About JWA and the Federal Aviation Administration's (FAA's) "NextGen" Project

Over the past few years, the FAA has implemented its <u>NextGen</u> effort across the nation. The FAA's goal with NextGen is to improve safety and the efficiency of air carrier traffic by (in effect) narrowing departure and arrival paths down more specific and repeatable tracks.

In our region, the FAA studied the 23 or so airports in and around Southern California (calling this the So Cal MetroPlex) and has implemented three new departure patterns for John Wayne Airport's (JWA's) major commercial air carriers. General Aviation planes generally do not fly these patterns. The three NextGen patterns out of JWA are known as:

- PIGGN (for flights going east of Las Vegas about half of all commercial carriers at JWA take this route)
- FINZZ (for flights going to Las Vegas or Salt Lake City <10% of all JWA flights go here)
- HHERO (for flights going north to the Bay Area, Portland, Seattle, and more a little over 40% of all JWA flights take this route)

NextGen's Major Carrier Departure Patterns at JWA					
Name of Departure Pattern	% of Carriers that Use it		Date First Implemented	Date Modified	City's Informal Concern
PIGGN	50%	East of Las Vegas	March 2, '17	25-May-17	Started too far east, then May modification may have moved route a little too far west
FINZZ	<10%	SLC, LAS	April 27, '17	May be modified 8/17/17, 12/7/17	Implementation appears to be a little too far east
HHERO	>40%	SFO, OAK, PDX, SEA	April 27, '17	May be modified 8/17/17, 10/12/17	Implementation appears to be a little too far east

Litigation

In Fall of 2016, the City Council authorized the filing of a lawsuit against the FAA regarding NextGen's implementation at JWA. The County of Orange intervened in this litigation and the City of Laguna Beach filed its own litigation. Please go to this <u>link</u> to view the letter that formalized many of our concerns. This litigation is now in Federal court, and we do not have an update to offer at this time.

Outside of the litigation, over the past months, City staff and County of Orange staff (the County administers JWA) have worked with the FAA to try and address concerns about planes taking off from JWA not staying in the center of the bay and flying over Noise Monitor #7.

Please be assured that the City, in cooperation with the County, is aware of the problems associated with PIGGN, HHERO, and FINZZ. We work on this issue nearly daily, and believe that our current collaborative approach to working with the FAA on a better path may lead to a successful resolution of these concerns. However, working with the FAA takes time, as we are not the only <u>city</u> under new NextGen flight paths with concerns.

About the Noise Abatement Departure Procedure

JWA is a heavily regulated airport, but the well-known "John Wayne Airport Takeoff" has some misunderstanding about it. The FAA has provided general guidance for two Noise Abatement Departure Procedures (NADPs) for JWA – they are:

- **Close-In**. For this departure, there is a thrust reduction followed by a flap retraction. This allows for an initially faster climb in close proximity to the runway.
- **Distant.** For this departure, there is a flap retraction followed by a thrust reduction. Aircraft are lower in the initial phase of this Distant NADP, but are higher in the distant portion of the departure (versus the Close-In NADP).

Ultimately, airlines develop their own procedures for each individual aircraft. This is especially true at JWA because airlines have to adhere to the Single Event Noise restrictions at noise monitoring stations. Importantly, the NADPs are not and have never been *required*. To re-emphasize, what IS required is that a plane departs in a manner that does not cause the plane to exceed noise thresholds (in single-event decibel levels) at any one of the seven noise monitoring stations (NMSs) on the departure path. If a plane can depart on a steady climb with no cutback and still fly below the NMS' dB levels, it doesn't need to use either NADP. Newer planes, lighter planes, and/or planes with less luggage and fuel can sometimes do this successfully.

About Aircraft Emissions

The US Environmental Protection Agency (US EPA) governs emissions from aircraft. According to the US EPA, "aircraft account for 12 percent of all U.S. transportation greenhouse gas (GHG) emissions and 3 percent of total U.S. GHG emissions."

In July 2016, then-US EPA Administrator Gina McCarthy signed a US EPA action entitled, "Finding that Greenhouse Gas (GHG) Emissions from Aircraft Cause or Contribute to Air Pollution that May Reasonably Be Anticipated to Endanger Public Health and Welfare." These findings were that: (1) Concentrations of six well-mixed GHGs in the atmosphere endanger the public health and welfare of current and future generations (the endangerment finding), and (2) GHGs emitted from certain classes of engines used in certain aircraft are contributing to the air pollution—the mix of those six GHGs in the atmosphere—that endangers public health and welfare (the cause or contribute finding, or contribution finding).

The EPA's findings are in preparation for a "future domestic rulemaking process" to adopt future GHG standards. Any future proposed aircraft engine standards would be open to public comment and review before they could take effect. As far as the City knows, at this time there is no specific intent on the US EPA's part to engage in a future domestic rulemaking process regarding aircraft engine standards. You may wish to contact your Congressional representatives or the US EPA directly for more information or to express concerns.

Common Questions about NextGen and JWA.

Q: Something has changed around my house. I see and hear the planes differently. What happened, and what's the City doing about it?'

A: NextGen indeed changed departure patterns. In some cases, planes are closer to Eastbluff and The Bluffs and Harbor Cove. In other cases, planes are closer to Westcliff and Dover Shores. As a result, if the paths are slightly too far east or too far west, people near the flight paths may be seeing more planes and hearing them more often. The City has no ability to dictate flight paths or to correct what we

perceive as problems with PIGGN, HHERO, and FINZZ, but we have tried anyway by working closely with the County and the FAA to try and improve the NextGen departures. This takes time, however.

Q: Flights appear to be lower now. Is that so?

A: Generally, no. When we <u>compare altitudes</u> between March – August 2013 and March – August 2015, for example, we see that most carriers are flying at or above 2013's levels. United/Continental appears to be an exception in this case. The City does not have an ability to govern the altitude at which planes fly – only the FAA can do that. But we have asked the County for a current update to the 2016 study and will release that as soon as we get it.

Q: What about emissions and health impacts? And all this black stuff on my porch and patio furniture? **A:** There's no easy way to determine what contaminant may be coming from what source. If we live close to Coast Highway or a major street like Jamboree or MacArthur, our homes will be impacted from truck and bus and car exhaust. Planes from JWA release exhaust as well. Today, we don't see a clear or easy way to determine how to look at an emission footprint and say "this is from a truck" or "this is from a plane."

Newport Beach residents have in the past asked the City government to see if a "health impacts" study could be done of residents who live near the JWA flight paths. However, a meaningful health impacts study follows a specific group of people over many years. It can work best if persons remain in a fixed location over the duration of the study period, agree to divulge extensive and personal medical information, and if we have an ability to factor in or out outside non-airport pollutants. We don't think that capability exists here.

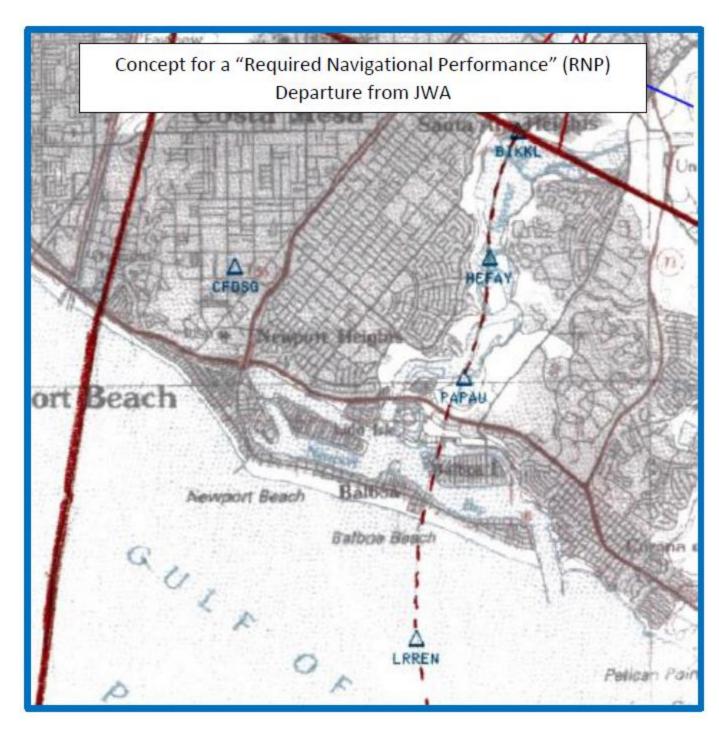
In 2008-2009, the City hired a consultant to do a limited look at trying to find a "footprint" associated with jet fuel emissions. Her work (released in 2010) is here.

Q: What can I do on my own?

A: You can stay updated on NextGen issues to subscribing to our <u>Monthly Reports</u>. Please email us <u>here</u> to subscribe. You can also contact the <u>JWA Noise and Access office</u> if you see or hear something that's not typical. You are always welcome to contact the <u>FAA</u> to let them know of your specific concerns.

Q: What else should I know? Is there any hope out there for improvement?

A: Certainly there are reasons to be optimistic. First, the FAA and the County are working with us closely as noted above. Secondly, the FAA has recently posted a "two turn" plan (see chart below) for the Upper Bay that leads us to infer that this important improvement is on the horizon. Thirdly, new generations of planes – like the Boeing 737-MAX and the <u>Airbus 320 neo</u> – are entering fleets. These planes appear to be quieter and emit less pollutants than their predecessors. Today, the single Frontier Airbus 320 neo (neo = "new engine option") that departs from JWA is one of the quietest departures from the airport each day.



City staff is always happy to discuss this and any other issue involving John Wayne Airport – please email us at dkiff@newportbeachca.gov or call us at 949-644-3001.