



1st Lt. Andrew H. Kim titled this image, "Cannon" and entered it in Division 1, Color, Military Life category. Photo by: army.mil

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 provides answers to program questions and assistance to small businesses and Government participants. It is operated Monday through Friday from 8 am to 5 pm (except on Federal holidays). You may reach the help desk by email at army.sbir@us.army.mil or by calling (703) 806-2085.

Message from the Army SBIR PM The Importance of Transition



Transitioning SBIR developed technologies is a critical step in delivering state-of-the-art products to our Soldiers. Transition is difficult and depends on several factors including the capability of the small business, both in terms of the business itself and the ability to do the research; the market for the technology; resources available; transition advocacy; and the maturity of the technology. To assist in transition, the Army established the following initiatives:

Commercialization Pilot Program (CPP): A congressionally authorized program, the CPP was created with the purpose of increasing Army SBIR technology transition and commercialization success with an emphasis on business development. The goal of the CPP is to accelerate the fielding of capabilities to Soldiers and benefit the nation through stimulated technological innovation, improved manufacturing capability, and increased competition, productivity, and economic growth.

Technical Assistance (TA): Also Congressionally authorized, the Army provides technical assistance services to small businesses through a network of Technical Assistance Advocates (TAAs), who work closely with small businesses, Army scientists and technologists, and SBIR stakeholders to reduce technical risk, identify the customer for the technology and resources, and to ultimately integrate these technologies into Army systems.

Phase II Enhancement: Allowed under the law, Army SBIR Phase II Enhancement provides Phase II SBIR funding to an existing Phase II project to continue R&D, produce more prototypes, and/or engage in any other activities that facilitate the transition of the project to Phase III, with an emphasis on fast response technology maturation opportunities.

Early feedback on these initiatives has been very encouraging and I recommend that you all take advantage of these opportunities that my office provides. I will continue to support these and other processes to transition technology to our Soldiers.

Sincerely,
Christopher S. Rinaldi, P.E.

Spotlight: Dr. Jyothi Krishnan Technical Assistance Advocate (TAA)

As a member of the TA team, Dr. Krishnan provides support for all transition activities throughout the entire life cycle of SBIR projects. Physically located at Picatinny Arsenal, NJ, she supports several Army organizations including ARDEC, NSRDEC, ARL, ARO, PEO Ammunition and PEO Soldier. Dr. Krishnan's role is to work with both the Army and the Small Businesses to commercialize the technology resulting from SBIR projects.

After identifying potential customers and/or commercial partners, Dr. Krishnan helps small businesses build transition plans and technology development strategies to accelerate the commercialization of SBIR technologies. She also manages Gated Management Reviews which are meant for the small businesses to showcase their technologies to potential customers and assist in acquiring resources to mature the projects. Dr. Krishnan also is involved in technology transition planning and management activities. Currently, Dr. Krishnan is focusing her energies on transitioning the 2007 Phase II projects, which are due to end later this year.



Iraqi policemen pull security during an air assault training event with U.S. Soldiers at Camp Cedar, Iraq.
Photo by: army.mil

SOLICITATION DATES:

09.3

Solicitation Opens Aug 24

Solicitation Closes: Sept 23

Phase I proposals due

2009 DATES TO REMEMBER

5th Annual Missile Defense Agency SBIR Industry Day Aug 11-12

www.ndia.org/events/9160

12th Annual Space and Missile Defense Conference Aug 17-20

<http://www.smdconf.org/>

2009 Beyond Phase II Conference Sept 21-25

<http://www.beyondphaseii.com>

Do you have a Success Story?

We are continually seeking new "success stories" from small businesses, much like the one you see featured in this newsletter. 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.

Featured Army SBIR Success Story



Fairchild Imaging
www.fairchildimaging.com
Milpitas, CA



U.S. Communications-Electronics Research, Development and Engineering Center

Monolithic Complementary Metal-Oxide Semiconductor (CMOS) Imaging Sensors for Low-Light Imagery

Soldiers need a solid-state silicon imaging camera that is equal to or exceeds the passive low light level performance of the current Gen III image intensifier (I2) man-portable imaging systems. Additionally, current I2 technology is bulky in size and weight and does not lend itself to be fused with other solid-state sensors. Because of this, the Army requires more advanced technology that is also smaller in size.

In response to this Army requirement, Fairchild Imaging developed a small, lightweight, low-power, solid-state video sensor with low light level imaging capability in the visible and near infrared band from 0.4 – 1.1microns. Fairchild Imaging has developed this technology in conjunction with the U.S. Army Night Vision Electronic Sensors Directorate (NVESD) to address a critical need for a solid-state, low light level solution.



The core of this technology is Fairchild Imaging's Low Light Level Monolithic Complementary Metal-oxide Semiconductor (CMOS) Image Sensor (L3CIS). The sensor provides low noise, low power, and high sensitivity in the near infrared band and incorporates advanced built-in architecture such as active pixel, pinned photodiodes, and dual amplifiers and analog to digital converters that provide the high dynamic range (< 84db) and high resolution (5M pixel) required for continuous day and night applications. Because L3CIS is completely solid-state with no vacuum or cooling requirements, manufacturing and reliability advantages will be apparent.

With this technology, the Army can replace two separate imaging channels with one camera for continuous day and night operation. The L3CIS technology is targeted to be used on many Army platforms, including the Bradley Fighting Vehicle System and the Armed Reconnaissance Helicopter. Other military programs where L3CIS technology has benefits are Common Sensor, Close Surveillance Support System (CS3), Sniper Night Sights, and the Apache EO Upgrade program. The first camera introduced, the Harrier 2051™, provides high-performance, low-light level digital imaging for applications demanding high-resolution low light performance at video frame rates.

Phase III Impacts:

Fairchild Imaging received \$500K from Army Program Manager Night Vision / Reconnaissance, Surveillance and Target Acquisition (PM NV/RSTA) and \$1.5M from the SBIR Commercialization Pilot Program. DoD prime contractors are developing systems that will incorporate the L3CIS into their manned and unmanned imaging applications. Fairchild Imaging also received \$2M through spin-off L3CIS technology from commercial customers (primarily scientific markets – fluorescence microscopy) and anticipates strong sales of the L3CIS technology to industry leaders in both the commercial and military markets.