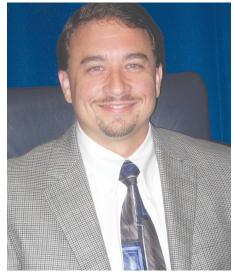
News from the Florida Department of Transportation Aviation and Spaceports Office

Florida Flyer

www.dot.state.fl.us/aviation

Summer 2016





Aaron N. Smith State Aviation Manager

"Florida is truly fortunate to be served by one of the most comprehensive and progressive airport systems in the country and continues to receive support far greater than any other state in the nation."

MANAGER'S CORNER

The 2016 Florida Legislature passed the fiscal year 2017 appropriations bill with \$249.9 million identified for aviation development grants (July 1, 2016 – June 30, 2017), including \$21 million for spaceport projects. The appropriation represents another historic year for Florida's Aviation and Spaceport Program. Florida is truly fortunate to be served by one of the most comprehensive and progressive airport systems in the country and continues to receive support far greater than any other state in the nation.

The appropriations bill also included two aviation/airport special appropriations, of which one was vetoed by the Governor. Unless otherwise specifically noted in the appropriations bill, the funds identified in the special appropriation must come from the district office where the airport is located. In addition, the special appropriation does not include additional budget (there's no new money), so the district office must identify the budget within the work program, which may be a part of an existing project or projects at one or more airports this next fiscal year. If the airport does not execute the joint participation agreement (JPA) for the project, for which the special appropriation(s) was intended, the funds sit in limbo for at least a year, or longer.

Chapter 333, Florida Statutes, update passes! The recommended changes to Chapter 333, Florida Statutes, also passed this year and will hopefully (fingers crossed) be signed in law shortly. A special thank-you to all who worked so diligently to see this update through the legislative process. It all didn't happen by accident; it was truly a team effort! And we are very appreciative of the assistance, though some nail-biting did occur!

CSFA 55.004 and 55.037. Related to project funding, and perhaps one which you may not be aware of, is the Catalog of State Financial Assistance (CSFA). CSFA is the basic reference source for state projects. The primary purpose of the catalog is to assist users obtaining general information on state projects and to identify state projects that meet specific objectives. The catalog contains state financial assistance projects available to local governments, nonprofit organizations, and for-profit organizations. State financial assistance as defined by Section 215.97, Florida Statutes, does not include procurement contracts used to buy goods or services from vendors or contracts to operate state-government-owned and contractor-operated facilities. Each project in the catalog is identified by a Catalog of State Financial Assistance (CSFA) number; the first two digits in this five-digit number represent the state awarding agency.

The FDOT Aviation and Spaceports Office maintains two CSFA numbers, 55.004 and 55.037. CSFA 55.004 provides guidance for the Aviation Program, while CSFA 55.037 provides guidance for the Spaceport Program. For each state project listed, the catalog provides the following key information:

Program: The set of activities undertaken in accordance with a plan of action organized to realize goals and objectives based on legislative authorization.

Specific Appropriation: The line number in the General Appropriations Act.

Legal Authorization: The authorization upon which a project is based.

Objectives: A statement of the specific objectives in terms of what the project is intended to accomplish along with the goals toward which the project is directed.

Restrictions: Lists any prohibited uses of state financial assistance or, alternatively, lists the authorized uses.

Application and Awarding Procedures: In addition to general statements regarding the application and awarding process, this section includes references to any standard application forms used, the offices and addresses from which applications may be obtained and to which applications may be submitted, and any applicable deadlines.

The Florida Department of Financial Resources regularly references the catalog, as well as the JPA, when processing invoices. To learn more about CSFA go to apps. fldfs.com/fsaa/catalog.aspx.

Aircraft Fuel Servicing Safety

by David A. Roberts

On a recent airport inspection, I discovered two fuel servicing tank vehicles and a homemade fuel servicing tank trailer parked inside a hangar immediately next to parked aircraft and each other. Fortunately, the tank vehicles were not servicing any aircraft at the time. No one was even in the vicinity. So, I informed the airport representatives with me that this was an unsafe situation and that it was not allowed.

Within 30 minutes and while on an active runway, I received a visit from the local fire chief. His question was basically, "Where does it say that we cannot do that?" I will not divulge my comment back to him, but needless to say, I was embarrassed for him.

Unfortunately, this is only an example and not an isolated incident. Generally, I see a lack of attention to safety when it comes to the fuel servicing of aircraft. Fuel servicing equipment is often improperly constructed, equipped, maintained, employed, and parked. This indicates a lack of training on the part of the fuel handlers and their supervisors. So, if you are a part of this industry, here is where you can look for guidance:

The Florida Fire Prevention Code Chapter 69A-60, Florida Administrative Code (FAC)

The Florida Fire Prevention Code is the minimum fire prevention code deemed adopted by each municipality, county, and special district with fire safety responsibilities. It applies to every building and structure throughout the state, except: (a) buildings and structures subject to the uniform fire safety standards adopted under Section 633.206, Florida Statutes (F.S.), and (b) buildings and structures subject to the minimum fire safety standards adopted pursuant to Section 394.879, F.S.

NFPA 407: Standard For Aircraft Fuel Servicing

Chapter 69A-60.005(2)(qqqq), FAC

This National Fire Protection Association (NFPA) standard outlines vital safety provisions for procedures, equipment, and installations in order to protect people, aircraft, and other property during ground fuel servicing of aircraft using liquid petroleum fuels. This standard addresses design requirements including aircraft fueling, aircraft fueling hose, fuel servicing vehicles, airport fuel systems, self-service aircraft fueling, fueling at rooftop heliports, and non-driven hydrant carts. Among operational issues covered are prevention and control of spills, emergency fuel shutoff, electrical equipment used on aircraft servicing ramps, aircraft fuel servicing locations, defueling, and loading of aircraft fuel servicing tank vehicles.

AC 150/5230-4B: Aircraft Fuel Storage, Handling, and Fuel Safety Training

This Federal Aviation Administration (FAA) Advisory Circular (AC) contains specifications and guidance for the storage, handling, and dispensing of aviation fuel on airports. Additionally, this AC provides standards and guidance for the training of personnel who conduct these activities.

Where to find this guidance online

To find Chapter 69A-60 of the Florida Administrative Code, mentioned above, see www.flrules.org. NFPA 407 is available at www.nfpa.org, and FAA Advisory Circular 150/5230-4B is available at www.faa.gov.

For more information on this topic, contact the Division of State Fire Marshal – Florida Department of Financial Services. Their office is located at 200 East Gaines Street, Tallahassee, Florida 32399-0322. You may reach them by telephone at (850) 413-3170 or by email at SFM@myfloridacfo.com.

Thank you for your attention to this important issue. Let's work together to make our airports the best airports that our communities want and deserve.

David A. Roberts, CPM, is Aviation Operations Administrator for the FDOT Aviation and Spaceports Office. Prior to his service with FDOT, David was a local fire chief and is a 13-year veteran of the fire service. He can be reached at (850) 414-4507 or David.Roberts@dot. state.fl.us.



Fuel trucks at Marco Island Airport.

Courtesy of Marco Island Airport

Maintenance, Repair, and Overhaul

by Mike McClure

Aircraft Maintenance Activity

Maintenance, repair, and overhaul (MRO) is a phrase widely used to describe aircraft maintenance activity. The repair station industry is huge, covering all segments of aircraft maintenance. In all segments of the aircraft maintenance industry (general aviation, business, helicopters, airline, military, and government), aircraft owners and operators today rely on numerous organizations as part of their overall maintenance, repair, and overhaul requirements.

The aircraft maintenance industry encompasses small repair stations that typically perform specialized services such as welding, plating, or nondestructive testing services. Many of these services are complex processes that require specialized equipment, experience, and authorizations. Other repair stations provide MRO services relating to specific types of components, such as avionics and electronics, mechanical actuators, or fuel systems and carburetors. And many of the aircraft maintenance workers from these companies rarely see or actually touch an aircraft.

Then there are the repair stations that provide MRO services on large complex components such as retractable landing gear assemblies, reciprocating and turbine engines, or auxiliary power units. And finally, there are repair stations that provide maintenance services on

the aircraft itself, regardless if you're operating a general aviation training aircraft, a business aircraft belonging to a corporate flight department, helicopters, or the transport category aircraft owned by those airlines and leasing companies.

-summarized and reprinted with permission from Aircraft Maintenance Technology and www.AviationPros.com; see "MRO Operations: Repair Stations and MRO" by Ronald Donner, October 14, 2010, available online at www.aviationpros.com/article/10371502/mro-operations-repairstations-and-mro







Photographs courtesy of Mobile Aircraft Services

Photographs, top: landing gear inspections; above: sheet metal repairs; left: cabin seat repair and adjustments.

Four Main Categories of Maintenance

The MRO industry includes a wide spectrum of maintenance activities, including the following four main categories of maintenance:

(1) Airframe Maintenance. Airframe maintenance typically requires service at an airport performed by an MRO with the required ramp and hangar space, ground support equipment (GSE), specialized tools and equipment, and so on.

Airframe maintenance includes regular, scheduled maintenance on an airframe's structure and cabin interior and maintenance on aircraft removed from service for a predetermined time at specified intervals. This maintenance is typically based on calendar time, number of flight hours, or number of flight cycles, and is commonly referred to as "C Checks" and heavy maintenance visits (HMVs).

(2) Engine Maintenance. Engine maintenance can be on-wing or off-wing. A replacement engine can be put on the aircraft to return it to service sooner; a quick response team may be dispatched to the location of a grounded aircraft to repair or replace an engine.

Engine maintenance may be carried out on a scheduled or on-condition basis. Off-wing work may require a great deal of effort to disassemble, repair, restore, and return each engine to service. Often, engine maintenance involves a shop visit to complete overhaul work or replacement of life-limited parts (LLP).

(3) **Component Maintenance.** Much of the actual component repair is carried out in a shop environment that may be located near, but not on, airport property. Depending on the component, the aircraft may still be flyable (possibly with restrictions such as VFR only, day only), a temporary replacement or loaner component may be installed, or the aircraft may be unserviceable until the component is repaired or replaced.

Component maintenance involves work carried out in a shop environment on components removed from aircraft. Sub-segments of component maintenance include avionics, auxiliary power units (APU), cabin systems, equipment/ furnishings, electrical, engine accessories, propellers, flight controls, structures, fuel systems, hydraulics, pneumatics, landing gear, wheels and brakes, tires, nacelles/thrust reversers, waste and water, cargo, and more.

(4) Line Maintenance. Line maintenance involves regular pre-flight and post-flight inspections, operational checks, and so on. This maintenance is conducted before or between operations. Line maintenance includes pre-flight/ transit checks, daily checks, weekly/ overnight checks, and A-checks. ◆

-Prepared, in part, based on information in the January 2014 report "Global MRO Market Economic Assessment Air Transport" published by the Aeronautical Repair Station Association. See www.arsa.org.

Mike McClure, C.M., is the Aviation Environmental and Freight Manager for the FDOT Aviation and Spaceports Office. Contact him at (850) 414-4506 or Mike.McClure@dot.state.fl.us.



Customer service, quality, and dependability are what make a great MRO.

Outlook and Challenges for the MRO Industry

The future of the MRO industry is described in "Turbulence Ahead, Disengage the Autopilot: 2015-2025 Global Fleet and MRO Market Forecast," a report prepared by CAVOK (a division of Oliver Wyman, an aviation services and consulting firm) and presented at the 2015 MRO Americas Conference. A few points from this report are highlighted below:

- Passenger traffic is picking up, but air transport fleet growth will be limited over the next 10 years as most of the 4,100+ deliveries are slated to replace aging aircraft.
- \$4.6 billion in MRO from 1970s and 1980s vintage aircraft will be lost over the next 10 years; however, 1990s, 2000s and 2010s vintage aircraft will see a \$5.9 billion increase.
- With 78 percent of the new deliveries forecast to replace older aircraft, the MRO forecast is virtually flat.
- Take the controls and make strategic investments now. Technologies will likely come online faster than anticipated: Additive manufacturing (3D printing) is quickly gaining traction; aircraft health monitoring (AHM) and big data are expected to be a significant driver of innovation over the next five years.
- Focusing solely on business as usual is a risky strategy in the coming years. Relying on current commercial offers, sales practices, and resources will challenge an MRO's future business.
- MROs and operators must actively choose technologies to develop and exploit.



Peter O. Knight Airport, looking north.

Peter O. Knight Airport

From page 1

In 1999, the Hillsborough County Aviation Authority (HCAA) purchased the airport from the city of Tampa. Over the past 15 years, the HCAA has continued to maintain and improve the airport by adding several additional facilities including a new administration building located west of the main terminal, a new fuel farm, a helicopter parking area, an additional aircraft parking apron, and two large enclosed hangars that are located on the easternmost portion of the airfield near the Seddon Channel.

A large project to reconstruct Runway 04/22 and rehabilitate the associated taxiways and pavement is scheduled for fiscal year 2017.

Peter O. Knight Airport supports nearly 300 jobs and generates a total economic impact of \$31,559,000. The airport's full-service fixed base operator is managed by Atlas Aviation, Inc. Atlas Aviation's sub-tenants include



Peter O. Knight terminal building, established in 1965.

flight training companies, aircraft charter companies, a news reporting service, and an aerial tour provider.

Public-use airport

In the 1930s, in recognition of the need for a public-use airport, the city of Tampa used Works Progress Administration (WPA) funds to build a new airport in the Tampa area. A site was identified in south Tampa within the Davis Islands development area. The construction of the airport included substantial dredging to create additional land needed for the new runways and also to fill one of the original canals that ran through the western edge of the airport site. Once completed, the overall construction costs amounted to \$426,264. The airport became Tampa's



Above: Staff members of the FBO, Atlas Aviation, Inc.

main commercial airport from 1935 to 1945. In the 1960s the original terminal building was torn down and replaced with the existing building used by general aviation operators.

Peter O. Knight was a prominent lawyer, businessman, and an influential member of the Tampa City Council who earned his law degree by the age of 18 and was elected mayor of Fort Myers before his 21st birthday. Knight convinced financiers to invest in property on Davis Islands and was also instrumental in arranging the property transfer and development of the land that would later become the airport site. Due to his contributions to the Tampa area, the airport was appropriately named the Peter O. Knight Airport.

HCAA's mission

The Hillsborough County Aviation Authority operates all publicly owned aviation facilities in Hillsborough County, including Peter O. Knight Airport, Tampa International Airport, Plant City Airport, and Tampa Executive Airport.

The mission of the Hillsborough County Aviation Authority is to be a major driver in the economic growth of

Cashin McLeinine



Jason McLemore

Photographs, center and above: Atlas Aviation, Inc. employees Matt Sachse and Josh Kidd.

the Tampa Bay Region, and "to be leading edge innovators to create global access and extraordinary customer experiences through our people and facilities to build prosperity for our stakeholders and the region."

For more information about Peter O. Knight Airport, see the airport's website at www.tampaairport.com/TPF. ◆

Economic Impact

The total annual economic impact of Peter O. Knight Airport is as follows:

- Total employment: 297
- **Direct impacts: \$8,826,000** (from the tenants/businesses at the airport and construction projects undertaken by the airport or by on-site businesses)
- Indirect impacts: \$9,360,000 (associated with spending from visitors who arrive in the area by way of general aviation aircraft)
- Multiplier (additional) impacts: \$13,373,000
- Total payroll: \$8,062,000
- Total output: \$31,559,000

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



June 7–23, 2016

CFASPP Regional Committee Meetings in various locations. For more information, see the website of the Continuing Florida Aviation System Planning Process at www. cfaspp.com.

July 16, 2016

CFASPP Statewide Steering Committee Meeting, Hyatt Regency Coconut Point, Bonita Springs. For more information, see the website of the Continuing Florida Aviation System Planning Process at www. cfaspp.com.

July 17-20, 2016

47th FAC Annual Conference and Exposition in Bonita Springs. For more information, call the Florida Airports Council at (850) 224-2964 or see www.floridaairports.org.



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House Bill 7061 revises and repeals ida Statutes (F.S.), which will require modification of existing airport zoning regulations previously adopted by local political subdivisions. House Bill 7061 becomes effective July 1, 2016, and provides that "any airport zoning regulations in effect on July 1, 2016, which includes provisions in conflict with this chapter shall be amended to conform

Both of these bills amend Chapter 333, but since the House Bill was passed after the Senate Bill, the House Bill has precedence. certain sections of Chapter 333, Flor-

during the 2016 Legislative Session by Senate Bill 1508 and House Bill 7061.

by Greg Jones

The Airport Zoning section of Chapter **1** 333, Florida Statutes, was amended

"FDOT is now drafting an analysis of the amended Chapter 333, F.S., and will post it to the Airport and Airspace Protection webpage as soon as possible."

to the requirements of this chapter by

though House Bill 7061 becomes ef-

fective July 1, 2016, airport zoning

regulations that comply with the current

Chapter 333 (prior to July 1, 2016) remain in effect until July 1, 2017, or when

FDOT takes the position that al-

tion/flpub.shtm. **♦**

revised by the political subdivision to fully comply with the amended Chapter 333, whichever occurs first. FDOT is now drafting an analysis of the amended Chapter 333, Florida Statutes, and will post it to the Airport and Airspace Protection webpage as soon as possible (www.dot.state.fl.us/aviation/compland. shtm). A copy of House Bill 7061 is now posted to the Documents and Publications page at www.dot.state.fl.us/avia-

Greg Jones is Airspace and Land Use

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Spaceports Office. He can be reached

at (850) 414-4502 or Greg. Jones@dot.

state.fl.us.

Airport Zoning Regulation Changes in the Florida Statutes

Check our Airport and Airspace Protection webpage for updates

July 1, 2017."