U.S. Department
of Transportation
**Federal Aviation
Administration**

Western-Pacific Region
Office of the Regional Administrator

777 S. Aviation Blvd.
El Segundo, CA 90245

Hollywood Burbank Airport
Attn: Patrick Lammerding
Deputy Executive Director
26227 N. Hollywood Way
Burbank, CA 91505

Dear Mr. Lammerding:

With this letter, we are providing the responses to the questions from the Southern San Fernando Valley Airplane Noise Task Force dated September 27, 2019.

The FAA remains committed to working with the Southern San Fernando Valley Airplane Noise Task Force. However, as many of you are aware, the City of Los Angeles filed a lawsuit against the FAA related to departures from Burbank Airport. Because that litigation is in its early stages, we are not engaging in public discussions on those matters right now. Unfortunately, five of the Task Force's questions relate to those issues, and we have not answered those questions here. Until that litigation is resolved, we hope to continue to work with the Task Force where we can.

If you have any questions, please contact our office at 424-405-7000.

Sincerely,

Raquel Girvin
Regional Administrator

Enclosure:
FAA Response to the Southern San Fernando Valley Task Force

FAA Responses to Southern San Fernando Valley Airplane Noise Task Force Questions

Questions/Request for Information to the FAA Likely Not Requiring Analysis/Research

1. What governing body decides when the skies are at their limit and no more planes can arrive or depart from a specific airport? If the airport, then what if the airports try to handle more planes than the Air Traffic Controllers can manage?

   FAA Response: The Federal Aviation Administration's (FAA) Air Traffic Control System Command Center (Herndon, VA), along with the Traffic Management Units at Los Angeles Air Route Traffic Control Center (Palmdale, CA) and Southern California Terminal Radar Approach Control facility (San Diego, CA), continuously monitors the National Airspace System (NAS). Part of their responsibility is to notice and react to constraints to the efficient flow of air traffic, including but not limited to: weather systems, exceptional demand on arrival airport or complex airspaces, and special events. If necessary, the FAA implements departure delays or other restrictions.

   The FAA does not have regulatory control or influence over the schedules of flights to or from public airports. Air Traffic Control (ATC), using prescribed rules and procedures, allows aircraft to depart/arrive from/to public airports as long as the operations can be conducted in a safe manner.

2. In 2015, the FAA established the noise steering committee to address environmental noise related issues associated with PBN, would it be possible to get more information about that committee or any documents that come from that committee to aid us in finding solutions?

   FAA Response: In January of 2016, the FAA initiated the Noise Steering Group (NSG) to provide a forum for senior FAA executives to discuss matters related to aircraft noise. Executives across the Agency participate in the NSG to better coordinate ways to manage noise concerns, including those associated with the introduction of Performance Based Navigation. To support the NSG and provide additional support for active project considerations, the Noise Working Group (NWG), co-chaired by the Executive Director of the Office of Environment and Energy and the Air Traffic Executive Director for Airspace Services, was also established in July of 2018.

   Both the NSG and the NWG serve to advise ongoing strategic and project initiatives to address aircraft noise, but do not themselves produce any specific documentation.

3. Did the FAA complete an Environmental Impact Report for the implementation of the Metroplex?

   FAA Response: No, an Environmental Impact Report was not completed. However, the FAA followed applicable federal laws and regulations, as well as Agency orders, and completed an Environmental Assessment (EA) for the Southern California (SoCal) Metroplex project.

   An Environmental Impact Report is a requirement of the California Environmental Quality Act (CEQA). Federal agencies such as the FAA are subject to federal environmental laws, including the National Environmental Policy Act (NEPA). Pursuant to NEPA and applicable FAA policies, the FAA conducted an EA for the SoCal Metroplex project. The FAA issued the Final EA and signed the Finding of No Significant Impact (FONSI)/Record of Decision (ROD) on August 31, 2016. On September 2, 2016, the FAA issued the Notice of Availability of the EA and FONSI/ROD through the Federal Register.

   The administrative process is closed. As a legal matter, the FAA's decision became final on September 2, 2016, and will not be revisited.

   The EA is available on the FAA's SoCal Metroplex website at: http://www.metroplexenvironmental.com/socal_metroplex/socal_introduction.html.

4. What outreach and community engagement was conducted prior to the implementation of the Metroplex? Were any communities notified by the FAA regarding these changes in flight paths and flight altitudes? Why didn't the FAA let the public know it is happening?

   FAA Response:

   (a) What outreach and community engagement was conducted prior to the implementation of the Metroplex?

   The FAA conducted extensive outreach for this project. The outreach the FAA conducted included early notification letters, invitations for government briefings, State Historic Preservation Office consultation, Tribal briefings, public workshops, and public notice of the Draft and Final EA.

   The FAA released the Draft EA for public review and comment on June 10, 2015. The FAA published notices of the availability of both the Draft and Final EAs in local newspapers and via email, provided local libraries with copies, made it available online, and notified local, state and federal officials with constituents residing in the study area. The FAA sent email notices about the availability of the Draft and Final EA to more than 700 government officials throughout Southern California, including from the Cities of Los Angeles and Burbank, Congressional offices, state legislators' offices, and Bob Hope Airport, as it was then known. Additionally, the FAA conducted outreach through press releases and direct contacts with news organizations, posted information about the project

and associated public workshops on its social media platforms, and sent emails asking government officials to help us alert their constituents about the workshops.

The FAA conducted 11 public workshops, including one in Burbank on July 1, 2015. The public comment period for the Draft EA was open for 120 days, from June 10, 2015, through Oct. 8, 2015. The FAA received and evaluated more than 4,000 comments on the Draft EA.

The Draft and Final EA, along with appendices, technical reports, and responses to comments, are located on the SoCal Metroplex website: http://www.metroplexenvironmental.com/socal_metroplex/socal_docs.html.

Appendix A of the Final EA describes all of the outreach and notification done for the EA.

Additional information is provided below.

Elected official notifications:

- January 16, 2014
- October 24, 2014

Elected official briefings:

- November 18, 2014, Ventura, CA
- November 19, 2014, Los Angeles, CA
- November 20, 2014, Burbank, CA
- December 9, 2014, San Diego, CA
- December 10, 2014, Palm Desert, CA
- December 11, 2014, Costa Mesa, CA

Tribal meetings:

- October 28, 2014, Escondido, CA
- October 29, 2014, El Cajon, CA
- October 30, 2014, Cathedral City, CA

Letters to State Historic Preservation Offices/Tribal Historic Preservation Officers:

- February 24, 2015
- June 5, 2015

Public comment periods:

- June 10, 2015, to July 10, 2015
- July 9, 2015, extended to September 5, 2015
- September 18, 2015, extended to October 8, 2015

FONSI/ROD: Signed September 2, 2016

Public Notices:

- July 9, 2015, FAA Website Announcement
- July 10, 2015, FAA Facebook Announcement
- July 10, 2015, FAA Twitter Announcement
- July 11, 2015, San Diego Union Tribune
- July 12, 2015, Los Angeles Times
- July 14, 2015, The Press-Enterprise
- July 14, 2015, Santa Barbara News-Press
- July 14, 2015, Ventura County Star
- July 14, 2015, Inland Valley Daily Bulletin
- August 15, 2015, La Opinion
- August 21, 2015, El Latino
- August 21, 2015, Hoy Los Angeles
- August 21, 2015, Excelsior
- August 22, 2015, Enlace

Public workshops:

- June 16, 2015
  McFadden Intermediate School – Auditorium 2701 S. Raitt St., Santa Ana, CA 92704
- June 17, 2015
  Santa Monica Public Library – Multipurpose Room 601 Santa Monica Blvd., Santa Monica, CA 90401
- June 18, 2015
  Proud Bird Restaurant – Grand Ballroom West 11022 Aviation Blvd., Los Angeles, CA 90045
- June 22, 2015
  Logan Heights Library – Community Room 567 South 28th St., San Diego, CA 92113
- June 23, 2015
  Palm Desert Library – Community Room 73-300 Fred Waring Dr., Palm Desert, CA 92260
- June 24, 2015
  Ken Miller Auditorium 3341 Torrance Blvd., Torrance, CA 90503
- June 25, 2015
  Beach High School – Auditorium 3701 E. Willow St., Long Beach, CA 90815
- June 29, 2015
  E.P. Foster Library – The Elizabeth R. Topping Room 651 East Main St., Ventura, CA 93001
- June 30, 2015
  The Westside Neighborhood Center – Auditorium 423 W. Victoria St., Santa Barbara, CA 93101
- July 1, 2015
  Burbank Community Services Building – Room 104 150 N 3rd St., Burbank, CA 91502

Webinars:

- October 17, 2016
  - Santa Barbara Municipal Airport (SBA)
  - Bob Hope Airport (BUR)
  - Palm Springs International Airport (PSP)
  - Ontario International Airport (ONT)
  - Van Nuys Airport (VNY)
  - Long Beach Daugherty Field (LGB)
  - John Wayne Orange County Airport (SNA)
  - Los Alamitos Army Airfield (SLI)
  - Fullerton Municipal Airport (FUL)
  - Zamperini Field (TOA)
- October 18, 2016
  - Long Beach Daugherty Field (LGB)
  - John Wayne Orange County Airport (SNA)
  - Los Alamitos Army Airfield (SLI)
  - Fullerton Municipal Airport (FUL)
  - Zamperini Field (TOA)
  - San Diego International Airport (SAN)
  - McClellan Palomar Airport (CRQ)
  - Brown Field Municipal Airport (SDM)
  - North Island Naval Air Station (NZY)
- October 20, 2016
  - Los Angeles International Airport (LAX)
  - Santa Monica Municipal Airport (SMO)
  - Santa Barbara Municipal Airport (SBA)
  - Bob Hope Airport (BUR)
  - Palm Springs International Airport (PSP)
  - Ontario International Airport (ONT)
  - Van Nuys Airport (VNY)
- January 18, 2017
  - Los Angeles International Airport (LAX)
  - Santa Monica Municipal Airport (SMO)
  - Los Angeles International Airport (LAX)
  - Bob Hope Airport (BUR)
  - Van Nuys Airport (VNY)
  - Santa Barbara Municipal Airport (SBA)
  - Camarillo Municipal Airport (CMA)
  - Point Mugu Naval Air Station (NTD)
- January 19, 2017
  - Orange County John Wayne International Airport (SNA)
  - Long Beach (Daugherty Field) Airport (LGB)
  - Fullerton Municipal Airport (FUL)
  - Torrance (Zamperini Field) Airport (TOA)
  - Los Alamitos Airfield (SLI)
  - San Diego International Airport (SAN)

- McClellan-Palomar Airport (CRQ)
- Brown Field Municipal Airport (SDM)
- Montgomery Field Airport (MYF)
- Gillespie Field Airport (SEE)
- Palm Springs International Airport (PSP)
- Ontario International Airport (ONT)

(b) Were any communities notified by the FAA regarding these changes in flight paths and flight altitudes?

Yes, the FAA notified communities about changes in flight paths and flight altitudes as part of the SoCal Metroplex Draft EA and Final EA outreach.

Appendix A of the Final EA describes the outreach and notification efforts completed by the FAA. It includes early notification letters, invitations for government briefings, State Historic Preservation Office consultation, Tribal briefings, public workshops, and public notice of the Final EA. The FAA published notices of the Draft and Final EAs' availability in local newspapers, local libraries were provided copies, the EAs were made available online, and notifications were given to local, state, and federal officials with constituents residing in the study area. Email notices of the availability of the Draft and Final EAs were sent to over 700 government officials, including the City Attorney, City Manager, Senior Assistant City Attorney, Senior Planner, and Interim Director of the City of Burbank.

On September 2, 2016, the FAA issued the notice of availability of the Final EA and FONSI/ROD through the Federal Register. The notice was also published in major newspapers, in both English and Spanish, published online, and announced through email notification. Notices were sent to federal and state agencies, local elected officials, study airports, and libraries.

(c) Why didn't the FAA let the public know it is happening?

As evidenced above, the FAA provided extensive public notification. The FAA released the Draft EA to the public for review on June 10, 2015. It is important to note the public comment period for the SoCal Metroplex Draft EA was open for 120 days. During that time, the FAA received more than 4,000 comments. The FONSI/ROD was signed on September 2, 2016.

5. Was topography factored into the design of the Metroplex procedures?

FAA Response: The FAA took topography into account as it relates to the safety of flight in procedure design, per agency requirements. Terrain and obstacle clearance are primary considerations for departure procedure development. Every route that was part of the SoCal Metroplex project was subjected to a rigorous safety analysis before it was finalized.

6. Did the FAA conduct safety analyses of the SoCal Metroplex procedures prior to implementation, particularly with respect to the topography in the Southern San Fernando Valley, other aircraft in the area (e.g., helicopters and private planes vs. commercial fixed wing aircraft) and engine failure? If so, please provide information showing the results of the analyses. If not, will the FAA investigate the safety hazards that come with flying at low altitudes above the Santa Monica Mountain Range?

   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.

7. Was the FAA aware of the fire danger in the Southern San Fernando Valley? If so, was that taken into account when designing the Metroplex procedures?

   FAA Response: The FAA is aware of wildfire dangers. When necessary, the FAA establishes temporary flight restrictions, implements and certifies temporary airport traffic control towers, and enacts other measures to support fire suppression activities. The FAA conducted an EA in accordance with applicable federal laws and regulations.

   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 SMS process. In compliance with SMS requirements, an 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.

8. Was there a study completed that looked into the impacts on the wildlife in the Santa Monica Mountain Range?

   FAA Response: Yes, the FAA considered impacts on wildlife in the SoCal Metroplex EA. The FAA conducted the EA in accordance with applicable federal laws and regulations. The analysis within the EA, and the environmental impact categories analyzed, are dictated by those laws and regulations. A significant impact would be likely to occur if the project's proposed changes were to jeopardize the existence of special-status species or result in destroying or adversely modifying critical habitat in the project Study Area. The proposed changes to flight paths primarily occurred at or above 3,000 feet above ground level, so there was no potential for these effects in the project Study Area. Accordingly, the analysis focused on the potential for significant impacts to species – birds and bats - resulting from increased wildlife strikes with aircraft. The EA determined no significant impacts to bird or bat species was anticipated.

9. Why did the FAA not implement a pilot project prior to implementation of the Metroplex?

   FAA Response: Implementation of Metroplex projects is the result of a nationwide Congressional mandate to modernize the airspace around the busiest terminal areas in the National Airspace System (NAS).

   In the early 2000s, the FAA began implementing individual satellite-based routes at various locations throughout the U.S. The Agency undertook the Metroplex process to coordinate the implementation of routes serving multiple airports in major metropolitan areas where heavy airport activity and environmental constraints combine to hinder the efficient movement of air traffic. 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.

   In addition, the SoCal Metroplex project encompassed more than 150 routes, so making these changes in the busy and complex Southern California airspace was a vast undertaking. In addition to validating any new routes, changes require extensive pilot and controller training, and software uploads to aircraft flight computers and traffic control computer systems. This is not conducive to implementing routes on a test or pilot project basis.

10. Can the Metroplex procedures be suspended and return to the previous conventional procedures until the results of the Task Force are completed? If not, why not?

    FAA Response: Implementation of Metroplex projects is the result of a nationwide Congressional mandate to modernize the airspace around the busiest terminal areas in the National Airspace System (NAS).

Prior to the introduction of Global Positioning System (GPS)-enabled flight paths, pilots were navigating toward and over fixed navigation aids to various destinations – and in several directions – and not a precise or highly predictable path.

Flight paths created by the use of GPS via satellite navigation are inherently safer because aircraft are now on a precise and predictable path that is preplanned and does not require vectoring by an air traffic controller. This reduces frequency congestion (too many people trying to talk at once on the frequencies used between pilots and controllers) and opportunities for missed communication between pilots and controllers. When an aircraft is on a GPS-enabled procedure, it is safely separated from other aircraft flying procedures in that airspace. Conventional flight paths using ground-based navigation were, and are, safe due to standards we built into the system; but, by design, having an aircraft on a precise and repeatable path is safer. Because satellite-based navigation is foundational to modernization of the airspace, the FAA will not return to ground-based navigation.

All the procedures approved in the SoCal Metroplex Project decision were implemented no later than mid-2017. Any subsequent amendment or newly proposed air traffic procedure is an independent action, subject to its own legal, environmental, and technical analyses.

11. Are there any temporary solutions that can be put in place during this interim period while the Task Force continues to meet and discuss? Are there any possible noise alleviations for these communities that could be implemented quickly while the Task Force continues to determine recommended changes for the FAA to consider?

    FAA Response: Since Van Nuys Airport (VNY) and Hollywood Burbank Airport (BUR) are surrounded by communities and large population areas, any change – whether temporary or permanent – will result in moving noise from one community to another. Any change requires coordination and collaboration with all affected communities, as well as community groups such as the Southern San Fernando Valley Airplane Noise Task Force.

    Implementation of temporary flight procedures is not a simple or easy solution, and would take time. Air Traffic Controllers must be trained, aircraft flight guidance and management systems need to be updated, and inter-facility agreements need to be updated to reflect the changes.

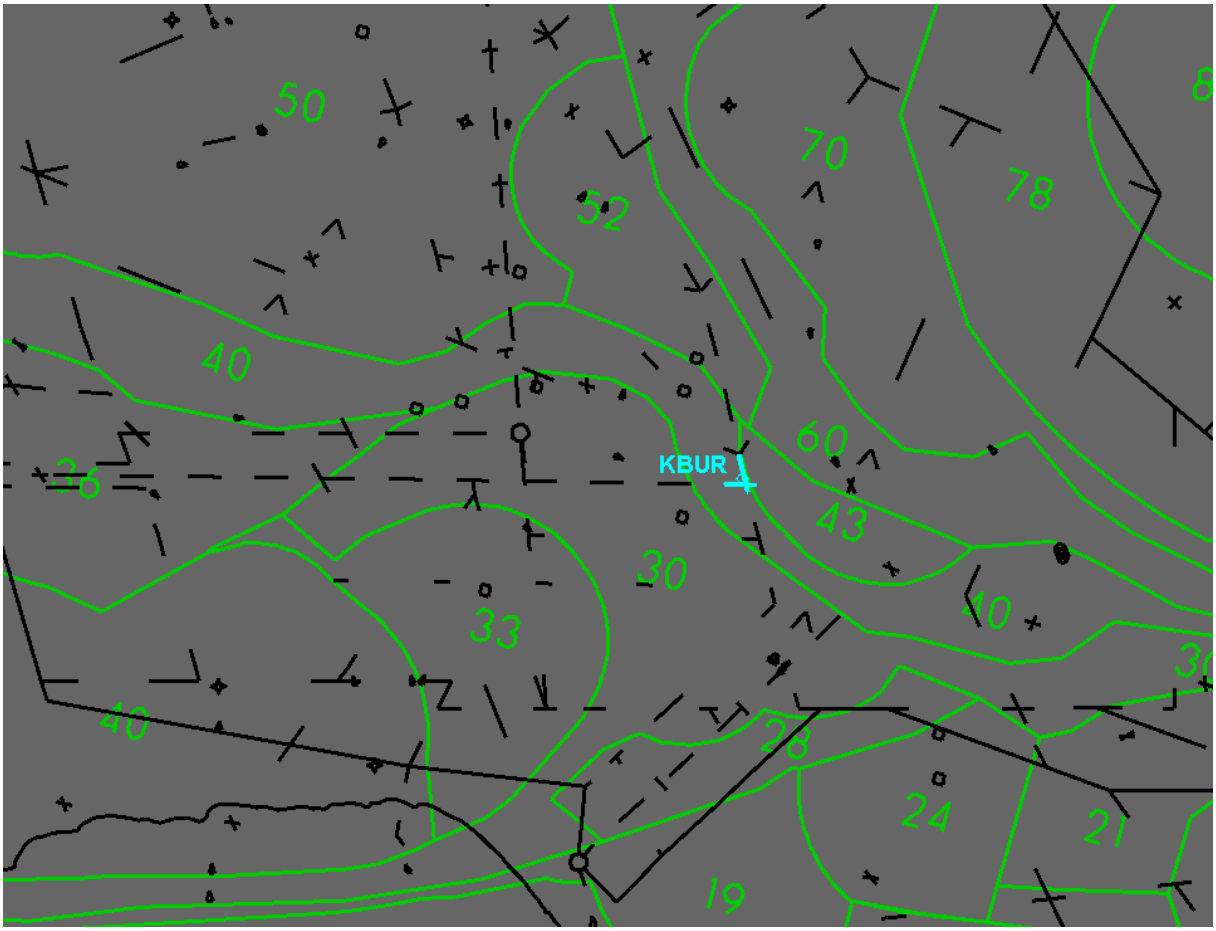
12. What role does the FAA play in determining when and how airplanes take off and land, in determining the number of frequency of takeoffs and landings at a particular airport, in determining the departure route of individual flights, and the time of day for takeoffs and landings?

    FAA Response: The FAA does not have regulatory control or influence over the schedules of flights to or from public airports. The FAA's role in determining when and how airplanes take off and land is to ensure the highest level of safety of flight. Through prescribed rules and procedures, ATC ensures positive separation of each aircraft such as arrivals vs.

departures and aircraft to/from BUR vs. VNY. While the pilot in command and flight crews must follow all ATC instructions, the individual flight profile and compliance with the instruction(s) will vary between each carrier/company, and aircraft flight crew. The operation of each aircraft is the sole responsibility of the pilot in command. The frequency of aircraft departing a public airport is dictated by the demand (the number of aircraft that wish to depart at a given time); the supply of the airspace is dictated by the ability of ATC to accept that demand, while being able to clear each aircraft to depart with the appropriate amount of space from other aircraft.

13. Are there altitude and/or safe distance requirements for incoming and outgoing flights that must be met when aircraft are departing, ascending or being vectored, and what are those requirements?

    FAA Response: ATC is regulated by specific procedures and rules to ensure and maintain the highest level of safety in the National Airspace System (NAS). These regulations and procedures are contained within various orders and manuals that all air traffic controllers follow. In general, airborne aircraft, regardless of whether they are arrival or departure aircraft, must remain vertically separated by at least 1,000 feet, and laterally separated by at least 3 NM in the terminal airspace around airports. There are specific cases where this separation requirement can decrease or, in some cases, where more space is needed. ATC may use vectoring to establish and/or maintain this safe distance. However, except under very specific exceptions, vectoring can only occur when aircraft are above what is known as the Minimum Vectoring Altitude. To assist air traffic controllers in ensuring necessary separation between aircraft and terrain/obstacles, each air traffic control "sector" is divided into smaller "polygons," each with a minimum altitude that is the necessary height above any obstacle within that polygon. The graphic that follows shows the Minimum Vectoring Altitude in the various polygons around BUR. Add two zeros to the numbers to get the altitude (for example: 70 = 7,000 feet, 28 = 2,800 feet).



14. What factors are considered when determining the direction (north, east, south and west) for aircraft operations?

    FAA Response: The FAA takes various factors into consideration when determining the landing/take-off direction for aircraft. The primary consideration for runway use is wind velocity and direction. Except under very specific circumstances, aircraft must take-off or land into the wind. Individual aircraft performance capabilities and weight may also dictate the direction of departure/arrival. Terrain and obstacle clearance are primary considerations for departure procedure development. The climb gradient(s) needed to provide a safe clearance distance from the ground and obstacles may also dictate the direction of operations to ensure safety of flight. Lastly, the direction/flow of other airports in the area is a consideration.

15. Which entities provide ATC services from departure until an aircraft reaches its cruising altitude and at what point(s) is that guidance transferred from one entity to another?

    FAA Response: Depending on the complexity and demand on the local airspace, there may be several air traffic facilities with which flight crews will communicate. The transfer of control and communications is coordinated at a set point, or on an individual basis, to ensure

the safest and most efficient control of that aircraft. For aircraft that depart BUR, pilots communicate with several different operating positions in the BUR Airport Traffic Control Tower (ATCT), the Southern California Terminal Radar Approach Control facility, and the Los Angeles Air Route Traffic Control Center. This "flow" of communications is the same for aircraft departing VNY, except that flight crews communicate with VNY ATCT instead of BUR ATCT.

Please refer to the following link for additional information: https://www.faa.gov/air_traffic/community_involvement/bur/media/BUR_ATC_101_Briefing_December_4.pdf.

16. Can the FAA, local ATC or an airport dictate that aircraft operators not use autopilot, and if so, what if any safety concerns are presented?

FAA Response: For normal flight procedures and operations, the FAA does not dictate or require specific means for how aircraft operators control aircraft. The decision to use any flight control system, including autopilot, is at the sole discretion of each carrier's directives and the pilot in command of each aircraft. If necessary to maintain the safety of flight, air traffic controllers can issue immediate control actions such immediate climbs, descents, turns, or vectors.

17. 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?

It is important to note that 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. The material highlighted in green in the following graphics show the climb gradients for the SLAPP and OROSZ departure procedures.

(OROSZ2.OROSZ) 18032

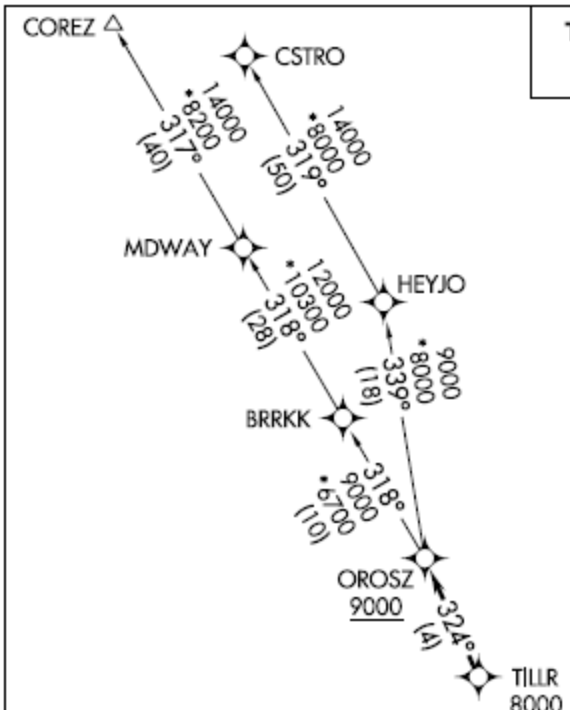
OROSZ TWO DEPARTURE (RNAV)

AL-67 (FAA)

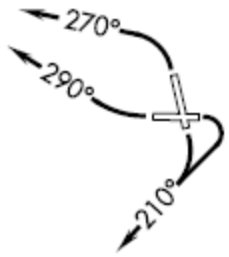
BOB HOPE (BUR)
BURBANK, CALIFORNIA

TOP ALTITUDE: FL230

CLNC DEL
118.0 348.6
CPDLC
SOCAL DEP CON
124.6 298.85



NOTE: DME/DME/IRU or GPS required.
NOTE: RNAV 1.
NOTE: RADAR required.
NOTE: Maintain at or below 250K unless otherwise directed by ATC.



TAKEOFF MINIMUMS
Rwy 8: Standard with minimum climb of 420' per NM to 2500.
Rwy 15: Standard with minimum climb of 340' per NM to 2100.
Rwy 26: Standard with minimum climb of 380' per NM to 4800.
Rwy 33: Standard with minimum climb of 460' per NM to 4900.

NOTE: Chart not to scale.

SW-3, 05 DEC 2019 to 02 JAN 2020

SW-3, 05 DEC 2019 to 02 JAN 2020

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAYS 8, 15: Climbing right turn heading 210° or as assigned by ATC, expect vectors to cross TILLR at or above 8000, then on track 324° to cross OROSZ at or above 9000, thence. . . .

TAKEOFF RUNWAY 26: Climbing right turn heading 290° or as assigned by ATC, expect vectors to cross TILLR at or above 8000, then on track 324° to cross OROSZ at or above 9000, thence. . . .

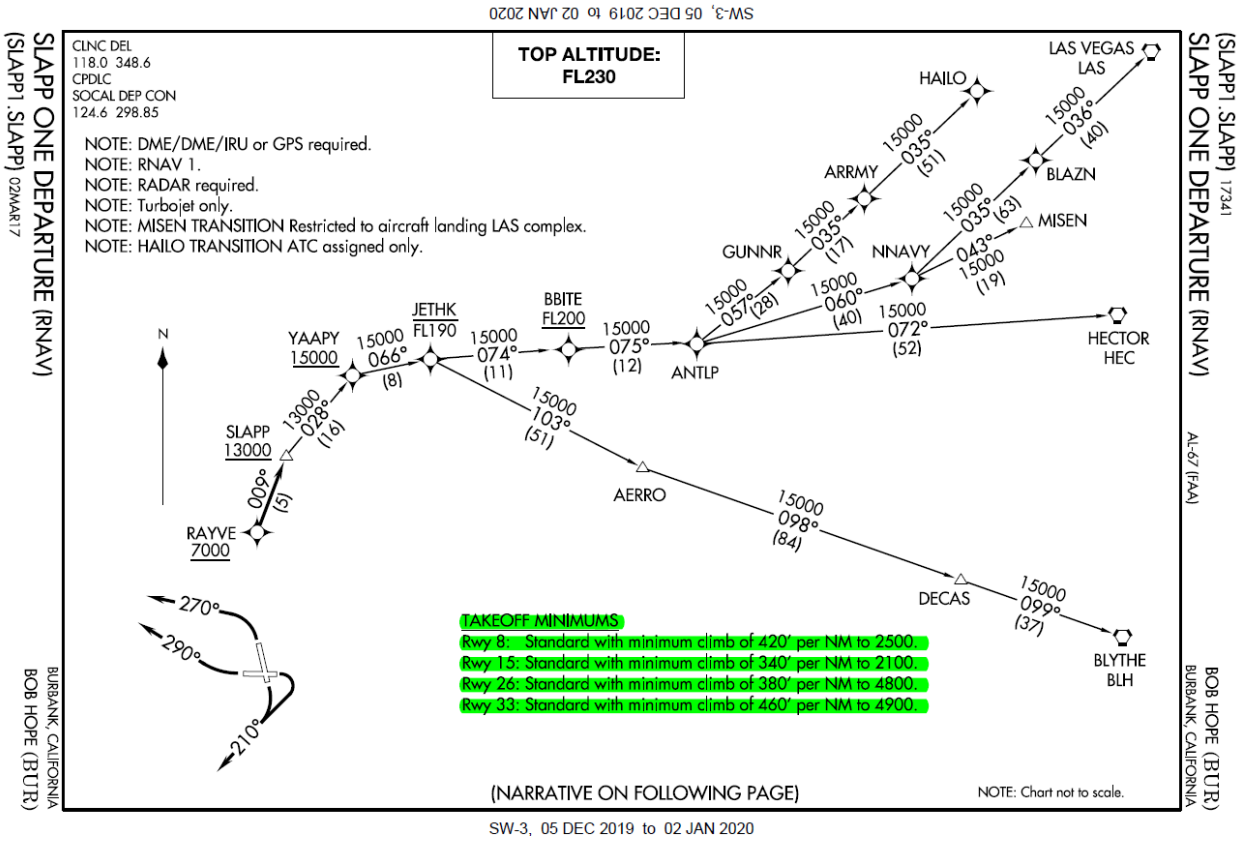
TAKEOFF RUNWAY 33: Climbing left turn heading 270° or as assigned by ATC, expect vectors to cross TILLR at or above 8000, then on track 324° to cross OROSZ at or above 9000, thence. . .

. . . .on (transition) maintain FL230. Expect filed altitude 10 minutes after departure.

COREZ TRANSITION (OROSZ2.COREZ)
CSTRO TRANSITION (OROSZ2.CSTRO)

OROSZ TWO DEPARTURE (RNAV)

BURBANK, CALIFORNIA
BOB HOPE (BUR)



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, and an equivalent level of safety exists.

c) Do airlines have a choice in climb rate or do they follow the direction of ATC?

Pilots may climb at any rate they determine safe provided it meets the minimum climb gradient and ATC clearance. Pilots, regardless of the type of aircraft they operate, must follow all ATC directions, including compliance with the lateral and vertical requirements of assigned IFPs. Regarding this specific question, the pilot in command of each aircraft can elect to fly at any climb rate that he/she determines is safe and appropriate for his/her flight/aircraft, provided it meets the minimum climb gradient of the assigned IFP.

d) Are there any restrictions that would prevent the FAA from increasing the minimum climb rate?

As noted in response to 17 a), the rate at which aircraft climbs is different from the climb gradient, and is variable based on the speed of aircraft. There is no FAA policy for climb rates, but FAA Order 8260.3 sets climb gradient standards for procedure development. FAA Order 8260.3 outlines requirements and restrictions on climb gradient determinations when designing IFPs. The FAA does not dictate specific climb rates to aircraft flight IFPs; these are determined by many variables (e.g., aircraft speed and weight, angle of climb, temperature), and are a result of the pilot's control of the aircraft to meet the required climb gradient of the procedures. Again, every effort must be made to formulate IFPs in accordance with these standards (those 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 approved, provided they are documented and an equivalent level of safety exists.

e) Where does the abilities to affect aircraft climb procedures fall?

The pilot in command has the sole discretion in determining how to fly the aircraft in compliance with the assigned IFP. FAA Order 8260.3 outlines specific requirements as to how IFPs are designed.

f) Does heat, weight, and/or season affect the climb rate and altitude?

Yes, heat (air temperature), weight, and seasonal changes in temperature are several of the factors that may affect the performance of an aircraft (including climb). To adjust for these factors, additional thrust (power) from aircraft engines may be required.

18. At what point can a plane initiate a turn after departure? Does climate have an impact on aircraft turning radius? Does the point change seasonally? What are the reasons that flights are not all turning before crossing the 101 Freeway?

FAA Response:

a) At what point can a plane initiate a turn after departure?

Speaking generally, the point at which an aircraft turns after departure is dictated by either a published departure procedure or a specific instruction from ATC. For a published procedure, the establishment of the turn point must meet all applicable procedure design criteria. If that turn is a specific and/or dynamic instruction from ATC, it is at the sole discretion of the pilot to safely, and without undue delay, comply with that control instruction. This altitude is at least 400 feet (for conventional procedures) or 500 feet (for RNAV procedures) above the ground.

b) Does climate have an impact on aircraft turning radius?

Speaking generally, in addition to the factors mentioned in the response to question 17 (air temperature, aircraft weight, and seasonal weather changes), wind direction, wind velocity, aircraft velocity, and air density may affect the airborne turning radius.

c) Does the point change seasonally?

Speaking generally, weather factors – such as air temperature and wind – can affect when aircraft begin their turns.

d) What are the reasons that flights are not all turning before crossing the 101 Freeway?

Because this question relates to issues raised in pending litigation filed by the City of Los Angeles, the FAA will not answer this question at this time.

19. Which entities (pilots, local ATC, FAA etc.) determine when it is appropriate for southbound departing aircraft to commence a 210-degree turn headed west?

FAA Response: Because this question relates to issues raised in pending litigation filed by the City of Los Angeles, the FAA will not answer this question at this time.

20. Can aircraft depart BUR to the east? If not, why not?

FAA Response: Departures to the east on Runway 8 are restricted to aircraft weighing less than 12,500 pounds (such as a smaller turboprop aircraft) due to mountainous terrain. Rapidly rising terrain precludes the design of an instrument departure procedure to the east for larger aircraft. Many of the larger aircraft would be unable to meet the climb gradient to safely clear the terrain if they departed to the east.

21. Was any outreach and community engagement conducted prior to the FAA's publication of the proposed SLAPP ONE and OROSZ ONE waypoints?

FAA Response: The SLAPP ONE and OROSZ ONE procedures were part of the SoCal Metroplex project; the FAA conducted extensive outreach for the Metroplex project.

22. Have the FAA's proposed SLAPP ONE and OROSZ ONE waypoints for airplanes departing Hollywood Burbank Airport been implemented?

FAA Response: The FAA implemented the SLAPP ONE and OROSZ ONE on March 2, 2017. The satellite-based route segments begin 11 nautical miles (NM) north, and 17 NM northwest, of BUR.

23. How were the locations of the FAA's proposed SLAPP ONE and OROSZ ONE waypoints for airplanes departing Hollywood Burbank Airport decided on?

FAA Response: Waypoint location considerations include, though are not limited to: type of aircraft, aircraft characteristics, procedure design criteria, environmental issues, and adjacent airports.

24. How was the location of the Metroplex PPRRY waypoint for airplanes departing Van Nuys Airport determined?

    FAA Response: The PPRRY waypoint was not implemented as part of the SoCal Metroplex project. However, Los Angeles World Airports (LAWA) determined that procedures implemented at VNY caused aircraft to turn earlier than what was prescribed in the VNY noise abatement procedures. In response, the FAA created the PPRRY waypoint as close as design criteria would allow – to where aircraft were previously turning – without violating minimum RNAV segment lengths.

25. Why did the FAA publish a new FATKO waypoint in 2017? Did the new FATKO waypoint provide the results expected?

    FAA Response: The original procedure designs proposed for VNY, in the SoCal Metroplex project, included a specific turn and altitude at a waypoint near the current PPRRY. However, a Procedure Review Board determined these were not acceptable designs. The Procedure Review Board did approve a design that, by placing the FATKO waypoint directly over the south end of the runway, allowed for vectoring almost immediately after departure. FATKO worked as it was intended; however, LAWA determined that this allowed aircraft to turn earlier than what was prescribed in the VNY noise abatement procedures. In response, the FAA created the PPRRY waypoint as close as design criteria would allow – to where aircraft were previously turning – without violating minimum RNAV segment lengths.

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

1. Can the FAA provide a presentation on the airspace prior to and after the implementation of the SoCal Metroplex in and around the Southern San Fernando Valley, including the interactions with other nearby airports?

   FAA Response: The FAA presented this information at the Southern San Fernando Valley Airplane Noise Task Force meeting on December 4, 2019. Please see the December 9 update on the following website: https://www.faa.gov/air_traffic/community_involvement/bur/.

2. What are the limiting factors in turning aircraft onto the 210 degree heading sooner after departing Runway 15?

FAA Response: Because this question relates to issues raised in pending litigation filed by the City of Los Angeles, the FAA will not answer this question at this time.

3. Explain exactly what happens between liftoff and 3000' and if you could explain all the different protocols associated with all the vectoring.

   FAA Response: Because this question relates to issues raised in pending litigation filed by the City of Los Angeles, the FAA will not answer this question at this time.

4. Are departing aircraft starting their initial turn from Runway 15 at Hollywood Burbank Airport later than they did previously? If so, why is that the case?

   FAA Response: Because this question relates to issues raised in pending litigation filed by the City of Los Angeles, the FAA will not answer this question at this time.

5. Our office has been told by VNY that the FAA states that aircraft are actually at a higher altitude now than they were before the Metroplex changes, could the FAA please confirm or deny this statement?

   FAA Response: Please provide more specific information so the FAA can respond to this inquiry.

6. A joint analysis team was deployed in 2018 for Southern California. Is there any update when we can get the cost/benefit analysis and new information from the joint analysis team when they are looking specifically at the southern California region?

   FAA Response: The Joint Analysis Team's methodology was used by the SoCal Metroplex Post Implementation Team to compute the projected annual benefits of $8.8 million for implementation of the SoCal Metroplex (see https://www.faa.gov/nextgen/snapshots/metroplexes/index.cfm?locationId=18&pdf).

   The Joint Analysis Team is not conducting any additional cost/benefit analysis for the SoCal region beyond the SoCal Metroplex Post Implementation Team's analysis.