THE Armbrust AVIATION GROUP Jet Fuel Report

Volume IX ✍ Issue 17 October 21, 2003

# TSA Spotlight On Airside Security; Some See Fuel Facilities As Vulnerable

**The TSA isn't expected to address security of fuel facilities specifically, but they will come into the spotlight as highly vulnerable assets on or near airport grounds.**

With the intense focus on airport terminal and passenger security in the past two years, what is happening on the ramp and surrounding areas of airport property has mostly stayed out of the limelight. Actions have been taken at individual airports to tighten security, but thus far there hasn't been a broad-based approach to tackling the considerable security issues faced in the airside, non-terminal areas of airports.

But that is about to change with new rules expected from the **Transportation Security Administration** (TSA) by the end of the year. As TSA shifts its attention from terminal security to cargo, airport grounds and perimeter security, fuel facilities are likely to come under increased scrutiny. The TSA isn't expected to address security of fuel facilities specifically, but they will come into the spotlight as highly vulnerable assets on or near airport grounds.

Already in certain cases, airlines, airports and into-plane companies have made significant changes in security infrastructure and policies for fuel storage facilities, and into-plane executives say security was generally top-notch even before the 9/11 terrorist attacks.

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## HIGHLIGHTS



# Low-Cost Airlines In Smaller Markets Can Challenge Fuel Infrastructure

For many airport directors, especially those working at facilities outside of the major cities, **Long Beach Airport** (LGB) is a success story they would like to emulate. Long successful as an airport renting space to everyone from Gulfstream to Boeing to the US military, Long Beach found new life as a commercial destination in 2002 when **JetBlue** selected it as its west coast hub.

JetBlue began with six flights at LGB and quickly expanded to its current level of 19 flights a day, accounting for about 72% of the commercial traffic there. As welcome as that new business is, however, it has undoubtedly put a strain on the airport's jet fuel infrastructure.

Indeed, LGB has been cited by numerous airline executives as one of the most taxed fuel systems among airports in the US. One source familiar with the situation said the infrastructure consists of three 20,000-gallon fuel tanks. But the source added "One-third of that is dedicated to Boeing and that fuel has an additive in it that the airlines won't accept. So now they're down to 40,000 gallons and they're probably moving between 90,000

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**319 Clematis Street, Suite 211 West Palm Beach, Florida 33401, U.S.A.**

**Published biweekly by;**
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**Subscription $1,675 per year. Transmitted via first class mail, fax and electronic mail. License rates on request.**
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**Other AAG publications; *Airport Revenue News*, published biweekly covering issues that concern airport managers, retailers, and concessionaires.**

"We have always taken a very proactive position on security as facility operators, even preceding 9/11," says **Andrew Grant**, director of fueling services for **Airport Group International**, adding that security has been heightened in recent years. "We're always very security conscious in this day and age, thinking of the 'what if'."

Similarly, **Larry McMahon**, vice president of fuel consortiums for **Aircraft Services International Group**, says changes have been nominal because "the security was in pretty good shape before." He adds that in cases where changes have been made, the outcome was positive.

"All the things that we've done so far have been things that we've felt are really going to improve security," McMahon said, adding that in those cases, "airlines have been more than willing in those instances to pay for it."

But while into-plane executives express confidence that airport fuel facilities are secure, others say they, and the pipelines that feed them, could be considered prime targets.

"Fuel facilities are so painfully obvious," says **David Forbes**, president and COO of aviation consulting firm **BoydForbes Inc**. Forbes says a fuel target would have the potential of crippling economic supply chains, which he considers to be a key goal of terrorists.

"Anything that affects transportation by way of the fuel supply is bound to be a key target," he says. "I'm talking about cross-country pipelines, fuel distribution centers, storage farms – the obvious ones, the ones that are above ground and stick out like a sore thumb."

And in a recent security update from consultants **Aviation Planning**, the firm outlined this scenario: "The single fuel pipeline into Denver International delivers a million gallons of jet fuel a day…. If that pipeline were destroyed by terrorist, the nation's number six airport would effectively be shut down for days, or maybe weeks, flat out of gas. There is no supply alternative, because there isn't enough tank truck capacity in the region to fill the gap.

"Now, consider a scenario where well-planned Al Qaeda types take out the fuel pipelines or fuel farms at, say, half a dozen hubsite airports…," the security update continued. "The US air transportation system would be mortally wounded."

## Challenges Abound

While some industry executives might consider such statements inflammatory, there is evidence that the larger airport grounds – usually encompassing fuel facilities – are often vulnerable. Recent high profile news stories underscore the potential risk. A man apparently had little problem packing himself into a crate and sending himself as cargo on a passenger plane. Another man and his two sons rowed a boat to shore, then wandered around the secure area of the John F. Kennedy International Airport. Barriers have been broken at LaGuardia International, Lihue Airport in Hawaii and others. Finally, last week a man jumped from his moving vehicle after driving his car through the chain link perimeter fence of San Diego Airport whereupon it crossed several taxiways and the main runway before coming to a rest on the other side of the airfield.

Most agree that it is nearly impossible to prevent all such occurrences. Grant acknowledges that some facilities are more vulnerable than others, but he says that in those cases security has been beefed up to counter the drawbacks. "We have facilities that are in high exposure, high traffic areas that are a little bit closer to the general public than we would probably design a facility now," he says, adding that "you just inherit those logistics and cope with it."

Honolulu is a key example, Grant says, where the fuel facilities are outside the airport perimeter.

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# TSA To Move On Cargo/Perimeter Security Initiatives

**The TSA has said it will issue a notice of proposed rulemaking by December 31, 2003.**

The Transportation Security Administration (TSA) is not expected to address airport fuel facility security specifically in its upcoming release of new rules for cargo and perimeter security, but some facilities and into-plane operators will likely be impacted by the change. And while airlines in general are far more concerned about cargo security requirements and their impact on operations, they too will be impacted by changes or additions to fuel facility security.

Below is a synopsis of the recommendations made to TSA by the Aviation Security Advisory Committee, a public and private sector cooperative effort to study the major issues surrounding air cargo operations and airport perimeter security. The TSA has said it will issue a notice of proposed rulemaking by December 31, 2003.

ASAC Recommendations

- ?? Strengthen the Known Shipper Program
  - ?? Improve technology links between air carriers and forwarders and the federal government to ensure that known shippers are vetted against all relevant government watch lists
  - ?? Expand databases using the latest advancements in link analysis as well as commercial data sources to further verify shipper legitimacy
  - ?? Simplify certain program regulations to improve compliance
- ?? Leverage new technology
  - ?? Implement a layered approach to cargo security that includes cargo profiling, inspection and detection.
  - ?? Pursue further research and development of cargo screening technologies with industry involvement in review of such technologies.
- ?? Enhance regulation of Indirect Air Carriers (IAC)
  - ?? Raise the security of IAC agents and contractors
  - ?? Require pre-employment screening of all persons with access to freight
  - ?? Set minimum federal standards for background checks similar to those used in the passenger airport environment
  - ?? Develop tools that industry can use to ensure greater compliance with TSA requirements
- ?? Strengthen security for all-cargo aircraft
  - ?? Raise perimeter security at all-cargo facilities
  - ?? Enhance personnel security procedures at all-cargo facilities
  - ?? Establish a revised "prohibited items" list for cargo personnel
  - ?? Reinforce measures to ensure the security of cargo aircraft
  - ?? Improve communication between TSA and aircraft operators to facilitate compliance with new regulations and allow for rapid

**The TSA is expected to address the key problem of penetrable airport perimeters when it issues rules on air cargo security by the end of the year.**

"The tanks are set back, but they probably would be set back a lot further if we were to rebuild the facility now," he says. "We've put security cameras around the perimeter and it's under constant surveillance so we keep monitoring what's going on. In areas where there are not cameras we have motion detectors that are tied to alarms in the control room.

"In other locations there are public right-of-ways and public roads that are adjacent to the fuel facilities that are off-airport, and the airport fuel system is serviced by pipelines which travel a distance from the off-airport terminal to the on-airport terminal," Grant adds. "We have constant foot surveillance done by our operations people walking through the yard. Keeping gates locked is foremost. We've been able to get airport authorities to help install barriers to prevent

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**"My advice to the fuel industry is not to sit back, but instead to come up with initiatives and creative solutions that anticipate both the threat and the regulatory impact."**

somebody from driving through a chain-link fence."

While not mentioning any specific locations, Forbes maintains that many such "cosmetic features and devices" could be overcome with just a modicum of effort on the part of a potential terrorist.

**Perimeter Concerns**

The TSA is expected to address the key problem of penetrable airport perimeters when it issues rules on air cargo security, expected by the end of the year. Many of the perimeter rules are expected to expand current policies using new technologies (see sidebar, above).

**Carter Morris**, vice president of transportation security policy for the **American Association of Airport Executives**, is a member of the working group advising TSA on cargo and perimeter security issues. Morris says the working group, which submitted its comments to TSA earlier this month, "focused more on procedures than technology," but adds that the group did explore various perimeter access technologies.

"We spent a lot of time discussing how you determine who is or isn't an appropriate person to be conducting business (on the airfield), and the group fortunately decided not to recommend 100% screening of people moving through the cargo areas," Morris said. "We're instead recommending random screening…and the screening can be defined as background checks."

**"We're instead recommending random screening…and the screening can be defined as background checks."**

Background checks are standard procedure for most ground services companies, despite the fact that since 9/11 that requirement has been superceded by FBI fingerprint checks prior to any employment with secure airport access. That has been problematic in some cases, due to delays.

"What is a headache in some cities is the turnaround time," says one executive at a ground operations company. "In some cities it just takes forever to get the authorization to hire somebody," he says. 'The employees get tired of waiting and they get another job, or we work short and have to be paying overtime to cover those people who are waiting for the background check to be approved."

Depending on what action the TSA takes regarding perimeter security, into-plane companies could potentially face delays in trucks entering and exiting airport grounds. Already, barriers vary airport by airport, and the differences will likely increase as high profile airports come under increased scrutiny.

"Every airport has a different configuration and different buffer zones of security within the airport operations area," says Grant. "At one location, fuelers have to swipe their badge sometimes two or three times to get through various security gates to go from a fuel reloading facility to the parking area and the gates, even though they are still within the restricted confines of the airport. At other airports there is nothing in between. In terms of hindering the fuelers ability to get from the fuel farm to the aircraft parking area, that is really going to be subject to the security at that particular airport."

**Who Pays?**

With potential increases in security around and within the airport perimeter, the inevitable question is, who will pay? All heads turn toward the TSA, but with cost overruns in the hundreds of millions of dollars since its inception, Congress is demanding a more lean agency. Furthermore, the vast majority of future spending is expected to be earmarked for increasing cargo security.

Thus far, beefed up security around fuel facilities has generally been paid for by airlines, airport, TSA or a combination of those groups. Grant says who pays often depends on the magnitude of the cost. "In the case of Hawaii, we are compiling and will be filing for federal reimbursement for the

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additional security required," he says. "In other cases where facility improvements and modifications are being made, we go to the airport or the fuel committee."

McMahon says that his experience so far has been a strong working relationship with airlines, airports and TSA, with no demand for unnecessary security expansion. "It's a double-edged sword," he says. "We're concerned about security and at the same time we're trying to be cost-effective with it, not just adding more security for the sake of it."

But Forbes points out that while fuel facilities have been able to stay out of the spotlight thus far, one incident, even a hoax, could change that. "You'll find the government suddenly giving the fuel supply systems and storage a lot of attention," he says. "My advice to the fuel industry is not to sit back, but instead to come up with initiatives and creative solutions that anticipate both the threat and the regulatory impact." **JFR**

**Low Cost Airlines In Smaller Markets Can Challenge Fuel Infrastructure**

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and 95,000 gallons a day." The remainder is brought in by truck, at least until new facilities can come on stream.

LGB had competition among into-plane operators as recently as a year ago, but currently all its commercial carriers are being served only by **Million Air Long Beach**, part of the Million Air FBO network. However, **Mercury Air Centers** is gearing up to provide full service FBO and commercial fueling services at the airport.

But until more storage infrastructure is in place, sources say LGB will continue to struggle with capacity issues. One source even alleged that Million Air may have violated some Air Transport Association rules including truck-to-truck transfers and not allowing settlement time in tanks. "The airlines know this and they've kind of turned their back until there's another alternative," the source said. Million Air did not return repeated phone calls for comment, but **Sharon Diggs-Jackson**, spokesperson for **LGB**, acknowledged there has been investigation by local officials, but she downplayed the significance of the alleged violations.

**The Long Beach situation is certainly unique. Few airports experience such a massive bump in traffic over such a short period of time.**

## Capital Shortage

The Long Beach situation is certainly unique. Few airports experience such a massive bump in traffic over such a short period of time. Even when a low-cost airline commits to new service at a smaller airport, they usually expand slowly to build up passenger demand, providing ample time to beef up fuel facilities if necessary.

But in certain cases the new business that an airport works so hard to attract can result in over-reliance on insufficient infrastructure. And with the current financial state of many of the nation's major carriers, many are shying away from making any capital expenditure commitments.

Part of the problem is that existing jet fuel infrastructure and fuel farm capacity is rarely looked at before a carrier targets a new airport. "In all my years of being on the airline side, I don't think I'd ever been asked by anyone on the marketing or route development side what the supply is like at the airport," said one source, a former executive at several airlines who now works for a major jet fuel supplier. "They just did not consider fuel as a criteria and occasionally that can be a problem."

Indeed the assumption among carriers seems to be "If you come, they will build it." And in most cases, that maxim has proven correct.

"Once you see the demand's there, it's a lot easier to go ahead," said **Robert Myrben**, director of fuel purchasing and inventory management for **Southwest Airlines**, "You can add on (to the

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## 6th Annual International Jet Fuel Conference & Exhibition


**March 7-10, 2004**
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**"An Industry in Transition"**

The aviation fuel industry has entered a period of significant transition. The airline industry remains in serious financial difficulty. Cost cutting and the preservation of capital has never been more important. Airlines are actively pursuing a new business model that calls for outsourcing non-core businesses. Is jet fuel part of an airline's core business? Airline CFO's and industry analysts will help answer that question at the March conference.

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existing fuel facility) incrementally. Normally that's the way Southwest has done it."

Who actually pays for these projects varies from airport to airport. Often times it is the airport or the FBOs who are adding additional tanks to the fuel facilities with the assumption that most of the costs can be passed on to the carriers. In a few cases a single carrier has taken it upon itself to build a new fuel farm and in some cases the FBO has undertaken the project themselves, often well in advance of arrival of new carriers and new routes.

**Thomas Duncan**, vice president of **Flint Air Service**, with handles commercial jet fueling at Flint, Michigan's Bishop International Airport says, "When we built our facility back in 1992, we anticipated some growth but obviously not what we've seen in the past 11 years. But we did build a facility that could be added on with additional fuel tanks."

Duncan says the 1992 facility had two 12,500-gallon tanks and in recent years the company added a third tanks to bring capacity up above 35,000 gallons. Current demand at the airport, which offers flights from **AirTran** and **Continental Express**, is about 15,000 gallons a day.

Duncan says Flint Air also purchased several new 4,000 gallon fueling trucks to replace its 2,000-gallon trucks, and added, "Outside of the electrical shutdown (August's blackout), we've had few problems. But one thing that helps is we have our own semis and so we haul our own product."

Duncan does have the luxury of being the sole local commercial jet refueling operation at the airport. He said he isn't that concerned that the airport's increasing business will attract another FBO to Bishop to compete with Flint Air, noting, "The margin is so low in the airline fuel retail side of the business."

But at other smaller airports, carriers have privately wished they could get some competition among into-plane service operators. "A lot of times these smaller FBOs don't have the bandwidth to handle the increased demand," the former airline executive said. "There is also the cost perspective because many are in a monopolistic position."

But the source added, "Airport's can be very political places and in my experience I worked with airports that desperately need additional competition. But for whatever reason, the local fuel operators were protected."

In a situation such as Long Beach however, the dramatic rise in commercial traffic has attracted some additional FBOs, such as Mercury Air's move to capture part of the commercial carrier business. **Daniel McDyre**, director of business development for **Mercury Air Service**, says his company has been in talks with all the major carriers at Long Beach, adding there's enough early interest to warrant the move. "We have our own fuel farm of 102,000 gallons," he says, but notes that probably won't be enough. "What airlines like to see is a three or four day supply in case there's some kind of stoppage," he said.

Toward that end McDyre is looking at adding 200,000 gallons of additional capacity at Long Beach, which he said, "can be done in three months…but that won't occur until the business warrants it."

Currently there are no above ground tanks at Long Beach, but McDyre says. "I've gone to the airport director and said if we're going to expand I want to have the right to have above ground tanks. They finally came back and said yes it's possible if you meet the criteria put out by the fire marshals of the city."

McDyre says he's even talked to the airlines about possibly forming a jet fuel consortium at Long Beach. "That would keep the cost down and provide them with a guaranteed amount of product," he said. "The interest is there."

Indeed as many of these small-size airports suddenly find themselves doing mid-size airport business, a jet fuel consortium

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**As low-cost carriers continue to lap up traffic, often basing their operations from small to mid-size airports that the Legacy carriers shun, fuel facility infrastructure concerns will continue.**

among the carriers would have once been the next logical step. But in the current economic climate, most legacy carriers have been shying away from such deals**.**

"The issue at some regional airports is you have partners of various credit worthiness which can present a challenge when trying to get finances for these infrastructure projects," notes Myrben.

Myrben cites Sacramento Airport as one example where Southwest couldn't work with the other carriers in financing a new fuel farm and has now decided to go it alone. What made Sacramento a bit easier investment for Southwest is that jet fuel supplier Kinder Morgan has agreed to build a new pipeline to the airport, eliminating an ongoing local concern about the number of fuel trucks traveling to and from the facility.

"(At Sacramento the other carriers) couldn't do it at the time so in order to keep the project moving and to keep the pipeline negotiations going, we decided to do it ourselves," Myrben says.

As low-cost carriers continue to lap up traffic, often basing their operations from small to mid-size airports that the Legacy competitors typically shun, fuel facility infrastructure concerns will continue. Yet relatively few airports have experienced significant problems with inadequate fuel facilities. In some cases, the fuel farm has been underutilized for years. For example, at Dayton-Wright Brothers Airport, the airport had previously been a hub for now Piedmont Airlines so the fuel farm was already large enough to accommodate new carriers.

Other airports have taken a more proactive stance, adding tanks in anticipation of luring new carriers. **Greg Kelly**, director of operations at Savannah/Hilton Head International Airport, said, "We've gone from 30,000 gallons to 90,000 gallons in the past six years. The airport paid for it but we worked it out with the airlines to absorb the costs through increased rates."

Kelly said the airport's current demand is about 30,000 gallons a day, but added, "We're always looking to attract additional business. And with the regional jets the frequency of operations increased so it's a matter of making sure we have inventory."

Indeed given that fact that most airlines, even after they've chosen a new destination, don't automatically start bringing in huge numbers of flights, most airports have a little bit of time to figure out a solution long before it becomes a problem.

"Most of the time it kind of works out for the short term," said the jet fuel executive. "The fuel folks travel around and figure something out." He added that often times fuel capacity is never really a long-term issue either, noting, "It's the intermediate where it can become an issue and …it's going to continue to be an ongoing issue at most locations." **JFR**

## *News Briefs*

### "Silver Nozzle Trophy" Awards Honor AGI, ASIG Employees

***San Antonio...***The National Petroleum Management Association announced its awards for airport fueling excellence earlier this month. The awards, dubbed the "silver nozzle trophies," are presented annually to companies and individuals that exemplify professionalism and dedication in ensuring a safe, dependable supply and fueling operation at US airports.

The "fuels manager of the year" award went to Airport Group International's (AGI) Honolulu fuel manager **Joseph Lovan**. The association recognized three employees of ASIG. **Steven Phillips** of Fairbanks International Airport was named fuels maintenance supervisor of the year; **Robert Everly** of Palm Beach International Airport was named fuels equipment

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# World Jet Fuel Prices

## Spot Cargoes — Trend ?

| Rotterdam | | | Mediterranean | | | Middle East | | | New York | | | US Gulf Coast | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10/17 | 10/10 | 10/3 | 10/17 | 10/10 | 10/3 | 10/17 | 10/10 | 10/3 | 10/17 | 10/10 | 10/3 | 10/17 | 10/10 | 10/3 |
| 288.5 | 276.3 | 260.8 | 282.4 | 268.7 | 255.6 | 34.2 | 32.9 | 31.5 | 87.67 | 84.99 | 79.59 | 85.41 | 82.52 | 76.62 |

| Chicago | | | Los Angeles | | | Pacific NW | | | CIF Japan | | | Singapore | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10/17 | 10/10 | 10/3 | 10/17 | 10/10 | 10/3 | 10/17 | 10/10 | 10/3 | 10/17 | 10/10 | 10/3 | 10/17 | 10/10 | 10/3 |
| 90.11 | 85.30 | 79.49 | 90.75 | 87.95 | 82.00 | 91.25 | 88.45 | 82.50 | 35.9 | 34.5 | 33.1 | 34.7 | 33.2 | 32.0 |

## Futures/Differentials — Trend ?

| IPE Gasoil* | | | NY Heating Oil | | | WTI Crude | | | Brent Crude | | | Rott Jet/IPE Gasoil | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10/17 | 10/10 | 10/3 | 10/17 | 10/10 | 10/3 | 10/17 | 10/10 | 10/3 | 10/17 | 10/10 | 10/3 | 10/17 | 10/10 | 10/3 |
| 249.2 | 265.5 | 245.7 | 84.35 | 90.00 | | 30.68 | 29.84 | 31.97 | 29.03 | 30.90 | 28.71 | 39.3 | 10.8 | 15.1 |

| NY Jet/Heating Oil | | | Gulf Jet/NY 2 Oil | | | Gulf/Los Angeles Jet | | |
|---|---|---|---|---|---|---|---|---|
| 10/17 | 10/10 | 10/3 | 10/17 | 10/10 | 10/3 | 10/17 | 10/10 | 10/3 |
| 1.75 | 2.35 | 2.26 | -0.59 | -0.34 | -0.72 | -5.34 | -5.43 | -5.38 |

*Key: U.S. weekly averages cents per gallon, WTI Crude, Asian jet in $/barrel, Europe, Medd $/Ton*

*Sources: Opis Jetfax, JFR*

operator of the year; and **Sandie Kostic** of Pittsburgh International Airport was recognized as fuels accountant of the year.

### Access Control Pilot Program To Begin At 20 US Airports

***Washington D.C.…*** The TSA has announced a test program at 20 or more airports that will evaluate technologies that might be deployed to enhance access control at airports. The airports involved in the airport access control pilot program have not yet been identified.

TSA said it will select airports and technologies for the program. Biometric technologies, possibly including fingerprints, retinal (iris) scans and facial recognition are expected to be part of the mix. So are next-generation surveillance cameras that could be used at access points for secure areas to guard against a second person slipping into a secure area on the heels of someone with proper credentials. TSA said technologies in the program could also contribute to a Transportation Worker Identification Card, which is being developed and is expected to be used by millions of workers across all forms of transportation. Unisys Corporation has a 20-month contract to serve as the systems integrator for the program. JFR