

LAWA's Efforts to Reduce Deviation from Over Ocean Operations

Presentation to LAX/Community Noise Roundtable

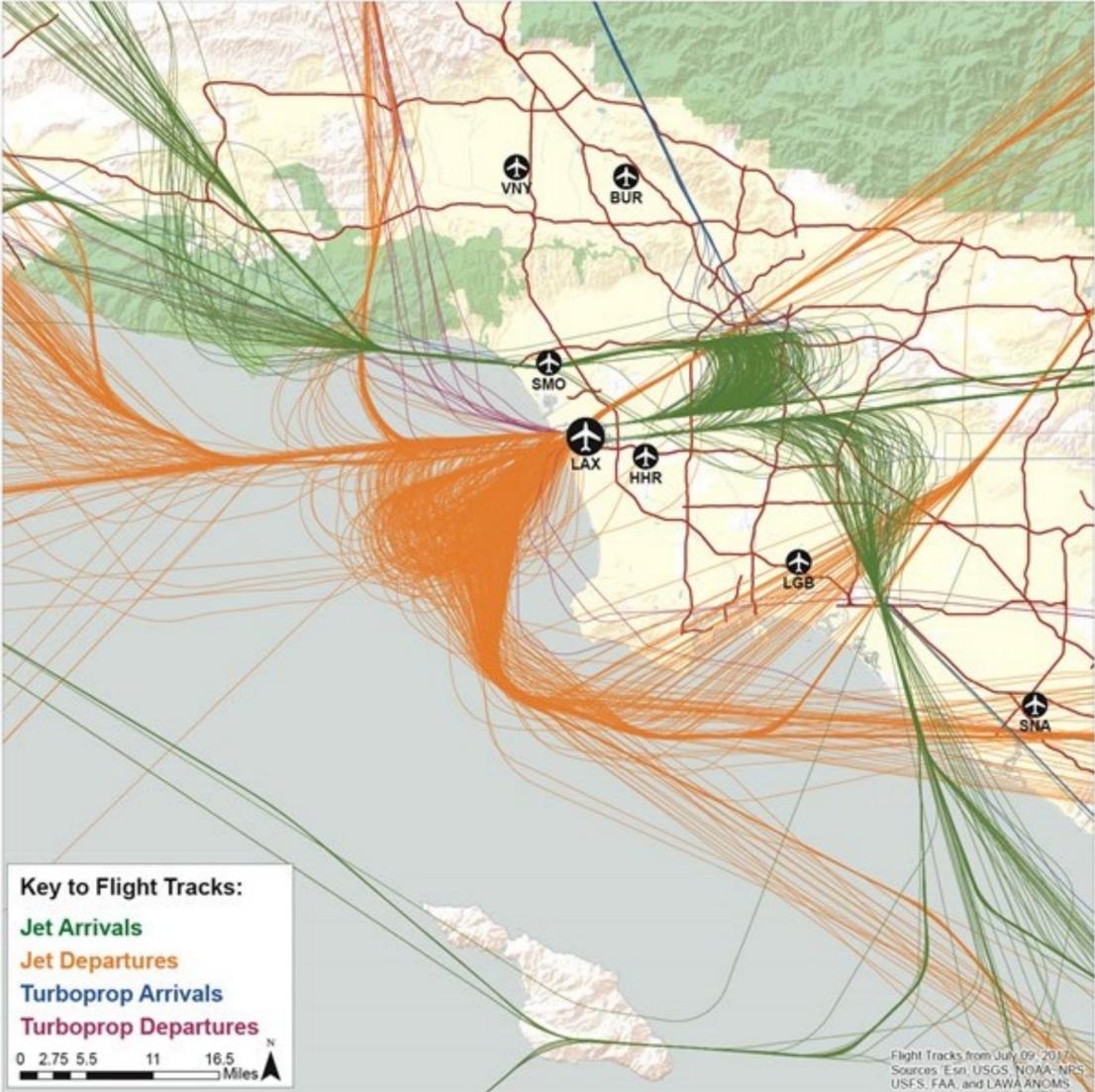
March 11, 2020

Typical Air Traffic Flow Patterns at LAX

Over-Ocean Operations
Nighttime
12 AM - 6:30 AM



Westerly Operations
Daytime
6:30 AM - 11:59 PM



Primary reasons for deviating from Over-Ocean Operations

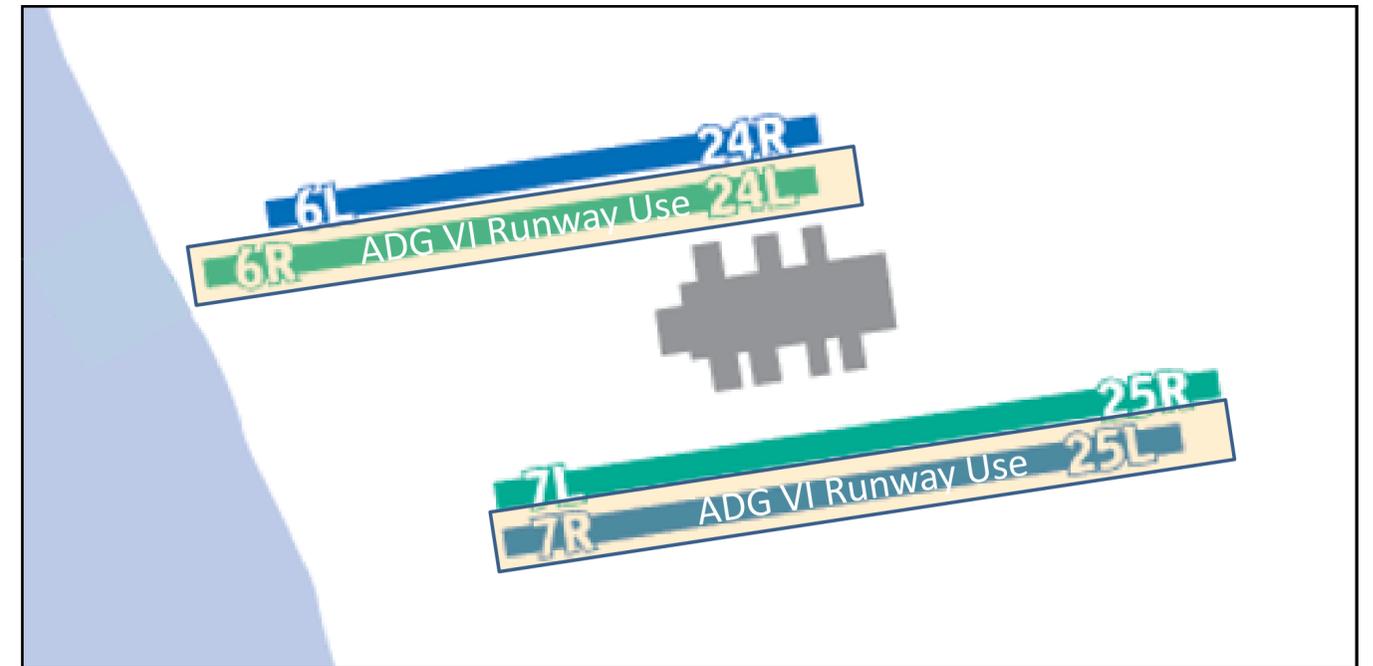
Over-Ocean Operations (OOO) is the preferred operational flow from 12am to 6:30 am, resulting in reduced noise to communities east of LAX, but may be suspended if one or more of the following conditions exists:

- Weather - The most common weather conditions that can cause LAX to deviate from OOO include low visibility, unfavorable wind conditions, and precipitation.
- Construction Activities – Certain construction activities that impede aircraft ground movement or restrict access to certain runways or taxiways on the airfield may also require deviation from OOO.
- Runway Closures – The closure of both runways on one runway complex will require deviation from OOO. Also, the closure of Runway 25L on the south complex (previously) required OOO deviation due to limited runway availability for ADG VI aircraft departures.

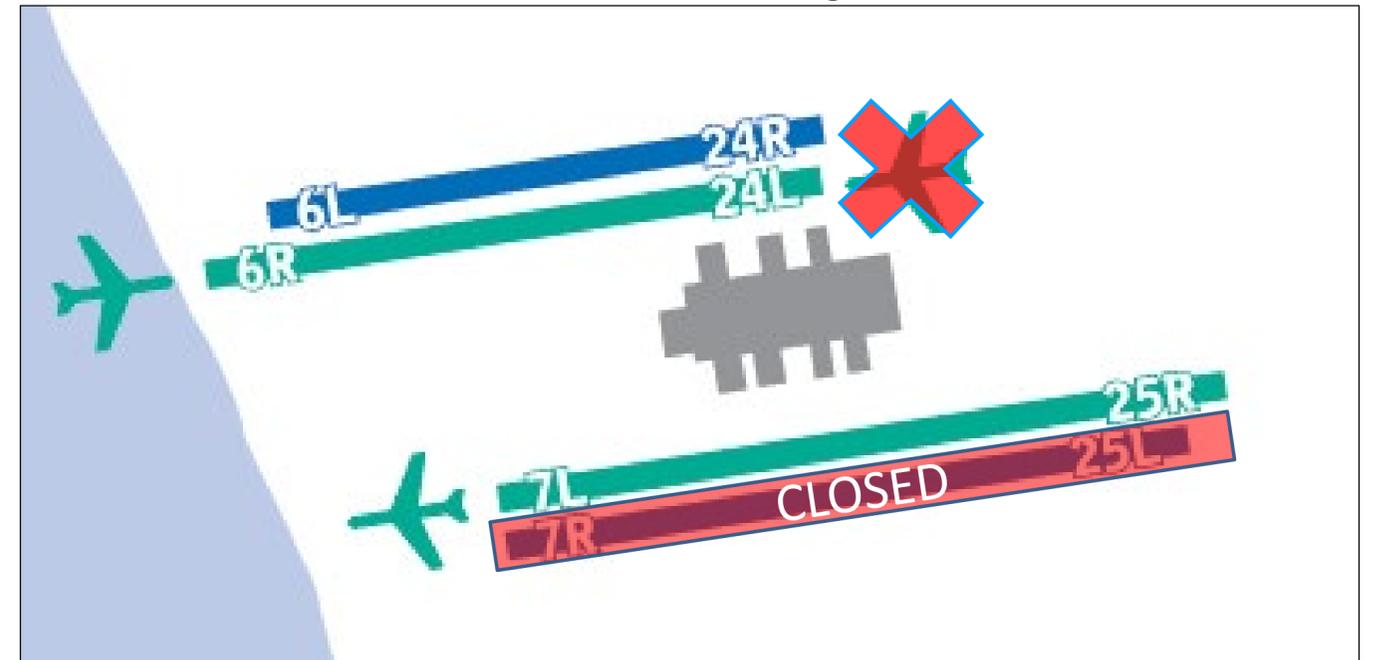
Issues with ADG VI Aircraft (B747-800 & A380)

- ADG VI Aircraft can primarily depart on two runways due to their large wingspan and limited spacing at LAX:
 - Runway 24L and Runway 25L
- When Runway 25L was closed for maintenance at night, these aircraft had to depart on Runway 24L on the north complex.
- Since runways on the north complex are reserved for arrivals during Over-Ocean configuration, departing from 24L would conflict head-to-head with arrivals on the same runway complex.
- FAA safety standards require a 10-mile separation for aircraft operating in opposite directions on the same runway complex.
- Therefore, deviation from Over-Ocean Operations was previously required whenever Runway 25L was closed.

Available Runways for ADG VI Aircraft



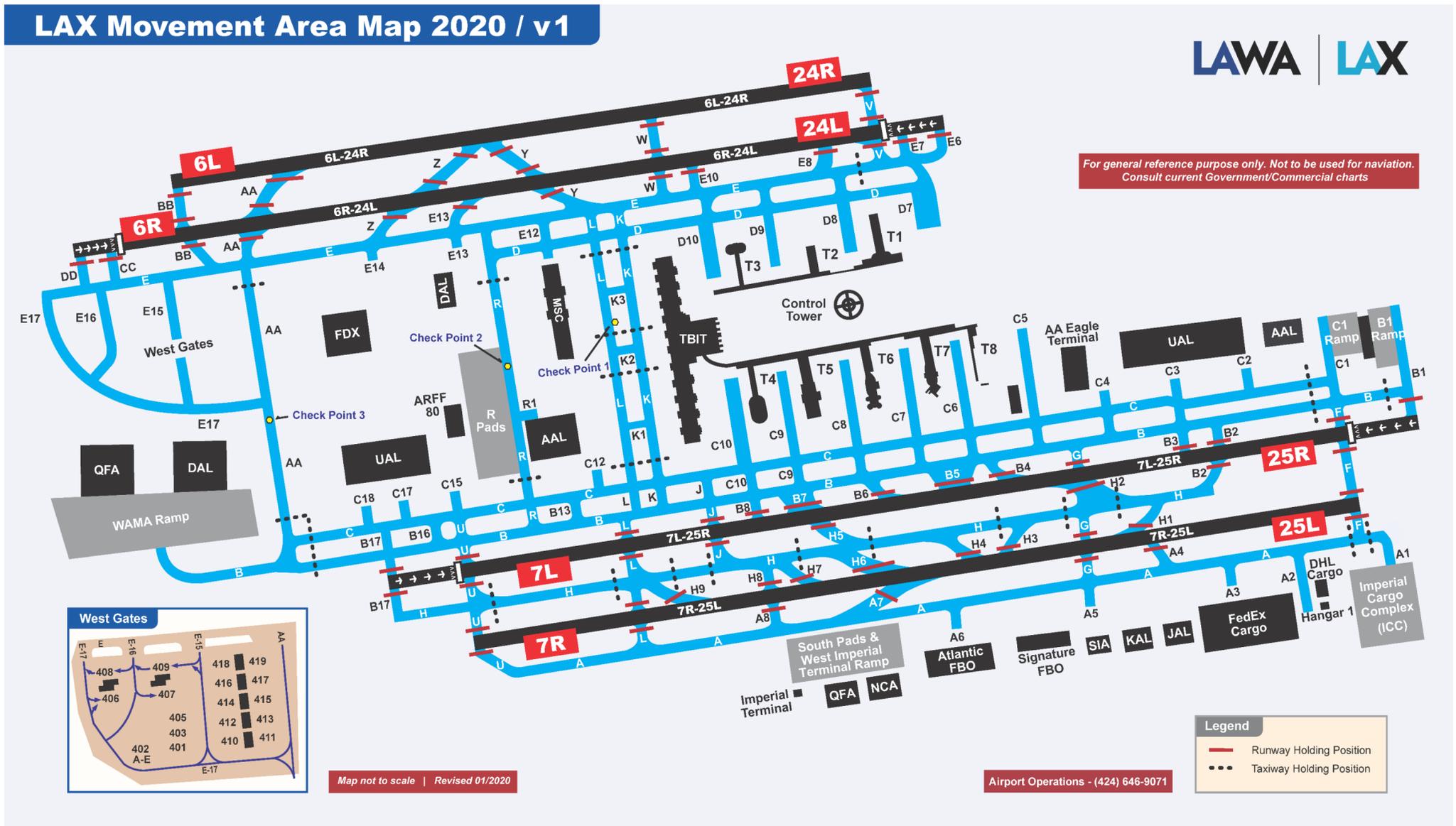
Over-Ocean Configuration



Efforts to Reduce Deviation from Over-Ocean Operations

- In August 2017, Noise Management met with Airport Operations and FAA Tower personnel to discuss ways to minimize OOO deviation. As a result of this meeting, LAWA implemented the following measures:
 - Minimized Runway 25L Closure for Rubber Removal
 - Improved Runway/Taxiway Closure Planning and Scheduling
- Subsequently, FAA Tower suggested that LAWA submit a Modification of Standards (MOS) application to FAA to allow certain ADG VI aircraft to depart on a different runway (25R) and thereby avoid deviating from Over-Ocean Operations.
 - In October 2018, LAWA submitted the MOS application to FAA.
 - LAWA received FAA approval of the MOS in March 2019.
 - FAA Tower implemented the MOS procedures in June 2019.

Modification of Standards (MOS)



- MOS allows B747-800 to depart Runway 25R when Runway 25L is closed during Over-Ocean Operations

- MOS requires closing Taxiway B to allow sufficient spacing for B747-800 departures on Runway 25R

- MOS does not apply to the A380 due its very large wingspan (262 ft.) which would require closing both adjacent taxiways (B & H) in order to depart on Runway 25R; not feasible

- A380 would still need to depart from Runway 24L on the North Complex as a result

- LAX will not need to deviate from Over-Ocean Operations when Runway 25L is closed as was previously the case

- FAA may need to allow any A380 departures to clear prior to commencing Over-Ocean Operations resulting in a slight delay of employing this traffic flow



Statistics on Deviation from Over-Ocean Operations

Year	% of OOO Deviation
2015	25%
2016	45%
2017	61%
2018	56%
2019	38%

Reduction in OOO Deviation has resulted from:

- 2018 – Reduced frequency of 25L closure for maintenance
- 2019 – Implemented MOS for B747-800 departures on 25R



Questions?

LAX