

## Kazmierczak, Matthew

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**From:** Marie-Jo Fremont <>  
**Sent:** Thursday, April 26, 2018 10:25 AM  
**To:**  
**Cc:** Kazmierczak, Matthew  
**Subject:** Additonal Recommendation for SJC South Flow Arrivals: De-Activate the SJC South Flow RNAV procedure

Dear Committee Member,

As you enter the final stretch of preparing recommendations on the SJC South Flow arrivals, I would like you to consider asking the FAA to de-activate the NextGen RNAV approach given its very low utilization and the large community noise impact caused by its implementation.

In the April 13, 2018 meeting, the FAA reported that the **SJC South Flow RNAV procedure** (e.g. the tight arch from Zorsa to the SJC localizer) was **used 14% of the time**.

Changes to the SJC south flow approaches occurred because this new RNAV precision route (which concentrated planes around a narrow and new ground track) was put in place. As a result of its implementation, residents have been experiencing a tremendous level of noise, some because they are now living under a low altitude, extremely narrow rail corridor and others because they are now living under a narrow path of vectored aircraft flying below 3,000 ft.

**Low altitude, extremely narrow air traffic corridors, such as this RNAV procedure, create living hells for residents. This procedure should never have been created in the first place without prior and proper consulting with communities.**

Furthermore, the very low utilization of the RNAV procedure means that **85% of the SJC south flow flights are vectored north at low altitudes** (typically between 2,000 and 3,000 ft) **over several miles of densely populated residential areas.**

**How can anyone justify keeping a procedure that is not used 85% of the time, especially knowing the resulting noise impact of the vectored flights? Why does the FAA allow planes to continue their descent when there is an 85% probability that they will be vectored north?**

The FAA offered two reasons why this RNAV procedure is used so little:

- Lack of proper avionics or RNAV pilot certification.
  - The FAA stated that not all aircraft or crew can fly the RNAV procedure because aircraft do not have the proper avionics equipment or pilots have not been trained. It would be interesting to know the % of aircraft that are RNAV-enabled, the % of RNAV-certified pilots, and the assumptions that the FAA made on both items when they decided to implement the RNAV procedure for the SJC south flow.
- Congestion (e.g. too many planes trying to land at the same time)
  - The FAA stated that planes have to be delayed due to congestion at SJC. Today, Air Traffic Control vectors the planes north at low altitudes over several miles of densely populated areas on the west side of the Bay. Given that congestion is not a last minute surprise, why does the FAA allow planes to pile up at low altitudes just a few miles away from SJC? Why can't planes be held back far from the airport or spaced farther apart?

In the April 13, 2018 meeting, Joe Brooke from the FAA made an analogy that sequencing flights for final approach is like merging cars from an on-ramp with freeway traffic. Indeed, sequencing is similar to merging but a destination airport is not a freeway. It's a dead-end with a finite capacity (e.g. number of slots) that is highly variable but well-defined at any given moment in time.

Could it be that airlines have unrealistic schedules? Unrealistic schedules are great to make on-time performance metrics look good but could create unnecessary congestion problems because the schedules have little resemblance with reality.

Could it be that airlines are pushing for unrealistic throughput rates at any cost, including the noise impact on residents but also the additional fuel and exhaust associated with vectoring aircraft at altitudes below 3,000 ft? Maximum throughput means that airlines want to take off and land as many planes as possible in the shortest amount of time. The FAA has accommodated these requests by reducing aircraft separation to the minimum that is considered safe. To maintain this minimum separation, pilots are now forced to adjust speed through thrust or brakes and/or Air Traffic Control is forced to vector the planes to create additional separation.

It is quite surprising that in this age of machine learning, queuing models, and real-time GPS data, the FAA cannot better manage arrivals. Furthermore, the FAA has control mechanisms that could be used many miles away from the airport to avoid vectoring flights near the ground. The FAA could increase in-trail spacing (e.g. the separation between planes) on the arrival routes. The closer planes follow each other, the higher the ripple effect on subsequent planes when there is any sequencing change for final approach. Increasing in-trail spacing would decrease the probability of vectoring. The FAA could also hold planes at high altitudes (as typically specified in the procedures) to delay them as necessary.

As part of your final recommendations, **I would like you to consider asking the FAA to de-activate the current RNAV south flow procedure. The FAA could revert to the pre-NextGen procedures while they design new south flow arrival procedures that would:**

- **disperse flights,**
- **allow pilots to fly quiet over residential areas,**
- **route planes at low altitudes over non-residential areas (e.g. commercial & industrial areas, freeways, and water),**
- **increase in-trail spacing,**
- **hold planes at high-altitudes (over 10,000 ft Above Ground Level) as necessary.**

**Such new procedures and their expected impact on people would also have to be reviewed with communities prior to implementation.**

Thank you for considering my input.

Best regards,

Marie-Jo Fremont

Palo Alto resident