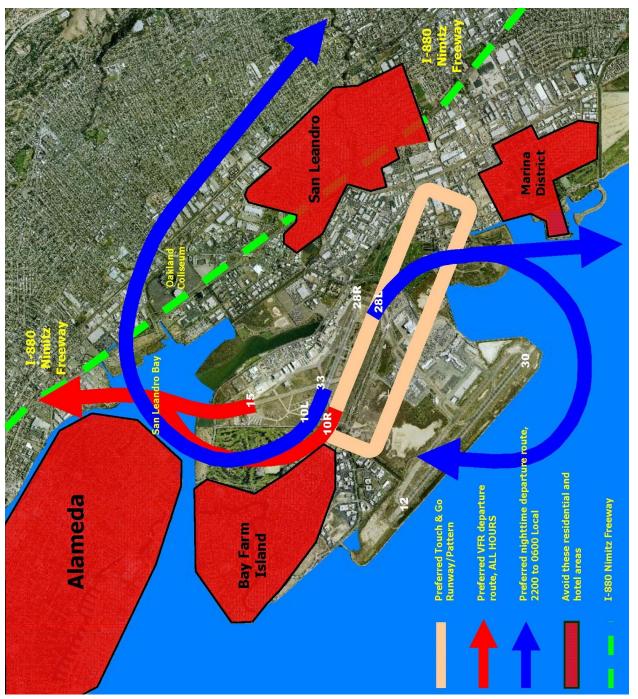
KOAK

Metropolitan Oakland Intl Airport Oakland, California, United States

Noise Sensitivity Level: HIGH

Diagram #1: North Field Noise Abatement Procedures All Aircraft Categories / Runways: 10L, 10R, 28L, 28R & 33

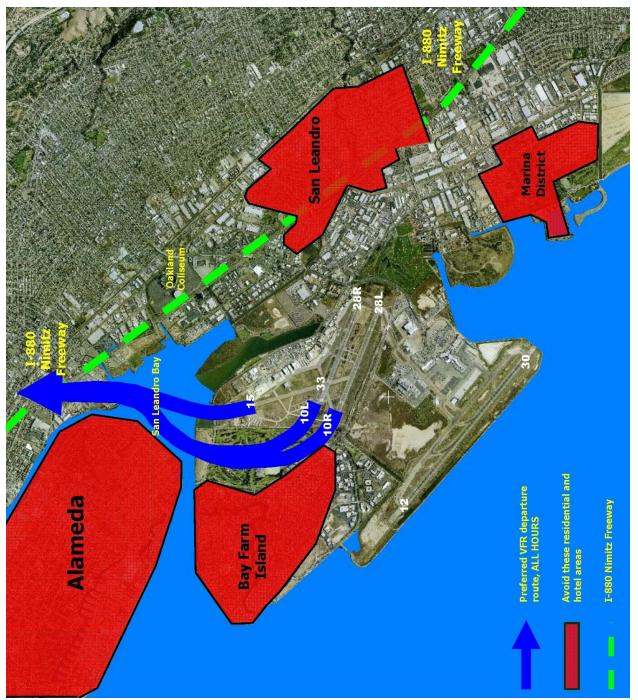


KOAK

Metropolitan Oakland Intl Airport Oakland, California, United States

Noise Sensitivity Level: HIGH

Diagram #2: North Field Preferred VFR Departures Aircraft Categories: A, B & C / Runways: 28L, 28R & 33



KOAK

Metropolitan Oakland Intl Airport Oakland, California, United States

Noise Sensitivity Level: HIGH

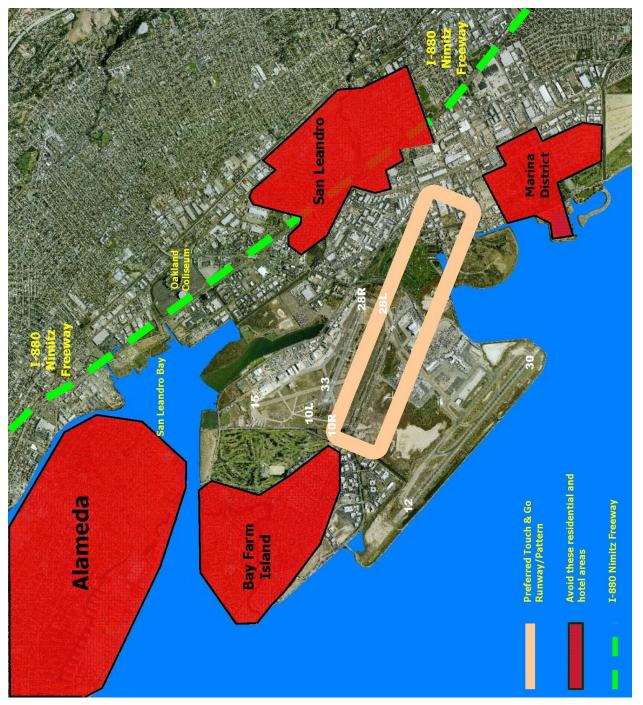
Diagram #3: North Field Preferred Nighttime Departures Aircraft Categories: A, B & C / Runways: 10L, 10R, 28L & 28R





Noise Sensitivity Level: HIGH

Diagram #4: Preferred Touch & Go Pattern Aircraft Categories: A, B & HELI / Runway 28L







OVERVIEW

The Port of Oakland, operator of the Oakland International Airport, and the citizens of the East Bay communities welcome you to our area. In order to be a good neighbor, the Airport and the community request that you follow these recommended noise abatement procedures. Minimizing aircraft noise near residential areas and operating a safe and efficient air transportation system is a worldwide challenge. Courteous and responsible pilots make the difference by avoiding unnecessary residential over-flights and by flying as quietly as safety permits. Please help us maintain a good neighbor relationship with the surrounding communities by following the recommended noise management procedures, subject to weather, equipment and pilot capabilities.

Safety always supersedes noise abatement procedures. Always comply with air traffic control instructions and other safety considerations caused by weather or emergencies.

ARRIVALS

Aircraft Categories: B, C, D & E / Runways: 10L & 10R

For noise abatement, the Port of Oakland recommends ALL JETS and other aircraft listed below, to land on Runway 12 when approaching from the North, unless otherwise directed by ATC.

All Aircraft Categories / Runways: 10L, 10R, 15, 28L, 28R & 33

Avoid flying over residential areas and hotels.

Aircraft Categories: B, C, D & E / Runways: 10L & 10R

The following aircraft should not land on Runways 10L/R, except during emergencies. Runway 12/30 should be used.

- Turbojet and turbofan powered aircraft.
- Turboprops over 17,000 pounds.
- Four-engine reciprocating powered aircraft.
- Surplus military aircraft over 12,500 pounds

All Aircraft Categories / Runway 15

No straight-in landings unless required by safety or wind conditions.

DEPARTURES

All Aircraft Categories / Runways: 10L & 10R

VFR and IFR departures should use 180 degree departure headings when able for E/SE-bound departures or use right turns over the airport for N/NEbound departures.

No left turn departures

All Aircraft Categories / Runway 10L

No straight out departures

Aircraft Categories: A, B, C & HELI / Runways: 28L & 28R

SALAD ONE Departure Procedure was published in August 2000. Please consult ATC instructions. Note: Do not use the OAK 313 or 310 degree heading departure.

Aircraft Categories: A, B & C / Runways: 28L & 28R

Make right crosswind turn over San Leandro Bay until reaching I-880 (Nimitz Freeway) and continue per ATC instructions.

No straight out departures

Aircraft Categories: A, B & C / Runway 28R

VFR departures should include a right crosswind or additional downwind segment avoiding Bay Farm Island and the main island of Alameda.

All Aircraft Categories / Runway 33

Make right northerly turn over San Leandro Bay until reaching I-880 Freeway and continue per ATC instructions.

No straight out or left crosswind/downwind departures

Aircraft Categories: A, B & C / Runways: 10L, 10R, 15, 28L, 28R & 33 Use only full runway-length departures from the chosen North Field runway.

Aircraft Category HELI / All Runways

Daytime/Nighttime

Fly over freeway and water as much as possible to avoid flying over hotels and residential areas.



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

- *The following aircraft should not depart Runways 28 L/R. Runway 12/30 should be used:*
- Turbojet and turbofan powered aircraft.
- Turboprops over 17,000 pounds.
- Four-engine reciprocating powered aircraft. • Surplus military aircraft over 12,500 pounds

PREFERENTIAL RUNWAYS

KOAK

All Aircraft Categories *Daytime - (0700 local to 2200 local)* Runways 28L/R, and Runway 33

Nighttime - (2200 local to 0700 local) Runways 10R/28R

Aircraft Categories: B, C, D & E

- *The following aircraft should not depart Runways 28 L/R. Runway 12/30 should be used:*
- · Turbojet and turbofan powered aircraft.
- Turboprops over 17,000 pounds.
- Four-engine reciprocating powered aircraft.

Surplus military aircraft over 12,500 pounds

All aircraft over 75,000 pounds are directed to use Runways 12/30

All Aircraft Categories *Nighttime - (2200 local to 0700 local)* Runway 28L

PATTERN ALTITUDES

ALL VALUES ARE MSL (FEET)

Aircraft Categories: A, B & HELI / Runways: 10L, 15, 28L & 33 Fly standard traffic pattern.

Fly Runway 10R/28L at approximately 600 feet AGL. For safety, beware of traffic on Runway 12/30.

INTERSECTION TAKEOFFS

Aircraft Categories: A, B & C / Runways: 10L, 10R, 15, 28L, 28R & 33 Use only full runway-length departures from the chosen North Field runway.

ENGINE RUNUP

Aircraft operator must contact the Manager On Duty (MOD) at 510-563-3361 to request authorization for an engine maintenance run-up prior to performing this activity. Airport Operations Directive in effect.

FLIGHT TRAINING

Runway 28L is the preferred touch-and-go runway; Fly 600 feet AGL traffic pattern and, for safety, beware of traffic on Runway 30.

COMMUNITY GROUPS/INFO

Oakland Airport/Community Noise Management Forum

The Noise Forum was created to address community noise concerns and make recommendations to the Port Of Oakland's Executive Director on noise related issues at the Airport. Forum representatives include one elected official and one citizen from eight neighboring cities, Alameda County, Marin County and the Port Director of Aviation. The Noise Forum facilitates cooperation between the Airport and local communities. Public attendance is welcomed at the Forum's quarterly meetings, which are held quarterly, on the third Wednesday of the month, at 6:30 p.m., at the Port of Oakland Board Room, 530 Water Street, 2nd Floor, in Oakland's Jack London Square.

The Noise Forum serves as an umbrella organization for two technical subcommittees or working groups that also meet separately on a quarterly basis

North Field Flight Route/Pattern Research Group

The North Field Group was formed to address aircraft noise issues associated with the operation of the North Field or general aviation facility of Oakland International Airport.

The South Field Research Group was formed to address aircraft noise issues associated with the operation of the South Field, or commercial airline and air cargo facility of Oakland International Airport.





FLIGHT TRACK MONITORING

The airport operates an Aircraft Noise and Operations Monitoring System (ANOMS) to monitor compliance with voluntary noise abatement procedures and to respond to community and stakeholder concerns or request for information.

NOISE MONITORING

The airport maintains 15 permanent noise monitors located throughout local communities and an additional one located within the airport at the Ground Runup Enclosure (GRE).

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.

D

121-140 kts 141-165 kts

AIRPORT CONTACT INFORMATION

ABOUT AIRCRAFT CATEGORIES

< 91 kts 91-120 kts

в

Α

С

Name Title	Jesse Richardson Airport Noise Abatement and Environmental
Noise Hotline	Affairs Supervisor
Phone	510-563-6463
Email	510-563-3349
Web Address	OAKNoiseProgram@PortOakland.com https://flyquietoak.com/

Е

>165 kts

HELI

Helicopters

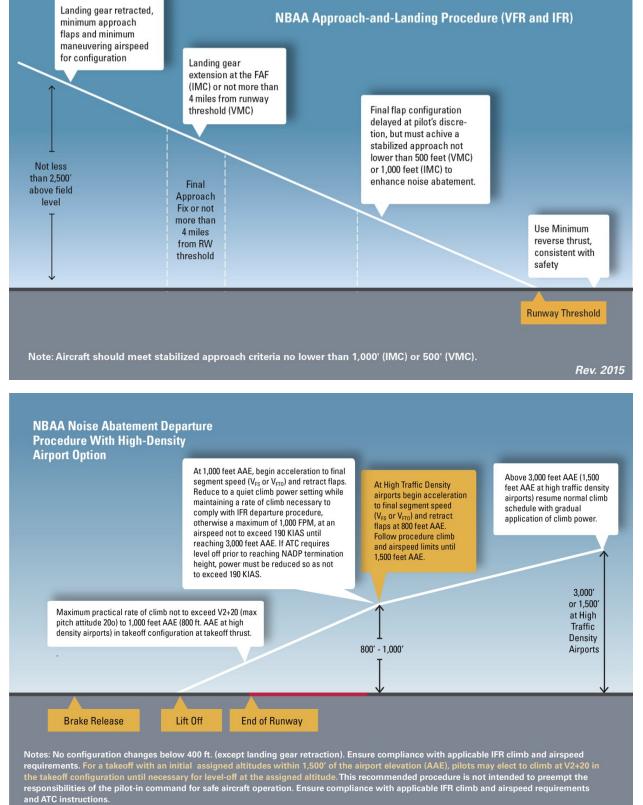
Metropolitan Oakland Intl Airport Oakland International Airport One Airport Drive, Box 45 Oakland 94621

Aircraft Approach Categories are based on FAA reference speeds. See http://whispertrack.com/pdf/faa_handbook.pdf $V_{---} = 1.3 \times V_{--}$ rau. ✓ V_{SO}

V_{REF}	= 1	.3	Х	V	;
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TEMPORARY INFORMATION (NONE)
MANDATORY RESTRICTIONS (NONE)
CURFEWS (NONE)
PREFERENTIAL INSTRUMENT PROCEDURES (NONE)
REVERSE THRUST (NO RESTRICTIONS)
APU USE (NO RESTRICTIONS)
STAGE II (NO RESTRICTIONS)
STAGE III (NO RESTRICTIONS)
NOISE ORDINANCE (NONE)
PRIOR PERMISSION (PPR) OPERATIONS (NONE)





Rev. 2015



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.