

AFWERX SBIR * STTR AF SBIR/STTR Overview Ohio Business Matchmaker Webinar Training 27 Oct 2021

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AFWERX

- In September 2020, AFWERX was adopted as an official Air Force organization under Air. Force Research Laboratory. In this transition, the Air Force SBIR/STTR Program Office was moved within AFWERX.
- Part of AFRL
- Reports to the DAF Service Acquisition Executive

AFWERX Director serves as DAF

Chief Commercialization Officer

SpaceWERX established Aug 2021

- Overview
 - AFWERX Fundamentals
 - AFVentures
 - Spark
 - Agility Prime

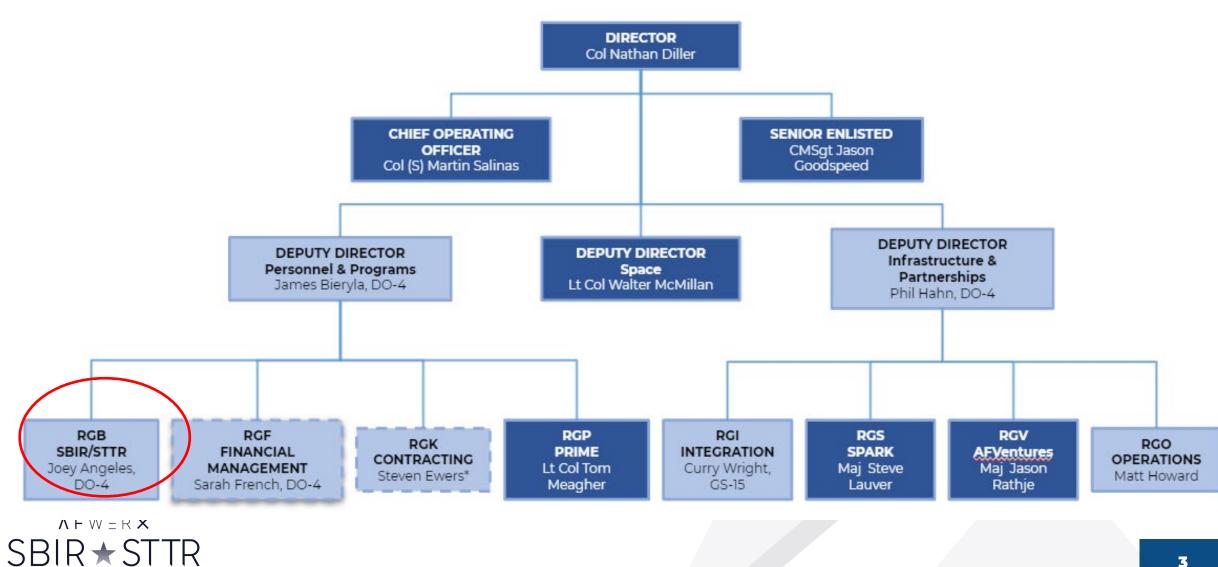


MISSION

AFWERX transitions agile, affordable, and accelerated capabilities by teaming

innovative technology developers with Airmen and Guardian talent.

AFWERX Leadership



AFRL/RGB AFWERX DAF SBIR/STTR Program Office

Mission Statement

Facilitate the DAF SBIR/STTR Life Cycle to enable transition of innovative technology to the Warfighter.

Vision Statement

Capitalize and grow institutional knowledge within the dynamic SBIR/STTR ecosystem.

Key Activities/Responsibilities

Integrates, enables, and facilitates the DAF SBIR/STTR life cycle activities. This includes, but not limited to, topic development, solicitations, proposal reviews, evaluation, selection, integrated master plan and schedule, change board process, requirements approval process, standard processes and statutory reporting. Integrates and supports the AFRL Technology Directorates and other organizations with the execution of the defense focused technologies without clear, near-term, non-defense potential. Integrates and supports the execution of the Space Force SBIR/STTR program. Manages the cost, schedule, and performance of the DAF SBIR/STTR program. Responsible for timely response to congressional inquiries.



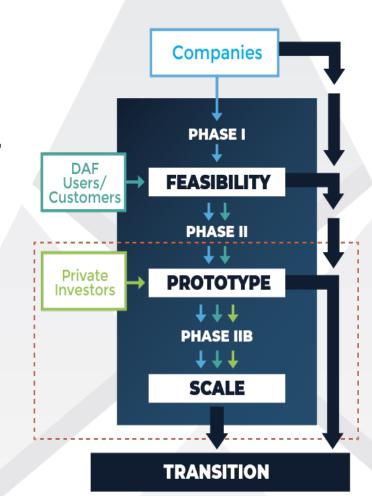
Purpose of SBIR/STTR

§ 1. This Act may be cited as the "Small Business Act."

"Research and development are major factors in the growth and progress of industry and the national economy. The expense of carrying on research and development programs is beyond the means of many small-business concerns, and such concerns are handicapped in obtaining the benefits of research and development programs conducted at Government expense. These smallbusiness concerns are thereby placed at a competitive disadvantage. This weakens the competitive free enterprise system and prevents the orderly development of the national economy. It is the policy of the Congress that assistance be given to small-business concerns to enable them to undertake and to obtain the benefits of research and development in order to maintain and strengthen the competitive free enterprise system and the national economy."

15 U.S. Code **§** 638 Small Business Act

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SBIR/STTR at a **Glance**



DAF SBIR/STTR Program Office awards Government contracts, not research grants!



SBIR Overview

Small Business Innovation Research (SBIR)

- Established by Congress in 1982
- 3-Phased Process
 - Phase I: Concept;
 - Phase II: Maturation;
 - Phase III: Commercialization
- Solicits proposals & awards funding to small business for federal research & development, production services, or any combination of these, to meet agency needs & missions

Used to research and develop solutions for technical challenges such as:

- Capital deficiency
- Service life limitation
- Excessive cost
- Functional problem hindering missions effectiveness



STTR Overview

- Small Business Technology Transfer (STTR)
 - Established by Congress in 1992
 - What's the difference?
 - STTR Program requires a search partner consisting of one of the following:
 - University
 - Federally funded Research & Development Center
 - Qualified non-profit research institution
- Required evaluation of commercial potential in Phase I and Phase II applications
- Create vehicles moving ideas from Research Institutions into the "Marketplace"



How to Participate

• Three Key Opportunities:

• Open Topic:

 Eligible companies can pitch an emerging technology concept for funding

Specific Topic:

- Submit a Problem Statement to discover solutions to specific problems/risks/issues/opportunities
- Tactical Fund Increase (TACFI) & Strategic Fund Increase (STRATFI) Program
 - Follow-on or supplemental Phase II SBIR/STTR awards



Open Topic

SBIR/STTR Phase I SBIR/STTR Phase II AFWERX Open Topic Open Topic INDUSTRY Evaluated by DAF · Evaluated by DAF BUYER Criteria: Criteria: (Acquisitions) - Technology (33%) Technology (33%) - Defense Need (33%) - Defense Need (33%) - Commercial (33%) - Commercial (33%) USER Phase I about \$50K over Phase II about \$750K (Operator) 3 month period of USER over 15 month period of via Mission performance performance (Operator) Focus Area

Phase I Open Topic Awards

About 5000 proposals / year and 1000 (20%) selected for Phase I

100s of DAF S&T, Acquisition, and Operational SMEs recruited to *independently* evaluate proposals

DECISION MAKERS

- 1. Operator, crafting focus areas
- 2. S&E, evaluating tech criteria
- Operator, evaluating defense criteria
- 4. Acquirer, evaluating commercial
- 5. Finance, for RDT&E validation
- Contracting, for policy compliance

Phase II Open Topic Awards

About 1200 proposals / year and 300 (25%) selected for Phase II

End-user must confirm requirement & acquirer must confirm PM support via memorandum prior to evaluation Evaluation rigor increased in Phase II

DECISION MAKERS: Gate 1

- 1. Prototype End-User
- 2. Prototype Acquirer

DECISION MAKERS: Gate 2

- S&E, evaluating tech criteria
- 4. Operator, evaluation defense
- 5. Acquirer, evaluating commercial
- Finance, for RDT&E
- 7. Contracting, for policy

- Operated under AFWERX's Division, AFVentures (AFRL/RGV)
 - Mission: Leverage commercial technology to deliver better capability to the warfighter, faster
 - Allows businesses the flexibility to bring us tools and technology we didn't think to ask for

Specific Topics

- Operated under AFWERX's Division, AF SBIR/STTR Program Office (AFRL/RGB):
 - Will your technology solve a Warfighter requirement
- Topics seek innovative solution(s) to a specific problem (Problem Statement)
- Budget allocated to the AFRL Technical Directorates (TDs):
 - Programs with Problem Statements must partner with an AFRL TD to participate in the Specific Topic Program

• Roles & Responsibilities:

- AFRL TD PK conducts solicitation & execution
- Topic Author: Writes & Develops the topic
- Topic Owner (Chief Scientist): Provides budget & oversight authority on all SBIR/STTR w/in their organization
- SBIR/STTR Program Manager: Coordinates between AFRL/RGB & the Topic Authors/Owners



Specific Topic Research Areas



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https://afresearchlab.com/technology/

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Aerospace Systems	STRATEGY	VANGUARDS		SYSTEMS
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	QUANTUM	HYPERSONICS	COVID-19 RESPONSE	CROSS DOMAIN

TACFI/STRATFI Program

- Operated under AFWERX's Division, Prime (AFRL/RGB)
- Designed to scale to transition
- Requires matched funding & customer ownership
- Eligibility
 - Phase II active or recent (within three years)
 - Not currently executing a TACFI/STRATFI effort
 - Able to achieve matching/investment funding requirements
 - Able to obtain end-user & customer memorandum of understanding, which identifies a multi-functional team to support the effort



TACFI/STRATFI Program

Different Topics Companies Should Expect to See in a Solicitation:

- Requires matched funding
- Requires customer ownership
- Designed to scale to transition (when supplemental funding is required)

Tactical Fund Increase (TACFI)

- Tactical needs with low capital requirements
- Fund request for >\$375K, <\$1.7M</p>
- Requires 1:1 Government or 1:1 Private Matching

• STRATEGIC Funding Increase (STRATFI)

- Strategic needs with high capital requirements
- Fund request for >\$3M, <\$15M</p>
- Customer must be DAF PEO or equivalent
- Requires 2:1 Government OR 1:1 Government & 2:1 Private Matchings





https://www.sbir.gov/tutorials

https://www.sbir.gov/

https://www.youtube.com/channel/UCb3EQFQNK0pw5EFv0rAkTBg

https://twitter.com/af_sbir_sttr?lang=en

https://www.linkedin.com/company/afsbirsttr

https://www.facebook.com/afsbirsttr/

https://www.afwerx.af.mil/



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AFVentures Weekly Webinars



AFVentures is hosting weekly webinars, every Thursday at noon EST/EDT, to educate, inform and answer any questions you may have about the AFVentures Open Topic process. Tune in each week to learn more and ask your questions.

REGISTER NOW!







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identify technology solutions for warfighter needs? This webinar will introduce AFVentures, the "Front Door" to the Department of the Air Force, and how you can participate in the ecosystem of emerging technologies and venture capital.

Description: What is AFVentures? What is an Open Topic? How can the SBIR/STTR program be leveraged to help

Description: Learn how SpaceWERX blends the best of commercial innovation with the needs of the men and women of the U.S. Space Force who depend on space technology to do their jobs.





Description: Hear from a small business who has been through the Open Topic SBIR process. Learn what worked for them and listen to pointers on best practices for navigating the process.

Description: This week's webinar will go over the most commonly asked questions on the Open Topic. If you have

questions about the open topic SBIR/STTR process, this is the session for you!

AFVentures Previously Recorded Webinars

Intro to AFVentures: What is SBIR/STTR

Recording from July 22nd Download Presentation

Phase I: Focus Area

Recording from July 26th Download Presentation

STRATFI/TACFI

Recording from September 16th Download Presentation

Post-Award FAQs

Recording from August 5th Download Presentation

Engaging the Market & Phase III Transition

Recording from August 26th Download Presentation

Specific Topics vs. Open Topics

Recording from Sept 9 Download Presentation

Phase II: Customer Memorandum & TPOC Duties

Recording from August 12th Download Presentation

RDT&E and the SBIR Program

Recording from Sept 2nd Download Presentation

SBIR * STTR

STTR

Recording from Sept 23rd Download Presentation

Growth Stage – STRATFI/TACFI

