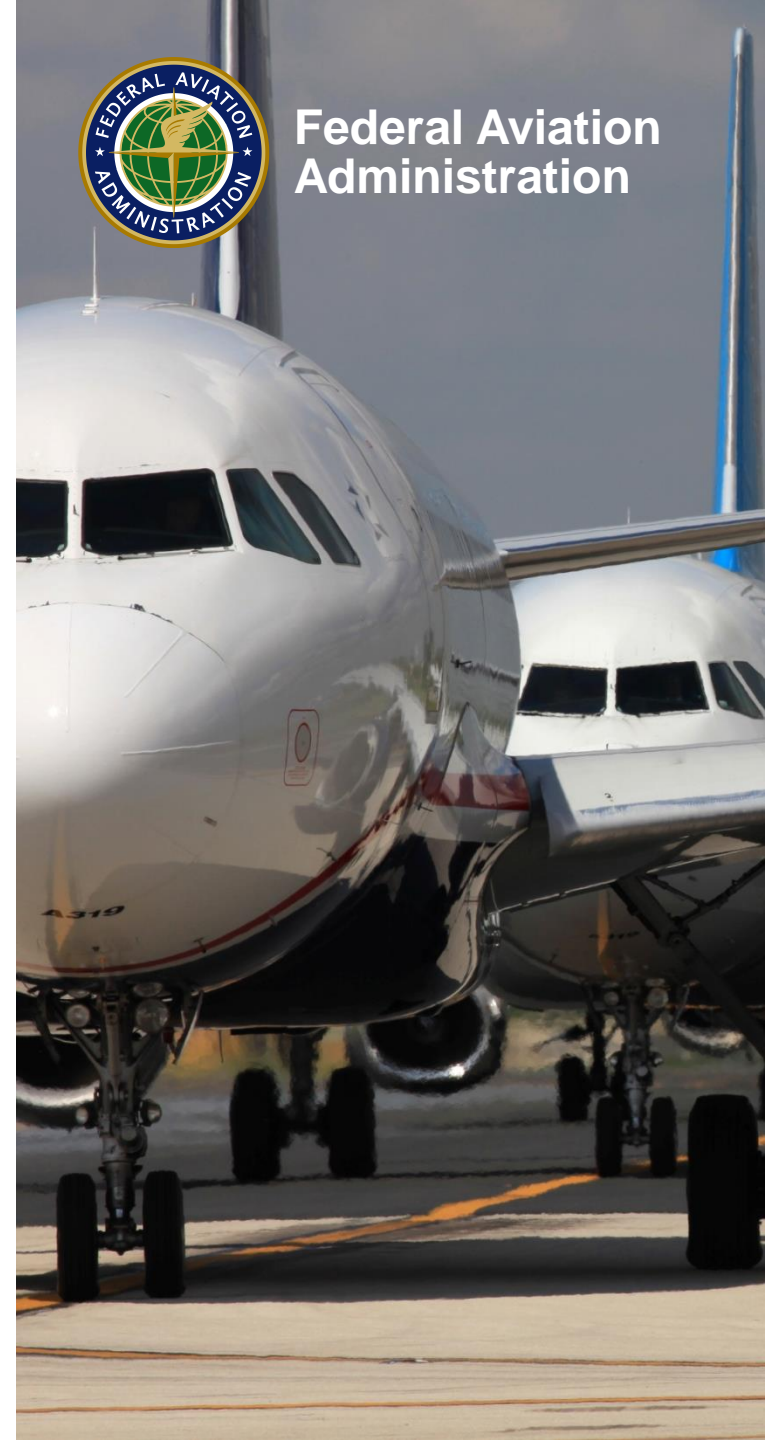


FAA Initiative to Address Noise Concerns of Santa Cruz/Santa Clara/San Mateo/San Francisco Counties

Additional Analysis



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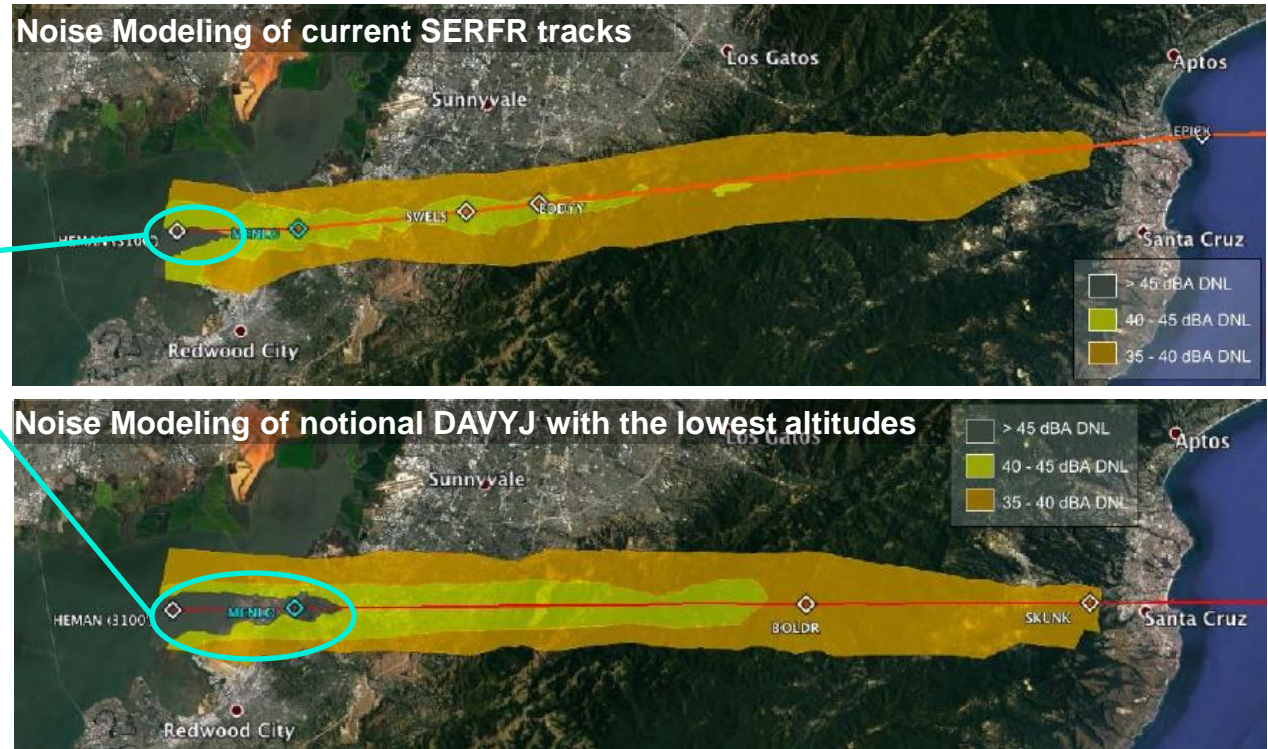


Clarification: Comparison of SERFR and DAVYJ and people exposed to >45 dB near MENLO for DAVYJ



Public Submission: Noise Modeling around MENLO

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



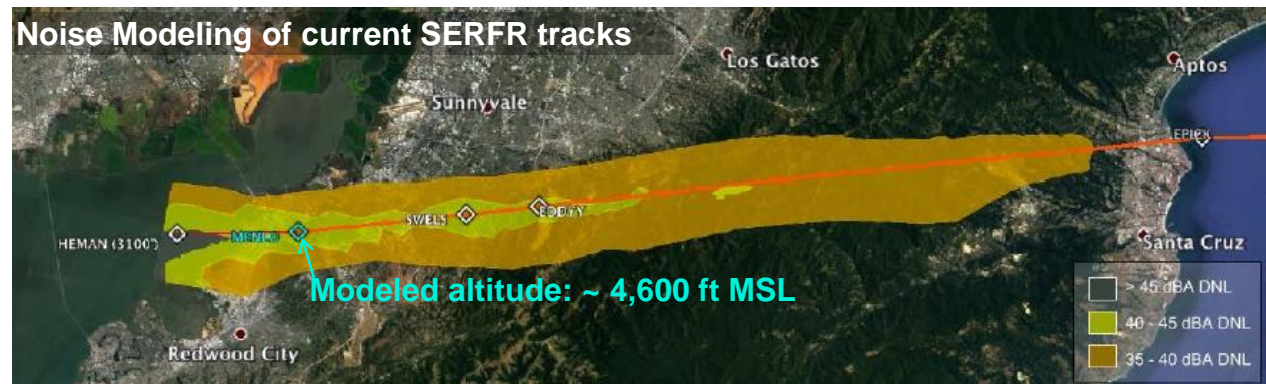
*www.Davyjfacts.org's version of FAA's Aug 18th 2016 presentation *



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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



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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



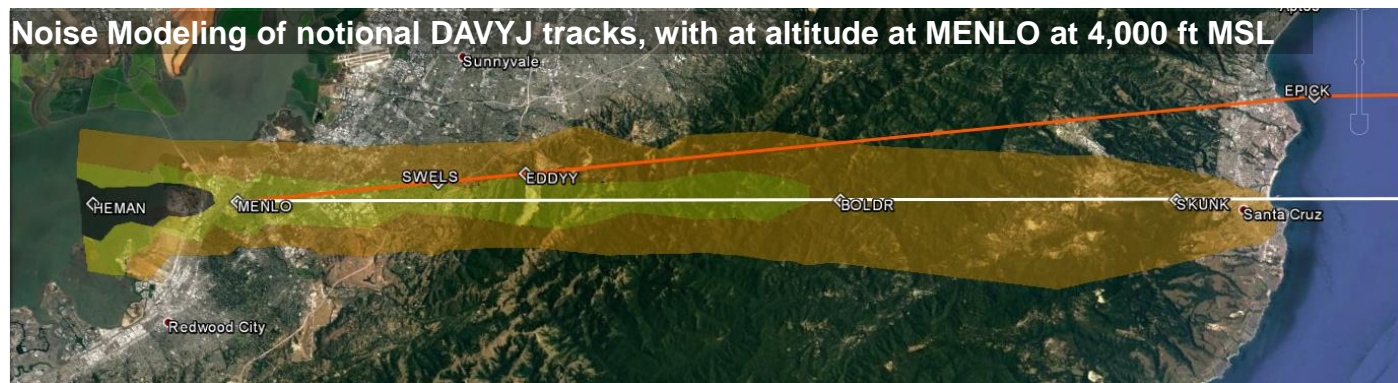
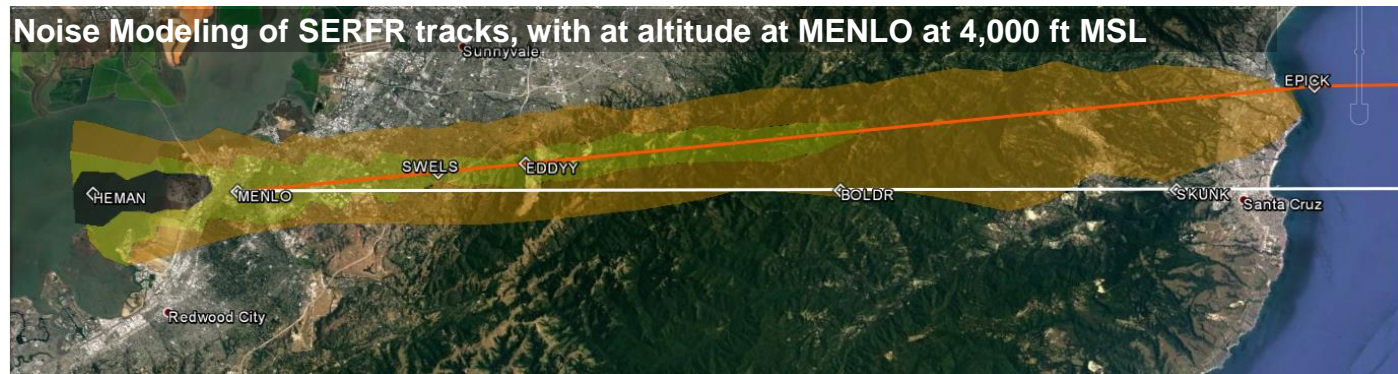
Current conditions Noise Analysis Based on July 2016 SERFR traffic



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

■ ≥ 45 dBA

■ 40 – 44 dBA

■ 35 - 39 dBA

— SERFR ground track

— notional DAVYJ ground track

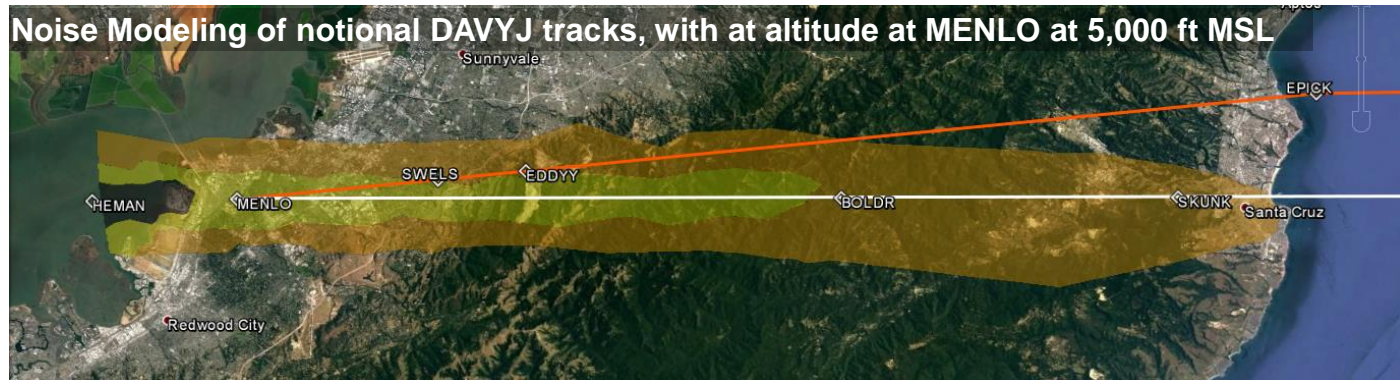
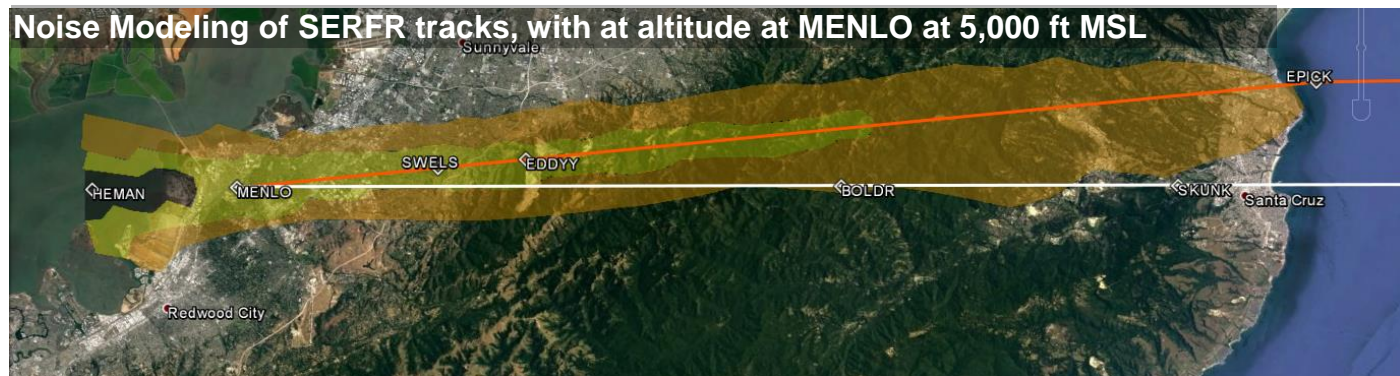


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Comparison of SERFR and notional DAVYJ

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

Track data: Model
based on
July 2016 SERFR
tracks



Key

■ ≥ 45 dBA

■ 40 – 44 dBA

■ 35 - 39 dBA

— SERFR ground track

— notional DAVYJ ground track



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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

| AIRCRAFT OPERATIONS | | | | | | | | | | | | | | | |
|---|----------------|-----------|------------|----------------------|------------------------|--------|----------|---------|------------------|----------|--------|---------|--------------|------------------------|-------------------|
| Enplanements | | | | Itinerant Operations | | | | | Local Operations | | | | Total Ops | Total Tracon Ops | Based Aircraft |
| Fiscal Year | 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.

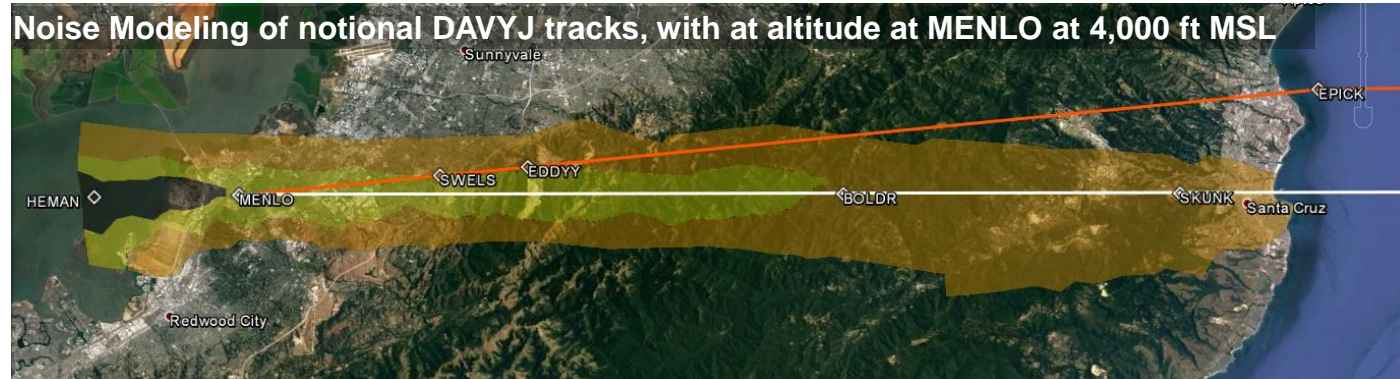
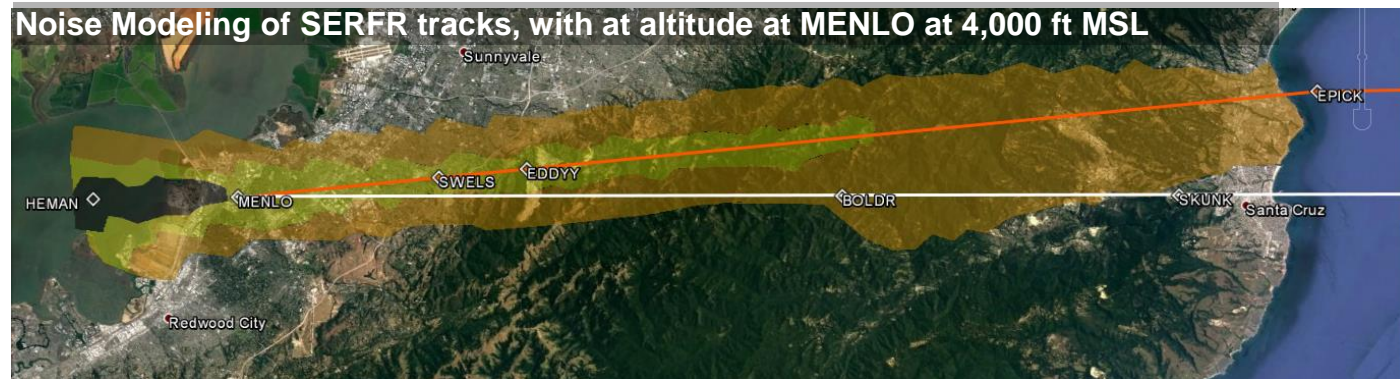
Based on this, we assumed that the operations on the SERFR in July 2019 would be 6% more than in July 2016.



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



Key

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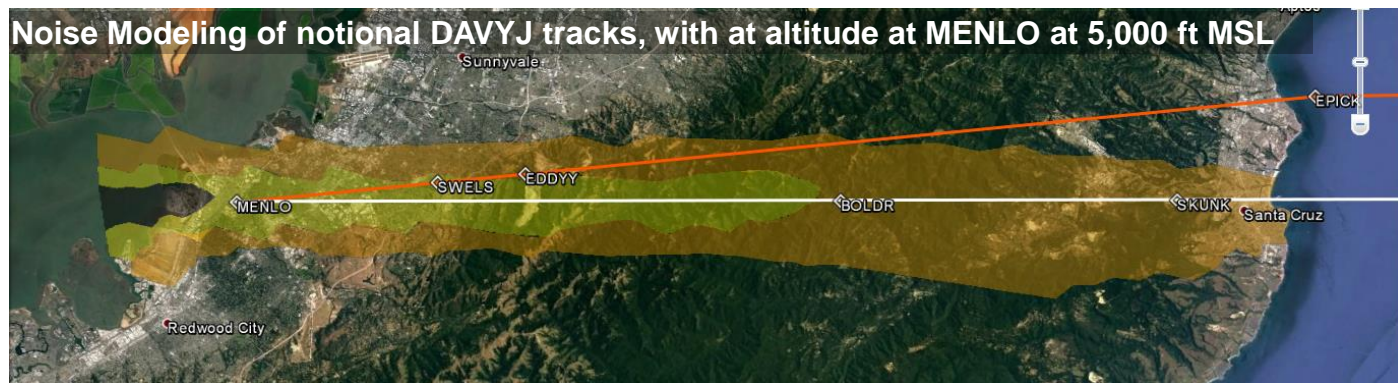
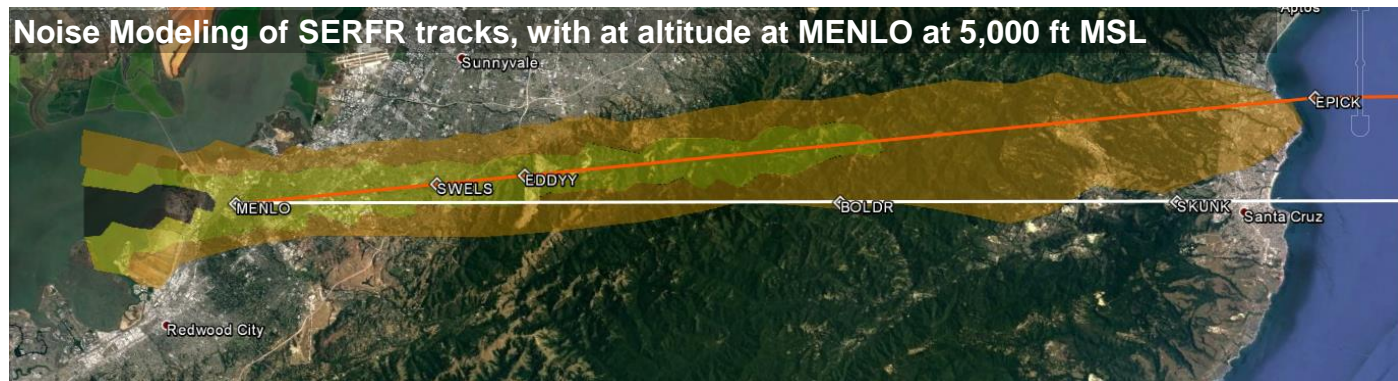


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Comparison of SERFR and notional DAVYJ

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