



Army 1st Sgt. Raymond Dakos assigned to the 1-66th Armor, 4th Infantry Division, patrols near Combat Outpost Kowall near the village of Tabin, March 8th, in Kandahar, Afghanistan.

Photo by U.S. Army

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](mailto:army.sbir@us.army.mil) or by calling (703) 399-2049.

## A Message from the Army SBIR Program Manager *Reauthorization*

The status of SBIR Program reauthorization continues to remain an item of interest for all involved. As many of you know, the basic SBIR Program law (15 U.S.C. 638) expired on 30 September 2008, but we have been able to continue executing the program due to a series of continuing resolutions. The latest continuing resolution extended the program through 31 May 2011. The House of Representatives and Senate are reviewing several plans and ideas to lead SBIR into the future. We support their efforts to pass legislation soon.

### *Small Business Administration (SBA) 2011 Tibbetts Awards*

Congratulations to the 2011 Tibbetts Awardees! The Tibbetts Awards, presented by the SBA, honor outstanding small businesses and individuals judged to exemplify the best in the Small Business Innovation Research (SBIR) Program. Tibbetts award winners are selected based on the economic impact of their technological innovation; and on whether they have met federal research and development needs, encouraged diverse participation in technological innovation, and increased the commercialization of federal research.

2011 Army SBIR Small Business Tibbetts Awardees:

|                                     |                                |
|-------------------------------------|--------------------------------|
| Adaptive Technologies               | Kutta Technologies, Inc.       |
| Advanced Cooling Technologies, Inc. | Nanohmics, Inc.                |
| Aerius Photonics, LLC               | Numerica                       |
| ANP Technologies                    | Operational Technologies Corp. |
| ATC-NY                              | Opto-Knowledge Systems, Inc.   |
| Colorado Engineering, Inc.          | Radiance Technologies, Inc.    |
| Cornerstone Research Group          | RE2, Inc.                      |
| Corvid Technologies                 | SA Photonics, LLC              |
| Fiber Materials                     | Safety Dynamics, Inc.          |
| FIRST RF Corporation                | Space Micro, Inc.              |
| Kitware, Inc.                       | Vecna Technologies, Inc.       |
|                                     | Williams-Pyro, Inc.            |



Mr. John Ruehe (left), Phacil, Inc, a support contractor who has worked in the Army SBIR Program Management Office for twelve years, was one of eight individual award winners.



### *Army SBIR Social Media Initiatives*

The Army SBIR Program is proud to announce the addition of two new social media initiatives to the Program: Facebook & Twitter pages. By joining our pages, you will be able to receive up-to-the-minute updates and announcements on the Army SBIR Program.





U.S. Army soldiers visit an Afghan police checkpoint in Pul-E-Khumri.

Photo by Jason Johnston, U.S. Navy

## 11.2 SOLICITATION

Solicitation Opens May 26, 2011

Solicitation Closes: Jun 29, 2011  
Phase I proposals due

## OUTREACH EVENTS

2011 SBIR Spring National Conference Apr 11-13, Madison, WI

[www.wisconsinsbir.org](http://www.wisconsinsbir.org)

2011 SBIR Beyond Phase II Conference Sep 12-15, Atlanta, GA

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

2011 Defense Manufacturing Conference Nov 28- Dec 1, Anaheim, CA

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

## 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](mailto:army.sbir@us.army.mil).

## Featured Army SBIR Success Story

Chesapeake PERL

[www.c-perl.com](http://www.c-perl.com)

U.S. Army Edgewood Chemical and Biological Center

### *Protein Manufacturing in Insect Expression*

Current methods for producing proteins typically utilize costly and time consuming bio-reactors. The Army has multiple research programs that identify and develop recombinant proteins for broad-spectrum applications in nerve agent therapeutics, vaccines, material and personnel decontamination, toxin stimulants, and chemical and biological sensors. C-PERL and the Army's Edgewood Chemical Biological Center recognized these expanding requirements for a rapid, cost-effective means of producing hard-to-express recombinant proteins. C-PERL has developed an innovative technology to provide the requisite protein manufacturing capability and capacity to expedite the transition of basic research to the advanced development and acquisition of new products to support the Soldier.

C-PERL's patent protected Protein Manufacturing in Insect Expression (PMIE) system is completely integrated — from insect larvae production through large scale protein expression and purification — in state-of-the-art facilities. The PMIE system is based on well-established baculovirus expression technology and a patented system for automated oral inoculation. C-PERL's insect protein expression technology provides the capability to produce conformational correct, complex proteins/enzymes that cannot be reliably produced by other systems without a need for subsequent complex treatment procedures.

The C-PERL PMIE system has proven to provide immediate benefits for Army research and development programs by reducing manufacturing time and cost of production and increasing the availability of hard-to-produce recombinant proteins to Army scientists and also the commercial market.

### Phase III Impacts

C-PERL was selected for the U.S. Army Commercialization Pilot Program and received an additional \$600K in Phase II SBIR funding. As a result of this work, C-PERL was awarded a multi-year contract that will total more than \$1M from the Defense Threat Reduction Agency to further support its Bioscavenger protein development effort.

C-PERL was also provided \$692K in additional SBIR extended support funding for production and commercialization of a protein for the U.S. Military HIV Research Program, a multi-dimensional research project headed by the Walter Reed Army Institute of Research.



For more information on Army SBIR Success Stories, visit our website:  
[www.armysbir.army.mil/commercialization](http://www.armysbir.army.mil/commercialization)