

## **Norman Y. Mineta San Jose International Airport Noise Abatement Office**

### **Frequently Asked Questions**

#### **Can the Noise Abatement Office change the flight paths?**

No. The Federal Aviation Administration (FAA) controls and regulates the airspace. Any change in departure or arrival flight paths must be approved and implemented by the FAA. The Noise Abatement Office is here in large part to help communicate between the airport, FAA and the local community.

#### **Why do aircraft fly during the posted Noise Based Curfew hours as outlined by San Jose Municipal Code?**

The City of San Jose established and began enforcing a noise-based curfew program during the hours of 11:30 pm and 6:30 am which allows aircraft certificated by the FAA at a noise level at or below 89.0 EPNdB (average of take off, sideline and approach) and aircraft listed on the Schedule of Authorized Aircraft PDF as listed on the Airport's website to fly during the curfew hours.

In the event that an aircraft with an FAA certificated noise level at or higher than 89.1 EPNdB (average of take off, sideline and approach) or an aircraft not listed on the Schedule of Authorized Aircraft operates during the curfew hours of 11:30 pm and 6:30 am, Airport Operations begins investigating the reason for the curfew intrusion as required by the City of San Jose Municipal Code. The aircraft operator must reply to the Noise Abatement Office and document the reason for the aircraft operating during the curfew hours.

If the Noise Abatement Office staff finds that the aircraft operated during the curfew hours due to factors beyond the control of the operator such as weather in another city, mechanical delays or FAA air traffic control delays, the flight is found to be in compliance with the City of San Jose Municipal Code and is not penalized for the operation.

If the Noise Abatement Office staff finds that the aircraft operated during curfew hours and the flight was scheduled for charter activities, was delayed due to a controllable event earlier in the day or found to be violating the City of San Jose Municipal Code, that airline will be penalized \$2,500 per operation.

#### **What happens when I submit a noise complaint?**

The Noise Abatement Office at San Jose International Airport will enter all noise complaints submitted via the Airport's website in the noise complaint database. The Noise Abatement Office at SJC investigates all complaints from those whom submit noise complaints and will respond to those complaints submitted during the curfew hours. When appropriate, the Noise Abatement Office will follow up with aircraft operators and/or the FAA to investigate what actions can be taken to minimize noise impacts in the future.

### **What kind of information should a complaint convey and why?**

In order to assist the Noise Abatement Office at San Jose International Airport, when filing a noise complaint via WebTrak on the Airport's website, please fill out all of the fields to the best of your knowledge. Due to the airspace congestion throughout the Bay Area, the more information provided on the Noise Complaint Form the better report and response you'll receive from the Noise Abatement Office at SJC.

### **Why do some aircraft seem louder than others?**

San Jose International Airport is utilized by General Aviation (GA) aircraft ranging from small propeller driven aircraft to top of the line jet aircraft as well as commercial aircraft with a diverse range of noise levels. The noise impact from aircraft relies primarily on the type of engine used by the aircraft, the size of the aircraft and whether the aircraft is landing or taking off at SJC or a neighboring airport. Most aircraft at SJC are Stage III and Stage IV aircraft as certified by the FAA for commercial and GA aircraft.

### **Why do aircraft sound louder at night than they do during the day?**

Aircraft utilizing San Jose International Airport seems to be louder at night and sometimes on the weekends due to the lower ambient noise in a community or area. There are commonly more noise events during the night hours compared to the daytime hours when there exists a higher ambient noise level.

### **What is a Noise Abatement Procedure?**

A noise abatement procedure is a recommended flight path aircraft follow to minimize noise over a populated area. Because this is a recommended procedure, pilots may decline to follow it due to safety concerns or operating limitations. For some noise abatement procedures, a pilot must be able to see specific visual cues. If the visual cues are not visible, the pilot will not be able to safely follow the noise abatement procedure. Other procedures rely on navigational equipment capabilities.

### **How does Mineta San Jose International Airport track and monitor flights?**

Our noise management office uses software called ANOMS, which stands for Airport Noise and Operations Monitoring System. This system collects noise data from 10 permanent community monitoring sites in addition to flight track data from the FAA. It is the main tool used by the noise office to research complaints and to monitor noise abatement procedures and programs.

### **Who tells the pilots where and when to turn?**

Flight crews will use a variety of methods to enter or depart from the Bay Area largely depending upon current or forecasted weather conditions in the Bay Area. During inclement weather

conditions, pilots can fly a prescribed route for departures or arrivals which will result in aircraft utilizing ground based navigational equipment or GPS coordinates to fly a route to safely arrive into or depart from the area. If weather conditions are clear and the flight crew is able to see the ground, the FAA will allow the flight crew to descend into the Bay Area through a visual approach or depart from the Bay Area prior to completing the prescribed route for departures. The avenue in which the flight crew is issued to use for the arrivals and departures for aircraft are provided, published and enforced by the Federal Aviation Administration (FAA) and not the Airport.

### **When do flight paths change? How do flight paths change?**

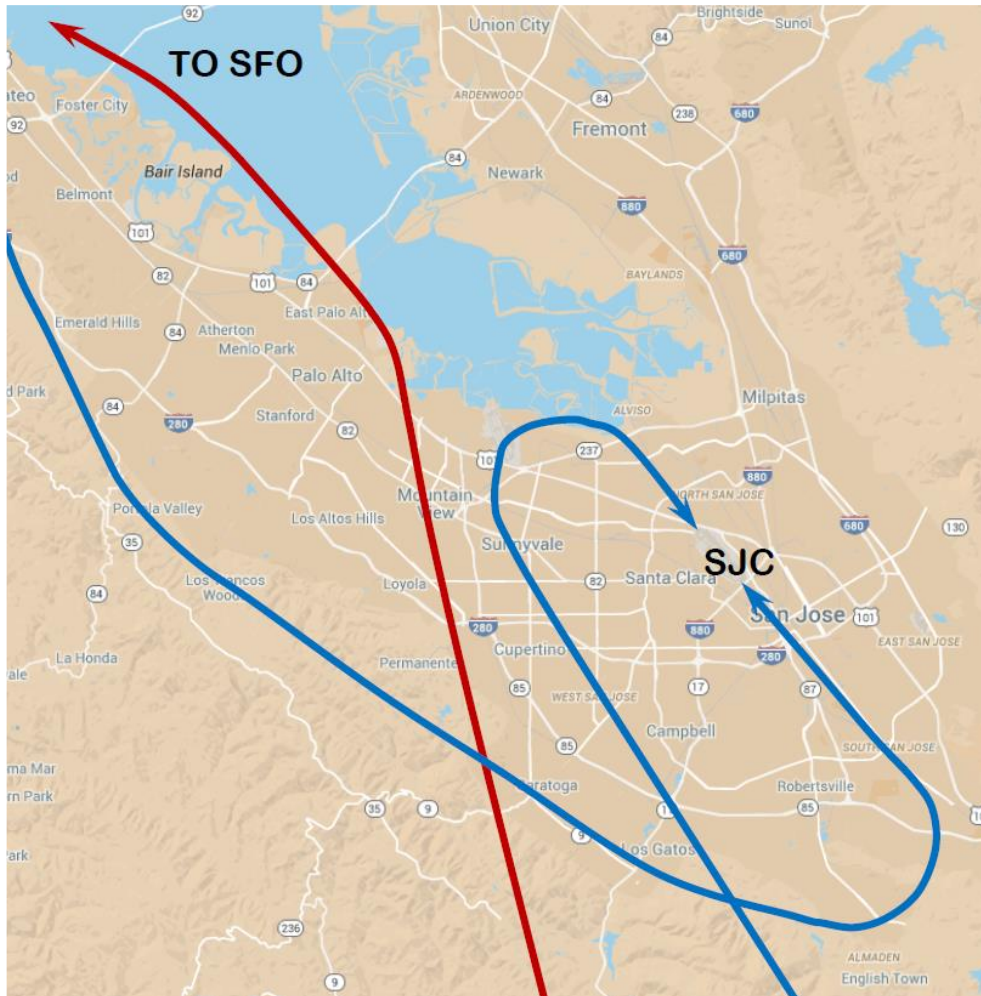
The flight paths into San Jose International Airport have not been largely impacted by changes due to OAPM initiatives or NextGen planning and implementation. Although there have been a few changes in arrival routes to San Francisco International Airport, San Carlos Airport and other airports in the region; SJC routes have not seen any drastic changes.

During calm wind conditions at SJC as measured by equipment on the airfield at SJC, aircraft arrive from the south over downtown San Jose and land toward the northwest (prevailing wind direction for the South Bay). Also during calm wind conditions, aircraft depart to the northwest toward the bay and turn over Milpitas and then southeast bound over east San Jose.

During the winter months, usually from September to March, the airport experiences winds from the southeast which means aircraft must land into the wind and from the north to the south. In order to safely navigate through the airspace for this arrival, aircraft are instructed by the FAA to follow FAA designated and published paths over communities to the west of the airport prior to turning south to arrive into SJC during inclement weather conditions (low cloud cover or fog). During these weather conditions wherein the wind is from the southeast, aircraft depart over downtown San Jose. Aircraft traffic patterns are not within the control of the Airport.

Changes to the flight paths outside of what is described above are changes made by the Federal Aviation Administration and not by the San Jose International Airport.

The map below shows the approximate arrival paths into SJC for both north flow and south flow. Please note, these are approximate paths to be taken by the aircraft and may be different depending on FAA instruction to aircraft based on surrounding air traffic, weather, temporary flight restrictions on the ground and traffic to other Bay Area airports.



### Why do airplanes fly out of the corridors?

There exist several reasons for flight crews to fly outside of the published corridor or procedure which could include:

Air traffic conflicts

Safety considerations

FAA air traffic control directives

Aircraft performance

Pilot technique

### How are Noise Levels Determined?

To more consistently and easily describe and compare noise environment comprised of numerous single events that vary in duration and magnitude over long periods of time, the U.S. Environmental Protection Agency developed a single number descriptor. This descriptor is the DNL. It is a noise metric which describes and average day/night sound level. The DNL metric is used by the FAA to quantify aircraft noise exposure in the vicinity of an airport. Noise contours of specific DNL levels are developed using the FAA's Integrated Noise Model (INM). Airport specific data used in the INM model to develop the contour will result in the depiction on noise exposure in the vicinity of an airport. Airport specific data used in the INM include: Average Daily Operations, Aircraft Fleet Mix, Runway Use, Flight Corridors and Usage, Departure Destinations and Day/Night Use.

### **What is A DNL?**

DNL (Day-Night Sound Level) is based on sound levels measured in relative intensity of sound, or decibels (dB), on the "A" weighted scale (dBA). This scale most closely approximated the response characteristics of the human ear sound. The higher the number on the scale, the louder is the sound. DNL represents noise exposure events over a 24-hour period. To account for human sensitivity to noise between the hours of 10 p.m. and 7 a.m., noise events occurring during these hours receive a "penalty" when the DNL is calculated. Each nighttime event is measured as if ten daytime events occurred.

### **Which Is Quieter—An Arrival or Departure?**

Arriving aircraft at low altitudes are generally quieter than departures of the same aircraft type because this mode of flight requires much less engine power. However, close to the airport, the relative quietness of an arrival may be offset by the fact that they are typically lower in altitude than departures over the same location.

### **What are Noise Contours?**

Noise contours are a series of line superimposed on a map of the airport's environs. These lines represent various DNL levels (typically 65, 70, and 75 dBA). DNL noise contours are used to several reasons.

Noise contours highlight existing or potential areas of significant aircraft noise exposure (as identified by the FAA).

Noise contours are used to assess the relative aircraft noise exposure levels of different runway and or flight corridor alternatives.

Noise contours provide guidance to political jurisdictions in the development of land use control measures. These measures include zoning ordinances, subdivision regulations, building codes and airport overlay zones.

It is the areas within the 65, 70, and 75 DNL noise contours that the FAA considers to be the most impacted by aircraft generated noise. Beyond the 65 DNL noise contour, noise is most noticeable in areas below established flight corridors.