

Building the Government-Industry Partnership



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Mr. John Ruehe, Phacil's Army SBIR Program Manager

Mr. Ruehe is an engineer by training, he is responsible for all aspects of support to Army SBIR. As a retired Army Officer and having worked with SBIR for 12 years, he has an in-depth knowledge of SBIR and Army organization and requirements.

Introduction

The defense of the United States in today's challenging security environment depends on successfully managing and leveraging technical innovation. This case study examines how the U.S. Army has drawn on the creativity of the U.S. small business community to fuel innovation, and how one contractor, Phacil, has successfully become the interface, facilitator, and integrator between the Army and private industry.

By way of a brief introduction, the U.S. Congress created the Small Business Innovation Research (SBIR) Program in 1982 to foster the involvement of U.S. based small businesses in Federal research and development. The Army SBIR program is designed to give small, high-tech businesses the opportunity to provide innovative research and development solutions in response to critical Army needs. At the same time, these small companies develop technologies, products, and services which they can then commercialize through sales in the private sector or back to the government.



The goals of the SBIR program are to: (1) stimulate technological innovation; (2) use small business to meet Federal R&D needs; (3) foster and encourage participation by socially and economically disadvantaged small business concerns (SBCs), and by SBCs that are 51 percent owned and controlled by women, in technological innovation; and (4) increase private sector commercialization of innovations derived from Federal R&D, thereby increasing competition, productivity and economic growth.

The executive agent for the Army SBIR program is the Program Manager (PM), a non-acquisition activity within the Army Research, Development, and Engineering Command (RDECOM). The Army SBIR PM coordinates SBIR activities across the Army's entire Research, Development, Test, and Evaluation (RDT&E) efforts.

Description of SBIR Process

The SBIR program uses a three-phase program structure, reflecting the high degree of technical risk involved in developing and commercializing cutting edge technologies.

Phase I is a feasibility study that determines the scientific, technical, and commercial merit and feasibility of a selected concept. Phase I projects are competitively selected from proposals submitted

against solicitations. Each solicitation contains topics seeking specific solutions to stated government needs. Phase I is six months, with a four month option possible at the government’s discretion, and is limited to \$70,000 in funding. The SBIR Phase I selection process is highly competitive, with about one out of ten submitted Phase I proposals receiving awards.

Phase II represents a major research and development effort, culminating in a well-defined deliverable prototype (i.e., a technology, product, or service). Phase II can be for two years and for a maximum of \$730,000 in funding. The Phase II selection process is also highly competitive. Successful Phase I contractors are invited to submit Phase II proposals as there are no separate Phase II solicitations.

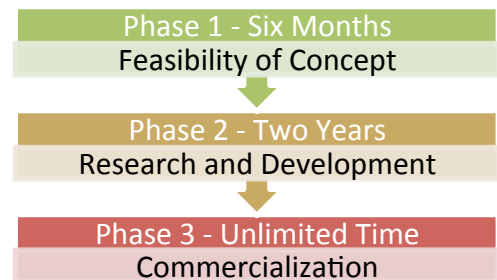


Figure 1: Phases of the SBIR Process

In **Phase III**, the small business is expected to obtain funding from the private sector and/or non-SBIR government sources to develop the prototype into a viable product or service for sale in the Government or private sector markets. The goal of the program is to see viable products sold to the government and/or the private sector, benefiting the small business community, the Soldier and the Nation.

Description of how Phacil is involved

The Army SBIR PM hired Phacil to support all aspects of SBIR Program execution – policy and guidance, source selection, data management and reporting, outreach, small business technical assistance, and technology transition. In this capacity, Phacil facilitates more than \$300 million of Research, Development, Testing and Evaluation each year.

Many of the small businesses wishing to participate in the SBIR Program have never had a government customer, and have little knowledge of how to participate and meet the requirements. As a small business working with the government, Phacil has direct experience applicable to understanding how to interface with government activities. Many of these companies have creative skills and technology that would benefit our Soldiers, but need assistance navigating the myriad rules and regulations to present these ideas to the government.

A small business may first become interested in the SBIR Program when they attend an outreach conference and study the Army SBIR website and materials prepared by Phacil. When the business decides to participate in the Army’s SBIR program, they use a Phacil-designed web portal, hosted on servers maintained by Phacil. When they call to get advice and help, they talk to Phacil employees. When they decide to submit a proposal, a Phacil employee guides them through the process. After they submit their proposal, Phacil administers the source selection process, coordinating government reviews. If they complete all phases of the process, Phacil publishes their success. Phacil provides the key interface between the small business community and government that makes the program work.

Phacil’s role is not to supervise government employees or to make buying decisions for the Army, but to assist small businesses to understand and navigate the system, and to help the Army identify the best technical innovations. Phacil does this by being the facilitator and by providing the tools used by both parties, within the Phacil developed and managed Army SBIR Management Portal, which supports all aspects of the SBIR process.

The Army has stationed Technical Assistance Advocates (TAAs) in five regions across the Army to provide technical assistance to small businesses that have Phase I and Phase II projects with the participating organizations within their regions. The TAAs, who are all Phacil employees, reside in the Army technology “centers of gravity” and are located in close proximity to the laboratories and Acquisition Centers.

The TAAs coordinate technical advice on SBIR projects to assist small businesses, and to help the government with technology transition. They provide mentoring to ensure the success of the large group of source selection participants, stakeholders and small businesses. This task requires a deep knowledge of the processes, attention to detail, patience, and tenacity. In coordination with the government research manager and the SBIR awardees, Phacil develops and delivers plans to small businesses to transition to Phase III (moving to a larger research program, an acquisition program, or a stand-alone product). In partnership with both the Army and the small business, Phacil helps develop the strategy to advance promising technology.

Phacil employees are the points of contact for businesses seeking to participate in the Army SBIR program. Our people help small businesses understand how to meet the requirements of the SBIR process, and they act as the liaison between the Army and the business community. Phacil employees follow the Phacil commitment to “be the customer” and impress the government’s partners with the Army’s competence. Each Phase I award winner is contacted by telephone, and Phacil helps these companies understand the SBIR process and requirements.

Major Shane Sullivan (Deputy SBIR Program Manager), in March of 2009, sat in on Phacil’s Program Assistance calls and wrote his comments for Chris Rinaldi (Army SBIR Program Manager). *“Every small business was absolutely impressed that the Army PMO SBIR office took time to make sure they understood the details of the program... one company commented that “the Army is really all over their SBIR program.” Mr. Rinaldi responded, “I sat in on some myself. They really present the program as proactive - quite a change from some expectations on a Government program.”*

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Figure 2: The illustration above is from the SBIR website, showing the PMO Technical Assistance team (<http://www.armysbir.com>).

The interface between the Army and small business is the key to the success of the program. Phacil, in its capacity supporting Army SBIR, has three customers:

1. Army employees in the SBIR program needing the best information to make good decisions.
2. Small companies seeking to grow their business by gaining the interest of the government in their innovative solutions.
3. The Soldiers, who need the best technology to meet the mission objectives.

To achieve a mutually-beneficial outcome through SBIR, the needs of each constituency must be understood and must be reinforced by the right attitude and skills.

1. Be positive and professional 100% of the time.
2. Making sure everyone involved has a positive experience. Most applicants will not receive funding, but everyone knows they were treated fairly, and got all the assistance they needed to make the best proposal possible. The Army and the Army’s civilian employees know that each

proposal has been prepared following the same rules, and can be evaluated on a level playing field.

3. Produce timely results. Phone calls are answered quickly. E-mail response is fast. Questions are answered promptly. Reports and evaluations are done on time. No one should miss an opportunity because they couldn't get the information or assistance they needed, when needed.
4. Track what needs to be monitored. Set standards and have metrics. Look for continuous improvement. Review and improve processes to incorporate best known methods.
5. Having extensive knowledge of the program and of each of the proposals. This is essential to establish trust.
6. Get the right people and treat them right. The small businesses involved in this program need to have a single person that can guide them through the process. This relationship can last several years. An extremely low turnover is beneficial.

Successful interface between the Army and private industry is achieved by a combination of factors. The people assigned to this task must have the technical competence to understand the intricacies of the program and of the technologies involved. They must also equip themselves with the right IT and tracking tools. These factors alone do not lead to success. Without the right attitude and training to understand the needs of the constituents, and to relate to both government and industry people in a friendly and helpful manner, exceptional performance, such as seen at the Army's Small Business Innovation Research Program, cannot happen.

The Army SBIR website is <https://www.armysbir.army.mil>.

Phacil brings a wealth of experience in managing contracts for defense and civilian customers. Our mission is providing exceptional service through our total commitment to continuous improvement. Our professional team is dedicated to understanding our customers' needs and actively managing the processes to meet and exceed expectations. Learn more at Phacil's website <http://www.phacil.com/> or by calling (703) 526-1800.