



Beyond Phase II Conference – RIF Overview

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“Most of the disruption that occurs in our technology ecosystem comes from small and medium size businesses ...”

- Dr. Mike Griffen, USD(R&E)

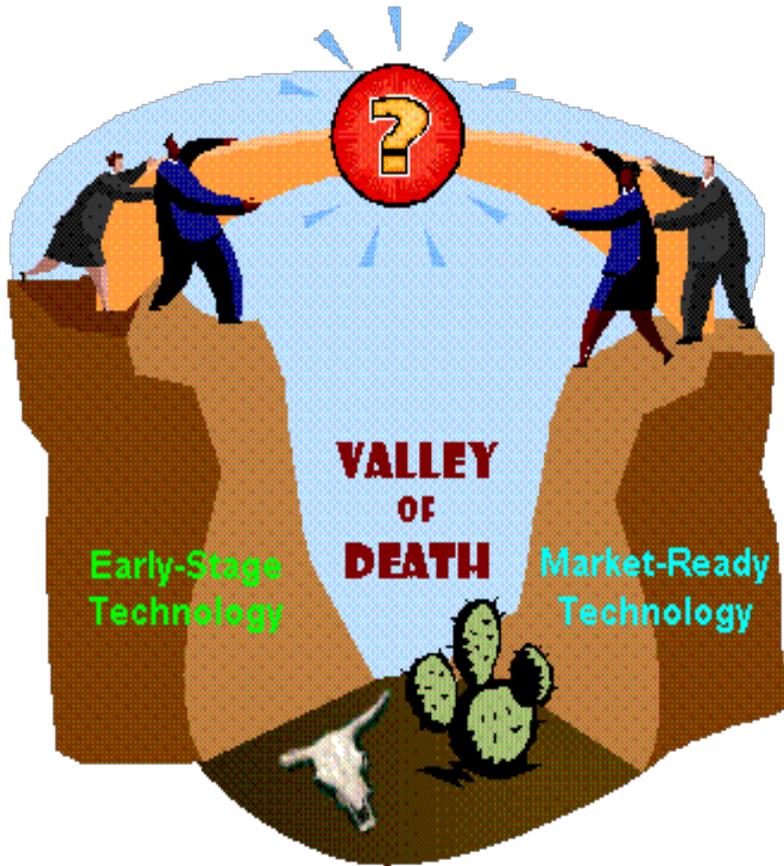
**House Armed Services Committee testimony on
“Promoting DoD’s Culture of Innovation,” 4/2018**

Background

- Established as the Rapid Innovation Program (RIP) in Section 1073 of the Fiscal Year 2011 National Defense Authorization Act (NDAA)
 - A competitive, merit-based program
 - Accelerates fielding of innovative technologies into military systems
- Reauthorized in the FY 2017 NDAA as a permanent program
- Re-designated as the Rapid Innovation Fund (RIF) within the Department of Defense (DoD)

Bottom Line Goal: Transition Innovative Technologies into Fielded Operational Capability or Defense Acquisition Programs

RIF Motivation–Bridging the “Valley of Death”



- Small Business long recognized by DOD and Congress as significant source of technology innovation
- Congressional initiative to bypass institutional hurdles:
 - POM process sets Acquisition Program funding baseline across FYDP...challenging to fund emerging technology
 - Original requirements not inclusive of performance/features from emerging technologies
- Response to Small Business Community concerns about lack of sufficient funds to transition research to programs of record (e.g. SBIR Phase I/II to Phase III)
- Accords space to cross valley of death by providing funding/time for developers to mature technology while programs adjust to integrate emerging technologies
 - Doesn't “break” Programs of Record
 - Shortens time to transition mature technology

Program Goals and Guidelines*

- **Goals**

- Accelerate the fielding of technologies developed by Phase II SBIR, defense laboratories, and other innovative technologies
- Rapidly insert technologies directly into MDAPs or other defense acquisition programs that meet critical national security needs
- Stimulate innovative technologies
- Reduce acquisition or lifecycle costs
- Address technical risks
- Improve the timeliness and thoroughness of test and evaluation outcomes

- **Project guidelines**

- Completed within 24 months of award
- Cost no more than \$3 million

* Per section 1073 of FY11 National Defense Authorization Act

RIF Demand FY 2011 - 2017

Summary Data:

- Over \$1.7B Invested
- 16 Broad Agency Announcements
- 25 DoD Organizations Served
- 16,500+ White Papers
- 1,000+ Full Proposals
- 687 Contract Awards (FY11-16 funds)

- 603 awards to Small Businesses
 - ✓ 88% of all awards
- 459 awards to current or prior Small Business Innovative Research (SBIR) participants
 - ✓ 67% of all awards

	FY11 (Actual)	FY12 (Actual)	FY13 (Actual)	FY14 (Actual)	FY15 (Actual)	FY16 (Actual)	FY17 (Act./Est)
Appropriated	\$439M	\$200M	\$250M	\$175M	\$225M	\$250M	\$250M
Organizations	10	13	19	22	20	25	22
BAAs Issued	A, N, AF, OSD	A, N, AF, OSD	A, N, AF, OSD	OSD	OSD	OSD	OSD
White Papers	3,626	2,405	2,763	2,291	1,955	1813	1747
Full Proposals	268	126	174	149	186	156	130 (est.)
Awards	175	86	104	85	103	135	
- Small Biz	95%	85%	85%	86%	84%	91%	TBD
- SBIR	80%	75%	70%	64%	52%	54%	
Avg. Award	\$2.2M	\$2.1M	\$2.1M	\$2.1M	\$2.2M	\$1.9M	TBD

FY2018: Government Participation

281 Requirements from 26 Defense Activities and 50 Programs

DEPARTMENT OF THE ARMY

- Acquisition Program Offices
 - Ammunition
 - Aviation
 - Soldier / Soldier Systems
 - Command, Control, Communications – Tactical
 - Intelligence, Electronic Warfare and Sensors
 - Combat Support / Combat Support Systems
 - Missiles & Space Systems
 - Simulation, Training & Instrumentation
- Research & Development Centers / Other Activities
 - Aviation and Missile Research Development & Engineering Center (AMRDEC)
 - Armament Research, Development & Engineering Center (ARDEC)
 - Army Research Lab (ARL)
 - Communications-Electronics Research, Development & Engineering Center (CERDEC)
 - Edgewood Chemical Biological Center (ECBC)
 - Natick Soldier Research, Development & Engineering Center (NSRDEC)
 - Tank Automotive Research, Development & Engineering Center (TARDEC)
 - Defense Forensics & Biometrics Agency (DFBA)
 - Corps of Engineers (COE)

DEPARTMENT OF THE AIR FORCE

- Acquisition Program Offices
 - Battle Management
 - Business Enterprise Systems
 - Command, Control, Communications, Integration & Network
 - Fighter / Bomber
 - Joint Strike Fighter
 - Space
 - Strategic Systems
 - Weapons
 - Intelligence, Surveillance Reconnaissance & Special Operation Forces
- Other Activities
 - Air Force Life Cycle Management Center
 - Air Force Test Center
 - Air Force Nuclear Weapons Center Commander
 - Air Force Propulsion Directorate
 - Air Force Sustainment Center

DEPARTMENT OF THE NAVY

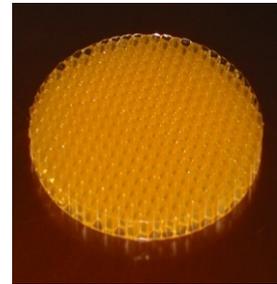
- Acquisition Program Offices
 - Naval Air Systems Cmd. (NAVAIR)
 - F-35 Joint Strike Fighter
 - Tactical Aircraft Programs
 - Air Anti-Submarine Warfare
 - Assault & Special Mission Programs
 - Unmanned Aviation & Strikae Weapons
 - Naval Sea Systems Cmd. (NAVSEA)
 - Aircraft Carriers
 - Integrated Warfare Systems
 - Littoral Combat Ship
 - Ships / Submarines
 - Special Warfare
 - Space & Naval Warfare Systems Cmd. (SPAWAR)
 - Cmd., Control, Comms. Computers & Intel.
 - Enterprise & Integrated Systems
 - Space Systems
 - Marine Corp (MARCOR)
 - Ammunition
 - Armor & Fire Support Sys.
 - Chemical & Biological Sys.
 - Combat Support Systems
 - Enterprise Info. Systems
 - Infantry Weapons Systems
 - Info. Systems & Infrastructure
 - Light Armored Vehicles
 - Marine Air-Ground Task Force Cmd., Control & Comms.
 - Marine Intelligence
 - Land Systems
 - Training Systems
- Other Activities: Warfare Centers, Naval Supply Systems Cmd., Navy Strategic Systems Programs, Naval Facilities Engineering Command, Bureau of Medicine & Surgery

DEFENSE AGENCIES, OSD ACTIVITIES & COMBATANT COMMANDS

- Chief Information Officer / Defense Information Systems Agency (CIO / DISA)
- OASD(R&E): EC&P, Research, Joint Improvised-Threat Defeat Agency (JIDA)
- Defense Threat Reduction Agency (DTRA)
- Missile Defense Agency (MDA)
- Defense Logistics Agency (DLA)
- National Reconnaissance Office (NRO)
- Combating Terrorism Technical Support Office (CTTSO)
- Joint S&T Office for Chemical and Biological Defense (JSTO / CBD)
- U.S. Africa Command
- U.S. Northern Command / North American Aerospace Defense Command
- U.S. Pacific Command
- U.S. Southern Command
- U.S. Special Operations Command
- U.S. Transportation Command

RIF Success Stories

Honeycomb-Core Helmet Pads for Mitigating Traumatic Brain Injury (TBI)



- Participants: Army, Natick Soldier Center and TIAX of Massachusetts
- Honeycomb structure in helmet padding distributes forces induced by blunt impact thereby reducing likelihood of TBI (*~30K soldiers experienced some degree of TBI following deployments in Iraq/Afghanistan*)
- Selected by helmet manufacturer and submitted to PEO Soldier for the Integrated Head Protection Systems Program of Record

Wide Field-Of-View Night Vision Goggles

- Participants: Navy, PMS-408 (Expeditionary Missions) and Kent Optronics
- Installable modification to existing night vision goggles that increases the field of view by 2X (40 vs. 80 degrees) significantly enhancing situational awareness during nighttime operations
- Navy initiated procurement of 1,250 units through FY 2021; Improved goggles cost \$31K less per unit than current technology resulting in >\$39M in procurement cost savings over the FYDP



RIF Key Points of Contact

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Defense Innovation Market Place -
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Questions? Contact us!



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