Funding Alert from the Michigan SBIR/STTR Assistance Program
Program link

DoD 2017.1 SBIR Topics
DoD 2017.A STTR Topics
Pre-release opens November 30, 2016
Open discussion with TPOCs through January 9, 2017
SITIS Q&A Closes January 25, 2017
Solicitation opens January 10 and proposals due February 8, 2017 at 6:00 a.m. ET

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 2017.1 and STTR 2017.A Topics
Solicitation link

Army SBIR

A17-001	Lightweight, Durable, Low-Cost Recuperators Designed for Integration with Small Turbo-generators for Future Army Unmanned Aerial Systems
A17-002	Advanced Electric Motor Technology for Hybrid More Electric/Micro-Turbine Architectures
A17-003	Development of In-Process Monitoring Closed-Loop Feedback for Use in Aluminum Alloy Additive Manufacturing (AM) Applications
A17-004	Composite Bondline Inspection for Structural Integrity
A17-005	Long-life, Shelf-stable, Wet Layup Laminating Resins and Paste Adhesives
A17-006	Model-Based Testing of Integrated Aviation Mission Systems
A17-007	Rapid Configuration of Heterogeneous Collaborative Aviation System-of-Systems Simulations
A17-008	Tunable Textured Composites for Lightweight Power Systems
A17-009	Long-Range Multiple Ballistic Missile Optimized Engagement in a Multi-Target Environment
A17-010	Ballistic Missile Defense Weather Management
A17-011	Multi-stage Shaped-charge Warheads
A17-012	Biodegradable Composites with Embedded Seeds for Training Ammunition
A17-013	Munition-Delivered Non-Kinetic Effects (NKE)
A17-014	Eutectics and Nanomaterials-based Supercapacitors for Enhanced Low-temperature Performance
A17-015	Methods for Determining Threat Level and Intent of Unmanned Aerial Systems
A17-016	Spin Compensation for Shaped Charge Liners
A17-017	Base-deployed Soft-Recovery Module for Precision Artillery
A17-018	Biologically-Derived Targeted Antifungals for Textile Applications
A17-019	CMOS Compatible Deposition of Multi-Ferroic Films for Tunable Microwave Applications

A17-020	Lithium Ion Battery Electrodes Manufacturing to Improve Power and Energy Performance
A17-021	Low Cost, Compact, and High Power Terahertz Emitter Arrays with 1550-nm Telecommunications Laser Drivers
A17-022	High-Speed Cryogenic Optical Connector for Focal Plane Array Read-out
A17-023	Lead Acid Battery Monitoring, Diagnostics, and Prognostics
A17-024	HPC enabled FDTD Channel Modeling for Dense Urban Scenes in the HF/VHF Band
A17-025	Safe Solid State High Power, High Energy Conformal Energy Storage
A17-026	Environmentally Intelligent Autonomous System
A17-027	Linear Efficient Broadband Transmitter Architecture at mm-wave frequencies
A17-028	Multi-Fuel Burners for Soldier Power
A17-029	Colloidal Quantum Dots for Cost Reduction in EO/IR Detectors for Infrared Imaging
A17-030	Self Regenerative Coatings for Enhanced Protection of Silicon Based Ceramic Composites in Particle Laden Degraded Engine Environments
A17-031	High-Fidelity Design Tools and Technologies for High-Pressure Heavy Fuel Injectors
A17-032	Revolutionary Concepts for Multi-Mode Adaptive Advanced Cycle Gas Turbine Engine
A17-033	Low-Cost, Lightweight, High-Strength Structural Materials for Small and Medium Caliber Sabots
A17-034	Lightweight Bullet and Fragment Impact Protection for Mobile Missile Launcher
A17-035	Inspection System for Body and Vehicle Ballistic Armor
A17-036	Civil Affairs Information and Military Sustainment in the Megacity Environment
A17-037	Data Security and Integrity Enhancements for Databases in the Tactical Environment
A17-038	Anti-Helicopter Mine and Improvised Explosive Device Countermeasures
A17-039	Signal Processing at Radio Frequency (RF) for Position Navigation & Timing Co-Site Interference
A17-040	UHF L-band Transmitter Receiver Antenna (ULTRA)
A17-041	Small Agile Filter-Tunable (SAF-T)
A17-042	Ultra Short Pulse Laser
A17-043	Fused positioning using imaging cameras and digital elevation data
A17-044	Algorithms for ground vehicle on-the-move detection of Unmanned Aerial Systems
A17-045	Night Sky Characterization System
A17-046	Image Enhancement in Heavily Degraded Visual Environments using Image Processing Methods
A17-047	High Definition Long Wave Infrared Spectral Camera
A17-048	Digital In-Pixel Uncooled LWIR Bolometer Camera
A17-049	Airborne ISR Sensors Fusion Algorithms
A17-050	Mitigating the Negative Effects of Polysulfide Dissolution in Lithium-Sulfur Batteries
A17-051	Tightly Coupled Oscillator and GPS Receiver
A17-052	Multi-Spectral Threat Warning Adjunct Sensor
A17-053	Analytic for Federated Data
A17-054	GMTI Radar Target Classification Using Spectral and Tracking Data
A17-055	Semantic Mission Plan Representation
A17-056	Paratrooper Operations in GPS-Degraded Environments
A17-057	Non-toxic Hydrophobic Coatings for Improved Infrared and Red Phosphorus Obscurant Performance
A17-058	Biotemplating for Synthesis of Metal Nanorods Used In Infrared Obscuration

A17-059	A Low-Toxicity, Non-Pyrotechnic, High Yield Visible Smoke Material
A17-060	Sensors for Assessing SeaPorts of Debarkation (SPOD)s
A17-061	Continuous Pavement Deflection Measurement System for Road and Airfield Pavements
A17-062	Multi-purpose geopolymer-basalt fiber reinforced composite
A17-063	Chemical, Biological, and Explosives Indicator Ticket
A17-064	Robotic Perception System for Casualty Pose Mapping
A17-065	Android and Medical App Biometric Identity and Access Management for Medic and Casualty Identification
A17-066	UAV/UGV Casualty Acceleration and G-Force Mission Constraint System
A17-067	Development of Novel Flexible Live Tetravalent Dengue Vaccine
A17-068	Vascular Engineering Platforms for Regenerative Medicine Manufacturing
A17-069	Novel Concentration Technology
A17-070	Compact Sanitation Center (CSC) for Expeditionary Field Feeding
A17-071	Development of Textiles to Provide Multispectural Camouflage and Concealment of Static Systems - ITAR APPLIES
A17-072	Development of a Military Hardened Expeditionary, Energy Efficient and Waterless/Low-Flow Laundry System
A17-073	Development of a Stochastic Multi-dimensional Fire Modeling and Simulation Software Package
A17-074	Lightweight Thin-film Solar Cell with Periodic Optical Nanostructure
A17-075	Fire Retardant Nylon Yarn
A17-076	Low Profile Strain Measurement System for Parachute Suspension Lines
A17-077	On Board Strain Measurement System for Ballistic and Ram-Air Parachute Canopies
A17-078	3D Food Printing Control System
A17-079	Innovative technologies that optimize the range of mortar systems
A17-080	Application of Additive Manufacturing Technologies to Produce Entire Munitions
A17-081	Biogenic Process for converting propellants and energetics into usable byproducts (such as biofuel)
A17-082	Reusable Pilot Vehicle Interface (PVI) Components and Widgets using ARINC 661 and FACE Architectures
A17-083	Advanced High Speed Scalable Dense Memory Payload for Army Group UAS
A17-085	Remote Radio Antennas for Command Posts
A17-087	Real-time Wastewater Analyzer
A17-088	Advanced Pretreatment for Greywater Reuse
A17-089	Low Flow Rate Energy Recovery
A17-090	Portable, Fieldable Method to Repair and Join Currently Non-Weldable Aluminum Alloys
A17-091	Vibration & Pressure Reducing, Soldier Health Seat Cushion Padding
A17-092	Materials with Wideband Transmissivity
A17-093	Optically Transparent Near-Perfect Microwave Absorber
A17-094	Seeker Dome Optical Correction for Non-Hemispherical Shapes
A17-095	Cluster UAS Smart Munition for Missile Deployment
A17-096	Tactical Wireless Gigabit (WiGig) for Dismounted Soldier Sensor Applications
A17-097	Cognitive Heterogeneous Adaptive Operational System (CHAOS)
A17-098	Squad-level Technology to Detect and Counter UAS (Unmanned Aircraft Systems)

A17-099   Intelligent Tutor as a Service

A17-100   Human-Type Target (HTT) Articulation

A17-101   Network-Enabled Casualty Treatment Trainers

A17-102   Advanced UAV and Mortar Target Detection and Tracking Algorithms for Low Signal-to-Noise Ratio and Cluttered Environments

A17-103   Low-Cost Reduced Size, Weight and Power RF Sensor for Short-Range Target Tracking in Degraded Visual Environments

A17-104   Variable Pulsed Parameter Tracking Illuminator Laser

A17-105   Bridge Launch Technology for Ultra Lightweight Combat Vehicles

A17-106   Integration of variable fidelity models for designing ground vehicle systems

A17-107   Systematic trade-off strategies for balancing survivability and mobility in vehicle design

A17-108   Lightweight Durable Bridge Decking

A17-109   Occupant Ejection Mitigation Technology

A17-110   Quiet Tracked Vehicle – Vibration Reduction focused Road Wheel

A17-111   Tailored Adhesives for High-Strain-Rate Applications

A17-112   High efficiency torque multiplication for military ground vehicle transmission

A17-113   Low Cost, Solid-State Scanning Lidar

A17-114   Nondestructive Characterization of Transparent Armor

A17-115   Adaptive Armor Actuator Mechanisms

A17-116   Field Instrumentation to measure, quantify, and characterize fuel contaminants

Army STTR

A17A-T001   Atomic Layer Deposition of Highly Conductive Metals

A17A-T002   High Efficient Flexible Perovskite Photovoltaic Modules for Powering Wireless Sensor Nodes and Recharging Batteries

A17A-T003   Photonic Nanostructures for Manipulation of High Energy Coherent Beams

A17A-T004   Functional Additive Manufacturing for Printable & Networkable Sensors to Detect Energetics and Other Threat Materials

A17A-T005   Mid-Infrared Chip-scale Trace Gas Sensors

A17A-T006   Mid-wave Infrared Laser Beam Steering

A17A-T007   High Dynamic Range Heterodyne Terahertz Imager

A17A-T008   3D Tomographic Scanning Microwave Microscopy with Nanometer Resolution

A17A-T009   Mechanochemical Sensing and Self Healing Solution to Detecting Damage in Composite Structures

A17A-T010   Scientific Data Management via Fast Dynamic Summarization

A17A-T011   Synthetic Biology Toolkit for Bioconversion of Food Waste

A17A-T012   High Performance Armor via Additive Advanced Ceramics

A17A-T013   Scalable Manufacturing of Functional Yarns for Textile-based Energy Storage

A17A-T014   Biosensor for Detection of Synthetic Cannabinoids

A17A-T015   Sealed Container Content Identification

A17A-T016   Method for Locally Measuring Strength of a Polymer-Inorganic Interface During Cure and Aging

A17A-T017   Dismounted Soldier Positioning, Navigation and Timing (PNT) System Initialization

A17A-T018   Novel Robust IR Scene Projector Technology

A17A-T019   Artificial Intelligence/Machine Learning to Improve Maneuver of Robotic/Autonomous Systems

A17A-T020   Bioaerosol Detector Wide Area Network

A17A-T021   Anticipatory Analytics for Environmental Stressors

A17A-T022   Biomechanical Rat Testing Device to Validate Primary Blast Loading Conditions for Mild Traumatic Brain Injury

A17A-T023   Field Verification of Micro/Ultra Filtration

A17A-T024   Additive Manufactured Smart Structures with Discrete Embedded Sensors

Air Force SBIR

F171-001   Variable Pressure/Flow Control Firefighting Nozzle

AF171-002   Wide-angle Retroreflectometer

AF171-003   Alternative Method of Surface Activation of High Strength Steels for Electroplating

AF171-004   Electroplating 3D Printed Materials

AF171-005   F-16 Landing Gear Bushing Bore Repair

AF171-006   Development of Additive Manufacturing for Landing Gear Components

AF171-007   Real-time, 3-D Model Deformation Measurement Capability for Perforated Wall Wind Tunnels

AF171-008   Reduction/Elimination of Unsteady Aerodynamic Loads on Model and Balance Support Systems in Large Scale Wind Tunnels

AF171-009   Miniature Video Camera Technology for Embedded Probes

AF171-010   Non-Intrusive, Time-Resolved Turbulence Measurements in Large-Scale Hypersonic Wind Tunnels

AF171-011   Advanced, Low-Erosion Electrode Technologies for Arcjet Testing

AF171-012   Air to Ground Target System for Engineering Based Airborne Electro-Optics Imaging System Performance

AF171-013   Next Gen Infrared Emitter Array Packaging

AF171-014   Dynamic Aircraft Tire Footprint Sensor (DATFS)

AF171-015   Infrared Light Emitting Diode Extraction Efficiency

AF171-016   Efficient On-Board Fire Suppression

AF171-017   Low Cost High Sensitivity Superconducting Magnetometers and Gradiometers

AF171-018   Gallium Oxide Homo/Hetero-Epitaxial Structures for RF and Power Switching Devices

AF171-019   High-Speed Wind Tunnel Transient Dynamics During Start-up

AF171-020   Instrumentation for carbon-carbon structures in extreme environments

AF171-021   Ultradense Plasmonic Integrated Devices and Circuits

AF171-022   Advanced back-illuminated CMOS image sensors for adaptive optics applications

AF171-023   Adaptive Optics Prototype for a Meter-class Telescope used for Space Surveillance

AF171-024   Daylight Glare Reduction Using a Light-field Camera

AF171-025   Realtime Multiframe Blind Deconvolution (MFBD) for Imaging through Turbulence

AF171-026   24/7 Monitoring of Active Satellites using Passive Radio-Frequency (RF) Sensors

AF171-027   Cyber warfare laboratory design

AF171-028   Cyber Attack model using game theory

AF171-029	Training for Cyber Operations
AF171-030	Battlefield Airmen Augmented Reality System (BAARS)
AF171-031	Wearable, Broadband, EM Field Exposure Detection System with Data Sharing Capability
AF171-032	Wearable Device to Characterize Chemical Hazards for Total Exposure Health
AF171-033	Mobile activity tracking system for field training and exercise assessment
AF171-034	Simulator Common Architecture Requirements and Standards (SCARS)
AF171-035	Data Growth Within the Air Force Weather Enterprise
AF171-036	Energy Efficient Technologies for Tactical Communications and Networking (E2-COMS)
AF171-037	Mission Assured Authentication (MAA)
AF171-038	High-Throughput High-Frequency (HTHF) Battle Management Command-Control (BMC2)
AF171-039	Data Protection and Sharing Technologies In Critical Key Networks and for Cyber Defense of Weapons (DPSTICK)
AF171-040	Aerial Cloud Analytics for Strategic and Tactical Warfighting (ACAST)
AF171-041	Aerial Cloud Computing Technologies (ACCT)
AF171-042	Big Data Cyber Analytics
AF171-043	Mobile User Objective System (MUOS) for Moderate Data Rate Communications (MMDR)
AF171-044	Mobile Authentication and Access Capability
AF171-045	Automatic Dependent Surveillance - Broadcast (ADS-B) and UAS operations
AF171-046	3rd Party Intellectual Property (I V&V Effort)
AF171-047	Resilient Communications for Contested Autonomous Manned/Unmanned Teaming
AF171-048	Big Data Analytics for Activity Based Intelligence
AF171-049	Collective Human Intelligence as Exploitation Layer in Automated Information Systems
AF171-050	Human-Machine Collaboration for Automated Patterns of Life Analysis
AF171-051	Elevated Situational Awareness through Discovery and Characterization of Composable Free Market Analytics
AF171-052	Non-Intrusive Passive Optics/Imaging for Damage Prediction and Structural Health Monitoring in Gas Turbines
AF171-053	Extrapolating Useful Life from Composite Structures Using In-Service Data
AF171-054	Non-GPS Relative Navigation for Remotely Piloted Aircraft (RPA) Refueling
AF171-055	Fast High Resolution, High Contrast Microfocus X-Ray Computed Tomography Reconstruction Algorithms for ICBM Components
AF171-056	Fiber Optic Sensing Systems (FOSS) for Expendable Launch Vehicles
AF171-057	Dynamic and Efficient Vapor Compressor for Aircraft Thermal Management Systems (TMSs)
AF171-058	Non-Persistent Tracers for Particle Image Velocimetry in High-Mach Number Wind Tunnels
AF171-059	Sustainable High-temperature Hybrid Turbine Rotors
AF171-060	Novel, Tactical-Sized Reconfigurable Aerial Refueling Boom
AF171-061	Micro Reactor Synthesis of Energetic Ionic Liquids
AF171-062	Sensor Open System Architecture (SOSA) Architectural Research
AF171-063	Electronically Controlled Adaptive Polarization for Compact Broadband Transmitters and Receivers

AF171-064   Energy Storage System

AF171-065   Effects of GPS Degraded or Denied Environments on Delivery Vehicles

AF171-066   Real-Time Threat Database

AF171-067   Miniaturization of Comprehensive Energetic Charged Particle Detectors for Anomaly Attribution

AF171-068   Non Destructive Trusted FPGA Verification

AF171-069   Improved Data Fusion Techniques for Space-Based Remote Sensing

AF171-070   Advanced Solar Cell Metallization

AF171-071   Integration of Tactical and Individual Satellite Operations with Global Operation and Control

AF171-072   Integrated Photon Management for Multijunction Solar Cells

AF171-073   Weather Satellite

AF171-074   Agile Inspector Satellite

AF171-075   Assured Autonomous Spacecraft GN&C via Hybrid Control

AF171-076   Wideband GPS Digital Payload Architecture

AF171-077   Cyber Vulnerabilities & Mitigations in the Radio Frequency Domain

AF171-078   SWIR-LWIR detectors employing Unipolar Barrier Architectures

AF171-079   Automatic Exploitation of Energetic Charged Particle Sensor Data

AF171-080   Dual Band Focal Plane Array

AF171-081   Low-Light SWIR Vision Systems

AF171-082   Modeling and Simulation of Complex Multiphase Interaction of Energetic Materials

AF171-083   High-g MEMS Accelerometer Sensor for Hard Target Applications

AF171-084   Advanced Bio-inspired Imaging System with Multiple Optical Sensing Modes

AF171-085   Small Munitions Advanced Seeker Handoff (SMASH)

AF171-086   Full-size Warhead Computed Tomography

AF171-087   FRM Automated Development (FAD)

AF171-088   Reactive Composite Materials for Asymmetric Shock Propagation in Multi-Functional Weapons

AF171-089   High Voltage (HV) Fireset Systems and Subsystem Component Level Designs

AF171-090   Deep Learning Tools and Architectures for Munitions (DeLTA-M)

AF171-091   Corrosion Indicating Coatings for Aircraft Bilges and Wheel Wells

AF171-092   Coating Additives for Enhanced Laser De-paint

AF171-093   Low Hyrdrogen Embrittlement (LHE) Brush Plating Chemistries for Cadmium (Cd) Replacement

AF171-094   Improved Non-Damaging Method of Removing Powder Coating System

AF171-095   Computational corrosion modeling for Condition Based Maintenance Plus (CBM+)/aircraft environment tracking

AF171-096   Improved Casting Quality through Novel Engineered Ceramic Molten Metal Filters
             Improved Casting Quality through Additively Manufactured Ceramic Molten Metal Filters

AF171-097   High temperature moisture sealants for hot exhuast structures on advanced system

AF171-098   Quantification of microtexture regions in titanium alloys using optical sensing methods

AF171-099   Diffusely Scattering Paints for Remotely Piloted Aircraft

AF171-100	Manufacturing and Metrology of High Magnetic Permeability Materials for High Efficiency, Wideband, and Conformal RF Antennas
AF171-101	Additive Manufacturing of Freeform Optical Elements for Imaging System Weight and Volume Reduction
AF171-102	Portable, Precision Automated Welding for Aerospace Alloys
AF171-103	Tailpipe Coating Thickness Measurement Capability
AF171-104	Portable, Localized Low Observable (LO) Coating Removal Tool
AF171-105	High Altitude Electromagnetic Pulse (HEMP) Protection for Nuclear Command and Control Communications (NC3) Systems
AF171-106	Improved manufacturing and design of liquid electrolyte delivery systems
AF171-107	Continuously Self-Leveling Weapons-Storage Support Structure
AF171-108	All-Fiber Optical Isolators for High Energy Lasers
AF171-109	Structural Directed Energy and Nuclear Effect Mitigation of Composite Aeroshells for Munitions
AF171-110	Additive Manufacturing Process for High Resolution Conductive Traces
AF171-111	Nondestructive Quantification of the Degraded Elastic Modulus and Poisson's Ratio of Impact Damaged Polymer Matrix Composites
AF171-112	Thermal Modeling Base High-Temperature Polymer Matrix Composite (PMC) Structural Repair
AF171-113	Solid-State Amplifier/Transmitter replacements for Travelling Wave Tube (TWT) Technology
AF171-114	Enhancing Systems Engineering for Complex Systems with Digital Thread
AF171-115	3-D Antenna Technology using Additive Manufacturing
AF171-116	Scalable Coherent Photonic Array on a Silicon Platform
AF171-117	Multi-Sensor/Multi-Platform Integration and Sensor Resource Management
AF171-118	Develop a Small Pitch LADAR Receiver for Low SWAP Sensing
AF171-119	NIIRS 9 Small Unmanned Aircraft System (SUAS) 5-Inch Gimbal
AF171-120	Direct Measurement of Targeting Coordinates from Small Unmanned Aerial Systems (SUAS) EO/IR Gimbal Systems
AF171-121	Integrated Circuit (IC) Die Extraction and Reassembly (DER) for More Complicated ICs
AF171-122	V/W-band Accelerated Life Test System
AF171-123	Dual Ka/Q-Band Low Noise Amplifiers
AF171-124	Ultra-Endurance UAV
AF171-125	Aerial Refueling of UAVs
AF171-126	Integrable high-performance analog optical modulators
AF171-127	Programmable Feed to Enable Low Frequency Measurements in Small Compact Far-Field Antenna Ranges
AF171-128	Advanced Analog-to-Digital Converter for GPS Receivers
AF171-129	Focal Plane Arrays (FPAs) for Coherent Ladar
AF171-130	Small Unmanned Aircraft System (SUAS) 5-Inch Gimbal with Full Motion Video and Hyperspectral

Air Force STTR

AF17A-T001	Fast Response Heat Flux Sensors and Efficient Data Reduction Methodology for Hypersonic Wind Tunnels
AF17A-T002	Sensors for High Pressure and Temperature Hypersonic Testing Facilities

AF17A-T003	Improved Calibration of Sensors and Instruments used for Measurement of High Speed Flow
AF17A-T004	Physics-Based and Computationally Efficient Combustion Chemistry Modules with Acceptable Uncertainty for Air Force Relevant Hydrocarbon Fuels
AF17A-T005	Alternative Methods for Creating a Sodium Guidestar
AF17A-T006	Three-sided Pyramid Wavefront Sensor
AF17A-T007	Automated 3D Reconstruction and Pose Estimation of Space Objects Using Ground Based Telescope Imagery
AF17A-T008	Unified sensor for atmospheric turbulence and refractivity characterization
AF17A-T009	Learner Engagement and Motivation to Learn Assessment and Monitoring System
AF17A-T010	Flexible Broad-band Optical Device
AF17A-T011	Blended Reality Solution for Live, Virtual, and Constructive Field Training
AF17A-T012	Development lightmap rendering technology to advance infrared simulation capabilities for training applications
AF17A-T013	Spectrum Localization for Improved Situational Awareness
AF17A-T014	Reliable Aerothermodynamic Predictions for Hypersonic Flight for High Speed ISR
AF17A-T015	Design Analysis Methodology for Topology Optimization of Thermally Loaded Structures
AF17A-T016	LWIR Thermal Imager for Combustion Process
AF17A-T017	Methodology for Optimization of Bodies Subjected to Loads Produced by Chaotic Flows
AF17A-T018	Adaptive and Smart Materials for Advanced Manufacturing Methods
AF17A-T019	High Strain Composite Testing Methodologies
AF17A-T020	Diagnostics for Multiphase Blast
AF17A-T021	High speed, multispectral, linear polarization display
AF17A-T022	Plasmonic Metamaterial Approach to Infrared Scene Projection
AF17A-T023	Practical Application of Molecular-Scale Modeling to Problems at the Grain Scale and Larger
AF17A-T024	III-Nitride Ternary Alloy Substrates for UV(A/B/C) and UWBG Development
AF17A-T025	Structural profile disruption effects for high-velocity air vehicles
AF17A-T026	Midwave Infared (MWIR) Quantum Cascade Lasers (QCL) Thermal Monitoring
AF17A-T027	Target Tracking via Deep Learning
AF17A-T028	Quantum Sensor for Direction Finding and Geolocation
AF17A-T029	Fast Optical Limiters (OL) with Enhanced Dynamic Range

CBD (Chemical and Biological Defense Program) SBIR

CBD171-001	Development of Solid-state Optical Cooler Materials to Replace Conventional Cryocoolers Used for Cooling SWIR and LWIR Infrared Detectors and Focal-plane-arrays
CBD171-002	MicroLens Hyperspectral Imager for Standoff Chemical Detection
CBD171-003	Tomographic Nanoscopy for Pathogen Identification
CBD171-004	Open-Path Optical Analyzer for Quantitative Chemical Weapons Detection
CBD171-005	Process Development and Manufacture of an Antibody-based Therapy Against Sudan ebolavirus

DHA (Defense Health Agency) SBIR

DHA17-001	Electro-Textile Medical Simulation
DHA17-002	Self-Healing Elastomer for Medical Simulation & Training
DHA17-003	Dynamics for Warfighter Avatars with Complete Articulated Anatomy
DHA17-004	A Device to Rapidly Detect Coliform Bacteria and Escherichia Coli in Field Water Samples
DHA17-005	Compression Garment with Embedded Electronics for Ambulatory Health and Performance Monitoring
DHA17-006	Development of Thermal Desorption (TD) Tube Sequential Sampler
DHA17-007	Noninvasive Monitor of Vascular Volume Fluid Shifts
DHA17-008	Self-Aligning Prosthetic Components
DHA17-009	Conformable Osteochondral Repair Platforms for Prevention of Post Traumatic Osteoarthritis
DHA17-010	Point of Injury Device to Maintain and Stabilize Moderate-Severe Traumatic Brain Injury (TBI) Casualties
DHA17-011	Point of Injury Therapy to Maintain and Stabilize Moderate-Severe Traumatic Brain Injury (TBI) Casualties.

DHA (Defense Health Agency) STTR

DHA17A-001	Medical Electro-Textile Sensor Simulation
DHA17A-002	Smart Morphing Medical Moulage
DHA17A-003	Principled Design of an Augmented Reality Trainer for Medics
DHA17A-004	Non-invasive Telemetric Assessment of Gut Microbiota Activity in Situ
DHA17A-005	Wireless Non-Invasive Advanced Control of Microprocessor Prostheses and Orthoses
DHA17A-006	Medical Device to Assess the Viability of Tissue Prior to Skin Grafting

DLA (Defense Logistics Agency)

DLA171-001	Increase Competition through Small Business Source Approval for Limited Source NSNs
DLA171-002	Reverse Engineering Technical Data Packages for Development of Alternate Sources of Supply for DLA NSNs

Navy SBIR

N171-001	Beyond Line of Sight (BLOS) High Data Rate Communications
N171-002	Intranasal Cooling for Encephalopathy Prevention (ICEP)
N171-003	Driver Performance Monitoring through Electronic Trip Tickets
N171-004	Collapsible Electronic Paper Display
N171-005	Deep Learning for Clutter Reduction in Multi-static Coherent Active Sonar Systems
N171-006	Guided Rocket Inductive Link
N171-007	Oxygen Mask Development to Improve and Facilitate Mask Discipline
N171-008	Novel Ventilating Fabric Dry Suit Technology
N171-009	Rugged Touchscreen Button with Positive Indication Feedback
N171-010	Additive Manufacturing Technology for Sonobuoy Applications
N171-011	Advanced Arresting Gear Water Twister Diagnostics and Health Monitoring

N171-012	Transition of Mission Planning Software to a Next Generation Component Based, Open Architecture using Advanced Refactoring Technology
N171-013	Photonic Switch for Laser Power Distribution
N171-014	Advanced Human-Machine Interface (HMI) for Dynamic Sensor Control
N171-015	Fiber Optic Ferrule with Internal Stepped Cavity
N171-016	Modular Multi-Platform Rotor Hub Fatigue Test Rig
N171-017	Compact, Broadband, Efficient and High Power Transmit Antenna for Airborne Electronic Attack Platforms
N171-018	In-Flight Bladder Relief
N171-019	Enhanced Long Range Line-up System (E-LRLS)
N171-020	Day, Night, and Night Vision Display Compatible Horizon Reference System
N171-021	Effectiveness Assessments of Mixed & Immersive Reality for Aviation Training
N171-022	Novel High Energy Density Fuels Development
N171-023	Computer Network Defense Trainer
N171-024	Processing and Fabrication Method to Enhance the Mechanical Performance and Extend the Overall Service Life of Arresting Gear Purchase Cable Wire
N171-025	Software Tool for Statistical Radar Signature Description of Small Sea Targets
N171-026	Aircrew-Mounted Self-Adjusting Tether System
N171-027	Innovative Approach to Full Scale Fatigue Testing using Hybrid Methodologies
N171-028	Lightweight Self-Start System for T56 Engine Driven Aircraft
N171-029	Accurate Sensing of Low Speed Vehicle Motion Relative to a Moving Platform
N171-030	Dual Chaff Air Expendable Decoy Device
N171-031	1 Micron Fiber Optic Receiver for Mil-Aero Environment
N171-032	Built-In Test Capable Aircraft Sensor and Stores Fiber Optic Interface
N171-034	Time-Resolved, Reynolds-Average Navier Stokes (RANS) / Large Eddy Simulation (LES) Flow-Modeling Tools Suitable for Gas Turbine Engine Sand and Dust Modeling
N171-035	Gamification for Combat System Employment
N171-036	Damage Visualization of Submersible Navy Composites
N171-037	Improved Magazine/Armor for Ballistic Performance
N171-038	Diffractive Optical Element for Light Field Displays (LFDs)
N171-039	SUBSAFE Hull Penetrator for Submarine High Energy Laser (HEL)
N171-040	Dual Authentication for Navy Tactical Systems
N171-041	Graphics Scene Description and Application Interface for Heterogeneous 3D Display Environments
N171-042	Improved Skirt System for Air Cushion Vehicles
N171-043	Solid State Radar Emitter Identification
N171-044	Cognitive Software Algorithms Techniques for Electronic Warfare
N171-045	Random Anti-Reflective Hydrophobic Textures on Semi-Hemispheric Domes
N171-046	Long Term, Low Voltage Storage of High Power and Energy Dense Batteries
N171-047	Advanced Minehunting Sonar Data Fusion
N171-048	Fully Adaptive Active Sonar (FAAS)
N171-049	Cyber Resiliency via Virtualization for Combat Systems

N171-050   Software-based Modular and Extensible Cybersecurity Framework for Combat Systems

N171-051   Advanced Direct Digital Exciter for Radar

N171-052   Data Science and Big Data Learning Algorithms and Analysis for Improved Operational Availability

N171-053   Automatic Acoustic Detection and Identification

N171-054   Cyber Threat Insertion and Evaluation Technology for Navy Ship Control Systems

N171-055   Methods for Measuring an Acoustic Array's Straightness and for Autonomous Mechanical Straightening to Avoid Contact with Sea Bottom Under All Operational Conditions

N171-056   Application Memory Space Integrity Monitor

N171-057   Circulator Technology for Full Integration at the Monolithic Microwave Integrated Circuit (MMIC) Level

N171-058   Agnostic Bi-Directional Data Exchange

N171-059   Verification and Optimization of Advanced Finite Element Modeling Techniques for Complex Submarine Hull Structures

N171-060   Development of Explosive Feedstock for Commercial-off-the-Shelf (COTS) 3D Printers

N171-061   Fusion Center/GUI for Shipboard Maintenance Activities and Supply Chain

N171-062   3D Image from Sensor Fusion

N171-063   Application of Telecommunications Laser Standards to Sonar Sensor Receivers

N171-064   Oil-less Cooking Deep Fat Fryer (DFF) Replacement

N171-065   Broadband Sonar Digital Signal Processing (DSP) for Undersea Marine Life and Hazard Detection & Classification

N171-066   Computerized Psychological Techniques to Teach Knowledge and Increase Skill Levels Quickly

N171-067   Biologic SONAR and Processing Network Improvement for Situational Awareness

N171-068   Innovative Capstan Rim Friction Coating

N171-069   Submarine Safety (SUBSAFE) Compliant Connection for External Sensors

N171-070   Non-Destructive Evaluation (NDE) of Additively Manufactured (AM) Parts

N171-071   Plug-and-play Analytical Framework for Distributed Structured and Unstructured Data Sets for Condition Based Maintenance Plus (CBM+)

N171-072   Removable and Maintainable Future Hull Arrays

N171-073   Submarine Shipboard Power Unbalance Correction

N171-074   Affordable, Fast-Tunable, Notch Filters at X-Band and Higher Frequencies

N171-075   Submarine Shipboard Power Supply Bridge

N171-076   Light-field Processing Unit for Extreme Multi-View Displays

N171-077   Food Service Integrated Barcode and Inventory Management System

N171-078   Culinary Specialist (CS) Food Service Support Platform

N171-079   Human Performance Self-Service Kiosk and Application

N171-080   High Fidelity Acoustic Scattering Models for Large Objects

N171-081   High Performance Thermal Interface Material for Energy Storage Devices and Other Electronic Components

N171-082   UAV-Compatible Secondary Payload for Meteorological Profiling

N171-083   Late-Stage Software Feature Reduction Tool for Security and Performance

N171-084   Artificial Intelligence for Infantry Simulation in Small Unit Decision Making Training

N171-085　Transportable Ultrashort Pulsed Laser (USPL) Characterization System

N171-086　Compact, Low Loss, Broadband Power Inductors for Navy Sonar Applications

N171-087　Autonomous Cargo Handling System

N171-088　Nickel Aluminum Bronze for Additive Manufacturing Alloy Development

N171-089　Multi-Beam, Free-Space Optical Terminal for Tactical Operations

N171-090　Understanding AM Solidification Profile Effects on Material Inhomogenieties, Defects, and Qualification

N171-091　Synthetic Vision System for Ground Forces

N171-092　Pedagogy Models for Training in Mixed Reality Learning Environments

N171-093　Theater Anti-Submarine Warfare Contextual Reasoning

N171-094　Interferometric ISAR Imaging of Maritime Targets for Improved Classification

N171-095　Shipboard Flywheel Energy Storage Parasitic Reduction

N171-096　Real Time Computation of Precision 3D Models Using Low Size, Weight, and Power (SWAP) Architectures

N171-097　Sustainable Autonomous Target Recognition of Maritime Targets from Passive ISAR Imagery

N171-098　Cellular Base Station for Low Earth Orbit Space Missions

N171-099　Next Generation Ultra High Frequency (UHF) Unified Satellite Communication Control System

N171-D01　Direct to Phase II - Unsteady Flow Analysis on Inlet and Exhaust System Distortion and Structural Analysis for Modern Propulsion Systems

Navy STTR

N17A-T001　Electro-Optic Transmissive Scanner

N17A-T002　Multi-Phase Flame Propagation Modeling for Present and Future Combustors and Augmentors

N17A-T003　Ignition Modeling for Present and Future Combustors and Augmentors

N17A-T004　Complex-Knowledge Visualization Tool

N17A-T005　Reduce Order Airwake Modeling for Aircraft/Ship Integration Modeling and Simulation

N17A-T006　Efficient Mid-Wave Infrared Quantum Cascade Lasers with Room-Temperature Wall-Plug Efficiency over 40%

N17A-T007　Innovative Packaging to Achieve Extremely Light Weight Sensor Pod Systems

N17A-T008　Mitigation or Prevention of Aging Effects in Hydrocarbon Missile Fuels

N17A-T009　Prediction of Rotor Loads from Fuselage Sensors for Improved Structural Modeling and Fatigue Life Calculation

N17A-T010　End-User Speech Recognition Support Tools for Crew Resource Management Training Systems

N17A-T011　High Density Capacitors for Compact Transmit and Receive Modules

N17A-T012　Innovative Material Handling System for the Expeditionary Mobile Base (ESB) Class Ship

N17A-T013　Low Cost Magnetic Sensor for Mine Neutralizer Identification and Charge Placement

N17A-T014　Advanced Material System for Reduced Wave Slam Energy in Combatant Craft

N17A-T015　Development of Explosive Non-Acoustic Sensing on Remotely Operated Vehicles for Littoral Threat Characterization in Complex Seabed Environments

N17A-T016　Improved Infrared Imaging with Variable Resolution Achieved via Post-Processing

N17A-T017   Learning Centered Technology and Innovative Instructional Methods for Anti-Submarine Warfare University

N17A-T018   Volumetric Atmospheric Modeling from Point Measurements or a Single Profile

N17A-T019   Reduced Cavitation, High Efficiency Outboard Propulsors for Small Planing Craft

N17A-T020   Phase-Change Materials for Tunable Infrared Devices

N17A-T021   Multi Modal Video Summarization

N17A-T022   Data Extractor for Event Pattern Archiving

N17A-T023   Degraded Synthetic Training

N17A-T024   Adaptive Optics for Nonlinear Atmospheric Propagation of Laser Pulses

N17A-T025   Innovative Collaboration for Unmanned Aerial and Dissimilar Systems

N17A-T026   Improved High-Frequency Bottom Loss Characterization

N17A-T027   Energy Efficient, Non-Silicon Digital Signal Processing (DSP)

N17A-T028   Automatic Detection of Hydrothermal Vents

N17A-T029   Multi-vehicle Collaboration with Minimal Communications and Minimal Energy

N17A-T030   Advanced Laser Based Processing System for Metal Additive Manufacturing

DARPA (Defense Advanced Research Projects Administration) SBIR

SB171-001   New Platforms for High-Throughput Culturing and Analysis of Microbial Communities

SB171-002   Automated Environmental and Biological Threat Identification System

SB171-003   New Platform Technologies for Viral and Therapeutic Evolution Assays

SB171-004   Applying Novel Materials and Fabrication Techniques to Thermionic Energy Conversion

SB171-005   Discovery

SB171-006   Code Interposition Framework for Mobile Cyber Applications

SB171-007   Modeling Human Dimensions of the Cyber Ecosystem

SB171-008   Harnessing Open-Source Signals for Detection of Systematic Intervention in Online Discourse

SB171-009   Force Protection in the Online Information Environment

SB171-010   Ultra-Compact Power Conditioning System for High Power RF Transmitters

SB171-011   Recommender Systems for Streaming Data Environments

SB171-012   Non-linear Adaptive Optics

SB171-013   Load Bearing Thermal Protection Structure for Hypersonic Flight

SB171-014   Adaptive Control and Advanced Sensing for Turbine Based Combined Cycle Vehicles

SB171-015   Spacecraft Identification Device

USSOCOM (U.S. Special Operations Command) SBIR

SOCOM17-001   Family of Light Weight Cases for 5.56mm Ammunition

SOCOM17-002   Moisture Wicking Pathway Treatment for Textiles

SOCOM17-003   Innovative CubeSat Payloads for USSOCOM Space Missions

SOCOM17-004   Big Data Network Forensics Analysis Tool Capability