

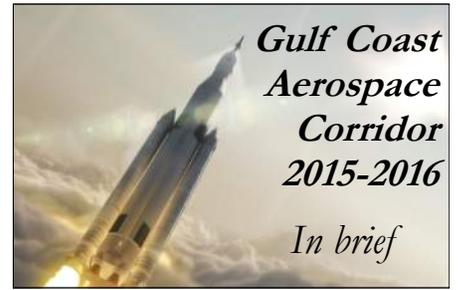
# Gulf Coast Reporters' League

Louisiana

Mississippi

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Florida



Vol. II, Issue VI

Gulf Coast Aerospace Corridor's bimonthly update of aviation activities in the I-10 region

June 2015



*A variety of  
treatments for  
your reading  
pleasure*

We're trying something new with this newsletter issue.

Normally, we don't have a newsletter the month our annual book publishes. But we started thinking it makes sense to have one to summarize the book chapters.

So, here it is.

We take this approach because we know people have different likes when it comes to reading, and we're trying to reach everyone from the headline reader to the reader who can't get enough.

On the front we take something of a Twitter approach. You can read the front page and get

*(Continued on page 8)*

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## I: Airbus delivery center set for debut

The first shipment of airplane sections left a German port May 29 and will arrive in Mobile in three weeks. It will take about nine months for the assembly line to give birth to its first plane, an A321 for JetBlue, and Airbus promises it will be an event to behold for Airbus and JetBlue. We take a look at Mobile's new delivery center.



## II: Why top aerospace companies are here

Their reasons vary, but some of the world's top 10 aerospace companies are here because of the military, some because of the space program, and others for their own business reasons. But no matter the reason, these companies help form a cluster that bodes well for the future. We take a look at where they have Gulf Coast operations.



## III: Filling the education pipeline

Educators across the region have heard the call and are gearing up to help fill the expected need for workers in aerospace and aviation. Many programs are already in place, others well on their way. As one educator says, they're not be ready just yet, but in three years they will. An overview of some of the programs in the region.



## IV: Innovation centers on the rise

R&D played a role in creating the nation's high-tech hot spots, and the Gulf Coast has its own players in the field, ranging from aerial weapons development to space activities. A new addition taking shape is an aviation research center in Mobile that brings together the best and brightest from academia and business under one roof.



## V: Tech parks: A place to call home

The Fort Walton Beach technology park is among the oldest in the region, home to companies that work with the area's military bases. But multiple parks, some old, some just forming, that cater to aviation dot the region and give prospects a variety of options to become a part of a larger, growing cluster. We take a look at some.



## VI: From F-35s to drones and more

Military aircraft are a common sight in the region, and include everything from trainers to the most lethal assets in the U.S. arsenal. Nine Air Force, Navy, Army and Coast Guard bases with aviation missions have between them more than three dozen aircraft types, including two types of fifth-generation, stealthy fighters.



# Airbus delivery center set for debut

*The huge Airbus delivery center will host VIPs and make history when the first passenger plane is delivered to JetBlue next year...*

When British airline EasyJet took delivery this past April of its 250th A320 at Airbus' delivery center in Hamburg, Germany, it was a very special occasion.

Top executives from both companies were there, praising the business relationship that resulted in EasyJet growing its A320 fleet to nearly 100, with more planes on order. In collaboration with EasyJet, Airbus gave the plane a unique paint job that used 250 tiny paintings of planes to form "250."

Later that month, the delivery of an A320 to Nepal Airlines at the same facility took a different approach. The jetliner was stocked with five tons of relief supplies for Nepal, which suffered from a 7.8 magnitude earthquake April 25.

It's still more than a year before the Airbus delivery center at the Mobile Aeroplex will turn over the very first Mobile-built jetliners to JetBlue, its first customer. But when it happens it will be historic.

"We work with our customers to make their delivery pleasant, efficient, and fun, whatever they'd like to get out of the process," said Airbus spokeswoman Kristi Tucker.

"I can promise you, the first delivery from Mobile will be an event, for us and for the customer."

That might be just a tad of an understatement. No matter what

*By Kaija Wilkinson*



Delivery center under construction at Mobile Aeroplex. It's the company's fourth.

the specifics might be, the delivery of the first Airbus figuratively stamped "made in America" will go down in history as a significant milestone in aviation history with both Boeing and Airbus building jetliners in the United States.

The new Mobile delivery center will be the fourth operated by the company. Others are in Toulouse, France; Hamburg, Germany; and Tianjin, China.

The delivery center is just one part of the \$600 million, 116-acre Airbus campus at the Mobile Aeroplex at Brookley. It includes 53 acres of aprons, roadways and buildings, including the final assembly line that will assemble the A319, A320 and A321 jetliners.

The plant will build up to 50 jetliners a year, but that may go up as Airbus ponders a 26 percent increase in production companywide.

Major sections for the first U.S.-built jetliner, including the fuselage sections, vertical tail, wings and more, left Hamburg, Germany,

May 29 for a 20-day voyage to Mobile. Those sections will be joined together to make the first aircraft, an A321ceo.

It will be in April of 2016 before the plane, which has a list price of \$113.7 million, is parked at the delivery center.

Longer than a football field, the delivery center includes parking spots for five A320s, offices, workshops and documentation rooms. The number of people who will be at the delivery will vary from customer to customer.

"At the very least there are contracts people who are completing the process and their flight crews must come since they are the ones who fly the plane once delivery paperwork is complete," says Tucker.

Details for the JetBlue delivery will be worked out as the time to turn the plane over to the new owners gets near.

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For more, see [Chapter I](#)

# Why top aerospace companies are here

*The military and NASA have been magnets for the aerospace industry, but there are other reasons companies are drawn to the region...*

When Northrop Grumman decided in 2005 to establish a production facility for its cutting edge Fire Scout unmanned helicopters in the small Mississippi town of Moss Point, it raised eyebrows.

Why would the company go to a location with no track record building aircraft of any type, let alone a high-tech unmanned system? The company knew it was taking a chance, but it knew the reputation of the workers at a shipyard in nearby Pascagoula that at that time was owned by Northrop Grumman.

What happened made Northrop Grumman look very smart. Not only did the workers manage to do the work on Fire Scout, but on Global Hawk as well. And they did so in a shorter learning curve than expected. As one official put it, they knocked their socks off. And a reputation was born.

Northrop Grumman is just one of the top aerospace and defense companies that have chosen to set up operations in the Gulf Coast region. And for an area of the country that has made aviation a target industry, it's significant. They range from large plants like the new \$600 million Airbus final assembly line in Mobile, Ala., to smaller operations that fall under the radar.

The reasons they chose to set up operations in the Gulf Coast region

*By David Tortorano*



varies from company to company. The lower cost of doing business, infrastructure, logistics and available workforce are all factors, as is the right-to-work status in all four of the states. But there are business reasons that go beyond that.

But as a group, the presence of these companies help form the foundation for the region's aerospace and defense cluster, one of the most research-intensive, high-tech sectors in the world. Importantly, these companies create jobs ranging from production workers to highly sought engineers and scientists.

The most high-profile operations are the space-related activities of Boeing and Lockheed Martin, and the commercial aircraft activities of Airbus. At Michoud Assembly Facility in New Orleans, Boeing is building the 200-foot tall core stage for NASA's Space Launch System and Lockheed Martin is building the Orion Multi-Purpose Crew Vehicle. In Mississippi at Stennis Space Center, Lockheed Martin

makes the core satellite propulsion subsystems and multi-layer insulation blankets and integrate them into the A2100 satellites used by satellites that go by other names.

The other high-profile work is the commercial aerospace activities of Airbus in Mobile, Ala., where an A320 assembly line will open in the summer of 2015. It opted to open the site to help address a huge backlog of the popular aircraft.

Also involved in commercial aviation work in the region are Rolls-Royce, which tests jet engines at Stennis Space Center, GE Aviation, which makes jet engine parts just outside the I-10 region, and Safran.

A lot of the top 10 companies are involved in defense activities, primarily but not exclusively in Northwest Florida. Companies like Raytheon and DRS go about their work under the radar.

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For more see [Chapter II](#)

# Filling the aviation pipeline

*Educators across the region have heard the call and are gearing up to help fill the expected need for workers in aerospace...*

It usually takes a lot to get Daniel Busse excited. But mention Pensacola State College plans to provide the Northwest Florida region's next generation of aerospace workers and this dean of workforce development and vocational support becomes animated.

Busse begins talking about working with the Florida Legislature to fund an innovative, high-tech \$26 million STEM Center at the main campus in Pensacola, which would drive home important lessons in science, technology, engineering and math. The center would boast labs located at the neighboring Pensacola International Airport Commerce Park, a major aerospace economic development player.

For the past three years, it's all he and other local business leaders have focused on. In fact, workforce development, especially with aerospace, seems to be a topic across the region.

Back in 2011 during the first Aerospace Alliance Summit in Destin, Fla., representatives from aerospace companies emphasized the importance of training the next generation of aerospace workers if the region wants to grow its aviation footprint.

Educators and workforce development specialists have responded.

*By Duwayne Escobedo*

Even Airbus, which will build A320 jetliners in Mobile, Ala., is getting involved. It created a coloring book for kindergarten and first graders to help children understand its assembly line.

In fact, the arrival of Airbus caused a ripple. The general consensus is that aerospace and aviation activities are growing, and future workers will be in great demand.

In Florida, Pensacola State College plans to quickly ramp up its aerospace and aviation-related courses, certifications and degrees and to build the STEM Center.

In Alabama, Enterprise State Community College has prepared airframe and powerplant mechanics at the Alabama Aviation Center since 1976 and recently began developing a composites program.

In Mississippi, Gulfport High School in 2010 became the first school in the state to combine course work and career-based projects to prepare students for the future aerospace workforce that will be needed.

Workforce experts from companies, education and government are working together to close an admitted huge skills gap to turn the area into a world-class aerospace, space and aviation corridor.

Roger Wehner, president and CEO of the Mobile Airport Authority, is a huge advocate for the



Pensacola State College is playing a role in training the aerospace workforce.

value of education. He has a poster in his office with an aerial view of the Mobile Aeroplex and the Airbus assembly line. It shows a youth park with a view of the plant, along with an elementary, middle and high school with an aviation academy all within a mile of the plant.

He can see the day a child playing soccer at the park might take a look at a plane taking off will be intrigued. The child might one day work his or her way through the school system and eventually take a high-paying job at the Aeroplex with one of the aviation companies at the complex.

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For more, see [Chapter III](#)

# Innovation centers on the rise

*A new research center for the Mobile Aeroplex is the latest innovation magnet for a region with more than some might think...*

Roger Wehner enjoys talking about the project taking shape a block away in a 1940s-era building. He speaks with passion about the importance of research and innovation to the future of the aerospace industry in the Gulf Coast.

Small wonder. A veteran economic development professional, Wehner is executive director of the Mobile Airport Authority. What has him excited is an 80,000 square-foot research center that will open in 2016 at the Mobile Aeroplex, a significant ripple from the Airbus decision to build A320s in Mobile.

The Alabama Aviation Innovation and Research Center, called A<sup>2</sup>IRc and pronounced “air.” When up and running, it will be where the best and brightest from a variety of disciplines in academia and industry collaborate on research with implications for the aerospace industry. It will become part of the nation’s \$465 billion R&D enterprise.

The phase one renovation of Building 14 involves a complete makeover of the three joined buildings. It will create space for six university participants, along with related offices, lab space, collaboration rooms and likely an incubator.

Behind the 80,000 square foot project is another 260,000 square feet of connected building space, much of it former warehouse space.

*By David Tortorano*



Commanders Building Concept by Hatch Mott MacDonald Alabama, LLC

An aerospace supplier has already committed to 40,000 square feet at the north end, and the space right next door is expected to go to another aviation company. The space between those operations and the education facilities will become a part of the \$25 million A<sup>2</sup>IRc.

Wehner said lessons were taken from two areas that were successful in creating industrial clusters. One is the Commonwealth Center for Advanced Manufacturing in Richmond, Va., and the other is the International Center for Automotive Research in Greenville, S.C.

“What we found that was positively correlated with success was a holistic workforce development model and bringing the research and innovation capacity to bear at the site of the project, at the heart of the cluster,” he said. “The number one thing the companies like the most about it is the ability to access intellectual capital.”

Bishop State Community College, the University of Alabama, Auburn University, the University of South Alabama, Tuskegee University and Troy University all will have a presence at the center.

A<sup>2</sup>IRc is just the latest of the research and applied technology operations in the Gulf Coast I-10 region. One of the best-known is the Florida Institute for Human and Machine Cognition (IHMC) in Pensacola, Fla., experts in human-machine cognition, artificial intelligence and robotics.

In the June 5-6 DARPA robotic challenge, where the best minds in robotics created robots to perform life-saving tasks, IHMC came in second to a team from Korea. Best in the U.S., it beat the likes of MIT, Carnegie Mellon and NASA. It took home a \$1 million prize.

The research labs in the Gulf Coast region have hundreds of scientists and technicians doing multi-million-dollar cutting-edge research in a variety of fields, including aerial weapons development at Eglin Air Force Base, Fla., and space-related research at Stennis Space Center, Miss. They attract the best and the brightest that help an area compete for 21st century jobs.

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For more, see [Chapter IV](#)

# Tech parks a place to call home

*Multiple parks that cater to aviation dot the region and give prospects a variety of options to become a part of a large cluster...*

Okaloosa County Economic Development Council Executive Director Nathan Sparks can drive through the sprawling Fort Walton Beach Commerce and Technology Park and point out 20 businesses with ties to aerospace and aviation. He likes it that way.

“Economic clusters are the Holy Grail of economic development,” Sparks said, referring to the tendency of like businesses, often competitors, to collect in the same vicinity and thrive by driving innovation and productivity.

The park in Okaloosa County is one of the oldest aerospace business clusters in Northwest Florida, which boasts six military installations with aviation missions. It’s home to tenants that include Boeing, Lockheed Martin, BAE Systems, DRS Training and Control Systems and more.

The Fort Walton Beach park is just one of the aerospace-focused parks that dot the region between New Orleans and Northwest Florida. Some are long-established, some just getting started. Some are small, others megasites. They were established because of nearby military activities, or because of space activities or commercial aviation. But no matter the reason, all are developing the aerospace cluster.

*By Tom McLaughlin*



*Okaloosa County Economic Development Council photo*

The decision of Airbus to build A320 jetliners in Mobile, Ala., supercharged efforts to attract more aviation activities. Groups across the region are trying to lure suppliers as well as operations with no link to Airbus.

Northwest Florida seems to be in great position to grow it’s aerospace footprint. It’s far enough from Mobile that it won’t compete with Airbus for workers, but close enough to make a pitch for suppliers.

Florida recently was ranked the best in the country for the second year in a row in aerospace manufacturing attractiveness by PricewaterhouseCoopers (PwC). And within the state, Northwest Florida is recognized as an aviation hotspot.

There are sites in Pensacola, Milton, Crestview and Panama City, many touting access to runways and certified as ready for development.

Across the state line, Alabama is home to one of the largest industrial sites in the Gulf Coast region, the 3,009-acre South Alabama Mega Site in Baldwin County.

In neighboring Mobile County, the Mobile Airport Authority operates the 1,700-acre Mobile Aero-plex at Brookley, where Airbus will build jetliners, and the 3,000 acre

Mobile Regional Airport, the commercial airport.

Thirty-five miles away in Moss Point, Miss., is the Jackson County Aviation Technology Park, where Northrop Grumman does some of the work on Global Hawk and Fire Scout unmanned aerial systems. Not far away is Gulfport-Biloxi International Airport, home of an Air National Guard Combat Readiness Training Center.

Further west is NASA’s Stennis Space Center, Miss., where huge rocket engines are tested. The 3,900-acre John C. Stennis Space Center Technology Park’s tenants include Rolls-Royce, Aerojet Rocketdyne and Lockheed Martin.

In New Orleans, NASA hopes to develop 300 under-utilized acres around Michoud Assembly Facility. The hope is the create an advanced manufacturing park.

Michoud is where Boeing is doing work on NASA’s Space Launch System, and Lockheed Martin is building portions of the Orion All-Purpose Crew Vehicle.

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For more, see [Chapter V](#)

# From F-35s to drones and more

*From training aircraft to the most lethal assets in the U.S. arsenal, military aircraft are a common sight all across the Gulf Coast region...*

Not many regions can claim to be home to fifth-generation fighter jets, let alone two different types of the most lethal warplanes the world has ever seen.

But this region can. F-22 Raptor pilots receive their training at Tyndall Air Force Base near Panama City, Fla., and it's also home of an operational squadron. About 80 miles away F-35 pilots are trained at Eglin Air Force Base, near Fort Walton Beach, Fla.

They are just two of the military aircraft types that can be seen in the skies in and around the greater Gulf Coast region. The area's Nine Air Force, Navy, Army and Coast Guard bases with aviation missions have between them more than three dozen aircraft types, ranging from high-tech \$145 million fighters all the way down to relatively low-cost, ubiquitous, orange and white Navy trainers and drones.

The list of aircraft includes some unique airframes, like the Russian-built MI-17 helicopter, and the deadly AC-130 gunship. The region is also home to some aircraft well-known to the public, like the F/A-18s of the Navy's Blue Angels Flight Demonstration Team and WC-130Js of the Air Force Hurricane Hunters.

The training aircraft account for most of the military operations in

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*By Rod Duren*

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the region, where the Army, Navy, Air Force and Coast Guard all train pilots and flight officers who then go to operational squadrons.

The training aircraft are at Naval Air Station Pensacola, Naval Air Station Whiting Field, Eglin Air Force Base, Tyndall Air Force Base, all in Florida, and Alabama's Fort Rucker and the Coast Guard Aviation Training Center in Mobile. They are frequent visitors to military outlying fields and civilian airports in the region.

Training aircraft are used for initial pilot training, intermediate and advanced training, and for training of air crew members, including flight officers and navigators.

The most prevalent of the rotary aircraft is the Navy TH-57s found at NAS Whiting Field, the busiest air station in the nation with 1.5 million annual flight operations. It has 160,000 flight hours per year,

14 percent of the Navy's total. Fort Rucker's Cairns Army Airfield is the busiest Army aviation base, with 240,000 annual flight hours.

The most widely seen of the fixed-wing aircraft is the Navy T-6 Texan II of NAS Whiting Field and NAS Pensacola.

But the aircraft used for training that are the most widely known outside the region may be the Lockheed Martin F-35 Lightning II Joint Strike Fighter and the F-22 Talon.

The F-35s at Eglin are used to train pilots and maintainers, while the F-22s at Tyndall are used to train pilots in the fifth-generation air dominance fighter. There's also an operational F-22 squadron, which deployed six jets on the F-22s first combat action in the fall of 2014 over Syria and Iraq.

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For more, see [Chapter VI](#)

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what you would with Twitter, only we don't use any abbreviations.

Then you can go to an inside page and read a summary of each of our six book chapters. It's more of a traditional newspaper treatment. There's a fair amount of detail, but each story can be read while you're sitting down eating your breakfast or having a cup of coffee.

Then, if you want to learn more, you can click on the link at the end of each page and go to the PDF of the full chapter. You'll see everything, including photos, sidebars and tables.

And for those of you who really love to read and want to take in the whole scope of the book, you can click [here](#) and get all 96 pages of the book.

The fifth annual book is brought to you free of charge thanks to our underwriters. They support the project because they believe the best way to tell the story about this region's aerospace activities is to let experienced journalists pick the stories and provide the research.

We hope you enjoy it.

*David Tortorano*  
*Editor*

***Gulf Coast Aerospace Corridor 2015-2016, the fifth edition of the annual, is made possible thanks to the sponsorship of the following organizations...***

