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

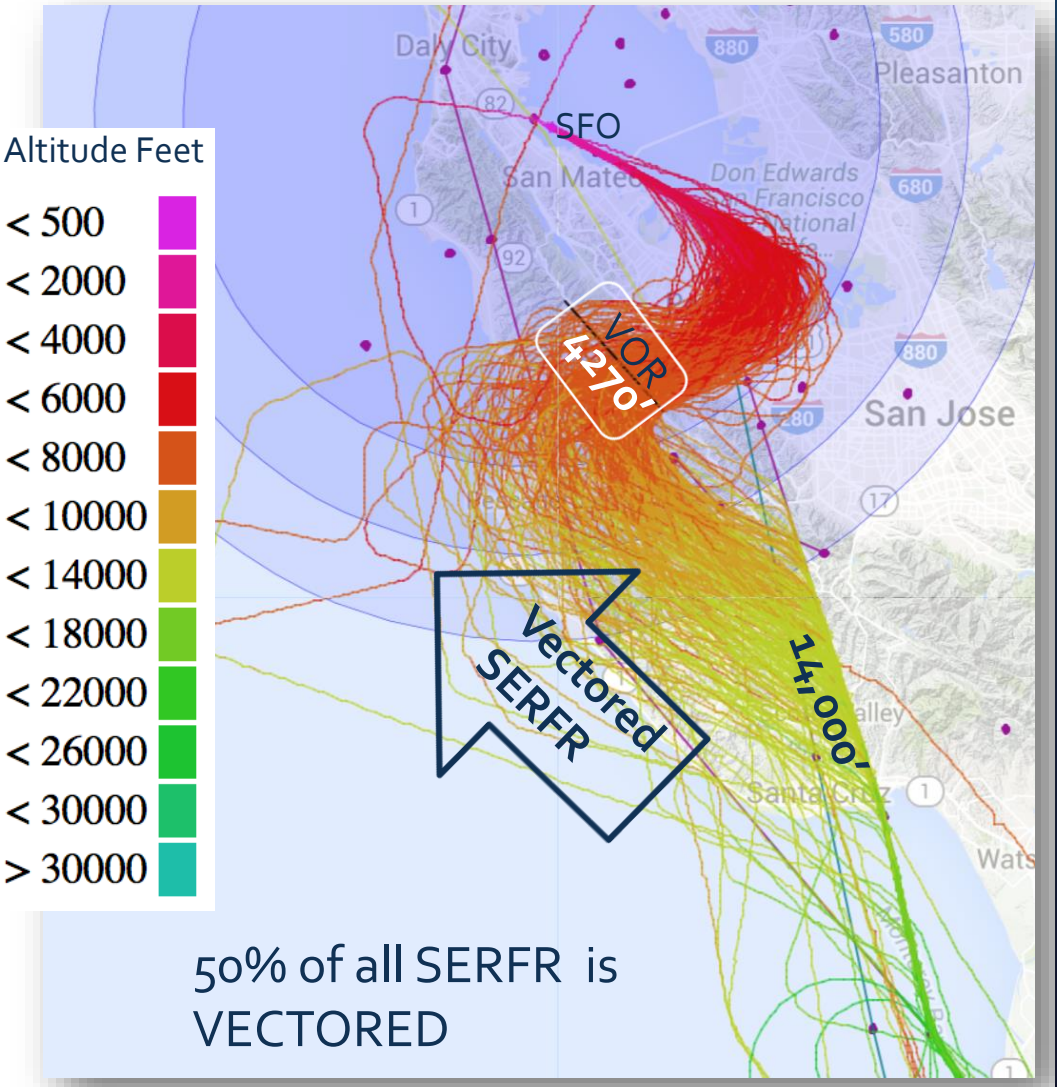
Much Lower Altitude

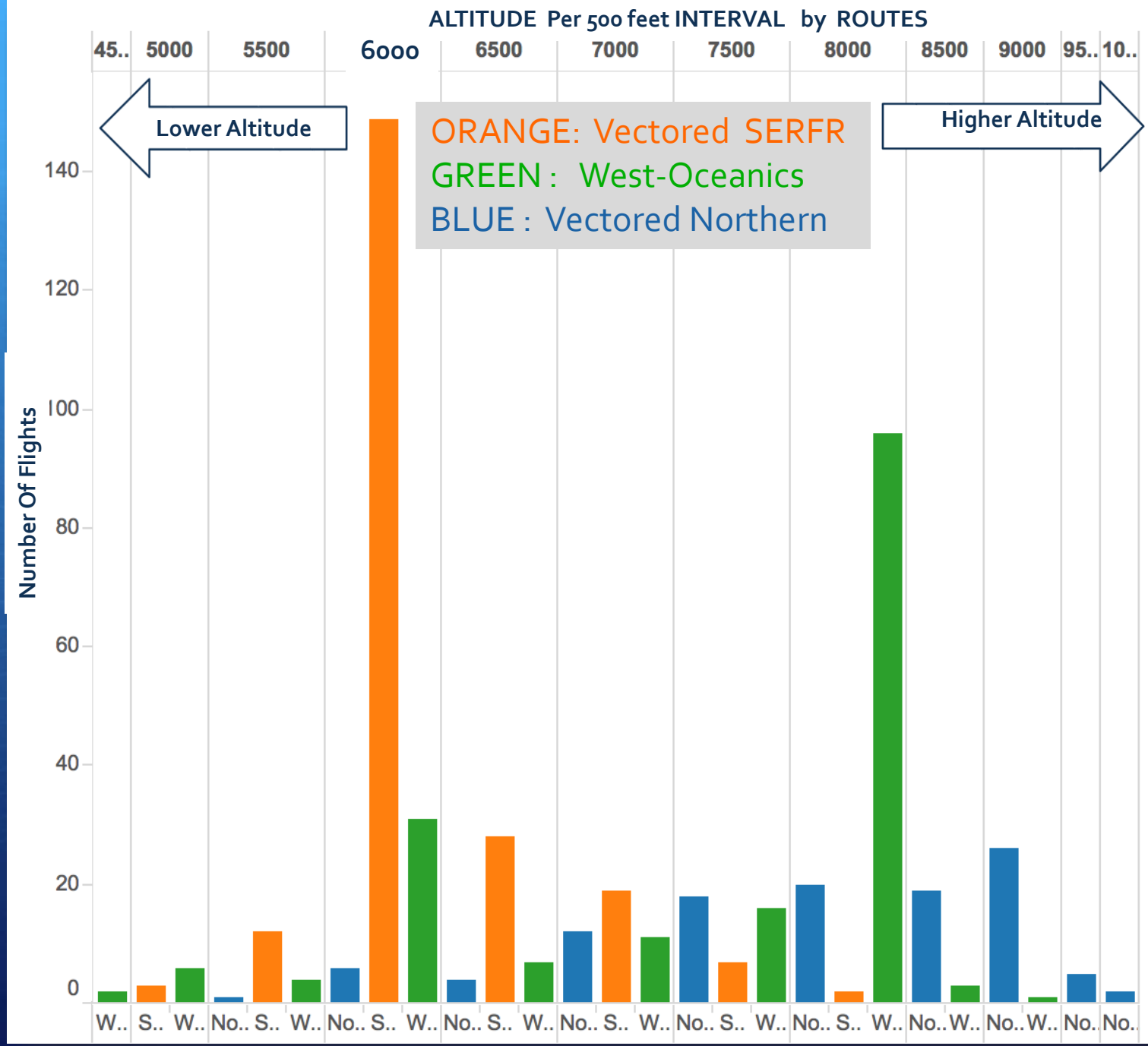
- Average 6270 feet
- VOR elevation ~2,000 feet
- ~4,270 feet AGL

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





Vectored-SERFR:

Largest Contributor of Traffic 43%

Lowest Average Altitude 6270 feet

4,270 feet AGL

Over a Third Of All Vectored SERFR

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

~4:15	~4:30	~4:40	~5:00	~5:50	~6:00	~6:30
UAL1746	UAL396	UAL1557	UAL1724	VRD048	UAL1580	UAL1575

- 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 Nigthtime 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