

Federal Aviation Administration

FAA RESPONSES TO SOUTHERN SAN FERNANDO VALLEY AIRPLANE NOISE TASK FORCE QUESTIONS

Questions/Request for Information to the FAA

1. On December 20, 2019 Senator Harris sent a request for information on the efficacy of the NextGen Program, are you aware of this letter?

FAA Response: Yes, the FAA is aware of this letter

2. Can the FAA commit to providing a response to the December 20, 2019 letter by January 31, 2020?

FAA Response: The FAA expects to send the response to this letter soon.

3. Can the FAA provide any completed post-implementation studies?

FAA Response: Yes, the FAA can provide.

4. Can the FAA provide any records it has review or generated regarding the safety risk management panel?

FAA Response: The FAA has not developed separate records from our safety risk management (SRM) analyses. The FAA conducts all SRM within the procedure development process. This question has been answered in the previous set of questions (see question 6) from September, 2019.

FAA Response: Yes, safety analyses were conducted on SoCal Metroplex procedures prior to their implementation. The safety analyses included, though were not limited to: mountainous terrain, Minimum Vectoring Areas, location of adjacent airports, air traffic flow and volume, and topography of Southern San Fernando Valley.

The FAA took topography into account as it relates to the safety of flight in procedure design, per agency requirements. Every route that was part of the SoCal Metroplex project was subjected to a rigorous safety analysis before it was finalized.

The FAA evaluated the procedures using its Safety Management System (SMS) process. In compliance with SMS requirements, a Safety Risk Management Panel (SRMP) evaluated the procedures following a five-step process. The FAA also undertook validation exercises that further refined the procedures to ensure they were viable, taking into account the limitations imposed by mountainous terrain, Class B airspace, and Special Use Airspace. Before implementing the routes that were part of the SoCal Metroplex project, the FAA did extensive modeling, simulation, testing, and validation to ensure they were safe, flyable, and operationally feasible. Additionally, the noise model that the FAA used accounted for terrain. The model - the Noise Integration Routing System (NIRS) – accounted for changes in elevation.

5. Can the FAA provide documents it generated or review in conducting noise model?

FAA Response: Yes, the Southern California Metroplex Project Noise Technical Report discusses the FAA's noise analysis and is available on the Southern California Metroplex Project website:

http://www.metroplexenvironmental.com/docs/socal_metroplex/final/SoCal_Metrop lex_Noise_Technical_Report_Final_20160822.pdf

6. Can the FAA clarify if their separation safety standards are either 3 nm or 1000 feet in elevation? Are both required or one or the other?

FAA Response: The FAA provided a verbal response to this question at the January 15, 2020 Task Force meeting. The aircraft separation requirements in the airspace around airports is EITHER 3 nautical miles of lateral separation or 1,000 feet vertical separation.

7. How often does the FAA seek public feedback on the navigation of their website? Can the FAA conduct additional feed-back?

FAA Response: For any feedback, the FAA has a "Contact Us" link on the bottom of the page where one can click and respond.

8. Section 176 of the Reauthorization timeline the FAA submitted, what is the status of the review and when will the report be available?

FAA Response: Sec. 176 – the FAA is reviewing the report associated with Sec. 176 and will release it as soon as possible. We will ensure you receive a copy when it is releasable.

9. Section 177 of the Reauthorization timeline the FAA submitted, can you please provide a scope and does the NAS have an abstract describing what they will review?

FAA Response -Section 177, of the FAA 2018 Reauthorization Act calls for the Secretary of Transportation to enter into an agreement with the National Academies of Sciences, Engineering, and Medicine under which the National Research Council will study aviation gasoline. The study shall include an assessment of:

• existing non-leaded fuel alternatives to the aviation gasoline used by piston-powered general aviation aircraft;

•Ambient lead concentrations at and around airports where piston-powered general aviation aircraft are used; and

• Mitigation measures to reduce ambient lead concentrations, including increasing the size of run-up areas, relocating run-up areas, imposing restrictions on aircraft using aviation gasoline, and increasing the use of motor gasoline in piston-powered general aviation aircraft.

The Secretary is to submit the study to Congress within 1 year of enactment of the Act.

<u>Status</u>

The FAA awarded a contract for the Section 177 lead study to the National Academies of Sciences, Engineering and Medicine in June 2019, and work on the project began by the

National Research Council (NRC) on July 1, 2019.

The FAA held an opening meeting with NRC, and NRC has selected experts for the study committee. The first of three committee meetings, with both public and closed sessions, was held in November 2019, and included an FAA briefing to the committee on the activities taken to investigate unleaded aviation gasoline options. The committee is now compiling scientific and technical information relevant to the study. The second of three committee meetings, with both public and closed sessions, is planned for 18-19 February 2020.

Questions/Request for Information to the FAA That May Require Analysis/Research

The FAA may require additional time to respond to the following questions as some research may be required for response:

3. What is the standard climb rate for aircraft taking-off? Is there a policy at the FAA for climbing at a certain rate? Do airlines have a choice in climb rate or do they follow the direction of ATC? Are there any restrictions that would prevent the FAA from increasing the minimum climb rate? Where does the abilities to affect aircraft climb procedures fall? Does heat, weight, and/or season affect the climb rate and altitude?

FAA Response:

a) What is the standard climb rate for aircraft taking off?

The rate at which an aircraft climbs is different than the gradient, and is variable based on the speed of the aircraft. There is no standard climb rate. Per FAA Order 8260.3, the standard climb gradient for departures procedures is 200 feet per NM, although most aircraft are able to meet a steeper climb gradient.

b) Is there a policy at the FAA for climbing at a certain rate?

There is no FAA policy for climb rates, but FAA Order 8260.3 sets climb gradient standards for procedure development. Per this order, climb gradients above 200 feet per NM require additional justification. Gradients in excess of 500 feet per NM require special approval, known as a waiver, as they become a "nonstandard Instrument Flight Procedure (IFP)." Every effort must be made to formulate IFPs in accordance with the standards contained in FAA Order 8260.3. However, obstacles, navigation information, or traffic congestion may require special consideration where justified by operational requirements. In such cases, nonstandard IFPs that deviate from these criteria may be allowed, provided they are documented, approved, an equivalent level of safety exists.

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