



U.S. ARMY



U.S. ARMY  
**RDECOM**



U.S. ARMY TANK AUTOMOTIVE RESEARCH, DEVELOPMENT AND ENGINEERING CENTER

# TARDEC

## Small Business Innovation Research (SBIR) Overview

George Pappageorge  
TARDEC External Business office



# What is SBIR?



## *A congressionally mandated program...*



- Established in 1982, P. L. 97-219
- Federal Government wide (11 Federal agencies and 12 DoD components participate)
- Across Federal Government (DoD, DoE, DHS, DoT, etc...)
- 2.9% of Army's FY RDT&E budget
- Stimulate technological innovation
- Increase small business participation in federally funded R&D; thereby increasing competition, productivity, and economic growth
- Transition Federal R&D into:
  - Government Programs
  - Industry Initiatives

# How can Small Business Participate?



- SBIR Program is administered with the Small Business Administration (SBA) Policy Directives
  - ✓ Must be a U.S. for-profit small business of 500 or fewer employees
  - ✓ All work must be performed in the United States, including subcontractors
  - ✓ During Phase I, a minimum of 2/3 of the effort must be performed by the proposing small business; a minimum of 1/2 of the effort in Phase II
  - ✓ The Principal Investigator must spend more the 1/2 of the time employed by the proposing business

# Participating Army Organization



U.S. Army Research, Development & Engineering Command



U.S. Army Corps of Engineers, Engineer Research & Development Center



Army Research Institute



U.S. Army Test & Evaluation Command



Medical Research & Materiel Command



U.S. Army Space and Missile Defense Command

## Program Executive Offices



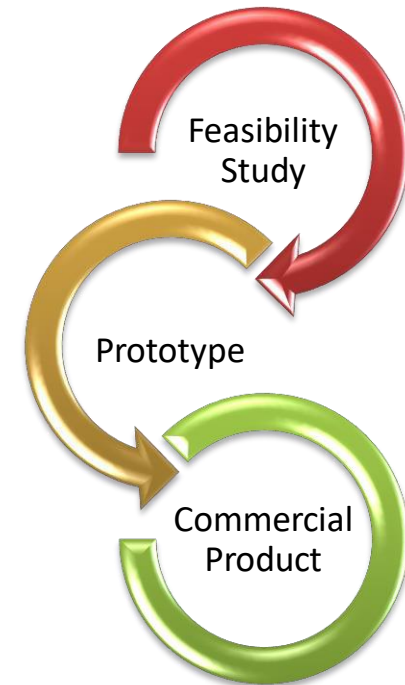
# Research and Development Organizations



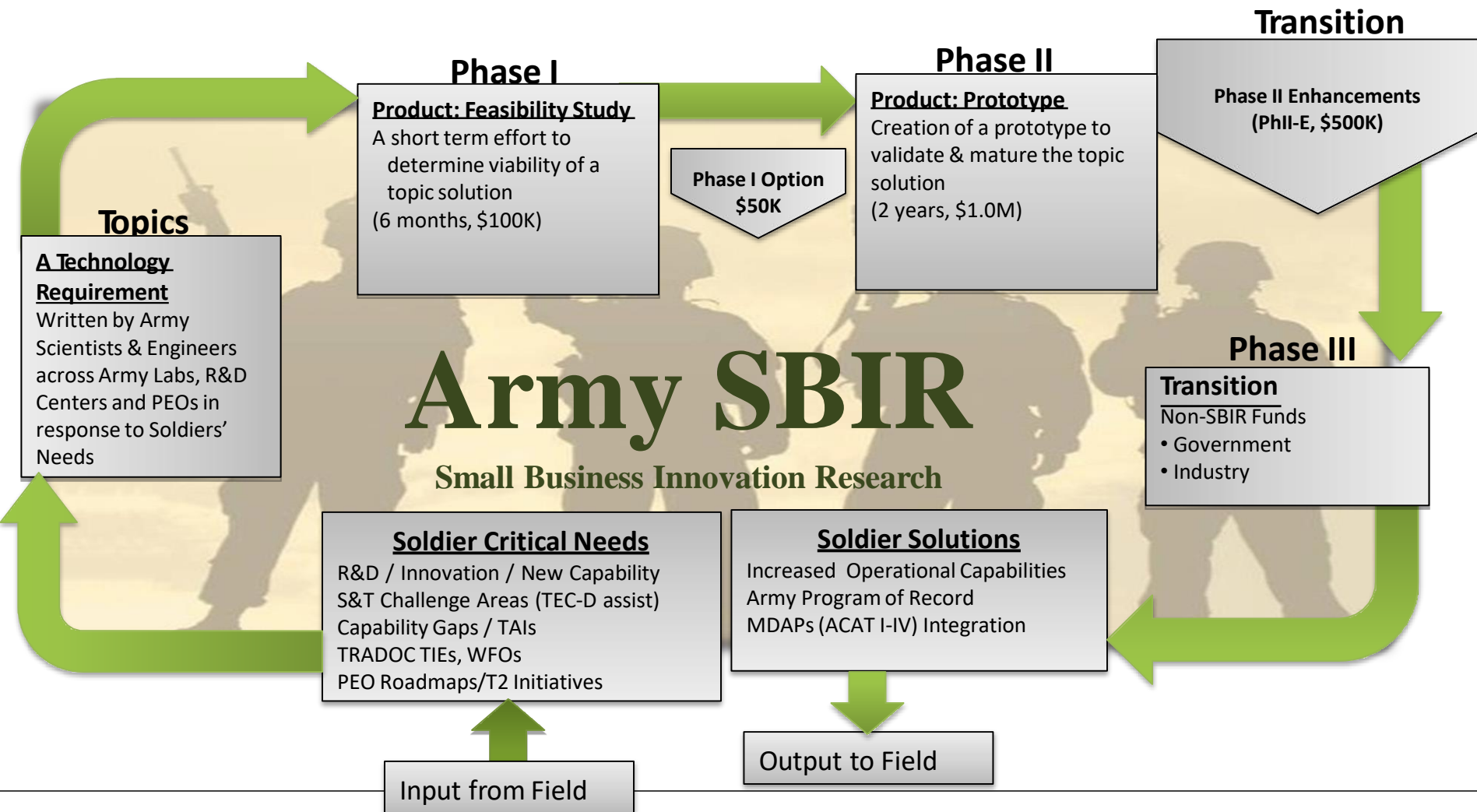
# Phases of SBIR



- **Phase I** – is a feasibility study that determines the scientific, technical, and commercial merit and feasibility of a selected concept. Phase I projects are competitively selected from proposals submitted against Broad Agency Announcement topics seeking specific solutions to Army needs.
- **Phase II** – Represents a major R&D effort, culminating in a well- defined deliverable prototype (i.e., a technology, product, or service).
- **Phase III** – Expects the small business or research institute to obtain funding from the private sector and/or non-SBIR government sources to develop the prototype into a viable product or service for sale in government or private sector services.



# Army SBIR Life Cycle

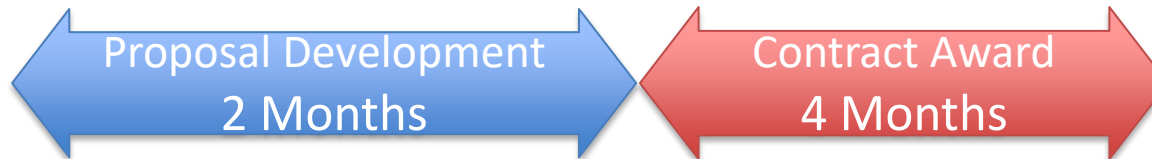


# Phase I Milestones



A DoD Agency-wide announcement includes:

- DoD Instructions
- Army Specific Instructions
- Topics



	Pre Solicitation	Solicitation	Proposal Deadline	Selection Announcement	Award Goal
SBIR FY18.1	29 Nov 17	10 Jan 18	7 Feb 18	9 May 18	9 Jul 18
SBIR FY18.2	20 Apr 18	22 May 18	20 June 18	20 Sep 18	19 Nov 18
SBIR FY18.3	24 Aug 18	24 Sep 18	24 Oct 18	28 Jan 19	25 Mar 19

- Evaluation process is a rigorous 2 tier source selection process (TET, SSEB, SSA)
- Evaluation criteria - technical feasibility, personnel/facilities, and transition potential
- Competitive Process (Phase I – 10% selected)
- 80-90% Army SBIR Topics are submitted in the XX.1 solicitation cycle each year



# Phase II Milestones



- 13.1 Phase I and later, Phase II invitations no longer required
- Phase II Proposals to be submitted between 4 to 17 months after the Phase I contract award date, and
- within one of four submission cycles, 30 calendar days starting on or about **15 October, 1 March, 15 June, 1 August**

- Phase III is the goal of every SBIR effort, and represents the commercialization phase of the program
- Phase III refers to work that derives from, extends, or logically concludes efforts performed under prior SBIR funding agreements, but is funded by sources other than the SBIR Program
- The Army has instituted several programs to facilitate the transition of Phase II projects to Phase III. These programs include:
  - **Technical Assistance**
  - **Transition Support**



- Technical Assistance Advocates (TAAs) are strategically placed in nine regions across the Army to provide technical assistance to small businesses that have Phase I and Phase II projects
- **TAAs provide:**
  - Expert advice and analysis to SBIR awardees in improving technical decisions; solving technical problems; minimizing technical risks; and developing/commercializing new commercial products and processes
  - Expert advice and analysis to the government regarding technology transition planning and development of technology integration roadmaps
  - In coordination with all stakeholders, assist in formulating Phase III plans for Phase II projects

**PM SBIR TAA at TARDEC is Mr. Michael Piatak**

For additional information on the Phase II Enhancement/CRP please refer to the Army SBIR public website: <https://www.armysbir.army.mil/sbir/PhaseIIEnhancements.aspx>

## 1. Transition Assistance

- Collaboration/Networking with Army technologists and Transition Agents, such as PEOs/PMs
- Technology Transition Planning and Development
- Phase III Planning Assistance (Help formulate Strategies and Resource Requirements)

## 2. Phase II-Enhancement and Commercialization Readiness Program (CRP)

- Both initiatives are complementary; Each authorized by Congress or SBA Policy (Guidance reaffirmed in FY12 NDAA, 31 Dec 2011)
- Purpose: To accelerate the transition to a useable technology
- Provide  $\leq$ \$500K Additional Funds To Active Phase II firms during their open Phase II contract (Contract Modification)
- Candidates are identified by local SBIR PC Team, who assesses all Ph2 projects during 1<sup>st</sup> year of contract performance
  - Promising technologies that will require activities after Year 2 prototype is delivered, are further evaluated for transition funds
  - Activities Funded: Further R&D, TRL Maturation, Prototype T&E, etc to facilitate transition to Phase III
- Funding is subject to availability and a deliberate approval process
- Funding commitments from transition partners is **STRONGLY** encouraged

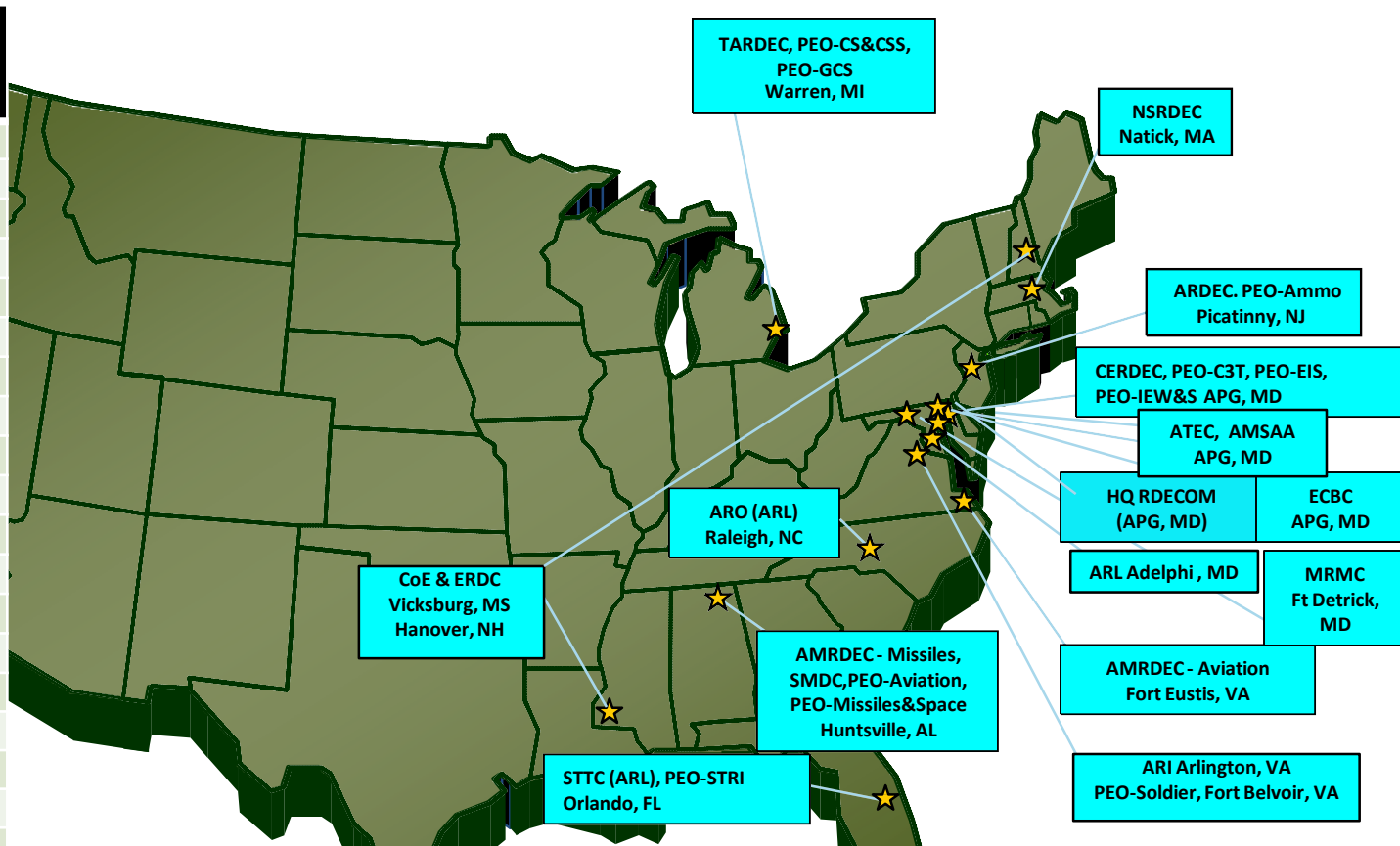
# Topic Author Organizations



U.S. ARMY  
**RDECOM**



Organization	2016 Topics
ARI	0
ARL	15
AMRDEC (A)	7
AMRDEC (M)	11
ARDEC	10
ATEC	2
CERDEC	20
ECBC	2
ERDC	2
MPMC	11
NSRDEC	8
SMDC	3
TARDEC	14
PEO AMMO	3
PEO AVIATION	2
PEO C3T	3
JPEO-CBD	0
PEO CS&CSS	3
PEO EIS	0
PEO GCS	3
PEO IEW&S	2
PEO M&S	4
PEO SOLDIER	5
PEO STRI	3
<b>Total</b>	<b>133</b>



- Headquarters RDECOM – Aberdeen Proving Ground, MD**
- AMRDEC – Aviation & Missile Research, Development & Engineering Center
  - ARDEC – Armaments Research, Development & Engineering Center
  - ARL – Army Research Lab
  - ARO – Army Research Office
  - CERDEC – Communication-Electronics Research, Development & Engineering Center
  - ECBC – Edgewood Chemical Biological Center
  - NSRDEC – Natick Soldier Research, Development & Engineering Center
  - STTC – Simulation and Training Technology Center
  - TARDEC – Tank Automotive Research, Development & Engineering Center

## ARMY SBIR

SMALL BUSINESS INNOVATION RESEARCH

HOME

SBIR

STTR

COMMERCIALIZATION

AWARDS

SMALL BUSINESS PAGE

RELATED LINKS

CONTACT US

SUGGEST A RESEARCH TOPIC

## PHASE III COMMERCIALIZATION BROCHURES

Click on image to download Phase III Commercialization Brochure (PDF)

2017	2016	2014	2012	2011
	2010	2008	2006	2005
	2004	2003	2002	2000

**ARMY SBIR**  
ARMY SMALL BUSINESS INNOVATION RESEARCH



Army SBIR Program Website:

[www.armysbir.army.mil](http://www.armysbir.army.mil)

DoD SBIR/STTR Small Business Portal:

<https://sbir.defensebusiness.org/>

U.S. Small Business Administration (SBA) SBIR/STTR Program:

[www.sbir.gov](http://www.sbir.gov)

# Small Business Technology Transfer



- ✓ The **statutory purpose** of the STTR Program... stimulate a **partnership** between innovative **small business** concerns (SBCs) and **Research Institutions** through Federally-funded research and development.



# STTR Eligibility Criteria



**Applicant is U.S.-owned Small Business Concern**



**Formal Cooperative R&D Effort**

- Minimum **40%** by small business
- Minimum **30%** by U.S. research institution



**U.S. Research Institution**

- College or university; other non-profit research organization; Federal R&D center



**Intellectual Property Agreement**

- Allocation of rights in IP and rights to carry out follow-on R&D and commercialization

**Award is always made to Small Business Concern (SBC)**

# SBIR/STTR Critical Differences



## Research Partner



**SBIR:** Permits partnering  
33% Phase I and 50% Phase II



**STTR:** Requires partnering with  
research institution.

## Principal Investigator



**SBIR:** Primary (>50%)  
employment must be with  
small business concern



**STTR:** may be employed by  
either research institution (RI)  
or SBC, **but...**

Phase I/II, primary employment of PI must be with the SBC or RI at the time of award and during project. Primary employment > 50% of PI time at SBC/RI. (STTR Policy Directive, 2012)



U.S. ARMY  
**RDECOM**



# Questions