Statistical Update on LAX Aircraft Operations

January 9, 2013

LAX/Community Noise Roundtable
Statistical information on the following operations:

- East Departures
- Early Turns
- Go-arounds
### Total Operations Comparison

<table>
<thead>
<tr>
<th>Year</th>
<th>Total Ops (Arrivals &amp; Departures)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1994</td>
<td>689,888</td>
</tr>
<tr>
<td>1995</td>
<td>732,639</td>
</tr>
<tr>
<td>1996</td>
<td>763,866</td>
</tr>
<tr>
<td>1997</td>
<td>781,492</td>
</tr>
<tr>
<td>1998</td>
<td>773,569</td>
</tr>
<tr>
<td>1999</td>
<td>783,433</td>
</tr>
<tr>
<td>2000</td>
<td>779,150</td>
</tr>
<tr>
<td>2001</td>
<td>773,569</td>
</tr>
<tr>
<td>2002</td>
<td>781,492</td>
</tr>
<tr>
<td>2003</td>
<td>763,866</td>
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<tr>
<td>2004</td>
<td>732,639</td>
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<tr>
<td>2005</td>
<td>689,888</td>
</tr>
<tr>
<td>2006</td>
<td>645,424</td>
</tr>
<tr>
<td>2007</td>
<td>650,629</td>
</tr>
<tr>
<td>2008</td>
<td>656,842</td>
</tr>
<tr>
<td>2009</td>
<td>680,954</td>
</tr>
<tr>
<td>2010</td>
<td>622,506</td>
</tr>
<tr>
<td>2011</td>
<td>603,912</td>
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</table>

**Total LAX Operations**

- **Los Angeles World Airports**
This report shows a summary of aircraft operations that departed to the east while the airport is still conducting westerly departures between midnight and 6:30 a.m. These individual easterly departures usually occur when the pilot of a heavy aircraft (e.g. B747s) determines that the tail wind is too great for the weight of the aircraft and requests to depart east into the wind for aircraft safety.

Sample of East Departure Flights

Annual Comparison

Monthly Comparison
Non-Conforming East Departures by Operators
Midnight to 6:30 AM

One Year Period
(Dec 2011 to Nov 2012)

Total: 52 East Departures

Number of East Departures

- Delta Airlines: 10
- Qantas Airways: 8
- Asiana Airlines: 6
- All Nippon Airways: 4
- China Airlines: 4
- Air China Cargo: 3
- V Australia: 3
- Cathay Pacific Airways: 3
- EVA Air: 2
- Philippine Airlines: 2
- American Airlines: 2
- Copa Airlines: 1
- Korean Airlines: 1
- Polar Air Cargo: 1
- United Airlines: 1
**Early Turn to the North**

Aircraft departing to the ocean turn early prior to reaching the shoreline.
Early Turn to the South

Aircraft departing to the ocean turn early prior to reaching the shoreline

Annual Comparison

Monthly Comparison

Early turn over El Segundo

Los Angeles World Airports
Early Turns Breakdown

**Early Turns by Gates**

- Hyperion
- El Segundo
- Playa Del Rey

**Result of Investigation**

Only El Segundo and Playa Del Rey Gates

- Total
- Pilot Initiated
- FAA Initiated
- Wind Drift
- Missing Data

- Dec-11: 33
- Feb-12: 47
- Mar-12: 58
- Apr-12: 52
- May-12: 49
- Jun-12: 45
- Jul-12: 44
- Aug-12: 46
- Sep-12: 48
- Oct-12: 45
- Nov-12: 55

- Dec-11: 34
- Jan-12: 44
- Feb-12: 40
- Mar-12: 27
- Apr-12: 30
- May-12: 14
- Jun-12: 18
- Jul-12: 28
- Aug-12: 26
- Sep-12: 37
- Oct-12: 46
- Nov-12: 232

- Dec-11: 174
- Jan-12: 173
- Feb-12: 131
- Mar-12: 178
- Apr-12: 156
- May-12: 110
- Jun-12: 110
- Jul-12: 133
- Aug-12: 118
- Sep-12: 137
- Oct-12: 232
- Nov-12: 123
Early Turns by Operators

One Year Period
(Dec 2011 to Nov 2012)
Top 10 Operators

(3%) 1218
(0.4%) 257
(1%) 129
(0.3%) 99
(2%) 91
(3%) 50
(3%) 47
(3%) 43
(1%) 31
(0.1%) 31

Jet Early Turn
Prop Early Turn

( ) = Percentage of Total Departure for each Operator

Number of Early Turn

Skywest
General Aviation
United
Delta
American
Fed Ex
Great Lakes Aviation
Najets
Horizon Air
American Eagle

Los Angeles World Airports
Monitoring pilot or ATC initiated go-arounds or missed approaches

Example of Go-arounds
## Reasons for Go-Arounds

<table>
<thead>
<tr>
<th>Category</th>
<th>May 2012</th>
<th>Nov 2012</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Pilot Initiated</strong></td>
<td>22</td>
<td>44</td>
</tr>
<tr>
<td>Weather</td>
<td></td>
<td>17</td>
</tr>
<tr>
<td>Too high or too fast</td>
<td>16</td>
<td>14</td>
</tr>
<tr>
<td>Aircraft Equipment (flaps, gears, avionics)</td>
<td>4</td>
<td>8</td>
</tr>
<tr>
<td>Ground Equipment (Navaids, lighting, etc)</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Unknown</td>
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<td></td>
</tr>
<tr>
<td><strong>Controller Initiated</strong></td>
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<td>14</td>
</tr>
<tr>
<td>In-trail Spacing</td>
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<td>4</td>
</tr>
<tr>
<td>Previous Arrival Traffic on Runway</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Runway Crossing Traffic</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Departure Traffic on Runway</td>
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</tr>
<tr>
<td>Other</td>
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<td>1</td>
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<tr>
<td><strong>Unknown</strong></td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>43</strong></td>
<td><strong>63</strong></td>
</tr>
</tbody>
</table>
Go-Arounds – Not Maintaining RWY Headings

Example of Go-around not maintaining runway heading
Go-Arounds – By Operators

Top 10 Operators
One Year Period
(Dec 2011 to Nov 2012)

United: 68
Southwest: 71
Skywest: 56
American: 58
Delta: 34
American Eagle: 28
Alaska: 16
Aeromexico: 9
Virgin America: 11
Wesjet: 17

South
North