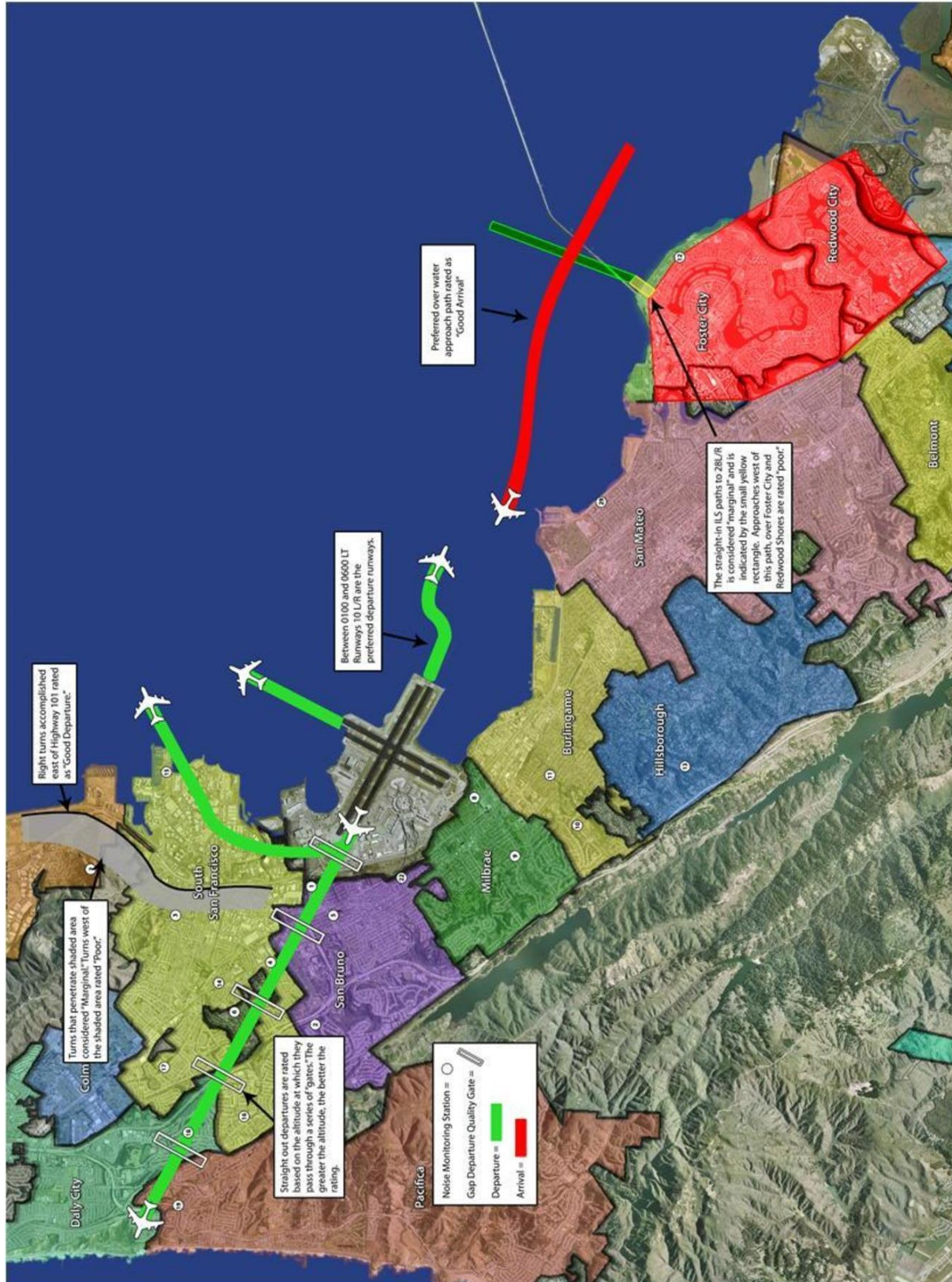


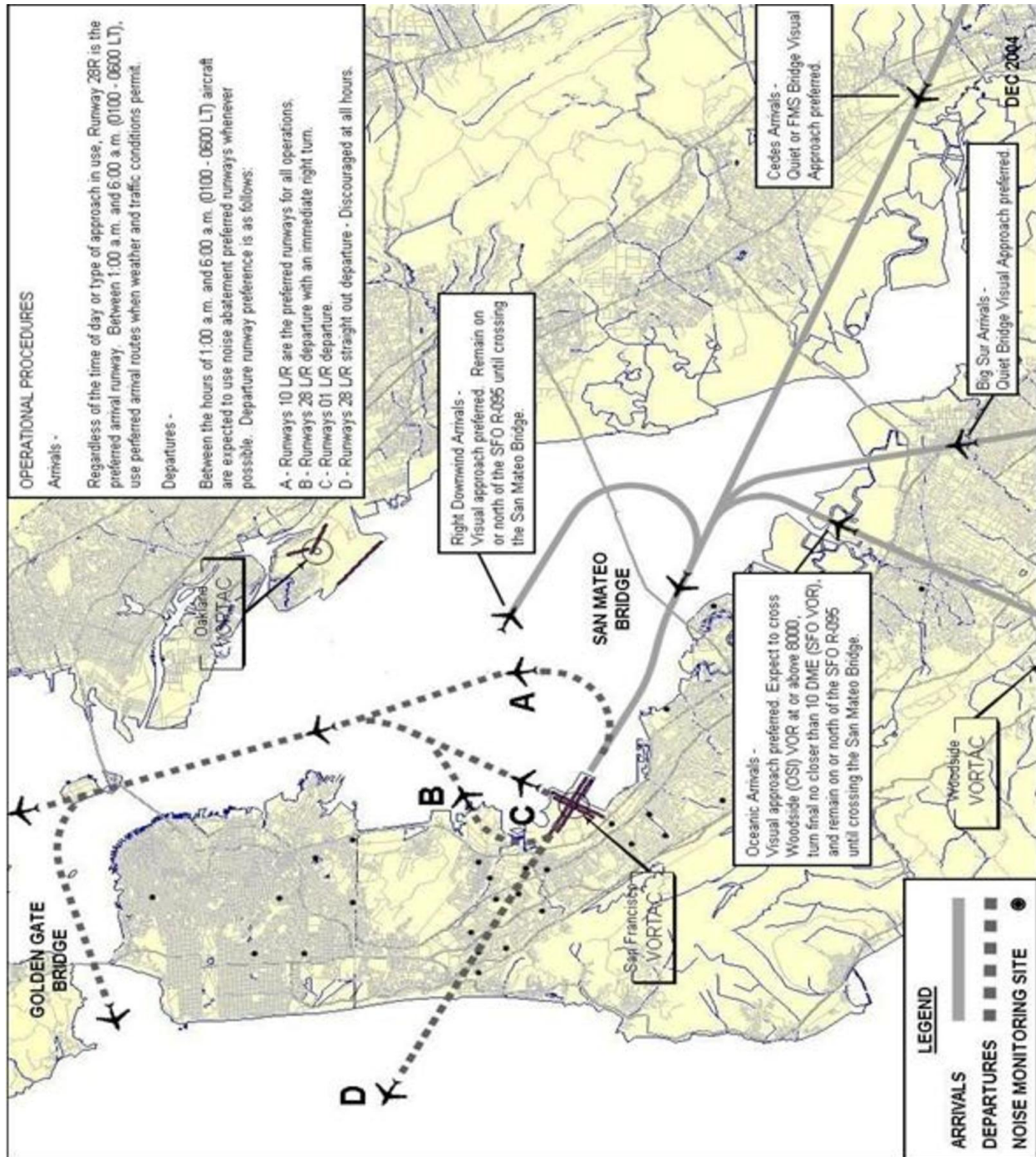
KSFO**San Francisco Intl Airport**
San Francisco, California, United StatesNoise
Sensitivity
Level:**HIGH****Diagram #1: SFO_FlyQuiet_Large**

All Aircraft Categories / All Runways



KSFO**San Francisco Intl Airport**
San Francisco, California, United StatesNoise
Sensitivity
Level:**HIGH****Diagram #2: Departure and Arrivals**

All Aircraft Categories / All Runways



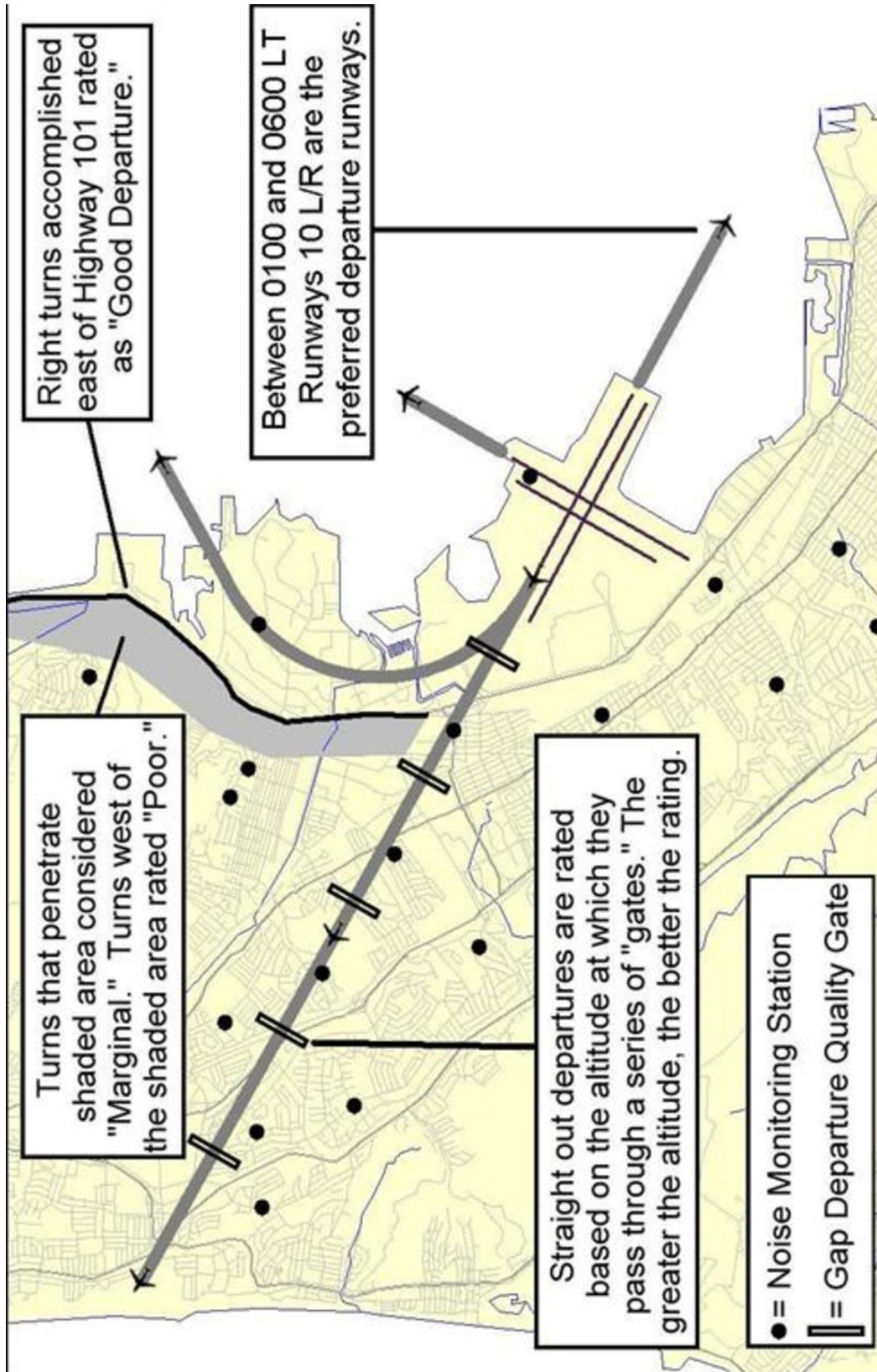
KSFO

San Francisco Intl Airport
San Francisco, California, United States

Noise
Sensitivity
Level:

HIGH**Diagram #3: Departure Procedures**

All Aircraft Categories / All Runways



KSFO**San Francisco Intl Airport**
San Francisco, California, United StatesNoise
Sensitivity
Level:**HIGH****OVERVIEW**

Airport Noise: We can Make A Difference

Aircraft Noise is noise pollution produced by any aircraft or its components, during various phases of a flight: on the ground while parked such as auxiliary power unit, while taxiing, on run-up from propeller and jet exhaust, during take off, underneath and lateral to departure and arrival paths, overflights while en-route, or during landing.

The SFO ANAO fosters a noise abatement program that incorporates working with each stakeholder to reduce noise and educate the public regarding operations at the airport. The noise abatement program includes voluntary noise abatement procedures, the Fly Quiet Program, Residential Sound Insulation Program, and the ability to view live radar flight tracks in 3D on the Internet.

Program Goals

The overall goal of the Fly Quiet Program is to influence airlines to operate as quietly as possible in the San Francisco Bay Area. A successful Fly Quiet Program is expected to reduce both single event and total noise levels around the airport.

Program Elements

Currently, the Fly Quiet Program consists of five elements.

- The overall noise quality of each airlines' fleet operating at SFO
- An evaluation of single overflight noise level exceedances
- A measure of how well each airline complies with the nighttime preferred noise abatement runways
- Assessment of how well each airline adheres to the Gap Departure
- Assessment of how well each airline adheres to the Shoreline Departure

With those measures in place, through a concerted effort, and by demonstrating your sensitivity to the concerns expressed by the community as it relates to airport noise, your relationship with those affected by airport noise can be significantly improved. But we must be willing to VOLUNTARILY take the steps necessary to be thoughtful to our fellow community members. Should voluntary efforts not be considered important to the airport, you may find your airport facing local legislation to fix the problem, and this solution isn't always in the best interest of the airport or its users.

ARRIVALS**Aircraft Categories: A, B, C, D & E / Runways: 28L & 28R**

Operational Procedures

Arrivals**

Regardless of the time of day or type of approach for use, Runway 28 is the preferred arrival runway.

**Use preferred arrival routes as weather and traffic conditions permit.

STARs - Standard Terminal Arrivals

BIG SUR TWO
GOLDEN GATE SIX **NEW**
HADLY TWO
LOCKE ONE
MODESTO THREE
POINT REYES ONE
STINS TWO **NEW**
YOSEM ONE (RNAV)

DEPARTURES**Aircraft Categories: A, B, C, D & E / All Runways**

Operational Procedures

Departures**

Between the hours of 1:00 a.m. and 6:00 a.m. (0100-0600 LT), aircraft are expected to use noise abatement preferred runways whenever possible.

Departure Runway preference is follows:-

- A. Runway 10 L/R are the preferred runways for all operations.
- B. Runway 28 L/R with an immediate right turn.
- C. Runway 01 L/R departures
- D. Runway 28 L/R straight-out departure discouraged at all hours

**Use preferred departure routes as weather and traffic conditions permit.

Departure Procedures

DUMBARTON SIX
EUGEN FIVE

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Sensitivity
Level:**HIGH**

GAP THREE
LUVVE THREE
MOLEN THREE
OFFSHORE FIVE
PORTE THREE
QUIET TWO
REBAS THREE (PROP)
SAN FRANCISCO EIGHT
SHORELINE ONE

NOTE: Special Take-Off Minimums/Departure Procedures apply [download \(40KB\)](#)

**

KSFO**San Francisco Intl Airport**
San Francisco, California, United StatesNoise
Sensitivity
Level:**HIGH****PREFERENTIAL RUNWAYS****All Aircraft Categories****Departures**

Daytime (0700-2200)

1st Preference: RWY 01 L/R

2nd Preference: RWY 28 L/R

Nighttime (2200-0700)

1st Preference: RWY 10L/R

2nd Preference: RWY 28 L/R on the Shoreline or Quiet Departure Procedures

3rd Preference: RWY 01 L/R

NIGHTTIME PREFERENTIAL RUNWAY USE RATING

Reducing nighttime noise "especially sleep disturbance" is a key goal of SFO's aircraft noise abatement program. SFO's Nighttime Preferential Runway Use program, developed in 1988, aims to maximize flights over water and minimize flights over land and populated areas between 1:00 AM and 6:00 AM, thus reducing nighttime noise in the airport surrounding communities.

Arrivals:

Daytime(0700-2200)

Preferred : RWY 28L/R

Quiet Bridge Visual 28 R/L

Nighttime (2200-0700)

Preferred : RWY 28L/R

Quiet Bridge Visual 28 R/L

*Use preferred runways as weather and traffic conditions permit.

PREFERENTIAL INSTRUMENT PROCEDURES**Aircraft Categories: A, B, C, D & E / Runway 28R**

ILS OR LOC RWY 28R

ILS RWY 28R(CAT II)

ILS RWY 28R(CAT III)

RNAV (GPS) Z RWY 28R

RNAV (RNP) Y RWY 28R

LDA/DME RWY 28R

LDA PRM RWY 28R (SIM CLOSE PAR)

QUIET BRIDGE VISUAL RWYS 28L/R

TIPP TOE VISUAL RWY 28L

NOTE: Special Alternate Minimums apply

REVERSE THRUST**Aircraft Categories: A, B, C, D & E / All Runways**

No restrictions on 'Landing for use' of thrust reverses, However aircraft that have non-wing mounted engines are certified by the FAA to "power-back" from gates that the airline & FAA have surveyed and where it can be safely allowed

PATTERN ALTITUDES*ALL VALUES ARE MSL (FEET)***Aircraft Category HELI**

None. Touch and Goes are restricted for General Aviation Aircraft, with the exception of Helicopter operations.**

**91.119 Minimum safe altitudes:

General Helicopters.

Helicopters may be operated at less than the minimums prescribed, if the operation is conducted without hazard to persons or property on the surface. In addition, each person operating a helicopter shall comply with any routes or altitudes specifically prescribed for helicopters by the Administrator.

INTERSECTION TAKEOFFS**Aircraft Categories: A, B, C, D & E / Runways: 28L & 28R**

Intersection Departure on Runway 28 at Intersection 'E' [echo], Only at controllers discretion.

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Level:**HIGH****APU USE**

Operators are encouraged to use 400Hz ground power and pre-conditioned air sources whenever practicable. Auxiliary Power Units may be used when aircraft are being towed.

At Domestic terminals the use of APUs is prohibited between 2200-0600 except 30 minutes prior to departure, when passengers are aboard, or if it is needed to test other aircraft equipment.

At the International Terminal

Aircraft scheduled to be at a gate in Boarding Areas A and G for more than 45 minutes between 0700 and 2200 are required to use 400Hz ground power and pre-conditioned air, where available. APUs are not authorized without prior permission from Airport Operations, during the use of pre-conditioned air until 30 minutes prior to push-back.

All aircraft scheduled to be at a gate between 2200 and 0700 are required to use 400Hz ground power and preconditioned air, where available regardless of duration at the gate. APUs are not authorized without prior permission from Airport Operations, during the use of ground power and pre-conditioned air until 30 minutes prior to push-back.

ENGINE RUNUP

Run-ups are prohibited between 2200-0700 except as noted here:

- An idle check of a single engine not to exceed 5 minutes in duration may be conducted in the specific airline lease hold area. If more than one engine is to be checked each engine must be checked separately and the cumulative duration of the idle checks cannot exceed five minutes
- An idle check of a single engine or multiple engines (checked separately) which will exceed five minutes in duration will be accomplished in the designated run-up. For purposes of noise abatement monitoring this will be considered a power run-up.
- Engines, when required, may be idled to accomplish compass checks on the compass rose located at the approach end of RWY 19R

FLIGHT TRAINING

The SFO Class B is open to VFR, with the following caveats:

- NEWS REPORTING, TRAFFIC WATCH, CIVIL AIRCRAFT BANNER TOWING, SIGHTSEEING (IN ROTORCRAFT AND AIRPLANES) CONDUCTED FOR COMPENSATION OR HIRE (UNDER PART 91, PURSUANT TO THE EXCEPTION IN 119.1(E)(2)), AND AIRSHIP/BLIMP OPERATIONS are still not allowed,

- Use a transponder (or get permission not to ahead of time),

- Monitor 121.5, if you can, and

- VFR PILOTS IN "ENHANCED CLASS B AIRSPACE" ARE ENCOURAGED TO OPERATE THEIR AIRCRAFT IN A NORMAL MANNER, AVOIDING AEROBATICS, LOITERING OR CIRCLING, AND UNPREDICTABLE FLIGHT PATHS (student pilots beware! -ed). PILOTS ARE URGED TO CHECK NOTICES TO AIRMEN (NOTAMS) AND CALL THE LOCAL FLIGHT SERVICE STATION AT 1-800-WX-BRIEF PRIOR TO EACH FLIGHT.

- Touch and Goes are restricted at SFO

COMMUNITY GROUPS/INFO**Airport/Community Roundtable**

The Airport/Community Roundtable was established in 1981 as a voluntary committee to address community noise impacts from aircraft operations at San Francisco International Airport. The Roundtable monitors a performance-based noise mitigation program implemented by airport staff, interprets community concerns and attempts to achieve noise mitigation through a cooperative sharing of authority among the aviation industry, the Federal Aviation Administration, SFO management and local government.

The authority to control aircraft in flight and on the ground is vested exclusively in the FAA. The FAA, however, cannot control the number of flights nor the time of day of aircraft operations. Federal law preempts any local government agency from implementing any action that is intended to control the routes of aircraft in flight. Neither the Roundtable, local elected officials nor airport management can control the routes of aircraft in flight or on the ground.

Every quarter the SFO Airport Director, John Martin, reports to the Airport Community Roundtable on the Fly Quiet Program and presents the results for the previous quarter. Meetings are held once every quarter. For More Info on the Roundtable, use link below:
<http://www.sforoundtable.org/index.html>

Residential/Community Sound Insulation Program

SFO has one of the most extensive home insulation programs in the nation. Dating from 1983, over 15,000 homes, 8 churches and 7 schools have been treated in six geographic areas: County of San Mateo, Daly City, Millbrae, Pacifica, San Bruno and South San Francisco. The total program expenditure now amounts to over \$153 million. The program is administered directly by the local jurisdictions which decide in what order eligible properties will be treated. Methods include: first come first served, lottery, and noisiest first. Localities also determine whether or not to include public buildings, multi-family residential buildings and/or rental properties. In all cases, the program is funded through a combination of FAA and airport funds distributed through the airport. FAA guidelines set the standard for eligibility for federal funds as noise sensitive properties within the federally-approved 65 dB CNEL annual noise contour.

KSFO**San Francisco Intl Airport**
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Sensitivity
Level:**HIGH****STAGE II**

STAGE 2 RESTRICTIONS Stage 2 airplanes >75,000 lbs are prohibited from operating at airports within the 48 contiguous states.

STAGE 2 PHASEOUT U.S. Stage 2 Phase out complete as of 12/31/1999 (CFR Part 91.801). Stage 2 airplanes >75,000 lbs are prohibited from operating at airports within the 48 contiguous states.

FLIGHT TRACK MONITORING

YES. As of January 2005, the Airport installed a new Aircraft Noise Management System utilizing Lochard's Airport Noise and Operations Monitoring System (ANOMS) 8 product suite. The previous passive radar system was replaced with Lochard's new hybrid, SkyTrak, an integration of the FAA ARTS IIIE and live Mode S with passive radar that drives the SFO community web site and delivers flight data throughout the airport.

NOISE ORDINANCE**RULE 11.0****NOISE ABATEMENT REGULATION****11.1 PURPOSE**

The Airport Commission of the City and County of San Francisco ("Commission") promulgates this regulation to provide for a continual reduction of cumulative noise resulting from aircraft operations at San Francisco International Airport ("SFIA") in accordance with the Commission's authority as proprietor of SFIA, the Charter of the City and County of San Francisco, and the provisions of Title 21, Sub-chapter 6 of the California Administrative Code, while allowing SFIA to continue its historic function as the leading gateway to the Pacific, as a vital contributor to a strong and growing economy, and as a major source of employment for the Bay Area. Airport Commission Resolution #88-0016 provides for the administration of the Airport's Noise Abatement Program and has been amended as follows: Effective July 16, 1991 by Resolution No. 91-0099, and on July 7, 1992 by Resolution No. 92-0202 and on December 7, 1993 by Resolution No. 93-0248 and on January 17, 1995 by Resolution No. 95-0015 and on November 20, 2001 by Resolution No. 01-0354.

11.2 EFFECTIVE DATE

This regulation shall become effective upon its adoption by resolution of the Commission, pursuant to the powers and duties vested in the Commission by Section 3.691 of the Charter of the City and County of San Francisco, and shall remain in effect until amended or repealed.

11.3 DEFINITIONS

Whenever used in Rule 11, the following terms shall have the meanings set forth below.

- (A) "Aircraft" - all subsonic transport category large airplanes, subsonic turbojet powered airplanes and supersonic transport category airplanes, which were ever certificated or recertificated at a maximum gross takeoff weight in excess of 75,000 lbs., whether certificated or recertificated by the United States or by a foreign country.
- (B) "Operation" - an aircraft landing or takeoff.
- (C) "Operator" - an entity that exercises operational control over an aircraft. Operational control includes, among other matters, control over scheduling, routes, or choices of aircraft.
- (D) "Preferential Runway Use Program" - written procedures concerning the performance of operations at SFIA to minimize the noise impact of such operations, applicable when air safety, air traffic, and meteorological conditions permit.
- (E) "Preferred Departure Procedure" - an aircraft operating procedure, approved by either the Federal Aviation Administration (FAA) or the International Council Aeronautical Organization (ICAO), to be used to reduce noise impacts during the initial phase of flight.

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- (F) "Stage 2 Aircraft" - an aircraft that is certificated by the FAA as complying with the noise levels prescribed in 14 C.F.R. Part 36, Appendix C, Section 36.5(a)(2), or is certificated in accordance with Chapter 2 of Annex 16 to Article 37 of the International Civil Aviation Organization Convention.

- (G) "Stage 3 Aircraft" - an aircraft that is certificated by the FAA as complying with the noise levels prescribed in 14 C.F.R. Part 36, Appendix C, Section 36.5(a)(3), or is certificated in accordance with Chapter 3 of Annex 16 to Article 37 of the International Civil Aviation Organization Convention.

11.4 REGULATION**(A) Stage 3 Requirement for Aircraft**

Upon the effective date of this regulation, an aircraft will be permitted to commence or continue operation at SFIA only if it is a Stage 3 aircraft.

(B) Auxiliary Power Unit (APU)

Operators are encouraged to use ground power and air sources whenever practicable. APU's may be used when aircraft are being towed.

- (1) At domestic terminals, the use of APU's is prohibited between the hours of 2200 - 0600 except 30 minutes prior to departure, when passengers are aboard, or it is needed to test other aircraft equipment.

- (2) At the International Terminal, the following procedures apply:

- (a) Aircraft scheduled to be at a gate in Boarding Areas A and G for more than 45 minutes between the hours of 0700 - 2200, are required to use 400Hz ground power and pre-conditioned air, where available. APU's are not authorized without prior permission from Airport Operations, during the use of ground

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Level:**HIGH**

power and pre-conditioned air until 30 minutes prior to push-back.

(b) All aircraft scheduled to be at a gate between 2200 – 0700 hours are required to use 400Hz ground power and pre-conditioned air, where available, regardless of the duration at the gate. APU's are not authorized without prior permission from Airport Operations, during the use of ground power and pre-conditioned air until 30 minutes prior to push-back.

c) Aircraft Engine Run-ups

Run-ups of mounted aircraft engines for maintenance or test purposes are prohibited between the hours of 2200 – 0700 daily except as provided below:

(1) An idle check of a single engine is allowed under the following conditions:

(a) An idle check of a single engine not to exceed a 5-minute duration may be conducted in the lease hold area. If more than one engine is to be checked, each engine must be checked separately and the cumulative duration of the idle checks cannot exceed 5-minutes.

(b) Idle checks of a single engine or multiple engines (checked separately) which will exceed a duration of 5-minutes will be accomplished in the designated run-up areas. For purposes of noise abatement monitoring, this will be considered a power run-up.

(2) During the hours of 2200 – 0700, the Operations Supervisor shall be called and permission received prior to any engine idle check or engine idle run-up, including any idle run for more than a cumulative duration of 5-minutes.

During other hours, the Operations Supervisor shall be called and permission received prior to any engine run-up.

Any request for an engine run-up during the hours 2200 – 0700, other than that described above, which is the result of unusual or emergency circumstances, may be approved by the Nighttime Noise Clearance Center. When approved and accomplished, the Maintenance Supervisor of the airline concerned must provide to the Airport Director a monthly report detailing the following:

(a) Date and time of the run-up

(b) Type of aircraft

(c) Aircraft identification number

(d) Location of the run-up

(e) Duration of the run-up

(f) An explanation of the unusual or emergency circumstances making the run-up necessary

Reports will be submitted to the Airport Director, Attn: Airport Operations within three working days after the last day of each calendar month.

(D) Noise Abatement Procedures

To reduce the impacts of aircraft noise in surrounding communities, particularly between the hours of 2300 and 0700, the Airport encourages the use of the following procedures.

(1) Depart on Runway 10.

(2) When departing on Runway 28L/R, use the Shoreline Departure procedure whenever possible.

(3) When departing straight cut on Runway 28L/R use the appropriate ICAO A or AC 91-53A noise abatement climb procedure for communities close to the airport.

(4) Use the Quiet Bridge Approach to Runway 28L/R.

(E) Sanctions

Violations of any provision of this regulation shall be punishable in the following manner:

(1) 1st violation in a twelve- Letter of admonishment from month period the Airport Director

(2) 2nd violation in a twelve- A fine in the amount of \$1,000. month period

(3) 3rd violation in a twelve- A fine in the amount of \$2,000. month period

(4) Additional violations in a A fine in the amount of \$3,000. twelve-month period

(F) Variances

(1) Upon the effective date of this regulation, requests by operators for a variance from any provision of this regulation must be made in writing to

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Level:**HIGH**

the Airport Director at least 60 days prior to the date the requested variance. Every request for a variance shall be reviewed by the Airport Director or his designated representative. Among other factors, the noise impact on the surrounding community and the fairness to other operators, which are in compliance with this regulation, shall be considered in determining whether a variance should be granted.

(2) The Airport Director shall notify the operator in writing whether a variance is granted and include any instructions or restrictions pertaining to the waiver.

(G) Nighttime Noise Clearance Center

The Airport Director shall establish a Nighttime Noise Clearance Center operated during nighttime hours by a duty officer whose responsibilities will include monitoring compliance with the Airport's preferential runway use program and responding to requests for exemptions.

11.5 CONSTRUCTION OF THE REGULATION

References in this regulation to Federal Aviation Regulations, 14 C.F.R. Part 36, are not intended to incorporate into this regulation the construction, regulatory purpose or specific application given by the Federal Aviation Administration or any court to those provisions. This regulation is designed to accomplish distinct regulatory goals dictated by the peculiar local conditions existing at SFIA. The Commission shall be the final authority on the interpretation, regulatory purpose, and application of all aspects of this regulation to all aircraft seeking permission to commence operation or to continue operation at SFIA.

11.6 SEVERABILITY

If any portion of this regulation or if any application of this regulation is held unconstitutional or otherwise unlawful, the remainder of this regulation and the remaining applications of this regulation shall not be affected thereby.

11.7 REPEAL

Commission Resolution 78-0131 and all Airport Operations Bulletins (AOB) issued thereunder are repealed as of the effective date of this regulation. In addition, the following AOB's are also repealed:

- 84-07 AOB Noise Abatement Regulation
- 85-06 AOB Aircraft Engine Run-ups
- 85-07 AOB Noise Abatement Regulation
- 88-01 AOB Maintenance Exemption from SFO Noise Regulation
- 88-02 AOB Variance Procedures
- 88-03 AOB Preferential Runway Use
- 88-04 AOB Implementation of Noise Regulation
- 88-07 AOB Reporting Requirements of Noise Regulation
- 90-06 AOB Auxiliary Power Units
- 91-02 AOB New Scheduled Operations between 2300 and 0700 hours
- 92-02 AOB Late Night Stage 2 Operations
- 93-01 AOB Operation of Stage 2 Aircraft between 2300 and 0700
- 93-03 AOB Percentage Stage 3 Requirement
- 98-05 AOB Percentage Stage 3 Requirement
- 98-06 AOB International Operators Percentage Stage 3 Requirement
- 99-03 AOB Operation of Stage 2 Aircraft between 1900 and 0700 hours
- 01-02 AOB Gate Restrictions for Auxiliary Power Units (APU)

KSFO

San Francisco Intl Airport
San Francisco, California, United States

Noise
Sensitivity
Level:

HIGH**NOISE MONITORING**

ANOMS

SFO maintains a state-of-the-art permanent noise monitoring system to keep track of noise levels in communities around the airport. There are 29 permanent monitors located around the Bay Area, 4 portable units and 4 Ground Run-up monitors with cameras.

PRIOR PERMISSION (PPR) OPERATIONS

Auxiliary power unit operating restrictions

All aircraft scheduled to be at a gate between 10:00 p.m. and 7:00 a.m. are required to use 400Hz ground power and preconditioned air, where available regardless of duration at the gate. APU's are not authorized without prior permission from Airport Operations, during the use of ground power and pre-conditioned air until 30 minutes prior to push-back.

FLY QUIET AWARDS

Each year the Jon C. Long Fly Quiet Awards recognize those airlines that made improvements in three award categories: The Most Improved, The Quietest Flier and The Chairperson's Award.

Program Elements

- Overall noise quality of each airline fleet operating at SFO
- An evaluation of single overflight noise level exceedances
- A measure of how well each airline complies with the nighttime preferred noise abatement runways
- Assessment of how well each airline adheres to the Gap Departure
- Assessment of how well each airline adheres to the Shoreline Departure

NBAA PROCEDURES

Our airport recommends use of NBAA procedures, please see the appendix.

AOPA NOISE AWARENESS STEPS

Our airport recommends use of AOPA procedures, please see the appendix.

AIRPORT CONTACT INFORMATION

Name Bert Ganoung
Title Aircraft Noise Abatement Manager
Noise Hotline 650-821-4736
Phone 650-821-5100
Fax 650-821-5112
Email sfo.noise@flysfo.com
Web Address <http://www.flyquietsfo.com>

San Francisco Intl Airport
PO Box 8097
San Francisco CA 94128

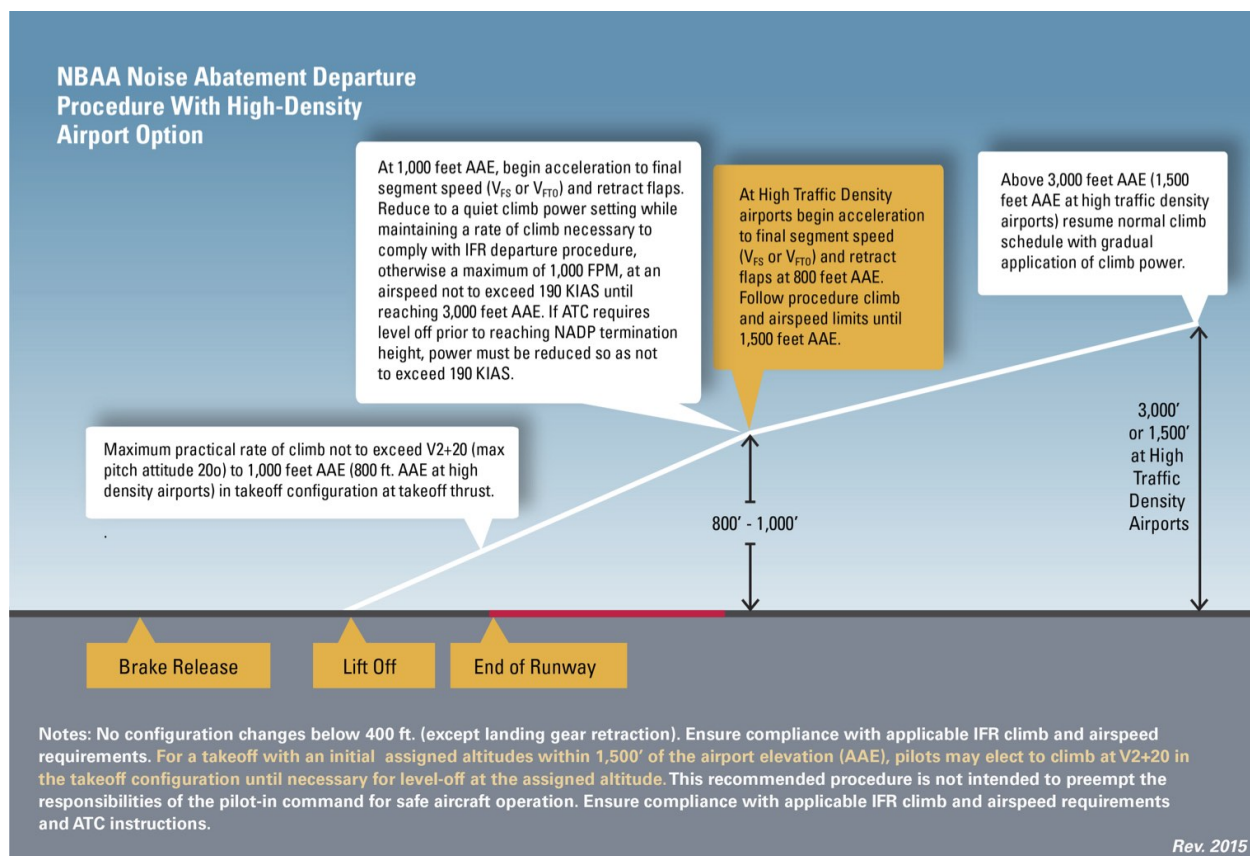
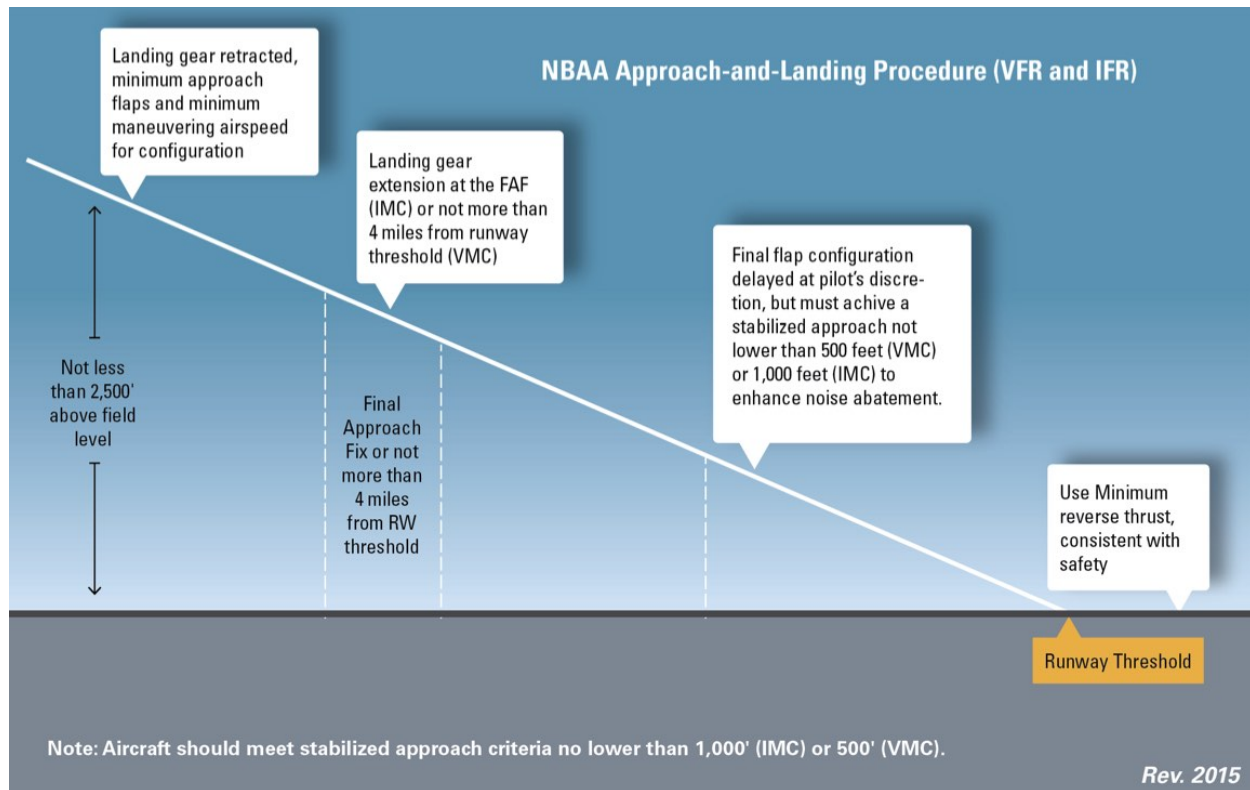
ABOUT AIRCRAFT CATEGORIES

A	B	C	D	E	HELI
< 91 kts	91-120 kts	121-140 kts	141-165 kts	>165 kts	Helicopters

Aircraft Approach Categories are based on FAA reference speeds.
See http://whispertrack.com/pdf/faa_handbook.pdf

$$V_{REF} = 1.3 \times V_{SO}$$

TEMPORARY INFORMATION (NONE)**MANDATORY RESTRICTIONS (NONE)****CURFEWS (NONE)****STAGE III (NO RESTRICTIONS)**

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AOPA Noise Awareness Steps

Following are some general guidelines and techniques to minimize the noise impact produced by aircraft operating near the ground.

1. If practical, avoid noise-sensitive areas such as residential areas, open-air assemblies (e.g. sporting events and concerts), and national park areas. Make every effort to fly at or above 2,000 feet over the surface of such areas when overflight cannot be avoided.
2. Consider using a reduced power setting if flight must be low because of cloud cover or overlying controlled airspace or when approaching the airport of destination. Propellers generate more noise than engines; flying with the lowest practical rpm setting will reduce the aircraft's noise level substantially.
3. Perform stalls, spins, and other practice maneuvers over uninhabited terrain.
4. Many airports have established specific noise abatement procedures. Familiarize yourself and comply with these procedures.
5. To contain aircraft noise within airport boundaries, avoid performing engine runups at the ends of runways near housing developments. Instead, select a location for engine runup closer to the center of the field.
6. On takeoff, gain altitude as quickly as possible without compromising safety. Begin takeoffs at the start of a runway, not at an intersection.
7. Retract the landing gear either as soon as a landing straight ahead on the runway can no longer be accomplished or as soon as the aircraft achieves a positive rate of climb. If practical, maintain best-angle-of-climb airspeed until reaching 50 feet or an altitude that provides clearance from terrain or obstacles. Then accelerate to best-rate-of-climb airspeed. If consistent with safety, make the first power reduction at 500 feet.
8. Fly a tight landing pattern to keep noise as close to the airport as possible. Practice descent to the runway at low power settings and with as few power changes as possible.
9. If a VASI or other visual approach guidance system is available, use it. These devices will indicate a safe glidepath and allow a smooth, quiet descent to the runway.
10. If possible, do not adjust the propeller control for flat pitch on the downwind leg; instead, wait until short final. This practice not only provides a quieter approach, but also reduces stress on the engine and propeller governor.
11. Avoid low-level, high-power approaches, which not only create high noise impacts, but also limit options in the event of engine failure.
12. Flying between 11 p.m. and 7 a.m. should be avoided whenever possible. (Most aircraft noise complaints are registered by residents whose sleep has been disturbed by noisy, low-flying aircraft.)

Note: These recommendations are general in nature; some may not be advisable for every aircraft in every situation. No noise reduction procedure should be allowed to compromise safety.