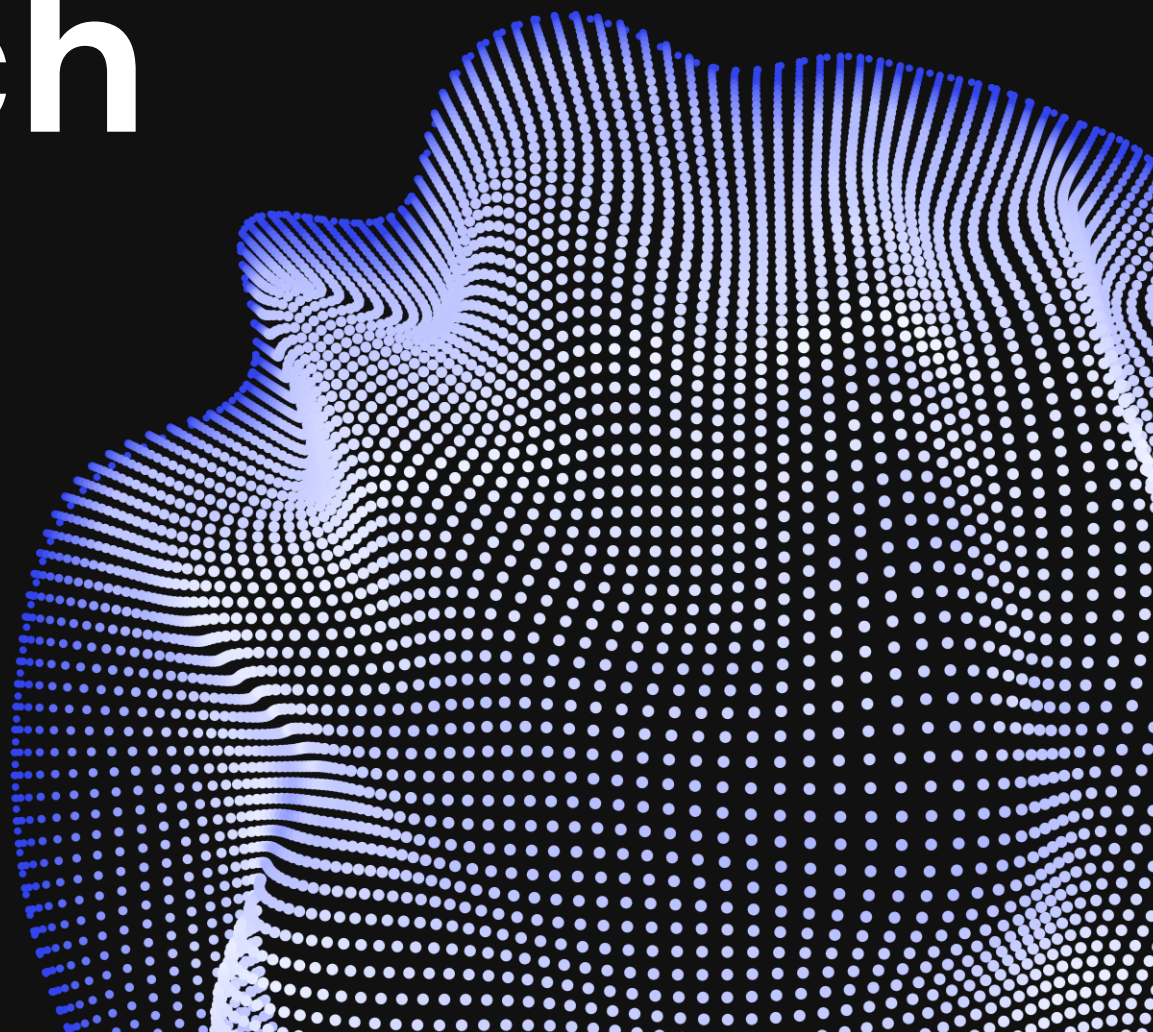




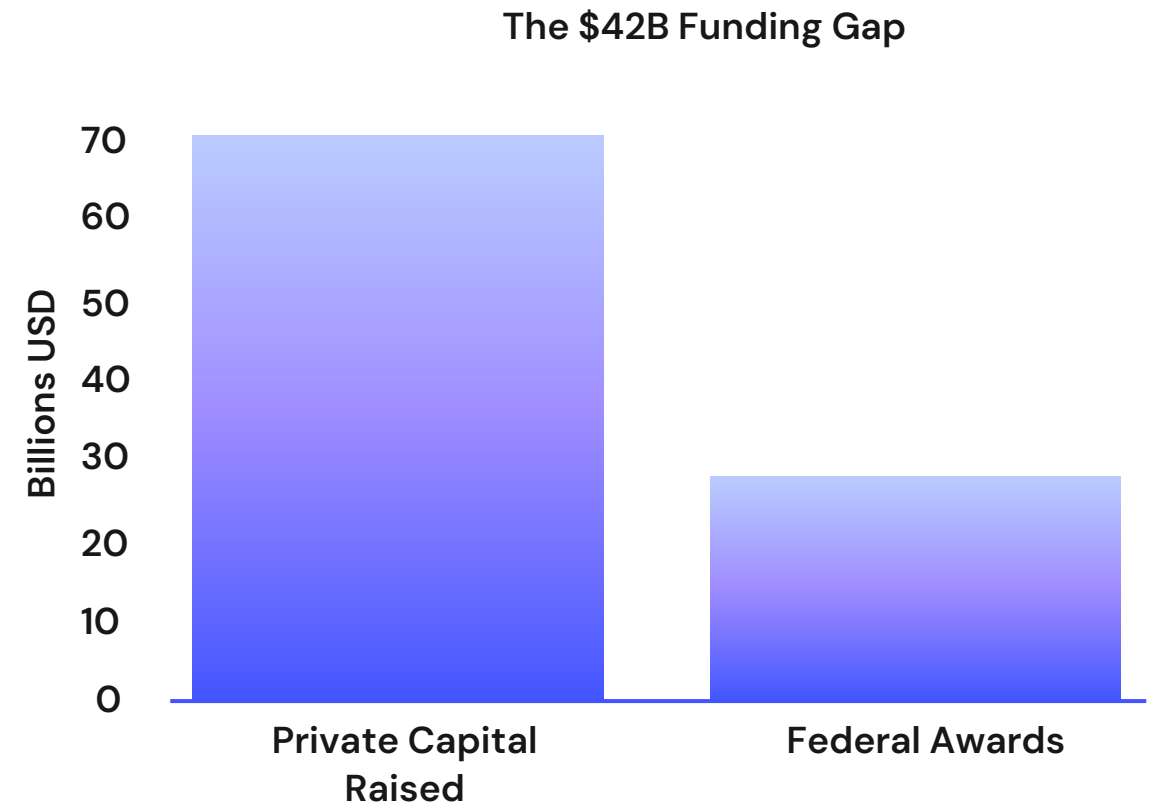
Defense Tech and the \$42 Billion Gap

Venture Capital Raised
vs
Federal Contract Awards



The \$42B Gap: Why VC-Backed Defense Startups Are Winning Contracts and Losing Money

In the last two years, venture capital poured more money into defense tech than at any point in history. The Pentagon has never been more vocal about wanting innovation. And somehow, the system still feels stuck. The numbers tell the story. According to the 2025 edition of the SVDG's NatSec100, the top 100 venture-backed defense companies have raised \$70.1 billion in private capital but collected only \$28 billion in federal awards. That \$42 billion gap isn't a funding problem. It's a structural problem—rooted in three misaligned narratives: Defense sees opportunity created. Venture capital sees a market forming. Startups see a survival timeline. Same ecosystem, fundamentally different interpretations.



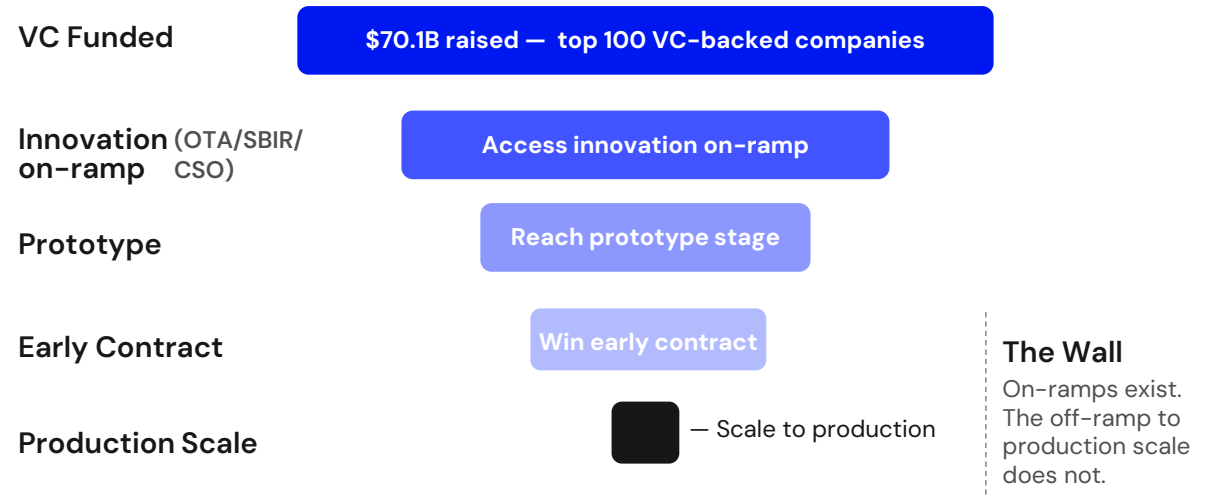
The Pentagon's Dilemma: What Defense Wants vs. What It Actually Buys

The DoD has made genuine moves toward innovation. It created the Office of Strategic Capital to channel private investment into defense-critical technologies, increased OTA awards by 8% from FY2024 to FY2025, introduced Commercial Solutions Openings as a streamlined on-ramp for nontraditional contractors, and stood up the Middle Tier of Acquisition to help promising technologies bypass the traditional program of record gauntlet. The intent is real.

But intent and buying behavior are two different things. The bulk of DoD contract dollars still flow to the same handful of established primes, and the acquisition system that governs how money actually moves hasn't fundamentally changed. The on-ramps exist. The off-ramp to production scale does not.

The Off-Ramp Doesn't Exist

Defense startup pipeline drop-off — from VC funding to production scale



Source: Silicon Valley Defense Group NatSec100 · **\$70.1B** private capital raised · only **\$28B** in federal awards collected · **\$42B gap** · Funnel proportions are directional

The VC Bet: How Venture Capital Misjudged the Defense Market

When venture capital discovered defense, it saw everything it wanted: a massive, non-cyclical customer with an unlimited budget and an urgent need for exactly what Silicon Valley builds. What it didn't see was how that customer actually buys.

VCs came in treating defense like enterprise SaaS. Large addressable market, the federal government as an anchor customer, and a clear path to recurring revenue. What VCs failed to price in was that a DoD contract win is not a customer. It's the beginning of a very long, very expensive relationship with unclear unit economics and no guaranteed renewal.

The difference becomes obvious when you compare it to how commercial deals actually work. In the private sector, relationships move fast. You meet the client, make your case, and close the deal, sometimes over dinner, sometimes over a round of golf.

Contracts are signed in weeks, not months. You deliver, submit an invoice, and thirty days later you're paid.

The government doesn't work that way. There is no wine and dine. There is only a procurement process, a contracting officer, compliance requirements, and a payment cycle that bears no resemblance to the cash flow models VCs built their return assumptions on. The money is real. The timeline to see it is not what anyone projected.

The VC Bet: How Venture Capital Misjudged the Defense Market



Commercial Sales

Deals close in weeks

Fast invoice cycles

Relationship-driven

Predictable scaling

Government Procurement

Awards can take months or years

Slow payment processes

Compliance-driven

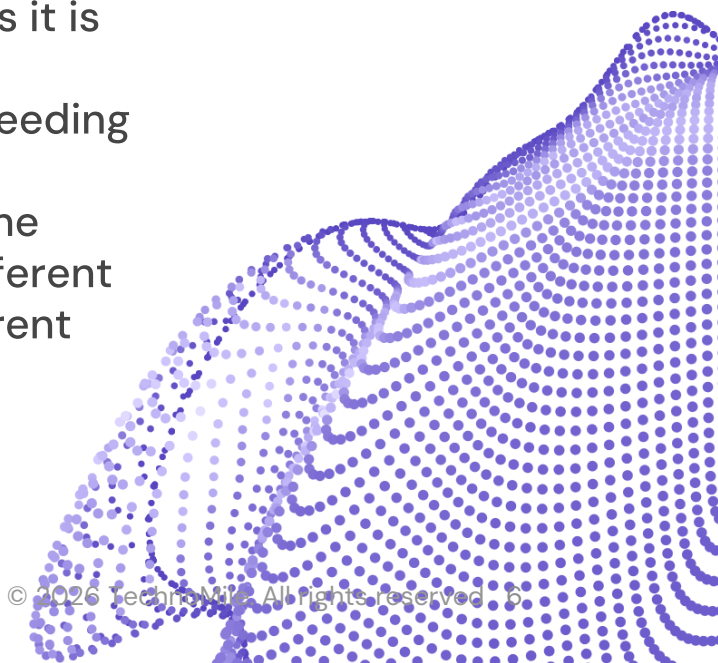
Uncertain production pathways

The Third Side of the Triangle: The Defense Startups

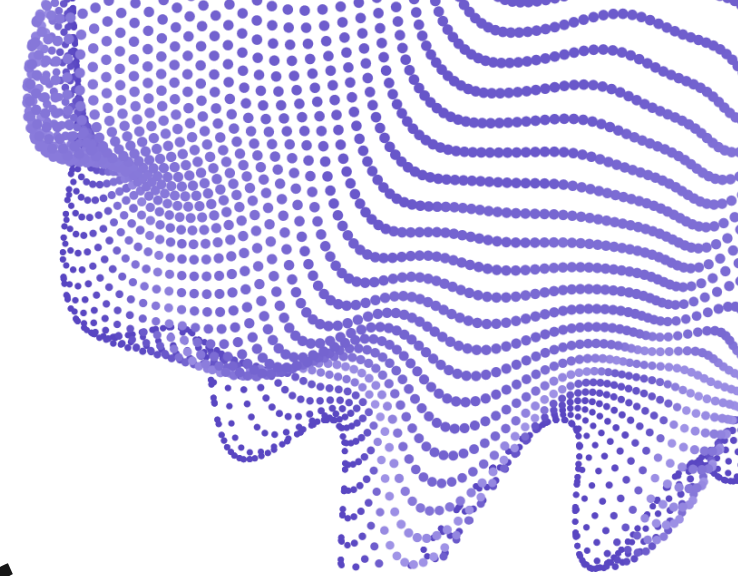
The venture-backed defense companies are caught in the middle. They won the pitch competitions, the OTAs, the SBIR grants, and even some early contracts. But they're burning cash between contract award and actual payment, can't manufacture at the volumes DoD needs, and are discovering that the bridge from prototype to program of record is where companies go to die. They face long timelines, compliance burdens, and profit structures that don't match their cost of capital. That \$42 billion gap isn't an abstraction. It shows up on every venture-backed defense company balance sheet as the distance between what investors expected and what the government actually paid.

On paper it should work. The money is there, the demand signals are real, and the acquisition pathways exist. But the three players in this ecosystem are not actually aligned, and the gap between them is wider than anyone wants to admit.

Defense believes it has created opportunity. Venture capital believes it is early to a booming market. And the defense startups believe they are bleeding out while waiting for real demand to materialize. They are all describing the same ecosystem, from angles so different they might as well be speaking different languages.



Same Ecosystem. Different Languages.



“

Defense

- “We opened pathways”
- “OTAs increased”

“

Venture Capital

- “We’re early”
- “Demand is real”

“

Defense Startups

- “We can’t survive this timeline”
- “Payment comes too late”

So How Do You Fix It?

The answer probably isn't another acquisition reform. The tools already exist — OTAs, CSOs, MTAs, the Office of Strategic Capital. The problem is that defense startups are trying to navigate a system they don't understand, with a timeline their investors won't tolerate, selling to a customer they've never met.

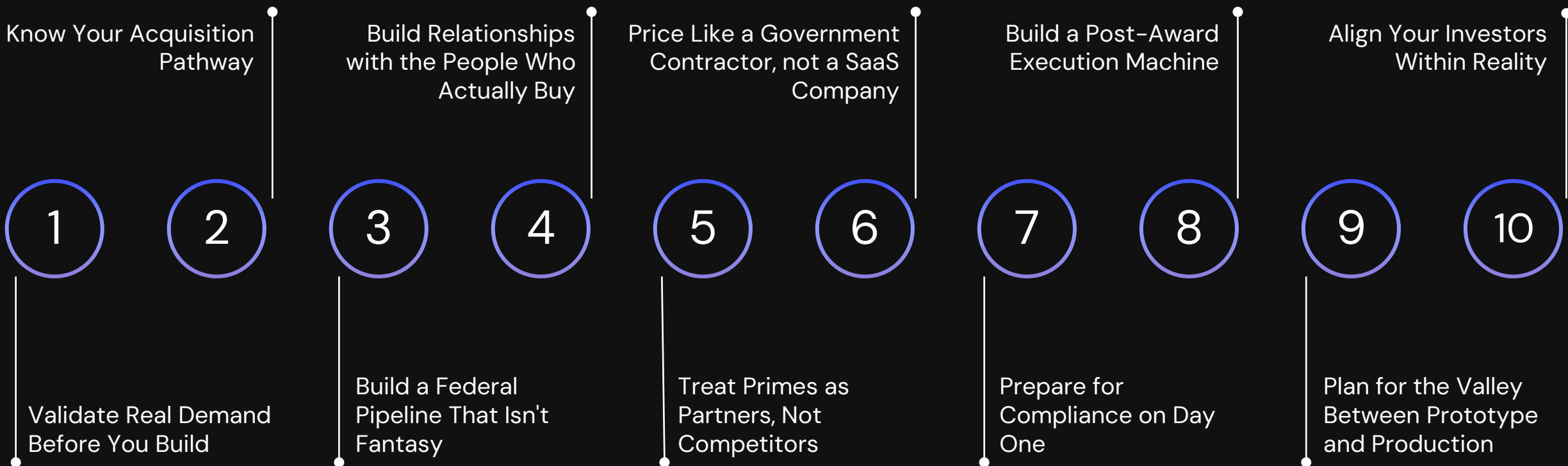
Closing that gap requires something more practical than policy: a way to make the existing system legible to the people trying to use it. That means faster onboarding into the government market, clearer visibility into contract vehicles and procurement pathways, and incentive structures that reward primes for scaling new entrants rather than absorbing them. The Mentor–Protégé Program is the closest existing mechanism, but today it's slow to navigate, hard to operationalize, and not built for the venture-backed startup era.

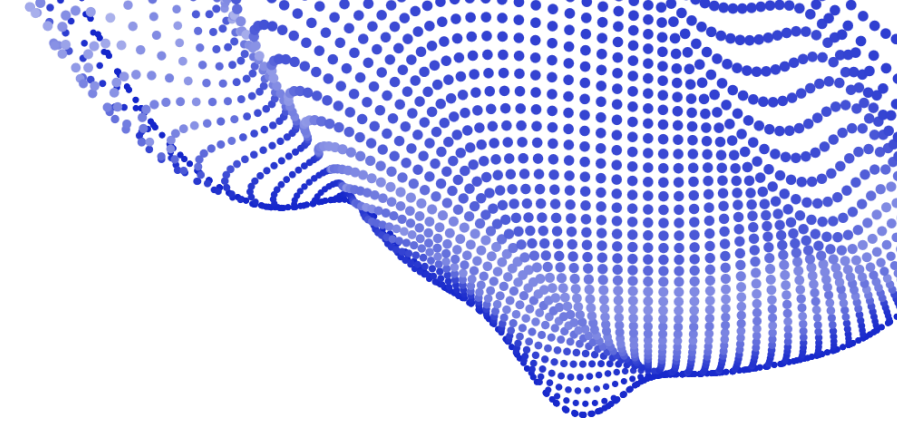
That's the problem TechnoMile was built to solve. Its integrated Growth, Contracts, and SIMS Suites give defense startups the tools to navigate government procurement without losing time or compliance ground, tracking contract changes and modifications, staying award-ready across OTAs, SBIRs, and full contracts, operationalizing a compliant industrial security program from day one (for those working with classified information), and turning the complexity of the federal market into something a defense startup's team can actually manage.

The relationships exist. The mechanisms exist. The money exists. What's been missing is a process designed for the government ecosystem we have now, and a platform built to operate inside it.

A Checklist for Defense Startups to Avoid Becoming Part of the \$42B Gap

If you're a defense startup, why not start being proactive? After all, you're already innovative, agile, and used to being out in front of technology. Take that same premise and apply it to the defense market.





1

Validate Real Demand Before You Build

You have a product. You know it would benefit the government. But you're not sure which agency needs it, whether the funding exists, or who your competition is. This is where TechnoMile's GovSearchAI pays for itself. It helps you identify which agencies actually buy your technology, confirm there is funding demand and not just interest, map the relevant programs of record and their timelines, and understand which primes already dominate the space and whether they need a subcontractor.

Don't build for a customer that doesn't exist.

2 Know Your Acquisition Pathway

Before you determine whether your technology fits OTA, CSO, SBIR, MTA, or FAR-based procurement, you need to understand the difference between each of them.

Pathway	Short Definition	Pros	Cons
OTA (Other Transaction Authority)	A non-FAR contracting method used for R&D, prototyping, and follow-on production with maximum flexibility	• Fastest path for prototypes • Fewer compliance burdens • Attractive to nontraditional vendors • Can lead to sole-source production	• Not guaranteed to transition to production • Limited to specific use case (R&D, prototyping) • Follow-on production requires justification
SBIR (Small Business Innovation Research)	A phased program providing non-dilutive funding for small businesses to develop and commercialize new technologies	• Non-dilutive capital • Clear phased structure (Phase 1 – 3) • Strong fit for early-stage startups • Phase III can be sole source	• Slow timelines • Highly competitive • Phase III transition is not automatic • Funding amounts are often insufficient for scaling

Pathway	Short Definition	Pros	Cons
MTA (Middle Tier of Acquisition)	A rapid acquisition pathway enabling the DoD to prototype or field capabilities in 2– 5 years, bypassing traditional programs for record	• Faster than traditional acquisition • Designated for emerging tech • Clear timelines for prototype and fielding • Strong pathway for scaling	• Requires mature technology • Still involves significant oversight • Not suitable for early-stage R&D • Can stall without sustained funding
CSO (Commercial Solutions Opening)	A streamlined, competitive process to acquire innovative commercial technologies using simplified evaluation and negotiation	• Faster than FAR • Great for dual-use and commercial tech • Lower barriers for nontraditional vendors • Flexible evaluation criteria	• Must be commercial or dual-use • Not always tied to long-term production • Funding can be limited or pilot-focused
FAR-Based Procurement	The traditional, highly regulated federal acquisition process governing most DoD contracts, including major programs and production	• Clear, established rules • Supports large, long-term production contracts • Predictable for experienced contractors • Strong oversight and accountability	• Slowest and most complex • Heavy compliance burden • Difficult for startups to navigate • High cost of bidding and execution

Understanding the difference between prototype funding and production funding is equally important.

Understanding the Two Types of Defense Funding

Early-Stage

Prototype Funding

(R&D / Early-Stage Funding)

Purpose

Reduce technical risk, Validate mission fit, Explore emerging or dual-use technologies, Run pilots, demos, and limited-scope experiments

Characteristics

Fast, flexible, often uses OTA, CSO, or SBIR, Lower dollar values, Shorter performance periods, No guarantee of follow-on work, Often non-recurring

Prototype funding is where most startups win, and where most die, because it does not equal a customer. It's a test, not a commitment

Scale-Stage

Production Funding

(Procurement / Fielding Funding)

Purpose

Acquire units, systems, or software at operational scale, Support long-term fielding and sustainment, Integrate into programs of record

Characteristics

FAR-based, structured, and heavily regulated, High dollar values, Multi-year contracts, Predictable revenue streams, Requires compliance, manufacturing readiness, and proven performance

Production funding is where real revenue lives, and where VCs expect startups to get. But the bridge from prototype to production is long, expensive, and often unclear

Bridge to production

Action

Know who controls the path

(Procurement / Fielding Funding)

Identify

Find the contracting shops and contracting officers who matters for your program. Know the decision-makers before the opportunity opens.

Track

Monitor which competitors are using which vehicle — this reveals where the market is actually moving, not just where it's being talked about

TechnoMile's GovSearch database gives you an updated picture of who's who across agencies, offices, and sub-offices.

Once you know your pathway

Prototype funding tests your idea • Production funding buys your product

3

Build a Federal Pipeline That Isn't Fantasy

Using an agentic-powered market intelligence platform like TechnoMile's GovSearchAI, you can build a pipeline based on funded opportunities, not wishful thinking. Track recompetes, incumbents, and historical award data. Understand the difference between "open" and "winnable."

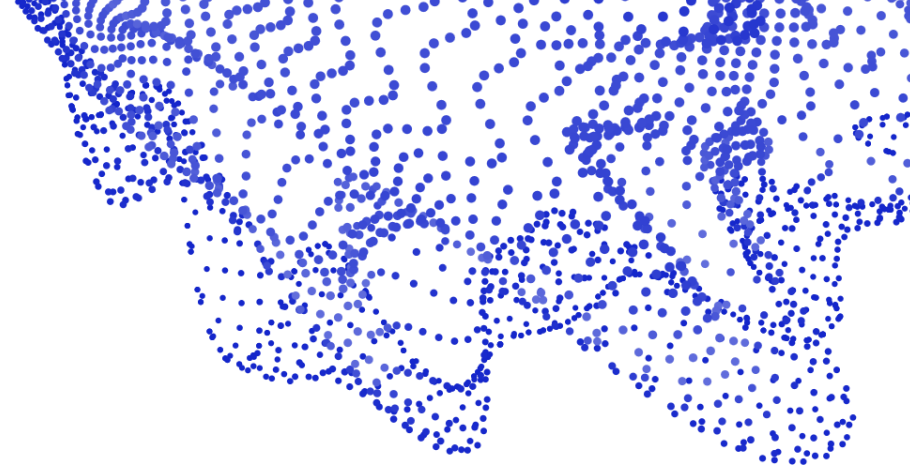
Your BD team gets actionable leads instead of noise. You replace optimism with intelligence.

4

Build Relationships with the People Who Actually Buy

In the government market, knowing who the players are is half the battle. Using tools like TechnoMile's GovSearch contact intelligence database, identify the program managers, contracting officers, and end users who control the budget and the buy. Attend the right industry days and technical exchanges. Understand the agency's mission, not just its requirements. Map the influencers and decision-makers across the acquisition chain.

Programs don't buy technology. People do.



5 Treat Primes as Partners, Not Competitors

Navigating the government market without understanding the prime landscape is like walking through a minefield. Using TechnoMile's GovSearchAI, map prime activity, award history, contract vehicles, and capability gaps before you ever walk into a conversation. Identify which primes align with your technology. Explore subcontracting, teaming, and Mentor-Protégé opportunities with confidence, not guesswork.

Don't try to outmaneuver a prime, out-partner them.

High-growth tech companies fail early because they chase noise, not demand, and lack the scalable processes to manage what they do win. TechnoMile's Growth Suite gives you the intelligence to pursue only what's real and the structure to drive consistent opportunity management processes across your entire team, track a growing pipeline, and collaborate effectively at every stage.

6

Price Like a Government Contractor, Not a SaaS Company

Understanding government contract pricing models puts you one step closer to navigating this space effectively.

Contract Type	Short Definition	Pros	Cons	Best For
Cost-Plus (CPFF, CPIF, CPAF) <i>Government takes the risk; contractors must prove every cost</i>	Government reimburses allowable costs and pays a fee; contractor is paid for effort, not outcome	- Lowest financial risk for contractor - Good for R&D and uncertain work - Encourages innovation where scope is unclear	- High compliance burden - Requires audited accounting system - Incentives for efficiency are weak - Cash flow can be slow	Early-stage R&D, complex development, uncertain requirements
Fixed-Price (FFP, FPIF) <i>Contractors takes the risk; profit depends on execution discipline</i>	Contractor delivers a defined product / service for a set price; contractor bears cost risk	- Predictable cost for government - Higher potential profit for contractor - Faster awards when scope is clear	- High financial risk for contractors - Require mature tech and stable requirements - Cost overruns come out of contractor margin	Production, manufacturing, mature tech, repeatable services
Time & Material (T&M) <i>Government pays for hours; contractor paid for effort, not deliverables</i>	Government pays for labor hours + materials; contractors are paid for time spent	- Flexible when scope is evolving - Faster to start work - Good for advisory, engineering, or surge work	- High oversight from government - Risk of appearing inefficient - Profits tied to hours, not outcomes	Services, engineering support, undefined or rapidly changing requirements

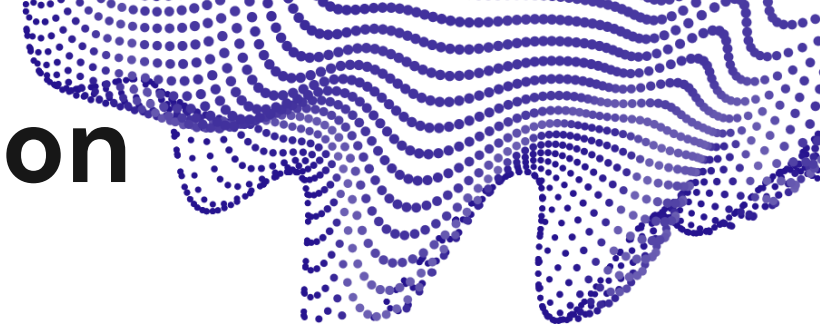
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Prepare for Compliance on Day One

Tracking government contract obligations on a spreadsheet is not a strategy; it's a liability. You need to identify clauses and funding details, track deliverables, modifications, and reporting requirements, and maintain audit-ready documentation at all times. TechnoMile's Contracts Suite handles all of it in a centralized contract repository that uses AI to automate workflows, removing administrative burden and freeing up your contracts professionals to focus on risk mitigation.

In addition, if your company works on contracts involving classified information, compliance with National Industrial Security Program (NISP) requirements isn't optional and the cost of getting it wrong goes well beyond a failed audit. TechnoMile's SIMS Suite unifies personnel, physical, and information security into a single trusted system of record, delivering complete visibility across every asset, access point, and individual within your security domain. The result is improved efficiency, stronger risk management, and a measurably reduced audit burden that lets your team scale security operations without adding headcount.

The best time to build your compliance infrastructure was before you won the contract. The second-best time is right now.



8

Build a Post-Award Execution Machine

Winning the award is the beginning, not the finish line. The moment a contract is awarded, the clock starts: funding, deliverables, deadlines, acceptance criteria, modifications, and audit documentation all need to be managed simultaneously, often across multiple contracts at different stages. For a defense startup still building its operational infrastructure, that load can be fatal if it isn't managed with the right tools from day one.

TechnoMile's Contracts Suite was built for exactly this moment. It centralizes contract obligations, automates deliverable tracking, enables proactive management of modifications and option periods, and maintains the audit-ready documentation trail that DCAA and DCMA expect to see. Winning a contract is the easy part. Executing it without drowning in compliance is where defense startups either build a sustainable government business or burn out trying.

For defense startups executing contracts that involve classified information, post-award compliance extends to industrial security requirements. TechnoMile's SIMS Suite keeps your security program running in lockstep with your contract obligations, tracking personnel clearances, managing visit requests, maintaining facility compliance, and ensuring nothing falls through the cracks between your contracts team and your security team throughout the life of the program.

The contract gets you in the room. Your security posture determines whether you stay there.

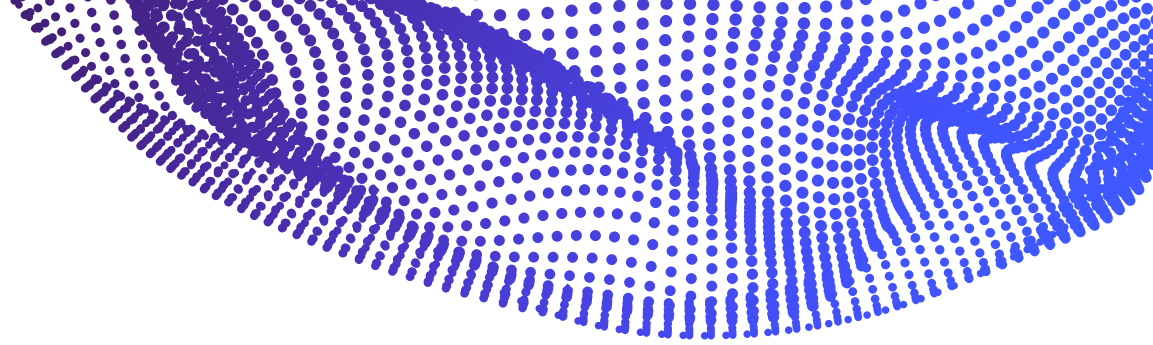
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Plan for the Valley Between Prototype and Production

Plan for an 18-to-36-month gap between early wins and real revenue. Secure bridge capital or non-dilutive funding. Build your manufacturing and supply chain plans early. Track production pathways and transition timelines. The goal is simple: survive long enough to scale.

TechnoMile's Contracts Suite gives you the infrastructure to make that jump safely, with purpose-built supplier intelligence and subcontract management tools that map your supply chain before you need it, ensure subcontract compliance with flowdown requirements, and maintain the documentation trail that production-scale contracts demand.

The defense startups that make it through the valley aren't the ones with the best technology. They're the ones that built the infrastructure to survive the wait.



10

Align Your Investors Within Reality

This final step is about transparency, reporting, and data-driven communication, and it's where everything comes together. TechnoMile's secure mission execution platform connects business development, contracts, compliance, and industrial security into one closed loop, giving founders and their investors a single, accurate picture of where the business actually stands. Dashboards show real pipeline health and monitor compliance and risk across your entire program portfolio. Integration with the ERP system provides a true picture of cash flow. Data helps founders educate investors on DoD timelines, replacing anxiety with evidence.

For defense startups operating in classified environments, that closed loop extends into industrial security. TechnoMile's SIMS Suite ensures your security program is never the weak link in the chain, keeping personnel, physical, and information security obligations current, visible, and audit-ready while the rest of the business scales around it. When investors ask hard questions about risk, liability, and program integrity, your security posture becomes part of the answer.

Investors don't fear long timelines. They fear uncertainty. TechnoMile gives you the data and intelligence, the structure, and the security posture to eliminate it, from first contract to full scale.

You don't close the \$42 billion gap with better technology. You close it with better execution.