

# NOISE FORUM SUMMARY

North/South Field Working Groups



**NOISE ABATEMENT REPORT**

**THIRD QUARTER 2023**

# Disclaimer

The Port of Oakland's Airport Noise and Operations Monitoring System (ANOMS) is the source of the data used in this report. Although ANOMS is a very sophisticated computer program that provides a state-of-the-art solution for collecting aircraft noise complaints. The number of aircraft noise complaints in the report are for informational purposes. Airport staff carefully reviews the data for accuracy and will make corrections whenever possible.

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Compliance Monitoring Quarterly Summary Comparison Third Quarter 2023				
	2022Q3		2023Q3	
	Compl.	N/C	Compl.	N/C
Runway 28R/L Jet Departure Compliance	94%	6%	94%	6%
Total Airport-wide Corporate Jet Departures	2,326	157	2,009	128
Runway 10R/L Jet Landing Compliance	83%	17%	96%	4%
Total Southeast Plan Corporate Jet Landings	40	8	26	1
North Field VFR Departure Compliance	89%	11%	95%	5%
Total Runways 28R/L & 33 Departures	207	26	242	14
North Field Quiet Hours Compliance	76%	24%	87%	13%
Total North Field Quiet Hours Departures	117	37	184	28
Runway 30 BFI Right Turn Departure Compliance	100%	0%	100%	0%
Total Runway 30 Turbojet Departures	18,887	3	16,391	2
Night Time Departure Compliance	99%	1%	99%	1%
Total Runway 30 Night Turbojet Departures	3,749	27	3,346	29
Runway 12 Night Departure Compliance	100%	0%	100%	0%
Total Runway 12 Night Turbojet Departures	47	0	15	0
Runway 30 East Turn Departure Compliance	100%	0%	100%	0%
Total Runway 30 East Turn Departures	4,631	3	4,166	3
100 Degree Radial Turbojet Landing Compliance	98%	2%	99%	1%
Total 100 Degree Radial Turbojet Landings	1,112	19	932	14
Engine Runup Program Compliance	100%	0%	82%	18%
Total Evening and Nighttime Engine Runups	7	0	11	2
Note: N/C means non-compliant. Percentage values are rounded out.				

Operation Details  
Beacon Code: 3373  
AC Type: H25C  
Operation Type: Departure  
Runway: 28L  
Date/Time: 12/13/2016 8:26:14 AM

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## Runway 28R/L Jet Departure NAP

**2023Q3**  
**94% Compliance**  
**(2,137 total departures)**  
**(128 non-compliant)**

**2022Q3**  
**94% Compliance**  
**(2,483 total departures)**  
**(157 non-compliant)**

Heading: 325  
Elevation: 15

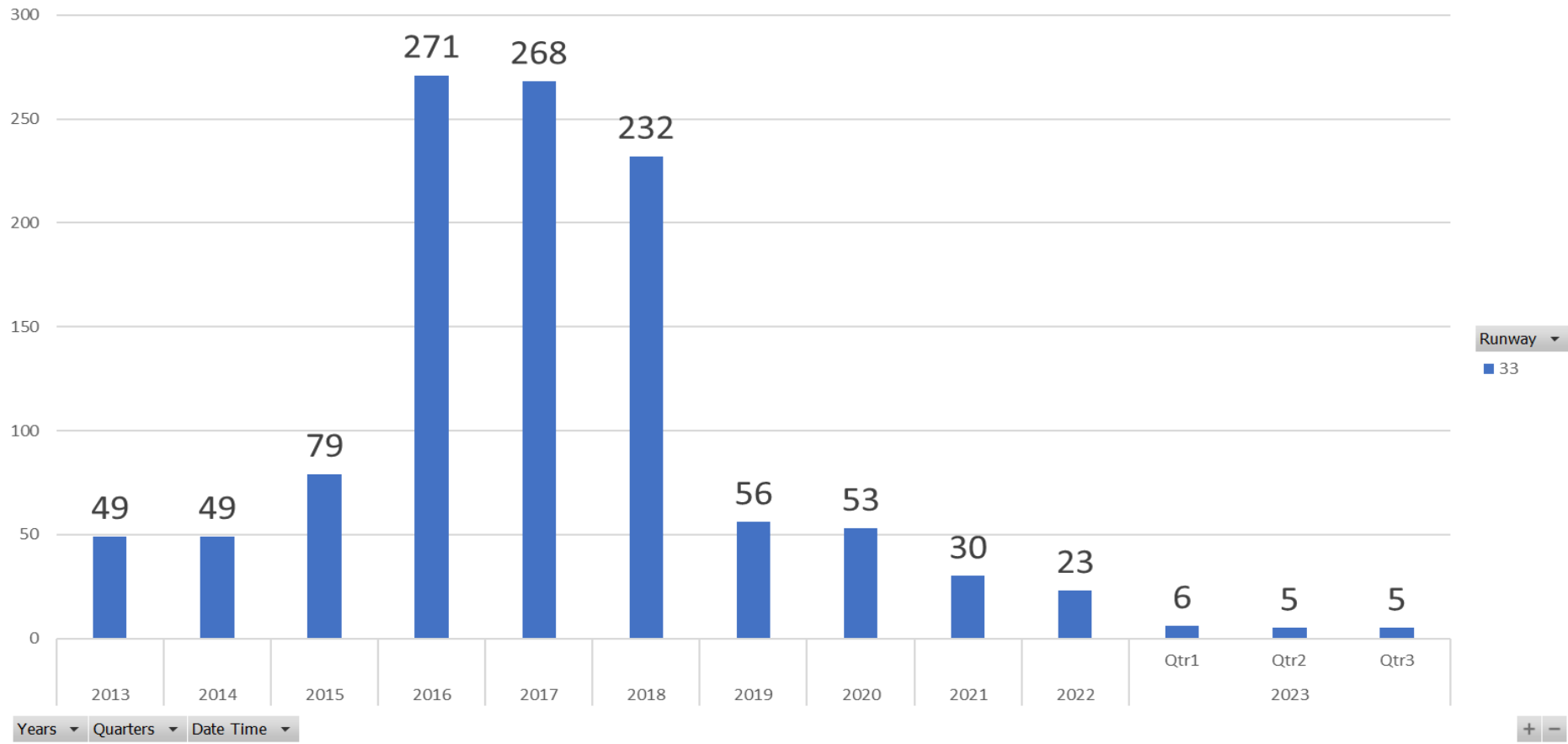
Arrivals  
Departures  
Touch and Go  
Overflights

# RUNWAY 33 JET DEPARTURES

## THIRD Quarter 2023

Count of Aircraft Type

### Runway 33 Jet Departure Trend Analysis



Operation Details  
Beacon Code: 4564  
AC Type: C550  
Operation Type: Arrival  
Runway: 10R  
Date/Time: 12/15/2016 8:15:42 PM

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## Runway 10R/L Jet Landing NAP

**2023Q3**

**96% Compliance**  
**(27 total landings)**  
**(1 non-compliant)**

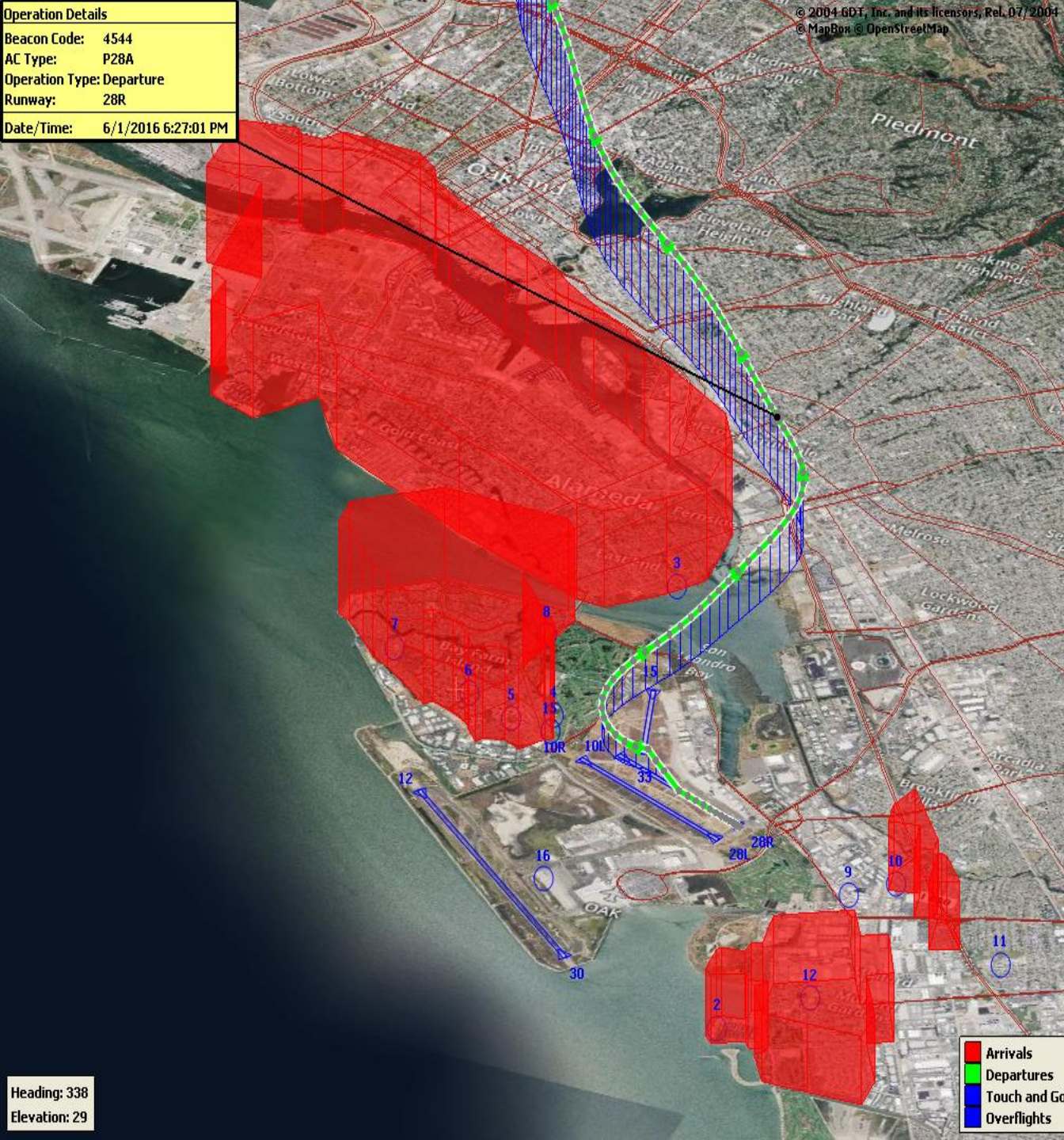
**2022Q3**

**83% Compliance**  
**(48 total landings)**  
**(8 non-compliant)**

Heading: 325  
Elevation: 15

Arrivals  
Departures  
Touch and Go  
Overflights

Operation Details	
Beacon Code:	4544
AC Type:	P28A
Operation Type:	Departure
Runway:	28R
Date/Time:	6/1/2016 6:27:01 PM



## VFR Aircraft Departure NAP

**2023Q3**  
**95% Compliance**  
**(256 total departures)**  
**(14 non-compliant)**

**2022Q3**  
**89% Compliance**  
**(233 total departures)**  
**(26 non-compliant)**

Operation Details  
Beacon Code: 3351  
AC Type: PC12  
Operation Type: Departure  
Runway: 28R  
Date/Time: 12/13/2016 6:02:33 AM

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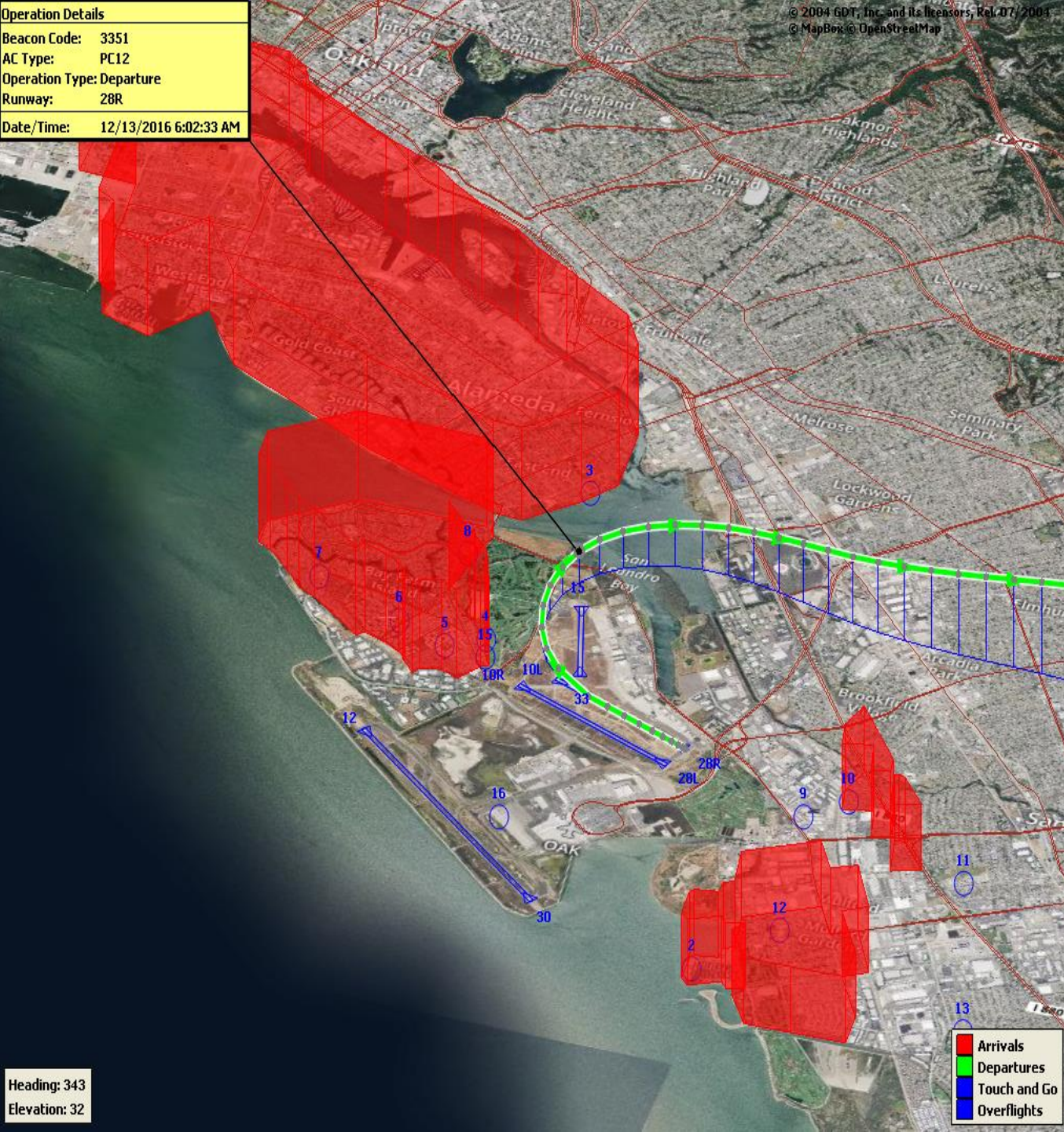
## North Field Quiet Hours NAP

**2023Q3**  
**87% Compliance**  
**(212 total departures)**  
**(28 non-compliant)**

**2022Q3**  
**76% Compliance**  
**(154 total departures)**  
**(37 non-compliant)**

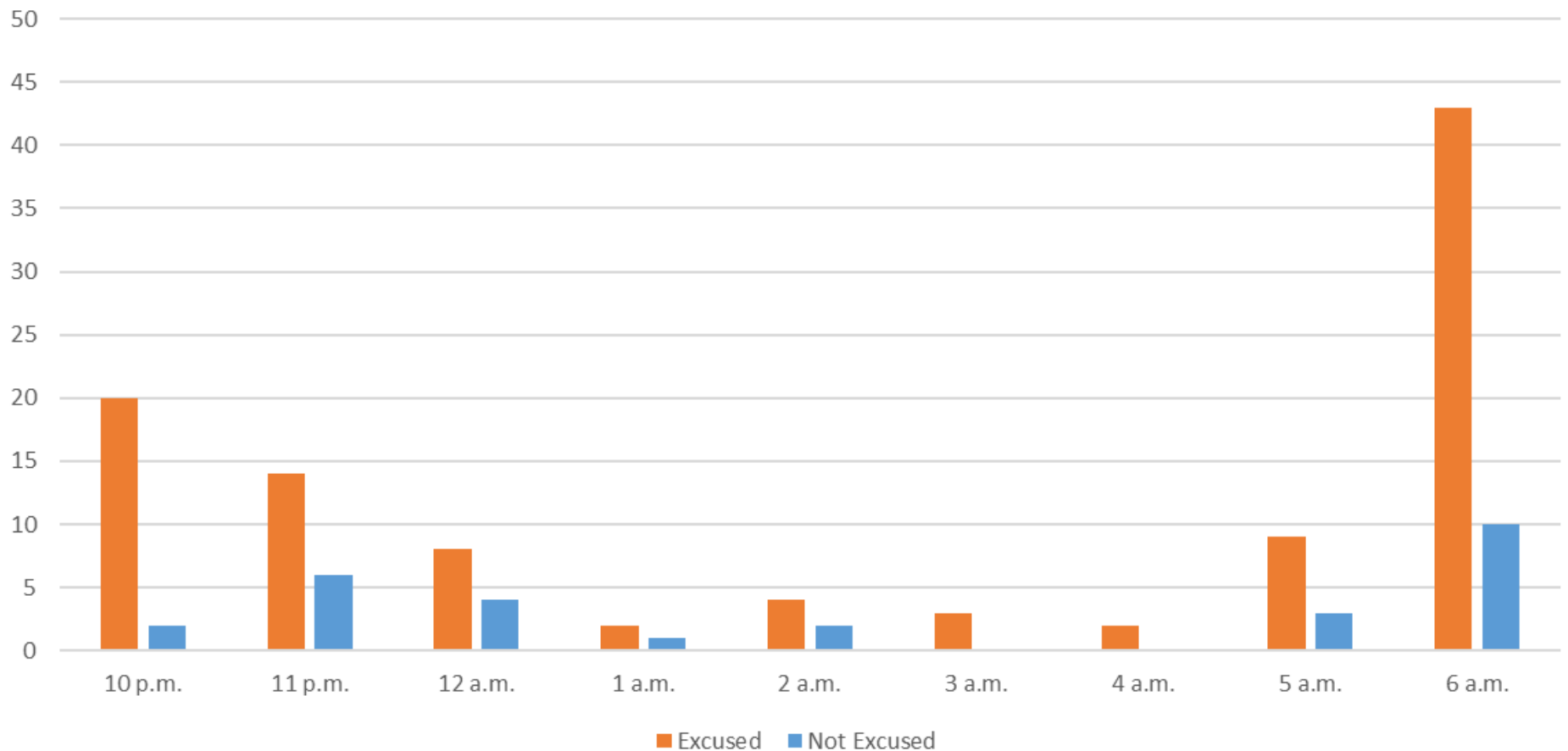
Heading: 343  
Elevation: 32

Arrivals  
Departures  
Touch and Go  
Overflights



# Quartely North Field Quiet Hours NAP Non-Compliant Per Quarter

Excused/Not Excused Violation Count Per Quarter



**Operation Details**  
 Beacon Code: 3641  
 AC Type: B737  
 Operation Type: Departure  
 Runway: 30  
 Date/Time: 8/22/2017 10:16:59 PM



## Night Time Departure NAP

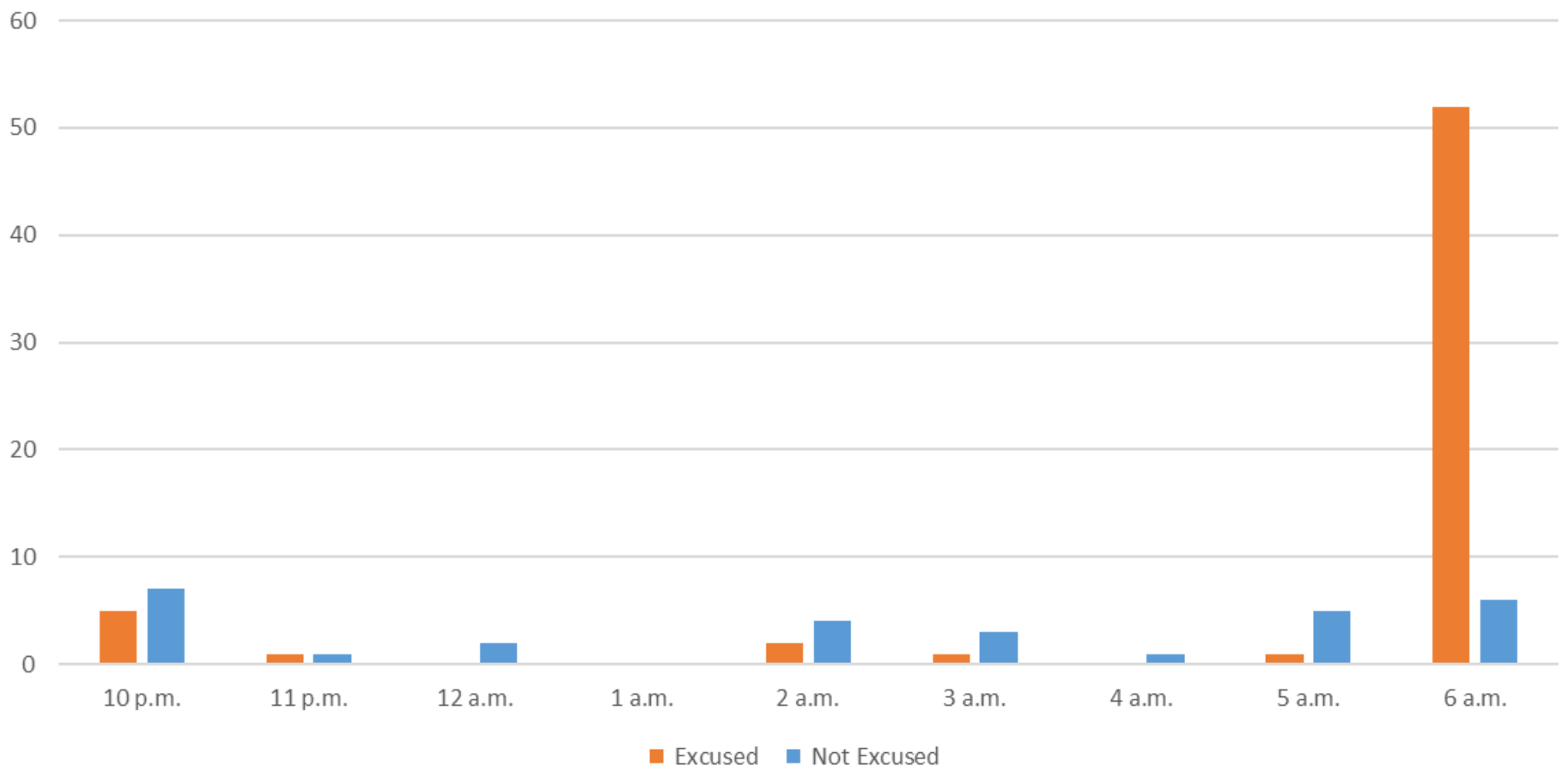
**2023Q3**  
**99% Compliance**  
**(3,375 total departures)**  
**(29 non-compliant)**

\*REBAS Gate non-compliant = 24

**2022Q3**  
**99% Compliance**  
**(3,776 total departures)**  
**(27 non-compliant)**

# Quarterly Night Time NAP Non-Compliant Count Per Quarter

Excused/Not Excused Violation Count Per Quarter

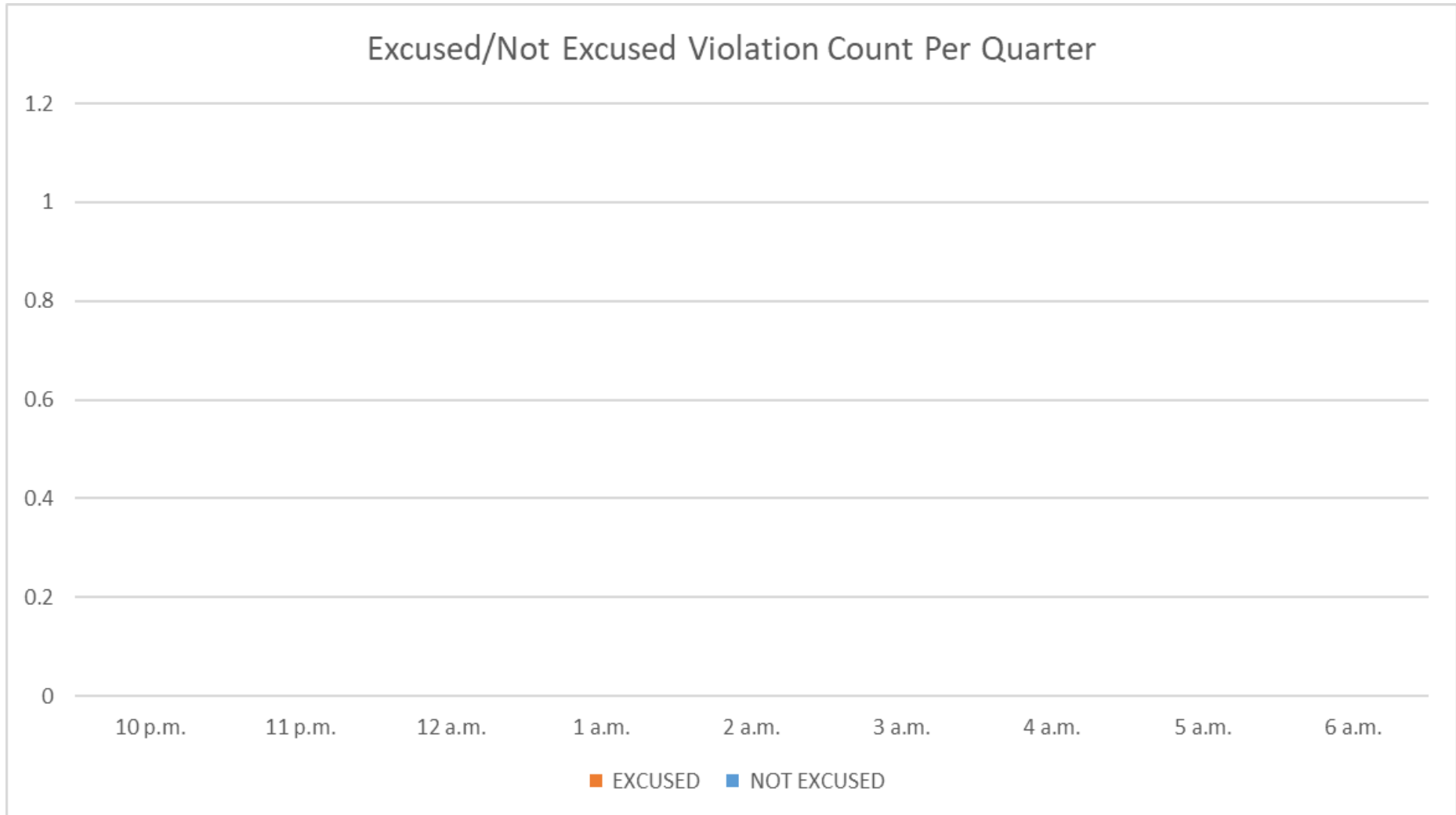


Heading: 1  
Elevation: 38



**100% Compliance**  
**(47 total departures)**  
**(0 non-compliant)**

# Quartely Runway 12 Night Departure Non-Compliant Count Per Quarter



Operation Details	
Beacon Code:	3374
AC Type:	B737
Operation Type:	Departure
Runway:	30
Date/Time:	1/7/2019 8:57:05 AM

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## Runway 30 Bay Farm Right Turn NAP

**2023Q3**  
**100% Compliance**  
**(16,393 total departures)**  
**(2 non-compliant)**

**2022Q3**  
**100% Compliance**  
**(18,890 total departures)**  
**(3 non-compliant)**

Heading: 299  
Elevation: 36



Arrivals  
Departures  
Touch and Go  
Overflights

## Runway 30 East Turn NAP

**2023Q3**  
**100% Compliance**  
**(4,169 total departures)**  
**(3 non-compliant)**

\*Excused Departures = 20

**2022Q3**  
**100% Compliance**  
**(4,634 total departures)**  
**(3 non-compliant)**

### Operation Details

Beacon Code: 3777

AC Type: B737

Operation Type: Departure

Runway: 30

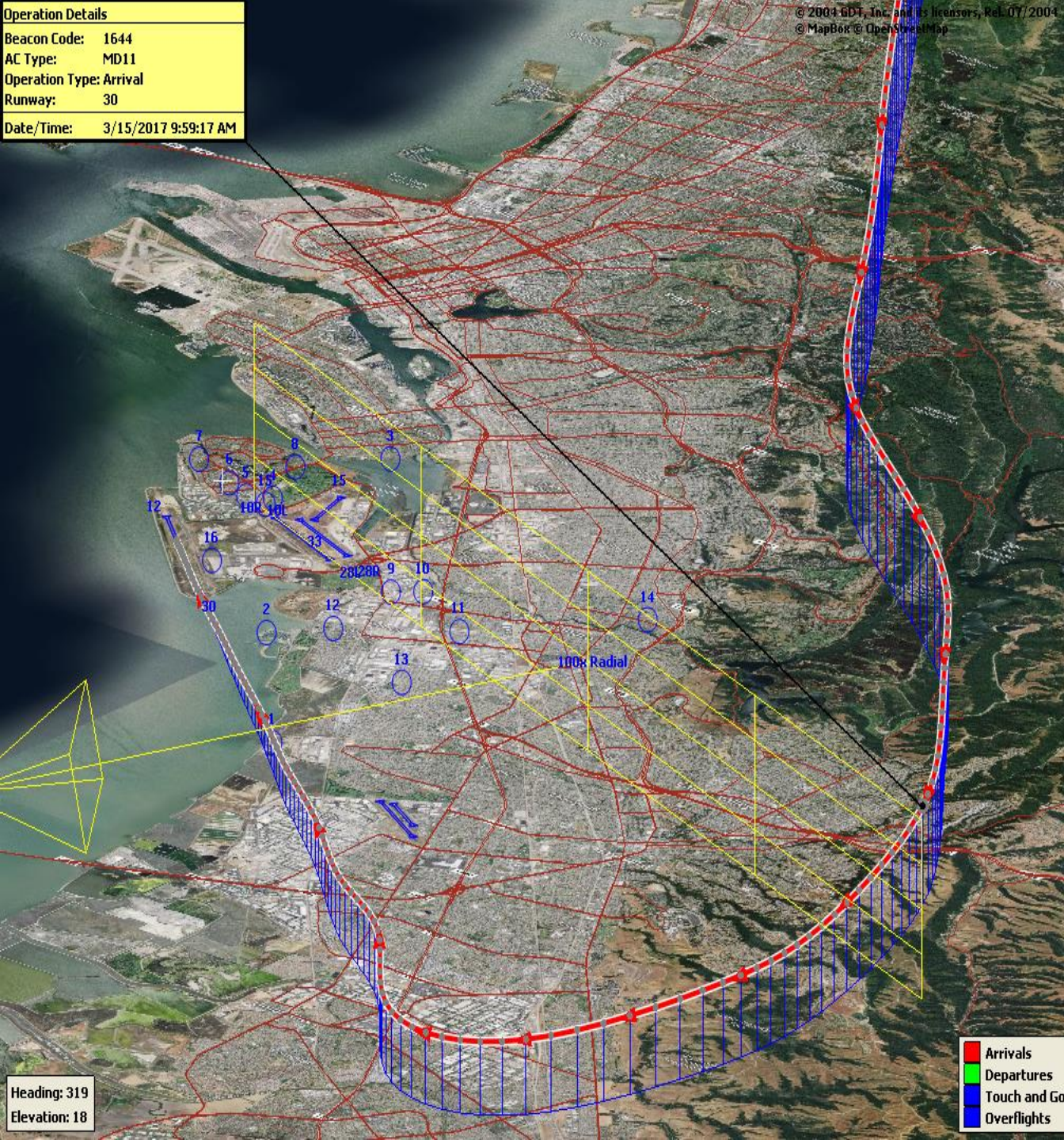
Date/Time: 3/15/2017 9:53:47 AM

Alameda Rwy 30



Operation Details	
Beacon Code:	1644
AC Type:	MD11
Operation Type:	Arrival
Runway:	30
Date/Time:	3/15/2017 9:59:17 AM

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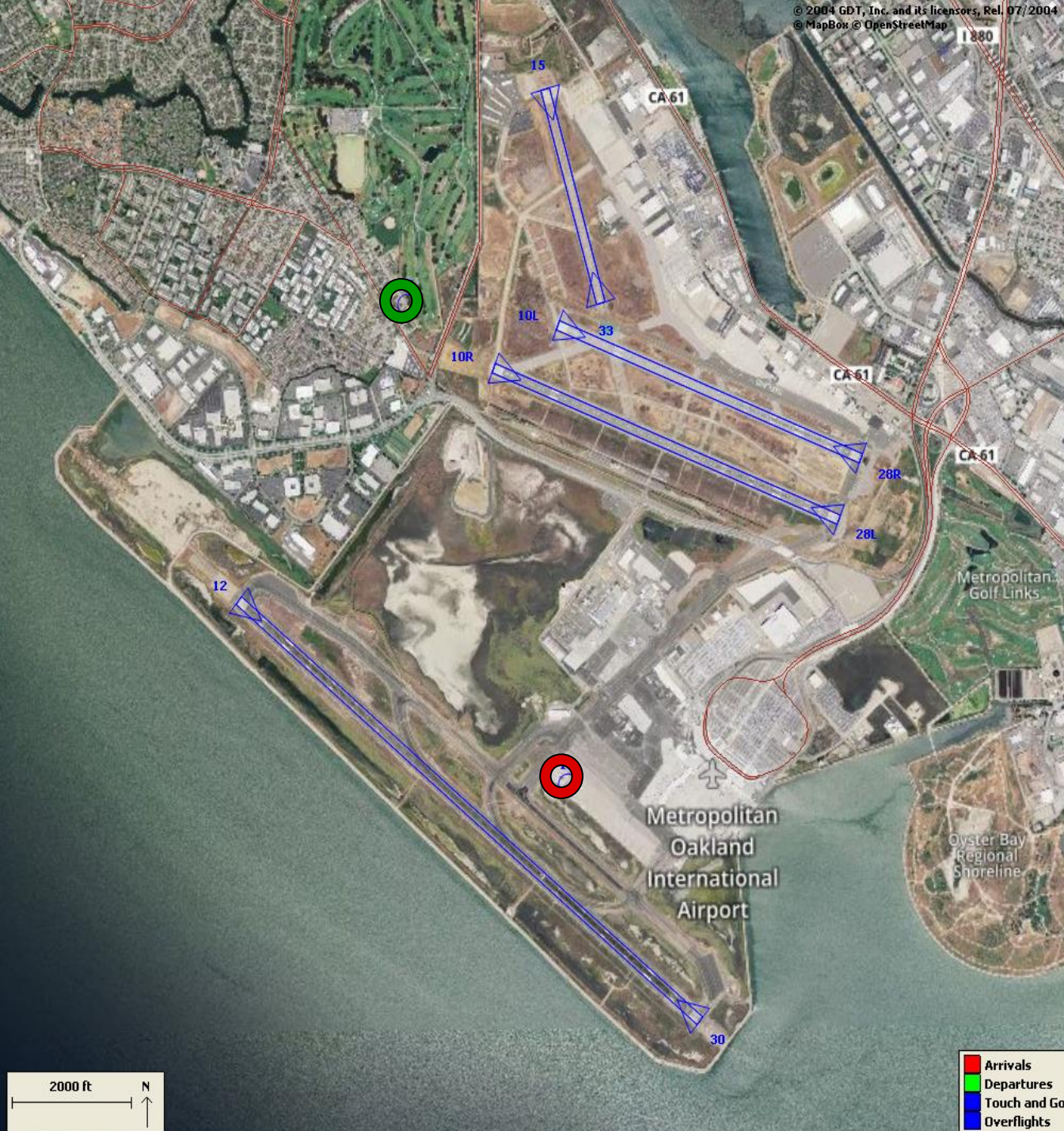
# 100 Degree Radial At 3,000 ft. NAP

**2023Q3**  
**99% Compliance**  
**(946 total landings)**  
**(14 non-compliant)**

**2022Q3**  
**98% Compliance**  
**(1,131 total landings)**  
**(19 non-compliant)**

Heading: 319  
Elevation: 18

- Arrivals
- Departures
- Touch and Go
- Overflights



## Engine Run-up NAP

**2023Q3**

**100% Compliance  
(13 engine run-ups)\*  
(2 non-compliant)**

**2022Q3**

**100% Compliance  
(7 engine run-ups)  
(0 non-compliant)**

**\*Only above idle-power run-ups  
recorded.**

Compliance Monitoring Quarterly Summary Comparison Second Quarter 2023 - Quarter-to-Quarter				
	2023Q2		2023Q3	
	Compl.	N/C	Compl.	N/C
Runway 28R/L Jet Departure Compliance	93%	7%	94%	6%
Total Airport-wide Corporate Jet Departures	2,061	159	2,009	128
Runway 10R/L Jet Landing Compliance	75%	25%	96%	4%
Total Southeast Plan Corporate Jet Landings	36	12	26	1
North Field VFR Departure Compliance	96%	4%	95%	5%
Total Runways 28R/L & 33 Departures	249	11	242	14
North Field Quiet Hours Compliance	86%	14%	87%	13%
Total North Field Quiet Hours Departures	168	28	184	28
Runway 30 BFI Right Turn Departure Compliance	100%	0%	100%	0%
Total Runway 30 Turbojet Departures	16,661	2	16,391	2
Night Time Departure Compliance	99%	1%	99%	1%
Total Runway 30 Night Turbojet Departures	3,571	46	3,346	29
Runway 12 Night Departure Compliance	96%	4%	100%	0%
Total Runway 12 Night Turbojet Departures	64	3	15	0
Runway 30 East Turn Departure Compliance	100%	0%	100%	0%
Total Runway 30 East Turn Departures	3,953	1	4,166	3
100 Degree Radial Turbojet Landing Compliance	98%	2%	99%	1%
Total 100 Degree Radial Turbojet Landings	749	13	932	14
Engine Runup Program Compliance	100%	0%	82%	18%
Total Evening and Nighttime Engine Runups	9	0	11	2
Note: N/C means non-compliant. Percentage values are rounded out.				

**Table 1. North Field Night Aircraft Departure SEL Noise Measurements**  
**Total Aircraft Departures = 212**

Third Quarter 2023 (10:00 p.m. to 7:00 a.m.)

NMT Number	Aircraft Noise Events Below SEL 80 dBA	Aircraft Noise Events SEL 80 - 84.9 dBA			Aircraft Noise Events SEL 85 - 89.9 dBA			Aircraft Noise Events SEL ≥ 90 dBA			Total Aircraft Noise Events
		Amount	Nightly Average	As Percentage of Departures	Amount	Nightly Average	As Percentage of Departures	Amount	Nightly Average	As Percentage of Departures	
1	0	0	0.0	0.0%	0	0.0	0.0%	0	0.0	0.0%	0
2	0	0	0.0	0.0%	0	0.0	0.0%	0	0.0	0.0%	0
3	36	1	0.0	0.2%	0	0.0	0.0%	0	0.0	0.0%	37
4	57	45	0.5	7.9%	36	0.4	6.3%	58	0.6	10.2%	196
5	74	19	0.2	3.4%	12	0.1	2.1%	69	0.8	12.2%	174
6	59	6	0.1	1.1%	21	0.2	3.7%	58	0.6	10.2%	144
7	17	16	0.2	2.8%	48	0.5	8.5%	17	0.2	3.0%	98
8	63	30	0.3	5.3%	3	0.0	0.5%	0	0.0	0.0%	96
9	1	1	0.0	0.2%	0	0.0	0.0%	0	0.0	0.0%	2
10	35	3	0.0	0.5%	1	0.0	0.2%	1	0.0	0.2%	40
11	0	0	0.0	0.0%	0	0.0	0.0%	0	0.0	0.0%	0
12	1	0	0.0	0.0%	0	0.0	0.0%	0	0.0	0.0%	1
13	0	0	0.0	0.0%	0	0.0	0.0%	0	0.0	0.0%	0
14	22	1	0.0	0.2%	1	0.0	0.2%	1	0.0	0.2%	25
<b>All NMTs</b>	365	122	1	0	122	1	0	204	2	0	813

**Table 2. Aircraft SEL Noise Measurements in Alameda - Total Aircraft Departures = 211**

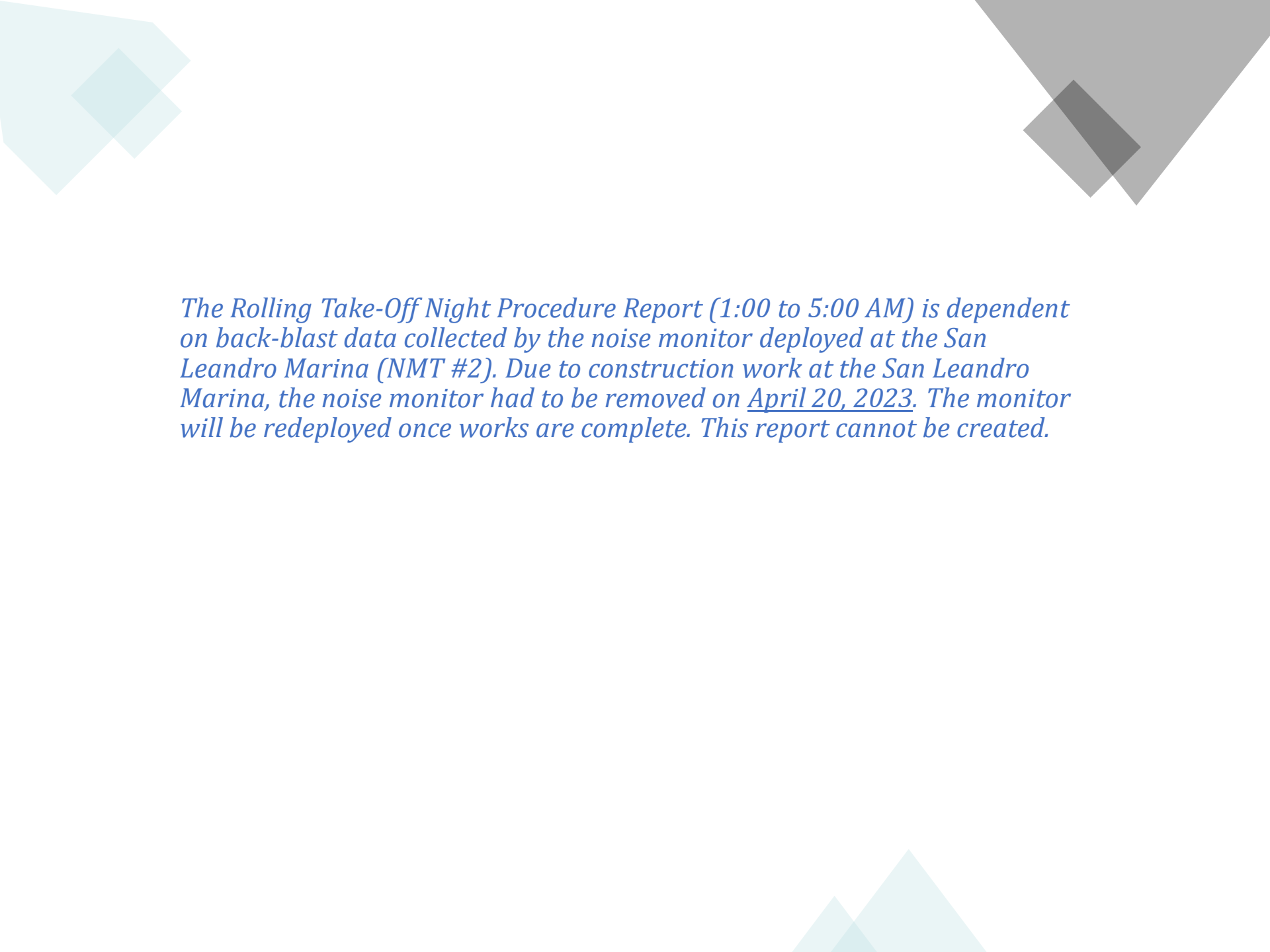
**Third Quarter 2023 (10:00 p.m. to 7:00 a.m.)**

NMT Number	Aircraft Noise Events Below SEL 80 dBA	Aircraft Noise Events SEL 80 - 84.9 dBA			Aircraft Noise Events SEL 85 - 89.9 dBA			Aircraft Noise Events SEL ≥ 90 dBA			Total Aircraft Noise Events
		Amount	Nightly Average	As Percentage of Departures	Amount	Nightly Average	As Percentage of Departures	Amount	Nightly Average	As Percentage of Departures	
3	36	1	0.0	0.4%	0	0.0	0.0%	0	0.0	0.0%	37
4	57	45	0.5	18.8%	36	0.4	15.1%	58	0.6	24.3%	196
5	74	19	0.2	7.9%	12	0.1	5.0%	69	0.8	28.9%	174
6	59	6	0.1	2.5%	21	0.2	8.8%	58	0.6	24.3%	144
7	17	16	0.2	6.7%	48	0.5	20.1%	17	0.2	7.1%	98
8	63	30	0.3	12.6%	3	0.0	1.3%	0	0.0	0.0%	96
<b>Total</b>	<b>306</b>	<b>117</b>	<b>1.3</b>		<b>120</b>	<b>1.3</b>		<b>202</b>	<b>2.2</b>		<b>745</b>

**Table 3. Aircraft SEL Noise Measurements in San Leandro - Total Aircraft Departures = 1**

**Third Quarter 2023 (10:00 p.m. to 7:00 a.m.)**

NMT Number	Aircraft Noise Events Below SEL 80 dBA	Aircraft Noise Events SEL 80 - 84.9 dBA			Aircraft Noise Events SEL 85 - 89.9 dBA			Aircraft Noise Events SEL ≥ 90 dBA			Total Aircraft Noise Events
		Amount	Nightly Average	As Percentage of Departures	Amount	Nightly Average	As Percentage of Departures	Amount	Nightly Average	As Percentage of Departures	
2	0	0	0.0	0.0%	0	0.0	0.0%	0	0.0	0.0%	0
9	1	1	0.0	0.3%	0	0.0	0.0%	0	0.0	0.0%	2
10	35	3	0.0	0.9%	1	0.0	0.3%	1	0.0	0.3%	40
11	0	0	0.0	0.0%	0	0.0	0.0%	0	0.0	0.0%	0
12	1	0	0.0	0.0%	0	0.0	0.0%	0	0.0	0.0%	1
13	0	0	0.0	0.0%	0	0.0	0.0%	0	0.0	0.0%	0
14	22	1	0.0	0.3%	1	0.0	0.3%	1	0.0	0.3%	25
<b>Total</b>	<b>59</b>	<b>5</b>	<b>0.1</b>		<b>2</b>	<b>0.0</b>		<b>2</b>	<b>0.0</b>		<b>68</b>



*The Rolling Take-Off Night Procedure Report (1:00 to 5:00 AM) is dependent on back-blast data collected by the noise monitor deployed at the San Leandro Marina (NMT #2). Due to construction work at the San Leandro Marina, the noise monitor had to be removed on April 20, 2023. The monitor will be redeployed once works are complete. This report cannot be created.*

**Rolling Take-off Night Departure Procedure (1:00 to 5:00 AM)  
Third Quarter 2022, NMT 2**

	Aircraft Departures	Recorded Noise Events (a)	Lmax Average	SEL Average	Avg. Duration (seconds)
Baseline (November 2002) [A]					
DC10/MD10	87	32	69	78	22
MD11	32	13	70	79	24
A306	67	21	67	77	25
Third Quarter 2022 [B]					
	Total [X]	Est. Avg. Monthly [X/3]			
B763	297	99	21	65	73
DC10/MD10	6	2	-	-	-
MD11	223	74	63	65	73
A306	13	4	1	63	70
B757	221	74	29	63	74
B77L	125	42	3	66	74
Difference [A-B]					
DC10/MD10		-85	-32	-69	-78
MD11		42	50	-5	-6
A306		-63	-20	-4	-7

(a) For the current calendar quarter reported, ANOMS does not correlate all departures to their respective noise events; that is most, but not all, aircraft back-blast noise events are effectively correlated as the program software algorithms may misidentify an aircraft noise event.  
Source: ANOMS (Airport Noise and Operations Monitoring System)

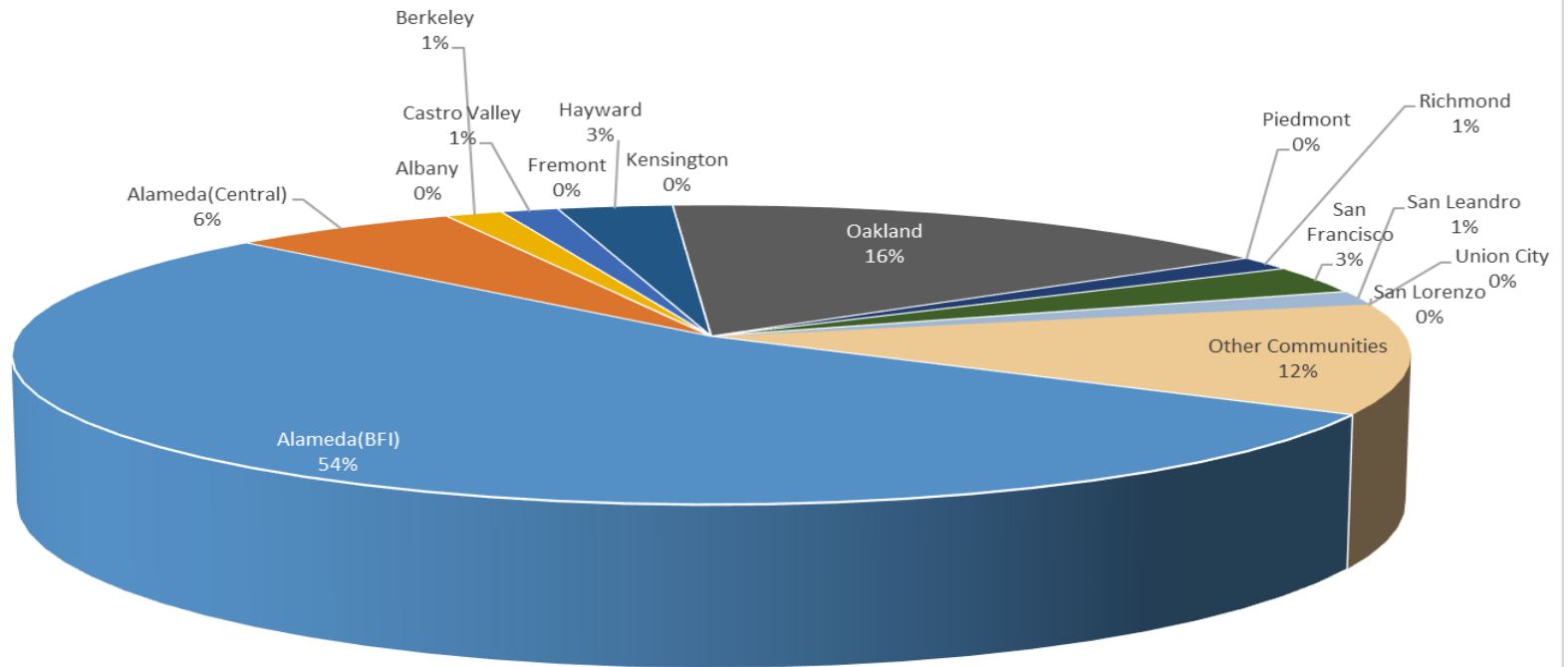
**Oakland International Airport  
Noise Complaint Summary  
July 2023**

Community	Callers	Complaints
Alameda(BFI)	36	971
Alameda(Central)	4	9
Albany	0	0
Berkeley	1	32
Castro Valley	1	16
Fremont	0	0
Hayw ard	2	20
Kensington	0	0
Oakland	11	2583
Piedmont	0	0
Richmond	1	79
San Francisco	2	2
San Leandro	1	1
Union City	0	0
San Lorenzo	0	0
Other Communities	8	14
<b>Total</b>	<b>67</b>	<b>3727</b>
<b>Complaints by Type</b>		
E-mail	2471	
View point App	1256	
<b>Complaints by Time of Day</b>		
Day ( 0700 - 1900 )	591	
Evening ( 1900 - 2200 )	982	
Night ( 2200 - 0700 )	2154	
<b>Complaints by Type of Operation</b>		
Arrivals	2353	
Departures	1289	
Over-flights	13	
Touch & Go	72	
Not Linked to an Operation	0	
<b>Complaints by Type of Aircraft</b>		
Business Jet	179	
Helicopter	28	
Jet	3262	
Military	0	
Not Reported (not linked to an aircraft)	0	
Other (Type information not available)	18	
Propeller	193	
Turbo-prop	47	

# Number of Callers

## July 2023

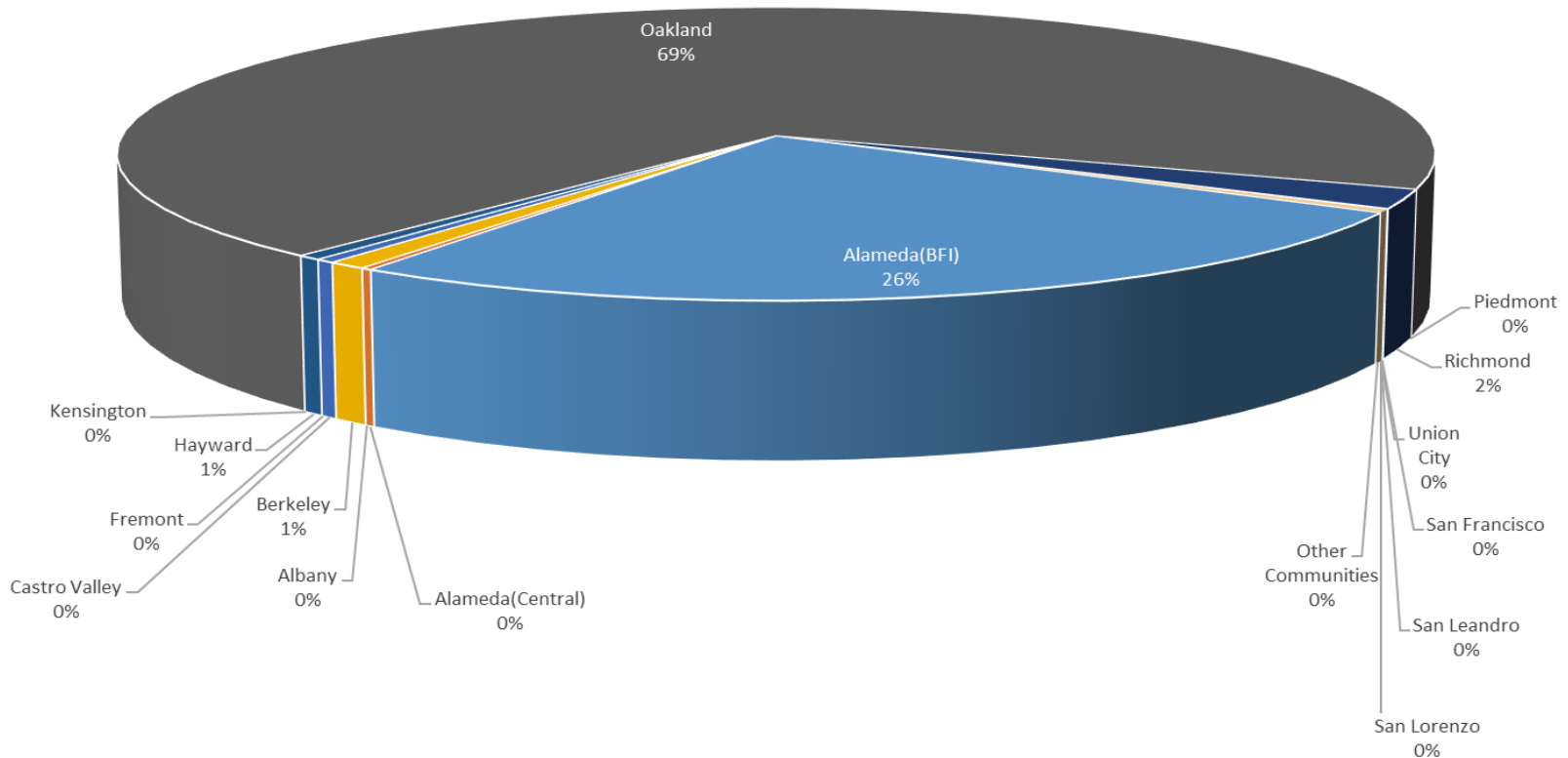
**Noise Complaints Summary by Number of Callers**



# Number of Complaints

## July 2023

### Noise Complaints Summary by Number of Complaints



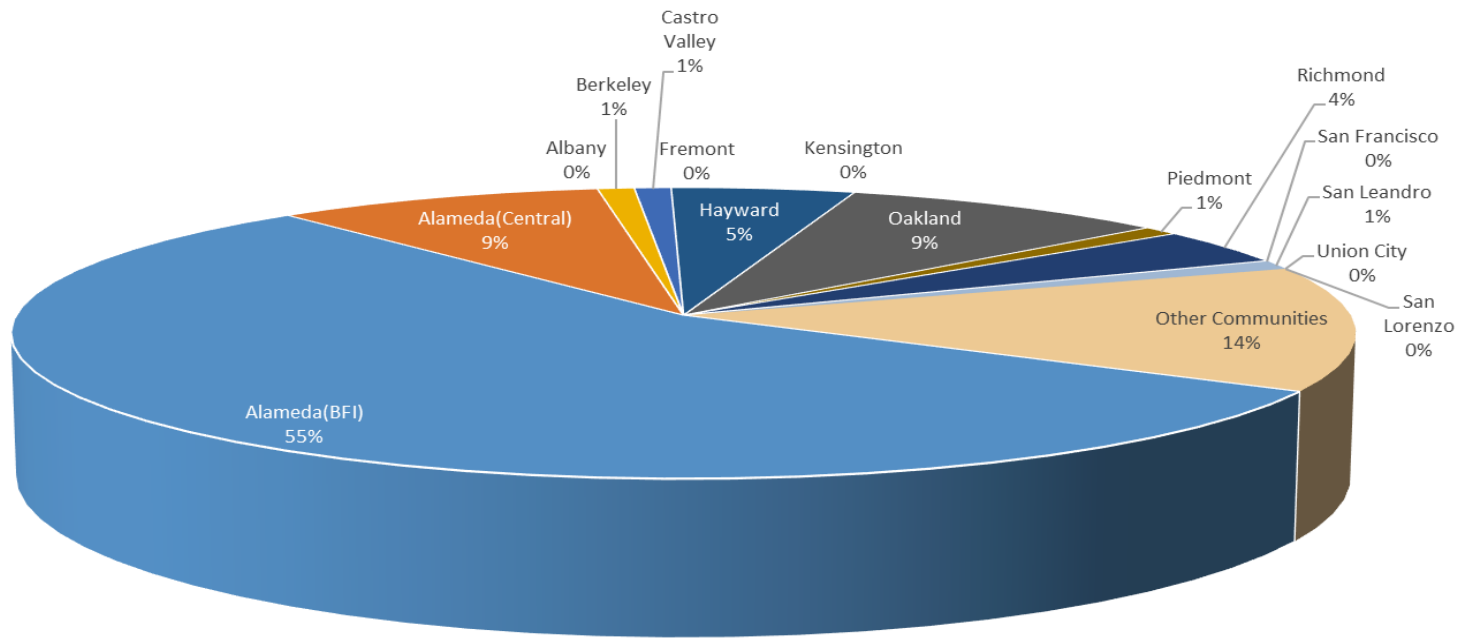
**Oakland International Airport  
Noise Complaint Summary  
August 2023**

Community	Callers	Complaints
Alameda(BFI)	56	1340
Alameda(Central)	9	35
Albany	0	0
Berkeley	1	2
Castro Valley	1	24
Fremont	0	0
Hayw ard	5	15
Kensington	0	0
Oakland	9	2876
Piedmont	1	1
Richmond	4	417
San Francisco	0	0
San Leandro	1	4
Union City	0	0
San Lorenzo	0	0
Other Communities	14	69
Total	101	4783
Complaints by Type		
E-mail	3056	
View point App	1727	
Complaints by Time of Day		
Day ( 0700 - 1900 )	843	
Evening ( 1900 - 2200 )	535	
Night ( 2200 - 0700 )	3405	
Complaints by Type of Operation		
Arrivals	3004	
Departures	1624	
Over-flights	72	
Touch & Go	83	
Not Linked to an Operation	0	
Complaints by Type of Aircraft		
Business Jet	195	
Helicopter	59	
Jet	4193	
Military	0	
Not Reported (not linked to an aircraft)	0	
Other (Type information not available)	26	
Propeller	208	
Turbo-prop	102	

# Number of Callers

## August 2023

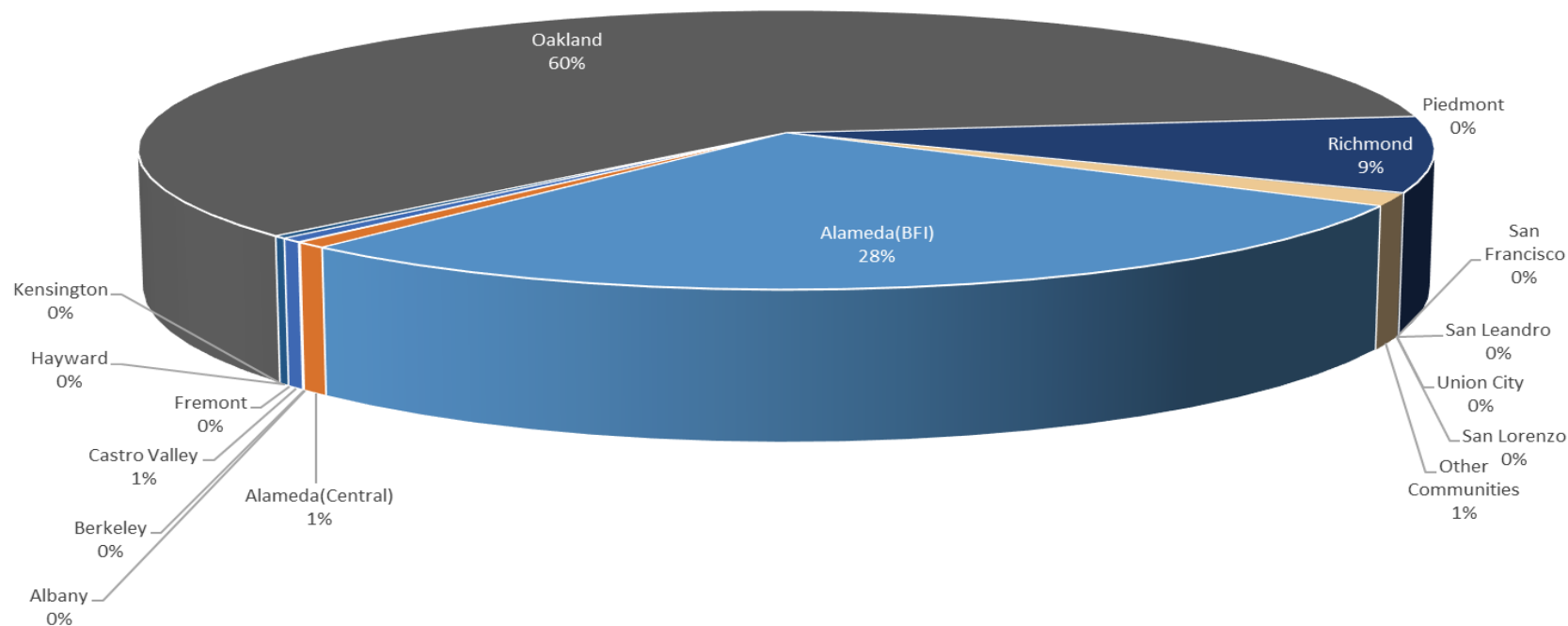
Noise Complaints Summary by Number of Callers



# Number of Complaints

## August 2023

Noise Complaints Summary by Number of Complaints



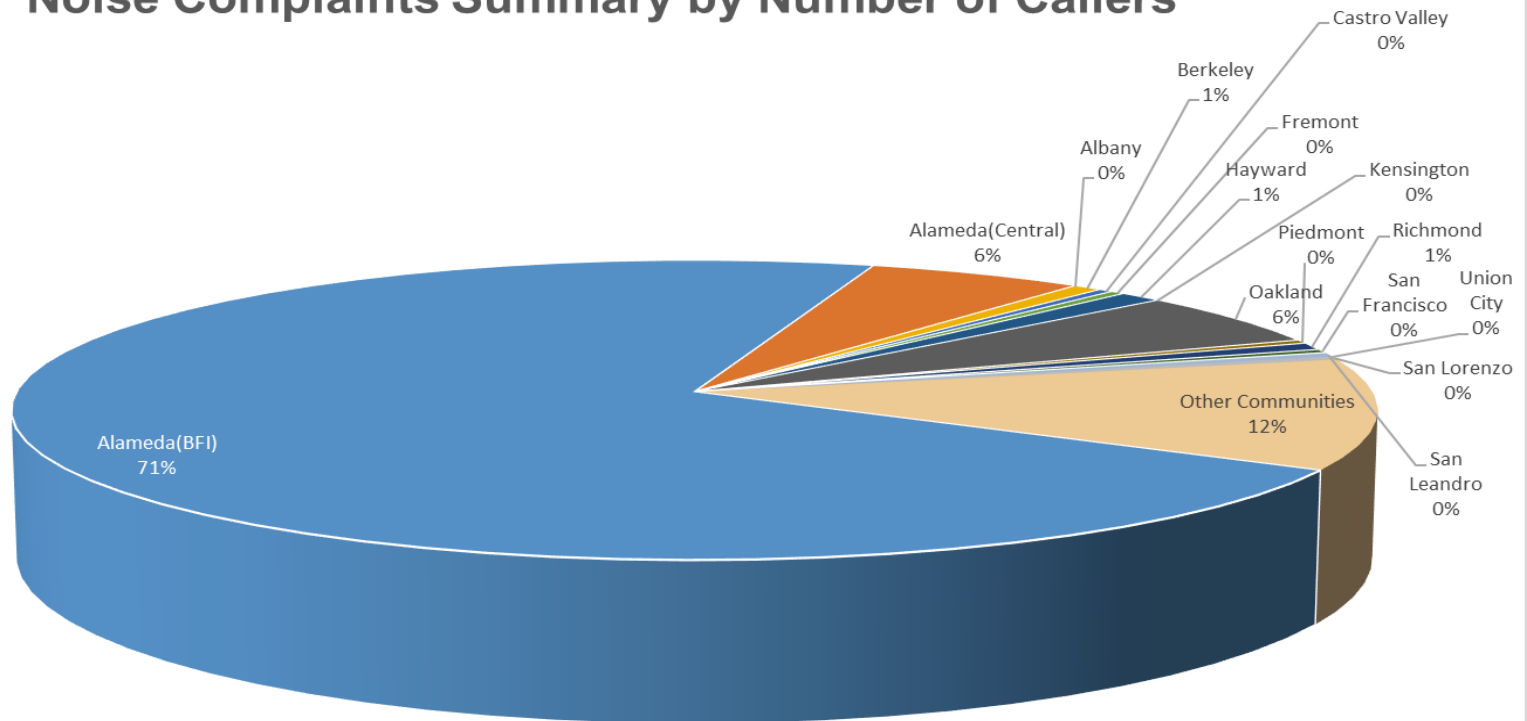
**Oakland International Airport  
Noise Complaint Summary  
September 2023**

Community	Callers	Complaints
Alameda(BFI)	185	5299
Alameda(Central)	15	60
Albany	0	0
Berkeley	2	79
Castro Valley	1	48
Fremont	1	1
Hayward	3	10
Kensington	0	0
Oakland	15	3252
Piedmont	1	2
Richmond	2	124
San Francisco	1	1
San Leandro	1	1
Union City	0	0
San Lorenzo	1	1
Other Communities	31	159
<b>Total</b>	<b>259</b>	<b>9037</b>
<b>Complaints by Type</b>		
E-mail		4781
View point App		4256
<b>Complaints by Time of Day</b>		
Day ( 0700 - 1900 )		2355
Evening ( 1900 - 2200 )		948
Night ( 2200 - 0700 )		5734
<b>Complaints by Type of Operation</b>		
Arrivals		3302
Departures		5461
Over-flights		96
Touch & Go		178
Not Linked to an Operation		0
<b>Complaints by Type of Aircraft</b>		
Business Jet		529
Helicopter		70
Jet		7679
Military		0
Not Reported (not linked to an aircraft)		0
Other (Type information not available)		28
Propeller		515
Turbo-prop		216

# Number of Callers

## September 2023

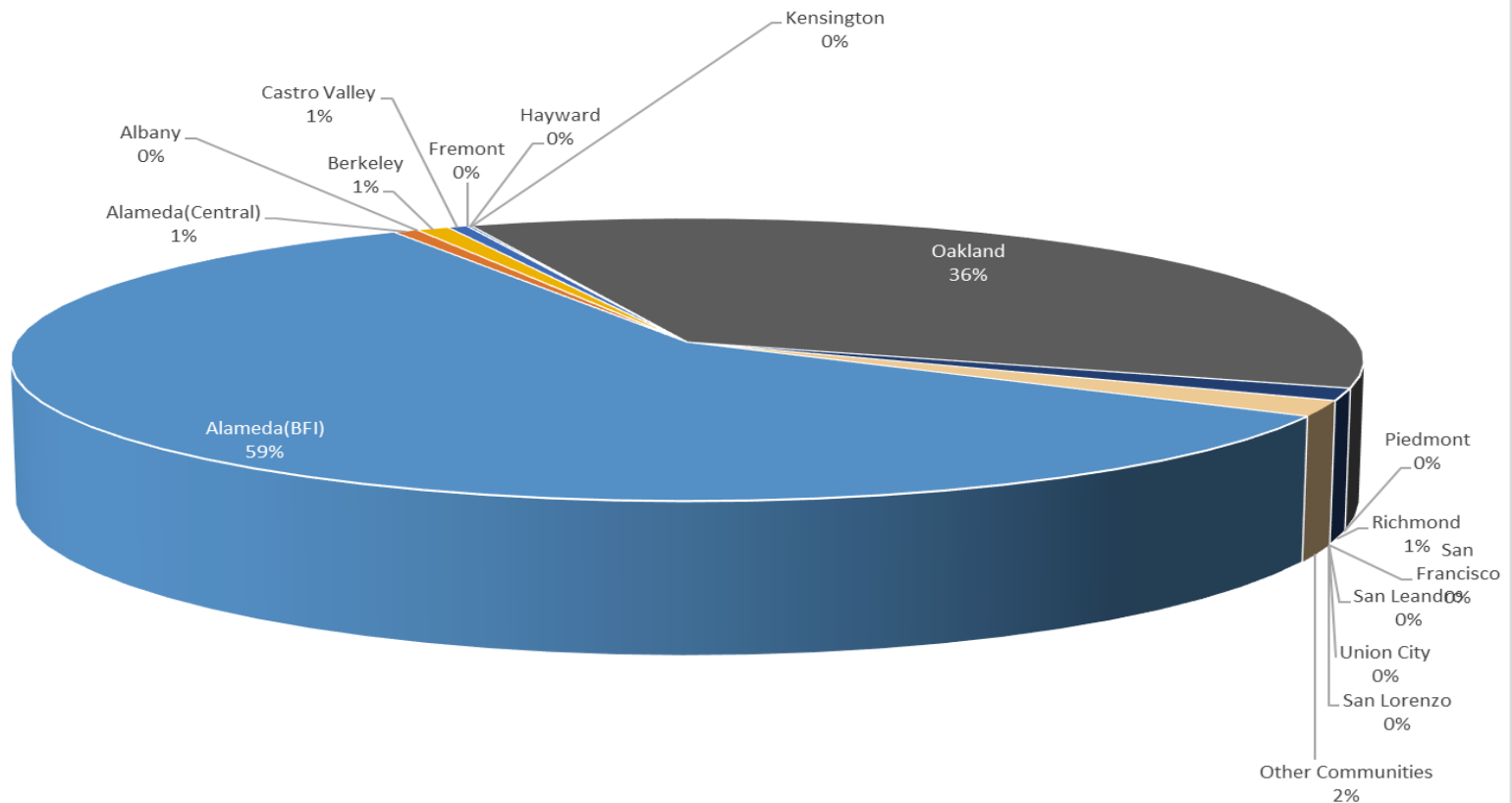
Noise Complaints Summary by Number of Callers

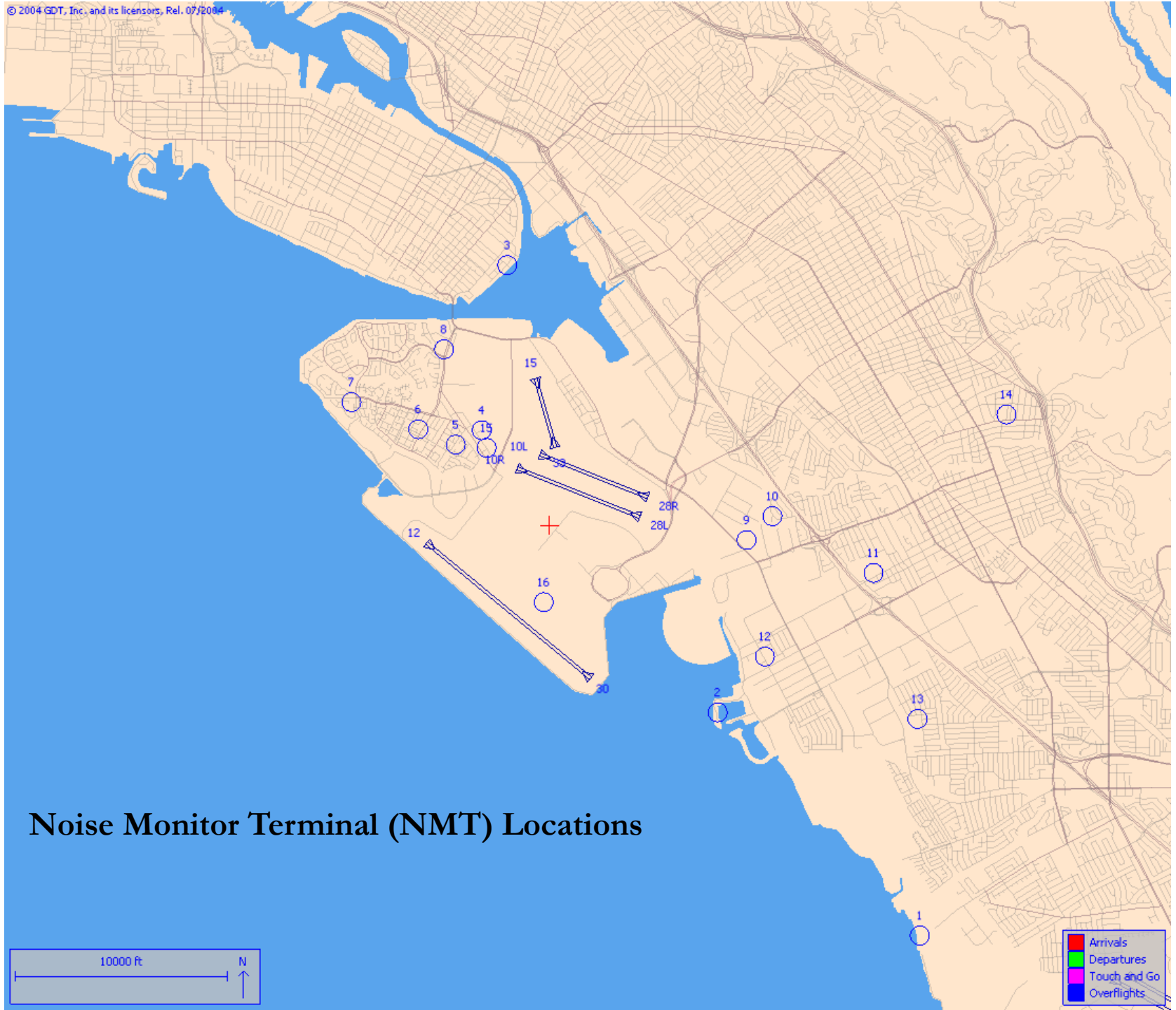


# Number of Complaints

## September 2023

Noise Complaints Summary by Number of Complaints





## Noise Monitor Terminal (NMT) Locations