Mississippi Enterprise for Technology

John C. Stennis Space Center

Volume III, Issue 1 | BUILDING WORKFORCE, BUILDING BUSINESS | January 2010

MsET gets EDA grant

Enhance organizational sustainability and effectiveness.

Bring value-added services to clients and partners.

When looking at any service-oriented non-profit corporation, the two sentences above could be reasonable goals. In fact, one could say they are cornerstones to an organization's existence.

Charlie Beasley is president of MsET

When the Mississippi Enterprise for Technology decided to propose a project to the Economic Development Administration for funding assistance, those two sentences represented the purpose of the project.

We asked for assistance in the development and implementation of a strategic plan focused on sustainability, effectiveness, and service. In late December EDA approved $600,000 in funding, noting the results are expected to place MsET in a position to make the most positive impact upon the economic development efforts at Stennis Space Center and the surrounding region – and to create a sus-

*(**Beasley** continued on page 2)*

Radiance Technologies

Spreading its wings

The Huntsville-based high-tech company has multiple operations in Mississippi, and growth may be in the cards…

Tom Strange has seen some changes since Radiance Technologies first opened its office at John C. Stennis Space Center in 2004. At the time it had eight employees. Today it has 30, and Strange hasn't had much trouble filling positions.

"Our key to success at Stennis has been our employees, who do a very good job for our customers and the word spreads. Now customers are calling us," he said.

Radiance Technologies is a member of the Mississippi Enterprise for Technology, which lists it as a "geospatial" company. While that's true, it doesn't begin to tell the story of the company headquartered in Huntsville, Ala.

Radiance Technologies started out as a support service provider in 1999. But by tapping into the expertise and interests of its employees, the company branched out into technology, hardware and subcontractor services. Today its major business areas include government support, technology development and technology applications.

And Strange believes the ties to Huntsville will help the Stennis operation grow.

The company

Radiance Technologies was established in March 1999 with a single office in Huntsville, a high-tech mecca in North Alabama that's home to NASA's Marshall Space Flight Center and the Army Aviation and Missile Command.

Radiance Technologies has appeared several times in Inc. magazine's list of the fastest growing private companies. Today it has more than 300 workers, about 160 of them in Huntsville. The rest are spread out in a network of 20 offices in 12 states as well as project offices around the world. It had annual revenue in 2008 of some $66 million.

Radiance Technologies, which specializes in the application of emerging technologies, provides systems engineering and development services to the government. It designs, develops, fabricates, integrates and tests both components and systems. Its fastest growing business area involves prototype development based on its expertise in hardware, software and integration.

It has a track record of working with military and intelligence clients, including the Air Force Research Laboratory; Aviation and Missile Research, Development and Engineering Center; Defense Intelligence Agency; Army Intelligence and Security Command; Missile Defense

*(**Radiance** continued on Page 2)*

(**Radiance** *continued from page 1)*
Agency; NASA; National Air and Space Intelligence Center; Naval Oceanographic Office; and Space and Missile Defense Command.

Key products from Radiance Technologies include electro-optical systems, radar power distribution technologies, high speed signal processing and life sensing systems. Two of the more interesting systems are WeaponWatch and Triange Sensor.

The first is a system that detects, locates, classifies and responds to fired weapons from fixed and rotary wing aircraft, unmanned aerial systems, ground vehicles, towers and tripods. WeaponWatch uses infrared cameras and high-speed data processing to recognize and analyze the heat signatures of fired weapons. It can detect and respond to enemy weapon fire by alerting soldiers, by communicating the type and location of the weapon and even return fire.

Triage Sensor is designed for first responders to help them find survivors among many motionless bodies. The sensor package can be mounted on small, remotely operated robots or mounted on a pole for direct use by rescuers. The sensors measure two basic life support metrics: pulse and breathing, in order to find survivors.

Being in a high-tech area like Huntsville presented both opportunity and challenges for the company. The city boasts more advanced degrees per capita than anywhere else in the country, but it also has a lot of talent-seekers, including some of the top defense companies in the nation like Lockheed Martin, Boeing and Northrop Grumman.

But Radiance Technologies found a way to compete. A founding principal of the company is that it is employee-owned, which the company considers an incentive for high achievement. Employees are encouraged to pursue profitable projects in their areas of interest and expertise. Program review process identifies all parties who contribute to winning and executing a successful project in order to reward employees.

The company developed a compensation strategy that helps it recruit and motivate its highly educated and sought after workforce. It includes recurring evaluations through which stock options are awarded to employees. Radiance Technologies claims a greater than 95 percent employee retention rate.

Mississippi

"The company has always been a model of steady growth since the start, and you can see that from their increased work and staff additions over the years," said Charlie Beasley, president of MsET. "The Mississippi operation has been a big part of that growth and employs some of the best talent at Stennis. The jobs Radiance creates are exactly the type jobs that help move Mississippi's economy forward."

And it's the ties to Huntsville that means so much to the Mississippi operation.

Strange's goal is to expand the work Radiance Technologies does in Mississippi, to go beyond geospatial.

"We started out with geospatial, in particular Naval Oceanographic work," said Strange. Now the operation is involved not only with the Naval Oceanographic Office, but NOAA's eCoastal Data Development Center, and it's "branching out."

"We're trying to bring technology jobs to Mississippi," said Strange, who notes that there are many benefits of working in the state, not the least of which is the cost of doing business. "Part of what we're trying to do is we're trying to leverage our Radiance government connections at Huntsville and Dayton (Ohio) to bring technology work to Mississippi."

Radiance Technologies is located in Building 1103, Suite 210 at Stennis Space Center, and it's the largest Radiance operation in the state, but certainly not the only one. Strange said the company also has an office with seven employees in Hattiesburg that works with the University of Southern Mississippi on standoff radiation detection for the Defense Threat Reduction Agency.

It also has a five-employee office in Jackson that works with Jackson State University on developing innovative IT solutions for the Department of Homeland Security and the Army's Space and Missile Defense Command, and 12 Radiance Technologies workers are in Oxford, home of the University of Mississippi.

The company also has offices along the Gulf Coast in Mobile, Ala., and Panama City Beach, Fla., as well as an operation in Ruston, La., that works closely with Louisiana Tech University.

- David Tortorano

(**Beasley** *continued from page 1)*
tainable structure that will keep making impacts for a long, long time.

The project is divided into three major parts: incubation, economic development, and communications. MsET's staff and dedicated Board of Directors took some time to take a good, hard look at the corporation and decided we needed to revitalize these three areas of business.

The mission of MsET is to leverage Stennis Space Center to facilitate commerce, create employment opportunities, and improve quality of life. The incubation of technology businesses have been our bread-and-butter for 15 years, and a more comprehensive economic development role is our future.

We plan to take this opportunity to modernize our incubation techniques, clearly define our current and future economic development functions, and create a communications structure that properly keeps MsET connected with our clients, partners, stakeholders, and the residents of the communities we impact.

I am particularly thankful to the Southern Mississippi Planning and Development District for its crucial guidance as we competed for the grant award. Although MsET put up matching money, the project also would not exist without the funds provided by the Mississippi Development Authority. Also, we appreciate the longstanding partnership MsET has with the University of Southern Mississippi, who will administer this grant.

We are looking forward to the hard, rewarding work required for this endeavor, but we are especially eager to deliver – in a most sustainable and effective manner of service.

The MsET story

Tortorano Publications photo

The Mississippi Enterprise for Technology Inc. at John C. Stennis Space Center is a nonprofit created in 1994 as a business incubator and technology transfer office. The joint effort of the Mississippi Development Authority, NASA and the state's universities was designed to spawn the development of high-wage, high-skill technology jobs.

MsET evolved into one of the first state groups to focus on leveraging the presence of federal geospatial activities, the gathering, interpretation and distribution of geographic data acquired with satellites and aircraft to provide a picture of the world. That's no small matter considering it's a key technology of the 21st century. It remains a key area for MsET, but by far not the only one.

The beginning

The state's interest in leveraging federal technologies at Stennis – then called the Mississippi Test Facility – began in 1964 with creation of the Mississippi Research and Development Center. State officials knew they had a jewel in the facility designed to test rockets for NASA.

In 1970 NASA located its Earth Resources Laboratory to MTF to find applications for data acquired from remote sensing equipment. At NASA's invitation, the departments of Commerce, Interior, Transportation, Army, Navy and EPA eventually set up operations at the facility that would be renamed Stennis Space Center.

In 1994 MsET was established to fulfill the role first envisioned 30 years earlier: leveraging the research, development, test and evaluation taking place at Stennis Space Center.

MsET today

MsET is headquartered in the 56,000-square-foot Mississippi Technology Transfer Center, designated the Center of Excellence in Geospatial Technologies. Building 1103 is also occupied by universities, nonprofits and commercial companies. MsET also has space in Building 1210 for a total of 15,000 square feet.

Its mission as an incubator and tech transfer office is to provide an environment where start-ups can turn technologies into products and services. It's a means to leverage Stennis Space Center as a catalyst to facilitate commerce, create job opportunities and improve the quality of life.

As a technology transfer office, MsET is a clearinghouse where research at SSC, whether from federal or state labs, can be converted into products and services for the general public.

As a business incubator, MsET is a member of the National Business Incubation Association and provides an environment where technology start-ups stand a better chance at surviving through providing business and technology-related services, opportunities for joint ventures, entrepreneur training and access to state and federal technology portfolios. It helps a startup in the critical early stages.

MsET works with a statewide network of offices to offer technology forecasts, business plans, market research, sources of financing/marketing strategies, patent searches and vendor sources.

MsET does not limit itself to a particular type of technology, and the current list of tenants includes companies involved in everything from software development to computer security systems. Long-range plans call for exploring the growth of alternative technology areas.

MsET is also currently applying additional focus on the economic development of Stennis Space Center. The incubator and technology transfer function will remain the focal point, but MsET will partner with local, state and federal organizations for the economic development of Stennis Space Center.

MsET already has a track record of getting directly involved in the economic development of Stennis. MsET in the past was instrumental in helping Stennis win the Shared Services Center in a NASA-wide competition. It wound up creating some 500 high-paying jobs.

"We need to position ourselves to be able to take advantage of opportunities," said Charles Beasley, president of MsET, "and we are now well on our way towards doing that."

Demographics

The John C. Stennis Space Center is a key location for three of five science and technology sectors likely to play a growing role in South Mississippi's future.

South Mississippi science & technology sectors	
Sector	Primary centers
Aerospace	Stennis Space Center; Moss Point
Advanced materials	Hattiesburg; Bay St. Louis; Gulfport
Shipbuilding	Gulfport; Pascagoula
Geospatial technologies	Stennis Space Center, Ocean Springs
Marine science	Stennis Space Center, Ocean Springs
Source: Mississippi Gulf Coast Alliance for Economic Development/Tcp	

Stennis tenant MsET has a range of technology companies involved in a variety of fields. The companies include that focus on everything from providing business services to making products.

Current MsET companies	
Company	Field
3 Rivers Visual Communications	Business services
DQSI Corporation	GIS support
DigitalGlobe	Imagery products
Digital Quest	Education products
DNet	Geoinformatics
Geocent	Geospatial
Helios Systems	Digital media
High Performance Solutions	IT support
Innovative Imaging and Research Corp.	Illumination; agr.
Melhcorp	UAV products
Mississippi Global Technologies	Navigation; security
MSU/Geo Research Institute	research
Northrop Grumman Information Technology	Emergency mgmt
Prototyping Solutions	3D printing
Radiance Technologies	Geospatial
Rockwell Collins	Geospatial; UAV
Skylla Engineering	Engineering
Themis Vision Systems	Imaging
WorldWinds	Weather modeling
Source: Mississippi Enterprise for Technology	

MsET tenant residency	
Pearl River County	27%
St. Tammany Parish	21%
Hancock County	17%
Harrison County	15%
Other Louisiana parishes	13%
Other Mississippi counties	8%

MsET tenant education	
Bachelors	44%
High school	30%
Masters	18%
Associates	6%
PhD	1%

MsET Profile

Most MsET tenant workers live in Mississippi, but 34% are from Louisiana. Sixty-nine percent of the workers have college degrees. *Source: MsET*

South Mississippi federal/state geospatial research	
Organization	Location
Center of Higher Learning/University Research (Consortium)	Stennis
Engineering Research Center - GeoResources Institute (MSU)	Stennis
Engineering & Science Directorate (NASA)	Stennis
Enterprise for Innovative Geospatial Solutions (UM)	Stennis, Oxford, Jackson
Gulf Coast Geospatial Center (USM)	Ocean Springs
Hydrographic Science Research Center (USM)	Stennis
Joint Airborne Lidar Bathymetry Technical Center (NOAA)	Kiln
Mississippi Enterprise for Technology (Mississippi)	Stennis
Mississippi Laboratory/Southeast Fisheries Science Center (NOAA)	Stennis
Mississippi Laboratory, Pascagoula Facility (NOAA)	Pascagoula
National Data Buoy Center (NOAA)	Stennis
Naval Oceanographic Office (Navy)	Stennis
Naval Research Laboratory, Research Site (Navy)	Stennis
Northern Gulf Institute (Consortium)	Stennis
Source: Mississippi Gulf Coast Alliance for Economic Development/Tcp	