



DoD 2019.2 SBIR Topics DoD 2019.B STTR Topics

Pre-released May 2, 2019
Open discussion with TPOCs through May 30, 2019
Proposals accepted May 31; Deadline July 1 at 8 p.m. ET

There are a number of significant changes to the Department of Defense 2019.2 SBIR and 2019.B STTR Broad Agency Announcement (BAA). Above each component's topic listing below you will see a table summarizing the Phase I changes, including differences in the funding ceilings, duration (aka Period of Performance or POP), Phase I Option details, TABA* (Discretionary Technical and Business Assistance), and differences in the page limit of the Technical Volume 2. ***As always, be sure to read the component specific instructions completely.***

For assistance in searching for appropriate topics and preparing competitive proposals, contact BBCetc at info@bbcetc.com or 734-930-9741.
And be sure to check out our [recorded DOD webinars](#).

DOD SBIR 2019.2 and STTR 2019.B Topics [Solicitation link](#)

Army Summary

<u>Phase I Ceiling</u>	<u>Duration</u>	<u>Phase I Option</u>	<u>TABA</u>	<u>Volume 2 limit</u>
Base NTE \$111,500 + Option NTE \$56,000	Base 6 months + Option 4 months	<u>Required</u>	<u>\$5,000*</u>	<u>20 page</u>

Army SBIR Topics

- A19-102 Effect of Heat Treatment on Additively Manufactured Ti-6Al-4V Alloy
- A19-103 High assurance hardware state machine trusted computing base
- A19-104 Cryogenic Production for Airborne Thermal Management
- A19-105 Innovative Muzzle Brake Design for Artillery
- A19-106 Collaborative Fire Control Decision Aids
- A19-107 Carbon Fiber Thermoplastics with High Through Thickness Modulus
- A19-108 Conformal RF Interfaces for Gun-fired Munitions
- A19-109 Maximizing Persistent Coverage of a Predetermined Area of Interest by Swarms of Assets for Targets Acquisition and Engagement
- A19-110 Multifunctional Materials for Increased Lethality Munitions
- A19-111 Non-Destructive Inspection of Modern Explosives and Ammunition Housings
- A19-112 Optical Based Proximity Sensor for Fuzing
- A19-113 Alternative Manufacturing Methods and Materials for Gun-Launched Components
- A19-114 High Sensitivity Miniaturized Gun-hardened Aeroballistic and Geolocation Sensor Technology
- A19-115 Synthetic Aperture by Direct Print-down of Micro-lens Arrays on CMOS Imagers

- A19-116 Integrated 2-color thermal polarimetric sensor and deep neural network system for artificial intelligence and machine learning (AI&ML) based automatic target detection and identification
- A19-117 Advanced, compact acoustic particle velocity-pressure sensory system
- A19-118 Image data compilation based on accurate registration of sequential frames from a drone
- A19-119 Deep Generative Modeling of Infrared Datasets for Aided Target Recognition
- A19-120 Novel Integration Technologies for Infrared Focal Plane Array Application
- A19-121 Foveated Headworn Display Demonstrator
- A19-122 Variable Attenuator for See-Through Day/Night Displays
- A19-123 Advanced Concepts for Low-Cost High-Speed Uncooled Infrared Detectors
- A19-124 A point-of-care assay to determine soldier dengue exposure and enable rapid, mass, cost-efficient dengue vaccination programs of military personnel
- A19-125 Advanced Machine Learning Target Recognition in Munitions
- A19-126 Advanced Machine Learning for Non-Destructive Testing
- A19-127 Software Defined Radio Automated Testing Solution
- A19-128 Intelligent Manufacturing Technologies for Lithium-ion 6T End-of-Line Testing
- A19-129 Advanced Signal Detection and Characterization Utilizing Artificial Intelligence (IL)/Machine Learning (ML)
- A19-130 Aerostat Hybrid
- A19-131 Reduced emission sensors for Short Range Air Defense (SHORAD)
- A19-132 Next Generation Aviation Helmet Shell
- A19-133 Power Generation for Individual Soldier
- A19-134 Real-time Muzzle Velocity Feedback System (RMVFS)
- A19-135 Powder Development and Characterization for Additive Manufacturing of FeMnAlC Alloy Steel
- A19-136 2kW Solid Oxide Fuel Cell (SOFC) Power System

Army STTR Topics

- A19B-T001 Freeform Optics for Small Arms Fire Control
- A19B-T002 Universal Navigation Solution Manager
- A19B-T003 Uniform Dispersion and Alignment of Short Fiber Composite Reinforcement
- A19B-T004 Diamond Electron Amplifiers
- A19B-T005 High-Speed Mid-Infrared Free-Space Laser Communications
- A19B-T006 Isogeometric Analysis Methods for High Fidelity Mobility Applications
- A19B-T007 Low Temperature Deposition of Magnetic Materials on Topological Materials
- A19B-T008 Exploiting Single Nucleotide Polymorphisms for Extreme Performance
- A19B-T009 Optical Grating Enhancement of MWIR Structures for High Temperature Operation
- A19B-T010 Production of Natural Melanin for Affordable EMP Shielding
- A19B-T011 Physical Vapor Deposition (PVD) as a Method to produce High Aspect Ratio Conductive Flakes for Advanced Bispectral or Infrared (IR) Obscuration
- A19B-T012 Mobile Metal Manufacturing Technologies for Repair and Retrofit of Infrastructure Systems
- A19B-T013 To Develop and Demonstrate a Technology Enabling the Detection and Quantification of Modified Nucleic Acid Bases from a Mammalian Genome Such as Methylation sStes
- A19B-T014 Passive, Non-powered Re-chargeable Heat Storage Systems for Cold Climate Operations
- A19B-T015 Direct Hydrogen Production from Sunlight and Water
- A19B-T016 High Performance, Non-flammable Lithium Battery

Air Force Summary Standard Topics

<u>Phase I Ceiling</u>	<u>Duration</u>	<u>Phase I Option</u>	<u>TABA</u>	<u>Volume 2 limit</u>
Base \$150,000	Base 6 months + 3 months reporting	NONE	NONE	20 page

Special Open Topic AF192-001

<u>Phase I Ceiling</u>	<u>Duration</u>	<u>Phase I Option</u>	<u>TABA</u>	<u>Volume 2 limit</u>
Base \$50,000	Base 2 months + 1 months reporting	NONE	NONE	5 page + Pitch Deck

Pitch Day Topics AF192-005 and AF 192-006

<u>Phase I Ceiling</u>	<u>Duration</u>	<u>Phase I Option</u>	<u>TABA</u>	<u>Volume 2 limit</u>
Base \$75,000	Base 2 months + 1 months reporting	NONE	NONE	5 page + Pitch Deck

Air Force SBIR Topics

AF192-001	Open Call for Innovative Defense-Related Dual-Purpose Technologies/Solutions with a Clear Air Force Stakeholder Need
AF192-005	Kessel Run Pitch Day
AF192-006	Unmanned Aerial Systems Pitch Day
AF192-007	Standardized, Compact, and Automated Shock Tube for Fuel Characterization and Modeling
AF192-008	Millimeter wave Instrumentation and Characterization
AF192-014	RF Situational Awareness with Low-Cost Signal Samplers
AF192-015	Low SWAP-C Anti-Jam Techniques for MGUE Increment 2 Handheld Receiver
AF192-016	Heterogenous Power Exploitation in GPS Receivers
AF192-017	W-band Receive Phased Array for SATCOM Uplinks
AF192-018	Dual-Band, Multi-Platform High Power Amplifiers for SATCOM Uplinks
AF192-019	V-band Transmit Phased Array for SATCOM Downlinks
AF192-020	V-Band Crosslink Solid-State Power Amplifiers
AF192-021	High Spectral Resolution Longwave Infrared Hyperspectral Imaging System
AF192-022	Develop Small Pitch Geiger Mode Avalanche Photodiode Detector Arrays for Multifunction LiDAR Receivers
AF192-023	Conformal Beam Steering for High Resolution Ladar
AF192-024	Cognitive Fully Autonomous Sensor Technology (CFAST)
AF192-025	Fully Adaptive Radar Resource Allocation
AF192-026	Advanced Hyperspectral Exploitation Using 3D Spatial Information
AF192-027	Compact Broadband Thermal Imaging and LWIR HSI Payload for Small Unmanned Aircraft System (SUAS)
AF192-028	EO/IR-Specific State of the Art Machine Learning
AF192-029	High-Resolution Rapid Refresh (HRRR) Weather Nowcasts
AF192-030	Next Generation Miniature Charged Particle and Multi-Phenomenology Detectors
AF192-031	Non-destructive Imagery and Analysis Techniques for Identification of Deleterious Defects in Li-ion Batteries
AF192-032	Novel Sensor Solutions for Qualification of Additively Manufactured Launch and Space Vehicle Components

AF192-033	Next Generation Device Attachment Thermal Interface Material
AF192-034	Laboratory Benchtop Accelerator for Charged Particle Detector Calibration
AF192-035	Develop Prototype Hyperspectral Microwave Imager for Terrestrial Weather
AF192-036	Large Area Solar Simulator for Next Generation Solar Panels
AF192-037	Military GNSS Data Server
AF192-038	Development of Graphene Batteries for Use in Space Applications
AF192-039	Plug-and-Play Technology for Distributed Modular Propulsion Engine Controls Design
AF192-040	Development of a High Performance, Printed Conformal Li Battery
AF192-041	Erosion Resistant Coatings for Large-Diameter Gas Turbine Engine Compressor Integrally-Bladed Rotors (IBRs) and Lift-Fan Blades
AF192-042	Advancement of High Energy Rechargeable Lithium Batteries
AF192-043	High Performance Solid Rocket Propellant Replacement
AF192-044	Propulsion for Agile, Resilient Spacecraft
AF192-045	Advanced Integrated Engine Control Test Bed for Development of Intelligent Systems and Smart Instrumentation
AF192-046	Passive Coatings for Aircraft Drag Reduction
AF192-047	MQ-9 Battery Technology Improvements
AF192-048	Hypersonic Vehicle Electrical Power Generation through Efficient Thermionic Conversion Devices
AF192-049	Data Science Based Approaches for Modeling Optimal Controls and PHM for Power and Thermal System Components.
AF192-050	New Methods, and Technologies Required for Heat Rejection from Next Generation Aircraft
AF192-051	Optically Gated, Wide Bandgap Semiconductors for Aircraft Electrical Actuator Motor Drives
AF192-052	Additively Manufactured Reactor For high performance, non-toxic monopropellants
AF192-053	Development of High Energy Software Control System
AF192-054	Small High Reliability Electrical/Signal Connectors for Gas Turbine Engine Applications
AF192-055	New Concepts for High Temperature Turbine Engine Oil Pumps
AF192-056	Low Cost Mission Enabling Cold Start for Small Engines
AF192-057	Dynamic, Risk-Based, Situational Awareness and Response
AF192-058	Delivery System and Compatible Chemicals for Rapid Collapse of Hi-EX Foam
AF192-059	Unmanned Aerial System (UAS) Aircraft Rescue and Firefighting (ARFF)
AF192-060	A small multi-spectral Imagery Pod to Provide High Resolution Rangeland Management Data
AF192-061	Energy Storage/Real-Time Peak Shaving
AF192-062	Determination of Significant Failure Size for Finite Element Analysis (FEA)
AF192-063	Ergonomic Dead Man Switch on Blast Nozzles
AF192-064	MIL-PRF-85285 Capable "Controlled-Spray" Head for Automated Stenciling of Aircraft Markings
AF192-065	High Precision, Non-Line-of-Sight Point Cloud Generation
AF192-066	All-electronic Switch Exceeding 10 THz

Air Force STTR Topics

AF19B-T001	Open Call for Science and Technology Created by Early-Stage (e.g. University) Teams
AF19B-T002	Advanced Kinetic Evolution of Oxidation Resistant Structures Through Additive Manufacturing
AF19B-T003	Fully Adaptive Radar Resource Allocation

AF19B-T004	All-electronic Switch Exceeding 10 THz
AF19B-T005	Image Segmentation for Target Attitude using a Priori Knowledge
AF19B-T006	Information Extraction for New Emerging Noisy User-generated Micro-Text
AF19B-T007	Ultra-Wideband Transmission Using Sub-Wavelength Antennas on Airborne Platforms
AF19B-T008	Networking for Wideband Links at Terahertz Frequencies
AF19B-T009	Multiband Equipment for Spectrum Agility (MESA)
AF19B-T010	Design and Develop a Methodology, Framework and Tool To Assess, Simplify and Automate Cybersecurity Controls and Reporting
AF19B-T011	Cyber Attack Immunity for Embedded Systems
AF19B-T012	Tailored Supersonic Flow Fields
AF19B-T013	Modern, Rapid, Usable, Lower Order Computational Fluid Dynamics (CFD) Development for Aerodynamic Analysis
AF19B-T014	Improvements for Helicon Plasma Thruster Technologies
AF19B-T015	Low Temperature Homogeneous Epitaxy of 4H-SiC Using Novel Precursors

Air Force Direct to Phase II Topics - see end of document

CBD (Chemical and Biological Defense Program) Summary

<u>Phase I Ceiling</u>	<u>Duration</u>	<u>Phase I Option</u>	<u>TABA</u>	<u>Volume 2 limit</u>
Base \$167,500	Base 9 months	NONE	NONE	20 page

CBD SBIR Topics

CBD192-001	Military Working Dog Decontamination Kit
CBD192-002	On-site Treatment of Contaminated Equipment
CBD192-003	A Mass Spectrometer Inlet Valve Synchronized to Pre-separated Sample Introduction
CBD192-004	Phage therapy for bio-threat bacteria
CBD192-005	Development (or Application) of a Non-Invasive Device to Measure Changes in Intra-Cranial Pressure resulting from Viral or Bacterial Infections of the Central Nervous System
CBD192-006	Development of Small Molecule Therapeutics for Emerging Viral Agents
CBD192-007	Optimized Platforms for Proper Glycosylation and Sialylation of Recombinant Human Butyrylcholinesterase (rBChE)
CBD192-008	Long Duration, Novel Opioid Medical Countermeasure for Intramuscular Injection

DHA (Defense Health Agency) Summary

<u>Phase I Ceiling</u>	<u>Duration</u>	<u>Phase I Option</u>	<u>TABA</u>	<u>Volume 2 limit</u>
Base \$250,000	Base 6 months	NONE	NONE	20 page

DHA SBIR Topics

DHA192-001	Development of a Clinical Decision Support Tool for Early-Detection of Directed Energy-Induced Injury to the Retina
DHA192-002	Treatment of Vestibular Impairment of Service Members after Traumatic Brain Injury through Use of an Individualized, Portable Neuromodulation Device

- DHA192-003 Forward Deployable Full Spectrum Oculomotor Assessment (OMA) and TBI Diagnostic Device
- DHA192-004 Solutions for Self-Control of Urinary Function and Control
- DHA192-005 Real Time Measurements of Tympanic Membrane and Middle Ear Mechanics
- DHA192-006 Tympanic Membrane Repair Material

DHA STTR Topics

- DHA19B-001 Neurofeedback Training and Hyperscanning for Mission Readiness and Return-to-Duty via Functional Near-Infrared Spectrometry (fNIRS)

DHA Direct to Phase II Topics - see BAA

DLA (Defense Logistics Agency) Summary

<u>Phase I Ceiling</u>	<u>Duration</u>	<u>Phase I Option</u>	<u>TABA</u>	<u>Volume 2 limit</u>
Base \$100,000	Base 6 months	Required	\$5,000*	20 page

DLA SBIR Topics

- DLA192-001 Reverse Engineering Technical Data Packages for Development of Alternate Sources of Supply for DLA Nuclear Enterprise Support Office (NESO)
Reverse Engineering Technical Data Packages for Development of Alternate Sources of Supply for DLA Nuclear Enterprise

DMEA (Defense Microelectronics Activity) Summary

<u>Phase I Ceiling</u>	<u>Duration</u>	<u>Phase I Option</u>	<u>TABA</u>	<u>Volume 2 limit</u>
Base \$100,000	Base 9 months	NONE	NONE	20 page

DMEA SBIR Topics

- DMEA192-001 Spatially Resolved Local Temperature Mapping with High Accuracy inside a Transmission Electron Microscope
- DMEA192-002 Applications of Machine Learning and Machine Vision to Determine the Authenticity and Security of Microelectronics Parts in Weapons Systems

DMEA Direct to Phase II Topics - see end of document

DTRA (Defense Threat Reduction Agency) Summary

<u>Phase I Ceiling</u>	<u>Duration</u>	<u>Phase I Option</u>	<u>TABA</u>	<u>Volume 2 limit</u>
Base \$162,500	Base 6 months + 1 months reporting	NONE	\$6,500*	20 page

DTRA SBIR Topics

- DTRA192-001 Artificial Intelligence for the Testing and Analysis of Energetic Fills
- DTRA192-002 Deep Reinforcement Learning Methods and Simulated Learning Environments for Counter-Unmanned Aircraft Systems (C-UAS) Applications

DTRA192-003	Supporting Continuity of Operations (COOP) through Resilient Blockchain Frameworks (SCOOP-RBF)
DTRA192-004	See-In-The-Wall (SITW) Imager Technology
DTRA192-005	Multi-Platform 3-D Radiation Mapping with Enhanced Sensor Data Fusion and Visualization
DTRA192-006	Windowless Alpha/beta detectors
DTRA192-007	Development of Camera-Motion Insensitive Dynamic Digital Photogrammetry Using Digital Image Correlation

MDA (Missile Defense Agency) Summary

<u>Phase I Ceiling</u>	<u>Duration</u>	<u>Phase I Option</u>	<u>TABA</u>	<u>Volume 2 limit</u>
Base \$162,500	Base 6 months + 1 months reporting	NONE	\$6,500*	20 page

MDA SBIR Topics

MDA19-001	Innovative Ejector Launch System
MDA19-002	Database Optimization Tool
MDA19-003	Material Solutions & Methods to Reduce Illuminator Radar Cross Section (RCS)
MDA19-004	Advanced Hierarchical Temporal Memory (HTM) Algorithm
MDA19-005	Battle Management (BM) for Integrated Air and Missile Defense (IAMD)
MDA19-006	Bare-Metal Hypervisor (BMHy) for Integrated System Security
MDA19-007	Supercapacitor Nano-architecture Using Bicarbons-based Materials Derived from Plant Cellulose
MDA19-008	Uncertainty Quantification for Modeling and Testing of Carbon-Carbon (C-C) Materials
MDA19-009	Self-Coding Cyber Fixes
MDA19-010	Enabling Technologies for Forward Looking Interceptor Seekers/Sensors
MDA19-011	Radiation Hardened Machine Vision Computer Solution
MDA19-012	MIL-STD-1901A Compliant Igniter Energetics for Solid Rocket Motors
MDA19-013	Additively Manufactured Thermal Protection/Thermal Management System for Hypersonic Flight
MDA19-014	Continuous Communications Through Plasma During Hypersonic Flight
MDA19-015	Flight Vehicle Surface Sensor Network
MDA19-016	Lightweight Fins for Enhanced Maneuverability of a High-Speed Interceptor
MDA19-017	Miniaturized Inflight-capable Laser Detection and Ranging (LADAR) System
MDA19-018	Missile Aft Antenna (MAA) Design Rearrangement
MDA19-019	Modeling of Fiber Laser Refractive Index Profiles and Dopant Index Profiles for Predicting High Power Fiber Laser Performance
MDA19-020	Enabling Technologies for an Exo-atmospheric Neutral Particle Beam Sensor Weapon

Navy Summary

<u>Phase I Ceiling</u>	<u>Duration</u>	<u>Phase I Option</u>	<u>TABA</u>	<u>Volume 2 limit</u>
Base NTE \$140,000 + Option NTE \$100,000	Base 6 months + Option 6 months	Required	\$6,500*	20 page

Navy SBIR Topics

N192-045	Active Explosive Ordnance Disposal Bomb Suit Cooling System Vest (AEODSUV)
N192-046	Lightweight Road Wheel (LwRW)
N192-047	Mobile Recycling Facility – Expeditionary (MRF-X)
N192-048	Automatic Track Generation Micro Preprocessor for Dismounted Electronic Warfare
N192-049	Family of Foreign Object Damage Mitigation Equipment (F2ME)
N192-050	Virtual Reality for Ground Vehicle Survivability, Lethality, and Vulnerability
N192-051	Wargaming Event Design, Scenario Development, and Execution Software Suite for Modeling and Simulation (M&S) Tool Automation
N192-052	Advanced Aircraft Electrical Load Management System
N192-053	Quantum Cascade Lasers Manufacturing 10X Cost Reduction
N192-054	Lowering the Probability of an Adversary Recognizing Inverse Synthetic Aperture Dwells While Maintaining Vessel Classification Capabilities
N192-055	Long-Wave Infrared (IR) Window/Dome Life-Cycle Cost (LCC) Reduction
N192-056	Holographic Optical Element for Free Space Optical Communication System on Mobile Platforms
N192-057	Advanced Alternative Gun Lubricant
N192-058	Predictor of Aircraft Structural Loads Due to Buffet
N192-059	Submarine Mast Discrimination Techniques for High-Altitude Maritime Surveillance Radar
N192-060	Multi-Sensor Sonobuoy
N192-061	Innovative Millimeter Wave Positioning System for Collision/Obstacle/Brown-Out with Sense and Avoidance
N192-062	Autonomous Unmanned Aerial Vehicle (UAV) Flight Without Supervisory Control
N192-063	High Dynamic Range Real-Time LIDAR Digitizer and Processor
N192-064	Real-Time Mapping from Over-Water Imagery
N192-065	Artificially Intelligent Object with Virtual Presentation of Engineering and Logistics Data
N192-066	Non-Invasive Radio Frequency System Characterization
N192-067	Anti-reflective Surface for Infrared Optical Fiber Endfaces
N192-068	Tool for Analysis to Predict Strength and Durability of Curved and Tapered Composite Structures under Multiaxial Loading
N192-069	[Navy has removed topic N192-069 from the 19.2 SBIR BAA]
N192-070	Manned-Unmanned Directional Mesh Enhanced Tactical Airborne Networks
N192-071	Innovative Methods for Correlating Physiological Measures of Pilot Workload to Handling Qualities
N192-072	Nondestructive Characterization of Microstructure and Grain Orientation on Large, Complex Parts
N192-073	Versatile Emitters
N192-074	Flow Forming Bomb Bodies
N192-075	Secure Communications Link Between Robotics and Autonomous Systems
N192-076	Fiber Optic Pressure Sensing for Military Aircraft (MIL-Aero) Environments
N192-077	Apparatus for Characterizing Mixed Failure Modes in Cross Deck Pendants
N192-078	Network Retention During Jamming Mission
N192-079	Unmanned Airborne Reconfigurable Naval Communications Network
N192-080	Open Architecture Development Environment for Radar Mode Design
N192-081	Improved Data Tracking System for Crew-Served Weapon Systems
N192-082	Mobile Phased Array Antenna for Robotic Autonomous Systems (RAS) Using Optical Broadband Communications

N192-083	Non-Traditional Airborne Anti-Submarine Warfare (ASW) System
N192-084	Room Temperature Shelf-Life Pre-impregnated Carbon Fiber Fabric for use in Out-of-Autoclave Aircraft Repair
N192-085	Rapid Repair of Corroded Fastener Holes
N192-086	Advanced Signal Analysis Techniques for Use on Non-Periodic Radio Frequency Signals
N192-087	Headset Equivalent of Advanced Display Systems (HEADS)
N192-088	Collision Avoidance System for Operations in Dense Airspace Environment
N192-089	Inverse Synthetic Aperture Radar (ISAR) Imaging in the Presence of Electronic Attack (EA)
N192-090	Modern Forward Error Correction (FEC) and Automatic Repeat Request (ARQ) Algorithms for Tactical Data Links
N192-091	Line-of-Sight (LOS) Low Probability of Detection/Intercept (LPD/LPI) Millimeter Wave Communication
N192-092	Distributed Sensing of Unsteady Surface Pressure Fields
N192-093	Threat Prioritization Decision Aid for Theater Anti-Submarine Warfare (TASW)
N192-094	Multiplayer Serious Game for Anti-Submarine Warfare Sonar Operator Training
N192-095	Multi-Instruction Set Architecture (ISA) Processing with a Peripheral Component Interconnect express (PCIe)
N192-096	Oxygen Delivery and Monitoring System
N192-097	Advanced Video Compression Capability
N192-098	Non-Explosive Wire Rope and Cable Cutter
N192-099	3D Visualization Capability for Fleet Remotely Operated Vehicles (ROVs)
N192-100	Passive Cooling for Aircraft Carrier Jet Blast Deflectors (JBD)
N192-101	Unmanned Vehicle Launch & Recovery (L&R) for MK VI Patrol Boats
N192-102	Blind Mating Connection for 19-inch Electronic Industries Alliance Racks in AEGIS Computing Infrastructure
N192-103	Field Serviceable Non-Acoustic Data Logging Sensor Module for Towed Arrays
N192-104	Large Instantaneous Bandwidth High Dynamic Range Digitizer
N192-105	FireFly™ Based Network Switch
N192-106	Innovative Helicopter Hangar Door Seals
N192-107	Quiet Launch for 6-Inch Externally Stowed Devices
N192-108	Structurally Integrated Enclosure for AEGIS Combat System Computer Hardware
N192-109	Undersea Sensor Network Performance Modeling and Cost Tool
N192-110	[Navy has removed topic N192-110 from the 19.2 SBIR BAA]
N192-111	Metal Additive Manufacturing of Pressure Vessel Experimental Models
N192-112	[Navy has removed topic N192-112 from the 19.2 SBIR BAA]
N192-113	Combat System Dynamic Resource Management
N192-114	Improved Propulsion Technologies for Mine Countermeasures Unmanned Undersea Vehicle Systems
N192-115	Durable Foreign Object Debris (FOD) Screens for Air Cushion Vehicles
N192-116	Deep Submergence Tactical Acoustic Doppler Current Profiler (ADCP) and Doppler Velocity Logger (DVL)
N192-117	Undersea Acoustic Risk Analysis Decision Aid for Theater Anti-Submarine Warfare (TASW) Mission Planning
N192-118	Application Level Cybersecurity Threat Detection
N192-119	Autonomous Collective Protection System (CPS)
N192-120	Small-Scale Velocity Turbulence Sensors for Undersea Platforms

N192-121	Torpedo Advanced Processor Build (APB) Algorithm Development
N192-122	Spatially Integrating Magnetometer
N192-123	Food Waste Transfer System from Ship Galleys to the Ship Solid Waste Processing Equipment
N192-124	Digital Twin Technology for Naval Maintenance Training and Operations
N192-125	High Current Cooled Flexible Bus Work Systems
N192-126	Metamaterial Devices for Photonic Systems
N192-127	High Heat Flux Thermal Management Technologies for Aluminum Decks
N192-128	Innovative Artificial Intelligence Features to Reduce Signal Dropout due to Clipping, Channel Fading, and Multi-path Interference
N192-129	Early Detection of Information Campaigns by Adversarial State and Non-State Actors
N192-130	Formable Reactive Metal Composites with Tailorable Energy Release Properties
N192-131	AI-Based Trend and Sentiment Analytics for Latent-Risk Discovery
N192-132	Accelerating Knowledge Acquisition for Close Combat Warriors
N192-133	Advanced Non-Electrochemical Energy Storage
N192-134	Modernizing Maintenance Operations and Training
N192-135	Autonomous Flight Termination for Use in Submarine-Launched Missile Applications
N192-136	Remote Analog-to-Digital Translator for Use in Submarine-Launched Missile Applications
N192-137	Propulsion Monitoring for Use in Missile Space Applications

Navy STTR Topics

N19B-T025	Overall Aircraft System-of-Systems Thermal Model and Simulation Tool
N19B-T026	Fatigue Prediction for Additive Manufactured (AM) Metallic Components
N19B-T027	Large Eddy Simulation (LES) Flow Solver Suitable for Modeling Conjugate Heat Transfer
N19B-T028	Additive Manufacturing of Inorganic Transparent Materials for Advanced Optics
N19B-T029	Data Science Techniques for Various Mission Planning Processes and Performance Validation
N19B-T030	Robust, Low Permeability, Water-Filled Microcapsules
N19B-T031	Innovations in Production of Rotorcraft Airframe Components using Advanced 3D Braiding
N19B-T032	Strength Loss Indicator for Webbing
N19B-T033	Analysis and Modeling of Erosion in Gas-Turbine Grade Ceramic Matrix Composites (CMCs)
N19B-T034	Model for Surface Finish Prediction and Optimization of Metal Additively Manufactured Parts
N19B-T035	Universal Sensor Application Programming Interface (API) for Undersea Data
N19B-T036	Three-Dimensional Field of Light Display

NGA (National Geospatial-Intelligence Agency) SBIR

<u>Phase I Ceiling</u>	<u>Duration</u>	<u>Phase I Option</u>	<u>TABA</u>	<u>Volume 2 limit</u>
Base \$100,000	Base 9 months	NONE	NONE	20 page

NGA SBIR Topics

NGA192-001 Fast Digitizer for Photon Detection
 NGA192-002 Machine Learning for Enhanced Remote Nuclear Detection
 NGA192-003 Advanced Materials and Algorithms for Radiation Detection
 NGA192-004 Simulating Coherent Activity Data
 NGA192-005 Long-term Patterns of Life from Sporadic Observations

OSD (Office of the Secretary of Defense - Manufacturing Technology Pg.) Summary

<u>Phase I Ceiling</u>	<u>Duration</u>	<u>Phase I Option</u>	<u>TABA*</u>	<u>Volume 2 limit</u>
Base \$250,000	Base 6 months	NONE	NONE	10 page

OSD SBIR Man. Tech. Topic

OSD 192-003 Educational Tool Development and Pilot Deployment to Facilitate Adoption of Advanced Manufacturing Technology

OSD SBIR Man. Tech. Direct to Phase II Topics - see end of document**OSD (Office of the Secretary of Defense - Strategic Capabilities Office) Summary**

<u>Phase I Ceiling</u>	<u>Duration</u>	<u>Phase I Option</u>	<u>TABA</u>	<u>Volume 2 limit</u>
Base \$225,000	Base 6 months	NONE	\$5,000*	20 page

OSD/SCO SBIR Topic

SCO192-001 Improvements to Weapon System Readiness Assessment Vehicles

SOCOM (U.S. Special Operations Command) Summary

<u>Phase I Ceiling</u>	<u>Duration</u>	<u>Phase I Option</u>	<u>TABA</u>	<u>Volume 2 limit</u>
Base \$250,000	Base 6 months	NONE	\$6,500*	10 page

SOCOM SBIR Topics

SOCOM192-001 Improving Human Performance Through Sleep Restoration
 SOCOM192-002 Advanced Decompression Pump for Manned Submersibles with a Diver-Lock Chamber
 SOCOM192-003 Indirect Fire Aiming Device

SOCOM Direct to Phase II Topics - see end of document

Direct to Phase II Component Summary

Several components are participating in the Direct to Phase II program in this BAA. *Make sure to read the specific component instructions carefully, as this is simply a summary.*

Component	Direct to Phase II Ceiling	Duration	Option	TABA	Volume 2 limit
Air Force D2P2	\$1,612,500	12 months + 3 months reporting	NONE	NONE	50 page
Air Force D2P2 'Typical' 192-D001	\$750,000	12 months + 3 months reporting	NONE	NONE	15 page, 15 slides, 100 sec video
Air Force D2P2 Rapid 192-D001	\$1,500,000 Matching funds required (see instructions)	24 months + 3 months reporting	NONE	NONE	15 page, 15 slides, 100 sec video + RAPID docs
DHA	\$1,600,000	24 months	NONE	NONE	20 pgs PhI + 40 pgs Phase II
DMEA	\$1,100,000	24 months	Enhance avail	NONE	15 pages + 5 feasibility
OSD/ManTech	\$1,500,000	12 month + 12-month option	YES	NONE	10 pages
USSOCOM	(none, \$750k - \$1M typical)	negotiated	NONE	NONE	20 pages