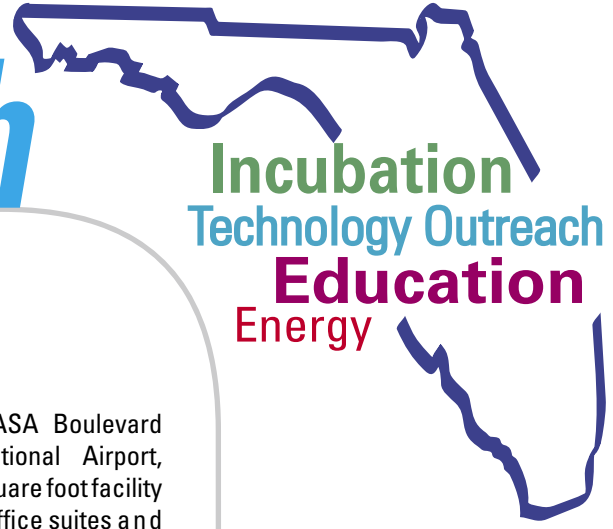


# TECH *reach*

Incubation  
Technology Outreach  
Education  
Energy



## TRDA TECHNOLOGY INCUBATOR TAKES SHAPE

A long list of eager entrepreneurs in east central Florida will be pleased to hear that the Technological Research and Development Authority (TRDA) has completed the 30% design review of its much anticipated technology business incubator.

The incubator center, which is expected to open in the first quarter of 2007, will host a



*When completed in early 2007 the 30,000 square foot TRDA business incubator will be an engine for local job creation, technology transfer and new product innovation.*

targeted small business program designed to stimulate economic development through the support of indigenous entrepreneurs. By offering traditional incubator services, such as flexible office space, critical business equipment and administrative support services, the state-of-the-art facility will provide the platform for local entrepreneurial firms to accelerate their growth and create high-paying jobs. TRDA will focus its services on substantive business mentoring, direct links to NASA technology, entrepreneurial training (especially to women and minority-owned businesses), and entrée to private investment capital.

Located at 1200 West NASA Boulevard near the Melbourne International Airport, building plans call for a 30,000 square foot facility equipped with varying sizes of office suites and light assembly space. The incubator will have

a reciprocal relationship with Florida Tech, the University of Central Florida and Brevard Community College to provide entrepreneurs with access to various subject matter experts, specialty facilities and equipment.

Financial contributors in the project include TRDA, NASA, the U.S. Department of Commerce Economic Development Administration, the City of Melbourne Community Development Block Grant program, and Brevard County. More than \$3,000,000 is being leveraged in this project that is conservatively estimating the creation of fifteen companies in the first year of operations.

### County Commission Supports TRDA Incubator with \$200K Grant

On September 21, 2005 the Brevard Board of County Commissioners unanimously approved a \$200,000 grant to the TRDA for construction of its latest technology incubator. The funding will help to provide additional space within the incubator facility for the Florida Institute of Technology and the University of Central Florida. Both universities' progressive approach to small business development is a program component that TRDA acknowledges is important to the center's comprehensive services.

"Educational institutions and business incubators have a long and successful history of working together to promote entrepreneurship and technology transfer", says Heidi Brandow, TRDA Incubator Network Director. "The two universities bring with them unlimited intellectual capital and the capacity for technology innovation that will enhance our ability to stimulate entrepreneurial activity and to create jobs," she added.

Approximately 4,000 square feet of the TRDA center will be available to the two universities, as well as Brevard Community College to carry on various business assistance activities including Florida Tech's National Center for Small Business Information, which assists individuals and small businesses through instruction on the fundamentals of government contracting, business software and technology.

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*The Technological Research and Development Authority (TRDA), established by the Florida Legislature in 1987, delivers successful and cost-effective transfer of cutting-edge technologies to schools and small businesses throughout the State of Florida.*

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# SATOP HELPS HYDROFLOW IMPROVE DEVICE TO DETECT CONTAMINATED WATER

By streamlining the development of a revolutionary technology, a more compact scanner to detect and analyze contaminants in water systems is one step closer to reality, thanks to assistance from the Space Alliance Technology Outreach Program (SATOP).

Safety Scan Technology, a HydroFlo Inc. portfolio company in Raleigh, N.C., is developing for the commercial market technology known as Swept Frequency Acoustic Interferometry (SFAI). The technology utilizes high frequency sound waves to analyze and detect pre-programmed contaminants in water systems through metal, glass, ceramic and plastic barriers. SFAI has been in use for seven years by the federal government.

"This technology will allow our customers the ability to analyze their water supply immediately and without the need to open the container," said Mike Doss, Safety Scan Technology's Chief Operating Officer. Potential clients for SFAI and the advanced scanner include water treatment facilities, which test water quality several times each day, and semiconductor manufacturers and pharmaceutical manufacturers, which need to verify incoming water purity.

Safety Scan Technology approached SATOP for assistance in consolidating the electronics associated with SFAI into a smaller, potentially hand-held sized unit, in contrast to the bulkier equipment currently in use.

"This new technology is light-years ahead of anything else on the market right now and should revolutionize the way water is controlled and analyzed," said Christophe Gilfriche, SATOP Florida senior program engineer. "Safety Scan needed to know how the device could be miniaturized and the best way to do so."

Gilfriche tapped Dan Kovach, a senior scientist specialist at The Boeing Company at Kennedy Space Center, to handle the Safety Scan Request for Technical Assistance. "Dan's expertise in instrumentation, computer aided design (CAD) and circuit/microprocessor design made him the logical choice for this technical challenge," Gilfriche said.

Through Kovach's research we concluded that the SFAI device can be miniaturized to the size of a commercially available handheld device using commercially available components.

In addition, Kovach suggested re-arranging the components and provided a list of options for consideration, such as a wireless system or separate monitor. He also advised that Safety Scan Technology avoids components that contain lead due to potential bans on such components in

various markets throughout the world. Lastly, Kovach provided suggestions for alternative methods for design and different graphical display options.

"Dan's advice will help us bring our product to the prototype stage faster and we will be able to move more quickly to make the device smaller," Doss said. Development of a working prototype is under way, and once completed the company will perform extensive field testing.

"We were looking for guidance about our micro circuitry, with the goal of saving a step or two in development down the road," Doss said. "We certainly received that and more from Dan, not to mention the opportunity to be associated with a great program like SATOP."



## Governor Bush Reappoints TRDA Board Members

Governor Jeb Bush has reappointed Brevard residents Dan Adovasio and Peter DiLavore to the Board of Directors of the Technological Research and Development Authority. The appointments took effect August 11, 2005.

Mr. Adovasio, who serves as secretary to the Authority, is a Merritt Island-based State Farm agent and 18-year resident of the area.



*Dan Adovasio*

This is his second four-year appointment to the TRDA. He has served on the boards of both the Economic Development Commission of Florida's Space Coast and the Cocoa Beach Chamber of Commerce. Adovasio has also participated in the development of the Brevard County Charter as a member of the Charter

Commission. He is a graduate of the University of Cincinnati.

Mr. DiLavore, who is the owner-broker of DiLavore Properties in Melbourne, was originally appointed by the Governor to the TRDA in 2003 to serve out the remainder of a term following a board vacancy. In his current appointment he will serve a full four-year term.

A long-time Brevard County resident, DiLavore has been an active real estate professional and small business owner who has served as the President of the Melbourne Area Association of Realtors, a member of the Kiwanis Club of Melbourne, a literacy tutor and board member of the Embers Alzheimer's Day Care Center. DiLavore has also been a gubernatorial appointee to the East Central Florida Regional Planning Council.

TRDA Board Chairman Al Glover praised the Governor for reappointing

both members. "Both Dan and Peter have brought leadership, energy and vision to TRDA team," said Glover. "With these appointments they can carry on their efforts to support education, economic growth and technology innovation, as well as continue to increase our accountability and service to the public."



*Peter DiLavore*

The TRDA was established by the Florida Legislature in 1987 to promote the advancement of research, education and economic development. The TRDA Board oversees and advises the Authority and is responsible for setting policy and direction.

## INCUBATION

## TRDA Business Incubator to Support Enterprise Florida Technology Initiative

The TRDA Florida/NASA Business Incubation Center was among nine technology incubators and seven university technology transfer offices selected to participate in a new Enterprise Florida pilot program designed to increase overall success rates for Florida companies applying for Small Business Innovation Research (SBIR) or Small Business Technology Transfer (STTR) grants.

"We were pleased when Enterprise Florida contacted us about teaming on this program," stated Heidi Brandow, TRDA Incubator Network Director. "The

SBIR program is the largest R&D grants program targeting the small business community with nearly \$2 billion available. This year's new pilot program will improve the odds for Florida start-up companies to win their first SBIR award."

Participants cannot have been awarded an SBIR/STTR in the last 5 years. Grant awardees will receive a total of up to \$2,500 for their use in offsetting costs related to applying for an SBIR or STTR grant. Grants will be awarded to select participants on the basis of an application, the recommendation of the applicant's

technology incubator or university technology transfer office, and the results of technology fit/innovativeness assessment. Applicants will pay a fee of \$250 and will receive the results of their assessments even if they are not awarded a grant under this program.

Any technology company interested in participating in this new program should contact Heidi Brandow at 321-269-6330 or email [hbrandow@trda.org](mailto:hbrandow@trda.org).

# TRDA BRINGS TEACHER PROFESSIONAL DEVELOPMENT TO NEW HEIGHTS

On Saturday, November 5th, twenty-five teachers embarked from the Kennedy Space Center for the once-in-a-lifetime experience of weightless flight. Selected from the Heartland Educational Consortium's (HEC) Math Science Partnership (MSP) grant participants, the teachers flew aboard ZERO Gravity's G-Force One®, a specially modified Boeing 727. Training for the flight took place in October during an information and experiment design workshop. The select teachers conducted pre-approved experiments in micro, Lunar and Martian gravity environments. They will integrate both the experience and the experiments into their classroom curriculum to inspire and educate students in the areas of math and science.

The weightless flight was part of the HEC MSP Summer Institute, which

provided math, science, technology and reading instruction to more than 150 teachers during two weeks. Many



*Math Science Partnership Instructor, Gus Koerner, shows a middle school teacher how to use a Global Positioning System unit during a Precision Agriculture workshop.*

teachers from the first week returned for more instruction and materials in week two—signifying to the organizers

that the professional development workshops were appropriately focused on their needs.

Participants also took advantage of field trip opportunities at locations such as the Riverwood's Field Lab, Archbold Biological Station, Harbor Branch Institute, and Mosaic Phosphate Mine. The teachers' evaluations rated the summer workshops a huge success.

Through the MSP grant more than \$1M has been put toward increasing teachers' access to advanced lab resources and industry expertise. DeSoto, Hardee, Highlands and Okeechobee Counties worked closely with the HEC office and the TRDA Endeavour Academy to obtain the grant funding. Additional follow-up training is currently being scheduled and will be provided during the summer of 2006.



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