



# City of Palo Alto

## City Council Staff Report

(ID # 6607)

---

**Report Type: Consent Calendar**

**Meeting Date: 2/8/2016**

**Summary Title: Airplane Noise Consultant**

**Title: Approval of a Contract With Freytag & Associates in the Amount of \$237,500 for Airplane Noise Assessment & Mitigation; and Approval of a Budget Amendment in the General Fund for Fiscal Year 2016, Offset by a Reduction of \$237,500 From the General Fund Budget Stabilization Reserve**

**From: City Manager**

**Lead Department: City Manager**

### **Recommendations**

1. Approve Contract C16161182 with Freytag & Associates in the Amount of \$237,500 for Airplane Noise Assessment & Mitigation.
2. Amend the Fiscal Year 2016 Budget Appropriation Ordinance for the General Fund by:
  - a. Increasing the City Manager's Office budget in the amount of \$237,500;
  - b. Decreasing the General Fund Budget Stabilization Reserve in the amount of \$237,500.

### **Background**

On February 10, 2015 the Policy & Services Committee discussed the issue of air traffic over Palo Alto. The committee made recommendations to the City Council and on August 24, 2015 the City Council directed staff to:

1. Issue a Request for Proposals (RFP) for a Technical Study, including data analysis of aircraft noise over Palo Alto and recommendations for alternatives to reduce noise;
2. Utilize the various tri-cities meetings as a vehicle to engage and measure the interest of surrounding cities in the flight path/noise issue and to reach out to several adjacent cities;
3. Elevate aircraft noise as a City priority and request advocacy at appropriate levels;
4. Have the City Manager continue to work with residents;
5. Have the City Attorney meet with residents to review state and federal statutes and regulations, and provide information on pending legal proceedings relating to aircraft noise in other regions.

In addition to these actions the City Council also appointed Council Member Eric Filseth as the City Council liaison to Sky Posse (local advocacy group) and the San Francisco Airport Roundtable (Roundtable) or its subcommittees and other regional bodies as needed. Finally, the City Council adopted Resolution 9543 urging the Federal Aviation Administration (FAA) to address increased aircraft noise in Palo Alto.

Also on February 10, 2015, the Policy & Services Committee, based on information from residents, recommended that the City Council approve \$30,000 for the technical study. However from February to August as staff and resident experts began to develop a scope of services, it became clear that costs would be well over \$30,000. Therefore the August staff report indicated that upon finalization of a scope, staff would bring forward the cost and reappropriation amount.

## **Discussion**

On September 24, 2015 the City issued RFP No. 161182 Airplane Noise Assessment & Mitigation. On November 25, 2015 the RFP closed with four respondents: g2 Engineering, Bruel & Kjaer, Sawhill Consulting, and Freytag & Associates (Freytag). After screening and interviews, which included community members from Sky Posse, the City selected Freytag. g2 Engineering and Bruel & Kjaer's proposals did not meet the RFP criteria. Sawhill Consulting's proposal did meet the criteria and the cost estimate was \$238,764. The review committee selected Freytag as they provide expertise in air space noise measurement, monitoring and modeling, as well as the ability to provide consultation services related to Air Traffic Control and Next Generation Air Transportation System (NextGen). Staff believes that these contract services are necessary to identify and effectively argue for important mitigations to reduce noise impact over Palo Alto; to provide the City Council with technical resources to better understand the detailed nature of airspace management and possible alternatives; and to assist with coordination between neighboring cities, the Roundtable, the FAA and Congressional offices.

The FAA, on November 16, 2015, through the offices of Congresswoman Eshoo, Congresswoman Speier, and Congressmen Farr released an Initiative to Address Noise Concerns in San Mateo, San Clara and Santa Cruz counties (Initiative). We understand this action is a significant departure from FAA's typical response to local noise concerns. Clearly, Congresswoman Eshoo's intervention efforts have been effective and we now have a unique opportunity to engage with FAA through the Initiative.

Freytag's first tasks will be to evaluate potential alternate air traffic routes and other mitigations, and assist staff in drafting an initial response to the Initiative by February 15. This work will be conducted under tasks three and four of the contract: *FAA and community activity/noise mitigation*. Staff is budgeting \$75,000 for these two tasks. Subsequently, staff, in consultation with Sky Posse representatives and Freytag, will finalize expectations for tasks one and two: *operational and noise assessments*. These tasks are complex and require further deliberation before work orders will be issued. Staff is budgeting \$132,500 and intends to stay

within the allocated amount. The analysis will quantify Palo Alto's increase in air traffic. Finally, the contract includes tasks five to seven which allow the City to undertake *sleep interference, classroom disruption and property valuation studies*, each costing \$10,000. The total contract award amount is \$237,500. By approving this staff report the Council will appropriate funds and authorize the expected tasks within the contract. Staff will issue work orders for each task at the appropriate time within the FAA Initiative process. The initial tasks, as mentioned, will be to draft a response to the Initiative and begin to work with our Congressional office, the FAA, Roundtable and other cities and counties.

To date, the City has met twice with the FAA through Congresswoman Eshoo's office. The meetings have been productive and there seems to be a genuine willingness by the FAA to address the problem of aircraft noise and frequency that is impacting Peninsula communities. We hope that this willingness extends beyond engagement to full commitment to developing alternatives. Making progress will require ongoing dialogue, negotiation and compromise amongst the local noise groups (such as Sky Posse) and the cities and counties involved with the FAA in the Initiative process. We continue to caution the community and City Council that this is a federal policy issue and involves complex engineering and technical challenges as well as a variety of national and local stakeholders.

We are expanding our efforts regionally. Staff is in regular communication with the Cities of Los Altos, Los Alto Hills, Portola Valley, East Palo Alto, Menlo Park, and Mountain View. Additionally, staff continues to coordinate with the County of Santa Clara and more recently with the Cities Association of Santa Clara County. Finally, staff attends all Roundtable meetings and is in regular communication with Congresswoman Eshoo's office.

In recent developments the cities of Portola Valley and Los Altos Hills utilized the services of Williams Aviation Consultants (WAC) to respond to the Initiative. Staff has attached the reports created by WAC. On February 3, 2016 the Roundtable discussed adding Palo Alto as a voting member, but did not take a vote due to a developing alternative proposed by Congresswoman Eshoo and Congressmen Farr. That alternative, described in the attached letter dated February 2, 2016, suggests a new FAA Select Committee made up of local elected officials from the cities and counties in the South Bay and Santa Cruz County.

Furthermore, staff continues to utilize the services of our federal legislative consultants, Van Scoyoc & Associates, as well outside consul Peter Kirsch from Kaplan Kirsch & Rockwell.

### **Resource Impact**

Costs for this project are incurred through contract dollars and additional staff time. By approving this staff report, City Council will appropriate \$237,500 for Freytag & Associates from the Budget Stabilization Reserve causing the reserve to fall below the City Council approved target level of 18.5% to approximately 18.3%. It is anticipated that through actions recommended as part of the Fiscal Year 2016 Mid-Year Budget Review to be considered by the

Finance Committee in March 2016, the Budget Stabilization Reserve can be brought back to meet or exceed the 18.5% target level.

In addition to Freytag, the City has existing contracts with our Federal lobbyist Van Scoyoc & Associates and Kaplan Kirsch & Rockwell. We expect that any assistance from Van Scoyoc in this area can be accommodated within their existing contract. Kaplan Kirsch & Rockwell's contract could increase depending on future needs and staff will return to City Council with an amendment if needed.

Staff time for this project is mainly incurred in the City Manager's Office through leadership by City Manager Jim Keene, oversight by Assistant City Manager Ed Shikada, and project management by Sr. Management Analyst Khashayar "Cash" Alae. Staff time is also incurred by City Attorney Molly Stump as well as technical advice from Andrew Swanson, Airport Manager, in the Public Works Department.

**Attachments:**

- Attachment A - Timeline of City Activities related to Airplane Noise (PDF)
- Attachment B - 11-16-15 FAA Initiative to Address Noise Concerns (PDF)
- Attachment C - 12-9-15 Eshoo Letter to Mayor Holman (PDF)
- Attachment D - 1-25-16 Eshoo Letter to Noise Groups (PDF)
- Attachment E - WAC Comments Portola Valley FINAL (PDF)
- Attachment F - WAC Comments Los Altos Hills FINAL (PDF)
- Attachment G - Staff Report 8-24-15 (PDF)
- Attachment H - Staff Report 2-10-15 (PDF)
- Attachment I - Contract C16161182 Freytag and Associates (PDF)
- Attachment J - Letter to FAA from Eshoo and Farr 2-2-16 (PDF)
- Attachment K - City Letter to Roundtable 2-3-16 (PDF)
- Attachment L - Roundtable Staff Report for 2-3-16 (PDF)

**Attachment A**  
**Timeline of City Activities related to Airplane Noise**

**October 6, 2014**

City Council referred the topic airplane noise to the Policy & Services Committee for discussion. This was due to the October 1, 2014 decision of the SFO Roundtable to only allow the City to participate as a nonvoting member. (For additional background prior to October 2014, please refer to Staff Report #5517.)

**February 10, 2015**

Policy & Services Committee held a discussion about Air Traffic Noise Impacts on Palo Alto Citizens (Staff Report 5517).

**March 10, 2015**

Mayor Holman met with FAA staff in Washington D.C. during the National League of Cities Conference.

**April 22, 2015**

City Manager Jim Keene met with John Martin, San Francisco Airport Director John Martin.

**June 5, 2015**

County Supervisor Joe Simitian met with Sky Posse at Mitchell Park Community Center to discuss his 13 points of effective advocacy.

**July 24, 2015**

Congresswoman Anna Eshoo held a meeting with local elected officials, staff and representatives of the FAA at Palo Alto City Hall.

**August 24, 2015**

City Council approved Policy & Services Committee and Staff Recommendation that the City Council Authorize a Request for Proposals for; a Technical Study of Increased Air Traffic Noise, to Designate a Council Member to act as a Liaison to Engage in Regional Mitigation and Advocacy Efforts, Adopt a Resolution Urging the Federal Aviation Administration to Address Increased Aircraft Noise in Palo Alto, and Direct Staff to Engage in Additional Outreach, Coordination and Advocacy Activities Regarding Aircraft Noise (Staff Report #6023).

**September 24, 2015**

City issued RFP #161182 titled Airplane Noise Assessment & Mitigation with a close date of November 25, 2015.

**October 6, 2015**

City Attorney Molly Stump met with Sky Posse to listen to their concerns about the legal elements of this topic.

**October 7, 2015**

Council member Eric Filseth (Council liaison) and Sr. Management Analyst Khashayar Alaee attended the regularly scheduled SFO Roundtable meeting. Representative of Sky Posse were also in attendance.

**October 9, 2015**

Sr. Management Analyst Khashayar Alaee and Lee Christel, Sky Posse representative, attended a meeting with FAA representative at San Jose International Airport. At this meeting technical representatives of the FAA were present along with noise group's representatives from Santa Cruz and staff from Congresswoman Anna Eshoo's office.

**November 16, 2015**

Congresswoman Eshoo, Congresswoman Speier, and Congressmen Farr released the *FAA Response to Congressional Inquiries* about Aircraft Noise

**November 25, 2015**

RFP # 161182 titled Airplane Noise Assessment & Mitigation closed with four bidders: g2 Engineering, Bruel & Kjaer, Sawhill Consulting, and Freytag & Associates.

**December 2, 2015**

Sr. Management Analyst Khashayar Alaee attended the regularly scheduled the SFO Roundtable. Representative of Sky Posse were also in attendance.

**December 3, 2015**

Cities of Palo Alto, Los Altos, and Los Altos Hills met to discuss partnership in addressing the topic. Cities of Mountain View, Menlo Park and East Palo Alto were also invited but did not attend.

**December 9, 2015**

Mayor Holman receives letter from Congresswoman Eshoo requesting support for Quiet Skies Act, FAA Community Accountability Act and a request to respond to the FAA Initiative in a timely manner.

**December 10, 2015**

Sr. Management Analyst Khashayar Alaee and Airport Manager Andrew Swanson attended a special SFO Roundtable Technical Working Group focused on Departures/Arrivals. Representative of Sky Posse were also in attendance.

**December 15, 2015**

The City received a letter from Congresswoman Anna Eshoo requesting prompt feedback to the *FAA Response to Congressional Inquiries* document.

**January 6, 2016**

City staff and Sky Posse representatives interviewed RFP applicants.

**January 7, 2016**

Sr. Management Analyst Khashayar Alaei attended a special SFO Roundtable Technical Working Group focused on Departures/Arrivals. Representative of Sky Posse were also in attendance.

**January 25, 2016**

Congresswoman Eshoo and Congressman Farr send letter to local noise groups requesting cooperation amongst groups and unified voice in working with FAA.

**January 27, 2016**

Cities of Palo Alto, Los Altos, and Los Altos Hills held conference call to discuss issue and receive a status update on the topic from Congresswoman Eshoo's office. County of Santa Clara and Portola Valley were not able to call in.

**January 28, 2016**

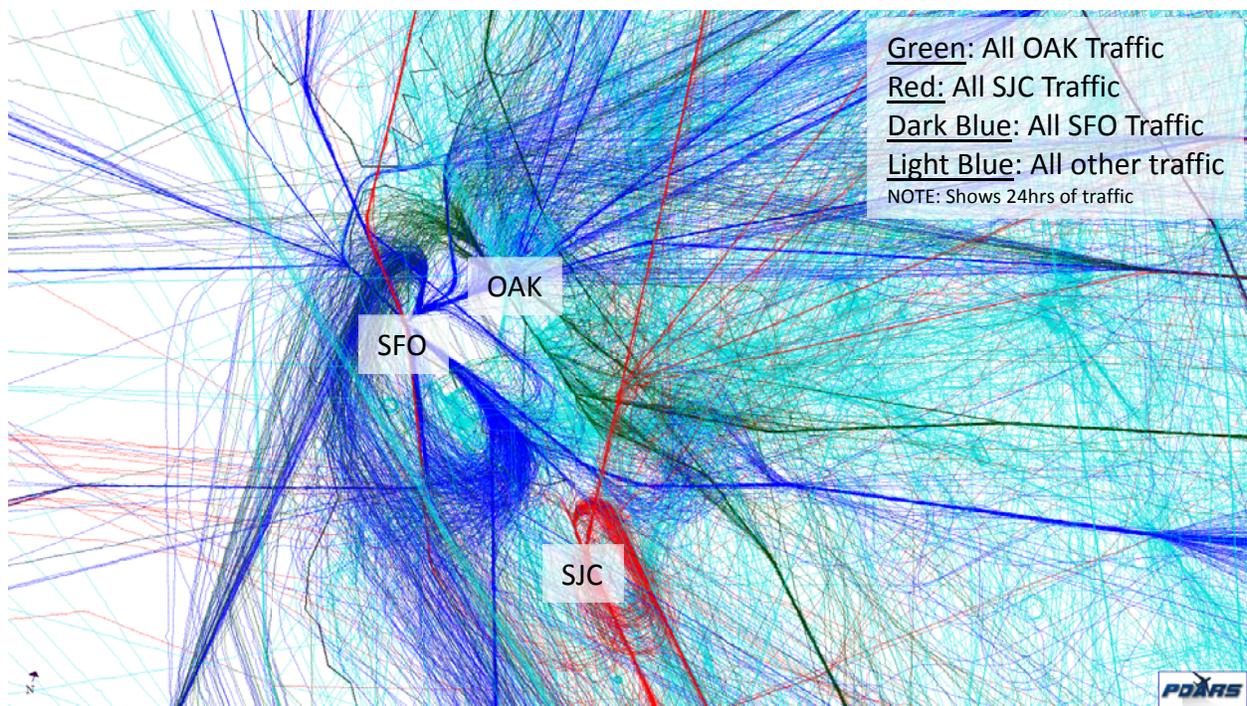
City Attorney Molly Stump, Outside Counsel Peter Kirsch, Assistant City Manager Ed Shikada, Public Works Director Mike Sartor, Airport Manager Andrew Swanson, and Sr. Management Analyst Khashayar Alaei met with Sky Posse representatives to discuss legal and legislative matters.

# FAA Initiative to Address Noise Concerns of Santa Cruz/Santa Clara/San Mateo/San Francisco Counties

Compiled at the Requests of Representatives Farr, Eshoo and Speier

## Executive Summary

Northern California airspace is very complex, with traffic from several major airports, smaller regional airports and military activity. All arrival and departure procedures within the Northern California airspace are interconnected, interdependent and were designed to improve safety and efficiency within the National Airspace System (NAS).



Longstanding issues with, as well as changes to, the Northern California TRACON instrument approach and departure procedures have generated noise concerns from local residents of Santa Cruz, Santa Clara, San Mateo and San Francisco Counties. In meetings and correspondence with congressional offices and local community representatives, the Federal Aviation Administration (FAA) has received recommendations to adjust the current published procedures. In response, the FAA has undertaken the following noise initiative to explore such modifications. Airspace and air traffic procedures are highly dependent upon each other within the NAS and must be evaluated collectively to ensure safety and efficiency.

This initiative will be comprised of three phases. During the first phase, the FAA will conduct a detailed analysis and a preliminary feasibility study focusing on flight procedures criteria and overall fly-ability of the new Performance Based Navigation (PBN) procedures, potential

procedural modifications including speed/altitude adjustments, airspace changes and possibility of moving existing waypoints. An assessment of impacts to operations at the surrounding airports and associated procedures will be completed. In addition, coordination with the local stakeholders will be conducted during this first phase.

During the second phase, FAA will consider any amendments and/or new procedures that are determined to be initially feasible, flyable, and operationally acceptable from a safety point of view. As part of this effort, FAA will conduct the formal environmental and safety reviews, coordinate and seek feedback from existing and/or new community roundtables, members of affected industry, and the National Air Traffic Controllers Association (NATCA) before moving forward with the formal amendment process. During phase three, the FAA will implement procedures; conduct any required airspace changes and additional negotiated actions, as needed.

In addition to its mandate to ensure the safe and efficient use of the NAS, the FAA complies with the requirements of the National Environmental Policy Act (“NEPA”). As such, although not specifically detailed within this noise initiative, the FAA’s procedures and standards for evaluating noise impacts associated with all potential modifications to currently published procedures—consistent with FAA Order 1050.1F (effective July 16, 2015)—will be followed and undertaken before implementing any airspace changes. Finally, this document does not constitute either a final decision of the FAA or a re-opening of the FAA’s August 6, 2014 final decision for the Northern California (NorCal) Optimization of Airspace and Procedures in the Metroplex (OAPM).

## **Initiative:**

### **Phase one: Initial Analysis, Feasibility, and Coordination**

#### **1. Instrument Flight Procedures/Airspace:**

**Planned Action:** The FAA will conduct a detailed analysis to include preliminary feasibility from a procedures/criteria perspective and fly-ability from an aircraft perspective. Procedures will be analyzed, modeled, and flown in flight simulators. An assessment of the impact to operations and other procedures will be completed. The analysis should indicate whether the potential procedural changes could be made to effectively reduce noise.

- a. Altitude adjustments:** Raising the floor and/or ceiling of existing procedures may allow the FAA to do the same for other procedures and reduce noise concerns in certain locations.
  - i. Analyze raising the floor and ceiling of existing SERFR and BRIXX arrivals. (AJV-WOSG)
    - a) Evaluate raising the altitude at MENLO waypoint to 5,000 feet or establish a new waypoint to allow for crossing the MENLO area closer to 5,000 feet.
  - ii. Analyze reducing impacts of SSTIK, WESLA, and CNDLE departures. (AJV-WOSG)

**Status: Analysis began October 2, 2015**

**Completion Date: TBD**

- b. Track adjustments:** Where possible, tracks should be adjusted away from areas of concern and moved over water versus land.
  - i. Analyze moving the SSTIK and PORTE departures more over water. (AJV-WOSG)
  - ii. Analyze reducing the impacts of SSTIK, WESLA, and CNDLE departures. (AJV-WOSG)
  - iii. Analyze moving the ILS/Visual Approach to Runway 28L offshore. (AJV-WOSG)

- iv. Analyze offsetting Visual Approaches until passing the San Mateo Bridge. (AJV-WOSG)
- v. Analyze the impact of non-charted visual approaches to RWY 28 (AJV-WOSG)

NOTE: There are three charted visual approaches to San Francisco (SFO). Two are FAA published approaches, the TIPP TOE VISUAL and the QUIET BRIDGE VISUAL. The third approach is owned by United Airlines and is a special charted visual, also available to other airlines. If changes are made to the procedure, the FAA would request that United Airlines and each airline that uses this procedure update their databases.

**Status: Analysis began October 2, 2015**

**Completion Date: TBD**

**c. Waypoint Adjustments:**

- i. On the SERFR arrival, analyze moving EPICK waypoint south to approximately 36 54 52.8N and 121 56 32.7W, add restriction to speed of 280 knots and altitude of 15,000 feet. (AJV-WOSG)
- ii. Analyze making adjustments to PORTE departure to maximize offshore routing. (AJV-WOSG)
- iii. Evaluate adding a new waypoint roughly over the Highway 17 summit area, between EPICK and EDDYY, with at least a 10,000 feet and 250 knot restriction. (AJV-WOSG)

**Status: Analysis began October 2, 2015**

**Completion Date: TBD**

**d. Speed Adjustments:**

- i. Analyze moving speed adjustments over water instead of over land. (AJV-WOSG)
- ii. Analyze reducing the speed on the current SERFR arrival. (AJV-WOSG)
- iii. Analyze data to determine compliance with the requirement to maintain 250 knots or less below 10,000 feet Mean Sea Level (MSL). (AJV-WOSG)

**Status: Analysis began October 2, 2015**

**Completion Date: TBD**

**e. Holding Patterns**

- i. On the SERFR arrival, study current use of the holding pattern at EPICK and the possibility of moving the holding pattern to WWAVS. (AJV-WOSG)

**Status: Analysis began October 2, 2015**

**Completion Date: TBD**

**f. PBN Procedures:**

- i. Evaluate proposed PBN arrival procedures from local community groups for feasibility, fly-ability and safety concerns. (AJV-WOSG)
- ii. Evaluate the effect of dispersing flight tracks over a wider range. (AJV-WOSG)
- iii. Study the feasibility of creating new transitions for the NIITE departure for airports to southbound destinations. (AJV-WOSG)
- iv. Study the possibility of new SFO RNP approaches that will serve Runways 28 L/R that follow the Big Sur ground track, curved out over the Bay crossing MENLO at 5000-6000 feet. (AJV-WOSG)

**Status: Analysis began October 2, 2015**

**Completion Date: TBD**

**2. Air Traffic Control:**

**Planned Action:** The Western Service Center, on behalf of the Air Traffic Director of Operations, will work with the facilities to assess what opportunities exist to modify operations. Part of this assessment will include looking at the possibility of adjustments during reduced volume night operations, even if day operations cannot be changed. If changes can be made there will need to be a safety assessment, controller training, pilot briefings, and the SFO community roundtable may need to be engaged.

**a. Sequencing and Vector Points:** There may be actions air traffic controllers can take to reduce noise concerns such as assessing whether changes can be made to vectoring aircraft over water more.

- i. Analyze adjusting air traffic activity in the vicinity of Woodside VOR including altitudes. (AJT, AJV-WOSG)
- ii. Analyze adjusting air traffic to eliminate early turns over land. (AJT, AJV-WOSG)
  - a) Focus on leaving aircraft over water as long feasible.
  - b) Keep aircraft on the SSTIK departure until the SSTIK waypoint before turning.
  - c) Keep aircraft on the NIITE departure to at least the NIITE Waypoint as much as possible.

**Completion Date: TBD**

**b. Use of Descend Via:**

- i. Increase use of descend via procedures. (AJT, AJV-WOSG)
- ii. Increase use of descend via procedures for international flights. (AJT, AJV-WOSG)

**Completion Date: TBD**

**c. Class B Containment:** Some current procedures, as designed, are not fully contained within the existing SFO Class B airspace.

- i. Analyze current versus historic data to determine trends and risks to aircraft exiting and reentering Class B airspace. (AJT, AJI, AJV-WOSG)
- ii. Analyze current RNAV arrival and departure procedures to determine necessity and feasibility of redesign. (AJT, AJI, AJV-WOSG)
- iii. Analyze current RNAV arrival and departure procedures to determine necessity and feasibility of redesigning Class B airspace. (AJI, AJV-WOSG)

**Status: Ongoing**

**Completion Date: TBD**

**d. Speed Brakes:**

- i. Study the potential reduction and/or elimination of the use of speed brakes and conduct a track analysis to determine flight characteristics, utilizing the Aviation Safety Information Analysis and Sharing (ASIAS) database. (MITRE CAASD)
- ii. Work with stakeholders to determine feasibility of reducing the use of speed brakes and other surface controls over land.

**Status: Ongoing**

**Completion Date: TBD**

**e. Runway Usage:**

- i. Study the feasibility of increasing the use of Runway 10. (AJT)
- ii. Study the feasibility of increasing the use of RWY 01 for Departures (AJT). Study the feasibility of proceduralizing the 050 departure heading off RWY 01 at night. (AJT)
- iii. Study the necessity of extending nighttime operations at SFO. According to the SFO Standard Operating Procedure, the preferred Runway for operations between 0100 and 0600 local time is departing Runway 10 and landing Runway 28. (AJT)
- iv. When weather conditions permit, study the increase in use of the Shoreline 7 Departure off RWY 28R or 28L. (AJT, AJV-WOSG)

**Completion Date: TBD**

**f. Instrument Flight Procedures (IFP):**

- i. Study the feasibility of creating new transitions for the NIITE departure for airports to southbound destinations. (AJV-WOSG)
- ii. When weather operations permit, study the use of the Shoreline7 departure off of Runway 28R or 28L. (AJT, AJV-WOSG)
- iii. Study the use of offset visual approaches in lieu of straight in visual approaches. (AJT, AJV-WOSG)
- iv. Study the usage of GAP departure. (AJT, AJV-WOSG)

- v. Study whether international and domestic aircraft are handled the same by Air Traffic Control (ATC). (AJT, AJV-WOSG)
- vi. Study the feasibility of increasing the use of the SSTIK departure during the day and the NIITE departure at night. (AJT, AJV-WOSG)

**Completion Date: TBD**

**g. Opposite Direction Operations (ODO):** Operational changes related to ODO may have increased noise concerns at night in certain locations.

- i. Review recent implementation of ODO procedures and their impacts in the San Francisco Bay area. (AJT, AJI)
- ii. Assess potential options for night operations. (AJT, AJI)

**Completion Date: TBD**

### **3. Traffic Management**

**Planned Action:** The Western Deputy Director of System Operations, on behalf of the Air Traffic Director of Operations, will work with the Western Service Center and local facilities to evaluate the actions and suggestions below. During the analysis, the focus will be on use of traffic management tools and initiative to ensure current practices are as effective and efficient as possible for the potential reduction of noise concerns.

**a. Equitability:** Concentration of noise should be reviewed, especially during nighttime operations.

- i. Review the current nighttime operations to determine if they adequately address preferential Runway usage. (AJT, AJV-WOSG)

NOTE: According to the SFO Standard Operating Procedure, the preferred Runway for operations between 0100 and 0600 local time is departing Runway 10 and landing Runway 28.

- ii. Evaluate the effect of dispersing flight tracks over a wider range or developing multiple parallel RNAV procedures. (AJT, AJV-WOSG)

**Completion Date: TBD**

**b. Interactions and agreements:** Facility agreements between Northern California TRACON (NCT), Oakland Air Route Traffic Control Center (ARTCC) (ZOA), and Los Angeles ARTCC (ZLA) might be amended to reduce the need for off-course vectors and speed adjustments to potentially reduce noise concerns in certain locations.

- i. Review facility agreements for possible changes to aircraft set up and sequencing. (AJT, AJV-WOSG)
- ii. Review facility agreements to ensure they are effective and efficient with regard to routing and speeds. (AJT, AJV-WOSG)

**Completion Date: TBD**

- c. **Time Based Flow Management (TBFM):** The use of TBFM to enhance sequencing may reduce the need for off course vectors and speed adjustments and may reduce noise concerns in certain locations.
  - i. Review the current and projected status of using TBFM procedures. (AJT, AJV, AJR)
  - ii. Review the impact of using TBFM on current noise issues. (AJT, AJV, AJR)

**Completion Date: TBD**

- d. **Nighttime Offloads/Routes:** Communities want a focus on reducing noise concerns at night.
  - i. Review nighttime operations. (AJT)
  - ii. Review cargo flight operations to determine if previous actions have adequately addressed all issues. (AJT)
  - iii. Review utilizing the current Big Sur for late night cargo arrivals. (AJT, AJV-WOSG)
  - iv. Review the current nighttime operations to determine if they adequately address preferential Runway usage. (AJT, AJV-WOSG)

NOTE: According to the SFO Standard Operating Procedure, the preferred Runway for operations between 0100 and 0600 local time is departing Runway 10 and landing Runway 28.

**Completion Date: TBD**

#### **4. Operators:**

**Planned Actions:** AJV will engage Airlines for America (A4A) and The International Air Transport Association (IATA) nationally to solicit perspective and input into defined issues. Operator involvement needs to be discussed, especially if the FAA does not utilize the roundtable concept to work issues with stakeholders. It is assumed that the

Office of the Associate Administrator for Airports (ARP) would want some level of input or engagement as SFO should also be involved directly in these conversations.

- a. **Use of speed brakes:** Operators can focus on reducing the use of speed brakes. Pilots have the sole responsibility to determine when speed brakes should be used. (A4A, IATA)

**Completion Date: TBD**

- b. **Runway choices:** Operators may request more “fly friendly” Runways, especially at night, to reduce noise concerns in certain locations. (A4A, IATA, SFO)

**Completion Date: TBD**

- c. **IFP choices:** Operators can file “fly friendly” procedures, especially at night, to reduce noise concerns in certain locations. (A4A, IATA, SFO)

**Completion Date: TBD**

- d. **Nighttime Offloads/Routes:** Communities want a focus on reducing noise concerns at night. (A4A, IATA, SFO)

**Completion Date: TBD**

- e. **Early Turns:** Operators can assist ATC in ensuring as much as possible of a flight is over water versus over land by not requesting early turns on course. (A4A, IATA)

**Completion Date: TBD**

- f. **International air carrier execution of Optimized Profile Descents (OPDs):** AJV will reach out to IATA to discuss and get input and perspective on this issue. (IATA)

**Completion Date: TBD**

## 5. Community Engagement

- a. **Community Forums:** Addressing noise concerns in a densely populated and operationally complex area like Northern California is best done in a forum (such as existing and/or new roundtables) that includes community leaders and is supported by the FAA and Bay Area Airports. (AWP, AGI)

- b. San Carlos Airport:** Apart from the efforts described in this report, there are TBD conversations with communities around the airport that are concerned about the increase in flights and noise. (AWP)

**Phase two: Modifications and Review**

Based on the outcome of the initial analysis, feasibility and coordination, modifications may be made to the proposed procedures and/or airspace or operating procedures using the guidance found in current FAA Orders, directives and labor agreements which includes conducting the Environmental Review; Safety Risk Management (SRM); and appropriate public outreach.

**Completion Date: TBD**

**Phase three: Implementation**

Based on the outcome of the modifications and review phase and assuming the proposed procedure(s) meet the purpose and need, as well as all applicable environmental laws and requirements, the controller workforce and operators will be trained/briefed on any operational or procedural changes before publication and operational use.

**Completion Date: TBD**



Congress of the United States  
House of Representatives  
Washington, D.C. 20515

Anna G. Eshoo  
Eighteenth District  
California



2015 DEC 15 P 3:07  
RECEIVED  
CITY MANAGER'S OFFICE

December 9, 2015

The Honorable Karen Holman, Mayor  
City of Palo Alto  
250 Hamilton Avenue  
Palo Alto, California 94301

Dear Karen,

I'm writing about two important follow-up items relative to FAA noise issues: (1) the FAA's Initiative which has been released and still open for public comment and (2) recent legislation I've introduced to reform the FAA.

It's important that the City review the attached FAA document entitled, "Initiative to Address Noise Concerns of Santa Cruz/Santa Clara/San Mateo/San Francisco." It's my understanding that the City of Palo Alto is hiring technical consultants and is in the process of working with other cities in Santa Clara County and Southern San Mateo County to find common ground on this issue. The FAA developed the document as a result of meetings with elected officials and community leaders over the last several months. Before the FAA returns to our Congressional District early next year to answer questions related to the initiative, the City's feedback on the FAA's Initiative, including additional suggestions for ways in which the FAA can address this regional issue is critical. FAA leadership informed my office that they are seeking comments by January 2016, and my staff advised the FAA leadership that the City is putting a technical team in place and will do so as soon as it is possible to. I strongly encourage the City to provide comment to the FAA as soon as possible.

On another related front, I've introduced legislative reforms to require the FAA to plan *with* communities *before* implementing changes, and also to restore the EPA's Office of Noise Abatement and Control which was defunded more than three decades ago. I'm enclosing copies of the legislation and would welcome the City's support of these legislative initiatives. The following summarizes the bills:

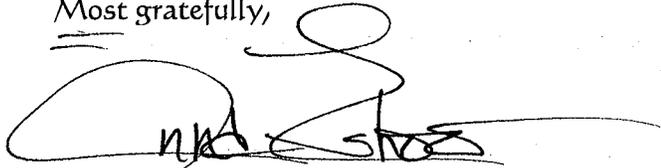
- The *Quiet Communities Act* would restore the EPA's Office of Noise Abatement and Control which was created by Congress in 1972. This office oversaw the nation's noise control activities until it was defunded by Congress at the request of the Reagan Administration in 1981. In addition to restoring funding for this office, the bill

effectiveness of the FAA's noise measurement methods, health impact thresholds, and abatement programs. This will bring transparency to the FAA's current noise measurement and abatement practices.

- The *FAA Community Accountability Act* would require the FAA to work with local communities and limit noise impacts when planning and implementing new flight paths. Importantly, the *FAA Community Accountability Act* would require the FAA to reconsider existing routes that expose residents to unacceptably high levels of aviation noise. The bill also creates a new Community Ombudsman in each FAA region to monitor the impact of NextGen implementation on affected communities, serve as a liaison between airport communities and the FAA, and make policy recommendations to Congress and the FAA.

Thank you for your leadership and that of the entire City Council on this issue which is affecting our mutual constituents. As always, I stand ready to assist you and the Council in every way possible.

Most gratefully,

A handwritten signature in black ink, appearing to read 'Anna Eshoo', written over a horizontal line.

Anna G. Eshoo  
Member of Congress

cc: Members, Palo Alto City Council  
Mr. James Keene, City Manager

Enclosures



January 25, 2016

Dear Members of the Quiet Skies Summit,

We are grateful to each of you who participated in the January 16<sup>th</sup> meeting to form a coalition of local community airplane noise groups that span our Congressional Districts.

We fully comprehend the impacts on our constituents and we're committed to resolving the issues with the FAA. We continue to advocate on your behalf and as Members of the Congressional Quiet Skies Caucus we're working with other Members of the House who are experiencing problems with the FAA's Next Gen Program. We're now in the process of scheduling follow-up meetings with the FAA leadership, community groups and local elected officials. The FAA's plan includes every suggestion to date from our constituents and they are still taking comment from local governments.

Moving forward, if we're to be successful, we must create regional solutions. If the final recommendations from the majority of your organizations are clear and do not contradict each other, we can be firm and clear with the FAA about next steps and implementing change sooner. We welcome one letter signed by each of your organizations stating for the record what you think the FAA can do to implement change. We request your letter addressed to us as soon as possible so that we can speak with one voice when the FAA leadership holds meetings in the three counties affected.

Most gratefully,

A blue ink signature of Anna G. Eshoo, consisting of a large, stylized 'A' and 'E' followed by the name 'Anna G. Eshoo' in a cursive script.

Anna G. Eshoo  
Member of Congress

A blue ink signature of Sam Farr, featuring a large, stylized 'S' and 'F' followed by the name 'Sam Farr' in a cursive script.

Sam Farr  
Member of Congress



---

## *Williams Aviation Consultants*

### **Williams Aviation Consultants, Inc. comments on The FAA Initiative to Address Noise Concerns of Santa Cruz/Santa Clara/San Mateo/San Francisco Counties.**

Williams Aviation Consultants, Inc. (WAC) has been retained by the Town of Portola Valley to analyze the FAA initiative prepared at the request of Representatives Farr, Eshoo and Speier. The document is undated and unsigned but was distributed on November 16, 2015.

The document purports to describe the actions that will be taken by the FAA to address the noise concerns identified by various community groups in the Bay Area. This “Noise Initiative” specifies three phases of activity, however only Phase one activities contain any detail on the content of the individual initiatives. Unfortunately, all completion dates are specified as “TBD”. The Initiative states: “During the first phase, the FAA will conduct a detailed analysis and a preliminary feasibility study focusing on flight procedures criteria and overall fly-ability of the new Performance Based Navigation (PBN) procedures, potential procedural modifications including speed/altitude adjustments, airspace changes and possibility of moving existing waypoints. An assessment of impacts to operations at the surrounding airports and associated procedures will be completed.” Coordination with “local stakeholders” will also occur during this phase.

Unfortunately, the activities implemented by the FAA in this document only “analyze” the proposed changes. Any actual consideration of adopting the procedure is part of Phase Two. The coordination with “local stakeholders” will certainly involve the Air Carrier community but “may” include community groups/round tables. This document therefore only commits the FAA to determining if the proposed changes are technically feasible. It does not obligate the FAA to discuss the process with any community group or to provide for any follow up community input.

#### **Instrument Flight Procedures:**

##### **Altitude Adjustments**

The FAA will analyze raising the crossing altitude at MENLO waypoint to 5,000 feet, a 1,000 foot increase. They also mention raising the floor on the BRIXX arrival to SJC but do not mention any specific waypoint(s) or altitudes. The FAA also plans to analyze the impact of “altitude adjustments” to the SSTIK, WESLA and CNDLE departures but fail to provide specifics of the changes proposed. The proposed increase in altitude at MENLO might provide some noise reduction, albeit minor, to Portola Valley. It is unlikely that the small increases in altitude specified (1000 feet) will offer any relief to those impacted by the current overflight condition.

##### **Track Adjustments**

The FAA will analyze moving the SSTIK and PORTE departures “more” over water. In addition they will look at “reducing the impacts” of the SSTIK, WESLA and CNDLE departures. Any

routing over water should reduce impacts on residents. Unfortunately the FAA has not provided the specifics of the procedures to be analyzed so a viable determination of impact cannot be made. The same lack of specific data also applies to the changes proposed for visual approach procedures. The offset visual approach and/or moving of the runway 28L visual approach offshore offer potential benefit to the residents of Portola Valley but the lack of detail makes quantitative analysis impossible. The existence of an unpublished visual approach procedure is problematic. A review of the procedure is not possible because it is not readily available. If the procedure is viable and environmentally friendly, the FAA should publish it. If not, it should be cancelled.

### **Waypoint Adjustments**

The FAA will analyze waypoint changes on the SERFR arrival. These changes have no impact on Portola Valley. The FAA will also analyze adjusting the PORTE departure to “maximize” off shore routing. Again, the FAA has not provided the specifics of the procedure to be analyzed so the impact of this change cannot be determined. If the revised PORTE departure track remained offshore and west of Woodside, some noise relief might occur for residents of Portola Valley.

### **Speed Adjustments**

The issues to be analyzed have little if any impact on Portola Valley. The issue of compliance with the 250 knot rule for aircraft operating below 10,000 feet is not appropriate for this analysis. This is solely an issue of pilot compliance with an existing rule (FAR).

### **Holding Patterns**

The proposed holding pattern change on the SERFR arrival has no impact on Portola Valley as aircraft do not currently hold over the town..

### **PBN Procedures**

While the FAA states it will analyze the “proposed PBN arrival procedures from local community groups” they fail to provide any data as to the specifics of those procedures. The one proposal for “new SFO RNP approaches that will serve Runways 28 L/R that follow the Big Sur ground track, curved out over the Bay crossing MENLO at 5000-6000 feet” could be good or bad for the residents of Portola Valley depending on the location and direction of the “curve”. The lacks of detail in the plans being analyzed make a determination of localized impact impossible.

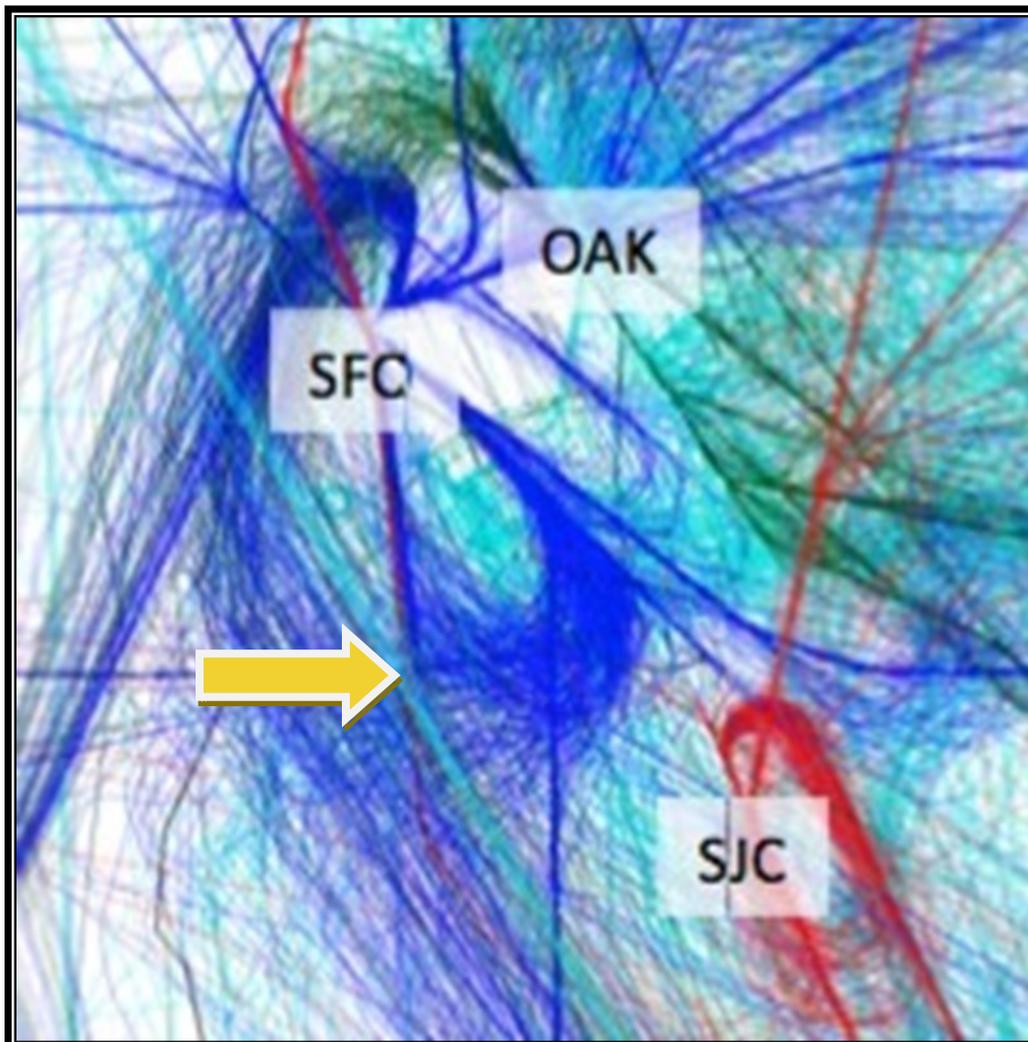
### **Air Traffic Control:**

As part of this analysis the FAA will have the Western Service Center (Seattle) “work with” the local Air Traffic Control (ATC) facilities to determine if operations can be modified. During the October 9 FAA briefing of community representatives in San Jose, the FAA specifically prohibited any discussion of local procedures and stated that the local ATC folks would not be allowed to meet with us. It now appears the agenda for these discussions will be developed and conducted in house. The FAA states that after it is determined changes can be made, “the SFO community roundtable may need to be engaged”.

### Sequencing and Vector Points

The FAA plans to “analyze adjusting air traffic activity in the vicinity of Woodside VOR including altitudes”. This activity, if done in concert with community representatives is the only viable method of mitigating the noise issues currently experienced by the residents of Portola Valley. Unfortunately, the community representative part is not in the FAA plan.

In the graphic below the blue teardrop shape extending from SFO southeastward towards SJC are the radar tracks of aircraft landing at SFO from departure airports in the north and northwest via the west leg of the Pt Reyes route. It is these aircraft along with the aircraft inbound on other routes (SEFER, Oceanic Arrivals as well as aircraft inbound from the east during poor weather conditions) that are placed on delaying radar vectors and sequenced with those inbound from the north that cause the greatest disruption to Portola Valley residents.



### Use of Descend Via

The lack of the specific changes anticipated makes any analysis of community impact impossible.

### **Class B Containment**

The analysis of any data to determine trends and risks associated with Class B containment have no bearing on this study. The existing procedures should be modified to assure aircraft are contained in the Class B airspace. Modification of the Class B airspace only will allow aircraft to continue to operate at relatively low altitudes. In either case, there is no anticipated impact on Portola Valley.

### **Speed Brakes**

The use of Speed Brakes and other surface controls is outside the purview of the Air Traffic Control system. These devices are used by air crews to adjust speed and descent rates. While ATC can impact their use, they have no control over the air crew's actions.

### **Runway Usage**

The FAA plan to study runway usage is simply put, confusing. They plan on studying the increased use of runway 10 but fail to mention if they are talking about arriving or departing aircraft. Runway 10 is, because of high approach minimums, virtually unusable for air carrier arrivals. If the plan anticipates an ability to use Runway 10 for departures more than is done currently, the normal Runway 28 L & R arrival situation would need to be altered. Runways 1L and 1R are the primary departure runways during normal wind conditions. These runways also place aircraft over open water after takeoff. Any change to existing runway usage is likely to cause far more disruption than will be considered acceptable. These changes would have minimal impact on Portola Valley.

### **Instrument Flight Procedures**

The changes in departure procedures/usage proposed offer no detail as to the actual difference with current operations. The offset visual approach offers potential benefit to the residents of Portola Valley but, again, no detailed data is provided. This lack of detail makes quantitative analysis of these proposals impossible. The discussion of ATC handling of international flights is not an IFP issue, rather it is an issue of how these flights are handled by ATC. This issue requires the participation of the local ATC personnel.

### **Opposite Direction Operations**

This activity only proposes to "review" recent changes to and "assess" potential options for opposite direction operations. No specific information is provided and any resultant impact is therefore impossible to determine.

### **Traffic Management:**

The use of effective Traffic Management tools could, if properly utilized, provide some over flight relief to Portola Valley. The bulk of the noise impacts currently experienced by Portola Valley residents appear to be during periods when the offset (LDA or Visual) approach to runway 28R is not available. During these periods, ATC appears to utilize the airspace over Portola Valley to sequence via Radar vectors aircraft into the compressed runway 28L&R flow. An effective Traffic Management program during these times could eliminate or reduce the need for these vectors. The FAA states "the focus will be on the use of traffic management tools and initiative to ensure current practices are as effective and efficient as possible for the potential

reduction of noise concerns”. An analysis of the specific concerns identified by Portola Valley should be a point of emphasis in this analysis.

### **Equitability**

The FAA plans to review/evaluate current nighttime operations and the effect of multiple parallel RNAV procedures. They provide no specifics as to what will be actually analyzed; therefore a determination of potential impact on Portola Valley cannot be made.

### **Interactions and agreements**

A review of agreements between different ATC facilities is unlikely to provide any change to the current over flight condition in Portola Valley. A review of procedures internal to the handling of aircraft within Northern California TRACON (NCT) could possibly identify some potential for alleviating the traffic congestion over Portola Valley.

### **Time Based Flow Management**

TBFM has the potential to significantly reduce the need for the sequencing/delay vectoring which currently occurs over Portola Valley. Unfortunately, this technology is in the early stages of implementation. At best this may be identified as a long term aid to the reduction in Portola Valley over flights. A less technology-driven solution needs to be developed in concert with the personnel at NCT.

### **Nighttime Offloads/Routes**

None of the procedures/operations under review have an impact on the residents of Portola Valley.

### **Operators:**

The FAA plans to discuss various aircraft operations issues which potentially impact noise with various airline based entities. It appears however that the impacted communities will not be part of this process. The FAA states: Operator involvement needs to be discussed, especially if the FAA does not utilize the roundtable concept to work issues with stakeholders. These discussions, if fruitful might offer a very small amount of noise relief under very limited circumstance to the residents of Portola Valley.

### **Community Engagement:**

The FAA states: “Addressing noise concerns in a densely populated and operationally complex area like Northern California is best done in a forum (such as existing and/or new roundtables) that includes community leaders and is supported by the FAA and Bay Area Airports.” Unfortunately, the FAA fails to commit to any public involvement during phase one. They have, in fact, indicated that they have no intention of allowing such participation.

### **Phase Two and Phase Three**

These phases are dependent on the outcome of Phase one. The FAA States “During the second phase, FAA will consider any amendments and/or new procedures that are determined to be

initially feasible, flyable, and operationally acceptable from a safety point of view.” It's important to note that the phase one analysis result is based almost solely on fly ability and ATC acceptance. It is likely that only a handful of relatively minor changes will meet that criterion. Since the radar vector situation over Portola Valley is not a specific item in the Phase one effort, it most certainly will not be part of any Phase two activity.

The FAA also states that as part of Phase two the: “FAA will conduct the formal environmental and safety reviews, coordinate and seek feedback from existing and/or new community roundtables, members of affected industry, and the National Air Traffic Controllers Association (NATCA) before moving forward with the formal amendment process.” This is the first point in this “Noise Initiative” that the FAA indicates it will allow public (Community) input.

## **Summary and Recommendations:**

At the October 9, 2015 FAA Technical Exchange Meeting, extensive data was presented, particularly by Santa Cruz and Palo Alto, which showed significant shifts in SFO arrival traffic. Specifically impacting Portola Valley is) the dramatic increase in air traffic over the Peninsula in the past few years. This appears to be the result of (1) routing Pt Reyes aircraft over the peninsula instead of using the Fly Quiet Approach over the Bay and (2) aircraft being assigned routes by Air Traffic Controllers (Vectors) that place them over the Peninsula at low altitudes while executing loud maneuvering turns.

Of the items/activities listed in the FAA Action Plan document, the following are most likely to help Portola Valley:

- Sequencing and Vector Points- analyze adjusting air traffic in the vicinity of Woodside VOR. A significant reduction in the use of the airspace overlaying the Portola Valley/Palo Alto area for delay/sequencing vectors by ATC would lead to significant noise mitigation.
- Track Adjustments and Traffic Management- the offset visual approach and/or moving the runway 28L visual approach offshore offer the possibility of some noise relief. Unfortunately, no specifics as to the procedures under consideration are provided. It is unlikely that these changes will be determined to be “operationally feasible”.

The following sound potentially beneficial, but no details are provided in the FAA document to assess the potential impact on Portola Valley:

- Instrument Flight Procedures/ Altitude Adjustments- specifically raising the crossing altitude at MENLO waypoint by 1000 feet to 5000 feet.
- Equitability

These specific solutions proposed by Sky Posse Palo Alto representative Dr. Lee Christel at the October 9<sup>th</sup> Technical Meeting are likely to alleviate the traffic congestion over Portola Valley and surrounding communities and therefore are critical for the FAA to evaluate:

- Re-balance the Pt. Reyes SFO Arrivals from West (over the Peninsula) to East (over the Bay) leg
- Direct flights such as those arriving from the south (the “commuter flights”) to enter at the south end of the Bay. With the long approach over the Bay, these flights would cross over land at significantly higher altitudes.

Reviewing the published navigation procedures is in our opinion lip service which may result in a minimal if any change. The bottom line is that if the FAA continues to allow controllers to take aircraft off published arrival and departure routes and utilize the airspace over Portola Valley/Palo Alto as the preferred location to vector/sequence these aircraft into SFO, the situation will not get any better. Until

the FAA is willing to allow discussions with those knowledgeable of the day-to-day operational situation, the reasons for the increased/changed traffic flows will remain unknown. Consequently, our ability to offer viable suggestions on possible ways to mitigate these issues is severely compromised.

We recommend that Portola Valley and the cities/towns in the surrounding area who are impacted by the disproportionate increases in traffic and resultant noise over a few communities from SFO arriving flights form a group to address specific concerns within a specific timeline. The FAA has indicated that they will work with community roundtables and mentioned that they will also work with new community roundtables. We recommend that the FAA expand the definition “local Stakeholders” to include these community groups. Answers on why a shift in traffic to locations over the Peninsula has occurred and about the handling of aircraft under varying traffic and weather conditions are important to develop short- and long-term solutions.

It has been mentioned that the FAA has legal constraints relating to the Nor Cal Metroplex. The public needs to know exactly what these constraints are and how and why they are holding up communications to solve the problem. Until there is complete and honest communications between the FAA (local and regional), local community leaders and elected representatives, this will continue to be an attempt to make the noise issue “disappear” without requiring any significant change in the way the FAA currently provides ATC services.



---

## *Williams Aviation Consultants*

### **Williams Aviation Consultants, Inc. comments on The FAA Initiative to Address Noise Concerns of Santa Cruz/Santa Clara/San Mateo/San Francisco Counties and The Mountain SERFR proposal.**

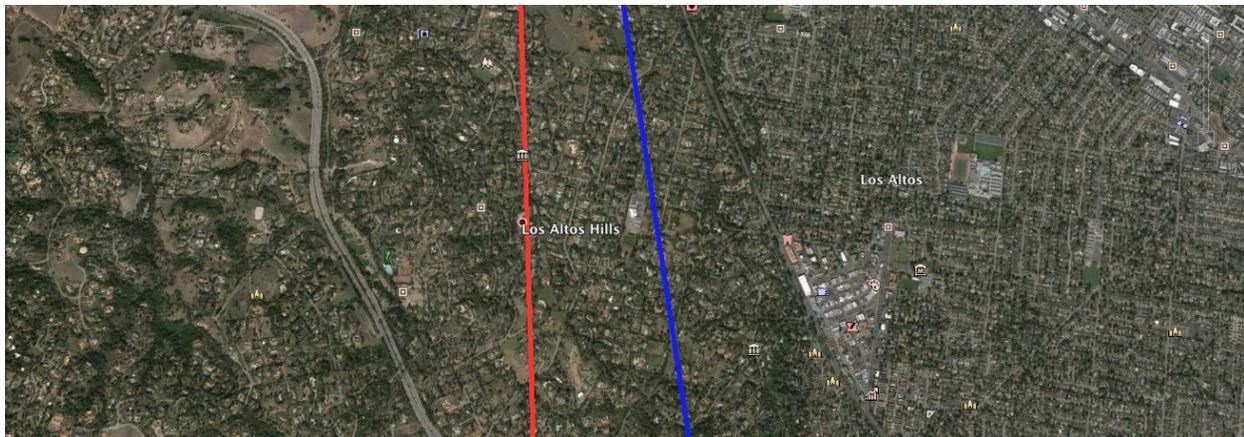
Williams Aviation Consultants, Inc. (WAC) has been retained by the Town of Los Altos Hills to analyze the FAA initiative prepared at the request of Representatives Farr, Eshoo and Speier. The document is undated and unsigned but was distributed on November 16, 2015. In addition, this document will analyze the potential impacts of the Mountain SERFR proposal submitted to the FAA by the Summit Santa Cruz Mountain Community.

#### **The Mountain SERFR proposal.**

This proposal recommends realigning the current SERFR 1/2 to the west to return to the flight profile used by the former Big Sur Arrival. In addition the proposal identifies prospective changes to the BRIXX Arrival to San Jose (SJC), the over water departure's from SFO and OAK airport and changes in the methods Air Traffic Control (ATC) uses to delay aircraft inbound to SFO.

#### **Proposed SERFR Arrival.**

The proposed SERFR Arrival moves the flight path west approximately 3.5 miles at the shoreline near Santa Cruz. The route then proceeds directly to the current MENLO intersection. The proposal also anticipates a significant increase in aircraft altitude along the route. The altitude at MENLO would be approximately 1,000 feet higher than that contained in the current procedure. As part of this proposal, it is recommended that the BRIXX Arrival to SJC be routed north of its current track and the altitude raised to remain above the proposed SERFR Arrival. The increased altitudes on the SERFR and BRIXX arrivals offer the potential of some noise relief to the residents of Los Altos Hills. Unfortunately the revised procedure moves the new flight track directly over Los Altos Hills. In the figure below, the red line shows the proposed SERFR Arrival while the blue line depicts the current procedure.



It is doubtful that the proposed change would alter or diminish the noise from SFO arriving aircraft to any significant degree. The current use of the airspace over Los Altos Hills as the preferred area to blend the various arrival flows into the required single stream of aircraft landing at SFO is the primary source of the existing noise problem. The increase in the altitude on the BRIXX Arrival to SJC offers the possibility of substantial noise reduction along that route.

The data provided on the current lack of Class B airspace containment for aircraft on the SERFR Arrival has identified a probable safety issue that will provide an incentive for the FAA to make some change to the current procedure. To assure the design of this revised procedure addresses the needs of all the various entities currently impacted by aircraft noise as well as the Air Traffic Control system, a candid discussion between community representatives/experts and the appropriate ATC personnel from Northern California TRACON (NCT) is imperative. It is only through a meeting such as this that a reduction in the use of the airspace over the peninsula for delay sequencing by ATC can be addressed.

#### **Proposed Over Water Departure's from SFO and OAK Airports.**

The proposal to redesign the over water departure procedures will provide significant relief to those communities currently experiencing such noise. As discussed later in this document the FAA readily admits that their primary customer or "stakeholder" is the airline industry. The routes proposed add some additional miles to those currently being flown so getting the airlines to support this change may not be possible. If these off shore routes were implemented, some noise reduction could be realized by residents of Los Altos Hills.

#### **Proposed Changes to ATC methods and procedures.**

The proposal makes several recommendations on changing the way the ATC system currently routes aircraft. Unfortunately, the FAA has refused to allow discussions to occur between the communities and the personnel directly responsible for the control of the aircraft flying over the peninsula. Without such dialog, a complete understanding of the issues faced by ATC and a viable compromise solution is impossible. In the October 9, 2015 meeting where this proposal was presented to the FAA, the meeting was chaired by the FAA Western/Pacific Regional Administrator. This individual is not in the chain of command of the Air Traffic Control system. A discussion with this individual on ATC matters is on a par with discussing assembly line issues with the building landlord.

#### **The FAA Initiative to Address Noise Concerns of Santa Cruz/Santa Clara/San Mateo/San Francisco Counties.**

The initiative purports to describe the actions that will be taken by the FAA to address the noise concerns identified by various community groups in the Bay Area. This "Noise Initiative" specifies three phases of activity, however only Phase one activities contain any detail on the content of the individual initiatives. Unfortunately, no completion dates are specified. The Initiative states: "During the first phase, the FAA will conduct a detailed analysis and a preliminary feasibility study focusing on flight procedures criteria and overall fly-ability of the new Performance Based Navigation (PBN) procedures, potential procedural modifications including speed/altitude adjustments, airspace changes and possibility of moving existing waypoints. An assessment of impacts to operations at the surrounding airports and associated

procedures will be completed.” Coordination with “local stakeholders” will also occur during this phase.

Unfortunately, the activities implemented by the FAA in this document only “analyze” the proposed changes. Any actual consideration of adopting the procedure is part of Phase Two. The coordination with “local stakeholders” will certainly involve the Air Carrier community but “may” include community groups/round tables. This document therefore doesn’t describe the procedures under consideration and only commits the FAA to determining if the proposed changes are technically feasible. It does not obligate the FAA to discuss the process with any community group or to provide for any follow up community input.

## **Instrument Flight Procedures:**

### **Altitude Adjustments**

The FAA will analyze raising the crossing altitude at MENLO waypoint to 5,000 feet, a 1,000 foot increase. They also mention raising the floor on the BRIXX arrival to SJC but do not mention any specific waypoint(s) or altitudes. The FAA also plans to analyze the impact of “altitude adjustments” to the SSTIK, WESLA and CNDLE departures but fail to provide specifics of the changes proposed. The proposed increase in altitude at MENLO might provide some noise reduction, albeit minor, to Los Altos Hills. It is unlikely that the small increases in altitude specified (1000 feet) will offer any relief to those impacted by the current overflight condition. To assure the design of any revised procedure addresses the needs of all the various entities currently impacted by aircraft noise as well as the Air Traffic Control system, a candid discussion between community representatives/experts and the appropriate ATC personnel from Northern California TRACON (NCT) is imperative.

### **Track Adjustments**

The FAA will analyze moving the SSTIK and PORTE departures “more” over water. In addition they will look at “reducing the impacts” of the SSTIK, WESLA and CNDLE departures. Any routing over water should reduce impacts on residents. Unfortunately the FAA has not provided the specifics of the procedures to be analyzed so a viable determination of impact cannot be made. The same lack of specific data also applies to the changes proposed for visual approach procedures. The offset visual approach and/or moving of the runway 28L visual approach offshore offer potential benefit to the residents of Los Altos Hills but the lack of detail makes quantitative analysis impossible. The existence of an unpublished visual approach procedure is problematic. A review of the procedure is not possible because it is not readily available. If the procedure is viable and environmentally friendly, the FAA should publish it. If not, it should be cancelled.

### **Waypoint Adjustments**

The FAA will analyze waypoint changes on the SERFR arrival. As previously stated, if these resemble those contained in the Summit Santa Cruz Mountain Community proposal there is potential adverse impact to the residents of Los Alto Hills. The FAA will also analyze adjusting the PORTE departure to “maximize” off shore routing. Again, the FAA has not provided the specifics of the procedure to be analyzed so the impact of this change cannot be determined. If

the revised PORTE departure track remained offshore and west of Woodside, some noise relief might occur for residents of areas impacted by current procedures.

### **Speed Adjustments**

The issues to be analyzed have little if any impact on Los Altos Hills. The issue of compliance with the 250 knot rule for aircraft operating below 10,000 feet is not appropriate for this analysis. This is solely an issue of pilot compliance with an existing rule (FAR).

### **Holding Patterns**

The proposed holding pattern change on the SERFR arrival has no impact on Los Altos Hills as aircraft do not currently hold over the town.

### **PBN Procedures**

While the FAA states it will analyze the “proposed PBN arrival procedures from local community groups” they fail to provide any data as to the specifics of those procedures. The one proposal for “new SFO RNP approaches that will serve Runways 28 L/R that follow the Big Sur ground track, curved out over the Bay crossing MENLO at 5000-6000 feet” could be good or bad for the residents of Los Altos Hills depending on the location and direction of the “curve”. The lack of detail in the plans being analyzed makes a determination of localized impact impossible.

### **Air Traffic Control:**

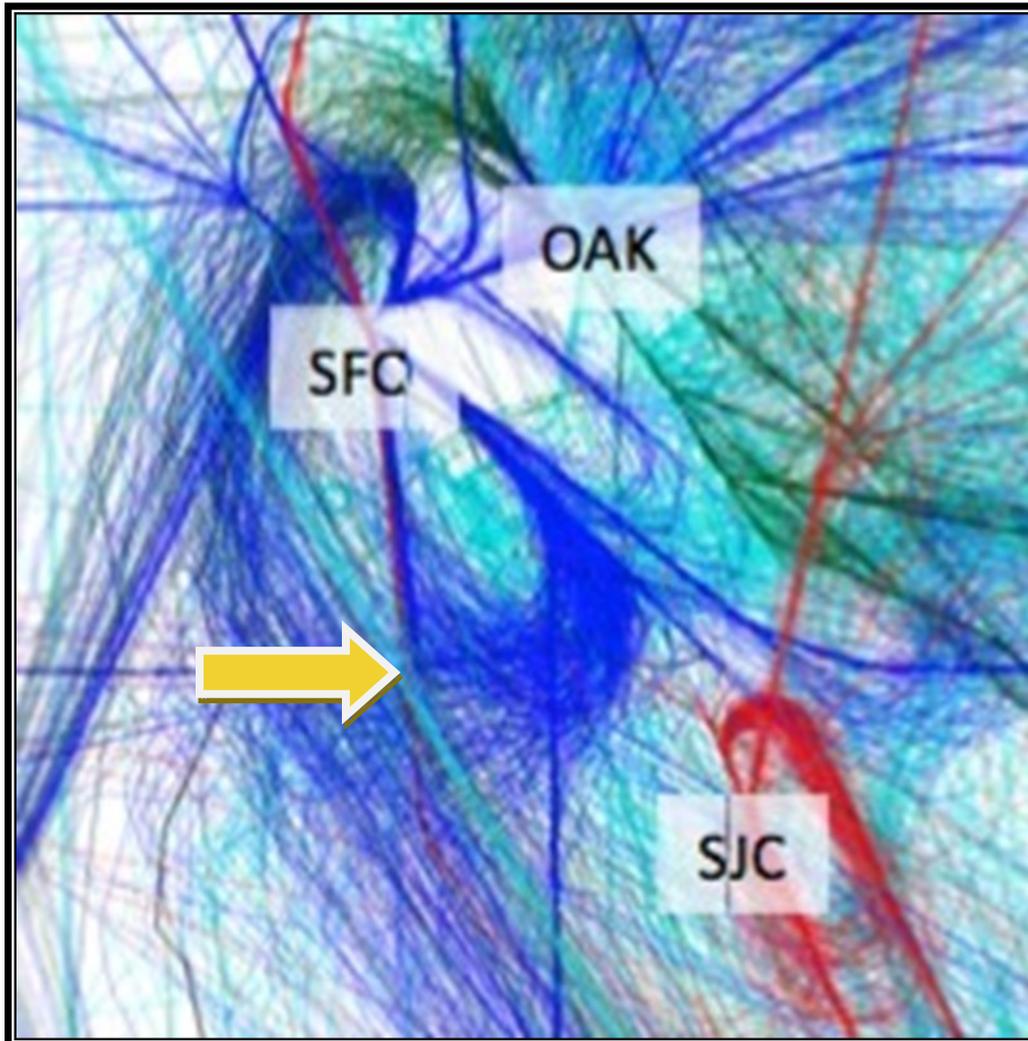
As part of this analysis the FAA will have the Western Service Center (Seattle) “work with” the local Air Traffic Control (ATC) facilities to determine if operations can be modified. During the October 9 FAA briefing of community representatives in San Jose, the FAA specifically prohibited any discussion of local procedures and stated that the local ATC folks would not be allowed to meet with us. . Unfortunately, the FAA’s refusal to allow discussions to occur between the communities and the personnel directly responsible for the control of the aircraft flying over the peninsula precludes a complete understanding of the issues faced by ATC and the development of a viable compromise solution. It now appears the agenda for these discussions will be developed and conducted in house. The FAA states that after it is determined changes can be made, “the SFO community roundtable may need to be engaged”. This is the complete opposite of an enlightened approach.

### **Sequencing and Vector Points**

The FAA plans to “analyze adjusting air traffic activity in the vicinity of Woodside VOR including altitudes”. This activity, if done in concert with community representatives is the only viable method of mitigating the most significant noise issues currently experienced by the residents of Los Altos Hills. Unfortunately, the community representative part is not in the FAA plan.

In the following graphic the blue teardrop shape extending from SFO southeastward towards SJC are the radar tracks of aircraft landing at SFO from departure airports in the north and northwest via the west leg of the Pt Reyes route. It is these aircraft along with the aircraft inbound on other routes (SEFER, Oceanic Arrivals as well as aircraft inbound from the east during poor weather conditions) that are placed on delaying radar vectors and sequenced with those inbound from the north that cause the greatest disruption to Los Altos Hills residents. This is also where the

greatest benefit can be obtained by direct dialog between community representatives and FAA ATC personnel.



**Use of Descend Via**

The lack of the specific changes anticipated makes any analysis of community impact impossible.

**Class B Containment**

The analysis of any data to determine trends and risks associated with Class B containment have no bearing on this study. The existing procedures should be modified to assure aircraft are contained in the Class B airspace. Modification of the Class B airspace only will allow aircraft to continue to operate at relatively low altitudes. In either case, there is minimal impact anticipated on LOS Altos Hills. The data provided in the Summit Santa Cruz Mountain Community proposal on the current lack of Class B airspace containment for aircraft on the SERFR Arrival has identified a probable safety issue that will provide an incentive for the FAA to make some change to the current procedure. To assure the design of this revised procedure addresses the needs of all the various entities currently impacted by aircraft noise as well as the Air Traffic

Control system, a candid discussion between community representatives/experts and the appropriate ATC personnel from Northern California TRACON (NCT) is imperative. It is only through a meeting such as this that a reduction in the use of the airspace over the peninsula for delay sequencing by ATC can be addressed.

### **Speed Brakes**

The use of Speed Brakes and other surface controls is outside the purview of the Air Traffic Control system. These devices are used by air crews to adjust speed and descent rates. While ATC can impact their use, they have no control over the air crew's actions.

### **Runway Usage**

The FAA plan to study runway usage is simply put, confusing. They plan on studying the increased use of runway 10 but fail to mention if they are talking about arriving or departing aircraft. Runway 10 is, because of high approach minimums, virtually unusable for air carrier arrivals. If the plan anticipates an ability to use Runway 10 for departures more than is done currently, the normal Runway 28 L & R arrival situation would need to be altered. Runways 1L and 1R are the primary departure runways during normal wind conditions. These runways also place aircraft over open water after takeoff. Any change to existing runway usage is likely to cause far more disruption than will be considered acceptable. These changes would have minimal impact on Los Altos Hills.

### **Instrument Flight Procedures**

The changes in departure procedures/usage proposed offer no detail as to the actual difference with current operations. The offset visual approach offers potential benefit to the residents of Los Altos Hills but, again, no detailed data is provided. This lack of detail makes quantitative analysis of these proposals impossible. The discussion of ATC handling of international flights is not an IFP issue, rather it is an issue of how these flights are handled by ATC. This issue requires the participation of the local ATC personnel.

### **Opposite Direction Operations**

This activity only proposes to "review" recent changes to and "assess" potential options for opposite direction operations. No specific information is provided and any resultant impact is therefore impossible to determine.

### **Traffic Management:**

The use of effective Traffic Management tools could, if properly utilized, provide some over flight relief to Los Alto Hills. The most significant noise impacts currently experienced by the majority of peninsula residents appears to occur during periods when the offset (LDA or Visual) approach to runway 28R is not available. During these periods, ATC appears to utilize the airspace over large areas of the peninsula south of Menlo Park to sequence via Radar vectors aircraft into the compressed runway 28L&R flow. An effective Traffic Management program during these times could eliminate or reduce the need for these vectors. The FAA states "the focus will be on the use of traffic management tools and initiative to ensure current practices are as effective and efficient as possible for the potential reduction of noise concerns". A full evaluation of the specific concerns identified by the various communities should be a point of emphasis in this analysis.

### **Equitability**

The FAA plans to review/evaluate current nighttime operations and the effect of multiple parallel RNAV procedures. They provide no specifics as to what will be actually analyzed; therefore a determination of potential impact on any given geographic area cannot be made.

### **Interactions and agreements**

A review of agreements between different ATC facilities is unlikely to provide any change to the current over flight condition in any peninsula town/city. A review of procedures internal to the handling of aircraft within Northern California TRACON (NCT) could possibly identify some potential for alleviating the traffic congestion over Los Altos Hills.

### **Time Based Flow Management**

TBFM has the potential to significantly reduce the need for the sequencing/delay vectoring which currently occurs over Los Altos Hills. Unfortunately, this technology is in the early stages of implementation. At best this may be identified as a long term aid to the reduction in over flights. A less technology-driven solution needs to be developed in concert with the personnel at NCT.

### **Nighttime Offloads/Routes**

None of the procedures/operations under review have an impact on the residents of Los Altos Hills.

### **Operators:**

The FAA plans to discuss various aircraft operations issues which potentially impact noise with various airline based entities. It appears however that the impacted communities will not be part of this process. The FAA states: Operator involvement needs to be discussed, especially if the FAA does not utilize the roundtable concept to work issues with stakeholders. These discussions, if fruitful might offer a very small amount of noise relief under very limited circumstance to the residents of the peninsula.

### **Community Engagement:**

The FAA states: “Addressing noise concerns in a densely populated and operationally complex area like Northern California is best done in a forum (such as existing and/or new roundtables) that includes community leaders and is supported by the FAA and Bay Area Airports.” Unfortunately, the FAA fails to commit to any public involvement during phase one. They have, in fact, indicated that they have no intention of allowing such participation.

### **Phase Two and Phase Three**

These phases are dependent on the outcome of Phase one. The FAA States “During the second phase, FAA will consider any amendments and/or new procedures that are determined to be initially feasible, flyable, and operationally acceptable from a safety point of view.” It's important to note that the phase one analysis result is based almost solely on fly ability and ATC acceptance. It is likely that only a handful of relatively minor changes will meet that criterion. Since the radar vector situation over the major portion of the peninsula is not a specific item in the Phase one effort, it most certainly will not be part of any Phase two activities.

The FAA also states that as part of Phase two the: “FAA will conduct the formal environmental and safety reviews, coordinate and seek feedback from existing and/or new community roundtables, members of affected industry, and the National Air Traffic Controllers Association (NATCA) before moving forward with the formal amendment process.” This is the first point in this “Noise Initiative” that the FAA indicates it will allow public (Community) input.

## **Summary:**

At the October 9, 2015 FAA Technical Exchange Meeting, extensive data was presented, particularly by Santa Cruz and Palo Alto, which showed significant shifts in SFO arrival traffic. Specifically, the data showed a dramatic increase in air traffic over the Peninsula in the past few years. This appears to be the result of (1) routing Pt Reyes aircraft over the peninsula instead of using the Approach over the Bay and (2) aircraft being assigned routes by Air Traffic Controllers (Vectors) that place them over the Peninsula at low altitudes while executing maneuvering turns.

The following items in the FAA initiative are potentially beneficial, but no details are provided in the FAA document to assess the potential impact on Los Altos Hills:

- Sequencing and Vector Points- analyze adjusting air traffic in the vicinity of Woodside VOR. The most significant noise impacts currently experienced by the majority of peninsula residents appears to occur during periods when the offset (LDA or Visual) approach to runway 28R is not available. During these periods, ATC appears to utilize the airspace over large areas of the peninsula south of Menlo Park to sequence via Radar vectors aircraft into the compressed runway 28L&R flow. An effective Traffic Management program during these times could eliminate or reduce the need for these vectors.
- Track Adjustments and Traffic Management- the offset visual approach and/or moving the runway 28L visual approach offshore offer the possibility of some noise relief. Unfortunately, no specifics as to the procedures under consideration are provided. It is unlikely that these changes will be determined to be “operationally feasible”.
- Instrument Flight Procedures/ Altitude Adjustments- specifically raising the crossing altitude at MENLO waypoint by 1000 feet to 5000 feet.
- Equitability

Reviewing the published navigation procedures is in our opinion lip service which may result in a minimal if any change. The bottom line is that if the FAA continues to allow controllers to take aircraft off published arrival and departure routes and utilize the airspace over densely populated portions of the peninsula as the preferred location to vector/sequence these aircraft into SFO, the situation will not get any better. Until the FAA is willing to allow discussions with those knowledgeable of the day-to-day operational situation, the reasons for the increased/changed traffic flows will remain unknown. Consequently, our ability to offer viable suggestions on possible ways to mitigate these issues is severely compromised.

The FAA has indicated that they will work with existing and new community roundtables. We recommend that the cities/towns that are impacted by the disproportionate increases in traffic and resultant noise from SFO arriving flights form a new group to address their specific concerns.

We also recommend that the FAA expand the definition “local Stakeholders” to include these community groups so their input can be considered in Phase 1. Direct discussions between these community groups and ATC personnel is crucial to obtaining answers as to why a shift in traffic to locations over the Peninsula has occurred and to develop short- and long-term solutions acceptable to all entities. Until there is complete and honest communications between the FAA (local and regional), local community leaders and elected representatives, this will continue to be an attempt to make the noise issue “disappear” without requiring any significant change in the way the FAA currently provides ATC services.



# City of Palo Alto

## City Council Staff Report

(ID # 6023)

---

**Report Type: Consent Calendar**

**Meeting Date: 8/24/2015**

**Summary Title: Policy & Services Committee Recommendation regarding Air Traffic and Adoption of a Resolution**

**Title: Policy & Services Committee and Staff Recommendation that the City Council Authorize a Request for Proposals for; a Technical Study of Increased Air Traffic Noise, to Designate a Council Member to act as a Liaison to Engage in Regional Mitigation and Advocacy Efforts, Adopt a Resolution Urging the Federal Aviation Administration to Address Increased Aircraft Noise in Palo Alto, and Direct Staff to Engage in Additional Outreach, Coordination and Advocacy Activities Regarding Aircraft Noise**

**From: City Manager**

**Lead Department: City Manager**

### **Recommendation**

The Policy and Services Committee recommends that the City Council approve the following motions:

1. Direct staff to issue a Request for Proposals (RFP) for a Technical Study, including data analysis of aircraft noise over Palo Alto and recommendations for alternatives to reduce noise, and return to Council with the results of the RFP by no later than December 2015.
2. Direct staff to utilize the different tri-cities meetings as a vehicle to engage and measure the interest of surrounding cities in the flight path/noise issue and to reach out to several adjacent cities as a complement.
3. Elevate aircraft noise as a City priority and request advocacy at various appropriate levels.
4. Authorize the Mayor to appoint a Council Member representative as liaison to the Sky Posse (local advocacy group) and as a non-voting representative to the Airport Round Table or its subcommittees and other regional bodies as needed.
5. Direct the City Manager to continue to work with residents.

In addition, Staff recommends that the City Council:

1. Adopt the attached Resolution to urging the Federal Aviation Administration (FAA) to address increased aircraft noise in Palo Alto.
2. Direct the City Attorney to meet with residents to review state and federal statutes and regulations, and provide information on pending legal proceedings relating to aircraft noise in other regions.

### **Background**

On February 10, 2015 the Policy & Services Committee discussed the topic of air traffic impacts on citizens of Palo Alto. The staff report discussed in detail the background of this issue and presented the Committee with a previous staff report associated with this matter. The February report also contained a letter to the Federal Aviation Administration (FAA) from the City as well as a letter to the San Francisco Airport Roundtable. It also included correspondence to the City Council from a local advocacy group, Sky Posse. At the Committee meeting, a discussed detail of the issue with the Sky Posse. The results were the recommendations listed above.

Since the February 10, 2015 meeting, staff has been working closely with Sky Posse, County of Santa Clara Supervisor Joe Simitian's Office, and United States House of Representative Anna Eshoo's Office. Specifically, Sky Posse representatives and staff created the attached scope of services for a RFP. Staff intends to issue the RFP after Council approval and return to Council by December 2015. The Policy & Services Committee recommended that Council approve \$30,000 for the technical study. Staff does not believe that the Council needs to approve funding for the study at this time. When staff returns to Council in December with the results of the RFP, staff will recommend an amount and source of funds for the study.

Staff has also been working closely with Supervisor Simitian's Office. The work has led to the attached resolution. Adopting this resolution will assist with regional and national advocacy efforts. The County of Santa Clara Board of Supervisors will review a similar resolution in August. Staff believes that Council's approval of the resolution will help Anna Eshoo in her efforts to work with the FAA.

On July 24, 2015, Congresswoman Eshoo convened a meeting with FAA Administrators to ensure that the FAA heard directly from residents and their elected representatives. The meeting was successful in that the FAA acknowledged an increase in complaints and committed to continue to gather input from the region. They also agreed to return to the region for additional meetings and encouraged elected officials to continue to work with San Francisco Airport and the Roundtable. In addition to the meeting, Congresswoman Eshoo has sent FAA Administrator several letters in her role as member of the Quiet Sky Caucus.

### **Discussion**

Staff is appreciative of the efforts by the Congresswoman Eshoo, Supervisor Simitian, their staff and the Sky Posse. Staff continues to recommend a steady approach of being responsive to our residents' concerns while working with our neighboring cities, the Association of Bay Area Governments, San Francisco International Airport, the SFO Airport/Community Roundtable,

County of Santa Clara and the United States Congress. Staff does want to caution the community that cities have a limited role in the area of airspace and that this resource is governed by the federal government.

The proposed scope of services described in the RFP is largely focused on quantifying the change in air traffic patterns that has occurred over Palo Alto over the past few years, and specifically the dramatic increase in concentrated, low-altitude flights and associated noise levels. Recognizing that this issue may fall outside the FAA's conventional metrics for determining adverse impacts, the scope of services should retain the flexibility to accommodate alternative approaches. Staff believes that by the time the results of the RFP return to Council, there will be further developments from the FAA's input gathering phase.

Additionally, with Council's appointment of a liaison to Sky Posse on this matter, greater alignment and consensus building on next steps is possible. This includes engagement with other communities throughout the Bay Area, which will be supported by the Santa Clara County Board of Supervisors.

### **Resource Impact**

Staff will return to Council with the results of the RFP which could require a Budget Amendent Ordinance for contract services. Staff time is another resources impact and reallocation or a request for additional staff resources could come before the Council as part of the FY16 mid-year budget or as part of the FY17 budget. Staff will have further information about this element when the results of the RFP return to Council.

### **Attachments:**

- Attachment A: Reso Urging FAA to address increased aircraft noise v2 (PDF)
- Attachment B - Scope of Work for RFP (DOCX)
- Attachment C - April 10, 2015 Eshoo Letter to FAA Administrator (PDF)
- Attachment D - April 15, 2015 Eshoo and Farr Letter to FAA(PDF)
- Attachment E - June 15, 2015 Quiet Skies Caucus Letter (PDF)
- Attachment F - February 10, 2015 P&S Staff Report (PDF)
- Attachment G - February 10, 2015 P&S Final Minutes (PDF)
- Attachment H - ABAG Regional Airport Committee Roster (PDF)
- Attachment I - Public Letters to Council (PDF)



# City of Palo Alto

## Policy and Services Committee Staff Report

(ID # 5517)

---

**Report Type: Agenda Items**

**Meeting Date: 2/10/2015**

**Summary Title: Discussion about Air Traffic Over Palo Alto Skies**

**Title: Discussion and Direction to City Manager Regarding Air Traffic Noise Impacts on Palo Alto Citizens**

**From: City Manager**

**Lead Department: City Manager**

### **Recommendation**

Staff recommends that the Policy & Services Committee recommend to the City Council to direct the City Manager to continue to work with residents, to utilize the City's federal legislative consultants, and to work with neighboring cities, counties and other governmental organizations on a regional approach in advocacy to the Federal Aviation Administration (FAA).

### **Background**

On October 6, 2014, City Council referred the topic airplane noise to the Policy & Services Committee for discussion. This was due to the October 1, 2014 decision of the San Francisco International Airport Community Roundtable (Roundtable) to only allow the City to participate as a nonvoting member. Prior to this decision, on April 29, 2014, staff presented City Council with a report about the [FAA Draft Environmental Assessment](#) (EA). The report included letters from Congresswoman Eshoo, former Mayor Shepherd and City Manager Keene where they requested a 60 day extension for comment period on the EA.

At April 29, 2014 meeting, City Council decided to contact the FAA and Roundtable. Therefore, on May 2, 2014, the City issued a letter to the FAA presenting a list of comments and concerns. Additionally, Council sought to join the Roundtable and on May 29, 2014 the City submitted this request to the Roundtable Chair. On June 5, 2014 concerned residents met with City Manager Keene to further discuss the noise problem, to discuss the EA, to inform staff about political initiatives to abate noise and to propose immediate actions to reduce noise. Over the next several months, staff began working with residents on their questions and requests. In July 2014, the FAA issued the "Finding No Significant Impact and Record of Decision," which can also be found at the link above. This decision was not favorable to the City, therefore, staff continued to meet with residents.

The City pursued membership on joining the Roundtable. However, on October 1, 2014 the City was notified that it could only participate as a nonvoting member. On October 24, 2014 the Palo Alto Weekly published two articles titled, “Unfriendly skies: Residents, city officials gear up to fight increased airplane noise” and “Making a noise: Government officials attempt to influence aircraft regulations.” These articles provide a perspective into the history and sense of the community’s actions. They reference key documents such as the Anna Eshoo letter from 2000, the Grand Jury Report about the Roundtable, and the September 12, 2014 letter from 26 Congress members to FAA Administrator. On December 10, 2014, the resident group referred to as Sky Posse Palo Alto, sent City Council a letter. In response to the Roundtable decision and in preparation for the Policy and Services Committee, staff from the City Manager’s Office met with Sky Posse representatives on several occasions. Attached is the presentation prepared by Sky Posse for the committee.

### **Discussion**

Staff recommends a steady approach of continuing to work on behalf of our residents in regional and federal advocacy regarding airplane noise. Staff is aware that cities have a limited role in the area of airspace and that this resource is administered by the federal government. Staff believes that utilizing our federal legislative consultants to work with the federal agencies, elected officials and the newly created Congressional Quiet Skies Caucus would be an appropriate use of City resources. Additionally, joining neighboring cities to discuss regional approaches would also assist with advancing Sky Posse’s goals. This action can take many forms such as meeting with San Mateo County cities, continuing to attend the Roundtable as a non-voting member, and/or working with our neighbors in Santa Clara County to create a new Roundtable. Additionally, the City can encourage the Association of Bay Area Government’s Regional Airport Planning Committee (RAPC) to convene and participate in the meetings. Finally, Sky Posse has suggested the hiring of a consultant. Staff is uncertain about the cost and benefits of this proposal.

Staff believes that the proposed recommendation will continue to advance our citizen’s goals. Through the actions mentioned above and proposed actions, staff has acknowledged the airplane noise problem, prioritized it and is willing to continue to assist our citizens with advocacy at the regional and national level.

### **Resource Impact**

Staff time and possible contract dollars are impacts to the General Fund.

#### **Attachments:**

- -: 4-29-14 Staff Report (PDF)
- -: 4-29-14 City Council Meeting Minutes (PDF)
- -: 5-2-14 Mayor's Letter to FAA (PDF)
- -: 5-29-14 Mayor's Letter to Roundtable (PDF)
- -: 10-24-14 PA Weekly Article (PDF)
- -: 5-12-2000 Anna Eshoo Letter (PDF)
- -: San Mateo Grand Jury Report(PDF)

- -: 9-12-14 Congressional letter for FAA reform (PDF)
- -: 12-10-14 - Letter from SkyPosse to City Council (PDF)
- -: Sky Posse Palo Alto Presentation (PDF)

**CITY OF PALO ALTO CONTRACT NO. C16161182  
AGREEMENT BETWEEN THE CITY OF PALO ALTO AND  
FREYTAG & ASSOCIATES, LLC. FOR PROFESSIONAL SERVICES**

This Agreement is entered into on this 8<sup>th</sup> day of February, 2016, (“Agreement”) by and between the CITY OF PALO ALTO, a California chartered municipal corporation (“CITY”), and FREYTAG & ASSOCIATES, LLC., a California Limited Liability Company, located at 925 Cresta Way, Ste. 9, San Rafael, California, 94903 (“CONSULTANT”).

**RECITALS**

The following recitals are a substantive portion of this Agreement.

A. CITY intends to assess the history of air traffic patterns over the Northern California (NorCal) Metroplex (“Project”) and desires to engage a consultant to provide services in connection with the Project (“Services”).

B. CONSULTANT has represented that it has the necessary professional expertise, qualifications, and capability, and all required licenses and/or certifications to provide the Services.

C. CITY in reliance on these representations desires to engage CONSULTANT to provide the Services as more fully described in Exhibit “A”, attached to and made a part of this Agreement.

NOW, THEREFORE, in consideration of the recitals, covenants, terms, and conditions, in this Agreement, the parties agree:

**AGREEMENT**

**SECTION 1. SCOPE OF SERVICES.** CONSULTANT shall perform the Services described at Exhibit “A” in accordance with the terms and conditions contained in this Agreement. The performance of all Services shall be to the reasonable satisfaction of CITY.

**SECTION 2. TERM.**

The term of this Agreement shall be from the date of its full execution through December 31, 2017 unless terminated earlier pursuant to Section 19 of this Agreement.

**SECTION 3. SCHEDULE OF PERFORMANCE.** Time is of the essence in the performance of Services under this Agreement. CONSULTANT shall complete the Services within the term of this Agreement and in accordance with the schedule set forth in Exhibit “B”, attached to and made a part of this Agreement. Any Services for which times for performance are not specified in this Agreement shall be commenced and completed by CONSULTANT in a reasonably prompt and timely manner based upon the circumstances and direction communicated to the CONSULTANT. CITY’s agreement to extend the term or the schedule for performance shall not preclude recovery of damages for delay if the extension is required due to the fault of CONSULTANT.

**SECTION 4. NOT TO EXCEED COMPENSATION.** The compensation to be paid to CONSULTANT for performance of the Services described in Exhibit “A”, including both payment for professional services and reimbursable expenses, shall not exceed Two Hundred Thirty Seven Thousand Five Hundred Dollars (\$237,500.00). The applicable rates and schedule of payment are set out at Exhibit “C-1”, entitled “HOURLY RATE SCHEDULE,” which is attached to and made a part of this Agreement.

Additional Services, if any, shall be authorized in accordance with and subject to the provisions of Exhibit “C”. CONSULTANT shall not receive any compensation for Additional Services performed without the prior written authorization of CITY. Additional Services shall mean any work that is determined by CITY to be necessary for the proper completion of the Project, but which is not included within the Scope of Services described at Exhibit “A”.

**SECTION 5. INVOICES.** In order to request payment, CONSULTANT shall submit monthly invoices to the CITY describing the services performed and the applicable charges (including an identification of personnel who performed the services, hours worked, hourly rates, and reimbursable expenses), based upon the CONSULTANT’s billing rates (set forth in Exhibit “C-1”). If applicable, the invoice shall also describe the percentage of completion of each task. The information in CONSULTANT’s payment requests shall be subject to verification by CITY. CONSULTANT shall send all invoices to the City’s project manager at the address specified in Section 13 below. The City will generally process and pay invoices within thirty (30) days of receipt.

**SECTION 6. QUALIFICATIONS/STANDARD OF CARE.** All of the Services shall be performed by CONSULTANT or under CONSULTANT’s supervision. CONSULTANT represents that it possesses the professional and technical personnel necessary to perform the Services required by this Agreement and that the personnel have sufficient skill and experience to perform the Services assigned to them. CONSULTANT represents that it, its employees and subconsultants, if permitted, have and shall maintain during the term of this Agreement all licenses, permits, qualifications, insurance and approvals of whatever nature that are legally required to perform the Services.

All of the services to be furnished by CONSULTANT under this agreement shall meet the professional standard and quality that prevail among professionals in the same discipline and of similar knowledge and skill engaged in related work throughout California under the same or similar circumstances.

**SECTION 7. COMPLIANCE WITH LAWS.** CONSULTANT shall keep itself informed of and in compliance with all federal, state and local laws, ordinances, regulations, and orders that may affect in any manner the Project or the performance of the Services or those engaged to perform Services under this Agreement. CONSULTANT shall procure all permits and licenses, pay all charges and fees, and give all notices required by law in the performance of the Services.

**SECTION 8. ERRORS/OMISSIONS.** CONSULTANT shall correct, at no cost to CITY, any and all errors, omissions, or ambiguities in the work product submitted to CITY, provided CITY gives notice to CONSULTANT. If CONSULTANT has prepared plans and specifications or other design documents to construct the Project, CONSULTANT shall be obligated to correct any and all errors, omissions or ambiguities discovered prior to and during the course of

construction of the Project. This obligation shall survive termination of the Agreement.

**SECTION 9. COST ESTIMATES.** If this Agreement pertains to the design of a public works project, CONSULTANT shall submit estimates of probable construction costs at each phase of design submittal. If the total estimated construction cost at any submittal exceeds ten percent (10%) of CITY's stated construction budget, CONSULTANT shall make recommendations to CITY for aligning the PROJECT design with the budget, incorporate CITY approved recommendations, and revise the design to meet the Project budget, at no additional cost to CITY.

**SECTION 10. INDEPENDENT CONTRACTOR.** It is understood and agreed that in performing the Services under this Agreement CONSULTANT, and any person employed by or contracted with CONSULTANT to furnish labor and/or materials under this Agreement, shall act as and be an independent contractor and not an agent or employee of CITY.

**SECTION 11. ASSIGNMENT.** The parties agree that the expertise and experience of CONSULTANT are material considerations for this Agreement. CONSULTANT shall not assign or transfer any interest in this Agreement nor the performance of any of CONSULTANT's obligations hereunder without the prior written consent of the city manager. Consent to one assignment will not be deemed to be consent to any subsequent assignment. Any assignment made without the approval of the city manager will be void.

**SECTION 12. SUBCONTRACTING.** Notwithstanding Section 11 above, CITY agrees that subconsultants may be used to complete the Services. The subconsultants authorized by CITY to perform work on this Project are:

Hughes AV  
10 Alicante  
Coto de Caza, CA. 92679

Clayton Smith Consulting  
79 Barton Road  
Edgewood, NM. 87015

CSDA Design Group  
475 Samsome Street, Suite 800  
San Francisco, CA. 94111

CONSULTANT shall be responsible for directing the work of any subconsultants and for any compensation due to subconsultants. CITY assumes no responsibility whatsoever concerning compensation. CONSULTANT shall be fully responsible to CITY for all acts and omissions of a subconsultant. CONSULTANT shall change or add subconsultants only with the prior approval of the city manager or his designee.

**SECTION 13. PROJECT MANAGEMENT.** CONSULTANT will assign John Freytag as the Project Manager to have supervisory responsibility for the performance, progress, and execution of the Services and to represent CONSULTANT during the day-to-day work on the Project. If circumstances cause the substitution of the project director, project coordinator, or any

other key personnel for any reason, the appointment of a substitute project director and the assignment of any key new or replacement personnel will be subject to the prior written approval of the CITY's project manager. CONSULTANT, at CITY's request, shall promptly remove personnel who CITY finds do not perform the Services in an acceptable manner, are uncooperative, or present a threat to the adequate or timely completion of the Project or a threat to the safety of persons or property.

CITY's project manager is Khashayar Allaei, City Manager's Office, 250 Hamilton Avenue, Palo Alto, CA 94303, Telephone: (650) 329-2230. The project manager will be CONSULTANT's point of contact with respect to performance, progress and execution of the Services. CITY may designate an alternate project manager from time to time.

**SECTION 14. OWNERSHIP OF MATERIALS.** Upon delivery, all work product, including without limitation, all writings, drawings, plans, reports, specifications, calculations, documents, other materials and copyright interests developed under this Agreement shall be and remain the exclusive property of CITY without restriction or limitation upon their use. CONSULTANT agrees that all copyrights which arise from creation of the work pursuant to this Agreement shall be vested in CITY, and CONSULTANT waives and relinquishes all claims to copyright or other intellectual property rights in favor of the CITY. Neither CONSULTANT nor its contractors, if any, shall make any of such materials available to any individual or organization without the prior written approval of the City Manager or designee. CONSULTANT makes no representation of the suitability of the work product for use in or application to circumstances not contemplated by the scope of work.

**SECTION 15. AUDITS.** CONSULTANT will permit CITY to audit, at any reasonable time during the term of this Agreement and for three (3) years thereafter, CONSULTANT's records pertaining to matters covered by this Agreement. CONSULTANT further agrees to maintain and retain such records for at least three (3) years after the expiration or earlier termination of this Agreement.

**SECTION 16. INDEMNITY.**

16.1. To the fullest extent permitted by law, CONSULTANT shall protect, indemnify, defend and hold harmless CITY, its Council members, officers, employees and agents (each an "Indemnified Party") from and against any and all demands, claims, or liability of any nature, including death or injury to any person, property damage or any other loss, including all costs and expenses of whatever nature including attorneys fees, experts fees, court costs and disbursements ("Claims") resulting from, arising out of or in any manner related to performance or nonperformance by CONSULTANT, its officers, employees, agents or contractors under this Agreement, regardless of whether or not it is caused in part by an Indemnified Party.

16.2. Notwithstanding the above, nothing in this Section 16 shall be construed to require CONSULTANT to indemnify an Indemnified Party from Claims arising from the active negligence, sole negligence or willful misconduct of an Indemnified Party.

16.3. The acceptance of CONSULTANT's services and duties by CITY shall not operate as a waiver of the right of indemnification. The provisions of this Section 16 shall

survive the expiration or early termination of this Agreement.

**SECTION 17. WAIVERS.** The waiver by either party of any breach or violation of any covenant, term, condition or provision of this Agreement, or of the provisions of any ordinance or law, will not be deemed to be a waiver of any other term, covenant, condition, provisions, ordinance or law, or of any subsequent breach or violation of the same or of any other term, covenant, condition, provision, ordinance or law.

**SECTION 18. INSURANCE.**

18.1. CONSULTANT, at its sole cost and expense, shall obtain and maintain, in full force and effect during the term of this Agreement, the insurance coverage described in Exhibit "D". CONSULTANT and its contractors, if any, shall obtain a policy endorsement naming CITY as an additional insured under any general liability or automobile policy or policies.

18.2. All insurance coverage required hereunder shall be provided through carriers with AM Best's Key Rating Guide ratings of A-VII or higher which are licensed or authorized to transact insurance business in the State of California. Any and all contractors of CONSULTANT retained to perform Services under this Agreement will obtain and maintain, in full force and effect during the term of this Agreement, identical insurance coverage, naming CITY as an additional insured under such policies as required above.

18.3. Certificates evidencing such insurance shall be filed with CITY concurrently with the execution of this Agreement. The certificates will be subject to the approval of CITY's Risk Manager and will contain an endorsement stating that the insurance is primary coverage and will not be canceled, or materially reduced in coverage or limits, by the insurer except after filing with the Purchasing Manager thirty (30) days' prior written notice of the cancellation or modification. If the insurer cancels or modifies the insurance and provides less than thirty (30) days' notice to CONSULTANT, CONSULTANT shall provide the Purchasing Manager written notice of the cancellation or modification within two (2) business days of the CONSULTANT's receipt of such notice. CONSULTANT shall be responsible for ensuring that current certificates evidencing the insurance are provided to CITY's Chief Procurement Officer during the entire term of this Agreement.

18.4. The procuring of such required policy or policies of insurance will not be construed to limit CONSULTANT's liability hereunder nor to fulfill the indemnification provisions of this Agreement. Notwithstanding the policy or policies of insurance, CONSULTANT will be obligated for the full and total amount of any damage, injury, or loss caused by or directly arising as a result of the Services performed under this Agreement, including such damage, injury, or loss arising after the Agreement is terminated or the term has expired.

**SECTION 19. TERMINATION OR SUSPENSION OF AGREEMENT OR SERVICES.**

19.1. The City Manager may suspend the performance of the Services, in whole or in part, or terminate this Agreement, with or without cause, by giving ten (10) days prior written notice thereof to CONSULTANT. Upon receipt of such notice, CONSULTANT will

immediately discontinue its performance of the Services.

19.2. CONSULTANT may terminate this Agreement or suspend its performance of the Services by giving thirty (30) days prior written notice thereof to CITY, but only in the event of a substantial failure of performance by CITY.

19.3. Upon such suspension or termination, CONSULTANT shall deliver to the City Manager immediately any and all copies of studies, sketches, drawings, computations, and other data, whether or not completed, prepared by CONSULTANT or its contractors, if any, or given to CONSULTANT or its contractors, if any, in connection with this Agreement. Such materials will become the property of CITY.

19.4. Upon such suspension or termination by CITY, CONSULTANT will be paid for the Services rendered or materials delivered to CITY in accordance with the scope of services on or before the effective date (i.e., 10 days after giving notice) of suspension or termination; provided, however, if this Agreement is suspended or terminated on account of a default by CONSULTANT, CITY will be obligated to compensate CONSULTANT only for that portion of CONSULTANT's services which are of direct and immediate benefit to CITY as such determination may be made by the City Manager acting in the reasonable exercise of his/her discretion. The following Sections will survive any expiration or termination of this Agreement: 14, 15, 16, 19.4, 20, and 25.

19.5. No payment, partial payment, acceptance, or partial acceptance by CITY will operate as a waiver on the part of CITY of any of its rights under this Agreement.

**SECTION 20. NOTICES.**

All notices hereunder will be given in writing and mailed, postage prepaid, by certified mail, addressed as follows:

To CITY:                      Office of the City Clerk  
   City of Palo Alto  
   Post Office Box 10250  
   Palo Alto, CA 94303

With a copy to the Purchasing Manager

To CONSULTANT: Attention of the project director  
   at the address of CONSULTANT recited above

**SECTION 21. CONFLICT OF INTEREST.**

21.1. In accepting this Agreement, CONSULTANT covenants that it presently has no interest, and will not acquire any interest, direct or indirect, financial or otherwise, which would conflict in any manner or degree with the performance of the Services.

21.2. CONSULTANT further covenants that, in the performance of this Agreement, it will not employ subconsultants, contractors or persons having such an interest.

CONSULTANT certifies that no person who has or will have any financial interest under this Agreement is an officer or employee of CITY; this provision will be interpreted in accordance with the applicable provisions of the Palo Alto Municipal Code and the Government Code of the State of California.

21.3. If the Project Manager determines that CONSULTANT is a “Consultant” as that term is defined by the Regulations of the Fair Political Practices Commission, CONSULTANT shall be required and agrees to file the appropriate financial disclosure documents required by the Palo Alto Municipal Code and the Political Reform Act.

**SECTION 22. NONDISCRIMINATION.** As set forth in Palo Alto Municipal Code section 2.30.510, CONSULTANT certifies that in the performance of this Agreement, it shall not discriminate in the employment of any person because of the race, skin color, gender, age, religion, disability, national origin, ancestry, sexual orientation, housing status, marital status, familial status, weight or height of such person. CONSULTANT acknowledges that it has read and understands the provisions of Section 2.30.510 of the Palo Alto Municipal Code relating to Nondiscrimination Requirements and the penalties for violation thereof, and agrees to meet all requirements of Section 2.30.510 pertaining to nondiscrimination in employment.

**SECTION 23. ENVIRONMENTALLY PREFERRED PURCHASING AND ZERO WASTE REQUIREMENTS.** CONSULTANT shall comply with the CITY’s Environmentally Preferred Purchasing policies which are available at CITY’s Purchasing Department, incorporated by reference and may be amended from time to time. CONSULTANT shall comply with waste reduction, reuse, recycling and disposal requirements of CITY’s Zero Waste Program. Zero Waste best practices include first minimizing and reducing waste; second, reusing waste and third, recycling or composting waste. In particular, CONSULTANT shall comply with the following zero waste requirements:

- All printed materials provided by CCONSULTANT to CITY generated from a personal computer and printer including but not limited to, proposals, quotes, invoices, reports, and public education materials, shall be double-sided and printed on a minimum of 30% or greater post-consumer content paper, unless otherwise approved by CITY’s Project Manager. Any submitted materials printed by a professional printing company shall be a minimum of 30% or greater post-consumer material and printed with vegetable based inks.
- Goods purchased by CONSULTANT on behalf of CITY shall be purchased in accordance with CITY’s Environmental Purchasing Policy including but not limited to Extended Producer Responsibility requirements for products and packaging. A copy of this policy is on file at the Purchasing Division’s office.
- Reusable/returnable pallets shall be taken back by CONSULTANT, at no additional cost to CITY, for reuse or recycling. CONSULTANT shall provide documentation from the facility accepting the pallets to verify that pallets are not being disposed.

**SECTION 24. NON-APPROPRIATION**

24.1. This Agreement is subject to the fiscal provisions of the Charter of the City of Palo Alto and the Palo Alto Municipal Code. This Agreement will terminate without any penalty (a) at the end of any fiscal year in the event that funds are not appropriated for the

following fiscal year, or (b) at any time within a fiscal year in the event that funds are only appropriated for a portion of the fiscal year and funds for this Agreement are no longer available. This section shall take precedence in the event of a conflict with any other covenant, term, condition, or provision of this Agreement.

**SECTION 25. MISCELLANEOUS PROVISIONS.**

25.1. This Agreement will be governed by the laws of the State of California.

25.2. In the event that an action is brought, the parties agree that trial of such action will be vested exclusively in the state courts of California in the County of Santa Clara, State of California.

25.3. The prevailing party in any action brought to enforce the provisions of this Agreement may recover its reasonable costs and attorneys' fees expended in connection with that action. The prevailing party shall be entitled to recover an amount equal to the fair market value of legal services provided by attorneys employed by it as well as any attorneys' fees paid to third parties.

25.4. This document represents the entire and integrated agreement between the parties and supersedes all prior negotiations, representations, and contracts, either written or oral. This document may be amended only by a written instrument, which is signed by the parties.

25.5. The covenants, terms, conditions and provisions of this Agreement will apply to, and will bind, the heirs, successors, executors, administrators, assignees, and consultants of the parties.

25.6. If a court of competent jurisdiction finds or rules that any provision of this Agreement or any amendment thereto is void or unenforceable, the unaffected provisions of this Agreement and any amendments thereto will remain in full force and effect.

25.7. All exhibits referred to in this Agreement and any addenda, appendices, attachments, and schedules to this Agreement which, from time to time, may be referred to in any duly executed amendment hereto are by such reference incorporated in this Agreement and will be deemed to be a part of this Agreement.

25.8 If, pursuant to this contract with CONSULTANT, CITY shares with CONSULTANT personal information as defined in California Civil Code section 1798.81.5(d) about a California resident ("Personal Information"), CONSULTANT shall maintain reasonable and appropriate security procedures to protect that Personal Information, and shall inform City immediately upon learning that there has been a breach in the security of the system or in the security of the Personal Information. CONSULTANT shall not use Personal Information for direct marketing purposes without City's express written consent.

25.9 All unchecked boxes do not apply to this agreement.

25.10 The individuals executing this Agreement represent and warrant that they have the legal capacity and authority to do so on behalf of their respective legal entities.

25.11 This Agreement may be signed in multiple counterparts, which shall, when executed by all the parties, constitute a single binding agreement

IN WITNESS WHEREOF, the parties hereto have by their duly authorized representatives executed this Agreement on the date first above written.

**CITY OF PALO ALTO**

**FREYTAG & ASSOCIATES, LLC.**

DocuSigned by:  
*Jack Freytag*  
7C429A52973744C...

President

APPROVED AS TO FORM:

Attachments:

EXHIBIT "A": SCOPE OF WORK  
EXHIBIT "B": SCHEDULE OF PERFORMANCE  
EXHIBIT "C": COMPENSATION  
EXHIBIT "C-1": SCHEDULE OF RATES  
EXHIBIT "D": INSURANCE REQUIREMENTS

## **EXHIBIT "A"** **SCOPE OF SERVICES**

The scope of services below provides details describing each task. As circumstances with Federal Aviation Administration and United States Congress progress, CITY staff and CONSULTANT may update tasks to adapt to current market conditions. Additionally as work on Historical Operations and Noise Assessments begin CITY staff and CONSULTANT may amend specific outputs. The descriptions below are intended to provide a framework for the activity. CONSULTANT will not begin tasks until work order is issued by CITY.

### **Task 1: Historical Operations Assessment**

- 1 Database preparation and mock data output  
CONSULTANT shall generate sample 'mock' outputs of data deliverables so that all parties understand what the deliverables will look like and that they are acceptable.
  - 1.1 Data Base import and customization
  - 1.2 Initial mapping developed
  - 1.3 Develop 5x5 boxes, per 1000 feet
  - 1.4 Heat Maps for SFO, SJC & OAK
  - 1.5 SFO arrivals (36 graphic & database outputs)
  - 1.6 SJC arrivals (36 graphic and database outputs)
  - 1.7 OAK Arrivals (36 graphic and database outputs)
  - 1.8 Customize database to include Airport runway usage
  
- 2 Cell maps  
A series of cell maps will be prepared to describe the distribution of various air operational parameters over the Bay Area.
  - 2.1 Basic historical data  
Prepare a series of cell maps delineating various combinations of flight tracks, altitudes, periods of the day/evening/night, for operations to and from SFO, SJC and OAK for several base years and months.
  - 2.2 Changes in flight operations  
Prepare a series of cell maps depicting changes in various air operations over specific years and/or seasons.
  - 2.3 Line charts  
Prepare a series of line charts depicting changes in various air operations over specific years and/or seasons.
  - 2.4 Histograms  
Prepare a series of histograms depicting the statistical distribution of various air operations over specific years and/or seasons.

### **Task 2: Historical Noise Assessment**

- 3 Noise Assessments
  - 3.1 Cell maps - DNL / SEL's / Respite minutes / day/evening /night

Prepare Cell maps of the above metrics for the Bay Area with color coding for noise metric levels. Noise contours for various years will be compared.

3.2 Line charts - Alternative metrics / years / months / day/evening/night

For each CITY, and for several years and months, analyze the Cell data for the CITY by month/year and prepare graphics to illustrate changes in noise patterns vs. time, separated by 'Day', 'Evening', and 'Night'.

3.3 Noise monitoring (1 month)

Install a temporary noise monitor (at least one month) at a location in Palo Alto and compare modeled data to actual data as a validation of the model.

Assumptions/Exclusions:

- The NOP data will be used to generate flight paths, number of operations, and runway use in the AEDT. Input files for flight tracks and operations will be provided by the NOP data manager.
- The NOP data does not provide all of the inputs needed for the AEDT. Specifically, we will need to make assumptions for the following:
  - Exact aircraft type (e.g., 737-700 versus 737-939).
  - Aircraft load
  - Meteorological conditions
  - Aircraft flap settings
  - Aircraft thrust settings

### **Task 3: FAA & Community Activity and Noise Mitigation**

- 4.a.1 Airline route analysis - review published routes  
Review published routes, procedures, and related documentation, identifying operational changes at SFO, SJC, and OAK with relevant impact on route usage and traffic levels over Palo Alto, since the year 2000. Prepare a report with findings.
- 4.a.ii Airline route analysis - ID ops changes for SFO, SJC and OAK
- 4.a.iii Airline route analysis - ID impact on route changes over Palo Alto
- 5.1 Assessing alternatives - ID lesser used airspace  
Track data analysis, TRACON vectoring practices for metering / sequencing. Review TRACON SOP's, identify compliance.
- 5.2 Assessing alternatives - modified flight path fuel/operating costs  
Explore T-Routes (GA), raise crossing fix altitudes, TEST options, fuel and CO<sub>2</sub> conservation, adjust vectoring pathology.
- 5.3 Assessing alternatives - reduced nighttime noise exposure  
Propose new options to current Noise Abatement Program (SFO)/compliance, review STAR profiles and compliance, USER meetings.
- 5.4 Assessing alternatives - minimize over-terrain flights <8,000 ft.

- Adjust / amend per 5.2.
- 5.5 Assessing alternatives - review MENLO "IAF" crossing altitude  
Adjustments/procedural amendments will be incorporated per outcomes of 5.2 and 5.5 based on TRACON concurrence and operational impact.
  - 5.6 Assessing alternatives - review SJC arrival impacts  
This task will be analyzed and amendments incorporated per outcomes of 5.1 thru 5.6.
  - 5.7 Assessing alternatives - costs/saving for alternative routing  
Operational/fuel costs will be derived from final amendments of route and practices with considerations given to surrounding Cities and air traffic flows and GA usage.
  - 5.8 Assessing alternatives - discuss and assess FAA directives  
As required / per demand.

#### **Task 4: Ongoing Community Noise Activity**

- 1 SFO Round Table Meetings
- 2 NOR CAL TRACON On-Site Meetings
- 3 Palo Alto City Meetings
- 4 Congressional Meetings
- 5 CITY Teleconference Calls
- 6 Meeting with FAA Regional Administrator / Staff
- 7 Draft technical correspondence for City review

#### **Task 5: Sleep Interference Study**

- 1 Phase 1 – monitoring -- 1 week @ 2 locations  
Two simultaneous noise monitors set inside and outside an unoccupied residence concurrently recording the sound level at least each one second intervals for seven consecutive days. This will identify all aircraft flyover events simultaneously inside and outside the residence.
- 2 Data reduction  
The noise data recorded will be downloaded from the digital programmable sound level meters and all aircraft flyover events identified.
- 3 Sleep interference computation  
The percentage of the population awakened by the series of aircraft flyover events will be computed in accordance with American National Standards Institute (ANSI) S12.9, Part 6, "Quantities and Procedures for Description and Measurement of Environmental Sound -- Part 6: Methods for Estimation of Awakenings Associated with Aircraft Noise Events Heard in Homes".
- 4 Sleep interference assessment  
The degree of sleep interference will be quantified from the measurement results.
- 5 Sleep interference written report  
The measurement, assessment procedure and results will be presented in a written report.
- 6 Sleep interference presentation  
The measurement, assessment procedure and results will be presented in an oral report to a Palo Alto forum.

### **Task 6: Classroom Disruption Study**

- 1 Phase 1 -- monitoring -- 1 week @ 2 locations  
Two simultaneous noise monitors set inside and outside an unoccupied classroom concurrently recording the sound level at least each one second intervals for several consecutive weekdays. This will identify all aircraft flyover events simultaneously inside and outside the school during school hours.
- 2 Data reduction  
The noise data recorded will be downloaded from the digital programmable sound level meters and all aircraft flyover events identified.
- 3 Classroom interference computation  
The degree of classroom disruption from aircraft noise will be assessed with respect to American National Standards Institute (ANSI) Standard S12.60, "Acoustical Performance Criteria, Design Requirements, and Guidelines for Schools, Parts 1 & 2".
- 4 Classroom interference assessment  
The degree of classroom interference will be quantified from the measurement results.
- 5 Classroom interference written report  
The measurement, assessment procedure and results will be presented in a written report.
- 6 Classroom interference presentation  
The measurement, assessment procedure and results will be presented in an oral report to a Palo Alto forum.

### **Task 7: Property Valuation Study**

- 1 Research
- 2 Property Valuation Report
- 3 Property Valuation Presentation

**EXHIBIT “B”  
SCHEDULE OF PERFORMANCE**

CONSULTANT shall perform the Services so as to complete each milestone within the number of days/weeks specified below. The time to complete each milestone may be increased or decreased by mutual written agreement of the project managers for CONSULTANT and CITY so long as all work is completed within the term of the Agreement.

Tasks	Completion No. of Days/Weeks From NTP
1. Historical Operations Assessment	TBD
2. Historical Noise Assessment	TBD
3. FAA & Community Activity and Noise Mitigation	TBD
4. Ongoing Community Noise Activity	TBD
5. Sleep Interference Study	TBD
6. Classroom Disruption Study	TBD
7. Property Valuation Study	TBD

**EXHIBIT “C”  
COMPENSATION**

The CITY agrees to compensate the CONSULTANT for professional services performed in accordance with the terms and conditions of this Agreement, and as set forth in the budget schedule below. Compensation shall be calculated based on the hourly rate schedule attached as exhibit C-1 up to the not to exceed budget amount for each task set forth below.

The compensation to be paid to CONSULTANT under this Agreement for all services described in Exhibit “A” (“Basic Services”) and reimbursable expenses shall not exceed \$237,500.00. CONSULTANT agrees to complete all Basic Services, including reimbursable expenses, within this amount. Any work performed or expenses incurred for which payment would result in a total exceeding the maximum amount of compensation set forth herein shall be at no cost to the CITY.

CONSULTANT shall perform the tasks and categories of work as outlined and budgeted below. The CITY’s Project Manager may approve in writing the transfer of budget amounts between any of the tasks or categories listed below provided the total compensation for Basic Services, including reimbursable expenses, does not exceed \$237,500.00.

<b>BUDGET SCHEDULE</b>	<b>NOT TO EXCEED AMOUNT</b>
Task 1 (Historical Operations Assessment)	\$62,500.00
Task 2 (Historical Noise Assessment)	\$70,000.00
Task 3 (FAA & Community Activity and Noise Mitigation)	\$25,000.00
Task 4 (Ongoing Community Noise Activity)	\$50,000.00
Task 5 (Sleep Interference Study)	\$10,000.00
Task 6 (Classroom Disruption Study)	\$10,000.00
Task 7 (Property Valuation Study)	\$10,000.00

Sub-total Basic Services **\$237,500.00**

Reimbursable Expenses \$0.00 (None)

Total Basic Services and Reimbursable expenses \$237,500.00

Maximum Total Compensation \$237,500.00

**REIMBURSABLE EXPENSES**

The administrative, overhead, secretarial time or secretarial overtime, word processing, photocopying, in-house printing, insurance and other ordinary business expenses are included within the scope of payment for services and are not reimbursable expenses. CITY shall reimburse CONSULTANT for the following reimbursable expenses at cost. Expenses for which CONSULTANT shall be reimbursed are:

A. Travel outside the San Francisco Bay area, including transportation and meals, will be reimbursed at actual cost subject to the City of Palo Alto's policy for reimbursement of travel and meal expenses for City of Palo Alto employees.

All requests for payment of expenses shall be accompanied by appropriate backup information. Any expense shall be approved in advance by the CITY's project manager.

**ADDITIONAL SERVICES**

The CONSULTANT shall provide additional services only by advanced, written authorization from the CITY. The CONSULTANT, at the CITY's project manager's request, shall submit a detailed written proposal including a description of the scope of services, schedule, level of effort, and CONSULTANT's proposed maximum compensation, including reimbursable expense, for such services based on the rates set forth in Exhibit C-1. The additional services scope, schedule and maximum compensation shall be negotiated and agreed to in writing by the CITY's Project Manager and CONSULTANT prior to commencement of the services. Payment for additional services is subject to all requirements and restrictions in this Agreement

**EXHIBIT "C-1"**  
**HOURLY RATE SCHEDULE**

Overall Project Manager, Freytag & Associates, LLC	\$ 280/hr
Air Traffic Management Manager, Hughes AV Associates	\$ 240/hr
National Offload Program Manager, Clayton Smith Consulting	\$ 250/hr
Noise Modeling and Graphics Production Manager, CSDA Design Group	\$ 240/hr
Senior Acoustician/Analyst	\$ 145/hr
Acoustician/Analyst	\$ 110/hr
Technician Administrative	\$ 90/hr
Administrative	\$ 70/hr

## EXHIBIT "D" INSURANCE REQUIREMENTS

CONTRACTORS TO THE CITY OF PALO ALTO (CITY), AT THEIR SOLE EXPENSE, SHALL FOR THE TERM OF THE CONTRACT OBTAIN AND MAINTAIN INSURANCE IN THE AMOUNTS FOR THE COVERAGE SPECIFIED BELOW, **AFFORDED BY COMPANIES WITH AM BEST'S KEY RATING OF A-VII, OR HIGHER, LICENSED OR AUTHORIZED TO TRANSACT INSURANCE BUSINESS IN THE STATE OF CALIFORNIA.**

AWARD IS CONTINGENT ON COMPLIANCE WITH CITY'S INSURANCE REQUIREMENTS, AS SPECIFIED, BELOW:

REQUIRE D	TYPE OF COVERAGE	REQUIREMENT	MINIMUM LIMITS	
			EACH OCCURRENCE	AGGREGATE
YES YES	WORKER'S COMPENSATION EMPLOYER'S LIABILITY	STATUTORY STATUTORY		
YES	GENERAL LIABILITY, INCLUDING PERSONAL INJURY, BROAD FORM PROPERTY DAMAGE BLANKET CONTRACTUAL, AND FIRE LEGAL LIABILITY	BODILY INJURY	\$1,000,000	\$1,000,000
		PROPERTY DAMAGE	\$1,000,000	\$1,000,000
		BODILY INJURY & PROPERTY DAMAGE COMBINED.	\$1,000,000	\$1,000,000
YES	AUTOMOBILE LIABILITY, INCLUDING ALL OWNED, HIRED, NON-OWNED	BODILY INJURY - EACH PERSON - EACH OCCURRENCE	\$1,000,000 \$1,000,000 \$1,000,000	\$1,000,000 \$1,000,000 \$1,000,000
		PROPERTY DAMAGE	\$1,000,000	\$1,000,000
		BODILY INJURY AND PROPERTY DAMAGE, COMBINED	\$1,000,000	\$1,000,000
		ALL DAMAGES		\$1,000,000
YES	PROFESSIONAL LIABILITY, INCLUDING, ERRORS AND OMISSIONS, MALPRACTICE (WHEN APPLICABLE), AND NEGLIGENT PERFORMANCE			
YES	<b>THE CITY OF PALO ALTO IS TO BE NAMED AS AN ADDITIONAL INSURED:</b> CONTRACTOR, AT ITS SOLE COST AND EXPENSE, SHALL OBTAIN AND MAINTAIN, IN FULL FORCE AND EFFECT THROUGHOUT THE ENTIRE TERM OF ANY RESULTANT AGREEMENT, THE INSURANCE COVERAGE HEREIN DESCRIBED, INSURING NOT ONLY CONSULTANT AND ITS SUBCONSULTANTS, IF ANY, BUT ALSO, WITH THE EXCEPTION OF WORKERS' COMPENSATION, EMPLOYER'S LIABILITY AND PROFESSIONAL INSURANCE, <b>NAMING AS ADDITIONAL INSURED CITY, ITS COUNCIL MEMBERS, OFFICERS, AGENTS, AND EMPLOYEES.</b>			

I. INSURANCE COVERAGE MUST INCLUDE:

- A. A PROVISION FOR A WRITTEN THIRTY (30) DAY ADVANCE NOTICE TO CITY OF CHANGE IN COVERAGE OR OF COVERAGE CANCELLATION; AND
- B. A CONTRACTUAL LIABILITY ENDORSEMENT PROVIDING INSURANCE COVERAGE FOR CONSULTANT'S AGREEMENT TO INDEMNIFY CITY.
- C. DEDUCTIBLE AMOUNTS IN EXCESS OF \$5,000 REQUIRE CITY'S PRIOR APPROVAL.

II. CONTACTOR MUST SUBMIT CERTIFICATES(S) OF INSURANCE EVIDENCING REQUIRED COVERAGE.

III. ENDORSEMENT PROVISIONS, WITH RESPECT FOR THE INSURANCE AFFORDED TO "ADDITIONAL INSURED"

A. PRIMARY COVERAGE

WITH RESPECT TO CLAIMS ARISING OUT OF THE OPERATIONS OF THE NAMED INSURED, INSURANCE AS AFFORDED BY THIS POLICY IS PRIMARY AND IS NOT ADDITIONAL TO OR CONTRIBUTING WITH ANY OTHER INSURANCE CARRIED BY OR FOR THE BENEFIT OF THE ADDITIONAL INSURED.

B. CROSS LIABILITY

THE NAMING OF MORE THAN ONE PERSON, FIRM, OR CORPORATION AS INSURED UNDER THE POLICY SHALL NOT, FOR THAT REASON ALONE, EXTINGUISH ANY RIGHTS OF THE INSURED AGAINST ANOTHER, BUT THIS ENDORSEMENT, AND THE NAMING OF MULTIPLE INSURED, SHALL NOT INCREASE THE TOTAL LIABILITY OF THE COMPANY UNDER THIS POLICY.

C. NOTICE OF CANCELLATION

1. IF THE POLICY IS CANCELED BEFORE ITS EXPIRATION DATE FOR ANY REASON OTHER THAN THE NON-PAYMENT OF PREMIUM, THE CONSULTANT SHALL PROVIDE CITY AT LEAST A THIRTY (30) DAY WRITTEN NOTICE BEFORE THE EFFECTIVE DATE OF CANCELLATION.
  
2. IF THE POLICY IS CANCELED BEFORE ITS EXPIRATION DATE FOR THE NON-PAYMENT OF PREMIUM, THE ISSUING COMPANY SHALL PROVIDE CITY AT LEAST A TEN (10) DAY WRITTEN NOTICE BEFORE THE EFFECTIVE DATE OF CANCELLATION.

**NOTICES SHALL BE EMAILED TO:**

**[InsuranceCerts@CityofPaloAlto.org](mailto:InsuranceCerts@CityofPaloAlto.org)**

## Certificate Of Completion

Envelope Id: 16A7326C9D54461A81A6E48A91B02300	Status: Completed
Subject: Please DocuSign this document: C16161182 FREYTAG AIR TRAFFIC CONTRACT MS 020216.pdf	
Source Envelope:	
Document Pages: 19	Signatures: 1
Certificate Pages: 1	Initials: 0
AutoNav: Enabled	Envelope Originator:
Envelopeld Stamping: Enabled	Christopher Anastole
Time Zone: (UTC-08:00) Pacific Time (US & Canada)	250 Hamilton Ave
	Palo Alto , CA 94301
	chris.anastole@cityofpaloalto.org
	IP Address: 199.33.32.254

## Record Tracking

Status: Original 2/2/2016 11:03:47 AM	Holder: Christopher Anastole chris.anastole@cityofpaloalto.org	Location: DocuSign
--	---	--------------------

## Signer Events

Jack Freytag  
jack@freytagllc.com  
President  
Security Level: Email, Account Authentication (None)

## Signature

DocuSigned by:  
  
7C429A52973744C...  
Using IP Address: 71.202.95.70

## Timestamp

Sent: 2/2/2016 11:05:50 AM  
Viewed: 2/2/2016 11:18:26 AM  
Signed: 2/2/2016 2:53:41 PM

Electronic Record and Signature Disclosure:  
Not Offered  
ID:

## In Person Signer Events

## Signature

## Timestamp

## Editor Delivery Events

## Status

## Timestamp

## Agent Delivery Events

## Status

## Timestamp

## Intermediary Delivery Events

## Status

## Timestamp

## Certified Delivery Events

## Status

## Timestamp

## Carbon Copy Events

## Status

## Timestamp

Khashayar Alaee  
Khashayar.Alaee@CityofPaloAlto.org  
Security Level: Email, Account Authentication (None)  
Electronic Record and Signature Disclosure:  
Not Offered  
ID:

**COPIED**

Sent: 2/2/2016 2:53:42 PM

## Notary Events

## Timestamp

## Envelope Summary Events

## Status

## Timestamps

Envelope Sent	Hashed/Encrypted	2/2/2016 2:53:42 PM
Certified Delivered	Security Checked	2/2/2016 2:53:42 PM
Signing Complete	Security Checked	2/2/2016 2:53:42 PM
Completed	Security Checked	2/2/2016 2:53:42 PM



February 2, 2016

Mr. Glen Martin, Western Regional Administrator  
Federal Aviation Administration  
15000 Aviation Boulevard  
Lawndale, California 90261

Dear Mr. Martin,

Thank you for working with us to explore standing up a new FAA Select Committee made up of local elected officials from the cities and counties in the South Bay and Santa Cruz County.

As you know, the vast majority of our constituent complaints involve aircraft coming into the San Francisco Airport, not the San Jose Airport. We understand the SFO Airport Roundtable is considering adding an additional city, Palo Alto, to its existing membership of 23 elected officials. This, in our view, will not resolve the issues at hand and we do not support this approach. Santa Clara County has 15 cities within its jurisdiction and adding only one city as a voting member is not an equitable solution. Additionally, Santa Cruz County must have representation as well. Given the focus of the SFO Airport Roundtable on many issues that are not relevant to the South Bay, we believe a new Select Committee representing the entire region (three congressional districts) is necessary.

We greatly appreciate your leadership and support in helping to ensure that our constituents have a direct voice in FAA matters with you and FAA leadership through a new Select Committee with equal regional representation of local elected officials appointed through an appropriate body within each county that we represent. We recommend the new Select Committee hold regular meetings in each county so constituents can have easier access to the meetings.

Most gratefully,

A blue ink signature of Anna G. Eshoo, written in a cursive style.

Anna G. Eshoo  
Member of Congress

A blue ink signature of Sam Farr, written in a cursive style.

Sam Farr  
Member of Congress

cc: The Honorable Jackie Speier (CA-14)  
Mr. John Martin, San Francisco International Airport Director  
Mr. Cliff Lentz, Chairperson, SFO Airport Roundtable



James A. Castaneda, AICP  
Program Coordinator  
County of San Mateo  
SFO Airport/Community Roundtable

February 3, 2016

Dear James,

On behalf of City Manager James Keene, I would like to thank you and the Roundtable for placing Item No. 9 (Consideration of the Amending the Roundtable's Memorandum of Understanding and Bylaws to Include the City of Palo Alto as a Voting Member) on the agenda of February 3, 2016.

The City is not in a position to comment on the item, as we were not notified in advance of the published agenda on January 28, 2016. On October 1, 2014, the Roundtable voted to not grant the City of Palo Alto membership. Circumstances have changed since then, and we continue to work through Congresswoman Eshoo's office to find a solution for Palo Alto and our region.

We remain committed to working with our neighboring cities impacted by air traffic noise. On February 8, 2016, our City Council will consider approval of a contract and budget amendment ordinance to hire a technical consultant to study the issue. We hope that shortly thereafter, a meeting can be scheduled with the Roundtable's technical consultants to advance the FAA Initiative of November 16, 2015.

Unfortunately, I will not be able to attend the meeting this evening but would appreciate if you would read this letter into the public record under Item No. 9.

Sincerely,

Khashayar "Cash" Alae  
Sr. Management Analyst  
City Manager's Office

cc. Cliff Lentz, Chairperson, SFO Airport Community Roundtable Chairperson  
John Martin, Director, San Francisco International Airport Director





January 28, 2016

**TO:** Roundtable Representatives and Alternates

**FROM:** James A. Castañeda, AICP, Roundtable Coordinator 

**SUBJECT:** Consideration of amending the Roundtable's Memorandum of Understanding and Bylaws to allow the City of Palo Alto to be a voting member

---

At the request of the Roundtable chairperson, the item of considering the City of Palo Alto to join the Roundtable as a member is being brought forth for consideration. Due to the ongoing noise impacts and recent FAA initiative to address noise issues in the Bay Area, it was felt appropriate to reintroduce the item for discussion and possibly amending the Roundtable's documents to allow membership to occur.

## BACKGROUND

Up until the spring of 1997, the Roundtable had been limited to the original nine cities since the establishment of the Roundtable in 1981- Brisbane, Daly City, South San Francisco, San Bruno, Pacifica, Millbrae, Burlingame, Hillsborough and Foster City. Due to a growing number of complaints in the southern San Mateo County communities in the mid-1990s, cities within that region became more active in participating on the Roundtable, and actively request membership. Beginning in December 1995, the Roundtable started granting provisional non-voting membership to cities in the south county. The cities of Palo Alto and Los Altos in Santa Clara County at this time expressed interest in also becoming voting members. In April 1997, the Roundtable amended the Memorandum of Understanding (MOU) to allow any city within San Mateo County membership, with no provisions to offer membership to other counties or any cities located in other counties. At that time, the cities of Atherton, Belmont, Half Moon Bay, Menlo Park, Portola Valley, Redwood City, San Mateo, and Woodside formally requested voting membership as a result of the adopted amendment to the MOU.

In September 1997, the City of Palo Alto requested voting membership on the Roundtable. At the January 7, 1998 Regular Meeting, the Roundtable considered the request, but did not take a vote to grant the City of Palo Alto voting membership, which required an amendment to the MOU to allow it. The Roundtable felt it was more appropriate to discuss aircraft noise issues beyond San Mateo County in regional forum, such as the Association of Bay Area Government's (ABAG) Regional Airport Planning Committee (RAPC).



At the Roundtable's regular meeting on October 1, 2014, the Roundtable considered another request from the City of Palo Alto to join the Roundtable. The membership voted not to grant membership, but to adopt recommendations provided by a subcommittee that encouraged ongoing participation at Roundtable meetings, participate at a regional level with RAPC, and assist the City of Palo Alto and County of Santa Clara to create a Roundtable organization in Santa Clara County.

## **AMENDMENT PROCEDURE**

### 1. Approval by the Roundtable Members

In order to include the City of Palo Alto's request, the Roundtable must amend language in both the MOU and Bylaws to add a non-San Mateo County city. Per Article V of the Roundtable's MOU, a motion to include the City of Palo Alto must be made by a Roundtable member, seconded, and approved by at least two-thirds of the current 23 voting membership seats (15 affirmative votes), which also include vacant seated members. If less than two-thirds of the Roundtable member are present and/or approve in the affirmative, the proposal fails.

The language in the MOU and Bylaws to consider could include the following (changes in bold):

#### MOU page 7, Article III, Section 4 edits:

"Additional Voting Membership – Other incorporated towns and/or cities located within San Mateo County, **and the City of Palo Alto**, may request voting membership on the San Francisco International Airport/Community Roundtable by adopting a resolution"

#### Bylaws page 5, Article III, Section 9 edits:

"Any city or town in San Mateo County, **and the City of Palo Alto**, that is not a member of the Roundtable may request membership on the Roundtable in accordance with the membership procedure contained in the most current version of the MOU."

### 2. Approval by Current Member Cities

Once approved by the Roundtable members, the proposed MOU amendment must be considered and approved by at least two-thirds of the respective councils/boards of the Roundtable member agencies/bodies by a majority vote of each of those bodies. If at least two-thirds of the current 23 member agencies/bodies approve (15 affirmative) the proposed amendment, the amendment becomes effective. If less than two-thirds of the member agencies/bodies approve the proposed MOU amendment, the proposal fails.