

ANNUAL REPORT

2021

SPACE FLORIDA





October 22, 2014



Dear Stakeholder:

This has been a significant year for Florida in which we have seen real economic growth coming from the space and aerospace industries. Combined with our highly-trained workforce and proven infrastructure, Florida is the ideal location for this industry to locate or expand. Today, more than 2,000 space and aerospace companies have Florida-based programs. Space Florida is positioned to help them succeed.

As we look ahead, Florida has a bright future in space. Florida is poised to serve as a global hub for the space and aerospace industries. I am pleased that Space Florida will continue to serve as a leader for this growth.

Sincerely,

A handwritten signature in blue ink, appearing to read "Rick Scott".

Rick Scott
Governor

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Message From Space Florida Chairman of the Board William T. Dymond, Jr.

November 27, 2014

As Florida's aerospace development arm and spaceport authority, Space Florida serves a number of important roles for the growth of Florida's space and aerospace economy.

Today, we are changing the economic model – with significant effort going into facing commercial markets. These range from commercial space launch companies to unmanned systems, microgravity-based research programs, nano satellite manufacturers and much more. Space Florida's unique State empowerments allow us to put together unique packages that attract, grow and retain some of the nation (and the world's) most progressive, leading edge space and aerospace companies.

In FY2014, we've been working toward reaching goals tied to the State of Florida's Strategic Plan for Economic Development – and I'm proud to report that we executed 25 strategies set forth by Governor Rick Scott. These include goals tied to expanding opportunities for access to capital, sustaining efforts related to innovative research and development and building Florida as a globally-competitive mega region. You can see all the details in this year's Annual Report.

As you may know, Space Florida continues to serve as a Spaceport Authority and in that capacity, we are working diligently with the FAA, NASA-Kennedy Space Center, Eastern Range officials, the Jacksonville Aviation Authority and many others to continue to develop Florida's rapidly growing spaceport network. Today, our state boasts two FAA licensed horizontal and vertical spaceports, with additional launch sites in the works on Florida's East Coast.

It's a busy and pivotal time for Florida's space industry, and Space Florida is leading the way. We are pleased to share with you our highlights from the past year.

Sincerely,

A handwritten signature in blue ink that reads "William T. Dymond, Jr." with a stylized flourish at the end.

William T. Dymond, Jr.
Chairman
Space Florida

ANNUAL REPORT
2014

SPACE FLORIDA LEADERSHIP

BOARD OF DIRECTORS:



Governor Rick Scott
State of Florida



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President/CEO
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Belinda Keiser
Vice Chancellor
Keiser University



Hayden Dempsey
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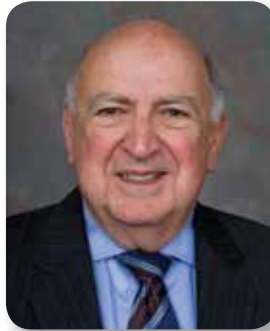
Julius D. Davis
President and CEO
VoltAir Consulting Engineers, Inc



Lewis Bear Jr
President and CEO
The Lewis Bear Company

SPACE FLORIDA LEADERSHIP

EXECUTIVE STAFF:



Frank DiBello
President and CEO



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Executive Vice President, Treasurer
and Chief Investment Officer



Jim Kuzma
Senior Vice President and
Chief Operating Officer



Denise Swanson
Chief Financial Officer and
Chief Administrative Officer



Mark Bontrager
Vice President,
Spaceport Operations



Percy Luney
Vice President, Education, Research
and Development, and Workforce



Bernie McShea
Vice President,
Business Development



Dale Ketcham
Chief of Strategic Alliances



Sharon Spratt
Senior Director,
Government Relations



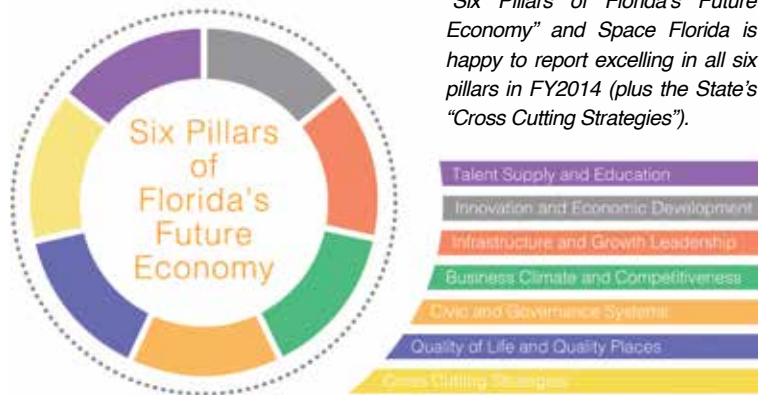
Keevin Williams
Vice President, Special Projects and
Strategic Initiatives

2014 ANNUAL OUTCOMES

Today, Florida boasts approximately 2,000 space and aerospace-related companies. In FY2014 alone, Space Florida was pleased to recruit, retain and/or expand 11 space and aerospace-related companies, who anticipate creating and retaining 2,920 jobs averaging \$76,667 in salary and over \$777M in capital investment over the next five years.

Funding appropriated by the State of Florida is central to our efforts, providing us the leverage we need to facilitate many new business development deals each year and utilize unique state empowerments to attract and expand the most innovative, high-tech companies in the world.

In the past five years, Space Florida leveraged \$1.4 billion in capital investment to produce:



Space Florida works to address the 29 strategies identified in The State of Florida's "Strategic Plan for Economic Development" in all of its business development activities. Within those 29 strategies are "Six Pillars of Florida's Future Economy" and Space Florida is happy to report excelling in all six pillars in FY2014 (plus the State's "Cross Cutting Strategies").

In FY2014, Space Florida provided 45 awards for Florida-based research projects. Data from Florida State University Center for Economic Forecasting and Analysis (CSU CEFA) also shows an overall industry growth of 7.82% in the past year.

While there were many interesting stories to tell about the past year, there are six in particular that reflect the benefits Space Florida's unique state empowerments and local, state, federal, and global relationships have been able to achieve.

**Source: Enterprise Florida*



Space Florida is an Independent Special District and a public-private partnership that was created to strengthen Florida's position as the global leader in aerospace research, investment, exploration and commerce. As Florida's spaceport authority and aerospace development organization, Space Florida is committed to attracting and expanding the next generation of space industry businesses.

The top strategic focus areas for Space Florida include: Business Development and Finance, Spaceport Operations and R&D/Workforce Development.

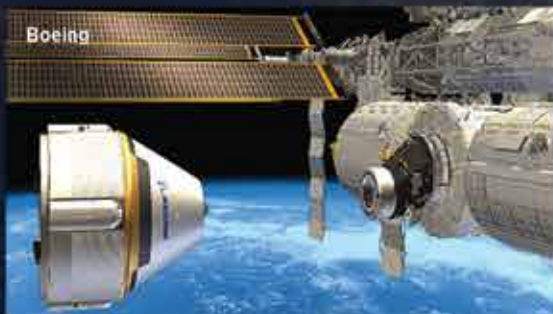
AEROSPACE MANUFACTURING IN FLORIDA: POISED FOR LIFTOFF



NASA'S COMMERCIAL CREW PROGRAM will take the next-generation of U.S. Astronauts to the International Space Station and other Low-Earth Orbit destinations on commercial spacecraft built

and launched in the U.S. NASA is expected to make the award for the final development, test, certification, and flights to one or more companies in Fall 2014.

- **The Boeing Company**, one of NASA's three Commercial Crew finalists, will manufacture and process their CST-100 spacecraft in Space Florida's newly modernized Commercial Crew and Cargo Processing Facility, located at the Kennedy Space Center. This program will result in hundreds of aerospace manufacturing jobs for the state.



- **Sierra Nevada**, another Commercial Crew finalist, will also host manufacturing/assembly and integration of its Dream Chaser vehicle in Florida.



The manufacture and use of **UNMANNED AERIAL SYSTEMS (UAS)** is growing significantly and Florida is already serving as an epicenter for demonstration launches. These innovative vehicles have a wide variety of applications, including crop monitoring, disaster relief, brush fire detection, and academic research.

- **Altavian** builds commercial and government-centric drone technology in Gainesville to provide fast, accurate data collection for its customers.
- Growing Naples-based **Angel Eyes UAV** provides batteries, motors, cameras and consulting services to non-military unmanned systems companies.
- Orlando-based **Elevated Horizons** designs and manufactures long endurance, long range, multi rotor UAS technology for agricultural monitoring.
- Also located in Gainesville, **Prioria Robotics** manufactures a family of lightweight, portable unmanned aircraft systems providing cost-effective government intelligence solutions.

Elevated Horizons






Prioria Robotics



SPACE FLORIDA

As Florida's spaceport authority and aerospace development organization, **SPACE FLORIDA** is committed to attracting and expanding the next generation of space industry businesses.

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The aerospace manufacturing sector in Florida is growing rapidly. Today, 20,416 aerospace related companies call Florida home, employing 141,591 workers and generating \$19.2 billion in sales. These numbers reflect an 8% average aerospace industry growth over the past 24 months alone. Manufacturing activity is a key driver of this growth with significant recent expansions in several sectors including: NASA's Commercial Crew Program, the defense industry, unmanned systems, aircraft manufacturing and small business.



Aerospace programs in Florida that directly serve the **DEPARTMENT OF DEFENSE** and other U.S. Military-based programs are thriving in Florida.



■ **Northrop Grumman** announced a \$500 million capital investment and up to 1,800 jobs tied to its new Manned Aircraft Design Centers of Excellence in Melbourne and St. Augustine in 2014. These facilities will handle manufacturing and testing of next-generation USAF long-range B-2 bombers.

■ **L-3 Crestview Aerospace** announced a \$7 million expansion of its aircraft manufacturing operations in Okaloosa County, increasing its workforce by 158 FTEs



Companies developing commercial, military and private **AIRCRAFT** have long viewed Florida as a prime location to base and expand their design, manufacturing and test operations.

■ **Embraer** expanded at Melbourne International Airport to manufacture its Legacy 450 and 500 executive planes there. The project will generate 600 jobs and \$28 million in capital investment.



■ **Pratt & Whitney** opens its new West Palm Beach Engine Center, producing propulsion solutions for Airbus A320 commercial aircraft and F35 engines for F35 fighters.

■ **PfMan**, a high precision parts design and manufacturing company, announced the opening of a 20,000 sq. ft. facility in Hardee County in 2014.

SPACE FLORIDA: A Valuable Partner in Growing Your Business

Space Florida is an Independent Special District and public corporation of the State of Florida, with significant empowerments to aid growing aerospace companies in Florida. Our toolkit is focused on helping companies to defray and defer both upfront and ongoing costs, utilizing techniques that include:

- **Conduit Financing**
- **Off-Balance Sheet Financing**
- **Tax Efficiencies**
- **Government to Government Conveyance of Federal Real Property and Equipment**



SMALL BUSINESSES are the heart of our state's economic growth and Space Florida has formed strategic partnerships with universities, technology-focused organizations and even other countries to facilitate the resources small, Florida-based companies need to grow.

- In 2014, the **University of Central Florida** and **Space Florida** partnered in a capital acceleration program, the CATS Awards. This competition matched investors with small Florida-based, high-tech businesses, of which, several are planning to establish manufacturing arms.
- In 2013, the State of Florida formed a \$2 million joint research fund with the **State of Israel** to support research, development and commercialization of aerospace and technology projects that benefit both states. The numerous awards that will come out of this program will directly benefit manufacturing operations based here.
- **Innovation Coast** and **Space Florida** partnered in the 2014 Innovation Awards Business Competition in which 10 small, high-tech companies will present their business case in Pensacola, before investors, financiers and a team of professional judges. The competition will provide an opportunity for manufacturing-focused small businesses to secure critical expansion funding.

NORTHROP GRUMMAN

In a huge win for Central Florida, Northrop Grumman officials in May 2014 announced the selection of Melbourne, Florida as the home of a new \$500 million Manned Aircraft Design Center of Excellence – tied to military contracts the company continues to fulfill and pursue.

Melbourne was selected as the top contender among a number of potential sites across the U.S. The project calls for the construction of a new, 220,000 sq. ft. mixed-use office and lab facility, and at least 300 new hires in the near term, with salaries averaging \$100,000. Longer term, the project (code named “Magellan” during the negotiation phase) could lead to as many as 1,800 new hires for Central Florida by 2020.



Approved for Public Release; NGAS 14-2922, 11/04/14

Space Florida played a pivotal role in enabling the deal and will facilitate much of the financing for new infrastructure and equipment needed for the project.

The Design Center project propels Central Florida into the national spotlight as a site for cutting-edge aerospace and aviation research and development, which also includes public and private rocket launches, spacecraft assembly, International Space Station support, and a massive supply chain that supports the aerospace industry and its related technologies.



Approved for Public Release; NGAS 14-2922, 11/04/14



Rick Matthews

Vice President
Northrop Grumman Melbourne Operations

“Space Florida serves as a wonderful resource for companies interested in establishing or growing business in the state. In our case, their experience in facilitating large brick and mortar projects, combined with their unique State empowerments, combined to create a ‘win-win’ that resulted in our company’s decision to make this most recent significant investment in Florida.

We appreciate how effectively this large, complex team worked together – and worked with us: Space Florida, the Governor’s office, Enterprise Florida, the Melbourne International Airport, the Economic Development Commission of Florida’s Space Coast and many others. This announcement was years in the making and wouldn’t have been possible without openness and close teamwork throughout the process.

I recommend using Space Florida as a liaison for any large-scale expansion such as ours. Their experience, flexibility, leverage and teamwork were second-to-none, and we look forward to continuing our partnership well into the future.”

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In 2009, Embraer Executive Jets established their first facility at Melbourne International Airport. In 2011, a second facility was constructed. During FY2014, the company



has expanded significantly, adding a third facility – the Engineering and Technology Center USA – to its campus. Space Florida served as a close partner to Embraer throughout the past five years for all of its infrastructure developments and was critical in leveraging financing for the latest facility through its banking partner, PNC. As a result of the financing provided through Space Florida and the Department of Economic Opportunity, the 75,000 square-foot state-of-the-art technology center will employ more

than 200 senior-level design and engineering professionals by 2016 with average salaries of \$70,000.

Space Florida funding also made possible advanced design capabilities in the new facility, including 3D printing machinery, advanced CAD-cam design tools, and virtual reality software that will allow Embraer to design, develop and test prototypes, and manufacture executive jet interiors in a streamlined manner.



Thanks to solid teamwork with state and local agencies, Embraer continues to grow in Florida – and Florida can now boast a world-class aviation design center in Melbourne, thanks to Embraer.



Gary Spulak
President
Embraer Aircraft Holding, Inc

"2014 has been another milestone year for Embraer on the Space Coast, highlighted by the September 8 inauguration of the Embraer Engineering and Technology Center (EETC) USA, a 67,000 square foot facility on our campus at Melbourne International Airport. When fully operational, the site will employ 200 engineers."

This state-of-the-art facility would not have happened without the dedicated help of many, including Space Florida. This partnership has leveraged a host of resources to take advantage of the engineering and professional talent we need for this operation to be successful.

The growth we are experiencing here took a lot of planning, a strong commitment and determination by many entities, and an environment that understands the needs of business. Space Florida, along with our other valued economic development supporters in the state, has nurtured a business environment that facilitates these types of projects that are important to companies like Embraer that are pursuing growth in the U.S."



Providing opportunities for Florida's many private unmanned systems companies to test a wide variety of commercial and disaster response applications is a Space Florida priority.

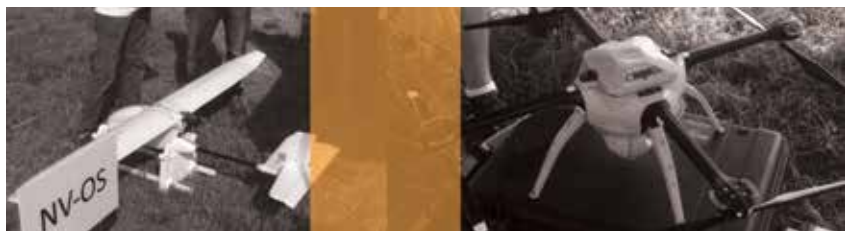


In 2014, Space Florida was able to coordinate and facilitate two of the first such Unmanned Aircraft System (UAS) demonstrations from the Space Coast. The demonstrations were held at Exploration Park in February and May, with the latter held just prior to the the 2014 AUUSI Unmanned Systems tradeshow in Orlando.

For both events, Space Florida coordinated with NASA/Kennedy Space Center (KSC) and local Range and FAA officials to safely develop and conduct these groundbreaking demonstrations.

Nine organizations representing seven industries and two academic teams participated, and a total of 335 minutes of flight time were achieved.

Flights were designed to test the capabilities of each complete system, from the air vehicle to ground control and sensor functionalities. The successful completion of these demonstration events defined Florida as a national leader in effectively coordinating and managing such demos.



Bryan da Frota
CEO
Prioria

"Prioria Robotics participated in both of Space Florida's UAS demonstrations in 2014. Space Florida's commitment to the economic development of the aerospace industry was evidenced by their dedication to efficiently moving through all of the administrative and logistical challenges in creating these demonstrations. The events were well executed, and we were pleased with how smoothly the process went for us. Participants conducted successful public demonstrations of UAS technologies that will go a long way in helping open up the unmanned systems industry in Florida, while demonstrating safe and reliable operations to the FAA.

Being headquartered in Gainesville, our company needed a Florida-based location to demonstrate, test, and operate our technology in real time. Space Florida's partnership with NASA/Kennedy Space Center made the process seamless for us and we were able to come away from all events with a better understanding of how best to demonstrate our products to a public audience.

In addition to providing companies like ours with a location and resources to conduct demonstration activities, Space Florida is also an important advocate for unmanned capabilities and has worked tirelessly to address respect of privacy concerns and educate its many stakeholders that new UAS technologies are safe, cost-effective, and efficient. We are thrilled to have Space Florida as our partner."



Cecil Air and Spaceport in Jacksonville has served Civil and Military aircraft since 1941. In 2012, Space Florida worked hand in hand with Cecil executives and the Jacksonville Aviation Authority (JAA) to establish Cecil as an official Florida Spaceport Territory there, adding to Florida's growing network of FAA licensed space launch sites.

Today, significant resources have been invested to create a spaceport that will attract and serve new commercial space customers in Florida. Construction plans are being finalized now for an apron and taxiway to complement a proposed vehicle storage facility, which will be instrumental in attracting new business.

Two of the most significant developments for Cecil Spaceport over the last year are the identification of a Horizontal Launch Vehicle Operator and funding for spaceport infrastructure appropriated by the Legislature. These items, in conjunction with continued close coordination and a solid working relationship with Space Florida, have propelled Northeast Florida on to the Horizontal Spaceport scene. Space Florida's expertise, business connections in the industry and international exposure has been extremely beneficial in assisting the JAA in sharpening its focus on the development of its spaceport.



Michael Stewart
Director, External Affairs
Jacksonville Aviation Authority

"Our vision for Cecil Spaceport is to accommodate multiple horizontal launch operators and supply chain businesses that support this industry. The growing partnership between the JAA and Space Florida will certainly enhance Florida's designation as the preeminent location for the attraction and development of space industry businesses."

The JAA and Cecil Spaceport have benefited tremendously from working with Space Florida's technical team. Their expertise and counsel has supplemented our knowledge base and enabled us pursue additional projects. We look forward to this relationship generating even more opportunities for Cecil Spaceport.

We are pleased to report improvements and additions are on target for completion by fall of 2016 and we look forward to enjoying a bustling Spaceport in Jacksonville in the very near future."



VISITOR COMPLEX

When government-backed space efforts first soared into the imaginations of every-day, hard working Americans in the 1960's, patriotic enthusiasm and nationalism was at some of its highest levels.



Seeking to rekindle America's love for space and the technology that enables it, the Space Shuttle Atlantis attraction opened at the Kennedy Space Center Visitor Complex to large crowds and glowing reviews in July 2013.



Space Florida secured more than half of the \$100 million needed for construction of this 90,000 sq. ft. exhibit through an innovative credit arrangement with Bank of America, where a percentage of revenue from tickets and concessions service the loan. This unique transaction would not have been possible without Space Florida's unique State empowerments and high-profile banking relationships.

Construction and management of the Space Shuttle Atlantis attraction by Delaware North Companies has resulted in hundreds of new jobs in Florida and tourism numbers are growing rapidly in response to this one-of-a-kind exhibit.



Darlene Evans-Borinski

Senior Director of Finance & Accounting
DNC Parks and Resorts at KSC, Inc.

"Space Shuttle AtlantisSM is a celebration of NASA's 30 year Space Shuttle Program offering guests from around the world an emotional and interactive journey to see a space shuttle as if flying in space.

The attraction has drawn thousands of new visitors to Kennedy Space Center Visitor Complex. Those visitors not only enjoy viewing a real space shuttle up-close, they can also participate in more than 60 interactive exhibits and high-tech simulators that bring the complex systems and components behind the legendary shuttle to life.

We've had a long-standing working relationship with Space Florida and view them as a critical partner, integral in the development of incredible experiences like Space Shuttle Atlantis as well as the Apollo/Saturn V Center and Shuttle Launch Experience®. We look forward to furthering our partnership on future endeavors."

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Space Florida worked with the Hardee County Industrial Development Authority in Florida's southwest region this year to announce the opening of a 20,000 sq. ft. facility for PF Man, a high precision parts manufacturer just beginning to establish its Florida presence.



Rodgers five-axis milling machines are also a critical component to the business, enabling operators to create computer-designed, precision parts. This highly complex machinery – made possible by Space Florida funding – is the only of its kind in the U.S. and only one of eight in the world.

Space Florida enabled staged funding for three key components of PFMan's business – high precision CNC machines, engine testing rooms and robotic arms used in automated assembly.

Today, PF Man is working on testing out its new rotary engine generator technology, as well as producing an array of custom parts for aerospace industry clients.



Veronica Hurst
Group Operations Officer
PFMan

"The best thing about working with the Space Florida Team is that they really have vision. At the end of 2013, we stood together in the middle of a rather empty factory taking receipt of our first CNC machines and explaining what we were about to do. They understood our business model and were incredibly supportive and enthusiastic."

We enjoy the visits we get from the Space Florida a couple of times a year and we are grateful for the business networking advice we receive.

PFMan is a new venture and Space Florida's partnership has resulted in other organizations taking us much more seriously. This was extremely helpful while we were putting our supply chain in place in anticipation of high volume production.

We hope to continue to collaborate with Space Florida as our operation grows."



Space Florida is dedicated to establishing long-term partnerships with Florida universities to expand and sustain space-related research projects across the state – a key initiative to ensuring Florida remains a global leader in high-tech innovation. In FY2014, two programs in particular – the Florida Space Research



– announced 16 projects from 10 universities selected through a competitive process to receive \$630,067 (plus additional grants of \$824,654 leveraged from matching funds) to conduct space-related research in one of three categories: Space Education and Training, Space Exploration and Spaceport Technical Development, and Space-Based Research and Payload Development.

The International Space Station Research Competition (ISSRC) also took flight during this fiscal year. The initiative – a joint partnership between Space Florida and microgravity research platform developer NanoRacks – identified seven winning teams to fly aboard multiple SpaceX cargo transport missions from Florida. In April 2014, two of those experiments were delivered to the ISS – HEART FLIES (studying the effects of spaceflight on the function, morphology and gene expression in fruit fly hearts) and Project MERCURI (studying microbial samples from public venues in space as compared to their activity in Earth-based labs).



Program and the International Space Station Research Competition – enabled significant levels of funding and support to stream into Florida universities and high-tech laboratories.

In FY2014 the Florida Space Research Program (FSRP) – a joint effort between Space Florida and the NASA Florida Space Grant Consortium

Spaceport Operations

Space Florida's Spaceport Operations Initiative was in full swing this year, as we continued to pursue infrastructure development and refurbishment to offer cost-effective launch facilities and leading-edge manufacturing, test and payload processing capabilities that face today's commercial, civil and defense markets.

Space Florida had the opportunity to work hand-in-hand with NASA-KSC officials to modernize legacy Shuttle-era infrastructure for space and aerospace customers and ensure Florida remains the "go to" location for space-related missions.



Here at Space Florida, we are grateful to the Florida Legislature for continuing to put the state's space and aerospace industry first, enabling the funding needed to keep Florida the premier manufacturing, test and launch site in the U.S.

The Commercial Crew and Cargo Processing Facility (C3PF), Former Orbiter Processing Facility 1, RLV Hangar and Former Shuttle Landing Facility (SLF)

Space Florida completed Phase 1 interior demolition in the former Space Shuttle Orbiter Processing Facility 3 – now named

the Commercial Crew and Cargo Processing Facility (C3PF) – completed its Phase 1 interior demolition in April 2014. This \$45 million project set the stage for Phase 2 – where Space Florida will work together with its customer – The Boeing Company – to design and build state-of-the-art processing bays that will house Boeing's Commercial Crew program and CST-100 crew delivery spacecraft manufacturing and test operations.



This project is the result of a first-of-its-kind partnership between NASA-KSC and Space Florida, where Space Florida secured full long-term rights to operate, maintain and improve the C3PF under purely commercial standards and make it available to commercial tenants such as Boeing. Utilizing existing Shuttle infrastructure saves an estimated 30% for the customer over alternative facilities available at market price.

The C3PF is ideally suited for commercial use, with close access to the 15,000-ft. former Shuttle Landing Facility (SLF) runway at KSC.

Adjacent to the C3PF is former Space Shuttle Orbiter Processing Facility 1 (OPF-1). In FY2014, Space Florida achieved interior demolition and began construction to create a processing facility – complete with high bay and cleanroom – for the U.S. Air Force X-37B Orbital Test Vehicle program, which will eventually land, refurbish and launch from Kennedy Space Center.



In June 2013, NASA selected Space Florida to operate and maintain the former Shuttle Landing Facility (SLF) at Kennedy Space Center as part of NASA's divestiture efforts for unneeded infrastructure. This year, Space Florida continued discussions with KSC to establish commercial horizontal launch and recovery operations at the SLF. As of today, Space Florida is in receipt of a first draft agreement from NASA and began negotiations for transfer of responsibilities.

Additionally, other commercial (horizontal) launch companies have shown significant interest in utilizing the SLF itself. In March 2014, Swiss Space Systems (S3) announced its intention to utilize the SLF for its zero gravity flights, which will begin in 2015. S3 will also evaluate the SLF as a main site for satellite launches beginning in 2018.

A key asset of the SLF is the Reusable Launch Vehicle (RLV) Hanger, built by the State of Florida in the early 2000s and managed by Space Florida. It is currently utilized by NASA and multiple commercial tenants.

The SpaceX Payload Integration and Processing Hangar

Space Florida has worked closely with SpaceX for nearly a decade, providing infrastructure, equipment and financial support for this leading commercial launch company.

SpaceX finalized the development and utilization of a payload processing and integration hangar at Space Launch Complex 40 for its groundbreaking Dragon crew and cargo capsule. Space Florida provided \$5 million in direct financing for the infrastructure through Florida Department of Transportation (FDOT) funding. This facility gives SpaceX the ability to easily refuel and rotate vehicles, as well as encapsulate payloads for flight.

Space Life Sciences Lab

The Space Life Sciences Lab (SLSL) at Kennedy Space Center continues to be managed by Space Florida and four new tenants joined the site in FY2014, including Intelligent Energy, Sierra Nevada Corporation, Swiss Space Systems and NanoRacks. This brings the total tenant count to 14 and the facility is now at 64% occupancy for office space and 57% occupancy for lab space.



In the third quarter, Space Florida matched \$10,000 in funding for research equipment (a 'StepOne Plus 96 Well Real Time System') for tenant Dr. Jamie Foster of the University of Florida. All tenants may now benefit from use of this cutting-edge equipment valued at \$25,000.

Significant upgrades and certification were achieved this year for the SLSL's Live Animal Care Facility. NASA took occupancy late in FY2014, with the first live animal experiments destined for the ISS expected to arrive in early FY2015.

Space Launch Complexes 36 and 46

Launch Complex 36 (LC-36) was once home to dozens of successful Atlas-Centaur launches from the early sixties until it was decommissioned in 2007. Since then, most of the site infrastructure has been demolished and removed. Today, Space Florida continues to do critical maintenance work to the 136-acre property to ensure it remains viable for future, liquid-fueled launches.

Located on the Eastern point of Cape Canaveral Air Force Station, Launch Complex 46 was designed to accommodate a variety of types and sizes of launch vehicles and is a key launch complex for supporting future NASA, Department of Defense and commercial projects.

To continue offering the most comprehensive tools on site for a variety of launch purposes, Space Florida contracted with Alliant Techsystems (ATK)



to initiate Phase Three of the communications infrastructure refurbishment in February 2014. With completion expected in 2015, this work will upgrade the communications infrastructure to provide a modernized suite of data, voice, timing, and video capabilities to meet anticipated launch and test activity requirements.

Space Florida concurrently will be developing operations and maintenance tools and software to assure the site meets industry standards for interaction with the U.S. Air Force Eastern Range. NASA plans to launch the Orion Multi Purpose Crew Vehicle Ascent Abort 2 test flight (AA-2) from SLC-46 in 2018 with pathfinder operations in the years preceding the flight.



Additional vehicles projected to launch from SLC-46 include the Lockheed Martin Athena family, Orbital Sciences' Minotaur and Taurus rockets, and other commercial, NASA, and/or military launch vehicles.

Florida's Next Commercial Spaceport

Space Florida continues efforts to establish a dedicated commercial, vertical launch capability at the proposed Shiloh Launch Complex on Florida's East Coast. The Environmental Impact Study (EIS) required to obtain an FAA site operator license is ongoing, and has included the conduct of public scoping meetings by the FAA in New Smyrna Beach and Titusville in February 2014. A draft EIS is expected in late FY2015.

Small Business Growth

With the goal of encouraging growth among small businesses, Space Florida partnered with the University of Central Florida and Innovation



Coast to plan two events taking place in 2014 that were developed specifically to help match investment sources to Florida-based high-tech startup companies.

Both competitions – one held in Orlando in June 2014 and the other coming in Fall 2014 in Northwest Florida – support the development of products and services that target industries including space and aerospace.

In both events, companies with the top-rated business plans are allowed a unique opportunity to present their business models in front of a qualified audience of potential angel funders, venture capitalists and banks to garner the interest and possible funding from those sources. Space Florida provided \$300,000 in total cash awards for the top two business plans in each competition.

These events help introduce new business leaders to strategists, funders and media to help bolster local business communities and support high-tech sectors that serve as an economic engine for Florida.

“We worked with Space Florida for about a year and a half on the CAT5 Awards, which was simply an extension of the long-established relationship we’ve already enjoyed with the agency,” said Andrea Wesser, University of Central Florida Associate Director – Office of Research and Commercialization. “A significant benefit to working with Space Florida is their unprecedented access to resources inside and out of our region. Our clients have been able to network with key industry stakeholders, have access to state-of-the-art scale-up production facilities and to directly interact with those who impact public policies within the aerospace industry. From this year’s event alone, our clients were able to receive coaching, mentorship and even funding that enabled revenue increases, formation of strategic partnerships and the ability to ramp up hiring.”



INNOVATION CONCOURSE
OF THE SOUTHEAST

INNOVATION
Coast

“The 2014 Innovation Awards are made possible only through a strong partnership and collaborative spirit between Space Florida, Innovation Coast, and the Florida Small Business Development Center (SBDC) Network,” said Dr. Brice Harris, officer and board member of Innovation Coast, Inc., a not-for-profit consortium of technology- and knowledge-based enterprises headquartered in Pensacola. “This capital acceleration program serves to exemplify the seriousness and dedication of Space Florida as an organization to supporting innovation, entrepreneurship, and economic growth throughout the entire state.

As a region, Northwest Florida is helping lead the state into the 21st century economy, and the success of the Innovation Awards is a strong testament to that fact. Moreover, as an inter-agency effort, the Innovation Awards serves as a model for leveraging disparate resources to achieve a common good - in this case, showcasing the talent, creativity, and business acumen of some of the most innovative companies in the Southeastern United States."

Jobs and Innovation Accelerator Challenge



In October 2011, a two-year, \$2.4 million initiative to increase clean energy-related jobs, resources, ideas sharing and consulting services in Florida – was initiated by Space Florida, the Space Coast Energy Consortium (now Energy Florida), Brevard Workforce Development Board and the Technological Research and Development Authority – and funded through the U.S. Economic Development Administration (EDA), U.S. Department of Labor Employment Training Administration (ETA) and the U.S. Small Business Administration.

The Space Coast Clean Energy Jobs Accelerator has been working over the past two years to develop an energy innovation ecosystem in the Central Florida region in four specific areas:

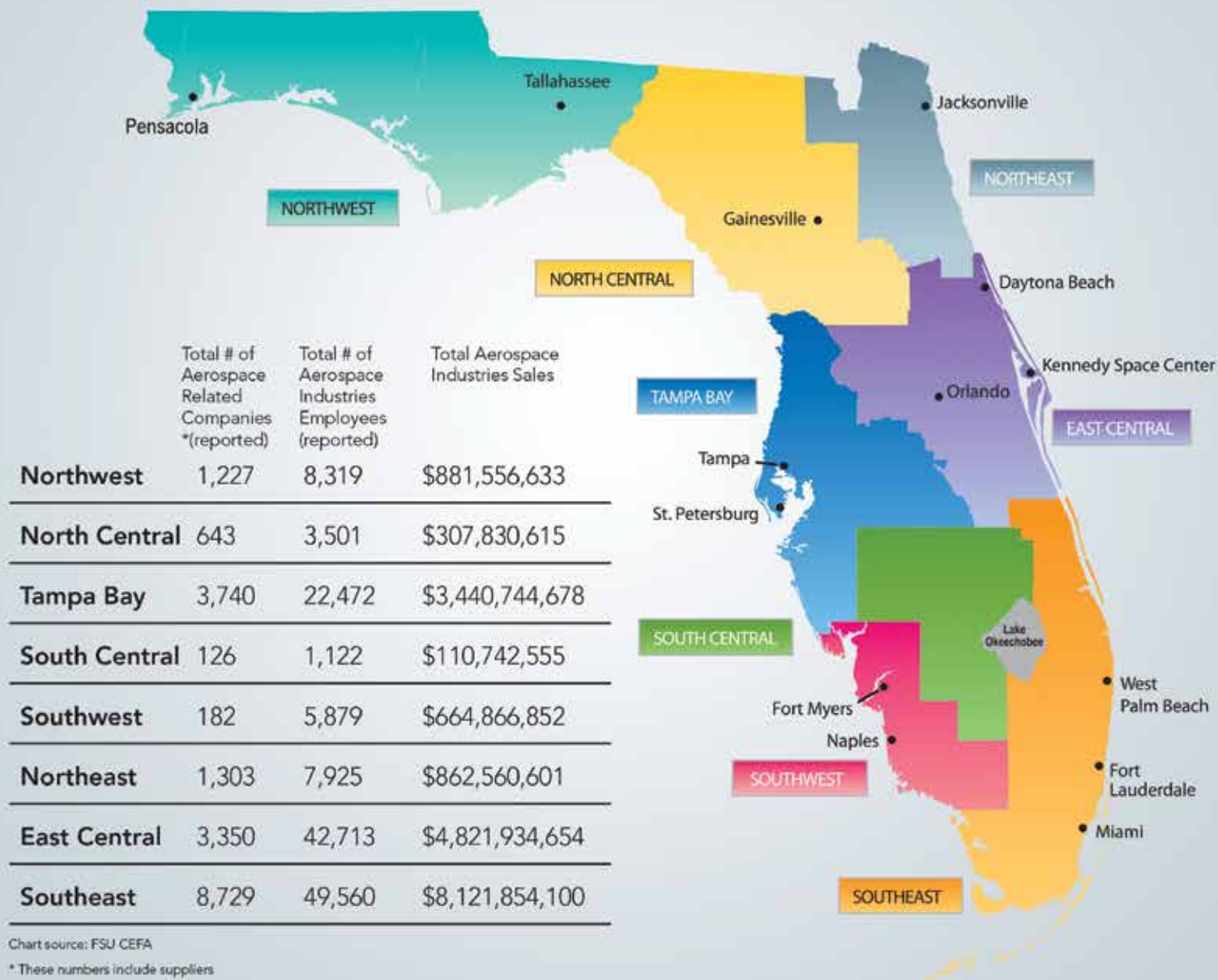


(1) advanced manufacturing and materials processing, (2) biomass, biofuels and waste-to-energy solutions, (3) advanced transportation solutions and (4) energy efficiency financing. As a result of pursuing these promising segments, the Accelerator was able to create 238 jobs and directly assist (through financial and/or consultative means) 100 companies across the state.

One of the most impressive outcomes of the Clean Energy Jobs Accelerator was the establishment of the Florida Clean Energy Research and Development Match Fund. This fund was created as a result of Jobs Accelerator research, which revealed that matching requirements of up to 50% of project costs are prohibitive for many small and mid-sized companies. The program is now funded at \$4 million for the current fiscal year.

FLORIDA: A GROWING FORCE IN THE INTERNATIONAL AEROSPACE MARKETPLACE

Economic Analysis of Space Florida's "Aerospace Industries" – Regional Breakdown: Space Florida is tasked by Florida Statute to focus on the state's economic development efforts to capture a large share of activity in aerospace research, technology, production, and commercial operations'. (Florida Statute, Chapter 331.) Space Florida is uniquely positioned to attract and capture the space portion of the industry, while partnering with state organizations that focus on the broader aerospace market as a major area for economic development.



As Florida's spaceport authority and aerospace development organization, **Space Florida** is committed to attracting and expanding the next generation of space industry businesses. www.spaceflorida.gov

Sources: 1Enterprise Florida, map data Florida State University Center for Economic Forecasting and Analysis (FSU CEFA)

Looking Ahead

Space Tourism

Space Tourism can convey a number of ideas – from human space travel, to watching a rocket launch, to visiting space-themed tourist attractions and participating in zero-g jet flights. Space Florida's goal is to promote any activity or facility that showcases space innovation and attracts visitors to the Sunshine State.

Space Florida is empowered to work with Visit Florida and others to promote Space Tourism



through targeted marketing efforts each year through a \$1.5 million appropriation. Space Florida has outlined goals to achieve Space Tourism-related marketing objectives, including:

- Increasing visitation to Florida, the Space Coast and KSC Visitor Complex and
- Branding Florida as a Space Tourism state

In FY2014, Space Florida engaged a number of cutting-edge branding tools designed to reach space enthusiasts and tourists in markets known for attracting Florida visitors – specifically Chicago, New York, Denver and London.

In spring 2013, a new, interactive website was unveiled to the public. WhereDreamsAreLaunched.com has been live for more than a year now and promotes Florida as THE destination for space lovers - showcasing stunning graphics with narrative describing the past, present and future of the space industry.



Chicago commuter trains were wrapped with eye-catching, space-themed graphics pointing viewers to the website to learn more about Florida – Where Dreams are Launched. An estimated 1 million potential Florida visitors were reached through this campaign in the past year.

Additionally, 100 kiosks using similar space imagery were unveiled in the New York City Financial District. Interactive digital displays were also created and placed at international gateway airports in Denver, Atlanta, New York, London and Chicago, and consumer reach was estimated at impressive counts of more than 10 million monthly.

This investment in the branding of Florida as the premier U.S. travel and tourism space destination – will have lasting benefits for the industry and for our economy – as thousands of travelers are exposed to the awe of space travel.

Florida's New Spaceport System

Florida has a growing spaceport network – from Cecil Field in Jacksonville (developed for horizontal space launches) to Kennedy Space Center (KSC) and Cape Canaveral Air Force Station on Florida's East Coast. While options do exist for commercial launch operators in Florida today, KSC and Cape Canaveral cater primarily to government customers at this time.

Growth in the commercial launch market is undeniable. According to a study conducted

by the Tauri Group, the suborbital launch forecast alone shows an anticipated 40% increase annually through 2020. This presents a tremendous opportunity for infrastructure expansion and utilization in Florida. Change must come for this to happen. The space marketplace must transition from an era that has been largely supported by Federal dollars to one that is driven by commercial market values – a simple supply and demand principle.

With rapid growth in mobile space platforms and worldwide connectivity needs, the global Commercial Space Marketplace is currently valued at approximately \$314 billion (Source: 2015 Space Report).

This is the market that Space Florida is actively seeking to capture – but to do so, we must provide low cost, efficient, highly-responsive and reliable launch services and ground support that operate at the speed of the commercial customer.

Evolving Florida's spaceport network in a way that is conducive to commercial business is impossible without the development of strategic partnerships and a new way of thinking. Commercial space launch companies and payload developers have a need for timely access to space unencumbered by bureaucracy. Florida is already missing prime opportunities to other states that are ready.

Space Florida continues to seek the development of a dedicated commercial spaceport on Florida's East Coast. Additionally, Space Florida leadership continue to work with NASA-KSC partners to create both horizontal and vertical launch facilities that will enable fast, reliable, cost-effective access for near-term commercial customers. Florida MUST provide dedicated commercial launch services soon – or continue to lose out to more forward-thinking states.

An environmental impact study continues at the Shiloh site – which Space Florida continues

to seek as the next Florida-based, designated vertical launch spaceport for commercial customers. In the meantime, we continue to work with NASA-KSC, the Eastern Range, Air Force and Department of Defense to utilize existing platforms that we hope will eventually be as responsive to the needs of our commercial clients as they are to their own.

Only then will our vision of a multi-user, multi-modal spaceport network – managed by a Spaceport Authority with DOD, civil agencies and commercial operators as customers – be possible.

International Partnerships

Space Florida has always valued international partnerships that benefit Florida's aerospace industry growth, and in the past few years, the United Kingdom, Israel, Spain, Brazil and Singapore have created business development partnerships with Florida.

In the past year, the State of Israel has become a cherished partner to Florida. In October



2013, a Memorandum of Understanding (MOU) was signed between the States of Florida and Israel to support research, development and commercialization of projects related to aerospace and other technology sectors.

Florida and Israel have each committed \$1 million to this effort annually and in 2014 the first Request for Proposals was made public. Both Space Florida and Israel's lead industrial center for research and development (MATIMOP) requested proposals for joint R&D projects in a

wide range of aerospace sectors. The first two Florida/Israeli teams have been selected for funding and a second solicitation will attract additional teams during FY2015.

In November 2013, Space Florida conducted a trade mission to Brazil, meeting with more than 20 high-tech and aerospace executives to explore, capture and accelerate near-term opportunities with aviation and aerospace companies interested in doing business in Florida.

Brazil has the largest aerospace economy in the Southern Hemisphere, and Florida has many synergies with Brazil, including dual pursuits of small satellite technology and launch, unmanned aerial system programs, and new and developing spaceports along coastal regions.

Partnering with countries that value and invest in next-generation space and aerospace technology development and commercialization falls directly into Space Florida's mission of ensuring a robust and profitable high-tech industry here in Florida. These relationships are a key element to a prosperous future for the Sunshine State.

What the Future Holds

In the space industry, we are transitioning from an era that has been largely federally-dominated to a true commercial marketplace that is increasingly driven by the private sector. Space is being used as a communications hub for lucrative mobile platforms, research and development of advanced materials, life sciences discovery and global interconnectivity served by new satellite constellations.

Global space markets today represent a \$314 Billion industry, with new sectors emerging every day. In order for Florida to take full advantage of this opportunity, we must be able to provide buyers of next-generation space products and

services low-cost, efficient, highly-responsive and reliable launch and spaceport capabilities, along with a robust, high-tech supply chain.

Today, due to the fact that Florida's spaceports are still dominated by civil and defense programs, we are unable to meet the needs of most commercial launch customers. Unless we can evolve our spaceports into the kind of business-friendly environment commercial customers seek, we will lose the new space race. Florida has already lost significant business to other states that were able to provide dedicated, commercial-friendly spaceports. We must not let this continue.

Goal: A multi-user, multi-modal spaceport, managed by a spaceport authority with DoD, civil agencies and commercial operators as customers.

Florida has a cost-competitive environment, a favorable business tax structure, no personal income tax, industry-specific incentives, advanced workforce training programs, and a superior quality of life. All that is missing for commercial customers is a spaceport that can meet their needs.

Our #1 Priority

In order to create a site that will satisfy commercial customer needs and ensure that companies like SpaceX, Orbital, XCOR and others see Florida as the best place for launch – we must create a spaceport that can be accessed at all times by commercial operators and payload customers. This commercial spaceport cannot be reliant on Federal Range instrumentation and command. Customers must be able to process and launch on their own schedule.

States like New Mexico and Texas are capturing key opportunities TODAY while Florida continues to try to adapt our existing spaceport environment to compete. We must move at the speed of the commercial marketplace and get a dedicated commercial launch site established immediately so we do not continue to lose this lucrative market. European countries, Russia and China are quickly ramping up their commercial space operations. The suborbital marketplace for research, education and space tourism is growing at an incredible pace.

In the past year, both Space Florida and KSC authored Spaceport Master Plans that have aligned goals and implementation steps.

Space Florida integrates the relevant plans and requirements of the Kennedy Space Center, Cape Canaveral Air Force Station and Florida's designated



spaceport territories into an overall Spaceport Master Plan for the state to meet future commercial market needs. The Air Force, KSC and the overall state Master Plan strongly support market growth opportunities and infrastructure needs to accommodate both military and commercial launches.

Further, both the KSC and the Space Florida Master Plans:

- Support a Spaceport Authority - that would manage operations, execute contracts, attract business and raise capital – this could be an entity such as Space Florida... with NASA, the military and commercial sector all serving as customers.

- Seek to balance support for new space programs while leveraging existing lands, facilities and infrastructure to meet market needs, when possible
- Recognize the need for policy and procedural shifts from Federal requirements to accommodate a multi-user, commercial-friendly spaceport
- Encourage attracting new business as a core necessity for growth and survival in today's space marketplace
- Recognize the importance of entities outside of NASA having rapid access to space
- Acknowledge existing environmental concerns and aim to address those concerns head on
- Recognize that there is considerable growth in the market

Knowing that there are so many overlaps in these Spaceport Plans, there is no reason we cannot create a dedicated commercial spaceport in the near term. At Space Florida, we are committed to partnership, and will continue to work with KSC officials to make Florida the World's premier gateway to space. A sense of urgency in creating this new commercial spaceport will be the key to that success as we move forward... and we cannot do it alone.

Florida's future in both the global space and aerospace marketplace is bright. Space Florida will continue to leverage its relationships and empowerments to encourage more businesses to establish and grow in Florida. We will also continue to work with commercial space companies and existing civil and military powers in Florida to ensure a flexible, commercial-friendly spaceport is developed quickly.

We look forward to keeping you, our stakeholders, apprised of these developments over the course of the coming year.

FINANCIAL HIGHLIGHTS



2014 STATE APPROPRIATED
REVENUE INCREASED TO

\$12,149,685

FROM
\$10,236,994
2013

54%

OF SPACE FLORIDA OPERATING
EXPENDITURES IN FY2014

WERE USED TO

**DIRECTLY CREATE AND MANAGE
ACTIVITIES AND PROGRAMS**

*THAT RETAIN, ATTRACT AND HELP EXPAND
AEROSPACE BUSINESSES IN FLORIDA.*

SPACE FLORIDA CURRENTLY HAS

A POSITIVE NET POSITION OF

\$97,255,619,

WITH

\$147,427,567 IN TOTAL ASSETS

AND

\$50,171,948 IN TOTAL LIABILITIES.



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