Florida

Renaissance on the Space of the Coast

The private space race is on.

By Mike Vogel

In January, Amazon founder Jeff Bezos' rocket-making company, Blue Origin, posted an animation of what its New Glenn heavy-lift rocket will look like launching from Florida. The accompanying text sounds for all the world like a promo for a new car — "more than 2X the available volume of any rocket flying today ... the most capable upper stage in the market."

The lingo punctuated just how much has changed in the quest for space in the 50 years since Florida and rocket launches became synonymous. Today, the space race is back, driven by the government but enabled by private companies that are bringing jobs, prestige and challenges to Florida. And this time, the state is serving as more than the nation's launching pad.

Long subject to whims in congressional spending on space, the Space Coast's economy turned in 2011 with the government's decision to end the shuttle program. Direct employment at NASA in Florida remained fairly stable — fluctuating between 1,750 and 2,800 since the 1970s, according to the federal Bureau of Labor Statistics. But the shuttle's demise fell hard on private contractors, who cut some 9,135 jobs.

Instead of slipping into an economic coma, however, the Space Coast capitalized on its skilled workforce. In less than a decade, the region has rebounded by attracting companies such as plane maker Embraer to join longtime Defense Department contractors Lockheed, Northrop Grumman and Harris in Brevard County.

Commercial rocket companies SpaceX and Blue Origin arrived, too, as the state and Space Florida — Florida's port authority for space — invested in launch and manufacturing facilities. Boeing came to build its Starliner space capsule. Lockheed came to build its Orion deep-space crew transport, Blue Origin arrived to build a rocket factory for its New Glenn rocket and OneWeb came



to build satellites. Florida, which for the most part was the place that launched spaceships — but didn't build them — suddenly did both.

Today, "if it's not the No. 1 fastestgrowing aerospace cluster in the United States, I would be shocked," says Philip "P.J." Anson Jr., CEO of Jensen Beachbased STS Aviation Group, which serves the aviation industry globally.

A signal of the shift: Industry publication *SpaceNews* chose the Space Coast



as its "Turnaround of the Year" award winner for 2018 and an "early frontrunner" for turnaround of the decade. The Cape saw 19 launches in 2017, making it the most active orbital launch site in the world. "To us, one of the clearest signs the Space Coast had rebounded economically is that there is now space commerce on Space Commerce Way," Brian Berger, the editor-in-chief of *SpaceNews*, said in announcing the award. Frank DiBello, Space Florida CEO, says he expects 2019 to be a "big year" for more relocations to Florida. For example, in January, Los Angeles-based Relativity, a startup led by former SpaceX hands, secured a launch pad at Cape Canaveral Air Force Station to test its 3-D-printed rocket.

Space Florida also plans to spend about \$1 million to upgrade the space shuttle's three-mile runway, which it now controls, for future launches. Space Florida is projecting 100 to 200 flights annually from Florida in a decade. As of January, 15 were scheduled, with more expected later in the year.

Astronauts

Investment firm Space Angels predicts 2019 will be the "year of commercial space travel." Boeing and SpaceX have scheduled Florida launches of seven-passenger spacecrafts the Boeing Starliner and SpaceX Crew Dragon. Bezos' Blue Origin and Richard Branson's Virgin Galactic also may carry people to space this year, though launched from outside Florida.

As always, projections about space flight require a grain of salt. Industry watchers marked their calendar for a mid-December day when four rockets were to go off from California, Texas, Florida and French Guiana — but, for various reasons, not a single



launch occurred. And in January, SpaceX laid off 10% of its workforce, though most of the hit seems to have fallen at the secretive company's California headquarters. Boeing's Starliner, which can carry up to seven passengers for missions to low-Earth orbit, is reusable up to 10 times with a sixmonth turnaround time.

2019 ROCKET LAUNCH

In Florida, SpaceX leads in launch market share. Space Florida CEO Frank DiBello envisions 100 to 200 launches annually from Florida in a decade — more than six times the 15 that so far are expected in 2019.





Falling Costs

Lost amid all the enthusiasm for U.S.-launched astronauts have been the leaps in lowering rocket costs, thanks to innovations such as boosters that don't just drop into the ocean when they've spent their fuel, but land under power and can be reused.

Lower costs mean NASA expects to pay SpaceX and Boeing about \$58 million per astronaut carried to the International Space Station, compared to the more than \$80 million per seat it's been paying Russia. Morgan Stanley says the cost to launch a satellite has fallen to \$60 million from \$200 million "with a potential to drop to as low as \$5 million."

Mass production of satellites — OneWeb's 600-satellite constellation will be made in Florida — has cut costs from \$500 million per satellite to \$500,000, Morgan Stanley reports.

Falling launch costs plus the exponential growth in global data demand have made the case for blanketing Earth's orbit with satellites to deliver broadband everywhere. Developers plan to launch 140 constellations with hundreds of satellites each — among them SpaceX's Starlink — in the next decade.

Northern Sky Research analyst Shagun Sachdeva says that given financing, regulatory and manufacturing hurdles, "we will surely see the total number drop quite a bit." But, she says, Florida will "remain well-positioned in terms of launch business."

Moonstruck

Lunar Landing

China could end this year with its Chang'e 5 unmanned vehicle landing on the moon and returning to Earth, the first such journey since Apollo in 1972. The milestone would further establish China as the most likely to land humans on the moon first in the next decade. Promoters of the U.S. space industry hope Chinese success will ignite U.S. government support for a new space race. There are currently as many moon missions planned as during the heyday of the space race. However, as much government support materializes, the new run to the moon will be enabled by private companies. Space Florida recently agreed to loan \$1.5 million to an unidentified company vying for a NASA contract to develop a commercial lunar lander, giving Florida a foothold in the lunar industry. SpaceIL, an Israeli non-profit, is to launch its lunar probe from Florida this year aboard a SpaceX Falcon 9.

Floating Habitat

This year, in the building at Kennedy Space Center that once processed space shuttles for launch, a team of Lockheed Martin engineers and technicians completed a 15-month project to refurbish an old space shuttle cargo container to see if it would work as a habitat in lunar orbit. NASA, which wants an outpost in lunar orbit for landing on the moon or flying to Mars, hired six companies to develop a design. Lockheed's answer is to outfit a surplus 4½-by-6½ meter container as a kind of orbital RV with sleep stations, exercise equipment, lighting and electronics. "We think the design we came up with is, in our minds, the right design," says project leader Bill Pratt.

NASA ultimately may or may not agree, but the project meant about 20 high-wage, high-skill jobs in Brevard County. The effort also drew at times on some of the 1,000 people Lockheed employs around Brevard on other projects, including its Orion crew transport, NASA's vehicle for the moon and beyond.

The habitat project illustrates that not all the projects driving the space industry resurgence in Florida involve monster rockets. But cost efficiency is something all want to share. For its orbiting lunar habitat, Lockheed looked to the surplus cargo container. Its NASA name was Donatello. (All the shuttle containers were named for Italian Renaissance masters/ Teenage Mutant Ninja Turtles.) "It was really born from this idea that we wanted to focus our efforts on all the stuff inside the habitat," Pratt says. "That's what mattered the most."

A Giant Leap, 50 Years Later

This July will mark the 50th anniversary of Apollo 11's moon landing. As part of the commemoration, Delaware North, the for-profit company that runs the visitors complex and attractions at Kennedy Space Center, is revamping the Saturn V display, including projecting images of the landing on the rocket itself.

The world tuned into Florida in 1969 to watch Neil Armstrong, Buzz Aldrin and Michael Collins venture forth. Some 530 million people globally watched Armstrong become, as last year's movie put it, "First Man." Apollo "profoundly affected Brevard County," says historian Gary Mormino. Brevard went from 16,000 people in 1940 to a quarter of a million by 1970 and 590,000 today.

Some impacts extended beyond Brevard. The University of Central Florida, for instance, was created by the Legislature in 1963 as Florida Technological University to open access to education to serve the space industry at Canaveral 40 miles to the east. A decade after opening in 1968, that focus shifted and it became UCF. Unlike California, which



had a string of high-quality universities and the assets to support them at the dawn of the Space Age, Florida had trouble really capitalizing on the space boom beyond publicity. "Florida had the desire but not the resolve and resources," says Mormino.

The Rocket Lineup: Who's Zooming What

ROCKETS



Blue Origin's New Glenn

NEW GLENN

Blue Origin's heavy-lift rocket, involving up to three stages, will take off from launch complex 36 at Cape Canaveral, not far from Blue Origin's new rocket factory in Exploration Park just outside Kennedy Space Center.

► VULCAN

United Launch Alliance, a joint venture between Boeing and Lockheed Martin, is developing the vehicle as a low-cost response to SpaceX's lower launch-cost rockets. The Vulcan will fly with Blue Origin engines from the Cape and California.

FALCON 9 AND FALCON HEAVY

The now iconic SpaceX reusable rockets that make up the majority of launches from the U.S. can put heavy payloads into space at attractive price points.

► SPACE LAUNCH SYSTEM

NASA says this monster rocket will be more powerful than the Saturn V, capable of hefting the equivalent of nine school buses into deep space. The space agency plans to launch it from the Cape to reach the moon in the late 2020s and Mars in the 2030s.

PEOPLE CARRIERS

▶ NEW SHEPARD

Amazon founder Jeff Bezos' suborbital tourist rocket will make 11-minute flights from West Texas.

► STARLINER

Boeing is building its sevenpassenger, low Earth-orbit crew carrier in Florida. The vehicle will transport people and supplies to the International Space Station. Riding atop United Launch Alliance's workhorse Atlas V, it begins test flights this year from Florida.

SPACEX CREW DRAGON

Elon Musk's seven-passenger vehicle, also for low Earth orbit and the ISS, begins flying this year from Florida atop the Falcon 9 rocket.



SpaceX Starship

► SPACEX STARSHIP

SpaceX's 100-passenger Buck Rogers-looking crew vehicle will start with a mission around the moon in 2023 with a Japanese billionaire as the first deep-space private tourist. Elon Musk says it will be the vehicle used to travel to and from Mars. Test flights of a prototype Starship Hopper will be in Texas. The SpaceX Starship will be hoisted by the Starship Super Heavy, formerly known as the Big Falcon Rocket, which will be the largest reusable rocket.

► STRATOLAUNCHER

The late Paul Allen's giant aircraft, the world's largest by wingspan, is being tested in Mojave, Calif. It's at least three years from carrying its first rocket — initially Northrop Grumman's Pegasus XL — for an airborne launch to space.



Orion Spacecraft

ORION CREW CAPSULE

NASA hopes to fly its Lockheed Martin-built, long-duration transport — NASA's first deep space people-carrier since 1972 — with a European Space Agency service module. The Orion will begin flying from Florida in 2020, but not with people aboard until at least 2022. It will be lifted by the gargantuan Space Launch System.

► VIRGIN GALACTIC

Richard Branson's suborbital vehicle will be launched from a plane out of New Mexico's Spaceport America, primarily to carry tourists. It was delayed after a 2014 crash in a test flight that killed a pilot. Its latest craft, VSS Unity, reached space with two pilots in December.

SATELLITE SYSTEMS



OneWeb satellite

ONEWEB

Founded by Greg Wyler, OneWeb aims to put a 600-satellite "constellation" in low Earth orbit that will spread broadband around the world. Satellites will be launched first from French Guiana on Soyuz rockets, then eventually from sites all over the world — but primarily from the Cape. An affiliate, OneWeb Satellites, a venture of OneWeb and Airbus, is building the satellites at a factory at Space Florida's Exploration Park.



Airforce X-37B

AIR FORCE

The Air Force doesn't talk much about its secret X-37B, a reusable, unmanned space plane, and what it's up to on those long space missions. But visit the Kennedy Space Center, and you can find the name of the mini-shuttle written on the side of a building easily visible on the bus tour. Meanwhile, the National Reconnaisance Office maintains a satellite processing facility at the Cape as well -a reminder that while the Boeing Starliner and Orion grab headlines, much work at Cape Canaveral involves secret spy agency satellite launches.

Launch Pads at Cape Canaveral

Combined, Kennedy Space Center on Merritt Island and the Cape Canaveral Air Force Station on the Cape itself are the busiest spaceport in the world. Under the aegis of Space Florida — Florida's port authority for space — and with the considerable support of NASA and the Air Force, the area has transformed into the nation's private space race capital, with launch complexes devoted to Blue Origin and SpaceX along with longtime stalwart United Launch Alliance and other players.



Constraints

To reach the target of 100-plus annual launches that industry leaders dream of, Florida will have to overcome some obstacles.

ISSUE

Congestion and Competition

The Air Force's 45th Space Wing at Patrick Air Force Base in Brevard County, which is in charge of the area's launch schedule and safety, has been pushing to more than double annual launches under a "Drive for 48" a year slogan. Littlenoticed changes help efficiency: SpaceX adopted an automated system to destroy its rockets if they go awry. An Air Force officer explained at a conference last year that the system eliminated the need for 96 government workers and cut the charge to the rocket-launching customer in half.

But the "Drive to 48" amounts to nearly one a week, a tough nut for a rocket range that accounts for nearly a quarter of the world's launches but in most years hosts fewer than 20 launches.

Last year, at the 45th Space Congress, the Air Force and private rocket companies aired their difficulties with speeding up launches — ship and plane encroachment on restricted areas, weather, scheduling conflicts.

There's also a safety issue with having one rocket on a pad while another rocket launches. Blue Origin orbital launch site director Scott Henderson noted that designated "critical days" around a launch mean some types of construction aren't allowed at area launch pads. Blue Origin at the time was working on launch complex 36 for its New Glenn rocket. In 10 of the prior 12 months, he said, more than half the work days had been "critical days." "It's nearly impossible to build a project under those kinds of constraints," he said.

Nearly two dozen active spaceports

around the globe are eager to pick up the business. The private space race has set off competition among states and nations to capture rocket makers and their launches. The United States alone now has 11 spaceports. Newcomers have pulled off recruiting coups; Texas, for example, won a SpaceX launch site, and New Mexico lured Virgin's tourism and satellite businesses.

More states want in on the action. Georgia seeks to develop a spaceport just across the Florida line. Contrasting itself with Florida, Georgia touts itself as the only "non-federal range on the East Coast" — a reference to NASA's and





New Mexico is home to one of 11 spaceports in the U.S. The southwestern state lured Virgin Galactic's tourism and satelitte business to its Spaceport America.

the Air Force's sway over Florida launch governance.

Space Florida CEO Frank DiBello wants Florida to develop a commercialonly spaceport and for Congress to free Florida from the layers of various federal agencies and regulation that took root over the years. The Air Force and NASA, which have supported making the Cape hospitable to private ventures, already have "leaned forward about as far as they can go," without congressional action, he says.

While the state tries to clear that bureaucratic nest, it has to work on upgrading its aging infrastructure at the Cape, a source of complaint from private companies. Unlike competing facilities in the launch marketplace, Florida's facilities can be more than a half century old. DiBello says efforts to create a "21st-century spaceport" with major infrastructure projects are ongoing. Space Florida has gotten \$38.8 million from the Florida Department of Transportation to improve its infrastructure.

"This is not a time for Florida to unilaterally surrender," DiBello says. "We want to be the global leader in enabling space commerce."



Workforce

In the latest PwC rankings of the most attractive states for aerospace manufacturing Florida, No. 1 just a few years ago, is down to 15th. In PwC's tabulation, Florida came off relatively poorly in infrastructure, costs and labor. The federal Labor Department projects the Space Coast will need to fill 200 aerospace engineer jobs and 1,020 aerospace and engineering technician jobs annually through 2026.

Marci Murphy, CEO of Career-Source Brevard, the area's state-run job agency, says a survey of employers in 2017 found a need for as many technicians as engineers. Jobs in the sector pay well — \$111,945 is the Brevard-area median for an aerospace engineer and \$60,000 for technicians with two-year degrees. But experienced talent is hard to come by. Bill Pratt, a project leader for Lockheed Martin on a lunar habitat project, says "for me, it's always a challenge in Florida or anywhere" to find highly skilled talent.

CareerSource Brevard is in its third year of a social media campaign to entice engineering talent to move to the region and, among other efforts, produced a video showing off the Space Coast as the kind of diverse, vibrant, active, live-work-play community sought by Millennials.

Eastern Florida State College in Brevard is trying to fill the labor pipeline with 25 programs that support companies in the space industry. Spokesman John Glisch says an aerospace technology internship program with Lockheed has led to the company hiring 30 graduates in the past three years for Lockheed's Orion crew transport.

Meanwhile, Eastern Florida has

an aviation center at Melbourne's airport where it trains technicians to work in commercial aviation and space. The college recently received \$3.8 million from the state to train students in aerospace and advanced manufacturing. The grant will enable the school to ramp up a new robotics lab and a "mechatronics" lab that combines mechanical engineering, electronics and computing for product design and manufacturing.

SPACE WAGES

Median Wages in Florida

Position	Pay
Aerospace Engineer	\$105,540
Electronic Engineering Technicians	59,340
Aerospace Engineering & Operations Technicians	58,100
Engineering Technician	53,780

Median Wages in Brevard County Metro Area:

Position	Pay
Aerospace Engineer	\$111,945
Electrical and Electronics Engineering Technician	63,398
Aerospace Engineering & Operations Technician	59,217

Notes: 2017 data, U.S. Department of Labor, provided by CareerSource Brevard

HELP WANTED

Aerospace Workers



Philip "P.J." Anson Jr., a licensed plane mechanic with an MBA, heads Jensen Beach-based STS Aviation Group, a global company that provides a host of services to the aviation industry, including supplying mechanics. The industry is said to face a labor shortage as Boomers retire and young people and their families focus on four-year degrees. Anson's thoughts:

Where Florida stands

"We recruit people to every area of the country. If I was going to pick one place on the planet to recruit aircraft mechanics to, it would be Florida. Nice climate, no income tax. Friendly place, cost of living isn't too high. You've got to pay somebody a lot more to go up to northern Michigan to work than to go to Melbourne, Florida, to work."

Pay shortage, not labor shortage

"Forecasts say around 2022 and 2025 it will become an actual labor shortage. Right today there's not a labor shortage. There's plenty of talent out there to work on the airplanes. If you raise the pay rates and all of a sudden people come out of the woodwork ready to work, it's not a labor shortage. It's a pay shortage."

The challenge in building the skill pipeline

"Every parent wants their kid to get a four-year degree. The problem is,



somebody has to go out and do the trades." Airplane mechanics face a two-year program to become licensed — "there's a lot of want-to involved in becoming an airplane mechanic" — but make less by about \$20 an hour than auto mechanics.

The solution

"It's going to be very similar to the nursing shortage. Everyone saw that coming, but no wanted to make the decision to pay them more until it became painful. Right now, it's not painful to the airlines. The airlines are really the leader in this industry from a career and pay standpoint. As soon as the airlines start to feel the pain, everything will start to move. Airlines will try to hold margins where they are and not want to increase costs so they'll hold off until the pain might be they don't have enough airplane mechanics to keep their airplanes flying, lose revenue for lack of mechanics. So pay them more. Then regionals pay more, then maintenance facilities pay more and then middle and high school kids' eyes get caught. Nothing happens until a big enough pain is caused to the people who really control it."

"If you raise the pay rates and all of a sudden people come out of the woodwork ready to work, it's not a labor shortage. It's a pay shortage."

— Philip Anson Jr. STS Aviation Group



Keeping Millennials in Space

The industry needs young engineers — and Millennials like a certain lifestyle.



Less than two years after buying a historic bank and hotel building in downtown Titusville, Colorado's Laura and Barry Hamilton are turning the bank space into co-working offices and the hotel into 20 apartments, some of which will come furnished for engineers on short-term assignment. Patios will allow for working outside. The decor will feature space program collectibles and art. A coffee shop, yoga studio and brew pub are in walking distance.

"From the very get-go, we programmed all the design to target Millennials," Laura Hamilton says.

Target market for the rehabbed space is the young people populating the workforce of young rocket-making companies such as Blue Origin and SpaceX. A recent PavScale survey found the median age at SpaceX to be 29. As that new generation of workers takes root, however, companies and economic developers along Florida's Space Coast have worried that the region lacks the walkable neighborhoods preferred by the stereotypical Millennial. Mixed-use projects with ground-floor commercial and upstairs residential are scarce. The Hamiltons' project is the first one, says Titusville redevelopment planner Tim Ford.

Barry Hamilton founded Red Canyon Software, an aerospace engineering and software company in Denver that has clients on the Space Coast. He and Laura, a designer and "estate sale junk ie," also invest in real estate. On a visit to



Laura and Barry Hamilton are designing their Launch Pad apartment complex and co-work space with Millennials in mind. The co-work space is scheduled to open this year.

Titusville, the locals swept the married couple off their feet. From the city staff to then-Gov. Rick Scott, everyone, she says, was eager to help them. Laura talks of being welcomed into people's homes and being invited on kayaking and boating outings. They bought a home for themselves to use when visiting and several others as investments.

"The small town of Titusville embraced us. We just fell in love with it," she says, "We think Titusville is the next big thing." They also fell in love with the old Bank of Titusville building — built in Florida's 1920s land boom — with its curved staircase and seven-foot high, 56-crystal Baccarat chandelier that once adorned an ambassador's house in France.

The adjoining old Walker hotel and apartment building, listed on on the National Register of Historic Places, drew them, too. The building had ongoing retail on the ground floor and rain damage, termites, broken windows and "incredible amounts of decay and smells" upstairs, Laura Hamilton says.

The Hamiltons hope to have the coworking space in the bank open this year, with the apartments available in early 2020. The co-working space will have beer on tap and wine in the refrigerator for members and, she hopes, a community of like-minded people who share the Red Canyon vision of "exploring other planets and improving our own."

The Hamiltons are calling the apartments Launch Pads and the co-working space and overall project Launch Now, a brand they want to spread across the country. In Titusville, they've applied for grants to improve the streetscape around their project and are involved in a fundraising campaign to repair and restore an old town clock.

"I love nothing more than bringing beautiful old buildings back to life," Laura Hamilton says. "Florida has rolled out the red carpet for us. I am so impressed on every single level with how Florida works and how they're open to business."

FLORIDA'S SPACE COAST: AMERICA'S HIGH TECH TITAN

Florida's Space Coast is the birthplace of American space exploration, and the hub of Florida's space industry. It is where 72 miles of pristine beachline meet an ideal operating climate. It is where low labor costs meet a high quality of life, and where aggressive and targeted incentives combined with a coveted workforce produce one of the very best site-location choices in the United States.

Join others such as Boeing, Blue Origin, Embraer, Harris Corporation, Lockheed Martin, Northrop Grumman and more and discover America's High Tech Titan. **Discover Florida's Space Coast**.

ECONOMIC DEVELOPMENT COMMISSION OF FLORIDA'S SPACE COAST 6525 3rd Street Suite 304 Rockledge, FL 32955 f 🗹 💿 in



Discover more at www.SpaceCoastEDC.org or 321.638.2000

SPACE FLORIDA

Driving Florida's Aerospace Future

Florida is well-positioned to dominate the future of the aerospace industry and lead the world in enabling space commerce and innovation.

Space Florida is endowed with statutory powers that enable a unique financing toolkit to support new and expanding aerospace companies.

Florida's Spaceport System is poised to lead the world

in this next space era, one that reflects the transition from a government-led and focused industry to a thriving commercial market. There is a growing recognition within the global aerospace industry

that Florida has the kind of business operating and living environment that next-generation aerospace companies need to thrive.

Florida is well on its way to becoming the world's premier space transportation hub.

Space Florida's focus for the next decade is to build the capacity of all Florida Spaceports, including the Cape Canaveral Spaceport, with new infrastructure, and to empower a new commercial future, one that serves space exploration, national security and space commerce. Florida's Spaceport System is poised to lead the world in this next space era.

SPACE FLORIDA

Florida's Aerospace Industry

Number of Companies

8.3% Growth 2013-2018

Number of **Employees** 3.5% Growth 2013-2018

Sales / **Revenues** 2.0% Growth 2013-2018 Source: National Establishment Time Series Database analyzed by Florida State University Center for Economic Forecasting and Analysis

SPACE COAST

Space Florida's Significant Assisted Projects 2013 - 2018

Capital Accelerator Space Florida partners with the Florida Venture Forum in holding two to three events annually, where early stage aerospace companies receive intensive coaching and present to investors.

Boca Raton • Gainesville • Melbourne Miami • Orlando • Tampa

Florida – Israel Innovation Partnership Now in its sixth year, Space Florida and the Israel Innovation Authority provide \$2 million annually in competitive grants to support joint aerospace commercialization projects by teams of for-profit Florida and Israeli companies. Daytona Beach • Jacksonville Kennedy Space Center • Melbourne Merritt Island • Tallahassee

Space Florida Financing

Toolkit Space Florida is authorized by Florida law to offer a conduit debt financing structure, which enables aerospace companies to defer and defray costs associated with expanding or relocating to Florida. Bowling Green • Jacksonville Kennedy Space Center • Melbourne Panama City • Rockledge • Tampa

Spaceport Infrastructure Funding In partnership with the Florida Department of Transportation, Space Florida provides reimbursable grants to support development and refurbishment of critical infrastructure in the State's FAA licensed spaceports. **Cape Canaveral Air Force Station Cecil Spaceport • Exploration Park Kennedy Space Center**

Space Florida, the State's aerospace and spaceport development authority, was created to strengthen Florida's position as the global leader in aerospace research, investment, exploration and commerce.

www.spaceflorida.gov