



December 2011
January 2012

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It's All About Business

Jeff Fegan runs an airport that
continues to redefine itself

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FBO Trends

Developer examines the good,
the bad of leases

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Jeff Fegan,
CEO, DFW International Airport

Concessions Sacramento

mixes local, national

page 8

Social Media Survey offers

a barometer for airports

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By John F. Infanger, Editorial Director

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Visit AviationPros.com for exclusive online blog content from editor John F. Infanger, certified speaking professional Ralph Hood, aviation security professional Art Kosatka, and marketing communications specialist Agnes Huff.

Inside Airport Security

by Art Kosatka

The New Airport Marketing

by Agnes Huff

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The Business Airport

DFW is unique due to its independence and business-like approach; and, lamenting the loss of leadership at FAA

A focus on a man who is leading one of the most business-oriented U.S. airports; and, the industry loses an Administrator ...



John F. Infanger
Editorial Director

Thing is, back in the day when I was just learning about things like minimum standards, MII, residual versus compensatory — among a sea of other things — I had the opportunity to get close to some well entrenched folks who became advisors, of a sort. At some point I asked the question: As you look at the airport manager landscape, who as an editor should I keep an eye on in terms of great managers, people who

are bringing new ideas to the table, etc.?

To a person the number one answer was, Keep an eye on **Jeff Fegan** at DFW. We have, which explains this issue's cover story.

DFW truly is a fascinating airport. As a user, recent improvements have set the stage for creating a great customer experience — the Skylink rail served as a transformational link. The new International Terminal D set the stage for the airport's modernization, and the bar.

Despite the fact that it is surrounded by communities — ones concerned about noise, etc. — it continues to move forward. It's positioning itself to become one of the global players in a global airport world. And, it has autonomy, as much as any U.S. airport does. A central part of its success, it should be noted.

Airport groups in D.C. keep telling Congress, allow our airports to operate as businesses. Take off the shackles. In the portfolio they present to the Hill one assumes there has to be documentation about DFW.

Jim Crites in the early days of the sustainability concept was ahead of the industry, to the point he hosted an **Airport Facilities Conference** when the idea was just taking root. The airport associations hadn't come on board yet. Crites and DFW took the lead. Today, sustainability is a core part of planning (see page 26) at airports across the U.S.

* * *

Meanwhile, much of the industry regretted hearing of **FAA Administrator Randy Babbitt's** recent resignation, following his being charged with DWI in **Virginia** outside **Washington, D.C.** A lifelong aviator, the man who had brought peace with the controllers looked to be a person with the unusual quality of being able to navigate the troubled waters of Washington while understanding and communicating with the industry.

As NATA vice president **Eric Byer** states in a recent blog, "It is absolutely critical that the President submit, and the Senate confirm, a qualified candidate as soon as possible to ensure that our industry has the proper leadership in place to navigate our community through the myriad pitfalls that we are facing next year."

Thanks for reading.

DFW is positioning itself to become one of the global players in a global airport world.



ORD: Using schedule and capacities filed for December 2011, an analysis was accomplished regarding the levels to which the hubbing carriers (American and United) rely on capacity outsourced to "regional" airlines. The numbers are telling — almost seven of ten United departures at ORD are flown by other operators. American is only slightly less at 66 percent.

United						
Aircraft Type	Departures	% of Departures	Seats	% of Seats	ASMs	% of ASMs
Outsourced <51 Seats	7,105	45.0%	358,136	26.0%	147,129	9.3%
Outsourced 51-75 Seats	3,737	23.7%	252,238	18.3%	164,360	10.4%
Mainline Single-Aisle	4,336	27.5%	621,798	45.2%	681,691	43.3%
Mainline Wide-Body	610	3.9%	143,230	10.4%	581,915	36.9%
Aircraft Type	15,788	100.0%	1,375,402	100.0%	1,575,095	100.0%
Total Outsourced	10,842	68.7%	610,374	44.4%	311,489	19.8%
Outsourced <51 Seats	7,105	45.0%	358,136	26.0%	147,129	9.3%
American						
Aircraft Type	Departures	% of Departures	Seats	% of Seats	ASMs	% of ASMs
Outsourced <51 Seats	6,807	52.3%	202,000	17.8%	85,373	6.8%
Outsourced 51-75 Seats	1,781	13.7%	298,288	26.3%	181,526	14.5%
Mainline Single-Aisle	4,013	30.9%	472,758	41.7%	535,755	42.9%
Mainline Wide-Body	406	3.1%	159,798	14.1%	446,331	35.7%
Aircraft Type	13,007	100.0%	1,132,844	100.0%	1,248,984	100.0%
Total Outsourced	8,588	66.0%	500,288	44.2%	266,899	21.4%
Outsourced <51 Seats	6,807	52.3%	202,000	17.8%	85,373	6.8%

Schedule Data From Innovata, LLC. Analyzed By Aviation DataMiner™

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AMR Files for Bankruptcy Protection; It's Impact on Airports in Question

AMR Corp., parent of American Airlines and American Eagle, files for reorganization under Chapter 11 of the U.S. Bankruptcy Code, posing potential risks to various general airport revenue bonds, according to Fitch Ratings. The ratings agency says that credit concerns do exist for individual airports, particularly facilities where American operates major connecting hubs. These include: Dallas Fort-Worth Int'l Airport, Miami Int'l Airport, and Chicago O'Hare Int'l Airport.

Fitch affirms the ratings and revises the Rating Outlook to Negative from Stable on the following bonds:

- DFW's approximately \$4 billion joint revenue improvement bonds (rated 'A+' by Fitch);
- Miami Dade-County, FL's approximately \$6 billion aviation revenue bonds (rated 'A' by Fitch), issued on behalf of MIA; and
- City of Chicago, IL's approximately \$6.5 billion airport revenue bonds at O'Hare.

In addition, Fitch has affirmed the City of Chicago, IL's approximately \$812.7 million passenger facility charge (PFC) bonds at 'A' with a Stable Rating Outlook.

Following Southwest acquisition, AirTran on the move at BWI

Baltimore/Washington Int'l Thurgood Marshall Airport reports a number of changes associated with the move of the AirTran Airways operations. As of Nov. 16, all operations for AirTran Airways shifted from Concourse D to the Terminal A/B facility, home of Southwest Airlines. Southwest formally closed on its acquisition of AirTran in May 2011. In order to help accommodate the increased passenger traffic in Terminal A/B, BWI Marshall Airport and TSA add a new security checkpoint on the lower level (arrivals level) near Concourse A. The new, four-lane security checkpoint will provide additional screening capacity and access to all Southwest and AirTran gates on Concourses A and B.

Southwest and AirTran are adding 16 automated ticketing kiosks to help travelers check in for flights quickly and easily. A third curbside check-in location was added along the upper level terminal roadway at Concourse B for AirTran customers.

Briefings ...

ACC — Airport Consultants Council selects Catherine 'Kate' M. Lang, FAA Deputy Associate Administrator for Airports, as recipient of the 2011 ACC Aviation Award of Excellence, acknowledging her skillful advocacy for a safe and efficient aviation system during some of the most challenging economic dynamics in history.

ALLEGHENY COUNTY (PA) AIRPORT AUTHORITY — is accepting Statements of Qualifications from firms interested in providing consulting services related to developing the PIT Connector Regional Air Service Plan, on behalf of the Pennsylvania Air Service Committee (PASC) of the PA Bureau of Aviation.

ALLEGIAN AIR — inaugurates nonstop service between Knoxville, TN and Las Vegas, and between Asheville, N.C. and Orlando Sanford Int'l Airport. It also enters into a purchase agreement with Scandinavian Airlines System, Denmark-Norway-Sweden ("SAS") to purchase up to 13 MD80 aircraft and 12 JT8D-219 spare engines in 2012 and 2013.

ATA — Air Transport Assn. is changing its name from to Airlines For America.

CESSNA AIRCRAFT CO. — launches a safety initiative to educate 100- and 200-series single-engine piston aircraft owners around the world about new supplemental aircraft inspection procedures that will be added to Cessna service manuals. The supplemental inspections cover Cessna single-engine piston aircraft produced between 1946 and 1986 when Cessna suspended production of piston aircraft. The inspections will be incorporated into the service manuals for the 200-series aircraft in early December and the change for the 100-series aircraft will be made in April 2012.

CENTURION AIR CARGO — celebrates its new global headquarters and 800,00-sq. ft. cargo center at Miami Int'l Airport. Expansion will add 200 jobs and \$123 million of capital investment to the local economy.

CHICAGO DEPARTMENT OF AVIATION — welcomes new service between Mexico City and Chicago Midway Int'l Airport from Mexico-based, low-cost carrier Volaris Airlines. Volaris also added two additional destinations to Mexico, Zacatecas and Morelia, starting November 10 and 11, respectively.

CITY OF KANSAS CITY — Aviation Department announces that St. Louis-based Missouri Partnership, the state's

(Continued on page 6)

CALENDAR

January

- 08-12** 26th Annual Aviation Issues Conference; Kohala Coast, HI; www.aaae.org
- 11-13** 2012 ACI-NA Risk Management Conference; New Orleans, LA; www.aci-na.org
- 15-18** NBAA 23rd Annual Schedulers & Dispatchers Conference; San Diego, CA; www.nbaa.org
- 22-24** 2012 ACI-NA Air Service Data and Planning Seminar; Long Beach, CA; www.aci-na.org
- 25-27** 2012 ACI-NA Media Relations and Crisis Communications Seminar; Long Beach, CA; www.aci-na.org
- 30-01** ACC Airport Pavement Design & Evaluation Workshop; Tampa, FL; www.acconline.org

February

- 13-15** Global Green Aviation Conference; Queenstown, New Zealand; www.aaae.org
- 15-17** 2012 AAEE Airports Energy Efficiency Forum; West Palm Beach, FL; www.aaae.org
- 26** ARN 2012 Revenue Conference; Orlando, FL; 2012conference.airportrevenuenews.com/
- 29-02** 2012 Airport Planning, Design & Construction Symposium; Denver, CO; www.aaae.org

March

- 05-07** 26th Annual Commercial Aviation Industry Suppliers Conference; Beverly Hills, CA; www.speednews.com/ConferenceInfo.aspx?conferenceID=21
- 06-09** DSE EXPO 2012; Las Vegas, NV; www.digitalsignageexpo.net
- 06-09** NATA Spring Training Week; Las Vegas, NV; www.nata.aero
- 07-09** 2012 Cygnus Aviation Expo; Las Vegas, NV; cygnusaviationexpo.com
- 07-09** SAE Aerospace & Defense GSE Conference; Las Vegas, NV; www.sae.org
- 08-09** 37th Annual FAA Aviation Forecast Conference; Washington, D.C.; www.aaae.org

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(Continued from page 5)

non-profit business attraction and marketing organization, has opened a Kansas City office, in the Ambassador Building at KCI.

DFW INT'L AIRPORT — will continue with plans for airport renovations under the Terminal Renewal and Improvement Program (TRIP) and other capital improvement projects that are currently underway despite the bankruptcy filing of hub carrier American Airlines.

DUNCAN AVIATION — develops new, roll-around Hawker landing gear, adding to its line of Hawker services. The gear will allow aircraft to be moved through all phases of maintenance at the same time the aircraft's landing gear is being overhauled at a Duncan Aviation facility.

FAA — announces that general aviation or on-demand charter aircraft owners or operators seeking to keep their aircraft's registration number from being displayed over public data systems during flight no longer need to submit a Certified Security Concern to FAA.

- FAA awards \$7.7 million in contracts to eight companies to help advance alternative, environmentally friendly, sustainable sources for commercial jet fuel. The contracts stem from work FAA is doing through the agency's Commercial Aviation Alternative Fuel Initiative (CAAIFI) and the agency's Continuous Lower Emissions, Energy and Noise (CLEEN) program.

- FAA proposes \$180,000 Civil Penalty Against Evergreen International Airlines, Inc. of McMinnville, OR for allegedly operating aircraft on seven

flights in 2009 when the pilots on those flights had not been trained in accordance with the airline's approved training program.

FONTAINEBLEAU AVIATION — opens a fixed-base operation at Opa-Locka Executive Airport in Miami, with more than 100,000 sq. ft. of space that can accommodate aircraft as large as a Boeing 737. It also has 19,000 sq. ft. of executive and maintenance offices.

FORECAST INTERNATIONAL — issues a new study, "The Market for Business Jet Aircraft," in which the Connecticut-based market research firm predicts that 10,907 business jets will be produced between 2011 and 2020. The value of this production is estimated at \$230.3 billion. Production is forecast to total 728 units in 2012, signaling the start of a gradual, though potentially long-lasting, market recovery.

FRESNO YOSEMITE INT'L AIRPORT — approves over \$35 million for runway reconstruction and ramp construction work.

FRONTIER AIRLINES — announces seasonal nonstop flights between Kansas City and Tampa, as well as seasonal service between Tampa and Omaha, Milwaukee, and Des Moines.

GA GROUPS — plan to meet with FAA to air concerns about changes in the issuance of digital charts, including possible new fees. FAA plans to discuss contract requirements for access to the charts during the meeting. Beginning April 5, FAA will provide downloads of digital charts only to those who have agreements with the Aero-Nav Services branch. The charts will be available for viewing for free on its website.

GAMA — General Aviation Manufacturers Assn. announces that its board votes to expand the association's membership to include rotorcraft manufacturers and to accept Bell Helicopter as the first GAMA member from this sector of general aviation products.

GE AVIATION — signs new engine orders and service agreements valued at \$13.8 billion at the Dubai Air Show, including plans to build a \$120 million engine overhaul facility for Emirates in Dubai. The orders include a \$6 billion engine and service contract to power Emirates' 50 new Boeing 777-300ER aircraft with the GE90-115B engines. The company also signed a \$1 billion agreement with Cargolux to power its new fleet of Boeing 747-8 freighters

with GE's latest engine technology, the GENx-B2 engine.

GREENWICH AEROGROUP — establishes Greenwich AeroGroup Financial Services, a division structured to provide finance and leasing options for a variety of general aviation aircraft and rotorcraft.

GREENVILLE-SPARTANBURG INT'L AIRPORT — reports that a joint venture of Skanska USA and Moss & Associates was recently awarded an \$80 million contract to expand and renovate the Greenville-Spartanburg Int'l Airport terminal in South Carolina.

HAWKER BEECHCRAFT — CEO Bill Boisture informs employees that the firm has decided "to slow the pace of completion of the Hawker 200 certification program" until the economy improves and the light-jet market segment picks up. The announcement follows communiqués to vendors last month telling them to cease deliveries of parts for the Hawker 200. Originally launched in 2008 as the Premier II, the six passenger, composite aircraft was rebranded a year ago as the Hawker 200.

IATA — International Air Transport Assn. reports global traffic demand was 4.7 percent below the same month in 2010 while passenger traffic showed a 3.6 percent rise over previous year levels. North American carriers saw international passenger traffic decline by 1.9 percent while capacity was almost at the same levels.

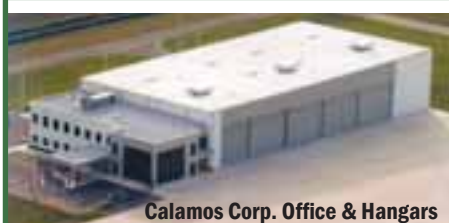
JETBLUE AIRWAYS — will launch twice daily nonstop flights from Kingston, Jamaica to Fort Lauderdale beginning April 30.

JETNET LLC — reports that for the first ten months of 2011 results for the pre-owned business jet, business turboprop, and helicopter markets continue to show improvement. 'For sale' inventories have declined, and full sale transactions have recorded double-digit growth for both business jets and turboprops of 10.3 percent and 10.2 percent, respectively. Both turbine and piston helicopter full sale transactions have declined by double-digit percentages.

KANSAS STATE UNIVERSITY — reports that helicopter flight training is getting a boost through a partnership with Universal Helicopters. The incoming fleet consists of two Robinson R22 Beta IIs and one Robinson R44 Raven II.

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LANDMARK OPENS NEW FBO FACILITY AT OAK

Landmark Aviation announces the grand opening of its upgraded fixed base operation at Oakland Int'l Airport. Landmark has initiated a multi-million dollar renovation project, having already upgraded the FBO terminal along with beginning hangar and property improvements. Landmark's FBO at OAK will participate in the company's proprietary program, "Landmark Cares." Supported by a number of Landmark's locations around the country, "Landmark Cares" is a community-based program focused on supporting local charitable groups. For every gallon of fuel sold, Landmark will make a donation to local non-profit and charitable organizations.

announces its airport business, SunState Aviation, has added the first of three Cessna 162 Skycatchers to its fleet. The new aircraft give students an option to begin training for a sport pilot license or a private pilot license at lower cost.

• Kissimmee Gateway Airport also announces Orlando Gateway Sport Pilot Training Center has acquired two Tecnam Bravo Light Sport Aircraft (LSA), which will allow the program to offer more in-depth education and experience to those seeking a sport pilot license.

LAMBERT-ST. LOUIS INT'L AIRPORT — is recognized by the Transportation Security Administration (TSA) as Airport of the Year for 2011, an honor shared with Orange County John Wayne Airport.

LS TRAVEL RETAIL — enters into an agreement to develop and operate several retail concessions at Edmonton Int'l Airport. As part of the award, LS Travel Retail will operate approximately 10,000 square feet of concessions space with nine concepts ranging from news and gift shops, bookstores, electronics, apparel, and fashion accessories delivered through a blend of national and international brands.

MIAMI-DADE AVIATION DEPT. — announces it will be featured in a new Travel Channel "docu-series" by local production company 2C Media debuting next Spring. Each of the initial six episodes will provide a day-in-the-life look at a cast of MIA employees who manage the challenges and successes of serving some 100,000 passengers per day at the No. 2 U.S. airport for international passengers and No. 1 for international cargo.

NAPLES MUNICIPAL AIRPORT — celebrates the grand opening of the Museum of Military Memorabilia. Photos, medals, flight jackets, uniforms, newspaper clippings, aircraft models, and as many as 500 of the museum's 10,000 artifacts are exhibited in the 900-square-foot space in the airport's commercial service ter-

minal. City of Naples Airport Authority provides space for the museum at no charge.

NATA — National Air Transportation Assn. president and CEO James Coyne is appealing to DOT to intervene in a lawsuit filed by environmentalists against fixed-base operations (FBOs) that sell aviation gasoline in California.

NBAA — National Business Aviation Assn. produces a new guide to support Light Business Airplane (LBA) operators and provide comprehensive information about reimbursement of flight expenses. The 15-page NBAA "Reimbursement of Flight Expenses for Owner-Pilots Handbook" is intended to help NBAA members understand the accommodations and limitations that the Federal Aviation Regulations allow for both

private and commercial owner-pilots; www.nbaa.org.

NTSB — swears in Robert L. Sumwalt for his second five-year term as a board member of the National Transportation Safety Board.

OAG — The world's airlines have scheduled 3 percent more capacity on 2 percent more flights in December 2011, marking the seventh consecutive month of growth compared to the same period last year, according to the latest statistics from OAG. The OAG FACTS (Frequency and Capacity Trend Statistics) report for December reveals that 51,166 more scheduled flights offering 10.5 million more seats will operate in December, totaling 322 million seats on 2.5 million flights.

PROFESSIONAL AIRCRAFT ACCESSORIES — of Brevard County, FL prepares to break ground on a 20,000-sq.ft. expansion to accommodate growth of the company's landing gear service area, accessory shop, instrument and avionics lab, as well as an expanded machine shop and paint shop.

ROSS AVIATION GROUP — of Denver is buying two Spokane aviation service companies and will combine them into a single operation. The company is acquiring XN Air and Spokane Airways; both are

located at Spokane Int'l Airport and are fixed-base operators providing services that include fueling, maintenance, training, cargo handling, and charter flights.

SPIRIT AIRLINES — will begin offering service from Phoenix-Mesa Gateway Airport to Las Vegas, DFW, and Fort Lauderdale, as well as 30 other cities throughout the U.S., Caribbean, and Latin America during the first quarter of 2012. Two daily non-stop flights between Phoenix-Mesa and Las Vegas begin on February 9, 2012, and daily non-stop service between Phoenix-Mesa and DFW with continuing service to Fort Lauderdale begins on March 22, 2012.

• Spirit Airlines also announces service to four new markets from DFW with \$11 fares. Starting February 9, 2012, Spirit will offer daily non-stop service from DFW to New York LaGuardia and Atlanta. Daily non-stop service from DFW to Orlando and Boston will begin on March 22, 2012.

TRANSAIR CENTER — opens a fixed base operation at Honolulu Int'l Airport, with a new passenger terminal and VIP lounge slated for completion in 2012.

TWC AVIATION — announces that the company's air charter fleet now includes a Bombardier Challenger 300, located at the Palm Springs Airport (KPSP). **ab**

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SAC Reflects Its Place

Opened in October, Sacramento International's new Terminal B offers art and a local/national brand mix

By John F. Infanger, Editorial Director

according to the *Sacramento Bee*, thousands of people toured the new Central Terminal B at Sacramento International Airport (SAC) in October and “oohed and aahed at the open house.”

“The \$1 billion glass-and-steel terminal ... doubles as both art gallery and a gateway to the capital. At center stage is Lawrence Argent’s 56-foot-long red rabbit sculpture. It’s one of a dozen pieces of airport art that make up the biggest public art project in Sacramento history,” says the newspaper account.

Donna Scranton, manager of business and property development at SAC, relates that Terminal B, which connects with ‘A’ by way of a short transit, was built for growth. “This project has put Sacramento in an excellent place to grow into the future. The way we designed the terminal allows for expansion in the future with smaller investments,” she explains.

“Overall the goal of the program and the whole new terminal was to encourage competition and create a sense of place related to the Sacramento region. So you’ll find a mix of local, regional, and national brands, particularly with the restaurants. We have several local brands with the retail as well.

The \$1 billion glass-and-steel terminal doubles as both art gallery and a gateway to the capital, says SAC property development manager Donna Scranton.



Airy and open is the order of the day at Terminal B.



The Esquire Grill comes to SAC from downtown, where the original and popular restaurant sits near the state capitol.

“We want passengers when they get off their airplane to know they’re in Sacramento. This is the gateway to Northern California; we have strong agricultural regions; a great wine region, out to the Napa/Sonoma area; the gateway to the Sierras; and we’re the capital of California. One of the restaurants in the terminal, the Esquire Grill — its downtown location is right near the capitol and it’s where a lot of the politicians go for lunch.”

It was a two-year process from RFPs to awards for food and beverage and retail concessions. Terms are seven years for retail; five years for kiosks; and ten years for food and beverage. “Restaurants have a higher build-out than the retail,” Scranton points out.

That process included a local outreach to encourage participation by companies from the region. The meetings were promoted through Chambers of Commerce; a local restaurant association; and other business groups. “We cast a wide net,” says Scranton. “They were very well

attended. All of the locals partnered with major concessionaires.”

Major concessionaires at Sacramento International include the Paradies Shops; HMS Host; Pacific Gateway Concessions, Incorporated; and SSP America.

Regarding lessons learned for others, Scranton comments, “The timeline for construction — there were some challenges there that may not have been anticipated. The lesson is, the more advance timing ahead of opening day the better.”

Scranton describes initial revenues in the new facility as “excellent; very strong.” **ab**



Going Green 2011

Highlights from the fourth annual Airports Going Green Conference include a global reporting initiative, waste diversion strategies, and sustainable parking technology

By Brad McAllister, Associate/Technology Editor

CHICAGO — At a conference session focused on the future of sustainability in the aviation industry, the Port of Portland's Phil Ralston presented on the Global Reporting Initiative (GRI), a global framework for sustainability reporting.

Airports participating in the initiative include: Denver International; San Diego International; Toronto Pearson Airport; Fraport; and the Port of Portland, to name a few.

According to Ralston, sustainability issues addressed by the GRI include emissions related to the ground transportation of passengers, staff, visitors, and suppliers; noise measurement and monitoring; waste management (disposal of confiscated materials, deicing effluent, and airline/service provider waste); and stormwater management and irrigation.

From a social perspective, the GRI addresses staff exposure to aircraft noise; airborne pollutions and contagious pandemic diseases; human trafficking; discriminatory practices in security screening processes; and involuntary resettlement of local communities, relates Ralston.

Waste diversion and recycling

San Francisco International Airport's (SFO) Sam Mehta says the new drivers behind the airport's waste diversion strategy are sustainability and climate change, stating it's "all about resources."

According to Mehta, state and city regulations set a mandate for the airport to establish a 50 percent waste diversion goal by year 2000 ... and a zero waste goal by 2020.

Currently, SFO separates some 4,700 tons per year of recyclable and compostable solid waste, says Mehta. The balance of 4,121 tons of the current annual waste generation is in the form of mixed solid waste.

In order to meet the zero waste goal by 2020, contractor's are required to separate a minimum of 42 percent of recyclable/compostable materials from the airport's mixed waste stream by the end of the first year of the contract, and increase the recycling rate by 2 percent for each of the following four years.

The airport's primary policy is to reduce and reuse, explains Mehta. Policy measures implemented by SFO include a 50 percent reduction of office paper; encouraging the use of reusable bags and bottles; electric hand dryers; precautionary purchasing to minimize packaging; source separation; and the utilization of bins for paper, bottles, and cans, and compostable waste.

There are more than 100 dumpsters and 22 waste compactors at SFO; the airport's Z-Best composting contractor sold more than 115,000 tons of compost last year, explains Mehta.

At Seattle-Tacoma International Airport (SEA), Jeremy Webb relates that environmental stewardship is an organizational priority at the Port of Seattle. The airport's environmental strategy plan is SEA's roadmap to sustainability, he adds, and the airport has set a goal to reach a 50 percent recycling rate by 2014.

According to Webb, 90 percent of SEA-TAC's waste comes from public areas, concessions, and aircraft; and 58 percent of airport waste is compostable. Ultimately, the airport separated the stakeholder processes for concessions and airlines to better manage recycling efforts.

"Airport goals, corporate social responsibility, and local economic and market conditions primarily drive concession sustainability at SEA," remarks Webb. "Education and outreach are essential for success."

Outreach provided by Seattle includes resources and technical assistance to concessions/tenants; clear communication of recycling goals and progress; free waste reduction training and recycling collection receptacles; and a consistently maintained dialogue.

AIRPORTS GOING GREEN AWARD RECIPIENTS

The Chicago Department of Aviation (CDA) announced the recipients of the 2011 Airports Going Green award at the fourth annual Airports Going Green Conference. The award recognizes the value of each project, as well as the project sponsors' leadership in pursuit of sustainability within the aviation industry.

The 2011 Airports Going Green Award Recipients are:

- **Hartsfield-Jackson International Atlanta Airport:** Sustainable Food Court Initiative Pilot
- **Ithaca Tompkins Regional Airport:** Sustainable Airport Master Plan
- **Dallas-Fort Worth International Airport:** Energy Management Program
- **Winnipeg James Armstrong Richardson International Airport:** New LEED-Registered Terminal
- **Denver International Airport:** Photovoltaic Power Installations
- **United Airlines:** Corporate Sustainability Initiatives and Support for Sustainability within the Aviation Industry

Furthermore, Webb stresses the importance of including all stakeholders in waste planning activities.

"Gather input to understand current practices, challenges, and future waste reduction and recycling opportunities; also address distinct differences between concessionaires and airlines with separate processes," he explains.

Advanced Parking Technology

Luis Guiron, marketing manager with the Siemens Corporation, discussed the 'Advanced Parking' technology concept.

By way of a central software system, advanced parking consists of four primary enablers: detection and direction; electronic payment; variable pricing; and guided enforcement.

Airport benefits of advanced parking include the optimized use of parking by maximizing capital expenses, and reduced traffic and congestion in parking areas, says Guiron.

Passenger benefits include some 100,000 excess miles saved per year and more than 13,000 tons of carbon dioxide emissions prevented. From a passenger point of view, there is less time spent searching for parking, providing an enhanced experience and reduced frustration, explains Guiron. **ab**

Leases, From a Developers Point of View

An industry veteran discusses landside multi-tenant development and what makes it work, or not

By Bill Prather, L.C. Fulenwider Inc.

In going over the outline of an airport project with Mr. John Yarberry, Senior Vice President-Real Estate for Wells Fargo, it became clear that for a bank like Wells Fargo to even consider project financing for an airport project they would want to see the following:

- Ideally a term of at least 50 years. If not that then a term that extended at least ten years beyond the end of the amortization period of the loan. If it's a 25-year loan then they would want a 35-year lease.
- Defined land rent escalations. This can take several forms, but doesn't include at the sole discretion of the airport.
- Relocation provisions that ideally would provide enough compensation to retire the loan, even if the developer lost all equity.

Additionally Wells Fargo would expect to underwrite the loan based on standard requirements like a 1.25 debt coverage ratio (income after expenses that is 1.25 times the debt service payment); a maximum of 70 percent loan to cost in the beginning (on a land lease 70 percent might be a stretch), and the maintenance of 70 percent loan to value over the life of the loan. A lot would depend on the bank's relationship with the developer, his track record, other assets, etc.

In other words, not an encouraging

start since many airports want as short a term as possible, and the more equity one has in the project the harder it is to realize an acceptable rate of return.

There are many important provisions in any land lease such as access, signage, offsite work, construction standards, and many others, but the following seem to be the potential deal killers ...

Item #1: Length of the lease

Probably the single most important item in the entire deal is the length of the lease. Some airports seem to have a goal of keeping the term as short as possible, and the developer, of course, wants it to be a very long term; at least 50 years or more.

On my first airport project we started by pushing for a 99-year lease and wound up settling for 20 years with no renewals (never again!).

I watched a large airport go to market with a request for proposals (RFP) that required a \$3.5 million structure to be built by the successful responder. The airport required well over one dollar per square foot for land rent, 10 percent of gross revenue, and a 15-year lease with no renewals.

(The developer is thinking: WHAT? They expect me to build the building, finance it over 15 years, get it paid off, and then GIVE it back to the airport. So they can do what? Go out with another RFP and let me compete for my own building and pay for it all over again. Forget it!)

The airport may be thinking: This sneaky developer wants to tie up our land for a long period of time while paying minimal rent and making a lot of money because of the traffic we are bringing to the site. Forget it!)

And in this case that is what both parties chose to do — forget it. There were no responses that met the airport's terms. Interestingly enough, even though it was a good and unique use, the airport dropped the entire thing instead of considering a modification of the RFP.

Financing

The developer has to build the building; lease it for enough to cover the loan, expenses, risk of tenant failure/vacancies, etc.; and still achieve a decent return on equity. This basically requires the end-user to pay rent that is higher than if they were able to build the building themselves and lease the land directly from the airport.

How do the lenders look at this? They really want to look the other way and do business somewhere else. Finance something where there is a residual value to the project and it may be more valuable over time as opposed to it becoming less and less valuable as the lease years go by. There is *nothing* to like from a lenders point of view.

The lender is probably wondering why the developer is even trying to do this deal when its on an un-subordinated land lease, vague language regarding land rent escalations (if it's that good), no renewals, and relocation provisions that altogether makes one want to faint.

The developer also gets to deal with the fact that virtually all commercial real estate loans have call provisions. Meaning that even though the loan may be amortized over 25 years, and everything is going well, at the five- or seven- year mark they get to take a peek and see if they still like you and everything that's going on. The bank basically calls the loan due. The bank will underwrite the loan all over again. This may result in a change in terms, or a requirement to buy down the principal amount of the loan if the ratios are out of line.



Bill Prather, vice president, L.C. Fulenwider, Inc.

WorldPort project at Denver International Airport.



Land rent, percentage rent, and escalations

When there is a developer between the tenant and the airport, it is a virtual certainty that the tenant will have to pay more to be in business than if the airport did the project itself (assuming costs are the same). The developer needs to be reasonably confident that it can make a profit over the holding period by leasing up the project, and either keeping it or selling it to a long-term investor.

The developer will most likely include land rent in its CAM (common area maintenance) charges to the tenants in multi-tenant buildings. A typical retail layout may have a floor area ratio (FAR) of .25, meaning the rentable building square footage covers one-fourth of the land area. Therefore if land rent is one dollar, the tenant is paying four dollars per square foot plus all other common charges.

It's always interesting to know how an airport sets the land rent per square foot. Is it a result of some formula that generates an amount to recover costs; is it arbitrary; or is it market value? If its market value, how is that determined? A range might be six to eight of the value of the land per year. But then the trick is to determine what that value is. One could obtain an appraisal or a broker's opinion to determine the value. Whatever the rate the airport charges the developer, the developer will most likely want to increase that rate to the end-user to recover improvement costs and to make a profit.

Percentage rent could be applied to gross revenue received by the developer (which they really hate), or more typically require each end-user to pay the percentage rent directly to the airport, since different uses may result in different rates.

Escalation provisions in a short-term tenant's lease can generally be dealt with by the end-user agreeing to pay a fixed stair step of increases, or base it on increases in the consumer price index (CPI) or a fixed percentage. This leaves the risk of undefined rent escalations imposed by the airport with the developer. Fixed increases on a long-term lease can sometimes get out of hand, and it may make sense to negotiate a "market rate" reset periodically during the lease.

Some airports want somewhat open-ended language regarding escalations due to their own requirements. This requires some real explaining to the bank and the developer as to why this won't be a problem. And that is always the position taken. No problem. The bank, developer, and long-term tenants *do* have a problem with this. The developer wants to pass it straight through to the tenant, but the bank wants to be sure the tenants are strong enough to handle undefined future rent increases.

Default Provisions

In a nutshell the bank needs default language that allows it to step in and take over the project if the developer fails. And do it without taking any kind of title to anything, and be able to then transfer everything to a new developer without a whole lot of interference from anybody. It needs to be able to step in and cure any money defaults, but perhaps not be required to perform all non-monetary obligations the developer was required to do under the lease. This is a major oversimplification of the issue, as there are many elements that go into the default provisions, but if there is a default the lender needs to be able to act in a timely manner to preserve the asset.

“Fixed increases on a long-term lease can sometimes get out of hand, and it may make sense to negotiate a 'market rate' reset periodically during the lease.”

Relocation

We developers know the airport needs a relocation provision whereby they can terminate the lease, as unlikely as it is that it should be required. Developer and lender will need some formula for this. Does the airport agree to pay an amount equal to the remaining balance after straight-line depreciating the project over the term of the lease? It may or may not even be enough to pay off the loan. Is there any compensation at all?

Another approach is to pay the fair market value of the project. An appraiser would likely determine this using a discounted cash flow approach. Naturally the fewer years that remain on the lease, the less valuable it becomes. I am a part owner in airport projects that grant no compensation whatsoever, and two projects that the airport will pay fair market value.

So, what's the best way to work with a developer? Once the tenant and airport have identified a site:

- Is an RFP issued for a developer for that site with no specific use? Or
- Is an RFP issued based on what has been identified as a use or uses to be developed on the site?

Both approaches have their pluses and minuses. In both cases one might be well served to be very open to what the local development, planning, and brokerage community thinks the tar-

get market is, what to build, and how to phase it.

Does the airport have personnel with the real estate knowledge to negotiate this kind of transaction, or should it consider a consultant to assist? One can get great input from developers, real estate agents, architects, planners, and consultants.

I think a very good case can be made for the airport doing the project itself. Determine what is wanted to see developed, plan the site, and market the parcels within the site to end-users or for a developer to build the multi-tenant building(s). All of the issues are the same, but the risk to the developer is substantially reduced because each parcel is a much smaller transaction. This would help open the process to a wider range of local developers who would be qualified for a smaller project that's part of the larger site.

Unsolicited Proposals

If a developer contacts the airport with an idea for a project, how is that handled? Is there a process for evaluating an unsolicited proposal? Will the airport select an appropriate location for the proposed use, qualify the developer, and negotiate a lease? Or, does it, by regulation or policy, always go out to the market with an RFP. Certainly a thorough and complete process of vetting the proposer and the project would be necessary to prevent criticism and second-guessing. However, being open to, or soliciting, ideas from the private sector may be a good way to discover some great ideas.

Many developers would not want to hold this kind of asset for a long term. What they do is *develop*. Their idea of a good time is to build a project that leases up at good rates and then sell it to a long-term investor. They make fees and then a profit when they sell, and then apply those resources to the next project. Some others may keep it in their portfolio for many years.

I believe airports are in the best position to develop a multi-tenant project. The airport should do the land planning and site development, unless the project is large enough to attract a national class developer with the ability to use non-project specific financing. The good news is that airports do bring in a lot of people and that will always get the interest of tenants and developers.

Bill Prather has been involved in commercial real estate for more than 40 years. With L.C. Fulenwider Inc., Prather assisted in the development of 7,500 acres around Denver International Airport, including the development of WorldPort at DIA. **ab**

It's All About Business

One on one with DFW's Jeff Fegan, who runs an airport that continues to redefine itself, is in an upgrade mode, and just may be the first true 'aerotropolis' in the U.S.

By John F. Infanger, Editorial Director

dFW AIRPORT, TX — Get to know the Dallas/Ft. Worth International Airport and the people who run it, and one gets the sense that this airport is something different. It's vast acreage in a sea of suburbia midway between the two cities is one distinction; in numerous interviews over the years, the overriding message is that this is an airport that is run like a business.

At the helm since 1994 is Jeff Fegan, who has experienced the transformation of the authority that runs it, the airfield itself, and its continuing connection to the global arena as one of the world's leading airports.

DFW offers some 1,750 flights per day and serves some 57 million passengers a year. It provides non-stop service to 145 domestic and 47 international destinations worldwide, and ranks in the top five for customer service among large airports globally. It has added 22 new destinations in the past year.

Fegan has served as the chair of Airports Council International-North America and is actively engaged in taking his airport to a new international level, per his board's direction. He shared his thoughts recently with *airport business* on the airport, the industry, air service development, and other topics. Edited excerpts of that discussion follow ...

airport business: You came into this position as a planner. What are your thoughts on the role of planning and how it's changed through the years?

Fegan: I was hired in December 1984 as a chief planner. I had worked in the

consulting business before that; I have a masters in city planning. Most of what planning is all about is a future orientation for problem-solving and trying to solve physical and transportation problems.

When I came to DFW what I saw was 18,000 acres of land; at the time we had five runways, we have seven today. The opportunity and the future — if you're a doctor, you want to work at the Mayo Clinic. If you're an airport planner, you want to work at DFW airport. It is absolutely the best opportunity to plan and actually implement what you plan of any place on earth. And we did.

The amount of activity I've been involved with since 1984 measures in the billions. We did the \$2.8 billion

program when we did Terminal D and the people mover; and we're involved in a \$1.9 billion program today. Between all that we spent anywhere from \$100 million to \$300 million a year in capital improvements. We built the taxiway system out; extended runways; got UPS to put their regional hub here; and are watching the whole west side of the airport develop from a cargo standpoint.

In 1994 I became CEO but was still a planner at heart. I'm still thinking about the next project, the next development

Wayfinding – DFW is implementing interactive technology in Terminal D, as it will following upgrades to other terminals.



Jeff Fegan





At DFW, global connections are a primary focus, and the airport has had significant success with international air service development.

that we need to stay ahead of the demand curve here at DFW.

If you have a planning orientation and you're the CEO of an airport, it's the right place to be.

ab: How is technology affecting the planning process?

Fegan: I can remember the day when we didn't have an IT department. Right now we have some 130 systems that the IT department is responsible for — everything from the security and camera systems to the parking control system to the systems we use to run our financials and every aspect of the business, really.

In Terminal A, as we go through the refurbishment program, we're loading up this terminal with technology and backbone infrastructure to be able to

heavy on business orientation. As airport groups continue to lobby Washington to be allowed to operate more as independent businesses, does DFW potentially offer one model to follow?

Fegan: When I became CEO in 1994 I had ten points, and one was we had to operate as a business. It was a transformation that took place from kind of this large landlord who was very passive to one that was very active, very engaged — driving the business and driving the revenue. Today we're a \$600 million enterprise; \$200 million from the airlines and the other \$400 million coming from non-airline sources.

We do run it like a business. We have a lot of success on a lot of different fronts, including some outlying things like our

charts. Of course, after 9/11 the brakes came on for awhile.

The other thing you'll find is we've created an environment that is probably different than most other airports in that we are very independent. We have a lot of our own policies — personnel issues; how we compensate. Most of the people that we have hired have come from the private sector. Very few have come from another airport. That private sector focus continues to drive our desire to run the airport like a business.

It's a professional environment. The work here is fantastic, whether you're a finance guy who goes to New York and borrows a billion dollars; or a construction guy who just finished up a billion dollar terminal; a land developer who just landed a deal with the Dallas Cowboys; or a concession person who has the responsibility for 250 stores out here. It is very much like what a Fortune 500 company would experience.

That kind of environment allows us to attract talent.

ab: And, you don't get any calls from downtown saying that somebody from the public works department is coming to work at the airport.

Fegan: One of the agreement provisions is that neither the city council nor my board can direct me on any personnel decisions. It's completely separate from that kind of influence, which is a nice place to be.

ab: DFW recently began its Terminal Renewal and Improvement Program (TRIP) to upgrade the original passenger terminals. Anything in particular of note on that program?

Fegan: As I look at the airport today and think of where it will be five years from now, we will have virtually all new terminals. We'll have transit connections from both DART [Dallas Area Rapid Transit] and The T [Ft. Worth's transit system]; we'll have the north DFW connector finished; we'll have the highway on the south end finished. We have seven runways today; we have plenty of capacity and are well-positioned for the future.

ab: As a user, one impression is that the new Skylink rail has transformed the DFW experience for passengers. True statement?

Fegan: Absolutely. The Skylink is probably the most transformational thing we've done. It has shrunk the airport dimension to the point that people now park in Terminal D because they know they have space there, and get on the train and get to Terminal A in five minutes. People use it to access concessions if they have time to kill.



A DFW app ... disguised as a holiday present.



DFW will soon connect to transit systems out of Ft. Worth and Dallas.

accommodate anything that comes our way, be it new security screen systems at the checkpoints; requirements for the airlines to have remote check-in; advertisements on the walls. Some 35 percent of our advertising space will be digital in the new terminal building. There's the technology of communicating with the public — social media.

We had a discussion today about patenting some of this stuff because it's so leading edge.

ab: Having met with DFW officials through the years and heard them at conferences, one impression they leave is one

natural gas [drilling]. We have a fantastic deal on that — probably one of the best of its time. We got in just at the right time.

We entered into the hotel business. We have a facility improvement corporation board that oversees the operation of the Grand Hyatt Hotel, and that board consists of myself and four of my executives. We are the owner and responsible for its success. The Grand Hyatt has paid huge dividends.

The events of 9/11 certainly caused us to be much more focused, much more detailed; much more business-like. Prior to 9/11 everything we touched turned into gold; we couldn't do things fast enough; revenues were going off the

(Continued on page 14)

(Continued from page 13)

It's finding the right airline with the right airplanes, and which is part of the right alliance at the right time. That's really what it's all about.

Concessionaires use it to get from one store to another; TSA uses it to man the various stations at the airport; the airlines use it as well. It's a transit system that probably rivals any mid-sized city in terms of the volume of people it carries every year — 14 to 15 million people.

ab: You've had a big year with air service development, notably on the international front.

Fegan: This year was probably the best in our history. We added 22 new destinations — nine international cities. We added Qantas this summer, flying to Brisbane and Sydney. Emirates just announced they'll be starting daily service on February 2 with a 777 to Dubai. American added Rio de Janeiro and Barbados. American Eagle has added four cities in Mexico — we have 17 cities in Mexico we serve today.

We added Virgin America and Spirit started this year. We expect to see more growth from the low-cost carriers at DFW. We've also seen a lot of growth on the cargo side. We added Air China Cargo from Shanghai. Korean does nine 747s a week, and it has increased their passenger frequency as well.

The one world alliance is shaping up and going to most of the important cities in the world.

ab: Are there any particular countries or regions that are on your 'hot' hit list?

Fegan: One of our target markets is



The Grand Hyatt is a cornerstone of the airport's redevelopment and is owned by the airport.

Taipei. Clearly, China — we don't have service to Beijing, Shanghai, or Hong Kong. All three of those can support service to DFW. Part of that is a pilot issue with American; their scope [clause] does not allow them to fly that without an extra crew. It's one of the things that's on the table in their labor negotiations.

It's where airplanes like the 787 come into play. Three years from now there will be several hundred of these in the fleet and we're hopeful the 787 will be transformational for the airport as well.

India is our largest unserved market. To the south, there are markets in Lima, Bogota, and others we feel we can support. The Middle East — we have Emirates, and have had interest from other carriers. In Europe, we have BA and Iberia as

part of the one world alliance; but also Air Berlin is now part of that alliance and something could materialize with them.

We're looking at Manchester, England. We have no service to Italy; we think there's a strong demand there. It's finding the right airline with the right airplanes, and which is part of the right alliance at the right time.

ab: Is there anything in particular you've learned along the way regarding air service development that could be shared as a best practice?

Fegan: We have a lot of the pieces. We have virtually unlimited capacity for an international carrier; we have great facilities with Terminal D; and we have a very aggressive incentive program which virtually makes it very inexpensive to near free from an airport cost standpoint for the first two years of their operation.

The real driver in all this is: How big is the market? This is a market that likes to travel, and it's the fourth largest metropolitan area in the United States. We have 20 Fortune 500 companies located here. All the things that an airline is looking for we have here.

Another aspect of it is, is it part of the airline's strategy to serve this market? And that is driven largely by the alliance. The ones that seem to work the best are those that have a hub on both ends. It's so powerful.

So, we're one of the great super-hubs in the world. If we connect with other hubs there's typically enough passengers to make them viable.

ab: Some airports and their sponsors are exploring the aerotropolis concept, the idea of building or rebuilding a region with the airport as the core for development. It seems that DFW is ahead of the game on that concept.

Fegan: We've got 18,000 acres of land and we've dedicated 12,000 acres for pure aviation uses. We laid it all out to make sure we don't do anything to take

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away from our airfield capacity. That still leaves us 6,000 acres; from a commercial development standpoint, it's a lot of land. It's bigger than most downtowns.

We've been focusing on development that helps support this operation. We try to attract companies that can take advantage of the proximity to cargo and the passenger terminals. For example, in our warehouse distribution area, the International Commerce Park, we have great companies like Aviall, the largest aircraft parts company that ships parts all over the world. We have Pratt & Whitney, DHL. Our most recent deal was with the Dallas Cowboys world merchandising headquarters with a 200,000-square foot warehouse.

We have a development on the south end called Southgate, and in January we'll be taking an action item to the board to hire a developer for that property.

Most of the people that we have hired have come from the private sector. Very few have come from another airport.

It also generates revenue, which goes to offset our costs and makes us more cost-competitive. And we are very cost-competitive — we have one of the lowest cost structures of any airport in the country. When you combine our airport costs, the airline costs, plus any delay costs, this airport versus others is substantially lower.

ab: A year ago you completed a new use agreement with the airlines at DFW. What can you tell us about the agreement and the process?

Fegan: It's a ten-year agreement and would be characterized as a hybrid. The non-airline revenues go into a certain fund; once they exceed \$60 million, anything above we share with the airlines — 75 percent to the airlines, 25 percent to us. That \$60 million is used for capital projects on the airport; anything above that \$60 million requires airline approval through an MII [majority-in-interest clause].

As part of the use agreement we got a \$1.9 billion capital improvement program approved for the four terminals; and another \$250 million for non-terminal related projects. And we believe that within the next couple of days we'll get another \$250 million approved — for example, the new parking structure for Terminal A.

ab: Anything to say about negotiating with the airlines, versus ten, 20, or 30 years ago?

Fegan: Actually, our first use agree-

ment lasted 35 years. It worked just fine. This one was designed to give us some more control of some capital. In the past we had a discretionary fund of about \$8 million a year; everything else required airline approval, including some major maintenance.

It wasn't the worst process I've been through; it was reasonable.

ab: A hot topic with DOT and the general media today is airlines that get stuck waiting on airfields due to extreme events, such as the October snowstorm in the Northeast that saw Hartford get an onslaught of airliner diversions. What do you see as the airport's responsibility in such events?

Fegan: The word responsibility may not be the right word. We're in the business of delivering facilities and services to our customers, and our customers are both the passengers as well as the air-

lines. We do feel a responsibility if an airline is struggling because of inclement weather or some irregular operation. We have reached out to the airlines on a number of occasions.

As people get diverted we monitor and attain information on all the flights perched to come into DFW. As time goes on, we will intervene if we have to.

We bought a bus and an automated jet bridge/stairway and we can offload people and take them right into the airport. We've also created some additional spare gates at one terminal; if every other gate is full, there are the spare gates available. We have a concessions irregular operations plan where we notify all the concessionaires; they agree to stay late and will stay open until all the customers are gone. We've had many nights where several hundred people spent the night in the terminals; we have cots and provisions — baby formula; diapers.

ab: What's it like running a U.S. hub airport today versus 30 years ago, and what can we learn from new facilities that have emerged internationally?

Fegan: Over the years it's gone from more of an operational exercise to more of a business operation. It's a complex environment with a lot of different stakeholders. Twenty years ago airlines made all the decisions; today, it's more of an equal partnership. The airlines have off-loaded a lot of their operational responsibilities to airports and we have embraced them.

I think over the years many international airports have learned from us and have taken it to another level altogether. We had a delegation just return from Singapore and they were talking about how incredible the concession program was and all the innovation that they saw in services to the concessionaires. Fly to Beijing or Incheon or Hong Kong and they have beautiful facilities.

It's kind of a situation where the country, the airline, and the airport have come together and decided to do something fantastic from a strategic perspective to attract business to their part of the world. The international airports have done a fantastic job of pushing the envelope.

ab: If you had an audience of airport managers sitting in front of you right now, what one thing might you want to make sure you tell them?

Fegan: The one thing that we've done here that is kind of extraordinary is that we have transformed what was sort of stogy, traditional public agency into a high-performing, entrepreneurial business. There are not many opportunities out there in this country that allows the public sector to do that. And if I had any criticism about the public sector and the people who are responsible for managing it, it's that I think being

If you're a doctor, you want to work at the Mayo Clinic. If you're an airport planner, you want to work at DFW airport. If you have a planning orientation and you're the CEO of an airport, it's the right place to be.

DFW - BY THE NUMBERS

- 2010 Total Operations: 652,261
- 2010 Total Cargo: 711,606 U.S. tons
- Total Destinations: 191 2010
- Total Passengers: 56,905,600 2010
- Total International Passengers: 5,460,318 2010
- Passenger Makeup: 59% connecting; 41% local

in the public sector is not an excuse for not running your airport like a business.

Unfortunately, many airports are under severe constraints in terms of their ability to do the things that we are able to do at DFW. That's been a real competitive advantage for us. Our governing structure; the willingness of our board to allow us to have the resources to be successful. I wish every airport in the country had a similar situation because I see airport executives who are very competent but very frustrated and I feel for them. They're very confident; want to do great things for their city; but they're being held back by the constraints of being in the public sector.

Politics is a word that some airports find themselves struggling with. **ab**



Ralph Hood
Certified Speaking Professional

TSA Surprises at BOS

No wallet and no ID, yet security proves not the obstacle feared

“I stood there, fully expecting a huge, fire-breathing, redneck-hating supervisor named Guido.”

Wife Gail and I were packing to return from a trip to our son's home in Boston when I discovered that my wallet was missing. We searched house, car, and already-packed bags. Gail is good at finding lost items. I, on the other hand, suffer from “Male Pattern Blindness,” which means one who can't see a gallon of milk in the front row of the refrigerator.

Gail couldn't find the wallet, and I was sore afraid. We left for the Boston airport, and I had no wallet, no money and, worst of all, absolutely no ID of any sort. I've told this story many times, and everybody keeps asking, “No I.D. at all? You didn't have a driver's license?”

We arrived at the airport an hour and 15 minutes before our flight. The Delta lady explained that since I checked in online, I had no problem with Delta. My problem, she said, was with TSA and, she said sweetly, “We have no influence with TSA at all.” In other words, I was on my own.

Before approaching TSA I went into automatic ass-kiss mode. I was well aware that I was in Boston and quickly practiced talking without saying y'all.

I explained my situation to the TSA people and they sent for a supervisor. I stood there as time ticked away, trying not to act irritable, and fully expecting a huge, fire-breathing, redneck-hating supervisor named Guido. Instead, a supervisor showed up who seemed to actually care about my problem and couldn't have been nicer. His name was Mike Gibson, and I'll never forget him as long as I live.

I suggested to Mr. Gibson — he said to call him Mike, but I called him mister — that I wrote for *airport business* magazine, and if he went to the website my name and photo are there. He politely ignored that suggestion, but said they could do something else and (wonder of wonders) he could get me on my flight. I was amazed, but skeptical.

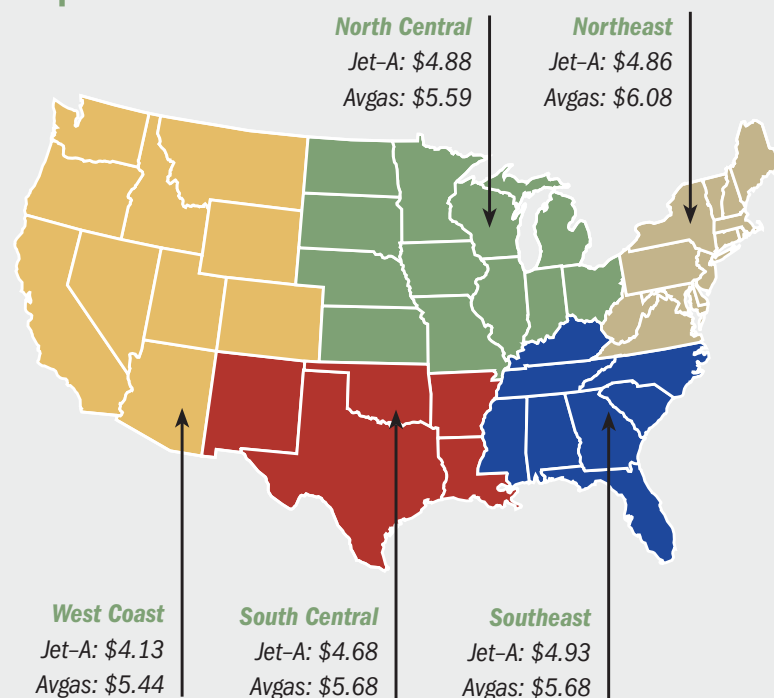
After getting my name, address, and ticket, he called a number on his cell

phone. I am convinced that he called Abby, the computer wizard on the NCIS TV show. On the show, Abby can find out anything about anybody in about two seconds. He gave this Abby-like person my name and address. A few seconds later she asked for my zip code. Then she asked if I was married, what was my wife's name and birthday, who lived on each side of us, and a few other questions. They were not checking what I suggested, but rather what they knew.

Then, zap, I was cleared. I made my flight and was so happy that it took a full hour before I began to worry about how the guvmint knew so much about me. Add it up, folks, between census info, licenses, Social Security, and other sources, the guvmint does have that info. That's not the story. The story is that TSA was nice, polite, took the trouble to solve my problem, and I appreciate it.

BTW, that night I found my wallet in pants that we had both searched diligently. **ab**

fuel watch



The following fuel prices were derived from transactions completed with the AVCARD credit card during November. Not all operations sell both jet-A and avgas. The figures for jet fuel prices will be more representative than those for avgas, due to the higher number of transactions recorded. Prices reflect all taxes and discounts. Data is supplied from AVCARD in consolidated format; individual transactions are not disclosed.

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The aviation spare parts search and deal-making platform Locatory.com introduces a new mobile phone application allowing faster access to its services. The company's clients will be able to connect to Locatory.com directly from smartphones and browse through a database of aviation spare parts as well as manage, send, receive, and answer RFQ's; www.locatory.com.

Boarding Gate Readers

Access IS, a data input technology company, displayed new near field communication (NFC) readers at the Paris Nord Villepinte exhibition center recently. Transport agencies in Europe, the U.S., and Japan have recently trialed the use of NFC in mobile phones. It's a standards-based, short-range wireless system for implementing instantaneous, secure, contactless communications between two enabled devices from a range of up to 4cm. The integrated, multifunction reader saves desk space, reduces maintenance requirements, and speeds-up passenger transit through checkpoints; www.access-is.com.

End-To-End Bag Drop

ICM Airport Technics and TAGSYS have signed a cooperative agreement to produce and supply end-to-end bag drop systems for the aviation industry. The end-to-end bag drop systems include a RFID UHF Gen 2 Permanent Bag Tag (PBT) and self-service systems through equipment enabling fast bag dropping for international flights. In order to be used internationally at airports that do not already have an RFID infrastructure, the tag offers a unique feature: a small e-ink-based display providing visual data such as flight number, owner name, and possibly a bar code; www.icm-airtec.com.

Flight Billing

Satcom1 recently announced the launch of Flight Billing, the first of its individual billing solutions for charters, fractionals, airlines, and business jet operators. The Flight Billing solution was developed to make passenger communications billing easier and more efficient for providers, and poses less risk of leaving providers with large communications charges. Satcom1's Flight Billing solution takes the inconvenience out of offering satellite services on aircraft as it automatically charges usage of each flight to a specific customer, according to the company; www.satcom1.com.

Gate-Side Survey

According to a gate-side survey conducted by FlightView, 78 percent of travelers are often frustrated by the lack of timely, accurate information, particularly when flights are delayed. FlightView's survey was conducted at four major U.S. airports – Boston Logan International, Denver International, San Diego International, and Myrtle Beach International. Of the travelers surveyed, 70 percent expect updates on flight changes in real-time. When flights are delayed, 45 percent of travelers surveyed said their biggest frustration was not knowing where the airplane was or when it would arrive. Another 34 percent said their biggest frustration was not receiving fast enough or accurate updates on new departure times; www.flightview.com.

HMS Mobile App

The B4YOUBOARD mobile app is now available to users of Android phones, including the Samsung Charge, HTC Evo 3D, and the Motorola Droid Bionic. Now, travelers at Minneapolis-St. Paul International Airport's Lindbergh Terminal can use the B4YOUBOARD app on an Android or iPhone to order food and have it delivered directly at the gate; www.hmshost.com.

Mobile Website

Phoenix Sky Harbor International Airport is launching a mobile version of its website, skyharbor.com. The new mobile site was developed internally by Phoenix Aviation Department Technology staff. Smartphone or tablet users will be automatically directed to the new mobile site when visiting skyharbor.com.

Online Flight-Tracking

The Jacksonville Aviation Authority (JAA) announced that it added the WebTrak Flight-Tracking and Noise Information system to the Jacksonville Executive at Craig Airport (JAXEX) page of the JAA website. WebTrak is a system that allows individuals to watch the movement of flights to, from, and overflying all four airports in the Jacksonville Aviation Authority's system. Displayed information includes the aircraft's beacon code, altitude, and the point of closest approach to a designated address; www.flyjaxex.com.

Personnel Screening

L-3 Communications announces that TSA has purchased 300 ProVision ATD personnel screening systems for use at aviation checkpoints. The contract value of the order is \$44.8 million and production of these units is underway. TSA is also in the process of upgrading 250 existing ProVision units deployed at 40 U.S. airports with the new image-free ATD software under a separate contract with L-3; www.sds.l-3.com.com.

Self-Service Revolution

The number of smartphones carried by airline passengers has doubled over the last year making them an important tool for travelers wishing to check in remotely, access flight information on the go, or use a range of flight-related applications, according to the 2011 SITA Air Transport World Passenger Self-Service Survey. At the world's busiest airport, Atlanta's Hartsfield-Jackson, 75 percent of survey respondents were carrying a smartphone. Among respondents carrying a mobile device, 73 percent would like to use mobile boarding passes while 17 percent had already used them at least once; www.sita.aero. **ab**



Brad McAllister
Associate/ Tech Editor

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How To Be Cyber Secure

LAWA's Dominic Nessi says the key to IT security is a combination of technology and training

By Brad McAllister, Associate/Technology Editor

Cyber security is the protection of personal or sensitive information, or any form of digital asset stored in a computer or in a digital memory device; it is also the protection of physical IT assets from random attacks targeted to destroy or disable computing power, explains Dominic Nessi, deputy executive director and chief information officer for Los Angeles World Airports (LAWA).

"The makeup of an airport's system and the network total make airports a target," explains Nessi. "Because of the types of systems that we have in an airport, we're going to have a lot of exposure just by virtue of the system itself. We can mitigate our vulnerabilities through good cyber security measures.

"It is difficult, however, to ascertain the threat level."

Threats; exposure

Airports must protect themselves against simple malicious codes called malware and spyware, and serious viruses that can wipe out a system; hackers that target a specific device or organization for either malicious enjoyment or financial gain; and denial-of-service (DoS) attacks that cripple an organization's ability to operate, says Nessi.

"We turn back hundreds of thousands of malware attempts every day," he adds. "We get a lot of attempts to see if our network can be exposed; we get a lot of email that contains malware."

Cyber security threats today include attacks via USB; large-scale, targeted bot-net attacks; attacks via social networks; click jacking and cross-site scripting Web attacks; phishing from "trusted" third parties; and data exfiltration and insider threats, to name a few.

"Aviation continues to be the target of terrorists, whether it be aircraft, airports, or airlines," remarks Nessi.

With regard to mobile technology, Nessi comments, "Almost any IT security magazine today is talking about the enormous number of security holes that mobile devices are exposing.

"Organizations, including airports, are rapidly trying to balance the desire for users to have mobile applications and

mobile hardware with the new security risks that they bring.

"The bottom line is that the hardware and new application evolves faster than the preventative measures that an organization needs to take can be developed."

E-enabled aircraft will present an entirely new challenge, adds Nessi. "Aircraft are becoming increasingly advanced technologically ... they are constantly fed data from multiple sources wirelessly.

"If someone had the right technology, it's conceivable that the data could be intercepted and changed. This is not something that is easily done ... you would have to have knowledge of protocol for that particular transmission; but that's not to say it couldn't happen."

One thing to keep in mind, says Nessi, is that not all threats are external. "You could have an internal threat as a disgruntled or former employee," he explains. "Most organizations focus on the external threat; in my opinion, you can find just as many cases of the internal threat out there as you do the external."

Technology; training

"There has to be a strong cyber security philosophy at the airport," says Nessi. "That includes a solid and experienced cyber security staff; a mindset that the network can't be as open and as flexible as every user would want; an internal program of training so that all employees are cognizant of potential threats; and programs internally that are strong.

"It's a combination of both technology and training."

While it costs to be secure, and each airport will invest based on the size and scope of its operation, the cost of mitigat-

ing the effects of a successful attack would be much more than any investment made up front to be proactive in any organization's network security, relates Nessi.

"It is very difficult to develop an objective return-on-investment on IT security improvements, yet we know what the cost



E-enabled aircraft will present an entirely new challenge with regard to cyber security, says Nessi.

will be if operations are stopped or inhibited," he relates.

Airports should also be subscribing to services such as MS-ISAC (Multi-State Information Sharing and Analysis Center) to help monitor networks.

According to its website, the MS-ISAC is the focal point for cyber threat prevention, protection, response, and recovery for the nation's state, local, territorial, and tribal (SLTT) governments. The MS-ISAC 24/7 cyber security operations center provides real-time network monitoring, early cyber threat warnings and advisories, vulnerability identification and mitigation, and incident response.

Comments Nessi, "The other thing airports have to do is work together as a community to share issues and concerns, and to keep others informed of potential threats. We also need to work closely with our federal partners at DHS (Department of Homeland Security)." **ab**



Dominic Nessi,
Deputy Executive Director/
Chief Information Officer,
Los Angeles World Airports

Learning To Fly at AUS

Entrepreneurial brothers launched Streamline Aviation in 2007 and experienced quick success; since the downturn, the business model has changed

By John F. Infanger, Editorial Director

aUSTIN, TX — In an era when much of flight training has become the domain of universities, two brothers and former military pilots, Matthew and Corey Quillen, have been working since 2007 to follow a more traditional path toward success with their own business. Their entrepreneurial endeavor, Streamline Aviation, is based here at Austin-Bergstrom International Airport.

The company uses Diamond trainers at its home base.



Explains 32-year old Matt Quillen, “We chose the name for two reasons: First, a streamline is an aerospace engineering term that is used to define airflow or other fluids over a wing and other objects — we’ve always thought that word sounded really cool. Second, we thought it would help describe our mission of making the pilot certification process simpler.”

Streamline Aviation, a Part 61 school, was launched in 2007, at the height of economic prosperity. “Our first year and a half the revenue growth was kind of like a hockey stick, really going up,” says Quillen. “Had we started at the end of ’08 or early ’09 we wouldn’t have made it six months. But because we had a great 2007 we were able to weather the storm.”

“Today we’re steady; we’re not growing as fast I’d like, as we were in ’07 and early ’08. I learned through the recession that we really need to hold onto our cash.”

“Our biggest thing now is instrument

ratings. We travel and fly customers in their own aircraft. You don’t even need an airplane for that; you just need a good instructor, good training aids, a good syllabus, and a good marketing campaign, which we’re working on.”

The company has two Diamond training aircraft under leaseback, and Quillen relates that many customers are business owners who purchase an aircraft and then need to learn to use it. Or, they upgrade to a different model and hire Streamline to provide “transition” training.

Says Quillen, “Our goal was to be a full-service flight school, start to finish, from private to instrument to ATP. And Diamond offered the entire fleet — DA20; DA40; and DA42. And we did that; we actually had five airplanes at one time and were providing all of that training.”

“When the downturn started, we did adjust our business model. I’m very glad that we did.”

“I think we’ll ultimately do nothing but instrument flight training, and probably with people who own their own airplane.

That’s been our biggest success. We do the ten-day instrument course.

“You’d be surprised how many people buy an airplane and don’t even have their private pilot’s certificate; and a lot of others don’t have their instrument rating.”

Streamline operates as a subtenant of Signature Flight Support at AUS under a three-year lease that renews automatically annually, according to Quillen. “They provide a professional environment and respond to our needs pretty quickly,” he says.

Streamline’s annual revenues topped out at \$800,000 early on; today it’s about 60 to 70 percent of that peak. “Our margins have been better since we changed the business model,” he says. Both brothers are instructors, though they focus today more on the business.

Comments Quillen, “Unfortunately, when you grow a business, instead of



Streamline is a subtenant of Signature Flight Support at AUS.

working in the business you have to work on the business. So we’re more managers at this point.”

He explains that since flight training is a riskier environment than private aircraft ownership, a key cost factor is insurance. “We contacted Avsurance and they took a leap of faith, if you will. There was only one company that would underwrite us.” The aircraft are insured for some \$250,000, at a cost of about \$1,000 per month.



Matt Quillen

To attract new customers the company relies heavily on its Internet presence [www.StreamlineAir.com]. “We try to be number one on the search engines,” explains Quillen. “Sometimes we’ll pay to be number one with a sponsorship if we have to. We do some direct mail; a lot of word of mouth. Probably a third of our customers come from other customers.” **ab**

Change That's Good

After losing \$2 million a year less than a decade ago, DuPage Airport now produces an annual operating profit and is debt-free

duPage Airport is owned and operated by the DuPage Airport Authority, a nine-member appointed board granted independent authority in 1982. The airport, located approximately 35 miles west of downtown Chicago, is situated in one of the region's rapidly developing areas and is the third busiest airport in Illinois after O'Hare and Midway. The airport accommodates the business and corporate aviation markets and is home to numerous corporate flight departments.

Significant restructuring

Over the past decade, the DuPage Airport Authority has reshaped the airport and its culture from political patronage to political independence and profitability. For years, airport operations were financed by the local community — supported by a property tax levying up to \$18 million from taxpayers each year, while grappling with bond debt that reached \$23 million.

The move toward profitability and independence began in 2002 with a series of actions. One of those was the 2004 hiring of a new executive director, David Bird, who was then an assistant director at the Colorado Springs Airport and who brought 20 years of aviation management experience to the organization.

The combination of a board that was motivated to change the 'business as usual' climate and a seasoned aviation professional as executive director began the process of changing almost every aspect of the way the airport operates.

Airport staffing was cut by 15 percent; all policies and procedures were rewritten to ensure accountability and transparency; the authority's tax levy was reduced to \$6 million annually; and the airport has abated \$500,000 in each of the last two years.

The \$23 million in debt has been erased. After losing \$2 million a year less than a decade ago, the airport now produces an annual operating profit and is debt-free.

DuPage was recently celebrated as "a model for the nation" by U.S. Transportation Secretary Ray LaHood during a June 9 visit, and also won praise from the U.S. Chamber of Commerce for using business prin-

ciples to upgrade services, pay off all debts, and cut the public subsidy.

Moreover, the authority has a focus to provide a positive economic impact to DuPage County and surrounding communities and has aggressively pursued opportunities for revenue enhancement from both aviation and non-aviation sources to ensure the airport remains fiscally sound. Some of these actions include:

- development of the DuPage Business Center, a 600-acre business park located adjacent to the airport;
- continued development of hangar facilities for corporate/charter users; and
- operation of Prairie Landing Golf Course, recently voted as the top public course in Chicago's western suburbs.

Development background

The airport's first hangars and runways were developed by the U.S. Navy in 1941 to train pilots for the war effort, and the airfield was ultimately sold to DuPage County after the war. In the early 1980's, the authority, FAA, and the Illinois Department of Transportation Division of Aeronautics initiated an extensive development plan to position the airport to better serve the emerging demand for business aviation in the Chicago region and provide additional relief to O'Hare.

These efforts resulted in an airport development program that included extensive land acquisition and the construction of two new parallel runways, an architecturally towering 52,000-square foot general aviation terminal complex (the DuPage Flight Center), and additional support infrastructure.

Overall development since the 1980's has included the preservation of aviation, commercial, and reserve land uses, and the authority has sponsored various improvements to maintain infrastructure and ensure financial stability.

However, more than 20 years had passed since the last comprehensive development plan was prepared, and because of the ample land owned by the authority, much of it undeveloped, there was a need to prepare an updated development plan.

2010 Master Plan

In early 2010, the authority completed a comprehensive master plan that establishes a long-range vision to

maximize the airport's potential in the context of the region's corporate and other GA needs. The plan identifies the land that should be preserved for future aviation and non-aviation development, and prioritizes investments in a comprehensive financial plan recognizing the authority's financial goals and competing needs for federal and state funds.

Primary projects and recommendations include:

- decommissioning the airport's original runway 15/33 and preserving approximately 70 acres in the northeast quadrant for future non-aviation uses;
- strengthening and widening primary runway 2L/20R and associated taxiways;
- extending runway 2R/20L and constructing a full-length parallel taxiway;
- implementing aviation infrastructure and utilities on a 45-acre site in the southeast quadrant of the airport to facilitate GA and commercial aviation maintenance/repair/overhaul-type development; and
- developing aviation infrastructure adjacent to the DuPage Flight Center.

In general, the overall \$145 million, 20-year plan represents a logical "next step" to the airport's long-term development, according to airport officials. The area was designated for continued corporate aviation expansion and provides easy access to the primary airfield infrastructure used by corporate aircraft — primarily runway 2L/20R.

The new general aviation facilities to be developed on the east side of the airport, which include hangars, aprons, access roadways, vehicular parking, and various GA-related businesses, are intended to replace the original 50-plus year old facilities on the airport's northeast quadrant.

Some 125 acres of on-airport land were identified for future non-aviation development (70 acres in the northeast quadrant are currently in direct aviation use, while 53 acres elsewhere on property are undeveloped). Pursuing non-aviation development on land not needed for future airport facilities would enable the authority to supplement its existing aviation-based revenue stream to help fund airport capital improvements and operations.

* * *

Eric Bernhardt, a director with Leigh|Fisher, contributed to this report.

ab



David Bird, DuPage executive director

Trends in airport digital communications

Survey results show enhancing customer service is the primary driver for initiating a digital communications strategy

By Brad McAllister, Associate/Technology Editor

SAN DIEGO — Recently, *airport business* magazine and SITA partnered on the development of a survey focused on identifying trends in innovative passenger and customer communication techniques related to social media, mobile technology, and other digital platforms utilized by airports.

Results of the survey were presented at the ACI-NA Annual Conference held here in October. Following are highlights of the survey results ...

Of the respondents, almost half represent non-hub airports with less than 350,000 annual departing passengers. Nearly a quarter represent large hub airports; a fifth represent small hub airports; and just more than a tenth of the sample represent medium hub airports.

Additionally, 51 percent of respondents indicate they are senior airport managers, 21 percent are in airport operations; and 9 percent are an airport commissioner or airport authority member. Remaining respondents identify themselves as IT, public relations, or customer service professionals.

Valued Services

Airports rated the following communications platforms from most to least important: Airport website; e-newsletters; Facebook; mobile website; Twitter; and YouTube. We also asked respondents to rate each platform individually by indicating if they are: highly important, important, offer some value, or offer little value.

The airport website is the platform that is most important for informing and communicating to the customer (75 percent say 'highly important'). This is the airport's online HQ and is the base at which digital communication begins, and the hub with which the airport delivers content to additional digital communication platforms such as e-news, Facebook, and Twitter.

Some 20 percent of respondents say Facebook offers 'little value' while some 78 percent say it offers at least some value.

Almost half say Facebook is either 'important' or 'highly important'.

The mobile website platform resulted in a mixed response — 20 percent deemed the mobile airport website as 'highly important' while 30 percent say it offers 'little value'.

Airports are still struggling with implementing the best way to reach and inform passengers via a mobile device. There is quite a debate occurring with regards to the benefits of mobile-enabled websites for airports as opposed to mobile device applications (apps). Even so, 70 percent of respondents say the mobile space offers at least 'some value'.

Twitter is 'highly important' to only 8 percent of respondents. Some 40 percent find Twitter to be of 'little value', however, some 30 percent indicate Twitter offers at least 'some value'.

Drivers/inhibitors

Some 32 percent of respondents indicate that enhancing customer service and interaction is the primary driver for initiating a digital communications strategy. Additional drivers include enhanced marketing efforts and customer demand for the service.

Based on what is known about airline cost-cutting and its effect on customer service, it's no surprise that airports initiate digital communication techniques to enhance customer service and interact more with the passenger base. These techniques can help identify an airport brand as the owner of the passenger experience.

Inhibitors include time and resource availability, cost, and lack of knowledge.

Regarding plans to utilize social media, all respondents indicate they are using social media to some degree in delivering some or all of the following: flight information and operational updates; to survey; disruption and emergency updates; customer service handling; and to promote and sell airport products and services. Additionally:

- 60 percent are delivering flight information updates via social



airport business magazine associate editor Brad McAllister, alongside SITA's Kristin Shaw, presents on airport digital communication strategies at the 2011 ACI-NA Annual Conference and Exhibition.

media; nearly 25 percent plan to do this by the end of 2012;

- Some 27 percent use social media for external surveys and focus groups;
- More than 60 percent offer disruption and emergency updates via social media; 20 percent have plans to do this by the end of 2012;
- Some 54 percent use social media for customer relationship handling; 23 percent plan to use social media for this by the end of 2012.

Regarding resource allocation, 46 percent of respondents say they dedicate one part-time position; 11 percent have more than one part-time position; 11 percent have one full-time position; 13 percent have 2-to-5 full-time positions; and 13 percent say they outsource this task to an external agency.

When asked about the aspect of digital communications respondents would like to learn more about to help the airport meet its overall objectives, the largest response was for information about social media marketing and communication strategies, and information about iPads or other tablet devices.

For more information on the Communication Evolution session at ACI-NA's annual event, visit <http://www.questionpro.com/a/ShowResults?id=2559882>. **ab**

Mission Possible

Concrete project helps keep Kansas National Guard flying

By Lindsey Babb, IRONCLAD Marketing Inc.

When the Kansas National Guard was dealing with the rundown remnants of a World War II-era hangar apron, Pavers Inc. accepted the project. The family-owned business, originally known as Wilson Constructors Inc., has focused on concrete work for more than 60 years. Since 1992 Pavers Inc. moved into municipal/highway contracting, and its skill set now includes concrete pavement, curb and gutter work, and site work such as demolition, grading, treated bases and dirt subgrade.

Repair work, along with an extensive amount of concrete work, is what brought Pavers to the Kansas National Guard project in Salina. The mission: Overhaul a 1,000-by-300-foot apron that didn't drain properly at Army Aviation Support Facility No. 2 at Salina Airport. Pavers needed to mill six inches of old asphalt and concrete and replace it with a fresh concrete overlay.

It's a mission in which Pavers is well-experienced, says Neal Saskowski, vice-president of Pavers. "Conservatively, we have done more than 100,000 square yards of pavement patching in the last 15 years," he remarks.

On average, those jobs range from about 2,000 to 10,000 square yards.

Since purchasing its first E-Z Drill in 1990, pavement repair projects have increased significantly for Pavers.



Repair work, along with an extensive amount of concrete work, brought Pavers Inc. to the Kansas National Guard project in Salina, Kansas.

That breaks down to 5,000 to 10,000 holes drilled for each project.

Over the years, Pavers' projects have spanned the gamut, with a specialty focus on airport runways. The Salina airport project for the National Guard had the company facing two feet of concrete and asphalt. The \$1.9 million project was bid in the fall of 2010 and work began in November.

A pneumatic advantage

The scope of the project meant sharing responsibilities with other

contractors.

One contractor did the milling for the top six inches of old concrete and asphalt that needed to come out, while another company was needed to install a 1-inch asphalt bond separation layer. A third major subcontractor provided traffic control, installing barriers around the work area and doing striping. Pavers focused on the drilling, doweling, and concrete overlay.

"One thing contractors do is, we'll go out there and see what other contractors are using," says Saskowski.

The company's observations, as well as Saskowski's own experience, led the crew to look into options from an Oklahoma-based company called E-Z Drill. When it learned the company's equipment draws its power from compressed air, they were further intrigued. For Pavers Inc., air compressors were already a standard piece of equipment on the jobsite. With E-Z Drill's fully pneumatic units, they merely needed to connect the air line and go.

"The pneumatic operation was a big seller for us because we already operate air compressors on the jobsites," Saskowski said.

Since purchasing its first E-Z Drill in 1990, pavement repair projects have increased significantly for Pavers.

"E-Z Drills are our drills of choice as they meet our production requirements, are fairly easy to maintain, and quite reliable when maintained properly," Saskowski says.





RAMPCHARGER Bosserman Aviation Equipment Inc.

Bosserman Aviation Equipment, Inc. introduces the RampCharger, an electrically driven Isuzu refueler, ramp, and hydrant servicer. The RampCharger is environmentally green (no gasoline or diesel engine), yet offers the amenities of a standard, factory-warranted chassis.

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FUEL TANK ENTRY AND RESCUE Didsbury Engineering Co. Ltd.

Didsbury offers Purge-Air Systems for aircraft fuel tank entry and rescue. Systems include equipment for draining residual fuel, ventilating tanks, providing engineers with constant supply of breathable air, communications, gas detection, lighting, rescue, and comprehensive training.

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SPORT FUEL STATION U-Fuel

U-Fuel announces the availability of its new Sport Fuel Station. This latest generation of aviation fuel stations from U-Fuel represents an important advancement in safety, cost, and value, says the company. U-Fuel provides complete support for all its fueling systems, including initial site planning, permitting, delivery and installation, training, and ongoing monitoring and maintenance.

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DEF DISPENSING HOSE REELS Reelcraft Industries Inc.

Reelcraft offers its DEF dispensing line of spring retractable hose reels. Designed to aide in the dispensing of diesel emissions fluid (DEF) for late model diesel engines, these reels are an integral part in emerging DEF service stations. Internal fluid path parts are made from 304L grade stainless steel and feature Viton O-rings. Goodyear DEF dispensing hose and adjustable bumper included.

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ELECTRIC HYDRANT DISPENSERS Liquip International/ Beta Fluid Systems

Liquip International's All-Electric Hydrant Dispensers offer the efficiency and safety of the standard vehicle but with the significant difference of having the diesel engine replaced by a 96VDC battery-powered motor and ancillary drives. A solar panel provides continuous battery top-up all day.

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FUELING COUPLER Eaton Aerospace Group

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Rusty Hodapp
DFW VP and
Sustainability Officer

Examining Sustainability

Rusty Hodapp, who heads up DFW's efforts, shares his thoughts on the state of the art

By John F. Infanger, Editorial Director

dFW AIRPORT, TX — During an interview with DFW International Airport CEO Jeff Fegan (Cover Story, page 12), the topic of sustainability came up, to which he comments, “We do pursue sustainability very seriously and have made tremendous progress. Looking over the last six years, our costs have been virtually flat. But we’re taking on more and more things.

“The sustainability initiative is all-encompassing but it has huge payoffs. And it’s one that we’re just scratching the surface.

“Look at the iPads. We have them out in the field; all of our contractors have them. The estimate is some \$5 million savings in paper from plans that don’t have to be produced every week.”

During the DFW visit, *airport business* also interviewed the man who spearheads the airport’s sustainability program, Rusty Hodapp, P.E., CEM, LEED AP, one of the leading industry advocates of the concept. Following are edited highlights ...

On the topic of how much of sustainability has to do with being “green” versus saving money ...

“We would say that they should be one and the same. There’s really no reason for them not to be. One thing that we really stress with our sustainability program is we view sustainability as a driver of innovation.

“Looking at the sweet spot of sustainability — the triple bottom line of social, economic, and environmental perspectives — there’s really no reason that doing something that’s green should be more expensive necessarily, although there are occasions. I would suggest when they’re doing that they’re really not practicing triple bottom line sustainability; they’re doing something perhaps overly weighted towards envi-

ronmental, and there may be good reasons for that.

“We’ve taken the approach, and energy efficiency is the best example we might have — if you’re doing things correctly from an energy efficiency standpoint, you’re obviously saving money, using less energy, and you’re clearly having a reduced impact on the environment, using less energy and creating fewer emissions.

“We’ve seen time and time again that not only are we doing that, but we’re also making a building operate better and when it operates better it’s better for the occupants as well.”

On who are some of the other leaders on sustainability ...

“Walmart would be a classic example. They’ve been a real leader in their supply chain management, energy efficiency — it’s unbelievable the stuff they do in their stores. They’re so big that they can move markets, and they do. Their personal sustainability publication focuses on selling sustainability to the individuals.

“Sea-Tac has some really incredible programs for recycling and waste minimization. One thing they’ve done well is how they engage the whole community — the concessionaires; the airlines; the whole community of business stakeholders at Seattle. They function together to recycle and compost; it all works together and we’re learning that from them.”

On the role sustainability is playing in DFW’s terminal redevelopment program ...

“A couple of areas that we highlight in the terminal renovation program involves replacing the old systems — heating; air conditioning; lighting; plumbing. So, the first opportunity is in replacing those systems with modern technology.

“We’re going to be able to do things within the building in terms of controlling

lighting, heating and cooling, integrating things like jet bridges and baggage handling systems, if for no other reason than to monitor their health. That improves our productivity in terms of managing and maintaining those systems.

“There’s environmentally friendly materials; we have a set of building standards that are guiding the selection of materials and the application of construction techniques.

“Also, because you’re demolishing so much stuff you’re pulling out materials that can be recycled. We just had a briefing to our board last month. Just in the one section of one terminal, 70 percent complete with the demo, and they’ve already recycled 499 tons of metal and carpet and other materials that’s not going to a landfill. It’s actually resold and is providing a direct financial benefit back to the airport, some \$260,000 or so.

On what surfaces in discussions with other airports about sustainability ...

“A lot of times we’re preaching to the choir, particularly those of us at larger airports. So one of the challenges we’ve had is with reaching out to the medium hub and smaller airports.

Energy efficiency is one I get tapped for a lot. It has tended to be underexploited at a lot of airports, in my opinion, because of the governance structure.

For example, a consultant I know did some work at Phoenix Sky Harbor. The airport people there never saw the utility bills because they went to accounts receivable in downtown Phoenix because it’s a city-owned airport. Then they come to a conference and hear me saying how much money we’ve saved.

“One thing we’re seeing more and more in the conversation is around the topic of collaboration and partnering. How do you partner to advance things with your tenants?” **ab**

“There’s environmentally friendly materials; we have a set of building standards that are guiding the selection of materials and the application of construction techniques.”

— Rusty Hodapp

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