

**SMALL BUSINESS IGNITING BIG INNOVATION**  
NDIA Special Operations Forces Industry Conference (SOFIC)  
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# SMALL BUSINESS **IGNITING** BIG INNOVATION

The Army SBIR|STTR Programs align innovative small businesses with critical U.S. Army priorities to deliver game-changing solutions for our most important customer — the Soldier.

## *Innovation Through Collaboration*

- Break down barriers to working with the Army.
- Stimulate technological innovation.
- Partner with small businesses to meet Army research and development needs.
- Connect awardees with subject-matter experts to guide technology maturation.





## ARMY SBIR PROGRAM VALUES

- **Timeliness:** Maximize initial cash-flow for small businesses; minimize time to contract.
- **Transparency:** Clear alignment with Army transformation; build confidence in system.
- **Transition:** Lower level of bureaucracy and improve transition potential through stakeholder engagement.
- **Partnership:** Directed technology alignment with ASA(ALT) & PEO priorities; integration of Soldiers into feedback loop.
- **Accountability:** Instill deliberate portfolio management construct for investment decisions.



## FLEXIBLE APPROACH

- The Army SBIR Program issues SBIR contract opportunities *throughout the year on an ad hoc, rolling basis*:
  - Responds to most critical Army capability needs.
  - Capitalizes on small business innovation.
  - Increases flexibility beyond the three pre-determined announcements at the DoD-level.

RDT&E Set-Aside	3.2%
Participants	U.S.-Based Small Businesses
Phase I (Feasibility)	Up to \$250K for up to 6 months
Phase II (Demo)	Up to \$1.7M for up to 24 months

# TRANSITION BROKER TEAMS (TBT)

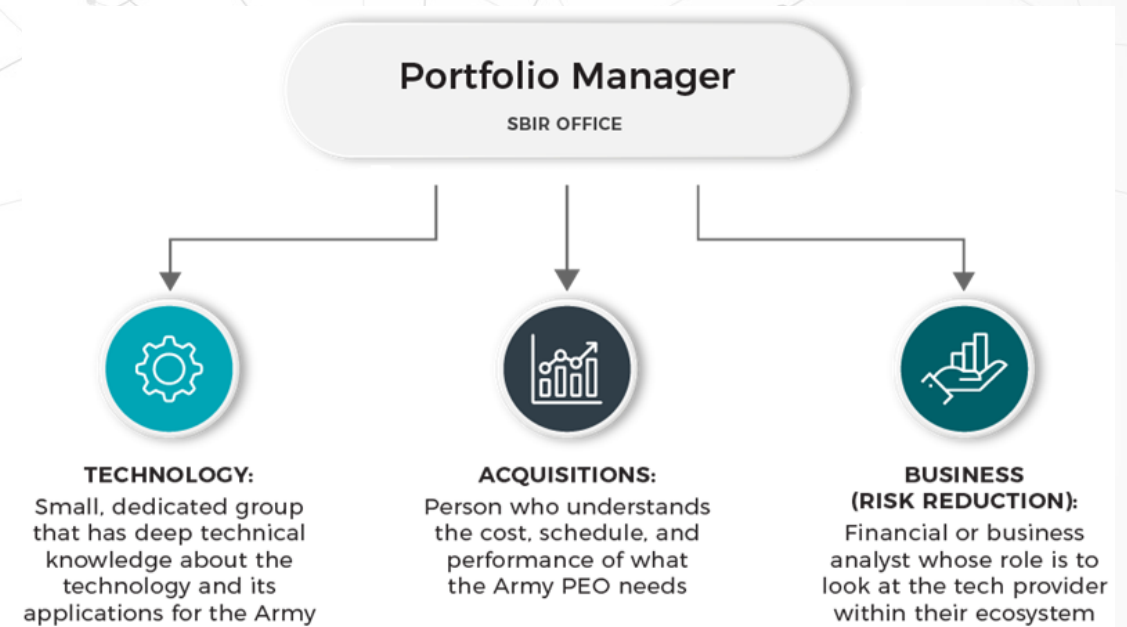
## • What They Are

- **Cross-organizational teams** with deep knowledge of emerging technologies and acquisition programs.
- Include members from S&T, R&D and acquisition communities, as well as business analysts and technology scouts who **identify the intersections between industry innovation and Army/DoD needs**.
- **Manage investments across the SBIR lifecycle** from topic identification to proposal selection, award management or investment exit, and technology transition.

## • Why They Matter

- **Engine for change; catalyst for the culture shift** from traditional passive, topic-driven approach to a strategic synchronization and integration of the Applied SBIR portfolio.
- **Prioritize program activities and costs**, and rapidly respond to emerging capability needs balanced with business realities.
- **Buy down risk** to the Army/DoD by funding high-risk R&D projects developed by small businesses and non-traditional defense contractors.

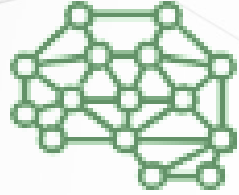
## TBT Structure



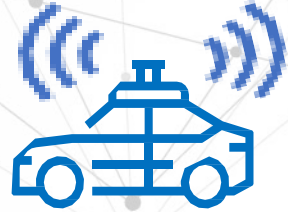
## TBT Value

- ✓ *Match industry innovation with Army/DoD needs*
- ✓ *Manage awards across the complete SBIR lifecycle*
- ✓ *Expedite solution transition to Army programs*

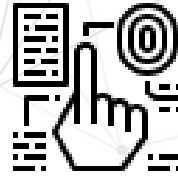
# CURRENT TBTs



## Artificial Intelligence/ Machine Learning



## Autonomy



## SMART Sensors



## Climate & Clean Tech

**NEW!**



## Immersive/Wearables

*Automatic Detection*

*Biometrics*

*Synthetic Data*

*Training Algorithms*

*Robotic Platforms*

*Unmanned & Optionally  
Manned Vehicles*

*Targeting*

*Detection*

*Real-Time Data Fusion*

*Data Distillation*

*Climate Technology*

*Energy Resilience*

*Augmented Reality*

*Virtual Reality*

*Mixed Reality*

*Wearable Technologies*

- ✓ *Overlap with Army Needs*
- ✓ *Technical subject-matter expertise in the private sector*
- ✓ *Opportunity for small-business market growth*



# ACTIVE TOPICS (AS OF 18 MAY 22)

TOPIC	TBT	STATUS	PHASE	CLOSE DATE
Bio-Based Fabric/Materials/Textiles for Military Applications	Climate & Clean Tech	Open	Phase I	14 JUN 22
Perception Sensing Advancements for Autonomous Ground Systems	Autonomy	Open	Direct to Phase II	14 JUN 22
Artificial Intelligence/Machine Learning for Visual Processing of Energetic Defects	AI/ML	Pre-Release	Phase I	28 JUN 22
Engineered Domestic Hardwood Replacement for Critically Endangered Species Hardwood	Climate & Clean Tech	Pre-Release	Phase I	28 JUN 22
Power Management for Energy Resiliency	Climate & Clean Tech	Pre-Release	Phase I	28 JUN 22

*Topics remain in DISP for a 15-day pre-release period for companies to prepare proposals, followed by a 30-day period for active submission of proposals.*

# ROAD TO CONTRACT

## PATHWAY TO CONTRACT

There are two ways to enter the Army Applied SBIR Program:

- Phase I: Up to \$250K for a 3-6-month period of performance; intended for concept development
- Direct to Phase II: Up to \$1.7M\* for a 12-24-month period of performance; intended for prototyping

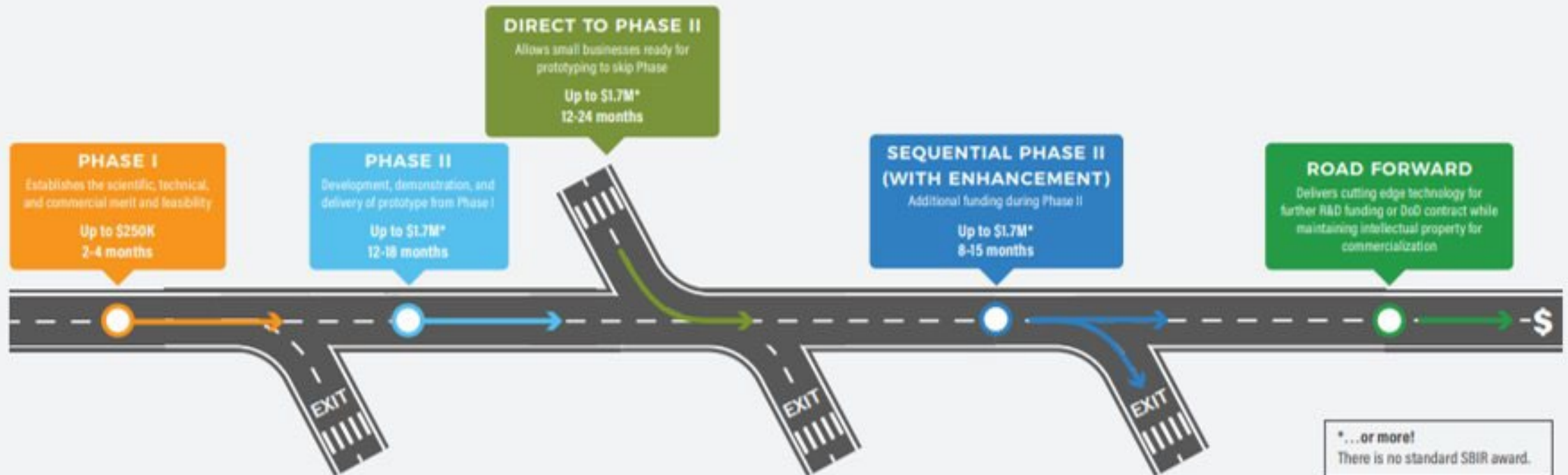
## ELIGIBILITY

Any firm that meets the following criteria:

- U.S.-based, for-profit business with 500 or fewer employees
- More than 50 percent of the principal investigator's work must be with the SBIR-awarded small business

## ROAD FORWARD

- Successful technologies from Phase II are considered for follow-on R&D and acquisition-contracts on a non-competitive basis.
- Sales to government do not preclude private market commercialization as companies retain intellectual property rights





# ARMY SBIR CONTRACTING CENTER OF EXCELLENCE

The new *Army SBIR Contracting Center of Excellence (COE)* was established to streamline contract execution across the Army SBIR Program and expedite funding for small businesses.

Managed under the ASA(ALT) Army SBIR Program Office

Awards, administers and closes out all Army SBIR Phase I and Phase II contracts, which represent **80% of the Army SBIR portfolio**

Rapidly releases contract opportunities on a rolling basis, enabling the Army to seek **timely, innovative solutions** for the most critical modernization priorities

**Increases flexibility and timeliness** to address emerging Army needs while **minimizing the time to contract**

**Reduces contract execution by up to 75%** compared to the previous timeline



# ARMY xTECH PROGRAM

The xTech Program, led by the Assistant Secretary of the Army for Acquisition, Logistics and Technology, manages the Army's prize competitions to award and accelerate transformative technology solutions that can help solve Army problems.

## Provides:

- Non-dilutive seed prizes
- Comprehensive feedback from Army experts
- Direct exposure to Army and commercial stakeholders
- Networking, education and mentorship opportunities

## Aims:

- Connect with non-traditional small businesses to spur innovation
- Breakdown barriers to working with the Army
- Accelerate technology development for the Army
- Propel American business toward enduring commercial viability and success



## WHERE WE ARE TODAY

Since xTech's launch in 2018, the program's numbers have skyrocketed to over...



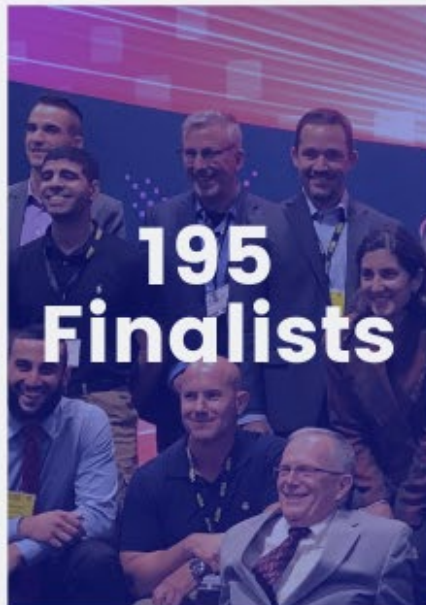
17  
Competitions

A panel of judges in a competition setting.

2,485  
Submissions

A group of people standing together, likely participants or staff.

20,830  
Evaluations

Two men in a discussion, one is smiling.

195  
Finalists

A group of people, some in military uniforms, standing together.

2,295  
Judges

A group of people, including some in military uniforms, standing together.

665  
Pitches

A man in a suit speaking at a podium.

63  
Mentors

A man in a military uniform speaking.

\$15.6M in  
Cash Prizes

A man holding a large check for \$15.6M.

\$71.6M in  
Contracts  
Awarded

A man in a military uniform with a name tag that says 'GEORGE'.



# PRIZE AUTHORITIES & CONTRACTS

xTech competitions are typically executed under two types of prize authorities:

- ***Title 10 USC 2374a***
- ***Title 15 USC 3719***

xTech offers a variety of opportunities and contractual avenues through programs and contract vehicles such as:

- ***Small Business Innovation Research***
- ***Other Transactional Authority***
- ***Small Business Technology Transfer***
- ***Cooperative Research and Development Agreements***
- ***Broad Agency Announcements***

## xTech Prize Authorities

### Title 10 USC 2374a

xTech competitions with specific problem statements

- ▶ Competitors with innovative technologies can demonstrate how their solution solves a specific problem or challenge for the Army

### Prize Money

Prize pool of up to \$1M for xTech winners

### Additional Benefits

- ▶ Contract and agreement vehicles for follow-on work
- ▶ Low-barrier to entry
- ▶ Transparent and detailed feedback from DoD experts
- ▶ Alignment with Army priorities
- ▶ Direct access to key stakeholders
- ▶ Networking, mentoring and educational opportunities

### Title 15 USC 3719

xTechSearch open topic competitions

- ▶ Competitors with innovative technologies can demonstrate how their solution can benefit the Army on a broad scale with little topic limitations

### Prize Money

Prize pool of up to \$50M for xTech winners

### Additional Benefits

- ▶ Low-barrier to entry
- ▶ Transparent and detailed feedback from DoD experts
- ▶ Alignment with Army priorities
- ▶ Direct access to key stakeholders
- ▶ Networking, mentoring and educational opportunities

# PROGRAM BENEFITS

The xTech Program benefits both the Army and non-defense businesses.

## Company Benefits

**Low-barrier to entry**, no contracting burdens, no IP concessions

**Alignment with Army priorities** and customers

**Networking, Mentoring and Education opportunities**

**Transparent and detailed feedback** from multidisciplinary experts

**Direct access to Army stakeholders**

## Army Benefits

Promotes **early and continual communication** for technology transition

**Stay current on technology developments**

**Professional development** in evaluating emerging technology concepts

**Influence development** in the private sector for Army use

**Grow the ecosystem and increase collaborations** across the Army



# xTECH ACCELERATOR PROGRAM

Assist in facilitating and transitioning technologies into the Army and/or commercial sector.

Each xTech Accelerator is customized for finalists to help businesses become successful via:

- Mentorship
- Educational Programming
- Venture-Building Activities
- Strategic Exposure
- Community-Building & Networking



**500+**

Army Personal  
Engaged in Customer  
Discovery



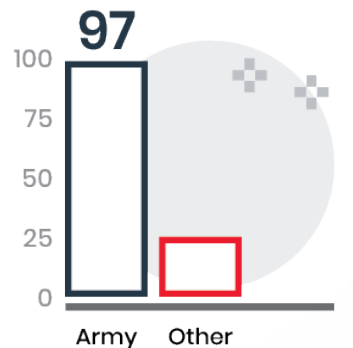
**\$14.4M**

Awarded DoD Contracts

**\$48.2M**

Total Contract Value Applied to

## DOD ENGAGEMENT



# of DoD Contracts Applied to

## PARTNER ENGAGEMENT

**5+**

xTech-xTech Synergy  
Discussions

**25+**

Continuing Engagement  
with Venture Capital Groups

**24+**

Strategic Discussions with  
US Industrial Base Leaders

**100+**

Unique Funding Opportunities  
Shared with xTech Companies









**20**

1:1's with ASAALT CTO

**30+**

Actionable FedTech Provided  
Collisions

# CURRENT AND UPCOMING COMPETITONS

	<p><b>Purpose:</b> Engage with non-traditional businesses, providing a game-changing way to interact with the Army, the true “friendly front-door” to the Army.  <b>Partnership:</b> ASA(ALT)</p>	<p><b>Impact:</b> The Army’s Flagship competition attracts an ever-increasing cohort of new dual-use innovators and accelerating the development of their technology to solve Army problems.</p>
	<p><b>Purpose:</b> Engage with small to medium international businesses to understand the realm of solutions available in the energy, water and synthetic biology space.  <b>Partnership:</b> ASA(ALT), DEVCOM Atlantic, ONR-G, AFWERX</p>	<p><b>Impact:</b> Awarding up to \$400K in prize money, providing direct access to key Army stakeholders, and providing accelerator programming that provides education, mentorship and strategic exposure to assist international businesses in understanding how to do business with the DOD.</p>
	<p><b>Purpose:</b> Engage with large and small businesses; academia; innovators and startups worldwide to tackle current challenges within the Counter-IED space to include sUAS, Low-Cost Millimeter Wave Imager and Autonomous Sensor Orchestration.  <b>Partnership:</b> (ASA)ALT, DEVCOM Forward Elements (DFE Americas, Atlantic, Pacific), ONR-G</p>	<p><b>Impact:</b> Awarding up to \$270K in prize money while providing and innovative businesses across the world, while providing opportunities for businesses to engage directly with key stakeholders across the DOD.</p>
	<p><b>Purpose:</b> Engage with students at qualifying HBCU institutions.  <b>Partnership:</b> ASA(ALT), AFC</p>	<p><b>Impact:</b> Awarding prize money and providing exposure opportunities to Army and DOD Stakeholders, entrepreneurship training and education and mentorship opportunities for HBCU Students.</p>
	<p><b>Purpose:</b> Provide low-barrier entry opportunities for HUBZone small businesses.  <b>Partnership:</b> ASA(ALT)</p>	<p><b>Impact:</b> Awarding prize money to identify novel technologies form economically disadvantaged HUBZone communities.</p>
	<p><b>Purpose:</b> Open-topic clean tech competition to discover game-changing technologies in support of the Army Climate Strategy.  <b>Partnership:</b> ASA(ALT)</p>	<p><b>Impact:</b> Awarding over \$450K in prize money to inject commercial sector climate/energy innovation into the Army climate risk matrix. Winners will have an opportunity to submit for either a Phase I SBIR worth up to \$250K or a Direct to Phase II SBIR worth up to \$1.8M each.</p>
	<p><b>Purpose:</b> Identify existing capabilities for PNT CMOSS CMFF Chassis, Single Board Computer cards, SDR cards, APNT cards and Switch Cards  <b>Partnership:</b> ASA(ALT), PM Mission Command C5ISR/EW</p>	<p><b>Impact:</b> Awarding \$100K in prize money to the top vendors while providing them with an opportunity to directly test their cards with Army systems in a tactically relevant environment.</p>
	<p><b>Purpose:</b> Engage with non-traditional businesses, providing a game-changing way to interact with the Army, the true “friendly front-door” to the Army through the seventh iteration of xTechSearch.  <b>Partnership:</b> ASA(ALT)</p>	<p><b>Impact:</b> The Army’s Flagship competition attracts an ever-increasing cohort of new dual-use innovators and accelerating the development of their technology to solve Army problems.</p>



# WORK WITH US

**Visit us at SOFIC – Booth #1, Mezzanine Floor**

Visit [www.armysbir.army.mil](http://www.armysbir.army.mil) to learn more about:

- The Army SBIR|STTR Programs
- Current Army SBIR|STTR opportunities
  - **Submission Period: 28 APR-14 JUN 22**
    - Direct to Phase II: Autonomy
    - Phase I: Advanced Materials and Manufacturing
  - **Submission Period: 26 MAY-28 JUN 22**
    - Phase I: AI/ML for Visual Processing of Energetic Defects
    - Phase I: Engineered Domestic Hardwood Replacement for Critically Endangered Species Hardwood
    - Phase I: Power Management for Energy Resiliency
- Visit **SAM.gov** to learn more about:
  - Current Army SBIR|STTR opportunities

Visit [www.xtechsearch.army.mil](http://www.xtechsearch.army.mil) to learn more about:

- The Army xTech Program
- Current and upcoming competitions
  - **xTechHBCU Student**
    - *Launching Late Spring 2022*
  - **XTechSearch7 and xTechHUBZone**
    - *Launching Summer 2022*

## EMAIL US!

Army SBIR: [usarmy.pentagon.hqda-asa-alt.mbx.army-applied-sbir-program@army.mil](mailto:usarmy.pentagon.hqda-asa-alt.mbx.army-applied-sbir-program@army.mil)

Army xTech: [usarmy.pentagon.hqda-asa-alt.mbx.xtechsearch@army.mil](mailto:usarmy.pentagon.hqda-asa-alt.mbx.xtechsearch@army.mil)