

# FAA Initiative to Address Noise Concerns of Santa Cruz/Santa Clara/San Mateo/San Francisco Counties

Additional Analysis



Federal Aviation  
Administration

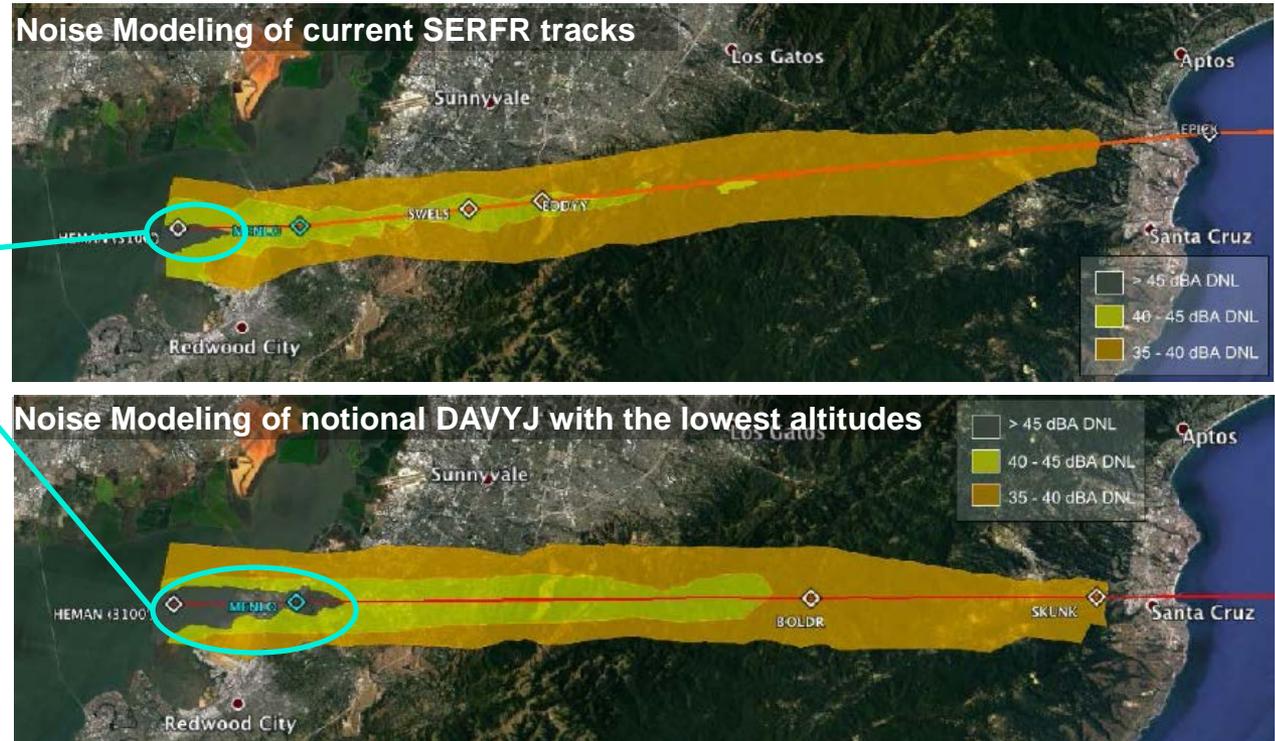


# **Clarification: Comparison of SERFR and DAVYJ and people exposed to >45 dB near MENLO for DAVYJ**



# Public Submission: Noise Modeling around MENLO

Why did the area of > 45 increase with the modelling of the lowest altitudes of the notional DAVYJ?

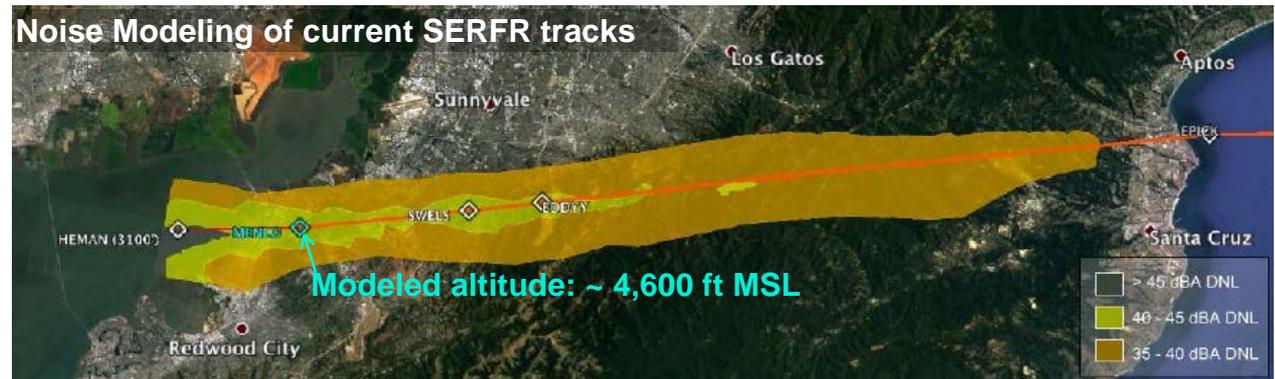


\*www.Davyjfacts.org's version of FAA's Aug 18<sup>th</sup> 2016 presentation \*



# Why the notional DAVYJ showed a larger 45 dBA area

The modelled SERFR used the average altitude of the current SERFR tracks\*. This average altitude includes the SERFR flights which remain on the procedure and those which are vectored off.



The modelled notional DAVYJ showed the lowest altitudes that the DAVYJ could achieve, assuming that all tracks would be at 4,000 feet MSL at MENLO, as published on the current SERFR.



\*Based upon 60 random days between June 2015 and May 2016



# Additional Noise Analysis

- **Current conditions (July 2016)**

- Comparison of SERFR and notional DAVYJ with MENLO at 4,000 ft MSL and crossing the Monterey Bay shoreline at 12,500 ft MSL
- Comparison of SERFR and notional DAVYJ with MENLO at 5,000 ft MSL and crossing the Monterey Bay shoreline at 12,500 ft MSL

- **Projected July 2019 conditions\***

- Comparison of SERFR and notional DAVYJ with MENLO at 4,000 ft MSL and crossing the Monterey Bay shoreline at 12,500 ft MSL
- Comparison of SERFR and notional DAVYJ with MENLO at 5,000 ft MSL and crossing the Monterey Bay shoreline at 12,500 ft MSL

\*Based on the Terminal Area Forecast for SFO\*



# Differences between original and additional noise analysis

- **For the original noise analysis:**
  - Used the 60 random days from June 2015 through May 2016
  - The altitudes at EPICK, EDDYY, SWELLS and MENLO were all defined.
- **For the additional noise analysis:**
  - Used July 2016 data.
  - The altitudes at EPICK and MENLO were defined



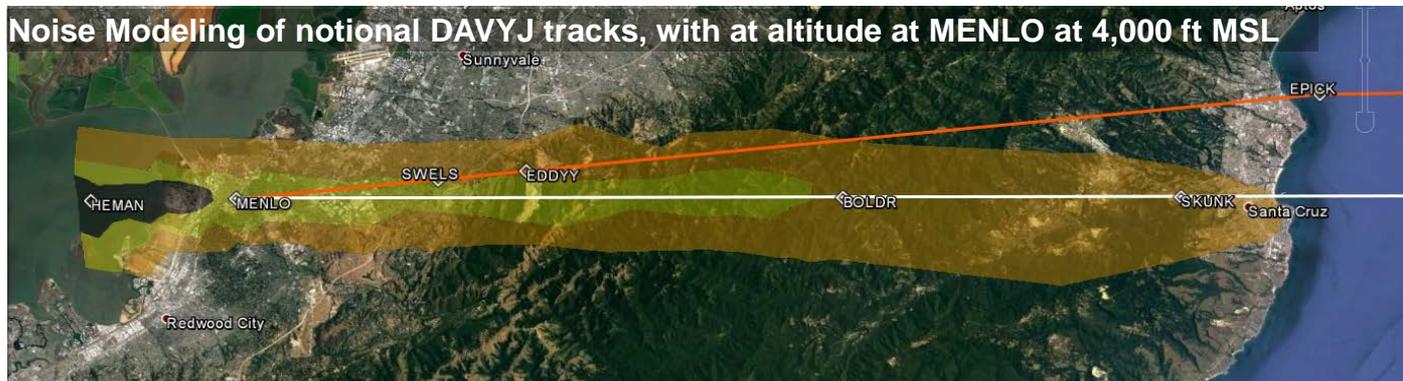
# Current conditions Noise Analysis Based on July 2016 SERFR traffic



# Comparison of SERFR and notional DAVYJ

MENLO at 4,000 ft MSL; Crosses Monterey Bay shoreline at 12,500 ft MSL

Track data: Model based on July 2016 SERFR tracks



## Key

■  $\geq 45$  dBA

■ 40 – 44 dBA

■ 35 - 39 dBA

— SERFR ground track

— notional DAVYJ ground track

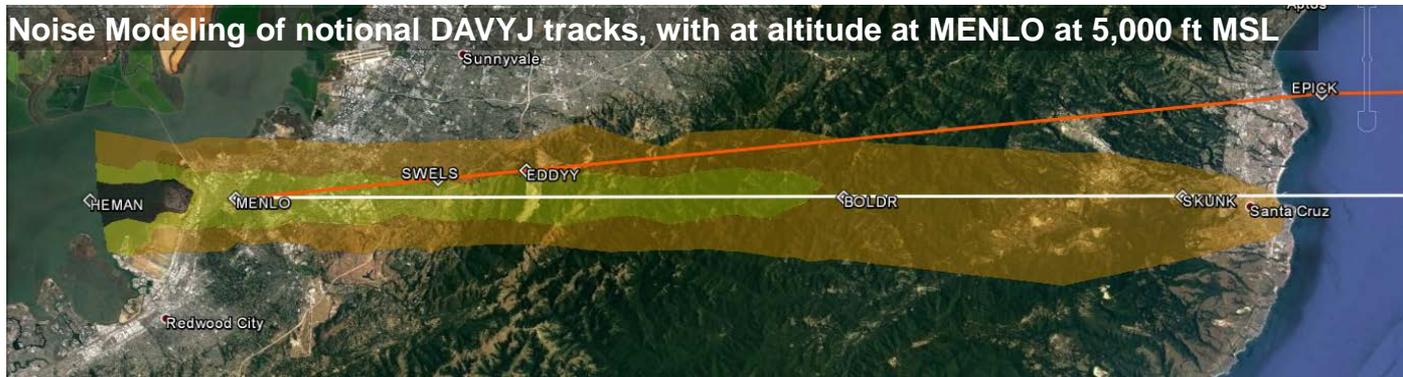
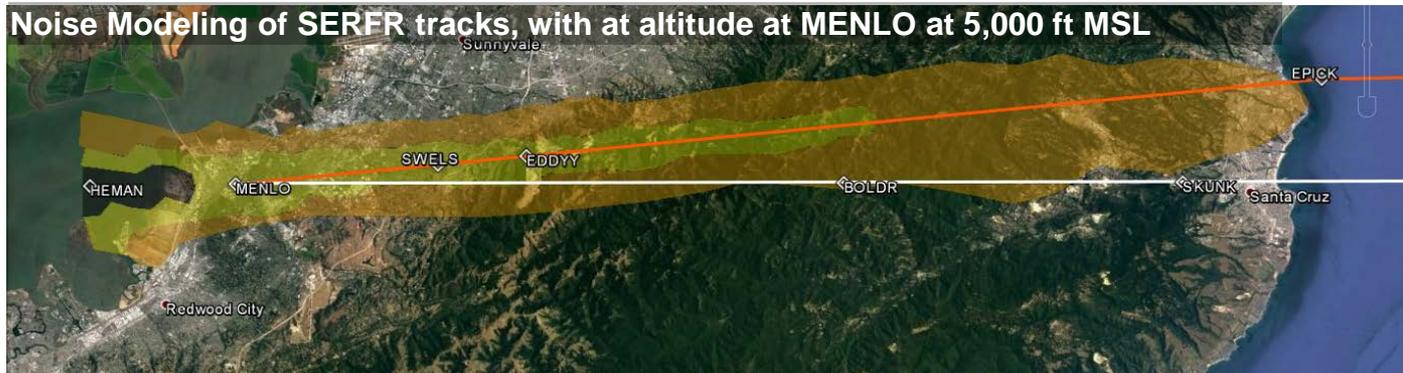


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# Comparison of SERFR and notional DAVYJ

MENLO at 5,000 ft MSL; Crosses Monterey Bay shoreline at 12,500 ft MSL

Track data: Model based on July 2016 SERFR tracks



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# Projected July 2019 Noise Analysis Based on SFO TAF data



**APO TERMINAL AREA FORECAST DETAIL REPORT**  
**Forecast Issued January 2016**

SFO

Fiscal Year	Enplanements			AIRCRAFT OPERATIONS					Total Ops	Total Tracon Ops	Based Aircraft			
	Air Carrier	Commuter	Total	Itinerant Operations			Local Operations							
	Air Carrier	Commuter	Total	Air Carrier	Air Taxi & Commuter	GA	Military	Total	Civil	Military	Total			
REGION:AWP STATE:CA LOCID:SFO														
CITY:SAN FRANCISCO AIRPORT:SAN FRANCISCO INTL														
1990	14,599,154	92,625	14,691,779	313,321	77,791	32,190	2,574	425,876	11,254	0	11,254	437,130	0	29
1991	15,043,625	705,570	15,749,195	310,013	85,969	26,195	2,361	424,538	10,771	0	10,771	435,309	0	26
1992	15,257,080	678,583	15,935,663	296,904	92,850	22,870	2,419	415,043	9,786	0	9,786	424,829	0	25
1993	14,935,725	702,898	15,638,623	287,404	101,982	22,211	2,322	413,919	9,485	0	9,485	423,404	0	25
1994	15,594,959	801,104	16,396,063	287,742	105,492	24,427	2,672	420,333	10,047	0	10,047	430,380	0	25
1995	16,179,584	707,763	16,887,347	299,444	96,936	25,664	2,465	424,509	12,398	0	12,398	436,907	0	25
1996	17,731,701	615,548	18,347,249	322,328	77,387	26,704	2,396	428,815	13,362	104	13,466	442,281	0	25
1997	18,413,138	591,576	19,004,714	329,238	73,155	26,291	2,657	431,341	15,666	110	15,776	447,117	0	25
1998	18,615,701	589,747	19,205,448	334,354	71,824	26,023	2,807	435,008	0	0	0	435,008	0	25
1999	18,618,549	606,425	19,224,974	332,161	74,293	26,332	2,526	435,312	1,347	0	1,347	436,659	0	25
2000	19,023,989	623,527	19,647,516	330,225	77,240	26,732	2,234	436,431	1,329	3	1,332	437,763	0	25
2001	17,325,346	550,580	17,875,926	318,595	66,220	19,858	2,362	407,035	5	0	5	407,040	0	25
2002	14,162,944	483,010	14,645,954	260,501	70,587	16,386	2,659	350,133	0	0	0	350,133	0	25
2003	13,167,468	834,928	14,002,396	237,228	79,633	16,137	2,787	335,785	0	0	0	335,785	0	25
2004	14,283,232	1,106,235	15,389,467	242,886	88,612	18,446	2,673	352,617	0	0	0	352,617	0	18
2005	14,625,017	1,314,815	15,939,832	239,325	89,053	19,296	2,609	350,283	224	1	225	350,508	0	18
2006	14,838,388	1,353,589	16,191,977	247,223	89,638	18,384	2,499	357,744	213	0	213	357,957	0	18
2007	15,508,129	1,406,691	16,914,820	254,918	94,603	19,169	2,579	371,269	22	0	22	371,291	0	16
2008	16,824,191	1,290,564	18,114,755	285,978	88,364	16,604	2,691	393,637	77	0	77	393,714	0	10
2009	16,738,574	1,434,387	18,172,961	277,394	84,654	13,119	2,935	378,102	103	0	103	378,205	0	17
2010	17,261,496	1,780,027	19,041,523	286,342	83,002	13,448	3,272	386,064	0	0	0	386,064	0	12
2011	17,912,336	1,955,147	19,867,483	292,899	88,620	13,641	3,212	398,372	0	0	0	398,372	0	12
2012	19,084,618	2,078,823	21,163,441	315,830	90,212	13,291	3,392	422,725	0	0	0	422,725	0	10
2013	19,396,150	2,063,519	21,459,669	315,544	85,965	12,643	3,066	417,218	0	0	0	417,218	0	10
2014	20,356,407	2,214,876	22,571,283	332,564	83,492	12,851	2,963	431,870	0	0	0	431,870	0	10
2015*	21,176,020	2,379,374	23,555,394	348,592	64,410	13,651	2,550	429,203	0	0	0	429,203	0	10
2016*	22,581,297	1,673,466	24,254,763	354,097	52,253	14,138	2,547	423,035	0	0	0	423,035	0	10
2017*	23,139,406	1,710,843	24,850,249	365,290	49,644	14,209	2,544	431,687	0	0	0	431,687	0	10
2018*	23,681,082	1,747,318	25,428,400	377,560	45,202	14,280	2,541	439,583	0	0	0	439,583	0	10
2019*	24,228,872	1,784,571	26,013,443	390,546	39,962	14,352	2,538	447,398	0	0	0	447,398	0	10

The Terminal Area Forecast for SFO shows that the total operations in 2019 is 6% higher than in 2016.

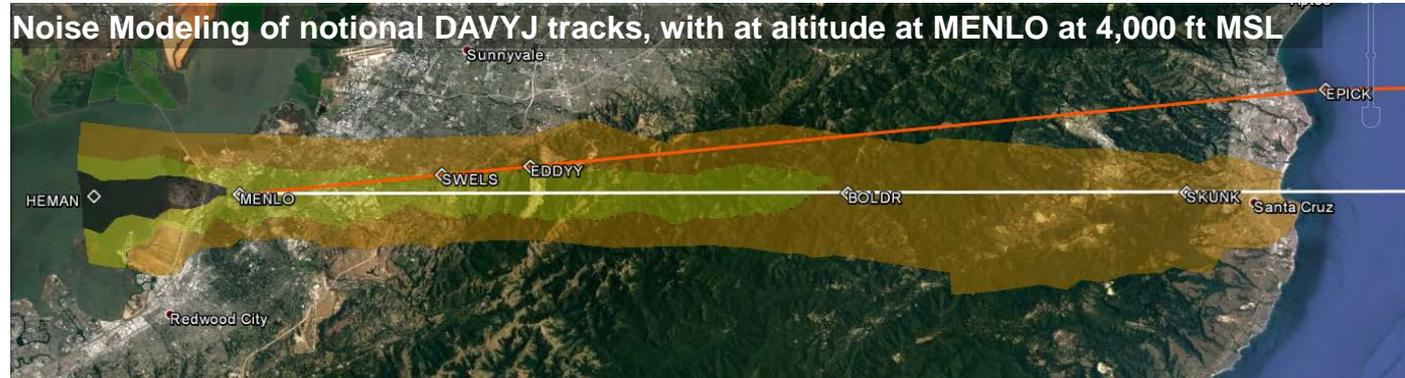
Based on this, we assumed that the operations on the SERFR in July 2019 would be 6% more than in July 2016.



# Projected comparison of SERFR and notional DAVYJ

## MENLO at 4,000 ft MSL; Crosses Monterey Bay shoreline at 12,500 ft MSL

Track data: Model based on projected July 2019 SERFR tracks



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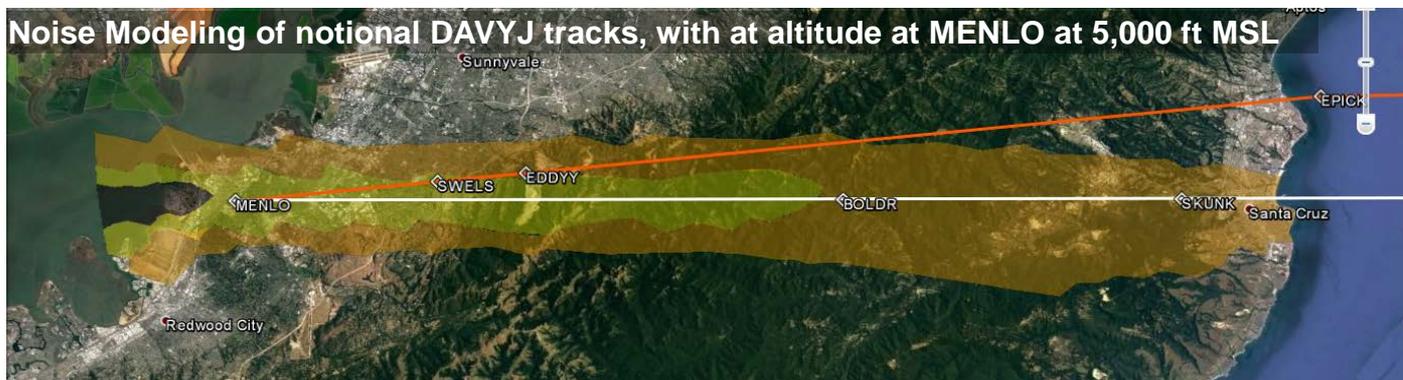
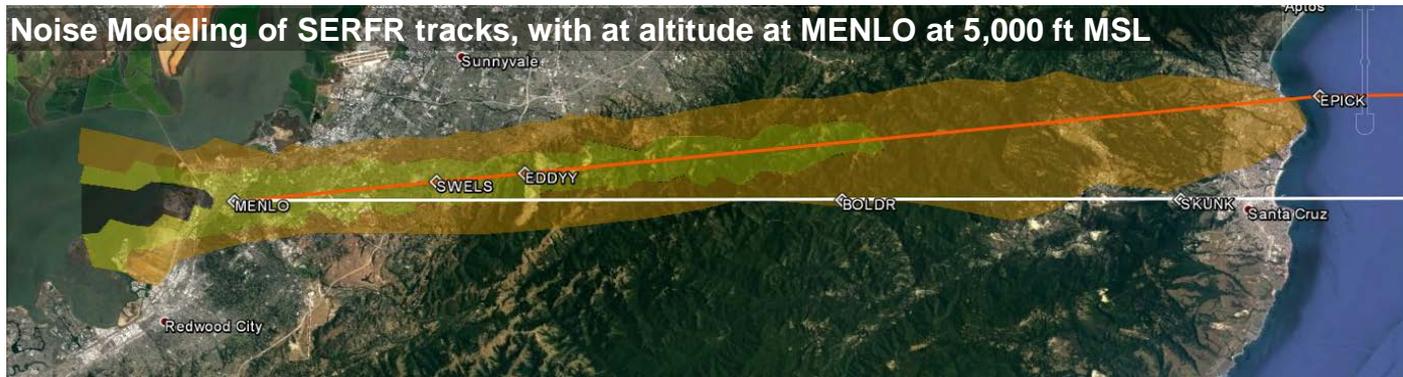
— notional DAVYJ ground track



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