

# **LONG BEACH AIRPORT NOISE ABATEMENT PROGRAM**

## GROUND LESSON

Student \_\_\_\_\_ Date \_\_\_\_\_

### **OBJECTIVE**

To develop the students understanding of noise abatement procedures at LGB and to encourage the skill and attitude to fly quietly.

### **EQUIPMENT**

LGB noise compatibility ordinance

FAA Chart Supplement Southwest US for LGB Airport diagram and LGB Airport Facilities

POH for representative aircraft

### **ELEMENTS**

Overview of history of LGB's noise ordinance..... Attachment A

Analysis of power/prop settings for noise abatement

Quiet flying procedures and safety... Attachment B

Discussion of noise sensitive areas around LGB

Noise monitoring, noise testing

Noise violation notification/enforcement... Attachment C

Airport Noise Violation Monitor Locations..... Attachment D

Discuss student's application of noise abatement procedures in his/her style of flying

### **COMPLETION STANDARDS**

The student should demonstrate understanding of the concept of flying quietly and knowledge of the performance/noise characteristics for the aircraft that he/she flies.

### **ADDITIONAL RESOURCES**

Visit the Airport's noise abatement office.

### **NOTES**

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## **Attachment A**

### **History of LGB's Noise Compatibility Ordinance**

In 1981, the City adopted its first noise control ordinance that limited air carrier flights to 15 per day and required air carriers to use quieter airplanes and equipment. In 1983, several commercial airlines challenged the ordinance in federal court. The court entered a preliminary injunction prohibiting the City from reducing the number of daily air carrier flights below 18.

Following the 1983 injunction, the City formed a task force and conducted a study of noise and other airport operations pursuant to Federal Aviation Regulations. The task force recommended allowing air carrier flights to increase to 41 per day so long as certain noise limits could be met. In 1986, the City adopted a second noise control ordinance that established noise limits and restricted the number of air carrier flights to 32 per day. The federal court refused to allow the "second" ordinance to go into effect after the air carriers claimed that the limitation on the number of flights was too restrictive. The federal court ultimately ordered the City to permit 41 airline flights per day at the Airport.

The City appealed the federal court's order, and in January 1992, the Ninth Circuit Court of Appeal upheld the trial court's decision, ruling that certain procedural defects in the ordinance made it legally unenforceable.

In an effort to resolve the protracted litigation without further contested proceedings, the City and the airlines entered into a stipulated settlement in October 1994. The court approved the settlement and entered final judgment on June 13, 1995.

As a result of the settlement, the City was permitted to enact the current version of Chapter 16.43 of the Municipal Code. Chapter 16.43 permits air carriers to operate 41 flights per day while commuter carriers are permitted to operate up to 25 flights per day. Public aircraft including emergency, military, and law enforcement are exempt from regulation.

The maximum number of commercial flights is determined by measured noise levels. We encourage the airlines to operate as quietly as possible by permitting increases in the number of air carrier flights if, as a group, the air carriers are below the noise budget. The noise budget was established based on noise data for the baseline year of 1989-1990. Additional flights can only be added if it is determined that the additional flights will not exceed the air carrier CNEL budget limits.

In December 2015, the most recent peer reviewed Airport Noise Budget Analysis, based on data from October 1, 2014 through September 30, 2015, requires that an additional nine Supplemental Air Carrier flight slots be allocated in order to comply with the requirements set forth in the Noise Ordinance; however, noise levels will still be maintained at the baseline 1989-90 levels.

Included in the ordinance are noise limits for arrival and departure for each runway, limitations on hours for training operations and engine run-ups (other than preflight). Noise violation enforcement procedures are also found in the ordinance.

General Aviation parties involved in the settlement (Gulfstream, National Business Aviation Association (NBAA), Aircraft Owners and Pilots Association (AOPA), et al. encouraged the formation of a General Aviation Noise Abatement Committee to act as a peer review group in the noise violation process.

This Committee was a key element of the settlement and is strongly supported by the Long Beach aviation community. The General Aviation Noise Abatement Committee is comprised of Long Beach aircraft operators, owners and FBOs. Its purpose is to educate the pilots and operators who utilize Long Beach Airport about noise regulations and procedures and to offer insight to reduce the negative effect of noise upon the surrounding community. The committee's efforts in conjunction with the Long Beach Airport are focused on promoting aviation and fostering aviation businesses at Long Beach in such a manner as to minimize the noise impact on our airport's neighbors.

The following volunteer members of the General Aviation Noise Abatement Committee are available to assist you with any noise related concern or question you may have:

<b>Kevin McAchren</b> -- <i>Airserv, Owner</i>	(562) 490-6200
<b>John Ringel</b> – <i>LGB tiedown tenant / GANAC member</i>	(310) 720-5830
<b>Candy Robinson</b> – <i>Long Beach Flying Club, Owner</i>	klgbanac@gmail.com

## **Attachment B**

### **Analysis of power/prop settings for noise abatement**

Discuss power/prop settings for each aircraft as recommended in POH.  
High RPM settings produce the most noise.

## **Help Minimize Aircraft Noise in Long Beach**

### **Quiet flying procedures and safety**

(Refer to Attachment D for airport layout)

- **Departure** – Attain as much altitude as possible before reaching residential areas. Use full length of runway when able.
- **Approach** – Avoid flying long, low, high power, high RPM approaches. Approach on or above glideslope/VASI/PAPI.
- **Pattern** – Pattern altitude 1000 ft MSL, large aircraft 1500 ft MSL. Remain as close to the airport and as high as practicable.
- **Practice Missed Approaches** – Reduce power/RPM when safely able after initiating the missed approach.

# Attachment C

## Discussion of noise sensitive areas around LGB

- Noise sensitive areas surround LGB, the least sensitive being the airport property itself and commercial developments near the airport.
- Tight patterns and use of techniques mentioned previously will help minimize noise in the surrounding communities.
- Runway 26R/8L has the most restrictive noise limits. Louder, high performance aircraft may want to consider using other runways.

## Discussion of noise monitoring, noise testing, and noise violation notification/enforcement

Noise is monitored 24hrs/day at 18 noise monitoring sites. Published noise limits for runways 30, 12, 26L, 26R, 8L and 8R are enforced 24hrs.

- **Noise Curfews** – The only active runway from 10:00 pm to 7:00 am is Runway 30/12 unless otherwise notified per NOTAM/ATC (Check ATIS). No intersection departures are permitted between 10:00 pm and 7:00 am.

## Prohibited Activities

- **Training Operations** - No touch & go, stop & go, practice low approaches and VFR practice missed approaches shall be conducted at the airport except between 7:00 am and 7:00 pm on weekdays and between 8:00 am and 3:00 pm on weekends and holidays. Except for instrument training, training operations shall be conducted only on Runways 08L/26R and 08R/26L.
- **Engine Runups** - Engine runups, for purposes other than preflight, are allowed only between 7:00 am and 9:00 pm, M – F, and 9:00 am and 9:00 pm, weekends and holidays, at locations approved by the airport manager.
- **Formation Takeoffs and Landings** - No formation takeoffs or landings are permitted.

## Noise Testing

- Aircraft operators have the opportunity to test flight procedures to identify the quietest procedures for their particular aircraft. Aircraft are exempt from noise violations during this testing period. Contact the Noise Compliance Office at (562) 570-2635 for details.

## Violation Enforcement

**1<sup>st</sup> Violation:** A violation notification letter is issued to the pilot/operator of the aircraft. A copy of the Noise Compatibility Ordinance and LGB Pilot Guide are included in the packet. A telephone response from the pilot/operator is required.

**2<sup>nd</sup> Violation:** A similar letter and packet of information is issued. Required is a written noise compliance program, describing what actions the pilot/operator will take to avoid noise violations in the future.

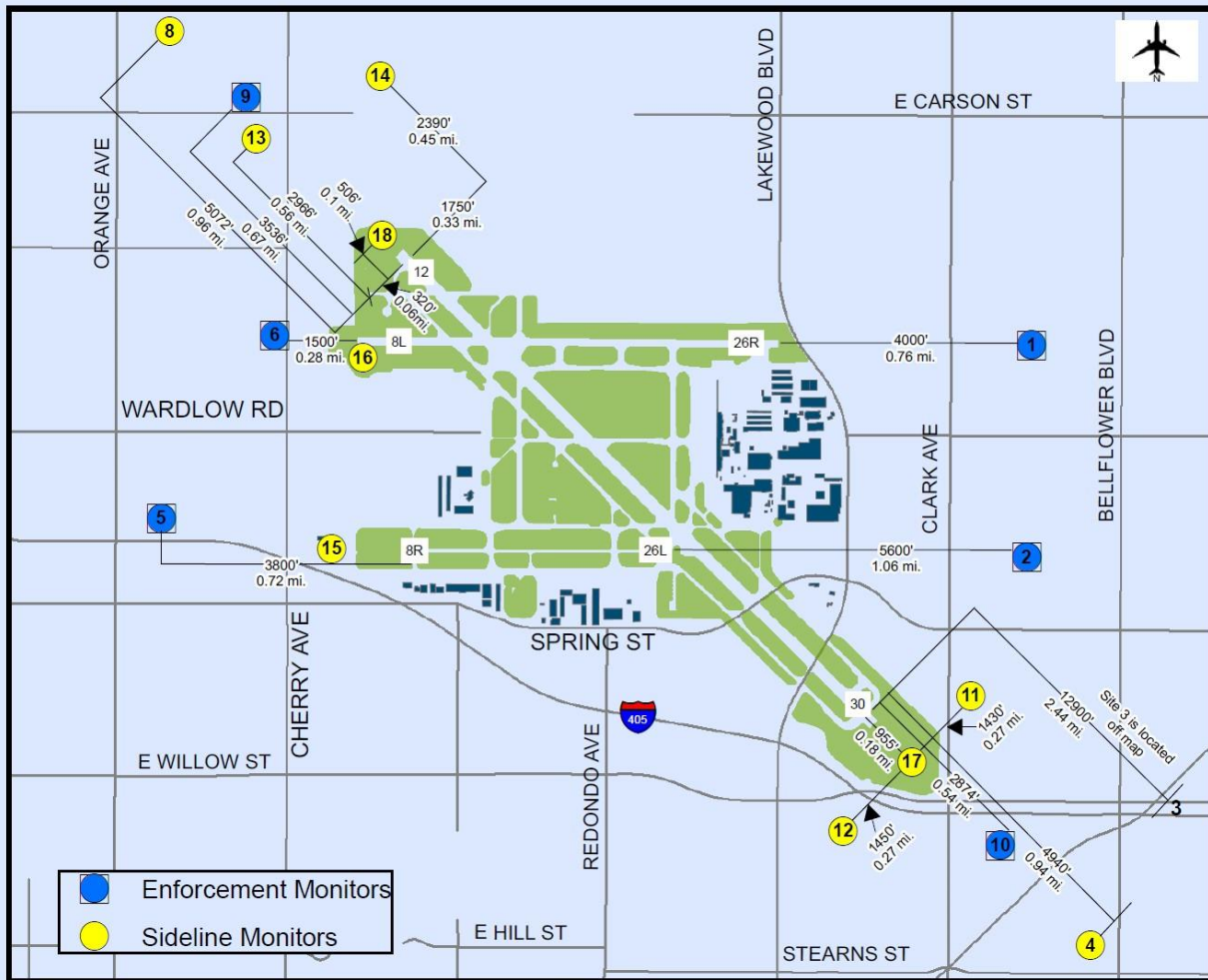
**3<sup>rd</sup> Violation** within one year of 2<sup>nd</sup> violation: \$100 surcharge

**4<sup>th</sup> Violation** within one year of 3<sup>rd</sup> violation: \$300 surcharge

Details of violation enforcement are described in the Noise Compatibility Ordinance.

# Attachment D

## NOISE VIOLATION MONITOR LOCATIONS



### Noise Limits

Runway	7:00 am - 10:00 pm SENEL (dBA)	10:00 pm - 11:00 pm 6:00 am - 7:00 am SENEL (dBA)	11:00 pm - 6:00 am SENEL (dBA)	Monitor #
	Departure/Arrival	Departure/Arrival	Departure/Arrival	
30	102.5/101.5	90/90	79/79	9 & 10
12	102.5/101.5	90/90	79/79	10 & 9
26R	92/88	-	-	6 & 1
26L	95/93	-	-	5 & 2
08R	95/92	-	-	2 & 5
08L	88/92	-	-	1 & 6

Time periods are enforced at the noise monitors, which are synchronized nightly to the atomic clock in Boulder, CO. SENEL (Single Event Noise Exposure Level) is a sound measurement in which the max decibel level and the duration are factored together logarithmically.

### Noise Abatement and Curfews

#### The City of Long Beach Noise Compatibility Ordinance NO. C7320 Chapter 16.43

- The only available runway between the hours of 10:00 pm and 7:00 am is Runway 30/12 unless notified per NOTAM or ATC.(check ATIS)

**-Training Operations:** No touch-and-go, stop-and-go, practice low approach, or VFR practice missed approach shall be conducted at the Airport except between 7:00 am and 7:00 pm on weekdays, and between 8:00 am and 3:00 pm on weekends and holidays.

**-Engine Run-Ups:** For purposes other than preflight, run-ups shall be permitted only between the hours of 7:00 am and 9:00 pm on weekdays, and 9:00 am and 9:00 pm on weekends and holidays, at locations approved by the Airport Manager.

**-Formation Takeoffs and Landings:** are prohibited at Long Beach Municipal Airport.

**Please Fly Quietly and help maintain the quality of life in surrounding communities.**

For more information contact (562) 570-2635

[www.longbeach.gov/lgb/](http://www.longbeach.gov/lgb/)