

## July 2010 Update- All things Aviation:



If you'd like additional information please contact the City.

### **The STREL**

Hopefully most of you have received a copy of the July 12, 2010 correspondence from Mr. Alan Murphy, Director of John Wayne Airport concerning the proposed STREL departure procedure proposed by the FAA. Mr. Murphy's letter, a copy which should be attached as part of this update, addresses the proposed implementation of the new RNAV/RNP procedure at JWA; as well as a diagram of the proposal. In addition it should be noted that as promised JWA, involved the experts at Georgia Tech, along with Mr. Vince Mestre of Mestre Greve Associates in commenting upon the STREL. It should also be noted that JWA is not "proposing" or "requesting" a new procedure but rather asked their experts to review the FAA's proposal, identify potential concerns and outlined suggestions that JWA would like the FAA to consider. While JWA is not the final expert in the field and does not have the authority to implement the procedures, JWA did express its concern about the practical effects of the STREL on the community as currently designed. In the end it is the FAA's call. For those wishing more information you can go to: <http://www.ocair.com/aboutJWA/FAQsDUUKETWO.html>

In addition, some of you have asked about the ADS-B, mentioned in the county's letter. First of all ADS-B stands for Automatic Dependent Surveillance Broadcast. ADS-B is a cooperative surveillance technique for air traffic control and related applications being developed as part of the Next Generation Air Transportation System. Far different from radar, which works by bouncing radio waves from fixed terrestrial antennas off of airborne targets and then interpreting the reflected signals, ADS-B uses conventional Global Navigation Satellite System (GNSS) technology and a relatively simple broadcast communications link as its fundamental components. Also, unlike radar, ADS-B accuracy does not seriously degrade with range, atmospheric conditions, or target altitude and update intervals do not depend on the rotational speed or reliability of mechanical antennas.

### **Nationwide air travel shows mixed results**

North American air travel was up 11 percent in May. Meanwhile, passenger traffic statistics show a mixed rate of recovery at Southern California airports.

LAX passengers were up 6.6 percent for the month of May and 5.1 percent for 2010 year-to-date. Meanwhile, John Wayne traffic was flat in May but up 2.1 percent for the year. (For June results see below). Meanwhile, Ontario posted a 0.7 percent improvement for May but is still down 2.1 percent for the year. Palm Springs was up 10.7 percent in May and 4.9 percent year-to-date.

For the six airports comprising the SCAG region - LAX, SNA, BUR, ONT, LGB and PSP - traffic in May totaled 6,858,672 passengers. This was a 4.7 percent increase over the month of May 2009. For the calendar year to date, the total passengers numbered 32,058,158. That was a 3.2 percent increase over the same five month period in 2009.

The volume this year to date was still 9.6 percent lower than in the same period ending May 2001, prior to the terrorist attacks of 9-11. In a somewhat related story, LAX is reconsidering its efforts to spread air traffic around Southern California.

#### **LAX Reconsidering Strategy**

As announced, LAWA, stated, "Here we sit on the incredible shrinking airport," said Gina Marie Lindsey, executive director of Los Angeles World Airports during her monthly report at a July 14 board of airport commissioner's meeting. Between 2000 and 2007, LAX lost 11 million passengers while other Southern California airports grew, Lindsey said at the meeting. "Continuing to pursue a strategy that actively pushes traffic away from the city of Los Angeles and into other jurisdictions could be viewed as a little self-destructive," Lindsey said during the meeting before updating commissioners on regionalization efforts so far.

Looking at 2009 data for just the airports included in Southern California Association of Governments boundaries, LAX accounted for 72.8 percent of the total passengers flying into and out of it, Ontario airport, John Wayne Airport in Orange County, Bob Hope Airport in Burbank and Long Beach Airport. By including San Diego International Airport, LAX had a 59.9 percent share of the market last year.

LAX's effort to regionalize air traffic in Southern California by spreading passengers out at other airports was born from a 2005 legal settlement made with neighborhoods around Los Angeles International Airport that opposed expansion. LAWA's staff and airport commissioners plan to meet with the plaintiffs of the settlement and also form a committee to redefine regionalization. Alan Rothenberg, the chairman of LAWA's board of airport commissioners, said during the meeting that the settlement assumed LAX traffic could reach 80 million passengers a year. The airport had 56.5 million last year.

"We're talking about regionalization. I guess it's heresy to say that what we should be thinking about is how to get more traffic at LAX," Rothenberg said.

#### **JOHN WAYNE AIRPORT POSTS JUNE 2010 STATISTICS**

Airline passenger traffic at John Wayne Airport decreased in June 2010 as compared to June 2009. In June 2010, the Airport served 772,155 passengers, a decrease of 1.7% when compared to the June 2009 passenger traffic count of 785,878.

Commercial aircraft operations decreased 5.4%, while Commuter aircraft operations decreased 72.2% when compared to the levels recorded in June 2009.

Total aircraft operations decreased in June 2010 as compared to the same month in 2009. In June 2010, there were 17,003 total aircraft operations (take-offs and landings), a decrease of 11.4% when compared to 19,201 total aircraft operations in June 2009.

## **ONTARIO AIRPORT TRIMS CHARGES TO AIRLINES**

Reduced expense at Ontario International Airport will allow officials there to lower landing fees and rental rates for the airlines that land there starting July 1, 2010, according to staff reports from Los Angeles World Airports, the agency that owns and operates Los Angeles International Airport and Ontario airport.

Airlines with regular commercial service and air cargo service are charged for every 1,000 pounds of an aircraft that lands at the airport as well as rent for the space in the terminal they use. Ontario's landing fees will be lowered 14.8 percent to \$2.35 per one thousand pounds and rental rates will drop 7.1 percent to \$169.95 per square foot.

Airlines are expected to pay \$11.8 million in landing fees in the fiscal year, saving \$2.8 million, according to the staff report. The airport expects to collect \$26.2 million from airlines from terminal rent, a \$2.8 million discount.

Southwest Airlines, the largest airline at Ontario airport, where it started service in 1985, had been working closely with the airport and other airlines to seek options that would reduce costs. "They've done a tremendous job in Ontario," said Steve Hubbell, properties manager for Southwest Airlines. Hubbell said the efforts have been ongoing for the past two years, before attempts by the city of Ontario to regain control of the airport from Los Angeles World Airports in order to lower costs.

### **Southwest to Anchor New John Wayne Terminal**

Southwest Airlines will anchor the new Terminal C at John Wayne Airport when it opens next year. Any new airlines would likely move into the facility – though airport officials say new carriers aren't currently in the airport's short-range plans.

The airport released its planned line-up for airlines after its \$543 million expansion from two to three terminals is completed in 2011.

The expansion will allow the airport to handle a maximum of 10.8 million passengers when completed, the number capped under an agreement with surrounding communities

that will be in effect until December 31, 2015.

The airport currently has openings for new airlines, especially since the departure of Virgin America in May. There is a "waiting list" of airlines that have expressed interest in serving Orange County, said airport spokeswoman Jenny Wedge.

The list includes discount carrier Air Tran, regional carrier Horizon Air, and Canadian discount carrier WestJet. The new terminal will include facilities for future international flights. Currently the airport cannot handle immigrations and customs at the airport. The lone international arrival, a daily flight operated by Air Canada from Toronto, has passengers clear the required paperwork to enter the country with U.S. agents based at the Canadian airport. Passengers can deplane in Orange County as if it were a domestic flight.

### **NBAA, AOPA Team Up to Preserve Access at Santa Monica Airport**

The battle over business aviation access to Santa Monica Airport (SMO) entered a new phase last week, when the National Business Aviation Association ("NBAA") was joined by the Aircraft Owners and Pilots Association (AOPA) in weighing in on the city's latest attempt to prohibit certain types of aircraft from using the airport. This is somewhat novel in that the groups have weighed in on the FAA-Santa Monica battle.

The controversy began in 2008, when Santa Monica city officials adopted a ban against Category C and D jets (mostly larger business aircraft) from serving SMO on safety grounds. The city's move was immediately challenged by the Federal Aviation Administration (FAA), which ruled that the airport did not have the authority to impose the ban, and disallowed it from taking effect until the FAA could further consider the matter, with a decision from the agency being subject to a federal court appeal.

As part of the ensuing court proceedings, Santa Monica officials filed an appeal in 2009 with the U.S. Court of Appeals for the District of Columbia Circuit challenging the FAA's ruling against the city. This past April, Santa Monica officials submitted a subsequent brief to the court, and the FAA submitted its response in early June.

On June 28, NBAA was joined by AOPA in submitting an appeal on an "amicus curiae," or "friend of the court" basis. The joint brief from the two associations strongly supports the FAA's position on the matter, explaining that decisions regarding safety are exclusively within the jurisdiction of the agency, and noting that the FAA's finding that Category C and D business jets can safely be operated at SMO is well-supported by the record established at an administrative hearing conducted by FAA in 2009.

## **Anaheim Big Winner as Federal Transit Administration Awards \$5 Million to the ARTIC Project**

U.S. Transportation Secretary Ray LaHood announced the award of \$5 million to help fund the Anaheim Regional Transportation Intermodal Center. The project is envisioned to be a transportation hub that is functional, adaptable and flexible. ARTIC will accommodate current modes of transportation such as bus, rail and shuttle connections to the Anaheim Resort Area and future services including high-speed trains, and is being designed as a vibrant urban center that offers civic and public space.

### **Airports 101 Continued- Noise**

*"I never cross a river when I only know its average depth is six inches."*

*Mark Twain, on averages*

A number of you have asked certain questions regarding the measurement of noise as a result of the discussion last month concerning SENEL- Single Event Noise Exposure Level; and CNEL- Community Noise Equivalent Level. If you recall SENEL is the maximum sound level caused by a single over flight over a noise measurement site. The noise level is measured in decibels (dB, or dBA). The SENEL is the noise that we actually hear from the airplanes which fly overhead. On the other hand CNEL simply put is an averaging of noise over a 24 hour period. So as follow up questions many have asked how they differ in specific instances. Dusting off your logarithms, and see what follows: (some of you may wish to tune out at this point which is understandable).

Initially it is important to understand that the decibel scale is not an arithmetic scale. Rather, it is a logarithmic scale. Most noise standards recognize a three decibel "exchange rate". The exchange rate is the decibel level that equals a doubling of energy and is also called a doubling rate. This means that an increase of 3 dBA is equal to doubling the sound pressure.  $IL = 10 \log (2/1); 10 \times (.301) = 3.01\text{dB}$  (80db + 80db= 83db). At the same time, by reducing the sound pressure level by 3 dBA, the noise "dose" would be cut in half. Therefore, an increase or decrease of three decibels is significant. At the same time a difference of 10db is what the human ear perceives as a doubling of the noise.

#### **Altitude Does Matter**

In addition, doubling distance from the source results in a decrease in 6dB. Which is why altitude makes a difference as well as distance regarding noise impacts. So what would be the difference (in decibels) of an aircraft flying at 100 feet over a home, compared to one flying at 500 feet over a home? And what equation is used to determine the change in decibels?

**The answer is: -13.979 dB.** The change in decibels (dB) is determined by the following equation: 20 times the logarithm base 10 of the ratio of those two distances. In the question presented, the answer is determined as 20 times the log of 100 over 500 or  $20 * \log(100 / 500) = -13.9794001$ . (-0.698970004 is the log of .2 or 100/500).

So how do we convert CNEL to SENEL?

$$\text{CNEL} = \text{SENEL} + 10 \log_{10} (\text{N}_D + 3\text{N}_E + 10\text{N}_N) - 49.4 \text{ (dB)}$$

$\text{N}_D$ = Number of daytime flights;       $\text{N}_E$ = Number of flights 7pm to 10 pm- weighted by 3

$\text{N}_N$ = Number of flights after 10 pm-weighted ten fold

Example:

$$X = 94.4 \text{ SENEL} + 10 \log_{10} (100 \text{ flights } 7\text{AM to } 7 \text{ PM}) - 49.4$$

$$X = 94.4 + 10 (2) - 49.4$$

$$\text{CNEL} = 65 \text{ CNEL}$$

The above equation can be solved for a value of 65 CNEL and 100 daytime flights and the result is that the 'standard' aircraft SENEL is 94.4 dB. (This is assuming the 94.4 at a particular location).

The N computed in the above equation is the number of equivalent noise budget units that are contributed to the budget for a daytime flight. If the flight occurred between the hours of 7 pm and 10 pm, the result is multiplied by a factor of 3. If the flight occurred between the hours of 10 pm and 7 am the result is multiplied by a factor 10. Note that for purposes of this computation, the evening penalty begins at 7:00:00 pm and ends at 9:59:59 pm and the night penalty begins at 10:00:00 pm and ends at 6:59:59 pm. There are no exceptions to the evening and night penalties. While I have attempted to compute these logarithmically, the systems like the one at JWA compute this through an integrated computer system specifically devised for performing these kinds of functions.