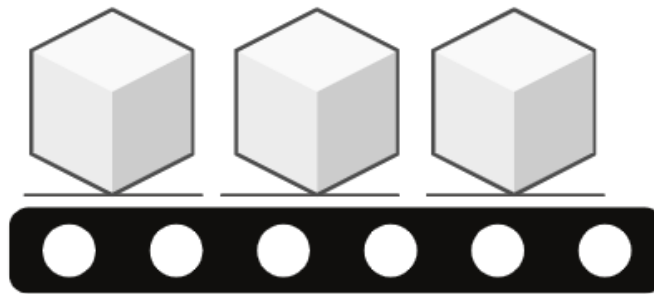


Technology Matching Guide

Sail to Success with Navy SBIR



Introduction

ETC developed this general-purpose guide as a supplement to the [Navy Webpage](#), to help our resource partners match companies to the new opportunities in the Dept. of the Navy SBIR announcement (BAA 22.2) released on April 20th, 2022. We have endeavored to categorize the SBIR topics into groupings to simplify your review. However, the reader should fully understand this is not an exact science so they should make their own judgements especially when it comes to North American Industry Classification System (NAICS) codes. Note that the vast majority of companies that decide to undertake and successfully secure an SBIR project will probably have the 541715 NAICS Code—Research and Development in the Physical, Engineering, and Life Sciences—as one of its identifying NAICS code. We sincerely hope this helps you get the underrepresented firms to these opportunities. Finally, thank you for all the feedback you can provide over the next few weeks with the new topics and any firm participation. Go, go, go!

The SBIR Process in a Nutshell



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ETC Cluster:	SBIR Requirements	Navy Technology Area
Aerospace Possible NAICS Codes: 3364 - Aerospace Product and Parts Manufacturing 336411 - Aircraft Manufacturing 336412 - Aircraft Engine and Engine Parts Manufacturing 336413 - Other Aircraft Parts and Auxiliary Equipment Manufacturing 541715 - Research and Development in the Physical, Engineering and Life Sciences 541511 - Custom Computer Programming Services	N222-114 Modern Integration/Application Techniques for Resilient Riblets (ONR)	Air Platforms; Materials / Processes; Weapons
	N222-122 High Temperature Cable and Connector Development for Radio Frequency (RF) Applications in Harsh Environments (SSP)	Battlespace Environments; Materials / Processes; Weapons
	N222-123 Software Simulation of a Thermal Protection System for Hardware-in-the-Loop (SSP)	Battlespace Environments; Materials / Processes; Weapons
	N222-127 Innovative Manufacturing/Materials in Hypersonic Thermal Protection Systems (SSP)	Battlespace Environments; Materials / Processes; Weapons
	N222-128 Development of Hypersonic Glide Body Deployable Antennas (SSP)	Air Platforms; Battlespace Environments; Weapons

ETC Cluster:	SBIR Requirements	Navy Technology Area
Artificial Intelligence (AI) / Machine Learning (ML) Possible NAICS Codes: 541511 - Custom Computer Programming Services 541512 - Computer Systems Design Services 541715 - Research and Development in the Physical, Engineering and Life Sciences 541330 - Engineering Services	N222-113 Interoperable Toolbox of Run Time Reconfigurable Digital Signal Processing Modules (ONR)	Electronics; Information Systems; Sensors
	N222-117 AI/ML for Additive Manufacturing Defect Detection (ONR)	Materials / Processes;
	N222-118 Artificial Intelligence-Driven Multi-Intelligence Multi-Attribute Metadata Enabling All-Domain Preemptive Measures (ONR)	Battlespace Environments; Information Systems; Sensors

ETC Cluster:	SBIR Requirements	Navy Technology Area
Communication Tech / Satellites	N222-112 Low-profile High-Frequency Maritime Antenna (ONR)	Electronics; Sensors
	N222-122 High Temperature Cable and Connector Development for Radio Frequency (RF) Applications in Harsh Environments (SSP)	Battlespace Environments; Materials / Processes; Weapons
	N222-128 Development of Hypersonic Glide Body Deployable Antennas (SSP)	Air Platforms; Battlespace Environments; Weapons
Possible NAICS Codes		
3342 - Communications Equipment Manufacturing		
334515 - Instrument Manufacturing for Measuring and Testing Electricity and Electrical Signals		
334511 - Search, Detection, Navigation, Guidance, Aeronautical, and Nautical System and Instrument Manufacturing		

ETC Cluster:	SBIR Requirements	Navy Technology Area
Cyber Security	N222-118 Artificial Intelligence-Driven Multi-Intelligence Multi-Attribute Metadata Enabling All-Domain Preemptive Measures (ONR)	Battlespace Environments; Information Systems; Sensors
	N222-124 Secure Data Module for Leave-Behind Applications (SSP)	Electronics; Information Systems
Possible NAICS Codes:		
541511 - Custom Computer Programming Services		
511210 - Software Publishers		
541512 - Computer Systems Design Services		

ETC Cluster:	SBIR Requirements	Navy Technology Area
	N222-088 Integrated High Power Generation for the Joint Light Tactical Vehicle (MCSC)	Ground / Sea Vehicles

Electronics/ Hardware		
Possible NAICS Codes:	N222-112 Low-profile High-Frequency Maritime Antenna (ONR)	Electronics; Sensors
3359 - Other Electrical Equipment and Component Manufacturing	N222-113 Interoperable Toolbox of Run Time Reconfigurable Digital Signal Processing Modules (ONR)	Electronics; Information Systems; Sensors
3353 - Electrical Equipment Manufacturing	N222-115 Quiet Auxiliary Propulsion Unit for Combatant Craft (ONR)	Ground / Sea Vehicles
3344 - Semiconductor and Other Electronic Component Manufacturing	N222-119 Next Generation Infantry Heads-up Displays for Close-Air Support (ONR)	Human Systems; Information Systems
334516- Analytical Laboratory Instrument	N222-124 Secure Data Module for Leave-Behind Applications (SSP)	Electronics; Information Systems
334511 - Search, Detection, Navigation, Guidance, Aeronautical, and Nautical System and Instrument Manufacturing	N222-128 Development of Hypersonic Glide Body Deployable Antennas (SSP)	Air Platforms; Battlespace Environments; Weapons

ETC Cluster:	SBIR Requirements	Navy Technology Area
Energy/ Clean Energy	N222-087 Performance and Safety Improvement of the Li-ion 6T Battery (MCSC)	Materials / Processes
Possible NAICS Codes:		
3241 - Petroleum and Coal Products Manufacturing, Fossil Fuel Electric Power Generation		
2211 - Electric Power Generation, Transmission and Distribution	N222-088 Integrated High Power Generation for the Joint Light Tactical Vehicle (MCSC)	Ground / Sea Vehicles
541715 - Research and Development in the Physical, Engineering and Life Sciences		
541330 - Engineering Services		

	N222-115 Quiet Auxiliary Propulsion Unit for Combatant Craft (ONR)	Ground / Sea Vehicles
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ETC Cluster:	SBIR Requirements	Navy Technology Area
Imaging	N222-116 Tunable, Repeatable, Calcium Lanthanum Sulfide Ceramic Powder Development (ONR)	Materials / Processes; Sensors; Weapons
Possible NAICS Codes:		
334511 - Search, Detection, Navigation, Guidance, Aeronautical, and Nautical System and Instrument Manufacturing		
541330 - Engineering Services		

ETC Cluster:	SBIR Requirements	Navy Technology Area
Materials	N222-087 Performance and Safety Improvement of the Li-ion 6T Battery	Materials / Processes
	N222-111 Advanced Manufacturing of Piezoelectric Textured Ceramic Materials (ONR)	Materials / Processes; Sensors
	N222-112 Low-profile High-Frequency Maritime Antenna (ONR)	Electronics; Sensors
	N222-114 Modern Integration/Application Techniques for Resilient Riblets (ONR)	Air Platforms; Materials / Processes; Weapons
	N222-116 Tunable, Repeatable, Calcium Lanthanum Sulfide Ceramic Powder Development (ONR)	Materials / Processes; Sensors; Weapons
	N222-117 AI/ML for Additive Manufacturing Defect Detection (ONR)	Materials / Processes;
	N222-121 Compact Sensor for Non-Destructive Propellant Mechanical Property Evaluation (SSP)	Materials / Processes; Sensors
Possible NAICS Codes:		
3252 - Resin, Synthetic Rubber, and Artificial and Synthetic Fibers and Filaments Manufacturing		

	N222-122 High Temperature Cable and Connector Development for Radio Frequency (RF) Applications in Harsh Environments (SSP)	Battlespace Environments; Materials / Processes; Weapons
	N222-123 Software Simulation of a Thermal Protection System for Hardware-in-the-Loop (SSP)	Battlespace Environments; Materials / Processes; Weapons
	N222-126 Compact Boost Motor Propellant Stabilizer Sensor (SSP)	Materials / Processes; Sensors
	N222-127 Innovative Manufacturing/Materials in Hypersonic Thermal Protection Systems (SSP)	Battlespace Environments; Materials / Processes; Weapons
	N222-128 Development of Hypersonic Glide Body Deployable Antennas (SSP)	Air Platforms; Battlespace Environments; Weapons

ETC Cluster:	SBIR Requirements	Navy Technology Area
Radio	N222-112 Low-profile High-Frequency Maritime Antenna (ONR)	Electronics; Sensors
	N222-122 High Temperature Cable and Connector Development for Radio Frequency (RF) Applications in Harsh Environments (SSP)	Battlespace Environments; Materials / Processes; Weapons
	N222-128 Development of Hypersonic Glide Body Deployable Antennas (SSP)	Air Platforms; Battlespace Environments; Weapons
Possible NAICS Codes:		
334220 - Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing		
541690 - Other Scientific and Technical Consulting Services		
334511 - Search, Detection, Navigation, Guidance, Aeronautical, and Nautical System and Instrument Manufacturing		

ETC Cluster:	SBIR Requirements	Navy Technology Area
	N222-089 Celestial Navigation System for Long Range	Battlespace Environments;

Sensors / Detection Tools	Unmanned Surface Vessels (MCSC)	Electronics; Sensors
Possible NAICS Codes 334511 - Search, Detection, Navigation, Guidance, Aeronautical, and Nautical System and Instrument Manufacturing 334413 - Semiconductor and Related Device Manufacturing 334513 - Instruments and Related Products Manufacturing for Measuring, Displaying, and Controlling Industrial Process Variables 541330 - Engineering Services	N222-111 Advanced Manufacturing of Piezoelectric Textured Ceramic Materials (ONR)	Materials / Processes; Sensors
	N222-117 AI/ML for Additive Manufacturing Defect Detection (ONR)	Materials / Processes;
	N222-120 Next-generation Underwater Life-support System (Rebreather) (ONR)	Biomedical; Human Systems; Materials / Processes
	N222-121 Compact Sensor for Non-Destructive Propellant Mechanical Property Evaluation (SSP)	Materials / Processes; Sensors
	N222-126 Compact Boost Motor Propellant Stabilizer Sensor (SSP)	Materials / Processes; Sensors

ETC Cluster: Ships / Submarines	SBIR Requirements	Navy Technology Area
Possible NAICS Code: 3366 - Ship and Boat Building 336611 - Ship Building and Repairing 336612 - Boat Building 334511 - Search, Detection, Navigation, Guidance, Aeronautical, and Nautical System and Instrument Manufacturing	N222-115 Quiet Auxiliary Propulsion Unit for Combatant Craft (ONR)	Ground / Sea Vehicles

ETC Cluster:	SBIR Requirements	Navy Technology Area
Data Analytics / Software	N222-117 AI/ML for Additive Manufacturing Defect Detection (ONR)	Materials / Processes;
	N222-118 Artificial Intelligence-Driven Multi-Intelligence Multi-Attribute Metadata Enabling All-Domain Preemptive Measures (ONR)	Battlespace Environments; Information Systems; Sensors
	N222-123 Software Simulation of a Thermal Protection System for Hardware-in-the-Loop (SSP)	Battlespace Environments; Materials / Processes; Weapons
	N222-124 Secure Data Module for Leave-Behind Applications (SSP)	Electronics; Information Systems
	N222-125 Development of a Shore Based Information Systems (SBIS) Interface Software (SSP)	Air Platforms; Battlespace Environments; Weapons
Possible NAICS Codes: 541511 - Custom Computer Programming Services 511210 - Software Publishers 541512 - Computer Systems Design Services 541715 - Research and Development in the Physical, Engineering and Life Sciences 541330 - Engineering Services		

ETC Cluster:	SBIR Requirements	Navy Technology Area
Weapons	N222-125 Development of a Shore Based Information Systems (SBIS) Interface Software (SSP)	Air Platforms; Battlespace Environments; Weapons
	N222-127 Innovative Manufacturing/Materials in Hypersonic Thermal Protection Systems (SSP)	Battlespace Environments; Materials / Processes; Weapons
Possible NAICS Codes: 336992 - Military Armored Vehicle, Tank, and Tank Component Manufacturing 336414 - Guided Missile and Space Vehicle Manufacturing, Small Arms Ammunition Manufacturing 33299 - Ammunition (except Small Arms) Manufacturing 332994 - Small Arms, Ordnance, and Ordnance Accessories Manufacturing 325920 - Explosives Manufacturing		

ETC Cluster:	SBIR Requirements	Navy Technology Area
<p>Human Science</p>	<p>N222-119 Next Generation Infantry Heads-up Displays for Close-Air Support (ONR)</p>	<p>Human Systems; Information Systems</p>
	<p>N222-120 Next-generation Underwater Life-support System (Rebreather) (ONR)</p>	<p>Biomedical; Human Systems; Materials / Processes</p>
<p>Possible NAICS Codes-</p> <p>541720-M Research and Development in the Social Sciences and Humanities</p>		

ETC Cluster:	SBIR Requirements	Navy Technology Area
<p>Telescopes / Astronomical</p>	<p>N222-089 Celestial Navigation System for Long Range Unmanned Surface Vessels (MCSC)</p>	<p>Battlespace Environments; Electronics; Sensors</p>
<p>Possible NAICS Codes-</p> <p>333314 - Telescopes manufacturing 811219 - Optical instrument repair and maintenance services (e.g., microscopes, telescopes)</p>		

ETC Cluster:

SBIR Requirements

Navy Technology Area

Medical

[N222-120 Next-generation Underwater Life-support System \(Rebreather\) \(ONR\)](#)

Biomedical; Human Systems;
Materials / Processes

Possible NAICS Codes:

541714 - Research and Development in Biotechnology

3391 -

Medical Equipment and Supplies Manufacturing

541715 - Research and Development in the Physical, Engineering and Life Sciences

541330 Engineering Services

Appendix - Acronym Guide

Department of Navy (DON) Systems Commands (SYSCOMS)

- [Naval Air Systems Command](#) (NAVAIR)
- [Office of Naval Research](#) (ONR)
- [Strategic Systems Programs](#) (SSP)
- [Naval Sea Systems Command](#) (NAVSEA)
- [Naval Facilities Engineering Command](#) (NAVFAC)
- [Marine Corps Systems Command](#) (MCSC)
- [Naval Supply Systems Command](#) (NAVSUP)
- [Naval Information Warfare Systems Command](#) (NAVWAR)