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DoD Funding Opportunities for Small Business Innovators

Creating the Next: Defense Innovation Conference
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Andrew E. Smith, *GTPAC Program Manager*

My Contact Info

- Andrew E. Smith
- Program Manager
- *Georgia Tech Procurement Assistance Center ("GTPAC")*
- Andrew.Smith@innovate.gatech.edu
- Ph: 678-890-2342

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- THIS PRESENTATION IS NOT INTENDED TO CREATE, AND DOES NOT CREATE, AN ATTORNEY-CLIENT RELATIONSHIP BETWEEN THE PRESENTER AND THE PARTICIPANT.

About GTPAC

- The Georgia Tech Procurement Assistance Center ("GTPAC") teaches Georgia based companies about all aspects of government contracting – at the federal, state and local level.

- Our assistance comes in the form of teaching, mentoring, coaching.

- Details at http://www.gtpac.org.

- GTPAC provides this assistance at **no cost.**

gtpac

Small Business Innovation Research (SBIR) program – Highly competitive program that encourages domestic small businesses to engage in Federal Research and Development projects that have the potential for commercialization.

Small Business Technology Transfer (STTR) program – Aimed at encouraging public/private sector partnerships to increase high-tech innovation. Requires a small business to formally collaborate with a research institution.

SBIR/STTR Program Goals

- Stimulate technological innovation.

- Use small businesses to meet Federal R&D needs.

- Foster and encourage participation in innovation and entrepreneurship by women and socially/economically disadvantaged individuals.

- Increase private-sector commercialization of innovations derived from Federal R&D funding.

- Foster technology transfer through cooperative R&D between small businesses and research institutions (STTR).

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Army

Navy

Air Force

Missile Defense Agency (MDA)

Defense Threat Reduction Agency (DTRA)

Defense Microelectronics Activity (DMEA)

Defense Advanced Research Projects Agency (DARPA)

Defense Health Program (DHP)

Chemical and Biological Defense (CBD)

Special Operations Command (SOCOM)

Defense Logistics Agency (DLA)

National Geospatial Intelligence Agency (NGA)

Source: DoD SBIR/STTR Program Office

Why Small Businesses Participate

- Largest source of Federal R&D funds for small businesses.

- SBIR invests more than VC community in pre-seed and early stage technology.

- No dilution of equity.

- Many angels and VC firms use SBIR as a pre-qualifier for their investment.

- Builds credibility while learning government contracting process.

- Companies retain data rights for 5 years (4 years for non-DoD).

SBIR Eligibility Requirements

- A small business with 500 or fewer employees.

- For profit.

- Principal place of business in the United States.

- At least 51% owned by U.S. citizens or lawfully admitted permanent resident aliens.

In addition:

- Work must be performed in the United States.

- The Principal Investigator must spend more than one-half of the time employed by the proposing firm.

- A minimum of two-thirds of the research work must be performed by the proposing firm in Phase I and one-half in Phase II.

STTR Eligibility Requirements

- For-profit small business of 500 or fewer employees; no size limit on the research institution.

- Research institution must be a U.S. college or university, Federally Funded Research and Development Center or non-profit research institution.

- Work must be performed in the United States.

- The small business must perform a minimum of 40 percent of the work and the research institution a minimum of 30 percent of the work in both Phase I and Phase II.

- The small business must manage and control the STTR funding agreement.

- The principal investigator may be employed at the small business or research institution.

Differences between SBIR / STTR

	SBIR	STTR
Partnering	Permits partnering	Requires a non-profit research institution partner.
Principal Investigator	Primary employment (>50%) must be with the small business applicant.	PI may be employed by either the research institution partner or small business applicant.
Work Requirement	May subcontract up to: 33% (Phase I) 50% (Phase II)	Minimum: 40% Small Business 30% Research Institution Partner

The small business is ALWAYS the applicant and awardee!

How does it work?

- DoD agencies / components post highly focused topics – theses are technical problems or issues where the government needs a specific solution.

- Small business submits a Phase I proposal, which proposes a technical solution (essentially a white-paper).

- DoD has a Phase I proposal user guide you can download here that guides you through the process: https://sbir.defensebusiness.org/Content/UserGuides/docs/Starting%20a%20New%20Proposal%20User%20Guide.pdf

- The DoD agency / component evaluates the proposal, and if they like your companies idea, they will award you a Phase I contract.

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- **Phase I – Feasibility Study Phase.** Determines the scientific, technical and commercial merit and feasibility of idea submitted. Deliverable is feasibility study or report. Awards normally do not exceed $150,000. 6 mos. – 1 year period. All must enter Phase I, can't go directly to Phase II.

- **Phase II – Full Research and Prototyping Phase.** The major research and development effort. This phase normally funds the prototyping and demonstration of the most promising Phase I projects. Deliverable is typically a working prototype. Awards normally do not exceed 1M. Typical performance period is 24 months.

- **Phase III – Commercialization Phase.** The ultimate goal of each SBIR/STTR effort. Phase III is funded by sources outside the SBIR/STTR program. Phase III may involve non-SBIR/STTR funded government contracts for products or services developed. These follow-on Phase III awards can be sole sourced.

Typical Topic Categories

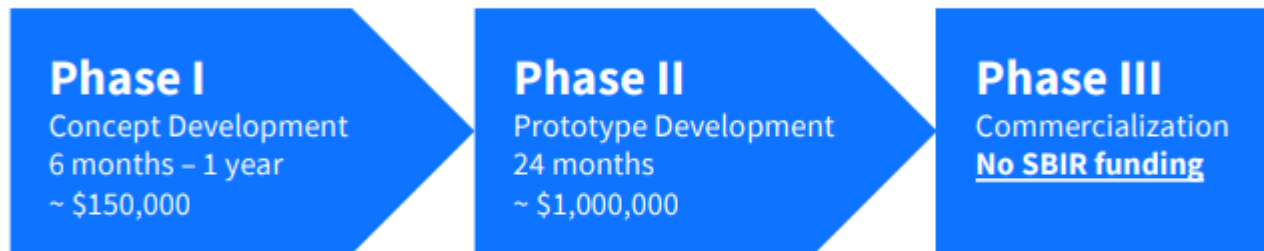| Advanced Electronics | Air Platforms | Autonomy | Biomedical (ASBREM) | C4I | Counter IED |
| Counter WMD | Cyber | Electronic Warfare | Energy & Power | Engineered Resilient Systems | Ground & Sea Platforms |
| Human Systems | Materials & Manufacturing Processes | Sensors | Space | Weapons Technologies | |

https://sbir.defensebusiness.org/topics

Source: DoD SBIR/STTR Program Office

Three Phase Process

Phase I
Concept Development
6 months – 1 year
~ $150,000

Phase II
Prototype Development
24 months
~ $1,000,000

Phase III
Commercialization
No SBIR funding

Solicitation to Award Process

Source: SBA SBIR Office

Find Solicitation → **Proposal Submission** → **Evaluation** → **Award Phase I**
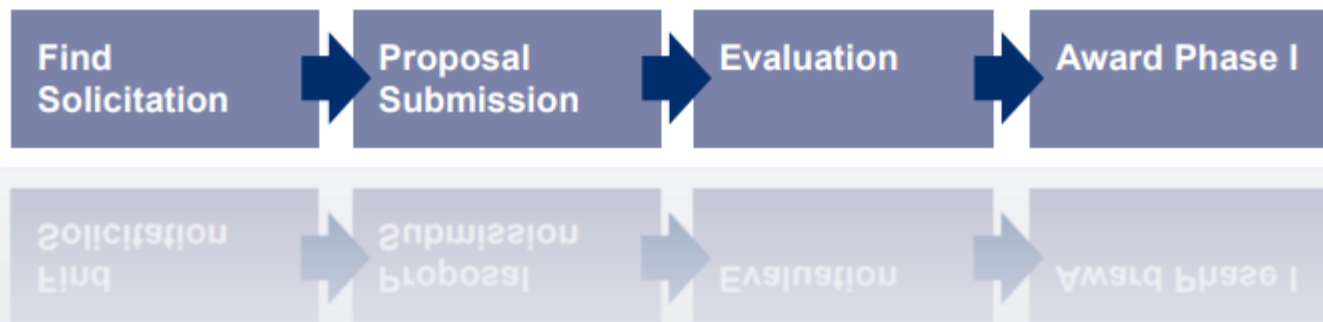
Evaluation Criteria

Phase I and II proposals are evaluated on three criteria:

- The technical and scientific merit of the proposed approach.

- Key personnel qualifications in the area of research.

- The potential for transition into a commercial product or service.

FY 2017 DoD Program

- DoD has the Largest SBIR program in Federal Government.

- Focused on helping the warfighter.

- 700+ topics posted in 2017.

- 3 solicitations.

- DoD received around 10,000 Phase I proposals.

- DoD made around 1,700 Phase I awards.

- Around 1,000 Phase II awards.

- FY17 Funding, 1.37B across DoD.

Source: DoD SBIR/STTR Program Office

DoD Participation

Air Force

Army

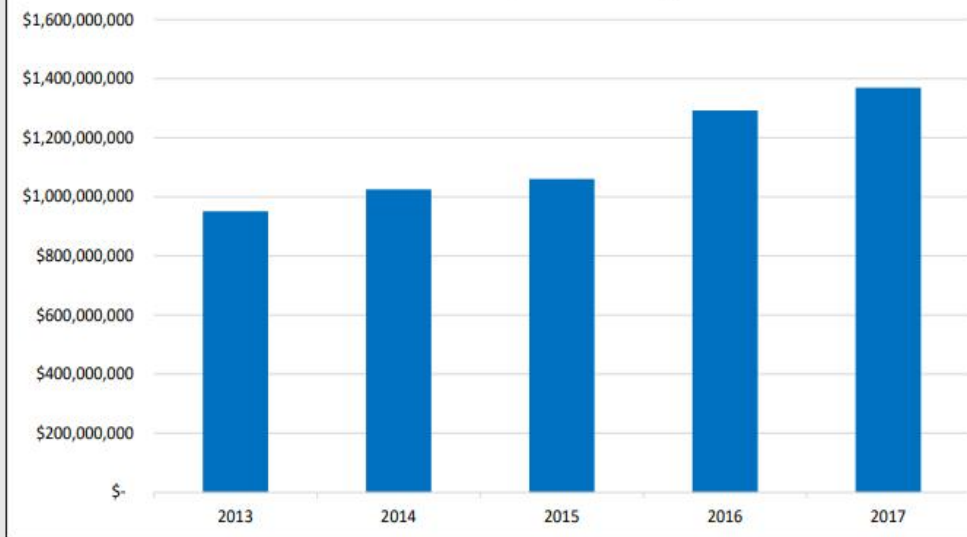DARPA
Defense Advanced Research Projects Agency (DARPA)

Defense Health Agency (DHA)

Chemical and Biological Defense (CBD)

National Geospatial Intelligence Agency (NGA)

Navy

Missile Defense Agency (MDA)

Special Operations Command (SOCOM)

Defense Microelectronics Activity (DMEA)

Defense Threat Reduction Agency (DTRA)

Defense Logistics Agency (DLA)

DOD Annual SBIR/STTR Funding

$1,600,000,000	
$1,400,000,000	
$1,200,000,000	
$1,000,000,000	
$800,000,000	
$600,000,000	
$400,000,000	
$200,000,000	
$-	

2013 2014 2015 2016 2017

Source: DoD SBIR/STTR Program Office

How to Participate

Each year, the services and defense agencies within DoD issue three SBIR solicitations and three STTR solicitations.

1. Identify the Solicitation Schedule
2. Find a Topic
3. Register Your Firm
4. Start a Proposal
5. Submit Proposal

SBIR 19.1
STTR 19.A

Pre-Release
11/28/18

Open
1/8/19

Close
2/6/19

Website: https://sbir.defensebusiness.org

Source: DoD SBIR/STTR Program Office

DoD SBIR/STTR Website Portal

Rapid Innovation Fund ("RIF")

- Established by RY 2011 NDAA

- Developed in response to Small Business Community concerns about lack of funds to transition research to commercialization (e.g. SBIR Phase I/II to Phase III)

Bridges the "Valley of Death"

Early-Stage Technology → Market-Ready Technology
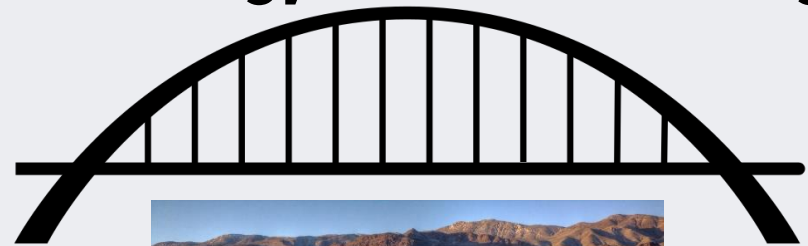
Bottom Line Goal: Transition Small Business Technologies into Defense Acquisition Programs

Rapid Innovation Fund ("RIF")

- Competitive, merit-based program

- Designed to transition small business technologies into military systems.

- Designed to fund *mature* technology ideas.

- 90% of RIF awards go to small businesses.

- Average award is $2.1 million.

Rapid Innovation Fund ("RIF")

Goal: Acquire small business innovative technologies that resolve operational challenges or address critical national security needs, and have a demonstrated path into a defense acquisition program.

- Accelerate or enhance a military capability
- Reduce the development, acquisition, sustainment or lifecycle costs of defense acquisition programs or fielded systems
- Reduce technical risk
- Improve the timeliness and thoroughness of test and evaluation outcomes

How to Participate?

Step 1:

- DoD issues a Broad Agency Announcement ("BAA") outlining requirements (e.g. problems or issues that need solving)

- Industry submits 3-page white-paper and quad chart in response, proposing sound solutions to the requirement.

- Initial evaluations occur ("Go or No Go decision")

Step 2:

- Highest rated offerors are invited to submit a full proposal

- Invite for proposal <u>DOES NOT</u> guarantee an award

- Highest-rated proposals lead to an award

RIF Public Notice

- RIF Broad Agency Announcements are posted on: www.FedBizOpps.gov

- They are also posted on the Research & Engineering Defense Innovation Marketplace: https://defenseinnovationmarketplace.dtic.mil/

RIF BAA Schedule

- Typically the RIF BAA is posted on FedBizOpps.gov in February or March.

- There is typically a Q&A period where you can ask questions about the requirements.

- White Papers and quad charts are normally due in either April or May.

- It does not appear the FY 2019 schedule has been posted yet, but keep an eye on: https://dodrif.com/ , its coming soon…

Additional RIF Resources

- [RIF Program Overview](#)
- [How to Write a RIF Proposal](#)

- Invention of lawmakers to give DoD more flexibility in obtaining innovation without the trappings of traditional procurements (e.g. not subject to the FAR or DFARS).

- By statute, Other Transaction Authority ("OTA") is for "prototype projects" that are directly relevant "to enhancing the mission effectiveness of military personnel and the supporting platforms, systems, components, or materials proposed to be acquired or developed" by DoD or to improve "platforms, systems, components, or materials in use by the armed forces." 10 U.S.C. § 2371b(a).

Other Transaction Authority

- Not considered a contract, but "authority" the government can use to acquire development of prototypes.

- DoD contracting officers may approve the use of an OTA for up to $100 million.

- For transaction agreements in excess of $100 million but not in excess of $500 million, a written determination is necessary from the senior procurement executive for the agency or, for DARPA and MDA, by the director.

- Great then $500 million is possible, but must be approved by the Under Secretary of Defense for Acquisition, Technology and Logistics with notice to Congress.

Other Transaction Authority

OTA may only be used when the following conditions are met:

1.   There is at least one nonprofit research institution or "nontraditional defense contractor" participating to a "significant" extent in the prototype project. (nontraditional defense contractor = think silicon valley)

2.   All significant participants in the transaction other than the government are small businesses (as defined by the Small Business Act) or nontraditional defense contractors.

3. At least one-third of the total cost of the prototype project is to be paid out of funds provided by sources other than the government.

4. The senior procurement executive for the agency determines in writing that exceptional circumstances justify the use of a transaction that provides for innovative business arrangements or structures that would not be feasible or appropriate under a contract or would provide an opportunity to expand the defense supply base in a manner that would not be practical or feasible under a contract.

How to Get an OTA?

- You can form joint ventures and teaming partnerships with nonprofit research institutions or nontraditional defense contractors.

- Forming or joining a non-profit consortium appears to be the most common approach to winning OTAs.

- Consortia are formed by contractors, non-traditional contractors, and academia based on industry / specialty.

How to Get an OTA?

- Each consortium creates rules for its members and often has a management group oversee the OTA.

- Commercial entities and academic institutions then apply to join a consortium as members.

- Consortium then works to capture and perform OTA opportunities.

- Later today you'll hear from Tim Greeff, who heads the National Security Technology Accelerator.

- Tim is an expert in OTAs and has over 20 years of experience building and managing non-profit technology consortia.
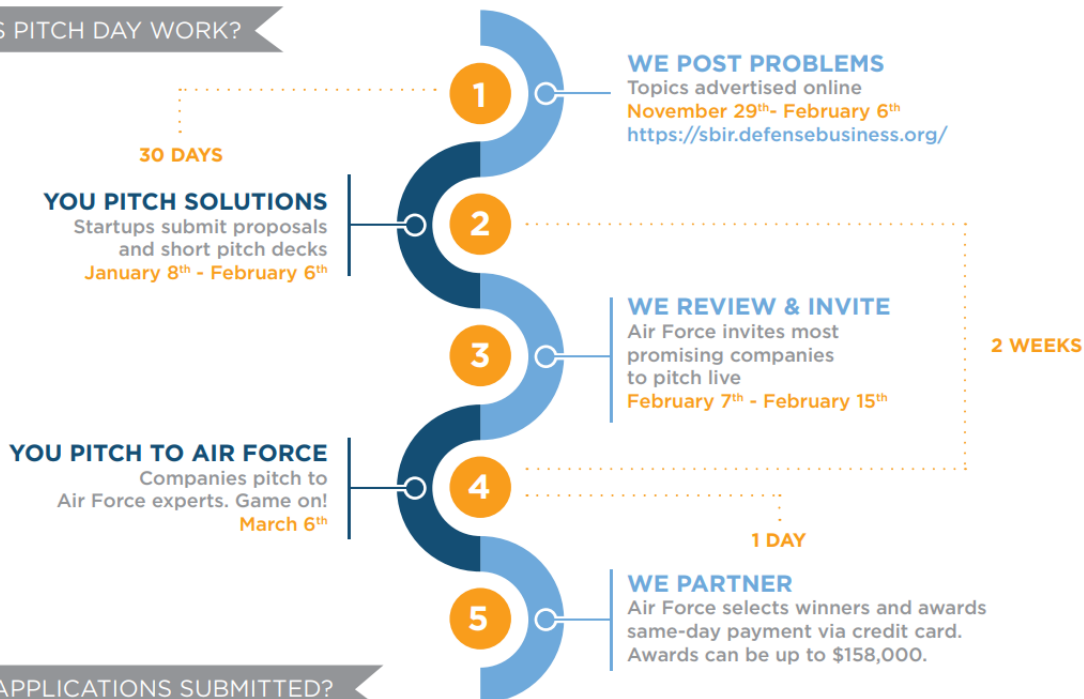
One more thing…

Inaugural AIR FORCE PITCH DAY
6-7 MARCH 2019 | NYC, NY

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WHY AIR FORCE PITCH DAY?

Many mind-blowing ideas are being birthed in U.S. startup companies, but the Pentagon largely misses out on them. For our big bureaucracy, awarding a contract in months is a flash. The Pentagon must do business at the speed of ideas: inspiring and accelerating startup creativity toward national security challenges. The smaller the company, the faster we must move. We accept that challenge. Welcome to Air Force Pitch Day.

HOW DOES PITCH DAY WORK?

1 WE POST PROBLEMS
Topics advertised online
November 29th - February 6th
https://sbir.defensebusiness.org/

30 DAYS

2 YOU PITCH SOLUTIONS
Startups submit proposals and short pitch decks
January 8th - February 6th

3 WE REVIEW & INVITE
Air Force invites most promising companies to pitch live
February 7th - February 15th

2 WEEKS

4 YOU PITCH TO AIR FORCE
Companies pitch to Air Force experts. Game on!
March 6th

1 DAY

5 WE PARTNER
Air Force selects winners and awards same-day payment via credit card. Awards can be up to $158,000.
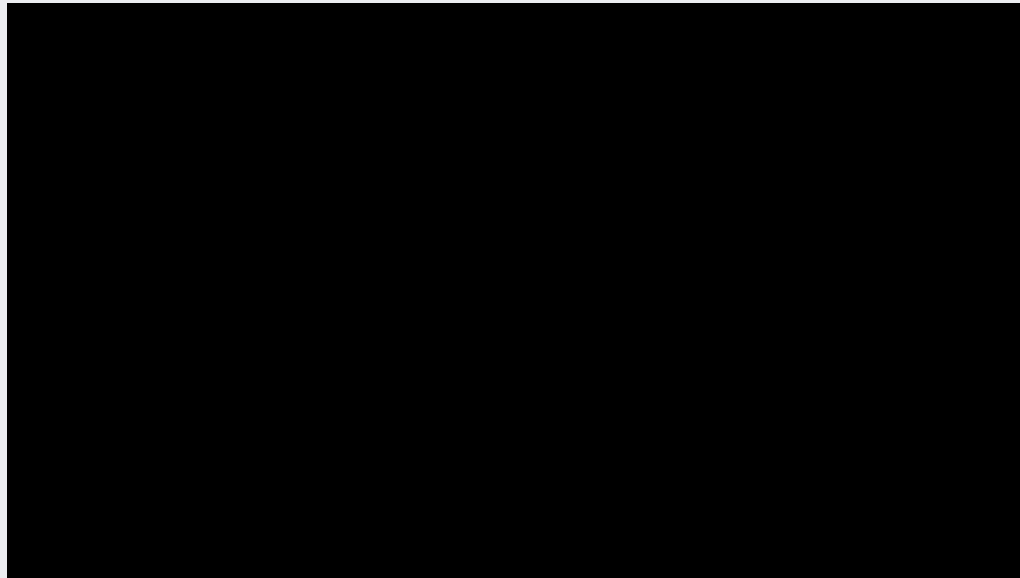
HOW ARE APPLICATIONS SUBMITTED?

Companies will have from **January 8th to (8:00pm EST) on February 6th 2019** to submit proposals and pitch decks. Companies submit applications via:

https://sbir.defensebusiness.org/

Air Force will notify selected companies for in-person pitches by February 15, 2019.

Full details on Air Force Pitch Day can be found here:

Air Force SBIR/STTR Website:

https://www.afsbirsttr.af.mil/

Detailed flyer:

https://www.afsbirsttr.af.mil/Portals/60/Pages/AFPitchDay/AF_pitch_day_3.pdf

Thank you.

andrew.smith@innovate.gatech.edu │ **www.gtpac.org** **38**