DON SMALL BUSINESS INNOVATION RESEARCH – A CASE STUDY IN SUCCESS

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DISTRIBUTION STATEMENT A. Approved for public release
Overall Economic Impact of DON SBIR/STTR

FY00-13 $2.3B Phase II funding resulted in $44.3B in economic impact across all 50 states according to a study conducted by TechLink a DoD funded technology transfer center at Montana State University

➢ $14.2B in sales of new products including $7B directly to the DoD

➢ $4.9B in federal, state and local tax revenues

➢ $22.2B in new wealth creation or value added including 14,973 Full-time jobs with an average salary of $68,535
Commercialization Support

- SBIR/STTR Transition Program (STP)
- Forum for SBIR/STTR Transition (FST)
- Primes Initiative
- Commercialization Readiness Program (CRP)
- Phase III Guidebook
- SBIR/STTR Search Tool
- “Reachback” Strategy
- Direct to Phase II
- Operations & Sustainment Pilot(s)
Slaying Giants and Saving Money

- Virginia Class submarine utilized several SBIR/STTR projects in its design and production to:
  - **Save costs** over those charged by large and sole source firms
  - Increase competition
  - Introduce new technologies

- **Utilized contract incentives** for incorporation of SBIR technology

- Keys to success:
  - SBIR topics generated for **sole source, obsolete, high cost items**
  - Incentives paid for using program savings
  - No impact to schedule or performance
DON SBIR/STTR Supports a Wide Variety of Technology Needs

SSN-774 Virginia-class Submarine

- **DSR**
  - Advanced Information Systems
  - Software Migration Legacy Trainer

- **Planning Systems**
  - GCCS Development & COTS Applications

- **Darlington**
  - SCS C4I & IM&M Technology
  - Combined Operations Wide Area Network

- **Trident Systems**
  - Mobile Computing for Submarine Applications

- **TCN**
  - OA Concepts

- **Progeny**
  - Audio Signals
  - Active Emissions
  - IA AN/WLY-1 AI&R

- **MIKEL**
  - Non-Collinear Wave Front Curvature Ranging

- **Chesapeake Science**
  - Acoustic Interface Design & Fabrication
  - Towed Arrays

- **Non-Pressure Hull**

- **PROGENY**
  - Tools For VME
  - Interactive Acoustic Analysis Process

- **3 Phoenix**
  - Real Time Data Fission

- **PROGENY**
  - Multi Tube Weapon Simulator

**PEO SUB: >$2B in Phase III contracts!**

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Delivering Technology to the Fleet

• “Push to Bush” or P2B was a response to deliver a ship launched anti-torpedo defense system capability to Nimitz class aircraft carriers

• Delivered Surface Ship Torpedo Defense (SSTD) to CVN-77 USS George H W Bush within 13 months of identified Urgent Operational Need

• Coordinated effort between SBIR contractors, ARL Penn State, Navy Labs, NAVSEA and CVN-77 personnel

• Successfully overcame challenges related to:
  - Lack of Prime contractor for the System
  - Limited Technological Maturity
  - Compliance with Weapon Safety Requirements
Surface Ship Torpedo Defense (P2B)
Emergency Integrated Lifesaving Lanyard (EMILY)

- EMILY began as part of STTR program with its key technologies deriving from ONR & NAVAIR sponsored Silver Fox UAV in 2001
- Led to development of Autonomous Gateway Buoy (AGB), and Autonomous Mobile Buoy (AMB) for ISR
  - EMILY is currently in use by the Los Angeles County Fire and Rescue Department as well as many other agencies, and Navies for both lifeguard, “man-overboard” and swift water rescues
  - EMILY has gained international acclaim for its efforts in support of humanitarian efforts including assistance with the refugee crisis off the coast of Greece
  - Silver Fox has been used by various warfighting units in different locations around the world and is currently being developed to be used as part of autonomous swarming UAV operations
  - AGB/AMB is being employed for various missions involving ISR, MCM, and communications by various Naval assets around the world
Delivering Technology Around the World

Silver Fox UAV

EMILY

AGB/AMB

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Working Across the Spectrum

- Company Size: 1 – 500 employees*
- States: All 50 states, Puerto Rico, and DC
- Company Revenue: $0->$660M (iRobot)*
- Company Age: Newly formed to > 50 years old*
- Technology Areas include all DoD Communities of Interest: Advanced Electronics, Air Platforms, Autonomy, Biomedical, C4I, Counter-IED, Counter-WMD, Cyber, Electronic Warfare, Energy and Power, Engineered Resilient Systems, Ground and Sea Platforms, Human Systems, Materials and Manufacturing Processes, Sensors, Space, and Weapon Technologies

* Not including firms purchased by large businesses