

Partnership Intermediaries and DoD Technology Transfer

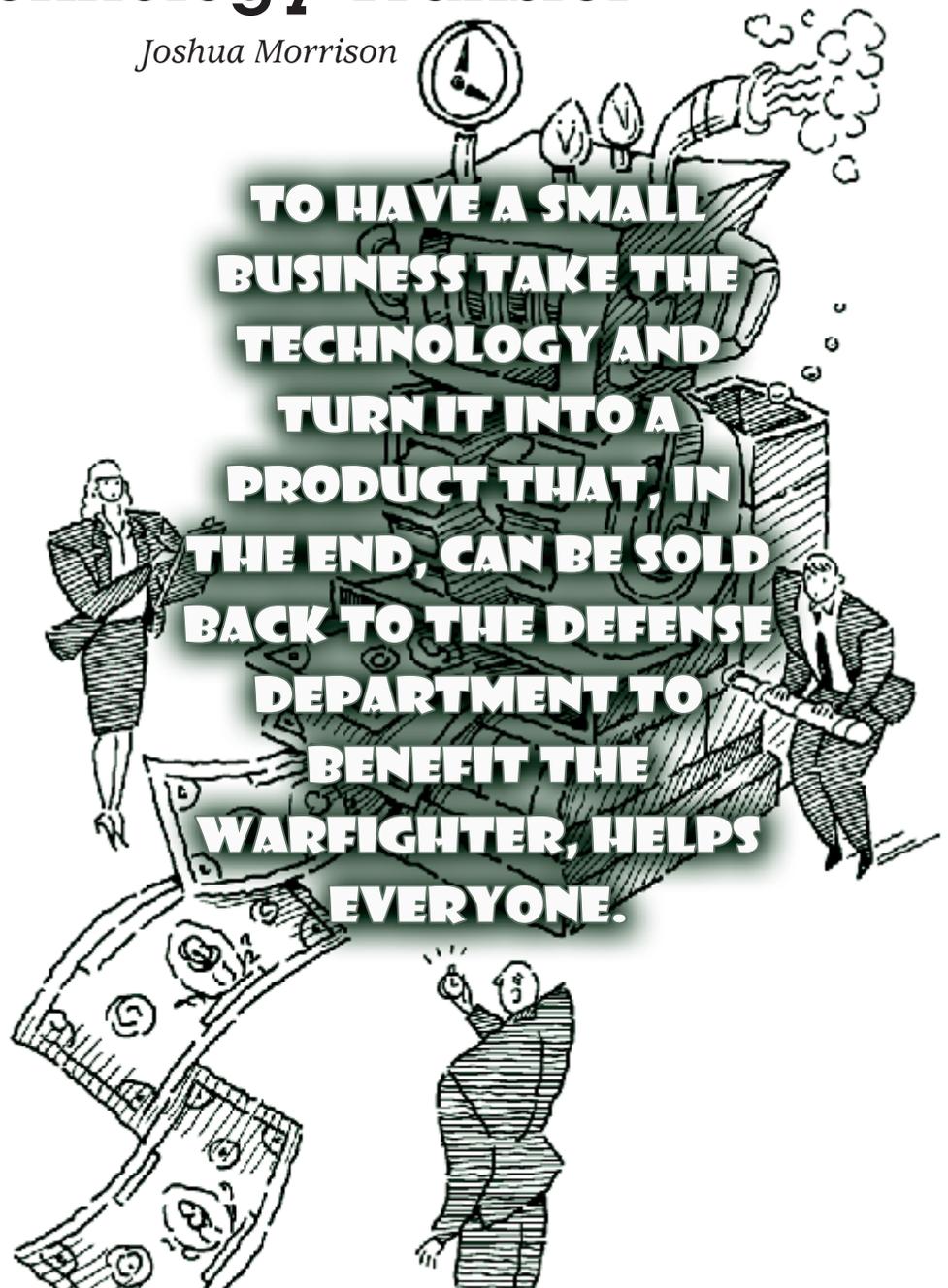
Joshua Morrison

The ultimate goal of Department of Defense technology transfer is to help the warfighter, and technologies developed in the Defense laboratory system are all aimed at this end purpose. Transferring the technology to a small business for commercialization is a plus, bringing in additional funding to the lab through licensing contracts, and lowering the product cost for Defense acquisition. To have a small business take the technology and turn it into a product that, in the end, can be sold back to the Defense Department to benefit the warfighter, helps everyone. Prime examples are the HOOAH! Bar®, an energy bar created by the U.S. Military that is now sold commercially; the Hearing Pill™, developed by the U.S. Navy to both prevent and reverse noise-induced hearing loss; and the MIOX Purifier Pen, a handheld water purifying device.

The BomBot™ Success Story

The BomBot™ started as a concept at Tyndall Air Force Base, Fla., where the Robotics Research and Development Group came up with the concept of modifying a commercial remote-control vehicle for counter-IED [*improvised explosive device*] efforts. The West Virginia High

Technology Consortium (WVHTC) Foundation, a non-profit organization located in Fairmont, W.Va., took that concept from the airfields at Tyndall to the mountains of West Virginia, and turned it into a shining example of technology transfer and transition.



Morrison graduated from West Virginia University with a bachelor's degree in information systems management and started work in October 2003 at the WVHTC Foundation.

Building on the initial design, the WVHTC Foundation licensed, from Battelle Labs, a receiver technology known as the Wireless Ethernet at UHF Frequency board. The WEUF board will allow the WVHTC Foundation to increase the distance from which the TRAXXIS remote-control 4x4 truck could be controlled from 300 – 400 yards up to 2.5 miles line of sight. Gone were the base tires and shocks. The heavier suspension and increased ground clearance allowed the vehicle to carry a 10 lb. load and travel at speeds up to 35 miles per hour. Once the internal research and development was complete, the WVHTC Foundation created a for-profit wholly owned subsidiary, Innovative Response Technologies (IRT), Inc., to build the BomBots.

In April 2006, the first BomBots rolled off the assembly line in response to a competitively awarded \$9.6 million contract from the Naval Explosive Ordnance Disposal Technology Division (NAVEODTECHDIV). The contract specified delivery of more than 2,300 Bombots to U.S. warfighters in Iraq and Afghanistan to aid in counter-IED efforts. Between April and September, IRT delivered the BomBots, finishing five weeks ahead of schedule. In September 2006, the first commercial BomBot was sold to the Birmingham, Ala., Police Department.

Completing the technology transfer/transition cycle, the BomBot began as an Air Force technology, was improved by the WVHTC Foundation, became the base technology for a start-up manufacturing company, was sold back to the Defense Department to aid our warfighters, and became a commercial product—all in a span of less than two years.

Partnership Intermediary Agreement

Legislation has shaped the landscape of federal technology transfer over the years, from the Stevenson-Wydler and Bayh-Dole Acts of 1980 to the Technology Transfer Commercialization Act of 2000. The Defense Authorization Bill of 1991 had one addition that caused a major impact, 15 U.S.C. 3715, which enabled the creation of Partnership Intermediaries. PIs are state, local government, or nonprofit entities that facilitate federal technol-

Partnership Intermediaries

For more information on the various programs, contact the following:

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ogy transfer. They assist companies or educational institutions in utilizing federal technologies, provide assistance to government Office of Research and Technology Application managers, and offer services that increase the likelihood of success of cooperative or joint activities of the laboratory with small business or educational institutions.

Partnership Intermediaries

In 1999, Montana State University's TechLink became the first DoD-wide PI. TechLink's primary focus is assisting DoD labs in licensing their technologies to industry for commercialization and transition to DoD operational use. TechLink also assists in establishing Cooperative Research and Development Agreements in support of licensing projects and helps DoD to develop and acquire new technologies by tapping private sector innovation. During the past three years, TechLink has facilitated approximately a third of all DoD licensing agreements nationwide. To date, TechLink has provided a 4:1 return on the dollars DoD spends to support the program.

Since then, more non-profit groups have worked to establish DoD-wide PIs across the United States.

FirstLink, located at the University of Pittsburgh and home of the DoD National Center of Excellence for First Responder Technologies, has a primary goal to facilitate technology transfer activities between DoD and businesses focused on benefiting the first-responder community in the gov-

ernment and civilian sectors. FirstLink facilitates the creation, transfer, and commercialization of technology to improve the ability to prevent, prepare for, respond to, or recover from emergencies and risks to safety and security.

The Institute for Defense and Homeland Security (IDHS) is an organization of university, industry, and federal research and development members dedicated to delivering world-class science and technology solutions in response to national defense and homeland security requirements. IDHS supports research, education, and technology transfer and transition, with an emphasis in



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the fields of telecommunications, bio-defense, sensor systems, crisis management, remote presence, and national energy independence.

T2Bridge is a technology transfer program designed to leverage innovative technologies and resources to solve defense needs. The program connects private-sector businesses and researchers in the southeast United States with DoD technologies, research capabilities, funding opportunities, development partners, and procurement needs. This includes helping companies with a variety of technology transfer activities such as obtaining funds for creation of new technologies; taking private-sector technologies and facilitating the acquisition path into DoD; and obtaining licenses to DoD technologies. The goal is to match DoD needs with innovative solutions and to use DoD resources to facilitate the development and transfer of the solutions into DoD. T2Bridge is a cooperative effort between Concurrent Technologies Corporation and East Carolina University. The program is patterned after, and works closely with, TechLink.

The most recent partnership intermediary is **SpringBoard**, whose mission is to provide Alaskan businesses with financial and technical tools so they can develop products

and services to help meet the needs of the DoD. This program helps to transfer technology from DoD labs to private companies and from the private sector to the DoD. SpringBoard essentially serves as a “broker” or “bridge” for transferring and transitioning technology. As an important component of this program, SpringBoard is developing an education program to enhance science and math skills in K-12 schools.

DoD TechMatch

DoD TechMatch, a program of the WVHTC Foundation, became a PI in March 2005. DoD TechMatch is different from the other PIs in that its focus is on developing software and databases to assist DoD technology transfer and transition efforts. DoD TechMatch has developed an eponymous Web-based portal that matches registered users with DoD research and development business opportunities. It is a free service. Users register with DoD TechMatch, select keywords that match their technology areas of interest, and DoD TechMatch automatically matches them up with opportunities from FedBizOpps, Grants.gov, Small Business Innovation Research / Small Business Technology Transfer Program solicitations, and various opportunities that originate at the research and development labs across the country. DoD TechMatch is a central source for finding DoD patents available for licensing, DoD technology transfer success stories, and information on major conferences and meetings sponsored by DoD. Work is currently under way to develop a Web-based intellectual property management system to be used by DoD to manage patented technologies and agreements.

A new feature of DoD TechMatch that is being used extensively by the other PIs is the Hot Technologies module. PIs identify technologies created in the labs that have a high commercial potential or are an emerging technology. These technologies are listed on DoD TechMatch under the Hot Technologies section. The purpose is to provide industry a quick overview of the technology and contact information to find out about licensing opportunities. These Hot Technologies are matched against the registered user base in the same way as other opportunities. Two licensing agreements in the past two months were signed with companies that found these technologies on DoD TechMatch.

OTT Partnership Intermediary Network

The growing number of PIs has created the need for a network to help them work more effectively and efficiently with one another, industry, and academia. TechLink was asked to develop processes to coordinate the activities of current and future PIs. OTT PIN—the Office

