Phase III & Commercialization Readiness Program

- **Phase III** is the commercialization of SBIR/STTR-funded technologies into goods or services in the private sector or federal agency, such as:
  - Follow-on R/R&D,
  - Commercial application, and/or
  - Production in the private sector or with a federal agency

- **Transitioning to Phase III** often crawled through the "Valley of Death"

- To accelerate the transition of SBIR/STTR-developed technologies, products and services to Phase III and into the acquisition process, Congress created the **Commercialization Readiness Program (CRP)**
  - NDAA FY2006 (PL 109-163, Section 252) created the Commercialization Pilot Program (CPP) for DoD SBIR only
  - NDAA FY2012 (PL 112-81, Section 5122) renamed CPP to CRP
    - Supports both SBIR and STTR Programs
    - Increased reporting requirements
AF Approach to CRP

“Boots on the ground”: Transition Agents (TAs) located at Air Force Centers and Technology Directorates

• Facilitate topic alignment with Acquisition Program Executive Offices (PEOs)

• Identify and Verify Customer, Need, & Technology
  • Support Technology Interchange Meetings (TIMs)
    • Focused Industry and PEO meetings
    • Targeted DoD SBIR/STTR data mining and due diligence
  • Facilitate and support Small Business Industry Days (SBIDs)
    • Center/PEO targeted events, for entire SB community not just SBIR
  • Continuous Phase II portfolio transitioning
    • Participation in various technology requirements discussions
    • Liaison for ad hoc PEO and industry technology needs

• Assist in development of Transition Plans (STTP/STMP)
CRP Operating Construct

<table>
<thead>
<tr>
<th>CRP Topics</th>
<th>Pre-Concept Refinement</th>
<th>Material Solution Analysis</th>
<th>Technology Development</th>
<th>Engineering and Manufacturing Development</th>
<th>Production &amp; Deployment</th>
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Technology Readiness Level (TRL)

- TRL 1: Basic Principles Observed
- TRL 2: Concept Formulation
- TRL 3: Proof of Concept
- TRL 4: Breadboard in Lab
- TRL 5: Prototype in Rep Environment
- TRL 6: Prototype in Ops Environment
- TRL 7: System Qual
- TRL 8: Mission Proven

C R P

Phase I

Phase II

Phase III

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Air Force Focus Areas

Goal: Maximize benefits to the warfighter while providing best opportunity for small business commercial success. Benefits include:

- Risk reduction
- New capability
- Obsolete equipment replacement
- Greater reliability
- Cost savings
- Improved performance and safety

[Diagram showing distributions for different focus areas:
- Sensors: 17%
- Air Platforms: 18%
- Space Platforms: 14%
- Information: 11%
- Materials: 15%
- Nuclear: 1%
- Electronics/EW: 7%
- Human Systems: 8%
- Weapons: 8%
- Battlespace: 1%]
Air Force R&D Organizations

- Air Force Research Laboratory
- Air Force Life Cycle Management Center
- F-35 Joint Strike Fighter
- Air Force Sustainment Center
- Air Force Special Operations Command
- Air Force Civil Engineer Center
- Space and Missile Systems Center
Collaboration at Work

AF SBIR/STTR Transition Team

Transition Team Support

Industry Needs

Center Needs

SBIR Technology Solutions

AF Centers/PEOs

Major Defense Contractors

AFRL Managers & SBIR/STTR Phase II Firms

21 Major Defense Contractors Participating

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GOAL: Increase collaboration between the AF and Major Defense Contractors (MDC) to accelerate technology transition

- Annually AF issues a TIM call via FBO announcement
- 6-9 MDCs participate each year
- 15-week process training and facilitating MDC as they identify and vet SBIR/STTR technologies that meet their needs to become candidates for STTPs
- Utilize SWIFT tool for data mining and workflow tracking
- Event hosted by MDC conducting one-on-one sessions under a NDA
- Hotwash & post-event follow-up on outcomes and STTP facilitation
Small Business Industry Days (SBID)

• **GOAL:** Increase Small Business participation in AF supply chain and technology transition activities

• **2-3 day event targets a specific AF Center/PEO**
  - Armament SBID, July 2014
  - Test Center (AFTC) SBID, November 2014
  - Sustainment (AFSC) SBID, July 2015
  - Space and Missile Center (SMC) SBID, October 2016

• **Broader than SBIR/STTR!** Open to all Small Businesses with technical capabilities that may meet the AF Center/PEO needs
  - **Track 1 – Products:** Small Businesses present products/capabilities/technologies that may fit AF needs
  - **Track 2 – Market Research:** Air Force Center/PEOs present opportunities coming up in the next 24 months that are appropriate for small businesses to serve as the prime contractor
  - **Track 3 – SBIR/STTR Transition:** Private TIM-like one-on-one sessions on SBIR/STTR technologies for potential transition to PEO programs/systems
  - Educational Sessions (e.g. IP Protection, DCAA Audits, SBIR/STTR, Rapid Innovation Fund (RIF))
  - Exhibit Hall & Networking Opportunities
Transition Planning “Ingredients”

SBIR Technology Transition Plan (STTP)
SBIR Technology Maturation Plan (STMP)

The “Bull’s Eye”

1. Air Force Customer
2. Capability Gap or Need
3. Relevant & Desired SBIR Technology

Examples of Transition Paths

- Acquisition Program of Record
- Technology Risk Reduction Effort
- Deploy Prototype System Directly into Theater
- MAJCOM/Combatant Command Application (not Acquisition PoR)
- Upgrade to Fielded System (i.e., Sustainment)
- Contract Capture Opportunity for Major Defense Company

AF CRP looks for ROI on its SBIR/STTR Projects
Elements of STTP

Consists of 8 Sections:

1) Management Summary
   • 1 Page, Synopsis of Document

2) Target Application & Stakeholders

3) Technology Maturation
   • Describes technology development tasks, timelines, readiness levels, & deliverables

4) Transition Strategy
   • Crux of plan - ID’s destination & application for technology while conveying plausibility

5) Financial Strategy
   • Critical - conveys interest in financial terms!

6) Risk Management

7) Intellectual Property Protection

8) Stakeholders Roles, Responsibilities
AF CRP Summary

- Focuses SBIR/STTR program on Air Force & Major Defense Contractor tech-based needs
- Establishes & implements processes to align & connect stakeholders
- Establishes clear lines of communication
- Is a cost sharing program
  - All Stakeholders Financially Assist Technology Transition
Resources

- Phase III Desk Reference 2016
- Achievements – 2015 Success Stories
- AF SBIR/STTR Advantage Newsletter
- Economic Impact Study (2014)

www.afsbirsttr.com/Publications
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