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May 2012

Your Management Source Inside the Fence

Trends in Terminal Design

From planning for technology to keeping sustainability top-of-mind, terminal structures evolve

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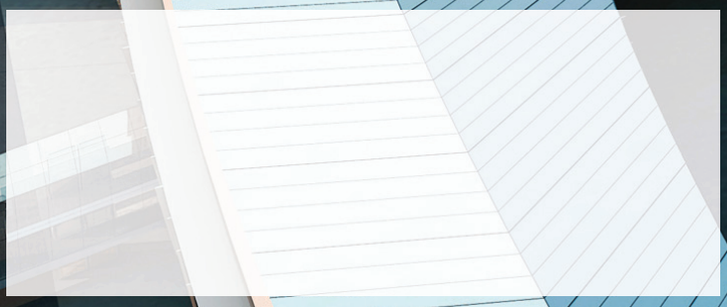

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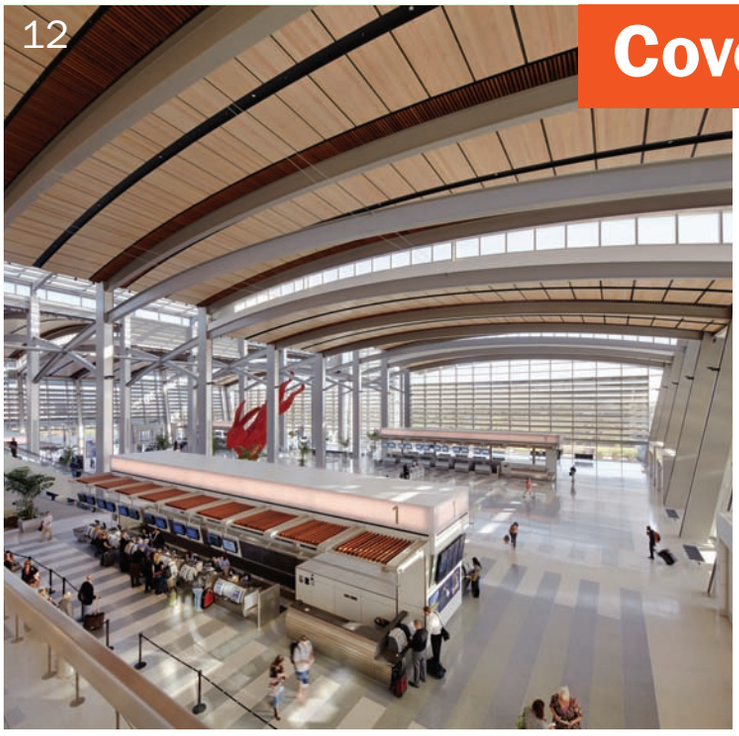

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By Brad McAllister, *Editor*

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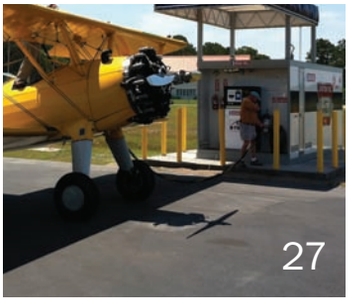

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Airports in London Go for the Gold

by Agnes Huff

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Brad McAllister

Airport Cities and Airline Mergers

Highlights from the world conference & exhibition, and a word from US Airways

At the recent Airport Cities Conference held in Denver, ACI World director general Angela Gittens relates that airports must be allowed to expand their role as infrastructure providers to a role that allows them to be operated as businesses in their own right.

This really is the essence and foundation of the airport city and aerotropolis concept. Coined by Dr. John Kasarda, director of the Kenan Insititue of Private Enterprise, the aerotropolis concept recognizes that airports are large players in the role of economic development for cities and regions.

During the event, the City of Denver unveiled its airport city concept.

Explains Mayor Michael B. Hancock, ""We will create a development that thrives on the airport's natural synergy, attracting business and jobs that benefit from a close relationship to the airport and its inherent access to national and international markets."

DIA is the primary economic engine of the state, generating more than $22 billion for the region annually.

Our May cover story on airport terminal facility design speaks to a primary aspect that underpins the aerotropolis concept: planning, and more importantly, planning together.

The 21st century demands transit-oriented development, incorporating stratagies that include building sustainably; harnessing technology to optimize the travel experience and better serve the airport user; facilitation of multi-modal development and initiatives; and area-wide stakeholder participation and engagement.

The global economy is an aviation-based economy, says Kosarda. "Airports have become major commercial magnates and regional economic accelerators," he adds. The airport city is made possible by "Airports doing business the way business does business," as Kosarda puts it.

Facility design speaks to a primary aspect that underpins the aerotropolis concept: planning, and more importantly, planning together.

Maintaining the focus on globalization, the airline industry has been affected by an increasingly globalized economy perhaps more than any other. In a presentation at the annual AAAE conference held in Phoenix in May, US Airways president Scott Kirby drove home that point, stating that the Delta and United mergers have created two behemoths that can outcompete due to their global comprehensive networks and ability to support large corporate accounts.

"The merger is good for the consumer because it brings a third player onto the playing field, particularly for those corporate accounts that have global travel needs, or for those elite business customers," remarks Kirby.

What's that mean for airports? Well, according to Kirby, the deal is good for small city service.

He adds that there are some 31 cities on the east coast that US Airways serves and American does not; some of those would get service to places like Dallas and Chicago. Similarly, there are some 56 cities in the Midwest that American serves and US Airways doesn't.

Overall, Kirby says bankruptcies have forced airlines to restructure, and the industry is on the threshold of completing the vision that it would consolidate into three large network carriers, and that they would be part of three global alliances.

Hmmm, looks like that's the way we are headed, for now at least. With so many factors involved — from the price of oil to the state of global terrorism — attempting to predict how the airline business will evolve can certainly be a trying endeavor.

Alas, airports are the support system for the industry, and *airport business* is here to support you. We have positioned our portal website, *AviationPros.com*, to be the industry leader in global aviation industry news, information, and analysis. Please, feel free to contact me if you have suggestions for how we can better serve you.

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Mike Boyd, president, Boyd Group International, Inc.

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Southwest: Further Evolution

Aside from simply running an efficient airline, Southwest's consistent success over the last four decades can be attributed to the fact that the airline has evolved with the changing economic dynamics of the air transportation business.

Southwest is no longer a "short haul" airline – its average passenger today travels over 900 miles, up from 770 in 2005. This longer trip length, combined with skillful yield management, has resulted in the average one-way fare (including federal fees and taxes) increasing by over 50 percent since 2005.

Year	Avg. PaxTrip	Southwest Yield Per Mile	Pax Avg Fare
2005	770	12.4	$114.46
2007	831	12.1	$119.95
2009	849	13.8	$138.46
2011	901	16.6	$173.14
Percent Change	**17.0%**	**33.9%**	**51.3%**

* The message this sends to airports is that Southwest is focused on markets that can generate strong traffic to diverse points across the nation. That translates into larger markets – smaller communities need not apply. With the retirement of more 737-550s and 700s, and replacement with larger 737-800s, the service bar to recruiting Southwest – and in some cases retaining Southwest will be going up markedly in the future.

Hawker Files For Bankruptcy Protection

Hawker Beechcraft has reached an agreement with a significant number of its senior secured lenders and senior bondholders on the terms of a financial restructuring plan that will strengthen the company for the future and eliminate approximately $2.5 billion in debt and approximately $125 million of annual cash interest expense. As part of the prearranged restructuring, Hawker Beechcraft obtained a commitment for $400 million in Debtor-in-Possession (DIP) financing, which will enable it to continue paying employees, suppliers, vendors, and others in the normal course of business. The company will comply with all Department of Defense acquisition and maintenance contracts, as well as agreements with international air forces including, but not limited to, the recently announced sale of T-6C+ trainer aircraft to Mexico. It is also committed to moving forward with its bid to provide the U.S. Air Force with the AT-6 in support of the Light Air Support contract.

Delta Air Lines Pays $150 Million For Oil Refinery

Delta Air Lines wholly-owned subsidiary, Monroe Energy LLC, has reached agreement with Phillips 66 to acquire the Trainer refinery complex south of Philadelphia. As part of the transaction, Monroe will enter into strategic sourcing and marketing agreements with BP and Phillips 66. The acquisition includes pipelines and transportation assets that will provide access to the delivery network for jet fuel reaching Delta's operations throughout the Northeast, including its hubs at LaGuardia and JFK. Jet fuel production is expected to begin during the third quarter, and changes to the plant infrastructure to increase jet fuel production would be complete by the end of the third quarter, resulting in expected 2012 fuel savings of more than $100 million.

Briefings ...

ACI-NA — America's commercial airports are a powerful economic engine, generating 10.5 million jobs and $1.2 trillion in total economic impact, according to a new study released by Airports Council International-North America. *The Economic Impact of Commercial Airports in 2010* quantifies the contributions of 490 commercial airports in the U.S., dubbed "Airports, Inc." The analysis, prepared by CDM Smith, concludes that in addition to the broader impacts, airports also are powerful economic multipliers in communities and states nationwide.

ACSF — Air Charter Safety Foundation has received approval from FAA as an aviation safety action program (ASAP) manager and to conduct a demonstration program for on-demand charter operators. The program will begin with two charter operators under the jurisdiction of the FAA Minneapolis Flight Standards District Office (FSDO), and will eventually expand to other charter operators in the FAA Great Lakes Region that are interested in participating in the program.

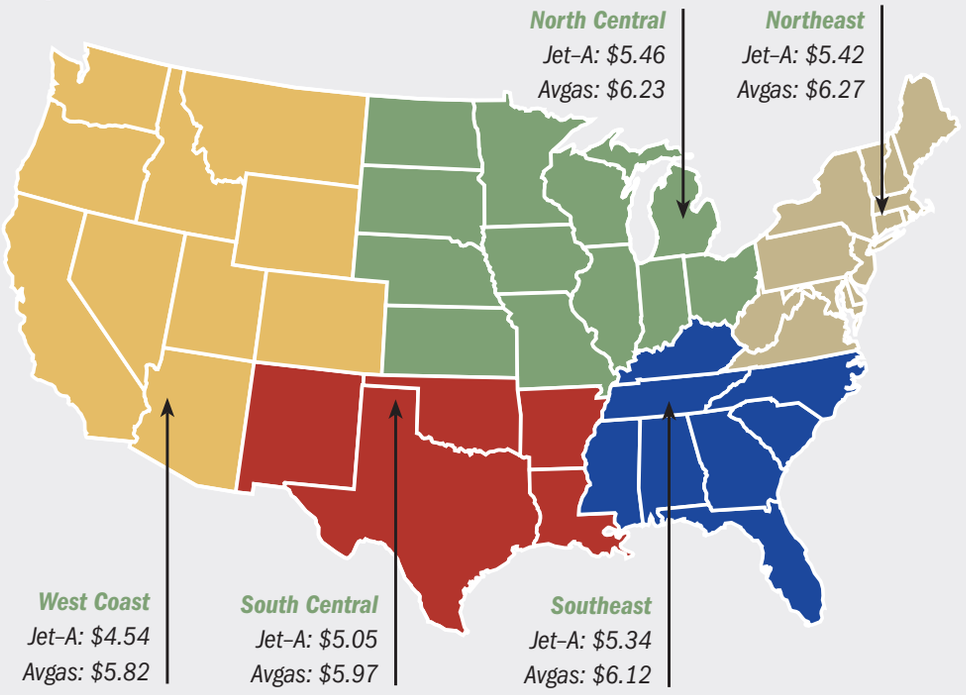
CABAA — Chicago Area Business Aviation Association has been selected as the 2012 recipient of the Illinois Aviation Hall of Fame (IAHF), *Spirit of Flight* Award. The Spirit of Flight Award is given annually to an organization that has made substantial contribution to aviation in Illinois, is based in Illinois, and exhibits a high degree of excellence in all accomplishments.

CESSNA — signs a strategic agreement with the China Aviation

CALENDAR

June	
04-06	**Airport Customer Service Forum;** Dubrovnik, Croatia; www.aaae.org
04-07	**Marketing and Communications Conference and Jumpstart;** Sacramento, CA; www.aci-na.org
09-12	**AMAC 28th Annual Airport Business Diversity Conference;** St. Louis, MO; www.amac-org.com
20-21	**2012 Air Transport IT Summit;** Brussels, Belgium; www.sita.aero
24-26	**General Aviation Issues and Security Conference;** Reno, NV; www.aaae.org
24-26	**10th Annual AAAE Arts in the Airport Workshop;** Albany, NY; www.aaae.org
26-28	**3rd Transatlantic Aviation Issues Conference;** Brussels, Belgium; www.aaae.org
July	
15-17	**Airports Conference Of The Americas;** San Jose, Costa Rica; www.aaae.org
15-17	**2012 AAAE/Northeast Chapter Large Hub Winter Ops & Deicing Conference;** Arlington, VA; www.aaae.org
16-17	**ACI-NA Small Airports Conference;** Grand Rapids, MI; www.aci-na.org
17-18	**ACC/FAA/TSA Summer Workshop;** Arlington, VA; www.faa.gov
23-29	**EAA AirVenture;** Oshkosh, WI; www. www.airventure.org
30-01	**Contract Tower Program Workshop;** Washington, D.C.; www.aaae.org
August	
02-05	**Great Lakes Chapter Annual Conference;** Appleton, WI; www.aaae.org
15-17	**Evolution of the Airport and Air Carrier Industry;** Montreal, Quebec; www.aaae.org

fuel watch



The following fuel prices were derived from transactions completed with the AVCARD credit card during April. 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.

Industry General Aircraft Company Ltd., (CAIGA) and the Shijiazhuang Municipal Government. The agreement is a progression stemming from the strategic framework that Cessna entered into with CAIGA parent company, Aviation Industry Corporation of China (AVIC), in March 2012. The step forms a cooperation framework for an eventual joint venture whose purpose will be the final assembly, sales, and customer support for the Cessna Caravan in China.

CLEAR CHANNEL AIRPORTS — A nationwide Scarborough research survey found that business frequent flyers are 83 percent more likely than all American adults to be the first to try or buy new products and services. The custom study was commissioned by Clear Channel Airports; the survey results highlight the value to advertisers of targeting frequent travelers while they are in transit in airports.

DALLAS LOVE FIELD AIRPORT — Two joint ventures led by travel retailer Hudson Group have been selected by the City of Dallas in a recent competitive bid process to provide both retail and food services in the newly renovated Love Field Airport (DAL). The award ranges over eight retail and two food & beverage packages and includes: three newsstands, a bookstore, 11 specialty retail concepts, and five food & beverage locations, totaling nearly 16,000 sq. ft.

DELTA AIR LINES — Baggage handlers were accused in a $500,000 drug conspiracy at Atlanta's Hartsfield Jackson Airport. The plot by three Delta workers to smuggle a bag filled with heroin and methamphetamine into the U.S. was foiled when the baggage ended up on an unclaimed luggage carousel.

DFW — announces the start of new service from Spirit Airlines to the cities of Tampa, Denver, and Myrtle Beach. Spirit offers daily service between Denver and DFW with a second daily flight starting May 17. Spirit has also added four non-stops per week between DFW and Tampa, as well as seasonal nonstop service with three flights per week between DFW and Myrtle Beach. With the newly added flights, Spirit now serves 11 destinations from DFW.

ECLIPSE AEROSPACE — announces a specific timeline to restart manufacturing an upgraded version of its very light jet, the Eclipse 550, with the first deliveries planned for the second or third quarter of 2013.

NYC AREA AIRPORTS — Collisions between birds and airplanes have risen 31 percent at the New York City area's major airports in the past two years, according to federal government statistics. Despite calls for improved wildlife management after a bird strike caused the "Miracle on the Hudson" water landing of US Airways Flight 1549 in 2009, collisions have climbed nearly 40 percent at Kennedy Airport, according to the FAA Wildlife Strike Database.

PINNACLE AIRLINES — files for bankruptcy protection to deal with its mounting debt. The Memphis-based airline says its current business model is not sustainable; it had tried for months to cut costs at its operating subsidiaries and recover from lost business with major airlines due to flying cutbacks.

PIPER — grew its new aircraft deliveries and sales revenue during the first quarter of 2012. Airplane deliveries increased more than 40 percent to 37 aircraft in the first quarter of 2012, from 26 airplanes during the first quarter of 2011. New aircraft sales revenue grew more than 20 percent

FBO snapshot

LOUISVILLE EXECUTIVE RAMPS UP STAFF FOR KENTUCKY DERBY

Louisville Executive Aviation readied to handle four times its usual weekend traffic as celebrities, horse owners, and racing fans in some 300 aircraft from Los Angeles to Dubai were expected to fly into Bowman Field (KLOU) for the Derby, known as "The Fastest Two Minutes in Sports."

Louisville Executive Aviation, a Phillips 66 Aviation-branded dealer, offered double WingPoints for the event; WingPoints rewards aviation fuel purchases at participating Phillips 66 FBOs with points redeemable for debit and gift cards online at www.wingpoints.com.

Celebrations started early with the eighth annual "Out of The Blue" Jet Show, a private aircraft reception showcasing the latest models from jet manufacturers and fractional providers, along with luxury automobile, watercraft, and motorcycle dealers. The FBO tripled its staff to handle the expected traffic.

to $31,578,203, when compared to sales of $26,159,703 during the same period the previous year.

PRIMEFLIGHT AVIATION SERVICES — a national ground handler accused of wage standards violations last year, will lay off some 64 people at San Antonio Int'l Airport after losing a contract with Delta Air Lines. The company also expects to lay off 276 employees at Bush Intercontinental Airport after United Airlines replaced it with another contractor there.

RALEIGH-DURHAM INT'L AIRPORT — will provide free wireless Internet service for travelers starting this summer. Boingo, which operates Wi-Fi service at 60 American airports, will go online at RDU by July 2. Between 10,000 and 20,000 travelers now pay AT&T for Wi-Fi at RDU each month at $7.99 for a 24-hour session. When Boingo takes over, RDU customers will have the option of free Wi-Fi with video advertising or a premium, ad-free service for $7.95.

SPIRIT AIRLINES — says that beginning November 6 it will charge $100 for fliers who pay for a carry-on bag at the boarding gate, up from the current $45 fee.

UNITED AIRLINES — order for at least 100 Boeing 737 narrowbody jets potentially worth $10 billion at list prices could increase to as many as 200 jets if United exercises some 100 options to buy other narrowbodies. The deal will feature mainly Boeing's upcoming 737 MAX, an upgraded, fuel-efficient version of the company's best-selling 737.

US AIRWAYS — building labor support for a possible bid for American Airlines, envisions 42 percent fewer job cuts among Transport Workers Union members than the bankrupt carrier is proposing. Under a US Airways agreement with the TWU, the airline would cut 450 jobs at American's maintenance base in Tulsa and grant two-year furlough protection to the 4,500 workers who remain.

U.S. CONGRESS — A dozen associations representing a cross-section of aviation stakeholders is urging Congress to continue its support of FAA's Contract Tower Program, the public-industry partnership that has provided air traffic control tower services to hundreds of U.S. communities for 30 years. The associations have asked Congress for $136.1 million for the fully funded contract towers as well as $10.35 million authorized for the continuation of the Contract Tower Cost-sharing Program. ab

Charter snapshot

ELITE AVIATION ENTERS JOINT VENTURE WITH STAJETS

Elite Aviation, a global private jet company, announces it has entered into a joint venture agreement with Orange County's STAjets which will provide additional aircraft and a second base of operations for the Van-Nuys, CA firm.

Effective immediately, Elite Aviation will have access to STAjets' fleet of mid to light jets and turboprops specializing in Bombardier, Hawker, Nextant, Citation, and Pilatus aircraft. STAjets is one of the first companies to offer a Nextant on a charter management certificate. Elite Aviation will also gain use of the STAjet facility at the John Wayne Airport (SNA).

40 UNDER FORTY

The best and brightest

Is anyone in your organization worthy of this honor?

Airport Business magazine's August/September issue will recognize 40 individuals from the Airport and FBO industry for their contributions to the industry and a "job well done." It is not a ranking, but rather a listing of individuals who have shown initiative, a capacity, or have made an impact to the aviation industry.

Let the industry acknowledge you or your colleagues for dedication to the aviation industry. If you or your colleagues will be 39 years old or younger on August 1, 2012, you are eligible to be nominated for Airport Business magazine's Top 40 Under 40.

Deadline June 1, 2012

Contact Missy Zingsheim at missy@aviationpros.com

airport business

From Corner Office to Mobile Office

A look at the key strengths airport management experience can bring to the private sector

By Mike Cheston, *consultant, Faith Group, LLC.*

The U.S. has the most sophisticated, advanced, and strictly regulated aviation system in the world today. This intricate system-of-systems demands continuous adjustment, dependable safety, and nearly constant improvement derived from the introduction of new and innovative technologies and procedures.

The increasing demand to provide safe, efficient and reliable air transportation services to an ever-increasing passenger base has been the impetus behind the Congressionally mandated Joint Planning and Development Office (JPDO) initiative that kick-started the Next Generation Air Transportation System (NextGen) design effort, and has now evolved into a dedicated FAA NextGen Division.

A key element of successfully reaching the NextGen vision starts on the airport departure roadway, and ends on the arrivals curbside. While the vast majority of certified commercial air carrier airports (FAR Part 139) are publically operated, they tend to be managed under a "private" business model, self-sustained from revenue developed on-airport and meeting the needs of the customer: the public, the airlines, and the U.S. government.

This takes a unique mix of managerial skills and business best practices that cover a landscape between governmental bureaucracy and for-profit business processes.

All Things To All People

Good airport directors develop the knowledge and skills necessary to meet these challenges through years of experience in a variety of issues facing the daily operational demands of an airport. The depth and breadth of knowledge an airport manager/director/CEO must possess can vary somewhat from one airport to another, but all obtain exposure to a lesser or greater extent, to the internal business machinery that drives airports through growing pains, capital development, community issues and involvement, and all the daily demands of a city.

> The airport director becomes all things to all people — an IT expert; aviation safety and emergency response expert; security guru; real estate baron; and environmental steward ... just to name a few.

The airport director rapidly becomes all things to all people — an IT expert, aviation safety and emergency response expert; security guru; real estate baron and environmental steward … just to name a few.

These exceptional skills developed through years of operations and management of complex airport operations creates both technical and managerial expertise usually resident in senior subject matter experts (SME) found in leading consulting firms; and these very skills can prove to be highly valuable to the aviation industry in managing, designing, and supporting airport projects that demand the expertise of someone who has the "been there, done that" experience of an airport manager.

In other words, if/when an airport director decides to hang-up the spurs for something else, a consulting career is a viable option.

Directors Turned Consultants

So, what key strengths does an airport director bring consulting firms that can support their business plan — what business do they want to develop and what market channel will prove to be their focus?

Of course there is personal reputation. Airport consulting firms are as much about the ability to develop healthy relationships with their clients as they are on building winning bids. For those who can jump right in as major league rainmakers — the highly influential, Category X, top ten airport director, industry association chairman, etc. — that part of the formula comes easy. A winning attitude and professional personality is the ability to convert that positive reputation into opportunities with prospective clients — to win business; less science and more personality.

Not everyone is destined to be a partner in a major consulting firm,

about the author

Mike Cheston has over 32 years of aviation experience, most of which was spent in Part 139 airport operations and management, including tenure as an airport authority CEO. He is a SME in a broad spectrum of topics, including NextGen, aviation security, SMS, airport security program management, national security topics, emergency management, and unmanned aircraft systems; he currently works as a consultant with Faith Group, LLC.

but can still enjoy an impressive practice by providing the expertise mentioned above. However, airport directors have a crutch of sorts that can prove to be a handicap when it comes to working as an independent member of a SME team of consultants: They need to do their own scheduling, word processing, graphic design, and other forms of administration.

It is very easy to get used to an efficient executive assistant directors enjoy to handle all the mundane tasks they don't have time to do. Making the plunge to consulting from the rarified air of the director's office can be a culture shock.

Most airport directors don't get to that lofty post if they are uncomfortable or otherwise don't like to write. But consultants spend most of their waking hours writing. The mastery of the English language is as critically important to consulting as technical prowess and experience.

Facilitation and Technological Abilities

Successful directors also don't get to the corner office unless they have strong facilitation and collaborative skills. Sure there are those who are more comfortable and successful with things happening in response to a wave of a hand, but when consulting, there is usually a number of key stakeholders who have strong opinions and 'votes' in the outcome of a particular program.

There's an art to helping a given vision solidify in active discourse, especially if there is a conflict of direction or expectation. The artful consultant is able to craft a solution that is not only best for the client and operation, but doesn't leave a trail of broken egos in the wake of 'success.'

Making the plunge to consulting from the rarified air of the director's office can be a culture shock.

Then there's the technological ability that an ex-director brings. Here's where some directors might be challenged. They all tend to be multi-taskers, over-achievers, jack-of-all-trades and masters of two or three. There is usually something that you love doing more than others.

For instance, a director that gravitates to operations and safety will find a natural home on that side of airport operations procedures, safety management systems, etc. If developing business and policy is the hot button, there is need there as well. When you start to get into more technical programs, such as airport pavement construction, IT system development, or environmental programs, it clearly helps to have an associated technical degree.

Finally, whether part of a firm or operating as an independent consultant, you have to have the following strengths: Detail-oriented, organization, flexibility, strong communications skills, problem solving to solution, and of course, a strong sense of humor always comes in handy. In essence, the blood, sweat and tears you've invested into a career of managing airports and the associated systems can prove to be highly valuable to solving the problems airports will face in the future, and can translate into a 'second' career with little effort on your part.

Consulting has its advantages and drawbacks to holding a 'real' job with an airport. The things I miss most include a sense of belonging to a mission-oriented group, the excitement of the daily 'thing' that seems to be endemic at airports, and the dependable paycheck for doing something you love.

That said, there are real advantages to consulting — whether under your own colors or for a firm. They include owning your own hours, having new and interesting projects to tackle, and not necessarily having to 'marry' any particular board of directors, city councils, mayors, and governors, which can be interesting at times.

In the final analysis, few if any people in an airport organization can carry the ball on so many subjects as the director. Born from experience, both good and bad, the airport director is someone who can flex to almost any challenge. ab

Sacramento International Airport was awarded LEED silver certification by the U.S. Green Building Council for its new $1 billion terminal and concourse.

Trends In Facility Design

By Brad McAllister, *Editor*

From planning for technology to keeping sustainability top-of-mind, airport terminal structures are evolving into environmentally responsible travel and information hubs

Jonathan Massey, principle at Corgan Associates, is an aviation architect and planner with more than 19 years of experience in the development and production of aviation-related facilities.

In addition to terminal design, Massey has worked extensively in the area of terminal modernization, renovation, and expansion in active operational environments; he holds two degrees in architecture and is LEED-Accredited.

Recent projects for Corgan include the new new 19-gate concourse and Terminal B at Sacramento International Airport (SMF) and a terminal renovation at Dallas Love Field (DAL)

At Sacramento, unique features included a replacement terminal, a significant rework of roadways, an impact on operations, and the addition of a people-mover system. There were significant operational implementation challenges, relates Massey. A LEED-Silver certified project, a primary goal at SMF was to create a distinct sense of place to evoke a particular regional feel. To that end, Corgan incorporated regional materials into the building design, such as reclaimed Redwood.

At Dallas Love Field, which was Corgan's first terminal project in 1958, and currently home of Southwest Airlines, the project involved a partial tear-down of three existing concourses and the rebuilding of a single concourse, and heavy renovation of the terminal building.

Planned to be a LEED-Silver structure, the Love Field facility was designed with several sustainable elements in mind, says Massey. Corgan sourced wood locally, and with regard to the energy model, much effort was put into the energy management function of the facilities.

The BIM Advantage

In terms of passenger flow and simulation modeling, Massey says the technology to present a true graphical representation of terminal interior models and how passengers use the facility has gotten much better in recent years. "Simulation modeling is a tried and true tool we continue to use," he comments.

The real advantage these days relates to BIM (building information modeling), says Massey. BIM allows building drawings and specifications to be modeled and reviewed in three dimensions.

"We've found that BIM has been extremely helpful in terminal buildings from a conflict resolution standpoint," he adds. "In the past, many things had to be resolved in the field … now that we use BIM — and the many designers and engineers can put all of their drawings in 3-D — we can do that conflict-resolution in a conference room on a screen before construction happens.

"This allows us to see where problems may exist before we get to that point in construction; it drives costs down and makes the process go along much easier."

BIM has also changed how architects, engineers, and contractors work together by requiring more communication between stakeholders, explains Massey.

The construction procurement method can have a significant impact over how the modeling and coordination process goes, he says. "We have done a lot of projects where the client brings on a construction manager during design — we have found that to be very beneficial. We believe overlap with the contractor and the design team is a good thing.

"In general, the best way to implement the terminal is to have the same set of eyes follow the process from planning all the way to opening day — that ensures the best continuity and execution of the original ideas."

A primary goal at Sacramento was to create a distinct sense of place to evoke a particular regional feel.

Planning For Technology

The evolution of the technology industry has certainly had an effect on airport terminal

In general, the best way to implement the terminal is to have the same set of eyes follow the process from planning all the way to opening day — that ensures the best continuity and execution of the original ideas.

Left: Incheon International Airport; right: DFW Terminal D.

buildings, relates Massey.

He remarks, "At Love Field, when we started to tear into the building and renovate it, we went into the basement and found 'spaghetti' of conduits and wires … everything from copper that had been there for 30 years to new fiber that somebody put in last year."

The good thing is the industry is getting to a point where everything is pretty much fiber optics, and everybody rides on the fiber-backbone, says Massey. "Airports can now provide that backbone and manage it just as it provides the roadway out front of the facility."

The challenge today is designing the facilities in a way that the technology is easily accessible, and not in the way of something that might need to be done to the physical infrastructure of the building in the future, explains Massey.

"There are a couple of very technology-intensive areas like ticketing halls and security checkpoints where everything needs an IP (internet protocol) address — it needs to be an adaptable network that you can get to and manage," he comments.

"Particularly in the ticketing halls, there are certain layouts of equipment that you can reasonably expect in many facilities. We try to create right-of-ways beneath the floor that correspond to those equipment 'zones'.

"The biggest thing we have found we can do with regard to IT is try to be as preemptive as we can about defining

the logical locations for future needs, and then reserving those spaces."

Defining Space; Wayfinding

The ticketing halls are getting to be a third of the size they used to be, relates Massey. "Probably within the next ten years I would think the ticketing hall size will reach equilibrium where it has become right-sized and where the baggage function will be the area's primary function."

The security checkpoint is one of the most difficult parts of the building to deal with, says Massey. "The best practices that we've found is to provide flexible infrastructure below the floor — you have to be able to get to the floor below the checkpoint so it is easier to run cable and move outlets as the equipment layouts change," he adds.

"Another trend at the checkpoint is to put 'soft' space on either side. By soft space, I mean offices or elements that can be relocated and moved around in case the checkpoint needs to be expanded."

The intuitive wayfinding concept is an architectural idea, explains Massey. "Particularly, it is related to the departures process, and it goes to the level of service.

"What you want the building to do is make the departures process for a passenger as simple and stress-free as possible ... that is done by creating space and utilizing art — telling people what to do next with the intelligent use of light and volume.

"Tall ceilings, bright lights, and clear views in the direction we want people to go; that's the basic premise of intuitive wayfinding."

Concessions; Retail

Most everything is post-security these days, except in places where there are larger meet and greet markets, says Massey.

He remarks, "Concessions are getting more and more important; concessions planners are telling us they need more space. The airport is using the concessions program as part of the branding of the airport and its region; we are doing a lot to integrate local flavor into the facility with regard to the retail and concession vendors."

Sustainability

Corgan has many LEED-accredited professionals in the practice, says Massey. LEED (Leadership in Energy and Environmental Design) is a system meant to get designers and owners thinking sustainably, he continues.

"Many of the terminal projects have been certified LEED-Silver; that seems to be the appropriate level for airports that utilize LEED guidance," comments Massey.

"We spend a lot of time analyzing the passenger population over time so we can determine the heat load, and right-size all of the systems in order to optimize the energy-saving potential of the building's various operational systems."

Looking for opportunistic innovation with regard to sustainability has paid off for Corgan, explains Massey. For example, the company reused Redwood from an old bridge for the Sacramento project.

In Dallas, Corgan found a natural underground spring — an ongoing problem for the airport with regard to keeping the basement dry. "We saw it as an opportunity," says Massey. "We captured the water and used it for the building's cooling systems.

"We like looking for unique aspects of different projects, and capitalizing on them in a sustainable way."

With regard to building materials in general, "In recent years, we have gone away from the exposed steel structures in big spaces; it has gotten expensive in the past several years," says Massey.

With regard to future trends, "The biggest area of change will be landside facilities such as the ticket hall, the roadways, and the parking garage … those are in a rapid state of development," remarks Massey. "How you get people and baggage out of cars and through security qucikly and efficiently is an area ripe for immense innovation in the next 10-20 years." ab

FENTRESS UNVEILS STUDENT DESIGNS FOR AIRPORT OF THE FUTURE

After reviewing some 200 student submissions, Fentress Architects announces the winning designs for the 2011 Fentress Global Challenge, an international competition for students to present their visions for the airport of the future.

Designs were evaluated on creative approach, response to site, sustainability, and functionality.

Grand Prize/Oliver Andrew: The LDN Delta Airport is designed as prefabricated, mass-produced islands situated in the Thames Estuary. The airport would ease the overcrowding of the surrounding airports as there are no cars, runways, nor check-in desks, but is served solely via public transportation. The airport supports vertical takeoff with hypersonic jets capable of flying at the edge of space, lifting off from purpose-built landing pads, and uses the tidal currents to run on total sustainable power.

Jury Members

G. Hardy Acree, Sacramento International Airport

Marvin Malecha, FAIA, Dean of the College of Design, North Carolina State University

Helen Norman, Editor, Passenger Terminal World

Tibbie Dunbar, Executive Director, Architecture + Design Museum

James P. Cramer, Cofounder & Chairman, Design Futures Council

Curtis Fentress, FAIA, RIBA, Principal-in-Charge of Design, Fentress Architects

Ralph Hood
Certified Speaking Professional

Guvmint VS BigBoy Jets

A major corporation had a small fleet of jets; the fleet is now down to just two jets, and thereby hangs a tale …

This corporation — let's call it BigBoy — had decided not to take Trouble Asset Relief Program (TARP) money back when it was available. (Surely you remember TARP — the entity that would return us to prosperity.) BigBoy did send a representative to a meeting at which the guvmint was to explain how TARP worked. That representative called his boss from the meeting and reported that the guvmint was going to help companies that took TARP dollars succeed, but make life tough for those companies that did not take TARP dollars. The powers-that-be changed their collective minds and BigBoy did take TARP dollars.

Thereafter, the guvmint — evidently suspecting that BigBoy jets were sometimes used for trips that were not strictly business — decided that BigBoy did not need that many corporate jets, and "persuaded" BigBoy to whittle the fleet down to two corporate jets. This also caused a proportionate reduction in the number of pilots.

Interesting, to say the least.

We know that Obama appreciates the value of dedicated jet aircraft. I am told that he uses his presidential aircraft — and the aircraft that support those aircraft — more than any other president has.

You'd think Obama might even understand a not-strictly-business trip. Do you remember when Obama was in Paris on business, accompanied by his wife and both daughters? Do you also remember that he returned to Washington, but left wife and daughters in Paris so that they could "go shopping?" Seems he also left a Boeing to bring them home. We can only imagine how many support people and equipment were also left for their care and protection. I've never seen a reasonable estimate of the cost of that little shopping trip.

The guvmint talks of charging corporation turbine aircraft something like $100 per leg for all business trips. I wonder if any corporations will get rid of a propjet and go back to a C-421 …

Does that shopping trip seem like legitimate guvmint business to you? It doesn't to me either. On top of that, I understand this caper did not please USA merchants.

Do you suppose Obama paid for the extra expense out of his pocket? I doubt it.

I understand that's the way big shots in private companies are required to handle it.

Come to think of it, if the guvmint suspected that BigBoy made non-business trips, why didn't they just tell them that the executives involved had to pay for those trips? Why would the guvmint instead push BigBoy to sell some of the jets?

Now, at the same time, the guvmint talks of charging corporation turbine aircraft something like $100 per leg for all business trips. I wonder if any corporations will get rid of a propjet and go back to a C-421 for corporate use?

I also wonder if anybody in guvmint really gives a hoot. ab

Cloud-Based Data Analysis Tool

CAPACG and AvConnect have developed a cloud-based flight data analysis tool that contributes to the next generation of GA safety and efficiency, delivering a detailed analysis of Garmin G1000 flight data for Embry-Riddle Aeronautical University. CAPACG's *FlyteAnalytics,* powered by AvConnect, will allow fleet operators of Garmin G1000 and other glass cockpit-equipped aircraft to employ proactive flight data monitoring programs without the added expense, weight, or downtime associated with installing lightweight aircraft recording systems (LARS); *www.AvConnect.net.*

CUPPS In Canada

Ultra Electronics, Airport Systems announces it has completed implementation of Canada's first Common-Use Passenger Processing System (CUPPS) at St. John's International Airport (SJIAA). The system, UltraCUSE Enterprise, uses VMware technology and thin client devices at the desks to replace conventional PCs and is the first of its kind in Canada, serving 46 check-in and gate positions at the airport; *www.ultra-electronics.com.*

Multi-Level Screening

Vanderlande Industries completes the first part of the baggage handling system for Edmonton International Airport (EIA) in Alberta, Canada. The system implements three levels of screening and successfully supports the new CATSA HBS initiatives. The new technology utilizes high speed CT EDS machines, a BAXORTER to buffer and sort bags to downstream destinations, automated BIWIS drop locations, and Vanderlande Industries' low energy GREENVEYOR transport solution; *www.vanderlande.com.*

Radio Navigation Simulator

Digital Aviation releases a new mobile flight simulator for radio navigation training on iPhone, iPad, or iPod touch devices. Radio Navigation Simulator is a precision 2D Flight Simulator that enables pilots and students to practice, understand, and become proficient in the use and management of VOR, VOR-DME, and ADF instruments, all displayed with a directional gyro on a realistic flight panel; *www.digitalaviation.com.*

Remote Runway Surveillance

Searidge Technologies announces it has been selected by National Aerospace Laboratory (NLR) as its video partner for the evaluation of a customized Remote Runway Surveillance system at Amsterdam Airport Schiphol (AMS). The Remote Runway Surveillance system is being evaluated to monitor the airport's most distant runway, located six kilometers from the central tower; *www.searidgetech.com.*

SITA Baggage Report

The eighth annual SITA Baggage Report shows that 99.1 percent of checked baggage was delivered on time to the passenger during 2011. This is the highest rate of successful delivery since the report was first produced and represents a saving of $650 million to the air transport industry over 2010, says the company. SITA's report shows that the mishandled rate has more than halved since 2007; *www.sita.aero/content/baggage-report-2012.*

Ultra-High Speed Baggage Scanner

Rapiscan Systems, Inc. announces its RTT (Real Time Tomography) baggage screening solution has become the first ultra-high speed system to pass the European Civil Aviation Conference's (ECAC) Standard 3 threat detection test. The RTT, designed to inspect checked baggage at airports, is capable of screening baggage at speeds of up to 1,800 bags an hour; *www.rapiscansystems.com.* ab

Airports Invest In Mobile Technology

In an effort to optimize the customer experience, airports offer mobile solutions to provide passengers with information in real-time

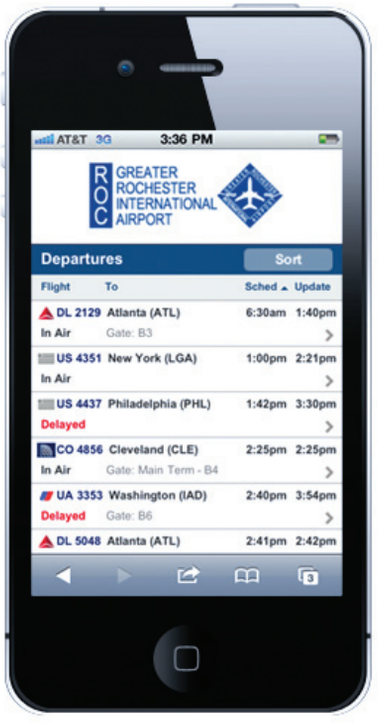
By Mike Benjamin, *CEO, FlightView Inc.*

With mobile devices on pace to exceed one billion units by 2015 — ignoring the mobile channel is no longer an option for airports. Today, it represents a clear competitive advantage; tomorrow, it will be the expectation. In fact, PhoCusWright reports nearly 75 percent of business travelers already own a smart phone today. That's more than half of an airport's customers all looking to the palm of their hands for information.

The consumerization of information technology is in full swing, and airports must evaluate their infrastructures to ensure that the right strategy and technologies are in place to meet evolving customer needs.

Technology Investment

A more connected consumer base puts increased pressure on airports to deliver and support mobile devices with relevant day-of-travel information, and airports are responding. According to the 2011 SITA airport IT trends survey, more than 80 percent of airports expect IT spending to increase or stay the same in 2012. Mobile services for passengers and staff continue to top investment priority lists — 80 percent of airports already have a plan to offer mobile device services for passengers within two years.



The core driver is traveler satisfaction and loyalty. In fact, improving customer service on a whole is the number one driver for new technology investments, according to the survey.

Every customer-facing technology is critical for creating a positive overall experience for the traveler.

More airports are investing in mobile content to both deliver core information and to incorporate additional features to achieve a competitive advantage over neighboring airports. Core information are the services most travelers have come to expect from mobile devices, such as flight status, restaurant and shop locations, parking lot listings and payment information, airline contact numbers, and hotel and ground transportation listings.

Additional features include real-time weather updates, terminal maps, and airport construction alerts. This available information allows an airport's mobile application, be it a mobile website or app, to become a one-stop shop for passengers.

Websites Vs. Apps

When it comes to developing mobile content, airports typically can chose between investing in a mobile website or a native app. And while both offer unique benefits, the majority of airports tend to gravitate towards the cost effectiveness of mobile websites

More airports are investing in mobile content to both deliver core information and to incorporate additional features to achieve a competitive advantage over neighboring airports.

about the author

As CEO of FlightView, **Mike Benjamin** works with airlines and airports worldwide to develop mobile strategies, enhance customer service, and provide accurate, real-time flight information for travelers.

first. More than half of major U.S. airports have invested in the technology and recognize that the platform allows them to build and maintain a presence that can be accessed by users across multiple devices and operating systems.

Airports that have recently launched mobile websites include Baton Rouge Metropolitan Airport, Dayton International Airport, Eastern Iowa Airport, Lincoln Airport, Nashville International Airport, and Raleigh-Durham International Airport.

Given that passengers may fly the same airline but are constantly visiting different airports, a mobile website lends itself to a traveler's natural instinct — to search for relevant airport information via a Web browser rather than download separate apps. By offering an easily searchable mobile website to obtain travel information quickly, travelers enjoy a better customer experience while in turn reducing the reliance on customer service staff.

In addition, mobile websites also tend to be significantly more affordable to develop because one site can be optimized for multiple platforms (iPhone; Android; BlackBerry). Mobile apps need to be developed separately for each operating system.

Social Media Integration

Beyond traditional flight and airport information, the most innovative airports are now turning to social media for a competitive edge. By allowing passengers to easily share flight status with friends and family via Facebook and Twitter, airports such as LeHigh Valley International are generating free visibility for every Tweet and status update that blasts the airport's name out into an individual's social network.

The value of social media is especially great for small and mid-sized airports competing against larger travel hubs. Sixty-six percent of airports plan to integrate social networking functionalities for passenger service because of the brand-building potential and the reach of social platforms.

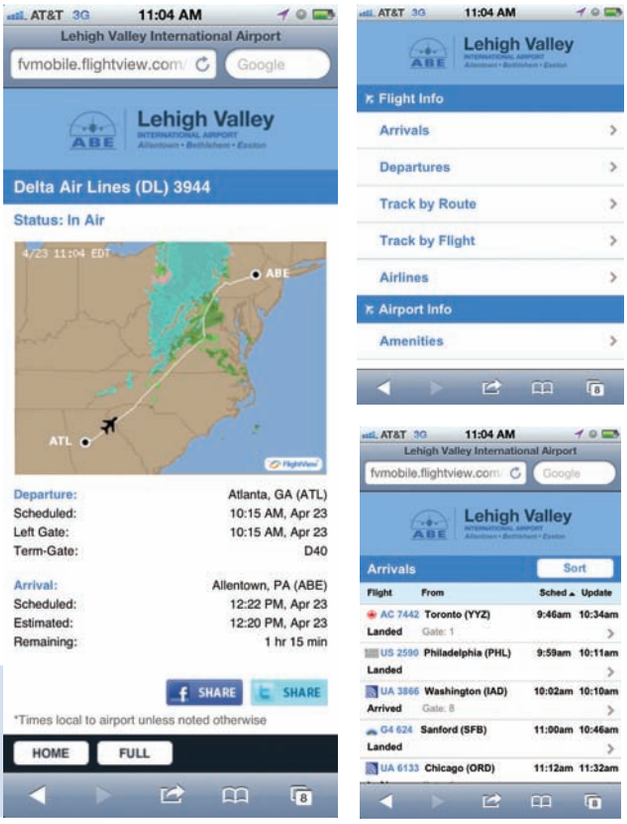
The Future

The airport industry has only just begun to tap into the power of mobile technology. Remote/self-service check-in, mobile boarding, and in-airport turn-by-turn navigation are all next-gen capabilities on the horizon.

Whether it's a mobile website or native app, customers are looking to their palms for information and answers. Flight status, retail coupons, terminal maps, social integration — air travel information and mobile technologies are intersecting.

Today the channel represents an opportunity for competitive advantage; tomorrow it'll be the norm — making it essential for airports to be innovative in their mobile offerings to stay ahead of the curve. ab

Mobile websites tend to be more affordable [than apps] to develop because one site can be optimized for multiple platforms.



Short-Term Lease, Long-Term Investment

FBOs Struggle for Sound Lease Agreements

By Linsey McFarren, *McFarren Aviation Consulting (MAC)*

FBOs and other on-airport aeronautical service providers (ASPs) have long struggled with using private funds to invest in their facilities on leased land on airports. Short-term lease terms often limit an FBO's ability to take advantage of favorable lending practices and commercial tax rules related to depreciation and amortization.

The General Aviation Infrastructure and Investment Coalition (GAIIC) was created to begin a dialogue about leasing provisions with FBOs and airports, as well as to increase visibility within Congress of the concerns surrounding private investments by ASPs. The GAIIC represents a cross-section of FBOs from across the country, including large FBOs with multiple locations as well as independent FBOs. In fact, more than 250 FBOs operated by more than 27 owners are represented.

Sam Whitehorn, executive vice president of McBee Strategic Consulting, who represented the GAIIC in negotiations with airport representatives, explained the issue the GAIIC sought to resolve: "FBOs need to know their construction investment is a sound one. Once we started the dialogue, we realized a lot of money is sitting on the sidelines because FBOs can't take advantage of tax incentives."

Best Practice Guidance

Several months ago, the GAIIC partnered with Airports Council International – North America (ACI-NA) to develop a best practices guide for airports and FBOs negotiating lease agreements. The best practices outline the following guidelines for an airport land lease:

- The lease term should reflect the level of capital investment required to develop the needed improvements to the leasehold as outlined in the sponsor's minimum standards or lease requirements;
- The lease term should provide the FBO/ASP the ability to take maximum advantage of the IRS amortizations schedules, when possible;
- Where the agreed to lease term is shorter than the period required to fully amortize the capital improvements, lease provisions should ensure that FBO/ASPs can take advantage of the IRS amortization schedules; airport sponsors should request a certified schedule to verify the amortization and depreciation of the FBO/ASP facility investment; and,
- Upon agreement between existing FBO/ASP and airport sponsor that a new capital improvement is required to meet demand in the market, and such investment is made by the FBO/ASP, extension of lease term and/or provision for a buy-out of the unamortized capital costs of such improvement should be negotiated.

Following the guidelines developed by the GAIIC and ACI-NA could allow an FBO with a 15-year land lease to amortize construction expenses over 20 or 30 years, for example. And we aren't talking about sprucing up a bathroom at an FBO.

One estimate indicates some $1 billion is available for private construction projects on airports, but sits unused or goes to off-airport commercial projects because short-term land leases prevent on-airport ASPs from taking advantage of tax incentives. These funds could be used to build general aviation hangars, maintenance facilities, and more.

The GAIIC represents a cross-section of FBOs, including large FBOs with multiple locations as well as independent FBOs – more than 250 FBOs operated by more than 27 owners.

Eric Byer, vice president of government and industry affairs for the National Air Transportation Association (NATA), believes these best practices can help stimulate economic growth and create jobs.

"The aviation industry has experienced difficult times in the past few years. These best practices have the potential to make airport sponsors and FBOs better partners, helping airports become significant economic drivers for local communities and our nation as a whole," he comments.

The GAIIC and ACI-NA agreed on

about the author

Lindsey McFarren is an industry-recognized expert in GA regulations, safety, and security. She founded McFarren Aviation Consulting (MAC) in 2009. She has a Masters of Aeronautical Science degree from Embry-Riddle Aeronautical University (ERAU) and was the manager of regulatory affairs at the National Air Transportation Association (NATA), where she focused heavily on Part 135 issues.

the best practices guidance in February. "The concept had a lot of pushback from the airport community originally, mostly because of misunderstandings of the overall concept and potential benefits of the best practices," says Whitehorn.

Some airport managers thought the GAIIC was trying to mandate contract lease terms between airports and FBOs. Quite to the contrary, the GAIIC thinks these best practices provide benefits for both airport sponsors and FBOs, such as the creation of jobs; the ability for FBOs to re-invest in facilities and provide higher levels of customer service; and flexibility to determine the length of FBO leases based on local conditions and needs.

Byer is also familiar with the misconceptions of some airport sponsors. "Many airports understand that encouraging private sector investments in facilities, such as general aviation hangars, means offering terms that best enable FBOs to utilize tax advantages that benefit off-airport commercial investors.

"However, a few airports do not sufficiently recognize the need to encourage investment in facilities and only offer short-term opportunities that constrict investment and a job-creation environment," Byer explains.

Communication Is Key

Both Byer and Whitehorn know the key to the success of these guidelines is communication.

Says Byer, "NATA believes these best practices prove the value of open communication and establish guidelines for airport sponsors and service providers to continue a process that incentivizes investment and could promote economic growth."

Anecdotally, one industry expert believes recent requests for proposals (RFPs) from airport sponsors seem to reflect these best practices. The true test of whether the industry accepts the GAIIC guidelines will be to evaluate RFPs over the next few years to determine if the concepts of the best practices are reflected in the RFPs.

Whitehorn knows educating airport sponsors and ASPs on leasing conditions that are mutually beneficial will take time. "Change is hard," he relates. "We know full acceptance of these practices won't happen overnight."

One estimate indicates some $1 billion is available for private construction projects on airports, but sits unused or goes to off-airport commercial projects because short-term land leases prevent on-airport ASPs from taking advantage of tax incentives.

ACI-NA, NATA, and other general aviation trade associations are working to get the word out to their membership through newsletters and conferences.

But Byer, Whitehorn, and others in the industry know the concepts in the best practices guidelines have the potential to overhaul the entire airport/FBO relationship, especially with support from Congress.

The GAIIC has made progress in its efforts to bring visibility to the issue on Capitol Hill. In fact, U.S. Representative Tom Petri (R-WI), Chairman of the Committee on Transportation and Infrastructure, Subcommittee on Aviation, and Representative John Duncan (R-TN) hosted representatives of the GAIIC and airport sponsors in a roundtable discussion in June of last year.

The GAIIC hopes to continue gaining support from the Hill while working towards general acceptance in the aviation industry. ab

Minimum Standards Exemptions

Part one of a six part series on airport tenant relations and aviation legal matters

By Paul A Lange, *Esq. and Megan Bryson, Esq.; Law Offices of Paul A. Lange, LLC*

Can an airport tenant ever really be exempt from an airport's minimum standards and regulations? This is a pressing and timely issue for all airport tenants, whether the tenant is the beneficiary of an exemption or whether its competitor has or is seeking an exemption.

The necessity for an exemption may arise due to a myriad of conditions. There is no question that the economic climate of late has resulted in substantial losses to FBO operators and other airport tenants, particularly with the widespread loss of general aviation aircraft hours flown. In response, airport tenants may look to non-aviation subtenants to make up some of their lost revenue, begging the questions:

1. Can an airport tenant ever really obtain an "exemption" from the airport minimum standards to accommodate non-aviation subtenants?

2. If an airport tenant does obtain such an "exemption", how does an airport tenant protect and enforce its "exemption"?

The recent Part 16 decision in Valley Aviation Services, LLP v. City of Glendale, AZ, FAA Docket 16-09-06 (May 24, 2011) is particularly illuminating with respect to these issues.

If you read this article no further, at least note the following with respect to "exemptions" from airport minimum standards at airports funded with federal monies and subject to the Federal Grant Assurances:

1. An airport tenant can never have a valid and enforceable "exemption" to accommodate non-aviation subtenants upon designated aeronautical property unless the airport sponsor obtains explicit permission from the FAA with respect to same; and

2. One airport tenant's "exemption" is the foundation for another airport tenant's Part 16 claim for a violation of Federal Grant Assurance 22 (Economic Non-Discrimination).

The Fleeting Exemption

Valley Aviation Services, complainant, is a tenant of Glendale Municipal Airport (GEU) in Glendale, Arizona, and operator of the Glendale Airport Hangars on the southern end of the airport, inclusive of large hangars, T-hangars, T-shades, office, and ramp space. The complainant was assigned the relevant leasehold interests for the Glendale Airport Hangars on January 1, 1999, though several of the issues raised in the context of this Part 16 action arose prior to that date.

Respondent, City of Glendale, owns and operates the airport; GEU is a federally funded airport.

The complainant was authorized to sublet its premises to non-aviation tenants through informal arrangements with various airport directors, until the respondent reversed its position and imposed strict enforcement of the airport minimum standards as to complainant, while allowing other airport tenants to continue the practice of subleasing to non-aviation tenants.

By way of specific example, the complainant was forced to evict its non-aviation tenants, including the Glendale Police Department (which stored police vehicles in the complainant's hangars), while another tenant on the airport was permitted to sublease its hangar space to the Maricopa County Police Department for vehicle storage. Likewise, the complainant was forced to evict all of its tenants storing non-airworthy and/or disabled aircraft, while other tenants were allowed to continue the subleasing of space for the storage of such aircraft.

While traditionally, such disparate treatment between airport tenants is the subject of Part 16 actions on the grounds of economic discrimination in violation of Federal Grant Assurance 22, Valley Aviation Services examines the interplay of Federal Grant Assurances 22, 29, and 19 with respect to these issues.

Federal Grant Assurance 22

Federal Grant Assurance 22, governing economic non-descrimination, requires airport sponsors to make federally funded airports available "for the use and benefit of the public and to make it available to all types, kinds, and classes of aeronautical activity on reasonable terms, and without unjust discrimination. Federal Grant Assurance 22 further requires airport sponsors "to treat in a uniform manner those users making the same or similar use of the airport and to make all airport facilities and services available on reasonable terms without unjust discrimination.

Valley Aviation Services presents the traditional Part 16 claim of economic

about the author

Paul A. Lange founded and leads the Law Offices of Paul A. Lange, LLC, with offices in CT and NY. The firm practices nationwide and internationally in various aviation related legal matters, including airport development, financing, regulatory enforcement matters, and disputes.

Megan Bryson is an attorney at the firm, whose practice includes airport matters.

www.lopal.com

discrimination between airport tenants in violation of Federal Grant Assurance 22. The complainant alleged that the respondent subjected it to disparate treatment and economic discrimination through strict enforcement of the minimum standards and airport regulations as to it, while the respondent simultaneously failed to enforce these same minimum standards and regulations with respect to other airport tenants.

In its defense, the respondent argued that the complainant and other airport tenants were "not similarly situated" by virtue of the fact that the complainant's lease and the leases of other airport tenants were negotiated at different times.

As noted by the Director, (FAA office of airport compliance and management analysis) however, the negotiation of leases at different points in time is irrelevant to the enforcement of airport minimum standards and regulations with respect to all such tenants at a particular point in time. Essentially, the airport director's determination is that, while shifts in airport minimum standards and regulations may account for differences in enforcement with respect to all tenants over the course of time, the only issue for evaluation with respect to Federal Grant Assurance 22 is whether all tenants are subject to enforcement of the same airport minimum standards and regulations at any given time.

The Director found the respondent in violation of Federal Grant Assurance 22 by virtue of the respondent's intermittent and inconsistent enforcement of the airport rules and regulations as to all airport tenants over the sixteen years preceding the decision in Valley Aviation Services, particularly with respect to the storage of non-aeronautical vehicles and equipment, and the storage of disabled aircraft at the airport.

Of note, the Director's decision seems only to except "incidental violations" by airport tenants, with respect to which the airport sponsor has no complicity. Therefore, to the extent that an airport tenant seeks an "exemption" from enforcement of the applicable airport minimum standards and/or rules and regulations that otherwise apply to all airport tenants, such an "exemption" will likely always substantiate another airport tenant's claim of a violation of Federal Grant Assurance 22 in the event that said "exemption" is not likewise afforded to all airport tenants.

Federal Grant Assurance 29

Federal Grant Assurance 29 (implementing 49 U.S.C. § 47107(a)(16)), governs airport layout plans and prohibits airport sponsors from using designated aeronautical areas for non-aeronautical purposes. To the extent that an airport sponsor allows the use of designated aeronautical areas for non-aeronautical purposes, the airport sponsor must actually obtain explicit approval from the FAA for the non-aviation use on an interim basis.

Relying on Boca Airport, Inc. d/b/a Boca Aviation v. Boca Raton Airport Authority, FAA Docket No. 16-00-10 (March 20, 2003), the Director in Valley Aviation Services held that the respondent, City of Glendale, violated Federal Grant Assurance 29 in failing to ensure that all designated aeronautical areas were used only for aeronautical purposes.

Federal Grant Assurance 19

In accordance with Federal Grant Assurance 19 (implementing 49 U.S.C. § 47107(a)(7)), an airport sponsor must "not cause or permit any activity or action [on the airport] which would interfere with its use for airport purposes."

The most common improper and noncompliant land uses are situations where nonaeronautical leaseholds are located on designated aeronautical use land without FAA approval or on property not released by FAA, and permitting dedicated aeronautical property to be used for nonaeronautical uses. Examples of typical uses include using hangars to store vehicles or other unrelated items. Other improper land uses found in the past have included using aeronautical land for nonaeronautical purposes such as animal control facilities, non-airport vehicle and maintenance equipment storage, aircraft museums, and municipal administrative offices.

In Valley Aviation Services, the complainant alleges that the respondent is in violation of Federal Grant Assurance 19 by virtue of the respondent's (1) allowing the operation of non-aeronautical activities in airport hangars; (2) allowing the storage of non-aeronautical items (police vehicles, classic cars, carpet, RVs, etc.) in airport hangars; and (3) allowing extended and/or unlimited storage of non-airworthy and/or disabled aircraft on the airport.

The respondent's position that non-aeronautical use of designated aeronautical land is permissible so long as it does not unreasonably interfere with the aeronautical use of the airport was expressly rejected by the Director. In his decision, the Director takes the categorical view that "allowing non-aeronautical usage of aeronautical land is interfering with its intended use."

Therefore, as with Federal Grant Assurance 29, if an airport tenant seeks an exemption allowing the use of designated aeronautical areas for non-aeronautical uses, the tenant should recognize that such an exemption, as a matter of Federal Grant Assurance 19, is impermissible unless explicit authorization is sought and obtained from the FAA.

Conclusion

Airport tenants should be cautious if afforded an "exemption" from the applicable minimum standards and airport rules and regulations by an airport sponsor. Such "exemptions" are fleeting, unreliable, and almost never a source of competitive advantage.

To ensure enforceability of such an "exemption" pertaining to non-aeronautical uses of designated aeronautical properties, an airport tenant should always request that the airport sponsor obtain explicit authorization from the FAA and, the airport tenant should always presume that any "exemption" afforded it will likely be afforded to all other airport tenants. ab

Airport tenants should be cautious if afforded an "exemption" from the applicable minimum standards and airport rules and regulations by an airport sponsor — such "exemptions" are fleeting, unreliable, and almost never a source of competitive advantage.

PSIM: Ready for Takeoff

PSIM provides situational awareness of incidents and operational issues and helps personnel respond with contingency plans to minimize disruptions

By Dr. Bob Banerjee and Yohai West, *NICE Systems*

about the authors

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Yohai West is a subject matter expert in airport security/safety technologies including video management systems, incident management, and physical security information management (PSIM). As product marketing manager for NICE Systems, Yohai consults with airports worldwide on best practices and strategies to mitigate safety, security, and operational risks. Yohai can be reached at Yohai.West@nice.com.

Large airports are like miniature cities, with tens of thousands of people passing through them on any given day. Dynamic and expansive, airport environments are anything but simple — and that makes securing them evermore complex. Toward this end, airports collectively spend billions on aviation security annually. While this technology has automated and greatly improved many functions, it has also created some challenges.

For example, with so much information from so many different sensors and systems flowing into the security operations center, it can be difficult to discern false alarms from real threats. Simply put, the overwhelming flood of data can obscure the big picture. This is precisely the problem PSIM addresses.

A Primer On PSIM

In its simplest form, PSIM (Physical Security Information Management) integrates, synthesizes, and analyzes information and alerts from different security and safety systems. PSIM is an open architecture, interoperable software solution with generic gateways that enable any number of security, communication, safety, alerting, and sensing systems to be integrated to form a unified platform.

Examples include video management systems (and accompanying video analytics applications like perimeter protection and counter flow detection), access control, alarm panels, fire and safety sensors, radars, radio and telephony communications systems, video walls, CAD (computer aided dispatch), GIS (geographic information systems), emergency/mass notification, real-time mobile video, Web/RSS feeds, fence sensors, weather systems, and just about any other security, operational, or communications system imaginable.

Using pre-defined rules, PSIM also analyzes and correlates information and alerts across these different subsystems in real time, providing rich situational awareness. Because it correlates data, PSIM connects the dots between seemingly unrelated events to form a Common Operating Picture (COP).

Finally, PSIM guides appropriate responses to situations based on all of the different indicators of what's happening. Adaptive, pre-defined response plans ensure standard operating procedures are followed. The PSIM solution thoroughly documents the incident as it's happening so it can be reviewed later on: When did the incident start; what specific actions were taken and by whom; and how and when was it resolved?

PSIM doesn't just bring data together, it helps operations manage incidents from start to finish.

What is PSIM?

PSIM (Physical Security Information Management) integrates, synthesizes, and analyzes information and alerts from different security and safety systems. PSIM is an open architecture, interoperable software solution with generic gateways that enable any number of security, communication, safety, alerting, and sensing systems to be integrated to form a unified platform.

Examples

- Video Management Systems
- Access control
- Alarm panels
- Fire and safety sensors
- Radars
- Radio and telephony communications systems
- Video walls
- CAD (Computer Aided Dispatch)
- GIS (Geographic Information Systems)
- Emergency/mass notification
- Real-time mobile video
- Web/RSS feeds
- Fence sensors
- Weather systems

Three Primary Benefits

"PSIM provides three main benefits," explains Moti Shabtai, VP security for NICE Americas. "Airports have many islands of information, essentially security systems that are silos. So the first benefit of PSIM is its ability to tie these sub-systems together in a cohesive common operating picture.

"The second benefit relates to visualization. Once the dots are connected between these complex sets of information and incidents are revealed, they're overlaid on a map-based interface — making it easy to get a real-time visual representation of an event and the associated assets and people involved.

"You can literally view the different 'plots' of an incident, whether it involves aircraft on a runway, vehicles on an airfield, or other tracked assets in terminals or on airport roadways. Everyone involved in the incident share a common understanding of what's going on.

"Finally, PSIM ensures consistent responses, in keeping with the airport's pre-defined standard operating procedures."

Since PSIM creates a unified, cohesive platform, multiple control centers are no longer needed. We've seen airports consolidate all their control room operations into a single expanded location with internal and external agencies and first responders all sitting side by side with the same view. This significantly improves communication and coordination, as well as saves money and resources.

PSIM at MSY

One of the first North American airports to deploy PSIM was the Louis Armstrong New Orleans International Airport (MSY). Spanning over 1,900 acres, with four concourses and two terminals, the airport serves some 8.5 million passengers each year and is the primary commercial airport for the New Orleans metropolitan area and southeast Louisiana.

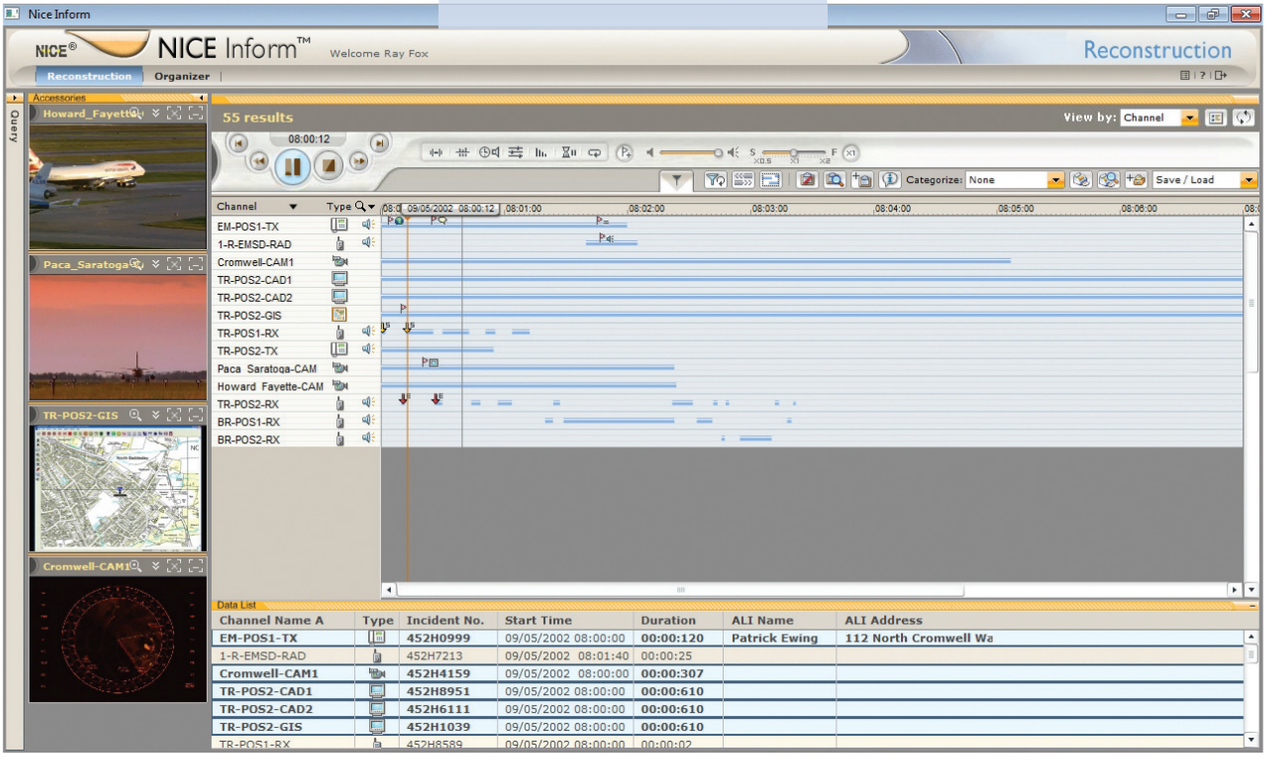
Managed by communications manager John M. Lyon, the Aviation Communications Center, also known as AVCOM, is the coordination hub for safety and security at MSY. In 2011, the Center handled more than 20,000 incidents that required life safety or security personnel to be dispatched.

The airport employs a variety of security and life safety systems, including video surveillance, access control, fire alarms, CAD, Voice over IP (VoIP), and automated external defibrillator (AED) alarms. Through the use of the NICE Situator PSIM solution, the airport was able to integrate all of these systems into a COP, so dispatchers get all of the real time information they need, in a relevant context, on just two PSIM screens.

PSIM documents the incident as it's happening so it can be reviewed later on: When did the incident start; what specific actions were taken and by whom; and how and when was it resolved?

PSIM doesn't just bring data together, it helps operations manage incidents from start to finish.

Comments Lyon "Before, we had silos of information, so different dispatchers would be responsible for monitoring video, access control, etc. If something happened, the dispatchers would need to verbally relay information to each other to put the pieces



together, and that took time.

"Now the different pieces are automatically assembled through the PSIM so dispatchers instantly get the big picture," he adds.

Dispatchers can also visualize geographically where incidents are happening and drill down into layers of rich information, including building plans and video.

Lyon says the PSIM solution helps dispatchers know how to respond as well. Prior to implementing the PSIM solution, dispatchers relied on 'flat' electronic forms. Now, when an incident occurs, the PSIM system guides them through a step-by-step response plan. In all, over 90 standard operating procedures are embedded in the PSIM system.

Additionally, the processes are interactive and adaptive. For example, in the case of a fuel spill, the specific response would depend on the magnitude, size, and type of spill. Escalation procedures can also be built in as a safeguard.

Not Just For Security

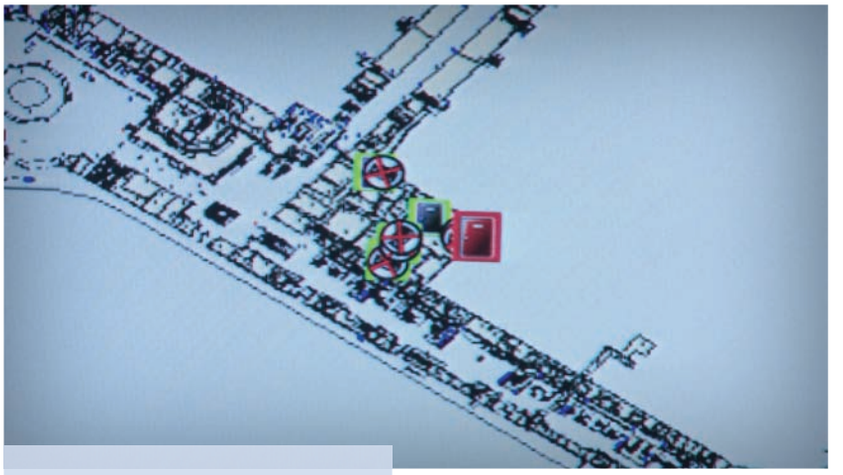
While PSIM evolved out of security, airports can also leverage it to enhance safety, operations, and overall ROI.

"We've already seen airports taking it to the next step — starting with security, and then broadening the scope to safety and even operations," says Shabtai.

"If you think about all of the things that PSIM can do — connecting the dots between different systems, creating the common picture, providing a consistent way to manage incidents and documenting their resolution — then you can begin to envision other applications.

"For example, using PSIM to coordinate all of the complex processes and resources involved in managing an emergency landing, or to manage other operational scenarios involving gate closures or maintenance issues, which all contribute to the smooth operation of the airport."

Case in point — say a water pipe bursts at the airport. As soon as the call comes into the operations center, the operator hits a quick launch button on a PSIM screen to open an incident. This in turn sets other procedures into motion.



Since PSIM systems are open and connect to security, safety, and operational systems through the use of gateways, they offer future adaptability and seamless technology migration.

The operator marks the location of the burst pipe on a map. The PSIM system automatically creates a work order as maintenance personnel are dispatched to the scene. Similarly, reports of other types of incidents, such as "slip and falls," lost items, etc., can be tracked, reviewed, and documented in the system.

> We've seen airports consolidate all their control room operations into a single expanded location with internal and external agencies and first responders all sitting side by side with the same view.

Finally, PSIM helps airports comply with regulations such as FAA Part 139 by giving them a mechanism to document and follow-up on safety hazards discovered during Part 139 field inspections.

PSIM ensures business continuity by providing complete situational awareness of the location and severity of incidents and operational issues, and by helping airport personnel respond quickly with contingency plans to minimize disruptions to operations.

Response plans for hurricanes and other weather events are also embedded in MSY's PSIM system. Lyon says the PSIM solution would extend critical technology to the airport's emergency operations center should airport managers and representatives from outside agencies need access to it.

Another aspect that facilitates disaster preparedness is PSIM's ability to leverage external real-time information sources. NICE recently completed an integration between its PSIM solution and the NC4 Risk Center service. The integration enhances the situational awareness picture in the PSIM solution by leveraging NC4's early incident warning capabilities to alert command and control centers to relevant threats, such as extreme weather events or terror threats.

One final technological note — since PSIM systems are open and connect to security, safety, and operational systems through the use of gateways, they offer future adaptability, and seamless technology migration.

Airports can migrate to new technologies without having to replace existing sub-systems. PSIM brings everything together under one cohesive umbrella. ab

Self-Service Fuel: Airport Money-Maker

A look at the benefits of U-Fuel self-serve fueling systems for airports

Kent Misegades, *aviation sales, U-Fuel*

With nearly all of America's 110,000 gas stations offering 24/7 credit-card, self-service pumps — isn't it odd that only about a third of our nation's some 3,600 airports do the same? To make matters worse, many pilots only have time to fly evenings and on holidays, when many FBOs are likely to be closed.

Consider the benefits of a modern self-service fuel station:

- Available 24/7; convenient; safe.
- Self-service fuel generally sells for less than full-service.
- Reduces fuel theft through sophisticated pump controllers.
- Web-based tools allow owners to monitor fuel operations 24/7 from a hand-held device.
- Allows private or public cards as well as proximity keys for authorization.
- Significantly lowers personnel and fuel vehicle costs.
- Pre-engineered and pre-fabricated to lower engineering, site prep, and installation costs.
- Modest-capacity systems sized for general aviation are highly affordable.
- Strong cash flow makes private financing possible and allows quick amortization.

Why don't all GA airports have self-service fuel stations? Arguments FBO managers have given in the past include costs, funding resource, limited use, and that fuel trucks are preferred.

While some of the above opinions were true years ago, aviation has changed. Small systems start at around $35,000; State funding is not needed as private financing is generally available; private jets and turboprops do use properly positioned fuel systems when available; and trucks can be expensive and require trained personnel to operate them.

Self-service fueling can lower costs and increase revenue. Add to this the growing popularity of unleaded aviation fuels such as ethanol-free autogas and UL91 — the timing for the investment in such systems seems right.

History; Safety

The first self-service fuel station for aviation was developed in 1987 by Michael Webb, private pilot, aircraft homebuilder, and owner of Oshkosh Aero, an FBO once located at Wittman Field in Oshkosh, WI — and later acquired by Basler Flight Service when Webb founded U-Fuel to support his

about the author

Kent Misegades is an aviation sales representative for U-Fuel of Elk Mound, WI. A pilot since 1973, Misegades is a director of the Aviation Fuel Club, co-author of the GAfuels blog for generalaviationnews.com, and president of EAA Chapter 1114. Contact the author at kent@ufuel.com

Due to strong cash flow, self-service fuel stations are **excellent candidates** for private financing.

Popular options to enhance usability and safety include lighted covers; built-on enclosures; electronic fuel level & leak monitoring systems; and vehicle collision protection.

growing business in fuel equipment.

Since we're dealing with highly flammable liquids, built-in safety features for a modern self service fuel station are absolute necessities. With U-Fuel, the features include double-walled fire resistant tanks (stainless steel or internal epoxy lining in the case of jet fuel), emergency vents, a fire valve, normally-closed solenoid valves, and various other components required by fire safety regulations.

Popular options to enhance usability and safety include lighted covers; "kiosks", or small built-on enclosures that provide a dry environment for transactions; electronic fuel level & leak monitoring systems; an automatic fire suppression system over the pump; listed tanks; and vehicle collision protection through crash posts/bollards or concrete partitions/dividers.

Site Prep & Installation

Site preparation consists typically of a concrete pad with phone and power hookups. 120V single-phase power is sufficient for most fuel stations found at GA airports. In fact, the low power requirements make the use of DC systems connected to a small windturbine or solar panel possible in many instances.

Installation involves the rental of a crane for a few hours and simple electrical connections and petroleum equipment checkout, which must be performed by a licensed installer and electrician.

The total ownership cost of a self-service fuel station must allow **quick amortization** of loan costs and have **minimal operational and maintenance expenses**.

Economic Aspects

Airports are often dependent on the 50-75 cent margin per gallon that is typical for fuel sales. In most instances, the federal government's Airport Improvement Program (AIP) excludes funding of revenue-generating facilities such as hangars and fuel stations. Therefore, the total ownership cost (TOC) of a self-service fuel station must allow quick amortization of loan costs and have minimal operational and maintenance expenses.

Unlike most other capital equipment acquisitions at airports, self-service fuel stations are revenue generators, and as such are generally excluded from state and federal funding programs. Due to strong cash flow, self-service fuel stations are excellent candidates for private financing, allowing airports to acquire systems far sooner than through traditional bureaucratic channels.

For instance, at October 2011 interest rates, a 60-month loan for a $60,000 system results in payments of approximately $1,200 per month or $14,400 per year. With modest annual sales of 24,000 gallons of fuel at a net margin of 75 cents per gallon, loan payments will be covered. After five years, the loan is retired and the system is generating more profit.

Not included in these calculations is the greater volume of fuel that is sold since the system is available 24/7, and the savings incurred from lower personnel and fuel truck costs. U-Fuel has partnered with American Equipment Finance to offer customers highly attractive terms to lease or finance systems.

Station or Truck?

Despite the flexibility offered, fuel trucks can be expensive due to an array of safety equipment they must include. A new fuel truck with a small capacity tank will cost at least $50,000; larger trucks can cost upwards of $150,000.

According to U-Fuel's president Michael Webb, who maintained a large fleet of fuel trucks at his former FBO, Oshkosh Aero, "Maintenance and personnel costs of fuel trucks can be very substantial. For instance, cold weather can cause the vacuum interlock systems to freeze up, or even a small speck of dirt will clog up the overfill protection.

"I used to have nine ramp trucks for the EAA AirVenture show, and one mechanic dedicated to keeping them running."

Self-Service and Jet Fuel

GA has seen the growing popularity of light turboprop- and turbofan-powered aircraft. With the inevitable demise of leaded avgas looming, many current high-performance piston engine aircraft operators will switch to turbines; this is already the case for those who fly in developing countries where autogas and Jet-A are the only two aviation fuels available.

While self-service fueling of turbine aircraft poses no major challenges for self service fuel stations, there are a few important differences compared to autogas or avgas, which increase costs somewhat:

- The weight of turbine aircraft often requires tow tugs for ground handling.
- Jet aircraft are normally parked 90 degrees to the pump allowing

for straight departure.

- Greater wingspans require longer hoses (75 feet - 100 feet) to reach tip tanks on the far wing.
- Larger aircraft fuel tanks require a larger pump with a higher flow rate — 50 gpm instead of 22 gpm for autogas/avgas.
- Self-service systems equipped with Single Point Fueling require interchangeable nozzles.
- Jet fuel requires that the inner tank of a fuel station should be made of stainless steel or be epoxy coated for microbial protection, while the outer tank is made of carbon steel.

The Future Is Now

U-Fuel has been working the past few years to lower the cost of self service fuel stations and provide a broader spectrum of products with tank capacities beginning as small as 1,000 gallons.

In order to further reduce the installation and operational costs as well as allow complete portability, we have recently developed wireless communication, solar- and wind-powered options, allowing customers to place or reposition the system anywhere on the airport. Evolving from "boxstations", created for remote mining and oil/gas exploration, the "FBO in a Box" concept provides basic services including fuel, restroom and office facilities, phone, Internet, and vending in a climate-controlled enclosure.

Summary

Borrowing from commodity production of fuel equipment in other markets, U-Fuel has lowered the cost of acquisition of such systems while making numerous advances to safety, reliability, and convenience. With the "FBO in a Box" concept, the company now offers a solution to airports seeking ways to offer services to pilots without incurring high personnel and equipment costs. ab

Testimonials

"Self-service is very important – about 30 percent of our non-jet fuel sales are outside of working hours. At Barnwell, self-service is available 24 hours per day, 7 days per week. Pilots rely on being able to get fuel at any time and don't have to rush to make it in time."

Cal Hoffman, Manager, Barnwell Regional Airport (KBNL), Barnwell, SC.

"I believe that self-service fueling is very important, since it allows for 24 hours a day fueling. Pilots stop by our airport to buy autogas or avgas, then stay for lunch at our restaurant, helping to keep it in business."

Kent Marshall, Manager, Suffolk Executive Airport (KSFQ), Suffolk, VA.

How To Reduce BHS Energy Consumption

Case Study, *Elite Line Services (ELS)*

ELS has been the operations and maintenance services provider for the baggage handling system (BHS) at Fort Myers' Southwest Florida International Airport (RSW) since it was installed in the early part of the last decade.

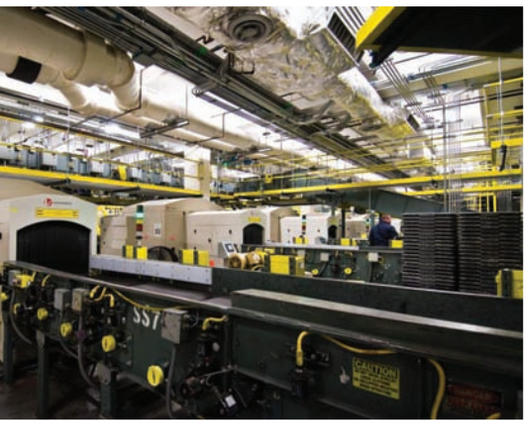
The BHS has more than 860 electric motors ranging in size from 2 to 7½ horsepower (480 volt, 3 phase). There are 12 ticket counter and 12 curbside input conveyors collecting bags into three primary conveyor lines. The primary conveyor lines carry bags to seven security lines, each feeding bags to one of seven L3 explosive detection systems (EDS) screening machines.

The baggage handling system at Fort Myers' Southwest Florida International Airport is certified to process 2,600 bags per hour through the L3 explosive detection systems (EDS) screening machines.

Bags that are cleared exit the machines and are routed to the 'clear' conveyors and ultimately sorted to the individual airlines. Bags that are not cleared by the L3 machines are routed to the 'not clear' conveyor for further processing by TSA.

Through an analysis of the BHS, ELS identified the potential to reduce energy consumption by routing bags differently during periods with lower bag volume and fine-tuning the shut down of idle sections through enhanced maintenance practices. The different routing, combined with revised PLC (programmable logic controller) programming, enables sections of the outbound system to be shut down during idle periods to conserve energy.

The BHS is certified to process 2,600 bags per hour through the L3 EDS machines. During periods of reduced baggage volume, the bags can be routed to a single bank of L3 machines, which allows much of the system to be shut down.



ELS provides the airport a cost savings of approximately $71,000 per year, or more than 790,000 kilowatt hours annually by routing bags differently during periods with lower bag volume and fine-tuning the shut down of idle sections.

When the daily bag volume is forecast to be less than 10,000 items and less than 1,000 for each two hour period of the operating day, ELS reroutes the normal flow to allow the L3 machines be shut down.

ELS constantly monitor the bag volume to immediately return the system to a full operational status when the capacity is needed. The energy savings from these initiatives have achieved in excess of 2,100 kilowatt hours per day, or more than 790,000 kilowatt hours annually.

This equates to energy cost savings of approximately $71,000 per year. An additional benefit not yet quantified is reduced maintenance cost for parts and labor as a result of the reduced wear and tear. The energy and maintenance cost savings are passed directly to ELS' customer, the Lee County Port Authority, and the operating airlines. ab

ENERGY FACTS

Abstract: A baggage handling system that operates with excess capacity or run times increases its total cost through energy waste, parts usage, repairs, and the carbon footprint.

Scope: Enhance maintenance activities and perform system analysis that optimizes electromechanical and system control efficiencies.

System Statistics: Three miles of conveyor; 840 electric motors; and up to 2,600 bags per hour.

Potential Savings: 790,000 KWH = $71,000 per year plus reduced parts and labor.

300C SMART CAROUSEL SYSTEM

Siemens Airport Logistics

The Siemens 300C is an intelligent, energy efficient claim and makeup device that utilizes multiple 2-hp redundant drive units which engage and disengage based on load requirements. The result is reduced power consumption, reduced maintenance, and increase in power train life. www.aviationpros.com/product/10709542

CRISBAG

BEUMER Group

The latest innovation in Crisplant's CrisBag technology for baggage handling is an adaptive tilt mechanism which provides both static and dynamic tilt for baggage discharge. By checking baggage flows, the control system can determine the required through-put and automatically switch between dynamic tilt, to discharge bags on-the-fly at a rate of 3,000 bags per hour, or static tilt for lower throughput and operating costs during quiet periods. The technology is currently being installed at Düsseldorf International Airport to link terminals.

www.aviationpros.com/product/10709521

PASSENGER HANDLING PRODUCTS

Wanzl

Wanzl, a passenger luggage cart manufacturer, has named Thompson Contract, Inc (Bohemia, NY) as their partner for the air transportation industry in the US, Canada, and the Caribbean. The team offers a wide range of landside and airside passenger baggage handling products.

www.aviationpros.com/product/10709565

BAG LIFT

Austral Star LLC

The Austral Star Bag Lift solves the problem of gate checked baggage handling with a solution that starts at concourse level by having passengers place their bag onto a bag cart built into the walls of a passenger boarding bridge (PBB) walkway. The gate agent then closes the door and sends the cart to the ramp where workers wheel it to the aircraft for loading. The solution reduces aircraft gate time and increases safety by eliminating bag congestion in the PBB, says the company.

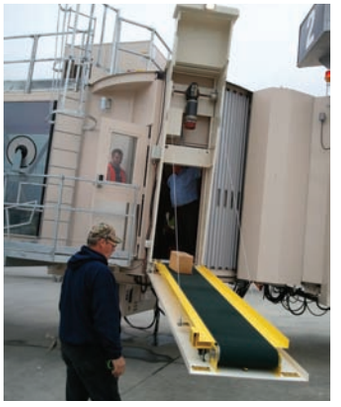
www.aviationpros.com/product/10709548

AUTO BAG DROP

ICM Airport Technics

ICM Airport Technics has developed a new self-service bag drop system. ICM has delivered a successful roll-out of 80 Auto Bag Drop (ABD) systems for Qantas Airlines in six airports across Australia. More than five million bags have been successfully injected. ICM has now been awarded a tender to install ABD trial units at Heathrow Airport.

www.aviationpros.com/product/10709556



CONVEYOR BAGGAGE TRANSFER SYSTEM

R.J. Design LLC

The Conveyor Baggage Transfer System was designed to eliminate shoulder and back injuries for ground personnel. With its unique design of being installed in the loading bridge cab curtain, it does not cause any damage (cutting or welding) on the passenger loading bridge and therefore can be moved to different locations. The entire unit folds back into the cab curtain when not in use.

www.aviationpros.com/product/10709561

SCAN&FLY

QuinTech

QuinTech launced Scan&Fly at the Passenger Terminal Expo 2012. Scan&Fly is a solution for self bag drop designed to be fast, functional, and easy to retrofit into current airport infrastructure. With Scan&Fly, it is possible to comfortably drop a bag in under 15 seconds, says the company.

www.aviationpros.com/product/10709579

BAGGAGE TRAY SYSTEM

Jervis B. Webb Company

Daifuku Co., Ltd. announces it has developed a new baggage handling system for airports called the baggage tray system (BTS). The BTS provides efficient and secure transportation and sortation of passenger bags from check-in counters to baggage make-up areas. Unlike conventional systems where bags are placed directly on conveyor belts, Daifuku's new system provides precise handling and tracking by transporting bags in individual trays. Additionally, BTS boasts conveyor speeds at 600 meters per minute.

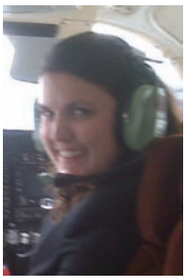
www.aviationpros.com/product/10709532

ELECTRIC BAGGAGE/ TOW TRACTORS

Tronair Inc.

Tronair offers two Electric Baggage/Tow Tractors: the ET 20-DC-60 and ET30-AC-60 have towing capacities of 20,000 and 30,000 pounds respectively. This allows towing up to five loaded baggage carts. The ET 20-DC-60 and ET30-AC-60 charge in any standard 110-volt plug; batteries and on-board charger are standard equipment on the unit.

www.aviationpros.com/product/10709571



Missy Zingsheim,
Publisher

On The Road With Airport Business

Well, it has been a whirlwind couple of weeks. *airport business* magazine and staff were at back-to-back shows, as many of you were, starting with Airport Cities in Denver and ending with the AAAE Annual Conference and Expo in Phoenix. The excitement and attitude of both attendees and exhibitors was positive.

I always enjoy going to different shows ... it has been a couple of years since I attended an airport show — and was glad to reconnect with friends and colleagues in the industry.

***

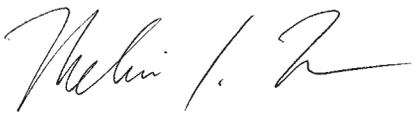
a*irport business* magazine is introducing our first ever 'Top 40 under 40' initiative. Developing future leaders is key for the growth and improvement of the industry. In our August/September issue we will recognize 40 individuals from the airport and FBO industries for their contributions and a 'job well done'. It is not a ranking, but rather a listing of individuals who have shown initiative and are making an impact on the aviation industry.

The excitement and attitude of both attendees and exhibitors was positive.

Allow us to acknowledge you and your colleagues for dedication to the industry. If you or a colleague will be 39 years old or younger on August 1, 2012, you are eligible to be nominated for *airport business* magazine's Top 40 Under 40.

The deadline for nominations is June 1st; you can find the nomination form on our daily eNewsletter. I look forward to seeing all the submissions: *www.aviationpros.com/newsletter/airb/daily*.

As always, I look forward to receiving your comments.



40 UNDER FORTY

The best and brightest

ad index

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