DEPARTMENT OF THE NAVY

SBIR/STTR TRANSITIONS

2016 FALL

FROM THE DIRECTOR

The 2016 Forum was a Huge Success! Are you ready for 2017?

Every participant in our 2016 Forum for SBIR/STTR Transition (FST) has a favorite memory of this great event, covered in detail below, but I have three great memories which standout for me. They are:

- ADM John Richardson, Chief of Naval Operations, deep in discussion with serial FST exhibitors about technologies that might serve Naval warfighters in theatre.
- RADM Mat Winter, Chief of Naval Research, waterside with children at a STEM event at the co-located Navy League sponsored Sea-Air-Space Expo, happily driving EMILY, the robotic STTR-based lifeguard derived from another STTR lifesaver, the Silver Fox UAV, also on display at Sea-Air-Space.
- Rep. Steve Knight (R-CA), a Forum keynote speaker with seats on both the House Armed Services and Small Business Committees, ditching his staff to return to Forum exhibits for nuanced discussions of how small business negotiates Naval acquisition mazes.

Yes, our 2016 Forum – partnered with the Navy League's unique global maritime expo at National Harbor – marked a big step forward for the Dept. of the Navy's (DON) SBIR/STTR Program:

- Closer collaboration with Navy and Marine Corps acquisition decision-makers
- Deeper linkage with defense industry decision-makers and Navy League principals
- Better cooperation and collaboration with the DON Office of Small Business Programs
- ... and recognition by key members of Congress of innovation in action.

The 2016 SBIR/STTR – DON Small Business – Sea-Air-Space Collaboration!

In addition, I cannot forget the optics of more than 100 SBIR/STTR technologies on display — just a few minutes' walk from thousands of defense professionals perusing large, vivid exhibits by dozens of defense industry leading firms. Still, I have to say, "You haven't seen anything yet" – we're already planning the 2017 FST with the Navy League and the Office of Small Business Programs; it promises to be a further step forward, and in a more prominent location next April at The Gaylord at National Harbor. Stay tuned for FST news!

New SBIR/STTR Terminology

A major change in terminology (not practice) took place on August 26, 2016 with the DoD's 16.3 SBIR and 16.C STTR. What was previously known as a "Solicitation" will now become a Broad Agency Announcement (BAA) or simply "Announcement".

This change does not connote any change in the competitive SBIR/STTR process. The only reason for this change is to avoid confusion on the part of some persons that this research announcement was governed under the competitive procedures of Federal Acquisition Regulation (FAR) Part 15 which generally uses the term "solicitation" and FAR Part 35 which applies to the acquisition of research. The SBIR/STTR research announcement is, and has always been, issued under the provisions and requirements of FAR Part 35 as a BAA.

Further, there is no change in the competitive process, which is governed by the rules of 15 U.S.C. 638 and the SBIR/STTR Policy Directive issued by the Small Business Administration, as well as by FAR Part 35. This change does not remove any existing requirements or provisions of the competitive process.

SBIR/STTR Reauthorization

During 2016, one of the most impressive aspects of Congressional reauthorization of the SBIR/STTR program has been the dedicated effort by many awardees to help members of Congress – very few of whom are scientists or engineers – understand this complex, dynamic innovation program and its benefits to our economy. As we're all aware, 2017 might witness the arrival of several newly elected Senators and Representatives, and no one does a better job of SBIR/STTR education to newcomers than their constituents. If you feel called to play this role, but aren't sure of your footing in regards to SBIR/STTR history and practice, especially as it relates to the Dept. of Defense, the standard desk references available to Congress are the "SBIR At The Dept. of Defense" and "STTR: An Assessment", both recently published by the National Research Council of the National Academies of Science. Regional economic impact studies are (or soon will be) available for the Air Force, Dept. of the Navy, DARPA, and other agencies.

We Hear You!

In my role as Director of the DON SBIR/STTR Program, I'm a very talkative advocate – but I'm also a careful listener, welcoming chance discussions with innovating entrepreneurs on what you think about improving the program and where there are potholes. Over the past months, I've heard three recurring themes:

- I'm confused about the rules regarding Discretionary Technical Assistance (DTA)!
- Time without money due to contracting delays is killing me!
- Technology development isn't getting any cheaper – I need a larger Phase I award!

So, starting with this issue of Transitions, I'll tell you what we've done to address the issues you've identified – and you're welcome to evaluate my responses, through the email address found at the end of this issue. What do you think? Further, I hope to continue to hear from you. My energies will continue to be focused on managing the most effective program within the federal government while we also work together to increase its efficiency and strive for a better business of the science.

Second Annual Primes Summit

Last year, I set forth a collaboration goal of building closer ties between small firms, government acquisition program offices, and large firms active in defense – especially Navy and Marine Corps – acquisition. The "SBIR/STTR Primes Summit", held in December 2015, was a successful invitation-only launch of this collaboration initiative.

We built on Summit results from some 100 hand-picked industry/government attendees, with a road-ahead plan to expand our Primes Initiative to improve partnering with small firms, and then we increased our level of effort at FST and NDIA's Gold Coast small business event in August 2016. Planning has begun for our Second Annual Primes Summit, another invitation-only event primarily for large defense firms, set for mid-December here in the Beltway. So far this year, we've been encouraged by similar interest from such R&D pillars as major universities and government laboratories. Stay tuned for more information, including a "Save The Date" announcement for this key invitation-only Summit.

Best regards,

Robert L. Smith

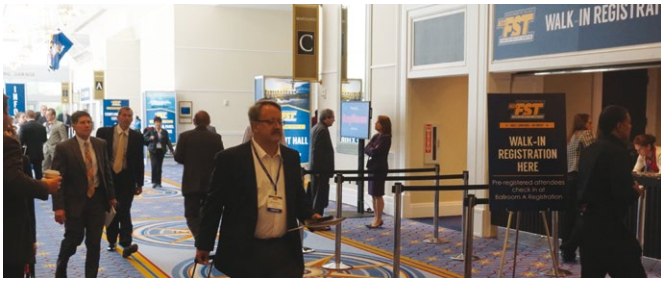
FST Puts the Power of Small Business Innovation on Display

The Navy engages with small businesses all year, but the annual Forum for SBIR/STTR Transition (FST) is the one event where small companies, Government acquisition managers, prime contractors, and warfighters come together to connect innovative small companies with Department of Navy requirements.

The Chief of Naval Research summed up the purpose of FST: bringing the Naval community, prime contractors, and small businesses together to improve the transition of Phase II SBIR technologies. "We're reaching out and we're ensuring that we're incorporating predominantly small businesses to help us more rapidly identify the solutions that we can experiment with and prototype with our warfighters," said Chief of Naval Research Rear Adm. Mat Winter.

The Forum was held May 16-18 at the Gaylord Hotel in National Harbor, MD, and took place concurrently with the Navy League's Sea-Air-Space expo.

RADM Mathias Winter provides opening remarks during the 2016 Department of the Navy Forum for SBIR/STTR Transition.



The numbers are impressive—97 companies exhibited, presenting 103 technology briefs. In addition, 145 Small Business Matchmaking Sessions were conducted with SYSCOM representatives and 172 1-on-1 meetings were arranged with interested Industry parties. To top it off, a variety of VIPs toured the Exhibit Hall—including the Chief of Naval Operations (CNO), Admiral Richardson, three Congressmen, and an impressive stream of Navy and Marine Corps flag ranking officers. An estimated 3,000+ people visited the exhibits.

Chief of Naval Operations (CNO), Admiral Richardson, touring the 2016 Department of the Navy Forum for SBIR/STTR Transition Exhibit Hall.

In his keynote address, Rep. Steve Chabot (R-OH), chairman of the House Small Business Committee, said, "In this era of globalization, the SBIR/STTR programs are making it easier for small businesses to develop and commercialize new innovative projects, which is essential not only for American competitiveness but also for its national security."

Rep. Steve Knight (R-CA), who serves on the House Armed Services, Science Space and Technology and Small Business Committees, addressed the participants on defense acquisition reform and its significance for small business.

SBIR/STTR firms benefited from interacting with decision makers in the technology community.

Scott Featherman of BlackBox Biometrics (B3) said his company presented and exhibited at the FST. "It was a really good event. There was some down time when the crowd would thin out, but then the staff would bring an admiral or general over to meet us and talk about our technology. Of all the events I've been to in the past three years with B3, I don't think I've ever seen so many admirals and generals stop by to see us. It really made the event worthwhile."

"The 2016 Forum was fantastic," said Janet Hughes of Robotic Research. "We attended and had an exhibit. It was probably the best show I've ever been to, and I've been to a lot of them."

SBIR-funded Technology Protects Warfighters From Over Exposure to Blast and Shock

Scott Featherman of BlackBox Biometrics (B3), based in Rochester, NY, said B3 has been selling the Blast Gauge System(R) to the Army for several years. The Blast Gauge System is a small, wearable sensor system that can detect and measure overpressure from explosions--like IEDs, artillery, or shoulder-fired weapons—which can cause brain injuries if the individual is too close to the blast.

"It measures the invisible shock wave, and lets the medic or commander know how badly exposed each individual was," Featherman said.

The system introduces an extended battery, so personnel can wear it for their entire deployment. It allows commanders and medics to monitor the exposure of all Marines in the unit to perform initial triage to determine who may need urgent medical attention. The three tiny sensors on each individual communicate wirelessly and are monitored using a hand-held tablet. The Army now requires all deploying Soldiers to wear the Blast Gauge System in theater.

The technology was first developed with DARPA and was adopted by the Army. Thanks to an SBIR from MARCORSYSCOM, Black Box has demonstrated the effectiveness of the technology to the Marine Corps. "We're completing our Phase II now and getting ready to enter Phase III, and begin commercial sales," Featherman said.

Featherman said the technology can both indicate an immediate blast event as well as cumulative exposure, both of which can be damaging. The technology can also be used to measure blast exposure throughout the career of a warfighter to conduct more thorough studies on the effects of repeated blast shock events.

"A lot of small blasts over time can add up. But we don't know just how much exposure leads to what effects. So we can measure exposure over time, which will help us learn more about the damaging effects over time," Featherman said.

In addition to meeting senior military personnel and program managers, Featherman said the forum provided an opportunity for small businesses to connect and discuss potential collaboration.

According to Hughes, what made the forum so successful was the quantity and "caliber" of people who came by their exhibit. "Our ultimate goal was to find new and viable contacts who were potential customers and to actually make some sales of our products. There were a lot of people who saw our booth and stopped to talk to us, including people that the staff brought by to introduce to us specifically. In fact, the staff bent over backwards to help us."

Hughes said there was one particular government customer that Robotic Research had been trying to connect with for a while. "We ran into them at the forum and got to talking with them. They were intrigued. In fact, they came by to see us several times. We discussed several of our products, and they were very interested." As a result of those discussions at the forum, Hughes said, "Robotic Research received two purchase orders for two different products, and we are expecting a third order for yet another product from that government customer." All of the products were developed from SBIRs.

Thanks to SBIR, these ideas have become reality. And, thanks to the 2016 FST, the company has been able to achieve their goal of obtaining firm orders.

"The show has been a bonanza," Hughes said.

Prime Panel

"The SBIR program helps us reduce cost, improve quality, and meet all of our commitments," said Boeing's SBIR coordinator Marlene Price, who participated in a panel comprised of representatives of the largest defense contractors. "Small businesses are a key enabler of our innovation throughout all of our product lines. We have an executive commitment to supporting small and diverse businesses, because it makes smart business sense for us."

"Our Supplier Innovation team was well represented at this year's SBIR/STTR Transition Forum. It was very informative, highly collaborative, and robust in its technical content. SBIR Partnerships are extremely valuable to the engineering solution/technology insertion space at Raytheon. A very strong focus on creative concepts and approaches for continuing to grow and

improve SBIR by Navy, U.S. Small Business, and other stakeholders was quite evident," said Alf Carroll, Supplier Innovation, SBIR Black Belt, Raytheon Integrated Defense Systems.

Shadi Azoum is the SBIR and RIF coordinator at SPAWAR in San Diego. He said the co-location with Sea-Air-Space was a great strategy. "The forum was a great opportunity for the primes to come up from the Sea-Air-Space exhibit floor and see the small companies. Next year I'd like to see even more primes there."

"There were a couple of small companies at the forum that have SPAWAR SBIRs. We brought Rear Adm. Boris Becker (PEO C4I and PEO Space Systems) over to meet each of them. It was a chance for him to commend them on their efforts and to offer some advice on working with the Navy's programs to better support our warfighters," Azoum said.

Azoum said that having all the systems command SBIR representatives together was another benefit of the forum. "We had a chance to sync up and share information, which will definitely lead to more collaboration."

Lieutenant General Ronald L. Bailey touring the 2016 Department of the Navy Forum for SBIR/STTR Transition Exhibit Hall.

"Sea Air Space is the largest Navy trade show in the U.S., and having an additional 3,000 people attend who were there for the FST and who were focused on getting their technology into the pipeline, made it even bigger and better," said Kevin Traver, who was vice president for corporate affairs and membership at the Navy League, and is now executive director of the Marine Technology Society. "It was a tremendous success in connecting big and small companies and actually getting business done.

Even though they were two separate events, Traver said there was a lot of cross pollination between the FST and SAS, and there were many conversations that will lead to great things for everyone.

"Because Sea Air Space was held at the same venue, many large companies took time to visit the FST and see what the small businesses had to offer," Traver said. "There were a lot of senior level people interacting with these small companies, and the top leadership in the Navy and Marine Corps were able to see the innovative technologies for themselves."

"The cooperation between the Navy League and the Navy's SBIR team was fantastic," Traver said. "We learned a lot about how we can work together. Next year will be even better."

SBIR Helps Big Ideas Get Bigger

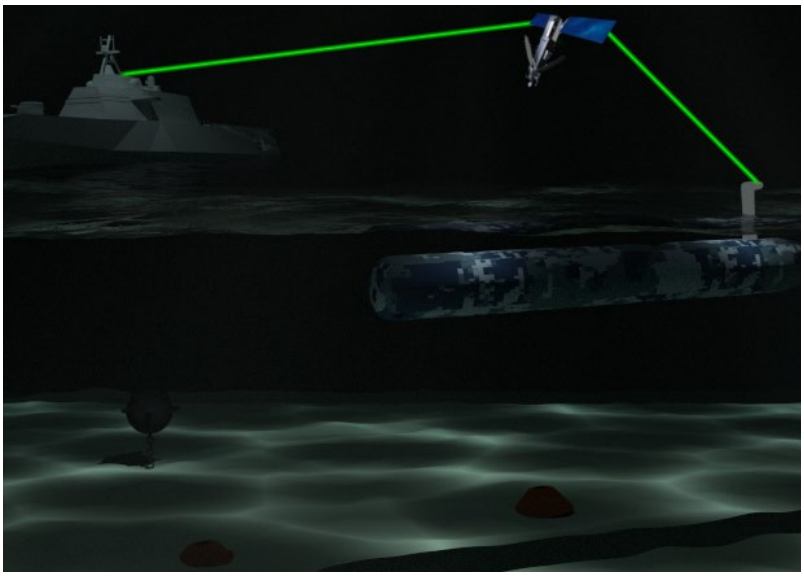
Robotic Research started with two people and some ideas in 2002. Today, thanks to the SBIR program, the Gaithersburg, MD, company has grown to 54 people...and lots of ideas.

In addition to the Department of the Navy, Janet Hughes of Robotic Research said her company has participated in SBIRs for a number of agencies, such as the Army, DARPA, and DHS; and a great deal of the technology is transferable to other services as well as to the commercial market.

"Today we use SBIR funding almost exclusively for our research and development," said Hughes.

"We've had success moving to Phase II and III by working closely with the TPOCs (technical points of contact)," Hughes said. "We've taken technologies developed through one agency's SBIR program and transitioned them into other agencies. We're also getting ready to team with a prime. It looks like it's going to happen."

Small Radio Connects Platforms and Sensors With High Data Rate, Significant Ranges



Thanks to SBIR, a small company in Melbourne, Florida has matched its existing technology with emerging requirements to provide communications relay radios between unmanned systems and host platforms.

"We've been around since 1986, and we're a small business that takes on big projects," says RSS CEO, Emilio Power. "We watch the SBIR topics when they are posted periodically on the Navy SBIR website, and we look to see where we fit in, such as in the case of the remote network radio with a high data rate. While the technology wasn't new, the Navy had to find a way to militarize it—it had to handle the vibrations and temperatures, and be small enough to fit inside an unmanned aerial vehicle (UAV). We said, 'Hey, we can do that.'"

Power says the objective was to create a way to transfer data from unmanned systems back to a host platform, such as sonar data from a mine hunting vehicle. "We submitted a paper and were then selected for Phase II."

The result was the RT 1944/U tactical network, which was developed by RSS using a Navy SBIR investment. Power says the RSS radio is now part of the Littoral Combat Ship (LCS) program, and the company's equipment is on both the ship and its offboard vehicles. With the RSS data relay, the offboard vehicles can be looking for mines or subs while the LCS is safely over the horizon.

But as sensors become more sophisticated, the data rate keeps going up as well. "We received more funding to make the data rate even faster. Our new version is the RT 1944A/U," Power says. "It's the same radio, but with a better chip set. We went from a data rate of 45 mbs (megabytes per second) to 300."

"We've built 200 radios," he says. "There are more ships coming and more offboard vehicles. We're just waiting for the budget."

Power says RSS saw another SBIR topic looking for a way to transmit data from an unmanned underwater vehicle (UUV) over long distances. "We thought, 'why don't we use Iridium?'"

RSS developed the RT 1988 Iridium datalink terminal that transmits sonar data from a Knifefish UUV to wherever it's needed using the Iridium satellite constellation. "The ocean is a very harsh operating environment, and the UUV comes up to the surface to transmit data where it's subject to 'wake wash'—waves washing over the antenna. So we developed a radio that sends a lot of information in microbursts. It's very small—cell phone-sized—and rugged. We've tested it with very high and low temperatures and heavy vibrations."

Program Advocates

"Our Phase III funding is allowing us to finish our software so we can conduct the seminal transition event, which is to do 80 MB at 30 miles," says Power. "We're getting ready to put that radio into production."

Once the project began, Power says his technical point of contact (TPOC) was a big help. But, he also made a point of periodically briefing senior leadership on the programs that the RSS technology would affect—and there are several, including the LCS program, mission module development, and mission package integration. "They're the customer. You have to show them how your technology is helping them and saving them money. They become your advocates."

Power says he continues to make frequent visits to Washington to update his customers and also because he's mindful of turnovers. "You have to stay on your toes, because these program managers rotate out to other jobs."

Technology Transition Plan

SBIR and STTR projects require a technology transition plan (TTP) that specifies the "fiscal and transition commitment of participants in the transition stream to develop, deliver, and integrate a technology/product into an acquisition program." In the case of RSS, the TTP called for a "seminal transition event" to test the technology in a mission environment before it can be used by the warfighter.

"The technology is there, but you have to get people to try it out." Power says.

"We tested our tactical data radio at Eglin Air Force Base with four boats simulating four Remote Multi-Mission Vehicles and a tower on shore simulating the LCS. We talked to four vehicles simultaneously at 16 miles, then brought in a UAV to serve as the relay, and were able to go out 40 miles."

The transition event is the government's responsibility and they have to pay for it. "We're the technical advisers and we help with the planning, and tell them what it can do so they know what to test. But the programs have to budget for it. That's another reason to keep in contact with the PMs, because they have to plan for it in their budget. If they don't have the money, you have to wait until they do," Power says. "You have to be patient."

For the testing, Power says his customer identified additional funding for RSS to build lightweight pods that could carry the RSS system to serve as an airborne relay. "We built two—one for the test, and a spare."

RSS found additional ways their technology can benefit the Navy; demonstrating that their system can help control mine hunting units deployed from the shore. "We have deployed one radio on the beach in a container with a mast tower and another on the boat that tows the mine hunting sonar.

"SBIR is Fantastic"

"The SBIR program is fantastic," Power says. "But one has to know how to work it. There is only a certain amount of money, but that investment can make the difference between an idea and a reality."

Power says resources such as the SBIR/STTR Assistance Program (STP) help make the right connections with program managers and primes and assist in preparing the TTP.

Power says one way to stretch the money is to augment it with other funding sources.

An example is the pod units for the test aircraft, which the Navy paid for with existing operations and maintenance dollars.

"We need funding to finish and get our system certified," Power says. "I could charter my own helo, but the Navy will use one of their own aircraft, which means everything we place on the aircraft has to be approved and certified. That takes time. We just have to be patient."

RSS is also using Rapid Innovation Fund (RIF) funding this year to further validate the concept. The Navy's RIF enables participants to develop concepts and technologies to meet operational or national security needs. RIF invests in ways to reduce technical risk and cost.

"Being a small business has its challenges, but smaller can be a big advantage," Power says. "A lot of the big guys have tried doing some of these projects, but it takes a long time. A small company can act and react faster."

Fall Transitions: We Hear You!

Innovating entrepreneurs aren't a shy bunch. In recent months, SBIR/STTR Director, Bob Smith, has received feedback on a number of issues from his small firms – and he's taken action, as you'll read below. Welcome to a new Transitions side-bar: "We Hear You!"

Small Business: I'm confused about the rules regarding **Discretionary Technical Assistance** (DTA); please clarify!

SBIR/STTR Director: We heard you! In our solicitation "Proposal Assistance Instructions," I had the staff revise the DTA language to provide clear detail on how to request DTA in Phase I, or in Phase II should you prefer this to participation in our celebrated Phase II SBIR/STTR Transition Program (STP). Proposal guidance sections are in alphabetical order. The heart of DTA guidance is this:

"Approval of direct funding for DTA will be evaluated for approval by the DON SBIR office if the firm's proposal (1) clearly identifies the need for assistance (purpose and objective of required assistance), (2) provides details on the provider of the assistance (name and point of contact for performer); and unique skills/specific experience to carry out the assistance proposed, and (3) outlines the cost of the required assistance (costs and hours proposed or other details on arrangement that would justify the proposed expense). **This information must be included in the firm's cost proposal** specifically identified as Discretionary Technical Assistance and cannot be subject to any profit or fee by the requesting SBIR firm." **Let me say it again: DTA cost details MUST be included in your cost proposal.**

Small Business: Time without money due to **contracting delays** is killing me!

SBIR/STTR Director: We heard you! This year I took a close look across the Navy at our contracting shops to compare their capacity and capability to process Phase I and Phase II awards. The homework paid off, and I'm now seeing good results from a pilot program with one contracts shop: overall, a reduction in the time to transact Phase II awards from 11 months down to 4 months – just what you asked for. So, we know how to reduce your time without money. Now, I'm working on a method to export this success for all Phase II awards. Stay tuned, we'll get there.

Small Business: Technology development isn't getting any cheaper – I need a **larger Phase I award**!

SBIR/STTR Director: We heard you! After much discussion with my SYSCOM SBIR Program Managers, and input from a number of small firms, we arrived at a consensus on a new Phase I award size of $225,000, in two tranches: $125K with a $100K option. There are some procedural boxes to check before the new award size is operative, but our goal is to debut the new Phase I award no later than the 17.2 BAA next Spring.

FIRST LOOK—a snapshot of this year's SBIR/STTR Transition Program (STP) participants

The following pages show a first look at the SBIR Phase II companies that are currently enrolled in the DoN SBIR/STTR Transition Program (STP). The companies are listed 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.

Over the next eight months these companies will be developing marketing materials, preparing technical presentations, and working to make contact with parties interested in their individual technologies. Their STP Business Development activities will culminate during the 2017 Forum at the Gaylord Convention Center in National Harbor, MD on 3-5 April. They will all be there—ready to show you what innovative technologies they have been developing.

Additional information on each of the companies will become available on 14 December. That is when the STP will launch this year's Virtual Transition Marketplace (VTM) — an on-line showcase that will provide a highly searchable catalog of the Thumbnail, Abstract, Quad Chart and Corporate Capability Brochure of each STP Small Business. We will remind you when the VTM goes live.

CoI	Company/Topic Title	Topic #	POC	Phone	Email
Advanced Electronics	**Daico Industries, Inc.** High Power Solid State Amplifiers	N131-049	Ruben Mao	(310)507-5698	rmao@daico.com
	EM Photonics, Inc. Lossless Non-Blocking Single-Mode Fiber Optic Wavelength Router	N101-030	Mathew Zablocki	(302)456-9003	zablocki@emphotonics.com
	First RF Corporation High Gain Common Data Link (CDL) Antennas for Networking UAV Nodes	N131-007	Ian Rumsey	(303)449-5211	irumsey@firstrf.com
	First RF Corporation Atmospheric Ice Detection and Avoidance System for Fixed and Rotary Wing Aircraft	N142-101	Justin Henrie	(303)981-7245	jhenrie@firstrf.com
	GIRD Systems, Inc. Improved High Frequency Communications	N121-097	James Caffery Junior	(513)281-2900	jcaffery@girdsystems.com
	Nuvotronics Monolithic Microwave Integrated Circuit (MMIC) Compatible Phase Shifters for Phased-Array Radars	N141-034	Scott Meller	(800)341-2333	sameller@nuvotronics.com
	Pacific Antenna Systems Flightworthy Prototype (FWP) Low Profile Antenna for Multi-Band (Ka SATCOM, X Band option) including Ku band Tactical Common Data Link (TCDL)	N141-015	Anthony Macari	(805)910-8869	anthony@pasantennas.com
	PROMET International Inc. Fiber Optic Connector Inspection Test Set	N092-118	Austin VanSickle	(651)600-4451	austin@prometoptics.com
	Vescent Photonics Inc. Waveguide Based Laser Beamsteerers: A Simple, Low Cost and Low SWaP Solution to a Long-Standing Problem	N111-039	Mike Ziemkiewicz	(303)296-6767	mziemkiewicz@vescent.com
Air Platforms	**Area I, Inc.** Low Magnetic Signature Expendable Unmanned Aerial Vehicle (UAV) for Anti-Submarine Warfare (ASW)	N141-014	Josh Steele	(678)594-5227	jsteele@areai.aero
	AVID LLC Aerodynamic Control of Micro Air Weapons	AF083-097	Erik Gelhausen	(757)886-2611	egelhausen@avidaerospace.com
	Creare LLC A Multi-Tiered Lithium-Ion Battery Thermal Fault Mitigation Architecture	N14A-T006	David Fogg	(603)643-2499	dwf@creare.com
	Intelligent Automation, Inc. Coupled Multi-physics Analysis and Design Optimization of nozzles (COMANDO)	N14A-T005	Nikhil Nigam	(301)294-4255	nnigam@i-a-i.com
	Materials Research & Design Innovative Interlaminar Mode I and Mode II Fracture Toughness Test Methods for Ceramic Matrix Composites	N13A-T008	Craig Iwano	(610)964-9000 x119	craig.iwano@m-r-d.com
	METSS Corporation Integral Fuel Tank Self-sealing Protection	N12A-T001	Brian Collett	(614)797-2200 x112	bcollett@metss.com
	Piasecki Aircraft Corporation Innovative CH-53K Cargo Floor System	N142-103	Grey Hagwood	(802)318-2851	hagwood_dg@piasecki.com
	Robotic Research LLC Loading for Naval Resupply for Deployment (LNRD)	N131-054	Janet Hughes	(240)631-0008	jhughes@roboticresearch.com
	San Diego Composites, Inc. Composite Pallet Rapid Restraint System for TBFDS	N142-097	Quinn McAllister	(858)751-0450	qmcallister@sdcomposites.com
	Triton Systems, Inc. Life improvement of Plain Airframe Bearings by Preventing Contamination	N131-016	Rafael Mandujano	(978)856-4193	rmandujano@tritonsys.com
Autonomy	**Daniel H. Wagner, Associates, Inc.** Detailed ASV/USV Modeling and Simulation System (DAMS)	OSD06-UM1	W. Reynolds Monach	(757)727-7700	reynolds@va.wagner.com
	Physical Optics Corporation Adaptive Disturbance Mitigation System	N132-117	Kangbin Chua	(310)320-3088	kchua@poc.com
Biomedical	**Accacia International, Inc.** Evaluation of safety and efficacy of commensal probiotics, L. salivarius MMP strain and L. senioris Accacia strain for maintaining dolphin (Tursiops truncatus) health	N13A-T013	Austin Sequeira	(512)782-8218	austin@accaciabio.com
	PhaseSpace Inc. Self-Contained Performance Monitoring System	N09-T021	Tracy McSheery	(650)281-7797	tracy@phasespace.com
	Vivonics, Inc. Miniature Integrated Circuits Reporting Overall Status (MICROS)	N14A-T019	Gordon Hirschman	(781)373-1930 x246	ghirschman@vivionics.com
Command & Control, Communications, Computers, And Intelligence (C4i)	**Adaptive Methods** Mission Planning Application for Submarine Operations and Risk Management	N131-044	Lewis Hart	703-968-8040	lhart@adaptivemethods.com
	Architecture Technology Corporation MoMiP (Mobile Mission Planning)	N142-105	Gene Proctor	(703)627-7741	gproctor@atcorp.com
	Assett, Inc. Net-Centric Collaborative Environment for Littoral Combat Ship (LCS)	N141-022	Cameron Green	703-365-7378	Cameron.green@assett.net
	Charles River Analytics Inc. Crowdsourcing using Intelligent Supervision to address Information Requirements in Crisis Situations (CRISIS	N131-063	Sean Guarino	(617)491-3474	sguarino@cra.com
	Charles River Analytics Inc. Climatological Observations for Maritime Prediction and Analysis Support Service (COMPASS)	N142-121	Alison O'Connor	(617) 491-3474 x748	aoconnor@cra.com
	Jove Sciences, Inc. Mission Intelligence Sensor Management and Data Fusion Automation & Collaboration Tool (MISMADFACT) for Dense Target Environments	N101-101	James Wilson	(949)366-6554	jwilson@jovesci.com
	Jove Sciences, Inc. AquaQuIPS Multi-INT Data Fusion in a Cloud	N132-135	James Wilson	(949)366-6554	jwilson@jovesci.com
	Knowledge Based Systems, Inc. Information DiscovEry Assistant that Learns (IDEAL)	N112-152	Perakath Benjamin	(979)575-7134	pbenjamin@kbsi.com
	Mayachitra, Inc. Object Cueing Using Biomimetic Approaches to Visual Information Processing	N14A-T008	Jelena Tesic	(646)379-6042	tesic@mayachitra.com
	Modus Operandi, Inc. POLIS: Pattern of Life Integrated System	N141-075	Scott Camden	(703)659.3239	scamden@modusoperandi.com
	Real-Time Innovations, Inc. DDS Enabled Mission Data Recording and Reconstruction for Surface Combatants	N141-046	Paul Pazandak	(408) 990-7400	research@rti.com
	Rite-Solutions Integrated Communications System-Next	N101-047	Mike Taylor	(401)847-3399 x145	mtaylor@rite-solutions.com
	Signal Processing, Inc. Intelligent Proxies for Automated Mission Planning	N111-022	Chiman Kwan	(240)505-2641	chiman.kwan@signalpro.net
	SimVentions, Inc. Automated Function Point Analysis	N141-055	John Klaczynski	(540)322-7622	jklaczynski@simventions.com
	Systems & Technology Research Opportunistic Real-Time multimodal Sensor Content Exploitation	N142-122	Nicholas Pioch	(781)503-3291	npioch@STResearch.com
	GIRD Systems, Inc. JTRS Compliant Waveform for LCS Unmanned Vehicle Communications	N141-035	James Caffery Junior	(781)503-3291	jcaffery@girdsystems.com

CoI	Company/Topic Title	Topic #	POC	Phone	Email
Energy & Power	**Advanced Cooling Technologies, Inc.** Affordable, Scalable, Ocean Energy Harvesting System	N142-116	Nathan VanVelson	(717)295-6061	nathan.vanvelson@1-act.com
	American Superconductor Compact, Lossless, Ruggedized, Electromagnetically Shielded Connectors for Power and Signals	N132-127	James Maguire	(978)842-3037	Jim.Maguire@amsc.com
Engineered Resilient Systems	**Optimal Solutions Software LLC** Modeling of Integrally Bladed Rotor (IBR) Blends	N13A-T002	Phillip Belnap	(208)569-4942	pbelnap@gosculptor.com
	Spectral Sciences, Inc. A Rapid Optical Approach to Quantitative Composite Bond Quality Assessment	N13A-T011	Bridget Tannian	(781)273-4770	btannian@spectral.com
Electronic Warfare/Electronic Protection (EW/EP)	**Agiltron Corporation** Light-Weight Solar Cells with High Specific Power and Conversion Efficiency	N14A-T003	Geoffrey Burnham	(781)935-1200 x2602	gburnham@agiltron.com
	Agiltron Corporation Wideband Radio Local Interference Optimization Techniques	N112-170	Brian Fix	(225)590-3554	fix@bascomhunter.com
	EpiSys Science, Inc. High-Speed Reconfigurable SIGINT (HiReS) System for Large Time Bandwidth Product	N141-065	Bo Ryu	(858)805-5608	boryu@episyscience.com
	H6 Systems Inc. Crossed Field Amplifier Transmitter	N122-127	Michael Hunter	(603)880-4191	mhunter@h6systems.com
	Metamagnetics Inc. Flexible Solid State High Power Radio Frequency Pulsed Source	N141-060	Michael Hunnewell	(617)833-2950	mhunnewell@mtmgx.com
	SI2 Technologies, Inc. Ultra Wideband Electronically Steered Multi-Beam Array (II.5 -1000-314)	N121-104	Tom Goodwin	(978)495-5300	jsteele@areai.aero
	TeraDiode, Inc. High-Power Mid-Infrared Quantum Cascade Laser Array with Continuous-Wave Output Power Exceeding 100W	N142-093	Rob Cook	(920)664-1626	robcook@teradiode.com
Ground & Sea Platforms	**Advanced Materials and Devices** Controllable and Adaptable Lateral Support System	N132-143	Barkan Kavlicoglu	(775)826-8868	b.kavlicoglu@amadinc.com
	ATA Engineering, Inc Simulation of Mechanical System Kinematic Operation Subsequent to High Intensity Loading	N141-032	Victoria Harris	(703)988-1951	victoria.harris@ata-e.com
	Boston Engineering Corporation GhostSwimmer: Tactically Relevant, Biomimetically Inspired, Silent, Highly Efficient and Maneuverable Autonomous Fish Robot	N08-T030	Michael Rufo	(781)466-8010	mrufo@boston-engineering.com
	Hydronalix, Inc AUV for Sustained Riverine and Littoral Assessments	N102-182	Tony Mulligan	(520)360-3487	tony.mulligan@hydronalix.com
	International Electronic Machines Wireless Hydraulic Actuator Monitor (WHAM) Phase II	N141-023	Ryk Spoor	(518)268-1636	rspoor@iem.net
	Karagozian and Case, Inc. Transparent Armored Windows for Ships	N121-066	Joseph Abraham	(818)240-1919	abraham@kcse.com
	Tethers Unlimited, Inc. Micro Towed Magnetic Anomaly Detection (MAD) System for Rotary Wing and Vertical Take-Off Unmanned Aerial Vehicles (VTUAVs)	N142-109	Greg Jimmerson	(425)892-9240	jimmerson@gmail.com
	Transparent Armor Solutions Lightweight GeminiTM Transparent Armor for Land Vehicle Applications	N131-073	David Jungk	(714)597-6500	davidj@transparentarmorsolutions.com
Human Systems(EW/EP)	**Alelo TLT, LLC** Second Language Sustainment Training with the Tactical Language and Culture Training System	OSD08-CR2	Lewis Johnson	(310)574-7500	ljohnson@alelo.com
	AnthroTronix, Inc. Interactive Next-Generation Testbed Environment For Retention And Assessment Of Computer-Based Training (Interact)	N142-124	Jonathan Brown	(440)463-5269	jbrown@atinc.com
	Applied Research in Acoustics LLC Environment for Surface ASW Interactive Learning (E-SAIL)	N141-028	Jason Summers	(202)629-9716	jason.e.summers@ariacoustics.com
	BlazeTech Corporation Aqueous Based Automatic Fire Extinguishing System	N132-085	Albert Moussa	(781)759-0700	amoussa@blazetech.com
	Charles River Analytics Inc. Intuitive User Interfaces for Task-Tailored Planning (INTUIT)	N141-019	Stephanie Kane	(617) 491-3474 x 528	skane@cra.com
	Creative Technologies Inc. Next-Generation of Maintenance Skills Training System	N142-124	James Korris	(323)472-6205	james.korris@cretecinc.com
	Cybernet Systems Corporation Interactive Instructor for Shipboard Technicians	N141-050	Charles Cohen	(734)668-2567 x203	ccohen@cybernet.com
	Enomalies Rapid Synthetic Environment Tool for Virtual Battlespace 2 (VBS2)	N132-130	Bill Gregory	(859)327-9977	bdgreg@gmail.com
	GameSim, Inc. Distributed Synthetic Environment Correlation Assessment Architecture and Metrics	N141-006	Andrew Tosh	805-284-9471	andrew.tosh@gamesim.com
	Paragon Space Development Corporation Paragon Dive System (PDS)	CBD02-201	Patrick Pasadilla	(520) 382-4867	ppasadilla@paragonsdc.com
	Securboration Inc. Information and Decision Recommender	N14A-T024	Bruce McQueary	(321)591-7371	bmcqueary@securboration.com
	Sonalysts, Inc. Next Generation Electronic Support Measures Trainer for Submarines	N131-078	David Shikada	(860)326-3847	dshikada@sonalysts.com
	Systems Technology, Inc. Advanced Helo Display for Zero-Zero Shipboard Landings	N132-133	David Klyde	(310)679-2281 x127	dklyde@systemstech.com
Material & Manufacturing Processes	**Advanced Ceramic Fibers, LLC** Robust 2700 F MC/C Fiber Reinforced Matrices for Turbine Engines	N141-074	Shawn Perkins	(208)705-7824	sperkins@acfibers.com
	Alpha STAR Interlaminar Mode I and Mode II Fracture Toughnesses in Ceramic Matrix Composites (CMCs)	N13A-T008	Frank Abdi	(562)961-7827	fabdi@alphastarcorp.com
	CeraNova Corporation High Strength, Optical Quality Spinel	N102-163	Marina Pascucci	(508)460-0300	mpascucci@ceranova.com
	ColdQuanta Compact robust testbed for cold-atom clock and sensor applications	N13A-T018	Jay Randolph	(303)440-1284	daniel.farkas@coldquanta.com
	Engineering & Software System Solution (ES3), Inc. Development of Cad Plating Replacement with Zinc Nickel on High Strength Steel Components	AF071-320	Daniel Farkas	(478)957-1278	jay.randolph@es3inc.com
	Imaging Systems Technology Mechanical Property Characterization and Modeling for Structural Mo-Si-B Alloys for High Temperature Applications	N13A-T012	Carol Wedding	(419)536-5742	cwedding@teamist.com
	Materials Research & Design Ultra Sharp Fiber Architectures for Ceramic Composites	N142-119	Derek Caputo	(610)964-9000 x115	derek.caputo@m-r-d.com
	NanoSonic, Inc. Low-Cost, Easily Applied Voc-Free Pipe Leak Repairing Resins	N141-052	Vince Baranauskas	(540)626-6267	vince@nanosonic.com

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Material & Manufacturing Processes	**Prime Photonics, LC** Non-Destructive Inspection (NDI) technique for Sub-Surface Crack Characterization for Non-Ferrous Metals in Propulsion System Components	AF141-205	Steve Poland	(540)315-3649	steve.poland@primephotonics.com
	QuesTek Innovations LLC Compact, Lossless, Ruggedized, Electromagnetically Shielded Connectors for Power and Signals	N141-062	Raymond Genellie Junior	(847)425-8212	rgenellie@questek.com
	SANOVA LLC Creation of New Robust Liquid Induction Carburization Technology LINCARBOHEAT for Deep Internal Splines with High Aspect Ratios	N102-142	Gene Ostrovsky	(718)392-0009	genost@sanovallc.com
	Tetramer Technologies, LLC Materials in Multi-kilogram Quantities for Optical Lens Development	N132-137	Adam T. Haldeman	864-646-6282 x202	adam.haldeman@tetramertechnologies.com
	Texas Research Institute Austin, Inc. Waterproof Towed Array Hosewall	N141-056	Daniel Farkas	(478)957-1278	jay.randolph@es3inc.com
Sensors and Processing	**Analysis, Design & Diagnostics, Inc.** In-node Processing for Low Power Target Detection, Classification, Localization, & Tracking	N141-070	Gary Donoher	(904)475-0095	gdonoher@adndinc.com
	Applied Signals Intelligence Spectrum Monitoring Payload for ScanEagle Unmanned Aerial Vehicle	N142-114	Martin Rofheart	(240)463-3306	martin.rofheart@asigint.com
	Daniel H. Wagner, Associates, Inc. Automated Active Sonar Interference Avoidance Algorithms (ASIA)	N141-039	W. Reynolds Monach	(757)727-7700	reynolds@va.wagner.com
	Freedom Photonics LLC Ruggedized Wideband High-Power Balanced Photodiode Receiver	N141-013	Ken Hay	(805) 967-4900 x7025	khay@freedomphotonics.com
	Innovative Dynamics, Inc. Atmospheric Icing Conditions Measurement System (AIMS) for UAVâ€™s	N142-101	Joseph Gerardi	(607)257-0534	jg@idiny.com
	Physical Optics Corporation Automated Non-Destructive Foam Sense and Control Unit	N122-131	Samuel Nieva	(310)320-3088	snievajr@POC.com
	Physical Sciences Inc. Compact LIDAR for Continuous Monitoring of Atmospheric Extinction	N131-046	B. Green	(978)689-0004	green@psicorp.com
	Poseidon Systems, LLC Dynamic Vehicle Center-of-Gravity and Gross Weight Estimation Usingly Readily Available Sensors	N133-149	Mark Redding	(585)633-8552	mark.redding@poseidonsys.com
	QuSpin A Fully Integrated Compact Scalar Atomic Magnetometer	N141-004	Jeramy Hughes	(303)325-7733	jh@quspin.com
	Rock West Composites, Inc. Affordable Broadband Radome	N101-034	Keith Loss	(858)537-6260	keith.loss@1rockwest.com
	SeaLandAire Technologies, Inc. Components for a Deep Drifting Sonobuoy	N142-117	Bill King	(517)784-8340 x151	bking@sealandaire.com
	Thermal Wave Imaging, Inc. Automated, Rapid Non-Destructive Inspection (NDI) of Large Scale Composite Structures	N092-097	Steven Shepard	(248)414-3731	sshepard@thermalwave.com
	Upstate Scientific Innovative Signal Processing Techniques for Mitigation of Wind Turbine Farm Interference in Airborne Radar Systems	N141-003	Vincent Amuso	(585)506-2405	amuso@upstatescientific.com
Weapons Technologies	**Advanced Systems & Technologies, Inc.** Advanced Adaptive Optics (AO) for Laser Weapons in Heavy Turbulence	N131-076	Debra Hadley	(949)733-3356	dhadley@asatechinc.com
	CFD Research Corporation An Integrated Human Test Surrogate to Assess Injury Risk and Measure Non-Lethal Exposure	N132-084	Keith Sedberry	(256)726-4917	keith.sedberry@cfdrc.com
	Eagle Harbor Technologies, Inc. A Variable Pulse Width, Voltage, and Repetition Frequency IGBT-based High Power Radio Frequency Source Driver	N132-129	Timothy Ziemba	(206)402-5242	ziemba@eagleharbortech.com
	MATSYS, Inc. Processing of Metal Powders for Enhanced Combustion Efficiencies	N141-072	Tony Zahrah	(703)964-0400	zahrah@matsys.com
	Mechanical Solutions, Inc. Automated Warhead Characterization System (AWCS)	N141-007	Keith Olasin	(973)326-9920	kbo@mechsol.com
	MZA Associates Corporation Naval Platform Aero-Optic Turbulence and Mitigation Methodology	N13A-T001	Matthew Whiteley	(937)684-4100	matthew.whiteley@mza.com
	Orbits lightwave, Inc. Ruggedized Narrow-Linewidth 1550nm Laser	N141-005	Yaakov Shevy	(626)394-2744	yshevy@orbitslightwave.com
	RadiaBeam Technologies, LLC Compact Radar Antenna	N132-087	Pedro Frigola	(310)822-5845 x125	frigola@radiabeam.com
	Reaction Engineering International A Multiscale Modeling and Simulation Framework for Predicting After-Burning Effects from Non-Ideal Explosives	N10A-T002	David Swensen	(801)598-7440	swensen@reaction-eng.com
	TechFlow, Inc. High-Power Microwave (HPM) Weapons Effects and Failure Analysis Tool	N121-008	Tom Dlugolecki	(619) 379-2512	tdlugolecki@techflow.com
	TechFlow, Inc. High Power Radio Frequency (HPRF) Dynamic Surface Engagement Modeling and Simulation Tool	N132-134	Tom Dlugolecki	(619) 379-2512	tdlugolecki@techflow.com

UPCOMING EVENTS

Oct 17-19	2nd Unmanned Maritime Systems	Washington, DC
Oct 27-28	2nd Annual AerospaceDefenseChain Conference	Montelucia, AZ
Nov 1-3	MILCOM 2016	Baltimore, MD
Nov 28-Dec 1	Defense Manufacturing Conference (DMC 2016)	Denver, CO
Nov 29-Dec 1	SBIR/STTR and Defense Energy Innovation Summit	Austin, TX

For more event information, please visit **NavySTP.com**

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