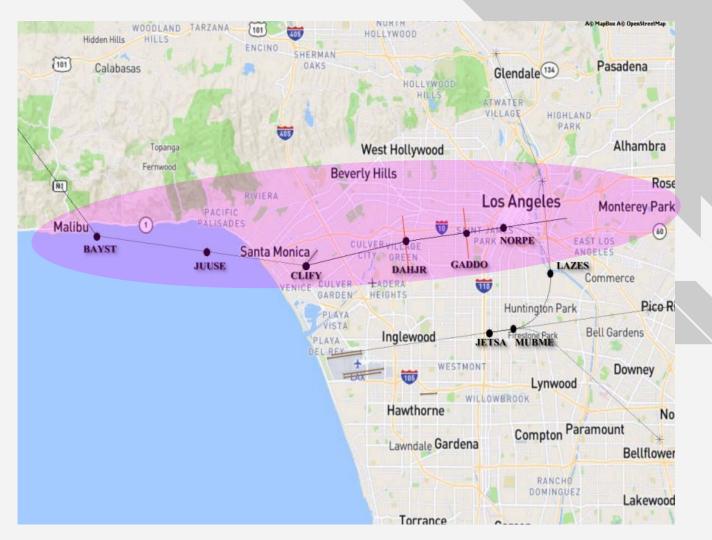


# LAX Metroplex / Wide Area Ad Hoc Committee

LAX Community Noise Roundtable Jul 2021

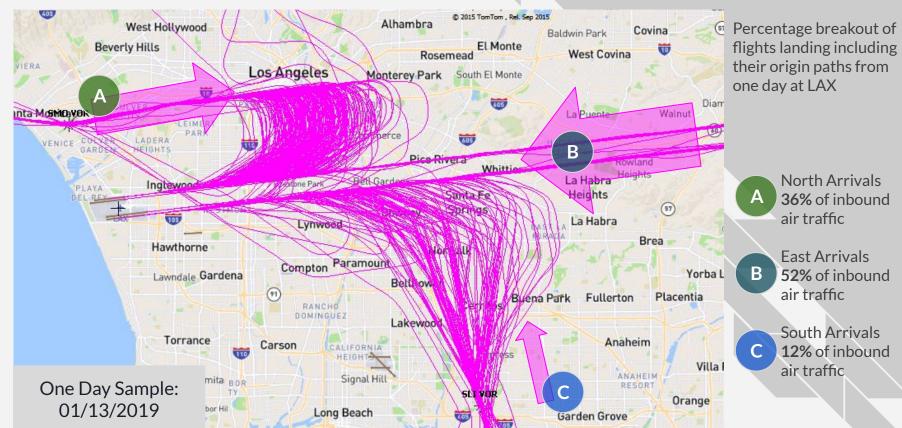
- 1. North Downwind Arrival Flight Paths
- 2. LAX and Other Airports
- 3. City of Los Angeles vs. FAA
- 4. Option B Proposal Development
- 5. DAHJR Flight Data 24 hours
- 6. DAHJR 0100 to 0500 hours
- 7. GADDO Flight Data 24 hours



# 1. North Downwind Arrival Flight Paths

Area in pink affected by North Downwind Arrival and has been studied more extensively in prior and current initiatives undertaken by the Metroplex Ad Hoc Committee of the LAX Community Noise Roundtable

# 1. North Downwind Arrival Flight Paths - Merges

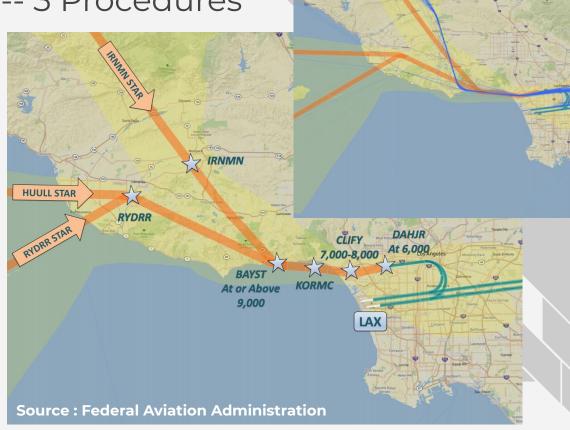


 North Downwind Arrival Flight Paths -- 3 Procedures

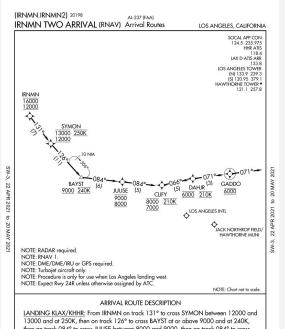


RYDRR, HUULL, & IRNMN are the 3 North Downwind Arrival Flight Paths into LAX

FAA | NextGEN



### North Downwind Arrival Flight Paths - IRNMN



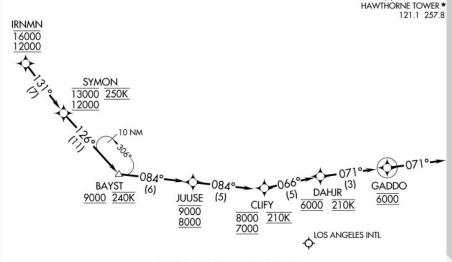
LANDING KLAX/KHHE. From IRNMN on track 131° to cross SYMON between 12000 and and 250K, then on track 126° to cross BAYST at or above 9000 and and 240K, then on track 084° to cross JUUSE between 8000 and 9000, then on track 084" to cross CLIFY between 7000 and 8000 and at 210K, then on track 066° to cross DAHJR at 6000 and at 210K, then on track 071° to cross GADDO at 6000, then on track 071°. Expect RADAR vectors to final approach course.

LOST COMMUNICATIONS

In the event of lost communications proceed on the RNAV (RNP) Z RWY 24R approach or the ILS or LOC RWY 24R.

IRNMN TWO ARRIVAL (RNAV) Arrival Routes (IRNMN.IRNMN2) 24MAY18

LOS ANGELES, CALIFORNIA



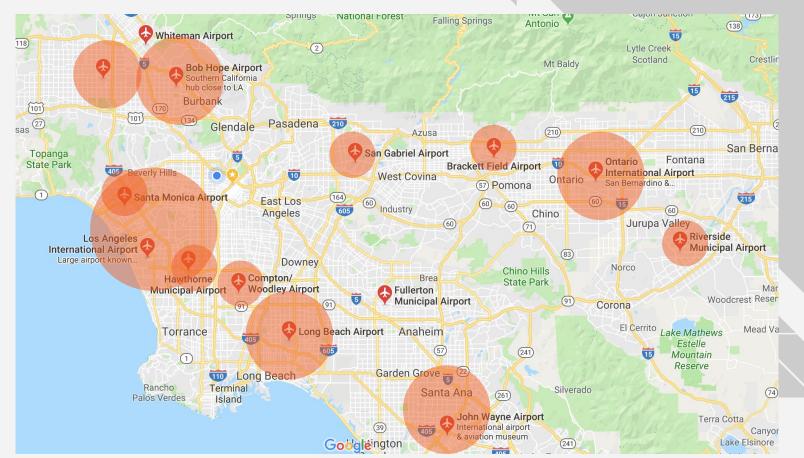
### ARRIVAL ROUTE DESCRIPTION

LANDING KLAX/KHHR: From IRNMN on track 131° to cross SYMON between 12000 and 13000 and at 250K, then on track 126° to cross BAYST at or above 9000 and at 240K, then on track 084° to cross JUUSE between 8000 and 9000, then on track 084° to cross CLIFY between 7000 and 8000 and at 210K, then on track 066° to cross DAHJR at 6000 and at 210K, then on track 071° to cross GADDO at 6000, then on track 071°. Expect RADAR vectors to final approach course.

### LOST COMMUNICATIONS

In the event of lost communications proceed on the RNAV (RNP) Z RWY 24R approach or the ILS or LOC RWY 24R.

# 2. LAX and Other Airports



# 3. City of Los Angeles vs FAA

- June 2019, the City Attorney petitioned the Appeals regarding flight paths (a.k.a. North Downwind Arrival) over Mid-City, West Adams and Central Los Angeles
- For the past two years FAA counsel advised FAA staff that they could no longer discuss any matters with the RT regarding North Downwind Arrival
- Last month federal judges for the 9th Circuit based in Pasadena heard oral arguments from the City of Los Angeles and the FAA
- Last week the City of Los Angeles won its case against the FAA
- The decision leaves the current North Downwind procedures in question in place. The FAA will need to conduct a new environmental assessment and community outreach for the procedures

# 3. City of Los Angeles vs FAA

The Ninth Circuit issued an opinion which invalidates the Federal Aviation Administration's (FAA) changes to flight procedures for aircraft arriving at Los Angeles International Airport. The court agreed with the City of Los Angeles that FAA violated the National Environmental Policy Act, National Historic Preservation Act, and Section 4(f) of the Department of Transportation Act by failing to conduct an environmental review and to consult with the City before making the flight procedure changes. The court found that FAA's after-the-fact analysis of environmental impacts did not comply with the law and that the agency improperly applied its procedures for so-called categorical exclusions which would have allowed only minimal environmental review. The court's ruling does allow the existing FAA flight procedure to remain in place while FAA conducts a proper environmental review, which under federal law will include public comment and consultation with the City. The Ninth Circuit did not rule on the City's secondary petition to invalidate an FAA notice regarding its website, holding that it was not a final agency action upon which it could rule.

# 3. City of Los Angeles vs FAA

- FAA counsel will be working with regional leadership to advise them on when full engagement with the LAX Community Noise Roundtable and the Metroplex Ad Hoc Committee can continue
- The Roundtable has engaged the FAA on multiple issues regarding the North Downwind that need responses from the agency
- The first being potential shifts to the JUUSE waypoint off the Pacific Coast near the Palisades, the second being Option B, of which will discuss next

### 4. Option B Proposal - Development

- Given lack of progress over the past 4 years for getting any major noise relief for communities under the North Downwind, Quiet Skies LA developed two proposals to route air traffic off the North Downwind
- These came to be known as Option A and Option B
- When this Option B was first studied by LAWA and aviation consultants hired, it was less developed than Option A, which was determined as infeasible
- The Metroplex Ad Hoc Committee agreed to continue studying Option B within the Committee

### 4. Option B Proposal - Update

- A draft proposal of a refined Option B has been finalized and distributed to you all as part of this meeting
- The refined Option B proposal recommends diverting 31% of current North Downwind flights on to an existing procedure farther to the east of the existing IRNMN flight path

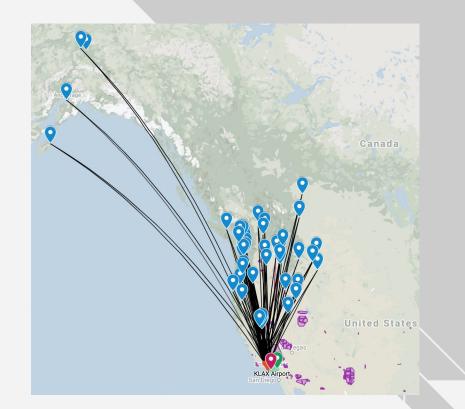


North Downwind Option B Proposal 07.13.2021

Metroplex Ad Hoc Committee LAX Community Noise Roundtable 1 World Way Los Angeles, CA 90045

# 4. Option B Proposal - Excluded Points of Origin

- 31% of flights proposed for rerouting were analyzed based on Point of Origin
- All cross-Pacific flights from Asia, Australia, Oceania & Hawaii were excluded from consideration due to fuel load requirements and significant additions to flight time
- All California-based flights w/the exception of Tahoe/Reno were also excluded for the same reason



# 4. Option B Proposal

31% of flights Point of Origins

- are noted to the left Airports in this list are located in Oregon, Washington State,
- Central and Northern Nevada, Idaho, Montana, British Columbia, Alberta, & Alaska Distance estimates done estimate that Option B adds
  - no more than approx. 5% of additional flight time. Some flight distances are reduced

ANC BFI BLI

BOI

**BVS** 

BZN

COE

CXP

EIL

EKO

**EUG** 

FAI

GEG

**GTF** 

LWS

HLN

MFV

MFR

MSO

MWH

OLM

OTH

ADQ

Seattle, WA Bellingham, WA Boise, ID Burlington, WA

Bozeman, MT

Coeur d'Alene, ID

Carson City, NV

Fairbanks, AK

Elko, NV

Eugene, OR

Fairbanks, AK

Spokane, WA

Lewiston, ID

Helena, MT

Genoa, NV

Medford, OR

Missoula, MT

Olympia, WA

Moses Lake, WA

North Bend, OR

Great Falls, MT

Point of Origin

Anchorage, AK

Kodiak, AK

% of

Option B

0.01%

1.38%

0.42%

0.35%

4.59%

0.01%

0.15%

0.04%

0.01%

0.01%

0.01%

3.77%

0.01%

1.35%

0.01%

0.01%

0.01%

0.05%

3.83%

0.41%

0.01%

0.01%

0.02%

% of N.

DwnWnd

0.00%

0.43%

0.13%

0.11%

1.43%

0.00%

0.05%

0.01%

0.00%

0.00%

0.00%

1.17%

0.00%

0.42%

0.00%

0.00%

0.00%

0.02%

1.19%

0.13%

0.00%

0.00%

0.01%

% of

Option B

3.05%

18.02%

1.00%

0.01%

0.01%

2.53%

10.31%

30.47%

0.66%

0.01%

0.01%

0.07%

0.12%

0.01%

0.01%

0.51%

0.01%

0.03%

0.01%

13.22%

3.49%

0.01%

0.04%

Code Point of Origin

Seattle, WA

Portland, OR

Pasco, OR

Moscow, ID

Bremerton, WA

Redmond, OR

Reno, NV

Seattle, WA

Sun Valley, ID

Sandpoint, ID

Twin Falls, ID

Tahoe, CA

Aurora, OR

Edmonton, AB

Kamloops, BC

Kelowna, BC

Pitt Meadows, BC

Vancouver, BC

Penticton, BC

Victoria, BC

Calgary, AB

Pierce County, WA

Campbell River, BC

PAE

PSC

**PWT** 

**RNO** 

**SEA** 

SUN

SZT

TIW

TRK

UAO

YBL

YEG

YKA

YLW

YYC

YYF

YYJ

% of N.

DwnWnd

0.95%

5.62%

0.31%

0.00%

0.00%

0.79%

3.21%

9.50%

0.21%

0.00%

0.00%

0.02%

0.04%

0.00%

0.00%

0.16%

0.00%

0.01%

0.00%

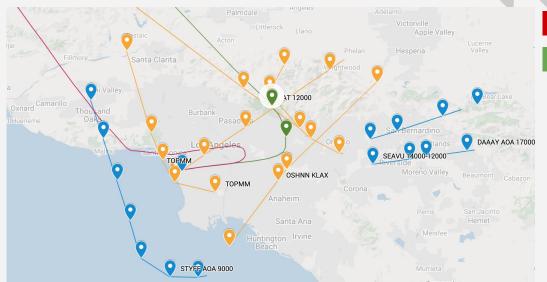
4.12%

1.09%

0.00%

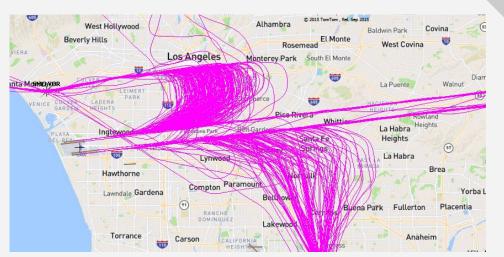
0.01%

### 4. Option B, Proposed Route Example



- Existing IRNMN
- Option B
  - Proposal is to use existing ANJLL flight procedure used for arrivals into LAX
  - Conflicts with existing flight paths for ONT or other facilities could be minimized by setting the right altitudes
- The shifting of flights will mean some shifting of noise as a result. However,
   Option B actively considers those challenges and attempts to mitigate them by being thoughtful about the proposed heights flown for the ANJLL procedure, and the portion of flights that would be taken off the North Downwind

### 4. Option B, Proposed Route Example



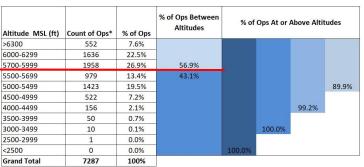
- Moving 31% traffic could reduce noise for communities east downtown Los Angeles in this turn radius. This is visually illustrated in Figure 4 for the large area of pink lines located just below the words "Los Angeles" on the map
- Option B traffic still needs to be merged into the majority of LAX arrivals traffic coming from the east. The proposal calls for this merge to occur between 12000 and 14000 feet and at a less severe angle than the North Downwind, thus reducing wind shear and fuselage noise on the aircraft. We see this as a strong benefit to Option B and would welcome FAA analysis of Option B final routing into LAX using OPD (Optimized Descent Profiles) to reduce aircraft noise

### 4. Option B Proposal - Next Steps

- The Metroplex Ad Hoc Committee has sent this Option B proposal to the Roundtable with no member opposition
- If the Roundtable agrees to send this proposal to the FAA, a cover letter will be sent with the report
- We will then await response and engagement from the FAA.
   This is the next step in analyzing the proposal, determining feasibility, and any potential next steps



### ANOMS Gate Penetration - DAHJR January 1-31, 2019



Prepared by: LAWA Noise Management

\*Data source: LAX ANOMS

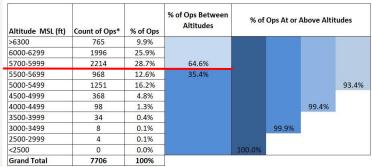
### ANOMS Gate Penetration - DAHJR March 1-31, 2019

| Altitude MSL (ft) | Count of Ops* | % of Ops | % of Ops Between<br>Altitudes | % of Ops At or Above Altitudes |        |       |       |  |  |
|-------------------|---------------|----------|-------------------------------|--------------------------------|--------|-------|-------|--|--|
| >6300             | 713           | 8.0%     |                               |                                |        |       |       |  |  |
| 6000-6299         | 2220          | 24.9%    |                               |                                |        |       |       |  |  |
| 5700-5999         | 2595          | 29.1%    | 62.0%                         |                                |        |       |       |  |  |
| 5500-5699         | 1113          | 12.5%    | 38.0%                         |                                |        |       |       |  |  |
| 5000-5499         | 1574          | 17.7%    |                               |                                |        |       | 92.1% |  |  |
| 4500-4999         | 524           | 5.9%     |                               |                                |        |       |       |  |  |
| 4000-4499         | 136           | 1.5%     |                               |                                |        | 99.5% |       |  |  |
| 3500-3999         | 33            | 0.4%     |                               |                                |        |       |       |  |  |
| 3000-3499         | 7             | 0.1%     |                               |                                | 100.0% |       |       |  |  |
| 2500-2999         | 1             | 0.0%     |                               |                                |        |       |       |  |  |
| <2500             | 0             | 0.0%     |                               | 100.0%                         | -,     |       |       |  |  |
| Grand Total       | 8916          | 100%     |                               |                                |        |       |       |  |  |

Prepared by: LAWA Noise Management

\*Data source: LAX ANOMS

### ANOMS Gate Penetration - DAHJR February 1-28, 2019



Prepared by: LAWA Noise Management

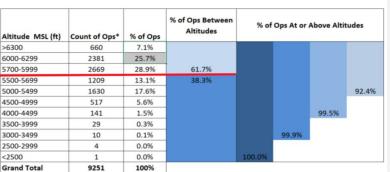
\*Data source: LAX ANOMS

### ANOMS Gate Penetration - DAHJR April 1-30, 2019

| Altitude MSL (ft) | Count of Ops* | % of Ops | % of Ops Between<br>Altitudes | ,      | 6 of Ops At or | Above Altitud | des   |   |
|-------------------|---------------|----------|-------------------------------|--------|----------------|---------------|-------|---|
| >6300             | 679           | 7.5%     |                               |        |                |               |       | П |
| 6000-6299         | 2368          | 26.1%    |                               |        |                |               |       |   |
| 5700-5999         | 2677          | 29.5%    | 63.1%                         |        |                |               |       | П |
| 5500-5699         | 1155          | 12.7%    | 36.9%                         |        |                |               |       | П |
| 5000-5499         | 1566          | 17.3%    |                               |        |                |               | 93.2% | П |
| 4500-4999         | 463           | 5.1%     |                               |        |                |               |       |   |
| 4000-4499         | 120           | 1.3%     |                               |        |                | 99.6%         |       | Ш |
| 3500-3999         | 27            | 0.3%     |                               |        |                |               |       | Ш |
| 3000-3499         | 6             | 0.1%     |                               |        | 100.0%         |               |       | Н |
| 2500-2999         | 3             | 0.0%     |                               |        |                |               |       |   |
| <2500             | 1             | 0.0%     |                               | 100.0% |                |               |       |   |
| Grand Total       | 9065          | 100%     |                               |        |                |               |       | - |

Prepared by: LAWA Noise Management

### ANOMS Gate Penetration - DAHJR May 1-31, 2019



Prepared by: LAWA Noise Management

\*Data source: LAX ANOMS

### ANOMS Gate Penetration - DAHJR July 1-31, 2019

| Altitude MSL (ft) | Count of Ops* | % of Ops | % of Ops Between<br>Altitudes | % of Ops At or Above Altitudes |        |       |       |  |  |
|-------------------|---------------|----------|-------------------------------|--------------------------------|--------|-------|-------|--|--|
| >6300             | 784           | 7.9%     |                               |                                |        |       |       |  |  |
| 6000-6299         | 2699          | 27.3%    |                               |                                |        |       |       |  |  |
| 5700-5999         | 3129          | 31.6%    | 66.8%                         |                                |        |       |       |  |  |
| 5500-5699         | 1313          | 13.3%    | 33.2%                         |                                |        |       |       |  |  |
| 5000-5499         | 1508          | 15.2%    |                               |                                |        |       | 95.4% |  |  |
| 4500-4999         | 359           | 3.6%     |                               |                                |        |       |       |  |  |
| 4000-4499         | 75            | 0.8%     |                               |                                |        | 99.7% |       |  |  |
| 3500-3999         | 21            | 0.2%     |                               |                                |        |       |       |  |  |
| 3000-3499         | 4             | 0.0%     |                               |                                | 100.0% |       |       |  |  |
| 2500-2999         | 0             | 0.0%     |                               |                                |        |       |       |  |  |
| <2500             | 0             | 0.0%     |                               | 100.0%                         |        |       |       |  |  |
| Grand Total       | 9892          | 100%     |                               |                                |        |       |       |  |  |

Prepared by: LAWA Noise Management

### ANOMS Gate Penetration - DAHJR June 1-30, 2019

| Altitude MSL (ft) | Count of Ops* | % of Ops | % of Ops Between<br>Altitudes | % of   | % of Ops At or Above Altitudes |       |       |  |  |  |
|-------------------|---------------|----------|-------------------------------|--------|--------------------------------|-------|-------|--|--|--|
| >6300             | 642           | 6.8%     |                               |        |                                |       |       |  |  |  |
| 6000-6299         | 2759          | 29.2%    |                               |        |                                |       |       |  |  |  |
| 5700-5999         | 2985          | 31.6%    | 67.6%                         |        |                                |       |       |  |  |  |
| 5500-5699         | 1138          | 12.1%    | 32.4%                         |        |                                |       |       |  |  |  |
| 5000-5499         | 1398          | 14.8%    |                               |        |                                |       | 94.5% |  |  |  |
| 4500-4999         | 420           | 4.4%     |                               |        |                                |       |       |  |  |  |
| 4000-4499         | 74            | 0.8%     |                               |        |                                | 99.7% |       |  |  |  |
| 3500-3999         | 14            | 0.1%     |                               |        |                                |       |       |  |  |  |
| 3000-3499         | 9             | 0.1%     |                               |        | 100.0%                         |       |       |  |  |  |
| 2500-2999         | 1             | 0.0%     |                               |        |                                |       |       |  |  |  |
| <2500             | 0             | 0.0%     |                               | 100.0% |                                |       |       |  |  |  |
| Grand Total       | 9440          | 100%     |                               |        |                                |       |       |  |  |  |

Prepared by: LAWA Noise Management \*Data source: LAX ANOMS

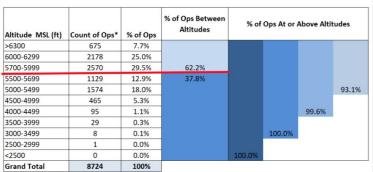
### ANOMS Gate Penetration - DAHJR August 1-31, 2019

| Altitude MSL (ft) | Count of Ops* | % of Ops | % of Ops Between<br>Altitudes | % of   | of Ops At or Above Altitudes |       |       |  |
|-------------------|---------------|----------|-------------------------------|--------|------------------------------|-------|-------|--|
| >6300             | 698           | 7.1%     |                               |        |                              |       |       |  |
| 6000-6299         | 2627          | 26.9%    |                               |        |                              |       |       |  |
| 5700-5999         | 3108          | 31.8%    | 65.8%                         |        |                              |       |       |  |
| 5500-5699         | 1275          | 13.0%    | 34.2%                         |        |                              |       |       |  |
| 5000-5499         | 1551          | 15.9%    |                               |        |                              |       | 94.7% |  |
| 4500-4999         | 417           | 4.3%     |                               |        |                              |       |       |  |
| 4000-4499         | 88            | 0.9%     |                               |        |                              | 99.8% |       |  |
| 3500-3999         | 14            | 0.1%     |                               |        |                              |       |       |  |
| 3000-3499         | 1             | 0.0%     |                               |        | 100.0%                       |       |       |  |
| 2500-2999         | 0             | 0.0%     |                               |        |                              |       |       |  |
| <2500             | 1             | 0.0%     |                               | 100.0% |                              |       |       |  |
| Grand Total       | 9780          | 100%     |                               |        |                              |       |       |  |

Prepared by: LAWA Noise Management

<sup>\*</sup>Data source: LAX ANOMS

### ANOMS Gate Penetration - DAHJR September 1-30, 2019



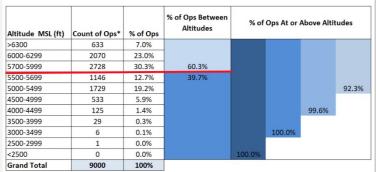
Prepared by: LAWA Noise Management

### ANOMS Gate Penetration - DAHJR November 1-30, 2019

| Altitude MSL (ft) | Count of Ops* | % of Ops | % of Ops Between<br>Altitudes | % of   | Ops At or | Above Alti | tudes |
|-------------------|---------------|----------|-------------------------------|--------|-----------|------------|-------|
| >6300             | 493           | 6.1%     |                               |        |           |            |       |
| 6000-6299         | 1780          | 22.0%    |                               |        |           |            |       |
| 5700-5999         | 2371          | 29.3%    | 57.3%                         |        |           |            |       |
| 5500-5699         | 1102          | 13.6%    | 42.7%                         |        |           |            |       |
| 5000-5499         | 1662          | 20.5%    |                               |        |           |            | 91.5% |
| 4500-4999         | 512           | 6.3%     |                               |        |           |            |       |
| 4000-4499         | 144           | 1.8%     |                               |        |           | 99.6%      |       |
| 3500-3999         | 26            | 0.3%     |                               |        |           |            |       |
| 3000-3499         | 8             | 0.1%     |                               |        | 100.0%    |            |       |
| 2500-2999         | 1             | 0.0%     |                               |        |           |            |       |
| <2500             | 0             | 0.0%     |                               | 100.0% |           |            |       |
| Grand Total       | 8099          | 100%     |                               |        |           |            |       |

Prepared by: LAWA Noise Management

### ANOMS Gate Penetration - DAHJR October 1-31, 2019



Prepared by: LAWA Noise Management

### ANOMS Gate Penetration - DAHJR December 1-31, 2019

| Altitude MSL (ft) | Count of Ops* | % of Ops | % of Ops Between<br>Altitudes | % of Ops At o |        |       |       |
|-------------------|---------------|----------|-------------------------------|---------------|--------|-------|-------|
| >6300             | 584           | 7.6%     |                               |               |        |       |       |
| 6000-6299         | 1752          | 22.9%    |                               |               |        |       |       |
| 5700-5999         | 2288          | 29.9%    | 60.5%                         |               |        |       |       |
| 5500-5699         | 995           | 13.0%    | 39.5%                         |               |        |       |       |
| 5000-5499         | 1325          | 17.3%    | 6<br>6                        |               |        |       | 90.9% |
| 4500-4999         | 509           | 6.7%     |                               |               |        |       |       |
| 4000-4499         | 131           | 1.7%     |                               |               |        | 99.3% | ,1    |
| 3500-3999         | 39            | 0.5%     |                               |               |        |       |       |
| 3000-3499         | 15            | 0.2%     |                               |               | 100.0% |       |       |
| 2500-2999         | 2             | 0.0%     |                               |               |        |       |       |
| <2500             | 1             | 0.0%     |                               | 100.0%        |        |       |       |
| Grand Total       | 7641          | 100%     |                               |               |        |       |       |

Prepared by: LAWA Noise Management

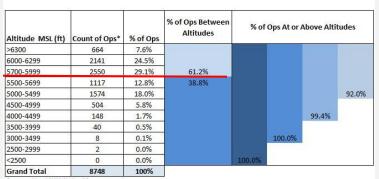
<sup>\*</sup>Data source: LAX ANOMS

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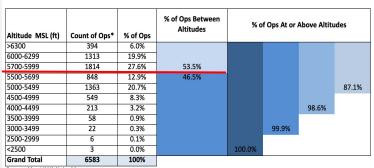
<sup>\*</sup>Data source: LAX ANOMS

### ANOMS Gate Penetration - DAHJR January 1-31, 2020



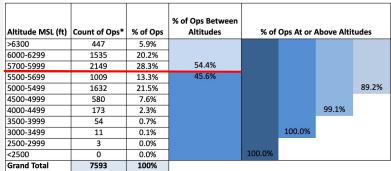
Prepared by: LAWA Noise Management

### ANOMS Gate Penetration - DAHJR March 1-31, 2020



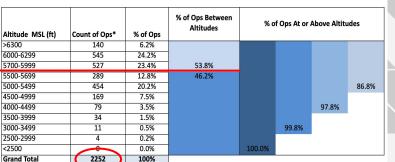
Prepared by: LAWA Noise Management

### ANOMS Gate Penetration - DAHJR February 1-29, 2020



Prepared by: LAWA Noise Management

### ANOMS Gate Penetration - DAHJR April 1-30, 2020



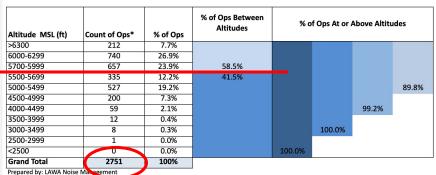
Prepared by: LAWA Noise Manage

<sup>\*</sup>Data source: LAX ANOMS

<sup>\*</sup>Data source: LAX ANOMS

<sup>\*</sup>Data source: LAX ANOMS

### ANOMS Gate Penetration - DAHJR May 1-31, 2020



\*Data source: LAX ANOMS

### ANOMS Gate Penetration - DAHJR July 1-31, 2020

| Altitude MSL (ft)  | Count of Ops* | % of Ops | % of Ops Between<br>Altitudes | % o    | f Ops At or Above Altitudes |       |       |  |  |
|--------------------|---------------|----------|-------------------------------|--------|-----------------------------|-------|-------|--|--|
| >6300              | 306           | 7.7%     |                               |        |                             |       |       |  |  |
| 6000-6299          | 1096          | 27.5%    |                               |        |                             |       |       |  |  |
| 5700-5999          | 1132          | 28.4%    | 63.5%                         |        |                             |       |       |  |  |
| 5500-5699          | 502           | 12.6%    | 36.5%                         |        |                             |       |       |  |  |
| 5000-5499          | 680           | 17.0%    |                               |        |                             |       | 93.2% |  |  |
| 4500-4999          | 205           | 5.1%     |                               |        |                             |       |       |  |  |
| 4000-4499          | 51            | 1.3%     |                               |        |                             | 99.6% |       |  |  |
| 3500-3999          | 14            | 0.4%     |                               |        |                             |       |       |  |  |
| 3000-3499          | 3             | 0.1%     |                               |        | 100.0%                      |       |       |  |  |
| 2500-2999          | 0             | 0.0%     |                               |        |                             |       |       |  |  |
| <2500              | U             | 0.0%     |                               | 100.0% |                             |       |       |  |  |
| <b>Grand Total</b> | 3989          | 100%     |                               |        |                             |       |       |  |  |

\*Data source: LAX ANOMS

Prepared by: LAWA Noise Management

### ANOMS Gate Penetration - DAHJR June 1-30, 2020

| Altitude MSL (ft) | Count of Ops* | Ops* % of Ops | Count of Ops* % of Ops |        | % of Ops At or Above Altitudes |       |       |  |  |
|-------------------|---------------|---------------|------------------------|--------|--------------------------------|-------|-------|--|--|
| >6300             | 244           | 7.7%          |                        |        |                                |       |       |  |  |
| 6000-6299         | 775           | 24.5%         |                        |        |                                |       |       |  |  |
| 5700-5999         | 845           | 26.7%         | 58.8%                  |        |                                |       |       |  |  |
| 5500-5699         | 400           | 12.6%         | 41.2%                  |        |                                |       |       |  |  |
| 5000-5499         | 595           | 18.8%         |                        |        |                                |       | 90.2% |  |  |
| 4500-4999         | 214           | 6.8%          |                        |        |                                |       |       |  |  |
| 4000-4499         | 76            | 2.4%          |                        |        |                                | 99.4% |       |  |  |
| 3500-3999         | 17            | 0.5%          |                        |        |                                |       |       |  |  |
| 3000-3499         | 1             | 0.0%          |                        |        | 100.0%                         |       |       |  |  |
| 2500-2999         | 1             | 0.0%          |                        |        |                                |       |       |  |  |
| <2500             | U             | 0.0%          |                        | 100.0% |                                |       |       |  |  |
| Grand Total       | 3168          | 100%          |                        |        |                                |       |       |  |  |

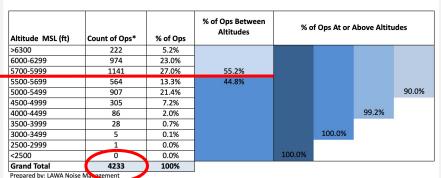
\*Data source: LAX ANOMS

### ANOMS Gate Penetration - DAHJR August 1-31, 2020

| Altitude MSL (ft)  | Count of Ops* | % of Ops | % of Ops Between<br>Altitudes | % o    | f Ops At or | f Ops At or Above Altitudes |       |  |  |  |
|--------------------|---------------|----------|-------------------------------|--------|-------------|-----------------------------|-------|--|--|--|
| >6300              | 275           | 6.5%     |                               |        |             |                             |       |  |  |  |
| 6000-6299          | 1048          | 24.6%    |                               |        |             |                             |       |  |  |  |
| 5700-5999          | 1245          | 29.2%    | 60.2%                         |        |             |                             |       |  |  |  |
| 5500-5699          | 567           | 13.3%    | 39.8%                         |        |             |                             |       |  |  |  |
| 5000-5499          | 828           | 19.4%    |                               |        |             |                             | 93.0% |  |  |  |
| 4500-4999          | 220           | 5.2%     |                               |        |             |                             |       |  |  |  |
| 4000-4499          | 56            | 1.3%     |                               |        |             | 99.4%                       |       |  |  |  |
| 3500-3999          | 19            | 0.4%     |                               |        |             |                             |       |  |  |  |
| 3000-3499          | 5             | 0.1%     |                               |        | 100.0%      |                             |       |  |  |  |
| 2500-2999          | 0             | 0.0%     |                               |        |             |                             |       |  |  |  |
| <2500              | 0             | 0.0%     |                               | 100.0% |             |                             |       |  |  |  |
| <b>Grand Total</b> | 4263          | 100%     |                               |        |             |                             |       |  |  |  |

Prepared by: LAWA Noise Management
\*Data source: LAX ANOMS

### ANOMS Gate Penetration - DAHJR September 1-30, 2020



<sup>\*</sup>Data source: LAX ANOMS

### ANOMS Gate Penetration - DAHJR November 1-30, 2020

| Altitude MSL (ft) | Count of Ops* | % of Ops | % of Ops Between<br>Altitudes | % o    | f Ops At or | Above Altitu | udes  |
|-------------------|---------------|----------|-------------------------------|--------|-------------|--------------|-------|
| >6300             | 353           | 7.5%     |                               |        |             |              |       |
| 6000-6299         | 969           | 20.5%    |                               |        |             |              |       |
| 5700-5999         | 1232          | 26.1%    | 54.1%                         |        |             |              |       |
| 5500-5699         | 660           | 14.0%    | 45.9%                         |        |             |              |       |
| 5000-5499         | 977           | 20.7%    |                               |        |             |              | 88.8% |
| 4500-4999         | 363           | 7.7%     |                               |        |             |              |       |
| 4000-4499         | 124           | 2.6%     |                               |        |             | 99.1%        |       |
| 3500-3999         | 30            | 0.6%     |                               |        |             |              | •     |
| 3000-3499         | 10            | 0.2%     |                               |        | 99.9%       |              |       |
| 2500-2999         | 3             | 0.1%     |                               |        |             |              |       |
| <2500             | 0             | 0.0%     |                               | 100.0% |             |              |       |
| Grand Total       | 4721          | 100%     |                               |        |             |              |       |

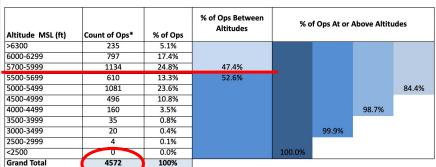
Prepared by: LAWA Noise Management

### ANOMS Gate Penetration - DAHJR October 1-31, 2020

| Altitude MSL (ft) | Count of Ops* | % of Ops | % of Ops Between<br>Altitudes | % o    | of Ops At or Above Altitudes |       |       |  |  |
|-------------------|---------------|----------|-------------------------------|--------|------------------------------|-------|-------|--|--|
| >6300             | 282           | 6.1%     |                               |        |                              |       |       |  |  |
| 6000-6299         | 1104          | 23.7%    |                               |        |                              |       |       |  |  |
| 5700-5999         | 1305          | 28.0%    | 57.8%                         |        |                              |       |       |  |  |
| 5500-5699         | 583           | 12.5%    | 42.2%                         |        |                              |       |       |  |  |
| 5000-5499         | 885           | 19.0%    |                               |        |                              |       | 89.4% |  |  |
| 4500-4999         | 365           | 7.8%     |                               |        |                              |       |       |  |  |
| 4000-4499         | 86            | 1.8%     |                               |        |                              | 99.1% |       |  |  |
| 3500-3999         | 28            | 0.6%     |                               |        |                              |       |       |  |  |
| 3000-3499         | 10            | 0.2%     |                               |        | 99.9%                        |       |       |  |  |
| 2500-2999         | 4             | 0.1%     |                               |        |                              |       |       |  |  |
| <2500             | 1             | 0.0%     |                               | 100.0% |                              |       |       |  |  |
| Grand Total       | 4653          | 100%     |                               |        |                              |       |       |  |  |

<sup>\*</sup>Data source: LAX ANOMS

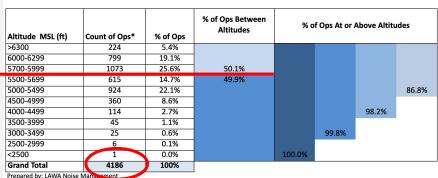
### ANOMS Gate Penetration - DAHJR December 1-31, 2020



Prepared by: LAWA Noise Management

<sup>\*</sup>Data source: LAX ANOMS

### ANOMS Gate Penetration - DAHJR January 1-31, 2021



\*Data source: LAX ANOMS

ANOMS Gate Penetration - DAHJR March 1-31, 2021

| Altitude MSL (ft) | Count of Ops* | % of Ops | % of Ops Between<br>Altitudes | % of Ops At or Above Altitudes |       |       | ıdes  |
|-------------------|---------------|----------|-------------------------------|--------------------------------|-------|-------|-------|
| >6300             | 249           | 5.8%     |                               |                                |       |       |       |
| 6000-6299         | 865           | 20.0%    |                               |                                |       |       |       |
| 5700-5999         | 1129          | 26.1%    | 51.9%                         |                                |       |       |       |
| 5500-5699         | 564           | 13.0%    | 48.1%                         |                                |       |       |       |
| 5000-5499         | 982           | 22.7%    |                               |                                |       |       | 87.7% |
| 4500-4999         | 376           | 8.7%     |                               |                                |       |       |       |
| 4000-4499         | 114           | 2.6%     |                               |                                |       | 99.0% |       |
| 3500-3999         | 34            | 0.8%     |                               |                                |       |       |       |
| 3000-3499         | 5             | 0.1%     |                               |                                | 99.9% |       |       |
| 2500-2999         | 4             | 0.1%     |                               |                                |       |       |       |
| <2500             | 0             | 0.0%     |                               | 100.0%                         |       |       |       |
| Grand Total       | 4322          | 100%     |                               |                                |       |       |       |

Prepared by: LAWA Noise Management

\*Data source: LAX ANOMS

### ANOMS Gate Penetration - DAHJR February 1-28, 2021

| Altitude MSL (ft) | Count of Ops* | % of Ops | % of Ops Between<br>Altitudes | % o    | % of Ops At or Above Altitudes |       |       |  |
|-------------------|---------------|----------|-------------------------------|--------|--------------------------------|-------|-------|--|
| >6300             | 263           | 6.2%     |                               |        |                                |       |       |  |
| 6000-6299         | 797           | 18.9%    |                               |        |                                |       |       |  |
| 5700-5999         | 1139          | 27.0%    | 52.1%                         |        |                                |       |       |  |
| 5500-5699         | 576           | 13.6%    | 47.9%                         |        |                                |       |       |  |
| 5000-5499         | 950           | 22.5%    |                               |        |                                |       | 88.2% |  |
| 4500-4999         | 338           | 8.0%     |                               |        |                                |       |       |  |
| 4000-4499         | 118           | 2.8%     |                               |        |                                | 99.0% |       |  |
| 3500-3999         | 30            | 0.7%     |                               |        |                                |       |       |  |
| 3000-3499         | 10            | 0.2%     |                               |        | 99.9%                          |       |       |  |
| 2500-2999         | 2             | 0.0%     |                               |        |                                |       |       |  |
| <2500             | 1             | 0.0%     |                               | 100.0% |                                |       |       |  |
| Grand Total       | 4224          | 100%     |                               |        |                                |       |       |  |

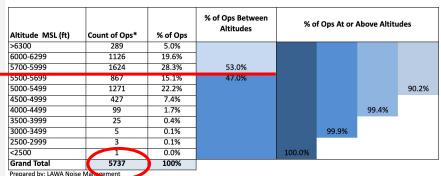
\*Data source: LAX ANOMS

### ANOMS Gate Penetration - DAHJR April 1-30, 2021

| Altitude MSL (ft) | Count of Ops* | % of Ops | % of Ops Between<br>Altitudes | % of Ops At or Above Altitudes |        |       | udes  |
|-------------------|---------------|----------|-------------------------------|--------------------------------|--------|-------|-------|
| >6300             | 305           | 6.5%     |                               |                                |        |       |       |
| 6000-6299         | 1062          | 22.5%    |                               |                                |        |       |       |
| 5700-5999         | 1209          | 25.6%    | 54.5%                         |                                |        |       |       |
| 5500-5699         | 652           | 13.8%    | 45.5%                         |                                |        |       |       |
| 5000-5499         | 1044          | 22.1%    |                               |                                |        |       | 90.4% |
| 4500-4999         | 335           | 7.1%     |                               |                                |        |       |       |
| 4000-4499         | 90            | 1.9%     |                               |                                |        | 99.4% |       |
| 3500-3999         | 25            | 0.5%     |                               |                                |        |       |       |
| 3000-3499         | 4             | 0.1%     |                               |                                | 100.0% |       |       |
| 2500-2999         | 1             | 0.0%     |                               |                                |        |       |       |
| <2500             | 0             | 0.0%     |                               | 100.0%                         |        |       |       |
| Grand Total       | 4727          | 100%     |                               |                                |        |       |       |

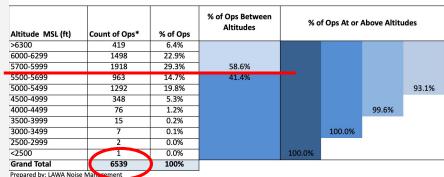
Prepared by: LAWA Noise Management

### ANOMS Gate Penetration - DAHJR May 1-31, 2021



\*Data source: LAX ANOMS

### **ANOMS Gate Penetration - DAHJR** Jun 1-30, 2021



|                      |                      | Time of Night      |                    |                    |                    |                    |                     |  |  |
|----------------------|----------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------------|--|--|
| Altitude MSL (ft)    | 12:00 to<br>12:59 AM | 1:00 to<br>1:59 AM | 2:00 to<br>2:59 AM | 3:00 to<br>3:59 AM | 4:00 to<br>4:59 AM | 5:00 to<br>5:59 AM | Totals by<br>Height |  |  |
| >6000                | 15                   | 5                  | 2                  | 5                  | 14                 | 36                 | 77                  |  |  |
| 5750-6000            | 18                   | 2                  | 1                  | 7                  | 7                  | 10                 | 45                  |  |  |
| 5500-5749            | 6                    | 1                  | 1                  | 2                  | 1                  | 7                  | 18                  |  |  |
| 5250-5499            | 2                    | 1                  | 2                  | 2                  | 0                  | 4                  | 11                  |  |  |
| 5000-5249            | 5                    | 0                  | 2                  | 2                  | 1                  | 4                  | 14                  |  |  |
| 4750-4999            | 1                    | 1                  | 0                  | 0                  | 0                  | 0                  | 2                   |  |  |
| <4750                | 1                    | 1                  | 0                  | 0                  | 2                  | 2                  | 6                   |  |  |
| Total of All Flights | 48                   | 11                 | 8                  | 18                 | 25                 | 63                 | 173                 |  |  |
|                      |                      | 1 to 5 Total       |                    | 1                  | .9                 |                    |                     |  |  |

Oct 2018
19 flights

| -                    |                      | Time of Night      |                    |                    |                    |                    |                     |  |  |  |
|----------------------|----------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------------|--|--|--|
| Altitude MSL (ft)    | 12:00 to<br>12:59 AM | 1:00 to<br>1:59 AM | 2:00 to<br>2:59 AM | 3:00 to<br>3:59 AM | 4:00 to<br>4:59 AM | 5:00 to<br>5:59 AM | Totals by<br>Height |  |  |  |
| >6000                | 24                   | 13                 | 11                 | 9                  | 58                 | 72                 | 187                 |  |  |  |
| 5750-6000            | 13                   | 4                  | 3                  | 0                  | 9                  | 19                 | 48                  |  |  |  |
| 5500-5749            | 6                    | 0                  | 1                  | 1                  | 2                  | 6                  | 16                  |  |  |  |
| 5250-5499            | 3                    | 2                  | 1                  | 1                  | 2                  | 8                  | 17                  |  |  |  |
| 5000-5249            | 2                    | 1                  | 1                  | 1                  | 1                  | 3                  | 9                   |  |  |  |
| 4750-4999            | 3                    | 0                  | 0                  | 0                  | 0                  | 0                  | 3                   |  |  |  |
| <4750                | 6                    | 1                  | 0                  | 0                  | 2                  | 6                  | 15                  |  |  |  |
| Total of All Flights | 57                   | 21                 | 17                 | 12                 | 74                 | 114                | 295                 |  |  |  |
|                      |                      | 1 to 5             | Total              | 1                  | 7                  |                    |                     |  |  |  |

Nov 2018 17 flights

|                      |          | Time of Night |         |         |         |         |           |  |  |
|----------------------|----------|---------------|---------|---------|---------|---------|-----------|--|--|
| ***                  | 12:00 to | 1:00 to       | 2:00 to | 3:00 to | 4:00 to | 5:00 to | Totals by |  |  |
| Altitude MSL (ft)    | 12:59 AM | 1:59 AM       | 2:59 AM | 3:59 AM | 4:59 AM | 5:59 AM | Height    |  |  |
| >6000                | 27       | 10            | 8       | 6       | 28      | 48      | 127       |  |  |
| 5750-6000            | 13       | 1             | 2       | 1       | 15      | 32      | 64        |  |  |
| 5500-5749            | 11       | 1             | 0       | 1       | 7       | 10      | 30        |  |  |
| 5250-5499            | 6        | 0             | 2       | 0       | 8       | 3       | 19        |  |  |
| 5000-5249            | 6        | 0             | 1       | 0       | 3       | 4       | 14        |  |  |
| 4750-4999            | 0        | 0             | 0       | 0       | 1       | 2       | 3         |  |  |
| <4750                | 2        | 0             | 0       | 1       | 0       | 3       | 6         |  |  |
| Total of All Flights | 65       | 12            | 13      | 9       | 62      | 102     | 263       |  |  |
|                      |          | 1 to 5        | Total   | 2       | 5       | 0.7     |           |  |  |

Dec 2018 25 flights

|                      |          | Time of Night |         |         |         |         |           |  |  |  |  |
|----------------------|----------|---------------|---------|---------|---------|---------|-----------|--|--|--|--|
|                      | 12:00 to | 1:00 to       | 2:00 to | 3:00 to | 4:00 to | 5:00 to | Totals by |  |  |  |  |
| Altitude MSL (ft)    | 12:59 AM | 1:59 AM       | 2:59 AM | 3:59 AM | 4:59 AM | 5:59 AM | Height    |  |  |  |  |
| >6000                | 10       | 6             | 6       | 4       | 3       | 13      | 42        |  |  |  |  |
| 5750-6000            | 6        | 2             | 0       | 0       | 5       | 6       | 19        |  |  |  |  |
| 5500-5749            | 9        | 0             | 1       | 1       | 2       | 3       | 16        |  |  |  |  |
| 5250-5499            | 2        | 0             | 1       | 0       | 3       | 4       | 10        |  |  |  |  |
| 5000-5249            | 2        | 0             | 0       | 1       | 0       | 0       | 3         |  |  |  |  |
| 4750-4999            | 1        | 0             | 0       | 1       | 0       | 1       | 3         |  |  |  |  |
| <4750                | 2        | 0             | 0       | 2       | 0       | 1       | 5         |  |  |  |  |
| Total of All Flights | 32       | 8             | 8       | 9       | 13      | 28      | 98        |  |  |  |  |
| W                    |          | 1 to 5        | Total   | 1       | 2       |         |           |  |  |  |  |

Jan 2019 12 flights

|                      | 0.                   | Time of Night      |                    |                    |                    |                    |                     |  |  |  |
|----------------------|----------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------------|--|--|--|
| Altitude MSL (ft)    | 12:00 to<br>12:59 AM | 1:00 to<br>1:59 AM | 2:00 to<br>2:59 AM | 3:00 to<br>3:59 AM | 4:00 to<br>4:59 AM | 5:00 to<br>5:59 AM | Totals by<br>Height |  |  |  |
| >6000                | 10                   | 4                  | 3                  | 1                  | 7                  | 9                  | 34                  |  |  |  |
| 5750-6000            | 5                    | 0                  | 0                  | 4                  | 1                  | 2                  | 12                  |  |  |  |
| 5500-5749            | 3                    | 0                  | 0                  | 0                  | 3                  | 2                  | 8                   |  |  |  |
| 5250-5499            | 2                    | 1                  | 0                  | 0                  | 1                  | 0                  | 4                   |  |  |  |
| 5000-5249            | 1                    | 0                  | 0                  | 1                  | 0                  | 2                  | 4                   |  |  |  |
| 4750-4999            | 24                   | 6                  | 11                 | 2                  | 26                 | 40                 | 109                 |  |  |  |
| <4750                | 1                    | 0                  | 0                  | 0                  | 0                  | 3                  | 4                   |  |  |  |
| Total of All Flights | 46                   | 11                 | 14                 | 8                  | 38                 | 58                 | 175                 |  |  |  |
| 5                    | 7.0                  | 1 to 5             | Total              | 5                  | 1                  |                    |                     |  |  |  |

Feb 2019 51 flights

|                             |          | Time of Night |         |         |         |         |           |  |  |
|-----------------------------|----------|---------------|---------|---------|---------|---------|-----------|--|--|
| alice I agai (6)            | 12:00 to | 1:00 to       | 2:00 to | 3:00 to | 4:00 to | 5:00 to | Totals by |  |  |
| Altitude MSL (ft)           | 12:59 AM | 1:59 AM       | 2:59 AM | 3:59 AM | 4:59 AM | 5:59 AM | Height    |  |  |
| >6000                       | 15       | 5             | 2       | 4       | 10      | 11      | 47        |  |  |
| 5750-6000                   | 38       | 12            | 2       | 17      | 45      | 52      | 166       |  |  |
| 5500-5749                   | 7        | 0             | 0       | 0       | 3       | 0       | 10        |  |  |
| 5250-5499                   | 1        | 0             | 1       | 0       | 3       | 5       | 10        |  |  |
| 5000-5249                   | 1        | 0             | 0       | 0       | 2       | 3       | 6         |  |  |
| 4750-4999                   | 1        | 1             | 0       | 0       | 1       | 0       | 3         |  |  |
| <4750                       | 2        | 0             | 0       | 0       | 1       | 0       | 3         |  |  |
| <b>Total of All Flights</b> | 65       | 18            | 5       | 21      | 65      | 71      | 245       |  |  |
| A.C                         |          | 1 to 5 Total  |         | 1       | 2       |         | 20        |  |  |

Mar 2019 12 flights

|                      |             | Time of Night      |                    |                    |                    |                    |                     |  |  |  |
|----------------------|-------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------------|--|--|--|
| Altitude MSL (ft)    | 12:59<br>AM | 1:00 to<br>1:59 AM | 2:00 to<br>2:59 AM | 3:00 to<br>3:59 AM | 4:00 to<br>4:59 AM | 5:00 to<br>5:59 AM | Totals by<br>Height |  |  |  |
| >6000                | 26          | 20                 | 10                 | 22                 | 58                 | 56                 | 192                 |  |  |  |
| 5750-6000            | 23          | 3                  | 2                  | 7                  | 6                  | 25                 | 66                  |  |  |  |
| 5500-5749            | 5           | 2                  | 0                  | 1                  | 1                  | 3                  | 12                  |  |  |  |
| 5250-5499            | 1           | 0                  | 0                  | 0                  | 0                  | 1                  | 2                   |  |  |  |
| 5000-5249            | 1           | 0                  | 0                  | 0                  | 1                  | 2                  | 4                   |  |  |  |
| 4750-4999            | 0           | 0                  | 0                  | 0                  | 0                  | 0                  | 0                   |  |  |  |
| <4750                | 2           | 0                  | 1                  | 0                  | 0                  | 0                  | 3                   |  |  |  |
| Total of All Flights | 58          | 25                 | 13                 | 30                 | 66                 | 87                 | 279                 |  |  |  |
|                      |             | 1 to 5             | Total              | (                  | 5                  |                    |                     |  |  |  |

Apr 2019 6 flights

Time of Night 3:00 to Totals by 12:00 to 1:00 to 2:00 to 4:00 to 5:00 to Altitude MSL (ft) 12:59 AM 1:59 AM 2:59 AM 3:59 AM 4:59 AM 5:59 AM Height >6000 5750-6000 5500-5749 5250-5499 5000-5249 4750-4999 <4750 Total of All Flights 1 to 5 Total

May 2019 6 flights

|                      |                      | Time of Night      |                    |                    |                    |                    |                     |  |  |
|----------------------|----------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------------|--|--|
| Altitude MSL (ft)    | 12:00 to<br>12:59 AM | 1:00 to<br>1:59 AM | 2:00 to<br>2:59 AM | 3:00 to<br>3:59 AM | 4:00 to<br>4:59 AM | 5:00 to<br>5:59 AM | Totals by<br>Height |  |  |
| >6000                | 44                   | 5                  | 3                  | 19                 | 63                 | 91                 | 225                 |  |  |
| 5750-6000            | 21                   | 5                  | 2                  | 5                  | 15                 | 31                 | 79                  |  |  |
| 5500-5749            | 11                   | 0                  | 0                  | 2                  | 1                  | 3                  | 17                  |  |  |
| 5250-5499            | 4                    | 0                  | 0                  | 0                  | 0                  | 2                  | 6                   |  |  |
| 5000-5249            | 4                    | 0                  | 0                  | 1                  | 0                  | 0                  | 5                   |  |  |
| 4750-4999            | 4                    | 1                  | 0                  | 0                  | 0                  | 1                  | 6                   |  |  |
| <4750                | 4                    | 1                  | 0                  | 1                  | 1                  | 1                  | 8                   |  |  |
| Total of All Flights | 92                   | 12                 | 5                  | 28                 | 80                 | 129                | 346                 |  |  |
|                      |                      | 1 to 5 Total       |                    | 8                  | 3                  |                    |                     |  |  |

| Jun     | 2019 |  |
|---------|------|--|
| 8 fligh | nts  |  |

|                      |                      |                    | Time of I          | Night              |                    |                    |                     |
|----------------------|----------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------------|
| Altitude MSL (ft)    | 12:00 to<br>12:59 AM | 1:00 to<br>1:59 AM | 2:00 to<br>2:59 AM | 3:00 to<br>3:59 AM | 4:00 to<br>4:59 AM | 5:00 to<br>5:59 AM | Totals by<br>Height |
| >6000                | 56                   | 8                  | 7                  | 15                 | 39                 | 55                 | 180                 |
| 5750-6000            | 29                   | 1                  | 2                  | 3                  | 14                 | 25                 | 74                  |
| 5500-5749            | 9                    | 0                  | 1                  | 0                  | 2                  | 1                  | 13                  |
| 5250-5499            | 3                    | 0                  | 0                  | 0                  | 0                  | 2                  | 5                   |
| 5000-5249            | 3                    | 0                  | 0                  | 0                  | 0                  | 1                  | 4                   |
| 4750-4999            | 1                    | 0                  | 0                  | 0                  | 0                  | 0                  | 1                   |
| <4750                | 2                    | 0                  | 0                  | 0                  | 0                  | 0                  | 2                   |
| Total of All Flights | 103                  | 9                  | 10                 | 18                 | 55                 | 84                 | 279                 |
|                      |                      | 1 to 5 Total       |                    | 3                  |                    |                    |                     |

Jul 2019 3 flights

|                      |                      |                    | Time of I          | Night              |                    |                    |                     |
|----------------------|----------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------------|
| Altitude MSL (ft)    | 12:00 to<br>12:59 AM | 1:00 to<br>1:59 AM | 2:00 to<br>2:59 AM | 3:00 to<br>3:59 AM | 4:00 to<br>4:59 AM | 5:00 to<br>5:59 AM | Totals by<br>Height |
| >6000                | 35                   | 3                  | 13                 | 9                  | 43                 | 61                 | 164                 |
| 5750-6000            | 26                   | 4                  | 1                  | 0                  | 15                 | 22                 | 68                  |
| 5500-5749            | 9                    | 4                  | 1                  | 0                  | 0                  | 1                  | 15                  |
| 5250-5499            | 2                    | 0                  | 0                  | 0                  | 0                  | 2                  | 4                   |
| 5000-5249            | 5                    | 0                  | 1                  | 0                  | 0                  | 0                  | 6                   |
| 4750-4999            | 2                    | 0                  | 0                  | 0                  | 0                  | 1                  | 3                   |
| <4750                | 1                    | 0                  | 0                  | 0                  | 0                  | 1                  | 2                   |
| Total of All Flights | 80                   | 11                 | 16                 | 9                  | 58                 | 88                 | 262                 |
|                      |                      | 1 to 5             | Total              | (                  | ;                  |                    |                     |

Aug 2019 6 flights

|                      |                      |                    | Time of I          | Vight              |                    |                    |                     |
|----------------------|----------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------------|
| Altitude MSL (ft)    | 12:00 to<br>12:59 AM | 1:00 to<br>1:59 AM | 2:00 to<br>2:59 AM | 3:00 to<br>3:59 AM | 4:00 to<br>4:59 AM | 5:00 to<br>5:59 AM | Totals by<br>Height |
| >6000                | 27                   | 4                  | 1                  | 0                  | 4                  | 25                 | 61                  |
| 5750-6000            | 10                   | 0                  | 0                  | 1                  | 3                  | 11                 | 25                  |
| 5500-5749            | 6                    | 0                  | 0                  | 0                  | 1                  | 1                  | 8                   |
| 5250-5499            | 5                    | 0                  | 0                  | 0                  | 0                  | 0                  | 5                   |
| 5000-5249            | 3                    | 0                  | 0                  | 0                  | 0                  | 1                  | 4                   |
| 4750-4999            | 1                    | 0                  | 0                  | 0                  | 0                  | 0                  | 1                   |
| <4750                | 1                    | 0                  | 0                  | 0                  | 0                  | 0                  | 1                   |
| Total of All Flights | 53                   | 4                  | 1                  | 1                  | 8                  | 38                 | 105                 |
|                      |                      | 1 to 5             | Total              | 1                  |                    |                    |                     |

Sep 2019 1 flight

|                      |                      |                    | Time of I          | Vight              |                    |                    |                     |  |
|----------------------|----------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------------|--|
| Altitude MSL (ft)    | 12:00 to<br>12:59 AM | 1:00 to<br>1:59 AM | 2:00 to<br>2:59 AM | 3:00 to<br>3:59 AM | 4:00 to<br>4:59 AM | 5:00 to<br>5:59 AM | Totals by<br>Height |  |
| >6000                | 21                   | 2                  | 2                  | 3                  | 3                  | 24                 | 55                  |  |
| 5750-6000            | 6                    | 0                  | 0                  | 1                  | 0                  | 6                  | 13                  |  |
| 5500-5749            | 6                    | 0                  | 0                  | 0                  | 0                  | 3                  | 9                   |  |
| 5250-5499            | 1                    | 0                  | 0                  | 0                  | 1                  | 0                  | 2                   |  |
| 5000-5249            | 1                    | 0                  | 0                  | 0                  | 0                  | 1                  | 2                   |  |
| 4750-4999            | 0                    | 0                  | 0                  | 0                  | 0                  | 3                  | 3                   |  |
| <4750                | 3                    | 0                  | 0                  | 0                  | 0                  | 0                  | 3                   |  |
| Total of All Flights | 38                   | 2                  | 2                  | 4                  | 4                  | 37                 | 87                  |  |
|                      |                      | 1 to 5 Total       |                    |                    | 1                  |                    |                     |  |

Oct 2019
1 flight

Time of Night Totals by 12:00 to 1:00 to 2:00 to 3:00 to 4:00 to 5:00 to Altitude MSL (ft) 12:59 AM 1:59 AM 2:59 AM 3:59 AM 4:59 AM 5:59 AM Height >6000 71 14 12 37 5750-6000 1 0 33 6 1 21 5500-5749 4 0 1 0 4 9 5250-5499 7 2 0 0 0 3 5000-5249 1 0 0 2 4750-4999 2 0 0 0 3 <4750 0 2 1 0 0 0 Total of All Flights 30 2 19 68 128 1 to 5 Total

Nov 2019 4 flights

|                      | Time of Night        |                    |                    |                    |                    |                    |                     |  |  |
|----------------------|----------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------------|--|--|
| Altitude MSL (ft)    | 12:00 to<br>12:59 AM | 1:00 to<br>1:59 AM | 2:00 to<br>2:59 AM | 3:00 to<br>3:59 AM | 4:00 to<br>4:59 AM | 5:00 to<br>5:59 AM | Totals by<br>Height |  |  |
| >6000                | 6                    | 0                  | 0                  | 0                  | 0                  | 0                  | 6                   |  |  |
| 5750-6000            | 6                    | 1                  | 0                  | 0                  | 0                  | 0                  | 7                   |  |  |
| 5500-5749            | 3                    | 0                  | 0                  | 0                  | 0                  | 0                  | 3                   |  |  |
| 5250-5499            | 0                    | 0                  | 0                  | 0                  | 0                  | 0                  | 0                   |  |  |
| 5000-5249            | 2                    | 0                  | 0                  | 0                  | 0                  | 0                  | 2                   |  |  |
| 4750-4999            | 1                    | 0                  | 0                  | 0                  | 1                  | 0                  | 2                   |  |  |
| <4750                | 0                    | 0                  | 0                  | 0                  | 0                  | 0                  | 0                   |  |  |
| Total of All Flights | 18                   | 1                  | 0                  | 0                  | 1                  | 0                  | 20                  |  |  |
|                      |                      | 1 to 5             | Total              |                    | 1                  |                    |                     |  |  |

Dec 2019 1 flight

|                      | Time of Night        |                    |                    |                    |                    |                    |                     |  |
|----------------------|----------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------------|--|
| Altitude MSL (ft)    | 12:00 to<br>12:59 AM | 1:00 to<br>1:59 AM | 2:00 to<br>2:59 AM | 3:00 to<br>3:59 AM | 4:00 to<br>4:59 AM | 5:00 to<br>5:59 AM | Totals by<br>Height |  |
| >6000                | 11                   | 2                  | 11                 | 10                 | 25                 | 54                 | 113                 |  |
| 5750-6000            | 7                    | 0                  | 2                  | 3                  | 5                  | 32                 | 49                  |  |
| 5500-5749            | 4                    | 3                  | 1                  | 1                  | 1                  | 8                  | 18                  |  |
| 5250-5499            | 1                    | 0                  | 0                  | 1                  | 2                  | 0                  | 4                   |  |
| 5000-5249            | 1                    | 0                  | 0                  | 0                  | 1                  | 4                  | 6                   |  |
| 4750-4999            | 0                    | 1                  | 1                  | 0                  | 0                  | 2                  | 4                   |  |
| <4750                | 3                    | 1                  | 0                  | 0                  | 0                  | 1                  | 5                   |  |
| Total of All Flights | 27                   | 7                  | 15                 | 15                 | 34                 | 101                | 199                 |  |
| 2.53x - 3.0          |                      | 1 to 5             | Total              | 1                  | 3                  |                    |                     |  |

Jan 2020 13 flights

|                      |                      |                    | Time of            | Night              |                    |                    |                     |
|----------------------|----------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------------|
| Altitude MSL (ft)    | 12:00 to<br>12:59 AM | 1:00 to<br>1:59 AM | 2:00 to<br>2:59 AM | 3:00 to<br>3:59 AM | 4:00 to<br>4:59 AM | 5:00 to<br>5:59 AM | Totals by<br>Height |
| >6000                | 8                    | 1                  | 0                  | 2                  | 6                  | 33                 | 50                  |
| 5750-6000            | 6                    | 0                  | 3                  | 1                  | 4                  | 7                  | 21                  |
| 5500-5749            | 0                    | 0                  | 0                  | 0                  | 1                  | 5                  | 6                   |
| 5250-5499            | 1                    | 0                  | 1                  | 0                  | 2                  | 1                  | 5                   |
| 5000-5249            | 1                    | 0                  | 0                  | 0                  | 0                  | 2                  | 3                   |
| 4750-4999            | 1                    | 0                  | 0                  | 0                  | 1                  | 2                  | 4                   |
| <4750                | 0                    | 0                  | 0                  | 1                  | 0                  | 2                  | 3                   |
| Total of All Flights | 17                   | 1                  | 4                  | 4                  | 14                 | 52                 | 92                  |
|                      |                      | 1 to 5             | Total              | (                  | 5                  |                    |                     |

Feb 2020 6 flights

|                      |                      | Time of Night      |                    |                    |                    |                    |                     |  |  |
|----------------------|----------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------------|--|--|
| Altitude MSL (ft)    | 12:00 to<br>12:59 AM | 1:00 to<br>1:59 AM | 2:00 to<br>2:59 AM | 3:00 to<br>3:59 AM | 4:00 to<br>4:59 AM | 5:00 to<br>5:59 AM | Totals by<br>Height |  |  |
| >6000                | 9                    | 1                  | 0                  | 2                  | 2                  | 12                 | 26                  |  |  |
| 5750-6000            | 7                    | 1                  | 0                  | 0                  | 1                  | 5                  | 14                  |  |  |
| 5500-5749            | 0                    | 0                  | 2                  | 0                  | 1                  | 2                  | 5                   |  |  |
| 5250-5499            | 0                    | 0                  | 0                  | 0                  | 0                  | 2                  | 2                   |  |  |
| 5000-5249            | 1                    | 0                  | 0                  | 1                  | 0                  | 0                  | 2                   |  |  |
| 4750-4999            | 1                    | 0                  | 1                  | 0                  | 0                  | 0                  | 2                   |  |  |
| <4750                | 1                    | 0                  | 0                  | 0                  | 0                  | 2                  | 3                   |  |  |
| Total of All Flights | 19                   | 2                  | 3                  | 3                  | 4                  | 23                 | 54                  |  |  |
|                      | •                    | 1 to 5             | Total              |                    | 5                  |                    |                     |  |  |

Mar 2020 5 flights

|                      |                      | Time of Night      |                    |                    |                    |                    |                     |  |  |
|----------------------|----------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------------|--|--|
| Altitude MSL (ft)    | 12:00 to 12:59<br>AM | 1:00 to<br>1:59 AM | 2:00 to<br>2:59 AM | 3:00 to<br>3:59 AM | 4:00 to<br>4:59 AM | 5:00 to<br>5:59 AM | Totals by<br>Height |  |  |
| >6000                | 3                    | 0                  | 1                  | 3                  | 6                  | 1                  | 14                  |  |  |
| 5750-6000            | 0                    | 1                  | 0                  | 0                  | 1                  | 0                  | 2                   |  |  |
| 5500-5749            | 2                    | 0                  | 0                  | 0                  | 2                  | 0                  | 4                   |  |  |
| 5250-5499            | 0                    | 0                  | 1                  | 0                  | 0                  | 0                  | 1                   |  |  |
| 5000-5249            | 0                    | 1                  | 0                  | 0                  | 0                  | 0                  | 1                   |  |  |
| 4750-4999            | 0                    | 0                  | 0                  | 0                  | 0                  | 0                  | 0                   |  |  |
| <4750                | 0                    | 0                  | 0                  | 0                  | 0                  | 0                  | 0                   |  |  |
| Total of All Flights | 5                    | 2                  | 2                  | 3                  | 9                  | 1                  | 22                  |  |  |
|                      |                      | 1 to 5 Total 4     |                    |                    |                    |                    |                     |  |  |

Apr 2020 4 flights

|                      |                      |                    | Time of N          | light              |                    |                    |                     |
|----------------------|----------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------------|
| Altitude MSL (ft)    | 12:00 to 12:59<br>AM | 1:00 to<br>1:59 AM | 2:00 to<br>2:59 AM | 3:00 to<br>3:59 AM | 4:00 to<br>4:59 AM | 5:00 to<br>5:59 AM | Totals by<br>Height |
| >6000                | 3                    | 9                  | 5                  | 6                  | 6                  | 4                  | 33                  |
| 5750-6000            | 0                    | 5                  | 1                  | 1                  | 1                  | 0                  | 8                   |
| 5500-5749            | 0                    | 0                  | 0                  | 0                  | 2                  | 3                  | 5                   |
| 5250-5499            | 0                    | 1                  | 1                  | 1                  | 0                  | 0                  | 3                   |
| 5000-5249            | 0                    | 1                  | 0                  | 0                  | 0                  | 0                  | 1                   |
| 4750-4999            | 0                    | 0                  | 0                  | 0                  | 0                  | 0                  | 0                   |
| <4750                | 0                    | 1                  | 0                  | 0                  | 0                  | 0                  | 1                   |
| Total of All Flights | 3                    | 17                 | 7                  | 8                  | 9                  | 7                  | 51                  |
|                      |                      | 1 to 5             | Total              |                    | 7                  |                    |                     |

May 2020 7 flights

|                      |                      | Time of Night      |                    |                    |                    |                    |                     |  |  |
|----------------------|----------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------------|--|--|
| Altitude MSL (ft)    | 12:00 to 12:59<br>AM | 1:00 to<br>1:59 AM | 2:00 to<br>2:59 AM | 3:00 to<br>3:59 AM | 4:00 to<br>4:59 AM | 5:00 to<br>5:59 AM | Totals by<br>Height |  |  |
| >6000                | 1                    | 0                  | 0                  | 0                  | 0                  | 3                  | 4                   |  |  |
| 5750-6000            | 2                    | 0                  | 0                  | 0                  | 0                  | 0                  | 2                   |  |  |
| 5500-5749            | 2                    | 0                  | 0                  | 0                  | 0                  | 0                  | 2                   |  |  |
| 5250-5499            | 0                    | 0                  | 0                  | 0                  | 0                  | 1                  | 1                   |  |  |
| 5000-5249            | 0                    | 0                  | 0                  | 0                  | 0                  | 0                  | 0                   |  |  |
| 4750-4999            | 0                    | 0                  | 0                  | 0                  | 0                  | 0                  | 0                   |  |  |
| <4750                | 0                    | 0                  | 0                  | 0                  | 0                  | 0                  | 0                   |  |  |
| Total of All Flights | 5                    | 0                  | 0                  | 0                  | 0                  | 4                  | 9                   |  |  |
|                      |                      | 1 to 5             | Total              | (                  | Ò                  |                    |                     |  |  |

Jun 2020 0 flights

|                      |                      | Time of Night      |                    |                    |                    |                    |                     |  |  |  |
|----------------------|----------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------------|--|--|--|
| Altitude MSL (ft)    | 12:00 to 12:59<br>AM | 1:00 to<br>1:59 AM | 2:00 to<br>2:59 AM | 3:00 to<br>3:59 AM | 4:00 to<br>4:59 AM | 5:00 to<br>5:59 AM | Totals by<br>Height |  |  |  |
| >6000                | 7                    | 3                  | 3                  | 6                  | 4                  | 14                 | 37                  |  |  |  |
| 5750-6000            | 2                    | 2                  | 2                  | 1                  | 4                  | 2                  | 13                  |  |  |  |
| 5500-5749            | 2                    | 0                  | 1                  | 2                  | 1                  | 0                  | 6                   |  |  |  |
| 5250-5499            | 0                    | 0                  | 0                  | 0                  | 0                  | 0                  | 0                   |  |  |  |
| 5000-5249            | 0                    | 0                  | 0                  | 2                  | 1                  | 0                  | 3                   |  |  |  |
| 4750-4999            | 0                    | 0                  | 1                  | 1                  | 0                  | 1                  | 3                   |  |  |  |
| <4750                | 0                    | 0                  | 0                  | 0                  | 0                  | 0                  | 0                   |  |  |  |
| Total of All Flights | 11                   | 5                  | 7                  | 12                 | 10                 | 17                 | 62                  |  |  |  |
|                      | •                    | 1 to 5             | Total              | 9                  | 9                  |                    |                     |  |  |  |

Jul 2020 9 flights

Prepared by: LAWA Noise Management Data Source: LAX ANOMS

|                      |                      |                    | Time of N          | light              |                    |                    |                     |
|----------------------|----------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------------|
| Altitude MSL (ft)    | 12:00 to 12:59<br>AM | 1:00 to<br>1:59 AM | 2:00 to<br>2:59 AM | 3:00 to<br>3:59 AM | 4:00 to<br>4:59 AM | 5:00 to<br>5:59 AM | Totals by<br>Height |
| >6000                | 2                    | 0                  | 4                  | 6                  | 5                  | 11                 | 28                  |
| 5750-6000            | 1                    | 0                  | 0                  | 0                  | 5                  | 3                  | 9                   |
| 5500-5749            | 2                    | 1                  | 0                  | 0                  | 0                  | 0                  | 3                   |
| 5250-5499            | 0                    | 1                  | 0                  | 0                  | 0                  | 2                  | 3                   |
| 5000-5249            | 0                    | 0                  | 0                  | 0                  | 0                  | 0                  | 0                   |
| 4750-4999            | 0                    | 0                  | 0                  | 0                  | 0                  | 0                  | 0                   |
| <4750                | 0                    | 0                  | 0                  | 0                  | 0                  | 0                  | 0                   |
| Total of All Flights | 5                    | 2                  | 4                  | 6                  | 10                 | 16                 | 43                  |
|                      |                      | 1 to 5             | Total              |                    | 2                  |                    |                     |

Aug 2020 2 flights

|                      |                      |                    | Time of N          | light              |                    |                    |                     |
|----------------------|----------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------------|
| Altitude MSL (ft)    | 12:00 to 12:59<br>AM | 1:00 to<br>1:59 AM | 2:00 to<br>2:59 AM | 3:00 to<br>3:59 AM | 4:00 to<br>4:59 AM | 5:00 to<br>5:59 AM | Totals by<br>Height |
| >6000                | 2                    | 2                  | 7                  | 8                  | 10                 | 21                 | 50                  |
| 5750-6000            | 2                    | 1                  | 4                  | 0                  | 2                  | 5                  | 14                  |
| 5500-5749            | 1                    | 1                  | 0                  | 0                  | 0                  | 0                  | 2                   |
| 5250-5499            | 0                    | 0                  | 0                  | 0                  | 0                  | 0                  | 0                   |
| 5000-5249            | 1                    | 0                  | 0                  | 0                  | 0                  | 1                  | 2                   |
| 4750-4999            | 0                    | 0                  | 0                  | 0                  | 0                  | 0                  | 0                   |
| <4750                | 0                    | 0                  | 0                  | 0                  | 0                  | 0                  | 0                   |
| Total of All Flights | 6                    | 4                  | 11                 | 8                  | 12                 | 27                 | 68                  |
|                      | •                    | 1 to 5             | Total              |                    | 1                  |                    |                     |

Sep 2020 2 flights

|                      |                      |                    | Time of N          | light              |                    |                    |                     |
|----------------------|----------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------------|
| Altitude MSL (ft)    | 12:00 to 12:59<br>AM | 1:00 to<br>1:59 AM | 2:00 to<br>2:59 AM | 3:00 to<br>3:59 AM | 4:00 to<br>4:59 AM | 5:00 to<br>5:59 AM | Totals by<br>Height |
| >6000                | 7                    | 3                  | 2                  | 7                  | 9                  | 37                 | 65                  |
| 5750-6000            | 1                    | 3                  | 0                  | 5                  | 2                  | 7                  | 18                  |
| 5500-5749            | 0                    | 1                  | 2                  | 0                  | 0                  | 2                  | 5                   |
| 5250-5499            | 0                    | 0                  | 0                  | 1                  | 0                  | 2                  | 3                   |
| 5000-5249            | 0                    | 0                  | 0                  | 0                  | 0                  | 3                  | 3                   |
| 4750-4999            | 0                    | 0                  | 1                  | 1                  | 0                  | 1                  | 3                   |
| <4750                | 0                    | 0                  | 0                  | 0                  | 0                  | 2                  | 2                   |
| Total of All Flights | 8                    | 7                  | 5                  | 14                 | 11                 | 54                 | 99                  |
|                      |                      | 1 to 5             | Total              |                    | 6                  |                    |                     |

Oct 2020 6 flights

|                      |                      |                    | Time of N          | light              |                    |                    |                     |
|----------------------|----------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------------|
| Altitude MSL (ft)    | 12:00 to 12:59<br>AM | 1:00 to<br>1:59 AM | 2:00 to<br>2:59 AM | 3:00 to<br>3:59 AM | 4:00 to<br>4:59 AM | 5:00 to<br>5:59 AM | Totals by<br>Height |
| >6000                | 9                    | 6                  | 8                  | 2                  | 14                 | 26                 | 65                  |
| 5750-6000            | 0                    | 0                  | 2                  | 0                  | 7                  | 11                 | 20                  |
| 5500-5749            | 2                    | 1                  | 3                  | 1                  | 3                  | 3                  | 13                  |
| 5250-5499            | 2                    | 0                  | 0                  | 0                  | 1                  | 3                  | 6                   |
| 5000-5249            | 0                    | 0                  | 0                  | 1                  | 0                  | 0                  | 1                   |
| 4750-4999            | 0                    | 0                  | 0                  | 0                  | 0                  | 1                  | 1                   |
| <4750                | 0                    | 0                  | 0                  | 0                  | 0                  | 0                  | 0                   |
| Total of All Flights | 13                   | 7                  | 13                 | 4                  | 25                 | 44                 | 106                 |
|                      |                      | 1 to 5             | Total              | 1                  | 0                  |                    |                     |

Nov 2020 10 flights

Prepared by: LAWA Noise Management Data Source: LAX ANOMS

|                      |                      | Time of Night      |                    |                    |                    |                    |                     |  |  |  |
|----------------------|----------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------------|--|--|--|
| Altitude MSL (ft)    | 12:00 to 12:59<br>AM | 1:00 to<br>1:59 AM | 2:00 to<br>2:59 AM | 3:00 to<br>3:59 AM | 4:00 to<br>4:59 AM | 5:00 to<br>5:59 AM | Totals by<br>Height |  |  |  |
| >6000                | 1                    | 7                  | 2                  | 4                  | 9                  | 12                 | 35                  |  |  |  |
| 5750-6000            | 1                    | 1                  | 0                  | 0                  | 1                  | 5                  | 8                   |  |  |  |
| 5500-5749            | 4                    | 1                  | 0                  | 0                  | 0                  | 1                  | 6                   |  |  |  |
| 5250-5499            | 0                    | 0                  | 0                  | 0                  | 0                  | 4                  | 4                   |  |  |  |
| 5000-5249            | 0                    | 0                  | 0                  | 0                  | 0                  | 0                  | 0                   |  |  |  |
| 4750-4999            | 0                    | 0                  | 0                  | 0                  | 0                  | 0                  | 0                   |  |  |  |
| <4750                | 0                    | 0                  | 0                  | 0                  | 0                  | 0                  | 0                   |  |  |  |
| Total of All Flights | 6                    | 9                  | 2                  | 4                  | 10                 | 22                 | 53                  |  |  |  |
|                      |                      | 1 to 5             | Total              |                    | Ĺ                  |                    |                     |  |  |  |

Dec 2020 1 flight

|                      |                      |                    | Time of N          | light              |                    |                    |                     |  |  |
|----------------------|----------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------------|--|--|
| Altitude MSL (ft)    | 12:00 to 12:59<br>AM | 1:00 to<br>1:59 AM | 2:00 to<br>2:59 AM | 3:00 to<br>3:59 AM | 4:00 to<br>4:59 AM | 5:00 to<br>5:59 AM | Totals by<br>Height |  |  |
| >6000                | 1                    | 1                  | 0                  | 1                  | 7                  | 13                 | 23                  |  |  |
| 5750-6000            | 2                    | 0                  | 0                  | 0                  | 3                  | 5                  | 10                  |  |  |
| 5500-5749            | 1                    | 0                  | 0                  | 0                  | 0                  | 0                  | 1                   |  |  |
| 5250-5499            | 1                    | 0                  | 0                  | 0                  | 1                  | 1                  | 3                   |  |  |
| 5000-5249            | 1                    | 0                  | 0                  | 0                  | 0                  | 0                  | 1                   |  |  |
| 4750-4999            | 1                    | 0                  | 0                  | 0                  | 0                  | 0                  | 1                   |  |  |
| <4750                | 0                    | 0                  | 0                  | 0                  | 0                  | 0                  | 0                   |  |  |
| Total of All Flights | 7                    | 1                  | 0                  | 1                  | 11                 | 19                 | 39                  |  |  |
| ,                    | •                    | 1 to 5 Total 1     |                    |                    |                    |                    |                     |  |  |

Jan 2021 1 flight

Prepared by: LAWA Noise Management Data Source: LAX ANOMS

|                      |                      | Time of Night      |                    |                    |                    |                    |                     |  |  |  |
|----------------------|----------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------------|--|--|--|
| Altitude MSL (ft)    | 12:00 to 12:59<br>AM | 1:00 to<br>1:59 AM | 2:00 to<br>2:59 AM | 3:00 to<br>3:59 AM | 4:00 to<br>4:59 AM | 5:00 to<br>5:59 AM | Totals by<br>Height |  |  |  |
| >6000                | 2                    | 1                  | 2                  | 1                  | 2                  | 20                 | 28                  |  |  |  |
| 5750-6000            | 1                    | 1                  | 0                  | 1                  | 0                  | 6                  | 9                   |  |  |  |
| 5500-5749            | 2                    | 0                  | 0                  | 0                  | 5                  | 3                  | 10                  |  |  |  |
| 5250-5499            | 1                    | 0                  | 3                  | 1                  | 2                  | 3                  | 10                  |  |  |  |
| 5000-5249            | 0                    | 0                  | 1                  | 1                  | 1                  | 2                  | 5                   |  |  |  |
| 4750-4999            | 0                    | 0                  | 0                  | 0                  | 0                  | 0                  | 0                   |  |  |  |
| <4750                | 0                    | 0                  | 0                  | 0                  | 0                  | 2                  | 2                   |  |  |  |
| Total of All Flights | 6                    | 2                  | 6                  | 4                  | 10                 | 36                 | 64                  |  |  |  |
| ,                    |                      | 1 to 5             | Total              | 1                  | 4                  |                    |                     |  |  |  |

Feb 2021 14 flights

|                      |                      | Time of Night      |                    |                    |                    |                    |                     |  |  |  |
|----------------------|----------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------------|--|--|--|
| Altitude MSL (ft)    | 12:00 to 12:59<br>AM | 1:00 to<br>1:59 AM | 2:00 to<br>2:59 AM | 3:00 to<br>3:59 AM | 4:00 to<br>4:59 AM | 5:00 to<br>5:59 AM | Totals by<br>Height |  |  |  |
| >6000                | 4                    | 2                  | 6                  | 2                  | 7                  | 22                 | 43                  |  |  |  |
| 5750-6000            | 3                    | 0                  | 0                  | 1                  | 4                  | 7                  | 15                  |  |  |  |
| 5500-5749            | 1                    | 1                  | 0                  | 0                  | 0                  | 1                  | 3                   |  |  |  |
| 5250-5499            | 1                    | 0                  | 0                  | 0                  | 0                  | 1                  | 2                   |  |  |  |
| 5000-5249            | 0                    | 0                  | 0                  | 0                  | 0                  | 1                  | 1                   |  |  |  |
| 4750-4999            | 0                    | 0                  | 0                  | 0                  | 0                  | 0                  | 0                   |  |  |  |
| <4750                | 0                    | 0                  | 1                  | 0                  | 0                  | 0                  | 1                   |  |  |  |
| Total of All Flights | 9                    | 3                  | 7                  | 3                  | 11                 | 32                 | 65                  |  |  |  |
|                      |                      | 1 to 5             | Total              | 2                  |                    |                    |                     |  |  |  |

Mar 2021 2 flights

|                      |                      |                    | Time of N          | light              |                    |                    |                     |
|----------------------|----------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------------|
| Altitude MSL (ft)    | 12:00 to 12:59<br>AM | 1:00 to<br>1:59 AM | 2:00 to<br>2:59 AM | 3:00 to<br>3:59 AM | 4:00 to<br>4:59 AM | 5:00 to<br>5:59 AM | Totals by<br>Height |
| >6000                | 0                    | 5                  | 10                 | 3                  | 14                 | 25                 | 57                  |
| 5750-6000            | 1                    | 4                  | 2                  | 2                  | 1                  | 7                  | 17                  |
| 5500-5749            | 0                    | 0                  | 0                  | 1                  | 0                  | 1                  | 2                   |
| 5250-5499            | 0                    | 0                  | 0                  | 0                  | 0                  | 1                  | 1                   |
| 5000-5249            | 0                    | 0                  | 0                  | 0                  | 0                  | 0                  | 0                   |
| 4750-4999            | 0                    | 0                  | 0                  | 0                  | 0                  | 0                  | 0                   |
| <4750                | 0                    | 0                  | 1                  | 0                  | 0                  | 0                  | 1                   |
| Total of All Flights | 1                    | 9                  | 13                 | 6                  | 15                 | 34                 | 78                  |
|                      |                      | 1 to 5             | Total              | - 2                | 2                  |                    |                     |

Apr 2021 2 flights

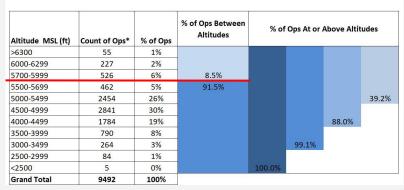
|                      |                      |                    | Time of N          | light              |                    |                    |                     |  |  |
|----------------------|----------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------------|--|--|
| Altitude MSL (ft)    | 12:00 to 12:59<br>AM | 1:00 to<br>1:59 AM | 2:00 to<br>2:59 AM | 3:00 to<br>3:59 AM | 4:00 to<br>4:59 AM | 5:00 to<br>5:59 AM | Totals by<br>Height |  |  |
| >6000                | 5                    | 1                  | 0                  | 1                  | 0                  | 3                  | 10                  |  |  |
| 5750-6000            | 2                    | 1                  | 0                  | 0                  | 0                  | 1                  | 4                   |  |  |
| 5500-5749            | 2                    | 1                  | 0                  | 0                  | 0                  | 0                  | 3                   |  |  |
| 5250-5499            | 0                    | 0                  | 0                  | 0                  | 0                  | 0                  | 0                   |  |  |
| 5000-5249            | 2                    | 0                  | 0                  | 0                  | 0                  | 0                  | 2                   |  |  |
| 4750-4999            | 1                    | 0                  | 0                  | 0                  | 0                  | 0                  | 1                   |  |  |
| <4750                | 1                    | 0                  | 0                  | 0                  | 0                  | 0                  | 1                   |  |  |
| Total of All Flights | 13                   | 3                  | 0                  | 1                  | 0                  | 4                  | 21                  |  |  |
|                      | •                    | 1 to 5 Total 1     |                    |                    |                    |                    |                     |  |  |

May 2021 1 flight

|                      |                      | Time of Night      |                    |                    |                    |                    |                     |  |  |
|----------------------|----------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------------|--|--|
| Altitude MSL (ft)    | 12:00 to 12:59<br>AM | 1:00 to<br>1:59 AM | 2:00 to<br>2:59 AM | 3:00 to<br>3:59 AM | 4:00 to<br>4:59 AM | 5:00 to<br>5:59 AM | Totals by<br>Height |  |  |
| >6000                | 10                   | 3                  | 10                 | 7                  | 8                  | 16                 | 54                  |  |  |
| 5750-6000            | 4                    | 0                  | 0                  | 0                  | 4                  | 7                  | 15                  |  |  |
| 5500-5749            | 1                    | 2                  | 2                  | 0                  | 1                  | 2                  | 8                   |  |  |
| 5250-5499            | 2                    | 0                  | 0                  | 0                  | 0                  | 2                  | 4                   |  |  |
| 5000-5249            | 1                    | 0                  | 1                  | 0                  | 0                  | 0                  | 2                   |  |  |
| 4750-4999            | 0                    | 0                  | 0                  | 1                  | 0                  | 0                  | 1                   |  |  |
| <4750                | 0                    | 0                  | 0                  | 0                  | 0                  | 1                  | 1                   |  |  |
| Total of All Flights | 18                   | 5                  | 13                 | 8                  | 13                 | 28                 | 85                  |  |  |
|                      | •                    | 1 to 5             | Total              |                    | 7                  |                    |                     |  |  |

Jun 2021 7 flights

### ANOMS Gate Penetration - GADDO September 1-30, 2018



### ANOMS Gate Penetration - GADDO November 1-30, 2018

| Altitude MSL (ft) | Count of Ops* | % of Ops | % of Ops Between<br>Altitudes | % of   | Ops At or Above Altitudes |       |       |  |
|-------------------|---------------|----------|-------------------------------|--------|---------------------------|-------|-------|--|
| >6300             | 67            | 0.8%     |                               |        |                           |       |       |  |
| 6000-6299         | 184           | 2.1%     |                               |        |                           |       |       |  |
| 5700-5999         | 459           | 5.2%     | 8.0%                          |        |                           |       |       |  |
| 5500-5699         | 372           | 4.2%     | 92.0%                         |        |                           |       |       |  |
| 5000-5499         | 2053          | 23.1%    |                               |        |                           |       | 35.3% |  |
| 4500-4999         | 2581          | 29.1%    |                               |        |                           |       |       |  |
| 4000-4499         | 1744          | 19.7%    |                               |        |                           | 84.1% |       |  |
| 3500-3999         | 907           | 10.2%    |                               |        |                           |       |       |  |
| 3000-3499         | 359           | 4.0%     |                               |        | 98.4%                     |       |       |  |
| 2500-2999         | 142           | 1.6%     |                               |        |                           |       |       |  |
| <2500             | 4             | 0.0%     |                               | 100.0% |                           |       |       |  |
| Grand Total       | 8872          | 100%     |                               |        |                           |       |       |  |

### ANOMS Gate Penetration - GADDO October 1-31, 2018

| Altitude MSL (ft) | Count of Ops* | % of Ops | % of Ops Between<br>Altitudes | % of   | 6 of Ops At or Above Altitudes |       |       |  |
|-------------------|---------------|----------|-------------------------------|--------|--------------------------------|-------|-------|--|
| >6300             | 47            | 0.5%     |                               |        |                                |       |       |  |
| 6000-6299         | 151           | 1.6%     |                               |        |                                |       |       |  |
| 5700-5999         | 448           | 4.9%     | 7.0%                          |        |                                |       |       |  |
| 5500-5699         | 389           | 4.2%     | 93.0%                         |        |                                |       |       |  |
| 5000-5499         | 2166          | 23.5%    |                               |        |                                |       | 34.8% |  |
| 4500-4999         | 2633          | 28.6%    |                               |        |                                |       |       |  |
| 4000-4499         | 1888          | 20.5%    |                               |        |                                | 83.9% |       |  |
| 3500-3999         | 948           | 10.3%    |                               |        |                                |       |       |  |
| 3000-3499         | 419           | 4.6%     |                               |        | 98.8%                          |       |       |  |
| 2500-2999         | 107           | 1.2%     |                               |        |                                |       |       |  |
| <2500             | 5             | 0.1%     |                               | 100.0% |                                |       |       |  |
| Grand Total       | 9201          | 100%     |                               |        |                                |       |       |  |

### ANOMS Gate Penetration - GADDO December 1-31, 2018

| Altitude MSL (ft) | Count of Ops* | % of Ops | Count of Ops* % of Ops |        | % of  | Ops At or | Above Altit | udes |
|-------------------|---------------|----------|------------------------|--------|-------|-----------|-------------|------|
| >6300             | 43            | 0.5%     |                        |        |       |           |             |      |
| 6000-6299         | 163           | 1.9%     |                        |        |       |           |             |      |
| 5700-5999         | 438           | 5.1%     | 7.6%                   |        |       |           |             |      |
| 5500-5699         | 415           | 4.9%     | 92.4%                  |        |       |           |             |      |
| 5000-5499         | 1937          | 22.8%    |                        |        |       |           | 35.2%       |      |
| 4500-4999         | 2380          | 28.0%    |                        |        |       |           |             |      |
| 4000-4499         | 1696          | 19.9%    |                        |        |       | 83.1%     |             |      |
| 3500-3999         | 907           | 10.7%    |                        |        |       |           |             |      |
| 3000-3499         | 408           | 4.8%     |                        |        | 98.5% |           |             |      |
| 2500-2999         | 121           | 1.4%     |                        |        |       |           |             |      |
| <2500             | 6             | 0.1%     |                        | 100.0% |       |           |             |      |
| Grand Total       | 8514          | 100%     |                        |        |       |           |             |      |

### ANOMS Gate Penetration - GADDO January 1-31, 2019

| Altitude MSL (ft) | Count of Ops* | % of Ops | % of Ops Between<br>Altitudes | % of   | % of Ops At or Above Alt |       |       |  |
|-------------------|---------------|----------|-------------------------------|--------|--------------------------|-------|-------|--|
| >6300             | 41            | 0.6%     |                               |        |                          |       |       |  |
| 6000-6299         | 120           | 1.6%     |                               |        |                          |       |       |  |
| 5700-5999         | 335           | 4.6%     | 6.8%                          |        |                          |       |       |  |
| 5500-5699         | 320           | 4.4%     | 93.2%                         |        |                          |       |       |  |
| 5000-5499         | 1572          | 21.6%    |                               |        |                          |       | 32.8% |  |
| 4500-4999         | 1992          | 27.4%    |                               |        |                          |       |       |  |
| 4000-4499         | 1577          | 21.7%    |                               |        |                          | 81.9% |       |  |
| 3500-3999         | 799           | 11.0%    |                               |        |                          |       |       |  |
| 3000-3499         | 375           | 5.2%     |                               |        | 98.0%                    |       |       |  |
| 2500-2999         | 138           | 1.9%     |                               |        |                          |       |       |  |
| <2500             | 5             | 0.1%     |                               | 100.0% |                          |       |       |  |
| Grand Total       | 7274          | 100%     |                               |        |                          |       |       |  |

### ANOMS Gate Penetration - GADDO March 1-31, 2019

| Altitude MSL (ft) | Count of Ops* | s* % of Ops | % of Ops Between Altitudes | % of Ops At or Above Altitudes |       |       |       |  |
|-------------------|---------------|-------------|----------------------------|--------------------------------|-------|-------|-------|--|
| >6300             | 52            | 0.6%        |                            |                                |       |       |       |  |
| 6000-6299         | 154           | 1.7%        |                            |                                |       |       |       |  |
| 5700-5999         | 397           | 4.5%        | 6.8%                       |                                |       |       |       |  |
| 5500-5699         | 413           | 4.6%        | 93.2%                      |                                |       |       |       |  |
| 5000-5499         | 2259          | 25.4%       |                            |                                |       |       | 36.8% |  |
| 4500-4999         | 2531          | 28.4%       |                            |                                |       |       |       |  |
| 4000-4499         | 1739          | 19.5%       |                            |                                |       | 84.7% |       |  |
| 3500-3999         | 873           | 9.8%        |                            |                                |       |       |       |  |
| 3000-3499         | 375           | 4.2%        |                            |                                | 98.7% |       |       |  |
| 2500-2999         | 107           | 1.2%        |                            |                                |       |       |       |  |
| <2500             | 7             | 0.1%        |                            | 100.0%                         |       |       |       |  |
| Grand Total       | 8907          | 100%        |                            |                                |       |       |       |  |

### ANOMS Gate Penetration - GADDO February 1-28, 2019

| Altitude MSL (ft) | Count of Ops* | % of Ops | % of Ops Between<br>Altitudes | % of   | Ops At or | Above Alti | tudes |
|-------------------|---------------|----------|-------------------------------|--------|-----------|------------|-------|
| >6300             | 66            | 0.9%     |                               |        |           |            |       |
| 6000-6299         | 156           | 2.0%     |                               |        |           |            |       |
| 5700-5999         | 437           | 5.7%     | 8.6%                          |        |           |            |       |
| 5500-5699         | 440           | 5.7%     | 91.4%                         |        |           |            |       |
| 5000-5499         | 1984          | 25.8%    |                               |        |           |            | 40.1% |
| 4500-4999         | 2145          | 27.9%    |                               |        |           |            |       |
| 4000-4499         | 1387          | 18.0%    |                               |        |           | 86.0%      |       |
| 3500-3999         | 676           | 8.8%     |                               |        |           |            |       |
| 3000-3499         | 314           | 4.1%     |                               |        | 98.8%     |            |       |
| 2500-2999         | 83            | 1.1%     |                               |        |           |            |       |
| <2500             | 7             | 0.1%     |                               | 100.0% |           |            |       |
| Grand Total       | 7695          | 100%     |                               |        |           |            |       |

#### ANOMS Gate Penetration - GADDO April 1-30, 2019

| Altitude MSL (ft) | Count of Ops* | % of Ops | % of Ops Between<br>Altitudes | 91     | % of Ops At or Above Altitudes |       |       |  |
|-------------------|---------------|----------|-------------------------------|--------|--------------------------------|-------|-------|--|
| >6300             | 50            | 0.6%     |                               |        |                                |       |       |  |
| 6000-6299         | 162           | 1.8%     |                               |        |                                |       |       |  |
| 5700-5999         | 490           | 5.4%     | 7.8%                          |        |                                |       |       |  |
| 5500-5699         | 435           | 4.8%     | 92.2%                         |        |                                |       |       |  |
| 5000-5499         | 2357          | 26.0%    |                               |        |                                |       | 38.6% |  |
| 4500-4999         | 2629          | 29.0%    |                               |        |                                |       |       |  |
| 4000-4499         | 1686          | 18.6%    |                               |        |                                | 86.2% |       |  |
| 3500-3999         | 778           | 8.6%     |                               |        |                                |       |       |  |
| 3000-3499         | 358           | 4.0%     |                               |        | 98.8%                          |       |       |  |
| 2500-2999         | 108           | 1.2%     |                               |        |                                |       |       |  |
| <2500             | 3             | 0.0%     |                               | 100.0% |                                |       |       |  |
| Grand Total       | 9056          | 100%     |                               | ·      | ·                              |       | ·     |  |

#### ANOMS Gate Penetration - GADDO May 1-31, 2019



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\*Data source: LAX ANOMS

#### ANOMS Gate Penetration - GADDO July 1-31, 2019

| Altitude MSL (ft) | Count of Ops* | % of Ops | % of Ops Between Altitudes |        | % of Ops At or Above Altitudes |       |       |  |  |  |
|-------------------|---------------|----------|----------------------------|--------|--------------------------------|-------|-------|--|--|--|
| >6300             | 43            | 0.4%     |                            |        |                                |       |       |  |  |  |
| 6000-6299         | 159           | 1.6%     |                            |        |                                |       |       |  |  |  |
| 5700-5999         | 536           | 5.4%     | 7.5%                       |        |                                |       |       |  |  |  |
| 5500-5699         | 511           | 5.2%     | 92.5%                      |        |                                |       |       |  |  |  |
| 5000-5499         | 2886          | 29.2%    |                            |        |                                |       | 41.8% |  |  |  |
| 4500-4999         | 3051          | 30.8%    |                            |        |                                |       |       |  |  |  |
| 4000-4499         | 1741          | 17.6%    |                            |        |                                | 90.3% |       |  |  |  |
| 3500-3999         | 678           | 6.9%     |                            |        |                                |       |       |  |  |  |
| 3000-3499         | 231           | 2.3%     |                            |        | 99.4%                          |       |       |  |  |  |
| 2500-2999         | 55            | 0.6%     |                            |        |                                |       |       |  |  |  |
| <2500             | 0             | 0.0%     |                            | 100.0% |                                |       |       |  |  |  |
| Grand Total       | 9891          | 100%     |                            |        |                                |       |       |  |  |  |

Prepared by: LAWA Noise Management

\*Data source: LAX ANOMS

ANOMS Gate Penetration - GADDO June 1-30, 2019

| Altitude MSL (ft) | Count of Ops* | % of Ops | % of Ops Between<br>Altitudes | % of   | tudes |       |       |
|-------------------|---------------|----------|-------------------------------|--------|-------|-------|-------|
| >6300             | 41            | 0.4%     |                               |        |       |       |       |
| 6000-6299         | 186           | 2.0%     |                               |        |       |       |       |
| 5700-5999         | 522           | 5.5%     | 7.9%                          |        |       |       |       |
| 5500-5699         | 457           | 4.8%     | 92.1%                         |        |       |       |       |
| 5000-5499         | 2734          | 29.0%    |                               |        |       |       | 41.8% |
| 4500-4999         | 2832          | 30.0%    |                               |        |       |       |       |
| 4000-4499         | 1651          | 17.5%    |                               |        |       | 89.3% |       |
| 3500-3999         | 698           | 7.4%     |                               |        |       |       |       |
| 3000-3499         | 238           | 2.5%     |                               |        | 99.2% |       |       |
| 2500-2999         | 73            | 0.8%     |                               |        |       |       |       |
| <2500             | 5             | 0.1%     |                               | 100.0% |       |       |       |
| Grand Total       | 9437          | 100%     |                               |        |       |       |       |

Prepared by: LAWA Noise Management \*Data source: LAX ANOMS

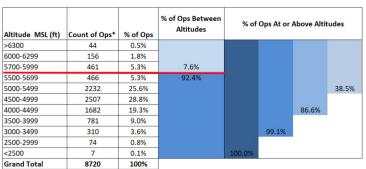
ANOMS Gate Penetration - GADDO August 1-31, 2019

| Altitude MSL (ft) | Count of Ops* | % of Ops | % of Ops Between<br>Altitudes | % of   | % of Ops At or Above Altitude |       |       |   |
|-------------------|---------------|----------|-------------------------------|--------|-------------------------------|-------|-------|---|
| >6300             | 37            | 0.4%     |                               |        |                               |       |       | 1 |
| 6000-6299         | 154           | 1.6%     |                               |        |                               |       |       | П |
| 5700-5999         | 471           | 4.8%     | 6.8%                          |        |                               |       |       |   |
| 5500-5699         | 472           | 4.8%     | 93.2%                         |        |                               |       |       |   |
| 5000-5499         | 2731          | 27.9%    |                               |        |                               |       | 39.5% | П |
| 4500-4999         | 3086          | 31.6%    |                               |        |                               |       |       |   |
| 4000-4499         | 1782          | 18.2%    |                               |        |                               | 89.4% |       |   |
| 3500-3999         | 737           | 7.5%     |                               |        |                               |       |       |   |
| 3000-3499         | 252           | 2.6%     |                               |        | 99.5%                         |       |       |   |
| 2500-2999         | 49            | 0.5%     |                               |        |                               |       |       |   |
| <2500             | 2             | 0.0%     |                               | 100.0% |                               |       |       |   |
| Grand Total       | 9773          | 100%     |                               |        |                               |       |       | - |

Prepared by: LAWA Noise Management

\*Data source: LAX ANOMS

#### ANOMS Gate Penetration - GADDO September 1-30, 2019



Prepared by: LAWA Noise Management

#### ANOMS Gate Penetration - GADDO November 1-30, 2019

| Altitude MSL (ft) | Count of Ops* | % of Ops | % of Ops Between<br>Altitudes | % of   | Ops At or | Above Alti | tudes |
|-------------------|---------------|----------|-------------------------------|--------|-----------|------------|-------|
| >6300             | 27            | 0.3%     |                               |        |           |            |       |
| 6000-6299         | 120           | 1.5%     |                               |        |           |            |       |
| 5700-5999         | 350           | 4.3%     | 6.1%                          |        |           |            |       |
| 5500-5699         | 308           | 3.8%     | 93.9%                         |        |           |            |       |
| 5000-5499         | 1759          | 21.7%    |                               |        |           |            | 31.7% |
| 4500-4999         | 2394          | 29.6%    |                               |        |           |            |       |
| 4000-4499         | 1721          | 21.3%    |                               |        |           | 82.5%      |       |
| 3500-3999         | 919           | 11.4%    |                               |        |           |            |       |
| 3000-3499         | 394           | 4.9%     |                               |        | 98.7%     |            |       |
| 2500-2999         | 98            | 1.2%     |                               |        |           |            |       |
| <2500             | 5             | 0.1%     |                               | 100.0% |           |            |       |
| Grand Total       | 8095          | 100%     |                               |        |           |            |       |

Prepared by: LAWA Noise Management

### ANOMS Gate Penetration - GADDO October 1-31, 2019

| Altitude MSL (ft) | Count of Ops* | % of Ops | % of Ops Between<br>Altitudes | % of   | % of Ops At or Above Altitudes |       |       |  |
|-------------------|---------------|----------|-------------------------------|--------|--------------------------------|-------|-------|--|
| >6300             | 49            | 0.5%     |                               |        |                                |       |       |  |
| 6000-6299         | 125           | 1.4%     |                               |        |                                |       |       |  |
| 5700-5999         | 438           | 4.9%     | 6.8%                          |        |                                |       |       |  |
| 5500-5699         | 370           | 4.1%     | 93.2%                         |        |                                |       |       |  |
| 5000-5499         | 2041          | 22.7%    |                               |        |                                |       | 33.6% |  |
| 4500-4999         | 2635          | 29.3%    |                               |        |                                |       |       |  |
| 4000-4499         | 1881          | 20.9%    |                               |        |                                | 83.8% |       |  |
| 3500-3999         | 917           | 10.2%    |                               |        |                                |       |       |  |
| 3000-3499         | 435           | 4.8%     |                               |        | 98.9%                          |       |       |  |
| 2500-2999         | 96            | 1.1%     |                               |        |                                |       |       |  |
| <2500             | 7             | 0.1%     |                               | 100.0% |                                |       |       |  |
| Grand Total       | 8994          | 100%     |                               |        |                                |       |       |  |

Prepared by: LAWA Noise Management

#### ANOMS Gate Penetration - GADDO December 1-31, 2019

| Altitude MSL (ft) | Count of Ops* | % of Ops | % of Ops Between<br>Altitudes | % of   | tudes |       |       |   |
|-------------------|---------------|----------|-------------------------------|--------|-------|-------|-------|---|
| >6300             | 37            | 0.5%     |                               |        |       |       |       |   |
| 6000-6299         | 90            | 1.2%     |                               |        |       |       |       | П |
| 5700-5999         | 326           | 4.3%     | 5.9%                          |        |       |       |       | Н |
| 5500-5699         | 323           | 4.2%     | 94.1%                         |        |       |       |       | П |
| 5000-5499         | 1878          | 24.6%    |                               |        |       |       | 34.8% | П |
| 4500-4999         | 2189          | 28.7%    |                               |        |       |       |       | П |
| 4000-4499         | 1513          | 19.8%    |                               |        |       | 83.2% |       | Ш |
| 3500-3999         | 768           | 10.1%    |                               |        |       |       |       | Ш |
| 3000-3499         | 383           | 5.0%     |                               |        | 98.3% |       |       | П |
| 2500-2999         | 118           | 1.5%     |                               |        |       |       |       |   |
| <2500             | 11            | 0.1%     |                               | 100.0% |       |       |       |   |
| Grand Total       | 7636          | 100%     |                               |        | 4     |       |       |   |

Prepared by: LAWA Noise Management

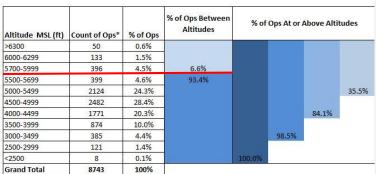
<sup>\*</sup>Data source: LAX ANOMS

<sup>\*</sup>Data source: LAX ANOMS

<sup>\*</sup>Data source: LAX ANOMS

<sup>\*</sup>Data source: LAX ANOMS

#### ANOMS Gate Penetration - GADDO January 1-31, 2020



Prepared by: LAWA Noise Management

#### ANOMS Gate Penetration - GADDO March 1-31, 2020

| Altitude MSL (ft) | Count of Ops* | % of Ops | % of Ops Between<br>Altitudes | % o    | f Ops At or Above Altitudes |       |       |  |  |
|-------------------|---------------|----------|-------------------------------|--------|-----------------------------|-------|-------|--|--|
| >6300             | 18            | 0.3%     |                               |        |                             |       |       |  |  |
| 6000-6299         | 86            | 1.3%     |                               |        |                             |       |       |  |  |
| 5700-5999         | 235           | 3.6%     | 5.2%                          |        |                             |       |       |  |  |
| 5500-5699         | 224           | 3.4%     | 94.8%                         |        |                             |       |       |  |  |
| 5000-5499         | 1261          | 19.2%    |                               |        |                             |       | 27.8% |  |  |
| 4500-4999         | 1699          | 25.9%    |                               |        |                             |       |       |  |  |
| 4000-4499         | 1439          | 21.9%    |                               |        |                             | 75.5% |       |  |  |
| 3500-3999         | 873           | 13.3%    |                               |        |                             |       |       |  |  |
| 3000-3499         | 534           | 8.1%     |                               |        | 96.9%                       |       |       |  |  |
| 2500-2999         | 180           | 2.7%     |                               |        |                             |       |       |  |  |
| <2500             | 22            | 0.3%     |                               | 100.0% |                             |       |       |  |  |
| Grand Total       | 6571          | 100%     |                               |        |                             |       |       |  |  |

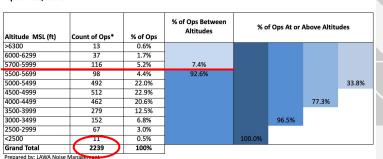
Prepared by: LAWA Noise Management

### ANOMS Gate Penetration - GADDO February 1-29, 2020

| Altitude MSL (ft) | Count of Ops* | % of Ops | % of Ops Between<br>Altitudes | % of Ops At or Above Altitudes |       |       |       |  |
|-------------------|---------------|----------|-------------------------------|--------------------------------|-------|-------|-------|--|
| >6300             | 35            | 0.5%     |                               |                                |       |       |       |  |
| 6000-6299         | 88            | 1.2%     |                               |                                |       |       |       |  |
| 5700-5999         | 287           | 3.8%     | 5.4%                          |                                |       |       |       |  |
| 5500-5699         | 276           | 3.6%     | 94.6%                         |                                |       |       |       |  |
| 5000-5499         | 1546          | 20.3%    |                               |                                |       |       | 29.4% |  |
| 4500-4999         | 2175          | 28.6%    |                               |                                |       |       |       |  |
| 4000-4499         | 1678          | 22.1%    |                               |                                |       | 80.0% |       |  |
| 3500-3999         | 936           | 12.3%    |                               |                                |       |       |       |  |
| 3000-3499         | 441           | 5.8%     |                               |                                | 98.1% |       |       |  |
| 2500-2999         | 132           | 1.7%     |                               |                                |       |       |       |  |
| <2500             | 10            | 0.1%     |                               | 100.0%                         |       |       |       |  |
| Grand Total       | 7604          | 100%     |                               |                                |       |       |       |  |

Prepared by: LAWA Noise Management
\*Data source: LAX ANOMS

#### ANOMS Gate Penetration - GADDO April 1-30, 2020

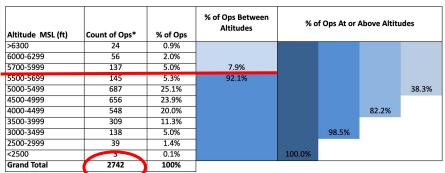


\*Data source: LAX ANOMS

<sup>\*</sup>Data source: LAX ANOMS

<sup>\*</sup>Data source: LAX ANOMS

### ANOMS Gate Penetration - GADDO May 1-31, 2020



Prepared by: LAWA Noise Management

### ANOMS Gate Penetration - GADDO July 1-31, 2020

| Altitude MSL (ft) | Count of Ops* | % of Ops | % of Ops Between<br>Altitudes | % o    | f Ops At or Above Altitudes |       |       |  |
|-------------------|---------------|----------|-------------------------------|--------|-----------------------------|-------|-------|--|
| >6300             | 31            | 0.8%     |                               |        |                             |       |       |  |
| 6000-6299         | 84            | 2.1%     |                               |        |                             |       |       |  |
| 5700-5999         | 226           | 5.7%     | 8.6%                          |        |                             |       |       |  |
| 5500-5699         | 199           | 5.0%     | 91.4%                         |        |                             |       |       |  |
| 5000-5499         | 1065          | 26.7%    |                               |        |                             |       | 40.3% |  |
| 4500-4999         | 1092          | 27.4%    |                               |        |                             |       |       |  |
| 4000-4499         | 733           | 18.4%    |                               |        |                             | 86.1% |       |  |
| 3500-3999         | 355           | 8.9%     |                               |        |                             |       |       |  |
| 3000-3499         | 151           | 3.8%     |                               |        | 98.8%                       |       |       |  |
| 2500-2999         | 43            | 1.1%     |                               |        |                             |       |       |  |
| <2500             | 3             | 0.1%     |                               | 100.0% |                             |       |       |  |
| Grand Total       | 3982          | 100%     |                               |        |                             |       |       |  |

Prepared by: LAWA Noise Management

\*Data source: LAX ANOMS

### ANOMS Gate Penetration - GADDO June 1-30, 2020

| Altitude MSL (ft) | Count of Ops* | % of Ops | % of Ops Between<br>Altitudes | % o    | f Ops At or Above Altitudes |       |       |  |
|-------------------|---------------|----------|-------------------------------|--------|-----------------------------|-------|-------|--|
| >6300             | 27            | 0.9%     |                               |        |                             |       |       |  |
| 6000-6299         | 59            | 1.9%     |                               |        |                             |       |       |  |
| 5700-5999         | 175           | 5.5%     | 8.3%                          |        |                             |       |       |  |
| 5500-5699         | 137           | 4.3%     | 91.7%                         |        |                             |       |       |  |
| 5000-5499         | 725           | 23.0%    |                               |        |                             |       | 35.6% |  |
| 4500-4999         | 823           | 26.1%    |                               |        |                             |       |       |  |
| 4000-4499         | 650           | 20.6%    |                               |        |                             | 82.3% |       |  |
| 3500-3999         | 362           | 11.5%    |                               |        |                             |       |       |  |
| 3000-3499         | 154           | 4.9%     |                               |        | 98.6%                       |       |       |  |
| 2500-2999         | 43            | 1.4%     |                               |        |                             |       |       |  |
| <2500             | 1             | 0.0%     |                               | 100.0% |                             |       |       |  |
| Grand Total       | 3156          | 100%     |                               |        |                             |       |       |  |

Prepared by: LAWA Noise Management
\*Data source: LAX ANOMS

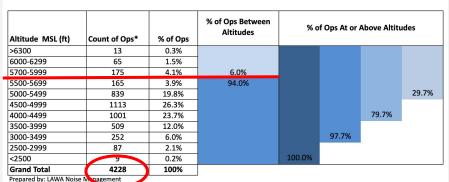
### ANOMS Gate Penetration - GADDO August 1-31, 2020

| Altitude MSL (ft) | Count of Ops* | % of Ops | % of Ops Between<br>Altitudes | % o    | % of Ops At or Above Altitudes |       |       |  |  |
|-------------------|---------------|----------|-------------------------------|--------|--------------------------------|-------|-------|--|--|
| >6300             | 37            | 0.9%     |                               |        |                                |       |       |  |  |
| 6000-6299         | 86            | 2.0%     |                               |        |                                |       |       |  |  |
| 5700-5999         | 195           | 4.6%     | 7.5%                          |        |                                |       |       |  |  |
| 5500-5699         | 157           | 3.7%     | 92.5%                         |        |                                |       |       |  |  |
| 5000-5499         | 997           | 23.4%    |                               |        |                                |       | 34.6% |  |  |
| 4500-4999         | 1208          | 28.4%    |                               |        |                                |       |       |  |  |
| 4000-4499         | 896           | 21.0%    |                               |        |                                | 84.0% |       |  |  |
| 3500-3999         | 454           | 10.7%    |                               |        |                                |       |       |  |  |
| 3000-3499         | 180           | 4.2%     |                               |        | 98.8%                          |       |       |  |  |
| 2500-2999         | 44            | 1.0%     |                               |        |                                |       |       |  |  |
| <2500             | 5             | 0.1%     |                               | 100.0% |                                |       |       |  |  |
| Grand Total       | 4259          | 100%     |                               |        |                                |       |       |  |  |

Prepared by: LAWA Noise Management
\*Data source: LAX ANOMS

<sup>\*</sup>Data source: LAX ANOMS

#### ANOMS Gate Penetration - GADDO September 1-30, 2020



<sup>\*</sup>Data source: LAX ANOMS

ANOMS Gate Penetration - GADDO November 1-30, 2020

| Altitude MSL (ft) | Count of Ops* | % of Ops | % of Ops Between<br>Altitudes | % o    | f Ops At or Above Altitudes |       |       |  |
|-------------------|---------------|----------|-------------------------------|--------|-----------------------------|-------|-------|--|
| >6300             | 42            | 0.9%     |                               |        |                             |       |       |  |
| 6000-6299         | 70            | 1.5%     |                               |        |                             |       |       |  |
| 5700-5999         | 183           | 3.9%     | 6.3%                          |        |                             |       |       |  |
| 5500-5699         | 174           | 3.7%     | 93.7%                         |        |                             |       |       |  |
| 5000-5499         | 912           | 19.4%    |                               |        |                             |       | 29.3% |  |
| 4500-4999         | 1241          | 26.4%    |                               |        |                             |       |       |  |
| 4000-4499         | 1102          | 23.4%    |                               |        |                             | 79.1% |       |  |
| 3500-3999         | 590           | 12.5%    |                               |        |                             |       |       |  |
| 3000-3499         | 288           | 6.1%     |                               |        | 97.7%                       |       |       |  |
| 2500-2999         | 101           | 2.1%     |                               |        |                             |       |       |  |
| <2500             | 6             | 0.1%     |                               | 100.0% |                             |       |       |  |
| Grand Total       | 4709          | 100%     |                               |        |                             |       |       |  |

Prepared by: LAWA Noise Management

#### **ANOMS Gate Penetration - GADDO** October 1-31, 2020

| Altitude MSL (ft) | Count of Ops* | % of Ops | % of Ops Between<br>Altitudes | % c    | f Ops At or Above Altitudes |       |       |  |
|-------------------|---------------|----------|-------------------------------|--------|-----------------------------|-------|-------|--|
| >6300             | 24            | 0.5%     |                               |        |                             |       |       |  |
| 6000-6299         | 74            | 1.6%     |                               |        |                             |       |       |  |
| 5700-5999         | 217           | 4.7%     | 6.8%                          |        |                             |       |       |  |
| 5500-5699         | 188           | 4.1%     | 93.2%                         |        |                             |       |       |  |
| 5000-5499         | 1005          | 21.7%    |                               |        |                             |       | 32.5% |  |
| 4500-4999         | 1238          | 26.7%    |                               |        |                             |       |       |  |
| 4000-4499         | 1006          | 21.7%    |                               |        |                             | 80.8% |       |  |
| 3500-3999         | 537           | 11.6%    |                               |        |                             |       |       |  |
| 3000-3499         | 250           | 5.4%     |                               |        | 97.8%                       |       |       |  |
| 2500-2999         | 95            | 2.0%     |                               |        |                             |       |       |  |
| <2500             | 7             | 0.2%     |                               | 100.0% |                             |       |       |  |
| Grand Total       | 4641          | 100%     |                               | •      |                             |       |       |  |

Prepared by: LAWA Noise Manage, and \*Data source: LAX ANOMS

#### **ANOMS Gate Penetration - GADDO** December 1-31, 2020

| Altitude MSL (ft) | Count of Ops* | % of Ops | % of Ops Between<br>Altitudes | % o    | f Ops At or Above Altitudes |       |       |  |
|-------------------|---------------|----------|-------------------------------|--------|-----------------------------|-------|-------|--|
| >6300             | 20            | 0.4%     |                               |        |                             |       |       |  |
| 6000-6299         | 39            | 0.9%     |                               |        |                             |       |       |  |
| 5700-5999         | 137           | 3.0%     | 4.3%                          |        |                             |       |       |  |
| 5500-5699         | 145           | 3.2%     | 95.7%                         |        |                             |       |       |  |
| 5000-5499         | 734           | 16.1%    |                               |        |                             |       | 23.6% |  |
| 4500-4999         | 1175          | 25.8%    |                               |        |                             |       |       |  |
| 4000-4499         | 1036          | 22.7%    |                               |        |                             | 72.2% |       |  |
| 3500-3999         | 731           | 16.1%    |                               |        |                             |       |       |  |
| 3000-3499         | 401           | 8.8%     |                               |        | 97.0%                       |       |       |  |
| 2500-2999         | 130           | 2.9%     |                               |        |                             |       |       |  |
| <2500             | 6             | 0.1%     |                               | 100.0% |                             |       |       |  |
| Grand Total       | 4554          | 100%     |                               |        |                             |       |       |  |

Prepared by: LAWA Noise Management \*Data source: LAX ANOMS

<sup>\*</sup>Data source: LAX ANOMS

#### **ANOMS Gate Penetration - GADDO** January 1-31, 2021



Prepared by: LAWA Noise Management

\*Data source: LAX ANOMS

#### **ANOMS Gate Penetration - GADDO** March 1-31, 2021

| Altitude MSL (ft) | Count of Ops* | % of Ops | % of Ops Between<br>Altitudes | % o    | f Ops At or Above Altitudes |       |       |  |
|-------------------|---------------|----------|-------------------------------|--------|-----------------------------|-------|-------|--|
| >6300             | 19            | 0.4%     |                               |        |                             |       |       |  |
| 6000-6299         | 58            | 1.3%     |                               |        |                             |       |       |  |
| 5700-5999         | 132           | 3.1%     | 4.8%                          |        |                             |       |       |  |
| 5500-5699         | 149           | 3.5%     | 95.2%                         |        |                             |       |       |  |
| 5000-5499         | 841           | 19.5%    |                               |        |                             |       | 27.8% |  |
| 4500-4999         | 1154          | 26.7%    |                               |        |                             |       |       |  |
| 4000-4499         | 947           | 21.9%    |                               |        |                             | 76.5% |       |  |
| 3500-3999         | 594           | 13.8%    |                               |        |                             |       |       |  |
| 3000-3499         | 337           | 7.8%     |                               |        | 98.0%                       |       |       |  |
| 2500-2999         | 78            | 1.8%     |                               |        |                             |       |       |  |
| <2500             |               | 0.2%     |                               | 100.0% |                             |       |       |  |
| Grand Total       | 4316          | 100%     |                               |        |                             |       |       |  |

Prepared by: LAWA Noise Management \*Data source: LAX ANOMS

#### **ANOMS Gate Penetration - GADDO** February 1-28, 2021

| Altitude MSL (ft) | Count of Ops* | % of Ops | % of Ops Between<br>Altitudes | % o    | f Ops At or Above Altitudes |       |       |  |
|-------------------|---------------|----------|-------------------------------|--------|-----------------------------|-------|-------|--|
| >6300             | 24            | 0.6%     |                               |        |                             |       |       |  |
| 6000-6299         | 59            | 1.4%     |                               |        |                             |       |       |  |
| 5700-5999         | 139           | 3.3%     | 5.3%                          |        |                             |       |       |  |
| 5500-5699         | 130           | 3.1%     | 94.7%                         |        |                             |       |       |  |
| 5000-5499         | 777           | 18.4%    |                               |        |                             |       | 26.8% |  |
| 4500-4999         | 1163          | 27.6%    |                               |        |                             |       |       |  |
| 4000-4499         | 944           | 22.4%    |                               |        |                             | 76.7% |       |  |
| 3500-3999         | 574           | 13.6%    |                               |        |                             |       |       |  |
| 3000-3499         | 310           | 7.3%     |                               |        | 97.6%                       |       |       |  |
| 2500-2999         | 88            | 2.1%     |                               |        |                             |       |       |  |
| <2500             | 12            | 0.3%     |                               | 100.0% |                             |       |       |  |
| Grand Total       | 4220          | 100%     |                               |        |                             |       |       |  |

Prepared by: LAWA Noise Managemen \*Data source: LAX ANOMS

#### **ANOMS Gate Penetration - GADDO** April 1-30, 2021

| Altitude MSL (ft)  | Count of Ops* | % of Ops | % of Ops Between<br>Altitudes | % o    | of Ops At or Above Altitudes |       |       |  |  |
|--------------------|---------------|----------|-------------------------------|--------|------------------------------|-------|-------|--|--|
| >6300              | 25            | 0.5%     |                               |        |                              |       |       |  |  |
| 6000-6299          | 80            | 1.7%     |                               |        |                              |       |       |  |  |
| 5700-5999          | 203           | 4.3%     | 6.5%                          |        |                              |       |       |  |  |
| 5500-5699          | 183           | 3.9%     | 93.5%                         |        |                              |       |       |  |  |
| 5000-5499          | 963           | 20.4%    |                               |        |                              |       | 30.8% |  |  |
| 4500-4999          | 1287          | 27.3%    |                               |        |                              |       |       |  |  |
| 4000-4499          | 1055          | 22.4%    |                               |        |                              | 80.4% |       |  |  |
| 3500-3999          | 566           | 12.0%    |                               |        |                              |       |       |  |  |
| 3000-3499          | 277           | 5.9%     |                               |        | 98.3%                        |       |       |  |  |
| 2500-2999          | 74            | 1.6%     |                               |        |                              | •     |       |  |  |
| <2500              |               | 0.1%     |                               | 100.0% |                              |       |       |  |  |
| <b>Grand Total</b> | 4719          | 100%     |                               |        |                              |       |       |  |  |

Prepared by: LAWA Noise Magagement \*Data source: LAX ANOMS

### ANOMS Gate Penetration - GADDO May 1-31, 2021

| Altitude MSL (ft) | Count of Ops* | % of Ops | % of Ops Between<br>Altitudes | % o    | % of Ops At or Above Altitudes |       |       |  |  |
|-------------------|---------------|----------|-------------------------------|--------|--------------------------------|-------|-------|--|--|
| >6300             | 25            | 0.4%     |                               |        |                                |       |       |  |  |
| 6000-6299         | 85            | 1.5%     |                               |        |                                |       |       |  |  |
| 5700-5999         | 192           | 3.4%     | 5.3%                          |        |                                |       |       |  |  |
| 5500-5699         | 167           | 2.9%     | 94.7%                         |        |                                |       |       |  |  |
| 5000-5499         | 1137          | 19.8%    |                               |        |                                |       | 28.0% |  |  |
| 4500-4999         | 1690          | 29.5%    |                               |        |                                |       |       |  |  |
| 4000-4499         | 1331          | 23.2%    |                               |        |                                | 80.8% |       |  |  |
| 3500-3999         | 697           | 12.2%    |                               |        |                                |       |       |  |  |
| 3000-3499         | 298           | 5.2%     |                               |        | 98.1%                          |       |       |  |  |
| 2500-2999         | 101           | 1.8%     |                               |        |                                |       |       |  |  |
| <2500             | 7             | 0.1%     |                               | 100.0% |                                |       |       |  |  |
| Grand Total       | 5730          | 100%     |                               |        |                                |       |       |  |  |

Prepared by: LAWA Noise Management

### ANOMS Gate Penetration - GADDO Jun 1-30, 2021

| Altitude MSL (ft) | Count of Ops* | % of Ops | % of Ops Between<br>Altitudes | % of Ops At or Above Altitudes |       |       |       |
|-------------------|---------------|----------|-------------------------------|--------------------------------|-------|-------|-------|
| >6300             | 27            | 0.4%     |                               |                                |       |       |       |
| 6000-6299         | 105           | 1.6%     |                               |                                |       |       |       |
| 5700-5999         | 248           | 3.8%     | 5.8%                          |                                |       |       |       |
| 5500-5699         | 277           | 4.2%     | 94.2%                         |                                |       |       |       |
| 5000-5499         | 1563          | 23.9%    |                               |                                |       |       | 33.9% |
| 4500-4999         | 1958          | 29.9%    |                               |                                |       |       |       |
| 4000-4499         | 1400          | 21.4%    |                               |                                |       | 85.3% |       |
| 3500-3999         | 644           | 9.8%     |                               |                                |       |       |       |
| 3000-3499         | 245           | 3.7%     |                               |                                | 98.9% |       |       |
| 2500-2999         | 69            | 1.1%     |                               |                                |       |       |       |
| <2500             | 4             | 0.1%     |                               | 100.0%                         |       |       |       |
| Grand Total       | 6540          | 100%     |                               |                                |       |       |       |

\*Data source: LAX ANOMS

<sup>\*</sup>Data source: LAX ANOMS

# THANK YOU