SVDG

NAT SEC 100

2025 EDITION

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J.P.Morgan

Silicon Valley Defense Group's
Top 100 Venture Capital-Backed
Defense Tech Startups

NATSEC100.ORG

What is the NatSec100?

Silicon Valley Defense Group, in partnership with J.P. Morgan, is proud to present the 2025 NatSec100. In its third year, this report identifies the top 100 venture-backed, dual-use and defense technology companies driving forward U.S. national security. These companies are not only advancing critical technologies, but also shaping the future contours of the U.S. defense innovation ecosystem. Our analysis yields key insights and recommendations for overcoming systemic barriers to innovation at scale.

WHAT

- The NatSec100 - Silicon Valley Defense Group's ranking and analysis of the top 100 venture capital backed defense tech startups

WHY

- Drive critical, pointed, and meaningful discourse on the state of the Defense Industrial Base (DIB) and National Security Innovation Base (NSIB)
- Identify which companies are riding significant momentum

HOW

- Momentum-based, quantitative methodology that is NOT valuation based
- Rankings determined from publicly available information. Methodology enables company analysis in a comparable way, irrespective of sector, stage, product, etc.

"I'm particularly excited about this year's NatSec100 release. We started SVDG ten years ago with a mandate from Senator McCain to build a bridge between Silicon Valley and DC. A decade later that bridge is being well travelled. Private capital and entrepreneurs are now working daily with policy makers and military leaders to build a new defense industrial base. Our democracy and our allies will be more secure as we enter a new long term geoeconomic competition.

James Cross

Founder & Board Member,
Silicon Valley Defense Group

This year's report is not just a snapshot—*it is a multi-year lens on the evolving momentum of the national security innovation base.*

The NatSec100 is intended to provoke urgent, informed dialogue about the state of the Defense Industrial Base (DIB) and the wider National Security Innovation Base (NSIB). Recognizing that every ranking has its limitations, our aim is not to declare winners but to inspire meaningful dialogue. Serious discussion is needed around who is delivering, where the system is showing promise, and where reforms are needed most.

In 2025, the American defense enterprise faces a defining inflection point. Great Power Competition has returned in force. On the battlefields of Ukraine, we are witnessing a revolution in military affairs—defined by low-cost, attritable, beyond-visual-line-of-sight drones and rapid iteration cycles that vastly outpace the Department of Defense's traditional R&D tempo. Innovation is no longer optional; it is the front line.

In this emerging era of techno-security competition to develop and deploy advanced technologies, the margins for victory are razor-thin. Although the United States continues to lead the world in breakthrough technologies, the Department of Defense lags dangerously behind in adopting them. To maintain our strategic edge, we must do more than innovate—we must accelerate adoption at speed and scale.

By spotlighting the companies driving change, the NatSec100 aims to illuminate our innovation pipeline and inspire action. SVDG remains committed to strengthening the connective tissue between government, industry, and capital—because in this race, the future belongs to the fastest adapter.

How is the NatSec100 Produced?

The NatSec100 has grown significantly in both scope and influence since the first release in 2023. In 2024, the NatSec100 drew substantial engagement from policymakers, investors, and national security leaders - with coverage across major media outlets, industry webinars, and thought leadership platforms including the Wall Street Journal, Bloomberg, and the Financial Times.

In 2025, **Silicon Valley Defense Group returns with the same quantitative methodology**, now bolstered by three years of comparative data. Our proprietary scoring calculation was developed in partnership with Franklin Templeton and Balyasny Asset Management. The ranking reflects weighted, quantitative factors that allow us to comparably analyze each company in an objective way, irrespective of sector, growth stage, hardware v. software, etc.

We fully acknowledge the **limitations**: our model relies entirely on **publicly available data**, and does not capture the operational impact or classified work of many companies, in part due to the lack of reliable, standardized reporting. Our ranking does not accommodate company valuations. Rather, we index on momentum. That said, within these bounds, the NatSec100 remains a **fair, repeatable, thoroughly researched, and comparative proxy for venture-backed momentum**.

This year's report is not just a snapshot — it is a multi-year lens on the evolving **momentum** of the national security innovation base. With three years of data now in hand, SVDG is not just naming high-performing companies — we are surfacing the structural gaps, patterns of growth, and lessons learned across the national security innovation base.

Our Top 100 companies are certifiably well-positioned to fill critical technology and capability gaps for the defense industrial base. Collectively, the NatSec100 highlights momentum within the world of venture-backed growth and provides a reasonable foundation upon which to explore the state of the Ecosystem.

The NatSec100 is a powerful diagnostic tool, offering a quantitative snapshot of the entities building, scaling, and delivering within the national security innovation ecosystem. We are optimistic that this analysis will continue to inform policy, enhance investment strategies, and inspire a proactive approach to innovation adoption across the defense enterprise.

METHODOLOGY INPUTS

Momentum centric formula, including but not limited to:

- Recent capital raised
- Total capital raised
- Recent headcount growth

ELIGIBILITY REQUIREMENTS

- Company must be **venture or PE-backed** and **not publicly traded**
- Must not have been **acquired by a public company**
- Must publicly demonstrate **dual-use or defense applicability** and **relevance to national security**
- **Must pass vetting** for foreign ownership concerns by our counter intelligence partners

KEY POINTS

- This list is momentum-based, focusing on growth and traction rather than valuation
- Methodology applied **consistently over three years** enabling reliable year-over-year comparisons
- List is constrained by **publicly available data**, which remains a structural limitation across the sector
- Despite data imperfections, list remains a **fair, repeatable, and practical proxy** for assessing growth.
- Ranking is **not a direct measure of operational impact**, due to lack of consistent, publicly available U.S. Government contracting data
- The value is in the **comparative analysis** across the 100 companies and the macro signals the list provides about the state of defense innovation

Setting the Scene

The 2025 NatSec100 reveals a powerful reality: innovation is no longer defined solely by creation—it is now defined by adoption.

SVDG at 10 Years

Last Decade's Focus
Innovation by Creation

This Decade's Focus
Innovation by Adoption

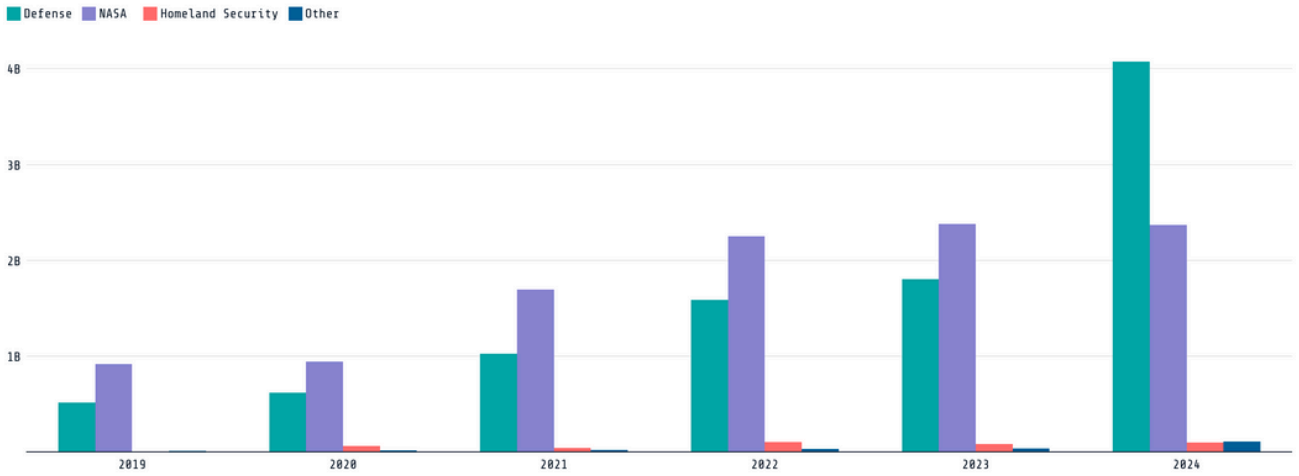
Over the past decade, the national security enterprise made meaningful progress in catalyzing a new wave of dual-use innovation, largely driven by private capital and startup ingenuity. But the next decade will be shaped by the government's ability to adopt, scale, and integrate these technologies into real-world missions. The companies in this year's NatSec100 cohort are maturing, raising follow-on capital, and demonstrating growing operational impact.

At the same time, trends in contracting, workforce growth, and the rise of software-enabled capabilities in traditionally hardware-centric domains all point to an ecosystem ready for a new phase—where success hinges not just on invention, but on institutional uptake. The future of defense innovation will be determined not by what is possible, but by what is actually adopted.

In 2024, we saw a ~2.3x increase over prior year in DoD spend on NatSec100 companies. **While encouraging, total spend consistently remains <1% of total DoD budget.**

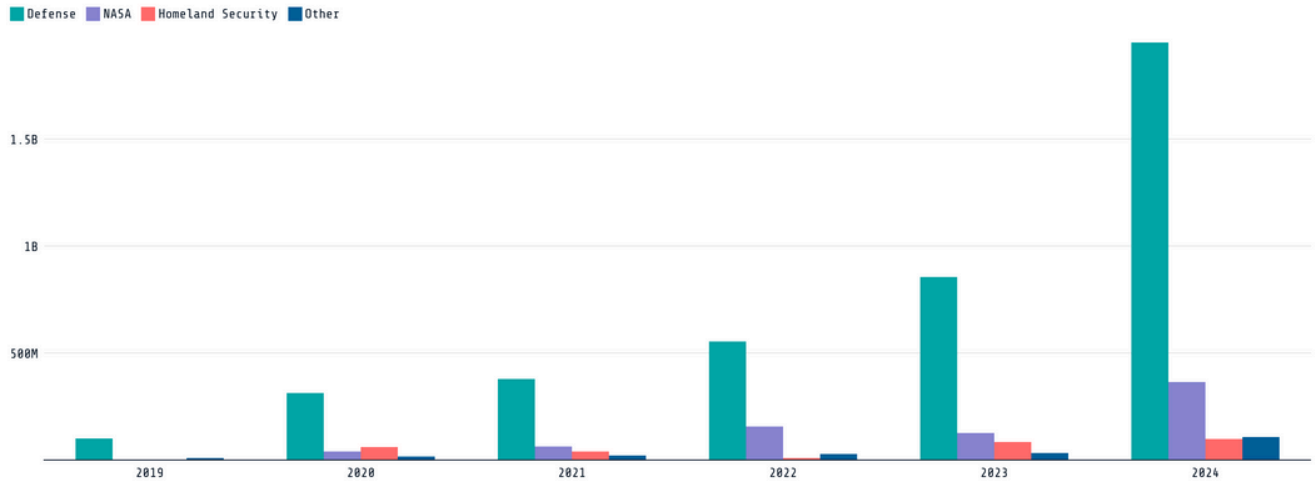
2024 DoD Awards to NatSec100 Companies increased ~2.3x

Including SpaceX data, total DoD spend of $4.1B (~8x increase since 2019)



Source: SVDG Analysis

Excluding SpaceX data, total DoD spend of $1.95B (~20x increase since 2019)



Source: SVDG Analysis

Special Consideration: SpaceX

Note: For much of our analysis, we isolate SpaceX from datasets. While SpaceX meets the eligibility requirements and remains on the list, it operates at a scale beyond other companies in the NatSec100. With tens of billions in private funding and USG awards, including SpaceX in some comparative analysis obscures the challenges facing the broader innovation ecosystem. For that reason, we often present analysis with and without SpaceX, to preserve analytical clarity and ensure trends among the remaining 99 companies are visible and actionable.

2025 Key Takeaways

Dynamic List Turnover Reflects a Maturing Market

The 2025 NatSec100 cohort saw meaningful movement: new entrants, strategic exits, and companies rising or falling in ranking.

- This churn signals real progress. The ecosystem is functioning—companies are scaling, raising capital, hiring talent, and in some cases, turning a profit. As dual-use technologies continue to mature, particularly in hardware-intensive sectors, the defense innovation base will require new financing models. Long-term success will depend not only on Wall Street's capital markets but also on the broader support of Main Street—America's industrial base, mutual funds, family offices, state and local governments – to ultimately deliver at scale.

DoD Spending is Growing– But Still Lags Private Capital

DoD spending on NatSec100 companies more than doubled from 2023 to 2024 (~2.3x), totaling nearly $4B, or $1.95B excluding SpaceX.

- While SVDG was thrilled to discover a ~2.3x YoY increase in DoD spend on 2025 NatSec100 companies, a significant investment mismatch remains. The USG has awarded $28B in total historical federal awards for this year's NatSec100 companies. Comparatively, $70.1B in total private capital has been raised for the same companies. This gap must continue to close in order to incentivize continued development and investment. Continued progress depends on DoD's willingness to take on more innovation risk and "pick winners." Picking winners means scaling firm fixed price contracting and large programs of record for non-traditional companies.

Non-Traditional Contracting Mechanisms Are Gaining Ground

In USG acquisitions, most contracts are governed by the Federal Acquisition Regulation (FAR), a robust and comprehensive set of rules and procedures for acquiring goods and services. However, contracting officers can also utilize alternative legal authorities and procedures, often involving Other Transaction Agreements (OTAs) or other mechanisms outside the standard FAR framework, referred to as non-FAR contracts. Roughly 12% of FY24 USG awards to NatSec100 companies (excluding SpaceX) were via non-FAR contracts—representing a 2x increase over last year. 92% of all contracts were fixed-price.

- The growing use of Other Transactions (OTs) underscores the limitations of traditional FAR-based procurement when engaging with non-traditional vendors. Despite years of calls to expand access to flexible contracting pathways, OT adoption has accelerated in recent years and gained meaningful traction — SVDG is not surprised that the increase in OTs coincides with a rise in total awards to NatSec100 companies. This trend presents a clear opportunity for acquisition leaders and lawmakers to institutionalize and scale the contracting mechanisms that are demonstrably accelerating innovation delivery.

Momentum for Procurement Reform—But Will It Stick?

Recent executive actions and pending legislation (e.g., FORGeD Act, SPEED Act) signal intent to transform acquisition processes and accelerate innovation adoption through significant structural changes.

- SVDG is optimistic—but cautious. Past reform efforts often fell short. The key question now: **Will DoD leadership continue empowering program managers and acquisition officials to sustain FY23–25's growth in innovation investment?** Ensuring follow-through will be essential to building a defense acquisition system that's fit for purpose in an era of strategic competition.

Investment Remains Uneven Across Priority Technology Areas

NatSec100 companies are not evenly distributed across the OUSD(R&E) list of 14 critical technology areas. The NatSec100 continues to be dominated by companies in AI, software, cyber, and space. Other priority tech areas, such as microelectronics, quantum, hypersonics, and directed energy—remain underrepresented.

- This concentration presents both a challenge and an opportunity. SVDG routinely hears from private capital that stronger demand signaling is required in order to deploy new capital. While the Department of Defense has traditionally relied on startups for innovative software and primes for complex hardware, this bifurcation may no longer serve emerging mission needs. As national security challenges demand advanced capabilities in areas like quantum science and engineered biology, investment will increasingly be the key to unlocking their potential.

America and the World are at a critical crossroads: comprehensive Action and Leadership are imperative now ... Protecting our country goes way beyond just the military and includes, among other items, grid security, data centers, communications and cybersecurity in general ... We need to allow greater flexibility on the reallocation of money; i.e., to continuously innovate (buy the newest drones and other items).

Jamie Dimon

CEO, JPMorganChase

Chairman and CEO Letter to Shareholders, 2024 Annual Report

STATS TO DATE

2025 NatSec100 Companies

$28.6B

Total Federal Awards

Prime, Sub, OTA, SBIR/STTR

▲ 18% from 2024

$70.1B

Total Private Capital Raised

▲ 32% from 2024

$25.8B
Federal Prime

$798M
Federal Subcontract

$1.8B
Federal OTA

$199M
Federal SBIR Awards

8.3 years

Average Age of Company

$41.5B

Gap between Total Private Capital and Total Federal Awards

Who Are the Companies?

The 2025 cohort represents an unprecedented surge in private and public investment — a signal that non-traditional companies are no longer on the margins. They are front and center.

Turnover is not a flaw — it's a feature. The NatSec100 is designed to reward momentum, and companies naturally rise and fall depending on where they are in their growth and delivery cycles. A healthy ecosystem is one where new players break through, while established ones mature and move to the next stage.

Of note, two companies in this year's top ten are brand new to the list - Dataminr and X Energy. Both companies owned large commercial businesses ahead of announcing and forming their public sector defense business units. For this reason, commercial momentum propelled these companies to the top of our list.

The 2025 NatSec100 tells a story of dynamic movement and ecosystem maturity:

34 New entrants reflect rising stars breaking into the national security space

7 "Graduates" have either been acquired or IPOed

2 New companies in the Top 10 show how rapidly fortunes can shift

42 "Three-peat" companies return for the third year, demonstrating sustained momentum

2025

NatSec100 Company List

KEY Capital Raised

$$$$$$$ – >$2B
$$$$$$ – $1B - $2B
$$$$$ – $750M - $1B
$$$$ – $500M - $750M
$$$ – $250M - $500M
$$ – $100M - $200M
$ – <$100M

Rank	Company	Website	Year Founded	HQ City	HQ State	Capital Raised
1	ANDURIL	anduril.com	2017	Costa Mesa	California	$$$$$$$
2	SPACEX	spacex.com	2002	Hawthorne	California	$$$$$$$
3	Applied Intuition	appliedintuition.com	2017	Mountain View	California	$$$$$$
4	databricks	databricks.com	2013	San Francisco	California	$$$$$$$
5	SARONIC	saronic.com	2022	Austin	Texas	$$$$$
6	Shield AI	shield.ai	2015	San Diego	California	$$$$$$
7	Dataminr	dataminr.com	2009	New York	New York	$$$$$$$
8	groq	groq.com	2016	Mountain View	California	$$$$$$$
9	energy	x-energy.com	2009	Rockville	Maryland	$$$$$$
10	EPIRUS	epirusinc.com	2018	Torrance	California	$$$$
11	ARMIS.	armis.com	2016	San Francisco	California	$$$$$$
12	Lambda	lambda.ai	2012	San Jose	California	$$$$$$
13	Snorkel	snorkel.ai	2019	Redwood City	California	$$
14	SYNTIANT	syntiant.com	2017	Irvine	California	$$$
15	cerebras	cerebras.ai	2016	Sunny Vale	California	$$$$
16	IMPULSE	impulsespace.com	2021	Redondo Beach	California	$$$$
17	PsiQuantum	psiquantum.com	2015	Palo Alto	California	$$$$$$$
18	True Anomaly	trueanomaly.space	2022	Colorado Springs	Colorado	$$$
19	Nominal	nominal.io	2022	New York	New York	$$
20	BASE	basepowercompany.com	2023	Austin	Texas	$$$
21	APEX	apexspace.com	2022	Los Angeles	California	$$$
22	AUTOMATION ANYWHERE	automationanywhere.com	2003	San Jose	California	$$$$$$
23	Chainalysis	chainalysis.com	2014	New York	New York	$$$$

Rank	Company	Website	Year Founded	HQ City	HQ State	Capital Raised
24	SambaNova Systems	sambanova.ai	2017	Palo Alto	California	$$$$$$
25	STOKE	stokespace.com	2019	Kent	Washington	$$$
26	Grafana Labs	grafana.com	2014	New York	New York	$$$$
27	FIREFLY AEROSPACE	fireflyspace.com	2013	Cedar Park	Washington	$$$$
28	BETA	beta.team	2012	South Burlington	Vermont	$$$$$$
29	Onebrief	onebrief.com	2018	Honolulu	Hawaii	$
30	CLAROTY	claroty.com	2014	New York	New York	$$$$
31	LYTEN	lyten.com	2014	San Jose	California	$$$$$$
32	X-BOW SYSTEMS	xbowsystems.com	2016	Albuquerque	New Mexico	$$
33	RADIANT	radiantnuclear.com	2019	El Segundo	California	$$
34	VARDA SPACE INDUSTRIES	varda.com	2021	El Segundo	California	$$$
35	UVEYE	uveye.com	2016	Teaneck	New Jersey	$$$
36	SANDBOXAQ	sandboxaq.com	2021	Palo Alto	California	$$$$$
37	ASTRANIS	astranis.com	2015	San Francisco	California	$$$$
38	Castelion	castelion.com	2022	El Segundo	California	$$
39	DataRobot	datarobot.com	2012	Boston	Massachussetts	$$$$$$
40	scale	scale.com	2016	San Francisco	California	$$$$$$
41	CHAOS	chaosinc.com	2017	Los Angeles	California	$$$
42	gecko	geckorobotics.com	2013	Pittsburgh	Pennsylvania	$$
43	ThoughtSpot	thoughtspot.com	2012	Mountain View	California	$$$$$
44	dataiku	dataiku.com	2013	New York	New York	$$$$$
45	netskope	netskope.com	2012	Santa Clara	California	$$$$$$
46	K2 SPACE	k2space.com	2022	Los Angeles	California	$$
47	REGENT	regentcraft.com	2020	North Kingstown	Rhode Island	$$
48	Altana	altana.ai	2018	Brooklyn	New York	$$$
49	big.id	bigid.com	2015	New York	New York	$$$
50	VAST	vastdata.com	2016	Campbell	California	$$$
51	NEROS	neros.tech	2023	El Segundo	California	$
52	ANYSIGNAL	anysignal.com	2022	Los Angeles	California	$
53	NORTHWOOD	northwoodspace.io	2022	Los Angeles	California	$

Rank	Company	Website	Year Founded	HQ City	HQ State	Capital Raised
54	AETHERFLUX	aetherflux.com	2023	Capitola	California	$
55	Skydio	skydio.com	2014	San Mateo	California	$$$$$
56	SIERRA SPACE	sierraspace.com	2021	Louisville	Colorado	$$$$$$
57	NOZOMI NETWORKS	nozominetworks.com	2013	San Francisco	California	$$$
58	mapbox	mapbox.com	2011	San Francisco	California	$$$$
59	STRIDER	striderintel.com	2019	South Jordan	Utah	$$
60	MACH INDUSTRIES	machindustries.com	2023	Huntington Beach	California	$$
61	2F	secondfront.com	2014	Arlington	Virginia	$$
62	CLOUDIAN	cloudian.com	2001	San Mateo	California	$$
63	SKYRYSE	skyryse.com	2016	El Segundo	California	$$$
64	loft	loftorbital.com	2017	San Francisco	California	$$$
65	ACS	allencontrolsystems.com	2022	Austin	Texas	$
66	Distributed Spectrum	distributedspectrum.com	2020	New York	New York	$
67	PORTAL	portalsystems.space	2021	Bothell	Washington	$
68	Cape	cape.co	2022	Arlington	Virginia	$
69	VANNEVAR Labs	vannevarlabs.com	2019	Palo Alto	California	$
70	rescale	rescale.com	2011	San Francisco	California	$$$
71	AXIOM SPACE	axiomspace.com	2016	Houston	Texas	$$$$
72	ZERO MOTORCYCLES	zeromotorcycles.com	2006	Scotts Valley	California	$$$$
73	Ditto	ditto.com	2018	San Francisco	California	$$
74	EnCharge AI	enchargeai.com	2021	Santa Clara	California	$$
75	CESIUM ASTRO SPACE & DEFENSE SYSTEMS	cesiumastro.com	2017	Austin	Austin	$$
76	AXION RAY	axionray.com	2021	New York	New York	$
77	Hebbia	hebbia.com	2020	New York	New York	$$
78	TRM	trmlabs.com	2018	San Francisco	California	$$
79	HORIZON3.ai	horizon3.ai	2019	San Francisco	California	$$
80	corelight	corelight.com	2013	San Francisco	California	$$$
81	SiMa.ai	sima.ai	2018	San Jose	California	$$$
82	WHOOP	whoop.com	2012	Highlands Ranch	Colorado	$$$
83	Overland AI	overland.ai	2022	Seattle	Washington	$

Rank	Company	Website	Year Founded	HQ City	HQ State	Capital Raised
84	EXOWATT	exowatt.com	2023	Miami	Florida	$
85	DRAGOS	dragos.com	2016	Hanover	Maryland	$$$
86	INSTABASE	instabase.com	2015	San Francisco	California	$$$
87	Hidden Level	hiddenlevel.com	2018	Syracuse	New York	$$
88	censys	censys.com	2017	Ann Arbor	Michigan	$$
89	HADRIAN	hadrian.co	2020	Los Angeles	California	$$
90	tomorrow.io	tomorrow.io	2016	Boston	Massachussetts	$$$
91	HERMEUS	hermeus.com	2018	Atlanta	Georgia	$$$
92	TURION SPACE	turionspace.com	2020	Irvine	California	$
93	OPAQUE	opaque.co	2020	San Francisco	California	$
94	TurbineOne	turbineone.com	2020	San Francisco	California	$
95	VIRTUALITICS	virtualitics.com	2016	Pasadena	California	$
96	kodiak	kodiak.ai	2018	Mountain View	California	$$
97	govini	govini.com	2011	Arlington	Virginia	$$
98	AECHELON TECHNOLOGY	aechelon.com	1998	San Francisco	California	$$
99	UMBRA	umbra.space	2015	Santa Barbara	California	$$
100	eightfold.ai	eightfold.ai	2016	Santa Clara	California	$$$

Note: Anthropic and Open AI

In June 2025, Open AI launched its OpenAI for Government initiative and promptly secured a $200 million "frontier AI" pilot with the Department of Defense, while Anthropic launched Claude Gov, its product designed specifically for U.S. defense and intelligence agencies. These collaborations signal a deeper operational engagement and commitment to mission-driven AI systems.

By the time these announcements were made, the eligibility list for the 2025 NatSec100 had already been finalized and therefore were not included for consideration this year.

Where Are the Companies?

The 2025 NatSec100 reflects both **geographic concentration and growing dispersion**. The majority of companies remain anchored in **California, New York, and Texas** — a reflection of long-standing advantages in venture capital density, technical talent, and proximity to key customers and research institutions. These states continue to serve as hubs for dual-use innovation, **housing roughly two-thirds of this year's cohort**.

Yet expansion beyond the coasts is accelerating. A new wave of NatSec100 companies are building manufacturing lines, engineering hubs, and R&D centers across the country — from the Southeast to the Midwest and Mountain West. These are not satellite offices; they are major investments.

This shift carries strategic and economic significance. As companies expand, they are drawing from a whole-of-U.S. workforce — skilled operators, engineers, technicians, and veterans who may be far from Silicon Valley but are central to America's industrial base. Geographic diversification helps de-risk the defense innovation ecosystem, strengthens national resilience, and ensures that the benefits of this new industrial wave are shared more broadly across the country.

18 States host a NatSec100 Company HQ

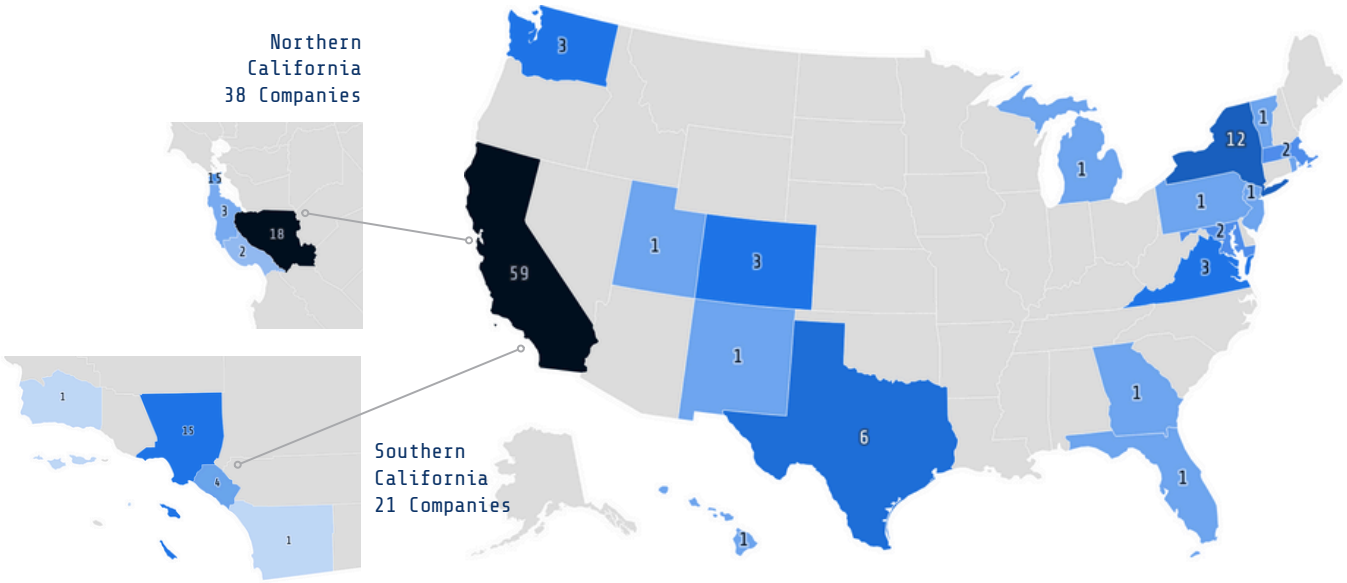
29 States host a NatSec100 Company Office

In January 2025, Anduril announced plans to build Arsenal-1 Manufacturing Facility in Central Ohio. The facility will span over 500 acres and is expected to create over 4000 jobs by 2035. This initiative marks Ohio's largest- ever job creation initiative, positioning the state, and the Midwest, as a hub in building America's defense manufacturing base.

Defense Innovation Goes Nationwide

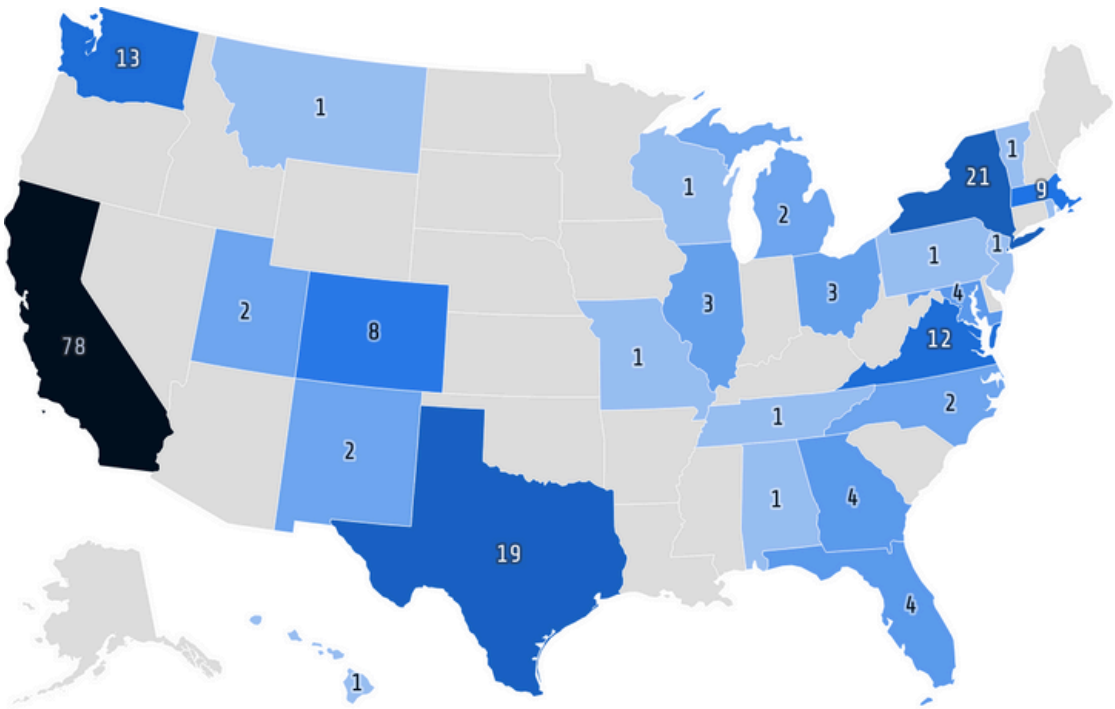
While geographic concentrations remain, NatSec100 companies are scaling nationwide -- creating jobs and diversifying the defense industrial base.

Headquarters by State



Source: SVDG Analysis

All Offices by State



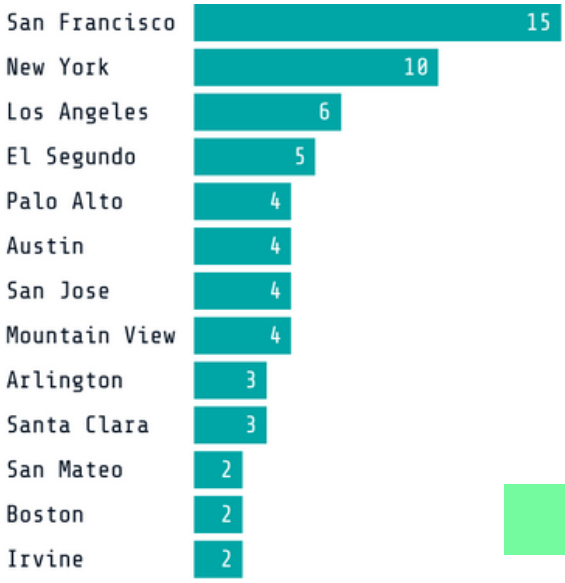
Source: SVDG Analysis

Federal initiatives like the CHIPS and Science Act, DoD's Microelectronics Commons, and regionally targeted SBIR programs are helping catalyze this footprint growth. But challenges remain: capital, talent pipelines, and DoD customer access are still unevenly distributed.

If the U.S. is to field a truly modern and resilient defense industrial base, the innovation pipeline must continue to stretch beyond traditional tech strongholds — activating the full spectrum of American talent and industrial capability in the process.

Top Cities for Headquarters

NatSec100 company HQ's co-located in hubs of commercial innovation and tech talent, demonstrating role of commercial tech in national security.



Source: SVDG Analysis

Many technologies take years to scale, but given the transformational potential of quantum computing, standing still is not an option. As nations spray the field with public funding, the United States should act decisively. Government investment isn't just about accelerating innovation for commercial purposes—it's about national security, economic resilience, and technological supremacy. Delays or half-measures put all three at risk. PsiQuantum is committed to unlocking the full potential of quantum computing by building this technology at scale, right here in the United States.

Jeremy O'Brien
CEO, PsiQuantum

What Do the Companies Do?

The NatSec100 reflects the changing face of the U.S. defense innovation base. Over the past three years, most companies on the list have focused on technologies like **advanced computing, software, AI, cyber, and space**—technologies that attract strong private investment and that are aligned to some of the Department of Defense's (DoD) critical technology priorities.

But this concentration also raises important questions. Are we doubling down on a few familiar lanes of innovation at the cost of building a more balanced industrial base? Despite national strategies that call for leadership in areas like quantum, biotech, and clean energy, those sectors remain underrepresented on the list—even when companies in those fields show real promise and are ranked highly on our list.

We have a couple big choices to make. Software companies have broken into Defense and continue to improve outcomes faster than hardware programs and traditional performers. The key indicator of lasting success will be who is involved on the government side. Two choices pose an outsized bearing on where our ecosystem is headed. First, how do we scale to the rest of the acquisition apparatus what's working in the parts of DOD that are successfully transitioning, adopting, and scaling innovation? And second, can we use software momentum to spur breakthrough partnerships and progress across the rest of our critical and prioritized technology areas?

Justin Fanelli,
Chief Technology Officer, U.S. Navy

This lack of balance has consequences. We can't build a resilient defense innovation base on software alone—even if it remains central to modernization efforts.

We're also seeing consolidation within sectors. Space, traditionally a fast-moving area for dual-use innovation, now shows fewer breakout companies beyond SpaceX—likely due to more government and investor dollars flowing to fewer players. At the same time, interest in AI and autonomy continues to dominate the conversation and funding landscape.

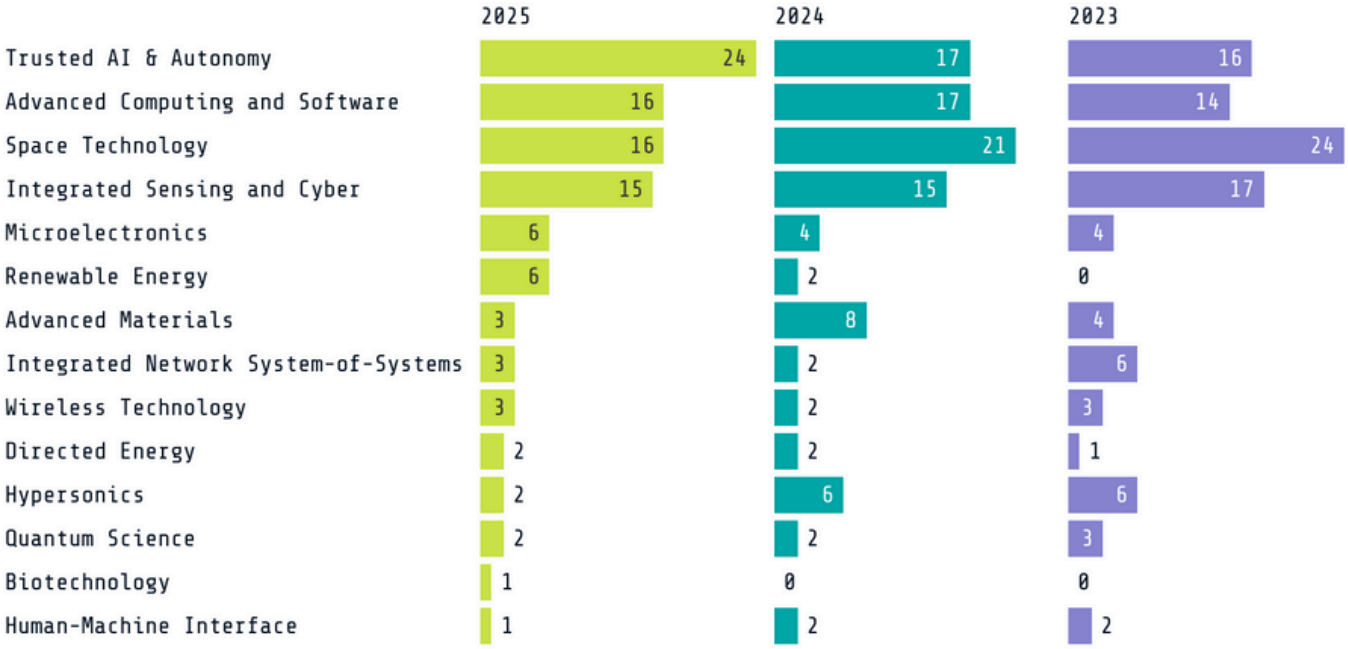
Still, we should not ignore major signs of progress. Companies like Netskope and Cerebras are eyeing IPOs in 2025, pointing to the reality of strong dual-use national champions with roots in the defense technology venture ecosystem. Where and when the USG policy environment supports long-term growth, the U.S. wields globally competitive firms that deliver for national security.

The concentration of investment in select tech categories may reflect potential structural realities:

- Limited government demand or follow-through in capital-heavy tech areas.
- A mismatch between VC models and technologies that require long development timelines, frequent access to capital, and major hardware investments.
- A continued reliance on traditional defense contractors for hardware, while newer startups are mostly tapped for software.

NatSec100 Companies are Concentrated in Select Critical Tech Areas

Across OUSD for Research and Engineering's 14 critical technology categories, company concentration in AI, Computing, and Software indicates comparative dearth of investment and development in remaining categories.



*each NatSec100 company has been tagged with a primary technology area, even though many companies work in multiple areas.

Source: SVDG Analysis

Policy Takeaway

To unlock the full potential of the NatSec100 ecosystem, federal investment must look beyond short-term innovation wins, and focus wholly on innovation adoption. That means scaling proven procurement templates from PEOs with strong innovation adoption track records, elevating adoption as the Department's focus, reducing risk around deep tech investment, and building lasting pathways for companies to scale.

Finance Takeaway

Hard tech needs more than VC—it needs greater participation from institutional investors, private equity, and Wall Street. It also needs more frequent access to non-dilutive capital, which means expanding the range of financial tools available to the defense innovation ecosystem.

Who Works at the Companies?

The 2025 NatSec100 reveals a clear trend: **the dual-use workforce is rapidly scaling.** The **median company increased its headcount by more than 100 employees year-over-year** — a signal that early-stage startups are maturing into real, durable companies with growing operational demands.

This growth isn't hypothetical. These companies are hiring engineers, machinists, program managers, supply chain leads, manufacturing technicians, and security-cleared specialists — building out the talent infrastructure required to deliver at scale.

It reflects a virtuous cycle: as more capital flows into dual-use startups, they're able to build the teams necessary to pursue and fulfill national security contracts.

70,905
Total Jobs

245
Median Headcount

207
Total Offices

Real Growth

Median increase +100 shows us companies getting funding to grow, and previous fledgling startups morphing into real companies.

Fewer USG Employees

Leading national security and defense tech companies are growing, while the current Administration is promoting budget cuts through personnel reduction which could present concerns in ensuring that there are enough USG employees to acquire and integrate emerging technologies.

Investments in Innovation Resulting in Job Creation

There is a continued increase of investment in NatSec100 companies that is resulting in job creation and workforce upskilling, strengthening local and state economies.

Median Headcount Growth

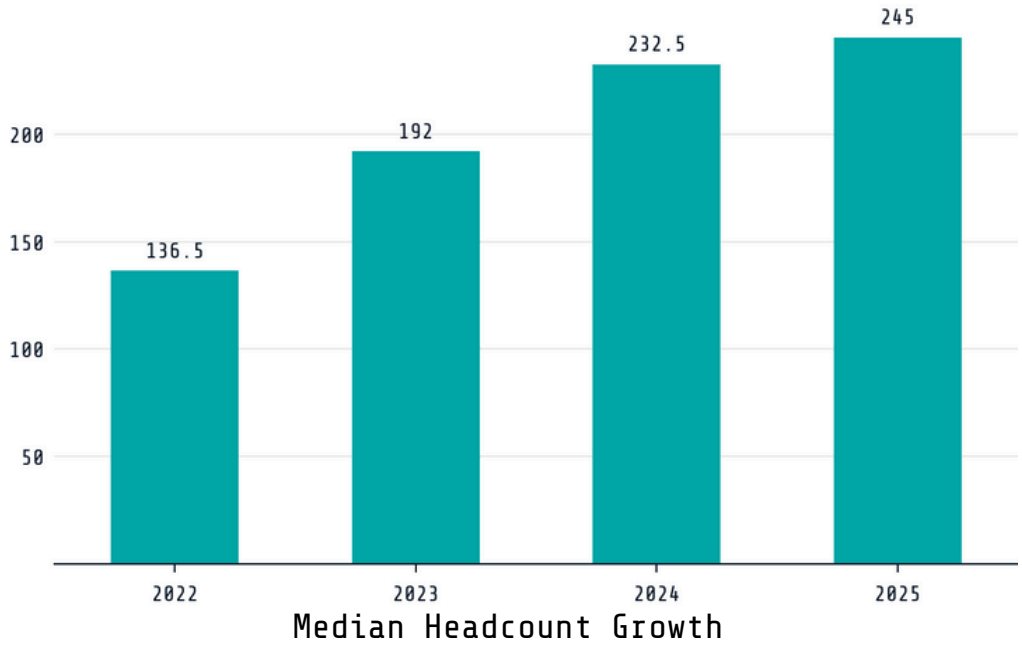
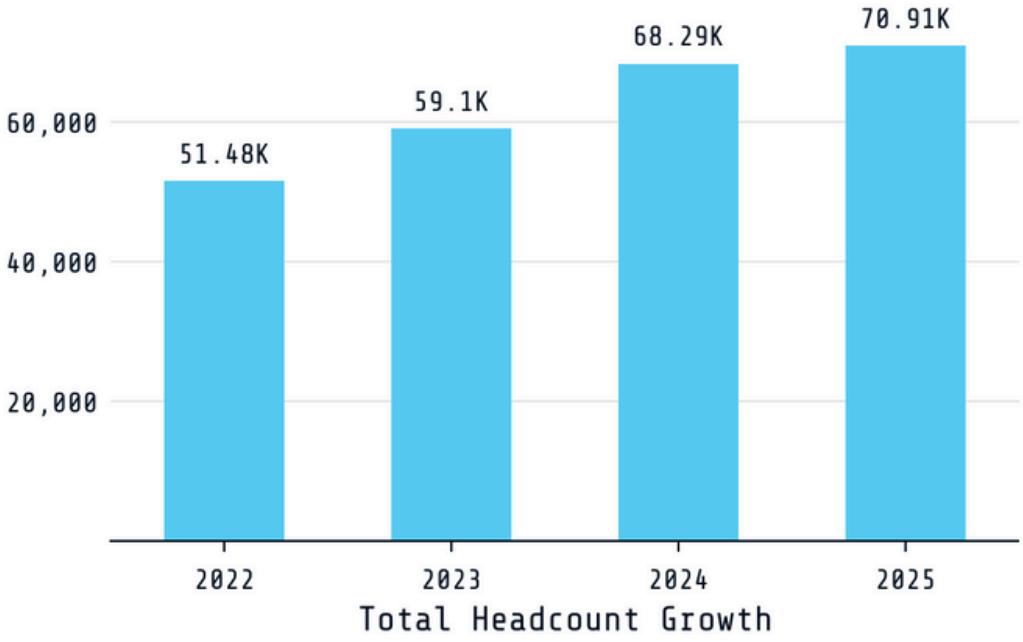


Chart: SVDG Analysis

Total Headcount Growth



Source: SVDG Analysis

Yet this growth also reveals a brewing imbalance. While the NatSec100 companies are hiring at pace, **headcount within the U.S. Government — particularly within the acquisition workforce — continues to decline**. The number of Contracting Officers, Program Managers, and technical evaluators is shrinking just as the volume and complexity of innovative commercial offerings is increasing.

Where does this end? Without a corresponding investment in government-side talent, the gap between capability supply and acquisition capacity risks becoming a structural failure point. No matter how fast startups grow, if the Department lacks the personnel to solicit, assess, and onboard these technologies, the system bottlenecks.

Takeaway

The NatSec innovation workforce is no longer theoretical — it's here, it's scaling, and it's nationally distributed.

The NatSec innovation workforce is no longer theoretical — it's here, it's scaling, and it's nationally distributed.

Byron Boots, CEO
& Steph Bonk, President
Overland AI

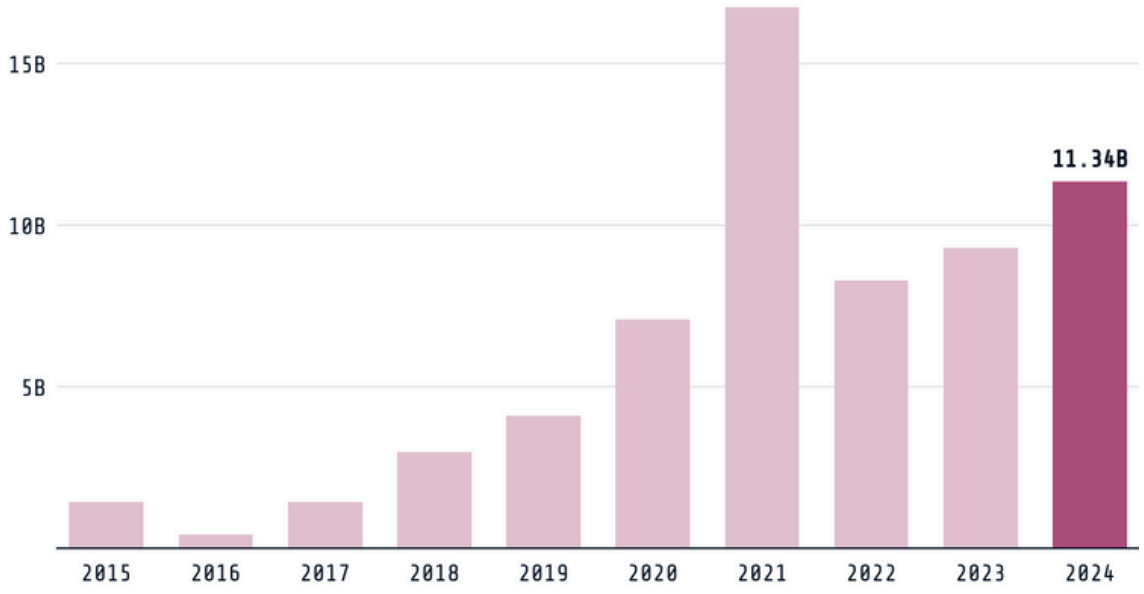
Our inclusion in the NatSec100 reflects Overland's growing momentum: doubling headcount, expanding to D.C., and delivering cutting-edge autonomy to warfighters. We're deploying autonomous ground vehicles that operate reliably across extreme conditions—from deep snow to dense forests—enabling one operator to command fleets. This capability is built through deep collaboration with Army, Marine Corps, and Special Operations units. With 20% PhDs, 20% veterans, and expanded facilities for software, hardware, and field testing, Overland is delivering what defense needs now: technical and operational excellence that helps protect lives on the battlefield.

Who is Funding the Companies?

Over the past year, we've seen a significant increase in private investment across the NatSec100 cohort — with total venture funding up **32%** compared to 2024. This growth is being driven by **venture capital, growth equity, and crossover funds (e.g. mutual funds and hedge funds making late stage private investments)** that increasingly recognize dual-use technologies as both strategically important and commercially viable.

Private Capital Investment in NatSec100

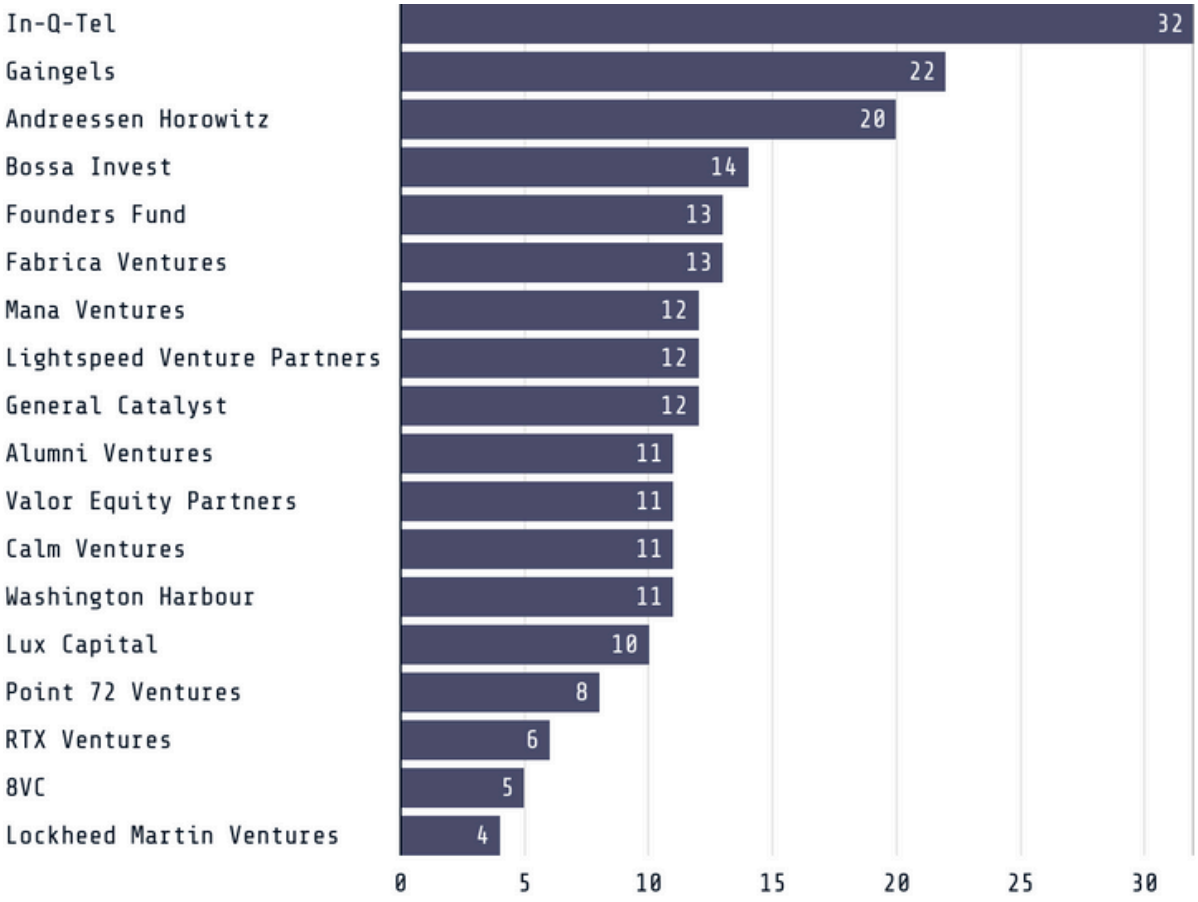
Defense innovation ecosystem momentum reflected in consistent yearly increase of investment.



Source: SVDG Analysis

Top 2025 NatSec100 Investors

Number of 2025 NatSec100 Company Investments by Firm



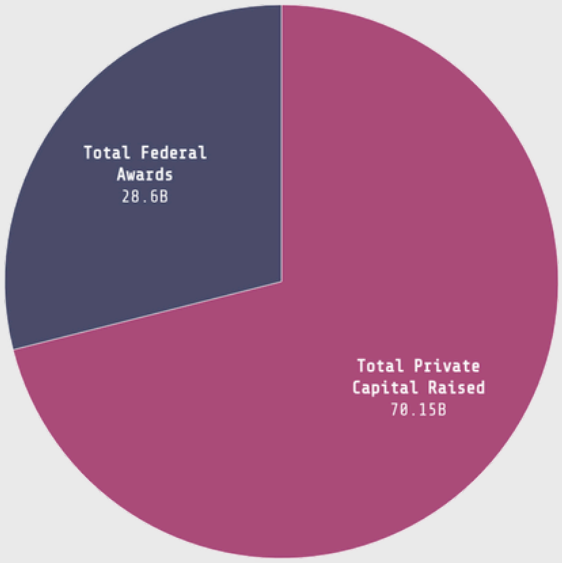
Source: SVDG Analysis

Top-tier firms are doubling down on national security bets — in areas like AI, space systems, advanced manufacturing, autonomy, and cybersecurity. Many of the fastest-scaling NatSec100 companies have raised large, late-stage rounds to build out production capacity, secure clearances, and deepen their federal customer base.

But the public sector is **not scaling in parallel.** Total U.S. Government spending across the NatSec100 cohort has grown modestly, and remains concentrated at the very top of the list — meaning a small handful of companies capture a disproportionate share of prime contract dollars, while the rest compete for crumbs. Despite rhetoric around diversifying the industrial base, the reality is that emerging players are still not seeing meaningful, programmatic contract dollars at scale.

Delta Between Private Investment and USG Awards Carries Risk

Despite growth in USG awards to NatSec100 companies, consistent and dangerous gap remains.



Numbers include ALL private investment and ALL public contract and funding dollars over all time.

We founded Vannevar to solve urgent national security problems by pairing top-tier American engineers with mission operators, and built the company ground-up around our country's top national security priority--competing with China. We've focused on capital efficiency as we've grown--spending only $12M in venture capital since we founded the company in 2019 and generating $80M in revenue last year. We're now valued at $1.5B, making us the most capital efficient defense unicorn by an order of magnitude. As global threats intensify, we're investing our own profits into bold technologies—cyber, economic warfare, sensing—to give the U.S. an edge and prevent future military conflict.

Nini Hamrick
President, Vannevar Labs

The $41.5B gap between private investment and federal revenue matters. The market is telling these companies to grow — and investors are backing them. But the Department of Defense has not yet built the contracting infrastructure or funding flexibility to meet the moment. Until that happens, we risk a two-speed ecosystem: one where private capital continues to surge ahead, while public dollars remain tethered to legacy processes and incumbent primes. Ultimately, this is not sustainable and we risk ecosystem momentum collapse.

Takeaway

If we want to unlock the full potential of the NatSec innovation base, public capital must start moving with the same urgency and clarity of purpose as private capital.

Capital is increasingly flowing because of value creation, geopolitical forces, and technology advances. Lightspeed is most excited to invest in this category because the best companies are fundamentally changing how systems for the military are made. While the first wave of defense tech focused on autonomous systems, the next wave will be characterized by advanced offensive and defensive weaponry. We think we will see a shake up in who serves the DoD. We think there will be 4-5 emerging defense companies elevated to major prime contractor status.

Connor Love

Partner, Lightspeed Venture Partners

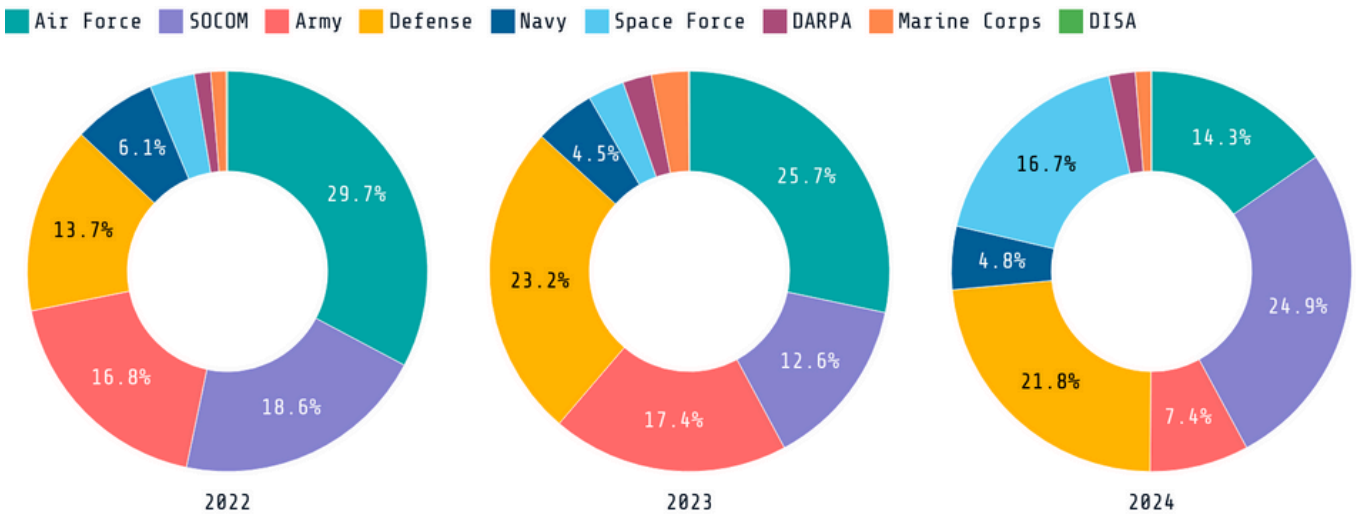
How Are the Companies Working with USG?

For NatSec100 companies, operational impact is increasingly reflected in government contract data—from traditional FAR-based awards to more flexible tools like Other Transaction (OT) authorities and SBIR/STTR grants. These pathways show how well startups are breaking through bureaucratic hurdles to deliver real-world capabilities.

More NatSec100 firms are now securing meaningful contracts from U.S. government agencies. The Air Force and U.S. Special Operations Command stand out as frequent adopters of emerging tech, particularly in AI, autonomy, and dual-use software. Their willingness to use agile contracting approaches makes them key entry points for nontraditional vendors.

Department of Defense Spending by Component

Disaggregation of DoD NatSec100 spend illustrates comparative strong performance and consistent prioritization of defense innovation from Department of Air Force and SOCOM. This chart excludes SpaceX data.



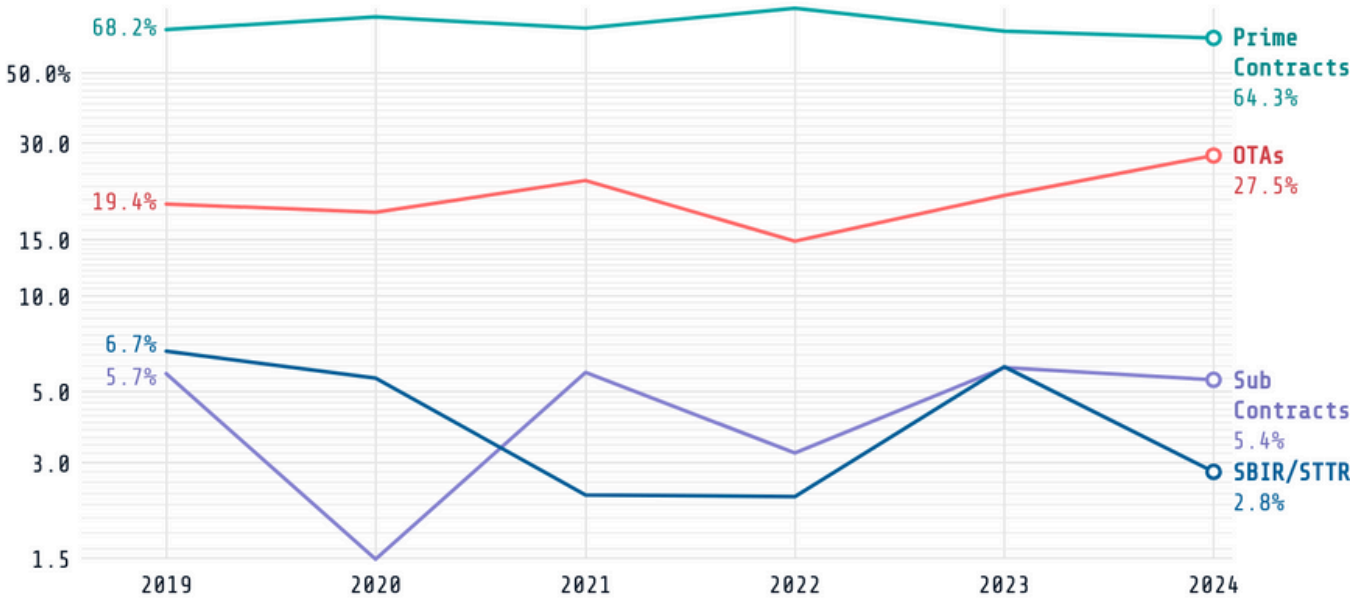
Source: SVDG Analysis

*Defense includes all subcomponents of Office of the Secretary of Defense (OSD) (e.g. Missile Defense Agency, Defense Logistics Agency, etc.)

One major trend is the rise of OT authority use, which helps the government partner with innovative companies outside the traditional defense base. Many NatSec100 firms, especially in autonomy, cyber, and edge computing, are using OT-based agreements or Commercial Solutions Offerings (CSOs) to gain traction. This reflects a broader shift in acquisition strategy, as agencies acknowledge that legacy processes are too slow to keep up with innovation.

Shift in Contract Type Towards OTAs

As operational demands increasing require defense tech innovation, use of OTAs increasing, while traditional Prime awards decrease. The chart below excludes SpaceX data.



Source: SVDG Analysis

*comparison for 2025 NatSec100 Cohort companies by year

70
Companies with Prime USG contracts

43
Companies have used an OTA

50
Companies that have received an SBIR grant

The 2025 NatSec100 cohort shows progress—more contracts, better access to receptive agencies, and increased use of flexible authorities.

Still, challenges remain. Although designed for early-stage R&D, SBIR/STTR programs are not consistently embraced by leading non-traditional companies. These awards are often seen as too small, slow, or disconnected from a PoR finish line to be worth the effort. Only 50% of the 2025 NatSec100 companies have received an SBIR/STTR grant. A concerted effort to reduce "SBIR Mill" companies will also prove helpful to improving today's SBIR/STTR program.

In the end, government adoption still lags behind the pace of private capital.

Takeaway

To truly scale emerging tech across the mission, the Pentagon must reduce barriers, spread investment more broadly, and institutionalize faster pathways from prototype to program of record.

While the VC ecosystem and Pentagon are in a new renaissance period, there is simply a mismatch with regard to how China utilizes their 2500+ state backed funds. If we want to compete with China for private sector capital investment into the military, the only metric of success is in the tech being operationally used in the fight, not money raised.

Brian MacCarthy
Managing Partner
Booz Allen Ventures

Defense Tech at an Inflection Point

A Moment of Strategic Reckoning

The NatSec100 report — and the broader mission of the Silicon Valley Defense Group — emerged from a recognition that the U.S. defense enterprise needed to prepare to absorb a future inflection point. That moment has arrived. Today, the United States can no longer assume uncontested dominance over the global commons. Strategic competitors are advancing, battlefield conditions are evolving rapidly, and our defense acquisition system remains mired in a status quo built for a different era. We are navigating 21st-century threats with largely 20th-century tools, while existing tools, like OTAs or CSOs, are likely underutilized. Success will require improved use of existing toolboxes and the initiation of new acquisition mechanisms and reforms.

The Readiness Gap

America's entrepreneurial technology ecosystem — particularly the dual-use venture-backed sector — is one of the country's most powerful untapped assets. Yet the national security enterprise has not adapted to harness it fully and effectively. While promising technologies exist across autonomy, cyber, space, and advanced software, the systems for acquiring and scaling them remain slow, risk-averse, and misaligned with operational urgency. The result is a growing gap between what is technologically possible and what is tactically deployable. We must fix this readiness gap before it becomes a strategic vulnerability.

A Wake-Up Call from Ukraine

Recent events in Ukraine have underscored the dangers of delay in adapting to modern, asymmetric warfare. In a paradigm-shifting drone strike earlier this year, Ukrainian forces employed first-person view (FPV) drones deep into Russian territory, demonstrating not only bold operational tactics but also the disruptive potential of pairing commercial software with low-cost hardware. This form of asymmetric engagement enables drone units to deliver levels of lethality once reserved for armored brigades or close air support — at a fraction of the cost. According to the Ukrainian 92nd Assault Brigade, a $100M drone unit can execute 5,000 lethal strikes annually, bringing the per-strike cost to just $20,000. This level of efficiency and impact is unmatched by traditional U.S. defense systems and illustrates how asymmetric technologies are redefining battlefield dominance.

The Next Revolution in Military Affairs

These developments may mark the beginning of a new revolution in military affairs — one defined not by new exquisite platforms or decades-long procurement cycles, but by the rapid iteration of commercial tech, highlighted in the proliferation of attritable, low cost, high impact, autonomous systems. The Ukraine case exemplifies a future in which software-defined, networked, and decentralized systems dominate the battlefield. If the U.S. does not reengineer its acquisition, development, and deployment models to match this pace, it risks falling behind both allies and adversaries.

> The country is not prepared to scale innovation adoption. If called upon in crisis, we are not ready. We must fix that. The country cannot afford failure.

Recommendations

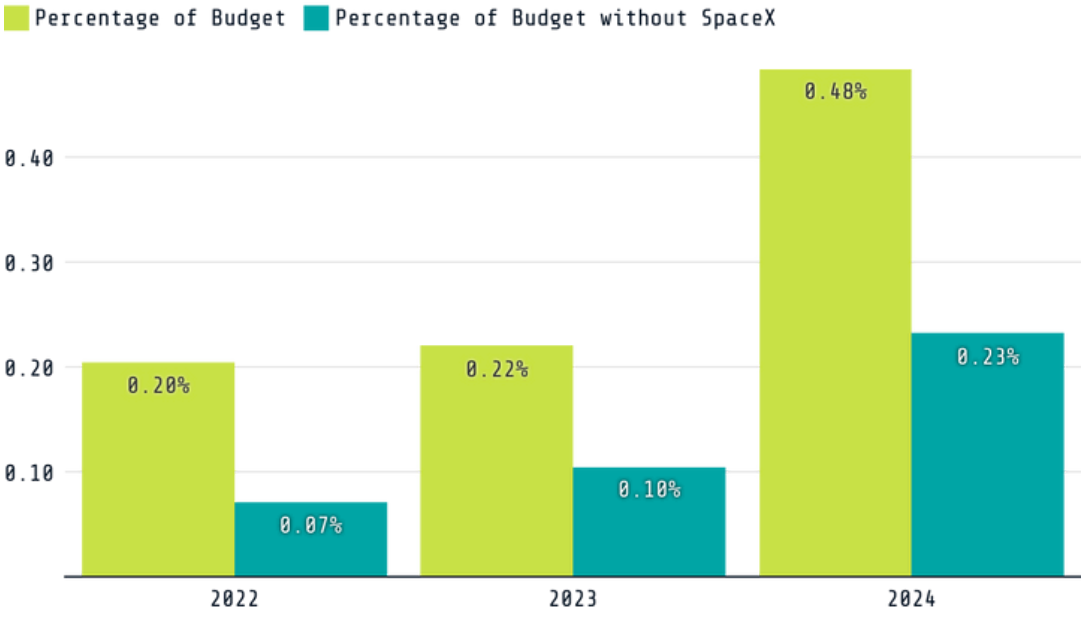
Focus on Adoption, Not Just Innovation: Turning Momentum into Mission Impact

Over the past several years, the Department of Defense has made significant strides in recognizing the importance of non-traditional defense technology. Today, efforts are being made at streamlining innovation pathways. The data reflects such, as seen below.

However, SVDG concludes that innovation alone is not enough. What matters most is **innovation adoption**—it is time for the U.S. government to move past a focus on identification of promising technologies, and to deploy technologies at scale in mission-relevant contexts. Our adversaries don't differentiate between "defense innovation" and "defense." Nor should we. We must adopt this mindset.

NatSec100 Companies Win Bigger Share of Defense Budget

Even when including SpaceX, total spend constitutes less than half a percent of DoD budget.



Source: SVDG Analysis

This shift from invention to implementation demands a recalibration of effort. The focus must move beyond experimentation and prototyping and toward contracting, fielding, and sustainment. Simply put: **energy, attention, and political capital must now be invested in buying innovation, not just finding it**.

Several potential risks could result in ecosystem failure:

- **Momentum Shift**
  Gap between private and public investment widens, capital deployment is halted by lack of company success stories, and ecosystem growth into next phase of maturity is stunted.
- **Diverted Attention**
  World events and domestic politics distract leadership from the intentionality, creativity, and risk taking required to enable innovation adoption.
- **Degredation of Mission Impact**
  Warfighters not equipped with required tools due to bureaucratic inertia, siloed development efforts (abroad and domestically), and lack of adoption at scale.

Recommendations for the Next 12–36 Months to Enable NatSec100 Companies to Flourish

Prioritize Innovation Adoption Over Innovation Creation

- Refocus OSD and Service innovation organizations on scaling and adoption over invention and innovation.
- Redirect energy and resources to accelerating deployment, ensuring recent tech investments result in fielded capabilities.

Standardize Scalable, Incentive-Aligned Contracts for Software

- Expand use of fixed-price award fee contracts tailored to commercial software firms, enabling scalable licensing and performance-driven growth.
- Normalize use of the Software Acquisition Pathway (SWP) to treat software-first firms as primes, with hardware in support roles.

Avoid the "Program of Record (PoR) Trap" Without Fielding

- Encourage adoption models outside traditional PoRs (e.g., direct-to-requirement contracting) but ensure these are supported by pathways to real-world deployment.
- Reward follow-through and institutional commitment—not just experimentation.

Signal Demand More Clearly to Industry and Investors

- OSD, SCO, and Services must clarify high-priority capability needs and concrete pathways to adoption—not just exploratory tech interests.
- Align government communication with investor expectations to unlock private capital already on the sidelines.

Engage Public Markets and Institutional Investors

- Help normalize dual-use defense tech by educating and engaging public equities analysts and institutional investors.
- Pivot from targeting one-off deals to courting long-term market support for defense tech as a maturing asset class.

Scale Coordination with Allied Innovation Ecosystems

- Build joint investment and development pathways with allied nations to mutually reinforce innovation ecosystems.
- Expand joint programming, shared test infrastructure, and capital exchange models.

Create PEO Scorecards to Incentivize Adoption

- Develop and publicly share performance scorecards for Program Executive Offices (PEOs) to track and reward mission-driven innovation adoption.
- Use outcome-based metrics to drive cultural change around risk, experimentation, and return on investment.

The success of U.S. defense innovation will ultimately be measured not by the volume of novel tech being funded in incubation cells, but by what is operational, fielded, and mission-relevant. In the coming years, the real differentiator will be how well government systems evolve to **buy, adopt, and scale** what the innovation base is already building.

Acknowledgements

We are deeply grateful to the individuals and organizations whose partnership, insight, and commitment made the NatSec100 possible.

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And finally, to the core **SVDG team**: **Emily McMahan**, **Simone Montadon**, and **Kyra Miklos** — thank you for your relentless energy, thoughtful execution, and unwavering dedication. This report is the result of your deep expertise and grit.

About
Silicon Valley Defense Group (SVDG)

The **Silicon Valley Defense Group (SVDG)** is a non-profit organization dedicated to accelerating national security innovation by bridging the gap between emerging technology, private capital, and the U.S. government. We convene industry, policymakers, and mission stakeholders to foster collaboration, surface new pathways for fielding critical technology, and support a resilient, distributed, and modern defense industrial base.

From policy dinners and executive roundtables to research reports and initiatives like the **NatSec100**, SVDG operates at the intersection of innovation and national defense—driving impact where it's needed most.

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to collaborate with other mission-driven leaders across tech, capital, and national security.

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