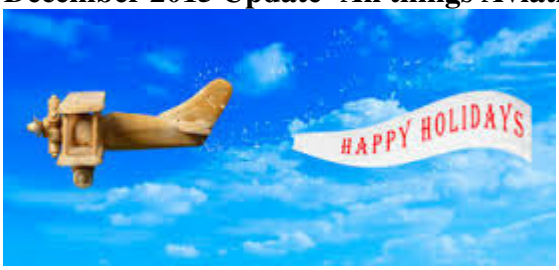
December 2015 Update- All things Aviation:



If you'd like additional information, please contact Newport Beach City Manager Dave Kiff at dkiff@newportbeachca.gov.

JWA –November

Airline passenger traffic at John Wayne Airport increased in November 2015 as compared with November 2014. In November 2015, the Airport served 876,748 passengers, an increase of +14.3% when compared with the November 2014. Moreover with 9.29 MAP through the first eleven months of the year, the airport is +8.3% ahead of the same period last year. ADDs for November were 121.05 vs. 108.93 for 2014.

Channel/Musel/Departure Issues

As was discussed at the recent Aviation Committee and as detailed to some degree in previous monthly updates, JWA has been and continues to gather a significant amount of data as a result of recent variations of the standard instrument departures (SIDs) from the historical SIDs and the so called ideal departure path. The JWA Access and Noise Office is seeking the insight and assistance of various carriers regarding a shift in aircraft lateral tracks deviating to the west of the Newport Back Bay and Balboa Island, specifically when the Channel 2 and Musel 7 SIDs are utilized. They have specifically noted that after a review of historical flight tracks compared to current flight tracks, aircraft were flown more precisely down the middle of the Newport Bach Bay in the past as compared to now. The analysis of the lateral shift to the west began after identifying an increase in distance between both the Channel and Musel, away from the Strel SID, which historically had not been present. JWA realized that the distance between the SIDs became more prevalent as a result of the Magnetic Variation (MAGVAR) that JWA underwent once new procedures were published by the FAA on September 18, 2014.

Once this was understood, JWA contacted the FAA and the Instrument Flight Procedures Group was made aware of the lateral shift. FAA first identified that Southern California Tracon (SCT) was not issuing headings outside of what is published. FAA then contacted Jeppesen on the Aeronautical Radio INC (ARINC) coding used for the Channel 2 and Musel 7 departure procedures. FAA found that Jeppesen's coding on the initial leg segments for the two departure procedures in question were coded differently than the FAA source coding. In order to align the FAA's source coding to the Jeppesen coding, FAA issued a request to re-code the initial segments for both the Channel 2 and Musel 7 from a Course to a Fix (CF) leg to a Heading to a Radial (VR) leg. By doing so, both the FAA and Jeppesen suggested that this would fix the lateral shift issues people were seeing. Jeppesen re-accomplished the coding for the 1510 Navdata cycle which went into effect on September 17, 2015.

However, as a result of the coding change, there was some improvement closer to the "ideal flight track", the lateral shift to the west was still present. Besides the apparent variables such as the Channel and Musel not being an RNAV SID, accuracy of the Flight Management Systems (FMS) within the terminal environment, and weather factors, it was not specifically determined as to what was required to be corrected for aircraft cleared for the Channel and Musel to follow the Newport Back Bay more precisely. Questions were raised such as: Is it the point where the initial turn is commenced, using one of the two options provided ? Could it be internal procedures, methods, and/or coding within the FMS that are air carrier or aircraft type specific?

In addition it has also come to the attention that a majority of the carriers do not utilize, nor tune into the localizer in order to capture the 1 DME for the initial turn. It has become suspect that utilizing the SLI R-118 as the point where the initial turn is commenced is far less accurate than commencing the initial turn at the 1 DME. Based upon the foregoing JWA is looking for specific responses from the carriers as well as Boeing regarding any potential modifications that will result in aircraft departing over the Newport Back Bay and Balboa Island more accurately. One thing that needs to be understood, the carriers are flying the proscribed departure procedures.

In addition and in response to questions regarding the flight management system (FMS) and the magnetic variation (MagVr), they too have an impact on where the planes

fly. The foregoing brings us to the sources of magnetic variation, which can vary dependent upon what is specifically loaded in the FMS for general use; the MagVr supplied in the navigation database for each procedure. In addition the magnetic variation in the navigation database is further broken down into individual elements dependant on the procedure to be flown and the magnetic variation source specified to be used by the FMS manufacturer and whose values may be modified by the airport magnetic variation; VOR declination; procedure design magnetic variation as designated by the procedure designer.

Accordingly, the foregoing is being accomplished only through the good graces of JWA working with the City and therefore potentially the good graces of the carriers/Boeing and ultimately the FAA willing to initiate modifications.

This is an on going process which requires a significant amount of time just gathering the necessary data to begin the analysis as well as the patience of all concerned[1].

Golf Course

On December 15, 2015, the Board of Supervisors unanimously approved the assignment of lease of the Newport Beach Golf Course to a new party, known as the Inland Group.[2] The Newport Beach Golf Course is located on Irvine Blvd., underneath the departures from John Wayne Airport (the "Clear Zone"). By way of further background, on June 3, 1975, the County leased the Clear Zone to a partnership that consisted of George C. Lane, Steven G. Lane and Christopher Jones, for development and operation, in conjunction with adjacent real property leased by them from the Irvine Company, of an 18-hole golf course facility commonly known as the Newport Beach Golf Course. On July 12, 1988, the Board of Supervisors (Board) approved the First Amendment to the Golf Course Lease to allow for the widening of Irvine Avenue and Bristol Street as part of the JWA Improvement Project. On or about October 23, 1998, the members of the golf course partnership became Newport Beach Golf Course, LLC

[1]It has so far been concluded that there is inconsistency which most non-RNAV SIDs have. Until such time as RNAV procedures are fully implemented this will be the case. (*According to FAA*, the earliest the full RNAV could be achieved would be 3/2/17).

[2] The consent applies to the portion of the golf course which is in the Clear Zone only. There is a portion of the golf course which is controlled by another entity.

("NBGC") and continued to operate and manage the golf course. On November 9, 2010, the Board approved a Golf Course Lease with (NBGC) for continued operation of the golf course situated on the Airport south clear zone. The original lease had an expiration date of January 1, 2007 however in exchange for completion of requested repairs, NBGC was issued a new Lease with a 10 year term which is set to expire on December 1, 2020.

3rd Quarter Operations JWA

Pursuant to the reports released by JWA, the ADDs for the third quarter of 2015[3] were 120.64 ADDs versus 113.10.ADDs for 2013. Of the total number of ADDs for the 3rd Qtr of 2015, 36.58 were Class E and 84.06 were Class A ADDs. In 2014 the numbers were 32.51 Class E and 80.59[4] were Class A ADDS.[5] Here is a comparison for the third quarter for years 2011-2015:

3rd Qtr. Of Year	ADDs	Class A	Class E	YTD MAP
2015	120.64	84.06	36.58	7.50 MAP
2014	113.10	80.59	32.51	7.00 MAP
2013	116.95	80.47	36.48	6.91 MAP
2012	116.77	78.40	38.37	6.60 MAP
2011	114.85	81.28	33.57	6.48 MAP

[3] For the period of 10/1/14-9/30/15 the ADDs were 113.57.
[4] Under the current JWA Settlement Agreement there are 85 Class A, ADDS allowed plus 4 Cargo flights of which 2 may if not otherwise utilized by the Cargo Carriers, as the case is currently, be allocated to the 85 Class A ADDs for a total of 89.
[5] For the past twelve months, ie. 10/1/13-9/30/14 the ADDs are 111.48.

Noise Comparisons

A comparison at noise monitors 4-7, SENEL for American Airlines and Southwest Airlines versus the same period for 2010-2015 shows:

American:

2010 AA B378	NMS 4[6]	NMS5	NMS6	NMS7
924 Ops.	86.8	88.6	88.7	84.4
2011 AA B378 870 Ops.	88.1	87.8	88.8	85
2012 AA B378 1054 Ops.	88.5	88.2	89.3	85.8
2013 AA B378 1103 Ops.	88.2	88.0	88.9	85.3
2014 AA B738 1184 Ops.	88.4	88.3	89.1	85.6
2015 AA B738	88.7	88.2	89.0	85.8
Noise Limits[7]	*94.1*	*94.6*	*96.1*	*93.*

Southwest:

2010 SWB737 1199 Ops.	81.3	81.2	82.1	79.3
2011 SW B737 1556 Ops.	80.5	79.3	79.9	76.6
2012 SW B737 1233 Ops.	83.9	83.6	85.0	81.9
2013 SW B737 1692 Ops.	83.8	83.3	84.6	81.5
2014 SW B737 2009 Ops.	84.3	83.8	85.00	82.1
2015 SW B737 2254 Ops.	85.0	84.3	85.5	82.7
2015 SW B738 317 Ops	84.6	83.2	84.9	82.3
Noise Limits	*94.1*	*94.6*	*96.1*	*93*

[6] NMS4- Tustin Ave., NB; NMS5- Vista Madera, NB; NMS6-Santiago, NB; NMS7-Back Bay Drive, NB.
[7] The new noise limits implemented and will be effective in next quarter's report are: 94.8; 95.3; 96.8; 93.7 respectively.

Class E Southwest Airlines 3rd Quarter 2013 – 2015 at Noise Monitors 4-7.

2013 SW B737 2847 Ops.	83.4	82.4	83.7	80.7
2014 SW B737 2262 Ops.	83.9	83.1	84.2	81.4
2015 SW B737 2678 Ops.	84.8	83.1	84.6	81.8
Noise Limits E[8]:	86.0	86.6	86.6	86.0

General Aviation ADDS- JWA

Due to requests to provide a breakdown of the ADDs for general aviation jets, the numbers for the third quarter are provided as follows:

Period	ADDs Commercial A&E	ADDsGen Jets	Total ADDs
7/1/15- 9/30/15	120.64 ADDs	40.37 ADDs	161.01 ADDs

On the following page is an historical breakdown of the CNEL[9] at the ten noise monitors at JWA for the periods of 1993-2014.

[8] The new noise limits implemented will be effective in the next quarter's report are:
86.6; 87.2; 87.2; 86.6 respectively.

[9] CNEL is the acronym for Community Noise Equivalent Level.CNEL is a single number result that is calculated for a complete 24-hour period and usually made up of results taken at shorter intervals such as 5 minutes or 1 hour and then averaged over the whole 24 hours. CNEL is the average sound level over a 24 hour period, with a penalty of 5 dB added between 7 pm and 10 pm. and a penalty of 10 dB added for the nighttime hours of 10 pm to 7 am.

Long Term Measured Aircraft Noise Level Values in dB CNEL at each station

Q-1 thru Q-4	Noise Monitoring Stations									
	1S	2S	3S	4S	5S	6S	7S	8N	9N	10N
2014	66.4	65.5	65.0	58.1	57.3	59.0	55.1	67.0	43.5	55.1
2013	65.9	65.1	64.4	57.5	56.8	58.4	54.7	66.9	43.5	54.8
2012	66.2	65.4	64.6	57.7	57.0	58.6	54.6	67.0	44.7	55.3
2011	66.5	65.3	64.1	57.2	56.8	58.4	54.0	67.2	44.0	55.3
2010	66.6	65.4	64.3	57.1	57.4	58.3	54.1	67.4	43.0	55.8
2009	66.4	65.1	64.2	57.3	56.5	58.3	52.6	67.2	42.7	55.7
2008	67.0	65.5	65.0	57.9	57.1	59.2	55.1	68.0	43.8	56.5
2007	67.6	66.0	65.7	58.4	57.7	59.9	55.5	68.7	44.6	57.1
2006	67.5	66.0	65.6	58.4	57.7	59.7	55.9	68.7	45.8	57.1
2005	67.8	66.8	66.0	59.1	58.9	60.6	57.9	68.7	49.9	57.3
2004	67.9	66.8	66.0	59.5	59.9	60.5	57.7	68.4	51.8	57.1
2003	66.9	65.8	64.9	58.7	58.7	59.8	57.8	68.4	52.6	57.1
2002	66.7	66.0	64.7	58.9	58.3	59.3	58.0	68.4	53.2	57.1
2001	66.5	66.5	64.7	59.2	58.2	59.3	58.0	68.4	51.4	57.0
2000	66.7	66.7	65.0	59.5	58.5	[7]59.9	57.7	68.5	51.6	57.2
1999	66.3	66.0	64.6	59.8	[6]58.7	59.8	57.1	67.7	52.1	56.9
1998	66.6	65.7	64.7	61.1	60.1	60.2	57.2	67.6	50.8	57.1
1997	66.0	65.7	64.4	60.0	57.8	59.7	57.3	67.7	54.9	55.9
1996	66.0	65.5	64.4	57.5	57.8	59.3	57.5	67.9	55.3	56.8
1995	66.0	65.3	64.3	56.2	58.1	58.8	57.1	67.7	50.3	56.7
1994	65.3	64.6	63.7	[3]57.3	[4]57.4	[5]58.5	56.9	67.3	51.8	55.9
1993	65.9	65.5	64.3	N/A	[1]54.5	[2]57.6	56.2	67.0	50.1	56.8

[1] ***1993, NMS 5S (RMS 5) located at 2601 Vista del Oro, Newport Beach***

[2] ***1993, NMS 6S (RMS 4) located at 1907 Tradewinds Lane, Newport Beach***

[3] ***1994, NMS 4S (RMS 22) located at 2338 Tustin Avenue, Newport Beach***

[4] ***1994, NMS 5S (RMS 21) located at 223 Nata, Newport Beach***

[5] ***1994, NMS 6S (RMS 24) located at 1918 Santiago, Newport Beach***

[6] ***1999, NMS 5S Located at 324 1/2 Vista Madera, Newport Beach***

[7] ***2000, NMS 6S (RMS 24) located at 1912 Santiago, Newport Beach***

Source: JWA Noise Abatement Program Quarterly Report, Table 2 - Revised October 2015

Airports in the Region

Long Beach Must Add Nine (9) Flight Slots to Comply with Noise Ordinance

An annual analysis of aircraft operating noise at the Long Beach Airport has led to the conclusion that the city must offer nine more daily commercial flights in order to stay in compliance with the Airport Noise Compatibility Ordinance. The analysis, conducted by Mestre Greve Associates, is part of the compliance agreement settled in court in 1990. That was the year a baseline was established, figuring the "noise bucket" for three categories of airplane — commercial, commuter and general aviation. Since that date, the commercial requirement was for Long Beach to offer a minimum of 41 flights a day. Currently, all of those flight slots are allocated.

A Noise Ordinance adopted in 1995 by the City Council requires an annual report on the noise experience in the previous year. The latest report covers Oct. 1, 2014, to Sept. 30, 2015. Those results showed the air carrier cumulative [noise] totals were well below the allocated noise budget. After additional study and an audit, it was confirmed that Mestre Greve's conclusion that at least nine more flights must be added was correct. Under the noise ordinance, it is the Airport Director's responsibility to allocate the slots, a process that must be completed within 30 days of the determination that they are available. According to the staff report, the slots will be given out on a first-come, first-served basis. If more than one carrier requests slots, they would be allocated sequentially to each carrier until all the slots were allocated.

There is an appeal process, with the airport director's decision appealable to the city manager. That decision can, in turn, be appealed to the council. However, the ordinance requirements for slots must be met, or the entire ordinance could be in jeopardy. Long Beach is one of the few airports in the nation to have an ordinance allowing it to limit the number of flights based on noise. JetBlue, the commercial carrier that holds most of the

commercial slots, requested earlier this year that the city study and file for designation as an international airport. Results of that study have not returned to the City Council.