oversight is able to evolve in ways that accommodate this distinct business model. For traditional acquisition programs, substantial oversight—whether conducted by the service, the Department, or Congress—occurs while a system is under development through program reviews, technical assessments, and cost and schedule metrics. During this period, oversight bodies monitor as the system design is refined through experimentation and prototyping, helping ensure the final system will meet performance requirements as well as cost and schedule commitments before proceeding to production. This oversight is intended to ensure agreement among stakeholders over the program's goals and its progress against those goals while there is still flexibility to course correct as needed.

Defense product companies represent a challenge to the traditional oversight model because development work occurs before government involvement. Two specific oversight challenges merit attention. First, this timing means that the military customer, as well as oversight bodies, may have limited insight into design decisions and technical approaches that shape product performance, requiring alternative mechanisms to validate that the product will perform as claimed in operational conditions. Defense product companies will need to build and maintain trust as well as provide data or other means of allowing independent verification of the company's claims. Second, intentionally or unintentionally, requirements and contracts may be written in such a way to unduly favor a particular company's offering over competing solutions. The Space Force will need to ensure that solicitations focus on broad capability requirements rather than product-specific features. The service may also need to explore new oversight mechanisms, balancing acquisition speed with accountability. Equally important, oversight bodies will need to adjust their expectations and practices to avoid smothering innovation with traditional methods.

Integrated Capabilities and Competition

The Space Force recognizes that future warfighting depends on fielding integrated capabilities, with space systems as integral to the kill chains that enable the joint force's effectiveness (Space Training and Readiness Command, 2025). National security space systems must efficiently generate and relay data across multiple networks and systems to execute military effects on complex, dynamic battlefields. Systems designed around proprietary or vendor-specific architectures—even if highly integrated within that network—present both operational and acquisition challenges by limiting interoperability.

Defense product companies may face a conflict reconciling integration with their business models. Because many build capabilities and value through software, they may be less incentivized to support integration with competing vendors' systems. For some of the largest defense product companies, the business model depends on securing long-term service or sustainment contracts by providing foundational software capabilities that become embedded in military operations (Panter, 2025). Over the near term, this strategy may work against the Space Force's efforts to improve integration and interoperability.

The Army's 2026 contract with Anduril illustrates potential challenges with single-vendor platform approaches. The Army awarded Anduril a 10-year, fixed price contract with a ceiling up to $20 billion to consolidate current and future commercial solutions into a single, enterprise licensing agreement. While this could simplify the Army's access to commercial technology and ensure consistent pricing and terms, analysts have noted that this approach could also create dependency on Anduril's proprietary software at the integration layer (Panter, 2025). According to some experts, the Army may also become complacent in reaching for familiar solutions from

established vendors rather than seeking out more disruptive innovations (Pomerleau & Welch, 2026). Additionally, this approach may serve as a false demand signal for industry if not followed by consistent orders and stable budgets. Both challenges are likely to appear in the government's agreements with defense product companies.

Within space acquisitions, the Space Development Agency's experience delivering its Proliferated Warfighting Space Architecture (PWSA) illustrates multi-vendor integration challenges. SDA prioritized competition through regular contract awards split among multiple vendors to field several hundred satellites (Berglund, 2024). However, according to SDA officials, integrating satellites from multiple vendors has proved challenging, contributing to delays and requiring a dedicated integration support contract that was not part of the PWSA's initial acquisition strategy (Erwin, 2025). While the PWSA involves both traditional contractors and dual-use companies, similar challenges would need to be addressed to combine solutions from multiple defense product companies to deliver an integrated space capability.

The Space Force will need to establish clear integration and interoperability requirements in contracts with defense product companies, while maintaining competitive pressure to prevent vendor lock-in when possible. This will require a variety of mechanisms, including technical standards, open architecture requirements, and contract structures that balance platform integration and scale with competition.

Market limits and Exportability

Defense product companies confront a structural challenge inherent to their business model: reliance on a single, volatile customer. Repeated studies have documented how the volatility of U.S. military demand—whether driven by budget cycles, political shifts, or system recapitalization schedules—is an obstacle for companies trying to maintain stable production lines, supply chains, and costs (Section 809 Panel, 2019). Even if a defense product company secures contracts from multiple government agencies or military services, it still faces uncertainty inherent to U.S. government procurement.

International sales to allies and partners are one mechanism for mitigating government demand volatility. In March 2026, Anduril completed delivery of nearly 300 of its Altius drone, a versatile platform that can support multiple missions, and supporting capabilities to Taiwan as part of a foreign military sales package the United States approved in 2024 (Lo et al., 2026). According to Anduril, the company was able to rapidly deliver on the contract by self-funding production and are taking additional steps to establish a long-term partnership with the Taiwanese military and industrial base (Anduril, 2025).

Similar foreign opportunities may be possible for defense product companies that focus on space solutions. While those companies may face greater export scrutiny due to the sensitivity of the counterspace missions they are likely to support, sales to close U.S. allies with sophisticated space capabilities may be acceptable. Such sales would also align with ongoing Space Force efforts to better integrate the space capabilities of allies and partners. For example, the Space Force's 2025 International Partnerships Strategy initiated a series of activities to better include allies and partners in future force planning (United States Space Force, 2025b).

Conclusion: Implications for USSF acquisition

The United States faces a challenging geopolitical and strategic environment, with mounting pressure from peer adversaries. The Space Force will need contributions from traditional defense contractors, dual-use companies, and defense product companies to confront challenges in the space domain. A clearer definition of its strategic objectives and capability requirements, particularly offensive and defensive actions within counterspace

operations, the service is sending a clearer signal to all DIB companies to inform research and development efforts. National security space will continue to benefit from commercial innovations for its many dual-use applications, but it will increasingly also demand military-specific capabilities as the Pentagon pursues new missions in space. The coming years represent an important test for both the Space Force and the broader defense acquisition community to demonstrate progress seizing commercial innovation to rapidly field warfighting capabilities.

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