



ΛFWERX
ΛFVENTURES

An Overview

Overview

AFVentures

SBIR vs STTR

Open Topic

Solicitation cycle

Phase I/Phase II/Phase III

STRATFI/TACFI

How to Leverage AFVentures





Mission

DAF's Commercial Investment Group

Leverage Commercial Technology to Deliver Better
Capability to the Warfighter, Faster



Vision

DAF's Commercial Investment Group

Develop and expand the 21st Century Industrial Base
for Defense



Approach

DAF's Commercial Investment Group

Incentivize private, for-profit investment in national security interests by matching emerging commercial solutions with DAF problems

A DUAL-USE APPROACH TO NATIONAL SECURITY SOLUTIONS

MISSION

Leverage commercial technology to deliver better capability to the warfighter, faster.

SIMPLICITY

An easy open door enables the Air Force to solve problems using existing & emerging commercial solutions

A NATIONAL APPROACH TO SECURITY

Incentivizes private capital investment in national security interests





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SBIR ★ STTR

Program Overview

Small Business Innovation Research and Small Business Technology Transfer

- **The SBIR program**, established by Congress in 1982 as a three-phased process, solicits proposals and awards funding to small business for federal research and development, production, services, or any combination of these, to meet agency needs and missions.
- **The STTR program** was established in 1992 with a similar statutory purpose. The major difference is that the STTR program requires a research partner consisting of one of the following:
 - University
 - Federally funded R&D center
 - Qualified non-profit research institution



SBIR vs STTR

STTR is similar to SBIR

- Three phase commercialization program codified in statute:
 - Discover (P1) – Prototype (P2) – Transition (P3)
- Results in sole-source justification for use by *all US federal agencies*

BUT

STTR has unique qualities based on its research focus

- Requires **one** qualifying research partner to perform **30% - 60%** of work (e.g. university, non-profit, or FFRDC)
- Principle Investigator may be primarily employed by research entity (e.g. professor) OR the small business
- Leverages close ties with both federal R&D AND operational communities



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SBIR★STTR

Open Topic

Open Topic

SBIR Open Topic

- The SBIR Open Topic program operates on a **single solicitation** that is an **open call for all solutions** - this allows businesses the flexibility to bring us tools and technology we didn't think to ask for.
- This program is open to startups and small businesses with **less than 500 employees** that are **majority American-owned**.

STTR Open Topic

- The STTR Open Topic program operates on a **single solicitation** that is an **open call for all solutions** - this allows businesses the flexibility to bring us tools and technology we didn't think to ask for.
- Businesses that apply to STTR must have less than 500 employees, be at least 51% U.S.-owned, complete at least 40% of the proposed work, and **partner with a university, research center, or non-profit development organization to perform at least 30% of the proposed work.**

Open Topic vs Specific Topic (previously Defense Focused)

Open Topic

Looking for non-defense commercial solutions to adapt to meet AF needs

- AFWERX evaluates/selects/manages Phase I proposals
- Stakeholders review/evaluate/select/manage Phase II proposals
- Customer Memorandum and funding commitment required for Phase II
- Company's business plan is "Extremely" important

Specific Topic

Topics seek innovative solution to a specific Defense problem

Phase I: NTE \$150K (9 Months) Feasibility Study

- AFRL & PEOs evaluate & select Phase I proposals (2 per topic)

Phase II: \$750K (27 Months) NTE \$1.5M or D2P2 up to \$1.6M

- AFRL & PEOs evaluate & select Phase II (1 per topic)
- AFRL TPOC manages Phase I & II contracts
- Letters of support from customer highly encouraged
- Company's business plan "Relatively" important

AFVentures at a Glance



MANY SMALL BETS (PHASE I)

- ▶ “Open door for innovation”
- ▶ Up to \$50,000 per award
- ▶ 1000-1500 awards per year
- ▶ Three solicitations per year



SOME MEDIUM BETS (PHASE II)

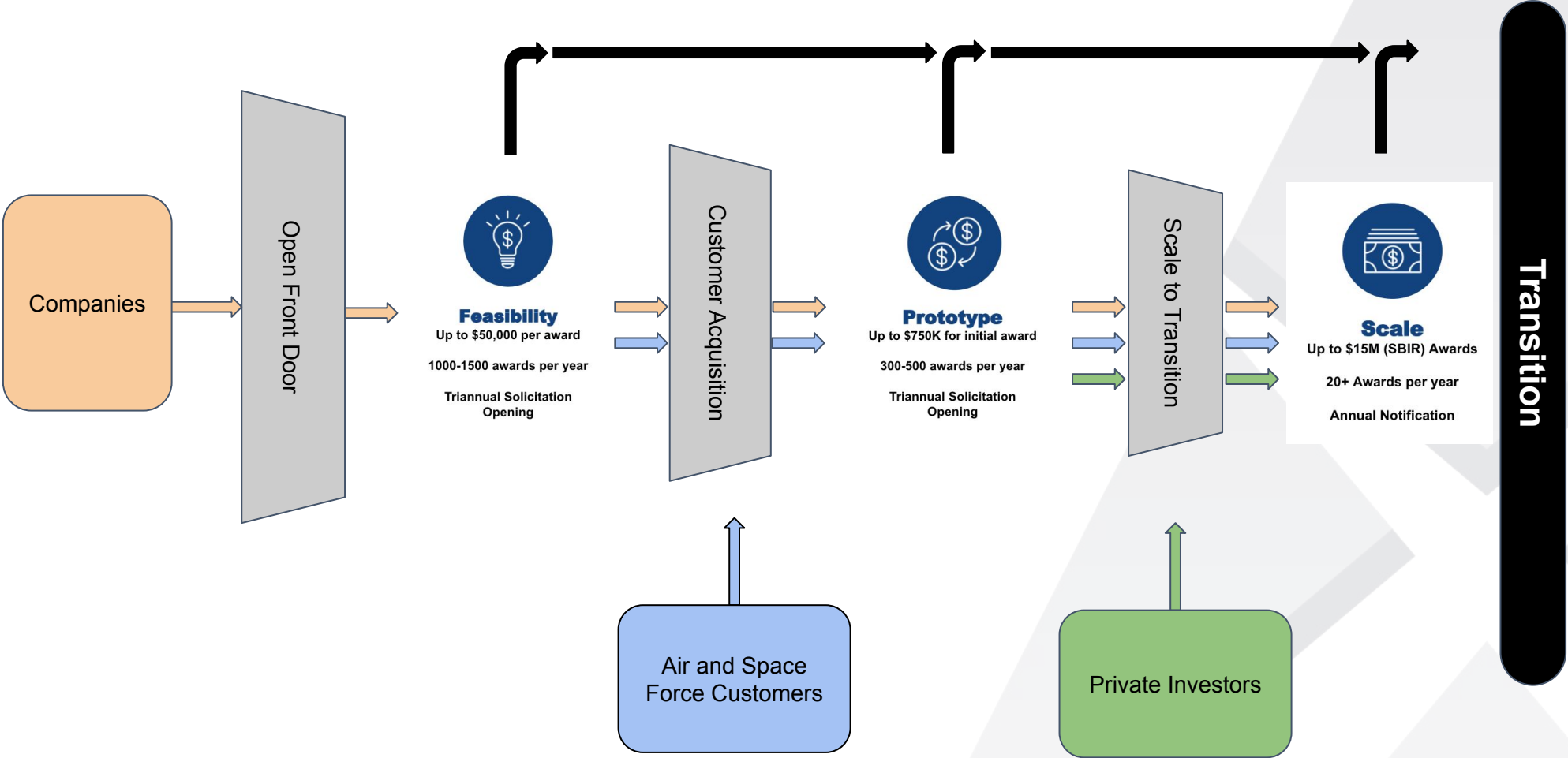
- ▶ Up to \$750K per initial award
- ▶ Matched funding encouraged
Up to \$1.5M
- ▶ 300-500 awards per year
- ▶ Live and virtual customer
matchmaking



A FEW BIG BETS (TACFI/STRATFI)

- ▶ Annual Solicitation
- ▶ TACFI - \$37K - \$1.7M
- ▶ STRATFI - \$3M - \$15M
- ▶ Defense Only or Dual-Use
Matching option

AFVentures Open Topic SBIR/STTR Program



AFVentures Results (2019-2020)

ACCELERATING AWARD TIMES

Contracts Awarded: 2,299 Total
Funding: \$710 million Proposals
Received: 4,850 Avg.
Time to Put Company on Contract: 72 day

DELIVERING CAPABILITIES

538 capabilities tested by warfighters
Over 300 Air Force & DoD units supported



INCREASED PRIVATE INVESTMENT

Companies have received \$2.22 billion in private sector investment following an Open Topic award, a 3:1 Private Capital ROI for the Air and Space Forces

MORE PARTNERS

Assisted 1,433 companies which >75% received their first Air Force SBIR/STTR contract through AFVentures



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Solicitation Cycle

Solicitation Background

- **What is a Solicitation?** A solicitation is a request for proposals that is posted for industry to answer. It provides companies the rules for qualifying, requirements to include in their proposal package, and the criteria standards they will be evaluated upon.
- **Why is the Solicitation important?** The standard to which proposals are evaluated directly links back to the solicitation.



Solicitations are posted [here](#):





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Phase I / Phase II / Phase III

STTR Intent

Phase 1 Objective: Conduct feasibility-related experimental or theoretical research / R&D related to agency's requirements to determine the scientific and technical merit and feasibility of the proposed effort and the quality of performance of the offeror.
In other words, Find the fit between the non-defense solution and the Defense Market

- Short Period of Performance: 3 months
- A maximum award of \$50K
- On contract to conduct Feasibility Study
- There are two deliverables (preliminary & final reports)
- Prepare for Phase II application
- Identify & codify DAF 'demand signal' for their solution (via Customer / End User signature of an Customer Memorandum)

SBIR Phase I “Open Topic” Intent

Objective: Conduct feasibility-related experimental or theoretical research / R&D related to agency’s requirements to determine the scientific and technical merit and feasibility of the proposed effort and the quality of performance of the offeror.
In other words, Find the fit between the non-defense commercial product and the Air Force Market

- Short Period of Performance: 3 months
- A maximum award of \$50K
- On contract to conduct Feasibility Study
- There are two deliverables (preliminary & final reports)
- Prepare for Phase II application
- Work to get an Air Force Customer and End User to sign a Customer Memorandum

SBIR Phase II Intent

Objective: Continue the research/R&D effort from the completed Phase I OR from a Direct-to-Phase II award where the proposal has sufficient scientific and technical feasibility and merit despite the lack of a Phase I award.

In other words, validate the fit between the non-defense commercial product and the Air Force Market

Typical

- Shorter Period of Performance: Up to 15-months
- A maximum award of \$750K
- Milestone Deliverables IAW Proposal Milestone Schedule
- Work with the AF Customer & End User who signed the Customer Memorandum

SBIR Phase III Intent

Objective: Work that derives from, extends, or completes an effort made under prior-award SBIR/STTR funding agreements, but is funded by NON-SBIR funding.

Why is Phase III unique?

Once a company has received a SBIR/STTR Phase I or II award, Phase III awards can be made to the company for their SBIR/STTR using a non-competitive/sole-source process, since competition requirements were satisfied under SBIR/STTR Phase I and/or Phase II Award.

Definition of Terms:

- “Derives from” is a broad test that refers to work that traces back to efforts performed under prior SBIR/STTR funding agreements
- “Extends” means the work can be for other applications not researched or performed in prior SBIR/STTR efforts
- “Completes” means commercialization of the prior SBIR/STTR research into a commercial product or application

Supplemental Funding Pilot Program

Defense-Only

Dual-Use

TACFI

1:1
SBIR/STTR : Gov*

or

1:1
SBIR/STTR : Private**

STRATFI

1:2
SBIR/STTR : Gov*

or

1:1:2
SBIR/STTR : Gov* : Private**

Supplemental Funding Pilot Program

	Minimum		Maximum
TACFI	\$375K SBIR/STTR funds	up to	\$1.7M SBIR/STTR funds
STRATFI	\$3M SBIR/STTR funds	up to	\$15M SBIR/STTR funds



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Questions?

Please type your questions in the Q&A section