Department of the Navy
Rapid Innovation Fund:
Funding for Small Business Technology Acquisition

August 2017
# Navy Program Offices & Systems/Engineering Commands

<table>
<thead>
<tr>
<th>Secretary of the Navy</th>
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<tbody>
<tr>
<td>Assistant Secretary of Navy for Research, Development and Acquisition</td>
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<tr>
<td>Assistant Secretary of Navy for Manpower &amp; Reserve Affairs</td>
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<tr>
<td>Assistant Secretary of Navy for Financial Management &amp; Comptroller</td>
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<tr>
<td>Assistant Secretary of Navy for Installations &amp; Environment</td>
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<tr>
<td>Chief of Naval Operations</td>
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<tr>
<td>Commandant of the Marine Corps</td>
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</table>

**Assistant Secretary of the Navy for Research, Development and Acquisition (ASN (RD&A))**
- PEO Ships
- PEO Submarines
- PEO Littoral Combat Ships
- PEO Aircraft Carriers
- PEO IWS
- PEO Air ASW, Assault & Special Missions
- PEO Tactical Air
- PEO Unmanned Aviation & Strike Weapons
- PEO JSF
- PEO C4I
- PEO Space Systems
- PEO Enterprise Information Systems
- PEO Land Systems
- Strategic Systems Program (DRPM)
- Chief of Naval Research

**Assistant Secretary of the Navy for Manpower & Reserve Affairs (ASN (M&RA))**

**Assistant Secretary of the Navy for Financial Management & Comptroller (ASN (FMC))**

**Assistant Secretary of the Navy for Installations & Environment (ASN (I&E))**

**Chief of Naval Operations (CNO)**
- Bureau of Medicine
- Naval Sea Systems
- Naval Air Systems
- Space and Naval Warfare System
- Strategic Systems Program
- Naval Facilities Engineering
- Naval Supply Systems

**Commandant of the Marine Corps (CMC)**
- Logistics
- Systems
- Combat Development
DoN Rapid Innovation Fund (RIF) Program

Source Selection Authority

Assistant Secretary of the Navy for Research, Development and Acquisition
ASN (RD&A)

Program Management

Office of Naval Research
ONR

Topics, Reviews and Contracts

Naval Sea Systems Command
Naval Air Systems Command
Space and Naval Warfare Systems Command
Marine Corps Systems Command
Naval Facilities Engineering Command
Naval Supply Systems Command
Strategic Systems Programs
Bureau of Medicine and Surgery
NAVSEA
NAVAIR
SPAWAR
MCSC
NAVFAC
NAVSUP
SSP
BuMed
DoN Rapid Innovation Fund (RIF) BAA Topics

- Navy BAA Topics are related to, but different from, Navy Requirements
- Majority of topics come directly from the acquisition program offices
- (PEO-Program Executive Offices or PM/PMW – Program Management Offices) with input from the fleet, warfighters and Naval RDT&E community
- Topics are sent from Program Offices to corresponding Naval System Command (SYSCOM) Chief Technology Offices (CTO).
- SYSCOM CTO prioritize and send to DoN RIF PM for review & submission

![Diagram]

- OSD Broad Agency Announcement
- Review Topics and Check Against Navy Requirements
- Consolidate Top Topic Submissions
- Collect Topics from Fleet, Warfighters and Naval RDT&E Community
DoN Rapid Innovation Fund (RIF) BAA Topics

Navy is very focused on Technology Readiness Level (TRL) & Transition. Technology really needs to be at TRL 6 at beginning of program

DoN RIF is a technology pull, not technology push program!

- We are looking for transition to acquisition program in 36 months
  - Cannot happen without direct Acquisition PM involvement
  - Cannot happen with immature technology regardless of benefit
- Do not transition out of SBIR too soon
  - Use SBIR Phase 2/2.5 to mature technology to TRL 6-7
  - Use SBIR Phase 2/2.5 to get Acquisition PM to submit requirement
  - Use SBIR Phase 2/2.5 to define required testing (time & cost)
**DoN Rapid Innovation Fund (RIF) Criteria**

**Source Selection Preference:**
Small Business Proposals

**Source Selection Criteria:**
1. Contribution to the Requirement
2. Technical Approach / Qualifications
3. Schedule
4. Cost

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**WHAT TO INCLUDE:**
Your technology solution
- How it addresses the RIF requirement
- Clear, concise synopsis of approach
- What’s innovative – what sets your technology apart from competition
- Enough technical specification to get tech evaluators ‘comfortable’

Some key data:
- Pictures & diagrams
- Key Government contacts that currently relate to this effort
- Summary of teaming arrangements
- Any prior testing & summary results

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**WHAT NOT TO INCLUDE:**
- Technology looking for a solution (e.g., un-related to the requirement)
- Generic company overview (org chart)
- History of the problem
- Testimonials from other industry or lab researchers
- Detailed diatribe of charts and formulas stating why your technology is the best

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**DO NOT WAIT UNTIL LAST MINUTE!**
Follow directions / template as provided in the submission portal(s)
DoN Rapid Innovation Fund (RIF) FY17 BAA Topics

https://www.fbo.gov/index?s=opportunity&mode=form&id=2695be1caea596c95b54e77e8db5e61e&tab=core&_cview=0

ANP: Reduced Naval Total Ownership Cost (TOC)
ANP: Power and Energy Systems
ANP: Development of the Additive Manufacturing (AM) Technology

AIR: Micro Militarized Mode 5/S IFF for Small Tactical UAS
AIR: Aircraft Life Limited Component Tracking
AIR: Power for Endurance in Small Tactical UAS
AIR: Multi-Level Secure Multi-Vehicle Mission Planning
AIR: Terrestrial Navigation in GPS Denied Environment
AIR: F-35 Improved Life Cycle Affordability
AIR: F-35 Follow on Development Maturation and Acceleration
AIR: Electronic Warfare Techniques Improvement to Enhance Anti-Submarine Warfare (ASW) Signal Intelligence Mission Capabilities
AIR: V-22 Nacelle Heat Exchanger
AIR: Adaptive Clutter Equalization for Airborne Maritime Radar
AIR: Standoff ice detection for manned and unmanned aircraft
AIR: Robust Unmanned Aircraft System (UAS) airborne communication relay capability for distributed ship operations
AIR: Threat Avoidance, Detection, and Countermeasure Systems

SPAWAR: Information Transport & Infrastructure (ITI)
SPAWAR: Information Security and Assurance (ISA)
SPAWAR: Data Integration and Decision Support (DDS) and Environmental Battlespace Awareness (EBA)
SPAWAR: Electromagnetic Spectrum Operations (ESO) and Non-Kinetic Fires (NKF)
SPAWAR: Assured Positioning, Navigation and Timing (APNT)
SPAWAR: Enhanced Targeting and Fire Control
SPAWAR: Human-Systems Interface: Improved Cognition in Complex Operating Environments
SPAWAR: Ultra High Frequency (UHF) Satellite Communication (SATCOM) End-to-End Capabilities
SPAWAR: Ocean Sensing Payloads for Small/Nano/CubeSats
DoN Rapid Innovation Fund (RIF) FY17 BAA Topics

https://www.fbo.gov/index?s=opportunity&mode=form&id=2695be1caea596c95b54e77e8db5e61e&tab=core&_cview=0

NAVSEA: Improving Warfighting Affordability, Capability, and Commonality
NAVSEA: Reducing Production, Operation, Maintenance and Decommissioning Costs
NAVSEA: Improving Cybersecurity Products and Processes
NAVSEA: Integrated Unmanned Maritime Systems
NAVSEA: Shipboard Passive/Augmented Detection and Evaluation (SPADE)
NAVSEA: Integrated Training Systems

MCSC: Advanced Biometric Device
MCSC: Long Range Obscurant System
MCSC: Portable Ruggedized Energy Efficient Medical Sterilizer
MCSC: Conditioned-Based Maintenance Plus (CBM+) Advanced Prognostics / Diagnostics for the M777A2
MCSC: Meteorological Exploitation of Radar
MCSC: Autonomous Construction Equipment and Sensing (ACES)
MCSC: River Flood and Storm Surge Inundation Modeling and Prediction

NAVFAC: Technology to Enable & Maximize Usage of Indigenous Bulk Materials in the Additive Manufacturing of Expeditionary Structures.
NAVFAC: Fully Automated Type II Waterside Security Barrier (WSB)

NAVSUP: Leverage Data Visualization Technology and the Logistics Cell (Logcell) to improve all Naval Aviation Enterprise (NAE) Availability and Readiness Goals
NAVSUP: Auditability Enhancements for Navy Shipping and Accounting Systems

SSP: Miniaturized Real-Time Monitoring Sensor Suite for Sustained Support Equipment Maintenance
SSP: Application of Model Based System Engineering (MBSE) to Strategic Weapon System (SWS) Trade-space Analysis and Multi-disciplinary Design Optimization
DoN Rapid Innovation Fund (RIF) FY17 BAA Topics

Full Topic Example

**Requirement #:** FY17-DoN-RIF-MCSC-01  
**Title:** MCSC: Advanced Biometric Device  
**Military System or Acquisition Program Customer:** Program Manager Marine Air Ground Task Force (MAGTF) Command, Control, Communications Systems (PMMC3), Force Protection Systems (FPS), Identity Dominance System – Marine Corps (IDS-MC)  
**Description:** In satisfaction of IDS-MC requirements and in seeking to lighten the MAGTF, PMMC3 seeks an Android operating system-based common handheld platform capable of performing biometric collection (of requisite quality), data standardization, local matching, storage, and lateral sharing functions without requiring new unique hardware or equipment. Alternatively, seeking small and lightweight biometric collection peripherals compatible with a standard Android operating system-based device and associated device software to conduct enhanced biometric collection, standardization, matching, storage, and sharing functions. Further sought are improved or enhanced biometric algorithms resulting in: faster location and collection of biometric signatures (e.g., fingerprints, faces, irises), improved performance in collection of biometrics under sub-optimal conditions (e.g., environmental conditions and subject proximity or cooperation), improved performance in enrollment processing/templatization speeds, faster match responses of collected biometrics against local biometric watch lists, biometric matching with reduced False Reject/False Accept Rates and False Match/Non-Match Rates, reduced local biometric records storage requirements, and reduced biometric data transmission sizes.  
**Technical POC:** Teresa Sedlacek, 703-432-9821, Teresa.sedlacek@usmc.mil or Bradford Crane, 703-432-8729, bradford.crane@usmc.mil
Advanced Electronic Guidance and Instrumentation System (AEGIS)/Ship Self Defense System (SSDS) Cybersecurity Toolkit Integration
Next Generation Secure Communications Controller
Strengthening Existing Naval Data-at-Rest Encryption Using Attribute-Based Encryption (ABE)
MH-60R Embedded Antisubmarine Warfare (ASW) Simulation
Computational Anthropomorphic Virtual Experiment Man (CAVEMAN) Model for Injury Assessment in Kinetic Events
Hyper Converged Infrastructure (HCI) for Consolidated Afloat Networks and Enterprise Services (CANES)
Improved Battery for Diver Propulsion Device
High-Bandwidth Acoustic Communications Supporting MK18 Mod 2 Unmanned Underwater Mine Counter-measure (MCM) Operations
Metamaterial Enhancement of E-2D Advanced Hawkeye Sensor System
Small Form Factor Mobile User Objective System (MUOS) Radio
Multi-Asset Planning and Execution Monitoring System
Electromagnetic Interference (EMI) Mitigation for Acute Spectrum Sensing and Awareness
Low Cost, Light Weight Unmanned Underwater Vehicle for Mine Identification (ID) and Explosive Ordinance Disposal (EOD)
Collaborative Mission Planning, Tasking, and Scheduling for Maritime Tactical Command and Control
Modular Refrigeration System (MRS)
Portable Augmented Reality Virtualization Tools for Aircraft Maintainers
Mobile Fuel & Energy Management
Interference Mitigation and Removal
Edge Modernization Command, Control, Communications, Computers, Intelligence, Surveillance and Reconnaissance (C4ISR)
Land Based Persistent Radar Periscope and Surface Surveillance
Holistic Modular Aircrew Physiologic Status Monitoring System
High-Performance Peripheral Component Interconnect Express Networking
Surface Combatant Composite Mid-Frequency Sonar Dome
Shipboard Automatic Test and Re-test
Environmental Wideband Acoustic Receiver and Source (EWARS)
Improved Ocean Monitoring via Commercial Nanosats
Radio Inversion to Retrieve Refractivity from Radios
Affordable Multi-Fuel Multi-Engine Advanced Combatant Craft
## DoN Rapid Innovation Fund (RIF) Award Status

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>White Papers</th>
<th>Full Proposals</th>
<th>Contract Awards</th>
<th>Contract Awards ($)</th>
<th>Small Biz Awards (%)</th>
<th>Previous SBIR Relationship (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY11</td>
<td>858</td>
<td>60</td>
<td>53</td>
<td>$106M</td>
<td>100% (53/53)</td>
<td>68% (36/53)</td>
</tr>
<tr>
<td>FY12</td>
<td>711</td>
<td>28</td>
<td>23</td>
<td>$44M</td>
<td>96% (22/23)</td>
<td>61% (14/23)</td>
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<tr>
<td>FY13</td>
<td>640</td>
<td>28</td>
<td>24</td>
<td>$51M</td>
<td>92% (22/24)</td>
<td>75% (18/24)</td>
</tr>
<tr>
<td>FY14</td>
<td>511</td>
<td>24</td>
<td>21</td>
<td>$45M</td>
<td>76% (16/21)</td>
<td>67% (14/21)</td>
</tr>
<tr>
<td>FY15</td>
<td>629</td>
<td>31</td>
<td>28</td>
<td>$59M</td>
<td>86% (24/28)</td>
<td>64% (18/28)</td>
</tr>
<tr>
<td>FY16</td>
<td>589</td>
<td>37</td>
<td>28*</td>
<td>$62M*</td>
<td>89%* (25/28)*</td>
<td>N/A</td>
</tr>
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</table>

*Estimate. Awards still in progress.*
# DoN Rapid Innovation Fund (RIF) Contacts

## DoN RIF Program

<table>
<thead>
<tr>
<th>DoN RIF Program Manager:</th>
<th>Scott Bartlett</th>
<th><a href="mailto:Scott.Bartlett@navy.mil">Scott.Bartlett@navy.mil</a></th>
</tr>
</thead>
<tbody>
<tr>
<td>DoN RIF Operations Manager:</td>
<td>Brad Pantuck</td>
<td><a href="mailto:brad.pantuck@atsi.co">brad.pantuck@atsi.co</a></td>
</tr>
</tbody>
</table>

## DoN RIF Technology Transition Coordinators

<table>
<thead>
<tr>
<th>NAVSEA, MARCOR:</th>
<th>Joe Piff</th>
<th><a href="mailto:jpiff@mcri.com">jpiff@mcri.com</a></th>
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</thead>
<tbody>
<tr>
<td>SPAWAR:</td>
<td>Todd Johnston</td>
<td><a href="mailto:Todd.m.johnston.ctr@navy.mil">Todd.m.johnston.ctr@navy.mil</a></td>
</tr>
<tr>
<td>NAVAIR, NAVSUP, NAVFAC, SSP:</td>
<td>Calvin Reddick</td>
<td><a href="mailto:calvin.reddick@atsi.co">calvin.reddick@atsi.co</a></td>
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<tr>
<td>BUMED:</td>
<td>Brad Pantuck</td>
<td><a href="mailto:brad.pantuck@atsi.co">brad.pantuck@atsi.co</a></td>
</tr>
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## DoN SYSCOM RIF Leads

<table>
<thead>
<tr>
<th>Naval Sea Systems Command</th>
<th>NAVSEA</th>
<th>Allen McConnell</th>
<th><a href="mailto:allen.mcconnell@navy.mil">allen.mcconnell@navy.mil</a></th>
</tr>
</thead>
<tbody>
<tr>
<td>Naval Air Systems Command</td>
<td>NAVAIR</td>
<td>Janet McGovern</td>
<td><a href="mailto:NAECTO@navy.mil">NAECTO@navy.mil</a></td>
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<tr>
<td>Space and Naval Warfare Systems Command</td>
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<td>Shadi Azoum</td>
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<tr>
<td>Marine Corps System Command</td>
<td>MCSC</td>
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</tr>
<tr>
<td>Naval Supply Systems Command</td>
<td>NAVSUP</td>
<td>Mark Deebel</td>
<td><a href="mailto:mark.deebel@navy.mil">mark.deebel@navy.mil</a></td>
</tr>
<tr>
<td>Naval Facilities Engineering Command</td>
<td>NAVFAC</td>
<td>Philip Vitale</td>
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</tr>
<tr>
<td>Strategic Systems Programs</td>
<td>SSP</td>
<td>Mark Hrbacek</td>
<td><a href="mailto:Mark.Hrbacek@ssp.navy.mil">Mark.Hrbacek@ssp.navy.mil</a></td>
</tr>
<tr>
<td>Bureau of Medicine and Surgery</td>
<td>BuMed</td>
<td>CDR Paul Hauerstein</td>
<td><a href="mailto:paul.g.hauerstein.mil@mail.mil">paul.g.hauerstein.mil@mail.mil</a></td>
</tr>
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BACKUPS
## Program Executive Office

### Tactical Aircraft Program

**PEO (T)**
- PMA 101: Multifunctional Information Distribution
- PMS 213: Naval Air Traffic Management
- PMA 231: E-2/C-2
- PMA 234: EA-6B Prowler
- PMA 251: Aircraft Launch and Recover Equipment
- PMA 257: AV-8B Harrier
- PMA 259: Air-to-Air Missile Systems
- PMA 265: F/A-18 & EA-18G
- PMA 272: Advanced Tactical Aircraft Protection
- PMA 273: Naval Undergraduate Flight Training
- PMA 298: Air Warfare Mission Area / From the Air

### Air ASW, Assault & Special Mission Programs

**PEO (A)**
- PMA 207: Tactical Airlift
- PMA 261: Heavy Lift Helicopter
- PMA 264: Air ASW Systems
- PMA 271: Airborne Strategic Command, Control & Communications
- PMA 274: Presidential / Executive Lift Helicopters
- PMA 275: V-22 Osprey
- PMA 276: Light / Attack Helicopters
- PMA 290: Maritime Patrol & Reconnaissance Aircraft
- PMA 299: Multi-Mission Helicopters

### Unmanned Aviation & Strike Weapons

**PEO (U&W)**
- PMA 201: Precision Strike Weapons
- PMA 208: Aerial Target & Decoy Weapons
- PMA 242: Direct & Time Sensitive Weapons
- PMA 262: Persistent Maritime Unmanned Aircraft
- PMA 263: Small Tactical Unmanned Aircraft
- PMA 266: Multi-Mission Tactical Unmanned Aircraft
- PMA 268: Unmanned Combat Air Systems
- PMA 280: Tomahawk Weapons System
- PMA 281: Strike Planning & Execution Systems

### Joint Strike Fighter

**PEO (JSF)**
- Air Systems Engineering
- Air Systems Integration
- Air Systems Logistics
- Air Systems Production
- Air Systems Requirements
- Air Vehicle
- Autonomous Logistics
- Business & Financial Contracts
- International Legal
- Operations
- Propulsion
- Public Affairs
- Security
- Verification & Test
Assistant Secretary of the Navy for Research, Development and Acquisition
ASN (RD&A)

Program Executive Office
Command, Control, Communications, Computers & Intelligence
PEO C4I
PMW 120: Battlespace Awareness and Information Operations
PMW 130: Information Assurance and Cyber Security
PMW 150: Command and Control
PMW 160: Tactical Networks
PMW 170: Communications and GPS Navigation
PMW 740: International C4I
PMW 750 Carrier and Air Integration
PMW 760 Ship Integration
PMW 770 Undersea Integration
PMW 790: Shore and Expeditionary Integration

Program Executive Office
Enterprise Information System
PEO EIS
PMM 110: Enterprise Software Licensing
PMW 205: Naval Enterprise Network
PMW 220: Navy Enterprise Business Solutions
PMW 230: Global Combat Support Systems
PMW 240: Sea Warrior Program
PMS 444: Navy Maritime Maintenance Enterprise Solution
DCAO: Data Center & Application Optimization

Program Executive Office
Space Systems
PEO SS
PMW 146 Navy Communications Satellite Program Office
AAA: Advanced Amphibious Assault
AC2SN: Air Command Control and Sensor Netting
GBAD-G/ATOR: Ground Based Air Defense / Ground Air Task Oriented Radar
LTV: Light Tactical Vehicles
M&HTV: Medium & Heavy Tactical Vehicles
TAS: Towed Artillery Systems