

Truong, Kathy

From: Dunn, Bill <Bill.Dunn@aopa.org>
Sent: Monday, December 3, 2018 6:36 AM
To: Cortese, Dave; Wasserman, Mike; Supervisor Yeager; Chavez, Cindy; Supervisor Simitian
Subject: AOPA Comments of Airport Business Plans - Dec 4th meeting, Item 19
Attachments: AOPA Comments - SCC BOS Airport Business Plans.pdf

Dear Supervisors,

Please find attached comments from the Aircraft Owners and Pilots Association (AOPA) concerning Board of Supervisors December 4th meeting and agenda item 19 relating to business plans for the county airports.

We appreciate your consideration of our comments on this important issue.

Bill Dunn
AOPA Government Affairs
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November 30, 2018

Santa Clara Board of Supervisors
70 West Hedding St
San Jose, CA 95110

Reference: Dec 4, 2018 Board meeting, Agenda item 19
Airport Business Plan

Dear Supervisors;

The Aircraft Owners and Pilots Association (AOPA) is a membership organization comprised of nearly 330,000 aircraft owners, pilots, and people who appreciate the value of general aviation in their communities. On behalf of more than 34,000 members in California, I am writing to urge the Board to approve option 1 of the staff report submitted by Jeffrey V. Smith, County Executive as described on page 17 of document 93897 A. This option, among other items, will set the County policy to once again accept Federal Aviation Administration (FAA) Airport Improvement Program (AIP) funds for airport maintenance and development at Reid Hillview Airport (RHV).

In reviewing all the documents relating to the development of the business plan updates for both Reid Hillview and South County's San Martin (E16) airports, we are troubled that the topic of closure of Reid Hillview Airport has again surfaced. Numerous small businesses and professionals use aircraft based at RHV to support their business needs. The proposal to close RHV and transfer operations to San Martin, an hour or more commute from San Jose, simply is not a viable or efficient option. With limited capacity for basing aircraft at both Palo Alto and SJC, there are no viable alternatives to RHV in the immediate area. AOPA is strongly opposed to any move by Santa Clara County to close RHV.

Reid Hillview Airport is a critical FAA designated reliever airport to San Jose Mineta International Airport (SJC). With its close proximity to Silicone Valley and downtown San Jose, RHV provides an attractive alternate for general aviation operations. Rather than arriving or departing from SJC, those aircraft operations take place at RHV. The loss of RHV would move a significant number of the 160,000 operations to SJC likely causing additional congestion and delays in airline operations at SJC.

Attempting to close Reid Hillview Airport in the face of existing Federal Grant Obligations "in perpetuity" linked to FAA Grant funds used to acquire the majority of land for the airport could result in expensive and uncertain litigation for years. Grant obligations linked to capital improvements accepted previously won't expire until 2031. Under current policy, the county is passing up millions of FAA AIP grants that could be used to upgrade and maintain the facilities at Reid Hillview, including repayment of the \$3 million loan issued in 2017 by the county to repave the runways at both Reid Hillview and San Martin Airports.

San Jose State University's Aviation Department, forced to relocate from SJC to RHV, is the only university in the State university system that offers a complete aviation curriculum including flight, technician and operations training. The university depends on its location at RHV to provide training opportunities for students. Students, including local community members, benefit from this training which provides access to high-paying careers in the aviation industry. If RHV were to close, with no viable alternatives in the valley in which to relocate this university program, so too would this important educational component.

Suggestions to close RHV seem to have germinated in response to a need for "affordable housing" in the Santa Clara Valley. Unfortunately, closing RHV will have no impact on affordable housing needs in 2018 since with current FAA Grant Assurances, we believe the earliest available date for closure would be after 2030. If the county were serious about addressing the affordable housing crisis, the county could begin immediate development with bond funds on land currently owned by the county. Progress could be made now, not 12 years from now when the affordable housing crisis will be much worse.

We urge the county Board of Supervisors to set a policy to accept federal AIP and other FAA grants for Reid Hillview Airport and to remove any process to study closing the airport. RHV is a viable and important community asset,

We appreciate your consideration of our comments on this most important issue.

Sincerely,



Bill Dunn
AOPA Government Affairs
e-mail: Bill.Dunn@aopa.org

Cc: Supervisor Mike Wasserman
Supervisor Cindy Chavez
Supervisor Dave Cortese
Supervisor Ken Yeager
Supervisor Joe Simitian

From: Brett Breitzman

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Sent: Sunday, December 2, 2018 10:24 AM

To: Cortese, Dave <Dave.Cortese@BOS.SCCGOV.ORG>; Wasserman, Mike

<Mike.Wasserman@bos.sccgov.org>; Supervisor Yeager <supervisor.yeager@BOS.SCCGOV.ORG>;

Chavez, Cindy <Cindy.Chavez@bos.sccgov.org>; Simitian, Joe <Joe.Simitian@bos.sccgov.org>; Supervisor

Simitian <Supervisor.Simitian@bos.sccgov.org>

Subject: Regarding Tuesday's Meeting

Dear Santa Clara County Supervisors,

My name is Brett Breitzman, I'm 24 years old and I'm from Fremont, CA. I may not be a resident of Santa Clara County but this county has a significant importance in my life. I went to San Jose State for over 4 years and got a degree in Aviation. I lived in San Jose for several of those years. I used to have several jobs in San Jose and one of my current jobs is in Sunnyvale. Reid Hillview Airport is where I obtained my private pilot certificate earlier this year from an amazing instructor at a great flight school. It is where I have made life long friends while taking classes at SJSU's airport campus. It is also where I plan to continue my flight training over the next few years and possibly become a flight instructor at this airport for a new generation of pilots. I did not come from a wealthy family, we believe in hard work and believing in each other to succeed. One of the individuals who believed in me and my pilot career the most is my Grandmother, and she is also one of my most favorite people in this world. She just passed away on Wednesday. I understand that there is a vote on Tuesday to decide the fate of RHV and I can't be there to show my deep support for this airport because I need to be with my Grandfather. I hope you consider what closing RHV will mean for people who have been working so hard to achieve their dreams and for those who have build a life here at this airport.

Please keep Reid Hillview open and allow the businesses there to continue supporting and inspiring the community. I want to thank Santa Clara County for all of the opportunities it has given me and hopefully continues to do so for others.

Yours Respectfully,

Brett Breitzman

From: Mark Donnelly
Sent: Friday, November 30, 2018 4:04 PM
To: Chavez, Cindy <Cindy.Chavez@bos.sccgov.org>
Subject: Reid Hillview Airport

Dear Supervisor Chavez,

I understand the Reid Hillview (RHV) Airport Business Plan is on the agenda for Tuesday December 4. I am urging you to vote to resume accepting FAA grants and to modernize the airport.

Full disclosure: As you know, I am a San Jose resident, pilot, and owner of an aircraft based at RHV. I fly dozens of business trips and donated Angel Flights from RHV each year to remote areas in California and Western States. In 2019, I will pay the County significant taxes on fuel, \$13,000 to hangar the aircraft, and over \$25,000 in property taxes for the airplane and hangar. The airport is tremendously convenient and useful for my real estate business and compassionate flights. For that overhead expense, it should be.

I am also a strong advocate for the homeless and underprivileged in SCC, having just completed six years as board member and chair of HomeFirst, three years (so far) on the board of Fresh Lifelines for Youth (FLY), and providing hundreds of thousands of dollars to local homeless and poverty causes by donating directly to Catholic Charities, HomeFirst, Sacred Heart Community Services, and FLY.

I am also a retired Apple VP and investor. I see a future for RHV beyond business as usual. NASA created the Urban Air Mobility Grand Challenge to invite everyone with a stake in the future of the National Airspace System to participate in the testing and evaluation of flying taxis, and the system that will be created to manage the airspace when cities start to buzz with a new kind of traffic. To be cost effective, those unmanned aerial systems will require centrally-located landing and takeoff facilities to take care of maintenance, storage, fueling, recharging, training, safety and security, package logistics, software updates, simulators, drone operator stations, flight instruction, and more. I see jobs for the people of East San Jose and a positive futuristic outcome for the airport, while still providing access to general aviation.

RHV fills that ticket. San Martin Airport does not. It is too far from the City to be effective for such services and a nasty commute from San Jose for those who wish to use our airplanes efficiently to support our business and charitable endeavors.

Cindy, as you know, I am hugely appreciative of your efforts to house veterans and other homeless in our County. Thank you very much for inviting me to your briefing on the affordable housing issue this week. However, I do not think affordable housing is the best use of the 180 acres at RHV. There are other County-owned properties, like the Fairgrounds, which I believe are massively underutilized, have no existing jobs base, no solid vision, and are better suited for affordable housing development. I truly believe the "Affordable Housing at RHV" idea, while it has merit on the surface, is mostly a mask for the real goal of District 2 residents, which is just to close the airport for any reason whatsoever.

Please support the future by accepting FAA grants for RHV to improve the airport and provide a local platform for transportation innovation.

Respectfully yours,
Mark Donnelly

San Jose, CA

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Truong, Kathy

From: Anissa Mohler <anissa@aoaflight.com>
Sent: Sunday, December 2, 2018 4:47 PM
To: Supervisor Simitian; Supervisor Yeager; Wasserman, Mike; Cortese, Dave; Chavez, Cindy
Cc: John Carr; Anissa Mohler
Subject: Lead Contamination and Poisoning in the Vicinity of Reid-Hillview
Attachments: Lead_in_East_San_Jose_Dec2018.pdf

Dear Santa Clara County Supervisors:

I am writing in response to the most recent report dated December 4, 2018 by Santa Clara County staff regarding the County Airports Business Plan Update. In this most recent report county staff state:

County staff have not to-date provided analysis addressing consistent community concerns around lead contamination and poisoning in the vicinity of Reid-Hillview Airport.

Executive Summary

The staff report attempts to address the community concerns around lead near Reid-Hillview, instead it does the following:

1. Confuses concentrations of lead in water, soil, and air, and incorrectly implies that there is no safe level of lead in ambient air, despite the fact that the USEPA and California EPA have determined that there is a level below which the public health and welfare is protected.
2. Appears to discount the fact that the ambient lead levels at the airport are typically less than one-half and always below the ambient air quality standards established by the USEPA and California EPA to protect the public, including the most sensitive individuals and children.
3. Fails to cite the most likely and obvious source of elevated blood lead levels in children: the prevalence of older homes with lead based paint and lead-containing plumbing in East San Jose.
4. Ignores that in the very near future, there will be widespread use of lead-free aviation fuel (avgas) and that there is already lead-free avgas available and used by General Aviation aircraft.

In summary, instead of addressing the concerns about lead contamination the report does the opposite. It inflames the fears of the public and makes no attempt to explore the potential causes of elevated levels of lead in measured in children living in some zip codes near the airport. Instead, it implies the blood lead levels that exist in those children are the result of Reid-Hillview, despite the fact that measured lead concentrations in the air at the Airport are always below the allowable USEPA standards; standards which are promulgated by both the USEPA and the California EPA at a level that protects the public health and welfare with an adequate margin of safety, even in the most sensitive individuals. This does not make sense.

The attached letter describes my background related to this issue and attempts to provide a more balanced view related to lead emissions, standards and the likely sources of lead creating the elevated blood lead levels of the children living in the East San Jose area.

This is a very important issue for the residents of East San Jose and I would greatly appreciate your time in reading and understanding the contents of this letter before voting Tuesday regarding Reid-Hillview Airport.

Respectfully,

Anissa Mohler,
CFI at Reid-Hillview

San Jose, CA

anissa@aoaflight.com
December 2, 2018

Santa Clara County Supervisors
70 W Hedding St
San Jose, CA

RE: Lead contamination and poisoning in the vicinity of Reid-Hillview

Dear Santa Clara County Supervisors:

I am writing in response to the most recent report dated December 4, 2018 by Santa Clara County staff regarding the County Airports Business Plan Update. In this most recent report county staff state:

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2. Appears to discount the fact that the ambient lead levels at the airport are typically less than one-half and always below the ambient air quality standards established by the USEPA and California EPA to protect the public, including the most sensitive individuals and children.
3. Fails to cite the most likely and obvious source of elevated blood lead levels in children: the prevalence of older homes with lead based paint and lead-containing plumbing in East San Jose.
4. Ignores that in the very near future, there will be widespread use of lead-free aviation fuel (avgas) and that there is already lead-free avgas available and used by General Aviation aircraft.

Results through December 2016 indicate that lead concentrations have exceeded 50% of the National Ambient Air Quality Standards – which are standards for harmful pollutants established by the EPA under authority of the Clean Air Act – for airborne lead (0.15 µg/m³)

The staff report does not say lead emissions exceed NAAQS. They are well below NAAQS. This is consistent with the data provided by the Bay Area Air Quality Management District (BAAQMD) to the Airports Commission this October:

We have been measuring lead at Reid-Hillview since February of 2012 and we continue to do so at this location. Reid-Hillview typically has the lowest concentrations of lead compared to the other two airports [PAO and SQL] and has not recorded an excess of the EPA's lead National Ambient Air Quality standard of 0.15 ug/m³ at any time. The measurements are taken as close as possible to the runways "run-up" area, where we expect to see the highest concentrations. Since lead concentrations drop off significantly with distance, we expect that lead concentrations outside the airport fence line are even lower. ⁽²⁾

This means that emissions are always below the NAAQS. Despite this fact the staff report implies that all lead emissions at the airport need to be eliminated and raises unfounded alarm. Would the police be justified in raising a safety alert for a neighborhood that has drivers consistently driving below the speed limit? Of course not. How is it reasonable to raise alarm for an airport that always operates below the lead emissions "speed limit" set by the USEPA?

"No Safe Level of Lead"

The staff report consistently confuses ambient concentrations of lead in the air and concentrations of lead in the blood (blood lead levels, BLL). The staff report states there is no safe level of lead, but fails to clarify that this is concentrations in the blood. The USEPA and the California EPA have both determined that there is a safe level of lead in ambient air. The USEPA is required to set their standards for air, water and soil to protect the public health of our most sensitive groups regardless of the technical feasibility or cost of achieving those standards. The USEPA recognizes the difference between concentrations in air, soil, and water. For instance, the USEPA states the following regarding the allowable levels of lead in drinking water:

EPA has set the maximum contaminant level goal for lead in drinking water at zero because lead is a toxic metal that can be harmful to human health even at low exposure levels. ⁽³⁾

If there was no safe level of airborne lead concentrations, the USEPA would be required to set the standard for airborne lead emissions to zero even if it were technically impossible or extremely costly to reach those levels. They have not.

The NIEHS stated two of the most common sources of lead in a home are lead-based paint from older homes and older plumbing. The CDC states:

Lead-based paint and lead contaminated dust are the most hazardous sources of lead for U.S. children. Lead-based paints were banned for use in housing in 1978. All houses built before 1978 are likely to contain some lead-based paint.⁽⁶⁾

In 1978 the use of lead in paint was prohibited. In 1987 the use of lead in plumbing was prohibited. It would follow that children growing up in homes built before 1978 and/or 1987 would be more likely to have measurable lead in their blood than those living in newer homes because these homes are highly likely to have at least two, if not more, of the common household exposure sources.

Let's look at the five zip codes with elevated blood lead levels and the relative age of the housing in those zip codes. To estimate the percentage of homes with potential lead contamination I pulled homes for sale data from Zillow for each zip code and identified the total count of homes for sale, the count of homes built before 1986 (likely to have lead plumbing/fixtures) and homes built before 1978 (likely to have lead-based paint and lead plumbing/fixtures).

For reference, Santa Clara County had 2668 homes for sale on December 1st. 64% were built before 1986 and 53% were built before 1987.

Zip Code	Region	Homes for Sale	% Built Before 1978	% Built Before 1986	Percentage of Children with =>4.5µg/dl BLL
95127	San Jose – East (RHV)	99	83.8%	84.8%	3.02%
95122	San Jose – East (RHV)	68	64.7%	86.7%	2.48%
95116	San Jose – East	68	57.3%	70.6%	1.93%
95111	San Jose – South	111	47.7%	69.3%	1.81%
95020	Gilroy	138	26.8%	41.3%	1.68%

These data show that the majority of homes in the zip codes where children with elevated lead levels live are older homes that are likely to have both lead-based paint and plumbing and fixtures with lead in them. Both of which are among the most common methods for lead exposure. Sadly, it's not at all surprising that children living in these zip codes have elevated blood lead levels. The one zip code with elevated blood lead levels and a lower percentage of older homes, zip code 95020 in Gilroy, is not near an airport.

The data clearly show Reid-Hillview is most likely not the primary source of the elevated blood lead levels in the local community. Instead the most likely culprit is the homes the children live in. Even if Reid-Hillview did not exist, these children would be at high risk for elevated blood lead levels.



Promoting, Preserving and Protecting California's
General Aviation Community and Airports

**1414 K Street, 3rd Floor
Sacramento, CA 95814
(800) 319-5286**

December 2, 2018

Santa Clara County Board of Supervisors
70 West Hedding Street
San Jose, CA 95110

Re: County Airports Business Plan Update, Agenda item 19

Dear Board of Supervisors;

The California Pilots Association, incorporated in 1949, has a mission is to promote, preserve and protect the state's airports. As a statewide volunteer organization, we work to maintain the State's airports in the best possible condition. We have chapters throughout the state including one at Reid Hillview Airport.

The California Pilots Association is concerned about the health of airports. We are monitoring Reid Hillview Airport (RHV) and the actions of the Board of Supervisors for Santa Clara County.

The Reid Hillview Airport is a vital link in the National Plan of Integrated Airport Systems (NPIAS). This is the network of airports throughout the country. It is a system of feeder airports 88% of which are General Aviation (smaller planes) airports like Reid Hillview Airport, which use the same navigational systems. They are integrated into the system with air carrier airports like San Jose International Airport (SJC) and San Francisco International Airport (SFO). Reid Hillview Airport is classified as a Reliever Airport that relieves or saves San Jose Airport from having to accommodate the Air Traffic of smaller planes. This allows for a more efficient use of air space and air traffic control which in practice prevents delays of scheduled commercial aircraft. That means your business trip or vacation is not delayed by having to wait while these smaller planes (which would then be forced use SJC should something untoward happen to Reid Hillview Airport) take off and land before your airliner.

You will hear from others the economic value of the Airport the benefits to the area of the Airport including Angel Flights and emergency services. Many small businesses use aircraft at RHV for business trips. There are also businesses on the field which employ all types of workers.

Additionally, the EPA study which took place at Reid Hillview also included San Carlos Airport. The San Carlos Airport Pilots Associations (SCAPA) also a chapter of the California Pilots Association responded to many of the inaccuracies of that report. It was flawed as the EPA failed to follow their own methodology and placed the monitors not in ambient air as required but very close to the planes' exhaust thus skewing the results. No high lead levels were found from monitors away from plane's exhaust. Attached is SCAPA's response much of which applies to RHV as well.

Lastly, we urge the adoption of Alternative 1 in the Santa Clara County staff report which suggests again taking Airport Improvement Program Grants from the Federal Aviation Administration. This not only maintains Reid Hillview Airport in good condition but provides infrastructure jobs in the San Jose/ Reid Hillview area. It also protects and improves the National Transportation System.

Thank you and please protect this vital public resource for the benefit of all of Santa Clara County.

Respectfully submitted,



Carol Ford
President - California Pilots Association
President-San Carlos Airport Pilots Association
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San Carlos Airport Pilots Association – Lead Task Force Memo



MEMORANDUM

From: SCAPA Lead Task Force

April 20, 2015

RE: EPA LEAD MONITORING AT THE SAN CARLOS AIRPORT (KSQL)

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I. Background

The San Carlos Airport Pilots Association (SCAPA) represents pilots who use San Carlos Airport (KSQL) as their main base of operations. Our members include commercial operators, airport businesses, and private operators. Our members' flying activities include everything from air ambulances, law enforcement and environmental missions, commercial passenger charters, Young Eagles (free educational children's flights), Angel Flights (volunteer medical transport), and business and personal transportation. SCAPA is committed to environmental responsibility—the underpinnings of which require sound science, analysis and action conforming to approved methods.

This memorandum considers the U.S. Environmental Protection Agency's (EPA's) premature release of uncertified and flawed raw data concerning the presence of lead at KSQL. Furthermore, this memorandum describes how EPA deviated from its own study design by placing ambient air monitoring equipment in extremely close proximity to aircraft engine propeller blast, forcing concentrated exhaust emissions into the monitors and thereby producing inaccurate, distorted lead level results. **Notwithstanding, subsequent monitoring on the North side of the Airport found unelevated, background – nominal lead levels, underscoring the EPA's flawed data and undertaking.**

San Carlos Airport Pilots Association – Lead Task Force Memo

The industry standard for aircraft fuel is 100 octane low-lead (100LL) aviation gasoline. There is no certified or commercially viable alternative today or in the immediate future for 100LL Avgas (the standard aviation gasoline sold at KSQL). While it has been asserted that 70% of the General Aviation fleet can be modified to run a commercializable form of unleaded fuel (94UL), the fact is that the remaining 30% of the fleet cannot, and that 30% is responsible for 70% of fuel sales because it includes all high performance aircraft including most commercial operations.¹

II. Discussion

In 2009, the EPA required that ambient air monitors be installed at fifteen airports throughout the United States, and that they be monitored for one year in an effort to better understand how lead emissions affect the air near airports. Three of the fifteen airports are located in the San Francisco Bay Area including KSQL, Palo Alto Airport and Reid-Hillview Airport.²

In early 2012, SCAPA learned that the EPA had adopted a rule for performing baseline studies of lead from various sources, including airports, and that KSQL was on the list of sites to be tested. At that time, EPA and Bay Area Air Quality Management District (BAAQMD) officials stated that the purpose of the study was exclusively "for modeling" to determine whether their study methodologies were valid and appropriate. No enforcement or other action was intended to be taken based on results of the surveys.

The EPA released a memorandum³ stating its rationale for selecting the airports and proposed protocols for monitoring air at such airports. In the memo, the EPA discussed the importance of testing "ambient air" at locations that are appropriate from a scientific perspective, and referred to several generations of lead studies at the Santa Monica Airport. The EPA stated its intention to measure ambient air "downwind" from the most frequently used runway because "The location of the predicted maximum lead concentration(s) at airports is *downwind* of the area(s) where pilots conduct the preflight run-up check and takeoff."⁴ The Santa Monica studies show that lead from aircraft engines tends to disperse very rapidly as distance from the engine exhaust increases, and that "lead concentrations during the maximum three-month period . . . decreased four-fold from the end of the runway to a site 150 meters downwind."⁵

¹ The FAA has formed the Unleaded Avgas Transition Advanced Rulemaking Committee (UAT-ARC) (which includes EPA) to address eliminating lead from aviation fuels. Their report is available at http://www.faa.gov/regulations_policies/rulemaking/committees/documents/media/Avgas.ARC.RR.2.17.12.pdf.

² Two of the remaining fifteen monitored airports are in Southern California at Palomar/Carlsbad and Gillespie Field in San Diego.

³ EPA, MEMORANDUM RE: SELECTION OF AIRPORTS FOR THE AIRPORT MONITORING STUDY (Nov. 18, 2010), at page 4, available at <http://epa.gov/otaq/regs/nonroad/aviation/memo-selc-airport-mon-stdy.pdf> (hereinafter "EPA Memo").

⁴ EPA MEMO, Id.

⁵ "The Santa Monica airport monitoring study . . . reported a three- to four-fold decrease in ambient lead concentrations over a distance of 80 meters between two monitors sited to evaluate the lead gradient downwind from the runway." EPA Memo, at page 6.

San Carlos Airport Pilots Association – Lead Task Force Memo

The EPA Memo also included discussion of the proposed study at each airport, including aerial photographs showing the site for the air monitors. For KSQL, the photo⁶ (see Figure 1, below) shows two monitors—one located on the north (Bay) side of runway 30, and one outside the security fence on the south side of runway 30.



Figure 1 - Study Design Monitor Placement

The monitor on the north side was to be placed “less than 50 meters” from the runway 30 runup area and threshold. Because there is no public access to the north side of runway 30, SCAPA objected to the placement of a monitor in that location. That monitor location was eliminated from the study. The monitor on the south side was to be placed at the location shown by the pin in Figure 1.

That, however, is *not* where EPA put the monitor. Instead of placing the monitor downwind from the runup area (where pilots exercise their engines to a high RPM to ensure proper performance and safety during take-off and thereafter) on the south side of 30, EPA mounted the monitor inside the security fence directly behind the run-up area—25 or fewer feet from the aircraft exhaust, and DIRECTLY in the propeller blast of the engines. See Figures 2 and 3, below. The prop blast easily overwhelms prevailing winds, and blows engine exhaust directly behind the airplanes, into the monitor, before the blast reaches the security fence that separates the runup area from the parking lot.⁷ Pedestrians are prohibited inside of the security fence.⁸ Even if pedestrians were permitted access, prop blast from aircraft engines at idle is significant, uncomfortable to endure, and during engine runup, highly uncomfortable and dangerous—blowing dust, sand, gravel with force sufficient to cause injury. People

⁶ EPA Memo, Figure 28, at page 36.

⁷ The EPA agreed that the EPA had moved the monitor from the position designated in the design study (telephonic conversation between Marion Hoyer and Carol Ford, at al., on March 7, 2013), but mistakenly represented it was only six feet. In fact, the actual location of the monitor is approximately 100 meters closer to the tailpipe source than the design location. In contrast, consider that the monitors at Gillespie Airport are ~400 feet from the run-up area.

⁸ The run-up area is in the “restricted access area” and the monitors are also inside the “Runway Object Free Area (ROFA)”.

San Carlos Airport Pilots Association – Lead Task Force Memo

do not voluntarily stand in or breathe prop blast. In EPA’s lexicon, the monitors are not located in or sampling “ambient air”. Moreover, the monitor manufacturer’s operating manual prohibits sampling in a direct blast of air (such as “prop blast” – the forceful wind from an aircraft’s propeller), in non-ambient air conditions. Thus, the conditions under which the EPA’s monitor data was taken at KSQL – in prop blast - was patently invalid.⁹



Figure 2 - Actual Monitor Placement (Red Arrow Location)

The force of the prop blast, however, dissipates quickly. The security fence itself, because it has slats in it, substantially arrests and deflects the prop blast. This fact is readily observable by standing behind the fence line, where the air velocity in the parking lot is dramatically less than the velocity on the other side of the security fence immediately behind the aircraft. Indeed, the security fence and environs show how the security fence absorbs tremendous amounts of energy from prop blast during runup. Once deflected, engine exhaust disperses and follows the prevailing winds away from the parking lot and towards the Bay.



Figure 3 - Monitor Proximity to Run-up Area – In the Prop Blast ~25'

⁹ See Tisch Environmental, Inc., Sampler Manuals, <http://tisch-env.com/manuals/high-volume-air-samplers/>.

San Carlos Airport Pilots Association – Lead Task Force Memo

Moreover, the force of that prop blast can resurrect contaminants that had build-up over years from prior land uses and (the extensive) prior use of leaded fuel on Route 101,¹⁰ all non-aviation sources.

Predictably, the monitors detected lead levels in excess of EPA's recently-lowered allowable threshold for airborne lead. In an apparent attempt to verify the readings of the single monitor that was originally placed, EPA installed a second monitor a few feet away. The results from the second monitor also exceed EPA's recently-lowered threshold, yet their results differ.

Notwithstanding EPA's previously-stated intent to use the data only for baseline study design purposes, EPA subsequently published the results of its (uncertified and flawed) study. This is further aggravated by the EPA "Fact Sheet" that failed to acknowledge that the monitors are placed improperly despite having been notified of same – thereby potentially misleading the public.¹¹

The security fence around the run-up area disperses some of prop blast. Moving the monitors outside the security fence and closer to the Bay (where originally proposed) would provide readings that represent the air in a publicly accessible area.

In March, 2013, an additional monitor was installed to the north of the Airport. The EPA subsequently characterized the results of such monitoring as "*pretty much background* – 0.001 micrograms/m³... The numbers from this monitor should ... be given the same weight as the numbers from the south monitor."¹² These results tend to validate the key assertions in this memo – that the monitoring results from the monitors proximate to the run-up area are flawed.

In March of 2015, another monitor was placed inside and near the fence, approximately ~145 yards downwind from the now-closed runup area. As before, these monitors are sampling air that the public does not breathe—not ambient air—and thus again, in violation of the EPA's own study protocols. Airport Management expects that the results from these monitors will nonetheless be lower than EPA's action threshold because (i) the monitors, while still inside the fence, are farther away from the now-closed runup area, and (ii) the runup area has been moved to a location even farther away than before. The Airport may be correct in its predictions. This does not, however, excuse the multiple errors in EPA's monitoring program, nor does it restore the use of the runup area to the public users of the Airport.

¹⁰ D.J. Steading, C.E. Dunlap, and A.R. Flegal, "New isotopic evidence for chronic lead contamination in the San Francisco Bay estuary system: Implications for the persistence of past industrial lead emissions in the biosphere," PROC. OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA, v. 97, no. 21, at pp. 11181-11186 (Oct. 10, 2000).

¹¹ MONITORING THE AIR FOR LEAD NEAR THE SAN CARLOS AIRPORT (draft, Mar. 8, 2013). Defects in the available EPA data/reporting (to date) include but are not limited to uncertain or unstated: qualifications of monitoring personal, adequacy of student training, calibration of instruments, comparison of instruments and personal at the target airports, and identification/descriptions of the physical locations and site locations at the airports studied.

¹² Email from Gwen M. Yoshimura, Air Quality Analysis Office, Environmental Protection Agency, Region 9 (Mar. 29, 2013) (emphasis added).

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Alternative Fuels

There is an established National working group of EPA, FAA and aviation industry representatives that is following recognized procedures to resolve unleaded aviation fuel issues. EPA's flawed lead study may also have the unintended effect of precipitating well-intended but premature and misdirected local initiatives to provide substitute fuels – initiatives which may not offer a viable solution. Indeed, as concluded by the General Aviation Avgas Coalition:

For the general aviation community, any regulation of aircraft emissions is a safety of flight issue. Small changes to aviation fuel can have life and death consequences for pilots, passengers, *and those living underneath flight paths*. . . . The prominence of safety reinforces the need to proceed carefully, and to make a determination only when such action is well supported by data and careful analysis."¹³

III. Analysis

The ambient air monitors were installed at all three Bay Area airports in early 2012. These airports have operations and mixes of air traffic nearly identical to KSQL. Yet, the raw data from the monitors at Palo Alto and Reid Hillview Airports show lead levels significantly lower than at KSQL. The placement of the monitors directly behind the aircraft run-up area and inside of a security fence at KSQL has created false data from which no public health implications can be drawn. ***EPA deviated from its own study design in placing the monitors.*** It neither considered the effect of prop blast, nor that *prop blast inside the security fence is not ambient air*. Indeed, the EPA's *Quality Assurance Handbook for Air Pollution Measurement Systems*¹⁴ states:

Because obstructions such as trees and fences can significantly alter the air flow, monitors should be placed away from obstructions. *It is important for air flow around the monitor to be representative of the general air flow in the area to prevent sampling bias....* Network designers should *avoid sampling locations that are unduly influenced by down wash....* in these cases, the sample intake should either be elevated above the level of the maximum ground turbulence effect or placed at a reasonable distance from the source....

The EPA appears to have failed to model or test the actual, true dispersal of aircraft exhaust at KSQL, which would take into account, among other things: (i) prevailing winds that carry exhaust away from the monitor site, (ii) the placement of monitors on the wrong side of the security fence, and (iii) the lack of public access—let alone significant distance to airport neighbors—where aircraft exhaust is blown by the wind.

¹³ COMMENTS OF THE GENERAL AVIATION AVGAS COALITION ON THE ADVANCE NOTICE OF PROPOSED RULEMAKING ON LEAD EMISSIONS FROM PISTON-ENGINE AIRCRAFT USING LEADED AVIATION GASOLINE, EPA DOCKET NO. EPA-HQ-OAR-2007-0294, *available at* <http://www.eaa.org/govt/EPA-Lead-Avgas.pdf> (emphasis added).

¹⁴ VOLUME II, AMBIENT AIR QUALITY MONITORING PROGRAM, EPA-454/B-08-003 (Dec. 2008), Section 6.3 at page 11 (emphasis added), *available at* <http://www.epa.gov/ttnamti1/files/ambient/pm25/qa/QA-Handbook-Vol-II.pdf>.

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The results from two monitors located just feet apart appear to confirm what EPA acknowledges in its own design memo: *distance and direction from the source have tremendous impact on the levels of lead detected by air monitors*. The sole valid conclusion that can be drawn from the data collected to date is that there is lead in aviation fuel.

IV. Questions for Consideration

EPA's handling of this matter raises many questions, including the following:

1. Why was the public initially told that the purpose of the study was merely for baseline research, when EPA instead released the raw study data to the public?
2. Why was the monitor location moved from the location in the published study design?
3. Why was the monitor placed directly in the prop blast of aircraft behind the run-up area?
4. Why was the monitor placed on the wrong side of the security fence—on the restricted side which prohibits public access?
5. Why was there no apparent consideration of whether the prop blast directly behind an aircraft meets the definition and purpose of "Ambient Air"?
6. Why has EPA apparently failed to internally validate its results before publication?
7. Why has EPA proceeded without critical stakeholder participation?
8. Why has another monitor again been placed inside the fence where there is no "Ambient Air"?
9. Why were no less drastic alternatives tried per the FAA's recommendations¹⁵ before the runup area was permanently closed?

V. Conclusion

The deviation from EPA's original study design has created a false and alarming picture of lead at KSQL. Rather than having measured ambient air at KSQL, the monitoring has simply measured aircraft exhaust virtually "at the tailpipe" of aircraft. Such results neither serve their intended purpose nor indicate the level of lead to which the public is exposed. Its release without adequate analysis, qualification, or consideration of available information is wrong! It assumes that the public stands close enough to breathe the exhaust of these small airplanes. Finally, the release of such erroneous data will likely irreparably harm KSQL, its many diverse users, and the community at large.

¹⁵ FAA, Memorandum from Ralph Thomson, Mgr., Apt. Planning and Environmental Div. (APP-400) to Reg'l Airports Div. Mgrs., et al (June 19, 2013).

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VI. Recommendations

1. Cease monitoring activities until a thorough review of the study design has been completed and remedial actions taken to ensure that the design and implementation conform to relevant standards and science, and that KSQL is not prejudiced as a result of the prior flawed, uncertified data monitoring results.
2. Thereafter, reposition the monitors to ensure that they sample ambient air in a publically accessible area rather than in localized concentrations of engine emission in prop wash.
3. Recognizing that future, properly executed lead monitoring should indicate nominal (conforming) emissions at KSQL, and recognizing that current National initiatives to develop a lead-free aviation gasoline substitute are not anticipated to product a viable result in the foreseeable future, local aviation fuel planning activities should be held in abeyance.
4. Formally recognize that SCAPA is a stakeholder.

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