Part 161 Study for
Los Angeles International Airport

Los Angeles World Airports

LAX Part 161 Application for a Proposed Noise Rule
November 2012
What is a Part 161 Study?

- Title 14, Part 161 of the Code of Federal Regulations specifies procedures that an airport must follow to implement a noise or access restriction affecting most types of civilian jets.

- Part 161 requirements include:
  - Analysis of the benefits and costs of the proposed rule
  - Examination of alternatives
  - Public notification and opportunity for public comment
  - Establishment of a public docket

- FAA must approve the study and restriction before implementation.
What is a Part 161 Application?

In simple terms, it addresses six “statutory conditions” required for FAA approval:

- Is reasonable, nonarbitrary and nondiscriminatory
- Will not create an unreasonable burden on interstate or foreign commerce
- Will maintain safe and efficient use of navigable airspace
- Will not conflict with any existing federal statute or regulation
- Does not create an unreasonable burden on the national aviation system
- Was the subject of adequate public notice and opportunity for public comment
Why is LAWA completing a Part 161 Study for LAX?

To reduce the occurrence and frequency of awakenings for residents living near LAX by restricting non-conforming easterly departures between midnight and 6:30 a.m. when the airport is in Over-Ocean Operations or Westerly Operations.

- LAWA has committed to pursue this objective in several agreements and public initiatives:
  - LAX/Community Noise Roundtable Work Program, Item A2
  - Master Plan Mitigation Measure (MM-N-5)
  - Stipulated Settlement Agreement
  - Community Benefits Agreement (CBA)
Part 161 Process

1. Define Noise Problem
2. Specify Proposed Restrictions
3. Forecast Operations with or without Proposed Restriction(s)
4. Determine Benefits and Cost of Proposed Restriction(s)
5. Compare Proposed Restriction(s) to Non-Restrictive Alternatives
6. Conduct Outreach/Prepare Documentation
From midnight to 6:30 a.m., LAX typically operates in either:

- **Over-Ocean Operations**
  - Aircraft arrive and depart over the ocean
  - Requires calm winds of 10 knots or less
  - This is the preferred nighttime runway use

- **Westerly Operations**
  - Aircraft arrive from the east and depart over the ocean
  - Occurs with steady winds from the west are above 10 knots

When wind is steady from the east, LAX operates in:

- **Easterly Operations**
  - Aircraft arrive over the ocean and depart to the east
  - *Easterly departures are only expected in these conditions*
  - Occurs during Santa Ana winds or strong Pacific storms
During late night hours when the airport is in either Over-Ocean or Westerly Operations, the FAA must grant pilot requests to depart to the east, even when they:

- Are contrary to the flow of the airport at the time
- Result in aircraft departing over highly populated communities that expect these operations only during Santa Ana conditions or strong Pacific storms
- Awaken and highly annoy thousands of residents, predominantly minority and/or low income

Since LAWA began monitoring “non-conforming” operations during Over-Ocean or Westerly Operations (in September 2000), on average these easterly departures:

- Have occurred on only 30 nights per year
- Represent a total of 65 takeoffs per year
1 – Define Noise Problem

Source: 12 months of non-conforming operations (April 2010 – March 2011)

Representative Sample of Non-Conforming Operations
Restrict easterly departures of aircraft, with certain exemptions, between the hours of midnight and 6:30 a.m. when the Airport is in Over-Ocean Operations, or when it remains in Westerly Operations.
3 – Forecast Operations

- Aircraft operations forecast was completed for two periods:
  - 2013 – expected year of implementation and application submittal to the FAA
  - 2018 – five years after the year of expected implementation

- Forecasts are consistent with FAA’s December 2011 Terminal Area Forecast (TAF) and received FAA approval

- Total aircraft operations are not expected to change with the implementation of the proposed restriction

- Operators are expected to:
  - Delay flight until unfavorable winds subside
  - Offload cargo and/or passengers to meet weight requirements
  - Accommodate restriction through flight planning
4 – Determine Benefits and Costs

- Expected upper bound costs to the operators to offload payload (net present value (NPV) in 2013 dollars):

<table>
<thead>
<tr>
<th>Annual Growth in Cargo Rates</th>
<th>Period NPV is Calculated</th>
<th>Payload Reduction of 10,000 lbs.</th>
<th>Payload Reduction of 20,000 lbs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>No increase</td>
<td>5 years</td>
<td>$3,249,000</td>
<td>$9,591,000</td>
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<tr>
<td></td>
<td>10 years</td>
<td>$5,566,000</td>
<td>$16,430,000</td>
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<tr>
<td></td>
<td>20 years</td>
<td>$8,395,000</td>
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<tr>
<td>3% Increase</td>
<td>5 years</td>
<td>$3,539,000</td>
<td>$10,448,000</td>
</tr>
<tr>
<td></td>
<td>10 years</td>
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<td></td>
<td>20 years</td>
<td>$10,881,000</td>
<td>$32,122,000</td>
</tr>
</tbody>
</table>

Source: SH&E

- Estimates represent upper bound since some or all of the affected payloads will be transferred to other flights operated by the same carrier with no net loss in revenue
- No other costs are expected
4 – Determine **Benefits** and Costs

- **Estimated benefits include the following:**
  - **Aircraft operational efficiencies**
    - Estimated 219,000 lbs. of carbon dioxide emissions saved per year
    - $500,000 in fuel costs over 20 years (in 2013 dollars)
  - **Environmental justice**
    - Without restriction, approximately 60% of awakenings are to minority or low-Income residents
  - **Quality of life**
    - Fewer annual awakenings
      - Over 8,000 fewer awakenings on some nights
An example:
On January 27, 2012, seven non-conforming operations occurred during between midnight and 1 a.m.

*If the restriction had been in place, it would have resulted in an estimated reduction of over 8,000 awakenings that night.*
The Board of Airport Commissioners (BOAC) has addressed easterly departures during late night hours in four formal resolutions since 1972.

The State of California Noise Variances, including the most recent effective February 2011, state that LAX is to:

“...continue in full force ... and enforcement of” the noise abatement policies that includes the Over-Ocean Operations between midnight and 6:30 a.m.

LAWA monitors, identifies and contacts operators of each non-conforming operation, and requests a response.
The City concludes that nonrestrictive mechanisms are insufficient and that a formal runway use restriction is the only feasible course of action to reduce non-conforming operations from awakening thousands of residents each night they occur.
6 – Conduct Outreach

- LAX/Community Noise Roundtable briefings
- Los Angeles Area Advisory Committee briefing
- Public workshops:
  - South Los Angeles, Inglewood, Lennox – November 2006
  - Final workshop, Flight Path Center – November 2012
- Handouts on Noise Effects and FAQs
- Part 161 website: www.laxpart161.com
- Toll-free hotline: (866) 441-4664
- Spanish language translations of web site and handouts; Spanish translators at study introduction public workshops
6 – Prepare Documentation

- Draft document available to the public November 2012

- 45-day public review period to obtain public comments during November and December 2012

- Comment docket for public inspection established at the start of the public comment period
  - Will continue as long as LAWA pursues or enforces the restriction
Analysis Results of the Proposed Restriction

- Is reasonable, nonarbitrary and nondiscriminatory
- Will not create an unreasonable burden on interstate or foreign commerce
- Will maintain safe and efficient use of navigable airspace
- Will not conflict with existing federal statutes or regulations
- Does not create an unreasonable burden on the national aviation system
- Will be subject of adequate public notice and comment opportunities
Next Steps

- 45-day public review period:
  - November 1, 2012 through December 17, 2012

- Public Workshop:
  - November 13, 2012

- LAWA submits Part 161 document to FAA:
  - January 2013

- FAA decision within 180 days of accepting the application
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Thank You