ANAC Public Comment Responses:

(June 15, 2016)

<u>Question:</u> Who when and why was the change in the established flight plan brought into change?

<u>Answer:</u> The Federal Aviation Administration (FAA) is responsible for directing aircraft arriving in and departing out of San Diego International Airport (SAN). It has not had any significant procedural changes that would alter the path aircraft fly out of SAN. That being said, a number of factors can affect the flight path of any given aircraft, including wind, weather and other aircraft traffic.

The Airport Authority, along with the airlines, the FAA and Air Traffic Control (ATC), strive to balance the needs of the community with those of the passengers at SAN. Even though we do not dictate the flight path (that's the responsibility of the FAA and ATC) or fly the planes (that's the airlines), it is our job to foster transparency among all parties in regards to airport operations over the communities surrounding the airport.

<u>Question</u>: Do the noise rules apply to FedEx planes?

<u>Answer:</u> Noise rules apply to all aircraft that operate at SAN.

Question: Why are the planes taking off at such a low angle?

<u>Answer:</u> The typical climb rate out of the airport is roughly 500-feet per nautical mile and departing aircraft must adhere to FAA safety criteria. That being said, the altitude of departing flights can vary based on several factors. The performance of the aircraft engines, the load of the aircraft (passengers and fuel), and the weather (hotter weather will decrease engine performance) are just a few factors that can affect the altitude of an airplane during takeoff.

Question: Why are low altitude planes not on radar?

<u>Answer:</u> Low-flying aircraft may be hidden behind terrain features and not be picked up by some radar. Radar uses radio waves to determine the range, angle, or velocity of objects. An antenna transmits a signal that is received by the aircraft, which measures the distance between the radar and the aircraft. The signal travels in a straight line from the antenna until it bounces off a solid object, which can be an aircraft, but also anything else in the way, including terrain features.

Question: Can we get penalties applied to early turns as we have for curfew violations?

<u>Answer:</u> Airlines follow the departure procedures as developed by the FAA. These FAA procedures do not have an "early turn" provision or penalty. The process required to adopt restrictions is mandated by a federal law known as the Airport Noise and Capacity Act of 1990 (ANCA), and Federal Aviation Regulation (FAR) Part 161 "Notice and Approval of Noise and Access Restrictions," which do not allow an early turn penalty.

<u>Question:</u> How accurate is the flight tracking App?

Answer: WebTrack[™] is an accurate and reliable system that combines multiple sources of flight information (data feeds) to precisely determine an aircraft's flight path. Some of these sources of information come into the system within 30 minutes of the actual flight; some sources come in after several hours. As more data feeds for any particular flight come in, the accuracy of the indicated flight path improves. That means if you view a flight path minutes after the aircraft takes off; and then re-check the flight the following day; you may see differences that reflect newer data feeds and, ultimately, a more accurate representation of the flight.

Question: What is being done to mitigate the new noise levels?

<u>Answer:</u> The airport takes the issue of noise very seriously, and continually works with the FAA, airlines and the surrounding community to mitigate noise to the fullest extent possible.

That being said, the airport is bound by state regulations (California Code of Regulations, Title 21) which provide noise standards governing the operation of an airport within the State. Among many things, Title 21 defines the basis for an "acceptable" level of noise for residents surrounding the airport, which is the 65 decibel (dB) Community Noise Equivalent Level (CNEL).

Sixty-five decibels sounds different to different people; but generally it is comparable to the noise of a dishwasher or air conditioner; or the amount of noise generated by a car traveling at freeway speeds as heard from 50 feet away.

Obviously, the noise generated by an airport is greater the closer you are to the airport. To help determine and illustrate how noise changes depending on distance from an airport, airports have noise contour maps.

Noise contours are a series of lines superimposed on a map of the airport's environs. These lines represent various sound levels that a typical person would experience depending on their proximity to the airport. Noise contours are used for several purposes; but in this context they highlight existing or potential areas of significant aircraft noise exposure (as defined by the FAA).

In order to determine the relative distance from the airport at which one would experience aircraft noise at 65 decibels (again, as defined by the FAA), the Airport Authority is required to continually measure noise and produce quarterly noise contours to measure noise impacts surrounding SAN.

Current mitigation efforts include the Quieter Home Program for residents located within the 65 dB (FAA-approved) contour. If the quarterly contours become larger than the FAA-approved contours, the Airport Authority may need to update the FAR Part 150 Noise Compatibility Study to potentially expand the area for the Quieter Home Program.

It should be noted that the industry has begun to implement the use of "ultra-high bypass" engines that are significantly quieter than current generation aircraft. While it will take years to see many of these aircraft integrated into the fleet, their noise reduction is significant. The 787 used by Japan Airlines uses this technology today and its noise impact is far less than its predecessor the 767. We expect to see further improvements as these engines are used on new narrowbody aircraft that will begin entering service in 2017 and 2018.

Question: How many airports have two fly overs on take-off?

<u>Answer:</u> Most airports across the nation that are surrounded by residential areas have aircraft that depart and have to cross back over the same area. The initial departure heading is, of course, determined by the runway's heading. Once the aircraft takes off and enters stable flight, it can then turn toward its destination. That can sometimes require a turn that results in the aircraft doubling back over the same area. Factors that affect this turn include the location of the destination, surrounding terrain and other aircraft traffic, including military air traffic. In San Diego, the initial turn is influenced by military airspace off the coast and Mexican airspace to the south.

Question: Why are planes routed to land if there is not enough runway space?

<u>Answer:</u> SAN's 9,401 foot runway is sufficient to support the landing of any aircraft operating at the airport or expected to operate at the airport in the future.

<u>Question</u>: When trying to cascade planes in & out of runway faster, we have more 400% more aborted landings. How does this plan save time & fuel?

<u>Answer:</u> Current FAA rules for Air Traffic Control dictate the sequencing for aircraft take-offs and landings. These requirements are valid for all airports around the country. Missed approaches, or "go-around" procedures are done for safety reasons and are not an effort to save time and fuel.

<u>Question</u>: Is there anyone on this panel who resides and represents the neighborhoods of Point Loma Heights Central, Point Loma Heights South, and Fleetridge? If not, how can we get a voting member elected to the ANAC, representing this area?

<u>Answer:</u> The neighborhoods referenced in the question are represented by a person appointed by the Pt. Loma Peninsula Planning Group. Recent membership changes also allow an individual representing a formal community noise group, which could also be from those neighborhoods. Finally, to allow members of the community that may not serve on the ANAC to be part of the dialogue to address noise concerns, a subcommittee from any neighborhood that has noise concerns was created.

<u>Question:</u> Is Orchard considered the 258 or 265 trajectory? If Orchard is the 258, when will the more conservative 265 trajectory be implemented?

<u>Answer:</u> Orchard Avenue's Intersection at Cable Street (at the ocean) falls in between the 258 and 265 headings. Aircraft that turn prior to the 265 heading, less than 1.5 miles off shore, are considered an early turn. The implementation of any particular heading falls under the jurisdiction of the FAA, not the Airport Authority.

Question: Where did this (WebTrack[™]) data come from? Of six flights tracked, the data does not reflect what is going on in Point Loma Heights.

<u>Answer:</u> The data used in the WebTrack[™] feed comes directly from the FAA and the National Offload Program (NOP). NOP data provides high fidelity traffic data for airports to use in their noise and operations monitoring system. The NOP data feed is an intermediate solution until the FAA has all of its data come through its System Wide Information Management (SWIM) system in 2016. Once the SWIM data feed is available, it is anticipated that data accuracy should increase.

<u>Question:</u> On Page 8 of Item No. 12, there are three charts with average altitude and noise measurements for Pt. Loma. Where did this data come from?



<u>Answer:</u> The graphic referenced in the question is shown above. The altitudes of the flight track data came from our Airport Noise and Operations Monitoring system and collected all flights south of the 265 heading, to the end of the Point Loma Peninsula. The noise measurements came from Site 32, Del Mar Avenue at Froude Street.

<u>Question</u>: Why are there no monitor placed in the area of Point Loma Heights South, Central and Fleetridge East?

<u>Answer:</u> The areas mentioned in this question experience noise from several sources in addition to the airport. The Airport Authority currently has 23 remote noise monitors in areas around the airport. These sites are carefully chosen to ensure they are predominantly measuring noise from the airport itself. Noise monitoring sites at other locations would make it challenging to differentiate ambient noises (military aircraft, roadway, etc.) from San Diego International Airport aircraft operations.

<u>Question:</u> Have you met with ALL of the Air traffic controllers about sticking to the 275 trajectory?

<u>Answer:</u> The Airport Authority has met with FAA Air Traffic Control Management to discuss adherence to the FAA Noise Dots. It is their responsibility to communicate the information to all air traffic controllers.

<u>Question</u>: It appears that the southern departures frequency is erratic and inconsistent, some days, it is way worse than others days, and doesn't seem to be related to weather. What could be the cause of the irregular departure patterns?

Answer: There are two major factors affecting departure patterns in this context. First, unless an aircraft is utilizing the satellite-based procedures (approximately 40% of SAN operations do) there will be variations in the flight paths as ground-based navigation does not have the precision of satellite-based procedures. The second major factor in this context is wind. While winds on the ground can be negligible, winds typically increase, and vary in direction, as altitude increases. It's why you can have a light breeze at Mission Beach and drive to the Cabrillo Monument and feel the need for a jacket. These winds continue to increase and change direction as the aircraft climbs, which may affect the departure pattern.

<u>Question</u>: Can the public be represented in meeting with the air traffic controllers and airline pilots to confirm the discussion and recommendations?

<u>Answer:</u> Yes. Both the FAA and airlines have representatives on the Airport Noise Advisory Committee (ANAC). Those meetings are open to the public. The FAA has also committed to attending the ANAC subcommittee meetings.

<u>Question</u>: From the 4/20 meeting, why was the early turn statistics graph eliminated, and not presented to the Airport Authority during the 4/21 meeting.

<u>Answer:</u> The 4/20 meeting was for ANAC and the 4/21 meeting was for the Airport Authority Board. The Board was presented with a very comprehensive overview of community noise issues in a 22 page staff report and separate presentation. That information is available on san.org.

<u>Question</u>: Will you come to my home so you can see how south these flights are flying, and the frequency of flights flying way south of the agreed upon 275 trajectory?

<u>Answer:</u> We will be implementing a process of validating WebTrak[™] by placing staff in the neighborhoods where we have received concerns about FAA flight data accuracy. It should be noted that the vast majority of aircraft that fly off of this heading are those flying a missed approach. When an aircraft experiences a missed approach, its direction of flight will be dictated by other aircraft in the local airspace at the time the missed approach occurs. As a result, it may turn south to clear the airspace for an awaiting departure because it cannot turn to the north into other traffic coming down the coast. A missed approach/go-around is a procedure where quick decisions have to

be made by ATC and Pilots depending on the current airspace/traffic situation at that moment in time.