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

FAA & Select Committee Working Meeting

August 4, 2016
Timeframes
Timeframes

• **Rulemaking (~3 years)**
  - SFO Class B Modification (#1)
    • 8 months into the process

• **Procedural Development (~1.5 – 2 years)**
  - Transition from SERFR to BSR ground track (#2)
  - Development of the south transition on NIITE (#4)

• **Operational (dependent on task)**
  - Keeping the NIITE flights on the NIITE SID until the NIITE waypoint (#3)
  - Keeping the CNDEL flights on the CNDEL SID until CNDEL waypoint (#5)
SFO Procedural Amendments
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• 7/21/2016 Publication
  – The DYAMD STAR was amended to be contained within SFO Class B
  • Once the Class B is amended, it will be changed back.
  – Editorial notes were removed from the SERFR STAR, per ATC request

• 9/15/2016 Publication
  – Procedures up-numbered to reflect an administrative changes to multiple navigational aids (NAVAID).
Recap of Previous Working Meetings
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• Once the SFO Class B is amended, more flights can fully execute an OPD. This is expected to alleviate some of the noise due to aircraft leveling off to remain in the current Class B.

• The current and proposed amended Class B contains the BRIXX STAR.

• There are no conflicts between the BRIXX and the SERFR. The BRIXX was designed to de-conflict from the SERFR.

• Vectoring is a tool used to space and sequence aircraft to ensure safe operations.

• Completes discussion on solution groups 1, 3, 4, and 5.
Transition the SERFR STAR Back to the BSR Ground Track Prior to EPICK
BSR – SERFR Altitude and Elevation Comparison
Average altitude on the BSR (July 2014)

Maximum Terrain Elevation along BSR: 3,132 ft

Average altitude on the SERFR (July 2015)

Maximum Terrain Elevation along SERFR: 2,574 ft
BSR-SERFR Average Altitudes

![Graph showing the average altitudes for BSR (July 2014) and SERFR (July 2015) as a function of distance from MENLO.]
Maximum Elevation

Max Elevation: 2,574 ft

Max Elevation: 3,134 ft

SERFR

BSR
BSR – SERFR Population Count Comparison
Population Density Near the BSR and SERFR

Key:
- Increasing population density
- BSR
- SERFR
Population Density Near the BSR and SERFR

Key:
- **increasing population density**
- BSR
- SERFR

0.36 NM

0.23 NM
Population Density Near the BSR and SERFR

Key:
- increasing population density (higher resolution to clearly see differences)

BSR

SERFR

2.97 NM
Moving SERFR back to the BSR ground track prior to EPICK: DAVYJ STAR

• For this presentation – the DAVYJ STAR is a notional concept of an OPD over the BSR ground track.

• The altitudes of the optimized DAVYJ STAR are higher than the SERFR STAR, but lower than BSR STAR.

• If fully optimized, DAVYJ will not be contained within the current SFO Class B.

• The OPD of the DAVYJ STAR would be contained within the proposed amendment to SFO Class B.
Estimated Altitudes of the DAVYJ STAR

- 11,300 - 12,100 ft MSL
- 11,200 - 12,000 ft AGL
- 8,400 - 10,000 ft MSL
- 7,600 - 9,200 ft AGL
- 5,800 - 6,800 ft MSL
- 4,200 - 5,200 ft AGL
- 4,700 - 6,000 ft MSL
- 4,300 - 5,600 ft AGL

Estimated altitude bounds of the provisional DAVYJ STAR