

1.2 Feasibility Group 2: Transition the SERFR Standard Terminal Arrival Route (STAR) Back to the BSR Ground Track Prior to EPICK

This description of item 1.2 has been amended to reflect more recent information provided by the FAA. Feasibility Group 2 contains proposals to move the SFO Southern Arrivals procedure back to the historical ground track previously used by the BSR procedure, from a point in the Monterey Bay northward. In March 2015 the FAA moved the flight path that historically was called BSR to a new flight path named SERFR, 3 miles to the east. The SERFR path was intended to be an Optimal Profile Descent (OPD) procedure. OPD uses idle power descent to reduce noise and save fuel. ‘OPD SERFR’ was never flown on procedure due to a conflict with Class B airspace. ‘As Flown SERFR’ has long segments of level flight that are very noisy due to engine thrust and use of speed brakes. The result is ‘As Flown SERFR’ has been extremely impactful to the communities below as documented by over 1 million complaints registered with the SFO Noise Officer. High elevation communities are affected the most. SERFR also represents a moving of a flight path and its associated noise with no consulting of the affected communities.

This proposal would return the SERFR flight path back to the BSR ground track, roughly 3 miles to the west of where the path currently crosses the Santa Cruz County coastline near the City of Capitola. A new BSR procedure would be designed to take advantage of satellite-based navigation and OPD capabilities. In contrast, the historic BSR procedure used a stair-step descent with segments of level flight, which can create more noise than an OPD procedure. The FAA has indicated that the new procedure can be designed with altitudes similar to the historic BSR path of 13,000’ at the Monterey Bay coastline. The FAA has also stated that Class B airspace will be modified to wholly contain the Southern Arrivals procedures.

The FAA states that the concentration of flights on SERFR and the historic BSR are similar. Both procedures have about half of their flights vectored off procedure to the west in order to sequence the planes for merging with other arrivals from the north and east, and for landing at SFO. These vectored flights are directed westward to the same airspace from either path. A slight dispersion of flights at the Santa Cruz coastline existed with the historic BSR due to the merging of flights at the SKUNK waypoint over Santa Cruz County. This proposal would move this point of merging

out over the Monterey Bay to eliminate noise over land associated with turns and speed adjustments at the merging waypoint. Over Santa Clara County and San Mateo County, the new OPD procedure would follow the BSR ground track past MENLO waypoint. The FAA is evaluating the feasibility of raising altitudes at the MENLO waypoint as recommended by the Select Committee in Item 2.5. The FAA states that the ground noise at MENLO from Southern Arrivals is dependent on the altitude of the planes, and not on the choice of flight path.

Recommendation 1: The Select Committee recommends that SFO southern arrivals use the BSR ground track for a new NextGen procedure that:

1. Results in noise modeling of the proposed new procedure that has an equivalent or less DNL noise exposure along its entire route when compared to the noise modeling of the BSR 2014 procedure
2. Uses flight altitudes at least as high as (and preferably higher) than the historic BSR procedure along its entire route
3. Starts from a point over the Monterey Bay and reaches the shoreline at an altitude no lower than 12,500ft MSL
4. Utilizes a new BSR waypoint equivalent to EDDYY at or above 6,000 feet to insure flights cross the MENLO waypoint at or above 5,000 feet and maintain idle power until HEMAN
5. Prioritizes and adheres as closely as possible to an OPD terminating at HEMAN
6. Incorporates a modification to Class B airspace if needed
7. Uses flight altitudes that are as high as possible while still allowing idle-power flight
8. Is designed to avoid the use of speed brakes
9. Will be subject to future capacity limitations, particularly during nighttime hours and when vectoring exceeds current levels.

This new procedure will be implemented as soon as feasible.

(Vote: ___ Aye, ___ Nay, ___ Absent or Abstain)

Recommendation 2:

1. Within three months of completing the implementation of the new procedure, the FAA will meet with the Ad-Hoc Subcommittee referred to in Recommendation 3.1 to review whether the new procedure has resulted in an equivalent or less DNL noise exposure along its entire route when compared to the noise modeling of the BSR 2014 procedure. The permanent committee referred to in Recommendation 3.2 will continue to monitor the implementation of the new procedure.
2. The FAA will work with the Ad-Hoc Subcommittee, the permanent committee, and the affected communities to make adjustments in the new procedures if needed to reduce its noise impact.

(Vote: ___ Aye, ___ Nay, ___ Absent or Abstain)

Recommendation 3: The Select Committee recommends that the FAA, in consultation with the permanent committee and the community, search for and develop a new flight procedure for SFO Southern arrivals to the west of the BSR ground track that: (a) meets each of the criterion in Recommendation 1 above; (2) takes maximum advantage of areas of non-residential use such as unpopulated mountainous areas, industrial areas, parkland, cemeteries, etc; and (3); reduces noise exposure to the maximum extent possible.

This new procedure will be implemented as soon as feasible, but the Select Committee recognizes that it will take considerably longer to implement than Recommendation 1.

(Vote: ___ Aye, ___ Nay, ___ Absent or Abstain)

Technical Note: Feasibility Group 2 encompasses two of the items in the Study: 1.f.i and 3.d.ii.