Post NextGen Rollout Phases

Increase in Aircraft Noise Over Woodside: Our Asks of the FAA

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Executive Summary: Sharp Increase of Aircraft Noise Over Woodside

- Major Increase of Aircraft Noise after NextGen rollout phases
  - March 15, 2015 phase: BRIXX route added over Woodside
  - Oct 15, 2015 phase: RNAV-caused shift and narrowing of flight corridors, e.g.
    - West-Oceanic arrivals (including 10pm to 7am sleep disruption; Appendix 1)

- Disproportionate amount of the noise burden of vectored SERFR
  - Over one third of all vectored SERFR
  - Fly at lowest altitudes and use of noisy speed brakes

- Please do not shift more routes or vectored flights over Woodside
- Please reduce the number of vectored SERFR over Woodside
- Please raise altitude of all vectored flights, SERFR including, to 8,000+ ft for the same noise abatement reasons as the Eshoo agreement
  - NorCal TRACON Order NCT 7110.65k 5-7 a.(2).(f)
- Please route all nighttime West/North Oceanics over the Bay (BDEGA East Leg)
SFO Roundtable Aviation Consultant Acknowledges Traffic Burden Over Woodside

In her Draft Response to Feasibility Document Adjustment 2.a.i: Adjust Traffic Activity in the Vicinity of Woodside VOR including Altitudes

She Identifies Several Issues in the Feasibility Document:

+ FAA Initiative considered only one portion of the flights, the subset of West-Oceanics which utilizes Tailored Arrivals

+ While the majority of traffic is vectored SERFR and vectored Northern Arrivals
Focus: Quantitative Analysis of Vectored SERFR Over Woodside

- Using the same Gate as SFO Noise Abatement Office reports on nighttime western Oceanic arrivals
  - fly below the 8,000 feet required minimum altitude

- Gate: a virtual two-dimensional window in space, where we measure aircraft traffic crossing through the window
  - See http://media.flysfo.com/napm_osi_20160619_w3b.pdf 3rd page

- Post October 15, 2015 NextGen Phase:
  - Representative 1-Week - Dec 4-10, 2015
  - Data Source: FOIA FAA
Altitude of Vectored SERFR Over Woodside VOR

4,270’ Above Ground Level (AGL) + Noisy Speed Brakes

**Much Lower Altitude**
- Average 6270 feet
- VOR elevation ~2,000 feet
- ~4,270 feet AGL

Than Other Areas of Vectored SERFR
- Elevation of 0 to 2000 feet
- 10,000 - 14,000 feet
- 8,000 - 14,000 feet AGL

**DISPROPORTIONATE AMOUNT OF NOISE BURDEN FROM SERFR DUE TO VERY LOW-ALTITUDE VECTORING**

50% of all SERFR is VECTORED
Higher Altitude

Number Of Flights

6000

Vectored-

SERFR:

Largest Contributor of Traffic 43%

Lowest Average Altitude 6270 feet 4270 feet AGL

Over a Third Of All Vectored SERFR

Lower Altitude

ALITUDE Per 500 feet INTERVAL by ROUTES

45.. 5000 5500 6000 6500 7000 7500 8000 8500 9000 95..10..

ORANGE: Vectored SERFR
GREEN: West-Oceanics
BLUE: Vectored Northern
ASKS of the FAA

- Reduce Number of Vectored SERFR over Woodside and Spread More Equitably: example suggestions
  - Greater Use of Holding Patterns of the Published SERFR Route over Water
  - Vector Further West Over the Ocean with Earlier Turn To SFO

- Raise Altitude to 8,000 feet or Above of all Vectored Flights
  - For the Same Noise Abatement Reasons that Require Altitude of the West-Oceanic Flights to be at or above 8,000’ (the Eshoo agreement)
  - NorCal TRACON Order NCT 7110.65k 5-7 a.(2).f) and 5-6 a.(1):
    “All oceanic jet arrivals inbound from the west shall cross [Woodside VOR] OSI at or above 8,000 feet MSL.”

- Do Not Use Speed Brakes in the Vicinity of Woodside VOR
  - Move Speed Adjustments Over Water Instead of Over Land
Conclusion

+ Vectoring Large Percentage of SERFR Flights in the Vicinity of Woodside VOR
  + Is Not Dispersal
  + Is Planned Concentration
  + Is Not Equitable

+ Please do not use the Woodside VOR vicinity as a low-altitude makeshift holding pattern for any traffic

+ “The Town [of Woodside] is vehemently opposed to any modifications to routes that would have the effect of concentrating additional flights over Woodside. In particular, any modification of routes which add additional aircraft to a route that approaches the Woodside VORTAC would have substantial noise impact on Woodside.” Town of Woodside Resolution No. 2016 7105

+ Please Read Appendix 1 on Sleep Disruption Caused by Nighttime West-Oceanic Flights and Suggested Approaches
THANK YOU

- Select Committee Members
- FAA Western Region Director Glenn Martin and Staff
- Congressional Representatives Anna Eshoo, Jackie Speier, and Sam Farr
- All the Congressional Staff Members
- And Others Who Have All Worked So Hard in Pushing Forward This Process
Appendices
Appendix 1: West Arrival Oceanic Problem: Sleep Disruption – Exacerbated with RNAV

Early Morning and Late Night Flights (Source: SFO Noise Abatement)

+ 5-7 flights from 4am-6:30am
+ Example

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+ 3-7 flights from 10:30pm to past midnight

LOUD

+ Loud Airplanes: B73*, Airbus 320
+ NorCal TRACON Order NCT 7110.65k SFO 5-7 a.(2).(f) “All oceanic jet arrivals inbound from the west shall cross OSI at or above 8,000 feet MSL.”
+ VRD046 /VRD048, ANZ8, CPA872, ...frequently fly below 8,000’, some as low as 4200’ (~2,200 AGL)
Appendix 1: West Arrival Oceanic Problem: Sleep Disruption -- ASKS

Route All Nighttime Flights Over the Bay, e.g., by
- Adjust Western Oceanic arrivals to join the Point Reyes approach at PYE or STINS and follow to SFO via the BDEGA Arrival East Leg (the “East Teardrop”)
- Alternatively, consider a new route directly over the Golden Gate Bridge for Western Oceanic Arrivals to join the BDEGA TWO East Leg arrival
- both suggested by Select Committee Member Gary Waldeck

Route Nighttime Flights Over Non-Populated Areas, by e.g.,
- Early am and late pm – little traffic => use best noise abatement paths, over non-populated area, disperse traffic (do not reuse the same path within and between each day)
  - E.g., Phleger Estate area, just north of Woodside VOR, is unpopulated
- Enforce 8,000’ minimum altitude