ARMY SBIR
SMALL BUSINESS INNOVATION RESEARCH

Army SBIR Newsletter

SBIR PROGRAM MANAGEMENT OFFICE http://www.armysbir.army.mil

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Photo by Sgt. Michael J. MacLeod

The purpose of this newsletter is to provide the small business community, Army, DoD and other government researchers and leadership additional insight into the Army SBIR program.

Army SBIR Vision

To be the Army's premier source of innovative technology solutions, providing direct access to America's high-tech small business research & development community, enabling our Soldiers deployed around the world.

Army SBIR Helpdesk

The Army SBIR Helpdesk answers program questions and provides assistance to small businesses and Government participants. Help Desk hours are Monday through Friday from 8 am to 5 pm EST (except on Federal holidays). You may reach the help desk by email at army.sbir@us.army.mil or by calling (703) 399-2049.

SBIR Reauthorization Update

As you all are probably fully aware, the SBIR Program was reauthorized when President Obama signed the FY12 National Defense Authorization Act (NDAA) on December 31, 2011. Formal guidance on execution of the program will be provided through a Policy Directive to be issued by the Small Business Administration for public comment on June 30, 2012. We will keep you informed of continuing developments.

Small Business Administration (SBA) 2012 Tibbetts Awards

Congratulations to the 2012 Tibbetts Awardees! The Tibbetts Awards, presented by the SBA, honor outstanding small businesses and individuals judged to exemplify the best in the SBIR Program. This year's awardees are:

Advanced Circulatory Systems, Inc.
BioStrategies, LC
CHI Systems, Inc.
Nanoparticle BioChem, Inc.
Primordial
San Diego Composites, Inc.
Separation Design Group, LLC
Systems Technology, Inc.
TRX Systems
Axion BioSystems, Inc.
Bridger Photonics, Inc.
FHC, Inc.
Piasecki Aircraft Corporation
RMD, Inc.
Sensor Electronic Technology, Inc.
Stottler Henke Associates, Inc.
The Design Knowledge Company
Vida Health Communications, Inc.

2012 Army SBIR Achievement Awards

On April 26, 2012, the Army SBIR Program held the 2012 Achievement Awards Ceremony at the Women in Military Service to America Memorial at Arlington National Cemetery. The Ceremony was hosted by Dr. Scott Fish, Chief Scientist of the U.S. Army. The Achievement Awards Program has been and continues to be very competitive. This year, 613 projects were eligible to compete for an award; from which 37 nominations were received and forwarded to the Selection Committee. 10 projects were selected and recognized at the Ceremony for their outstanding achievements. Read about the award winners on the next page.

2012 Achievement Award winners
Photo by Ms. Nisha Marzo

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Photo by Sgt. April York

12.3 SOLICITATION

Solicitation Pre-release	26 July 2012
Solicitation Opens	27 August 2012
Solicitation Closes	26 Sept 2012

OUTREACH EVENT

National SBIR Beyond Phase II Conference and Technology Showcase	September 10-13, 2012

Have a Success Story?

We are continually seeking new "success stories" from small businesses. Successful small businesses and their technology are highlighted in our yearly Commercialization Brochure, website, and quarterly newsletter. If you are interested in submitting a story, please contact the SBIR Program Management Office at: army.sbir@us.army.mil

You can download and view our Commercialization Brochures at: https://www.armysbir.army.mil/Commercialization/Default.aspx

2012 Army SBIR Achievement Award Winners

Advanced Circulatory Systems, Inc.– Advanced Circulatory Systems was recognized for its project, "ResQVent-Treatment for Traumatic Brain Injury." This project is being developed for use on the battlefield and during transport of Soldiers with traumatic brain injury and/or hypotensive emergencies. The ResQVent is an electronic, portable device that delivers novel Intrathoracic Pressure Regulation therapy.

Luna Innovations, Inc.– Luna Innovations was recognized for its project, "Conformal and Embedded Antennas." Luna Innovations and the Georgia Tech Research Institute have developed high performance antennas through combing specially engineered Magneto-Dielectric substrate materials, unique antenna designs, and inkjet printing for rapid antenna prototyping techniques. The use of conformal and embedded antennas can significantly reduce the visibility of communication antennas and improve aerodynamic performance for both ground and airborne platforms.

Migma Systems, Inc.– Migma Systems was recognized for its project, "Infrared Improvised Explosive Device and Landmine Detection Systems." Migma Systems developed hardware, software, and algorithms for detection of buried mines and IEDs that can be integrated into the Vehicle Optics Sensor System vehicles that are currently deployed in Theater. The goal is to be able to automatically detect buried mines and IED in real time during day and night at standoff distances of 150 feet or greater and at speeds of 10-15 miles per hour.

Radiance Technologies, Inc.– Radiance Technologies was recognized for its project, "Power Conditioning for Explosive Pulsed Power." Radiance Technologies has developed a unique technology for converting energy from explosives or other sources into radio frequency energy for applications in Electromagnetic Pulse Warheads and Improvised Explosive Device detection and defeat, and for stopping hostile vehicle or vessels with little or no collateral damage.

RBC Technologies– RBC Technologies was recognized for its project, "Self-contained Air Activated Ration Heater." Using its extensive technical background in energy storage and delivery electrochemistry, RBC Technologies developed a low-cost and scalable alternative to the incumbent ration heater based on zinc-air battery technology. This technology can be used in situations that do not readily permit the use of a powered heating source and represents a significant advance in portable heater technology with widespread use in both private and military markets.

ROTHTEC– ROTHTEC was recognized for its project, "Digital Printing with Near Infrared Reflectance Properties." ROTHTEC's research efforts have resulted in the development of innovative processes in the use of digital inkjet print software, firmware, and hardware resulting in new technology that has the capability to significantly reduce the time to field combat uniforms with new camouflage designs, making site-specific camouflage clothing and equipment an operational reality.

Soar Technology, Inc.– Soar Technology was recognized for its project, "*Tiger Board*-Traffic Control Simulation." Soar Technology designed and delivered the *Tiger Board*– an intuitive, domain-centric interface that composes synthetic air traffic for Air Traffic Control training exercises. Using *Tiger Board,* scenario developers and operators who have limited or no experience with programming or behavior modeling will be able to easily compose, debug, and control simulated forces for a variety of airspace management training objectives.

Spectrum Research Corporation– Spectrum Research was recognized for its project, "Towable 100 kW Power Unit." Spectrum Research has developed a prototype 100kW Tactical Quiet Generator that can be towed behind a HMMWV. This technology contains a hybrid electronic structure so that speed of the engine is constantly varied to match the applied load. Soldiers will immediately notice less fatigue due to reduced acoustic signature especially at partial power setting.

Translume– Translume was recognized for its project, "Laser Spectrometer for Toxic Chemical Detection." Translume is developing a small, robust, field-compatible, infrared laser spectrometer for ultra-sensitive chemical detection to replace current large and expensive infrared spectrometers. This technology has the potential to greatly improve micro-manufacturing of miniaturized optics and optical devices and can be incorporated into the next generation of chemical and biological sensors to provide early warning of an attack.

UES, Inc.– UES was recognized for its project, "Nano-sensor Bioagent Detection." UES developed *Silver-HAWQ* (Silver film-based Human-portable Air and Water Quality), a nano sensor-based system that is modular, can be modified to detect many biological targets and has long-term stability when deployed. The sensors can be adapted to a broad range of targets of interest, and the straight forward technology allows the sensor to be utilized with limited training. Soldiers know within minutes if water or air sources are contaminated versus taking samples to a laboratory from a forward operating position.

To learn more about the Achievement Awards and other success stories in our newest Commercialization Brochure, please visit our website: https://www.armysbir.army.mil/Commercialization/Default.aspx