



# Army STTR 101

*Guidance and Preparation for the Upcoming 24.B Solicitation*

# Housekeeping

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*Guide to Airmet, Events, and Key Resources*



*Hello!*

# Matthew Bigman

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**Mr. Tylar Temple**

**Program Manager,  
Army STTR**

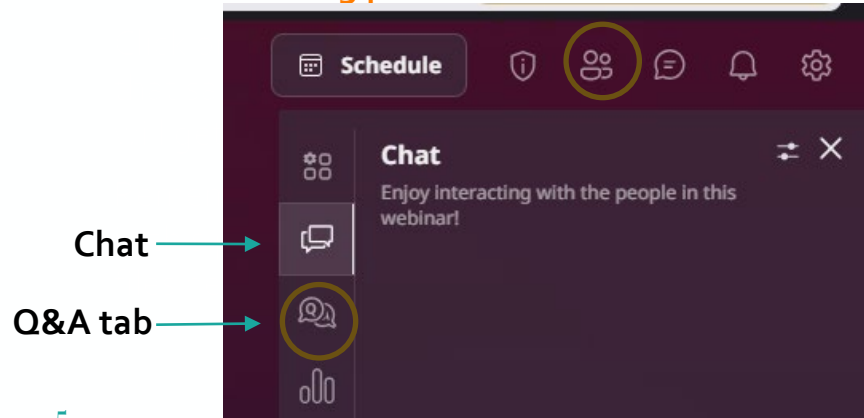
# Welcome to the Webinar

## Objectives:

- Learn about Army Research Priorities and how they will potentially drive topic selection for the 24.B Army STTR program
- Get a brief introduction to the Army STTR program
- Learn about the resources we provide on your road to STTR success

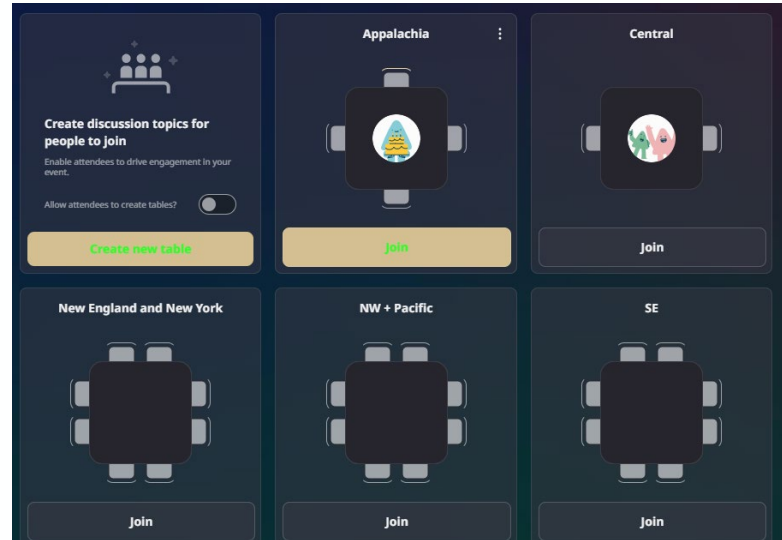
## Ground rules

- Please be kind and polite to our speakers
- Submit questions in our Q&A tab on the right side
- Feel free to use the chat or search bars to find networking partners



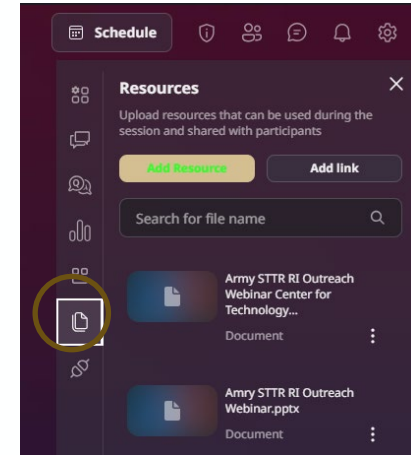
# Join us for networking after the event

- Check out profiles and tables
- Find partners you need to apply to STTR
- Connect to Peers in the field
- Exchange contact information



# Resources

- Slides are available in the resources tab to the right
- Visit [Armysttr.com](https://armysttr.com) for our mailing list and the latest updates
  - Yearly preview of the topics a few weeks prior to prerelease
  - Links to the BAA Submission portal and other resources
  - Success Stories and Previous Winner Information
  - Previous event recordings, interviews, and slides
  - **Coming for 2024: RI database**
    - Yearly list of RIs divided by resources and topics of interest
- Please note that this is general information about Phase I proposals, and is not meant to replace the guidance in the official DoD 24.B BAA
  - Visit The Broad Agency Announcement (BAA) Page for release and final details <https://www.dodsbirsttr.mil/submissions/baa-schedule/active-baa->



SBIR/STTR Awardees

## Success Stories

Below are success stories from just a few of the Army's outstanding previous STTR awardees.

DeepRadio: Deep Learning for Wireless Communications and Security

Intelligent Automation, Inc. (IAI) developed DeepRadio technology per embedded implementation of deep neural networks on a stand-alone chaotic radio frequency (RF) spectrum environment in real-time spectrum dynamics. DeepRadio uses deep learning to detect and classify...



# Official STTR Program Inquires

- General BAA Questions:
  - DoD Wide Information: <https://www.dodsbirsttr.mil/submissions/learning-support/faqs>
  - Army Instructions:
    - [usarmy.rtp.devcom-arl.mbx.sttr-pmo@army.mil](mailto:usarmy.rtp.devcom-arl.mbx.sttr-pmo@army.mil)
    - 919-549-4200
- General STTR Program Questions:
  - Program Wide Information <https://www.sbir.gov/tutorials>
  - Army Specific:
    - [www.armysttr.com](http://www.armysttr.com)
    - [usarmy.rtp.devcom-arl.mbx.sttr-pmo@army.mil](mailto:usarmy.rtp.devcom-arl.mbx.sttr-pmo@army.mil)
    - 919-549-4200
- DoD SBIR/STTR Website:
  - DoD Submission Site
    - <https://www.dodsbirsttr.mil>
  - Technical Issues
    - [DoDSBIRSupport@reisystems.com](mailto:DoDSBIRSupport@reisystems.com)



# Army STTR Overview

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*What is Army STTR?*



# STTR/SBIR is Funding for your Success

- Federal agencies with extramural R&D budgets exceeding \$100million are required to allocate 3.2% to fund small businesses through the SBIR (Small Business Innovation Research) program.
- Federal agencies with extramural R&D budgets exceeding \$1 billion are required to allocate 0.45% to fund small businesses through the STTR (Small Business Technology Transfer) program.
- Phase I is up to \$204,000 dollars per program
- Only 11 federal agencies do SBIRs, even less do STTRs

Investing in **your** solution, and the freedom to run the business according to **your** vision



# Army STTR

The Army Small Business Technology Transfer (STTR) program encourages small, high-tech U.S. businesses (fewer than 500 employees) in partnership with research institutions to provide innovative research and development solutions in response to critical Army needs. By capturing the tremendous and varied talents of the U.S. small business community and research institutions, the STTR program benefits the Department of Defense (DoD), the private sector, and our national economy.

Each year, the Army STTR program develops a set of research topics that represent the Army's current and anticipated warfighting technology needs. These topics are included in the Army portion of the DoD SBIR/STTR Broad Agency Announcements (BAA). Proposals are developed by a small business in partnership with a nonprofit research institution (RI). Proposals must respond to a specific topic in the BAA. The STTR program does not accept unsolicited proposals.

[Check out our previous webinar videos for more information!](#)

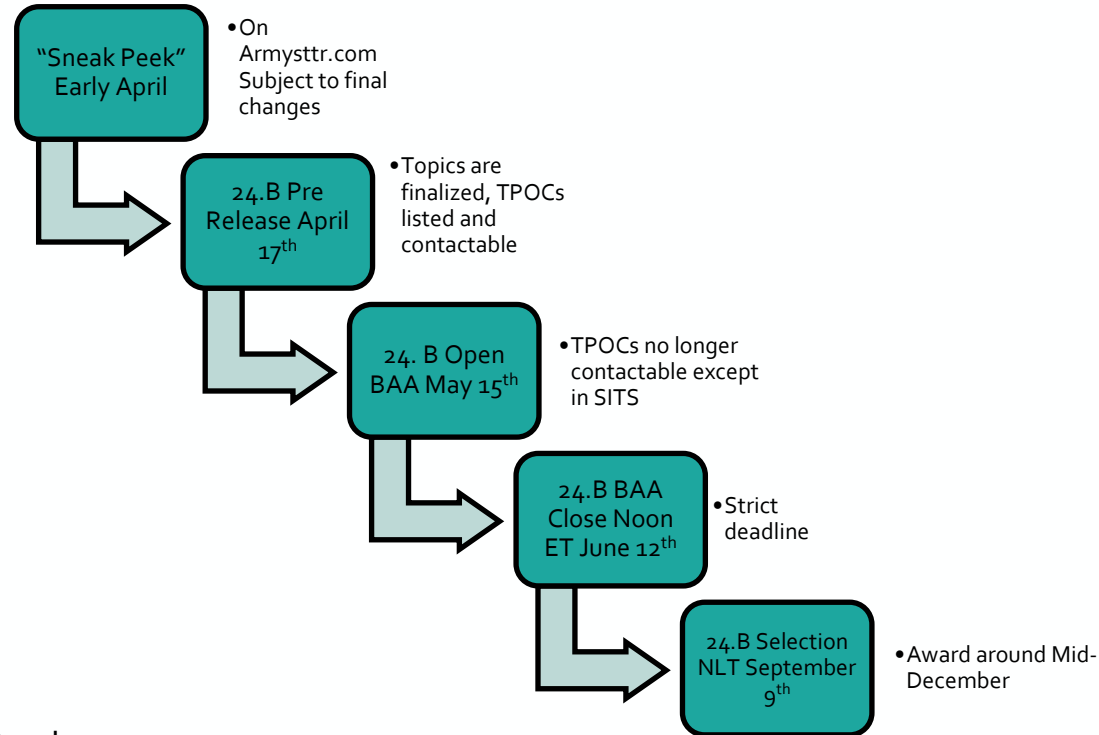


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*STTR bridges the gap between  
small business and US research*

Army is mission driven. It is has a problem it wants solved and believes that the technology is on the cusp, with dual use commerical applications

# Army STTR Schedule Overview



○ All dates subject to change

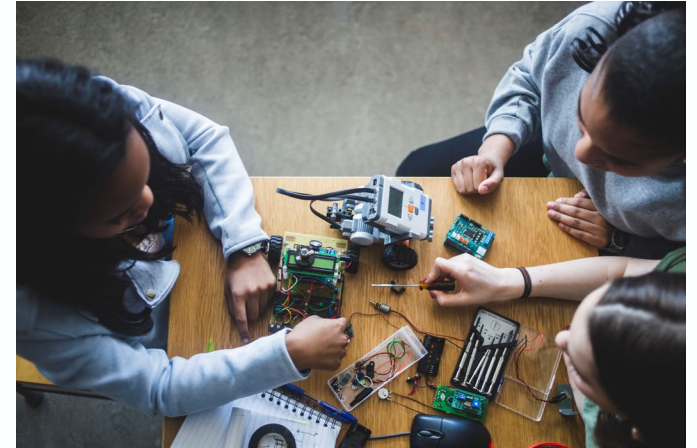
# For a Small Business

- Non-dilutive funding
  - America's Seed Fund awards non-dilutive funding—owners do not give up equity or ownership—to develop your technology and chart a path toward commercialization through the SBIR and STTR programs
- You choose how the IP is split with your research partner
- You illustrate to other investors you have the confidence and interest of the US Army
  - Segway to the DoD and US Government, defense primes
- Access to the US Army perspective and mission to accelerate your commercialization
  - Form lasting partnerships and insights
- Up to \$204,000 dollars over six months
- Pathway to Phase II funding of up to \$1,363,000 dollars for additional R&D derived from 24.B
- Focus on, and sole source, commercialization rights with any federal contract matching your technology



# For a Research Institution

- More funding and IP opportunities in cutting edge research areas of interest for the government and dual use commercialization technologies
- Technology spin off opportunities for your research
- Access to the US Army viewpoint and experience working with the US Army
- Experience for your graduate students and young faculty with commercialization
- Exposure to small business, prime contractor, and federal research environments
- The kind of development metrics state officials love from their public institutions
- Funding

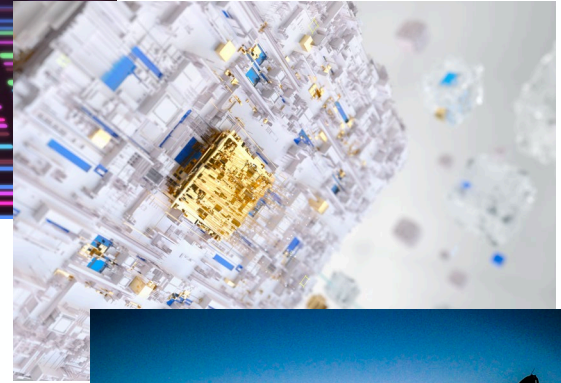
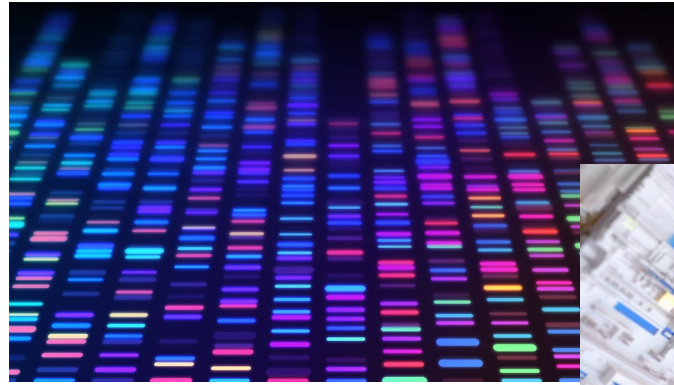




# What do you need to apply for an STTR

- ◆ A proposed solution to an Army Solicited STTR Topic
- ◆ A US Based Small Business (SB) Concern (51% US citizen or permanent resident owned and operated) who acts the prime
  - ◆ You must register at [sbir.gov/registration](http://sbir.gov/registration) and meet all SBA requirements
  - ◆ You must register at [sam.gov](http://sam.gov) and get a CAGE code for DSIP
- ◆ Partnership with a U.S. non-profit Research Institution (RI)
  - ◆ University, FFRDC, or other non-profit RI
- ◆ Budgeting for both the business (at least 40%) and research institution (at least 30%)
- ◆ **Willingness and time to carefully read the BAA, address the application questions, and fill out all the requirements with a solid plan**





# Topics

*Finding the What*





# Topics

- 20-24 preselected topics each year
  - On average, 2 awards per topic for Phase I
- Technical Points of Contact (TPOC) submit topics for selection months ahead of 24.B cycle
  - Topics are often related to key Army Research Priorities
  - Mix of conventional topic areas and some more niche areas of interest
  - No open solicitations in the STTR program
- Topics are searchable by keywords, priorities, technical areas
  - Include Phase 1 Objectives
  - Include references to related science and research
- During the pre-solicitation, you can learn more about the topics with direct contact with TPOCs or Industry Day/Topic Events
  - Once the BAA officially opens, only questions submitted in SITS will be allowed
- Final information or clarifications will be posted at the DSIP BAA:  
<https://www.dodsbirsttr.mil/topics-app/>



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*The BAA is the final say on a topic*

TPOCs want solutions to the objectives they outlined

# The BAA

- **Topic Name**

- A23B-T022 Soldier Personnel Protective Equipment from High Energy Lasers

- **RT&L Focus Area(s):**

**RT&L Focus Area(s):** Directed Energy

- **Technology Areas**

**Technology Area(s):** Human Systems, Materials

- **ITAR Requirements**

**Objective:** A lightweight and wearable Soldier PPE able to neutralize high energy laser threats upon impact and, incidentally, able to alert the wearer of the presence of such threats

- **Objective**

**Description:** High energy laser (HEL) threats are expected to be deployed in the future battlefield. They exhibit many compelling features including speed-of-light engagement, a deep magazine, and limited protection against the highest powers. The threat mechanism is via optical damage and intense thermal damage. These qualities behoove the development of PPE for Soldiers. A solution to this problem does not have to provide complete protection against HELs, even partially protection can buy Soldiers enough time to evade or engage the threats. In addition, the wavelength could be in the near infrared (NIR), such as with a Nd:YAG laser, making it undetectable visually via scattered light. A PPE system was developed for industrial users of high energy lasers [1]. The PPE proposal here could involve a wearable for the Soldier or a shield-like product. HELs can have irradiances greater than 10 W/cm<sup>2</sup> or powers greater than 500 W. Even materials with extremely small amounts of absorption in the visible or NIR, such as noble metals, will lead to optical power absorption, heating and thermal runaway as the material gets damaged. Damage leads to further absorption as the material's absorption coefficient increases. Energy can be reflected away and/or spread around to a larger volume to prevent damage.

- **Description**

- **Phase I Milestones**

- **Phase II Milestones**

- **Phase III Dual Use Applications where applicable**

- **Scientific References**

- **Keywords**

- **List of TPOCs and their contact info**



# The Partnership

*Finding the Who*





“

*“No matter how brilliant your mind or strategy, if you’re playing a solo game, you’ll always lose out to a team.”*



# The Partnerships

- You need both a Small Business **and** Research Institution to do the STTR, no exceptions
  - Both US owned (51%) and operated
  - 40% of budget for small business
  - 30% of the budget for research institution
- ~2 months to find the right match from the topic release
  - Find a partner(s)
  - Figure out your costs, timeline, approach, and IP
  - Set expectations for the team
  - Have the small business write the proposal and get the RI inputs
  - **Get this approved by partner's contracting offices**
  - Submit



# Networking and Outreach

## Starting now

- Network
- Alumnus/Alumni
- Professional Organizations
- Entrepreneurship Support Orgs
- Attend networking events
- Find a breadth of potential partners
- Identify strengths and weaknesses
- Have a plan

## Starting after the topics release

- Identify the right partner and get their business/contracts office involved early
- Talk to each other
- Attend our networking events
- Figure out IP requirements
- Find co-funding options in your states





# Partnering Considerations

## What do you need?

- ◆ What's missing?
- ◆ What are the gaps in topics and proposal?
- ◆ What resources do you need?
- ◆ Experience or hunger?
- ◆ What can you afford?

## What can you give?

- ◆ What makes you uniquely great?
- ◆ Why are you a great partner?
- ◆ What resources can you share?

## Logistics?

- ◆ Funding and IP plan
- ◆ Mutual understanding, expectations, requirements, motivations and formalizations
- ◆ What does Phase II look like?



# The Proposal

*Finding your Voice*





*People make the proposals work*

The Proposal is hard; but if you have a solution the topic you want your solution to compete, not your proposal



# The Proposal

- 2 months or less to write and coordinate with your partners
  - Clear with contracts
  - Limited Space
  - 10-page limit for Phase I for the Technical Volume
- Strict rules and requirements for each section
- **Strict deadline of noon ET June 12<sup>th</sup>, 2024**
  - Does not matter if the website is down, or one minute late
- More proposals than funding, do not be eliminated by a small error
- 24.A and 23.B can provide early hints
- Roughly 40-50 successful STTRs for the Army each year



# Proposal Advice

- Have a story
  - Live, breathe, and eat your technology solution
  - Think about research needs and customer (Phase II/III) needs
- Draft early, review and revise often
  - Get contracts involved as soon as you have a topic, solution, and partner
  - Show it your mean friend, tech savvy friend, and non-tech friend
  - Reach out to some of the *More Resources* slide options for additional reviews
  - Talk to TPOCs, attend events
  - Cut judiciously, be ruthless and fight for space
    - Use all the allotted space you need
- Read the BAA
  - Start tasking out sections early
    - Address everything required
  - Ask questions and clarifications
  - Figure out what the TPOC is looking for
- Seek Phase Zero funding and advice opportunities
  - Identify gaps in experience
    - Take course now
  - Useful skills for other government prospects
- If you don't succeed, look for similar topics in other programs, and consider the feedback provided
  - Multiple members of the Army will review proposals and provide feedback



*Have a plan for Phase II*

# More Resources

- Phase Zero and State Matching Programs
- Economic Development Authorities
- University Outreach Offices
- Incubators and Accelerators
- Federal Lab Consortium
- USPTO

## Helpful Links

<https://www.sbir.gov/local-assistance>

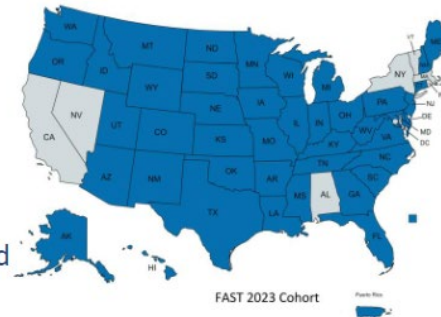
<https://www.sbir.gov/support-organizations>

<https://www.sbir.gov/accelerators>

<https://federallabs.org/flc-business/about-flc-business-77c1c2a816321eb2ce47b44233b73840>

<https://www.uspto.gov/learning-and-resources/startup-resources>

FAST organizations conduct outreach, training, and mentoring for potential SBIR/STTR applicants and awardees, with a focus on increasing successful applications from underserved communities.



# Initial Steps

- Register at [sbir.gov/registration](https://sbir.gov/registration)
- Register at [sam.gov](https://sam.gov)
- Register at <https://www.dodsbirsttr.mil/submissions/login> and listserv
- Sign up for [Armysttr.com](https://armysttr.com)
- Read past BAAs and solicitations
- Look for partners
- Check out STTR events
- Watch for the topic “sneak peek”
- Fill out the survey to let us know what else we can do



# THANK YOU FOR ATTENDING!

Please complete the event survey



<https://www.surveymonkey.com/r/Y75ZL3Y>

Let us know how we can help you!



Sign up on Armysttr.com



[www.Armysttr.com](http://www.Armysttr.com)

Follow for upcoming events and information/updates for the 24.B cycle