

# Florida Flyer

[www.dot.state.fl.us/aviation](http://www.dot.state.fl.us/aviation)

Fall 2014

## INSIDE

3

### General Permit for Statewide Airport Stormwater Management

A multi-year study results in safety benefits, environmental protection, and cost savings

6

### 2014 Florida Aviation Awards

Ananth Prasad, P.E.,  
Secretary of the Florida  
Department of Transportation,  
and Aaron N. Smith, State  
Aviation Manager, announced  
the winners at the Florida  
Airports Council Conference

7

### Pavement Inspection and Repair Courses Offered in October

The courses and materials are  
free to all participants



Photograph by David King

*Aerial view of Clearwater Airpark, owned and managed by the city of Clearwater.*

## Clearwater Airpark

Clearwater Airpark, a thriving general aviation airport on Florida's west coast, is located on a 47-acre site within the city limits of Clearwater.

Several exotic destinations are just a short drive from the airport, including Caladesi Island, Honeymoon Island, Clearwater Beach, and the beaches of St. Petersburg. The airport is only minutes away from the spring training facilities for the Philadelphia Phillies and the Toronto Blue Jays.

Clearwater is known for its beaches and large fishing fleet, as well as extensive nature trails and parks. In 2013, Clearwater received USA Today's Best Beach Town Award. Visitors enjoy swimming, fishing, sailing, dolphin watching, and many other outdoor

activities. Major companies in Clearwater include Morton Plant Hospital, Tech Data Corporation (a distributor of information technology products and services), and Honeywell (space-related projects including sophisticated guidance navigation and control devices).

### Runway and facilities

Clearwater Airpark has one runway, 16/34, with an adjoining taxiway. Runway 34 has a right traffic pattern for noise abatement. The airport has a 2,114 square-foot general aviation terminal building along with 24 auto-parking positions to serve the building.

A maintenance facility/hangar is

**See Clearwater Airpark, page 4**

# MANAGER'S CORNER

I am pleased to announce the appointment of Greg Jones to the Airspace and Land Use Manager position within the Aviation and Spaceports Office (ASO).

In this new role, Greg will be managing the statewide Airspace Protection and Airport Compatible Land Use Programs, providing technical assistance to airports and local and county governments, and conducting airport inspections, while also serving as a technical advisor for disaster response and recovery operations.

Greg has been with FDOT since 1998 in the Office of the General Counsel serving as Special Counsel for Construction, Chief of Litigation, and Assistant General Counsel. Prior to joining FDOT, Greg served as a private attorney and an Aviation Officer in the U.S. Army. Greg received his Juris Doctor from the McGeorge School of Law in Sacramento, California, and is a graduate of the United States Military Academy. Greg is also a highly decorated combat veteran.

Please join me in welcoming Greg Jones to his new role within the Aviation and Spaceports Office.

## Florida Airports Council Annual Conference

The Florida Airports Council conference was held in Jacksonville this year, and I must say that our hosts at Jacksonville Aviation Authority did a fantastic job! The conference is a great place for the department to conduct business with all of our airport partners under one roof. I especially appreciate participating in the committee meetings. The committees cover a broad range of issues which impact Florida aviation each and every day.

The Federal Aviation Administration (FAA) was also well represented at the conference. It was good to see our counterparts from the Orlando Airports

District Office, Southern Region, and Washington, who really are there to help and guide us. In addition, we learned that Florida swept the FAA Southern Region awards. Lee County Port Authority received both the Commercial Service and General Aviation Airport Safety Awards, while Michael Handrahan from Zephyrhills Municipal Airport was awarded General Aviation Airport Manager of the Year, and Kent George with Fort Lauderdale-Hollywood International Airport was awarded Commercial Service Airport Manager of the Year. Congratulations to all for your deserving recognition!

## Strategic Airport Investment Projects

The 2014 Legislature created a provision in Chapter 332, Florida Statutes, for Strategic Airport Investment Projects. Pursuant to Section 332.007, F.S., FDOT may provide up to 100 percent funding for commercial and general aviation airport projects that meet the following criteria:

- Provide important access and on-airport capacity improvements;
- Provide capital improvements to strategically position the state to maximize opportunities in international trade, logistics, and the aviation industry;
- Achieve state goals of an integrated intermodal transportation system; and
- Demonstrate the feasibility and availability of matching funds through federal, local, or private partners.

I highly recommend that airports review the eligibility requirements at [www.dot.state.fl.us/aviation/flpub.shtm](http://www.dot.state.fl.us/aviation/flpub.shtm) before contacting your FDOT district office. Eligibility requirements include the following questions: Is the proposed project a top priority for the airport? Has



*Aaron N. Smith  
State Aviation Manager*

financial and economic analysis been completed? Does it support an increase in Florida jobs? Does it provide statewide or national impacts? Does it provide improved access for multi-modal connectivity for passengers or freight?

If you find yourself answering “yes” to these questions, then the project may very well be eligible under the new provisions.

## Automated Vehicles Summit

The Florida Institute of Consulting Engineers will be hosting an Automated Vehicles Summit December 15–16, 2014, in Orlando. Automated vehicles, whether on the roads or in the sky, are the future of transportation. The summit will update on the state of the industry and what Florida is doing to prepare for the revolutionary technology. Road and air vehicle demonstrations will be held at the Walt Disney World Speedway. For more information please see the summit website, [www.automatedfl.com](http://www.automatedfl.com).

## Recognition

I would like to recognize Fred Karga, Communications Manager, for assisting with the annual awards presentation. He does all the heavy lifting and pulls it all together. And, without his inspiration many of these manager corner articles would fall flat. Thank you, Fred! ♦



# General Permit for Statewide Airport Stormwater Management

by Abdul Hatim, Ph.D.

On October 1, 2013, Florida Administrative Code (FAC) 62-330.449, General Permit for Construction, Operation, Maintenance, Alteration, Abandonment or Removal of Airport Airside Stormwater Management Systems, became rule. This is the culmination of over a decade of data collection, model studies, and administrative negotiations aimed at improving airport safety, effectively managing stormwater quality and quantity, speeding permit times, and reducing construction costs. The new rule represents success on all fronts, and the results are being applied in other states and to other project types.

Under the leadership of the Florida Department of Transportation (FDOT) Aviation and Spaceports Office and with full support from the Federal Aviation Administration (FAA), a stakeholder group to address airport stormwater management in Florida was formed. The stakeholder group, in addition to FDOT and FAA, included the Florida Department of Environmental Protection (FDEP) and the five state Water Management Districts. The FDEP and Water Management Districts jointly work to protect Florida's water quality and to manage extremes of flood and drought through both regulation and physical works. Together, the state transportation and environmental agencies selected a consultant team to study the challenges facing the aviation community in managing stormwater runoff, collect the data, and suggest solutions meeting the requirements of aviation and environmental protection.

## The findings of the study

The multi-year data collection was conducted at a wide range of airports including large international facilities down to small general aviation airfields in order to be representative of all of Florida's 130 public-use airports. Findings include:

- Airside pavements—aprons,



Photograph by Aerial Innovations of Florida

*Above: Recently completed stormwater management system at Naples Municipal Airport.*  
*Right: The Naples stormwater system under construction.*



Courtesy of Naples Municipal Airport

taxiways and runways—have very good stormwater quality when compared to most land uses. In many cases, the water quality for nutrients of the direct pavement runoff is equal to or better than natural sites.

- Overland flow is generally effective in reducing pollutant loads for those constituents that must be kept at or below natural background to avoid adverse impacts. This avoids wet ponds that can attract birds and other wildlife hazardous to aircraft operations.
- Designs based on average annual conditions best manage runoff quality. Designs based on specific storms advised by FAA can reduce

costs and still provide flood protection for off-airport properties.

The General Permit from FDEP and the Water Management Districts authorizes those airport airside projects that can match nutrient loads from a natural vegetative community and that do not impact wetlands or cause offsite flooding. The permit is issued within 30 days of application and accelerates project schedules significantly which is crucial when working against accelerated schedules to obtain FAA funding. The new rule references the Statewide Airport Stormwater Best Management Practices (BMP) Manual that was prepared as part of the FDOT airport stormwater

**See General Permit, page 8**

# Clearwater Airpark

From page 1

located on the field, as well as 47 T-hangers, 40 covered hangers, and two corporate (multi-airplane) hangars. One full-service fixed base operator, Clearwater Airpark, Inc., serves the airport. Airport tenants provide services such as fuel, aircraft sales, flight instruction, aerial sightseeing, and aerial photography.

Approximately 15 percent of the airport's annual operations are related to sport aviation and recreational flying, and approximately 30 percent are related to flight training. The airport has one flight training school that employs 7 flight instructors and has 14 aircraft that are based at the airport. General aviation operations by corporate and business users are common, and several local companies use the airport's general aviation facilities.

Clearwater Airpark supports Weaver Industrial Park, located a half mile to the east, that houses approximately 100 businesses and is at full capacity.

## Recent improvements

Runway 16/34 was recently extended to 4,108 feet long. The airport also resurfaced, edged, and marked the entire runway and full-length parallel taxiway, and resealed the remaining ramp areas and hangar taxiway areas.

An AWOS III (automated weather observing system), installed earlier this year, was certified by the FAA in July. New airport equipment includes a Lektro electric aircraft tractor with a ground power unit (GPU) for safely and professionally towing aircraft, and a Dixie Chopper mower to assist in keeping the airpark grounds well maintained.

Another recent change is a new campus for the Civil Air Patrol and the Tampa Bay Veteran's Alliance. This professionally landscaped campus includes five modular buildings and a 4,500 square-foot drill pad.

Experimental Aircraft Association Chapter 282 is based at the airport, and the chapter schedules a Young Eagles Rally several times each year using airport facilities. The chapter is currently restoring and/or building two aircraft.



Corporate hangars at Clearwater Airpark.

Photograph by David King

## Airpark history

Prior to the mid-1930s, the Fugazzi family owned the original land, which was several hundred acres of palmetto brush, before it was turned into an airport. During a period from 1934 through 1936, the Fugazzi family gave portions of the land to the city of Clearwater. The airpark officially opened in 1939 as Clearwater Executive Airpark, catering primarily to transient aircraft. The airport was closed during World War II but reopened after the war, still carrying the airpark designation but serving a combination of transient and locally based aircraft. At that time, Clearwater Airpark was a three-runway grass facility on a 185-acre site.

The airport was operated as a public-use facility under an agreement signed in 1954 between the city of Clearwater and the Clearwater Flying Company, Inc. The area grew rapidly in the 1950s and 1960s with the development of residential areas and an industrial park.

Golf Park, Inc., purchased the lease agreement in 1970 and converted part of the original airport property into an executive golf course and multi-family dwellings, and reconstructed the airpark into most of what exists today. The three grass runways gave way to a single paved runway on a 62-acre site. By this time, the airpark was totally surrounded by industrial and residential development, and communication with neighbors

## Points of Interest

- Clearwater Airpark estimates 50,000 operations annually.
- Approximately 125 aircraft are based at the airport.
- Clearwater Airpark is the highest airport in Pinellas County at 71 feet above sea level.

became increasingly important.

In 1980, the city of Clearwater repurchased the lease for the airport portion of the property, and the city has owned the airport since that time. During this time, the airport has become an important link for Clearwater and the surrounding areas. Many businesses in the area rely on general aviation.

## Dedicated staff

Airport manager William "Bill" Morris, Clearwater's Director of Marine and Aviation Department, and his staff members are committed to carrying out the airport's mission. Gordon Wills, Operations Manager for Clearwater, handles much of the day-to-day operations at the airport. Gordon Wills' "ability to both rally other city departments, work with FDOT, and equally as important, address virtually all neighborhood concerns has been the backbone of our success," says Bill Morris.

Clearwater Airpark received the 2014 General Aviation Airport of the





*Left: New AWOS at Clearwater Airpark; Above: Maintenance hangar; Right: The back patio of the FBO building.*



Photographs by David King

## Economic Impact

The total annual economic impact of Clearwater Airpark follows:

- **Direct impacts: \$3,836,800**  
(from the tenants/businesses at the airport and construction projects undertaken by the airport or by on-site businesses)
- **Indirect impacts: \$843,700**  
(associated with spending from visitors who arrive in the area by way of general aviation aircraft)
- **Multiplier (additional) impacts: \$3,466,500**
- **Total economic activity: \$8,147,000**

*—from the Florida Statewide Aviation Economic Impact Study, March 2010*

Year Award at the Florida Airports Council conference, and the manager and staff were commended for their outstanding accomplishments.

For more information about Clearwater Airpark, see the airport's website at [www.clearwater-fl.com/gov/depts/marine\\_aviation](http://www.clearwater-fl.com/gov/depts/marine_aviation). ♦

## Clearwater Airpark's Accomplishments

"Being 'The Marine and Aviation Department' we run everything on the water and in the air in Clearwater (or at least answer for it), and if not for the great crew, two city resident staffed advisory boards, one Marine, one Aviation, we could not have accomplished all we have done over the past 15 years. Our airpark is financially out of the city's General Fund and with the help of FDOT, 'self supporting.'

"With our last set of projects completed at the airpark we are seeing an increase in traffic, both in number and in size with planes like the Pilatus that have always been able to land there now comfortable landing with the additional 610 feet on the north end of the runway. That improvement, along with a new electric tug for starting/running and/or moving the aircraft and being able to deliver both 100 LL and Jet-A to the plane or fuel at the tanks, has greatly enhanced our appeal to a broader audience as a safe and professional airfield. We continue to add to safety with the construction of our AWOS . . . We have seen an increase in fuel sales and the demand for hangar space.

"Lastly we helped the Civil Air Patrol and the local Veterans Alliance by expanding the CAP's resources from one 14-year-old trailer (already disheveled and military surplus when they received it) to four newer classroom trailers donated by St. Petersburg College. We assisted with allowing a fifth trailer and poured a 50-by-90 'drill field' with an offset flag pole to create a visible CAP compound for the ever-growing program/command, and concurrently provided our local community veterans a home with a physical address fully ADA compatible (all this is just outside the main gates so there is no increase in on-field vehicle or foot traffic). We have 24-hour FBO staffing or city police trained police aides."

—William D. Morris (CDR, USCG retired)  
Director of Marine and Aviation Department  
City of Clearwater

# 2014 Florida Aviation Awards

Ananth Prasad, P.E., Secretary of the Florida Department of Transportation, and Aaron N. Smith, State Aviation Manager, announced the winners of the 2014 Florida Aviation Awards at the Florida Airports Council Conference in August in Jacksonville.

## Aviation Professional

### Ted Soliday

Ted Soliday, Executive Director of the Naples Airport Authority, served as a helicopter pilot and air traffic controller in the U.S Marine Corps from 1966 to 1972. He has flown more than 700 combat missions and was decorated nine times.

Under Soliday's direction, the airport is financially self-supporting and debt-free. He continues to find ways to support tenants and users. To improve safety, the airport lengthened the main runway in 2011. In 2012, a campaign was launched to emphasize the airport's recommended aircraft curfew, preferred flight corridors, landing procedures, and quieter departure techniques.

Recently, he and his staff secured FAA and FDOT support for water-management system improvements and the extension of Taxiway A. The project will improve runoff and stormwater collection, water filtration, impurities removal, and distribution of clean water into nearby waterways.

## Distinguished Aviation Service

### Peter Horton

Peter Horton serves as Director of Airports for Key West International Airport in Monroe County, and will be retiring from the aviation world in a few months. Horton has been recognized for significant achievements in aviation several times by both the FAA and FDOT, and he has a continuing passion to enhance aviation safety and promote environmental awareness.

Horton also received a Prudential Davis Productivity Award for his work to improve runway safety areas.

Peter Horton has been proactive in



**Aviation Professional: Ted Soliday;** Sheila Dugan (center) accepted on Ted Soliday's behalf



**Distinguished Aviation Service: Peter Horton** (center)



**General Aviation Airport: Clearwater Airpark;** Gordon Wills (center), Operations Manager for the city of Clearwater



**Commercial Service Airport: Sarasota Bradenton International Airport;** Rick Piccolo (center), President, CEO of the Sarasota Manatee Airport Authority



**General Aviation Project: Kissimmee Gateway Airport;** Terry Lloyd (center), Director of Aviation



**Commercial Service Project: Southwest Florida International Airport;** Bob Ball (left), A.A.E., Executive Director, Lee County Port Authority

**Photographs, above:** The 2014 Florida Aviation Awards presentation; in most of the photographs, State Aviation Manager Aaron Smith is on the left and FDOT Secretary Ananth Prasad is on the right. Photographs by Steven Schultz, Jacksonville Aviation Authority

providing airport users with a safe airfield. He led the installation of a state-of-the-art EMAS bed for Runway 9. The airport is now preparing to install a second EMAS system for Runway 27.

He has guided the airport through

a series of changes to alleviate flooding threats. He will soon oversee construction of an emergency drainage system that will quickly remove stormwater from safety areas and prevent the backflow of sea water onto the airport.



## General Aviation Airport

### Clearwater Airpark

Established in 1939, Clearwater Airpark was one of the first flying fields on Florida's west coast. In 1980, the airpark came within one vote of closing forever. The airport had become the subject of neighborhood complaints and politics. It took the mayor to break a tie vote and save the airport, now surrounded by residential development.

The airport recently extended Runway 16/34 by 610 feet, which gave it an overall length of just over 4,000 feet. The entire runway and taxiway was leveled and resurfaced. The new runway provides a greater level of safety for both takeoffs and landings. A number of trees located on private property were trimmed or removed for better approach clearance. And, a lighted windsock was installed on the north end of the field.

The airport installed an AWOS III system this year. The FBO can now add information to the AWOS recording to provide better information to pilots.

Other improvements that were completed this year include a new campus for the Civil Air Patrol and the Tampa Bay Veterans Alliance. Also, the FBO building was completely refurbished.

We congratulate William Morris and the staff of Clearwater Airpark.

### Commercial Service Airport Sarasota Bradenton Int'l Airport

Sarasota Bradenton International Airport continually monitors the approach surfaces to each runway to improve and protect the airspace.

The airport is currently undergoing a major terminal building renovation.

This year the airport repainted the runway centerline, land and hold short line, and surface hold signs. The Airport Facilities Department established a crew that specifically works on airfield maintenance. The crew participates in the annual Part 139 training and continually strives to improve airfield safety.

A new taxiway connector to the primary runway allows aircraft to exit the runway at a higher speed than at existing connectors, thereby permitting other aircraft to land or depart sooner.

We congratulate Rick Piccolo and the staff of Sarasota Bradenton International Airport and the Sarasota Manatee

Airport Authority.

### General Aviation Airport Project

#### Flight Training Facility, Kissimmee Gateway Airport

Kissimmee Gateway Airport replaced an old flight school with a new larger building that will sustain the current volume of flight training with greater efficiency.

The project presented several challenges that were overcome with good planning and resourcefulness. The project was managed with attention to budget, while utilizing low-e transmission glass and installing a state-of-the-art Daikin VRF HVAC system. The project included both public and private financing, and came in under budget.

The new SunState Aviation Flight School building includes a café, pilot store, FAA testing center, training rooms, aircraft hangar, administrative offices, and a simulator room.

We congratulate Terry Lloyd of Kissimmee Gateway Airport; AVCON, Inc.; MLM Martin Architects, Inc.; and Britt Construction, Inc.

### Commercial Service Airport Project

#### Apron Expansion, Southwest Florida International Airport

Southwest Florida International Airport began the apron expansion project in 2009 and completed it in March of this year.

This project consists of the construction of 185,000 square yards of bituminous aircraft apron and taxiway pavement, stormwater drainage, airfield lighting, signage, and reshaping/reinforcing existing stormwater drainage conveyances and detention pond slopes.

The ditch enhancements address the wildlife hazard attractants along the runway and taxiway. The slope enhancements on the 140-acre lake reduce hazardous wildlife attractants, improve drainage, and ensure stormwater management will function as intended.

We congratulate Robert Ball and the staff of Southwest Florida International Airport and the Lee County Port Authority; AECOM Technical Services, Inc.; and Manhattan Construction (Florida), Inc. ♦

## Pavement Inspection and Repair Courses Offered in October

The FDOT Aviation and Spaceports Office will be offering airport pavement inspection training and airfield distress repair training on October 6–9, 2014.

The courses and materials are free to all participants. If you have questions about the training, please contact Abdul Hatim, Ph.D., Aviation Engineering Manager, at (850) 414-4504 or Abdul.Hatim@dot.state.fl.us. ♦

## Calendar

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

### October 30, 2014

CFASPP Statewide Steering Committee Meeting, Tampa International Airport, HCAA Board Room. For more information, see [www.cfaspp.com](http://www.cfaspp.com).

### November 19–21, 2014

2014 FAC Specialty Conference in Lake Buena Vista. For more information, see [www.floridaairports.org](http://www.floridaairports.org) or call the Florida Airports Council at (850) 224-2964.

### April 21–26, 2015

SUN 'n FUN International Fly-In & Expo, Lakeland Linder Regional Airport (LAL). For more information, see [www.sun-n-fun.org](http://www.sun-n-fun.org) or call SUN 'n FUN at (863) 644-2431.

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

# General Permit for Statewide Airport Stormwater Management

From page 3

initiative. The BMP Manual provides the “how to” information to evaluate and design systems that meet the project mission of “Clean Water – Safe Airports.” The BMP Manual will continue to be updated as engineering advances support improved design methods.

## Cost savings

While the up-front engineering costs are increased due to added testing and analysis, the construction savings far exceed those engineering costs. This is supported by airport projects that were constructed using the method prescribed in the airport stormwater initiative, but permitted under the slower and more elaborate Individual Permit process. Costs for engineering for ten projects at three airports were about \$500,000 more expensive than standard designs. Construction cost savings for those same projects were about \$4.5 million compared to standard design costs. Savings came from smaller culverts, no ponds, and no underdrain

systems. These savings represent a 20 to 30 percent cost reduction on all new airport pavement projects which could amount to \$10–\$20 million per year over the next 10 years.

The General Permit is a major step forward based on data and engineering. However, it does not apply to all airside projects or to non-airside projects at airports. There are projects and airports that cannot use the permit directly due to geology or pre-existing drainage conditions, and that may require wet ponds for quality or flood management. The FDOT, FAA, FDEP, and Water Management Districts are addressing these situations with a full-scale, pilot study of a wet pond with special design features resulting from this airport stormwater study conducted at Naples Municipal Airport (see photographs, page 3). Construction of the pond was completed in June 2014. Post-construction monitoring of water quality and wildlife started in July 2014 and is expected to be completed by December 2015. These features

are intended to minimize wildlife attraction while meeting the requirements for water management in a reduced area. If the full-scale tests match predictions from computer simulations and physical scale models, these design features will become a part of the General Permit in the future.

## Many benefits

The public is the beneficiary of the safety, environmental protection, and overall cost savings this airport stormwater initiative has produced. Air travel safety is enhanced without compromising water quality or flood protection. This project highlights the effectiveness of inter-agency focus on the common good of citizens of Florida. ♦

*For more information about stormwater management, contact Abdul Hatim, Ph.D., Aviation Engineering Manager for the FDOT Aviation and Spaceports Office, at (850) 414-4504 or Abdul.Hatim@dot.state.fl.us.*

Recycled paper



Printed on

**Florida Flyer**  
Florida Department of Transportation  
605 Suwannee Street, MS-46  
Tallahassee, FL 32399-0450



The *Florida Flyer* is a non-profit newsletter published quarterly by the Aviation and Spaceports Office of the Florida Department of Transportation. To subscribe to the *Florida Flyer*, contact Fred Karuga, Editor, FDOT Aviation and Spaceports Office, 605 Suwannee Street, MS-46, Tallahassee, Florida 32399-0450, phone (850) 414-4512, fax (850) 414-4508, email Fred.Karuga@dot.state.fl.us. Visit our website at [www.dot.state.fl.us/aviation](http://www.dot.state.fl.us/aviation).

