

Dear Congresswoman Eshoo,

We are sending you this letter as individuals and long-time citizens of Palo Alto. We appreciate your efforts to deal with airplane noise over the Peninsula, and our City in particular. We were also extremely impressed by Joe Simitian, whose patience, clarity, and wisdom steered the Select Committee effectively. We also want to thank your staff for their support during this long process.

We are pleased with several of the recommendations that the Select Committee made:

(1) recognizing the need for noise monitoring and better noise metrics and thresholds, (2) establishing a successor Committee to the Select Committee, (3) returning arrival traffic from the north to BDEGA-east, (4) pursuing new nighttime noise abatement procedures, (5) retrofitting Airbus 319 and 320 class aircraft, and (6) returning the target altitude around the MENLO waypoint to 5000 feet. If implemented, these measures will help reduce noise.

The Select Committee fulfilled its primary goal to move the NextGen SERFR ground track back to the Big Sur ground track, per your Aug. 21, 2015 joint letter with Congressman Farr to FAA Administrator Huerta.

Unfortunately, the return of the SERFR ground track will have little effect one way or the other on the communities at the end of the NextGen procedure – Los Altos Hills, Stanford, Palo Alto, Menlo Park and East Palo Alto – where the majority of your constituents live. These cities experienced a very significant increase in noise and will continue to do so. Reduced vectoring will make our situation even worse.

Noise became intolerable under NextGen/SERFR because previously dispersed traffic was concentrated into a narrow corridor and because traffic on SERFR increased. Before NextGen, the FAA used a highly manual air traffic approach system, whose imprecision naturally spread arriving aircraft across a 10 mile wide corridor. NextGen replaced that dispersion with an automated high-capacity conveyor-belt that concentrates all arrivals onto a single dense track about the width of several football fields. The FAA then added traffic to this narrow super track by moving flights from other approaches onto SERFR and reducing separation between sequential flights. (See the appendix to this letter for traffic increases on SERFR vs. other routes and overall SFO arrivals.)

In our view, moving the SERFR track from over Capitola back to over Santa Cruz is a local Santa Cruz County issue that doesn't hurt or help the mid-Peninsula in any significant way. Lengthy Select Committee discussions about the track diverted the Select Committee's attention from the real problems:

1. The concentration of noise into a narrow corridor over Los Altos Hills, Stanford, Palo Alto, Menlo Park, and East Palo Alto, and
2. The ever increasing number of flights in this corridor.

Shifting and concentrating cumulative noise from a wide dispersion to a narrow track is viewed by experts around the country as the primary noise problem created by NextGen. Even Michael Huerta acknowledged this recently.

In addition, we disagree with the Select Committee recommendation that the FAA eliminate the 50% of vectored traffic that remains dispersed (contrary to the FAA's early observation that this dispersion was a good thing). The vectored traffic is still handled manually by air traffic

controllers, and so largely follows historical pre-NextGen patterns. Under the Select Committee's recommendation, an additional 50% of traffic would move to the new route over the now narrowed BIG SUR track, further increasing the amount of noise over Palo Alto and nearby communities.

Finally, the Select Committee did not even ask the FAA to investigate the most logical solution, which is to use GPS technology to enable higher and fully over-the-bay approaches. These would reduce noise for everyone, but even an investigation of them was dismissed out of hand because of the questionable assertion that it would shift noise. (The SFO Roundtable independently suggested an over-the-bay approach). How could the Select Committee not ask the FAA to investigate over-the-bay solutions based on unsubstantiated concerns that it might shift discernible noise while recommending to concentrate vectored traffic even though the FAA made clear that such action will shift more traffic and noise over densely populated areas such as Palo Alto?

Prior to the Select Committee's final decisions, we assumed that Palo Alto would have to wait longer for relief, but that the Select Committee would recommend moving directionally on longer-term structural solutions. Instead, the Committee's recommendations to concentrate further traffic over Palo Alto and not to investigate over-the-bay approaches appear to us to be a missed opportunity to ask the FAA to solve the aircraft noise issue they created for mid-Peninsula communities that experienced the greatest noise increase from NextGen.

Based on these concerns, we would ask for your support and commitment to:

- 1) **Establish a Permanent Committee on Arrivals as soon as possible** to follow up on the Select Committee recommendations and begin work on long-term solutions that reduce noise throughout the region. We also believe that this committee needs an independent technical capability, similar to the one that supports the SFO Roundtable. The Select Committee process seemed to be influenced at times by flash mob political pressure rather than by sound technical expertise or consideration. In contrast, the SFO RoundTable, which relied heavily on its independent technical staff, included a number of technically insightful and nuanced recommendations for the mid-Peninsula, even though it was not in their charter to do so.
- 2) **Ask the FAA to investigate approaches that use the full length of the bay for traffic arriving from the south.** Results of these investigations would of course be discussed with representatives of the areas that could potentially be affected.
- 3) **Push SFO to modernize its landing system to enable options that reduce noise for everyone.** When SFO attempted to add a third runway a number of years ago, they promised to implement precision GPS-based landing systems to keep noise over the bay. They never implemented this system. One of the main reasons that SFO uses the bay so ineffectively is that the use of GPS-based systems (a primary goal of NextGen) actually ends at the MENLO waypoint. The final approach and landing system used at SFO – the last mile if you will – still uses obsolete technology. This antiquated system prevents SFO from implementing higher angle approaches (as used in Europe and Japan) or efficient use of both the shape and full length of the bay. In addition, the FAA considers GPS landing systems to be safer than SFO's current system, yet SFO has not invested in upgrades even with its close parallel runways. (The Houston TX airport, for example, currently uses a GPS-based landing system very successfully.) If noise is ever

November 22, 2016

to be reduced for everyone on the peninsula, SFO must invest in a GPS-based landing system to replace its current, rigid, and outdated ILS system.

Please accept our observations and suggestions as constructive feedback. We are encouraged that efforts are underway to attempt to improve the situation. However, as described above, we believe that the harder and bigger problems, particularly in Palo Alto and nearby communities, were overlooked by the Select Committee and will continue to worsen unless ameliorated by more innovative approaches than we have seen to date.

We would again like to thank you for your continued attention to this problem and would be grateful for the opportunity to explain our analysis and recommendations further either in Palo Alto or Washington at your earliest convenience.

Sincerely,

Lee Christel
Tom Rindfleisch

Marie-Jo Fremont
Mark Shull

Rachel Kellerman
Jon Zweig

Appendix – Traffic increases on SERFR vs. other routes and overall SFO arrivals

SFO Arrival Changes in one month (July 2016 vs. July 2014)

Source: FAA presentation to Select Committee on Nov 3, 2016



Traffic data changes July 2016 vs. July 2014

Arrival routes	# of aircraft July 2014	# of aircraft July 2016	Delta (Jul16 – Jul14) # of aircraft	Delta (Jul16 – Jul14) %
OCEANIC	1139	867	- 272	-23.9%
NORTHERN (GOLDN/BDEGA)	4400	4929	+529	+12.0%
SOUTHERN (BSR/SERFR)	4752	5576	+824	+17.3%
EASTERN (MOD/DYAMD)	7728	7300	-428	-5.5%
TOTAL SFO	18019	18672	+653	+3.6%

- **SERFR**: 824 more planes/month → ~27 more planes/day; ~10,000 planes/year
- **BDEGA**: 529 more planes/month → ~18 more planes/day; ~6,000 more planes/year
- **OCEANIC**: 272 fewer planes/month → ~9 fewer planes/day; ~3,000 fewer planes/year
- **SFO**: 653 more planes/month: ~22 more planes/day; ~8,000 more planes/year
- **DYAMD**: 428 fewer planes/month: ~14 fewer planes/day; ~5,000 fewer planes/year

Source: FAA presentation to Select Committee on Nov 3, 2016

9

Menlo Waypoint Trends

