

City of Palo Alto
Office of the Mayor and City Council

May 6, 2019

Mr. Dan Elwell, Acting Administrator
Federal Aviation Administration
800 Independence Ave SW
Washington, D.C. 20024

Subject: City of Palo Alto Response to FAA Initiative to Address Noise Concerns of Santa Cruz/Santa Clara/San Mateo/San Francisco Counties, Further Updates on Phase Two, dated December 2018 and April 2019

Dear Acting Administrator Elwell,

Thank you for the FAA's work to analyze, study, and advance recommendations of the Select Committee and the SFO Roundtable. The City of Palo Alto offers the following questions and requests in response to the December 2018 and April 2019 Updates on Phase Two.

First, we offer an overarching request. We ask the FAA to transparently communicate the rationale for decisions made and actions taken in these Update documents. While we respect the FAA's professional expertise and need to make managerial decisions regarding the feasibility of recommendations, we believe affected communities and constituents deserve to understand the data and analyses supporting these decisions. Simply stating in writing that a recommendation is infeasible does not educate local stakeholders about the contributing factors. If the communities within the region are to work cooperatively with the FAA, then transparency is required.

Class B Redesign

The redesign of the Class B Airspace creates possibilities for future policies and procedures that reduce noise impacts within the Northern California Metroplex. We thank the FAA for undertaking this effort.

The Select Committee supported this recommendation in order to relieve noise impacts. In order to understand if a reduction in noise impacts has occurred as a result of the Class B redesign, the FAA must share data and information regarding (a) if more aircraft have been able to maintain an OPD; and (b) if there has been a decrease in noise levels experienced on-the-ground by affected communities.

The redesign included the creation of additional waypoints, including the SIDBY waypoint which is directly over Palo Alto. The redesign maintained the MENLO waypoint, which also brings air traffic over Palo Alto. The City of Palo Alto asks for the FAA to (a) disclose any noise impacts that were analyzed as part of the redesign or noise impacts that have been recorded since the new airspace has been in use; (b) describe the procedures that use SIDBY and MENLO waypoints, including any changes to the procedures such as minimum altitudes, ground tracks, aircraft speed, air brakes, angles of descent, etc.; and (c) to describe the vectoring used by aircraft using the SIDBY and MENLO waypoints.

BSR Overlay

The City of Palo Alto looks forward to the formation of the Full Working Group and their first meeting in

P.O. Box 10250
Palo Alto, CA 94303
650.329.2477
650.328.3631 fax

June. Based on oral communications at the April 24, 2019 Santa Clara/Santa Cruz Counties Roundtable, the Full Working Group will consist of technical and aviation professionals, the airlines, and representatives from airports. The City asks for the FAA to share in writing the specific membership, scope, authority, and meeting schedule of the Full Working Group. The City of Palo Alto asks for the FAA to ensure that noise impacted communities are included in the conversation. How will the FAA ensure the Working Group considers the perspective of affected communities? What are the Full Working Group's means and methods for gathering input and incorporating public feedback? We ask that the FAA brief the SC/SC Roundtable on the Full Working Group's progress.

The City of Palo Alto also requests that the FAA collaborate with the Full Working Group to consider the Ground-Based Augmentation System (GBAS) system at SFO and the system's capacity to decrease noise impacts. The BSR overlay may achieve even greater relief from noise if combined with the technological advancement the GBAS. In order to take full advantage of the GBAS system, the FAA, SFO, and Full Working Group must work in collaboration to create approved paths of travel for aircraft that are compatible with GBAS.

BDEGA In-Trail Spacing

We appreciate the FAA's consideration of this recommendation from the SF Roundtable. While the Roundtable and neighboring communities hoped this recommendation would result in decreased use of speed brakes and thus minimization of noise impacts, we understand this has been deemed infeasible. We request the analyses be shared so that we can better understand the factors that prevent the implementation of this recommendation.

Revise Woodside VOR OTA

The City of Palo Alto applauds the FAA for formalizing this change that will bring some relief to neighboring communities by flying at higher altitudes. Nevertheless, we are troubled by the lack of community engagement during the planning and execution of the proposed changes. In addition to concerns about the lack of outreach, we are concerned that through the publication of PIRAT STAR TWO, air traffic will increase in volume as more airlines will have access to the route. Traffic will also increase as aircraft en route to Oakland International Airport will also be able to use the route. Lastly, PIRAT STAR TWO ends at the ARGGG waypoint. From that point, air craft are vectored at a 060 heading towards their final destinations. Because the procedure does not address vectoring after ARGGG, the procedure does not address the impacts to Palo Alto and other neighboring communities.

For a complete discussion of the City of Palo Alto's concerns, please see the City's letter to Dan Elwell dated November 13, 2018 (attached).

The FAA use new, more effective, time-based flow management tools for better sequencing

We join with the FAA, the Select Committee, and neighboring communities in recognizing the opportunity for new and emerging technologies to provide relief to communities impacted by air craft noise. We look forward to the FAA's engagement through the SC/SC Roundtable to explore how these efforts may impact local quality of life.

Additionally, we would like to understand if a visual approach to SFO's runway 28L would work with a GBAS landing system. Since the GBAS landing system may be soon used at SFO, we are curious if that system combined with the visual approach alleviates the safety concerns that have been identified.

While the FAA has yet to respond to our inquires and requests for information, we maintain hope that the FAA will work with the City of Palo Alto and our neighbors to resolve the issues challenging our City.

Sincerely,

DocuSigned by:
Eric Filseth
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Eric Filseth, Mayor
City of Palo Alto

Hon. Dianne Feinstein, U.S. Senate

Hon. Kamala D. Harris, U.S. Senate

Hon. Anna G. Eshoo, U.S. House of Representatives

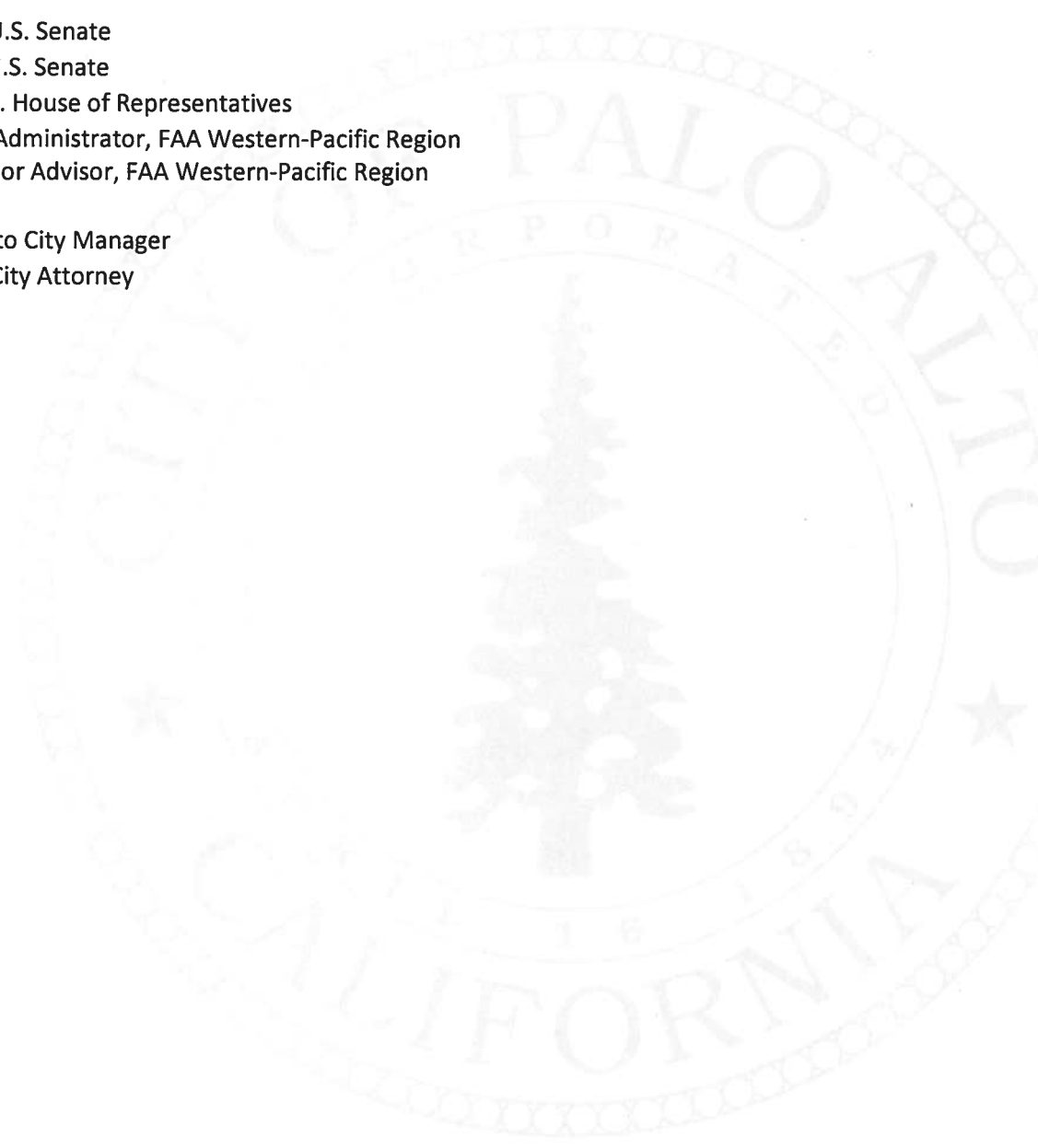
Raquel Girvin, Regional Administrator, FAA Western-Pacific Region

Faviola Garcia, FAA, Senior Advisor, FAA Western-Pacific Region

Palo Alto City Council

Edward Shikada, Palo Alto City Manager

Molly Stump, Palo Alto City Attorney



November 13, 2018

Mr. Dan Elwell
Acting Administrator
Federal Aviation Administration
800 Independence Ave., SW
Washington, DC 20024

Sent via email to Dan.Elwell@faa.gov

Dear Administrator Elwell:

The City of Palo Alto is writing to comment on the recently proposed PIRAT ONE ARRIVAL Standard Terminal Arrival Route (STAR). These comments are submitted in response to the solicitation of comments set forth on the FAA's IFP Gateway which indicates that comments are being accepted until November 13, 2018. (See https://www.faa.gov/air_traffic/flight_info/aeronav/procedures/application/?event=procedure.results&tab=coordination&nasId=SFO#searchResultsTop)

We note at the outset that we understand the request for comments on the IFP Gateway is directed primarily at solicitation of technical comments from air traffic professionals or aeronautical users. The agency has not, however, provided any other mechanism for the public to comment on this proposed procedure. We are, therefore, availing ourselves of this opportunity to ensure that the FAA receives and considers our comments before taking a final agency action pursuant to 49 U.S.C. 46110.

We are troubled by the lack of community engagement by the FAA during the planning and execution of such proposed changes to routes or procedures. The manner in which the PIRAT STAR has been proposed and the process for solicitation of comments does not comply with the FAA's own Community Involvement Policy as set forth in Appendix 10 to FAA Order JO 7400.2L. Neither has the process complied with current FAA practice to engage the community in any air traffic change which is likely to be controversial on environmental grounds. See FAA Order 1050.1F § 5-2; see also RTCA, PBN Blueprint Community Outreach (2016) (available at https://www.rtca.org/sites/default/files/2016_pbn_blueprint_community_outreach.pdf) which was approved by the FAA's NextGen Advisory Committee in June 2016. As far as we know, the agency has not solicited non-technical comments, has not widely distributed the proposed draft CatEx document, and has not provided the environmental documentation that was prepared in connection with what appears to be a documented CatEx. See Order 1050.1F § 5-3. (The City, through its attorney, has submitted a FOIA request for this documentation but the agency has thus far not responded to the request. We reserve the right to supplement these comments upon the timely receipt of the requested information. We reiterate here, as we did in the FOIA request, that the environmental documentation is essential for the City to determine whether the agency has properly documented the Cat Ex.)

The City of Palo Alto has also written several letters to the FAA in the past to which the FAA has been completely unresponsive. We have been left with no viable process for engaging with the FAA regarding the many questions and concerns we have about flight operations in the airspace over our city; this

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communication vacuum is unacceptable. In the present context, in particular, the agency has failed to explain how the proposed PIRAT route addresses our previous complaints and concerns regarding OCEANIC arrivals into San Francisco International Airport (SFO).

With that background, we offer the following comments and raise several questions specifically on the proposed PIRAT STAR.

Because it has neither provided the environmental documentation to support the CatEx nor responded to the City's FOIA request, the FAA has not communicated whether or how the impacts of the proposed PIRAT route have been studied. We request that the FAA disclose single event noise levels, number of events over grid points on-the-ground and other relevant per-flight-operation noise data on the proposed PIRAT route using the FAA standard AEDT model. See FAA Order 7400.2L § 32-2-1. We also request that the proposed PIRAT route be presented for community involvement per Appendix 10 to FAA Order 7400.2L. We specifically request that preparation of an Air Traffic Initial Environmental Review pursuant to Order 7400.2L § 32-2-1(b).

We have several concerns about the potential impacts of the PIRAT route and ask the FAA to clarify the following issues related to routing paths and altitudes; air traffic volume; and noise and other environmental impacts, particularly given that one of NextGen's goals was to "take into consideration, to the greatest extent practicable, design of airport approach and departure flight paths to reduce exposure of noise and emissions pollution on affected residents."

While we appreciate the intent to limit flights to 8,000 MSL or higher near the neighborhoods in the Woodside area, we remain concerned about noise and other environmental impacts anticipated from the PIRAT STAR. In particular, we are concerned about the predictable increase in the volume of overflights resulting from the transition of the Pacific 2 Tailored Approach (TA) to a public-use area navigation (RNAV) STAR, and the increased impacts associated with adding Oakland International Airport (OAK) traffic to SFO traffic on this route. We are also troubled by the ambiguity and absence of information about where and how aircraft will be vectored by Air Traffic Control (ATC) between the ARGGG waypoint and final approach at SFO or OAK.

The following questions illustrate the current dearth of information available to the public about the impacts of the proposed PIRAT STAR and the necessity for a more transparent public process prior to any implementation decision.

Ambiguity of Vectoring's Routes, Altitudes, and Impacts

How will Air Traffic Control manage the paths for vectoring from the stated 060 heading from the ARGGG waypoint? Where are aircraft most likely to fly between the ARGGG waypoint and final approach into each airport? When vectoring aircraft from ARGGG, will Air Traffic Control maintain aircraft at or above 6,000 MSL over Palo Alto? What altitudes will be maintained over other neighboring sensitive areas? What are the impacts on the Air Traffic Control workload when all flights must be vectored by ATC after the ARGGG waypoint?

Impacts of Increased Volume

How many total operators and flights are anticipated to use this public-use STAR compared to the volume limitations of the current TA? Does the FAA anticipate increases in flights on this route because

of the increased growth projected at all three international airports in the San Francisco Bay Area? What are the anticipated levels of use by OAK arrivals vs. SFO arrivals on this route? What are the anticipated levels of use, if any, by SJC? What are the implications of the proximity of current and future SJC traffic to the anticipated PIRAT traffic vectored from ARRRG en route to SFO? How has the FAA studied the safety implications of PIRAT in increasingly congested airspace? What are the impacts on efficiency of increased volume?

Environmental Impacts

What studies has the FAA completed on the noise and emission impacts of the PIRAT STAR procedure, including especially the on-the-ground noise impacts because of increased volume on PIRAT? Some flights currently using the Pacific 2 TA overfly our community during nighttime and early morning hours. What is the anticipated volume and frequency of flights on the newly proposed public route during these disruptive times?

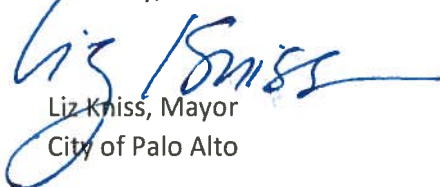
The proposed route, and the associated areas most likely to be used in vectoring flights from ARGGG to final approach, would likely direct aircraft over noise-sensitive areas, several wildlife refuges and water storage areas, historic areas, and minority and low-income populations. We draw your attention to the specific obligations of the FAA to consider impacts over such areas even if the agency believes that it has adequate legal justification to use a CatEx. See FAA Order 1050.1F § 5-3 in particular. What has the FAA done to study the environmental impacts of PIRAT flights, including the increased volume of these flights and their required vectoring, over these sensitive areas?

Finally, we urge the FAA to creatively partner with airports in the San Francisco Bay Area Metroplex to leverage new technologies to develop improved procedures as part of its Next-Gen journey. Leveraging SFO's Ground-Based Augmentation System (GBAS) is a key starting point. As you know, SFO is linking two satellite-based approach technologies – Required Navigation Performance (RNP) and a Global Navigation Satellite System (GNSS) Landing System (GLS) to improve from the approach tools invented 85 years ago, but improvements can only be gained by this technology if the FAA is willing to consider procedures that take advantage of it. Did the FAA team approach the SFO GBAS team to discuss how the new procedure could take advantage of GBAS to reduce aircraft impacts on nearby areas? How has the FAA considered SFO's upcoming deployment of new landing options when designing the PIRAT procedure?

Let me be clear that we do not believe that the FAA has adequately disclosed impacts of the PIRAT STAR under its existing orders and policy statements. And, in particular, the manner in which PIRAT STAR has been publicly disclosed violates standard agency practice for enhanced community involvement that has been adopted in the wake of the *Phoenix v. Huerta* decision.

Thank you for your attention to our concerns. We look forward to your response.

Sincerely,



Liz Kniss, Mayor
City of Palo Alto

cc: 9-AMC-Aerochart@faa.gov

[https://www.faa.gov/air traffic/flight info/aeronav/procedures/application/?event=email.contact&details=SFO%20\(%20KSFO\)%20SAN%20FRANCISCO%20INTL,%20SAN%20FRANCISCO,%20CA%20-%20STAR%20PIRAT%20\(RNAV\)%20ONE%20SAN%20FRANCISCO%20CA%20KSFO&procedureName=STAR%20PIRAT%20\(RNAV\)%20ONE%20SAN%20FRANCISCO%20CA%20KSFO&airportCode=SFO&airportName=SAN%20FRANCISCO%20INTL&airportState=CA](https://www.faa.gov/air%20traffic%20flight%20info/aeronav/procedures/application/?event=email.contact&details=SFO%20(%20KSFO)%20SAN%20FRANCISCO%20INTL,%20SAN%20FRANCISCO,%20CA%20-%20STAR%20PIRAT%20(RNAV)%20ONE%20SAN%20FRANCISCO%20CA%20KSFO&procedureName=STAR%20PIRAT%20(RNAV)%20ONE%20SAN%20FRANCISCO%20CA%20KSFO&airportCode=SFO&airportName=SAN%20FRANCISCO%20INTL&airportState=CA)

Mr. Dennis Roberts, FAA Western-Pacific Regional Administrator

Ms. Faviola Garcia, Acting Deputy Regional Administrator

Ms. Kimberly Stover, Director, Air Traffic Operations, FAA Western Services Area, AJTW

Mr. Kevin Stewart, Acting FAA Aeronautical Information Services Manager

FAA Western Services Area Air Traffic Organization Manager

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