Mission Support Services 800 Independence Avenue, SW. Washington, DC 20591



Federal Aviation Administration

FEB 2 7 2018

Mr. Denny Schneider LAX Community Noise Roundtable 1 World Way Los Angeles, CA 92216

Dear Mr. Schneider:

Thank you for the Los Angeles International Airport (LAX) Community Noise Roundtable's (the "Roundtable") October 1, 2017, November 21, 2017, and January 17, 2018, letters to the Federal Aviation Administration's (FAA) former Administrator, Michael Huerta; and current Acting Administrator, Dan Elwell. I am glad to be able to respond to the concerns you raised in the letters.

In responding to the issues raised in your letters, the Federal Aviation Administration (FAA) carefully reviewed the charts and analysis provided in the Roundtable's report, in addition to conducting its own study of the LAX north downwind, using a variety of different parameters. The FAA analyzed aircraft altitudes for the time period described by Roundtable reports and expanded that data set to include six months of post-implementation results from 2017. Below I have summarized each concern raised by the Roundtable and provided a response based on the FAA's analysis.

Concern 1: Resident noise complaints are the direct result of relocated and densely concentrated flight paths from Southern California (SoCal) Metroplex procedures.

Response 1: A number of communities are under what has historically been the downwind leg for LAX Runway 24L and 24R arrivals from the northwest. Residents in certain communities have long lobbied for flight path changes over the area. This desire for change predated the SoCal Metroplex Project. In a December 12, 2017, email, you made the statement, "Noise complaints were already at serious levels along northwind arrival in areas of Malibu, Palisades, Mar Vista and Venice as well as in Culver City even before the complaint growth started at least a year or more before NextGen implementation." Indeed, the FAA started receiving noise complaints about changed routes before we implemented any changes.

Concern 2: 67 percent of aircraft pass DAHJR below the mandatory minimum altitude of 6,000 feet MSL.

Response 2: There is a 6,000-foot Mean Sea Level (MSL) altitude restriction at DAHJR on the IRNMN, RYDRR, and HUULL Standard Terminal Arrival Route (STAR)s for certain aircraft only. The altitude restriction on the IRNMN, RYDRR, and HUULL STARs applies to aircraft

that are flying the Required Navigation Procedure (RNP) approach that is connected to those STARs. The RNP is one of several available approach procedures into LAX. Not all aircraft are equipped to fly the RNP and not all aircrews have the training or experience to fly it. Moreover, traffic volume sometimes prevents Air Traffic Controllers from assigning it. Due to these factors, controllers sometimes assign alternate approach procedures to aircraft on the IRNMN, RYDRR, and HUULL STARs. These may include Instrument Landing System (ILS) approaches or visual approaches.

The 6,000-foot MSL altitude restriction does not apply to aircraft that are flying these alternate approach procedures. Additionally, altitude restrictions on any procedure may be negated by controllers, who must sometimes direct, or vector, aircraft off the STARs to maintain a safe and efficient flow of traffic in a highly dynamic environment. Vectoring involves changing the aircraft's lateral or vertical path, or both. The altitude restriction does not apply to vectored aircraft, either. For more information, please see 14 CFR 91.123(a) at the following link: https://www.ecfr.gov/cgi-bin/text-

To investigate your concerns, the FAA conducted extensive analysis and monitoring of flight tracks at DAHJR beginning in May 2017, and again from July through November 2017. You stated that 67 percent of aircraft pass DAHJR below 6,000 feet MSL. Because air traffic tolerances allow for up to a 299-foot variance in altitude due to the imprecisions inherent in Mode C transponder systems, which provide altitude information, we consider aircraft that are at 5,701 feet MSL to be compliant with a 6,000-foot MSL clearance. The FAA analysis indicates that in May 2017, 62 percent of aircraft were at or above 5,701 feet MSL during the day, and 53 percent of aircraft were at or above that altitude at night. By November 2017, the analysis demonstrated an improvement with aircraft altitudes at or above 5,701 feet MSL 71 percent and 70 percent, for day and night respectively.

The FAA believes this data represents a general uptrend in the number of LAX arrivals at or above 5,701 feet MSL when crossing the DAHJR intersection. This uptrend is occurring as air traffic controllers are becoming more familiar with the procedures. Furthermore, the Metroplex Team is working with Southern California Terminal Radar Approach Control management, who are re-enforcing to controllers the benefits of keeping aircraft on the procedures as much as possible. The FAA, during our post-decision public outreach for the SoCal Metroplex project implementation, explained that not all aircraft would cross DAHJR at 6,000 feet MSL. For information on optimizing LAX aircraft arrival paths, please see "Improving Arrivals into LAX" at the following link: https://www.faa.gov/tv/?mediaId=1477, and "Internet Based Webinar #1" contained on the SoCal Metroplex website:

http://www.metroplexenvironmental.com/socal_metroplex/socal_media_library.html

Concern 3: Far too many aircraft were 2,000 and 3,000 feet below the altitude restriction at DAHJR.

Response 3: Since the implementation of the SoCal Metroplex procedures, the overall altitude of aircraft at DAHJR has risen substantially. The FAA compared flight track data both before and

after the publication of the IRNMN, RYDRR, and HUULL STARs. In November 2016, prior to implementation, 64.64 percent of flights were above 5,500 feet MSL in the area where DAHJR is now located. In November 2017, after Metroplex implementation, the number of flights above 5,500 feet MSL had increased to 82.2 percent, with 95.58 percent of those flights above 5,000 feet MSL. Almost all flights, or 99.64 percent, were above 4,000 feet MSL at this location. It is important to note that before the IRNMN, RYDRR, and HUULL STARs were implemented, there was no altitude restriction where DAHJR is now located.

Concern 4: The Metroplex Project concentrated flights into narrow zones that previously had much lighter traffic.

Response 4: While designing the IRNMN, RYDRR, and HUULL STARS (and all other SoCal Metroplex procedures), the Metroplex team remained aware of historical flight tracks. The IRNMN, RYDRR, and HUULL STARs remain within the historical LAX North Downwind arrival tracks.

The FAA was transparent in conducting public outreach to explain the changes people could experience as a result of the SoCal Metroplex Project. The FAA, on the Metroplex website, stated: "When the Southern California Metroplex procedures are implemented, some people might see aircraft where they did not previously fly. This is because some air route changes will occur, and because satellite-based procedures create more concentrated flight paths than conventional procedures." Please see:

http://metroplexenvironmental.com/socal_metroplex/socal_questions.html

It is also worth noting that the ability to have a high percentage of aircraft cross DAHJR at a high altitude is dependent upon the repeatable and predictable flight paths that result from the satellite-based routes.

Concern 5: Nighttime arrivals into LAX pass DAHJR 1,000 to 3,000 feet below the mandatory minimum altitude. Using nighttime "over-ocean" operations has been the exception, not the rule.

Response 5: As noted in Response 2, the 6,000-foot MSL altitude restriction at DAHJR, on the IRNMN, RYDRR, and HUULL STARs applies only to aircraft that are flying the RNP approach that is connected to those STARs. As noted above in Response 3, in November 2017, 95.58 percent of all flights were above 5,000 feet MSL at DAHJR.

Runway Safety Area construction is a factor that may influence nighttime arrivals at LAX. At night, LAX typically utilizes "over-ocean" operations to reduce the noise impacts for communities surrounding the airport. Over-ocean operations route arriving aircraft to the north runway complex (Runways 6 L/R), which allows departures to take off over the ocean from the south runway complex (Runways 25 L/R). The use of over-ocean operations requires the availability of both the north and south runway complexes in order to keep arrivals and departures safely separated.

As the Roundtable noted in its October 1, 2017, letter, over-ocean operations "are limited in their use by weather conditions and runway conditions." LAX has been experiencing extensive

airfield construction projects since 2013. At times, these projects have rendered one of the runway complexes unavailable. As a result, over-ocean operations were not possible at these times. We expect that when the LAX runway construction is complete, the historic use of over-ocean operations will be restored.

Concern 6: The FAA is not adhering to the mandatory minimum altitude at the GADDO waypoint per FAA Order 8260.3C PARA 2-2-lf(6)(b). This rule has been in effect since at least March 14, 2016.

Response 6: The SoCal Metroplex Design Team began work in October 2012. The FAA design criteria for procedures continually evolves and is refined. It is not practical to design new procedures that conform to every change in criteria that occur during the design process. As is the case with all other longer-term design projects, the SoCal Metroplex Design Team was given authorization to complete designs based on the criteria set out when the design phase began. If procedures subsequently require amendments, those amendments must adhere to any new criteria published since the initial design phase. All current SoCal Metroplex procedures and all modifications of procedures are compliant with all applicable criteria for the project.

Additionally, as with DAHJR, the altitude restriction for aircraft on the IRNMN, RYDRR, and HUULL STARs at the GADDO waypoint applies only to aircraft assigned to the procedure. It does not apply to aircraft that have received alternative instructions from Air Traffic Controllers.

Concern 7: The FAA declined to attend the September 2017 LAX Roundtable meeting when asked to provide information on proposed revisions to a number of SoCal Metroplex procedures, including the SADDE 8 Instrument Flight Procedure (IFP).

Response 7: At the time of the September meeting, the FAA was involved in confidential mediation discussions with litigants that challenged the environmental review for the SoCal Metroplex Project. The FAA was not available for comment while mediation discussions were ongoing.

I understand there has been frustration about FAA's recent level of participation in the LAX roundtable meetings. Going forward the FAA will continue to engage with the roundtable, as it has in the past, by providing technical information on an as-needed basis, when invited with appropriate notice. It is possible that FAA will need to decline from speaking on certain topics, if they are the subject of on-going litigation, but the FAA will attempt to be as responsive as is appropriate. The FAA continues to believe the input from roundtables led by the local airport and surrounding communities is exceptionally valuable. As you may know, the FAA signed the SoCal Metroplex Record of Decision on August 31, 2016, and issued it on September 2, 2016. That administrative process is closed. As a legal matter, the FAA's decision became final on September 2, 2016, and will not be revisited.

The SADDE 8 is a conventional, legacy arrival procedure to LAX that was modified to a limited extent, in order to provide continuity with other Metroplex designs. With regard to your concerns about the opportunity to contribute public comments on SADDE 8 and any other IFPs, all new or changed procedures are posted on the IFP Information Gateway where they are

available for public viewing. The website allows users to read the documents used to create each procedure, as well as any obstructions or waivers required to satisfy the FAA criteria. The website generates an email form with which to contact the FAA and provide a detailed description of your concerns. A Flight Procedures Specialist reviews all comments provided to the FAA through the IFP Information Gateway. For more on the IFP Information Gateway, please see the following link: https://www.faa.gov/air_traffic/flight_info/aeronav/procedures/

Attachment A, following this letter, provides information about the changes made to SADDE 8 and the reasons for those changes.

I am glad to have had the opportunity to respond to the Roundtable's concerns and hope these responses clarify the various orders, policies, and requirements that apply to the procedures in question, and clarify various understandings about the SoCal Metroplex Project.

If we can be of further assistance, please contact Chris Brown, Assistant Administrator for Government and Industry Affairs, at (202) 267-3277.

Sincerely,

Jodi S. McCarthy
Vice President, Mission Support Services

Air Traffic Organization

Enclosures:

Transmitted Correspondence

Attachment A

SADDE Changes:

- 1. Removed reference to SMO R-068/9 DME after SMO VOR/DME at end of STAR and replaced it with heading 070 for radar vectors.
- 2. Added altitude restriction AT/ABOVE 7000 at SMO.
- 3. Added speed restriction AT 250 KIAS at SYMON.
- 4. Removed "CROSS AT 280K OR ASSIGNED BY ATC" from SYMON Vertical Navigation Planning Information.
- 5. Added Lost Communication Procedure.
- 6. Raised MEA RZS-VTU from 6000 to 6400

REASONS:

- 1. Realigned to prevent aircraft from continuing on the old feeder to and turning in on the ILS 24R/L.
- 2. An altitude restriction is required by current criteria at the STAR terminus.
- 3. For flow control.
- 4. STAR now ends in vectors.
- 5. Updated evaluation identifies new controlling terrain within expansion area