

# **NOISE FORUM SUMMARY**

**North/South Field Working Groups**



**NOISE ABATEMENT REPORT**

**FIRST QUARTER 2024**

# 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  
First Quarter 2024**

	2023Q1		2024Q1	
	Compl.	N/C	Compl.	N/C
Runway 28R/L Jet Departure Compliance	94%	6%	94%	7%
Total Airport-wide Corporate Jet Departures	2,400	156	2,547	156
Runway 10R/L Jet Landing Compliance	84%	16%	87%	13%
Total Southeast Plan Corporate Jet Landings	566	107	490	75
North Field VFR Departure Compliance	92%	8%	95%	5%
Total Runways 28R/L & 33 Departures	172	15	175	9
North Field Quiet Hours Compliance	85%	15%	83%	17%
Total North Field Quiet Hours Departures	150	26	174	35
Runway 30 BFI Right Turn Departure Compliance	100%	0%	100%	0%
Total Runway 30 Turbojet Departures	12,497	7	12,780	1
Night Time Departure Compliance	99%	1%	99%	1%
Total Runway 30 Night Turbojet Departures	2,366	19	2,507	22
Runway 12 Night Departure Compliance	94%	6%	100%	0%
Total Runway 12 Night Turbojet Departures	769	52	437	0
Runway 30 East Turn Departure Compliance	100%	0%	100%	0%
Total Runway 30 East Turn Departures	2,759	2	3,083	4
100 Degree Radial Turbojet Landing Compliance	98%	2%	99%	1%
Total 100 Degree Radial Turbojet Landings	737	18	610	4
Engine Runup Program Compliance	100%	0%	100%	0%
Total Evening and Nighttime Engine Runups	8	0	4	0
<b>Note: N/C means non-compliant. Percentage values are rounded out.</b>				



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

**2024Q1**  
**94% Compliance**  
**(2,703 total departures)**  
**(156 non-compliant)**

**2023Q1**  
**94% Compliance**  
**(2,556 total departures)**  
**(156 non-compliant)**

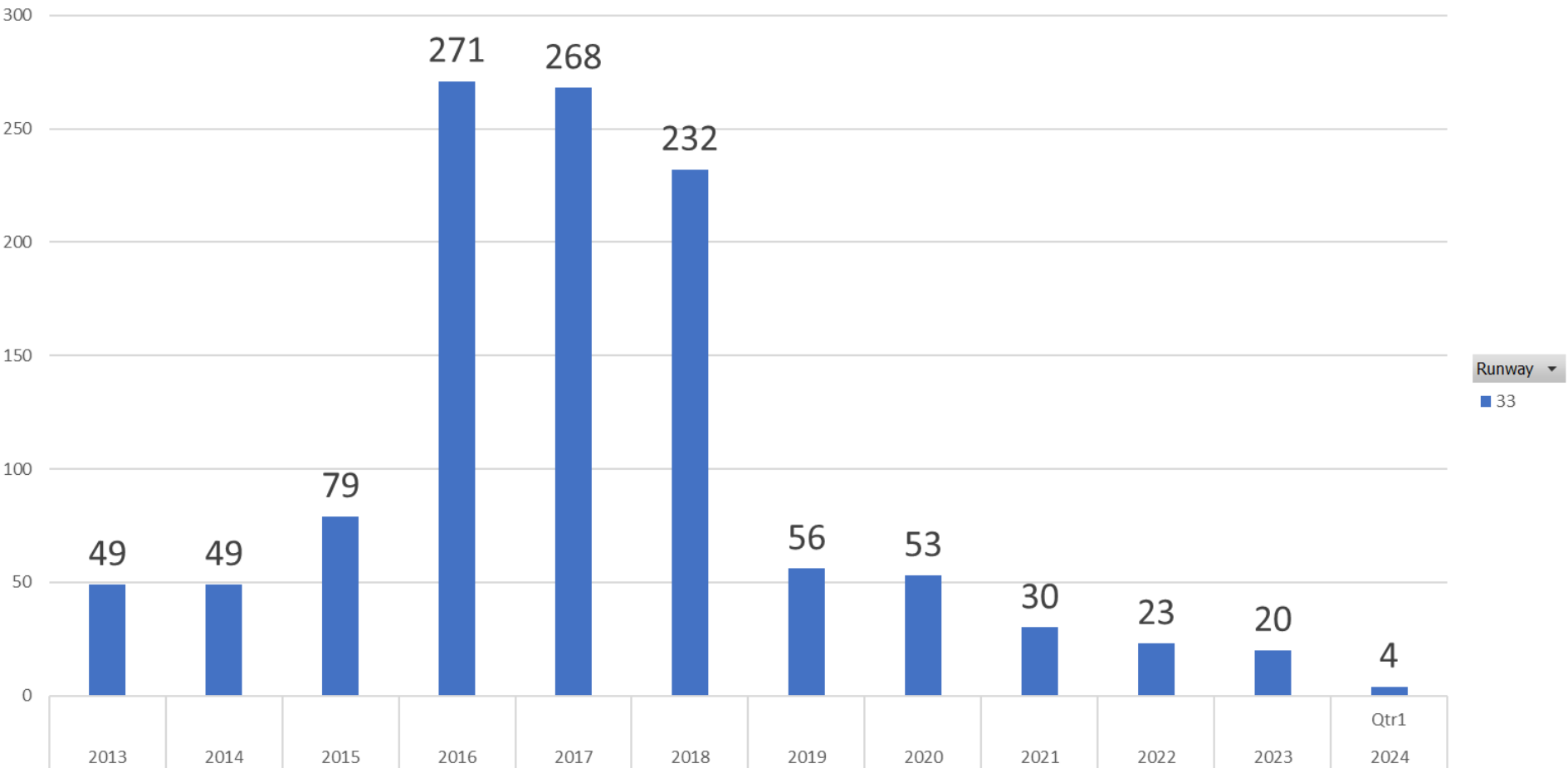
Heading: 325  
 Elevation: 15

<span style="color: red;">■</span>	Arrivals
<span style="color: green;">■</span>	Departures
<span style="color: blue;">■</span>	Touch and Go
<span style="color: blue;">■</span>	Overflights

# RUNWAY 33 JET DEPARTURES FIRST Quarter 2024

Count of Aircraft Type

## Runway 33 Jet Departure Trend Analysis



Years ▾ Quarters ▾ Date Time ▾

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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

**2024Q1**  
**87% Compliance**  
**(565 total landings)**  
**(75 non-compliant)**

**2023Q1**  
**84% Compliance**  
**(673 total landings)**  
**(107 non-compliant)**

Heading: 325  
 Elevation: 15

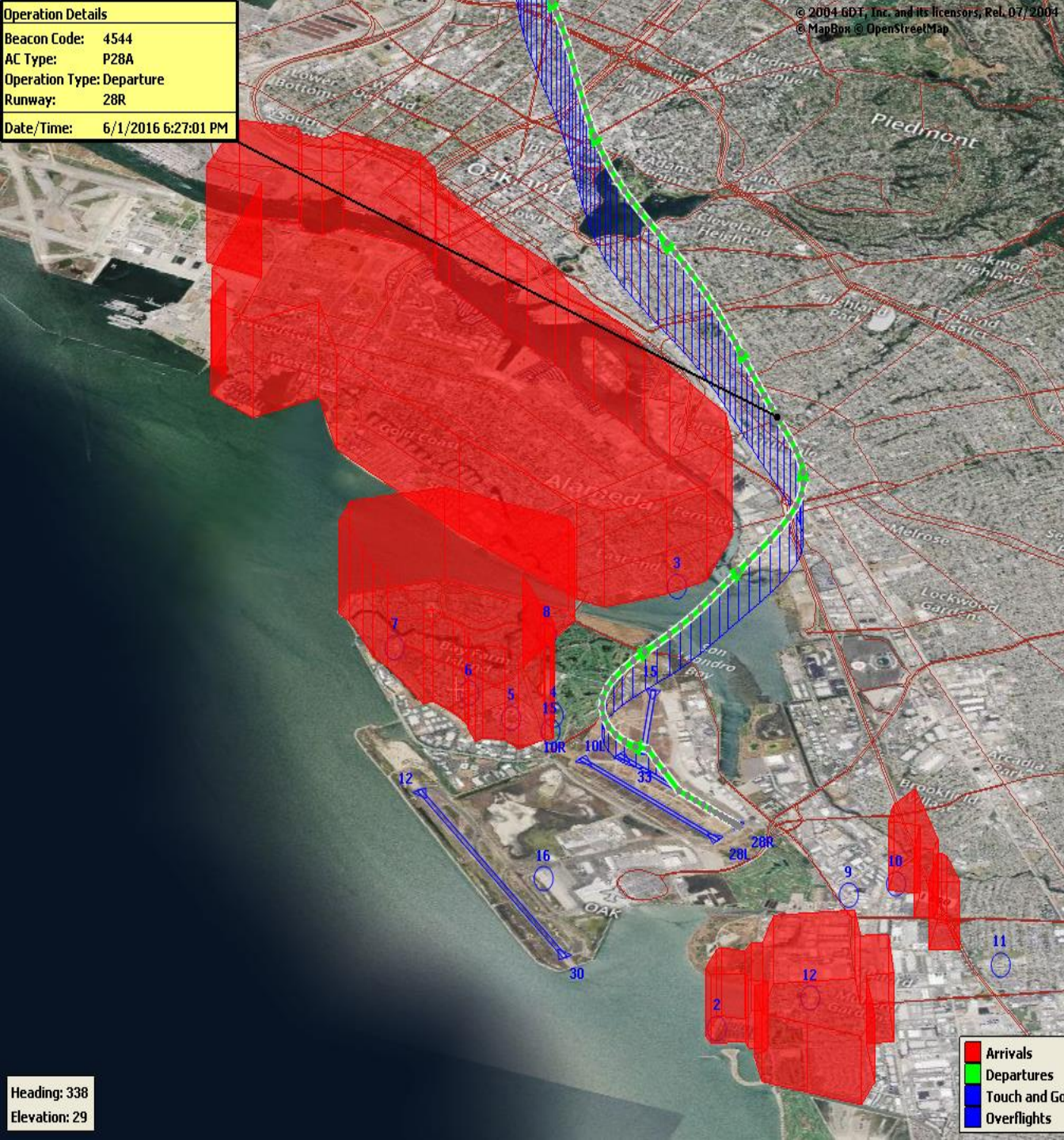
- Arrivals
- Departures
- Touch and Go
- Overflights





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

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## VFR Aircraft Departure NAP

**2024Q1**  
**95% Compliance**  
**(184 total departures)**  
**(9 non-compliant)**

**2023Q1**  
**92% Compliance**  
**(187 total departures)**  
**(15 non-compliant)**

- Arrivals
- Departures
- Touch and Go
- Overflights

Heading: 338  
 Elevation: 29



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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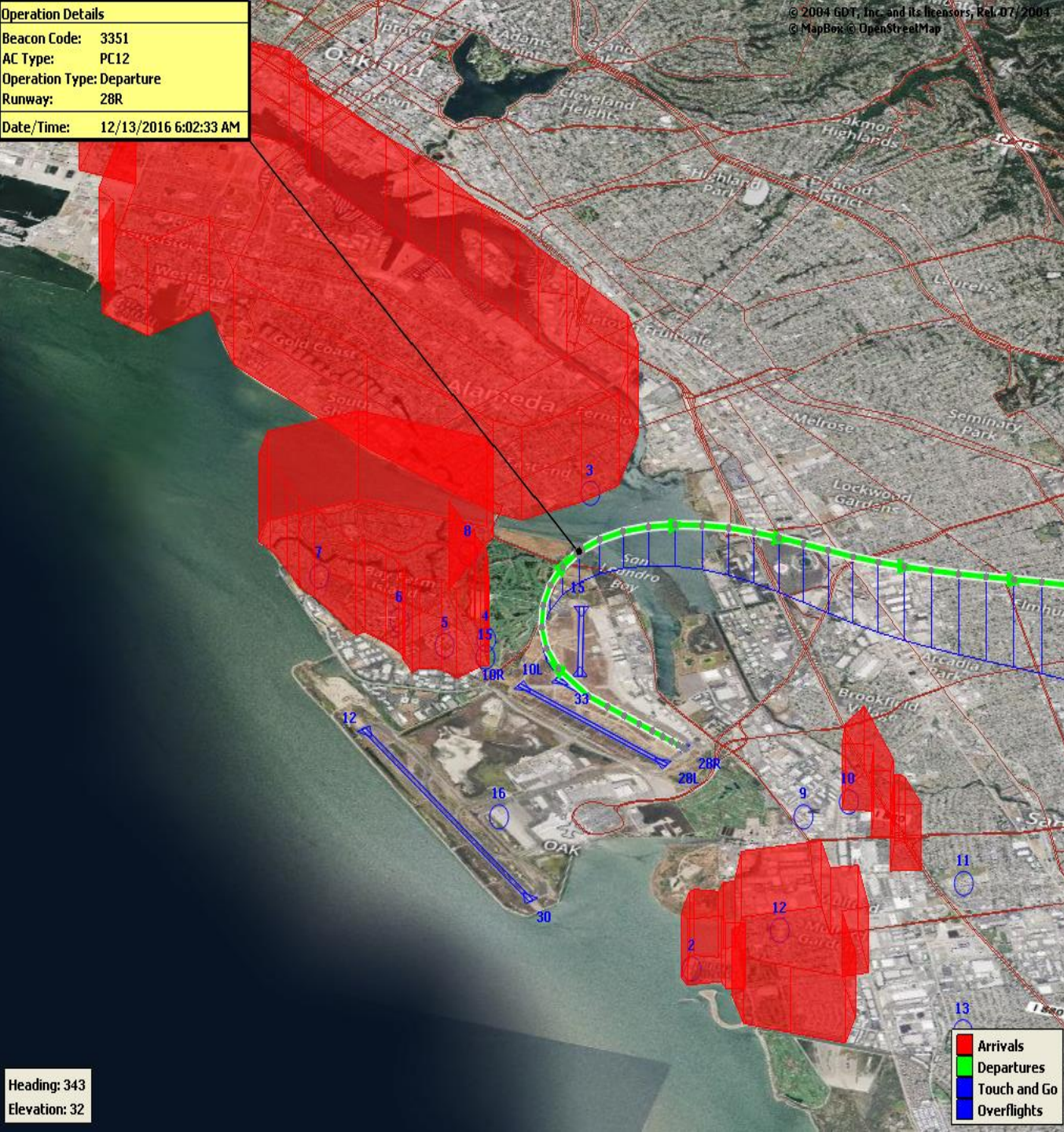
# North Field Quiet Hours NAP

**2024Q1**  
**83% Compliance**  
**(209 total departures)**  
**(35 non-compliant)**

**2023Q1**  
**85% Compliance**  
**(176 total departures)**  
**(26 non-compliant)**

Heading: 343  
Elevation: 32

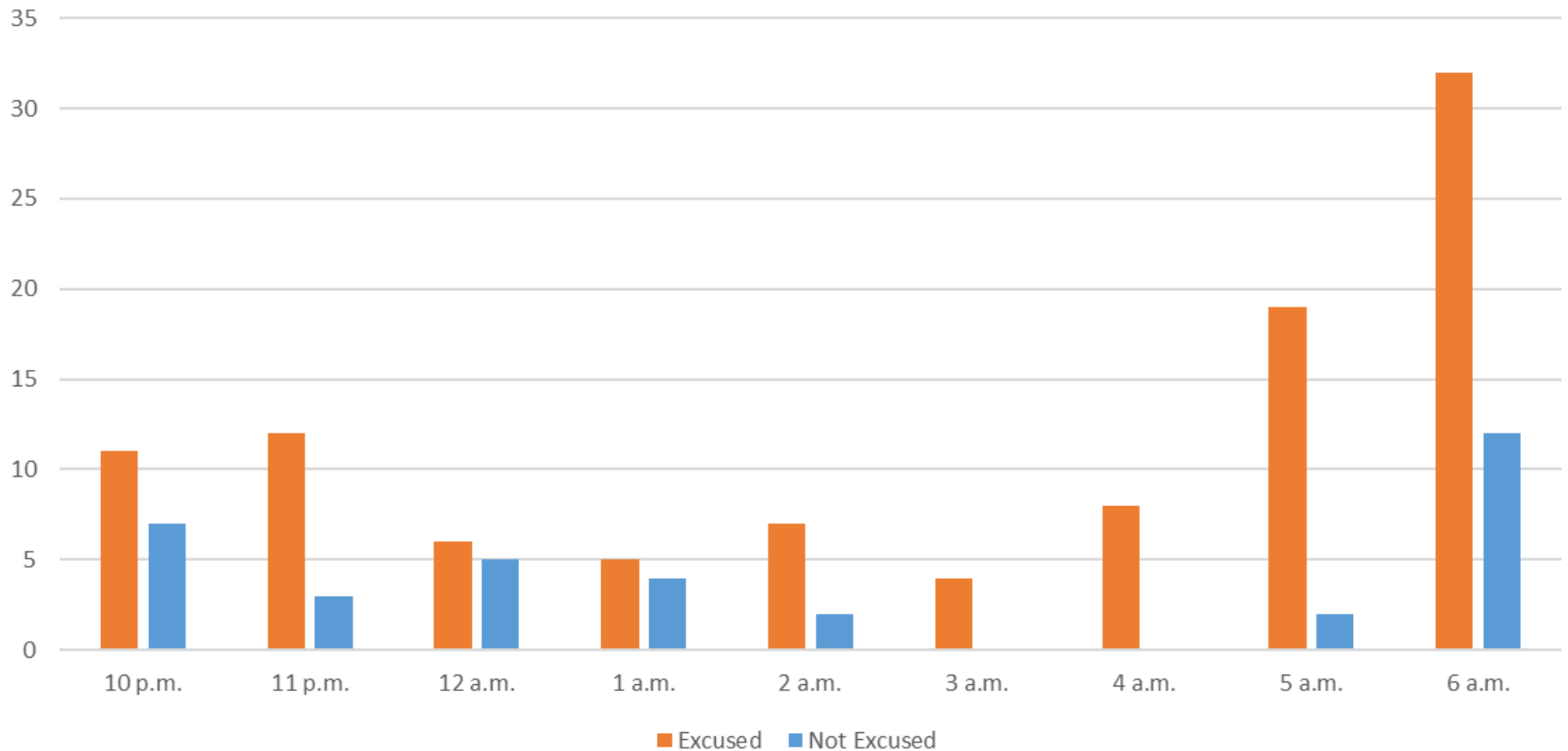
Arrivals  
Departures  
Touch and Go  
Overflights





# 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

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# Night Time Departure NAP

**2024Q1**  
**99% Compliance**  
**(2,529 total departures)**  
**(22 non-compliant)**

\*REBAS Gate non-compliant = 22

**2023Q1**  
**99% Compliance**  
**(2,385 total departures)**  
**(19 non-compliant)**



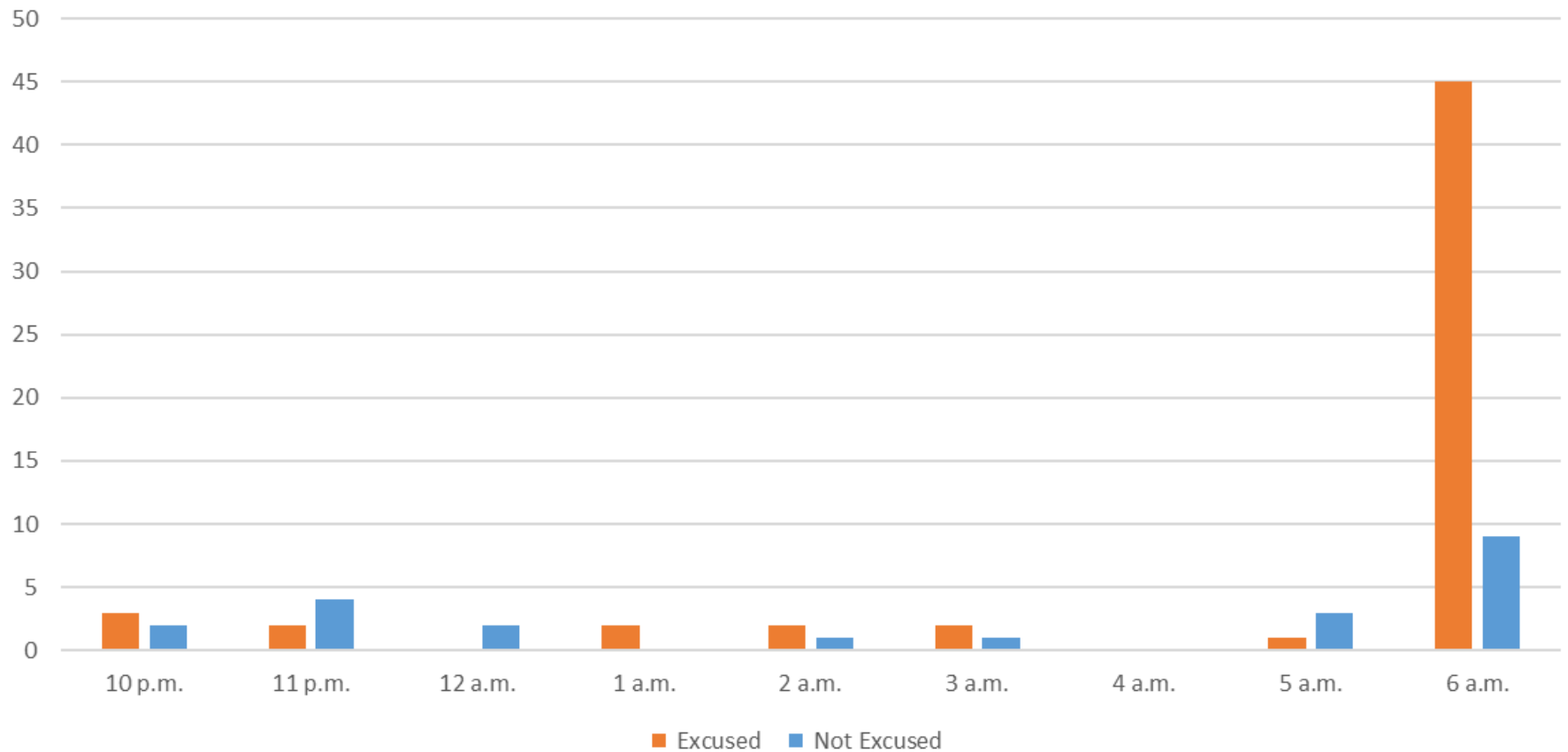
Heading: 349  
 Elevation: 59

■ Arrivals  
■ Departures  
■ Touch and Go  
■ Overflights

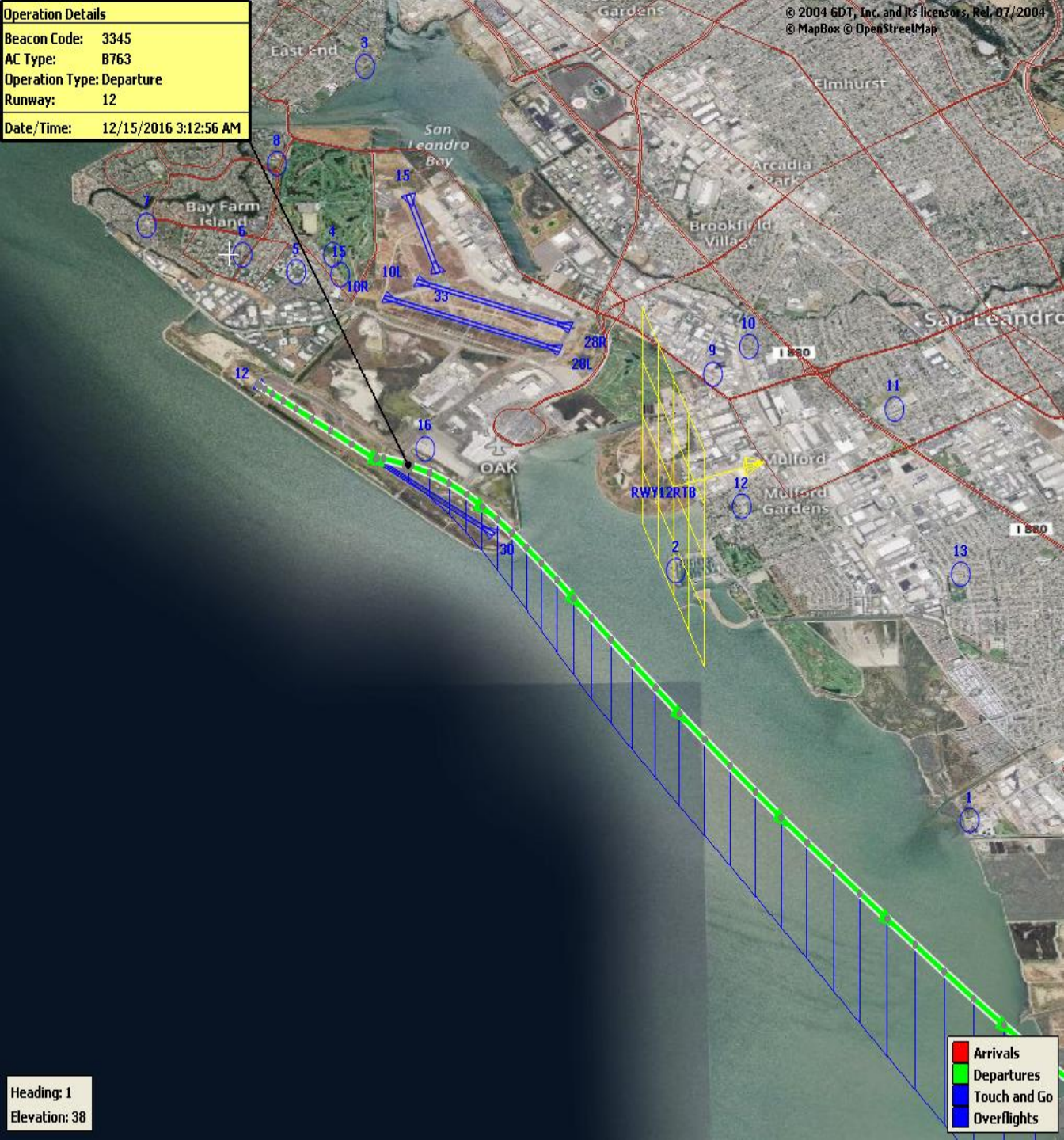


# Quarterly Night Time NAP Non-Compliant Count Per Quarter

Excused/Not Excused Violation Count Per Quarter



**Operation Details**  
Beacon Code: 3345  
AC Type: B763  
Operation Type: Departure  
Runway: 12  
Date/Time: 12/15/2016 3:12:56 AM



## Runway 12 Night Departure NAP

**2024Q1**  
**100% Compliance**  
**(437 total departures)**  
**(0 non-compliant)**

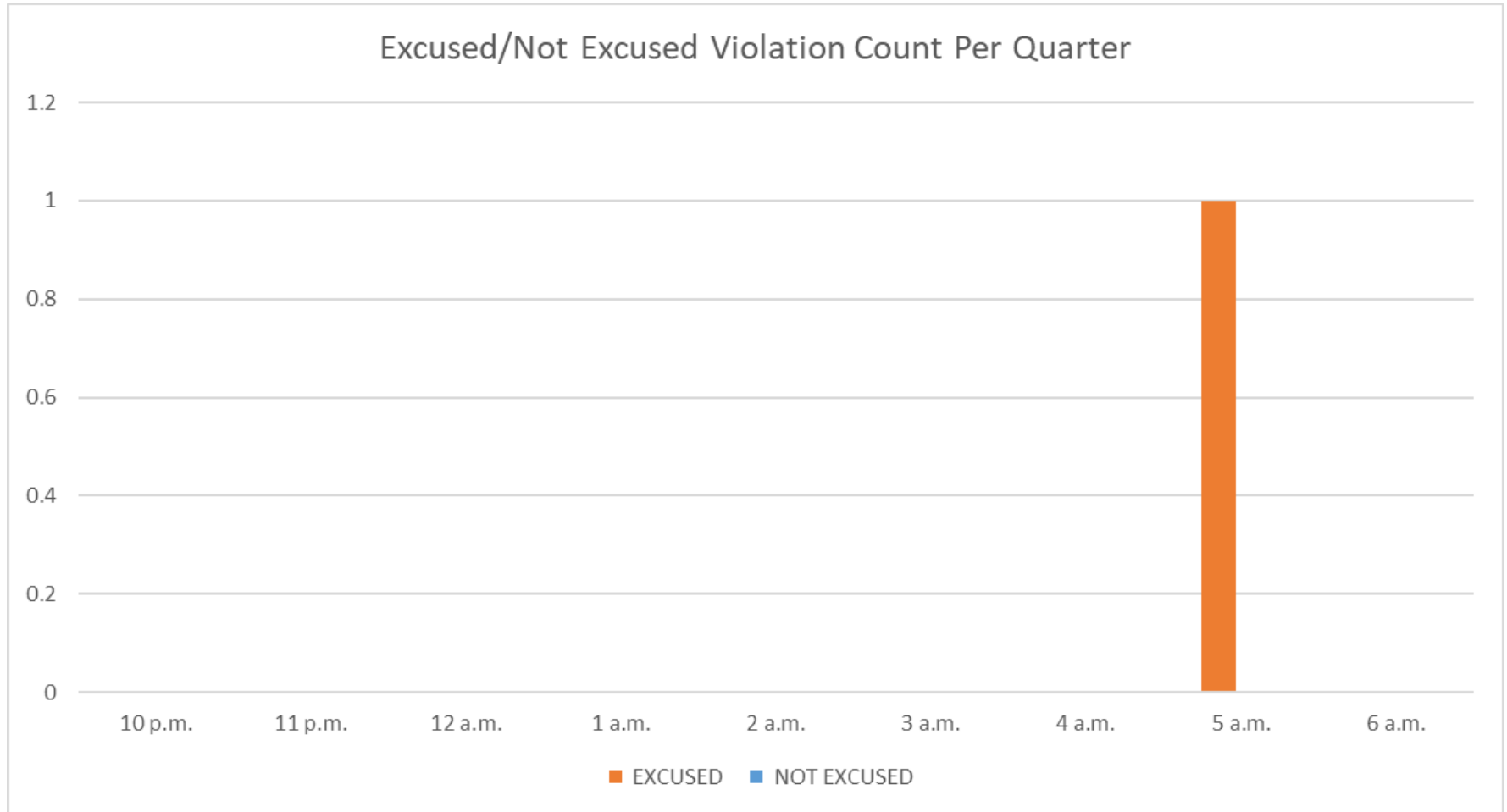
**2023Q1**  
**94% Compliance**  
**(821 total departures)**  
**(52 non-compliant)**

Heading: 1  
Elevation: 38

Arrivals  
Departures  
Touch and Go  
Overflights



# 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



**2024Q1**  
**100% Compliance**  
**(12,781 total departures)**  
**(1 non-compliant)**

**2023Q1**  
**100% Compliance**  
**(12,504 total departures)**  
**(7 non-compliant)**

Heading: 299  
 Elevation: 36

<span style="color: red;">■</span>	Arrivals
<span style="color: green;">■</span>	Departures
<span style="color: blue;">■</span>	Touch and Go
<span style="color: black;">■</span>	Overflights



Operation Details  
Beacon Code: 3231  
AC Type: B738  
Operation Type: Departure  
Runway: 30  
Date/Time: 4/7/2024 8:05:16 PM



## Runway 30 East Turn NAP

**2024Q1**  
**100% Compliance**  
**(3,087 total departures)**  
**(4 non-compliant)**

\*Excused Departures = 4

**2023Q1**  
**100% Compliance**  
**(2,761 total departures)**  
**(2 non-compliant)**

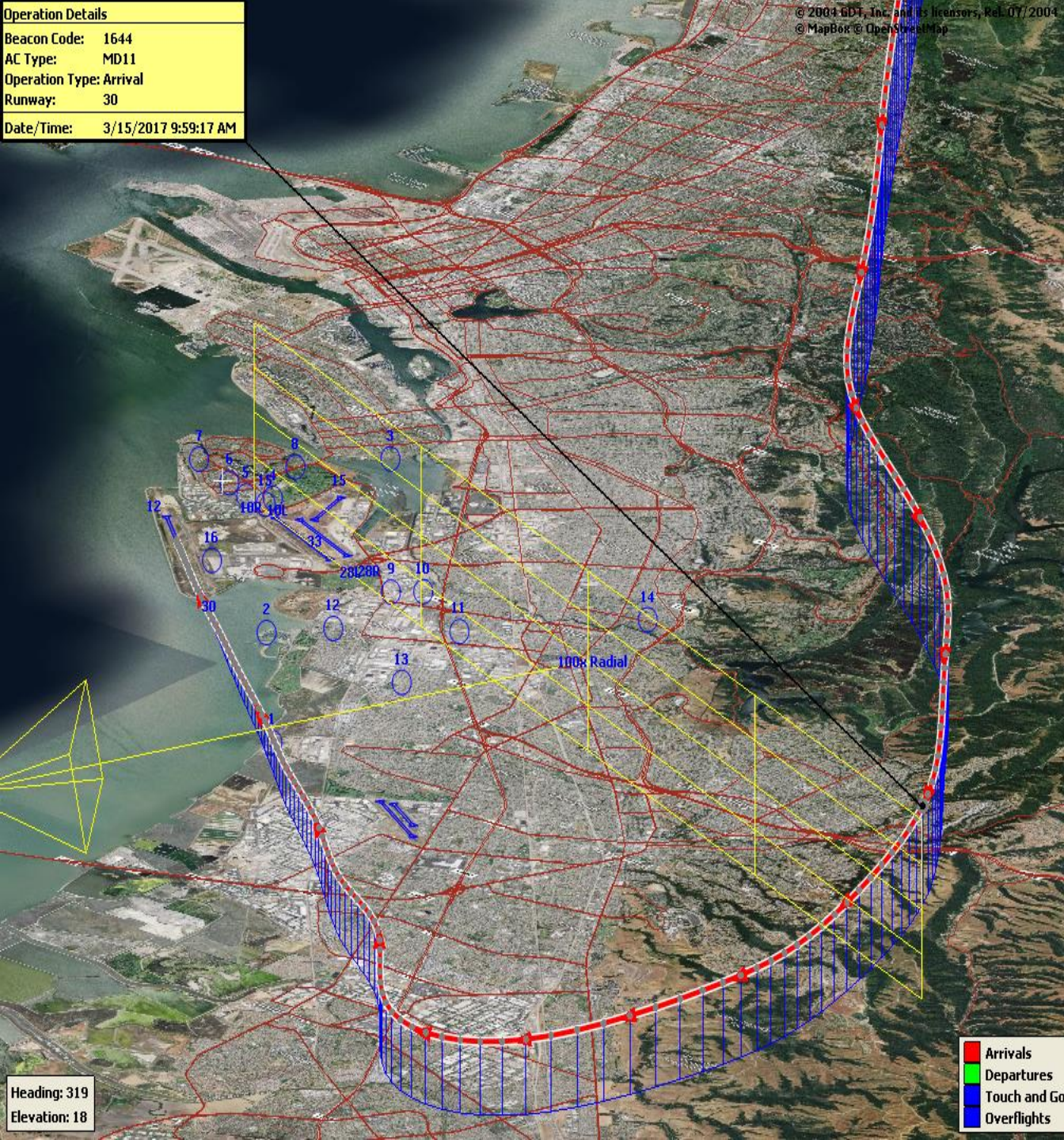
Heading 310°  
Elevation 24°

Operation Mode  
Arrivals  
Departures  
Overflights  
Ground Operation  
Touch and Go



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

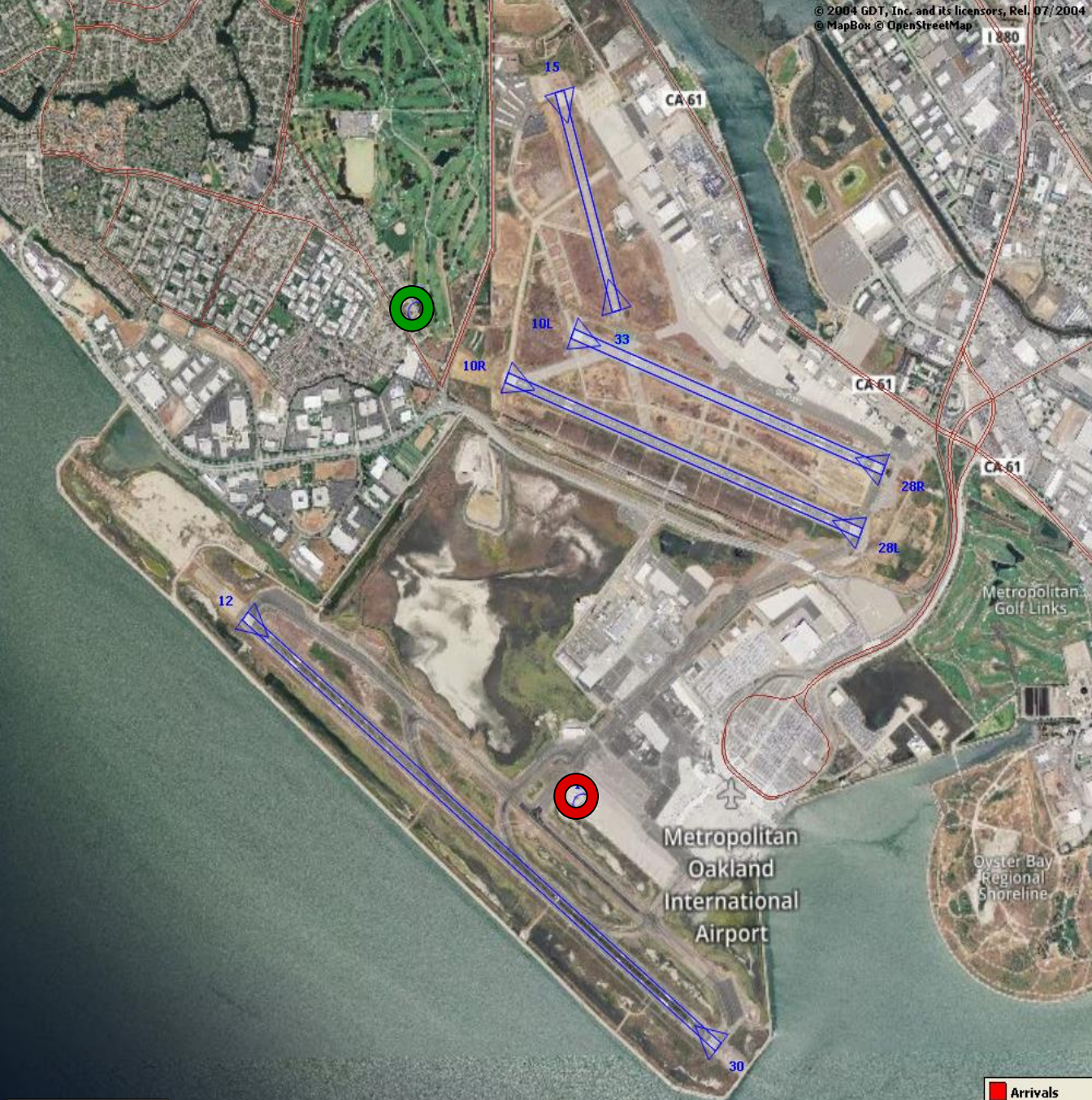
**2024Q1**  
**99% Compliance**  
**(614 total landings)**  
**(4 non-compliant)**

**2023Q1**  
**98% Compliance**  
**(755 total landings)**  
**(18 non-compliant)**

Heading: 319  
Elevation: 18

- Arrivals
- Departures
- Touch and Go
- Overflights





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## Engine Run-up NAP

**2024Q1**  
**100% Compliance**  
**(4 engine run-ups)\***  
**(0 non-compliant)**

**2023Q1**  
**100% Compliance**  
**(8 engine run-ups)**  
**(0 non-compliant)**

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

	Arrivals
	Departures
	Touch and Go
	Overflights

**Compliance Monitoring Quarterly Summary Comparison  
First Quarter 2024 - Quarter-to-Quarter**

	2023Q4		2024Q1	
	Compl.	NC	Compl.	NC
Runway 28R/L Jet Departure Compliance	93%	7%	94%	7%
Total Airport-wide Corporate Jet Departures	2,111	154	2,547	156
Runway 10R/L Jet Landing Compliance	83%	17%	87%	13%
Total Southeast Plan Corporate Jet Landings	163	33	490	75
North Field VFR Departure Compliance	92%	8%	95%	5%
Total Runways 28R/L & 33 Departures	228	19	175	9
North Field Quiet Hours Compliance	82%	18%	83%	17%
Total North Field Quiet Hours Departures	206	46	174	35
Runway 30 BFI Right Turn Departure Compliance	100%	0%	100%	0%
Total Runway 30 Turbojet Departures	15,637	2	12,780	1
Night Time Departure Compliance	99%	1%	99%	1%
Total Runway 30 Night Turbojet Departures	3,260	30	2,507	22
Runway 12 Night Departure Compliance	60%	40%	100%	0%
Total Runway 12 Night Turbojet Departures	32	21	437	0
Runway 30 East Turn Departure Compliance	100%	0%	100%	0%
Total Runway 30 East Turn Departures	3,943	3	3,083	4
100 Degree Radial Turbojet Landing Compliance	98%	2%	99%	1%
Total 100 Degree Radial Turbojet Landings	1,005	19	610	4
Engine Runup Program Compliance	100%	0%	100%	0%
Total Evening and Nighttime Engine Runups	14	0	4	0

**Note: NC means non-compliant. Percentage values are rounded out.**



**Table 1. North Field Night Aircraft Departure SEL Noise Measurements**  
**Total Aircraft Departures = 209**

First Quarter 2024 (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	10	3	0.0	0.5%	2	0.0	0.4%	0	0.0	0.0%	15
2	0	0	0.0	0.0%	0	0.0	0.0%	0	0.0	0.0%	0
3	31	6	0.1	1.1%	0	0.0	0.0%	0	0.0	0.0%	37
4	52	43	0.5	7.6%	51	0.6	9.0%	26	0.3	4.6%	172
5	57	19	0.2	3.4%	17	0.2	3.0%	34	0.4	6.0%	127
6	45	11	0.1	1.9%	19	0.2	3.4%	25	0.3	4.4%	100
7	11	16	0.2	2.8%	27	0.3	4.8%	3	0.0	0.5%	57
8	54	20	0.2	3.5%	1	0.0	0.2%	0	0.0	0.0%	75
9	18	30	0.3	5.3%	18	0.2	3.2%	3	0.0	0.5%	69
10	123	39	0.4	6.9%	12	0.1	2.1%	0	0.0	0.0%	174
11	22	8	0.1	1.4%	1	0.0	0.2%	0	0.0	0.0%	31
12	10	11	0.1	1.9%	5	0.1	0.9%	0	0.0	0.0%	26
13	25	2	0.0	0.4%	2	0.0	0.4%	0	0.0	0.0%	29
14	48	0	0.0	0.0%	0	0.0	0.0%	0	0.0	0.0%	48
<b>All NMTs</b>	506	208	2	0	155	2	0	91	1	0	960

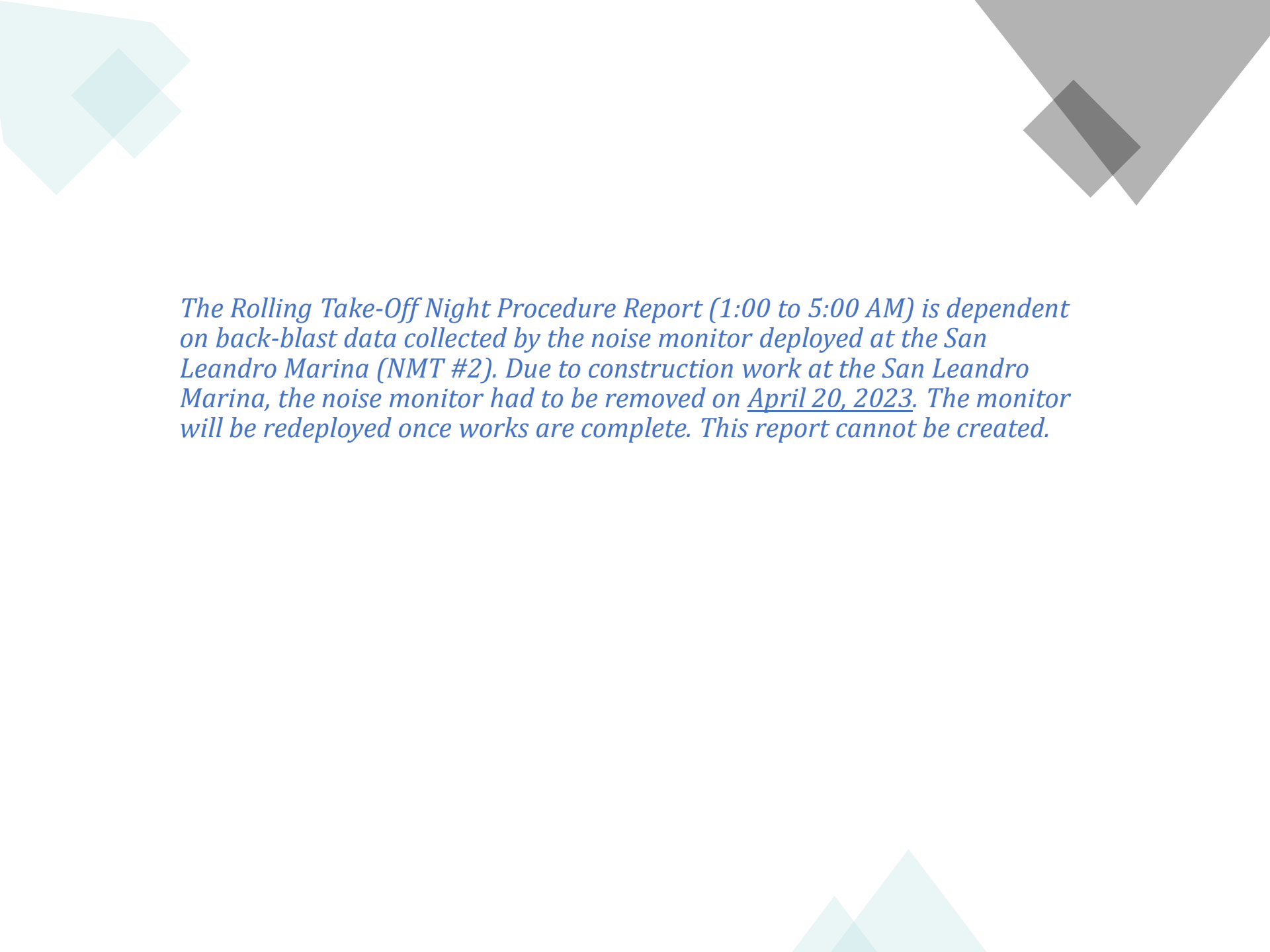
**Table 2. Aircraft SEL Noise Measurements in Alameda - Total Aircraft Departures = 150**

First Quarter 2024 (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	31	6	0.1	2.5%	0	0.0	0.0%	0	0.0	0.0%	37
4	52	43	0.5	18.0%	51	0.6	21.3%	26	0.3	10.9%	172
5	57	19	0.2	7.9%	17	0.2	7.1%	34	0.4	14.2%	127
6	45	11	0.1	4.6%	19	0.2	7.9%	25	0.3	10.5%	100
7	11	16	0.2	6.7%	27	0.3	11.3%	3	0.0	1.3%	57
8	54	20	0.2	8.4%	1	0.0	0.4%	0	0.0	0.0%	75
<b>Total</b>	<b>250</b>	<b>115</b>	<b>1.3</b>		<b>115</b>	<b>1.3</b>		<b>88</b>	<b>1.0</b>		<b>568</b>

**Table 3. Aircraft SEL Noise Measurements in San Leandro - Total Aircraft Departures = 59**

First Quarter 2024 (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	18	30	0.3	9.1%	18	0.2	5.5%	3	0.0	0.9%	69
10	123	39	0.4	11.9%	12	0.1	3.7%	0	0.0	0.0%	174
11	22	8	0.1	2.4%	1	0.0	0.3%	0	0.0	0.0%	31
12	10	11	0.1	3.4%	5	0.1	1.5%	0	0.0	0.0%	26
13	25	2	0.0	0.6%	2	0.0	0.6%	0	0.0	0.0%	29
14	48	0	0.0	0.0%	0	0.0	0.0%	0	0.0	0.0%	48
<b>Total</b>	<b>246</b>	<b>90</b>	<b>1.0</b>		<b>38</b>	<b>0.4</b>		<b>3</b>	<b>0.0</b>		<b>377</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)  
First Quarter 2023, 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	
First Quarter 2023 [B]						
	Total [X]	Est. Avg. Monthly [X/3]				
B763	217	72	63	65	74	19
DC10/MD10	0	-	-	-	-	-
MD11	164	55	73	68	77	20
A306	57	19	19	65	74	15
B757	86	29	30	65	75	19
B77L	103	34	21	65	73	14
Difference [A-B]						
DC10/MD10		-87	-32	-69	-78	-22
MD11		23	60	-2	-2	-4
A306		-48	-2	-2	-3	-10

(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)

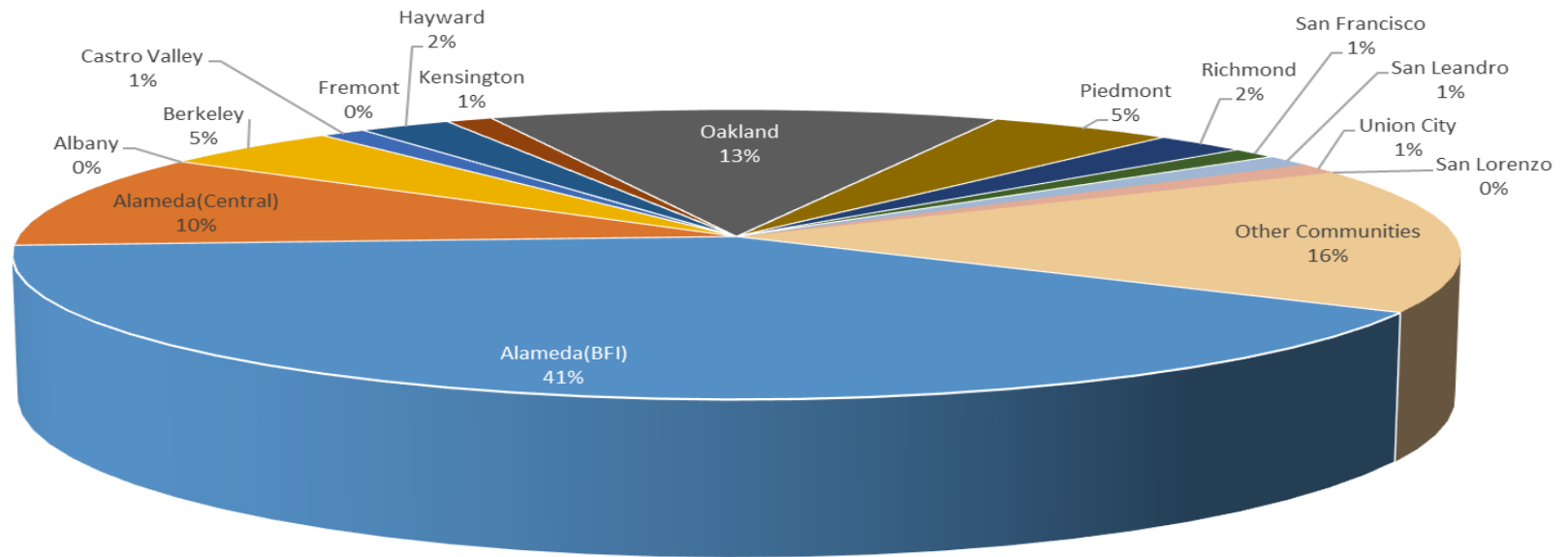


**Oakland International Airport  
Noise Complaint Summary  
January 2024**

<b>Community</b>	<b>Callers</b>	<b>Complaints</b>
Alameda(BFI)	35	769
Alameda(Central)	9	38
Albany	0	0
Berkeley	4	142
Castro Valley	1	20
Fremont	0	0
Hayward	2	2
Kensington	1	1
Oakland	11	2485
Piedmont	4	12
Richmond	2	253
San Francisco	1	3
San Leandro	1	10
Union City	1	1
San Lorenzo	0	0
Other Communities	14	60
<b>Total</b>	<b>86</b>	<b>3796</b>
<b>Complaints by Type</b>		
E-mail		2651
View point App		1145
<b>Complaints by Time of Day</b>		
Day ( 0700 - 1900 )		669
Evening ( 1900 - 2200 )		783
Night ( 2200 - 0700 )		2344
<b>Complaints by Type of Operation</b>		
Arrivals		2755
Departures		948
Over-flights		23
Touch & Go		70
Not Linked to an Operation		0
<b>Complaints by Type of Aircraft</b>		
Business Jet		322
Helicopter		36
Jet		3285
Military		0
Not Reported (not linked to an aircraft)		0
Other (Type information not available)		2
Propeller		109
Turbo-prop		42

# Number of Callers January 2024

## Noise Complaints Summary by Number of Callers

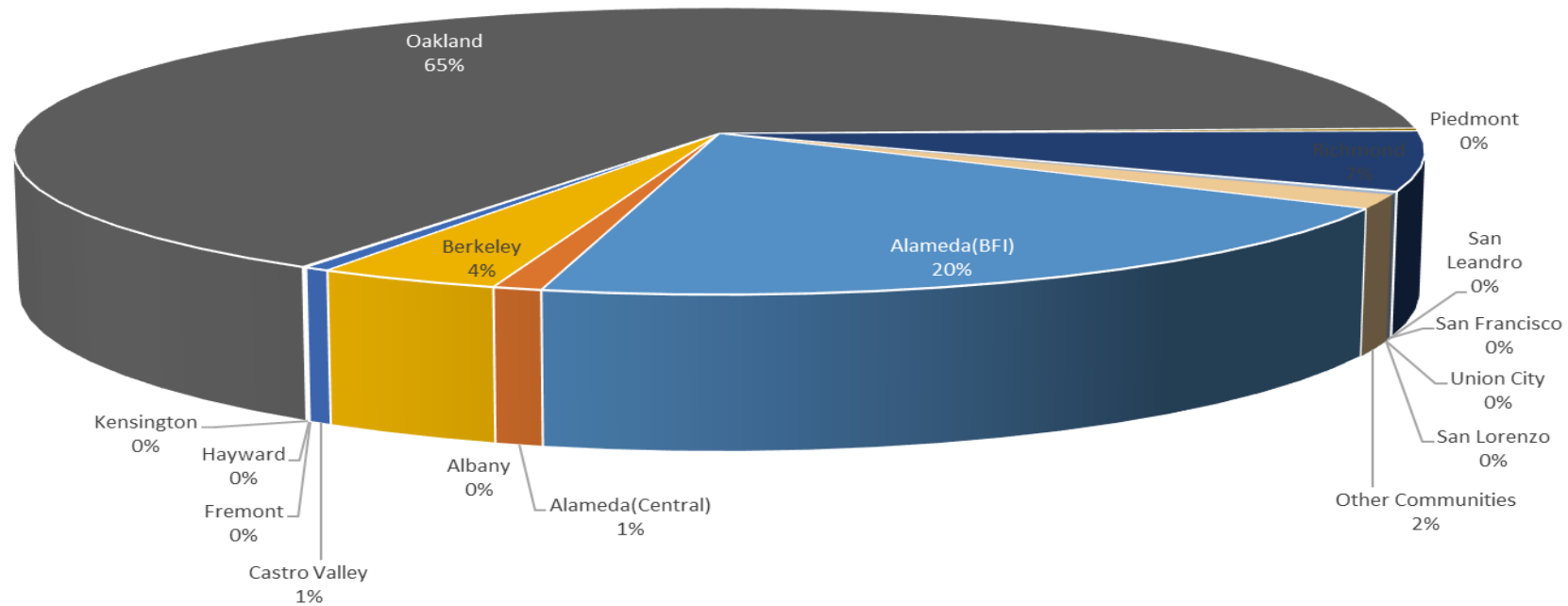




# Number of Complaints

## January 2024

### Noise Complaints Summary by Number of Complaints



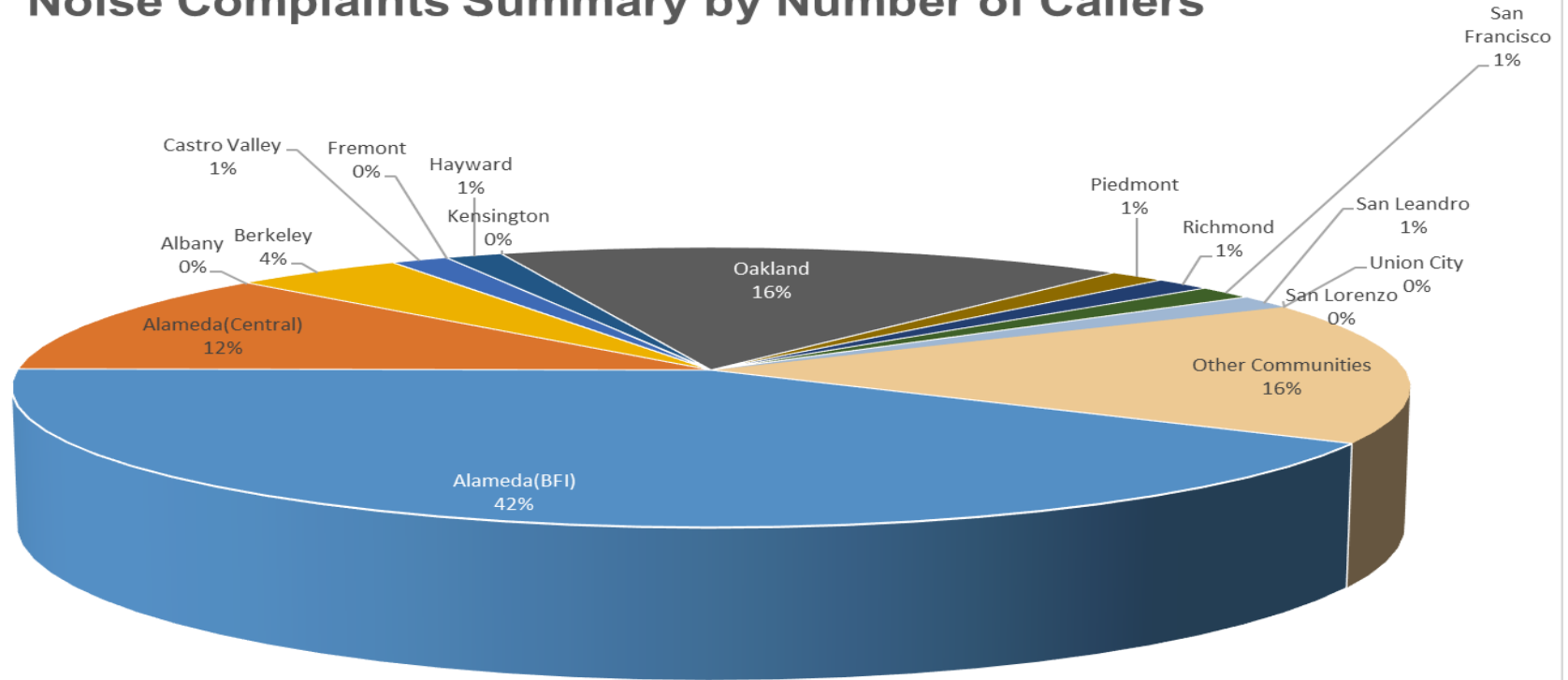
**Oakland International Airport  
Noise Complaint Summary  
February 2024**

<b>Community</b>	<b>Callers</b>	<b>Complaints</b>
Alameda(BFI)	28	516
Alameda(Central)	8	24
Albany	0	0
Berkeley	3	123
Castro Valley	1	33
Fremont	0	0
Hayward	1	3
Kensington	0	0
Oakland	11	844
Piedmont	1	1
Richmond	1	147
San Francisco	1	5
San Leandro	1	3
Union City	0	0
San Lorenzo	0	0
Other Communities	11	28
<b>Total</b>	<b>67</b>	<b>1727</b>
<b>Complaints by Type</b>		
E-mail		867
View point App		860
<b>Complaints by Time of Day</b>		
Day ( 0700 - 1900 )		740
Evening ( 1900 - 2200 )		343
Night ( 2200 - 0700 )		644
<b>Complaints by Type of Operation</b>		
Arrivals		947
Departures		710
Over-flights		21
Touch & Go		49
Not Linked to an Operation		0
<b>Complaints by Type of Aircraft</b>		
Business Jet		210
Helicopter		20
Jet		1078
Military		0
Not Reported (not linked to an aircraft)		0
Other (Type information not available)		0
Propeller		359
Turbo-prop		60



# Number of Callers February 2024

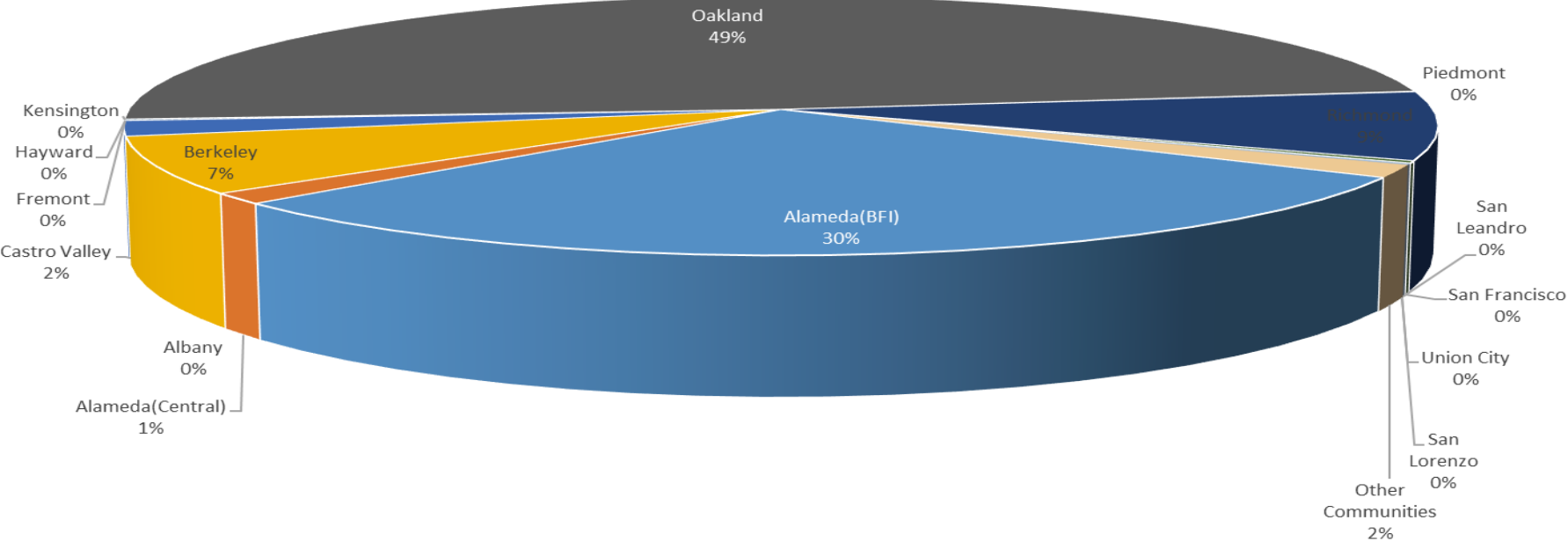
## Noise Complaints Summary by Number of Callers



# Number of Complaints

## February 2024

### Noise Complaints Summary by Number of Complaints



**Oakland International Airport  
Noise Complaint Summary  
March 2024**

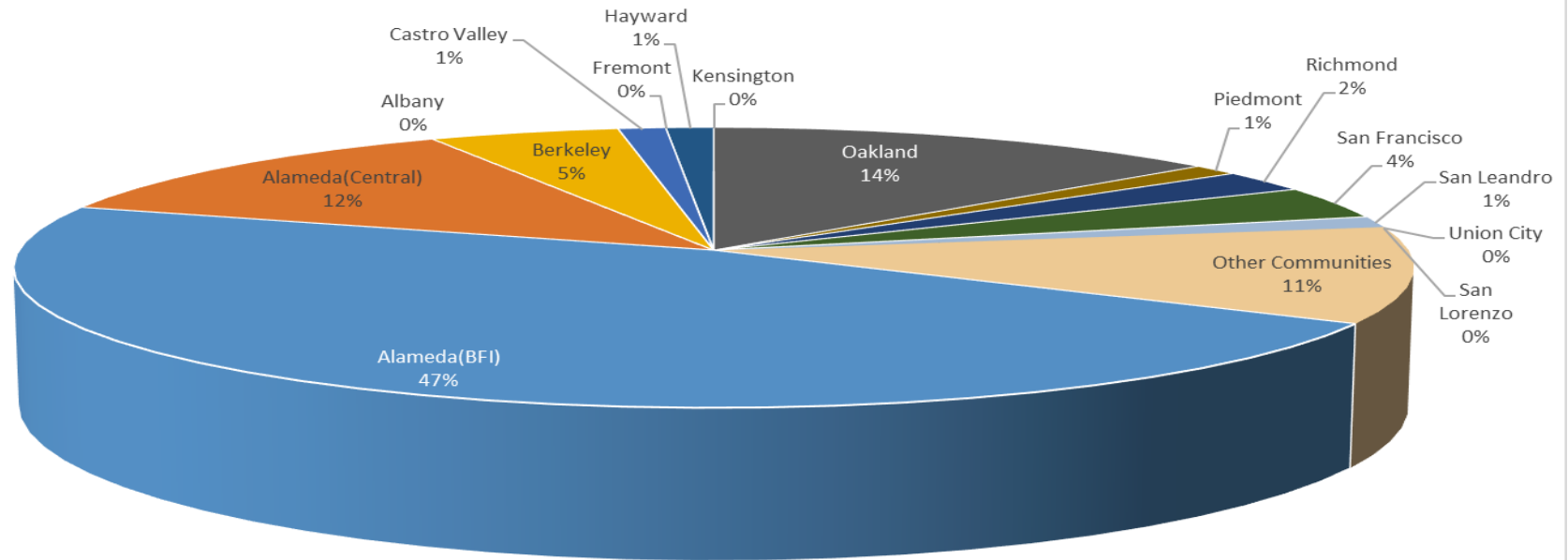
<b>Community</b>	<b>Callers</b>	<b>Complaints</b>
Alameda(BFI)	38	717
Alameda(Central)	10	21
Albany	0	0
Berkeley	4	163
Castro Valley	1	33
Fremont	0	0
Hayward	1	1
Kensington	0	0
Oakland	11	2866
Piedmont	1	19
Richmond	2	206
San Francisco	3	5
San Leandro	1	47
Union City	0	0
San Lorenzo	0	0
Other Communities	9	52
<b>Total</b>	<b>81</b>	<b>4130</b>
<b>Complaints by Type</b>		
E-mail		2998
View point App		1132
<b>Complaints by Time of Day</b>		
Day ( 0700 - 1900 )		912
Evening ( 1900 - 2200 )		492
Night ( 2200 - 0700 )		2726
<b>Complaints by Type of Operation</b>		
Arrivals		2776
Departures		1156
Over-flights		140
Touch & Go		58
Not Linked to an Operation		0
<b>Complaints by Type of Aircraft</b>		
Business Jet		225
Helicopter		45
Jet		3393
Military		0
Not Reported (not linked to an aircraft)		0
Other (Type information not available)		141
Propeller		238
Turbo-prop		88



# Number of Callers

## March 2024

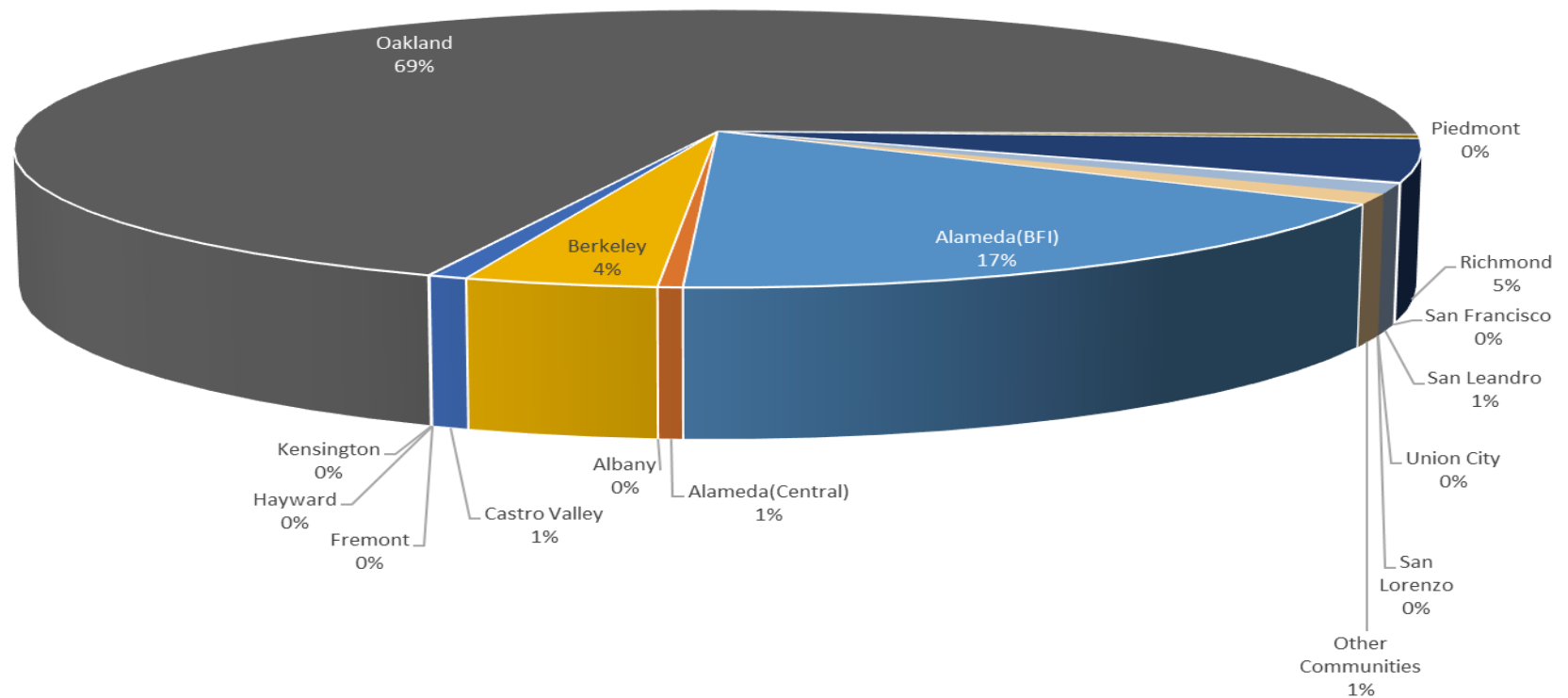
Noise Complaints Summary by Number of Callers

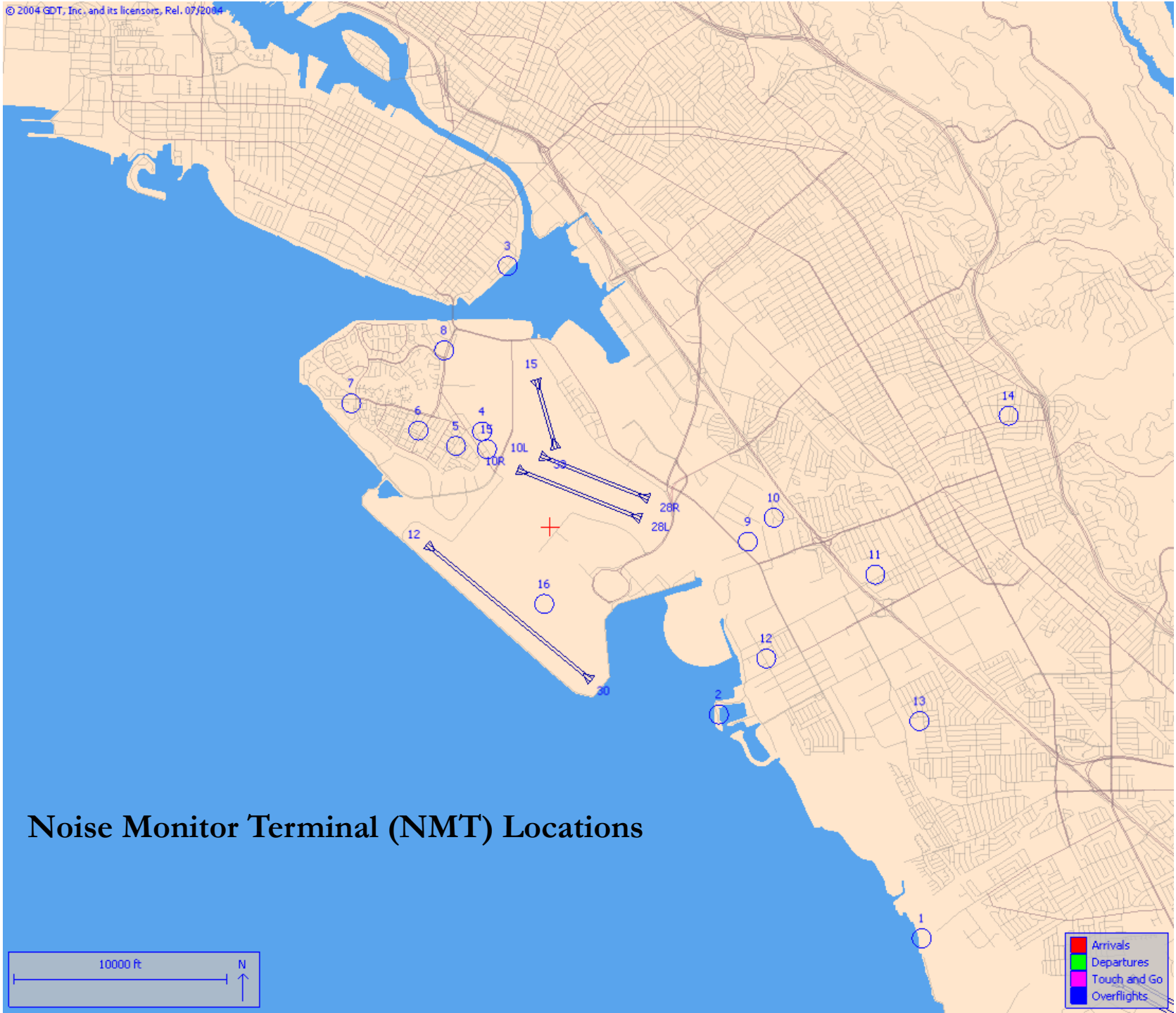


# Number of Complaints

## March 2024

### Noise Complaints Summary by Number of Complaints





## Noise Monitor Terminal (NMT) Locations

