JUNE 2019 UPDATE
All Things Aviation:

General Aviation Improvement Project

The County’s proposed General Aviation Improvement Project (GAIP) continues to dominate the community’s interest.

The community of Newport Beach turned out and let their opinions be known at the May 7, 2019 Board of Supervisors’ meeting. There was a strong showing of community members, but there wasn’t a clear consensus behind one alternative or concept. Some supported the So Cal Pilot’s proposal (calls for 3 FBOs and more space for light GA), others sought to delay the Board's vote, and some supported Alternative 3. No one spoke in favor of Alternative 1. Mayor Dixon and Council Members Herdman and Brenner also spoke at the public hearing.

After the Board discussed the various alternatives, Supervisor Andrew Do proposed a compromise - a modified Alternative 1 - in an effort to address some of the concerns raised by the community. The Board decided to continue the item to its June 25 meeting to give County staff time to analyze the proposal and determine if it is in alignment with the environmental document. The City has continued to advocate the elements it believes will best protect our community.

Departure Questions

One of the continuing questions raised is why do planes depart to the south? The City has examined this issue before. Despite air traffic issues, the departure direction essentially relies upon winds at the airport. As noted in the City’s 2008 John Wayne Orange County Airport Departure Noise Impact Analysis, “Ten years of historical weather data for John Wayne Airport were obtained from the National Oceanic and Atmospheric Administration (NOAA) in order to develop an accurate profile of the local
meteorological conditions. Three separate sets of data were acquired; “all-weather”, Visual Flight Rules (VFR), and Instrument Flight Rules (IFR). Based on analysis of the historical weather data, Visual Meteorological Conditions (ceiling greater than 1,000 ft and visibility greater than 3 miles) occur over 95.5% of the time and Instrument Meteorological Conditions occur 4.5% of the time. The average wind speed is 3.4 knots, with winds predominately out of the southwest.

The principle focus of the weather analysis was on wind conditions, since wind direction plays a large role in dictating runway usage at an airport. This is due to the fact that, for fixed-wing aircraft, it is advantageous to perform takeoffs and landings into the wind to reduce takeoff roll and reduce the ground speed necessary to achieve flying speed. Therefore the north-south runway alignment at SNA dictates that winds with directional headings between approximately 100° and 260° (essentially winds out of the south) would favor a southward traffic flow, with aircraft landing and departing to the south. Conversely, winds with directional headings between approximately 280° and 80° (winds out of the north) would favor a northward traffic flow, with aircraft landing and departing to the north. Typically in aviation, wind speeds measured at 3 knots or less result in conditions that are termed “calm” conditions. Conditions involving wind speeds measured at greater than 3 knots are termed “other-than-calm” conditions. In calm conditions, the flow of air traffic is dictated by the air traffic control tower order. In other-than-calm conditions, air traffic flow is dictated by wind direction. However, Runway 20 is the preferential runway at SNA and is used with tailwinds of up to 10 knots... Airport runway usage is dictated largely by wind direction, with aircraft departing and landing into the wind. Therefore the north-south runway alignment at SNA dictates that in other-than-calm conditions, wind headings between approximately 100° and 260° would favor a southward traffic flow (aircraft landing and departing to the south). Other than-calm conditions that favor a southerly air traffic flow occur approximately 58% of the time at SNA. Conversely, winds with directional headings between approximately 280° and 80° would favor a northward traffic flow, with aircraft landing and departing to the north. Other than-calm conditions that favor a northerly air traffic flow occur approximately 8% of the time at SNA. Since wind conditions favoring a south-flow air traffic configuration occur approximately 58% of the time, it stands to reason that this is the predominate air traffic flow configuration in use at SNA. In a south-flow configuration, aircraft land and depart primarily on Runway [19R] now 20R. Wind conditions only necessitate the use of a north-flow air traffic configuration approximately 8% of the time, in which case aircraft land and depart primarily on Runway 01L. The remaining 34% of the time, conditions are calm and favor no particular air traffic flow. As discussed previously, in calm conditions, the flow of air traffic is at the discretion of air traffic controllers and is normally dictated by the air traffic control tower order.”
Below you will also note what traffic looks like on a typical day in Southern California\textsuperscript{1} (June 21, 2018).

\textbf{John Wayne Airport}

\textbf{SNA Departures}

\begin{center}
\includegraphics[width=\textwidth]{sna_departures.png}
\end{center}

\textbf{All Southern California Airports}

\textbf{All Airports}

\begin{center}
\includegraphics[width=\textwidth]{all_airports.png}
\end{center}

\textsuperscript{1} Courtesy of FAA and Airport Working Group.
Aircraft Technology is one of the Answers

For those in the community seeking some respite from aircraft noise, the newer technology suggests there is some hope. A look at the results for the fourth quarter of 2018 and the first quarter of 2019, shows that some of the newer aircraft, in this case the B38M, operating as a Class E Aircraft, are demonstrating a definite improvement to the noise characteristics of the departing aircraft. Below is shown the noise monitor readings at Noise Monitor 5 (Eastbluff); 6 (Dover Shores); 7 (the Dunes) and comparing them to the noise standards at those locations as well as comparison to some of the other aircraft operating at the airport.

<table>
<thead>
<tr>
<th>Noise Monitor</th>
<th>Class A Noise Standards</th>
<th>Class E Noise Standards</th>
<th>SWest B38M 4th Qtr. 2018</th>
<th>SWest B737 4th Qtr. 2018</th>
<th>SWest B38M 1st Qtr. 2019</th>
<th>SWest B737 1st Qtr. 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>NMS5</td>
<td>95.3 dB</td>
<td>87.2 dB</td>
<td>80.0 dB</td>
<td>84.6 dB</td>
<td>81.6 dB</td>
<td>85.5 dB</td>
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<tr>
<td>NMS6</td>
<td>96.8 dB</td>
<td>87.2 dB</td>
<td>81.6 dB</td>
<td>85.0 dB</td>
<td>83.6 dB</td>
<td>85.7 dB</td>
</tr>
<tr>
<td>NMS7</td>
<td>93.7 dB</td>
<td>86.6 dB</td>
<td>77.0 dB</td>
<td>82.5 dB</td>
<td>79.5 dB</td>
<td>84.0 dB</td>
</tr>
</tbody>
</table>

JWA April Results

Airline passenger traffic at John Wayne Airport increased in April 2019 as compared with April 2018. In April 2019, the Airport served 899,276 passengers, an increase of 0.6% when compared with the April 2018 passenger traffic count of 893,668. Commercial aircraft operations increased 0.7% and commuter aircraft operations increased 607.1% when compared with April 2018 levels. Total aircraft operations increased in April 2019 as compared with the same month in 2018. In April 2019, there were 26,922 total aircraft operations (take-offs and landings), a 7.7% increase compared to 24,999 total aircraft operations in April 2018. General aviation activity, which accounted for 70.0% of the total aircraft operations during April 2019, increased 8.9% when compared with April 2018. The top three airlines in April 2019 based on passenger count were Southwest Airlines (318,595), United Airlines (138,398) and American Airlines (136,417).

By comparison, the number of Average Daily Departures (ADDs) for April 2019 was 133.4 ADDs vs. 126.8 ADDs for 2018. The difference is for the most part attributed to the number of commuter departures.

Airport to Introduce New Noise Complaint Procedure

The Airport will be introducing a new noise complaint management system, supported by Bruel & Kjaer, called Viewpoint. Viewpoint will automate noise complaints at JWA, and it will be readily accessible to the community via a mobile app, desktop version, and telephone tree. It will be available in late spring or early summer.
Once the Viewpoint mobile app and desktop versions are released to the public, the noise office email address will continue to be active for an undetermined period of time while providing an auto-reply message referring the complainant to the Viewpoint application website to register and submit a noise complaint. As the system is unveiled, the Airport will do some community outreach. Stay tuned.

Next Quarterly Noise Meeting

For those interested in reviewing the results of the first quarter of 2019 noise reports, the quarterly meeting will be held on June 20 at 1 p.m. at the Airport.

Ontario Airport

Ontario Airport continues to take off with passengers as the number of passengers for 2019 is +5.3% for the year. The rapid expansion of commercial air service at Ontario International Airport (ONT) continues with the inauguration of United Airlines nonstop flights serving Houston’s George Bush Intercontinental Airport (IAH). ONT now reaches 21 domestic and international destinations with nonstop service.

United’s new flight is scheduled to arrive from IAH at 10:55 p.m. (PDT), with return service to Houston departing at 11:45p.m. United already provides daily nonstop service to San Francisco and Denver from Terminal 2 at ONT, the nation’s fastest-growing airport. The air service development wave began at ONT in April with the start of Delta Air Lines’ daily, non-stop service to its Atlanta hub. A second roundtrip will be added later this month. Beginning next week, Southwest Airlines will add new daily service to San Francisco with four flights a day Monday through Friday, three flights on Saturday and two on Sunday. Southwest, which operates from Terminal 4, will also add to its current service to Denver with a mid-morning departure Monday through Friday. Summer travel through ONT is forecast to increase by nearly 14% this summer, more than four times the expected increase nationally. More than 1.6 million air travelers are expected to arrive and depart ONT between Memorial Day weekend and Labor Day.

An interesting comparison can be made as Southwest, which served approximately 318,000+ passengers at JWA in April while also servicing 229,000+ passengers at ONT. At the same time Southwest served another 92,000+ at Long Beach. Meanwhile JetBlue notified the Long Beach on Tuesday that it would give up 10 of its 34 gate slots. The carrier said the reduction in service from Long Beach had long been planned as the airline expands services from other West Coast airports, such as Ontario International Airport and Hollywood Burbank Airport.

Questions about the Airport or Operations

if you have any questions about John Wayne Airport and its departures and/or operations, please do not hesitate to contact the City of Newport Beach City Manager’s Office.