Air Force Small Business Innovation Research (SBIR)

Commercialization Pilot Program (CPP)

23 August, 2007
• New SBIR Topic Allocation Distribution
  – Based on $$ Contribution: 64% allocated to PEOs vice 47% last year
  – Goal: Focus on near term funded acquisition technology based needs

• Strategy vs Tactics
  – More strategic topic generation process with closer ties to acquisition community and prime contractors

• Air Force SBIR Commercialization Pilot Program (CPP)
Air Force Technology Needs Gathering Process

- Senior leader engagement
- Joint AFRL/Product center process
- Multi-directorate AFRL engagement
- PEO/TEO approval
- SPO Primes participation

Strategy Driven Process

- Prep for Senior Strategy Meeting #1
  - May - Jun
  - Lab/Prod Center’s Planning Sessions

- Senior Strategy Meeting #1
  - Jul - Aug
  - Prioritized Needs Focus Areas

- AFRL Deep Dive Working Meetings
  - Aug - Oct
  - Proposed Tech Solution Options & SBIR Topics

- AFRL Corporate Board Review
  - Mid-Oct
  - CB Proposed

- Prep for Senior Strategy Meeting #2
  - Mid-Late Oct
  - CB Approved
  - 1 or 2 Days

- SPO Prime Feedback
  - Oct - Dec
  - 1 or 2 Days

- Senior Strategy Meeting #2
  - Mid-Late Oct
Program of Record: ___________________________  Product Center Need Id # (ex. ESC-07-001): _________________

Technology Need Description: _____________________________________________________________
_________________________________________________________
_________________________________________________________

Technology freeze date if applicable: ______________________________

 Desired Key Performance Parameters: ___________________________________________________
_________________________________________________________

Product Center's POC to support AFRL Deep Dive team (Name & Contact Info): _________________

Related Development Efforts: _____________________________________________________________
_________________________________________________________
_________________________________________________________

<table>
<thead>
<tr>
<th>PEO Priority</th>
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<tbody>
<tr>
<td>High</td>
</tr>
<tr>
<td>Medium</td>
</tr>
<tr>
<td>Low</td>
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<tr>
<td>System Specific?</td>
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<td>or</td>
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Prime Input to Tech Need? YES ✓

Pervasive Need? NO

4
### Technology Challenge Description:

Product center defined need

**Prog Office:** F-15 (POC name)

### AFRL Proposed Approach:

- **Brief description of the proposed solution**

<table>
<thead>
<tr>
<th>Core</th>
<th>POM</th>
<th>SBIR</th>
<th>ManTech</th>
<th>IR&amp;D</th>
<th>Referral</th>
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<tr>
<td>✓</td>
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### Solution Options:

- Core Funding - Modify existing program (6.2 or 6.3)
- New AFRL POM Initiative (6.2 or 6.3)
- SBIR
  - Topic: “Interesting SBIR prog” (ID potential Jumbo topics) in FYxx
  - Modify existing Phase I or II prog
- 7.8 (ManTech) Effort
- IR&D opportunity
- Identify other agency S&T efforts
- External programs (Customer, other agency)

### Technology Investment Schedule (FY)

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<tr>
<th>Prior</th>
<th>07</th>
<th>08</th>
<th>09</th>
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<tbody>
<tr>
<td><strong>System Definition Study</strong></td>
<td><img src="image" alt="Starting TRL/MRL" /></td>
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<tr>
<td><strong>Risk Reduction Data Collections/Analyses</strong></td>
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<td><img src="image" alt="Final TRL/MRL" /></td>
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<td><strong>IPPD Analysis</strong></td>
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<td><strong>Sensor Technology</strong></td>
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<td><img src="image" alt="Final TRL/MRL" /></td>
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<tr>
<td><strong>Integration/Installation</strong></td>
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<tr>
<td><strong>Flight Demonstration</strong></td>
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<table>
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<tr>
<th><strong>Funding ($M)</strong></th>
<th>AFRL funded effort</th>
<th>5.0</th>
<th>3.0</th>
<th>3.0</th>
<th>2.0</th>
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<td><strong>Funding Shortfall</strong></td>
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Air Force Technology Needs Gathering Process

- Senior leader engagement
- Joint AFRL/Product center process
- Multi-directorate AFRL engagement
- PEO/TEO approval
- SPO Primes participation

Strategy Driven Process
AF CPP Strategy

• Utilize CPP to significantly strengthen the impact and appreciation of the SBIR Program for AF PEOs and staff
  – Strategic vs. Tactical framework
  – Improve connectivity among all critical AF SBIR program participants
    • PEO Organizations/Log Centers/Test Centers
    • AF Research Lab
    • PEO Prime Contractors and Suppliers
  – Increase technology transition opportunities to support the Warfighter
• SBI R Phase 2 Success Stories
  – Track and record all AF SBI R product transitions (Phase III)

• Coordinates with Local AF SBI R Program Managers
  – Assists in identifying SBI R Phase 2 programs with high probability of transitioning

• Facilitates all aspects of SBI R Workshops
Air Force CPP Implementation

• Use needs gathering process to identify SBIR Topics tied directly to Acquisition Technology Based Needs
  – Transition Agents are Active members on AF PEO Need gathering teams

• Supports AF acquisition program offices in gathering topic inputs
  – provide a bridge between the laboratory & product centers & both program offices (JSF & F-22);
  – Product Centers:
    • Space and Missile Systems Center (SMC)
    • Aeronautical Systems Center (ASC)
    • Electronic Systems Center (ESC)
    • Air Armament Center (AAC)

• Coordinates Prime Contractor Input
  – Assist with Specific SBIR Topic Generation

• Helps develop transition strategies, plans & agreements
  – **SBIR Technology Transition Plan (STTP)**
Tool-Kit (Assistance Instruments)

- SBI R
  - Enhancements
  - Extensions
- Mission funding
  - AFRL
  - PEO
- IR&D funding
- Mentor-Protégé
- Manufacturing Technical Assistance Production Program (MTAPP)
- Etc.
SBIR Workshop Planning Process

- Data Mining
  - Match PEO needs to existing Phase II SBIRs
- Technical POC
  - Make contact with Government Technical POCs to verify SBIR status
- Small Business
  - Collect information from Small Business Principle Investigators
- Primes/Industry
  - Review SBIR Business summary reports
  - Select small business for invitation to workshop
- AF Acts as “Honest Broker” & Workshop Facilitator
- MacB Transition Team
  - Facilitate one-on-one sessions between SBIR & supply chain contractors
• Air Force conducts interchange workshops between industry supply chain & small business contractors

  • JSF & F-22 Industry Workshop          Nov 07
  • ESC Industry Workshop                Feb 08
  • SMC Industry Workshop                Apr 08
  • ASC Industry Workshop                Summer 08

• Objectives of Workshops
  - Identify areas of mutual interest
  - Initiate a “Way Forward” for small businesses and supply chain contractors

Small Businesses - By invitation only
Technical Information Document

- SBIR Topic Number/Contract Number/SBIR Project Title
- Company Name
- Government SBIR PM and TPOC
- Description of Work (Phase II Abstract)

- Verify Company PI and POC contact information
- Additional Funding (Extension/Enhanced)
- Current status of Technology Development
  - Meeting milestones
  - Expected TRL at completion
- Potential match for PEO need?

Collected prior to TPOC calls

Collected from TPOC
Business Information Document

- SBIR Topic Number/Contract Number/SBIR Project Title
- Company Name
- Company PI and POC contact information
- Description of Work (Phase II Abstract)

- Do they have:
  - Tech Transition/Commercialization Experience
  - Ability to manufacture the technology
  - Past/current contact with major DOD Primes/Suppliers
  - Industry certifications (ISO 9001, ASE, EN 2000, etc.)

- Do they intend to:
  - Manufacture the technology
  - License the technology

Collected prior to TPOC calls
Collected from TPOC
**Business Summary Document**  
--- *Information sent to Primes/Suppliers*

- SBIR Topic Number/Contract Number/SBIR Project Title
- Company Name
- Company PI and POC contact information
- Description of Work (Phase II Abstract)
- Status of:
  - Funding (Extension/Enhanced)
  - Technology Development
- Company Qualifications:
  - Tech Transition/Commercialization Experience
  - Ability to manufacture the technology
  - Past/current contact with major DOD Primes/Suppliers
  - Industry certifications (ISO 9001, ASE, EN 2000, etc.)
- Company intend to:
  - Manufacture the technology
  - License the technology
Workshop Follow-Up Process

- Facilitators Conduct One-on-One Wrap-Up for each session
- Transition Team conducts follow-up telecons, arrange meetings, etc.
- Transition Team coordinates plans with AF stakeholders
  - Initiates SBIR Technology Transition Plan (STTP) as needed

Primes – Be Proactive!
The diagram outlines the AF SBI R Transition Support Process, detailing the steps from SBIR Phase II projects to CPP Candidate. The process involves:

1. **SBIR Phase II projects**
2. **PEO Needs**
3. **Prime Ktr Workshops**
4. **Outside of Tech Based Needs Gathering Process**
5. **Small Business Transition to Prime**
   - **STTP (document)**
     - Signed By:
       - PEO
       - SP Director
       - Small Business
       - Prime Contractor
       - AFRL Tech Dir
6. **CPP Database (OSD)**
7. **OSD Report to Congress**
8. **SAF**
9. **AQR Approval**
10. **CPP Candidate**

This process includes transition options such as w/o PEO endorsement and transition to AFRL for further development (6.2 or 6.3).
Summary
-- AF CPP Process

• Provides new SBIR Topic Allocation
  – Increased Focus on Product Center Tech needs/challenges

• Doesn’t require a data call
  – Internal AF Process
  – Transition agents facilitating necessary collaborations

• Accelerates technology transition of successfully developed SBIR technologies

• Provides method to rapidly address critical SBIR technologies identified by warfighters

AF SBIR program is CPP