



A VIPERIUS PLAYBOOK · AUGUST 2026

SBIR & STTR, Explained The \$50K Door

A founder's guide to America's largest non-dilutive funding program — what it actually is, how the three phases work, and how to find a solicitation worth pursuing.

INTRODUCTION

The government's largest non-dilutive funding program — and the one most founders half-understand.

SBIR and STTR let small businesses compete for federal contracts to solve problems government agencies actually have. Along the way, they hand out real, non-dilutive capital — no equity given up, no debt owed.

1982

THE YEAR SBIR WAS CREATED BY
THE SMALL BUSINESS
INNOVATION DEVELOPMENT ACT

\$81B+

INVESTED ACROSS MORE THAN
34,000 SMALL BUSINESSES SINCE
THE PROGRAM BEGAN

11

FEDERAL AGENCIES REQUIRED
TO RUN SBIR PROGRAMS OFF
THEIR OWN R&D BUDGETS

At Viperius, we've made a close study of both programs — not just what they are, but how to actually navigate them. For a defense startup, SBIR will provide the large majority of your viable federal contracting opportunities, and most defense-relevant solicitations are published by the Department of War (DoW), the Department of Defense's successor name as of 2025.

Both programs are also mid-transition as of this writing: SBIR/STTR's authorization lapsed for six months in late 2025 before being reauthorized on April 13, 2026 through September 30, 2031 — a reminder that even the government's most established startup funding mechanism carries real legislative risk.

A COMMON MISCONCEPTION

SBIR is not a defense-only or weapons-only program. It's government-wide — NIH and NSF actually distribute more SBIR funding than DoD does. For a defense startup, "defense-relevant" is a far wider net than weapons: software, sensors, cybersecurity, medical technology, and manufacturing processes all regularly appear as DoW topics.

SECTION 01

Two sister programs, one key difference: who does the research.

SBIR and STTR share the same three-phase structure and the same goal — but they answer a different question about who's allowed to do the work.

SBIR — Small Business Innovation Research

Founded in 1982, SBIR gives small businesses a shot at fulfilling contracts issued by government agencies. The competing business performs the large majority of the research itself: at least **67% of the effort in Phase I** and at least **50% in Phase II**, with the remainder available to subcontractors, consultants, or research partners. Collaboration with an outside research organization is allowed — it just can't be the majority of the work.

STTR — Small Business Technology Transfer

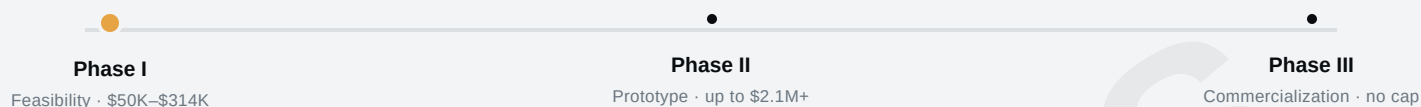
Founded a decade later in 1992, STTR funds research conducted jointly by a small business and a nonprofit research institution — typically a university or federal lab. The split is fixed: the business must perform **at least 40%** of the work, and the research institution must perform **at least 30%**, with the remaining 30% allocated between either party. STTR is generally the better fit for teams spinning directly out of a university lab.

MEASURE	SBIR	STTR
Founded	1982	1992
Research partner required?	No — allowed, not required	Yes — formal partnership required
Minimum work by small business	67% (Phase I) · 50% (Phase II)	40% (both phases)
Minimum work by research institution	N/A	30% (both phases)
Best fit for	Company-led R&D	University spin-outs

SECTION 02

Every SBIR/STTR contract moves through the same three phases.

Winning Phase I doesn't automatically carry you into Phase II — each phase is its own competitive proposal, open only to prior-phase awardees. Understanding what each phase actually rewards is the difference between a company that plans for the whole arc and one that's surprised by it.



Phase I — Proving Feasibility

\$50K–\$314K

TYPICAL DURATION: 6–12 MONTHS

The goal of Phase I is simple: prove the idea is feasible, not that it's finished. The agency evaluates the R&D behind your proposal and the promise it shows toward solving the stated problem. **The published guideline runs \$50,000 to roughly \$275,000**, though the SBA's inflation-adjusted statutory cap has climbed to approximately \$314,000 as of 2026 — agencies can exceed even that with an approved waiver on high-priority topics.

Phase II — Building the Prototype

Up to ~\$2.1M

TYPICAL DURATION: UP TO 24 MONTHS · OPEN ONLY TO PHASE I AWARDEES

Phase II is where a company tests and demonstrates its technology with significantly greater resources. This is the bridge between Phase I's proof-of-concept and Phase III's production — more advanced prototypes, improved performance, and real preparation for government purchase. **Only successful Phase I awardees are eligible to apply**, and it's a separate, competitive proposal, not an automatic continuation.

Phase III — Commercialization

No SBIR funding

NO FUNDING CAP · NO FURTHER COMPETITION REQUIRED

Phase III is fundamentally different: the SBIR/STTR program itself stops writing checks, and the technology becomes available for purchase — by commercial customers, other government agencies, or individual military branches. **The most important detail founders miss: Phase III contracts can be awarded sole-source**, without a new competition. That's the mechanism behind deals like Anduril's \$87M JIATF 401 task order — itself the first order under a 10-year, up-to-\$20B Army enterprise agreement — skipping the standard procurement cycle entirely.

SECTION 03

Start from the problem you solve, not the money on the table.

The single most important habit in SBIR contracting: identify what problem your technology solves, then find the solicitation that best matches that description. Chasing the biggest available award instead of the best-fit topic is the most common way startups waste a proposal cycle.

To show what that actually looks like in practice, here's how we'd walk a company through choosing a solicitation for an inertial navigation module built for aerospace systems.

Step 1 — Understand your product

TECHNOLOGY	Inertial navigation module
CAPABILITY	Determines an aerospace vehicle's position without relying on external reference signals
CURRENT STAGE	Early prototype
POTENTIAL USES	Missile systems, aircraft, drones, and other atmospheric aerospace applications

Step 2 — Widen your search vocabulary

Searching only "inertial navigation" misses a large share of relevant solicitations. Expand into adjacent terms agencies actually use when publishing topics:

AEROSPACE GUIDANCE

NAVIGATION ACCURACY

RUGGEDIZED ELECTRONICS

GPS-DENIED NAVIGATION

INERTIAL SENSING

SECTION 03, CONTINUED

Investigate the gap, map the phases, then decide.

Step 3 — Investigate the solicitation

Once you've found a plausible match, analyze exactly what the contracting agency wants and identify where your product already excels versus where it falls short. In our example, the navigation module might already satisfy requirements around miniaturization and low power draw — but fall short on durability, integration with an existing platform, or the level of precision the DoW is asking for. Those gaps become the explicit focus of the Phase I proposal.

Step 4 — Map out all three phases before you commit

- **Phase I.** Can you realistically close enough of the gap to show competence? It doesn't need to be a finished product — it needs to show genuine promise.
- **Phase II.** Can the lab prototype become a real, functioning design that's actually ready to be sold?
- **Phase III.** Who's the eventual buyer? Government agencies, military branches, private defense primes, or a dual-use commercial conversion all count.

Step 5 — Make the decision

This is the step Viperius specializes in: deciding whether a given contract is actually worth the time and cost of pursuing. The comparison that matters most is your current product against the solicitation's actual requirements. If you can realistically close the gap within a reasonable budget and timeline, it's worth pursuing. If not, it's almost always better to move on and find a better fit than to force a proposal that isn't ready.

THE VIPERIUS APPROACH

We help defense startups run exactly this process — matching real technology to the right solicitation, honestly assessing the gap, and deciding where the odds are actually worth the effort.

IN CLOSING

The money is public.
Knowing **which door to knock on**
is the actual advantage.



GET IN TOUCH
huntercoakley@viperius.co