

Airport

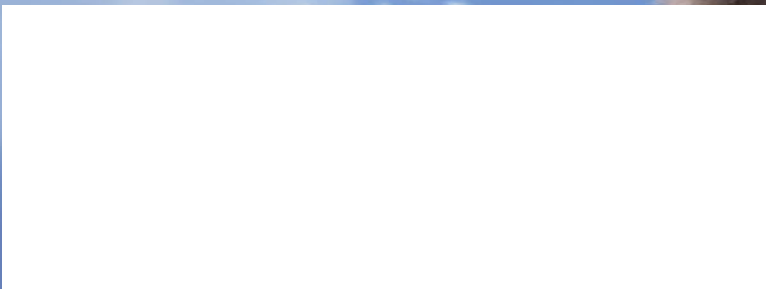
M A G A Z I N E

www.aaae.org/magazine | June/July 2007

Wildlife Management

vegetation management
ramp security

US
rf



Burns
pickup from
Annual 07
Cover 4
Full Bleed

Analogic

FPO

to be placed by

GOOD

features



27

cover: Wildlife Management

(1 of 2) Man Vs. Nature | 27

Airports are constantly fighting a high-stakes battle against mother nature's creatures.



30

(2 of 2) Striking Developments | 30

Increased reporting and better technology are giving industry unparalleled intelligence on bird strike trends.



43

Court Case

Case Closed | 24

In "City of Dania Beach, Florida, et al. v. Federal Aviation Administration," the court holds FAA must follow its own runway use procedures.

Ramp Security

Ramp Clampdown | 43

Awareness and adherence to policy may help the industry avoid 100-percent employee physical screening.

Baggage Handling

First Person: Catherine Mayer | 48

SITA VP – Airport Services Catherine Mayer talks baggage handling technology with Airport Magazine.

departments

Inner Marker	6
Up Front	9
Market Scan	21
Corporate Outlook	23
Retail Spotlight	37
Measure of the Month	39
Airport Spotlight	40
General Aviation	51
Airport Tech	52
Billboard	54
Plane Sight	58

coming in *Airport Magazine*

International security developments (August/September)

Biometric security at airports (December/January 2008)

Architecture/engineering/construction (December/January 2008)

Cover Design: Katy O'Donovan-Peterson

EDITORIAL BOARD

- WILLIAM G. BARKHAUER
Morristown, New Jersey
- BRYAN ELLIOTT
Charlottesville, Virginia
- BILL HOGAN
Reynolds, Smith, & Hills
- JAMES E. JOHNSON
Odessa, Florida
- RANDY D. POPE
Burns & McDonnell

AAAAE BOARD OF DIRECTORS

- CHAIR**
KRYST T. BART, Reno, Nevada
- FIRST VICE CHAIR**
JAMES P. ELWOOD, Aspen, Colorado
- SECOND VICE CHAIR**
JOHN K. DUVAL, Boston, Massachusetts
- SECRETARY/TREASURER**
JAMES E. BENNETT, Washington, D.C.
- FIRST PAST CHAIR**
ELAINE ROBERTS, Columbus, Ohio
- SECOND PAST CHAIR**
R. LOWELL PRATTE, Louisville, Kentucky

BOARD OF DIRECTORS

- STEPHEN J. ADAMS, JR., *Manchester, New Hampshire*
- LORI L. BECKMAN, *Denver, Colorado*
- JEFF BILYEU, *Conroe, Texas*
- GARY CYR, *Springfield, Missouri*
- BENJAMIN R. DECOSTA, *Atlanta, Georgia*
- KEVIN A. DILLON, *Manchester, New Hampshire*
- ROD DINGER, *Redding, California*
- LINDA G. FRANKL, *Columbus, Ohio*
- MICHAEL J. HANEY, *Moline, Illinois*
- GARY L. JOHNSON, *Stillwater, Oklahoma*
- ALEX M. KASHANI, *Washington, D.C.*
- SCOTT MALTA, *Atwater, California*
- JEFFREY MULDER, *Tulsa, Oklahoma*
- ROBERT P. OLISLAGERS, *Englewood, Colorado*
- LISA A. PYLES, *Addison, Texas*
- WAYNE SHANK, *Norfolk, Virginia*

CHAPTER PRESIDENTS

- LEW BLEIWEIS, *Louisville, Kentucky*
- BERN CASE, *Medford, Oregon*
- GARY JOHNSON, *Stillwater, Oklahoma*
- BRADLEY PENROD, *Pittsburgh, Pennsylvania*
- GARY RICE, *Santa Maria, California*
- ROBERT WORKING, *Evansville, Indiana*

POLICY REVIEW COMMITTEE

- WILLIAM G. BARKHAUER, *Morristown, New Jersey*
- THELLA F. BOWENS, *San Diego, California*
- MARK P. BREWER, *Warwick, Rhode Island*
- TIMOTHY L. CAMPBELL, *Baltimore, Maryland*
- CHERYL COHEN-VADER, *Denver International Airport*
- LARRY D. COX, *Memphis, Tennessee*
- ALFONSO DENSON, *Birmingham, Alabama*
- KENT G. GEORGE, *Pittsburgh, Pennsylvania*
- MICHAEL A. GOBB, *Lexington, Kentucky*
- SEAN HUNTER, *New Orleans, Louisiana*
- CHARLES J. ISDELL, *Philadelphia, Pennsylvania*
- THOMAS J. KINTON, JR., *Boston, Massachusetts*
- MARK KRANENBURG, *Oklahoma City, Oklahoma*
- LYNN F. KUSY, *Mesa, Arizona*
- ERIN M. O'DONNELL, *Chicago, Illinois*
- MORTON V. PLUMB, *Anchorage, Alaska*
- MARK M. REIS, *Seattle, Washington*
- MAUREEN RILEY, *Salt Lake City, Utah*
- LESTER W. ROBINSON, *Detroit, Michigan*
- JAMES R. SMITH, *Newport News, Virginia*
- RICKY SMITH, *Cleveland, Ohio*
- MARK WEBB, *San Antonio, TX*

PRESIDENT

CHARLES M. BARCLAY, *Alexandria, Virginia*

Who is improving efficiency and security at airports all across the US? We are.



Innovations from Siemens can be found everywhere. We provide US airports with solutions that strengthen passenger security, safety and comfort. As the largest manufacturer of baggage handling systems, we maintain passenger and baggage screening equipment at virtually all US commercial airports. More than half of the nation's busiest airports rely on our lighting control systems. And we deliver 100% in-line security screening systems. From check-in through takeoff to landing, our innovations help turn dreams into reality.

Discover innovation without limits.

automation & control • building technologies • energy & power • financial services • hearing solutions
industrial solutions • information & communication • lighting • medical solutions • transportation • water technologies

usa.siemens.com

SIEMENS

Solving The Recruitment Riddle



This issue's Inner Marker features an interesting letter from a reader who would like nothing more than to do what many of you do: work at an airport. Read on:

Dear Mr. Broderick,

For the past 15 years, I have constantly heard that there is a great need for airport managers. That debate has always left me scratching my head wondering how that could be true. First, let me tell you about myself.

I decided at the age of 24 that I wanted to manage airports. I sold my home and moved to Florida to attend Florida Institute of Technology. Four years later, I graduated with honors and a degree in aviation management. I cannot explain the excitement, as I started to make contacts and realize that I may soon reach my goal. Besides the standard excuses of hiring freezes, I could not find a job. After spending four years and fifty grand on this education, I was no better off and even had one manager tell me he just started his career by picking up trash at the airport he now managed. That made me feel an education in aviation was worthless.

Fifteen years later, I still have never had the chance to do what I always wanted. Since then, I have earned a masters' degree in logistics and work at a large corporation in the logistics division, but I still want to work in aviation. I would move to any airport in the Southeastern U.S. to get a chance, but now being over 40 makes it even tougher to get looked at for positions. I must have sent 400 resumes and I have never gotten anywhere with this profession. My question is with the advanced ages of many of the airport managers, where will all the replacements come from for these positions?

It is still my hope to work in operations at an airport somewhere in the Southeast. I love aviation and want to be involved with it in some way. So, the next time someone says there is a shortage of trained aviation professionals, please let them


know that we are out here waiting for someone to give us a chance.

Regards,

*Glenn P. Clinger III
Easley, S.C.*

First, a few thoughts on Mr. Clinger's letter. While I'm not about to challenge the value of an aviation management education, I'm fairly confident in saying that one of the best ways to rise through the ranks is to start out an airport "picking up trash." Thanks to efforts like AAAE's Accreditation and ACE programs, airport employees at all levels have ample opportunities to further their educations without relying on an aviation management degree. This is one effective way to feed the pipeline, ensuring that airport managers of today will be succeeded by capable managers tomorrow.

Of course, none of this helps aspiring airport workers, like Mr. Clinger, who can't catch the break they need to get into the business. AAAE offers AirportJobsOnline.com for both recruiters and aspiring job-seekers, but some airports report challenges finding candidates—or the right candidates, at least—for myriad jobs. (One airport even commissioned our ANTN multimedia division to produce a recruitment video.)

Does your airport have problems filling slots? Are you getting sufficient applications from qualified candidates when you post job vacancies? If your answers are "no" and "yes," respectively, please consider sharing the secrets to your success with me—and we will consider sharing them, via these pages, with others who may not be so well off. 

Sean Broderick
Editor
sean.broderick@aaae.org

EDITOR

SEAN BRODERICK
sean.broderick@aaaee.org

PUBLISHER

JOAN LOWDEN

EXECUTIVE EDITOR

ELLEN P. HORTON

DEPUTY EDITOR

BARBARA COOK

ASSISTANT EDITOR

MELISSA BABULA

NEWS EDITOR

HOLLY ACKERMAN

ART DIRECTOR

DARYL HUMPHREY

CONTRIBUTORS

BRODERICK GRADY

JEFF PRICE

NINA RAO

CLIF STROUD

STAFF PHOTOGRAPHER

JAMES MARTIN

STAFF VICE PRESIDENT

SALES AND MARKETING

SUSAN LAUSCH

susan.lausch@aaaee.org

DIRECTOR

SALES AND MARKETING

MIKE CANDELA

mike.candela@aaaee.org

EDITORIAL OFFICE

601 Madison Street, Suite 400

Alexandria, VA 22314

(703) 824-0500, Ext. 126

Fax: (703) 820-1395

Internet Address: www.aaaee.org/magazine

Send editorial materials/press releases to:

magazine@aaaee.org

REPRINT INFORMATION

THE REPRINT DEPARTMENT

(717) 481-8500

Airport Magazine is published bimonthly by the AAAE Service Corporation Inc., a wholly owned subsidiary of the American Association of Airport Executives, and the Airport Research and Development Foundation.

Subscription price for AAAE members is included in the annual dues. U.S. subscription rate to non-members is \$45 for one year. International rate for non-members is \$75. Single copy price is \$10.

Copyright 2007 by AAAE.

All rights reserved.

Statements of fact and opinion are the responsibility of the authors and do not necessarily reflect the views of AAAE or any of its members or officers.

POSTMASTER

Send address changes to:

Airport Magazine

601 Madison Street, Suite 400

Alexandria, VA 22314

NAC



2007 F. RUSSELL HOYT
NATIONAL AIRPORTS CONFERENCE
PREPARING TODAY FOR TOMORROW'S SUCCESS
HOSTED BY TUCSON INTERNATIONAL AIRPORT

SEPTEMBER 9-11, 2007
LOEWS VENTANA
CANYON RESORT
TUCSON, ARIZONA

WWW.AAAE.ORG/MEETINGS
REGISTER ONLINE TODAY!

CONTACT THE AAAE MEETINGS DEPARTMENT AT
(703) 824-0504 OR E-MAIL AAAEMEETINGS@AAAEE.ORG

Reveal
pickup from
Annual 07
pg 12

Skybus CEO Speaks

Airports must find ways to reduce costs if they want to attract new low-fare air service and boost passenger growth. That was the message from Skybus CEO Bill Diffenderffer in a keynote speech during the 79th Annual AAAE Conference and Exposition in Washington, D.C., in early June.

He said lower costs allow airlines to lower their fares, and when fares go down, passenger traffic increases disproportionately. “When an airline can get its average one-way fares below \$100, to \$60 or \$70 fares, demand starts going off the chart.”

He said the industry needs airports that will work with an airline like Skybus and deliver a facility where

planes can get “down and in and out” in 25 minutes. He added that long taxi times are a definite deterrent. Also needed are airports that aren’t caught up in capacity issues where airlines are forced to “fly around in circles instead of a straight line.”

Addressing Skybus’ business model, Diffenderffer said that when he took the helm of the fledgling carrier in June 2001, he was given six months to raise \$80 million. He said they succeeded on the basis of “some dramatic promises.”

Diffenderffer explained, “We promised that we’d be able to have a cost structure that was, at the time, 40 percent below Southwest’s numbers. That was the big promise. We promised that we could go from zero rev-

enue to \$1 billion in revenue inside of five years. Not very many companies do that. We promised we would be able to do a \$1 billion IPO within three years. And we promised that we’d be able to deliver superior customer service with all of that. The basic model was Ryanair meets Southwest meets technology.”

He explained that Skybus’ idea of customer service hinges on giving customers the things they want.

“Price and schedule are hugely important, but customers care about three other things as well. They care about on-time performance. They care about their bag arriving with them when they arrive. And they care, for reasons not entirely clear, about a smile. Skybus is going to try



Mike Gobb, A.A.E., executive director for Lexington (Ky.) Blue Grass Airport, along with wife Kristina and 9-year-old daughter Kirsten, welcome Queen Elizabeth II and husband Prince Philip to Lexington during their recent trip to the U.S.

BLUE GRASS AIRPORT

and do those things better than anyone in the United States.”

He said the carrier would deliver price at “unbelievable levels,” with every flight having 10 seats available for \$10 one way and other one-way fares below \$100, and would deliver on schedule with nonstop service between cities that for the most part don’t have it.

“And we’re trying and do it on time because it’s a very simple operation,” Diffenderffer said. “We use airports like Port Columbus, like Bellingham [Wash.], where it’s easy to get in and out, where you can do 25 minute turns, where you have utilization capability of up to 15 hours a day for your airplanes. Airplanes should be flying you more than they’re driving you, or more than they’re being used as something to stand at a jetway. If the airplane’s not up in the air flying in a straight line, it’s not making you any money. It’s costing you vast amounts of money.”

He also praised Elaine Roberts, A.A.E., CEO of the Columbus Regional Airport Authority, for her help in getting Skybus off the ground.

“We had the great good luck of having an Elaine Roberts, somebody who truly understood that there was a need—an opportunity to do something different,” Diffenderffer said. “She saw a business model, rough as it was, and said ‘I am going to help back this.’ She brought it to the mayor, the mayor brought to the business communities. This was the early foundation of Skybus, and it was not done, really, by the airline.

“It was done by the leader of an airport, who saw the fact that they had capacity to do much more,” he continued. “She saw that the fares were incredibly high. She saw that most of the planes going in and out were RJs and most of her flights were actually connections to somewhere. Not nearly enough nonstops. This is what she saw. This is what she did: she helped drive this forward. And,” he told delegates, “what’s so important about this is you all have this within you.”

Diffenderffer noted that Skybus

won’t be able to serve some markets due to costs or distance from the end destination. For example, he said they could not serve New York City through LaGuardia, Kennedy or Newark due to costs and the inability to turn aircraft in 25 minutes. He said Skybus does like Stewart International Airport in Newburgh, but said the facility, at about two hours from the city, is probably too far away to be practical.

Asked how Skybus would deal with inconveniences stemming from a “thin” schedule, such as the inability to arrive and depart a city on the same day, Diffenderffer said these would be addressed by adding planes. However, he noted the carrier would work on schedule diversity first, and schedule density next. He explained that the passengers Skybus is wooing aren’t as “schedule-sensitive.”

In response to a question about the effect the new service is having on visitor levels in Columbus, Diffenderffer said they have been astounded by the statistics. They anticipated that 90 percent of traffic would originate in Columbus; however, figures show 75 percent of the carrier’s passengers actually originate elsewhere, with Columbus as their final destination.

Diffenderffer also told delegates that Skybus might consider adding international service in the future, though that would not include trans-Atlantic or trans-Pacific flights. The carrier would be more interested in destinations in the Caribbean and other relatively close vacation destinations.

Diffenderffer concluded by predicting a very different airline environment 10 years down the road, “if Skybus is successful.”

Virgin America Cleared To Fly

DOT on May 18 granted Virgin America Airlines rights to begin operating as a U.S. carrier, after the company modified its ownership and

management structure to meet U.S. citizenship tests as outlined under federal law.

Virgin America substantially revised its application after DOT last year issued an initial tentative decision that found that the company failed the citizenship test on a number of grounds.

The company agreed to remove the Virgin Group’s veto power over certain contracts and expenditures, amend the company’s loan agreements with the Virgin Group, limit the tenure of its current chief executive officer, restructure its board of directors to reduce the number of foreign representatives, and revise its trademark license to ensure the U.S. carrier can operate independently of U.K.-based Virgin Atlantic. Further, Virgin America agreed to provide advance notice to DOT if the company should receive additional financing from non-U.S. investors.

Fred Reid, the carrier’s current CEO, will be required to relinquish his post within six months under terms of DOT’s decision. Under the Federal Aviation Act, to be licensed as a U.S. airline a company must show that it is actually controlled by U.S. citizens, that the president and two-thirds of the board of directors are U.S. citizens, and that at least 75 percent of the voting interest is owned and controlled by U.S. citizens.

“It’s tough to think of a company that has done as much to meet our standards for becoming a commercial airline,” said DOT Secretary Mary Peters. “Anyone who has doubts about the future of commercial aviation in this country should take a close look at one company’s efforts to compete.”

Virgin America greeted the success of its long-fought struggle to gain U.S. rights with the announcement: “Pop the bubbly. We’ve been approved.”

The company is planning a mid-summer launch, with the first flights from its home base in San Francisco to New York Kennedy International. The airline also plans to serve Los Angeles International, Washington Dulles International, San Diego International and McCarran Las

Gina Marie Lindsey was named executive director of **Los Angeles World Airports**. ... **Danny Murphy** was named aviation director for the city of Phoenix, overseeing **Phoenix Sky Harbor International** and general aviation airports **Phoenix Deer Valley** and **Phoenix Goodyear**. Murphy had served as acting aviation director since June 2006. ... **Sean Hunter** was named director of aviation for **Louis Armstrong New Orleans International Airport**. Hunter had been serving interim director since May 2006. ... **Richard Hrabko, A.A.E.**, was appointed director of **Lambert-St. Louis International**. ... **Kevin Dillon, A.A.E.**, former director of Manchester-Boston Regional Airport, was named deputy executive director of **Orlando International**. ... **Robert Gluck** has been appointed airport manager at **LA/Palmdale Regional Airport**. ... The **Salina (Kan.) Airport Authority** named **David "Gunner" Wiles** as manager of operations. ... **Ellen Lindblad** joined the **Lee County Port Authority** as senior manager of planning and environmental compliance. ... **Max Fajardo** is the new deputy director of operations and maintenance for **Miami-Dade Aviation Department**. ... **AECOM Technology Corp.** announced that **Norman Y. Mineta**, former DOT secretary, has joined its board of directors as an independent director. AECOM Technology Corp. is the parent company of **DMJM Aviation** and **DMJM Harris**, among others. ... **Kevin Dolliole, A.A.E.**, currently senior vice president of the Airport Services Group for San Antonio-based **UCG Associates**, was elected to **W.D. Schock Company's** Board of Directors. ... **SSP** announced the appointment of **Les Cappetta** as CEO of its U.S. division **Creative Host Services**.

Tech Briefs are on page 54.



Detroit's new \$426 million, 26-gate terminal is scheduled to open in 2008 and replace the L.C. Smith and Berry terminals.



Vegas International within its first year of operations.

The airline announced it will serve as many as 10 cities within a year of operation and up to 30 cities within five years of service. Additional cities under Virgin America's consideration include: Atlanta, Austin, Baltimore, Boston, Charlotte, Chicago, Cincinnati, Cleveland, Dallas, Denver, Detroit, Fort Lauderdale, Fort Myers, Hartford, Houston, Indianapolis, Jacksonville, Kansas City, Miami, Milwaukee, Minneapolis, Nashville, Newark, New Orleans, Orlando, Philadelphia, Phoenix, Pittsburgh, Providence, Portland, Ore., Raleigh-Durham, Sacramento, Salt Lake City, San Antonio, San Jose, Calif., Sarasota, Seattle, St. Louis, Tampa and West Palm Beach.

Detroit Topping Off Terminal

Detroit Metro recently celebrated a milestone in its North Terminal Redevelopment Project with the top-

ping off of the new, 26-gate terminal that will open in 2008 and replace the L.C. Smith and Berry Terminals, which will be decommissioned.

The tradition of topping-off ceremonies dates back to a centuries-old tradition and signifies the completion of the terminal's framework. Over the next several months, the project team will focus on completing the exterior walls of the facility and then begin building out the terminal's interior.

When it opens, the \$426 million terminal will house Air Canada, American, AirTran, British Airways, Frontier, Lufthansa, Royal Jordanian, Southwest, Spirit, United, US Airways, and USA 3000, as well as non-scheduled airlines. Northwest and its SkyTeam partners, Northwest Airlin, Air France, Continental and Delta will remain in the McNamara Terminal.

The new North Terminal, together with the McNamara Terminal, which opened in 2002, will provide Metro with nearly 150 gates and two modern Federal Inspection Services facilities for international travelers.

“The North Terminal will primarily serve local travelers—those beginning or ending their trip at Detroit—who will now enjoy the same world-class facilities that our connecting passengers already do at the McNamara Terminal,” stated airport authority CEO Lester Robinson.

The progress of the North Terminal’s construction can be tracked at www.metroairport.com/project/.

New Blue Grass Concourse

Lexington, Kentucky’s Blue Grass Airport has opened the new Concourse B addition. The \$16.9 million project includes six passenger boarding gates, additional restroom facilities, and space for a new retail

outlet that will open in the fall 2007.

“Blue Grass Airport previously had nine boarding gates and 14 aircraft trying to use those gates each morning. This concourse addition will allow airlines to operate more efficiently today and allow us to accommodate new growth in the future,” said Michael Gobb, A.A.E., the airport’s executive director. “The new gates and loading bridges will add much needed seating and services for our passengers—especially during peak travel hours.”

The airport next will begin renovating the existing portion of Concourse B and the main corridor that connects its two upstairs concourses. The interior furnishings and decor will be upgraded to match the appearance of the new addition and the newly renovated Concourse C.

RJs At DEN

United Express carriers in late April began using Denver International Airport’s new regional jet facility at the east end of Concourse B.

United leased the 16-gate facility, which has 13 loading bridges designed to accommodate 50- and 70-seat regional jet aircraft, includes hold-room seating for passengers, restrooms and several concessions that are new to the airport. The new concessions are Connections Newsstand, Heidi’s Brooklyn Deli, New Belgium Brewing Co. and Starbucks.

United Express flights from Denver International serve eight Colorado cities, including Steamboat Springs, Durango, Grand Junction and Montrose.

Denver International built the RJ facility as part of an agreement under which United will consolidate all of its operations on Concourse B. Five Concourse A gates previously used by United’s Ted subsidiary are now available for expansion of Concourse A airlines.

KCI Opens Rental Car Facility

Kansas City International Airport in early May celebrated the opening of its new \$90 million rental car facility.

The 135,000-square-foot, two-level building is at the center of a 72-acre site that formerly was a satellite parking lot. Ten rental car agencies are consolidated into the new building: Advantage, Alamo, Avis, Budget, Dollar, Fox, Enterprise, Hertz, National and Thrifty.

The facility has an overall capacity for 8,000 cars. Each car rental company has its own dedicated section in the parking lot, as well as its own on-site service center for vehicle fueling, washing and maintenance and repairs.

A common shuttle service transports passengers from all three terminals to the rental car facility, minimizing congestion through the termi-



MICHAEL SPILLERS

Kansas City International's new \$90 million, 135,000-square-foot rental car facility consolidated 10 agencies into one building. Features include vehicle washing and fueling facilities, and space for 8,000 cars.



Hartsfield-Jackson Atlanta International Airport has placed into service a second group of five Oshkosh Striker aircraft rescue and firefighting vehicles. The airport now operates a total of 10 Striker vehicles. All are 6x6 all-wheel drive, and are equipped with a 3,000-gallon water tank, roof turret, high volume-low attack bumper turret, 500-pound dry chemical fire suppression system and rear vision cameras, among other features. Two of the units are equipped with Snozzle 50-foot high-reach extendable turrets.

nal drives and reducing the environmental impact of separate bus lines for each rental car company. At the new facility, plasma screen monitors in the upper level atrium and on the lower by the plaza provide travelers with up-to-the-minute flight information.

KCI in late 2004 completed the total renovation of its three terminals, and now offers 50 percent more restaurant and retail space, restroom facilities and concessions inside the gates and free wireless Internet.

Boston's Hybrids

The Massachusetts Port Authority (Massport) and the city of Boston jointly announced the launch of a two-pronged incentive program that promotes the use of clean-fuel vehicles.

Massport officials unveiled a plan to encourage Boston Logan International passengers and Boston taxis to drive to the airport in hybrid,

alternative-fuel and alternative-powered vehicles. Boston Mayor Thomas Menino announced a new \$25,000 grant to encourage the purchase of CleanAir cabs.

For those who choose to drive to the airport, Massport is offering a preferred parking program to customers driving hybrid and alternative-fuel vehicles at the airport's Central garage, Terminal B garage, Terminal E surface lot and economy parking. In total, more than 100 parking spaces at Logan will be dedicated to clean-fuel vehicles. Signage and green painted parking stalls will mark the spaces. Eligibility for the parking program is determined by the federal Clean Fleet Guide that currently lists vehicles using CNG, hybrid electric, hydrogen fuel cell, and ethanol 85 power sources.

In addition, Logan International is offering head-of-line privileges at the airport's taxi pool for Boston cabs that

qualify as a clean-fuel vehicle.

"We take our commitment to operate our facilities in an environmentally sound manner very seriously," said Massport CEO and Executive Director Thomas Kinton Jr. "I'm pleased to join Mayor Menino in the CleanAir Cabs program and happy to extend his plan one step further to promote clean fuel vehicles with our airport customers. Working with the mayor, we now have the first comprehensive incentive program in Massachusetts promoting hybrid and alternative-fuel vehicles."

Vision 100 PFC Changes Official

FAA on May 23 issued a final rule making official changes incorporated in the "Vision 100 – Century of Aviation Reauthorization Act," including several that affect the passenger facility charge program. The




IET Granted Canadian Patent

AAAE's Interactive Employee Training (IET) system has received a patent from the Canadian government, representing the second time the system has been recognized for its unique combination of computer and interactive video technology.

The IET system won a U.S. patent in 2003, protecting the technology the association developed and incorporated into the system.

The IET system is used for the training of airport employees, including airlines, tenants and contractors.

"IETs have proven to be a highly successful business designed around a need our members pointed out back when computers and video were just beginning to merge," commented AAAE President Charles Barclay. "Our talented staff of 'inventors' took that need and developed a unique solution that has now received its second patent and become one of the most widely used training platforms in aviation, considering that over 700,000 individuals have been trained, tested and results recorded on IETs. The IET patents help ensure that this valuable business asset of AAAE will continue to benefit the members of the association for years to come."

The IET system is eligible for both AIP and PFC funding. The first IET system was delivered to Reagan Washington National Airport in December 2000, and since then 59 IET systems have been ordered and more than 400 training more workstations deployed. 

final rule adds more eligible uses of revenue, protects PFC revenue in air carrier bankruptcy proceedings, and clarifies use of PFC revenue for debt servicing.

Vision 100 mandated the FAA to make several changes to the PFC program. Among them:

- Making low-emission airport vehicles and ground support equipment eligible for PFC funding.
- Using PFCs to pay debt service on projects that are "not an eligible airport-related project" when there is a

financial need at the airport.

- Clarifying the PFC status of military charters.
- Structuring PFC account requirements for air carriers in bankruptcy.
- Making eligible the use of PFC revenue as the local share for projects under the air traffic modernization cost-sharing program.

In addition, the final rule incorporates changes to streamline the PFC program, including the use of electronic filing of notices and reports; a periodic review and change of the

carrier compensation level for PFC collection; and, modifying the content and due date for some public agency reports and notices.

Parking Innovations

New parking innovations are on tap or in place at two Midwestern airports.

Detroit Metropolitan Wayne County Airport said it will install new state-of-the-art equipment and technology at its on-airport parking facilities. The new technology, called 1-2-3 Park – Credit Card In/Credit Card Out, will allow on-airport parkers to use their credit or debit card to enter and exit the airport's onsite parking facilities without the need to pull a ticket.

Using the new system, customers enter by inserting a credit/debit card into the automated 1-2-3 Park entry device. When the customer returns, he or she inserts the same credit/debit card into a 1-2-3 Park exit device, which then calculates the correct charges, bills the customer's card and prints a receipt.

Metro Airport began phasing in the new 1-2-3 Park system this spring in the Green and Yellow lots. The project will be completed by the end of the summer, when the McNamara Terminal garage incorporates the new technology.

Separately, patrons of Minneapolis-St. Paul International can obtain real-time parking availability information prior to arriving at the airport, thanks to a new system called SurePark.

To obtain parking information at both the Lindbergh and Humphrey terminals general and short-term parking lots, customers can log on to www.mspairport.com/msp/parking/realtime.aspx to view parking availability percentages; call 1-877-FLY-PARK for an audible message, or call 1-877-FLY-PARK from a text-enabled communications device and press five to request a text message be sent within a user-specified number of minutes.

Parking rates and facility information also are available online and

Qinetiq
pickup from
Annual 07
pg 41
full bleed

SHARM EL-SHEIKH INTERNATIONAL AIRPORT



The new two-level, 43,000-square-meter Sharm El-Sheikh International Airport terminal features 40 check-in counters and one domestic and six international gates. The building's architectural design marries two circular-shaped halls to a central hub that serves as the passenger transit area.

audibly through the FLY-PARK number.

New Terminal On Sinai Peninsula

Sharm El-Sheikh International Airport, which serves Egypt's popular southern Sinai Peninsula resort area, has opened a new \$70 million terminal to accommodate an increasing number of international charter flights. With more than 80 percent of the airport's traffic consisting of foreign charters, Sharm El-Sheikh sometimes has more planes landing daily than Cairo Airport.

The new two-level, 43,000-square-meter terminal features 40 check-in counters and one domestic and six international gates. The building's architectural design marries two circular-shaped halls to a central hub that serves as the passenger transit area. Within the hub are located passport control, a duty-free shop, VIP areas and cafes/restaurants.

The roofs of the two adjoining halls are covered in stretched PTFE, or Teflon-like, fabric to resemble the billowing tents of the indigenous Bedouin culture. Use of the PTFE fabric as a roofing material marks a first in the Middle East on this scale, according to the terminal's design

company Dar Al-Handasah. The benefit of using PTFE allows the terminal to be flooded with sunlight during the daytime, while illuminating the airport as a landmark in the desert landscape during the night hours, the design company said.

Airlines Urge Cost Consciousness

Rising airport costs continue to be a concern for airlines, and increased communications between carrier executives and airport officials is part of the solution, several airline representatives said during a panel at the

AAAE 79th Annual Conference and Exposition.

“The most important thing is collaboration,” American Airlines Vice President, Corporate Real Estate Laura Einspanier told airport executives. “We have got to work together to figure this out.”

One example she cited was recent collaboration between Norman Mineta San Jose International officials and airline executives that helped cut a proposed capital expenditure project at the airport from \$4.5 billion to \$1.5 billion.

“Airport costs are a huge issue at American Airlines,” she added, noting they are “much higher” than the oft-quoted 4 percent industry standard.

Southwest Airlines has concerns about rising costs. Vice President of Properties Bob Montgomery said that an analysis of planned capital expenditures at Southwest’s airports shows a big increase in the next decade. Even factoring in grant money and

funds like passenger facility charges, the carrier’s rates and charges will double in the next 10 years if all announced programs—such as those listed in FAA’s National Plan of Integrated Airport Systems—are completed. Airlines and airports must work together—like in the San Jose example—to make sure what’s getting done is what’s necessary.

“There are a good many consultants going around making a buck telling you how to destroy relationships with us,” Montgomery told the airport executives. “Our concern right now is, how do we overcome these airport cost headwinds? I’m not arguing that things don’t need to be constructed. I am arguing that we’re doing it the wrong way.”

UPS Airport Properties Manager Joe Richardson urged airports to reach out to express carriers and develop an understanding of how these “not normal” operators work. “I wish that airports would take a little

more time and put more attention on cargo express guys,” he said. “You know what passenger folks do. Spend a bit of time looking at our business models.” He said that uninitiated airports are “shocked” when UPS explains how valuable three minutes can be to a night’s operation.

Meanwhile, Montgomery and Einspanier expressed doubt that airport privatization made sense for the industry. “At the end of the day, it increases airline costs,” Montgomery said. “I’m not sure anyone can point to a single privatization that has worked.”

Montgomery said that Southwest is looking closely at Chicago’s proposal to privatize Midway Airport as part of an FAA pilot program. He indicated that while the jury remains out, the verdict appears clear. “The question has got to be, is there a way to take what is a fairly efficiently run airport and privatize it, keep it efficient and lower the costs, and bring value to the

ricondo
pickup from
Annual 07
pg 61
1/2 h bleed

table?” he said. “We haven’t seen evidence yet that it will.”

TSA Checkpoint Focus Shifts

TSA’s traditional focus on the science side of checkpoint technology is yielding to a bottom-up approach that looks to fit the best machines and procedures for today’s threats into the current airport environment. That’s the message from Adam Tsao, the agency’s deputy assistant administrator, operational process and technology.

Today’s standard checkpoint has evolved little from the checkpoint’s inception in response to aircraft hijacking threats some 40 years ago, he told attendees at the 79th Annual AAAE Conference and Exposition. Changes have come via adding layers to the existing security procedures, largely in the same footprint, rather than through complete overhauls.

When new machines have been deployed, TSA’s focus has been on how they performed in the lab, not in the airport environment. Handling projected passenger growth and addressing today’s threats—which have changed significantly from the hijacking and bombing threats that gave birth to aviation security—will require a new approach.

“Integration has always been an afterthought for us,” Tsao said. “We’ve been focused on the science. Now, we’re starting with the integration first and working backwards, [asking] how do we fit our design into the industry around us?”

Flexible systems are a key to both fitting in and adapting to industry changes. One example Tsao offered is the FIDO handheld liquid explosives detector, which is being tested at several airports, including Miami, Newark Liberty, Detroit Metro, Los Angeles, Las Vegas McCarran and Boston Logan.

The inexpensive, lightweight units, which went from concept to field-testing in three months, are showing false-alarm and nuisance-alarm rates

in the “low single digits,” Tsao said.

The one drawback so far is sensor life, but TSA expects to have that issue solved and some 200 of the units deployed by the end of the year.

One piece of traditional technology that will be found at checkpoints is an explosives detection system (EDS) machine. TSA’s project Cambria, launched in 2005, is developing existing EDS machines for the checkpoint environment. Reveal Director of U.S. Sales Steve Pelham said that his company’s Cambria system, the CT-80FX, has a throughput of 400 bags per hour. Pilots with the machine are slated to start later this year.

A key concern with putting EDS at checkpoints is the impact on space. Patricia Krall, L-3’s vice president of business development, noted that the company’s Project Cambria unit fits in the same footprint as today’s carry-on bag screening machines. Pelham said Reveal’s machine is about six inches wider than current machines. The machines are also heavier than current X-ray

machines, which Pelham acknowledged “could be an issue.”

Meanwhile, the Reveal CT-80 checked-baggage scanner is on track to see its throughput boosted from the currently certified rate of 127 bags per hour to 200 by the fall, Pelham said. Reveal has EDS machines in about 40 airports in various configurations, including stand-alone, inline and at checkpoints, he noted.

TSA Names Screening Contractor

TSA announced that Trinity Technology Group of Fairfax, Va., is the private screening contractor for Charles M. Schulz-Sonoma County (Calif.) Airport under the federal Screening Partnership Program (SPP).

The competitively awarded contract is for security screening services for both passenger checkpoint and checked baggage operations. The total contract award value, including options, is approximately \$5.2 mil-

WANT MORE NEWS FROM AAAE '07?

Catch up on the highlights from this year’s annual conference by checking out the Daily Dispatch, the e-newsletter produced by Airport Magazine and Airport Report Express. Connect to five days’ worth of coverage at

www.aaae.org/_dailydispatch.



listen.

Atlanta, a bustling hub of economic activity, needed a more efficient means for moving goods, services, and people in and out of the city to accommodate growth and increasing commercial activity.

think.

As comprehensive environmental management consultant for the city of Atlanta's Department of Aviation, CDM developed more than 170 civil and environmental initiatives to increase and streamline air travel at Hartsfield-Jackson Atlanta International Airport, such as environmental assessments and regulatory support. CDM also served as a primary member of the design team for the new 9,000-foot Runway 10-28 and supporting taxiways.

deliver.

In addition to greatly expanding airport capacity and saving millions of dollars in expenses related to flight delays, the initiatives and new runway are pivotal in the city's ability to sustain economic development, attract both businesses and residents to the Southeast, and limit environmental impacts on the community.



Hartsfield-Jackson Atlanta International Airport Environmental Management



*Lasting solutions
to strengthen a
community's future.*

CDM.

consulting • engineering • construction • operations

www.cdm.com



Check out our new Cities of the Future
podcast series at www.cdm.com/podcasts



tractors had to apply and be accepted as a iQualified Vendor in order to compete for a SPP contract, the agency said.

SPP is designed to meet the requirement for the opt-out program established in the Aviation and Transportation Security Act of 2001. To date, all of the original pilot program airports—San Francisco International; Kansas City (Mo.) International; Greater Rochester (N.Y.) International; Jackson Hole, Wyo., and Tupelo (Miss.) Regional—are participating in SPP. In addition, Joe Foss Field in Sioux Falls, S.D., Key West International and the Florida Keys Marathon Airport have transitioned to SPP. TSA also signed a three-party contract with U.S. Helicopter Corp. and McNeil Security Inc., under SPP that established screening operations to support airport shuttle services at New York's East 34th Street Heliport. 

lion. The total period of performance is four years and three months, which began on June 22, 2007, and will end on Sept. 30, 2011, if all options are exercised.

Under SPP, the federal security director at Oakland International will remain responsible for overseeing

TSA security standards and contractor performance at Schulz-Sonoma.

This is the second contract awarded at an SPP airport using a streamlined acquisition process implemented by TSA in 2006, which allows any interested company to respond to a request for proposal. Previously, con-

HELPING CLIENTS
ACHIEVE THEIR GOALS...

...through creative solutions.



PLANNING LEADERSHIP

National
Aviation Director



Brian P. Reed
Jacksonville, FL

National and
South Central
Planning Leader



Donald G. Andrews
Houston, TX

National
Environmental
Leader



David J. Full
San Francisco, CA

Southeast
Planning Leader



Mary Soderstrum
Jacksonville, FL

Great Lakes
Planning Leader



Joseph P. Jackson
Chicago, IL

Rocky Mountain
Planning Leader



David F. Nafie
Denver, CO

RS&H
IMPROVING YOUR WORLD

1-800-225-7739 www.rsandh.com
Brian P. Reed - Sr. Vice President

AIRFIELD • BUILDINGS • PLANNING • ENVIRONMENTAL • GENERAL CONSULTANT SERVICES
CALIFORNIA • COLORADO • FLORIDA • GEORGIA • ILLINOIS • MICHIGAN • MINNESOTA • MISSOURI • NORTH CAROLINA • OHIO • TEXAS • UTAH • VIRGINIA

Available Seats In Top 25 U.S. Domestic Markets

July 2003 vs. July 2007

Non-stop, operating, passenger flights only

07 Rank	Airport Markets		July 2003	July 2007	Change
1	Honolulu International	Chicago O'Hare	307,404	321,068	4.4%
2	Las Vegas McCarran	Los Angeles International	251,392	294,441	17.1%
3	Atlanta Hartsfield-Jackson	Orlando International	226,782	283,833	25.2%
4	Chicago O'Hare	New York LaGuardia	251,240	271,876	8.2%
5	Las Vegas McCarran	Phoenix Sky Harbor	245,010	267,618	9.2%
6	Atlanta Hartsfield-Jackson	New York LaGuardia	233,011	255,495	9.6%
7	Honolulu International	Kauai Island Lihue Municipal	233,574	254,913	9.1%
8	Atlanta Hartsfield-Jackson	Dallas/Fort Worth	232,549	246,722	6.1%
9	Honolulu International	Kona	187,082	241,812	29.3%
10	Honolulu International	Los Angeles International	237,332	239,307	0.8%
11	Washington Reagan National	New York LaGuardia	234,091	236,865	1.2%
12	Los Angeles International	San Francisco International	186,913	236,823	26.7%
13	Atlanta Hartsfield-Jackson	New York LaGuardia	235,412	233,947	-0.6%
14	New York JFK	Los Angeles International	201,884	229,960	13.9%
15	Los Angeles International	Chicago O'Hare	285,263	220,861	-22.6%
16	Dallas Love Field	Houston Hobby	212,218	219,162	3.3%
17	Atlanta Hartsfield-Jackson	Fort Lauderdale/Hollywood	198,650	217,042	9.3%
18	Chicago O'Hare	Minneapolis International	230,660	214,312	-7.1%
19	Los Angeles International	Phoenix Sky Harbor	220,475	210,398	-4.6%
20	Anchorage International	Seattle/Tacoma International	208,564	209,750	0.6%
21	Denver International	Dallas/Fort Worth	189,988	202,891	6.8%
22	Dallas/Fort Worth	Chicago O'Hare	209,880	202,634	-3.5%
23	Denver International	Phoenix Sky Harbor	143,258	200,207	39.8%
24	Denver International	Los Angeles International	179,359	199,692	11.3%
25	Atlanta Hartsfield-Jackson	Los Angeles International	194,539	197,023	1.3%

source: BACK AVIATION SOLUTIONS OAG SCHEDULES DATABASE. Data as of June 25.

80th AAAE Annual
pickup from
Annual 07
pg 98
full bleed

We Need Each Other

FAA reauthorization is a critical issue for the aviation community this year. It is particularly complicated because the Airport and Airways Trust Fund also must be renewed. Remember the last time we faced the end of the trust fund taxes? It took 18 months to resolve, Congress had to pass three continuing resolutions, and AIP funding lapsed for six months. We can't let that happen again.

FAA's proposal to change its system for obtaining revenue has generated a lot of noise. Republicans like to raise user fees. Democrats like to raise taxes. Airlines want a system they believe more fairly spreads costs to all users, which will cause general aviation users to pay more. And general aviation doesn't believe a new user fee system is cost beneficial, particularly since GA costs will rise as a result. It's a major debate that well could delay the passage of a multi-year FAA reauthorization and an AIP trust fund bill.

As the revenue system debate fades, other issues will rise to the top, and there are many. The most basic needs of airports must be heard, such as the passage of legislation in time to allow continuous operation of FAA and AIP, and a final version of the legislation that increases funding for AIP and includes the ability to increase PFC funding.

These central needs are being heard, but are having difficulty rising to the top of the legislative agenda. We must get our needs addressed. We need a united position and a loud voice speaking in unison. We need each other.


AAAE and ACI-NA have discontinued their legislative alliance. Each organization has its own constituent perspectives and association needs.

That returns us to the days when airports had two major organizations representing them in Washington. Two voices can be very strong. But they are stronger if they are saying the same thing. Both associations generally are making the same points. We need them to stay coordinated and speak in unison on the major issues.

I am the current chair of the Airport Consultants Council (ACC). ACC represents 240 aviation consultants and vendors, many of whom are large companies with influence in Washington, D.C. ACC also has won the cooperation of other large professional service associations such as the American Society of Civil Engineers, American Institute of Architects and the American Council of Engineering Companies. These associations number in the tens or hundreds of

thousands of members. We are working together to get our issues heard.

ACC is working in support of the AIP and PFC levels called for by AAAE and ACI-NA. We all need a common position. Additionally, each of the associations has issues that are very important to it individually, while not particularly important to the others. We need to work together to avoid inadvertently opposing something that is critical to one of our cooperating associations. We must have a coordinated effort.

This time, we need an extra strong, unified voice with an easily understood clear message. Let's make this happen; our industry is counting on it. We need each other. 

We need to work together to avoid inadvertently opposing something that is critical to one of our cooperating associations. We must have a coordinated effort.



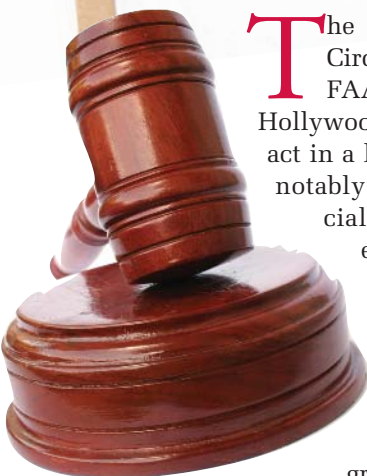
by Brian Reed

Brian Reed is RS&H's senior vice president—Aviation. Contact him at brian.reed@rsandh.com

Case Closed

In “City of Dania Beach, Florida, et al. v. Federal Aviation Administration,” the court holds FAA must follow its own runway use procedures.

By Broderick C. Grady



The U.S. Court of Appeals for the District of Columbia Circuit on May 11, 2007 issued a ruling concerning an FAA attempt to alter runway use at Fort Lauderdale-Hollywood International Airport (FLL). The ruling is but one act in a long-running dispute between cities adjacent to FLL—notably Dania Beach and Hollywood, Broward County officials—and FAA over many issues, most notably airport expansion, noise and air pollution. While the court’s decision may not alter the course of expansion at FLL, it does underscore an important precedent—namely, FAA must follow established procedures, set out by regulation or by law, when it takes such an action.

The roots of the conflict lie in FLL’s spectacular growth from a regional airport to one of the Top 50 busiest U.S. commercial airports in 2006. There are three runways in use at FLL—two parallel east-west runways and a crosswind northwest-southeast runway. Under a 1995 Noise Compatibility Program approved by FAA in 1995, all turbojet arrivals and departures were assigned to the northernmost parallel runway. The south and crosswind runways would be used for general aviation and commuter flights.

Even after 1995, FLL occasionally used the south and crosswind runways to handle jet traffic. These instances usually involved periods of high winds or runway maintenance, or to accommodate special events such as air shows. The Broward County Director of Aviation approved these uses, but limited the uses to specific FAA requests and stressed that any future runway use would require further authorization.

In 2005, FAA issued a letter stating that it had the authority to use “all available runways” for jet traffic, stating that this right justified its use of the south and crosswind runways for commercial jets when high traffic and delays warranted it, without seeking permission from Broward County authorities. The letter stated that this approach was permitted by Broward County ordinances, which allowed use of one of the runways for jet traffic when “operational necessity” warranted. FAA also noted that this expanded runway use did not change the existing “informal runway use program” and that future runway use would “operate within existing procedures.”

The cities of Dania Beach and Hollywood, along with two local residents whose property rights would be affected by increased jet traffic on the two runways, filed suit in the U.S. Court of Appeals to challenge the proposed expansion of runway use. They argued that FAA and other federal environ-



mental statutes and regulations required FAA to conduct environmental studies before altering existing runway use patterns under the Noise Compatibility Plan, and that FAA failed to do so. FAA countered that the letter merely explains the existing procedures and does not change the use of the runways. As such, the letter was not an “order”—an agency action that the court could review. FAA also claimed that the publishing in late 2006 of noise data relating to the expanded runway use was sufficient evidence to show that the use of the south and crosswind runways for jet traffic would not have a significant environmental impact.

The opinion released by the court stated that the letter was in fact FAA action and not just an explanation of existing procedures. Accordingly, FAA took this action without following the required environmental review process. Further, the court



rejected FAA's argument about the 2006 noise data, stating that "[r]egardless of the ultimate outcome of the environmental review, the FAA was still required [by statute and regulation] to engage in the review process" (emphasis in original).

Even if the 2006 noise data could show that the expanded runway use would have no significant environmental impact, it could not be used to justify

set aside the FAA letter and directed FAA to conduct the required environmental review.

While the plaintiffs hailed the court's ruling as a victory, it was only one event in the long-running conflict between proponents of airport expansion, largely comprised of FAA and local business officials, and their opponents, including local municipi-

The court's ruling is significant for airports and anyone else regulated by FAA.


FAA action because it was not part of the required process, which was designed to protect citizens and municipalities from potentially environmentally harmful governmental action. The court therefore

palities and residents who expect to bear the brunt of the anticipated adverse effects of FLL's expansion. Indeed, at the end of an often contentious meeting in early June, the

Broward County commissioners voted in favor of a \$695 million project to expand the south runway so that it can accept larger commercial jet aircraft. Many local city officials and environmental groups are concerned that this expansion will lead to even more noise and pollution.

As a result of the court's ruling, FAA has several options: It can ask for a rehearing at the Circuit Court level, and can even appeal to the U.S. Supreme Court. In the interim, FAA may choose to continue with its expanded runway use plan.

Regarding the current prospects for runway use at FLL, FAA may not need to continue this fight in the courts. Instead, it may choose to perform the environmental review the court said it should have performed in 2005. If it finds that the expanded use of the south and crosswind runways by commercial jets would not have a significant environmental impact, it can then reissue an order directing the expanded use of the other runways. Either method will take time and likely prove costly. FAA's ability to reissue the order, coupled with the recent vote to expand the south runway, will likely lead to increased commercial jet activity at FLL, despite the best efforts of anti-expansion groups.

Nonetheless, the court's ruling is significant for airports and anyone else regulated by FAA. In its ruling, the court made it clear to FAA that it cannot avoid following established procedures—its own or those set forth by statute—simply by labeling the action as “explanatory” or a “clarification.” It is important that FAA, like any government agency, face challenges—legal or otherwise—when it attempts to avoid its regulatory obligations. After all, these obligations are a safeguard—for citizens, municipalities, and even airports—against harmful or illegal government action. 

Broderick Grady is a freelance writer and aviation attorney living in Raleigh, North Carolina. He can be reached at broderickgrady@gmail.com.





By Nina Rao

Man vs. Nature

Airports are constantly fighting a high-stakes battle against mother nature's creatures.

Cleveland Burke Lakefront Airport is a haven for birds—especially water birds because the airport is bordered on three sides by Lake Erie.

And that's a serious challenge in terms of airport safety.

Not long ago, the number of feathered residents at the general aviation airport had grown significant enough that some pilots were avoiding Burke because they considered it too risky, Airport Commissioner Khalid Bahhur said.

"When you have wildlife on the airfield that's causing damage to a \$20 [million] or \$30 million aircraft, that's bad for business and it's dangerous," he said.

You have to have lots of tools in your toolbox, everything from pots and pans to lasers.



So when Bahhur took the airport's top job five years ago, he decided to tackle the problem in any way he could.

Now the airport has a full-time wildlife biologist. Staff harass, trap and relocate birds and collect eggs from nests along the waterfront. The airport is experimenting with grasses, such as garlic grass, that may reduce insect populations, which, in turn, would reduce the number of birds that feed on those insects. And it's using gull effigies—essentially dead gulls on sticks—to scare the gulls away.

The multi-pronged strategy is working: in the past five years, the airport has had no significant damage due to wildlife strikes.

"There's no one solution or magic pill to eliminating or managing wildlife at an airport," Bahhur said. "You have to do a lot of little things and you have to do them really well."

Nationwide, the need to manage wildlife on airport property is growing as increasing urbanization makes the green space surrounding airports ever more attractive to birds, deer and other wildlife. Since aircraft-wildlife strikes cost the civilian sector more than \$500 million a year in the U.S. and have resulted in more than 250 civilian deaths worldwide since 1960, managing that wildlife is a vital and on-going process at most airports.

It is also one that has led to some creative solutions, often targeted at the specific environment and circumstances of each particular airport.

"What works at one airport may not work at another," said Ed Cleary, FAA staff wildlife biologist and vice-chair of Bird Strike Committee USA. "All these airports are different; all these environments are different."

Often even the economics are different. Cleary recently advised airports in Africa and China, where labor is cheap,



on how to manage their wildlife issues.

“They’re walking around with slingshots and brass gongs. So don’t sell the low-tech [solution] short. It works,” Cleary said. “You have to have lots of tools in your toolbox, everything from pots and pans to lasers.”

Other options for managing wildlife include pyrotechnics, robotic and real falcons and, in some cases, even dogs to scare birds and other animals away.

In 1999, Southwest Florida International Airport in Fort Myers became the first commercial airport to use a dog to help manage its bird problem. The airport started with a Border Collie named Jet and, when he retired, replaced him with a female named Radar.

“The thing that works about this program is that the birds might get used to pyrotechnics or the big owl dolls—sometimes you have the birds roosting right on those—but they’ll never stop thinking of the dog as a predator,” said airport spokeswoman Barbara-Anne Urrutia.

Once a dog started patrolling the grounds, the airport saw an immediate decline in bird strikes and in the airfield’s resident bird population.

“Basically, we don’t have any groups of birds living here,” Urrutia said. “They have moved away.”

Southwest Florida International Airport turned to a dog trained

specifically to deal with birds because birds pose the biggest hazard at the airport. But sometimes identifying the problem is not simply a question of identifying the wildlife that poses a direct danger.

At Orlando International Airport, for example, large populations of birds—sandhill cranes, cattle egrets and ringbill gulls, among others—live on the airport’s 13,000 acres and pose a hazard to the 850 daily commercial operations and the 34.8 million annual passengers.

The birds are attracted to the airport’s many lakes and water retention areas. Given that water is an inevitable feature of the Florida landscape, the airport couldn’t simply drain the area.

So instead, as part of an extensive wildlife mitigation effort, it focused on one piece of what draws birds to water: fish.

“We know that fish will attract birds of all species,” said Johnny

Metcalf, the airport’s staff biologist.

Three years ago, the airport partnered with the University of Florida to start relocating fish to nearby lakes in an effort to make the airport property a less attractive habitat for birds. So far, they’ve relocated about 15,000 fish.

At another airport, FAA’s Cleary ran into a bird problem that boiled down to an earthworm problem. Essentially, earthworms crawling onto the tarmac after it rained were attracting birds. Therefore, solving the earthworm problem proved a big step toward solving the bird problem.

In general, the goal is to make the airport as unfriendly an environment for wildlife as possible.

“Wildlife is [at airports] because they can find something they want. So get rid of the food, the shelter and the water, and the animals will go somewhere else,” Cleary said.

On the other hand, airports will never be completely sterile landscapes no matter how many mitigation programs they have in place.

“You can’t fix the problem. You can’t say we’ll never have birds because we have a dog or we have a falcon or we have pyrotechnics,” said Eugene LeBoeuf, chief of the U.S. Air Force Bird/Wildlife Aircraft Strike Hazard (BASH) Team. “Nature abhors a vacuum. The best you can do is minimize the impact.”

For the Air Force, wildlife mitigation is an especially important issue since military planes often are at more exposed to potential wildlife strikes than commercial planes since they fly at lower altitudes and, during training maneuvers, land and take off repeatedly.

Since 1973, the Air Force has lost 41 aircraft and had 35 fatalities due to wildlife strikes, and since 1985, its total cost due to aircraft-wildlife strikes has been \$731 million.

The military relies on the same essential toolbox to manage wildlife as the commercial sector. “We use anything,” LeBoeuf said.

In the vast majority of cases, the mitigation strategies focus on birds

MEETINGS AND MORE

Looking for more information in wildlife management? Consider attending these meetings:

Birdstrike USA/Canada, Sept. 10-13, 2007, Kingston, Ontario, Canada. For information, see www.birdstrikecanada.com.

AAAE's Wildlife Management Workshop, October 8-10, 2007, in Minneapolis, Minn. Contact AAEE's James Freeman at (703) 824-0504, or james.freeman@aaae.org.

Also, check out Bird Strike Committee USA's Web site at www.birdstrike.org

because 97 percent of reported wildlife strikes are with birds.

The history of aircraft-wildlife strikes even starts with birds. The first recorded aircraft-wildlife strike occurred in 1905 when, according to Orville Wright's diary, he hit and killed a bird as he circled a cornfield. Experts now surmise—based on the time of year and the location—that the bird in question was a red-winged blackbird, Cleary said.

Decades later, the modern era of aircraft-wildlife strikes also began thanks to birds. In 1960, a Lockheed Electra turboprop hit a flock of European starlings as it took off from Boston's Logan International Airport. Bird ingestions caused one of the plane's engines to shut down and two more to lose power. The plane crashed into Boston Harbor, killing 59 passengers and three crewmembers. Because of this incident, FAA initiated its wildlife mitigation program, both in terms of requiring bird ingestion standards for aircraft and in terms of helping airports manage their wildlife. (Note: see story on page 30 for more on FAA's efforts.)

BEYOND BIRDS

Indiana's South Bend Regional Airport in Indiana doesn't have a bird problem, thanks in part to a neighboring golf course whose ponds and manicured lawns attract the fowl.

Instead, the airport had to contend with a herd of about 30 deer living on its 2,200 acres.

Airport staff tried lion urine to scare the deer away (it didn't work).

They had an eight-foot fence (which the deer jumped). In the early 1980s, they organized a public hunt (a logistical nightmare that ended up netting only two deer). They regularly drove the property to herd the deer out (the deer just came back in).

"I think we tried everything," said John Schalliol, A.A.E., the airport's executive director.


Then in 2005, the airport started an ambitious and expensive fencing effort designed to solve the problem permanently.

The new fence is 10 feet high with three strands of barbed wire at the top, giving it an effective height of 11 feet. In addition to that, the airport had the old eight-foot chain link fence dug into the ground under the new fence to prevent animals from digging under it.

The project cost the airport almost \$1 million, which it could afford thanks to an FAA discretionary grant.

"It's been extremely effective," Schalliol said. "We are now deer-free for the first time in 20 or 30 years, maybe in forever."

Though the number of deer-aircraft strikes is still relatively low, the potential is increasing as the nation's deer population spikes. At the same time, successful animal protection programs have also made other wildlife more prevalent. And increasing air traffic is further adding to the strike risk.

"More aircraft, more wildlife," Cleary said. "It's a growing problem at all airports." 

Nina Rao is a freelance writer based in Springfield, Missouri.

wildlife management

Increased reporting and better technology are giving industry unparalleled intelligence on bird strike trends.



Striking Develop



KANSAS CITY AVIATION DEPARTMENT

ments

By Barbara Cook

Airports now have access to an improved wildlife management tool, thanks to the recent completion of a bird DNA library that can pinpoint the exact species of bird that caused an aircraft strike.

Armed with that specific information, airports can develop tailored habitat management programs to alleviate the potential for dangerous, and often deadly, aircraft-bird collisions.

Using a five year, \$500,000 grant from FAA's William J. Hughes Technical Center, the Smithsonian Institution's Feather Identification Lab in the Bird Division of the Museum of Natural History, in collaboration with the University of Guelph in Canada, mapped the DNA barcode for 96 percent of the bird species that reside in the U.S. and Canada.

"We consider this a major breakthrough for identification that doesn't involve feathers," commented Smithsonian Institution research scientist Carla Dove. The program to develop the DNA library was finished in fall 2006 and Dove's team of three immediately began using it for bird strike identifications. Co-workers with Dove on the team are DNA lab specialist Nancy Rotzel and feather lab technician Marcy Heacker.

EXCEEDS REQUIREMENTS. AND ALL YOUR EXPECTATIONS.

It's no surprise that the Oshkosh® Striker® ARFF vehicle surpasses NFPA, FAA and ICAO regulations. After all, every model was designed with the help of fire fighters like you, who day-in and day-out, require nothing less than the highest levels of performance, safety and reliability from their ARFF trucks. And then some.





RESPOND FULL FORCE

