

Posted date: 10/30/2006

## **Defense, Military Ventures with Products Close to Market Find Friend in Commercialization Center**

*Firms Present Homeland Security Devices to Gain Funds for Product Development*

By Amy Yarnall

Five years after arriving in San Diego, the Center for Commercialization of Advanced Technology has helped more than 60 entrepreneurs get their startups off the ground.

Two CCAT centers are based at local universities — one at **San Diego State University** and one at California State University, San Bernardino.

Both locations help startups develop business plans and marketing strategies, and awards prototype grants worth up to \$75,000.

The center has made it a habit to share its successes with those who help fund its operations.

On Oct. 11, CCAT held a presentation for U.S. Rep. Brian Bilbray, R-Escondido, at the California Center for the Arts, Escondido.

Bilbray was briefed about companies in his district connected to defense and homeland security.

"We believe, since Congress is supporting CCAT, that it is only fair and part of good business practice to update the congressman on our clients and their technologies," said Barry Janov, director of sponsored research project management.

Janov, a retired U.S. Navy captain, is one of the founders of CCAT. He began working for CCAT in 2001.

### Local Showcasers

The companies that presented were San Diego-based Pixon Imaging Inc., Daylight Solutions, AIRSIS Inc., Pacific Microwave Research Inc., Crossflo Systems Inc. and Seacoast Science Inc.

The San Diego CCAT has put on similar presentations for U.S. Reps. Darrell Issa, R-Vista, and Susan Davis, D-San Diego.

"We have a responsibility to those who have shown their support for the center and we conduct periodic reviews to show their investment was worth it and that we are giving good

return on their dollars," Janov said.

Currently, CCAT offers only commercialization services, not money to develop products.

"We've already afforded our full allotment of grants — \$600,000 for the San Diego center in 2006," Janov said.

"We do anticipate opening up for funding awards in the summer of 2007."

CCAT was awarded \$5.2 million in 2001 to help get technology-related defense and space operations moving.

CCAT in San Diego receives \$5 million annually, according to Janov.

Clients include defense technology companies that produce a variety of products, including products used in missiles, bomb detection systems, body armor, infrared vision and night vision devices and sound-detection devices.

Since 2001, the national CCAT program has provided funding and assistance to nearly 70 private ventures and universities, including University of California, San Diego and government labs, such as Spawar.

"CCAT believes it has developed a model to more effectively channel efforts to commercialize these technologies," said Mike Elconin, technology and business advisor for CCAT, and vice president for Tech Coast Angels in El Cajon, which invests in startups.

#### CCAT Assists Small Firm

CCAT helped Daylight Solutions, a company of 12 employees, develop a molecular detection device.

Advancements in this technology, used to find explosives, have been reduced from the device from the size of a computer disk to the size of a business card.

Three of the founders, native San Diegans who graduated from San Diego State, are Paul Larson, president and chief operating officer, Tim Day, chief executive officer and chairman of board, and Sam Crivello, a physicist.

The device would allow security personnel to stand at a distance and detect the contents of a mysterious package, such as luggage at the airport. It could also allow military personnel identify if someone has explosives under their clothes, such as a suicide bomber.

The company said it expects its standoff detection device to be completed in 2007.

Larson declined to state how much the company spent on development.

"For a small company, funding is crucial," Larson said. "CCAT provides a source of funds for small startups and also offers advice and guidance for those companies that request it."

Launched in 2005, the company is not yet profitable. It introduced its first product this year and expects to be profitable in 2008.

"We are on track (to generate) several million dollars in revenue over the next couple of

years," said Larson.

The company received \$7.5 million in venture capital in June 2006 with San Diego-based Hamilton Technologies as the lead investor. Investing along with Hamilton Technologies was Magnecomp and Masters Capital.

#### Fun Experience

Larson said he and co-founder Day are enjoying themselves.

"We started with only three people and have hit every milestone to date that we told our investors we would meet," Larson said. "We are ... committed to bringing this molecular detection technology and other technology to the world."

The real test is developing a product that is marketable and has practical applications for defense contractors or the military.

Louis Haerle, vice president of operations for San Diego-based Seacoast Science Inc., said his company is in the precarious position of developing a new product. The firm has set a deadline of October 2007 for its product launch.

"We are at that transition stage of research development to commercializing our product and that's what CCAT has helped us with," Haerle said.

The tech company was inspired by shoe bomber Richard Reid, who tried to set fire to explosives in his shoes while on an American Airlines flight from Paris to Miami in 2002.

"(Reid) opened our eyes to the possibilities of building a prototype that looks like a badge, and with 10 sensors, can detect chemical warfare agents and toxic chemicals," Haerle said.

The chemical detection company received one prototype grant of \$75,000 in 2005.

"Right now, we have enough to make payroll for the next couple of months," Haerle said.

The company draws its revenue from the \$100,000 in product sales and Haerle said it has research dollars, which he declined to state.

The company said it is currently trying to "make it happen," and is excited, but facing challenges of getting in the doors of larger contractors and businesses.

"CCAT has done this in the past, they have helped open doors for companies."