

# DoD SBIR/STTR Programs Quarterly Review



Vol. 1, Issue 2



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## Message from the Small Business and Technology Partnerships Office

Welcome Spring! This quarter's newsletter includes program changes and updates, success stories, upcoming outreach events and more. Topic suggestions for the newsletter are encouraged – please email your ideas to [osd.ncr.ousd-r-e-mbx.sbir-sttroutreach@mail.mil](mailto:osd.ncr.ousd-r-e-mbx.sbir-sttroutreach@mail.mil).

The SBIR/STTR programs were established with the purpose of strengthening the role of innovative small business concerns in Federally-funded research and development (R&D). Since inception, SBIR in 1982 and STTR in 1992, the programs have demonstrated their success for DoD, which has been captured in an Economic Impact Study published in 2019, and available at <https://www.sbir.gov/impact>.



Matthew Williams  
Technology Portfolio Manager &  
Director, Rapid Innovation Fund,  
Small Business and Technology Partnerships

The programs have been reauthorized and extended multiple times since their creation, and are once again up for reauthorization – ***if the programs are not reauthorized, they will expire at midnight on September 30, 2022.***

***A reauthorization is necessary to allow the DoD to continue publishing SBIR/STTR Broad Agency Announcements/Commercial Solutions Openings as well as to fund new and ongoing SBIR/STTR projects.***

The Department is working with the Small Business Administration and Congressional Committees to avoid a lapse in program reauthorization, which would have a devastating impact on small businesses and the DoD. With a strong return on investment for DoD and a positive impact to the Nation's overall economy, the Department supports the SBIR/STTR programs being reauthorized and made permanent.

Sincerely,

Susan Celis and Matt Williams

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## NATIONAL ECONOMIC IMPACTS From the DoD SBIR/STTR Program 1995-2018

DoD's investment of **\$14.4 billion** in small business R&D resulted in:



## DoD SBIR/STTR Q2 News

### **Small Business Technology Partnerships (SBTP) Transitioning from Dun & Bradstreet Number (DUNS) to the Unique Entity ID (UEI) as Unique Identified for Small Business Firms.**

SBTP is preparing the Defense SBIR/STTR Innovation Portal (DSIP) for the transition from using the Dun & Bradstreet, Data Universal Numbering System (DUNS), which will be replaced by the Unique Entity ID (UEI) as the authoritative unique entity identifier used by the Federal Government. The DSIP will be updated to accept the new UEI as the unique small business firm identifier beginning on April 7, 2022. Rollout of a detailed implementation and communication plan is in progress.

The change is being implemented in order to align with General Services Administration's System for Award Management (SAM) and Integrated Award Environment (IAE) and requires numerous code and data updates in DSIP, communication with Services and Components, as well as action from small business firms to provide their updated UEI information. To learn more, visit <https://sam.gov/content/duns-uei>.

## Funding Opportunities

In the second quarter, SBTP released over 190 Small Business Innovation Research (SBIR) topics and over 35 Small Business Technology Transfer (STTR) topics across four Broad Agency Announcements (BAAs) and one Commercial Solutions Opening (CSO). Additionally, this included the first topics under the DoD-wide Annual SBIR & STTR BAAs, as well as topics under the DoD 22.1 SBIR & 22.A STTR BAAs and the Air Force X22.1 CSO. During this timeframe, approximately 3,500 proposals were submitted across all topics and solicitations. For a full list of current and upcoming funding opportunities, please visit <https://www.dodsbirsttr.mil/submissions/login>.

The screenshot shows the DSIP homepage with a navigation bar at the top containing 'HOME', 'TOPIC INFO', 'PROGRAM INFO', and a 'Login/Register' button. A large orange banner reads 'Welcome to the DSIP (Defense SBIR/STTR Innovation Portal)!'. Below this, an 'ATTENTION:' box states that as of April 4, 2022, the DUNS Number has been replaced by the Unique Entity ID (UEI) from SAM, and users must update their firm information. A 'Quick Links' section on the left includes links for BAA Schedule, Topics and Topic Q&A (SITIS), Learning & Support, Additional Program Info, SBIR.gov, and DSIP Listserv. On the right, an 'Active BAAs' section highlights 'DoD SBIR 2022.4' with 10 active topics. The Department of Defense logo is in the bottom right corner.

**DSIP** Defense SBIR/STTR Innovation Portal  
Proposal Submissions

HOME TOPIC INFO PROGRAM INFO Login/Register

Welcome to the DSIP (Defense SBIR/STTR Innovation Portal)!

**ATTENTION:**

On April 4, 2022, the DUNS Number was replaced by the Unique Entity ID (SAM) as the authoritative unique entity identifier used by the Federal Government. **DSIP Firm Admins must log in to DSIP and update the Firm Information with the UEI (SAM) before your next submission.** This action can only be completed by the user assigned as the Firm Admin after logging into their DSIP account.

For more information on the DUNS to UEI (SAM) transition, please visit <https://sam.gov/content/duns-uei>.

Quick Links <<

- BAA Schedule**  
View active, upcoming, and archived Broad Agency Announcements (BAAs)
- Topics and Topic Q&A (SITIS)**  
View available topics for each BAA and ask questions during Pre-Release periods
- Learning & Support**  
View templates, training materials, and FAQs
- Additional Program Info**  
Access more information on the DoD SBIR/STTR program
- SBIR.gov**  
Learn more about the overall SBIR/STTR program and search prior awards
- DSIP Listserv**  
Sign up for the DSIP Listserv to receive emails about BAAs, new opportunities, and more!

Active BAAs

**DoD SBIR 2022.4**  
10 Topics Active

**DEPARTMENT OF DEFENSE**  
Small Business Innovation Research  
Small Business Technology Transfer

To be notified of new funding opportunities and to receive e-mail updates on the DoD SBIR and STTR Programs, subscribe to our Listserv by visiting <https://www.dodsbirsttr.mil/submissions/login> and clicking “DSIP Listserv” located under Quick Links.

*The Broad Agency Announcement details the procedures for the acquisition of basic and applied research and that part of development is not related to the development of a specific system or hardware procurement. BAA's may be used by agencies to fulfill their requirements for scientific study and experimentation directed toward advancing the state-of-the-art or increasing knowledge or understanding rather than focusing on a specific system or hardware solution. In some instances, a DoD component may elect to release topics under a Commercial Solutions Opening (CSO). CSOs are a competitive procedure used to acquire innovative commercial items, technologies, or services. It allows DoD to obtain solutions or potential new capabilities to aid in fulfilling requirements, closing capability gaps, or providing potential technological advancements.*

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### **Components Connection**

#### **DoD's Air Force/Space Force Launched Blue Cyber, a New Initiative to Support Cybersecurity Success for Small Businesses**

The Department of the Air Force (DAF) Chief Information Security Officer (CISO), launched a new cyber initiative, Blue Cyber, to ensure that Air Force, Space Force and DoD SBIR/STTR firms are aware of and understand the DoD cybersecurity and information protection requirements in their contracts and provide the necessary state and federal resources for implementation. The goal of Blue Cyber is for no small business cybersecurity or information protection questions to go unanswered.

While serving as the Chief Technology Officer in the SBIR/STTR program office, Kelley Kiernan recognized the need for small business cybersecurity outreach. “As small businesses drive innovation and support the Department of the Air Force missions with cutting-edge technologies, it is vital we work together to protect sensitive data and networks,” Kiernan said.

Kiernan, a scientist, engineer and small business champion, reached out to the Air Force Chief Information Security Officer to propose a solution. She was subsequently detailed to the office, and in her new role created the Blue Cyber initiative which is supported by the innovation arm of the Air Force and Space Force—AFWERX.

Blue Cyber has three components; the first is 25 short, ultra-relevant presentations created so that Department of the Air Force SBIR/STTR firms, contractors, prospective companies and their government partners can understand the DoD cybersecurity and information protection regulations at their own pace. All Blue Cyber content, including the new videos, are located on the DAF CISO's SB website <https://www.safcn.af.mil/CISO/Small-Business-Cybersecurity-Information/>

The second component is the “Air Force/Space Force Chief Information Security Officer's Blue Cyber Ask-Me-Anything” webinar which provides current cybersecurity content and guest speakers from organizations such as National Institute of Standards and Technology and the Department of Defense Cyber Crime Center, or DC3. The unique, live events are held every Tuesday from 1-3 p.m. ET via Zoom. Kiernan and her team usually speak to over 200 current Department of the Air Force SBIR/STTR firms and DoD contractors every week, with the goal to reach prospective companies as well.





Kiernan allocates three hours each day where she takes one-on-one calls. She hears company's unique challenges and directs them to federal and state resources to guide them to cybersecurity compliance success. This outreach has the direct effect of aiding the Air Force SBIR/STTR small businesses by helping them protect their intellectual property, employee personal information and sensitive DoD data. "Failure to protect our sensitive data will put service members and military missions at risk. We must match the aggressiveness of our cyber adversaries with radical teamwork to bring our small businesses up-to-speed in the most modern methods for comprehensive protection of DAF sensitive data and networks," said Kiernan.

In addition to the webinars, Blue Cyber efforts, supported by an AFVENTURES team, includes a free Cybersecurity Boot Camp that provides supply contractors and prospective contractors with the most current resources. Outreach targets for 2022 include academic and research institutions as well.

For more information on the Blue Cyber Education Series, visit [www.safcn.af.mil/CISO/Small-Business-Cybersecurity-Information/](http://www.safcn.af.mil/CISO/Small-Business-Cybersecurity-Information/), on LinkedIn by following USAF SBIR/STTR or Kelley Kiernan at [kelly.kiernan@us.af.mil](mailto:kelly.kiernan@us.af.mil).

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## **The Hill**

### **Reauthorization of DoD Small Business Innovation Research and Small Business Technology Transfer Program Remains High Priority**

With the DoD SBIR/STTR programs currently set to expire on 30 September 2022, reauthorization of the programs remains the primary focus of the SBTP office as a new authorization and appropriation cycle begins. SBTP is working with the Small Business Administration to ensure Congress is aware of the impacts a lapse in program authorization would have on small businesses and the DoD. Since inception, SBIR in 1982 and STTR in 1992, the programs have demonstrated their success for DoD, which has been captured in a recent Economic Impact Study. With a strong return on investment for DoD and impact to the Nation's overall economy, the Departments support the SBIR/STTR programs being made permanent.

## **Success Stories**

### **Oceanit Laboratories, Inc., Secures Food & Drug Administration (FDA) Emergency Use Authorization (EUA) for Simple, High-Accuracy, Rapid COVID-19 Test Kit**

Joining a DoD-wide effort to combat the COVID-19 pandemic, the Defense Logistics Agency (DLA) Small Business Innovation Research (SBIR) Program funded a series of projects in response to national shortages on items such as test kits. One DLA SBIR firm, Oceanit Laboratories Inc., developed a break-through, point-of-care rapid test kit with 89% sensitivity, and 100% specificity, and delivering results in 20 minutes – the ASSURE-100. Oceanit's three-component test kit–swab, vial and cassette – requires no additional equipment and has the same high-performance for all COVID 19 variants, including Omicron. At scale, the ASSURE-100 will cost roughly \$5 per test, retail.

In February 2022, Oceanit received the EUA from the United States Department of Agriculture, FDA for the ASSURE-100 Rapid COVID-19 test kits.





“The rigorous regulatory standards in place to safeguard public health, combined with the stringent nature of the authorization process, meant that Oceanit needed to be airtight when submitting and defending their EUA application” said Dr. Imes Chiu, the project’s Technical Point of Contact. “If any one thing doesn’t work, Oceanit starts over. They also responded to FDA questions within 48 hours,” stated Dr. Chiu. Dr. Chiu serves as the Science and Technology Forward from the United States Army Corps of Engineers—Engineer Research Development Center co-located at DLA Research & Development, Fort Belvoir.



Assure 100 COVID 19 Test Kits. Image provided by Oceanit, 2022.

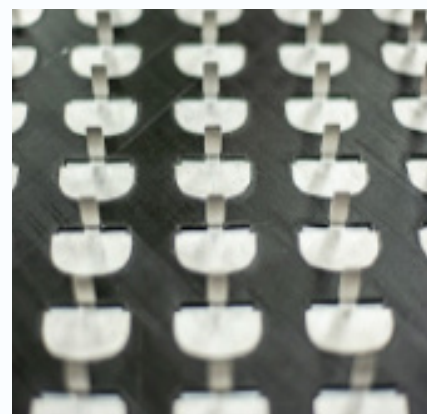
In the days following the EAU issuance, Oceanit received large volume orders from various institutions, such as United States Government agencies, state and local government agencies, pharmaceutical companies, schools, labor unions, independent pharmacies, first responders, not-for-profit organizations and many other establishments from across various industries. For more information on Oceanit Laboratories, Inc., please contact [DLASBIR2@dla.mil](mailto:DLASBIR2@dla.mil).

## Parts Life inc. Qualifies as Alternative Source for Modernized Missile Components

The Elevon Barrel Seal is a stainless-steel bracket designed from high strength, corrosion resistant stainless steel. A specialized silicon rubber sealing is affixed to the bracket in position using a specially designed, 3D printed assembly template. Using the Original Equipment Manufacturers (OEM) partial technical data, Parts Life converted the documents to modernized material and finished the specifications. The drawings were re-created in Solidworks 3D modeling software and new drawings were produced with modernized specifications, improving both tolerancing and clarity for manufacturability. During prototyping, Parts Life used its X-Ray Fluoresce and Fourier Transform Infrared material scanners to verify the chemical composition of both the acquired metal and rubber samples before assembly could take place.

Specialized bending equipment and dies were required to produce the complex radii defined in the part drawings. First samples were produced before the pieces were inspected for adherence to drawing dimensioning and tolerancing. This was completed using a Keyence 3D Optical Measurement Machine to inspect the first pieces for increased accuracy over hand measuring tools.

Parts Life produced first articles for testing and modified the drawings based on Engineering Support Activity (ESA) requirements. 3D samples were printed throughout this process to validate all changes made in the 3D models and 2D drawings. Following these engineering changes, Parts Life carried out the full production of the Elevon seals. This included the forming of the metal bracket portion of the seal, the passivation of the stainless-steel component, the adhesion of the specialized silicon rubber onto the assembly, the part marking, and the custom packaging of all 415 units required. Parts Life fulfilled two acquisitions contracts within the year and resolved another DLA obsolescence limited source requirement. For more information, please contact [DLASBIR2@dla.mil](mailto:DLASBIR2@dla.mil).



3D printed precision assembly fixture used to position the rubber seal into place before adhesion IAW the drawing specifications. Image provided by Parts Life, 2021

## Outreach Events

### **Small Business and Technology Partnerships Attended the Consumer Electronics Show (CES®)**

Small Business and Technology Partnerships (SBTP) attended the Consumer Electronics Show on January 4 – 7, 2022 in Las Vegas, Nevada. This was the first-ever federal wide innovation booth at the CES® that provided information and resources on programs by the U.S. government for startups and small businesses. Booth space was a collaborative effort between the United States Patent and Trademark Office (USPTO), Small Business Administration (SBA), SelectUSA, and the DoD Small Business Innovation Research (SBIR) and Small Business Technology Transfer (STTR) Programs (Army, Navy, DARPA, and OSD).

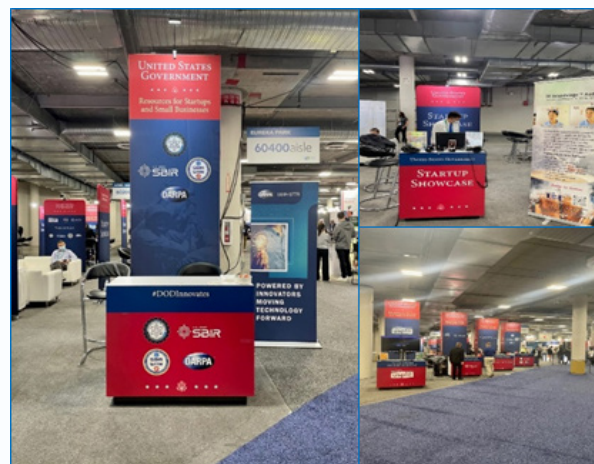


Exhibit Hall at CES® 2022

CES® is the largest display and exhibition of cutting-edge consumer technology in the United States. Over 1,100 companies from across the globe showcased the latest in digital health, artificial intelligence, 5g, robotics, space tech. CES® showcased companies including manufacturers, developers and suppliers of consumer technology hardware, content, technology delivery systems and more.

The DoD SBIR/STTR Programs are constantly seeking ways to bring non-traditional organizations and groundbreaking technologies to the Department and ultimately the warfighter. CES® was an opportunity for the SBTP to learn more about technological trends in the commercial space, meet with technologists, and educate them on the needs of the Department and the importance of the SBIR/STTR programs.

### **DoD SBIR/STTR Programs Participated in U.S. Women's Chambers of Commerce Events During Women's History Month**

In celebration on Women's History Month, the SBTP office presented a DoD SBIR/STTR contracting overview at the Virtual National Small Business Federal Contracting Summit Conference jointly hosted by the U.S. Women's Chamber of Commerce and the American Small Business Chamber of Commerce on March 9, 2022. The session offered insight into considerations for small businesses pre, during, and post contract awards, policy and regulations, the acquisition process, and a question and answer session. Later in the month, Ms. Susan Celis, Acting Director, SBTP, hosted a DoD SBIR/STTR Programs overview webinar for Chamber members.

The SBTP Office is committed to creating, supporting, and attending outreach events that focus on educating and increasing participation of underrepresented communities in the SBIR/STTR arena. Through opportunities to collaborate with organizations like the U.S. Women's Chamber of Commerce and provide pertinent information and resources to women in business, DoD SBIR/STTR Programs support a shared mission to increase women's business growth in all industries.

### **SBTP Attended the 2022 Pacific Operational Science & Technology (POST) Conference**

SBTP attended the POST conference in Honolulu, HI from March 7 – 11, 2022 including events hosted by the National Defense Industrial Association (NDIA), United States Indo-Pacific Command (USINDOPACOM) and the Defense Threat Reduction Agency (DTRA),





sessions by agency and industry leaders; technology demonstrations and a site visit to Oceanit Laboratories, Inc. which received the Emergency Use Authorization (EUA) from the United States Department of Agriculture, Food & Drug Administration (FDA) for the ASSURE-100 Rapid COVID-19 test kits.

The Hon. Ms. Heidi Shyu, Under Secretary of Defense for Research and Engineering (OUSD(R&E)) provided a keynote address and discussed the importance of small businesses, faster technology transition, maintaining the United States' technological competitive edge, and modernization priorities. Other sessions included Mr. Maynard Holliday, Director of Defense Research and Engineering for Modernization (DDRE(M)) and Principal Directors from Cyber, Directed Energy, Space, and Hypersonics, who discussed technology priorities and working with the Department. There were also sessions focused on bridging technology gaps, strategic collaborations on cutting edge technology with international allies and how to better engage with industry. Also during the conference, SBTP hosted a networking session and provided insights on the DoD SBIR/STTR programs, OSD Transitions SBIR/STTR Technologies (OTST) program, and the Rapid Innovation Fund (RIF) and shared a booth with the Missile Defense Agency (MDA).

For the past 22 years, POST has brought together leaders from the Department of Defense, agencies, the international science & technology community, industry executives, academia and STEM who collaborate on how they can contribute to peace and stability in the Indo-Pacific region through science and technology. The conference has served as a leading forum for understanding operational issues in the region and for technology providers to recommend solutions to these issues.



SBTP staffers and attendees at POST 2022 on the exhibit floor and networking.

### DoD SBIR/STTR Program Components Participate in South by South West (SXSW)

From March 11-15, 2022 the Small Business and Technology Partnerships (SBTP) office participated in activities and panels during SXSW, hosted by AFWERX, AFVENTURES, Defense Innovation Unit (DIU), and National Security Innovation Network (NSIN), at the Capital Factory in Austin, TX. Other DoD participants included the Rapid Reaction Technology Office (RRTO), Defense Advanced Project Agency (DARPA), Defense Logistics Agency (DLA) and Missile Defense Agency (MDA). The SBTP team collaborated with the AFWERX and DIU teams to have presence at SXSW/Capital Factory for the DARPA, DLA, and MDA SBIR/STTR teams; participated in technology demonstrations; networked with small businesses during panels, offices hours, and social events; had conversations with AFWERX, AFVENTURES, DIU, NSIN leadership on challenges and solutions within SBIR/STTR contracts; and participated in panels/questions and answer sessions.

#### Conference highlights included:

- Town Hall: Small Business & Startup Opportunities with the U.S. Air Force. Representatives from AFWERX, AFVENTURES, DARPA and SBTP joined a panel discussion on contracting vehicles such as open topics, Strategic Funding Increase (STRATFI)/Tactical Funding Increase (TACFI), and working together to bridge the valley of death.
- RAPIDx: A Discussion on Tech Transition, Supply Chains, and Logistics. Colonel Eric Obergfell, Director of Contracts, Air Force Research Laboratory and Deputy Director of Contracts, Air Force Life Cycle Management Center, led a roundtable discussion with leaders from the U.S. Air Force and industry to discuss the importance of supply chains, logistics, and venture capital in an era of great power competition.

- Working with DARPA. Ms. Sha-Celle Manning, Chief, Commercial Strategy, Ms. Jennifer Thabet, Director, Small Business Programs and Dr. Blake Bextine, Biological Technologies, Program Manager, discussed working with DARPA and overviews of their offices and projects.
- Rapid Reaction Technology Office (RRTO). Mr. Jon Lazar, Director, Rapid Reaction Technology, OUSD(R&E), provided an overview of the RRTO program and his office's mission to discover new ideas for emerging technologies and capabilities, turn them into executable programs, and accelerate capability to the warfighter.
- Transition Working Group. Staff from AFWERX, AFVENTURES, DARPA, DLA, MDA, and SBTP had a closed-door discussion on better ways to foster collaboration across the Department to transition mission-critical technologies.
- Building the Military Meta-verse. Mr. Daniel Robinson, Founder and CEO of Red 6 and Ms. Kelly Perdew, Co-Founder and Managing General Partner of Moonshots Capital, led a discussion on the genesis of the Military Meta-verse and how it is revolutionizing the ability to conduct both campaign-level training and military operations.

Creating, supporting, and attending outreach events that focus on educating and increasing participation of underrepresented and nontraditional communities in the SBIR/STTR programs is a vital mission of the SBTP office. SXSW is one of the most significant events that brings creatives, technologists, entrepreneurs, and industry together and the Capital Factory was impactful for small businesses, government personnel, and support contractors because these events provided a rare opportunity for vested parties to have an open discourse of working with the DoD.

### Upcoming Events

#### **Women in Tech Global Conference (Virtual)**

June 7 – 10, 2022

[www.womentech.net](http://www.womentech.net)

#### **TechConnect World Innovation Conference**

and Expo Spring Conference

Gaylord National Harbor, Maryland

June 13 – 15, 2022

<https://www.techconnectworld.com/World2022/register.html>

#### **DoD SBIR/SBIR Webinar**

Elevate Ventures

June 29, 2022

[www.elevateventures.com](http://www.elevateventures.com)

#### **DSIP**

<https://www.dodsbirsttr.mil/submissions/login>

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