

October 2020



# LOS ANGELES INTERNATIONAL AIRPORT (LAX)

AIRCRAFT EARLY TURN MONTHLY REPORT

## Background

Los Angeles World Airports (LAWA) is the City of Los Angeles department that owns and operates Los Angeles International (LAX) and Van Nuys (VNY) airports and is committed to minimizing noise impacts from aircraft operations. Since 1959, LAWA has worked with the Federal Aviation Administration (FAA) and in partnership with adjacent communities to implement noise abatement programs.

While all aircraft generate noise, technological advancements have produced quieter aircraft and airports have implemented programs and procedures to reduce the effects of aircraft noise on surrounding communities. [LAWA noise abatement policies and programs](#) include no early turn policies, runway use procedures, over-ocean flight procedures, helicopter operating procedures, maintenance and engine run-up restrictions, and residential sound insulations programs within communities neighboring LAX and VNY.

The purpose of this report is to provide information regarding compliance with the LAX No Early Turn Policy, which requires pilots to refrain from turning prior to the shoreline when departing to the west unless otherwise instructed by FAA air traffic control. Early turns prior to the shoreline are discouraged as they result in noise impacts for adjacent neighborhoods to the north and south of the airport. Previous months' Early Turn data is also included in this report for context.

## WHAT IS AN EARLY TURN?

LAX aircraft generally depart to the west due to prevailing westerly winds. Pilots comply with the voluntary LAX No Early Turn policy by flying a straight path out over the shoreline, before making any turns. However, there are times when pilots may turn north or south prior to reaching the shoreline, resulting in an "early turn." To identify early turns, three virtual gates (Playa Del Rey to the north, El Segundo and Hyperion to the south) are used to monitor flight tracks. Any flight tracks that penetrate these gates are considered early turns.



## HOW DOES LAWA CONTINUE TO MONITOR AND MINIMIZE EARLY TURNS?

LAWA staff uses radar flight track data from the FAA in our noise monitoring system to identify and report early turns. While staff monitors and reports all early turns, additional steps are taken to investigate early turns that fly over communities (El Segundo and Playa Del Rey gates) by listening to recordings of communications between pilots and air traffic controllers to determine the reason for the early turns. Hyperion gate early turns fly over Hyperion Treatment Plant and are generally higher in number due to the convergence of this gate with the departure paths from the south runways.

LAWA provides Early Turn reports to each operator that conducted one or more early turns during the month and request they provide the reason for the early turn(s) and note what efforts will be made to reduce or avoid them in the future. These reports and information are shared with the FAA and local jurisdictions affected by early turns. LAWA also monitors early turn operations to determine whether there were any unusual factors that may have contributed to an increase in early turns. If necessary, LAWA will notify the appropriate parties, either the aircraft operators and/or the FAA, to request that they look into those unusual early turn occurrences and minimize them where possible.

Early Turns are also included as one of the scoring elements of the [LAX Fly Quieter Program](#) as an incentive for operators to reduce early turns as much as possible.

## REASONS FOR AN EARLY TURN?

LAWA's LAX Noise Management staff reviews early turns to identify the reasons for deviations from the policy, which are grouped into four (4) categories:

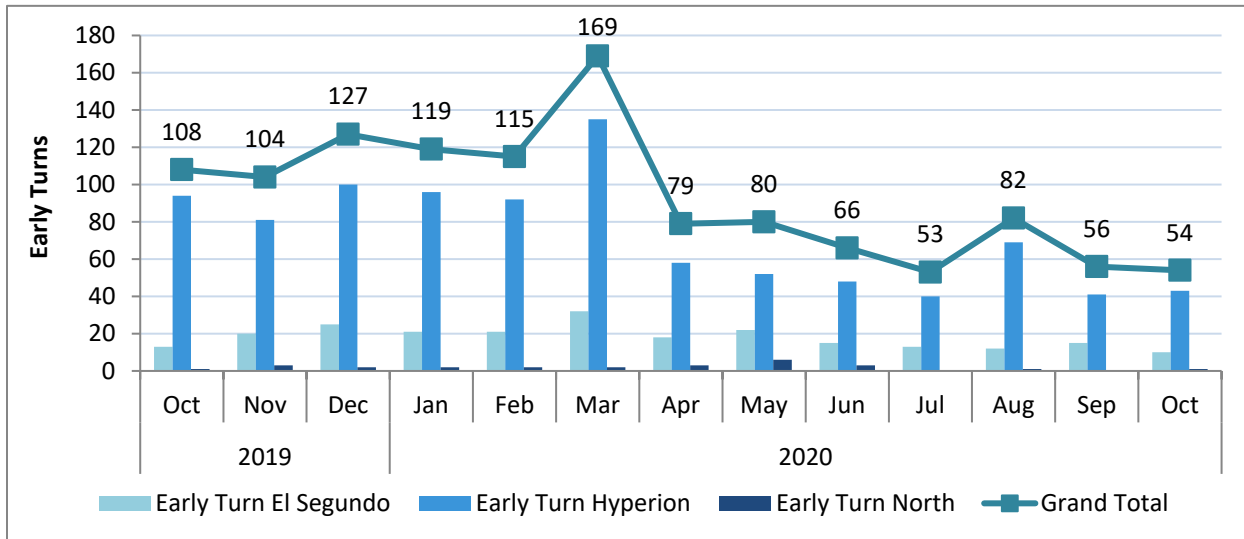
A ***pilot-initiated*** early turn generally occurs when a pilot executes a turn prior to the shoreline without specific instruction from FAA.

An ***FAA-directed*** early turn occurs when the FAA air traffic control instructs the pilot of the aircraft to turn early for reasons including safety (e.g. separation of aircraft) or for operational efficiencies when a runway may be closed for maintenance/construction.

An early turn resulting from ***wind drift*** occurs when wind pushes an aircraft slightly off course/off heading to either the north or south before reaching the shoreline.

An early turn is categorized as ***undetermined*** if information is not available to determine the reason for an early turn. This category also includes a small number of early turns executed by General Aviation (GA) operators, which are counted in the report but currently not investigated.

## TOTAL EARLY TURNS



The graph above shows the total early turns through Playa Del Rey gate on the North, and El Segundo and Hyperion gates on the South. In addition to capturing the total number of early turns, LAVA conducts investigation for those that fly over communities.

**54**

TOTAL EARLY TURNS THIS MONTH

**-4%**

CHANGE IN EARLY TURNS FROM PREVIOUS MONTH

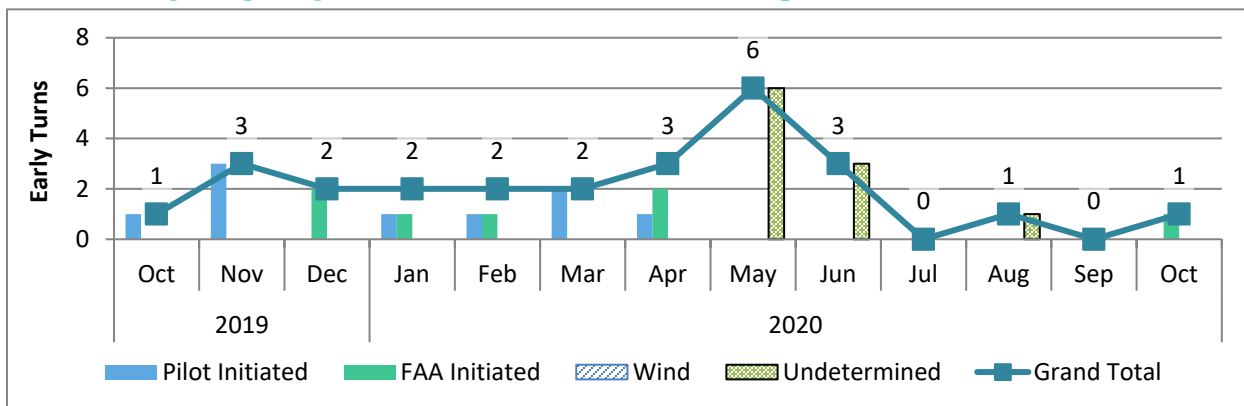
**99.63%**

COMPLIANT WITH POLICY

**14,596**

TOTAL WEST FLOW DEPARTURES THIS MONTH

## EARLY TURNS NORTH — PLAYA DEL REY GATE



The graph above shows the total early turns through the Playa Del Rey gate, including reasons for the turns.

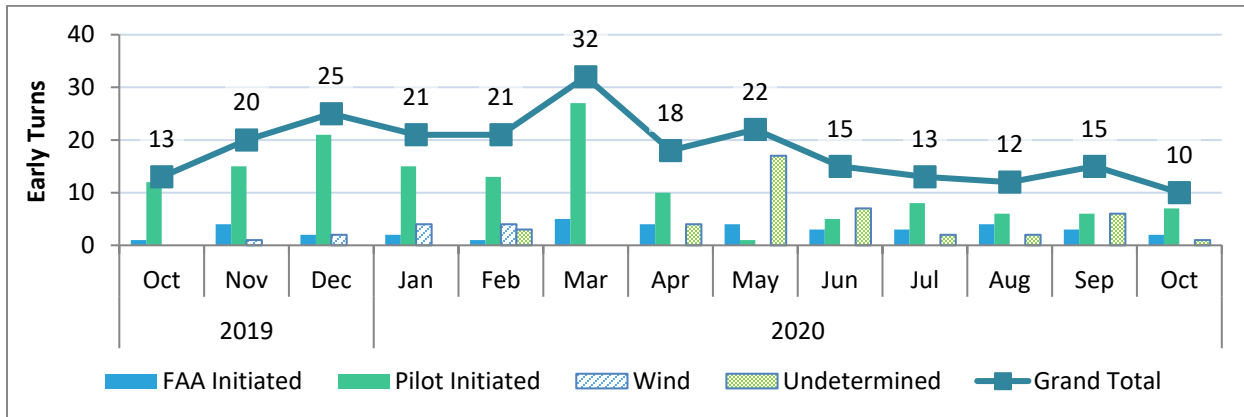
**1**

EARLY TURNS THIS MONTH

**99.99%**

COMPLIANT WITH POLICY

### EARLY TURNS SOUTH – EL SEGUNDO GATE



The graph above shows the total early turns through the El Segundo gate including reasons.

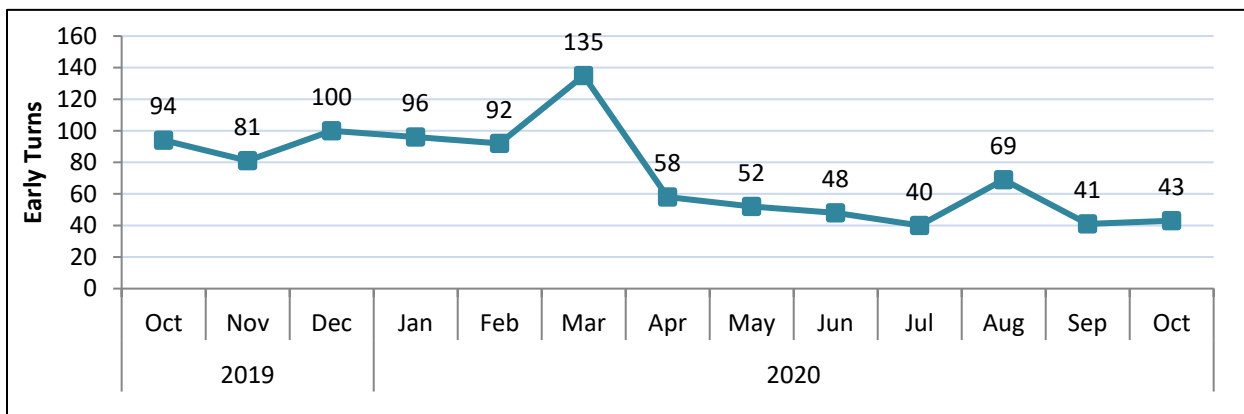
**10**

EARLY TURNS THIS MONTH

**99.93%**

COMPLIANT WITH POLICY

### EARLY TURNS SOUTH – HYPERION GATE



The graph above shows the total early turns through the Hyperion gate (over Hyperion Treatment Plant).

**43**

EARLY TURNS THIS MONTH

**99.71%**

COMPLIANT WITH POLICY

### WHAT IS CAUSING THE CHANGE IN EARLY TURNS?

Specific to this month, the number of early turns is at a similar level compared to the previous month despite a slight uptick in aircraft operations at LAX this month.