



## Meeting Agenda Technical Working Group Fly Quiet Program Workshop

**Tuesday, June 30, 2026 – 6:00 p.m.**

Brisbane City Hall Annex

25 Park Place | Brisbane, CA 94005

Hybrid Option: <https://smcgov.zoom.us/j/91662423638>

Call-in: US: +1(669)900-6833 Webinar ID: 916 624 23638

This meeting of the San Francisco Airport Community Roundtable Technical Working Group Subcommittee will be in person at the above-mentioned address. Members of the public will be able to participate in the meeting remotely via the Zoom platform or in person at 25 Park Place, Brisbane, CA 94005.

### **Public Comment**

#### **In-person Participation:**

If you wish to speak to the Membership, please fill out a speaker's slip located at the entrance. If you have anything you want to distribute to the Membership and include in the official record, please hand it to the Clerk who will distribute the information to the Membership and Staff.

#### **Via Teleconference (Zoom):**

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#### **Written Public Comments:**

Written comment should be emailed to [sforoundtable@smcgov.org](mailto:sforoundtable@smcgov.org). Your email should include the specific agenda item for which you are submitting a comment. Members of the public are limited to one written comment per agenda item and the length of the emailed comment should be commensurate with two minutes or approximately 300 words. Written comments received by 5:00 pm on the day before the meeting, will be provided to the Roundtable, made publicly available on the website and read during the meeting.

### **ADA Requests**

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TOWN OF ATHERTON| CITY OF BELMONT| CITY OF BRISBANE| CITY OF BURLINGAME| TOWN OF COLMA| CITY OF DALY CITY  
CITY OF EAST PALO ALTO| CITY OF FOSTER CITY| CITY OF HALF MOON BAY| TOWN OF HILLSBOROUGH| CITY OF MENLO  
PARK| CITY OF MILLBRAE| CITY OF PACIFICA| TOWN OF PORTOLA VALLEY| CITY OF REDWOOD CITY| CITY OF SAN BRUNO  
CITY OF SAN CARLOS| CITY OF SAN MATEO| CITY OF SOUTH SAN FRANCISCO| TOWN OF WOODSIDE

## Page 2 of 2

## AGENDA

- ## REGULAR AGENDA

## UPDATES

- |    |                |                    |        |
|----|----------------|--------------------|--------|
| 5. | Member Updates | <i>Information</i> | Verbal |
| 6. | Adjourn        |                    |        |

# Fly Quiet Program Workshop

## Evaluation of Proposed Program Elements

Technical Working Group Subcommittee  
June 11, 2026

# Three Questions Used to Evaluate FQP Elements

*Framework used to evaluate proposed Fly Quiet Program elements.*

## **1. Who Has Control?**

*Who influences the operation through their actions?*

## **1. Is it Effective?**

*Is the element likely to provide meaningful noise reduction?*

## **1. Who Benefits?**

*Which communities benefit?*

## Fly Quiet Program: Element Evaluation Summary

| Element    |      | SECTION 1: Control |                                  | SECTION 2: Effectiveness & Benefits |                      |                      |                        |                         |
|------------|------|--------------------|----------------------------------|-------------------------------------|----------------------|----------------------|------------------------|-------------------------|
| Name       | Type | Who Has Control?   | Pilot Control Level (H/M/L/None) | Time of Day                         | How It Reduces Noise | Usage Volume (H/M/L) | Communities Benefiting | Overall Benefit (H/M/L) |
| Element 1  | DEP  |                    |                                  |                                     |                      |                      |                        |                         |
| Element 2  | ARR  |                    |                                  |                                     |                      |                      |                        |                         |
| Element 3  | DEP  |                    |                                  |                                     |                      |                      |                        |                         |
| Element 4  | ARR  |                    |                                  |                                     |                      |                      |                        |                         |
| Element 5  | GBN  |                    |                                  |                                     |                      |                      |                        |                         |
| Element 6  | DEP  |                    |                                  |                                     |                      |                      |                        |                         |
| Element 7  | ARR  |                    |                                  |                                     |                      |                      |                        |                         |
| Element 8  | DEP  |                    |                                  |                                     |                      |                      |                        |                         |
| Element 9  | ARR  |                    |                                  |                                     |                      |                      |                        |                         |
| Element 10 | DEP  |                    |                                  |                                     |                      |                      |                        |                         |

**Usage Volume:** High (≥150/day); Medium (50-149/day); Low (1-50/day)

**Type:** DEP = Departure Procedure; ARR = Arrival Procedure; GBN = Ground-Based Noise

# Standard Element Evaluation Template

| SECTION 1: CONTROL                  |                                                                                          |
|-------------------------------------|------------------------------------------------------------------------------------------|
| Who Has Control?                    | ATC / Airline / Pilot / Other                                                            |
| Pilot Control Level                 | High / Medium / Low / None                                                               |
| SECTION 2: EFFECTIVENESS & BENEFITS |                                                                                          |
| Time of Day                         | Day (7am-10pm) / Night (10pm-7am)                                                        |
| How it Reduces Noise                | Higher altitude, over water, early turns, reduced thrust, etc.                           |
| Usage Volume                        | High / Medium / Low, H: $\geq 150$ /day, M: 50-149/day, L: $<50$ /day                    |
| Communities Benefiting              | Communities expected to benefit                                                          |
| Overall Benefit                     | High / Medium / Low (combines noise reduction, communities benefiting, and usage volume) |
| Clarifications                      | Additional information needed                                                            |

# Estimated Usage of SFO Procedures

Daily averages estimated based on 9 months of data (Jun 2025-Feb 2026) published in Airport Director's reports.

| AVERAGE DAILY DEPARTURES     |                              |                           |                              |                          |
|------------------------------|------------------------------|---------------------------|------------------------------|--------------------------|
| GAP                          | SSTIK                        | NIITE                     | TRUKN R1                     | TRUKN R28                |
| <b>136</b><br>Range: 116-151 | <b>155</b><br>Range: 137-172 | <b>51</b><br>Range: 36-60 | <b>203</b><br>Range: 187-216 | <b>15</b><br>Range: 5-54 |

| AVERAGE DAILY ARRIVALS                                                                                                                               |                              |                              |                           |
|------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|------------------------------|---------------------------|
| BDEGA                                                                                                                                                | DYAMD                        | SERFR                        | PIRAT                     |
| <b>166</b><br>Range: 141-193<br><ul style="list-style-type: none"><li>• Down the Bay: 54/day (46-63)</li><li>• Peninsula: 112/day (87-131)</li></ul> | <b>213</b><br>Range: 192-226 | <b>150</b><br>Range: 142-157 | <b>38</b><br>Range: 33-43 |

## Community Coverage of Expected Benefits by FQP Element

### *Conceptual Example*

| City           | Element 1 | Element 2 | Element 3 | Element 4 | Element 5 | Element 6 | Element 7 | Element 8 | Element 9 | Element 10 | TOTAL |
|----------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|------------|-------|
|                | DEP       | DEP       | ARR       | ARR       | DEP       | DEP       | DEP       | DEP       | ARR       | GBN        |       |
| Atherton       |           |           |           |           |           |           |           |           |           |            |       |
| Belmont        |           |           |           |           |           |           |           |           |           |            |       |
| Brisbane       |           |           |           |           |           |           |           |           |           |            |       |
| Burlingame     |           |           |           |           |           |           |           |           |           |            |       |
| Colma          |           |           |           |           |           |           |           |           |           |            |       |
| Daly City      |           |           |           |           |           |           |           |           |           |            |       |
| East Palo Alto |           |           |           |           |           |           |           |           |           |            |       |
| Foster City    |           |           |           |           |           |           |           |           |           |            |       |
| Half Moon Bay  |           |           |           |           |           |           |           |           |           |            |       |
| Hillsborough   |           |           |           |           |           |           |           |           |           |            |       |
| Menlo Park     |           |           |           |           |           |           |           |           |           |            |       |
| Millbrae       |           |           |           |           |           |           |           |           |           |            |       |
| Pacifica       |           |           |           |           |           |           |           |           |           |            |       |
| Portola Valley |           |           |           |           |           |           |           |           |           |            |       |
| Redwood City   |           |           |           |           |           |           |           |           |           |            |       |
| San Bruno      |           |           |           |           |           |           |           |           |           |            |       |
| San Carlos     |           |           |           |           |           |           |           |           |           |            |       |
| San Francisco  |           |           |           |           |           |           |           |           |           |            |       |
| San Mateo      |           |           |           |           |           |           |           |           |           |            |       |
| SS Francisco   |           |           |           |           |           |           |           |           |           |            |       |
| Woodside       |           |           |           |           |           |           |           |           |           |            |       |
| Cities Covered |           |           |           |           |           |           |           |           |           |            |       |

## **FQP 2.0 Proposed Elements (4/29/2026) with Additional Suggestions**

- Shoreline Departures
- Oceanic Woodside Gate Crossing Altitude
- New: NIITE-HUSSH
- Nighttime Use of Runway 28R and offset approach to Runway 28R
- Gap departure Altitudes
- Gap SNTNA Departures
- Gap (Vectoring) Departures
- SSTIK Departure Procedure
- Early Turns to Arrive Runways 28L/R
- New: BDEGA Down the Bay
- Ground Engine Run-Ups
- Fleet Noise Quality Rating
- Noise Exceedance Rating

# Shoreline Departures - DEP



## SECTION 1: CONTROL

|                                                |                                                                                                                                                                                          |
|------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Who Has Control?</b>                        | TBD: ATC / Airline / Pilot / Other                                                                                                                                                       |
| <b>Pilot Control Level</b>                     | TBD: High / Medium / Low / None                                                                                                                                                          |
| <b>SECTION 2: EFFECTIVENESS &amp; BENEFITS</b> |                                                                                                                                                                                          |
| <b>Time of Day</b>                             | TBD: Day (7am-10pm) / Night (10pm-7am)                                                                                                                                                   |
| <b>How it Reduces Noise</b>                    | TBD: Avoid shoreline cities when turning right as soon as possible for TRUKN and NIITE 28R/L departures                                                                                  |
| <b>Usage Volume</b>                            | Medium ~75/day                                                                                                                                                                           |
| <b>Communities Benefiting</b>                  | TBD: Brisbane? San Bruno, South San Francisco                                                                                                                                            |
| <b>Overall Benefit</b>                         | TBD: High/ Medium / Low                                                                                                                                                                  |
| <b>Clarifications</b>                          | TBD: TRUKN and NIITE are RNAV procedures that define the turn towards the Bay. Who controls a tighter turn: FAA or airlines when encoding the RNAVs into their Flight Management System? |

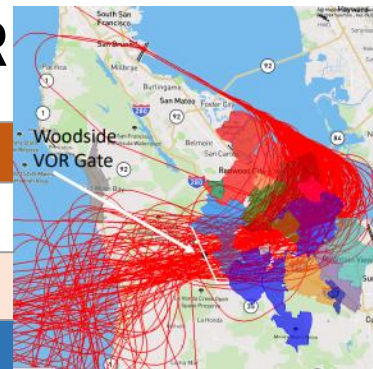
# Oceanic Woodside Gate Crossing Altitude - ARR

## SECTION 1: CONTROL

|                            |                                    |
|----------------------------|------------------------------------|
| <b>Who Has Control?</b>    | TBD: ATC / Airline / Pilot / Other |
| <b>Pilot Control Level</b> | TBD: High / Medium / Low / None    |

## SECTION 2: EFFECTIVENESS & BENEFITS

|                               |                                                                                                                                                                              |
|-------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Time of Day</b>            | Day (7am-10pm) & Night (10pm-7am)                                                                                                                                            |
| <b>How it Reduces Noise</b>   | A minimum altitude over Woodside may reduce noise slightly over Woodside area but leads to additional noise on downstream communities such as East Palo Alto and Menlo Park. |
| <b>Usage Volume</b>           | Low ~ 40/day                                                                                                                                                                 |
| <b>Communities Benefiting</b> | TBD: Woodside? Negatively affected: East Palo Alto, Menlo Park                                                                                                               |
| <b>Overall Benefit</b>        | TBD: High/ Medium / Low                                                                                                                                                      |
| <b>Clarifications</b>         | TBD: Additional information needed?                                                                                                                                          |



# NIITE-HUSSH - DEP

## SECTION 1: CONTROL

|                     |                                    |
|---------------------|------------------------------------|
| Who Has Control?    | TBD: ATC / Airline / Pilot / Other |
| Pilot Control Level | TBD: High / Medium / Low / None    |

## SECTION 2: EFFECTIVENESS & BENEFITS

|                        |                                                                                                                                                                                 |
|------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Time of Day            | Night: restricted to 1am - 5am                                                                                                                                                  |
| How it Reduces Noise   | NIITE-HUSSH West and NIITE-HUSSH South departures eliminate SSTIK departures.<br>Ensuring that aircraft turn within 2 miles of GOBBS waypoint reduces noise over San Francisco. |
| Usage Volume           | TBD: Low                                                                                                                                                                        |
| Communities Benefiting | TBD: Brisbane, Colma, Daly City, Pacifica, San Bruno? San Francisco, South San Francisco                                                                                        |
| Overall Benefit        | TBD: High/ Medium / Low                                                                                                                                                         |
| Clarifications         | TBD: Historical usage of NIITE-HUSSH West and NIITE-HUSSH South                                                                                                                 |



# Nighttime Arrivals on Runway 28R: Separate Evaluation

| Current Element                                              | Proposed Structure                                                                                 |
|--------------------------------------------------------------|----------------------------------------------------------------------------------------------------|
| Nighttime Arrivals on 28R and Offset Arrival Approach to 28R | <ul style="list-style-type: none"><li>● Night Arrivals 28R</li><li>● Night Offset to 28R</li></ul> |

## Rationale

- Not all night arrivals may occur on 28R using an offset approach
- Therefore, the two items are best considered separately
- Also ATC may control the runway assignment and pilot may control whether to do an offset

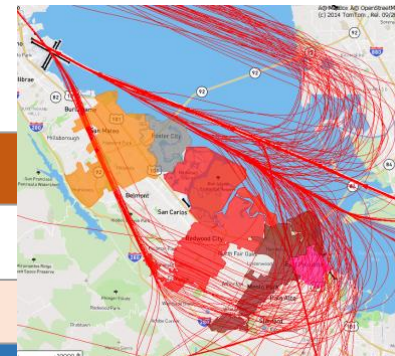
# Night Arrivals 28R - ARR

## SECTION 1: CONTROL

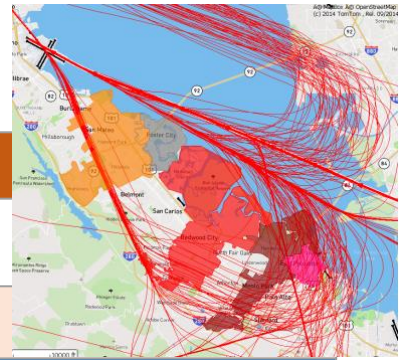
|                     |                                    |
|---------------------|------------------------------------|
| Who Has Control?    | TBD: ATC / Airline / Pilot / Other |
| Pilot Control Level | TBD: High / Medium / Low / None    |

## SECTION 2: EFFECTIVENESS & BENEFITS

|                        |                                                                             |
|------------------------|-----------------------------------------------------------------------------|
| Time of Day            | Night (10pm-7am)                                                            |
| How it Reduces Noise   | Move flights further offshore and away from shoreline communities           |
| Usage Volume           | TBD: High / Medium / Low, H: $\geq 150$ /day, M: 50-149/day, L: $< 50$ /day |
| Communities Benefiting | TBD: Foster City, Redwood City? San Mateo?                                  |
| Overall Benefit        | TBD: High/ Medium / Low                                                     |
| Clarifications         | TBD: Additional information needed?                                         |



# Night Offset to 28R - ARR



## SECTION 1: CONTROL

|                            |                                    |
|----------------------------|------------------------------------|
| <b>Who Has Control?</b>    | TBD: ATC / Airline / Pilot / Other |
| <b>Pilot Control Level</b> | TBD: High / Medium / Low / None    |

## SECTION 2: EFFECTIVENESS & BENEFITS

|                               |                                                                            |
|-------------------------------|----------------------------------------------------------------------------|
| <b>Time of Day</b>            | Night (10pm-7am)                                                           |
| <b>How it Reduces Noise</b>   | Move flights further offshore and away from shoreline communities          |
| <b>Usage Volume</b>           | TBD: High / Medium / Low, H: $\geq 150$ /day, M: 50-149/day, L: $<50$ /day |
| <b>Communities Benefiting</b> | TBD: Foster City, Redwood City? San Mateo?                                 |
| <b>Overall Benefit</b>        | TBD: High/ Medium / Low                                                    |
| <b>Clarifications</b>         | TBD: Additional information needed?                                        |

# Gap Departures: Reorganize by Departure Procedure

| Current Elements           | Proposed Structure |
|----------------------------|--------------------|
| Gap departure Altitudes    | Gap Oceanic        |
| Gap SNTNA Departures       | Gap SNTNA          |
| Gap (Vectoring) Departures | Gap Early Turns    |

*Altitude performances would be defined for each procedure and be specific to different aircraft types such as narrowbody 1, narrowbody 2, widebody 1, and widebody 2.*

## Rationale

- Different procedures may have different altitude requirements as specified by the FAA
- Different aircraft can climb differently based on their capabilities and weights
- Current Gap departure Altitudes element overlaps with Gap SNTNA and Gap Vectoring elements (double counting)

# Gap Oceanic - DEP

## SECTION 1: CONTROL

### Who Has Control?

TBD: ATC / Airline / Pilot / Other

### Pilot Control Level

TBD: High / Medium / Low / None

## SECTION 2: EFFECTIVENESS & BENEFITS

### Time of Day

TBD: Day (7am-10pm) / Night (10pm-7am)

### How it Reduces Noise

TBD: Slightly higher altitudes  
Criteria: meet altitude thresholds at 4 different gates with different thresholds for different aircraft type categories

### Usage Volume

Medium: ~ 40% of Gap departures = ~ 50-55/day

### Communities Benefiting

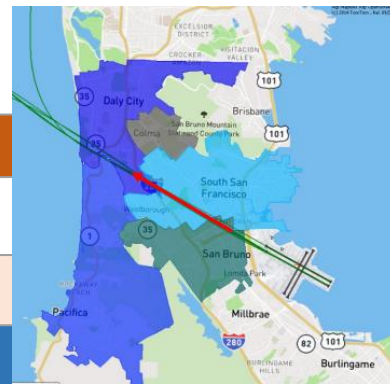
TBD: Daly City, Pacifica, San Bruno, South San Francisco

### Overall Benefit

TBD: High/ Medium / Low

### Clarifications

TBD: Additional information needed?



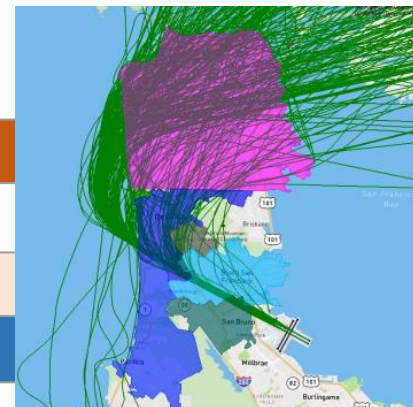
# Gap SNTNA - DEP

## SECTION 1: CONTROL

|                            |                                    |
|----------------------------|------------------------------------|
| <b>Who Has Control?</b>    | TBD: ATC / Airline / Pilot / Other |
| <b>Pilot Control Level</b> | TBD: High / Medium / Low / None    |

## SECTION 2: EFFECTIVENESS & BENEFITS

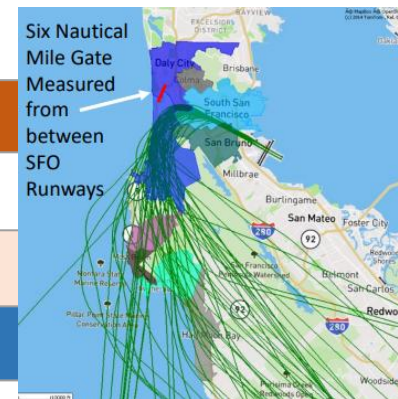
|                               |                                                                                                         |
|-------------------------------|---------------------------------------------------------------------------------------------------------|
| <b>Time of Day</b>            | TBD: Day (7am-10pm) / Night (10pm-7am)                                                                  |
| <b>How it Reduces Noise</b>   | Avoids early, low-altitude turns over communities<br>Slightly higher altitudes (similar to Gap Oceanic) |
| <b>Usage Volume</b>           | Medium: ~ 60% of Gap departures = ~80/day                                                               |
| <b>Communities Benefiting</b> | TBD: Brisbane? Colma, Daly City, Pacifica, San Bruno, San Francisco, South San Francisco                |
| <b>Overall Benefit</b>        | TBD: High/ Medium / Low                                                                                 |
| <b>Clarifications</b>         | TBD: Additional information needed?                                                                     |



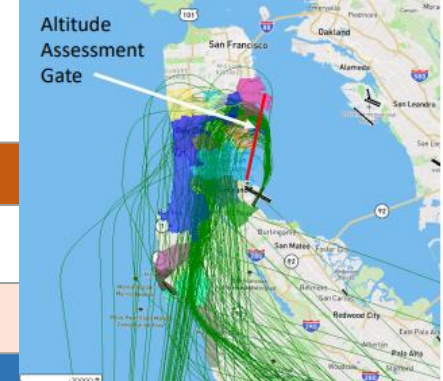
# Gap Early Turns - DEP

## SECTION 1: CONTROL

|                                                |                                                                                      |
|------------------------------------------------|--------------------------------------------------------------------------------------|
| <b>Who Has Control?</b>                        | TBD: ATC / Airline / Pilot / Other                                                   |
| <b>Pilot Control Level</b>                     | TBD: High / Medium / Low / None                                                      |
| <b>SECTION 2: EFFECTIVENESS &amp; BENEFITS</b> |                                                                                      |
| <b>Time of Day</b>                             | TBD: Day (7am-10pm) / Night (10pm-7am)                                               |
| <b>How it Reduces Noise</b>                    | TBD: Higher altitude, over water, later turns, reduced thrust, etc.                  |
| <b>Usage Volume</b>                            | Low: ~ 2% of Gap departures = ~ 3/day                                                |
| <b>Communities Benefiting</b>                  | TBD: Daly City, Montara (San Mateo County)? Pacifica, San Bruno, South San Francisco |
| <b>Overall Benefit</b>                         | TBD: High/ Medium / Low                                                              |
| <b>Clarifications</b>                          | TBD: Additional information needed?                                                  |



# SSTIK Departures - DEP



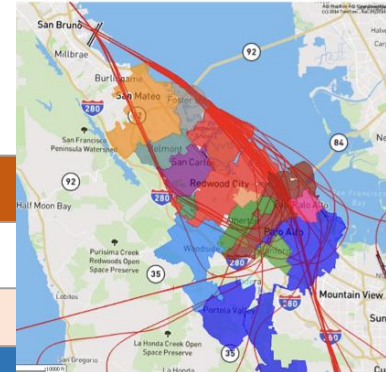
## SECTION 1: CONTROL

|                            |                                    |
|----------------------------|------------------------------------|
| <b>Who Has Control?</b>    | TBD: ATC / Airline / Pilot / Other |
| <b>Pilot Control Level</b> | TBD: High / Medium / Low / None    |

## SECTION 2: EFFECTIVENESS & BENEFITS

|                               |                                                                                                                                                                                                                                                           |
|-------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Time of Day</b>            | Day (7am-10pm) & Night (10pm-7am)                                                                                                                                                                                                                         |
| <b>How it Reduces Noise</b>   | Encourage airlines to turn over the peninsula after minimum altitude                                                                                                                                                                                      |
| <b>Usage Volume</b>           | High ~155/day                                                                                                                                                                                                                                             |
| <b>Communities Benefiting</b> | TBD: Brisbane, Colma, Daly City, Pacifica, San Bruno? San Francisco, South San Francisco                                                                                                                                                                  |
| <b>Overall Benefit</b>        | TBD: High/ Medium / Low                                                                                                                                                                                                                                   |
| <b>Clarifications</b>         | TBD: STIKK is an RNAV procedure that turns over the Peninsula at the STIKK waypoint (no specified altitude). Pilots must be cleared by ATC to go above 2100 ft. Determine whether pilot controls climb rate given that ATC controls the clearance timing. |

# Early Turns to Arrive 28L/R - ARR



## SECTION 1: CONTROL

|                            |                                    |
|----------------------------|------------------------------------|
| <b>Who Has Control?</b>    | TBD: ATC / Airline / Pilot / Other |
| <b>Pilot Control Level</b> | TBD: High / Medium / Low / None    |

## SECTION 2: EFFECTIVENESS & BENEFITS

|                               |                                                                                                                                                                                                                                                   |
|-------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Time of Day</b>            | TBD: Day (7am-10pm) / Night (10pm-7am)                                                                                                                                                                                                            |
| <b>How it Reduces Noise</b>   | Encourage airlines to align with runways 28L/R further out over the Bay to avoid planes turning into final approach across the Peninsula.                                                                                                         |
| <b>Usage Volume</b>           | Low                                                                                                                                                                                                                                               |
| <b>Communities Benefiting</b> | TBD: Foster City, Belmont? Redwood City?                                                                                                                                                                                                          |
| <b>Overall Benefit</b>        | Low, 1% of the time                                                                                                                                                                                                                               |
| <b>Clarifications</b>         | TBD: Early turn for safety (missed approaches, congestion) or pilots' requests for visual approach when they have the airport in sight? ATC vectors all Peninsula arrivals (after ARGGG for PIRAT, after EDDYY for SERFR, after BRIXX for BDEGA). |

# BDEGA Down the Bay - ARR



## SECTION 1: CONTROL

|                            |                                    |
|----------------------------|------------------------------------|
| <b>Who Has Control?</b>    | TBD: ATC / Airline / Pilot / Other |
| <b>Pilot Control Level</b> | TBD: High / Medium / Low / None    |

## SECTION 2: EFFECTIVENESS & BENEFITS

|                               |                                                                                                                                                                                |
|-------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Time of Day</b>            | Day (7am-10pm) & Night (10pm-7am)                                                                                                                                              |
| <b>How it Reduces Noise</b>   | Move flights over the Bay instead of over the Peninsula.                                                                                                                       |
| <b>Usage Volume</b>           | High ~165/day                                                                                                                                                                  |
| <b>Communities Benefiting</b> | TBD: Atherton, East Palo Alto, Menlo Park, Portola Valley, Redwood City, Woodside                                                                                              |
| <b>Overall Benefit</b>        | TBD: High                                                                                                                                                                      |
| <b>Clarifications</b>         | Unclear if there are usage patterns for domestic carriers. Foreign carriers are unlikely to use current Down the Bay. Usage may increase once RNP Down the Bay is operational. |

# Ground Engine Run-Ups - GBN

## SECTION 1: CONTROL

|                            |         |
|----------------------------|---------|
| <b>Who Has Control?</b>    | Airline |
| <b>Pilot Control Level</b> | None    |

## SECTION 2: EFFECTIVENESS & BENEFITS

|                               |                                                                                                                                                                               |
|-------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Time of Day</b>            | TBD: Day (7am-10pm) / Night (10pm-7am)                                                                                                                                        |
| <b>How it Reduces Noise</b>   | TBD: SFO can fine airlines for violations (prohibited at night, requires permission during the day).                                                                          |
| <b>Usage Volume</b>           | TBD: High / Medium / Low, H: $\geq 150$ /day, M: 50-149/day, L: $<50$ /day                                                                                                    |
| <b>Communities Benefiting</b> | TBD: Burlingame? Millbrae                                                                                                                                                     |
| <b>Overall Benefit</b>        | TBD: High / Medium / Low                                                                                                                                                      |
| <b>Clarifications</b>         | TBD: How often? Other GBN sources to consider? APUs, taxiing, takeoff roll, or reverse thrust on landing (modern aircraft don't need reverse thrust because of new equipment) |

# Fleet Noise Quality Rating - TBD DEP

| SECTION 1: CONTROL                  |                                                                                                                                                                                                                       |
|-------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Who Has Control?                    | Airline                                                                                                                                                                                                               |
| Pilot Control Level                 | None                                                                                                                                                                                                                  |
| SECTION 2: EFFECTIVENESS & BENEFITS |                                                                                                                                                                                                                       |
| Time of Day                         | Day (7am-10pm) & Night (10pm-7am)                                                                                                                                                                                     |
| How it Reduces Noise                | Lower engine noise at takeoff and during climbing phase                                                                                                                                                               |
| Usage Volume                        | High, all departures ~650/day                                                                                                                                                                                         |
| Communities Benefiting              | TBD: Primarily communities under departure flight paths up to some altitude level (typically 15,000 ft). Arrival communities are mainly affected by airframe noise, not engines, which are typically idle on descent. |
| Overall Benefit                     | High                                                                                                                                                                                                                  |
| Clarifications                      | Airline-controlled element                                                                                                                                                                                            |

# Noise Exceedance Rating: Discussion Item

## Current Challenge

- Not operationally actionable because based on averages across aircraft and procedures
- May overlap with other Fly Quiet Program elements (e.g., Gap departures)
- Requires additional discussion

## Potential Revised Approach

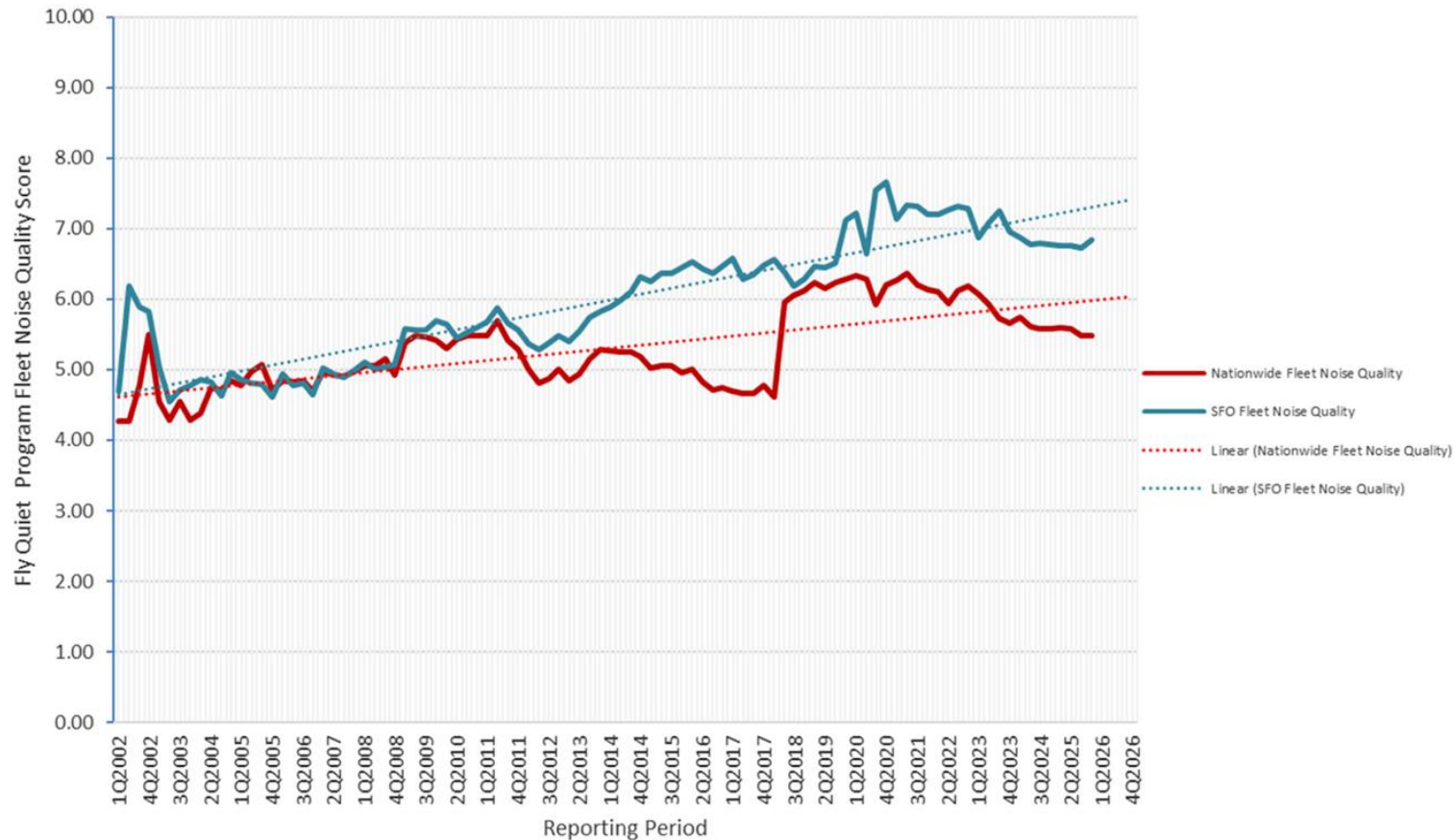
- Apply only to procedures not already covered by another FQP element
- Evaluate-by procedure and aircraft type category
- Use different scoring for daytime and nighttime

## Examples for Discussion

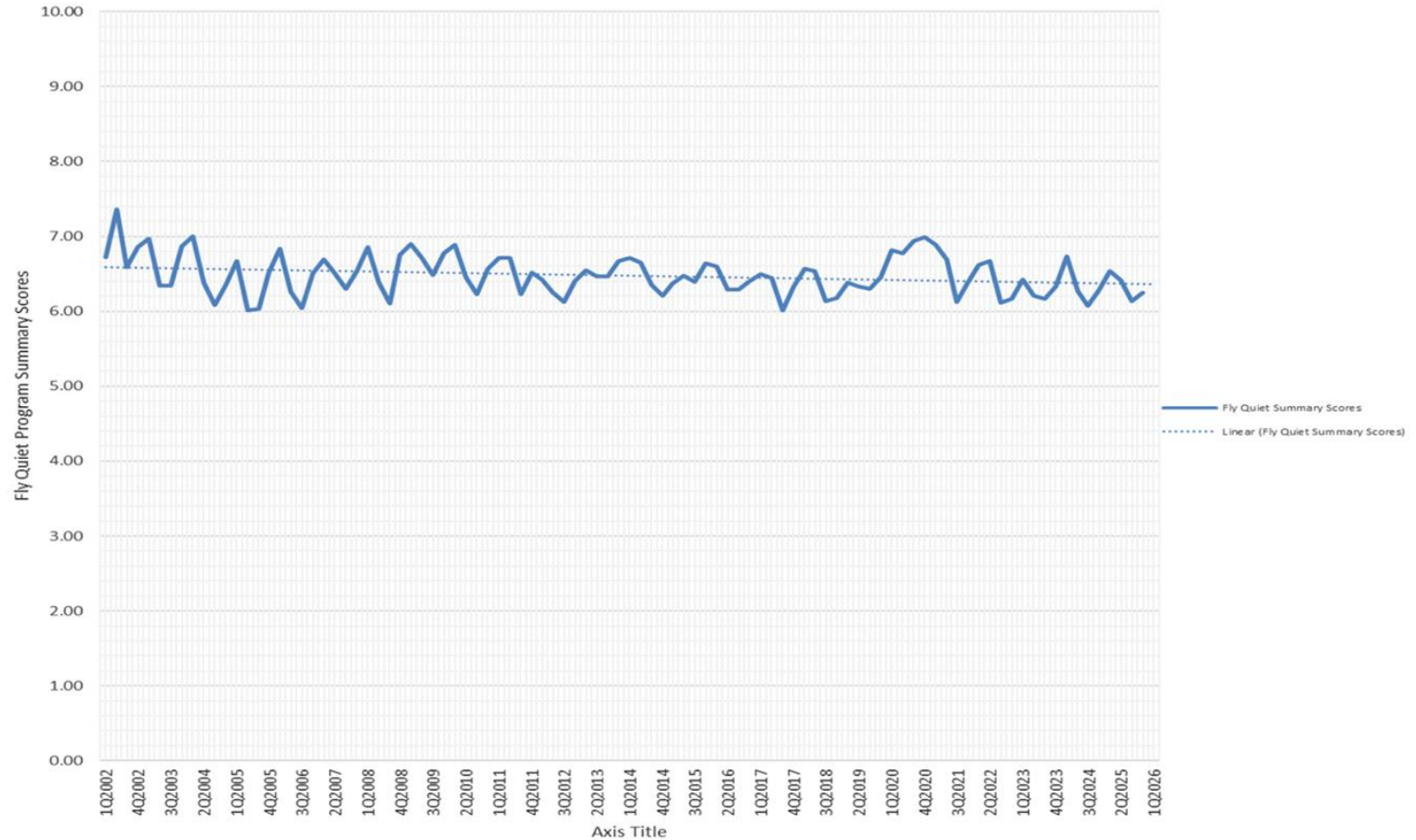
- Potential candidates: SERFR, BDEGA, PIRAT or other procedures not otherwise covered in a FQP element
- Applicable to operations below altitude threshold

# Appendix

## SFO Fleet Noise Quality Improvement 2002 - 2026



# Fly Quiet Program Summary Scores 2002 - 2026



# Fly Quiet Program 1.0

\*each category is 10 Points

| CATEGORY                          | METRIC                                                                                                                                                                                 | IMPACT                                                             |
|-----------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------|
| Fleet Noise Quality               | Encourages airlines to operate newer, quieter aircraft, reducing the overall noise footprint around the airport.                                                                       | ✓ Quieter Aircraft Technology                                      |
| Noise Exceedance Rating           | Discourages operations that produce noise levels above established thresholds at monitoring locations.                                                                                 | ✓ Flight Path Compliance<br>✓ Reduce Communities Impacted          |
| Nighttime Preferential Runway Use | Encourages departures over the bay rather than over populated areas between 1:00 a.m. and 6:00 a.m. by incentivizing use of preference runways                                         | ✓ Reduce Nighttime Noise Exposure<br>✓ Reduce Communities Impacted |
| Shoreline Departure               | Encourages aircraft to remain on the shoreline departure path rather than turning inland over residential areas, through the use of <b>TRUKN</b> and <b>NIITE</b> departure procedures | ✓ Flight Path Compliance<br>✓ Reduce Communities Impacted          |
| Gap Departure Rating              | Directs aircraft toward the gap corridor northwest of the airport to minimize noise exposure over South San Francisco, San Bruno, Daly City, and Pacifica.                             | ✓ Flight Path Compliance<br>✓ Reduce Communities Impacted          |
| Foster City Arrivals              | Encourages over-the-bay approaches instead of approaches over residential communities during nighttime hours.                                                                          | ✓ Reduce Nighttime Noise Exposure<br>✓ Reduce Communities Impacted |