

# Florida Flyer

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Neil Rashba

*Jacksonville Executive at Craig Airport is conveniently located for corporate aviation and flight training.*

## Jacksonville Executive at Craig Airport

**J**acksonville Executive at Craig Airport (CRG) is a mid-sized general aviation facility located in eastern Duval County just outside the Jacksonville central business district.

Jacksonville is one of the largest cities in the state of Florida, with a population of more than 1.5 million. Tourism, banking, insurance, and healthcare are important industries in the area. Jacksonville offers the opportunity to relax on beautiful beaches, play golf and other sports, visit museums and galleries, browse in local shops, and enjoy community parks and a zoo. With U.S. Navy bases and the Port of Jacksonville

located here, Jacksonville is a major military and civilian deepwater port.

### Two active runways

Jacksonville Executive at Craig Airport has two active, asphalt runways served by full-length parallel taxiways. The runways can accommodate Design Group II aircraft, up to a 79-foot wingspan and up to 60,000 pounds dual wheel loading.

Runway 14/32 is 4,008 feet long by 100 feet wide; it is equipped with high intensity runway lights, precision approach path indicator lights, and runway

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Aaron N. Smith  
State Aviation Manager

***“From fiscal years 2012 through 2016, the state of Florida committed over \$1 billion, matching over \$1 billion of local and federal funds.”***

# MANAGER'S CORNER

Florida's Aviation Program continues to be this country's most robust state aviation program. From fiscal years 2012 through 2016, the state of Florida committed over \$1 billion, matching over \$1 billion of local and federal funds. Strategic Intermodal System (SIS) funds accounted for over \$300 million. The Aviation Program consists of funds from several sources including the State Transportation Trust Fund, or what is commonly referred to as the STTF, which receives aviation fuel tax dollars of approximately \$30 million to \$40 million per year. In fact, the Aviation Program is second only to the FDOT Highway Program in terms of state dollars. Should you care to know more about FDOT's revenue sources, our General Accounting Office has developed the Transportation Tax Source Primer, available at [www.fdot.gov/comptroller/gao.shtm](http://www.fdot.gov/comptroller/gao.shtm), which provides all those exciting details. All kidding aside, it's a fantastic source of information that few take time to read and understand.

In addition to funding airport projects which may include but are not limited to construction, planning, and capital equipment, the program supports FDOT's state-wide studies and projects. This includes the Florida Aviation System Plan, Pavement Management Program reports and manuals, Statewide Aviation Economic Impact Study, *Aviation Emergency Response Guidebook*, Florida air service and cargo studies, *Airport Compatible Land Use Guidebook*, *Florida Public Airport Revenue Use Guide*, *Guidebook for Airport Master Planning*, *Florida General Aviation Airport Business Plan Guidebook*, and, currently in development, the *Airport Sustainability Guidebook*, just to mention a few. All of these products and more are available at [www.fdot.gov/aviation/flpub.shtm](http://www.fdot.gov/aviation/flpub.shtm).

The future of Florida's Aviation Program looks similar to the past. Over the next five years we can expect to see similar funding levels which naturally vary year to year based on state revenues, local needs, priorities, and so on.

Education continues to be a priority, and we recently completed computer-based training (CBT) modules for our online capital improvement program, the Joint Automated Capital Improvement Program (JACIP). There are three modules: FDOT, airport, and FAA. In addition, we continue to develop and refine the Florida Aviation Professionals Academy. The intent of this academy is to provide a baseline for FDOT, airports, consultants, and others in terms of the Florida Aviation Program. The academy program will be delivered in a variety of platforms including computer-based training, webinars, and classrooms. There will be much more to come about this program.

Note: The 2017 Florida Legislative Session began March 7 and runs through May 5.

# Airport Sustainability

by Jim Halley, A.A.E., ACE

The word *sustainability* has many connotations that may imply different things to different audiences. As it relates to airports, sustainability can be considered in the context of administration, procurement, planning, design, construction, maintenance, and operations. The sustainability framework can consist of policies, procedures, and practices that reduce facility and operational costs as a result of better utilization of resources, higher levels of efficiency, and a greater emphasis on planning.

For example, sustainability planning and performance benchmarking and tracking can have a profound impact on costs, both hard and soft, as a result of reduced resource usage (typically resulting in fewer greenhouse gas emissions), improved passenger satisfaction (leading to increased terminal concessions revenue and positive public relations implications), a more strategic use of airport property (increasing revenue and decreasing airport-wide costs), and reduced waste generation and increased recycling (lowering waste management fees), to name a few. There are additional positive impacts related to customer and employee benefits as well as improvements to environmental quality and stakeholder relationships, especially with neighboring residents, businesses, local governments, and permitting and regulatory agencies. It is important that considerations of economic viability and operational efficiency be considered in airport sustainability planning, with strong consideration also being given to natural resource conservation and the social responsibility of the airport.

## Sustainability guidebook

The Florida Department of Transportation's (FDOT) *Airport Sustainability Guidebook* will support the department's goal of having Florida's public-use airports being financially self-sufficient while also realizing social, operational, and natural resource benefits. Additionally, the guidebook will further enforce FDOT's and the Aviation and Spaceports Office's (ASO) mission to provide a system that "enhances economic

prosperity and preserves the quality of our environment and our communities" and FDOT and ASO values such as integrity ("We always do what is right") and customer driven ("We listen to our customers").

From an economic perspective, there are two general ways that airports can achieve financial self-sufficiency: increasing revenues and reducing costs. FDOT currently provides guidance, technical support, and funding in an effort to help airports achieve this goal of financial self-sufficiency through increasing revenues. FDOT's publication, the *Florida General Aviation Airport Business Plan Guidebook*, addresses facility development and long-range planning through the master planning process, focusing on meeting design standards and planning for future needs. It is an important resource that provides many helpful tools to increase revenues and build relationships within the airport's community. The *Airport Sustainability Guidebook* focuses on making the most efficient use of airport resources with an eye to reducing operational costs while providing a balance between economic growth, community needs, environmental concerns, and operations.

Together, these two guidebooks will provide Florida's airports with the tools needed to increase revenues, decrease costs, become financially self-sufficient, and support the overall goals of their adopted master plans. These tools further strengthen the position of the FDOT Aviation and Spaceports Office as a nationwide leader in aviation and airport development. The *Florida General Aviation Airport Business Plan Guidebook* is available at [www.fdot.gov/aviation](http://www.fdot.gov/aviation) (choose "Documents and Publications" and scroll down to "Planning").

## FAA guidance

As part of its Sustainable Master Plan Pilot Program, the Federal Aviation Administration (FAA) provided select eligible airports in the U.S. with Airport Improvement Program (AIP) grant funds to complete sustainability planning documents for their facilities.

These planning efforts included recommendations that help to achieve economic growth, financial self-sufficiency, and efficiencies for daily operations that result in reduced operating costs and improvements in other areas of the airport. The FAA awarded numerous grants during the pilot program phase to gather lessons learned that are forming the basis of national program guidance on sustainability planning currently in development. In Florida, Northeast Florida Regional Airport (Saint Augustine), Vero Beach Municipal Airport, and Tampa International Airport participated in the program. FAA guidance on sustainability can be found at [www.faa.gov/airports/environmental/sustainability](http://www.faa.gov/airports/environmental/sustainability).

Comprehensive sustainability planning is typically done in two ways: sustainable master plans integrate sustainability into all aspects of an airport's traditional long-range planning while sustainability management plans are stand-alone documents that develop a framework for integrating sustainability into all facets of an organization (administration, procurement, operations, maintenance, planning, design, construction, and so on). Both use various planning methods to identify ways to increase the economic benefits to airports along with other benefits such as reducing environmental impacts and improving public perception.

## Other guidelines

In addition to the FAA's evolving guidance on sustainability planning, other federal, state, and local requirements and guidance are being used in transportation and other areas; there is no one clear set of guidelines that Florida airports can follow. The *Airport Sustainability Guidebook* will examine many of these resources and provide concise summaries of these documents for use during the development of an airport sustainability program. Additionally, the guidebook will assess numerous airport sustainability tools available

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# Jacksonville Executive at Craig Airport

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end identification lights. Runway 5/23 is 4,004 feet long by 100 feet wide; it is equipped with medium intensity runway lights and precision approach path indicator lights.

Two full-service fixed base operators serve the airport, Craig Air Center ([www.craigaircenter.com](http://www.craigaircenter.com)) and Sky Harbor Aviation ([www.skyharboraviation.com](http://www.skyharboraviation.com)). Aviation maintenance and electronics services are available on-site. Several flight schools and charter companies are located on the airport, as well as an 18-hole Jack Nicklaus-designed golf course.

The air traffic control tower operates Monday through Friday from 6:00 a.m. to 11:00 p.m. and from 7:00 a.m. to 10:00 p.m. on Saturday and Sunday.

## Economic impact

Jacksonville Executive at Craig Airport generates an annual economic impact of nearly \$132 million, employing more than a thousand people on airport property.

The airport is one of four airports owned by the Jacksonville Aviation Authority (JAA). JAA's vision is to enhance its standing as a premier economic engine for the city of Jacksonville and the Northeast Florida region.

## Built in the 1940s

Jacksonville Executive at Craig Airport was built in the 1940s, "one of six airports in the area developed for military training," according to the airport's website. "In 1946, under the Federal Surplus Properties Act, the U.S. military gave the airport to the city of Jacksonville, which named the airport after Navy Lt. Commander James Edwin Craig (1901–1941) who was killed in action" during the attack on Pearl Harbor. A memorial pavilion was dedicated to Lt. Commander Craig in 2013.

"The U.S. Navy's Blue Angels performed their first air show at the airport on June 15, 1946. The exhibition team flew three Grumman F6F Hellcat fighter planes."



Lans Stout

*Above: Jacksonville Executive at Craig Airport is Jacksonville's prime location for corporate aviation.*

*Right: Blue Sky Golf Club is one of the airport's tenants.*

For many years the airport was named Craig Municipal Airport. In 2011, the airport's name was changed to Jacksonville Executive at Craig Airport to "better reflect its role as a corporate reliever" for Jacksonville International Airport.

## Service to the community

Airport staff members frequently conduct tours of the airport facilities for visitors who are middle school age and above. The airport is also home to a Civil Air Patrol squadron and to Experimental Aircraft Association Chapter 193.

The airport and the aviation authority have worked in partnership with the Police Athletic League of Jacksonville to establish the JAXEX High Achievers program designed to introduce local middle and high school students to career opportunities in aviation and to



Lans Stout

encourage interest in aviation.

For more information about Jacksonville Executive at Craig Airport, see the airport's website at [www.flyjacksonville.com](http://www.flyjacksonville.com) (click on "JAXEX" near the bottom of the page). ♦





Lans Stout



Lans Stout

## Economic Impact

The total annual economic impact of Jacksonville Executive at Craig Airport follows:

- **Total employment: 1,123**
- **Direct impacts: \$57,705,000**  
(from the tenants/businesses at the airport and construction projects undertaken by the airport or by on-site businesses)
- **Indirect impacts: \$20,194,000**  
(associated with spending from visitors who arrive in the area by way of general aviation aircraft)
- **Multiplier (additional) impacts: \$54,021,000**
- **Total output: \$131,920,000**

—from the *Florida Statewide Aviation Economic Impact Study Update, August 2014*

## Points of Interest

- Jacksonville Executive at Craig Airport has approximately 416 based aircraft.
- Total operations for 2016 are estimated at more than 197,000.
- The airport's advisory committee provides opportunities for residents, officials, and business groups to discuss airport issues.



Lans Stout



Lans Stout

*Jacksonville Executive at Craig Airport is a mid-sized general aviation facility (two photos, top) with two FBOs: Sky Harbor Aviation (middle) and Craig Air Center (above).*

# Aviation Safety:

## Holding Position Markings and Signs on Airports

by David Smith

In this edition of the *Florida Flyer*, I would like to discuss a topic on aviation safety and an important aspect of Florida's airport licensing program. One of the standards I would like to discuss is holding position markings and signs on airports.

### Prevent runway incursions

Holding position markings and signs serve an important role to help prevent runway incursions. It's one way of informing flight crews and ground vehicle operators of an approaching runway. They basically serve as the "stop signs" on the airport.

The pavement markings should be maintained in a manner so that they are clearly visible; this includes outlining the markings with a black border on light-colored pavement and using glass beads in the paint. The painted lines should be six to twelve inches wide and extend across the entire width of the taxiway. The pavement markings should consist of two dashed lines and two solid lines with the dashes being three feet long with three-foot spacing between dashes. The solid lines should always be on the side where the aircraft are to hold short of the runway. Think of it as the center lines on a roadway; you cannot pass on the solid line side, but you may pass on the dashed side.

### Clearly visible markings

Keep in mind that these in-pavement markings may be angled where two or more taxiways intersect at the hold line, but they should be perpendicular to the taxiway centerline. Clearly visible markings are important because they may catch the attention of a distracted flight crew or vehicle operator and possibly avoid a runway incursion.

Another important role that holding position markings and signs serve is to help ensure that aircraft or ground vehicles holding short of a runway are not becoming obstructions. Chapter 14-60, Florida Administrative Code, states that holding position markings on paved taxiways shall be placed 125 feet from visual runways serving small aircraft, 150 feet from visual runways serving large aircraft or with non-precision approaches, and 200 feet from runways with a precision approach. On unpaved taxiways, holding position signs are to be placed outside of the primary surface on the left side of the taxiway or both sides if the unpaved taxiway is more than 150 feet in width. Just remember, if an airport is adding more precise approaches, the holding position markings/signs may have to be relocated to maintain minimum standards.

### Holding position signs

Holding position signs can serve as an additional visual warning that a runway is approaching. If they are installed for paved taxiways, they are typically co-located with the in-pavement holding position markings, and on unpaved taxiways they are placed outside of the runway primary surface.

Holding position signs should consist of the runway designation numbers separated by a white dash such that their arrangement indicates the direction to the corresponding runway threshold. This does two things that may help to enhance safe operations.

First, it can serve as a way of verifying that one is lining up or entering the correct runway prior to actually entering the runway. If you were assigned a specific runway by air traffic control, this provides a way of verifying you are at

the correct runway, and possibly avoid a deviation if not.

Second, it can help to provide a higher level of situational awareness for vehicle operators and flight crews. If an aircraft is announcing on the radio what runway they are landing on (at an airfield with no control tower), the hold short signs that show the direction of the runway thresholds give personnel holding a clue as to where they can expect the landing traffic to come from. The holding position sign numbering should be white and no less than 12 inches tall on a red background to enhance visibility. The sign face shall be no less than 18 inches tall and 30 inches wide, and the sign itself should not stand more than 42 inches high along with being mounted on a frangible base.

### To learn more

If you would like to know more concerning the state requirements for airport safety at your facility, please refer to Chapter 14-60, Florida Administrative Code and, as always, if corrective measures are undertaken, please ensure they comply. Chapter 14-60 is available on the Florida Aviation website at [www.fdot.gov/aviation/safeinsp.shtm](http://www.fdot.gov/aviation/safeinsp.shtm).

Please feel free to contact me if you require further assistance with this matter or have questions concerning Florida's airport licensing program. ♦

*David Smith is the Airport Inspection and Safety Manager for the FDOT Aviation and Spaceports Office. Contact him at (850) 414-4515 or [DavidP.Smith@dot.state.fl.us](mailto:DavidP.Smith@dot.state.fl.us).*



# Need Help Revising Airport Zoning Regulations?

Resource documents are available for revising zoning regulations to comply with changes to the Florida Statutes

by Greg Jones

As a result of the amendments to Chapter 333, Florida Statutes (F.S.), Airport Zoning, the Department's Aviation and Spaceports Office (ASO) has prepared several resource documents for zoning authorities to utilize to revise their existing airport zoning regulations to comply with the amendments. The statute requires that these changes be completed by July 1, 2017.

## Documents on ASO website

These documents are found at the ASO website, [www.fdot.gov/aviation](http://www.fdot.gov/aviation), under "Office Resources/Documents & Publications – Statutes." The documents include the former and current version of Chapter 333, F.S.; House Bill 7061 (which amended the former Chapter 333); and a comparison matrix of HB 7061 and the current version of Chapter 333, F.S. ("HB 7061 & FS 333 Comparison Matrix").

The ASO also prepared and presented webinars regarding these changes on October 4, 12, and 20, 2016. For those who may have missed the webinars, the October 20 session has been recorded and posted to the ASO website for future viewing. The PowerPoint presentation that was made for the webinars is posted on the homepage of the ASO website under "News: Webinar Presentation, Statutory Submittal Requirements to FDOT."

## Detailed comparisons available

In order to familiarize zoning authorities and others with the changes to Chapter 333, F.S., the ASO prepared the PowerPoint presentation to reflect the role the Federal Aviation Administration (FAA) regulations play in the local

airport zoning process and to reflect the differences between the former and current airport zoning statute. To further assist zoning authorities, the ASO's "HB 7061 & FS 333 Comparison Matrix" shows how the language of the former statute was modified by House Bill 7061, and it shows the language of the current statute. This matrix provides a section-by-section comparison to illustrate the additions and deletions to the former Chapter 333 language.

The PowerPoint presentation and the comparison matrix are provided in a form which can be modified as necessary by users to train their staff members and inform citizens and public officials of the significance of the changes to the new airport zoning statute.

## Email addresses

In addition, the ASO has provided email address accounts to which zoning authorities can submit amendments to airport zoning regulations (DOTRegulationReview@dot.state.fl.us) and airport zoning permit applications (DOTAirportZoning@dot.state.fl.us) as required by Sections 333.025(4), F.S., and 333.03(3), F.S., respectively. For more information on this statutory requirement and procedure, see the PowerPoint presentation beginning at slide number 10. Questions regarding the submission of zoning amendments and permit applications may be sent to the respective email account. ♦

*Greg Jones is Airspace and Land Use Manager for the FDOT Aviation and Spaceports Office. Contact him at (850) 414-4502 or [Greg.Jones@dot.state.fl.us](mailto:Greg.Jones@dot.state.fl.us).*

## Airport Sustainability

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for use in developing, implementing, and tracking airport sustainability. The guidebook also contains six case studies, from general aviation airports to large-hub commercial service airports. These case studies provide insights on various challenges and opportunities to sustainability through real-world examples.

ASO presented an overview of the guidebook at the Florida Airports Council's Specialty Conference in October 2016. The final guidebook will be released in early 2017 and will be uploaded to the ASO website. For additional information on the *Airport Sustainability Guidebook* or for answers to any airport sustainability questions, please contact Jim Halley. ♦

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## Calendar

*Please contact event organizers before attending in case of cancellation due to weather or other factors.*

### April 4–9, 2017

SUN 'n FUN International Fly-In & Expo, near Lakeland Linder Regional Airport (LAL). See [www.flysnf.org](http://www.flysnf.org) or call SUN 'n FUN at (863) 644-2431.

### July 23–26, 2017

48th FAC Annual Conference and Exposition at Lowe's Miami Beach Hotel. For more information, see the Florida Airports Council's website at [www.floridaairports.org](http://www.floridaairports.org).

*For information about CFASPP, see [www.cfaspp.com](http://www.cfaspp.com).*

# New Flying Club at Arcadia Municipal Airport

*Below is an excerpt from an article by Dan Namowitz, published by AOPA, reprinted here with permission. To read the entire article online, see "New Flying Club the Latest Addition at Thriving Florida Airport" at [www.aopa.org/news-and-media/all-news/2016/september/28/new-flying-club-the-latest-addition-at-thriving-florida-airport](http://www.aopa.org/news-and-media/all-news/2016/september/28/new-flying-club-the-latest-addition-at-thriving-florida-airport).*

The debut flight of the Aviation City Flying Club from Arcadia Municipal Airport, with President Don Morley in the left seat, was the latest in a series of developments putting the airport on the map as a general aviation destination and reinforcing the airport community's reputation as strong GA advocates.

Even before the half-dozen charter members of the flying club had organized as a flying club with help from AOPA, the welcome mat was out for visitors to the airport. For more than a year, a nonprofit group, the Friends of Arcadia Airport, has been operating a one-of-a-kind, on-airport camping facility

featuring a 20-by-30-foot pilot shelter set in a live oak grove, available to visitors for a fee and by reservation (see the group's website for details). The group designed, funded, and built the "fly in, camp out" facility, which has been visited by pilots from such organizations as the Recreational Aviation Foundation and the Millennial Wings of the Florida Aero Club of Fort Lauderdale.

Unlike many Florida airports, non-towered Arcadia Municipal in DeSoto County is not located in busy airspace. Visiting pilots are drawn to its one paved runway, one grass runway, open spaces, and mom-and-pop atmosphere—but that's just the beginning of the appeal, say the airport's friends. Attractions available to groups and individual visitors who have flown in include a popular rodeo, and a river-canoeing expedition operation, as well as in-town activities.

That message must be getting around, as there were more than 200 individual overnight stays in the facility's first full operating year, says the friends

organization (noting that it is unaware of any other on-airport camping facility in the eastern part of the country).

With the airport drawing visitors to Arcadia, population about 7,700, local businesses have begun to see GA's local base as an economic-development asset for the city, said George Chase, president of the Friends of Arcadia Airport group and AOPA's Airport Support Network volunteer for the airport. ♦

## Note Our New Web Address:

[www.fdot.gov/aviation](http://www.fdot.gov/aviation)

The FDOT Aviation and Spaceports Office's web address has changed to **www.fdot.gov/aviation** (formerly [www.dot.state.fl.us/aviation](http://www.dot.state.fl.us/aviation)). Our website looks the same, but the web address is shorter and easier to remember. ♦

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