



TRANSITIONS

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TEAM SUB SURPASSES \$1 BILLION IN SBIR AWARDS

On May 10, 2006, Team Submarine (Team Sub) awarded Trident Systems a contract worth \$50 million for the delivery of Shipboard Mobile Computing Engineering Model under the Small Business Innovative Research (SBIR) program. This award represents the billionth dollar that Team Sub has awarded under the SBIR program, in Phase III alone, since it began more than a decade ago.

While the SBIR program is in place across the Department of Defense (DoD), for years Team Sub has been at the forefront of gainfully utilizing this program to expand its vendor base while also promoting competition and innovation. Team Sub utilizes the SBIR program to do exactly what it was designed for, including: stimulating technological innovation, increasing private sector commercialization of federal research and development (R&D), and fostering participation by minority and disadvantaged firms in technological innovation.

What PEO SUBS has accomplished under the leadership of Dick McNamara is monumental.

—John Williams, Director, Navy SBIR/STTR Program

“Small businesses are at the heart of innovative research,” said Richard McNamara, Executive Director, PEO Submarines. “Being small allows companies to think outside the box, keeps them agile enough to respond quickly to emergent needs and requirements, and therefore at the cutting edge of technology.”

“What PEO SUBS has accomplished under the leadership of Dick McNamara is monumental. When a PEO has a senior civilian, such as Dick, who knows that the SBIR program can provide more affordable, better weapons systems, then success happens.” said John Williams, Director, Navy SBIR/STTR Program.

Team Sub has awarded 362 individual contracts to a total of 152 small companies, since its SBIR Program inception ten years ago. Within the three types of contracts that compose the SBIR Program, Team Sub has awarded 209 Phase I contracts worth \$100,000 each, has signed 124 Phase II contracts that are for engineering development worth \$750,000, and has signed 29 Phase III contracts for varying amounts of money.

Currently, Team Sub has 13 different small businesses participating in Phase III of the SBIR program. These companies are working on a number of different programs including the Multi-Purpose Processor, materials research in sliding electric contacts, new towed array technology which leverages commercial network standards, components, and manufacturing processes to provide a cost-effective product for use in submarine, surface ship, and surveillance towed array systems; information assurance tools and solutions that are currently being integrated into the *Virginia* class and *Los Angeles* class submarine’s tactical combat systems; and Commercial Off The Shelf (COTS) based tactical weapon simulation training and maintenance that is utilized for unique sensor and weapons applications that meet all shipboard requirements.

“Having the ability to reach out to small businesses opens up a wealth of entrepreneurial research and development that is unattainable elsewhere,” said Rear Adm. William Hilarides, Program Executive Officer for Submarines. “The SBIR companies help to keep the U.S. Submarine Force number one in the world.”



(Left to right) VADM Paul Sullivan, Cmdr Naval Sea Systems Command; John Williams, Director Navy SBIR/STTR; Frank Ramos, OSD SADB; Nicholas Karangelen, President, Trident Systems; Kerry Knapp, Contracting Officer for Submarine Systems; Dick McNamara, Executive Director, PEO Submarines; RDML William Hilarides, PEO for Submarines

'06 SUCCESSES AND CHALLENGES AHEAD

We began 2006 full of enthusiasm, looking ahead toward the 6th annual Navy Opportunity Forum with its biggest-ever cast of presenting SBIR projects, and paying attention to increased SBIR proactivity by several defense industry giants. We were pleased to see more SBIR veterans speaking out to improve the SBIR program, and were aware of intense Congressional desire for increasing and accelerating the transition of SBIR technologies into Defense systems. Indeed, we hoped that 2006 would be the "Year of Commercialization" for the SBIR program.

As I write this column in late July, I'd have to say that already the year has fulfilled its promise—and that this turn of events has brought us face-to-face with many challenges that the SBIR community must embrace immediately. Keep in mind that there's a broader context, here: the imminent reauthorization of the SBIR program, which must be resolved by 2008.

Navy Opportunity Forum

If you participated in this year's Forum, you saw the sea change—including a 50% increase in participation from 900 to 1330 persons. And it's not just that we saw a significant increase in attendance by the government acquisition community, and more defense contractors implementing plans to mine the Forum's 150 SBIR project resources. This year, we were also honored by the presence of some very important figures in keynote speaking roles: Dr. Dolores Etter, the Navy's new ASN (RD&A), Sen. Mark Pryor (D-AR), and Peter Levin, the veteran Minority Counsel of the Senate Armed Services Committee. Ultimately, the success of this year's Forum will be measured by the number of Phase III dollars realized by Forum firms and the number of SBIR technologies acquired to meet warfighter needs. In any case, this Forum crossed an important threshold of visibility.

Primes Initiatives

Over the past year, five well-known defense contractors—Lockheed Martin, Raytheon, Boeing, Curtiss-Wright and Northrop Grumman—have announced broad corporate approaches to SBIR involvement, including formal appointment of SBIR leads at the corporate level. We expect other large defense contractors will follow. While the Navy SBIR program's Primes Initiative is designed to facilitate such activity, we will carefully monitor outcome metrics, especially the number of key ACAT program subcontracts let to our SBIR firms by these industry giants. These are critical success metrics.

DoD SBIR Commercialization Pilot Program (CPP)

The 2006 Defense Act contains in Sec. 252 authorization of a four-year pilot program. In a 27 June, 2006 memo to Army, Air Force and Navy Secretaries, Kenneth Krieg, OSD AT&L, writes, "The purpose of the CPP is to accelerate the transition of SBIR-funded technologies to Phase III ... through activities that enhance the connectivity among SBIR-firms, prime contractors and DoD science and technology and acquisition communities. It can

also be accomplished by improving a SBIR firm's capability to provide the identified technology to the Department, either directly or as a subcontractor."

The three services are rapidly pushing our individual CPP strategic planning processes, as you will soon learn, with DoD coordination provided by Carol VanWyk, former NAVAIR SBIR Program Manager.

CHALLENGES TO BE EMBRACED

SBIR Data Rights Issues

This year we saw more than one SBIR commercialization effort stymied by contractual insertion of SBIR data rights. If the opportunity posed by the DoD CPP is to be realized, this set of problems must be addressed by all stakeholders, and resolved.

Measuring Phase III Performance by the Primes

The key success metric of Primes' uptake of the SBIR opportunity has to be the number of key subcontracts let to SBIR firms. However there is no standard in which to measure by. Resolving this issue needs to be a critical part of the DoD's CPP effort and will allow the services and Congress to measure Phase III money flow from the prime to SBIR firms.

Incentivization in the Transition Stream

Developing standard incentive clauses that reward our primes for reaching SBIR subcontracting goals will be critical if we are to achieve the goals of the CPP. First we need to establish rules for measuring Phase III activity and an incentive structure, then we need to require that these incentive clauses get incorporated in major DoD contracts.

Supporting Enhanced Technical Assistance

While the Navy finds real value in the Navy Transition Assistance Program (TAP), even the first steps in the DoD SBIR CPP have shown the need for the Navy to provide additional transition assistance to our SBIR firms, starting at the Phase I. Doing more, in this regard, requires clarification of the technical assistance funding provisions in section 301 of the SBIR legislation. Currently our SBIR firms are not using the \$8,000 allotted in the legislation because of the limitations of the language.

In closing, it has been a very busy year, but there is still much to be done. We need to make the most of the increased interest that the DoD SBIR program is currently getting and push for changes that will continue to increase the transitions of SBIR technologies. We know that our SBIR firms have the technologies that can provide the warfighter with a significant advantage and address the rising costs of weapon systems. We need to continue the fight, and eliminate the barriers that still exist.

—John Williams, Director Navy SBIR/STTR Program

PLANNING SYSTEMS INCORPORATED ACQUIRES NEPTUNE SCIENCES, INC.

When looking to broaden market opportunities and expand technology reach, Planning Systems Incorporated (PSI), a leading network-centric technology company, approached Neptune Sciences Incorporated (NSI) in 2004 concerning a possible acquisition. NSI, a 2001 Tibbetts Award recipient, and PSI had worked together on previous projects and had a good appreciation of each others strengths.

As successful SBIR firms with strong DOD customer relationships, both CEOs—Dr. Alan Friedman of PSI and Dr. Marshall Earle of NSI—realized that their combined technologies could provide expanded opportunities for additional services to these valued customers. At the acquisition announcement, Dr. Friedman remarked that the acquisition of NSI would “strengthen our market position, giving PSI an additional services presence in specific geographic locations and adding to the portfolio of innovative technologies that we are developing and deploying within the government and commercial sectors.”

Recently, Transitions sat down with Dr. Earle and Sophie Barrett, PSI Director of Corporate Communications to discuss the PSI acquisition of NSI, the reasoning behind the agreement, and some key lessons that can be taken away by other SBIR firms in similar situations. Echoing Dr. Friedman’s sentiment at the acquisition announcement, Dr. Earle commented that “NSI brings a number of talented people and a suite of emerging technology developments to the table that will immediately benefit PSI’s current business, as well as future opportunities.” Due to the synergy between the two companies, the formal acquisition process moved quickly. NSI provided a brief on their technologies and capabilities to the PSI management team which subsequently led to PSI’s submission of an acquisition “letter of intent.”

Upon receipt of the letter of intent, Dr. Earle assembled his employees, informing them of the potential acquisi-

tion and emphasizing the need for both organizations to complete the due diligence process. Keeping employees of both companies informed of the changes really kept the process on track. “Change isn’t easy for anyone, but emphasizing the positives of this transaction was very important to achieving a smooth transition for both organizations,” said Barrett.

The acquisition was finalized on Nov. 1, 2004 and under the terms of the agreement NSI remained as a contiguous unit operating as the Neptune Sciences Division of PSI with Dr. Earle managing the new division. This division, mainly located in Slidell, La., employs approximately 45 people in two locations and focuses on development of ocean wave and surf zone instrumentation, ocean buoys, Unmanned Aircraft System (UAS) sensors, and technology for protection and surveillance of offshore facilities.

Dr. Earle expressed satisfaction with the process and expanded opportunities that were created. He and Ms. Barrett outlined some of the key lessons that other SBIR firms should keep in mind when considering an acquisition opportunity as a means to further their commercialization options, including:

- » Sharing a common corporate culture and similar management principles is critical.
- » Shared intellectual property and SBIR Data Rights can bring additional opportunities to the combined organization. All SBIR Data Rights are retained under the agreement and existing SBIR contracts are unaffected by the acquisition.
- » Communicate, communicate, and communicate! The acquisition objectives need to be communicated to all affected parties in a complete and timely manner.
- » The conversion to new management processes takes time. It is important that both organizations have accurate, up-to-date personnel and financial files.
- » The combined strength of both organizations brings more stability and less risk to addressing common technical challenges. The potential for higher level sales and expanded career opportunities can be leveraged by each organization.

The lessons learned by both NSI and PSI were to be utilized again, in very short order. Less than one year following the completion of their acquisition, Foster-Miller, Inc., the U.S.-based engineering and technology development company which is part of the rapidly expanding QinetiQ North America group of companies, announced it was acquiring PSI. The acquisition was finalized on Sept. 2, 2005.



NSI Data Acquisition Buoy Payloads.

FORMER SBIR AWARDEE HONORS DOD SBIR PROGRAMS IN RIBBON CUTTING CEREMONY

"Today it is my honor and joy to reciprocate some recognition to this organization. I would like to announce the dedication of the Office of Student Services to the United States Department of Defense Small Business Innovation Research program."

—Fariborz Maseeh, Founder and former President and CEO, IntelliSense Corporation
Founder and President of the Massiah Foundation for Venture Philanthropy

Meeting needs and effecting change on a grand scale takes many people, but often has just one catalyst. On May 9, at Portland State University, a group of people including leaders of industry, University administration, and political leaders, gathered to honor a catalyst of many changes—Dr. Fariborz Maseeh. The event was to celebrate the grand opening of the building that will house the Fariborz Maseeh College of Engineering and Computer Science and included a ribbon cutting ceremony involving Ted Kulongoski, Governor of Oregon; Steven A. Ballmer, Microsoft Corporation Chief Executive Officer; Fariborz Maseeh, Massiah Foundation founder and president; Dan Bernstine, Portland State University president; and Robert Dryden, Dean of the Maseeh College of Engineering and Computer Science.

This celebration, over two years in the making, was brought about by a generous gift of \$8 million to PSU from Dr. Fariborz Maseeh. An alum of the PSU engineering program, Dr. Maseeh's gift—made through the Massiah Foundation—is the largest donation ever received by the University. The money was designated to fund the construction of the Northwest Center for Engineering, Science and Technology as well as to establish two professorships, five student fellowships, and an endowment for the dean of the College of Engineering and

Computer Science, which has been named the Fariborz Maseeh College of Engineering and Computer Science at Portland State University. Commenting on his gift, Dr. Maseeh said that he hoped his gift would, "help propel the Maseeh College of Engineering and Computer Science to new heights."

Fariborz is working to support a diverse American population, one that doesn't have the financial means to get ahead, by investing in education, culture and children's organization.

—John Williams, Director of Navy SBIR/STTR Program

Dr. Fariborz Maseeh, an entrepreneur, is a worldwide recognized expert in the field of micro-electro-mechanical systems (MEMS). The founder and former president and chief executive officer of IntelliSense Corporation and the founder and the president of the Massiah Foundation, Maseeh is a first-generation immigrant, born in Iran. He received both his B.S. in Structural Engineering and M.S. in Mathematics from PSU before earning a doctorate of science from the Massachusetts Institute of Technology in 1990.

Maseeh founded IntelliSense in 1991 with the vision of reducing the time and expense of creating next-generation MEMS devices. Under his leadership, IntelliSense successfully began the first custom design, development, and manufacturing MEMS operation and became the world's fastest-growing MEMS corporation, twice named to both The New England Technology Fast 50 and The Forbes Fast 50. In 2000, IntelliSense was acquired by Corning, Inc., after which Maseeh founded an investment management firm located in Southern California and started the Massiah Foundation, which makes investments for public benefit where there are unmet needs, including the areas of education, health care, spirituality, arts, and culture.

Prior to the acquisition, IntelliSense received DoD SBIR funding. At that time, John Williams, who now serves as the Director of the Navy SBIR/STTR Program, was the TPOC for IntelliSense and worked closely with Maseeh on his Navy SBIR contracts. Maseeh had extended an invitation to Williams to attend the May 9 event.



Photo credit: Dipaola Photography, Inc.

(Left to Right) Dr. Fariborz Maseeh, Steven A. Ballmer, Microsoft CEO, Dan Bernstine, PSU President, Robert D. Dryden, Maseeh College Dean, Theodore R. Kulongoski, Governor of Oregon

Photo credit: Dipaola Photography, Inc.



(Left to right) Robert Dryden, Dr. Fariborz Maseeh, John Williams stand in front of the Student Services office dedicated to the DoD SBIR Program.

During the ribbon cutting ceremony, Maseeh made clear to those present the importance of SBIR funding in the success of IntelliSense.

"I studied here [at PSU] under Dean Erzurumlu and Prof. Rad. What these talented people invested in has carried me throughout my life. I have said this before, and I say this today, that I often thought that I had worked a lot harder here than when at MIT," Dr. Maseeh remarked during the ceremony.

"Later on in my entrepreneurial self studies, a different organization invested in me and I owe my business success to it. It is quietly one of the largest venture capital organizations in the world. Today it is my honor and joy to reciprocate some recognition to this organization. I would like to announce the dedication of the Office of Student Services to the United States Department of Defense Small Business Innovation Research program."

A plaque outside the new office of student services reads:

The Department of Defense (DoD) Small Business Innovative Research (SBIR) program has enabled numerous companies and entrepreneurs to achieve success by providing funding for their research.

"The entrusted investments from the U.S. Navy, U.S. Air Force, U.S. Army, and the Defense Advanced Research Projects Agency (DARPA) SBIR Programs have had a profound impact on my success"

—Fariborz Maseeh

Williams, speaking on behalf of the Navy SBIR program, was able to relate to the attendees the inspiration Maseeh had provided to those at the Navy who had worked with him. Reiterating Maseeh's work ethic and commitment to his business, Williams told the crowd, "Fariborz is working to support a diverse American population, one that doesn't have the financial means to get ahead, by investing in education, culture and children's organization." The work of the Massiah Foundation is structured to provide funding for individuals who will move ideas forward. The gift to the PSU Engineering and Computer Science program will help to provide critical research and workforce development, which is sorely needed, not only in the Portland area, but across the country.

"He is also promoting the DoD SBIR program at a time when many of us forget that the DoD funds more than the war effort, but also funds the advancement of science and research through our universities and small companies," Williams remarked.

He went on to say that as a government employee, Maseeh's story reconfirms for him the fact that Federal R&D programs can have an impact not only on individuals, but on whole communities. "In closing," Williams said, "Thank you, Fariborz, the Department of Defense is honored to have played a part in your success and we thank you for what you have given back."



Maseeh College of Engineering and Computer Science, Portland State University Campus

FARIBORZ MASEEH COLLEGE OF ENGINEERING & COMPUTER SCIENCE

OFFICE OF STUDENT SERVICES

Dedicated in recognition of contributions from

The U.S. Department of Defense SBIR Program

06 NAVY

OPPORTUNITY FORUM®

TRANSITIONING TECHNOLOGY TO THE FLEET

PHOTOS FROM THE FORUM

The 2006 Navy *Opportunity Forum*® was a huge success with over 1300 people in attendance. These two pages include photos of the event and quotes from participants and attendees.

"The Navy Forum gave us an opportunity to gain knowledge, awareness and business contacts in a focused environment of emerging technologies and requirements affecting the maritime industries. We found that the event supplied a good mix of briefings and networking opportunities. The synergy and ability to contact a wide-range of promising partners is rarely available in one location. This was the event to attend this year!"



GSE, Inc., Presenting Firm at 06 Navy Opportunity Forum®

"The Virtual Acquisition Showcase®, available online, is exceptional, in both its scope and depth. I would venture that it is unparalleled in similar events and should serve as a model for all /any similar events. It was especially useful for pre-screening and optimizing my time at the show."



Luncheon featuring Dr. Delores Etter, ASN (RD&A), as speaker

"Of all comparable events that I have attended in 20+ years, this has been the best."

"I like the presentations by the small businesses and the strict time keeping. You get 20 minutes—just enough!"

"The conference was well run and offered several things we were looking for, including:

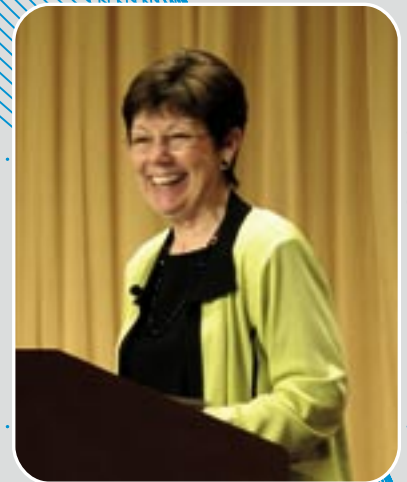
- » Broad range of technologies represented
- » Diverse showcase of technology
- » Networking and one on ones
- » Opportunity to re-connect with companies/ Navy customers and to meet new ones"



Communication & Ear Protection, Presenting Firm at 06 Navy Opportunity Forum®

"As a government contractor, it is beneficial to interact with the companies we support and discuss their concerns and needs. The Navy Opportunity Forum provides that opportunity. Also, while I am there, I always learn something new about the program and participation."

"Plentiful topic info allows preparation for forum attendance. There was an excellent overview of emerging technology applicable to marine and related industries."



Dr. Delores Etter, ASN (RD&A)



Sensor Technologies & Systems, Presenting Firm at 06 Navy Opportunity Forum®



Sen. Mark Pryor (D-AR)

"Congratulations for a very smooth execution of this 06 Opportunity Forum. Well done! I got lots of excellent ideas to do in the NAVSEA program office."

CONTENTS

PEO NEWS

Team Sub Surpasses \$1 Billion in SBIR Awards

SPECIAL STORY

Former SBIR Awardee Honors DoD SBIR Programs

ACQUISITIONS

Neptune Sciences, Inc. and Planning Services, Inc.

'06 NAVY OPPORTUNITY FORUM®

Photos from the Forum

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EDITOR'S NOTE:

In our Spring 2006 Edition (Volume 3, Issue 1) on page 12, it was noted in a table titled, "Navy SBIR Companies Recently Acquired" that Noesis, Inc. had been acquired by ITS Corp. on Dec. 1, 2005. In actuality, it was a three-way transaction involving Noesis, Inc., ITS Corp., and a third company, Defense Holdings, Inc. (DHi). The December 1 transaction involved only the sale of a portion of Noesis, Inc.'s business assets to ITS Corp., not the entire company.

Just prior to the ITS Corp. acquisition of the Noesis Federal Services Support (FSS) unit, Noesis acquired DHi. As a result of this transaction, Noesis' remaining federal and commercial ventures were able to be transitioned to the newly-acquired DHi banner, while ITS Corp. retained the name of Noesis for the business unit they acquired.

For more information on the acquisitions and companies in question, visit the DHi web site at <http://www.dh-inc.com/> and/or the ITS Corp. Noesis Business Unit's web site at <http://www.its-noesis.com/>.

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