PitchBook



VC trends, industry overview, and market landscape



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Executive summary

- VC investment in defense tech remained steady from 2022 to 2023, with \$35.8 billion across 800 deals in 2022 and \$34.9 billion across 627 deals in 2023. So far in 2024, \$9.1 billion has been invested across 228 deals, contrasting with the broader VC market's decline and indicating the sector's robustness. Over the past 12 months, key investment areas included renewable energy generation & storage (\$4.4 billion); advanced computing & software (\$3.7 billion); sensing, connectivity & security (\$3.7 billion); and space technology (\$3.5 billion).
- Exit activity has been modest, with \$2.2 billion across 39 exits in 2023 and \$8.3 billion across 35 exits in 2024. M&A activity increased from \$4.6 billion across 56 deals in 2022 to \$9.3 billion across 53 deals in 2023. 2024 has seen \$5.2 billion across 36 deals, suggesting continued acquisitions by larger players to expand their product portfolios.
- In 2015, the Defense Innovation Unit (DIU) was established to integrate commercial technologies into national defense. Evolving from DIU 1.0 through DIU 3.0, it now focuses on scaling capabilities for strategic impact. In April 2023, the DIU was realigned to directly report to the secretary of defense, enhancing its influence. Fiscal year 2023 achievements include 33 new solicitations; 1,768 commercial proposals; 90 prototype contracts worth \$298 million; and a cumulative transition rate of 51%.¹ Notable projects span AI; drones; cyberthreat telemetry; and international collaborations with India, the UK, Australia, and Japan. The DIU also secured \$983 million in funding for fiscal year 2024—up from \$191 million in 2023.² The National Security Innovation Capital (NSIC) received \$35 million to support startups and attract private investments. The Office of Strategic Capital (OSC) released its fiscal year 2024 strategy, which

1: "The Defense Innovation Unit FY 2023 Annual Report," US Department of Defense, n.d., accessed June 17, 2024. 2: "Defense Innovation Unit Would Get Major Funding Boost in Spending Bill," C4ISRNet, Courtney Albon, March 21, 2024. focuses on component-level technologies, financial tools to attract private investment, and lending to minimize taxpayer burden, with priority areas in advanced materials, biotechnology, 5G, microelectronics, quantum science, renewable energy, and space technology.³

- The Department of Defense's (DoD's) National Defense Industrial Strategy highlights the need for innovation and venture capital to revitalize the US defense industrial base, especially in response to China's dominance in shipbuilding and microelectronics. Despite traditional contractor challenges, US manufacturing construction spending doubled to \$200 billion between 2022 and 2023,⁴ creating significant investor opportunities. Conflicts in Eastern Europe and the Middle East emphasize the need for a resilient defense industrial base, with the DoD investing in munitions production and expanding precision-guided munitions capacities to maintain technological superiority.
- The defense acquisition process is shifting toward more open and flexible approaches, as seen with the DIU's facilitation of over 450 contracts and the "Open" topics of the US Air Force's Small Business Innovation Research (SBIR) program. This encourages nontraditional defense contractors and startups to propose innovative solutions, boosting VC funding and integration into defense applications. The continuous threat environment, particularly from drones, necessitates rapid innovation, as seen with Epirus' high-power microwave system and the Army's investment in counter-drone technologies. This dynamic landscape presents opportunities for venture capital to engage with DoD modernization programs and global defense technology markets.

 "Investment Strategy for the Office of Strategic Capital: Fiscal Year 2024," US Department of Defense, March 8, 2024. 4: "Total Construction Spending: Manufacturing in the United States," FRED, June 3, 2024.

Defense tech timeline

April 20, 2023

SpaceX's Starship, the most powerful rocket ever built, successfully launches. This event marks a significant milestone in space exploration and technology. For defense technology, the Starship's capabilities in terms of payload capacity and reusability have potential applications in the rapid deployment of satellites, space-based sensors, and possibly even troop transport. This could revolutionize logistics and strategic mobility in future conflicts.

2023

August 8, 2023

Devastating wildfires break out in Hawaii, causing extensive damage and loss of life. While primarily a natural disaster, this event underscores the importance of advanced detection and response technologies in disaster management. For defense, technologies such as drones for real-time surveillance, AI for predictive analytics, and autonomous systems for firefighting could be critical in both military and civilian applications.

Jul 2023

September 2, 2023

India launches its first solar observation mission. Aditya-L1, aimed at studying the sun's corona. Understanding solar activity is vital for predicting space weather, which can affect satellite operations and communications. For defense technology, this knowledge is essential for protecting critical spacebased assets and ensuring reliable communication and navigation systems.

Apr 2023



NATO Innovation Fund closes on its \$1.0 billion initial fund.

August 23, 2023

2023

un

India's Chandrayaan-3 mission successfully lands on the moon, making India the fourth country to achieve this feat. This accomplishment showcases India's growing capabilities in space technology. The implications for defense include advancements in satellite technology, lunar resource exploration, and enhanced space situational awareness (SSA), all of which are crucial for maintaining strategic advantages in space.

September 7, 2023

2023

Anduril acquires North Carolinabased Blue Force Technologies and its large uncrewed aircraft system development program to enhance its competitive edge against traditional defense contractors' sophisticated autonomous vehicles.

October 7, 2023

Sep 2023

A new conflict erupts between Israel and Hamas. This event brings attention to the use of advanced military technologies, including precision-guided munitions, drone warfare, and cyber operations. The conflict underscores the need for continuous innovation in defense technologies to maintain superiority and effectiveness in modern warfare.

Commercial events

Geopolitical events

September 27, 2023

The US Army awards Palantir Technologies a contract worth \$250 million, running through 2026, to research and experiment with AI & ML.

Oct 2023

October 31, 2023

Nov 2023

Israel intercepts a ballistic missile launched by the Houthi rebels. This event represents the first recorded instance of space combat.

December 18, 2023

Significant disruptions occur in shipping lanes in the Red Sea, impacting global trade. This event emphasizes the strategic importance of maritime security and the need for advanced surveillance, unmanned systems, and AI-driven threat detection to protect critical sea routes. Defense technology innovations in these areas are crucial for ensuring the free flow of commerce and responding to maritime threats.

March 6, 2024

The DoD releases a report on reforming the Planning, Programming, Budgeting, and Execution (PPBE) process. This reform aims to enhance the agility and efficiency of defense spending, ensuring that resources are allocated to critical areas such as emerging technologies and innovation. The report underscores the importance of adapting procurement and budgeting processes to keep pace with rapid technological advancements.

March 13, 2024

The European Union adopts the Artificial Intelligence Act, setting comprehensive regulations for the development and deployment of AI technologies. This legislation has significant implications for defense, as it establishes guidelines for ethical AI use, data privacy, and security standards. Ensuring compliance with these regulations is essential for developing trustworthy and effective AI systems in defense applications.

Iran conducts retaliatory strikes against Israel, escalating tensions in the region. This event highlights the use of advanced missile and drone technologies in modern conflicts. It underscores the necessity for continuous innovation in missile defense, counter-drone systems, and intelligence gathering to anticipate and mitigate threats in volatile regions.

2024

December 29, 2023

Dec 2023

A large-scale drone conflict occurs between Russia and Ukraine, with both sides deploying swarms of drones. This event highlights the transformative impact of unmanned systems and AI in warfare. The use of drone swarms for reconnaissance, electronic warfare, and direct attacks represents a significant shift in military strategy and operations, emphasizing the need for advanced counter-drone technologies and AI-driven battlefield management systems.

Jan 2024

March 6, 2024

Palantir Technologies secures a \$178.4 million contract from the US Army to develop and produce the Tactical Intelligence Targeting Access Node, a system that integrates data from various sensors to provide targeting information, supporting the Army's Joint All-Domain Command and Control initiative.

Feb 2024

March 14, 2024

Red 6, an augmented reality startup, wins a \$30.0 million AFWERX STRATFI contract matched with \$30.0 million from private investors to advance its Advanced Tactical Augmented Reality System (ATARS) and Augmented Reality Command and Analytic Data Environment (ARCADE), aiming to revolutionize US Air Force pilot training and enhance joint-force training capabilities.

2024

April 24, 2024

The US Air Force chooses Anduril and General Atomics over major defense firms to design, manufacture, and test drones for the Collaborative Combat Aircraft program, aiming for production decisions by fiscal year 2026 and fielding before the decade's end. There are plans to integrate these drones alongside existing fighter jets as part of the Next-Generation Air Dominance systems, supported by a funding request of \$557 million for fiscal year 2025 and nearly \$9 billion through fiscal year 2029.

Geopolitical events

April 13, 2024





Defense tech VC ecosystem market map

This market map is an overview of venture-backed or growth-stage companies that have received venture capital or other notable private investments.



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Independent, objective, and timely market intel

As the private markets continue to grow in complexity and competition, it's essential for investors to understand the industries, sectors, and companies driving the asset class.

Our Industry and Technology Research provides detailed analysis of nascent tech sectors so you can better navigate the changing markets you operate in—and pursue new opportunities with confidence.

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