MISSISSIPPI GULF COAST ALLIANCE
FOR ECONOMIC DEVELOPMENT

Alliance INSIGHT

Volume I, Issue IV | aerospace – advanced materials – shipbuilding – geospatial – marine science | October 2007

Inside this issue:

MISSISSIPPI GULF COAST Alliance FOR ECONOMIC DEVELOPMENT

The Alliance is an independent partnership serving six Mississippi counties nearest the Gulf of Mexico. Through this professional group, businesses and industries can work with a central contact when considering relocating and expanding into the area.

George County Economic Development Foundation

Hancock County Port & Harbor Commission

Harrison County Development Commission

Jackson County Economic Development Foundation

Partners for Pearl River County

Stone County Economic Development Partnership

Mississippi Power Company

Aerospace

Paris: Raising the regional bar

Northrop Grumman image

A Royal Australian Air Force KC-30B lands at the Paris Air Show.

Regional cooperation has been a matter of faith in economic development circles for years now. It's a standard part of speeches from politicians and economic development officials alike.

But South Mississippi kicked it up a notch when two economic development officials went to this summer's Paris Air Show to show support for Mobile, Ala., in the competition to build an Air Force tanker. They were part of the Alabama contingent.

The reason goes beyond the immediate Northrop-EADS and Boeing fight to win the $40 billion contract to build the next generation of aerial tankers. If Northrop-EADS wins, it will reinforce the Gulf Coast as an aerospace center, and South Mississippi as an integral part of the corridor.

"We are not in competition for a site here. What we're trying to do is, when a project site has been decided, show regional support for a contract to come to this region," said George Freeland, executive director of the Jackson County Economic Development Foundation.

*(See **AEROSPACE** on page 2)*

Marine Science

Riding the wave of the future

The invitation-only gathering at the Ocean Springs lab in August 2007 was designed with one idea: convince economic development leaders about the significant role marine aquaculture can play in the future of South Mississippi.

And it's the tip of the iceberg.

The group that organized the event was focusing on just one aspect of the broad field of marine science, an umbrella term under which exists a host of specialties. Marine issues have been a part of the Mississippi Gulf Coast economy for so long most give it little thought. Yet marine science and all it involves – from aquaculture to finding medical cures – represents a little-tapped gold mine.

Marine areas are seen as one of the last relatively unexplored frontiers for industry development, and nations that develop leading-edge marine

*(See **MARINE** on page 3)*

Aerospace corridor

(Continued from page 1)

"We spent time with EADS executives and Northrop Grumman executives, to show them that we're behind this project," said Larry Barnett, executive director of the Harrison County Development Commission.

Regionalism

On the surface, the competition is between Boeing, which plans to build the tankers in Washington State, and the Northrop-EADS team, which opted for Mobile. But under the surface, it boils down to a fight between two regions.

The I-10 corridor region between South Louisiana and Northwest Florida is no newcomer to aviation. New Orleans is home of the Michoud Assembly Facility, Mississippi has Stennis Space Center, Mobile the aviation-focused Brookley Industrial Complex and northwest Florida has Pensacola Naval Air Station and Eglin Air Force Base.

The range of aerospace activity includes military pilot training, weapons development, propulsion system testing and more.

For the most part it has not been seen as a coherent region acting in concert, but that's beginning to change. During the opening of a UAV center in Moss Point in 2006, Northrop Grumman CEO Ron Sugar said he sees an emerging aerospace corridor.

This year Mississippi State University President Robert Foglesong said he's noticed the wealth of aerospace activity and said that under the right circumstances it could become an aerospace "gorilla."

Leroy Barnidge, a vice president supporting Tanker Programs for Northrop Grumman, said there are two world centers for aerospace industry – Toulouse, France, and Seattle, Wash. "I really think there could become a third aviation center in the world, and that could be the greater Mobile area."

The greater Mobile area, according to Barnidge, includes the Mississippi counties of Jackson, Harrison, George, Hancock, Stone, Greene, Perry and Forrest. They'll receive an immediate, significant impact if Northrop-EADS gets the contract, he said.

Aerospace employment

Center	*Average*	*2004*
Los Angeles-Long Beach-Santa Ana, CA	**101,814**	**89,585**
Seattle-Tacoma-Bellevue, WA	**82,977**	**62,014**
Dallas-Fort Worth-Arlington, TX	**40,113**	**39,348**
Hartford-West Hartford-East Hartford, CT	**21,345**	**20,314**
Boston-Cambridge-Quincy, MA-NH	**18,228**	**15,489**
Phoenix-Mesa-Scottsdale, AZ	**17,732**	**10,450**
Philadelphia-Camden-Wilmington, PA-NJ-DE-MD	**14,622**	**12,997**
New York-Northern New Jersey-Long Island,NY-NJ-PA	**14,212**	**12,717**
Cincinnati-Middletown, OH-KY-IN	**9,305**	**8,419**
Wichita, KS	**7,131**	**615**
Indianapolis, IN	**5,712**	**4,985**
San Jose-Sunnyvale-Santa Clara, CA	**5,359**	**2,671**
Savannah, GA	**4,465**	**4,465**
St. Louis, MO-IL	**4,461**	**2,224**
Palm Bay-Melbourne-Titusville, FL	**4,032**	**2,663**
Huntsville, AL	**3,537**	**3,229**

Source: AIA

> "A KC-30 tanker win will have an unprecedented impact not only in Alabama, but also in the entire Gulf Coast region."
> — William J. Canary
> president and chief executive officer
> of the Business Council of Alabama

That impact will extend eastward as well, to Pensacola and beyond. In fact, because of the size of the project, Barnidge thinks the entire Southeast will receive both direct and indirect benefits from the project.

The Mercedes lesson

The lessons of Mercedes-Benz in Alabama are not lost on economic development officials: Get a big enough production facility that requires a large supplier base and it could cause a paradigm shift in the future of a region.

In 1993, Alabama was a novice with the auto industry, and it was criticized for the size of the incentives used to land the marquee company. But years later, it's clear it delivered more than promised. Today, Alabama is a center for the auto industry.

The tanker project holds that kind of hope. It brings the promise of a long-term $100 billion impact on the Gulf Coast. While it's a given that it will attract suppliers, it could go beyond that by paving the way for additional U.S. and foreign aerospace facilities.

Barnidge points out that the Gulf Coast region, in addition to its aerospace activities, also has a large shipbuilding infrastructure and related activities that provide a degree of synergism that, combined, could make the Gulf Coast an economic "empire."

"A few years ago, there was a very heated and thorough site search process that ultimately led to the decision to propose Mobile as the location for the KC-30 project. EADS was focused on a site search to identify the region of the country that could best support the long term success of this project," said Freeland.

"What brought us here is a level of

*(See **NORTHROP GRUMMAN** on page 8)*

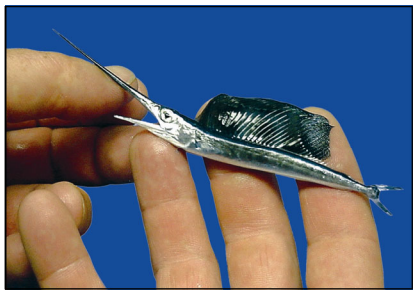
Marine science and the future

(Continued from page 1)

industries and technologies have the potential to supply a very wide international demand, according to Australia's National Oceans Office. Marine industries are diverse, from seafood to offshore oil and gas and from marine instrumentation to emerging industries. Companies interested in applied marine science research include environmental consultants, dredging companies, equipment manufacturers, hydrographic surveying companies and more. One emerging field highly interested in marine science: medical and pharmaceuticals because of the sheer size of organisms that inhabit the world's waters and the potential that offers for new products.

Infrastructure

South Mississippi and other states that border the 579,153 square-mile Gulf of Mexico have embraced marine science as a key research field. Every university in the region and many federal facilities are involved to one extent or another in marine science research, primarily littoral and estuarine studies. Mississippi alone has 22 research units spread out between Stennis Space Center, Biloxi and Ocean Springs.



USM image

This rarely seen juvenile sailfish was captured by USM scientists while investigating role of floating algae sargassum as critical nursery habitat.

The federal effort alone is impressive. South Mississippi has key operating units of the U.S. Environmental Protection Agency, the National Oceanic and Atmospheric Administration, and the U.S. Department of Defense.

But most of the research units in South Mississippi are run by the universities. Their research runs the gamut, from microbial ecology and genetics to remediation and hydrography. Some of the programs are cooperative projects with federal agencies.

The future

At the Ocean Springs meeting, economic development officials learned that the American seafood appetite contributed to a trade deficit of more than $7 billion. More than 80 percent of seafood Americans consume is imported, and 40 percent of that is the product of foreign marine aquaculture operations. At the present rate of commercial and recreational fishing, the world's seas and oceans can no longer sustain the demand for fish.

The economic development officials were told that a window of opportunity exists for the northern Gulf of Mexico to develop a domestic marine aquaculture industry that will create new avenues of environmentally responsible economic growth while helping sustain traditional commercial and recreational fishing industries.

But that's just a beginning. An understanding of the importance of aquaculture opens the door to a better understanding of other marine science fields.

South Mississippi is in the enviable position of having much of the infrastructure in place that could make it a leader at a time when the nation is focusing more on marine science issues. – *Tcp*

(Condensed from Mississippi Gulf Coast Marine Science 2007-2008, which can be downloaded at www.mscoastmarinescience.com)

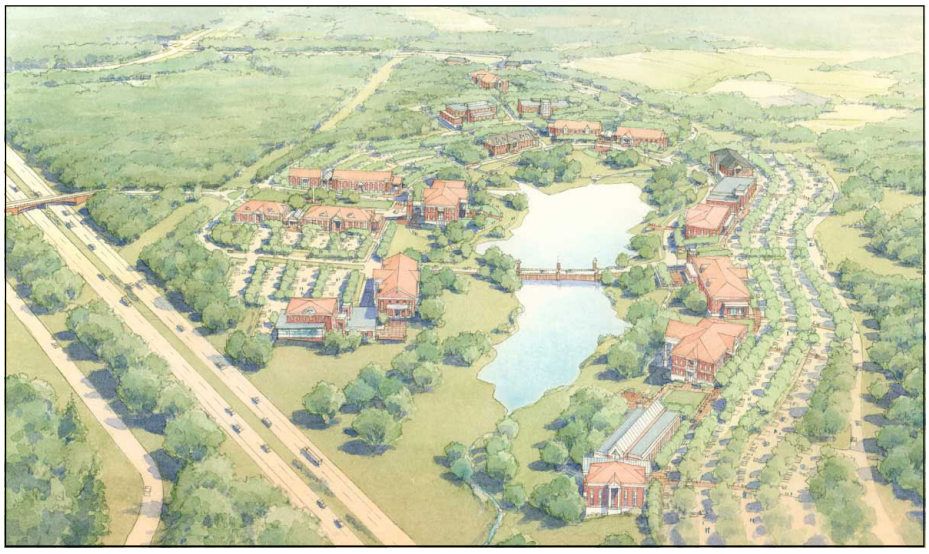
South Mississippi marine science RDT&E
Center for Marine Education and Research
Center for Trace Analysis
Center of Higher Learning and University Research
Coastal Research and Extension Center
Department of Coastal Sciences
Department of Marine Science
EPA, Environmental Chemistry Laboratory
Gulf Coast Geospatial Center
Gulf Coast Research Laboratory
Gulf of Mexico Program Office
Hydrographic Science Research Center
Mississippi-Alabama Sea Grant Consortium
Mississippi Laboratory, Southeast Fisheries Science Center
Mississippi Laboratory, Pascagoula Facility
National Coastal Data Development Center
National Data Buoy Center
National Estuarine Research Reserve System – Grand Bay
Naval Oceanographic Office
Naval Research Laboratory Detachment
Northern Gulf Institute
Undersea Vehicle Technology Center
U.S. Geological Survey, Office of Surface Water, Hydrologic Instrumentation Facility

Research

Technopolis push may alter future

Drive along Interstate 10 and it's not readily apparent. But along the 70-mile stretch of South Mississippi interstate you'll pass developments in Moss Point, Biloxi, Gulfport and the John C. Stennis Space Center area that promise to change the economic face of South Mississippi.

South Mississippi, which has its share of industrial and office parks, is a late bloomer when it comes to the development of university and privately developed science and technology parks. But now they are popping up all over, and when combined with the efforts to rebuild hurricane-damaged portions of South Mississippi with the latest in new urban thinking, it could make this region a showcase.



UM Image

Artist's rendering of the 500-acre research park at the University of Mississippi in Oxford, just south of the campus.

The Stanford example

Research parks are crucial to an area that sees a science- and technology-based future. Stanford University in California created the nation's first high-tech research park in 1951 in response to industry's call for land near university resources and the emerging electronics industry tied closely to the School of Engineering. It was instrumental in the creation of Silicon Valley.

Other parks followed, including North Carolina's Research Triangle Park, the largest research park in the world with more than 7,000 acres, and Cummings Research Park in Huntsville, Ala., a premier aerospace center.

Science parks stand out for their emphasis on bridging the gap between research and industry. The traditional research park has a university element, though there are parks that do not. While they have residential neighborhoods in proximity, a newer development has been the incorporation of neighborhoods into the park itself.

One example of this approach is the 1,334-acre Centennial Campus in Raleigh, N.C., Centennial Campus is North Carolina State University's vision of the future, a "technopolis" that consists of multi-disciplinary R&D neighborhoods, with university, corporate, and government facilities intertwined with a middle school, residential housing, executive conference center and hotel, golf course and town center.

One university impressed with Centennial Campus is the University of New Orleans. UNO's Research and Technology Park, on the shores of Lake Pontchartrain, is a 56-acre campus on the site of a former amusement park. Plans call for development of a 400-acre UNO R&T Park Slidell Campus that will reflect aspects of Centennial Village.

Mississippi

Three of the state's four major research universities are developing research parks. In Hattiesburg ground was broken in May for the first building at the University of Southern Mississippi's Innovation and Commercialization Park; in Oxford, the University of Mississippi has a 500-acre park in the works; in Starkville, Mississippi State University has a research park and is involved in the development of an aerospace park in the Golden Triangle airport region. The fourth research university, Jackson State University, has a variation of the research park theme with its Medical Mall, a former shopping center.

South Mississippi was interested in a science park as far back as 1999 with a plan to create a 90-acre R&D park in Gulfport for remote sensing businesses. But the idea fell through. Now, nearly 10 years later, things are picking up.

Some of the developments are taking on the Centennial Campus approach. Just outside Stennis Space Center, a Mobile developer has put up the first building of Stennis Technology Park, a 1,000-acre park for high-tech companies that graduate from the Stennis Space Center incubator. Plans now call for incorporating a residential community and town square.

The Tradition community nine miles north of Biloxi started as a walkable

community with several neighborhoods and shopping at a town square. It has added an office/research complex to the plan and will be the site for a William Carey University campus.

A short distance to the southwest of Tradition, the new USM campus to the west of the I-10-U.S. 49 intersection will have 1,700 acres at its disposal and plans call for a research center. While plans are yet to be firmed up — with the addition of residential communities — it, too, could become a Centennial Campus-type development.

Other options

But there are other science and technology parks being developed more along traditional lines. The list includes Moss Point's Trent Lott Aviation Technology Park, home of the Northrop Grumman Unmanned Systems Center and the Moss Point Industrial and Technology Complex, Harrison County's Bernard Bayou Industrial Complex and the Intraplex 10, and Hancock County's Port Bienville Industrial Park.

In Ocean Springs, the Gulf Coast Research Lab's Cedar Point development will include an incubator for companies interested in taking advantage of the research at the lab. Whether it might also include a research park is still to be decided.

Pearl River County is pondering smaller developments that would take advantage of proximity to Stennis Space Center and an emphasis on agricultural research. Stone County believes its location along high-growth U.S. 49 will open multiple opportunities for sci-tech parks that would take advantage of proximity to Tradition, the new USM campus as well as Hattiesburg. And George County has a new megasite that expects to leverage its location between high-growth Hattiesburg and Mobile, Ala.

Industrial parks are also luring tech companies.

Port Bienville Industrial Park near Waveland in 2002 welcomed its first tenant that focuses on research and development. Mississippi Polymer Technologies moved into a site to develop a plastic that has the strength of steel. It has since been purchased by Europe's Solvay.

Another former military facility is the 4,300-acre Mississippi Army Ammunition Plant Industrial Complex in the northern portion of Stennis Space Center. Today it caters to both high-tech and industrial tenants. More than half the useable space is being utilized by a variety of government entities and companies, including Pratt & Whitney Rocketdyne.

Gulfport-Biloxi International Airport is developing a 120 to 270-acre aviation park as part of its plan to move its general aviation operation to the south part of the field.

Stennis Space Center, the state of Mississippi, Hancock County and Stennis are developing the Stennis Aerospace Technology Park. While no specific size has been determined for the park, there are up to 5,000 acres in the northeast quadrant of Stennis that could be used. The first tenant is the Lockheed Martin Space and Technology Center, a 220,000 square-foot facility that opened in 2002.

– Tcp

USM image

Artist's rendering of aquaculture pavilion at the University of Southern Mississippi's Cedar Point Park. The pavilion will be part of a development that will include an incubator.

South Mississippi science and technology parks

Park name	*Location*
Aerospace Technology Park	**Stennis**
Stennis Technology Park	**Kiln**
Trent Lott Aviation Technology Park	**Moss Point**
Bernard Bayou Industrial District	**Gulfport**
Mississippi Army Ammunition Plant	**Stennis**
Port Bienville Industrial Park	**Bay St. Louis**
Biloxi Commerce Park	**Biloxi**
Intraplex 10 Industrial Park	**Gulfport**
Long Beach Industrial Park	**Long Beach**
Moss Point Industrial and Technology Complex	**Moss Point**
John C. Stennis Industrial Park	**Pascagoula**
Stennis International Airport	**Kiln**
Sunplex Light Industrial Park	**Ocean Springs**
Tradition	**Biloxi**

Source: Tcp

Research

JSU's Mason atop growing research power

It's hard to believe from the numbers - $35.9 million in FY 2005. But Jackson State University is a relative newcomer to the research arena with just a six-year track record.

And JSU is getting noticed. The third annual ranking of universities by *Washington Monthly* has JSU 37th based on what it returns to the community. A part of that assessment is based on the research it does.

President Ronald Mason said research is important because it furthers knowledge, addresses the needs of a community, attracts talent and resources and can be an economic driver.

Ronald Mason

"If you look for an investment that was wise and led to the health and well-being of the community, then investing in the research enterprise makes a great deal of sense, which is what I've been telling the legislature for several years," said Mason.

JSU in downtown Jackson is the fourth largest research university in the state in R&D expenditures. Like the other three research universities, it has a Carnegie classification of RU/H (research university/high research). It is involved in South Mississippi through its work with Northrop Grumman, Stennis Space Center and the Gulf Coast Research Lab.

"Like anything that is successful quickly, it's a combination of some good planning, some luck, some timing," said Mason, who finds himself a player on a field he's not certain the university should have entered: research.

Making the transition

"Research is an expensive and difficult game to play. If somebody had asked me six years ago whether Jackson State should get into that arena – given the resources we had to work with – I'm not sure I would have. But we're in it now, and we can't get out of it because, among other things, it fuels our Ph.D programs," said Mason.

JSU is a growing producer of African-American PhDs "and soon to be No. 1 producer. So it's a track we're on and we have to figure out how to fuel it," said Mason, who sees salaries as one of the hurdles to overcome.

"We're making the transition from a teaching institution to a bonafide research institution, but research faculty makes a lot more money. And we only have one externally funded endowed chair, and we just got that this year," said Mason.

Mississippi's top four research university expenditures

Institution	*2004*	*2005*
Mississippi State University	**$191,352,000**	**$179,825,000**
University of Mississippi, all	**$79,867,000**	**$91,913,000**
University of Southern Mississippi	**$35,908,000**	**$37,881,000**
Jackson State University	**$31,641,000**	**$35,876,000**

Source: National Science Foundation

"And without endowed chairs to attract the kind of faculty you need to pull in the kind of research interests that you need, it's very difficult. So we're going to be going through a restructuring exercise over this next year that will help, I think, position us better to fuel the research machine."

Mason understands there will be some resistance to change. Universities historically move slowly, and he's locked horns with the faculty on occasion over the changes he's made. It's the old that's-not-how-we-do-things refrain.

"It's a heck of a challenge, but you know, we've kind of been getting ready for it the last few years. I've been here eight years and I think in the first four years I reorganized the top level five times," he said.

His idea is to "change it up" from time to time to see what works, what doesn't.

"We don't have a choice," said Mason about experimenting with different approaches. "This is all necessity driven. We have more university than we have money or people to operate. And that's just a fact."

The changing landscape

He expects research dollars to go up, driven by the new College of Engineering and School of Public Health. But how much he's not willing to say, in part because of all the variables. His main goal is to make JSU flexible to the changing landscape.

"We need to see the future of higher education and have Jackson State sitting there waiting for it. We're going to have to really understand what the world is and what it needs 10, 15, 20 years from now and become the kind of institution that satisfies those needs. But we've got to see it before everybody else because the dollars are driving us to be innovative in how we deliver what we deliver and do what we do," he said.

– T*cp*

Third Quarter regional news headlines

Aerospace

- Grant to be used for tech park near Eglin Air Force Base (Northwest Florida Daily News, 09/04/07)
- EADS approved for Mississippi-built helicopter (Mobile Press-Register, 09/01/07)
- Boeing wins contract for new space vehicle's rocket Multiple, 08/28/07)
- NASA breaks ground on new test stand at Stennis NASA, 08/23/07)
- Northrop: KC-30 will mean $12 million impact for Mississippi (Prime Newswire, 08/15/07)
- Groundbreaking set for new Stennis test stand (NASA, 08/15/07)
- Northrop releases KC-30 impact figures (Prime Newswire, 08/08/07 and 08/14/07)
- Northrop wins UAV contract (Reuters, 08/01/07)
- Global Hawk completes 1,000th flight (NorthropGrumman, 07/27/07)
- KC-30 runs successful refueling (Mobile Press-Register, 07/25/07)
- Designs for next spacecraft unveiled (New Orleans Times-Picayune, 07/20/07)
- Jacobs Technology gets NASA Stennis contract (Stennis Space Center, 07/12/07)
- Boeing plane has Foley connection (Mobile Press-Register, 07/08/07)
- Investments to help Michoud (New Orleans Times-Picayune, 07/04/07)
- Raytheon files protest over outcome of cargo aircraft bid (Mobile Press-Register, 07/01/07)

Materials

- General Dynamics receives contract (The Sun Herald, 08/21/07)
- Research center announces cyber competition (University of Southern Mississippi, 08/16/07)
- Fire strikes refinery (Multiple, 08/16/07)
- ThyssenKrupp names management team (Mobile Press-Register, 08/03/07)
- Changing output of U.S. scientific articles: 1988-2003 (National Science Foundation, 07/18/07)

Shipbuilding

- U.S. Navy Secretary Winter visits Austal (Mobile Press-Register, 08/11/07)
- Coast Guard awards contract for third ship (Trent Lott release, 08/09/07)
- Navy to go to fixed-price contracts (Mobile Press-Register, 08/04/07)
- Navy considers speed-up for Maine yard (The Associated Press, 07/27/07)
- Austal completes first addition (Mobile Press-Register, 07/19/07)
- Navy secretary blasts Northrop's work (Multiple 07/11/07)
- Saunders Engine to be sold (Mobile Press-Register, 07/10/07)
- Navy to return island to Mississippi (The Associated Press, 07/07/07)

Geospatial

- ITAC acquired by Rockwell Collins (Rockwell Collins, 08/13/07)

Marine Science

- Research lab pushes for focus on aquaculture (Tcp, 08/31/07)
- Students compete to name research vessel (USM, 08/29/07)
- USM professor's research published in science journal (USM, 07/05/07)
  GCRL scientist picked for microbiology committee (USM, 07/03/07)

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Partially funded by the
MISSISSIPPI DEVELOPMENT AUTHORITY

Northrop Grumman says KC-30 program will generate new jobs

(Continued from page 2)
research and due diligence conducted by EADS that clearly demonstrated this region of the Gulf Coast, and particularly the area that we define as the I-10 corridor, has the intellectual and physical capital necessary to support this project in the decades to come."

Northrop/EADS impact

State	*Current jobs*	*Payroll*	*Jobs from KC-30***	*Dollars from KC-30*	*Total impact on state****
Mississippi	**11,000***	**$574M**	**200**	**$12M**	**$800M**
Florida	**4,700**	**$343M**	**2,000**	**$100M**	**$500M**
Alabama	**1,300**	**$107M**	**5,000**	**$280M**	**$1B**

*Northrop and EADS; ** direct and indirect; *** Northrop, KC-30 supplier team

Source: Northrop Grumman

Paris Air Show

Northrop Grumman officials have said the KC-30 tanker program will create 5,000 jobs in Alabama and generate an additional $280 million annually in economic growth in Alabama. But the impact will go beyond that state.

"A KC-30 tanker win will have an unprecedented impact not only in Alabama, but also in the entire Gulf Coast region," said William J. Canary, president and chief executive officer of the Business Council of Alabama.

And that's what brought Freeland and Barnett to Paris. They went as members of the Mississippi Gulf Coast Alliance for Economic Development, a group representing six counties in South Mississippi.

"We have been working with Mobile to market and to demonstrate the overall capacity of the I-10 aerospace corridor through a host of different venues," said Freeland. "We were in Paris specifically to show a level of regional support and collaboration for the tanker project and to demonstrate to the international aerospace industry our collective wherewithal and capacity to support new aerospace development."

Both Freeland and Barnett did make a pitch to suppliers.

"We met with a host of different or potential tanker contractors that communicated to us their clear intentions to relocated or locate operations in close proximity to Brookley," said Freeland.

The Air Force does not plan to pick a winner until the end of the year, so it remains to be seen what will eventually come to the Gulf Coast. EADS already has an engineering center at Brookley Field and says it's in Mobile for the long term, tanker project or not.

– Tcp