



Air Force

**Small Business Innovation
Research (SBIR) Program**



Air Force

SBIR / STTR





Overview

- **Federal Legislation and Air Force SBIR/STTR**
- **SBIR/STTR Program Overview**
- **Commercialization Pilot Program**
- **Additional Info Resources**





How the Air Force Traditionally Works with External Organizations

Government to Government

Alliances

Contracts

Government to Industry



**Other Government
Agencies**



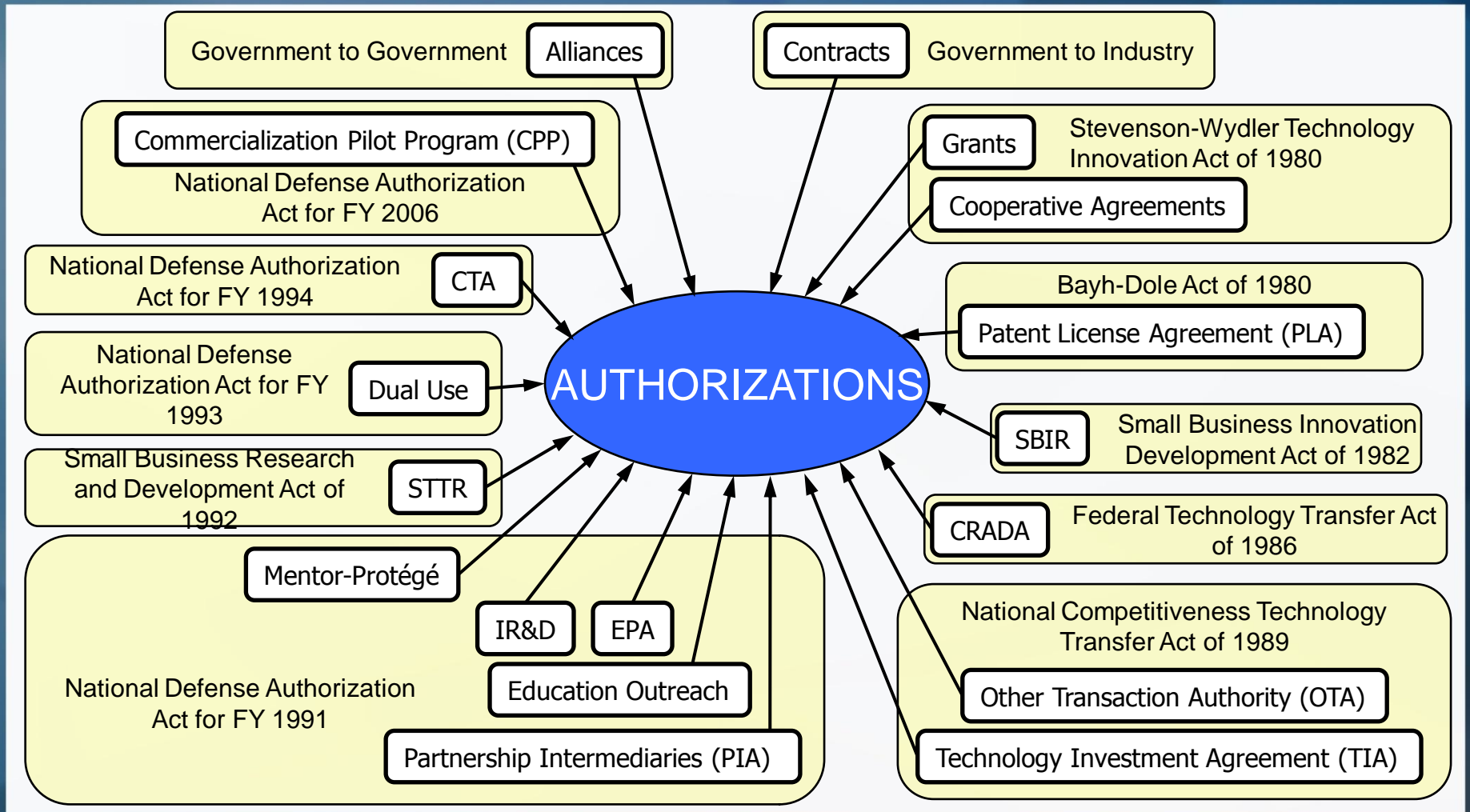
U.S. AIR FORCE



Industry

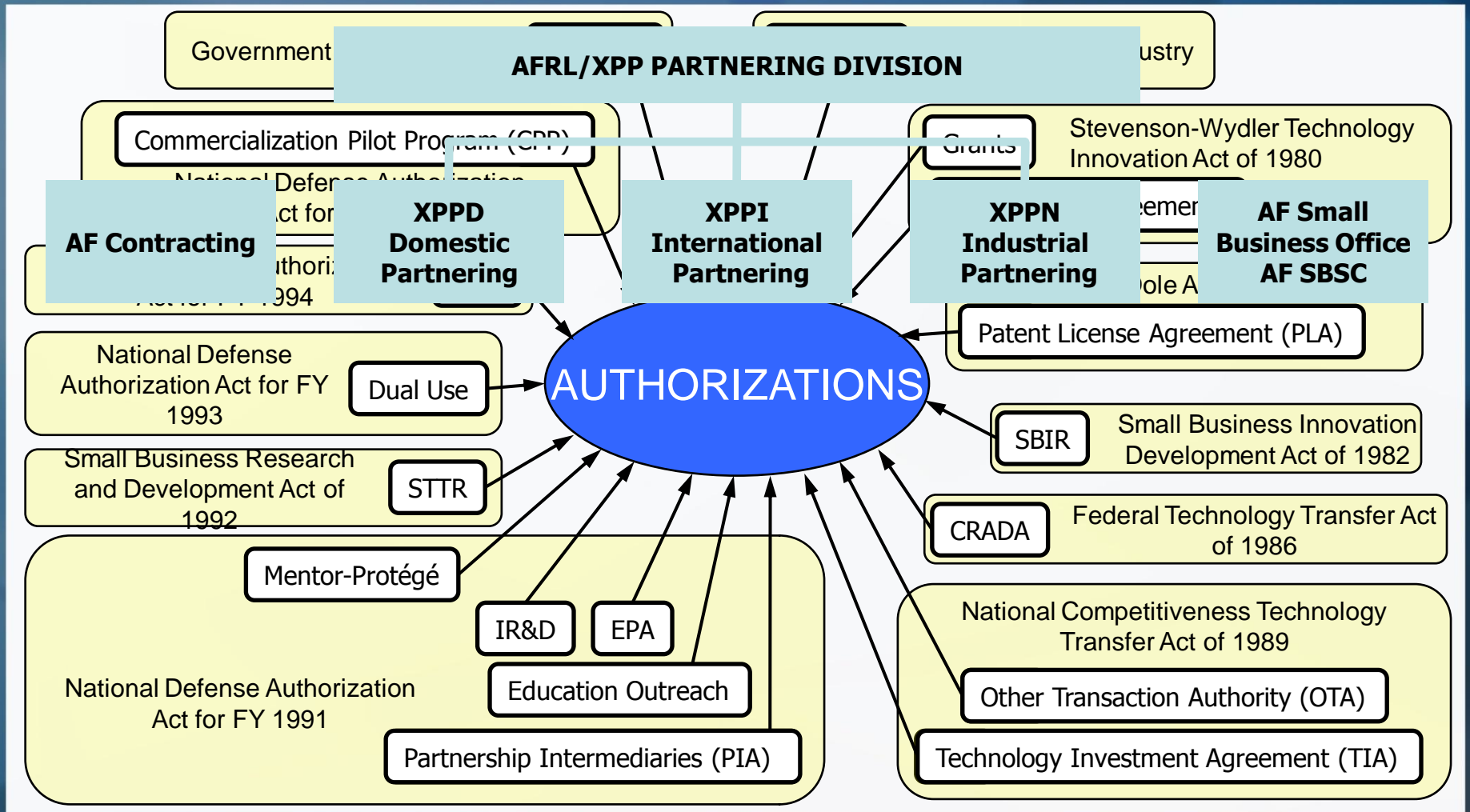


Federal Legislation Since 1980



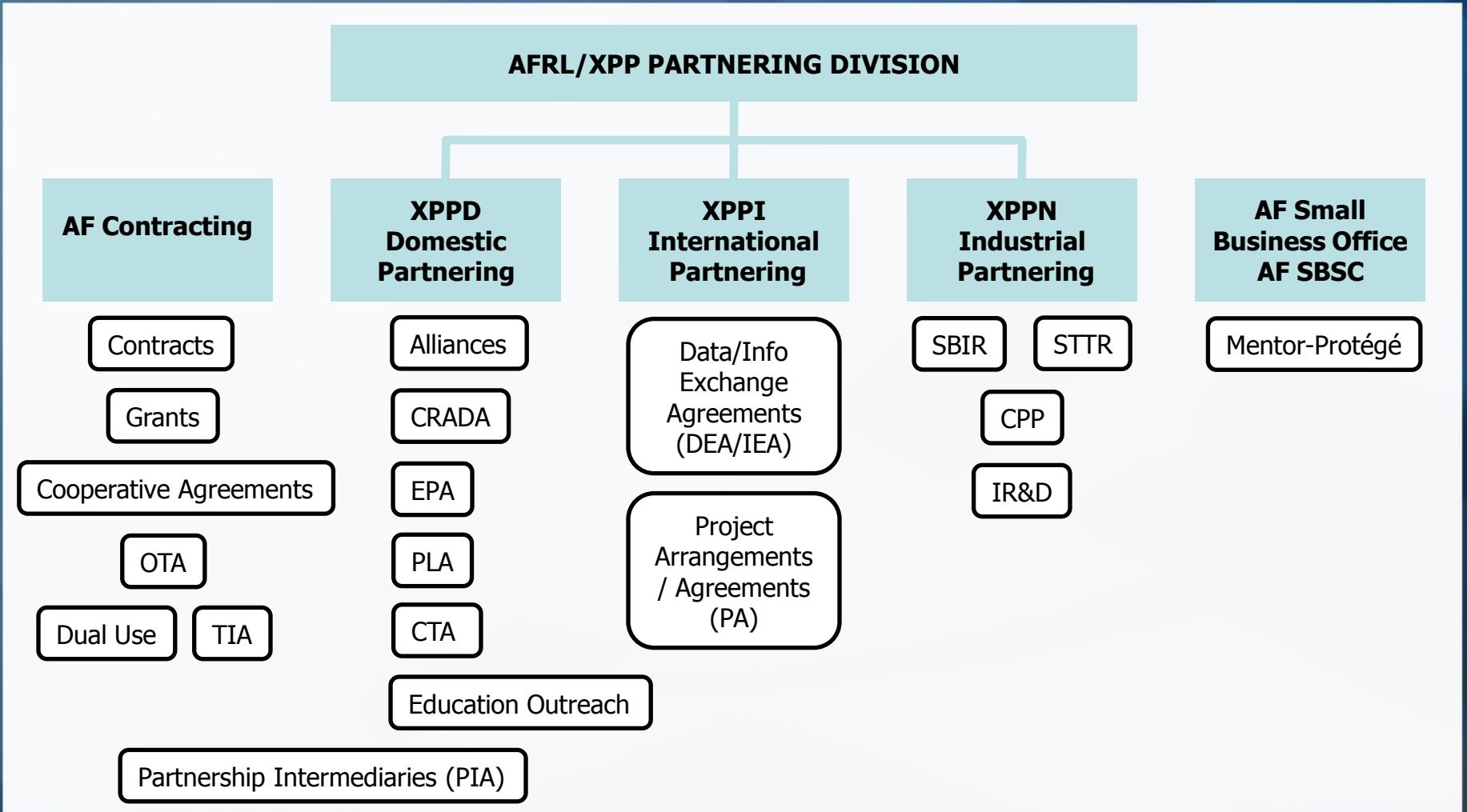


Authorities Organized within Air Force





Authorities Organized within Air Force





AFRL/XPP Partnering Division

AFRL/XPP PARTNERING DIVISION

XPPD Domestic Partnering

Alliances

CRADA

EPA

PLA

CTA

Education Outreach

Partnership Intermediaries (PIA)

XPPI International Partnering

Data/Info
Exchange
Agreements
(DEA/IEA)

Project
Arrangements
/ Agreements
(PA)

XPPN Industrial Partnering

SBIR

STTR

CPP

IR&D

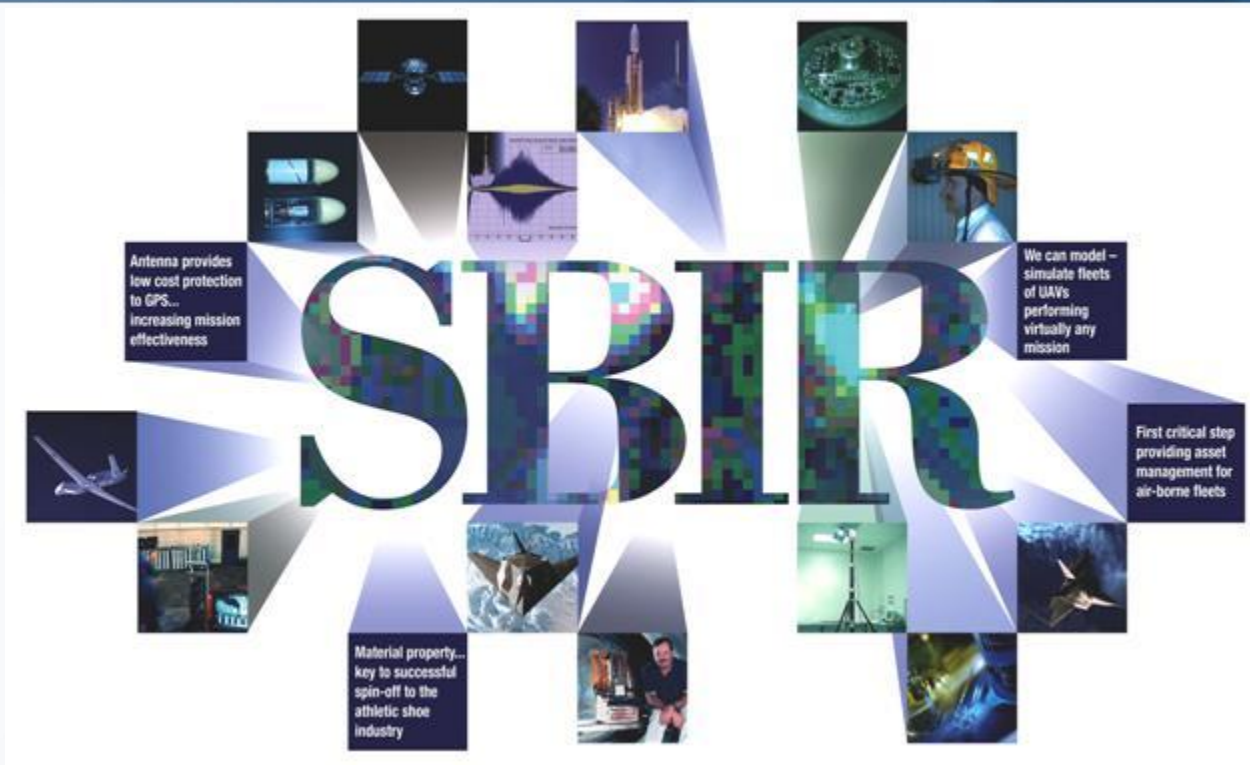
Technology Transfer



= Air Force Level Programs



Small Business Innovation Research/ Small Business Technology Transfer



Federally Mandated Program requiring 2.5% (SBIR) and .3% (STTR) of Air Force Extramural RDT&E Budget



SBIR Program Goals



Congressional Goals & Purpose:

- Stimulate Technological Innovations
- Increase small business participation in federally funded R&D
- Foster and encourage participation by minority and disadvantaged firms in technological innovation
- Increase private sector commercialization of federally supported R&D



STTR Program Goals

Congressional Goals & Purpose:

- Stimulate and foster scientific and technological innovation through cooperative research and development carried out between small business concerns and research institutions
- Foster technology transfer between small business concerns and research institutions



AFRL Mission Driven Execution of SBIR



- The Air Force Research Laboratory (AFRL) is the executive agent for the Air Force SBIR Program
- AFRL administers the SBIR Program as an integral part of its overall technology development mission

Benefits to the Air Force:

- Maintains Domestic Base for Technological Innovation
- Mitigates risk to AF Acquisition Programs
- Leverages the innovation and agility of small businesses



SBIR Award Construct

**Topic
Generation**



**Topic
Solicitation**



**Proposal
Submission**



Evaluation



Award

The Air Force SBIR/STTR Program works with Air Force Organizations to Develop Topics

Annual averages

Topics ~ 230

Phase I Proposals ~ 3500

Phase I Contracts ~ 500

Phase II Proposals ~ 450

Phase II Contracts ~ 270



AF SBIR/STTR Process Overview

Topic Generation



Topic Solicitation



Proposal Submission



Evaluation

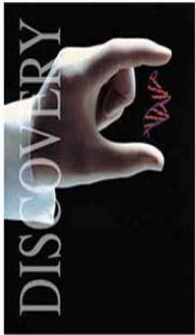


Award

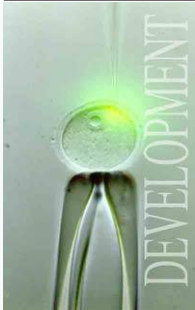
- Topics are Generated through internal processes across AF (PEOs, TDs, ALCs, & Test Centers)
- Topics are reviewed by AF SBIR Office
- Topics are then submitted to DoD for formal review by DDR&E
- Approved Topics are pre-released by DoD through FedBizOpps Announcement
- Proposal submission through DoD Website
- DoD transmits appropriate submissions to AF
- 3 AF Evaluators are assigned to each proposal
- Source Selection to Award (4 Months)



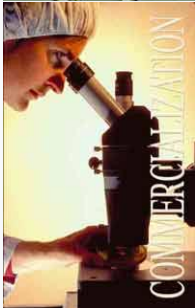
SBIR/STTR Three Phased Approach



- PHASE I
 - Feasibility Study
 - \$100K, 9-month (SBIR) or 12-month (STTR) Award



- PHASE II
 - Full Research/R&D
 - \$750K, 2-year Award (SBIR & STTR)

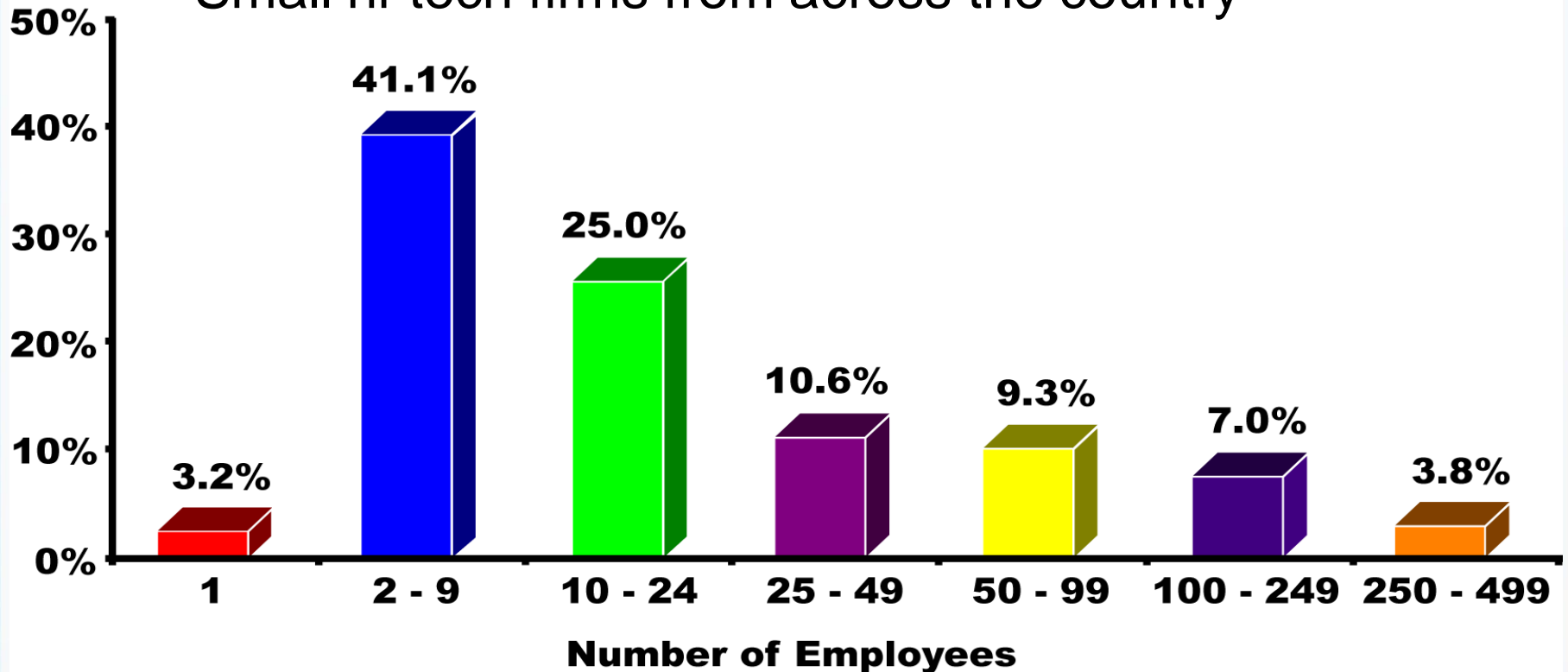


- PHASE III
 - Commercialization Stage
 - Use of non-SBIR/STTR Funds



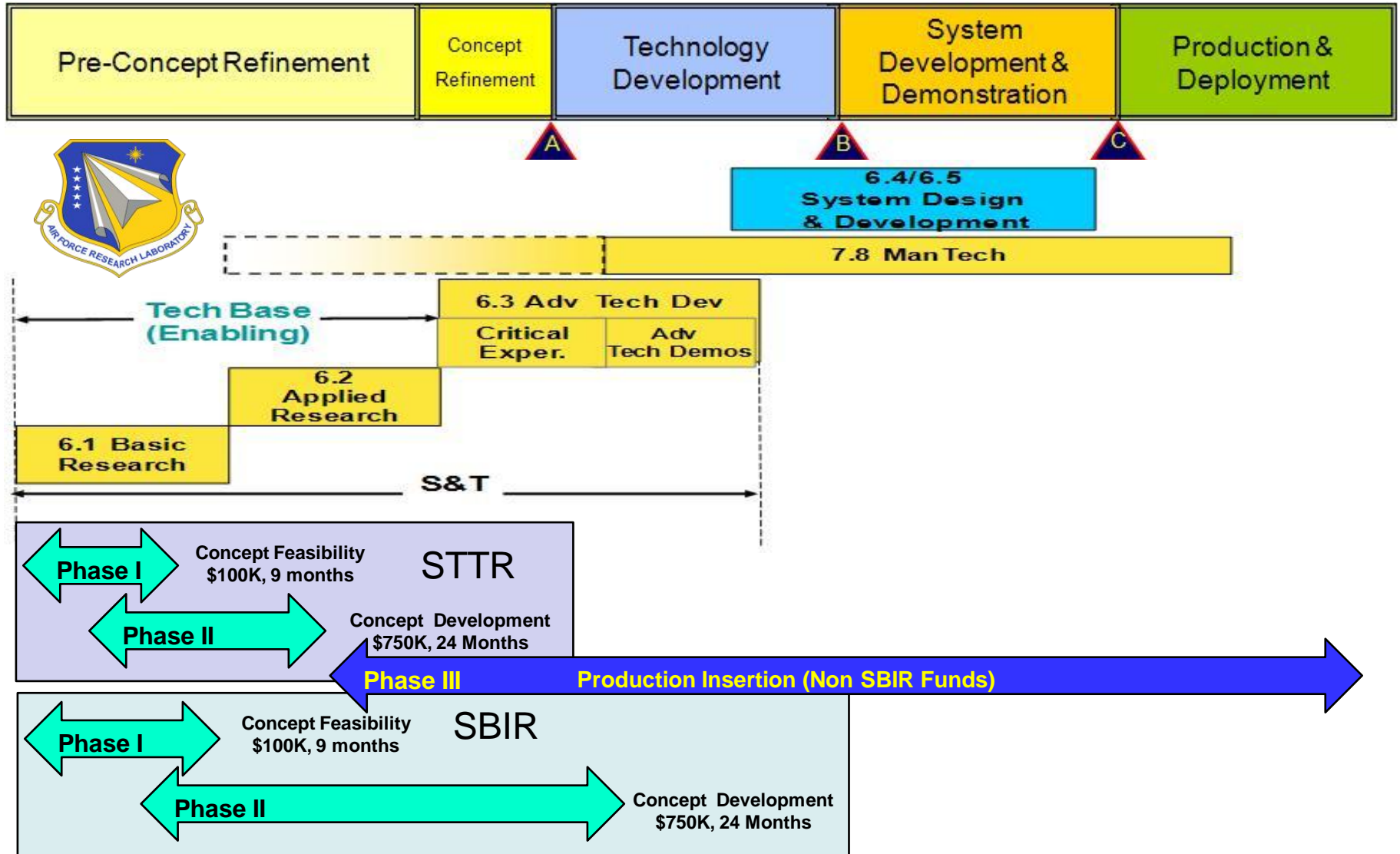
SBIR Participation

- Firms are typically small and new to the program.
- About 1/3 are first-time Phase I awardees.
- Small hi-tech firms from across the country





SBIR/STTR's Role in Air Force Acquisition

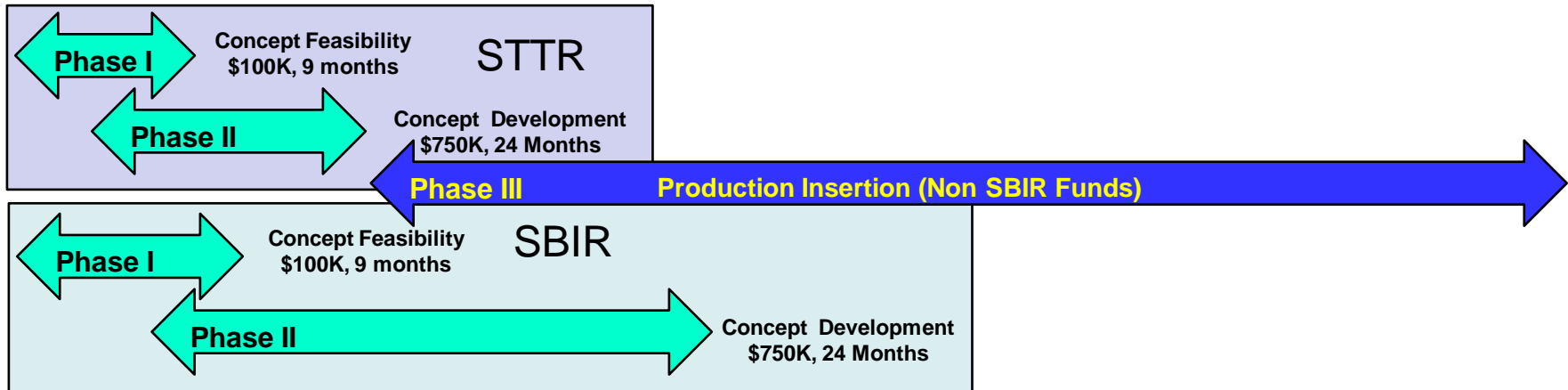




SBIR/STTR's Role in Air Force Acquisition



TRL 1 Basic Principles Observed	TRL 2 Concept Formulation	TRL 3 Proof of Concept	TRL 4 Breadboard in Lab	TRL 5 Breadboard in Rep Environment	TRL 6 Prototype in Rep Environment	TRL 7 Prototype in Ops Environment	TRL 8 System Qual	TRL 9 Mission Proven
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Air Force SBIR

Commercialization Pilot Program

- Created in Sec 252a of FY06 Nat'l Defense Auth Act
 - IDs SBIR-developed technologies & accelerates their transition
 - Allows 1% of SBIR budget to administer pilot program; authorized thru FY09
- AFRL hired 'transition agents,' placed 2 in each PEO XR
 - Help establish/maintain connections among PEO SMEs & AFRL S&Es
 - Facilitate SBIR topic generation and technology transition
- Supports Industry Technology Interchange Workshops
 - Addresses Centers' prioritized near-term technology-based needs
 - IDs SBIR technologies of mutual interest to large & small business
 - Culminates in new SBIR Technology Transition Plans (STTPs)
 - STTPs codify stakeholder roles/responsibilities, current & req'd TRLs/MRLs, and funding commitments/shortfalls
- Works to integrate SBIR into PEO roadmaps & investments
- Result: Signed SBIR Technology Transition Plan (STTP)

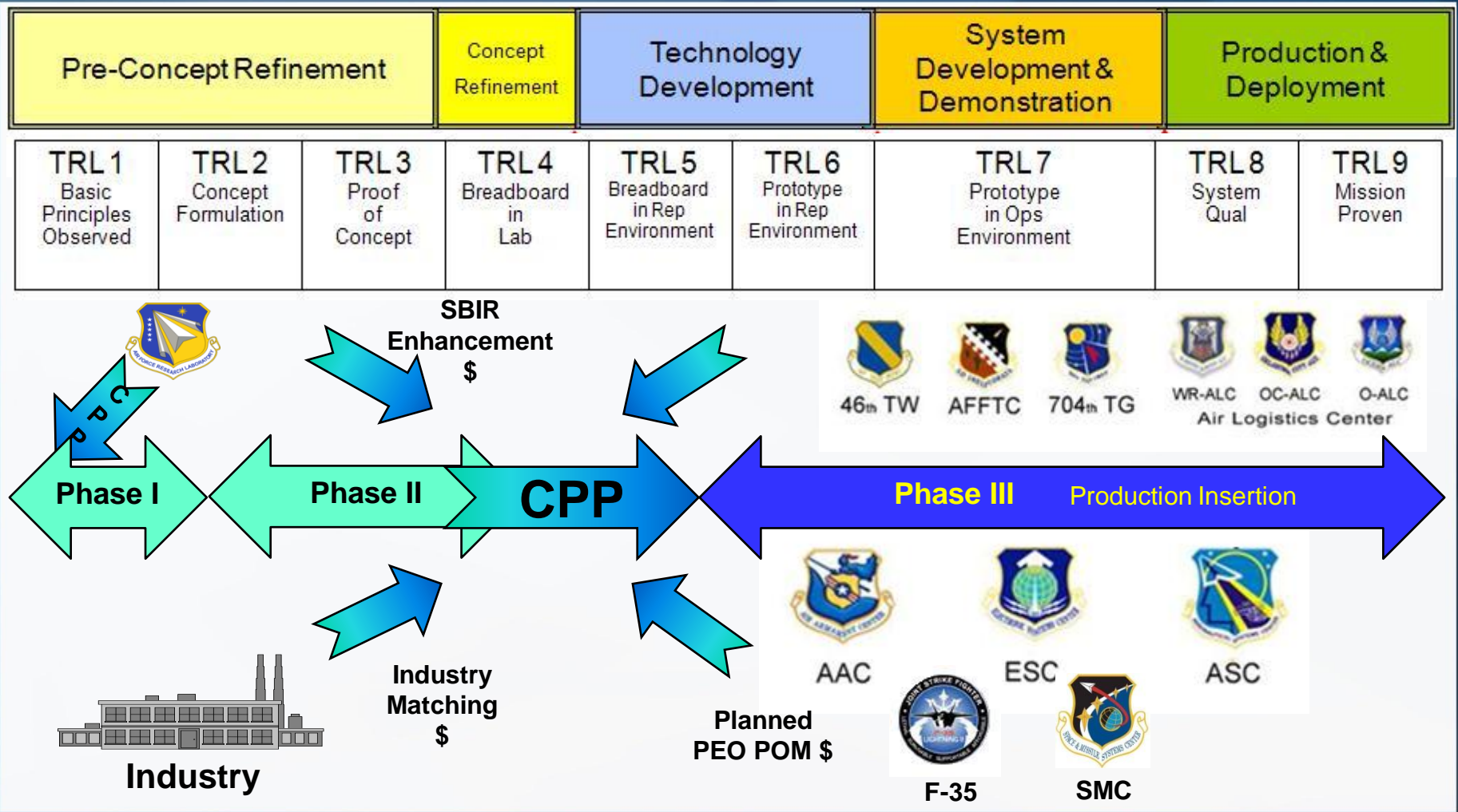


CPP Operating Construct





CPP Operating Construct





Summary

The Air Force SBIR Program works to accomplish the Congressional Goals of the SBIR Program and supports the Air Force as an integral part of AFRL's overall technology development Mission





Additional Information Resources

Air Force

- www.sbirstrmall.com
- www.selltoairforce.org

DoD

- www.dodsbir.net