DEPARTMENT OF THE NAVY

SBIR/STTR

TRANSITIONS

2020 SUMMER

FROM THE DIRECTOR

Easier Makes Faster

Bob Smith, Director DON SBIR/STTR

With a bureaucracy it's hard to make change. But leadership has been asking us to go even faster, and they gave us the support to make it happen.

We were looking at improving the business side of what we do. We didn't just decide yesterday that we needed to go faster. We've been working it. We identified accelerating the contracting process as one of our goals, and we found that the Naval Air Warfare Center at Lakehurst, N.J., was doing it before we even approached them.

We started a pilot program to see if they could help us with our contracting, and we eventually brought all of the Navy SBIR/STTR contracting up to Lakehurst (the Marines have a different accounting system, so they do their own contracting).

I want to recognize the Lakehurst team for their phenomenal work establishing best practices and processes for SBIR contracts. They have people who are well trained, focused on their customers, and stay with it. It has made everything easier for the companies as well as the government TPOCs.

Last year, we brought our SBIR directors together and looked at the best practices, and how we can scale those up to all of the Navy.

We looked at what makes sense. One of the systems commands was using an automated tracking tool to record the progress of all their evaluation reports. We've ported that tracking tool to everybody.

One way to make the process faster is to make it easier. We conducted a pilot to reduce the size of proposals from 20 pages to five. It helped, but we realized that wasn't enough space for the necessary information. We found the sweet spot for proposals is 10 pages. That's the standard now. That means the proposal evaluation committees have half as much to read as before, so they can get through them faster.

We also changed the payment cycle. Instead of waiting 60 days before companies can submit their first invoice, now they can submit an invoice for half the value of the contract after the first two weeks, and get paid faster.

It takes a team focused on supporting our Naval

warfighters to achieve maximum results. With the whole DoN SBIR team—TPOCs, program managers, financial specialists and contracts—working diligently together every day, we have demonstrated why small businesses find the department to be a fantastic partner.

Connect, collaborate and coordinate

The Assistant Secretary of the Navy for Research, Development & Acquisition (ASN (RDA)) created the NavalX program to increase and facilitate outreach and collaboration, and established a network of TechBridges located around the nation to be the connective tissue between the government and those local innovation and technology ecosystems.

Each TechBridge has a director who is tied with a local military installation, Navy labs, warfare centers or educational institutions, and is linked to industry and academic facilities nearby. In that way they all have a different, localized focus. They are located outside the government fence line, so there is no impediment to coming aboard and getting engaged. Our TechBridge teams know small business concerns, and are connected to regional, state, and local small business resources to help companies get into the game. They are there to help you develop faster ways to connect, collaborate and coordinate. I invite you to read the story about TechBridges in this issue of Transitions.

Progress despite a pandemic

All of us have had to make some adjustments during the COVID-19 shutdown—including our small companies, academic partners, primes and the government. Travel has been drastically curtailed. Our companies have been working to get some of their employees into the shop some of the time. Our STTR partners have had limited access to their laboratories because campuses have closed. We're all adjusting to telework. One of our SBIR companies, Propel LLC, shifted its work from specialized damage control garments for the submarine force to making facemasks for emergency health care providers.

While we did not anticipate the pandemic, we were well positioned when the call came down from the ASN (RDA) to support the defense industrial base. Because of our reengineering efforts over the past year to simplify the process, we have been able to open the aperture to more proposals and accelerate the evaluation process. Our collective DoN team looked at what we had planned and shifted as much as we could to the left to help our small businesses remain viable. We increased the number of awards, and where possible, we executed increments earlier, and put more money on the street. So, while we didn't get more funding, we executed faster. If there was a downside, it's that we used up all our flexibility for the rest of the fiscal year in that surge to support the nation in the midst of this crisis. But a new fiscal year is already upon us.

We all miss those face-to-face meetings so important to collaboration. We're doing more webinars and virtual meetings. Oddly enough, however, I'm actually talking to more companies than before because they don't feel intimidated by some of our big events and are not afraid to contact me one-on-one. While I long for the day when we can share a cup of coffee with you again, we're still here to talk to you, so we can together help our warfighters and our nation.

Despite these uncertain times, the Navy is still the Navy. We still have Sailors and Marines in harm's way. We still have to solve their problems, and we invite you to help us with solutions. We make a great partner.

Sincerely,

Robert L. Smith
Director DON SBIR/STTR

NavalX TechBridge

Connecting, Co-investing in Communities to Raise Collective Competencies and Capabilities

By Edward Lundquist

ASN (RD&A) James "Hondo" Geurts

Assistant Secretary of the Navy for Research, Development & Acquisition (ASN (RD&A)) James "Hondo" Geurts established NavalX in 2019 to be a "Department of Navy (DoN) workforce 'super-connector,' focused on scaling non-traditional agility methods across the DoN workforce."

As part of NavalX, TechBridges have been created across the country as storefront "agility cells" to broaden the network to help the Navy and Marine Corps learn and act faster.

"NavalX is a way to connect up our own network, and operate at network speed across the Department of the Navy," said Geurts, speaking at a Navy Memorial Foundation forum. "Wandering through the warfare centers and systems commands to find the person to talk to was pretty onerous and likely a barrier to the velocity I'm looking for. I want to reduce the barriers to entry for participants to bring us new solutions and ideas. Think of NavalX as the 'network,' and the TechBridges as the nodes on the network. The people on the TechBridge team are super-connectors. They look for opportunities and get problems or ideas in the hands of the right people."

This storefront concept applies both internally within the Department of the Navy, but also externally, with other federal, state, regional and local government organizations, academia, non-profits, trade and professional organizations and industry.

According to DoN Tech Bridge Director Whitney Tallarico, Tech Bridges are a way to convene disparate stakeholders. "The Navy is not alone in developing technology, growing our workforce or improving our skillsets. Just like industry and academia, we're trying to find talent and foster innovation. The great thing is that we already have people that know how to do this. The challenge is that they are rarely surrounded by the right people to complete the task. TechBridges want to provide them with the platform to connect."

> ***"Think of NavalX as the 'network,' and the TechBridges as the nodes on the network. The people on the TechBridge team are super-connectors. They look for opportunities, and get problems or ideas in the hands of the right people."***
>
> *ASN (RD&A) James "Hondo" Geurts*

"The more our people work through the Tech Bridges, the more they can see how to connect not only across the Department of Navy but also to industry and academia," Tallarico said. "If we find an

innovative company, idea or technology, we tell all of the TechBridges. We're getting better and faster at making these connections."

When it comes to SBIR specifically, Tallarico said there are a number of ways to connect. "We help internal DoN groups with the process of submitting topics, and can connect resources to problems if there is a serious capability gap. For small businesses that don't know who to talk to within the DoN, we can connect them with SBIR leads and other points of contact and sources of funding, and invite them to outreach events and small business engagements. We search for people who have problems that SBIR technologies can solve. If someone in the department asks about a problem set or capability gap, we can provide them with a whole list of companies who have addressed that issue in the past. We're making it faster to find the technology they need."

The TechBridges are generally tied to one or more warfare center and the technology-ecosystems in those areas. There are, however, exceptions.

Accelerating learning

"Each TechBridge is a little different. And we're even more different," said Chris Manuel, director of the Central Coast TechBridge.

Unlike the other TechBridges, the Central Coast TechBridge is not tied to one of the warfare centers, but is connected to a unique academic institution in the Naval Postgraduate School (NPS) at Monterey, not far from one of the tech hubs of the universe, Silicon Valley.

NPS students are primarily mid-level military officers (not just from the Navy and Marine Corps,

NavalX Tech Bridge Locations

The NavalX Tech Bridges are connected networks that enhance collaboration between Naval labs, industry, academia, and other military branches. They offer an off-base collaboration space that is more easily accessible to build productive partnerships and accelerate delivery of dual use solutions to the warfighter. They offer access to state and local government and academic agencies creating a richer regional innovation ecosystem and further supporting economic development.

Current Locations	
Capital	National Capital Region
Central Coast	Monterey, Calif.
Central Florida	Orlando, Fla.
Inland Empire	Norco, Calif.
Mid-Atlantic	Norfolk, Va.
Midwest	Crane, Ind.
Northeast	Newport, R.I.
Northwest	Keyport, Wash.
Palmetto	Charleston, S.C.
SoCal	San Diego, Calif.
Southern Maryland	Patuxent River, Md.
Ventura	Ventura, Calif.

but from all military services, and international students as well), who have been out in the fleet or with operating forces. While earning an advanced degree from a respected university, NPS students research real-world DoD issues that they often have first-hand experience with as military professionals. "With their experience, they understand the problems that need to be solved, and during their time at NPS they can investigate and develop solutions to those problems and bring them back to the fleet," Manuel said.

"TechBridge is a way to engage those students with the tech community, including the whole spectrum of SBIR companies, while at the same time we can provide technologists an insight to the warfighter's perspective. We can connect our students with the diverse faculty expertise that resides here on campus, as well as externally through TechBridge. We're helping the students get exposed to different ways of thinking, and it's accelerating their education here at NPS, and ultimately benefiting the fleet," Manuel said.

TechBridges align with not-for-profits under partnership intermediary agreements (PIAs), which are relationships between the government entity, such as a lab or warfare center, and the not-for-profit, which in turn has access to infinite relationships.

According to Megen Schlesinger, deputy director of the Central Coast TechBridge, if the government contracts with that PIA, they can then sub-contract out to a wide variety of companies, individuals or institutions. "Because it's a private business that is also not-for-profit, these organizations can easily engage with non-traditional players across our regional innovation ecosystem. This federal acquisition pathway allows government resources to be used on small, agile non-traditional players, including SBIR awardees, to perform some of this collaborative work along the tech-transfer spectrum."

Making sparks fly

The Northeast TechBridge is affiliated with the Naval Undersea Warfare Center at Newport, R.I., and works with the many tech and defense industries in New England.

"We work to help our SBIR/STTR companies, and connect them to people and companies in our ecosystem that are pivotal to helping our SBIR/STTR participants work and thrive," said Lee Silvestre of the Northeast TechBridge. "We rarely receive a call that doesn't end up generating a dozen or more ideas and connections."

Silvestre has worked for large defense system integrators, small tech startups and not-for-profits.

"I know and understand the players in defense, to include their funding and contracting mechanisms, and I absolutely love the innovation you find in the private sector. By bringing those two worlds together in a compact region as we have here in New England, I feel like an old-fashioned telephone switchboard operator, where I'm plugging one person in with somebody else. That's what I'm doing all day," she said. "I'm making those connections, so that sparks fly."

More information is available at the following link: https://www.secnav.navy.mil/agility/Pages/techbridges.aspx

Airborne Networking Live-Virtual-Constructive Environment

Source: Jeff Hoyle, Vice President, Federal Programs, SCALABLE Network Technologies

As an active participant in the Navy SBIR/STTR Transition Program (Navy STP), SCALABLE Network Technologies (SCALABLE) worked with the Multifunction Information Distribution Systems (MIDS) Program Manager and Naval Air Warfare Center Weapons Division China Lake to develop and optimize an Airborne Networking Live-Virtual-Constructive (LVC) Environment to support rapid and comprehensive assessment of network performance in support of future airborne networks mission concepts of operation (ConOps).

SCALABLE's Airborne Networking LVC Environment enables both government and defense prime organizations to realistically model airborne network communications in environments of interest for future warfighting, including highly contested environments with near-peer adversaries. Use of a common LVC environment by both government and defense prime organizations significantly enhances information sharing and collaborative development of future capabilities.

SCALABLE's modeling and simulation tools can perform both pure simulation, which is completely computer-generated, and emulation, which communicates with real radio hardware and network components in real time. Simulation allows engineers to run through many "what if" scenario analyses with large scale airborne networks for different warfighting concepts as quickly as possible.

The tools also can connect live equipment up to that environment and do more hardcore testing to determine how well whatever new hardware or software that will deploy on Navy or Marine Corps aircraft is going to work, particularly scaled up to large numbers of equipment. "A lot of times when you are testing new hardware and software you don't necessarily want to buy lots of components right away so the Live-Virtual-Constructive environment helps you test small numbers and still represent how it's going to work when you scale up to larger networks," said Jeff Hoyle, a vice president at SCALABLE.

Understanding the end-to-end performance of mission command applications executing on airborne networks under realistic operational conditions is critical for development of future capabilities and evaluation of new warfighting concepts. Identifying and mitigating any shortfalls in application performance can provide significant value to warfighters and directly save lives by ensuring communication and targeting data shared among command and control, weapon launching, and electronic warfare platforms all will work as expected and as required to be operationally successful.

"By testing systems as they are developed, when warfighters go into battle they are going to have

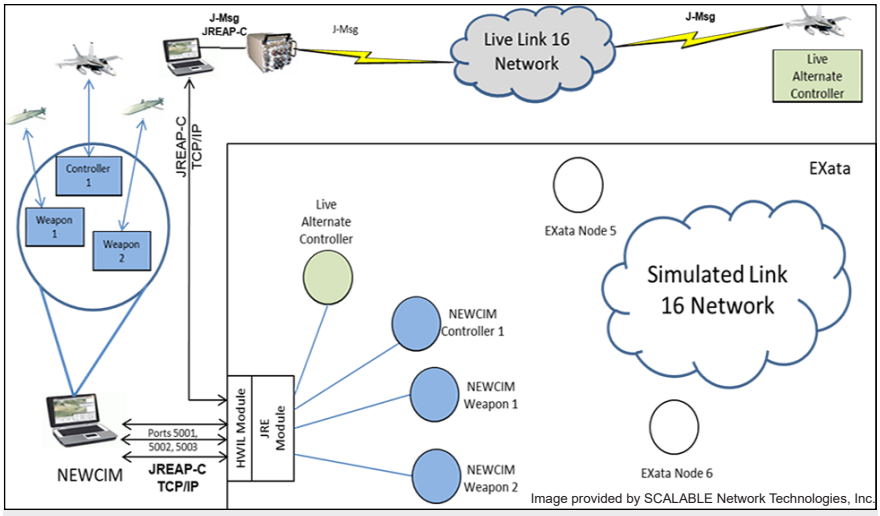

Image provided by SCALABLE Network Technologies, Inc.

A simulated Link 16 network models how well the network will work live.

systems that will work for them at the speed and the scale that they need. So if it's a large force-on-force event, they need to be able to scale up these airborne networks in order to handle all the targeting information that is required for whatever the particular mission is. You've got to make sure that equipment is going to work in the harshest environment you can imagine," Hoyle said.

This project enables predictable communications in all physical and cyber warfighting domains, enhancing future integrated fires and cooperative engagement capabilities for all Link-16 network capable platforms, including tactical aircraft, ships and submarines.

Specific capabilities provided by the Airborne Networking LVC Environment include:

- Link-16 Network System-in-the-Loop Capability
- Tactical Targeting Network Technology (TTNT) Waveform Compatibility
- Joint Range Extension Applications Protocol Version C (JREAP-C) Application Layer Model
- J-Series Message Generation and Consumption
- Standards Compliant External Interfaces (e.g., Distributed Interaction Simulation (DIS) Interface)
- Net-Enabled Weapon Control Interface Module (NEWCIM) Interoperability
- External Simulation System Integration (e.g., Advanced Framework for Simulation, Integration and Modeling (AFSIM))

The Airborne Networking LVC Environment has successfully transitioned to the Naval Air Warfare Center Weapons Division China Lake for use in their Tactical Network Model Development Branch. It has also transitioned to Naval Air platform providers responsible for the E-2D Hawkeye (Northrop Grumman Aeronautics Systems), F/A-18 Super Hornet (Boeing Defense) and MQ-25 Stingray (Boeing Defense). Government and defense prime organizations are using the Airborne Networking LVC Environment to evaluate future airborne networking capabilities and warfighting concepts. Each organization continues to add additional capabilities to their LVC environments through new commercial licensing and additional development services provided by SCALABLE.

The primes building these platforms and integrating all the equipment can test the same way that China Lake is testing at the government laboratory's facility. "It enables the sharing of models as well as hardware and software that can be tested in the loop and so, for example, as Boeing is developing the MQ-25, they need to make sure it's going to be able to network. It's even more challenging for an MQ-25 because it's an unmanned aircraft that doesn't have the benefit of an operator who can make decisions; it has to do that on its own as it's performing its mission. As Boeing is developing those systems to be able to do that they need to test that in situ with other aircraft and that starts in the modeling and simulation world before moving to actual flights, identifying and fixing potential issues in a simulation environment while you are still on the ground," Hoyle explained.

According to Hoyle, the biggest benefit of participating in Navy STP was the events, particularly the Navy Forum for SBIR/STTR Transition (Navy FST). "At Sea-Air Space we got lots of exposure to government personnel as well as potential prime personnel and got to talk to them about what we are doing and show them the capabilities we are providing."

Thanks to SCALABLE's SBIR-supported technology, current and future government and defense industry customers can plan and deploy reliable Link-16 networks, enabling predictable communication in all warfighting domains, using less time and fewer resources.

Navy FST to be Held with USMC SBIR/RIF LMUA

Department of the Navy Forum for SBIR/STTR Transition (Navy FST) events are now "on the road," showcasing Department of the Navy SBIR/STTR Transition Program (Navy STP) Phase II companies' technologies at multiple events throughout the year. The first of our focused technology events for the current program year will be the U.S. Marine Corps (USMC) SBIR/Rapid Innovation Fund (RIF) Limited Military Utility Assessment (LMUA) and Demonstration Week 2020, held 17-19 November 2020.

Marine Corps Systems Command (MCSC) Deputy to the Commander of SEAL is the sponsor for the LMUA with the SBIR Program Office serving as the command lead. Portfolio Manager (PfM) Ground Combat Element Systems (GCES) and PfM Logistics Combat Element Systems (LCES) are providing SBIR prototypes for assessment.

Also participating are Program Executive Office Land Systems (PEO LS), Joint Non-Lethal Weapons Directorate (JNLWD), Office of Naval Research (ONR), Naval Air Systems Command (NAVAIR), and Naval Surface Warfare Center Indian Head, Demonstration and Assessment Team (DAT).

The LMUA, held at MCSC Parade Field, Quantico, Va., will include about 30 Phase I and II SBIR technologies.

The purpose of the USMC event is to facilitate the transition to the fleet of promising SBIR- and RIF-developed technologies. Navy FST participants will be able to present their technologies, demonstrate their prototypes and receive feedback on their technologies from Marines and Sailors and get exposure to USMC acquisition decision makers to facilitate transition.

Focused technology events that showcase Navy STP participants' technologies provide a more precise way to connect the Navy STP small business innovators with Navy decisionmakers and industry across the country. Attending more localized events focused on specific technologies increases opportunities for small businesses to identify transition possibilities.

For updates on showcased technologies, upcoming opportunities, and newly scheduled Navy FST events, visit:

DEPARTMENT OF THE NAVY
FST
Forum For SBIR/STTR Transition
an STP Event

www.NavyFST.com.

NAVY FST Goes Virtual Along with Sea-Air-Space and AIAA

By Jennifer Reisch, Navy STP Managing Editor

The Department of Navy SBIR/STTR Transition Program (Navy STP) promoted several innovative Navy SBIR/STTR projects via virtual Forum for SBIR/STTR Transition (Navy FST) events at the 2020 Sea-Air-Space global maritime exposition and the American Institute of Aeronautics and Astronautics (AIAA) Aviation Forum. These large events are held live annually; however, due to the COVID-19 pandemic they were unable to happen in person as scheduled. The pandemic did not stop the Navy STP from moving forward virtually to highlight our small businesses.

Sea-Air-Space is sponsored by the Navy League of the United States, which brings U.S. defense industry and key military decision-makers together. Twenty companies recorded their Tech Talks, which were promoted on the Sea-Air-Space website.

The SBIR/STTR participating projects covered these technology focus areas:

- Aviation & Avionics Enhancements
- Communications & Cyber
- EO/IR & EW Systems Support
- Logistics & Maintenance
- UUV/USV & Undersea Warfare
- Warfighter Tools & Support

Links to the Tech Talks can be found on the Navy STP website: https://navyfst.com/events/fst-at-sas2020/

The AIAA Forum covers the entire spectrum of aviation business, research, development, and technology. For AIAA, the Navy FST projects focused on the following technology areas:

- Additive Manufacturing
- Aircrew Equipment & Training
- Antennas, Sensors & Self-Defense Systems
- Aviation Design & Test Tools
- Battery & Power Technologies
- Fiber Optics/Photonic Technologies
- Structural Health Monitoring & Repair Advancements

Links to the Tech Talks are available on the Navy STP website: https://navyfst.com/events/fst-at-aiaa/

While these Navy FST events were unable to bring our innovative companies face-to-face with potential partners and customers, the companies still have a platform to share how their Navy-funded developments can meet the current and emerging technology needs of warfighters. Interested customers can reach out to Navy FST at navyfst@atsicorp.com to request an opportunity to “Meet the Expert” behind the SBIR/STTR-supported technologies. Despite the challenges created by COVID-19, these experts are adapting and still delivering tomorrow’s technology today.

First Look: A Snapshot of this year's DoN SBIR/STTR Transition Program (Navy STP) Participants

The following pages provide a first look at the Phase II companies currently enrolled in the DoN SBIR/STTR Transition Program (Navy STP). The companies are listed by SYSCOM in alphabetical order, under OSD Communities of Interest (CoI) categories most appropriate to their technology. If you see something of interest, and want to know more, please contact the company directly. Corporate information and technology quad charts, abstracts, thumbnail descriptions, and company capability brochures for the companies listed below will be available through the Virtual Transition Marketplace (VTM) online database of innovative Phase II SBIR/STTR technologies in December 2020. You can access the VTM at: https://www.navyfst.com/vtm/.

SBIR/STTR Transition Program (STP) Participants

	Company / Topic Title	Topic #	POC	POC Phone	POC Email	Navy FST
Advanced ELectronics	**NAVAIR**					
	International Electronic Machines Corporation	A02-075	Ryk Spoor	(518)268-1636 x125	rspoor@iem.net	SAS
	Non-Contacting Torque Sensor for Helicopter Tail Rotor Drive Systems.					
	Transwave Photonics, LLC	N182-109	Seungyong Jung	(631)682-3260	sjung@transwavephotonics.com	NAVAIR
	Monolithic High-Power Qcl-Based Photonic Integrated Circuits For Two-Dimensional Beam Steering					
	NAVFAC					
	Creare LLC	N172-123	Paul Movizzo	(603)643-3800	pgmovizzo@creare.com	SAS
	Sea State Prediction System					
	NAVSEA					
	Charles River Analytics Inc.	N181-044	Shashank Manjunath	(617)491-3474 x598	smanjunath@cra.com	NAVSEA
	Turbulence Mitigation, Error Reduction, and Increased Contrast (TURMERIC)					
	Prometheus Inc.	N093-198	Katherine Brown	(703)861-5746	kbrown@prometheus-us.com	NAVSEA
	MIRK to Improve ASW & Reduce False Alarms					
	NAVWAR					
	ROCCOR, LLC	N172-137	Mario Saldana	(559)303-9944	mario.saldana@roccor.com	WEST 2021
	Advanced Cooling Technologies For Multifunctional Information Distribution System (MIDS) Terminals					
	ONR					
	BNNT, LLC	N181-078	Scott Powell	(330)374-7737	scott.powell@bgi-llc.com	NAVAIR
	Novel Thermal Management Materials Technologies for High Power Naval Systems					
Air Platforms	**MARCOR**					
	D'Angelo Technologies, LLC	N172-100	Miranda Arnett		miranda@dangelotechnologies.com	NAVAIR
	Single Surface High Altitude Low Opening Parachute					
	NAVAIR					
	ATA Engineering, Inc.	N181-010	Heather L. Wilkens, Ph.D.	(858)480-2043	heather.wilkens@ata-e.com	NAVAIR
	Rotorcraft Integrated Electro-Optic/Infrared (EO/IR) Plumes and Effects Signature Modeling					
	BASCOM Hunter Technologies	N18A-T001	William Nostadt	(419)889-1820	nostadt@bascomhunter.com	NAVAIR
	Cooling System for Laser Enclosure					

	Company / Topic Title	Topic #	POC	POC Phone	POC Email	Navy FST
Air Platforms	**CFD Research Corporation**	N182-110	Vincent Harrand		vincent.harrand@cfdrc.com	NAVAIR
	Development and Validation of a Computational Tool for Missile Flight Through Rain					
	Corrdesa LLC	N162-129	Michelle Rose	(770)683-3960	mrose@corrdesa.com	SAS
	Optimized Galvanic Corrosion Control of Repair Bushings and Fasteners Utilizing Advanced Performance Organic Coatings					
	Corrdesa LLC	N112-154	Michelle Rose	(770)683-3960	mrose@corrdesa.com	SAS
	Selective Electroplating Technology Improvement (SETI)					
	Freedom Photonics LLC	N182-101	Maddy Woodson	(805)967-4900	mwoodson@freedomphotonics.com	NAVAIR
	Multicore Fiber Optic Packaged Photonic Integrated Circuits for Wideband RF over Fiber					
	Freedom Photonics LLC	N171-031	Maddy Woodson	(805)967-4900	mwoodson@freedomphotonics.com	NAVAIR
	1 Micron Fiber Optic Receiver for Mil-Aero Environment					
	Luna Innovations Incorporated	N182-114	David Remer	(434)220-9448	remerd@lunainc.com	NAVAIR
	Wahter Wearable Aircrew Hydration Tracking and Extended Recording					
	Lynntech, Inc.	N181-021	Brian Hennings	(979)764-2234	brian.hennings@lynntech.com	NAVAIR
	Innovative Ultra Violet and Ozone Resistant Material for Hydraulic Clamp Cushions					
	Mainstream Engineering Corporation	N181-005	John Michael Van Treeck	(321)631-3550	jvantreeck@mainstream-engr.com	SAS
	High Power Density Aircraft Power Factor Correction					
	Nextech Materials, Ltd. Dba Nexceris, LLC	N181-013	Scott Swartz	(614)842-6606	s.swartz@nexceris.com	SAS
	Compact, Lightweight, Power-Dense, Integrated Fuel Cell System					
	Precision Combustion, Inc.	N182-118	Anthony Anderson	(203)287-3700	aanderson@precision-combustion.com	SAS
	System for Onboard Engine and Bleed Air Monitoring and Filtering					
	Skyward, Ltd.	N172-120	Dan Cyphers	(937)252-2710	dcyphers@skywardltd.com	NAVAIR
	Mitigation of Helmet Vibration					
	Systems Technology, Inc.	N181-017	Amanda Lampton	(310)679-2281	alampton@systemstech.com	NAVAIR
	Real-Time Turbulence Recognition and Reporting System for Unmanned Systems					
	Technical Data Analysis, Inc.	N161-010	Mehdi Naderi	(703)237-1300	mnaderi@tda-i.com	NAVAIR
	Novel Method to Utilize Multi-Scale Physics-Based Technique for Crack Path Determination in Fiber-Reinforced Composites					
	TDA Research Inc.	N182-121	Wallace Ellis	(303)940-2331	wellis@tda.com	NAVAIR
	Low-Density, Low-Volume Explosion Suppression Material for Aircraft Fuel Tanks					
	Technology Service Corporation	N172-118	Don Akamine	(310)754-4210	don.akamine@tsc.com	NAVAIR
	Laser Target and Analysis Board Development					
	ONR					
	Creare LLC	N18A-T023	Darin Knaus	(603)643-2355	dak@creare.com	NAVAIR
	Engine Particle Ingestion Classifier for Gas Turbine Engines					
	Platform Aerospace	AF171-124	Tony Jones	(737)999-2986	anthony.jones@platformaero.com	SAS
	Ultra-Endurance UAV					
Autonomy	**NAVAIR**					
	Barron Associates Inc.	N17B-T034	Nathan Richards	(434)973-1215	richards@barron-associates.com	NAVAIR
	Risk-Based Unmanned Air System (UAS) Mission Path Planning Capability					
	Near Earth Autonomy, Inc.	N152-084	John Bonanni	(724)699-4898	john.bonanni@nearearth.aero	NAVAIR
	Robust Relative Navigation and Control for Autonomous Ship-Based Landing of Resupply Vertical Take-Off and Landing Aircraft					
	Opto-Knowledge Systems, Inc. (OKSI)	N17B-T035	Marco Romani	(415)412-9203	marco.romani@optoknowledge.com	NAVAIR
	Cognitive Adaptation and Mission Optimization (CAMO) for Autonomous Teams of UAS Platforms					
	NAVSEA					
	Scientific Systems Company, Inc.	N181-061	Jeremy O'Neal	(401)484-4827	jeremy.oneal@ssci.com	SAS
	Total Infrastructure and Mission Planning Suite					

	Company / Topic Title	Topic #	POC	POC Phone	POC Email	Navy FST
Autonomy	**Spatial Integrated Systems, Inc.**	N141-058	Richard Simon	(757) 461-5206 x103	rick.simon@sisinc.org	NAVSEA
	High Sea State Automated Deployment and Retrieval of Towed Bodies From a Small Surface Platform					
	ONR					
	Dynamic Dimension Technologies	N181-077	Karl Loedler	(703)963-2204	kleodler@dynamicdimensiontechnologies.com	NAVSEA
	Surf Zone Simulation for Autonomous Amphibious Vehicles					
Battlespace Environments	**NAVAIR**					
	Boston Engineering Corporation	N181-012	David Shane	(781)314-0760	dshane@boston-engineering.com	NAVAIR
	Low Cost Persistent Environmental Measurement System					
	Boston Engineering Corporation	NOAA141-842W	David Shane	(781)314-0760	dshane@boston-engineering.com	NAVSEA
	Low-Cost Mcm Sound Velocity Profiler Based on MASED					
	ONR					
	ARiA	N181-082	Zaki Zuberi	(301)789-7094	zaki.zuberi@ariacoustics.com	NAVAIR
	Multi-Dimensional Ambient Noise Model					
Biomedical (ASBREM)	**MARCOR**					
	Vivonics Inc.	N171-002	Ryan Myers Ph.D.	(781)373-1930	rmyers@vivonics.com	LMUA
	Phase II: Intranasal Cooling for Encephalopathy Prevention in Combat Casualties (ICEPICC)					
	NAVAIR					
	Intelligent Automation, Inc.	N172-120	Arvind Bhat	(310)294-5254	abhat@i-a-i.com	NAVAIR
	Magnetorheological Active Damper with Linear Resonating Actuator (MAD-LRA) and Magnetorheological Impact Foams (MIF) for Mitigation of Helmet Vibration					
Command, Control, Communications, Computers, & Intelligence (C4I)	**MARCOR**					
	FIRST RF Corporation	N171-001	Dean Paschen	(303)449-5211	dpaschen@firstrf.com	LMUA
	Beyond Line of Sight (BLOS) High Data Rate Communications					
	NAVAIR					
	Aptima, Inc.	N17B-T032	Shawn Weil		sweil@aptima.com	SAS
	TACTIC-D II: Techniques to Adjust Computational Trends Involving Changing Data					
	Daniel H. Wagner, Associates, Inc.	N18A-T002	Brandon Lindley	(703)938-2032	brandon.lindley@va.wagner.com	NAVAIR
	Active Sonar Statistical Estimation Tool (ASSET)					
	FIRST RF Corporation	N181-007	Dean Paschen	(303)449-5211	dpaschen@firstrf.com	WEST 2021
	Robust Communications Relay with Distributed Airborne Reliable Wide-Area Interoperable Network (DARWIN) for Manned-Unmanned Teaming an a Spectrum Denied Environment					
	Fuse Integration, Inc.	N181-007	Rebecca Unetic	(952)994-3323	rebecca.unetic@fuseintegration.com	SAS
	Robust Communications Relay with Distributed Airborne Reliable Wide-Area Interoperable Network (Darwin) for Manned-Unmanned Teaming in a Spectrum Denied Environment					
	Intelligent Automation, Inc.	N181-006	Arvind Bhat	(301)294-5254	abhat@i-a-i.com	WEST 2021
	Miniature S-band T/R Module for Phased Array Radar (MSPAR)					
	Maxentric Technologies LLC	N181-007	David Massey	(202)807-9122	massey.cdavid@gmail.com	West 2021
	Robust Communications Relay with Distributed Airborne Reliable Wide-Area Interoperable Network (Darwin) for Manned-Unmanned Teaming in a Spectrum Denied Environment					
	NAVSEA					
	BTech Acoustics, LLC	N141-026	Jessica Godfrey	(401)529-9762	jessica.godfrey@btechacoustics.com	NAVSEA
	Innovative Velocity Sensors					

	Company / Topic Title	Topic #	POC	POC Phone	POC Email	Navy FST
Command, Control, Communications, Computers, & Intelligence (C4I)	**BTech Acoustics, LLC**	N161-027	Jessica Godfrey	(401)529-9762	jessica.godfrey@btechacoustics.com	NAVSEA
	Shallow Water Communications for Mine Warfare					
	Daniel H. Wagner, Associates, Inc.	N141-039	W. Reynolds Monach	(757)727-7700	reynolds@va.wagner.com	WEST 2021
	Enhanced Active Sonar Interference Avoidance (ASIA)					
	FIRST RF Corporation	N181-064	Dean Paschen	(303)449-5211	dpaschen@firstrf.com	NAVSEA
	Scalable Directional Antenna for Unmanned Aerial Vehicles (UAVS)					
	GIRD Systems, Inc.	N161-049	Mark Fischer	(513)477-0214	mfischer@girdsystems.com	SAS
	Joint Tactical Radio System (JTRS) Compliant Anti-Jam Waveform for Littoral Combat Ship (LCS) Unmanned Vehicle Beyond Line of Sight					
	Intelligent Automation, Inc.	N181-033	Arvind Bhat	(310)294-5254	abhat@i-a-i.com	SAS
	IDA: Intelligent Digital Assistant					
	Skayl LLC	N181-053	Sonya Hand	(410)848-4946	sonya@skayl.com	SAS
	Leveraging a Robust Data Architecture for Rapid Combat System Integration, Testing, and Certification					
	STILMAN Advanced Strategies	N03-202	Jerry Speer	(407)403-0314	jerry@stilman-strategies.com	WEST 2021
	Combat System Automation Management					
	NAVWAR					
	MaXentric Technologies LLC	N181-088	David Massey	(202)807-9122	massey.cdavid@gmail.com	WEST 2021
	High Dynamic Range Multi-Carrier Amplifier (HDR MCA)					
	ONR					
	Lynntech, Inc.	N182-127	Brian Hennings	(979)764-2234	brian.hennings@lynntech.com	LMUA
	Fooling Computer Vision Classifiers with Adversarial Examples					
	SSP					
	FIRST RF Corporation	N163-140	Dean Paschen	(303)449-5211	dpaschen@firstrf.com	SAS
	Curved (Convex) Surface Global Positioning System (GPS) Antenna Design for Submarine Launched Ballistic Missile (SLBM) Trident D5 Flight Test Reentry Bodies					
* (C-IED	**ONR**					
	Re2, Inc.	N151-066	Jonathan Brown	(440)463-5269	jonathan.brown@resquared.com	SAS
	Underwater Dual Manipulator Inflatable (UDMI)					
Cyber	**NAVAIR**					
	Metamagnetics, Inc.	N182-112	David Audette	(781)562-0756	daudette@mtmgx.com	WEST 2021
	Advanced Signal Processing aAnd Coordination Applied to Electronic Support Measures					
	Tri-Guard Risk Solutions, LTD	DOE16-030	Keesha Crosby	(703)435-9545	kcrosby@tgrisksolutions.com	NAVSEA
	Software Assurance Compliance Verification Risk Evaluation - Defense (SACRE-D)					
	NAVSEA					
	Fortiphyd Logic, Inc.	N181-035	David Formby	(803)645-0829	dformby@fortiphyd.com	NAVSEA
	Network Traffic Analysis for Cybersecurity for Navy Industrial Control Systems					
	G2 Ops, Inc.	N181-051	Corren Mccoy	(757)330-0374	corren.mccoy@g2-ops.com	NAVSEA
	Unified Cybersecurity System Modeling of Naval Control Systems					
	La Jolla Logic, Inc.	N132-140	Brian Brethen	(619)884-0353	brian.brethen@lajollalogic.com	SAS
	Cognitive Autonomous Artificial System Intelligence (CAASI)					
	Real-Time Innovations	N171-050	Paul Pazandak	(408)990-7471	paul@rti.com	SAS
	Software-Based Modular And Extensible Cybersecurity Framework for Combat Systems					

* Counter Improvised Explosive Devices (C-IED)

	Company / Topic Title	Topic #	POC	POC Phone	POC Email	Navy FST
Cyber	**TDI Technologies, Inc.**	N16A-T013	Irene Katacinski	(215)897-7596	ikatacinski@tditek.com	SAS
	Cyber Forensic Tool Kit for Machinery Control					
	ONR					
	Objectsecurity LLC	N182-131	Ulrich Lang	(650)515-3391	ulrich.lang@objectsecurity.com	WEST 2021
	Redbox: Red Team in a Box					
Electronic Warfare (EW)	**NAVAIR**					
	Phase Sensitive Innovations, Inc.	N182-101	Peng Yao	(302)286-5191	yao@phasesensitiveinc.com	SAS
	Multicore Fiber Optic Package Optical Subassembly for Wideband Digital and Analog Photonic Links					
	NAVSEA					
	Helios Remote Sensing Systems, Inc.	N171-044	Breyt Coakley		breyt.coakley@heliossensors.com	NAVSEA
	Cognitive Software Algorithms Techniques for Electronic Warfare					
	ONR					
	Hypres. Inc.	N17A-T027	Deepnarayan Gupta	(914)592-1190	gupta@hypres.com	SAS
	Energy Efficient, Non-Silicon Digital Signal Processing (DSP)					
Energy & Power Technologies	**MARCOR**					
	Candent Technologies Inc.	N132-086	Hernando Munevar	(317)336-4478	hmunevar@candent-technologies.com	SAS
	Prime Power System Development for Active Denial Technology (ADT) and High-Power Radio-Frequency (RF) Systems					
	NAVAIR					
	NanoCoatings, Inc.	N162-092	Frank Kustas	(605)716-0082	fmkustas.nci@gmail.com	NAVAIR
	All Solid-State Batteries for Navy Applications					
	Neodynetics Corporation	N172-113	Allan Roberts	(715)458-2587	aroberts@neodynetics.com	None
	Long Endurance Compact Sonobuoy Power Source					
	Physical Sciences Inc.	N172-113	Christopher Lang	(978)835-1388	lang@psicorp.com	NAVAIR
	On Demand High Power Primary Battery					
	Piasecki Aircraft Corporation	N17A-T007	Grey Hagwood	(802)318-2851	hagwood_dg@piasecki.com	SAS
	Innovative Packaging to Achieve Extremely Light Weight Sensor Pod Systems					
	Precision Combustion, Inc.	N181-013	Anthony Anderson	(203)287-3700	aanderson@precision-combustion.com	NAVAIR
	Compact, Lightweight, Power-Dense, Integrated Fuel Cell System					
	NAVSEA					
	Physical Sciences Inc.	N152-093	Christopher Lang	(978)835-1388	lang@psicorp.com	NAVSEA
	Risk Mitigation And Design Alternatives for Non-Flammable HA Cells for Navy Applications					
	TELAZTEC LLC	N171-045	Erik Cedrone	(781)229-9905	ehcedrone@telaztec.com	West 2021
	Random Anti-Reflective Hydrophobic Textures on Semi-Hemispheric Domes					
* (ERS)	**NAVSEA**					
	Beacon Interactive Systems	N171-071	MI Mackey	(617)680-3428	ml.mackey@beaconinteractive.com	SAS
	Plug-and-Play Analytical Framework for Distributed Structured and Unstructured Data Sets for Condition Based Maintenance Plus (CBM+)					
Ground and Sea Platforms	**MARCOR**					
	Conductive Composites Company	N172-103	Nate Hansen, Ph.D.		nhansen@conductive.com	WEST 2021
	Electro-Magnetic Interference Composite Rigid Wall Shelter (EMI CRWS)					
	JNI Armor	N181-001	Vanessa Hong		vanessah@jniarmor.com	LMUA
	Extended Service Life of Transparent Armor					

* Engineered Resilient Systems (ERS)

	Company / Topic Title	Topic #	POC	POC Phone	POC Email	Navy FST
Ground and Sea Platforms	**Sphere Brake Defense, LLC** Advanced Tactical Sphere Brake	N173-142	Aaron Lewis	(814)898-4321	aaronlewis@spherebrakedefense.com	LMUA
	TDA Research Inc. Environmentally-Friendly Method for Cleaning Sealed Suppressors	N162-077	Wallace Ellis	(303)940-2331	wellis@tda.com	LMUA
	NAVAIR					
	Breault Research Organization, Inc. Heat Resistant Visual Landing Aid (VLA) Lighting Fixtures for Ship Flight Decks and Expeditionary Air Field (EAF) Matting	N102-132	Mark Fink	(520)721-0500	mfink@breault.com	NAVAIR
	Metis Design Corporation Maturation of a Guided Wave-Based Bondline Integrity Monitoring System	N122-125	Seth Kessler	(617)661-5616	skessler@metisdesign.com	NAVSEA
	Response Technologies, LLC Low-Density, Low-Volume Explosion Suppression Material for Aircraft Fuel Tanks	N182-121	Ed Bard	(401)585-5918	ebard@responsetechs.com	SAS
	NAVSEA					
	AVX Aircraft Company Lightweight Gearbox for Air Cushion Vehicles	N181-072	Ian Brown	(817)731-8003	ian@avxaircraft.com	NAVSEA
	Galley Power LLC Ultra-Low Ripple 1000 Volt Direct Current Battery Charger	N181-048	Peng Li	(978)558-0048	pli@galleypower.com	NAVSEA
	Great Lakes Sound & Vibration, Inc. Common Unmanned Underwater Vehicle (UUV) Stern Launch And Recovery System	N181-039	Kyle Waatti	(906)482-7535	kylew@glsv.com	SAS
	Pacific Engineering, Inc. Light Weight Composite Components for Naval Systems	N171-072	Pete Perry		pete.perry@pacificengineeringinc.com	SAS
	Precision Combustion, Inc. High-Efficiency Filter System for Removal of Copper Contamination from Jet Fuels	N181-071	Matthew Steinbroner	(203)287-3700	msteinbroner@precision-combustion.com	NAVSEA
	Qualtech Systems, Inc. Full Featured Low-Cost Hms for Combatant Craft	N18A-T015	Somnath Deb	(860)761-9344	deb@teamqsi.com	NAVSEA
	TDA Research, Inc. Advanced Pem Electrocatalysts for Submarine Oxygen Generators	N162-107	Wallace Ellis	(303)940-2331	wellis@tda.com	NAVSEA
	Creare LLC Compact Microchannel Recuperators for Cryogenic Coolers	N141-068	Mike Izenson	(603)640-2405	mgizenson@creare.com	NAVSEA
Human Systems	**NAVAIR**					
	2 Circle Consulting, Inc. Data Science Driven Aircrew Performance Measurement and Proficiency System	N181-026	Brad Gilroy	(757)353-8806	bgilroy@2circleinc.com	SAS
	Aptima, Inc. A-PuMPS: Aircrew Performance Measurement And Proficiency System	N181-026	Shawn Weil		sweil@aptima.com	NAVSEA
	BGI LLC Data Science Driven Aircrew Performance Measurement and Proficiency System	N181-026	Scott Powell	(330)374-7737	scott.powell@bgi-llc.com	SAS
	Kennon Products, Inc Surface Flotation Device for Cold-Water Aviation Survivors	N121-009	Dakotah Gali	(307)674-6498	dakotah@kennoncovers.com	NAVAIR
	Knowledge Based Systems, Inc. Training Simulation Intelligent Scenario Generation Tools	N02-184	Byon Williams	(979)260-5274	bwilliams@kbsi.com	WEST 2021
	Prevailance, Inc. Repurposing Computational Analyses of Tactics for Training Assessments	N18A-T003	David Landess		david.landess@prevailance.com	NAVAIR
	ONR					
	Charles River Analytics Inc. Adaptive Training Protocols (ATP)	N172-132	Spencer Lynn	(617)491-3474 x782	slynn@cra.com	LMUA

Materials & Manufacturing Processes

Company / Topic Title	Topic #	POC	POC Phone	POC Email	Navy FST
Charles River Analytics Inc.	N151-077	Spencer Lynn	(617)491-3474 x781	slynn@cra.com	SAS
Strengthening Health and Improving Emotional Defenses (SHIELD)					
Charles River Analytics Inc.	N162-124	Ashley Mcdermott	(484)678-8037	amcdermott@cra.com	SAS
Simulating Training Results to Understand Differing Effects of Fidelity on Learning (STRUDEL)					
NAVAIR					
Engineering & Software System Solution, Inc. (ES3)	AF093-203	Jay Randolph	(478)922-1460	jay.randolph@es3inc.com	NAVAIR
FY-19 "SDIS" Pilot Project - Improved Landing Gear Grinding/Finishing Methods on Hard Wear Resistant Surfaces					
Helicon Chemical Company LLC	N141-011	David Reid	(321)300-6266	david.reid@heliconchemical.com	WEST 2021
Solid Ramjet Fuel Containing In-Situ Grown Aluminum Nanoparticles					
Hill Engineering, LLC	N162-085	Adrian Dewald	(916)635-5706	atdewald@hill-engineering.com	NAVAIR
Analytical Tool for Design and Repair Of Engine Hardware for Robust High Cycle Fatigue Performance					
Metis Design Corporation	N18B-T031	Seth Kessler	(617)661-5616	skessler@metisdesign.com	NAVAIR
Scalable Manufacturing of Composite Components Using Nanostructured Heaters					
Product Innovation And Engineering LLC	N162-087	Todd Sparks	(573)612-1352	toddesparks@mopine.com	SAS
Onsite Structural Restoration Methods for Aircraft Components					
Product Innovation And Engineering LLC	N181-028	Aaron Flood	(620)210-0357	ajflood@mopine.com	SAS
Precision Machining of Composite Structures					
Surface Optics Corporation	N182-105	Joseph Gleave	(801)673-5712	jgleave@surfaceoptics.com	NAVAIR
Internal Antireflection Coatings for Aerodynamic Missile Domes					
Third Wave Systems, Inc.	N181-028	Jarred Heigel	(952)832-5515	jarred.heigel@thirdwavesys.com	NAVAIR
Precision Machining of Composite Structures					
NAVSEA					
Mainstream Engineering Corporation	N141-024	Andrew Wagner	(321)631-3550	awagner@mainstream-engr.com	NAVSEA
Development of a Greywater Recycling System for Galley-Scullery Wastewater					
Materials Sciences LLC	A16-122	Simon Chung	(215)542-8400	simon@materials-sciences.com	NAVSEA
Metallic Coatings for Structural Enhancement of Polymers and Composites for Reduced Weight Missile Structure					
Materials Sciences LLC	N161-017	Jeffrey Lugo	(215)542-8400	lugo@materials-sciences.com	NAVSEA
Efficient On-Aircraft Composite Repair Process Requiring Minimal Support Equipment - P4450					
METSS Corporation	N181-034	Brian Collett	(614)797-2200	bcollett@metss.com	NAVSEA
Surface Ship Fat Line Towed Array Cut-Resistant Vibration Isolation Module (VIM) Hose					
RadiaBeam Technologies, LLC	N16A-T010	Pedro Frigola	(310)822-5845	frigola@radiabeam.com	WEST 2021
Additive Manufacturing for Microwave Vacuum Electron Device Cost Reduction					
NAVSUP					
Propel LLC	N182-124	Clare King	(401)722-4491	cking@propel-llc.com	NAVAIR
Seamless Knitting for Military Protective Clothing					
ONR					
NALAS Engineering Services Inc.	N16A-T021	Dave Price	(423)212-3247	david.price@nalasengineering.com	SAS
High Performance Energetic Propellant Ingredient Process Research and Development					
Plasma Processes, LLC	N131-071	Tyler Kaub	(256)851-7692	tkaub@plasmapros.com	SAS
High Density, Multi-Layered Nosetips for Hypersonic Projectiles					

	Company / Topic Title	Topic #	POC	POC Phone	POC Email	Navy FST
Modeling and Simulation Technology	**MARCOR**					
	Design Mill, Inc.	N172-101	Nathan Greiner	(563)587-8778	nathan_greiner@designmillinc.com	SAS
	Shipboard Dimensional Analysis Tool (SDAT)					
	NAVAIR					
	ARiA	N182-119	Kara Taylor	(540)423-0323	kara.taylor@ariacoustics.com	NAVAIR
	Oceanography Tactics Training for Employment Readiness					
	Freedom Photonics LLC	N182-108	Maddy Woodson	(805)967-4900	mwoodson@freedomphotonics.com	SAS
	Photonic Integrated Circuit Reliability Prediction, Verification And Validation					
	Karagozian & Case, Inc.	N181-008	Pietro Gheorghiu	(818)844-1975	gheorghiu@kcse.com	NAVAIR
	Maritime Lethality Analysis Toolset					
	NAVSEA					
	Magee Technologies LLC	N171-059	G. Robert Bennett	(805)967-4900	robert.bennett@mtech.aero	NAVSEA
	Verification and Optimization of Advanced Finite Element Modeling Techniques for Complex Submarine Hull Structures					
Sensors	**MARCOR**					
	Cyan Systems	N153-125	John Caulfield	(805)453-0582	john@cyan-systems.com	WEST 2021
	High Definition Small Arms Sensor					
	NAVAIR					
	Aqwest, LLC	N121-059	Chris Villani	(206)769-5069	cvillani@aqwest.com	NAVAIR
	High Power Ultra-Short Pulse Bulk Laser Amplifier at Eye Safer Wavelengths					
	Beam Engineering For Advanced Measurements Company	N181-022	Anna Tabirian	(407)734-5222	anna@beamco.com	SAS
	Laser Periscope Detection					
	Guide Star Engineering, LLC	N182-097	Seibert Murphy	(808)497-0144	smurphy@gsellc.com	NAVAIR
	Ultra Compact DIFAR Upper					
	Hal Technology, LLC	N18A-T023	Gregor Waldherr	(855)438-4258	gwaldherr@haltechnologies.com	NAVAIR
	Operational Sand and Particulate Sensor System for Aircraft Gas Turbine Engines					
	Innoveering, LLC	N162-105	David Mroczka	(631)620-2431	david.mroczka@innoveering.net	NAVAIR
	Real Time Gas Turbine Engine Particulate Ingestion Sensor for Particle Size and Composition					
	MRV Systems, LLC	N181-012	Fritz Stahr	(800)645-7114	stahr@mrvsys.com	NAVAIR
	Low Cost Persistent Environmental Measurement System					
	Polaris Sensor Technologies, Inc.	N181-023	Michele Banish	(256)562-0087	michele.banish@polarissensor.com	NAVAIR
	Multispectral/Hyperspectral Imaging System for Small Boat Detection Under Wake Clusters					
	Prime Photonics LLC	N162-097	Eric Grandjacques	(540)739-5416	eric.grandjacques@primephotonics.com	SAS
	Non-Contact Torque Sensor for Unmodified Composite Shafts and Non-Ferrous Metal Shafts					
	Scientific Applications & Research Associates, Inc.	N151-026	Jeff Hamilton	(714)615-0844	jhamilton@sara.com	WEST 2021
	Discretionary Pii - Small Non-Cooperative Collision Avoidance Systems Suited to Small Tactical Unmanned Systems					
	Triton Systems, Inc.	N182-097	Ken Lannamann	(978)856-1901	klannamann@tritonsys.com	NAVAIR
	Low-Cost Approach for Improved Performance of the Difar Upper					
	NAVSEA					
	Makai Ocean Engineering, Inc.	N171-055	Richard Argall	(808)259-8871	richard.argall@makai.com	NAVSEA
	Methods For Measuring An Acoustic Arrays Straightness and for Autonomous Mechanical Straightening to Avoid Contact With Sea Bottom Under All Operational Conditions					

	Company / Topic Title	Topic #	POC	POC Phone	POC Email	Navy FST
Sensors	**Makai Ocean Engineering, Inc.**	N181-036	Richard Argall	(808)259-8871	richard.argall@makai.com	NAVSEA
	Hydrodynamic Control of a Towed Vertical Array					
	Nikira Labs Inc.	N181-049	Rupal Gupta	(650)814-9833	rupal.gupta@nikiralabs.com	NAVSEA
	Advanced Analyzers for Monitoring Submarine Atmosphere					
	Opto-Knowledge Systems, Inc. (Oksi)	N17A-T016	Marco Romani	(415)412-9203	marco.romani@optoknowledge.com	NAVSEA
	Integrated Learning-Based and Regularization-Based Super Resolution For Extreme Mwir Image Enhancement					
	Physical Sciences Inc.	N181-022	Julia Dupuis	(978)738-8273	jdupuis@psicorp.com	NAVSEA
	High Speed VNIR/SWIR HSI for Airborne Mine Detection					
	Q-Peak, Inc.	N141-008	Kevin Wall	(781)271-1804	kwall@qpeak.com	SAS
	Multispectral Six-Color Laser Transmitter for Mine Hunting Applications					
	ONR					
	Makai Ocean Engineering, Inc.	N18A-T017	Richard Argall	(808)259-8871	richard.argall@makai.com	WEST 2021
	Temperature Sensing Submarine ISR Buoy / Surface Ship Sensor Tow Cable					
Space	**NAVWAR**					
	Atmospheric & Space Technology Research Associates, LLC (ASTRA)	N16B-T026	William Armijo	(303)653-4262	warmijo@astraspace.net	SAS
	Ocean Surface Vector Winds (OSVW)					
Weapons Technologies	**MARCOR**					
	Infibertech, Corp.	N162-076	Ram Yahalom	(781)806-5615	ram1@infibertec.com	SAS
	Miniaturization of GPS Alternative Survey Equipment					
	NAVSEA					
	Vadum Inc.	N181-046	David Padgett	(919)341-8241	david.padgett@vaduminc.com	NAVSEA
	Tracking Algorithm(s) for Determining Highest Probability Predicted Intercept Points(s) In The AEGIS Combat System					
	Vadum Inc.	N181-055	David Padgett	(919)341-8241	david.padgett@vaduminc.com	NAVSEA
	Scheduling Algorithm for Efficient and Effective Predicted Intercept Points (PIPS) for Multiple Targets					
	ONR					
	Physical Sciences Inc.	N151-062	Jeff Wegener	(978)738-8164	jwegener@psicorp.com	NAVSEA
	Electrically-assisted, High Performance Extinguishable Solid Propellant for Advanced Thrust Control Motors					
	SSP					
	VJ Technologies, Inc.	N153-132	Randy Shepard	(631)589-8800	rshepard@vjt.com	SAS
	High Energy High Flux X-ray Detector					

Guidance for Small Businesses Impacted by Coronavirus

COVID-19 impacts on small business and the country are far reaching and very dynamic. Policies and programs change frequently to address these challenges, including SBIR/STTR and doing business with the federal government. The Office of Naval Research (ONR) has created a special web resource on Coronavirus Assistance and Acquisition-Related Information and Resources located at www.onr.navy.mil/coronavirus. There is guidance from ONR, the Office of Management and Budget (OMB), and the Department of DoD.

Upcoming Events

Date	Event & Link	Location
Sept. 22-24	Modern Day Marine Virtual Experience https://www.marinemilitaryexpos.com/modern-day-marine/home/	Virtual
Sept. 22-24	National Small Business Week https://www.sba.gov/national-small-business-week	Virtual
Oct. 6-7	Advanced Machinery Technology Symposium http://www.navalengineers.org/Symposia/AMTS2020	Virtual
Oct. 13-16	Association of the United States Army (AUSA) Annual Meeting and Exposition https://meetings.ausa.org/annual/	Virtual
Oct. 19-23	SBIR Virtual Road Tour—Midwest www.sbirroadtour.com/dates/2020-midwest/	Virtual
Oct. 20-22	Innovation & Opportunity Virtual Conference—Hosted by the NASA SBIR/STTR Program https://innovation-opportunity-conference.com/	Virtual
Nov. 2-6	SBIR Virtual Road Tour—South https://www.sbirroadtour.com/dates/2020-southern/	Virtual
Nov. 16-17	Technology, Systems & Ships (TSS) Symposium http://www.navalengineers.org/Symposia/In-Person-TSS-2020	Arlington, Va.
Nov.17-19	Combat Systems Symposium http://www.navalengineers.org/Symposia	Arlington, Va.
Nov.17-19	SBIR/STTR Virtual Innovation Conference https://events.techconnect.org/DTCFall/sbir.html	Virtual
Nov.17-19	Defense TechConnect Virtual Innovation Summit & Expo https://events.techconnect.org/DTCFall/	Virtual
Nov. 16-18	Naval Submarine League Annual Symposium & Industry Update https://www.navalsubleague.org/events/annual-symposium/	Virtual
Nov. 30-Dec.3	Aircraft Structural Integrity Program (ASIP) Conference http://www.asipcon.com/	Phoenix, Ariz.

For comments or questions about this newsletter, send e-mail to: NavySTP@atsicorp.com