



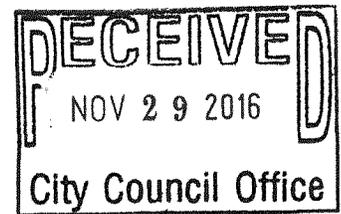
U.S. Department
of Transportation

**Federal Aviation
Administration**

NOV 21 2016

Western-Pacific Region
Office of the Regional Administrator

P.O. Box 92007
Los Angeles, CA 90009-2007



The Honorable Glenn Hendricks
Mayor of Sunnyvale
456 West Olive Avenue
Sunnyvale, California 94086

Dear Mayor Hendricks:

Thank you for your October 10, 2016, letter concerning the Bayside Visual Approach, and San Jose Airport (SJC) South-flow arrivals.

In your letter, you request input from the Federal Aviation Administration (FAA) on specific questions so you can better inform your residents on these issues. Below are the responses to your concerns related to Surf Air and the use of the Bayside Visual Approach.

Surf Air and Bayside Visual Approach

Who or what department in the FAA will be making this determination? A determination on whether to continue the use of the Bayside Visual approach will be dependent on who makes the request, and what type of procedural request is made (e.g. RNAV versus conventional, special versus public, etc). The Bayside Visual Approach will terminate on January 5, 2017. The FAA does not have a request to continue the procedure at this time.

What criteria will be used to make this decision and when will this decision be made? The Surf Air six month testing process began on July 5, 2016, and will end on January 5, 2017. The San Carlos Airport (SQL) Manager and staff are collecting data specific to noise complaints during the course of the test. Please know that the FAA has been provided with interim noise complaint data from SQL over Sunnyvale, which includes complaints specifically from the City of Sunnyvale. The FAA must follow the requirements outlined in FAA Order 1050.1F (Environmental Impacts: Policies and Procedures) to determine whether a proposed procedure will require an environmental review under National Environmental Policy Act (NEPA).

Will the concerns of the City of Sunnyvale and its residents be included and used as part of the criteria for making this decision? At the conclusion of the test, the airport or the operator can submit a request to the FAA for a published/permanent procedure. If the airport or the operator requests the procedure be published, the FAA must follow the requirements outlined in FAA Order 1050.1F (Environmental Impacts: Policies and Procedures). Before the FAA makes a decision, the FAA will ensure the effected communities are apprised of the FAA's scheduled public outreach efforts.

Is increasing the altitude of flights for Surf Air over Sunnyvale being included in the options? If no, why not? At this time the FAA does not have a request to publish a procedure after the test ends. If a request is made, the FAA will follow all procedures and environmental laws to determine a safe and efficient altitude.

Is the number of complaints received a factor in this decision? How many complaints is the tipping point that it makes a difference? The noise complaints submitted during the test will be used in part, along with a noise screen, in making decisions moving forward.

SJC South-flow Arrivals

You also explain that in a recent meeting with the SJC Operations staff, there was a discussion about the South-flow arrivals and an increase in flights over Sunnyvale. In your letter, you request a better understanding about this process. Our responses to your questions are, as follows:

What is the exact trigger process? Since runway changes are complex and demand an increased workload, the tower takes many contributing factors into consideration when determining if a runway change is required, and also if the runway change is most advantageous for the safety of the operation. Contributing factors include: current winds, forecasted winds, forecasted weather, current weather, and current traffic load.

The winds determine the runway that will be in use. Once the winds meet or exceed a tailwind of 5 knots or more, the process of runway and airport configuration change begins, which is defined in paragraph 3-5-1, of FAA Order 7110.65 (Air Traffic Control). For example: if there is a tailwind of 5 knots or more, SJC Tower must utilize Runway (RWY) 12, in accordance with paragraph 3-5-1. This may result in the SJC being on RWY 12 for periods when the tailwind is less than 5 knots if the wind is forecasted to remain out of the east/southeast and increase in velocity. This is the least favorable configuration for both the SJC and NCT and it is not utilized more than necessary.

Does the FAA change to South-flow because the weather report says they will need to? Forecasted weather is a consideration when making the determination of what runway configuration will be utilized. However, it is not the sole reason for a runway change.

Is it based on exact weather conditions on the ground at the airport? We take the wind conditions at the airport into account and they are a large part of the determination to switch to a South-flow.

If once they are in South-flow, and the winds calm down, but they think it will return in 60 minutes – do they stay in South-flow because of the time it takes to switch modes? If winds calm to 4 knots or less but are forecasted to peak above 5 knots within 60 minutes, the tower may elect to stay on a South-flow configuration.

Is there a range of conditions where a controller can decide to switch or not switch to South-flow, or do some controllers do it at the early end of the scale and some do it at the later end of the scale? The winds are the first determining factor of which runway to use. Controllers are trained to configure the runway that is most aligned with the winds when they meet or exceed 5 knots. Controllers also look at forecasted winds and anticipate the need for a runway change. On other occasions, controllers may elect to remain on the runway that is in use and wait for an ideal time to change runways.

Are the controllers aware that there is a concern from the public when they switch to South-flow? The FAA continues to strive to balance the needs of the community with the requirements of the NAS. South flow is the least favorable configuration for both SJC and NCT and it not utilized more than necessary.

Waypoints

You also raise concerns that a waypoint was changed over Sunnyvale and that the defined altitude was lowered. We believe you are referring to the waypoint ZORSA. Waypoint ZORSA is on the Area Navigation (RNAV) Required Navigation Performance (RNP) Z to RWY 12 at SJC. This RNP approach was modified in early 2016 by moving the fix (HITIR) approximately $\frac{3}{4}$ nautical miles to the southeast (away from Sunnyvale) and raising the altitude from 3,600 feet to 4,000 feet at HITIR. The only other waypoints near Sunnyvale that the NCT utilizes AMEBY on the RNAV approach into SQL, and PUDBY on the RNAV approach into Palo Alto Airport.

If there is an assigned altitude over Sunnyvale, what are the criteria that controllers appear to sometimes use to authorize flights to fly lower? If the FAA is not telling the aircraft to fly lower, how do we prevent the pilots from doing it (we have seen radar tracks where the flights are flying lower than the definition for the way points)? Sunnyvale is under multiple flight paths, with different assigned altitudes, for both arrivals and departures. If an aircraft is not on a published procedure, the minimum vectoring altitude (MVA) is used to determine how low an aircraft can be vectored over Sunnyvale. If the aircraft is on a published procedure, the aircraft will be at the procedure altitude or climbing/descending on the procedure. If the aircraft has been cleared for a visual approach, the aircraft will be descending for the runway.

What is the process for Sunnyvale to request higher flight altitude over the City for South-flow? How do we change this and make it higher again? To make requests for new or modified Instrument Flight Procedures (IFPs) can be initiated by “anyone who recognizes a potential increase in safety and/or efficiency” through the development or amendment of an IFP (14 CFR Part 97). All IFP requests must be submitted via the IFP Information Gateway, https://www.faa.gov/air_traffic/flight_info/aeronav/procedures. Each IFP request goes through an initial feasibility study which determines if an airport is eligible for the IFR procedures, if the airport’s infrastructure and obstacle survey supports the type

of procedure requested, and if the procedure provides benefit to the National Airspace System. Providing as much information as possible in the IFP request can greatly reduce the time it takes to conduct this initial feasibility study.

Not all aircraft fly the RNP approach into SJC, and NCT does vector many aircraft for the SJC RWY 12 Instrument Landing System (ILS) approach. Usually these aircraft are descending to 3,000 feet on the downwind, which overflies Sunnyvale. This practice has not changed and NCT is unable to keep these aircraft higher due to the conflict with other traffic, including the San Francisco final. This airspace is very congested and NCT is unable to accommodate any request to keep aircraft higher in the vicinity of Sunnyvale during SJC RWY 12 operations.

Thank you for this opportunity to answer your inquiry. If you have any questions, please contact me or Tamara A. Swann, Deputy Regional Administrator, at (310) 725-3550.

Sincerely,

A handwritten signature in cursive script that reads "Glen A. Martin". The signature is written in black ink and is positioned above the printed name and title.

Glen A. Martin
Regional Administrator

cc: The Honorable Mike Honda, U.S. Congress