



# **LAX Community Noise Roundtable**

LAX Preferential Runway Use Report

May 14, 2014

# LAX Preferential Runway Use Report



## Presentation Overview

- **Background**
- **Preferential Runway Use Policy**
  - Rules
  - Implementation
- **Report findings**
- **Past efforts to improve the Preferential Runway Use Policy**
- **Report recommendations for improving implementation of the Preferential Runway Use Policy**
- **Questions and comments**

# LAX Preferential Runway Use Report



## Background

- **Because of incompatible land uses within its 65 decibel (dB) Community Noise Equivalent Level (CNEL) contour, LAX has been deemed by Los Angeles County as a “noise problem” airport, pursuant to the state’s Noise Standards (PUC, Title 21)**
- **LAWA, as owner and operator of LAX, must implement programs to reduce the noise impact area and, in the interim, apply for a three-year variance from the state’s noise standards**
- **One such noise reduction program is LAWA’s longstanding Preferential Runway Use Policy (Policy), which is codified in Section 05 of the LAX Rules and Regulations Manual**

# LAX Preferential Runway Use Report



## Background

- Pursuant to Order 7 of the LAX Variance, LAWA agreed to:
  - analyze the effectiveness of the Policy,
  - identify areas for potential improvement, and
  - submit a report to Caltrans on LAWA's findings

# LAX Preferential Runway Use Report



## LAWA's Preferential Runway Use Policy

- **Rules relevant to implementation of the Policy are as follows:**
  1. **Operational Responsibilities**
    - a. **ATC shall employ the noise abatement preferential runway and taxiway use procedures specified herein, recognizing that under certain conditions it may be necessary to prescribe deviations because of aircraft emergencies, adverse weather, or field construction and maintenance work. Nothing in these procedures shall limit the discretion of either ATC or the pilot with respect to the full utilization of the airport facilities in an unusual situation.**

# LAX Preferential Runway Use Report



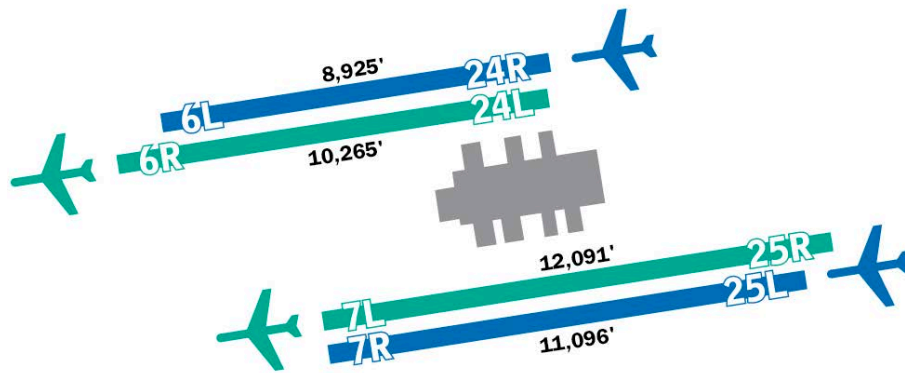
## LAWA's Preferential Runway Use Policy

- **Rules relevant to implementation of the Policy are as follows:**
  2. **Runway Use Procedures**
    - a. **Preferential Runway Use.** During the noise sensitive hours of 2200 to 0700, ATC shall maximize use of inboard Runways 06R/24L and 07L/25R and Taxiways C and E. At all times, the inboard runways shall be preferred to the outboard runways for departures. Over-Ocean Operation procedures shall be in effect between the hours of 0000 and 0630.

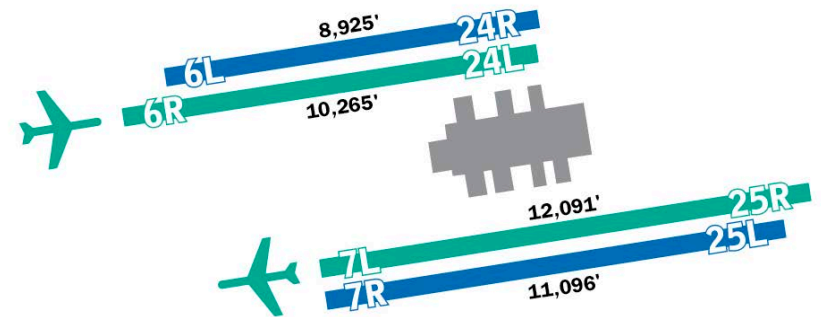
# LAX Preferential Runway Use Report



## LAWA's Preferential Runway Use Policy



**Daytime  
Westerly Operations**



**Nighttime  
Over-Ocean Operations**

# LAX Preferential Runway Use Report



## LAWA's Preferential Runway Use Policy

- **Implementation of the Policy:**
  - **Implementation:** LAWA coordinates with Federal Aviation Administration (FAA) Air Traffic Control (ATC), which is responsible for assigning runways to departing and arriving aircraft at LAX
    - FAA ATC has the discretion to utilize all four runways as necessary for the purposes of safety and air traffic efficiency
  - **Tracking:** LAWA tracks implementation of the Policy as a routine part of its noise management program; using the Airport Noise and Operations Management System (ANOMS) to gather operational data
  - **Reporting:** LAWA reports on operations and runway usage in a quarterly report it prepares pursuant to its Variance



# LAX Preferential Runway Use Report



## Report Findings

The Report found that overall adherence to the Policy is very high

- Over the four-year study period, *departures on the inboard runways occurred:*
  - 97% of the time on the North Complex, and
  - 93% of the time on the South Complex
- Over this same study period, *arrivals on the outboard runways occurred:*
  - 93% of the time on the North Complex, and
  - 94% of the time on the South Complex

# LAX Preferential Runway Use Report



## Report Findings

2010 – 2013 RUNWAY UTILIZATION – NORTH AND SOUTH COMPLEXES				
Calendar Year	Departures		Arrivals	
	Inboard	Outboard	Inboard	Outboard
<b>NORTH COMPLEX</b>				
2013	97%	3%	8%	92%
2012	96%	4%	8%	92%
2011	97%	3%	6%	94%
2010*	97%	3%	6%	94%
<b>Four Year Average</b>	<b>97%</b>	<b>3%</b>	<b>7%</b>	<b>93%</b>
<b>SOUTH COMPLEX</b>				
2013	91%	9%	6%	94%
2012	93%	7%	7%	93%
2011	94%	6%	7%	93%
2010*	94%	6%	6%	94%
<b>Four Year Average</b>	<b>93%</b>	<b>7%</b>	<b>6%</b>	<b>94%</b>
*Calendar Year 2010 – based on Q2 – Q4 data Source: LAWA, 2014				

# LAX Preferential Runway Use Report



## Report Findings

- **When runway utilization was examined by time of day for both the North and South Complexes, the Report found that use of the inboard runways for departures decreased during the nighttime hours of midnight to 6:30 a.m.**

# LAX Preferential Runway Use Report



## Report Findings

### 2013 RUNWAY UTILIZATION BY TIME OF DAY – NORTH AND SOUTH COMPLEXES

Period	Departures		Arrivals	
	Inboard	Outboard	Inboard	Outboard
<b>NORTH COMPLEX</b>				
24 Hours	97%	3%	8%	92%
Day (7 a.m. - 10 p.m.)	97%	3%	4%	96%
Night (10 p.m. - 7 a.m.)	95%	5%	33%	67%
Over Ocean (Midnight - 6:30 a.m.)	90%	10%	73%	27%
<b>SOUTH COMPLEX</b>				
24 Hours	91%	9%	6%	94%
Day (7 a.m. - 10 p.m.)	93%	7%	5%	95%
Night (10 p.m. - 7 a.m.)	85%	15%	18%	82%
Over Ocean (Midnight - 6:30 a.m.)	79%	21%	46%	54%

Source: LAWA, 2014

# LAX Preferential Runway Use Report



## Report Findings

- **Policy adherence rates are higher among commercial/air cargo operators as compared to general aviation aircraft operators**
  - **Over a four-year period, commercial/air cargo aircraft departed from the inboard runway (7L/25R) 95% of the time and only 5% of the time from the outboard runway (7R/25L) on the South Complex**
  - **During this same period, general aviation aircraft departed from Runway 7L/25R 70% of the time and departed from Runway 7R/25L 30% of the time**

# LAX Preferential Runway Use Report



## Report Findings

- **Primary reasons for non-adherence to the Policy:**
  - High volumes of air traffic
  - Runway closures related to emergencies
  - Runway closures related to routine maintenance activities, which primarily occur during the nighttime hours
  - Safe and efficient movement of general aviation aircraft taxiing from fixed base operators south of Runway 7R/25L
  - Aircraft design and separation standards, which prohibit certain types of aircraft (e.g., B747-800) with expanded wing spans from departing from Runway 25R due to insufficient spacing between the runway and TWY B

# LAX Preferential Runway Use Report



## Past Efforts to Improve the Preferential Runway Use Policy

- **Ongoing actions:**
  - **Minimize duration of Runway 25R closures by consolidating all maintenance work during a planned closure and scheduling maintenance during the lowest traffic periods practicable**
  - **Assign as many south-complex cargo and GA aircraft departures to the inboard runway as safety and workload allows**
  - **Continue to encourage and coordinate with cargo operators who are familiar with the airport to routinely request inboard runways for departure**
  - **Continually monitor implementation of the Policy and provide periodic updates to the Roundtable related to implementation of the Policy; post runway utilization reports to the LAX Roundtable website**
  - **Conduct outboard runway departures between midnight and 6:30 a.m. only when absolutely necessary (e.g., when inboard runways or key taxiways are closed)**
  - **Conduct outreach with affected jurisdictions**

# LAX Preferential Runway Use Report



## Report Recommendations for Improving Implementation of the Policy

- 1. Develop pamphlets and/or flyers that can be posted in pilots' lounges/ready rooms that educate pilots on the purpose and importance of adherence with the Policy**
- 2. Develop a brochure that is sent out to airlines and general aviation aircraft owners and operators that have large numbers of non-adherent operations in any quarter, educating them as to the purpose, intent, and need for adherence with the Policy. Consider other potential recipients of the brochure besides just non-adherent aircraft owners/operators**
- 3. Engage stakeholders to solicit suggestions for improving Policy implementation**
- 4. Post maintenance schedules on the LAX Aircraft Noise website in order to notify communities around LAX when operations on outboard runways may increase**
- 5. Maintain adequate staffing dedicated to the noise program to provide for outreach and timely adherence monitoring**



# LAX Preferential Runway Use Report



## Report Recommendations for Improving Implementation of the Policy

6. Increase efforts to monitor Policy implementation for any abnormal increases in non-adherent operations
7. Use ANOMS to automate, to the greatest extent possible, the process of identifying and investigating atypical increases in non-adherent operations
8. Focus efforts on tracking and investigating non-adherent operations that occur during the nighttime hours and on the south runway complex
9. Request that ATC assign Group VI aircraft, particularly the B747-800 and A380, to depart the north complex inboard runway (24L), especially during the more noise-sensitive period between 10 p.m. and 7 a.m.
10. Increase effort to coordinate and work with FAA ATC to maximize implementation of the Policy to the greatest extent practicable
11. Determine if results from the South Runway Shift Study affect operational impacts to the south airfield runway use by allowing more aircraft located on the south side to depart more easily from the inboard runway

# LAX Preferential Runway Use Report



## Report Submittal

- **The Preferential Runway Use Report was submitted to Caltrans Department of Aeronautics on April 11, 2014**

# LAX Preferential Runway Use Report



## Questions?

