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.

**Spotlight: Jim Faunce**
Technical Assistance Advocate (TAA)

Jim Faunce is a Technical Assistance Advocate (TAA) on the Army SBIR Team. He provides assistance to both Army Scientists and Technologists who write SBIR Solicitation Topics and to small businesses who participate in the Army Program. His ultimate goal is to transition SBIR-developed technologies into Army systems. Located at Ft. Monmouth, NJ and supporting CERDEC, JPEO JTRS, PEO C3T, PEO EIS and PEO IEW&S, his focus is on Army Command and Control technologies.

To realize the goal of transition, Jim assists small businesses for the duration of both Phase I and Phase II projects. Jim provides expert advice and analysis to assist in: 1) a thorough and complete understanding of the SBIR process; 2) solving technical problems; 3) minimizing technical risks; 4) identifying and facilitating working relationships between the small business and Primes/Army Stakeholders; and 5) developing commercialization strategies for integration into Army systems. He also provides analysis to the Government regarding technology transitions, as well as planning, technology developing, and integration roadmaps by participating in requirement planning and development sessions of Army programs.

Jim works on an integrated team of five TAAs located at the various Army centers of technology. For more information go to www.armysbir.com/sbir/taa_desc.htm

**Message from the Army SBIR Program Manager**

Conferences & Outreach Events—An Opportunity

The Army SBIR Program actively participates in a number of conferences and outreach events each year. By attending these events, my staff and I am able to interface directly with small businesses and provide guidance and solutions on SBIR issues as well as gather feedback on our process and any new initiatives. These events are the only time you will be able to meet and talk face to face with my team. From my own personal experience and feedback from my team, there is great benefit to small businesses who attend SBIR conferences and events, such as being given the opportunity to:

**Attend** informative sessions with subject matter experts, industry leaders, and government officials.

**Learn** the details of the Army SBIR program, as well as, strategies to market and transition your technology to the government and the commercial sector.

**Network** with a wide range of attendees such as government Program Managers, Prime Contractors, transition specialists, and other small business professionals.

I encourage and invite you to attend future SBIR conferences and meet members of the Army SBIR Team. A list of upcoming conferences can be found on the 2

Sincerely,
Christopher S. Rinaldi, P.E.

**www.armysbir.com**
Featured Army SBIR Success Story

Ultra-Scan Corporation
Amherst, NY
http://www.ultra-scan.com/

US Army Research Office
Multimodal Biometric Fusion

There is a global proliferation of biometric identification systems as the need for rapid and positive identification of individuals becomes an ever increasing necessity. Requirements for these systems are driven from such diverse applications as commercial fraud reduction in financial systems and patient identification within a healthcare setting, to military applications such as securing our nation’s borders against terrorism. While more and more commercial and government organizations are implementing biometrics for personal identity management and security applications, both near and long term operational success has been hampered due to fundamental limitations in accuracy that are unique to each currently employed biometric technology (fingerprint, facial recognition, iris recognition, etc). Additionally, significant increases in the number of biometric records stored in large databases and the degradation of biometric sample quality due to the expansion of data collection into difficult environments (outdoor, all weather, high threat, etc), have made consistent, successful identification more difficult.

As a result of this technology performance gap, the industry has responded by capturing multiple biometric measurements such as fingerprint, facial and iris biometric samples to achieve the desired system accuracy. This approach, while promising, has lacked the robust scientific analysis needed to unequivocally answer key fundamental questions:

- Can a multimodal biometric system truly offer better system accuracy?
- How (at what level) should biometric samples be fused together?
- What is the optimal fusion method?
- How do we build a common fusion engine to integrate different modality devices (i.e. vendor neutral)?

The answer was developed by Ultra-Scan Corporation of Amherst, NY. AMBIS, or Automatic Multimodal Biometric Identification System, is a mathematically optimum solution pioneered by Ultra-Scan. It operates with any number of different biometric modalities, supports multiple vendor technologies for a given modality, and integrates seamlessly without the need for modification of existing algorithms. This landmark technology will, for the first time in the history of the biometric industry, enable the virtual integration of global multimodal databases and permit simultaneous, seamless searching. The processing power of agencies such as the US DoD, FBI, DHS as well as the UK Home Office will be significantly enhanced as these agencies now have the technology to integrate the strengths of their independent identification technologies to provide unparalleled system performance.

Phase III Impacts

- $1.0M in Army research funding
- Over $6M in federal and private sector sales
- 1 US patent issued