

NOISE FORUM SUMMARY

North/South Field Working Groups



NOISE ABATEMENT REPORT

THIRD QUARTER 2021

Compliance Monitoring Quarterly Summary Comparison Third Quarter 2021				
	2020Q3		2021Q3	
	Compl.	N/C	Compl.	N/C
Runway 28R/L Jet Departure Compliance	96%	4%	96%	4%
Total Airport-wide Corporate Jet Departures	2,098	84	2,596	119
Runway 10R/L Jet Landing Compliance	0%	0%	0%	0%
Total Southeast Plan Corporate Jet Landings	0	0	0	0
North Field VFR Departure Compliance	93%	7%	87%	13%
Total Runways 28R/L & 33 Departures	236	19	180	27
North Field Quiet Hours Compliance	66%	33%	90%	10%
Total North Field Quiet Hours Departures	123	62	222	24
Runway 30 BFI Right Turn Departure Compliance	100%	0%	100%	0%
Total Runway 30 Turbojet Departures	11,698	7	15,360	4
Night Time Departure Compliance	99%	1%	100%	0%
Total Runway 30 Night Turbojet Departures	2,182	32	2,846	14
Runway 12 Night Departure Compliance	0%	0%	93%	7%
Total Runway 12 Night Turbojet Departures	0	0	26	2
Runway 30 East Turn Departure Compliance	100%	0%	100%	0%
Total Runway 30 East Turn Departures	4,220	17	4,646	15
100 Degree Radial Turbojet Landing Compliance	98%	2%	98%	2%
Total 100 Degree Radial Turbojet Landings	704	12	698	11
Engine Runup Program Compliance	100%	0%	100%	0%
Total Evening and Nighttime Engine Runups	16	0	6	0
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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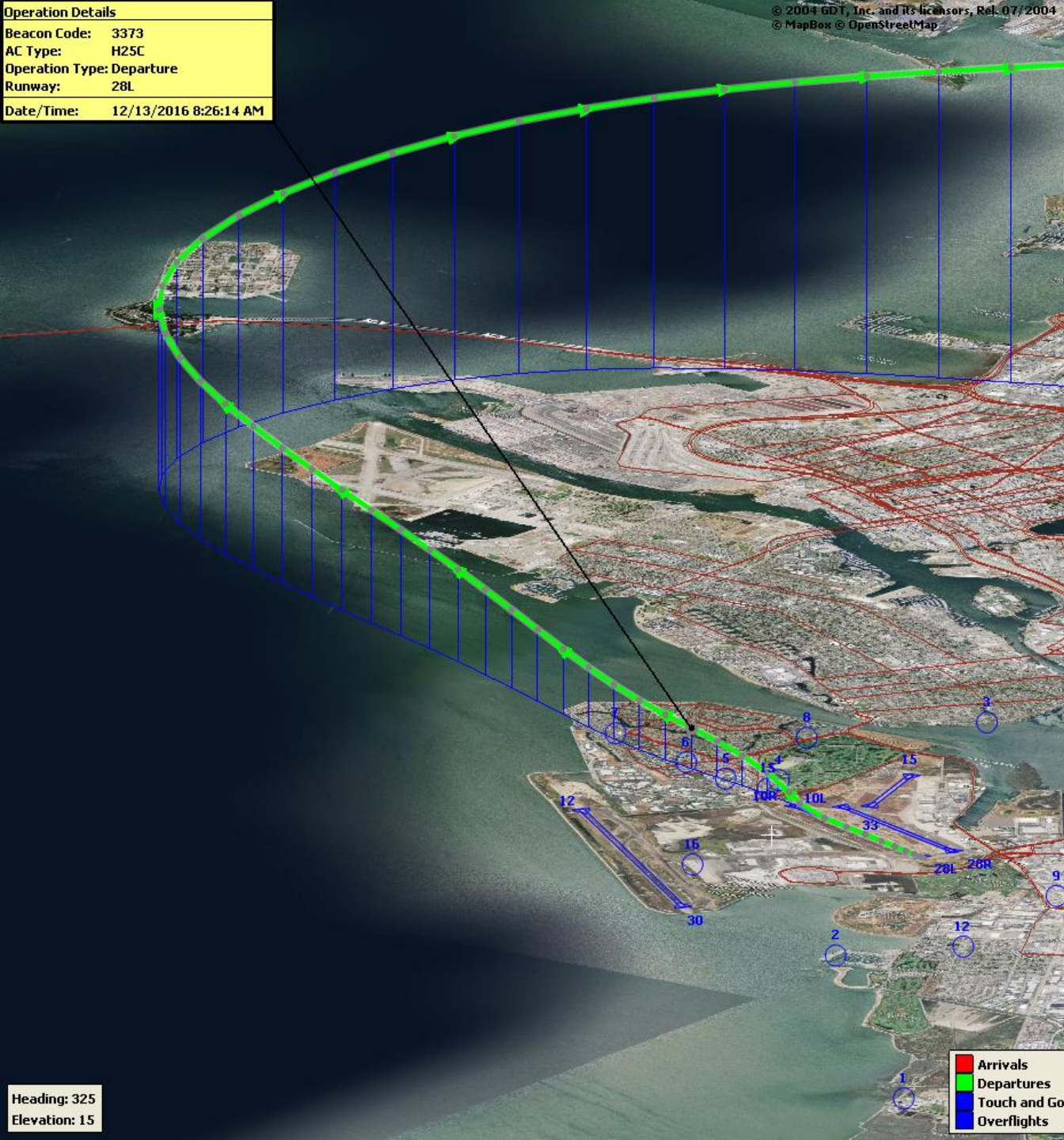
Runway 28R/L Jet Departure NAP

2021Q3
96% Compliance
(2,715 total departures)
(119 non-compliant)

2020Q3
96% Compliance
(2,182 total departures)
(84 non-compliant)

Heading: 325
Elevation: 15

Arrivals
Departures
Touch and Go
Overflights

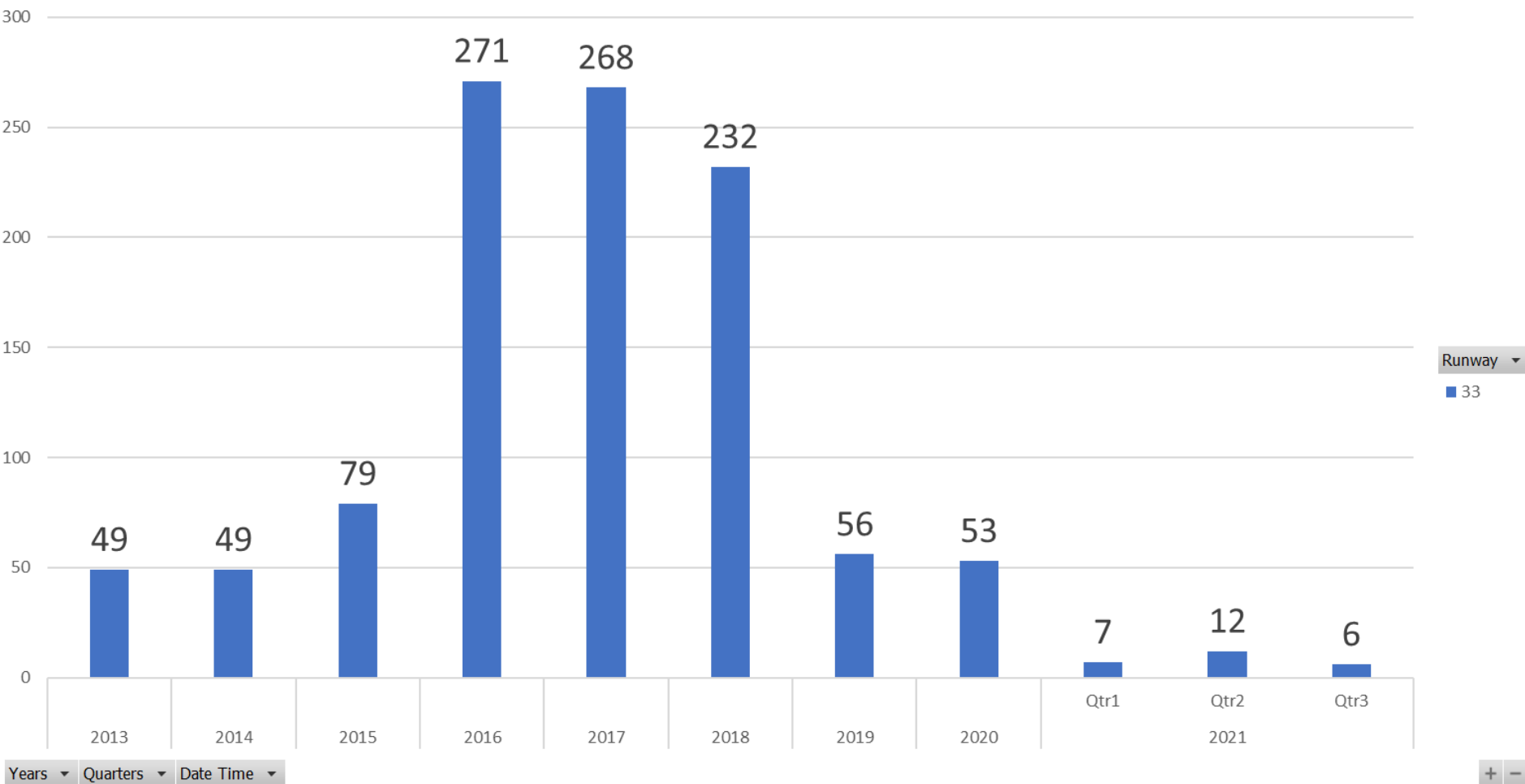


RUNWAY 33 JET DEPARTURES

Second Quarter 2021

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

2021Q3

N/A Compliance
(0 total landings)
(0 non-compliant)

2020Q3

N/A Compliance
(0 total landings)
(0 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

2021Q3
87% Compliance
(207 total departures)
(27 non-compliant)

2020Q3
93% Compliance
(255 total departures)
(19 non-compliant)

Heading: 338
Elevation: 29

- Arrivals
- Departures
- Touch and Go
- Overflights

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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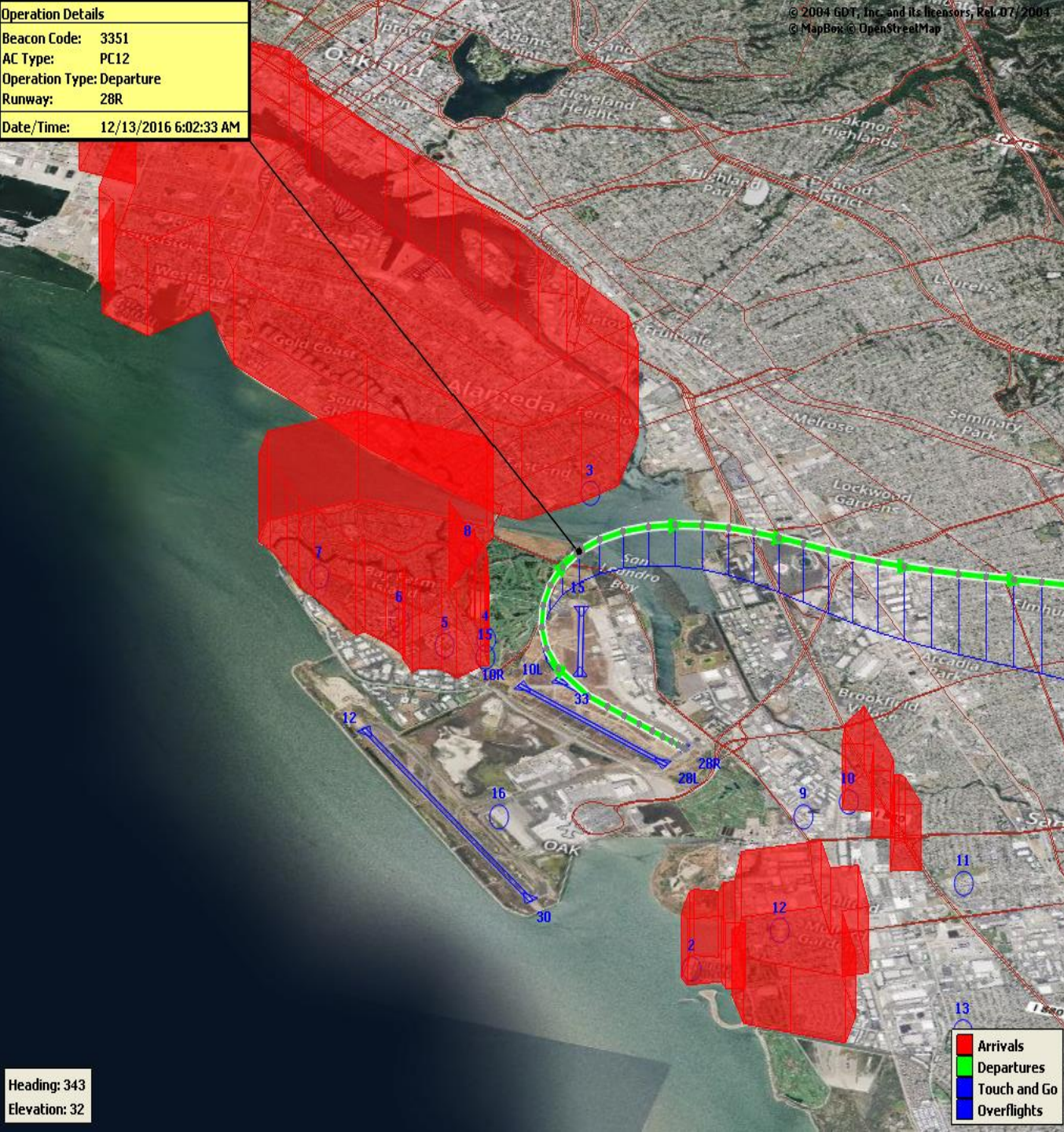
North Field Quiet Hours NAP

2021Q3
90% Compliance
(246 total departures)
(24 non-compliant)

2020Q3
66% Compliance
(185 total departures)
(62 non-compliant)

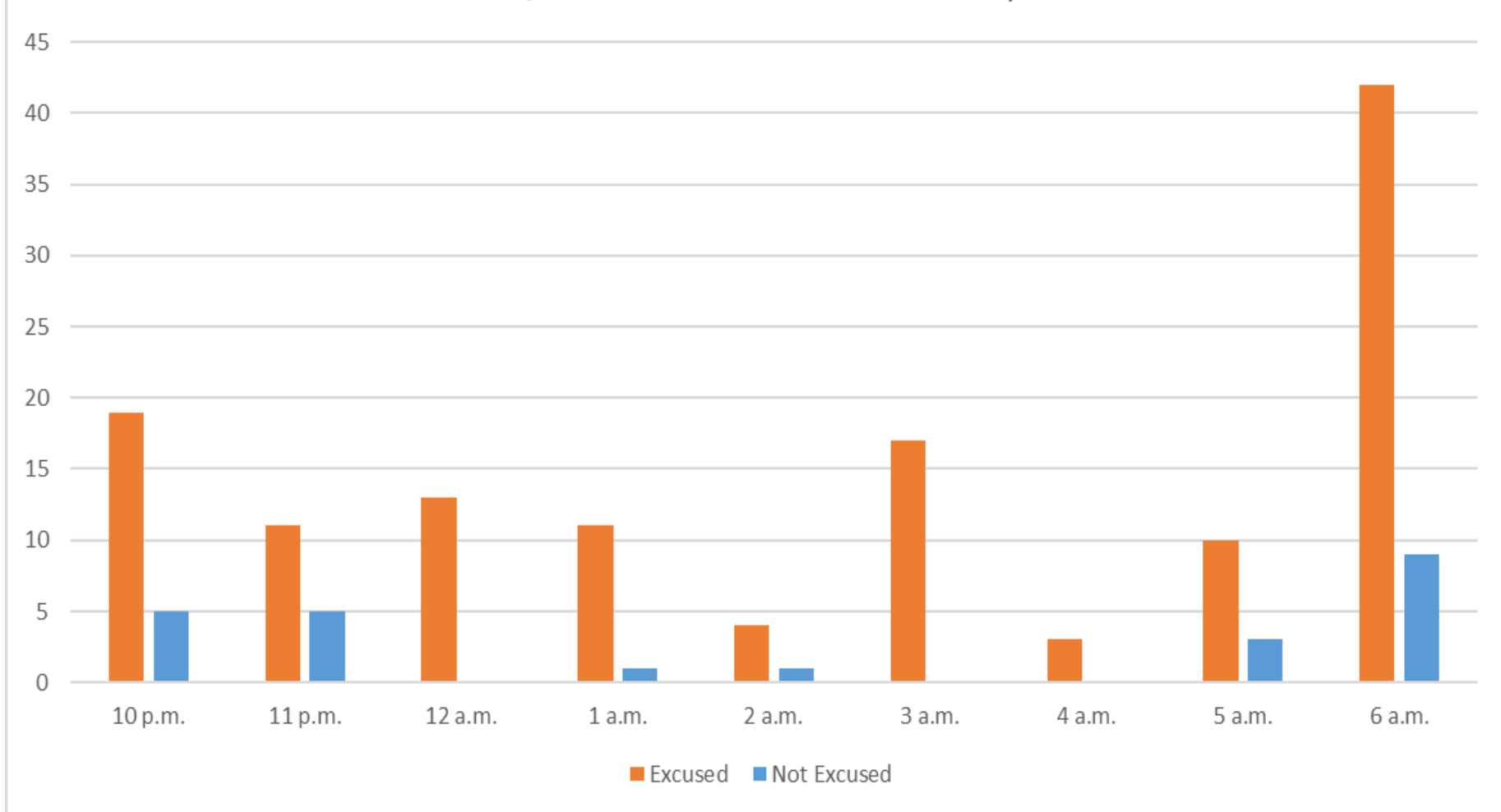
Heading: 343
Elevation: 32

Arrivals
Departures
Touch and Go
Overflights



North Field Quiet Hours NAP Non-Compliant by Hour

Excused/Not Excused Violation Count by Hour



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

2021Q3

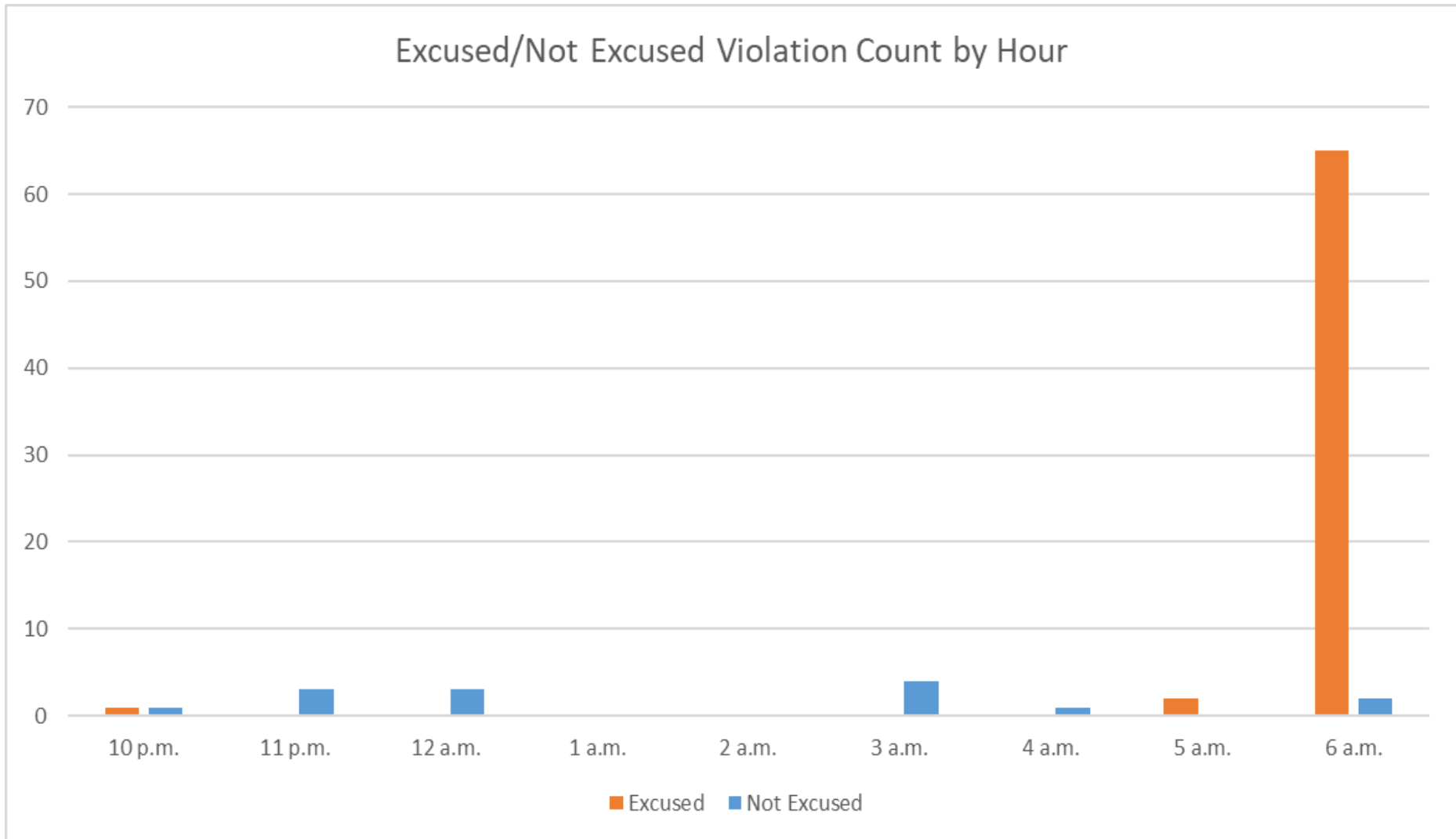
100% Compliance
(2,860 total departures)
(14 non-compliant)

*REBAS Gate non-compliant = 12

2020Q3

99% Compliance
(2,214 total departures)
(32 non-compliant)

Night Time NAP Non-Compliant Count by Hour



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

Heading: 1
Elevation: 38



Runway 12 Night Departure NAP

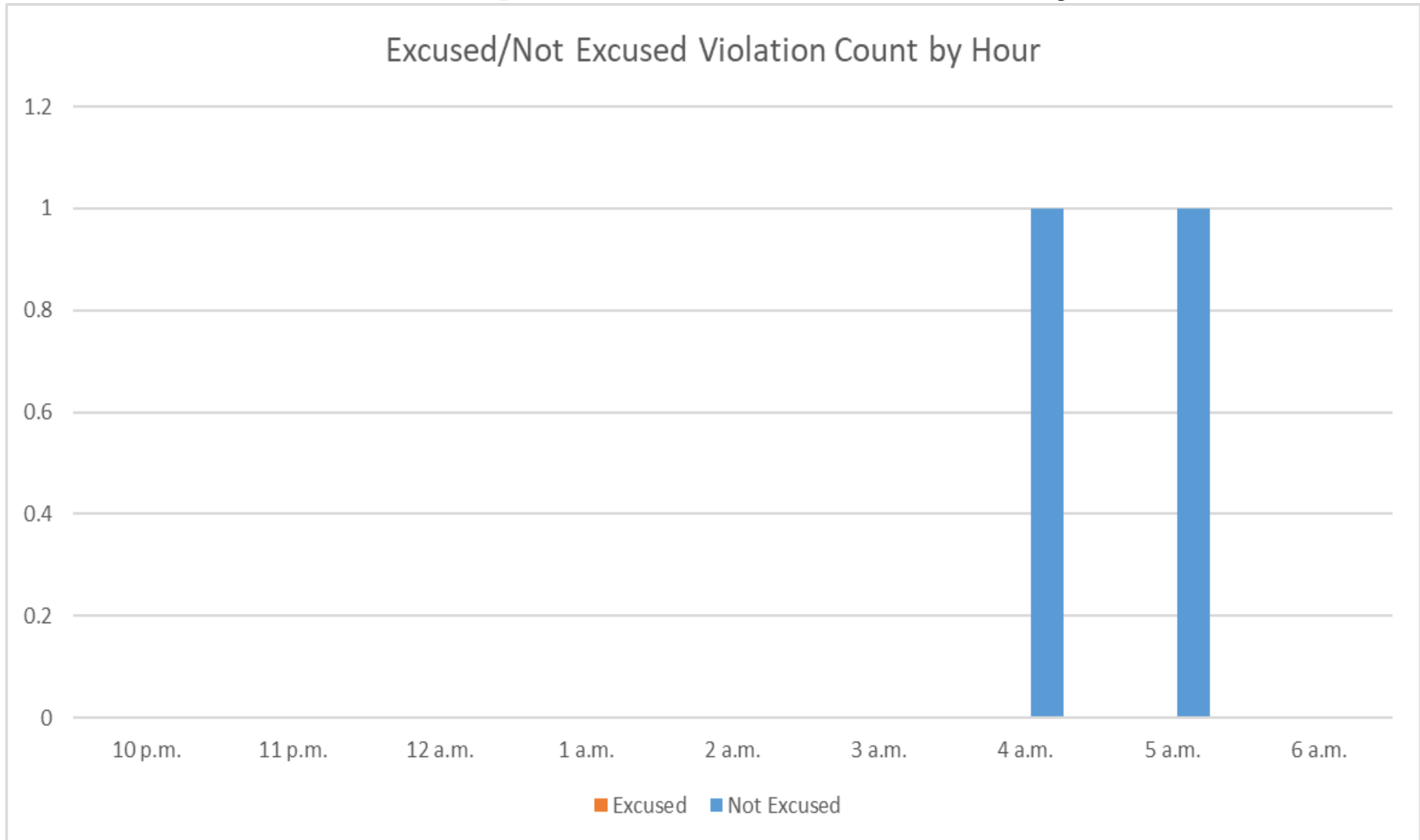
2021Q3

93% Compliance
(28 total departures)
(2 non-compliant)

2020Q3

N/A
(0 total departures)
(0 non-compliant)

Runway 12 Night Departure Non-Compliant Count by Hour



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

2021Q3
100% Compliance
(15,364 total departures)
(4 non-compliant)

2020Q3
100% Compliance
(11,705 total departures)
(7 non-compliant)

Heading: 299
Elevation: 36



Arrivals
Departures
Touch and Go
Overflights

Runway 30 East Turn NAP

2021Q3
100% Compliance
(4,661 total departures)
(15 non-compliant)

*Excused Departures = 49

2020Q3
100% Compliance
(4,237 total departures)
(17 non-compliant)

Operation Details

Beacon Code: 3777

AC Type: B737

Operation Type: Departure

Runway: 30

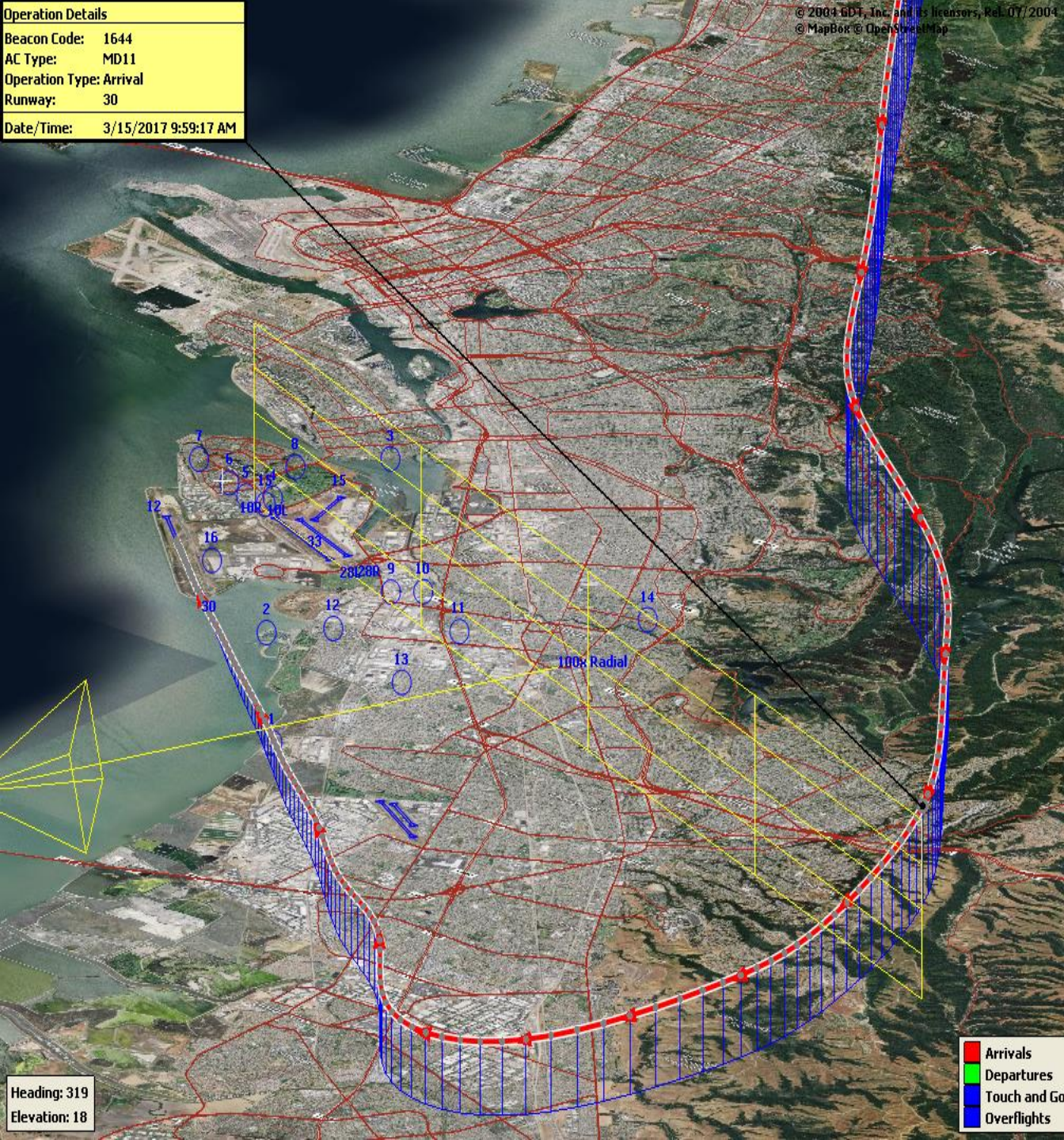
Date/Time: 3/15/2017 9:53:47 AM

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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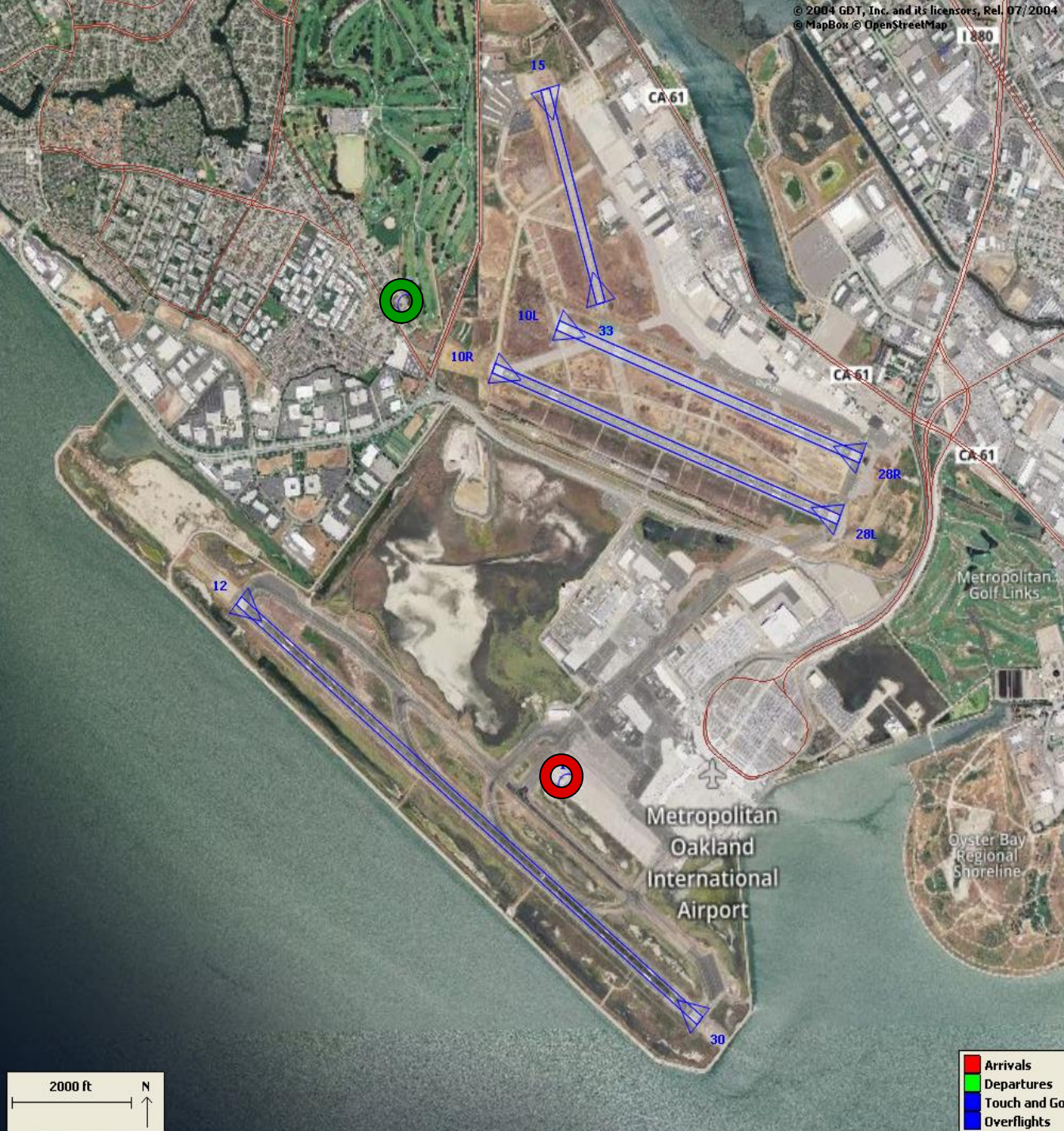
100 Degree Radial At 3,000 ft. NAP

2021Q2
98% Compliance
(709 total landings)
(11 non-compliant)

2020Q2
98% Compliance
(716 total landings)
(12 non-compliant)

- Arrivals
- Departures
- Touch and Go
- Overflights

Heading: 319
Elevation: 18



Engine Run-up NAP

2021Q3

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

2020Q3

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

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

Compliance Monitoring Quarterly Summary Comparison Third Quarter 2021 - Quarter-to-Quarter				
	2021Q2		2021Q3	
	Compl.	N/C	Compl.	N/C
Runway 28R/L Jet Departure Compliance	95%	5%	96%	4%
Total Airport-wide Corporate Jet Departures	2,610	146	2,596	119
Runway 10R/L Jet Landing Compliance	100%	0%	N/A	N/A
Total Southeast Plan Corporate Jet Landings	2	0	0	0
North Field VFR Departure Compliance	96%	4%	87%	13%
Total Runways 28R/L & 33 Departures	278	11	180	27
North Field Quiet Hours Compliance	89%	11%	90%	10%
Total North Field Quiet Hours Departures	164	20	222	24
Runway 30 BFI Right Turn Departure Compliance	100%	0%	100%	0%
Total Runway 30 Turbojet Departures	14,590	0	15,360	4
Night Time Departure Compliance	99%	1%	100%	0%
Total Runway 30 Night Turbojet Departures	2,676	21	2,846	14
Runway 12 Night Departure Compliance	N/A	N/A	93%	7%
Total Runway 12 Night Turbojet Departures	0	0	26	2
Runway 30 East Turn Departure Compliance	100%	0%	100%	0%
Total Runway 30 East Turn Departures	4,449	17	4,646	15
100 Degree Radial Turbojet Landing Compliance	98%	2%	98%	2%
Total 100 Degree Radial Turbojet Landings	723	12	698	11
Engine Runup Program Compliance	100%	0%	100%	0%
Total Evening and Nighttime Engine Runups	4	0	6	0
Note: N/C means non-compliant. Percentage values are rounded out.				

Table 1. North Field Night Aircraft Departure SEL Noise Measurements
Total Aircraft Departures = 121

Third Quarter 2021 (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	5	1	0.0	0.2%	0	0.0	0.0%	1	0.0	0.2%	7
3	26	1	0.0	0.2%	0	0.0	0.0%	0	0.0	0.0%	27
4	24	35	0.4	6.2%	24	0.3	4.2%	26	0.3	4.6%	109
5	35	11	0.1	1.9%	20	0.2	3.5%	35	0.4	6.2%	101
6	12	15	0.2	2.6%	22	0.2	3.9%	22	0.2	3.9%	71
7	18	26	0.3	4.6%	21	0.2	3.7%	0	0.0	0.0%	65
8	19	14	0.2	2.5%	0	0.0	0.0%	0	0.0	0.0%	33
9	1	0	0.0	0.0%	2	0.0	0.4%	0	0.0	0.0%	3
10	12	3	0.0	0.5%	0	0.0	0.0%	0	0.0	0.0%	15
11	0	0	0.0	0.0%	0	0.0	0.0%	0	0.0	0.0%	0
12	1	1	0.0	0.2%	0	0.0	0.0%	0	0.0	0.0%	2
13	0	0	0.0	0.0%	0	0.0	0.0%	0	0.0	0.0%	0
14	0	0	0.0	0.0%	0	0.0	0.0%	0	0.0	0.0%	0
All NMTs	153	107	1	0	89	1	0	84	1	0	433

Table 2. Aircraft SEL Noise Measurements in Alameda - Total Aircraft Departures = 118

Third Quarter 2021 (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	26	1	0.0	0.4%	0	0.0	0.0%	0	0.0	0.0%	27
4	24	35	0.4	14.6%	24	0.3	10.0%	26	0.3	10.9%	109
5	35	11	0.1	4.6%	20	0.2	8.4%	35	0.4	14.6%	101
6	12	15	0.2	6.3%	22	0.2	9.2%	22	0.2	9.2%	71
7	18	26	0.3	10.9%	21	0.2	8.8%	0	0.0	0.0%	65
8	19	14	0.2	5.9%	0	0.0	0.0%	0	0.0	0.0%	33
Total	134	102	1.1		87	1.0		83	0.9		406

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

Third Quarter 2021 (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	5	1	0.0	0.3%	0	0.0	0.0%	1	0.0	0.3%	7
9	1	0	0.0	0.0%	2	0.0	0.6%	0	0.0	0.0%	3
10	12	3	0.0	0.9%	0	0.0	0.0%	0	0.0	0.0%	15
11	0	0	0.0	0.0%	0	0.0	0.0%	0	0.0	0.0%	0
12	1	1	0.0	0.3%	0	0.0	0.0%	0	0.0	0.0%	2
13	0	0	0.0	0.0%	0	0.0	0.0%	0	0.0	0.0%	0
14	0	0	0.0	0.0%	0	0.0	0.0%	0	0.0	0.0%	0
Total	19	5	0.1		2	0.0		1	0.0		27

Rolling Take-off Night Departure Procedure (1:00 to 5:00 AM)
Third Quarter 2021, 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 2021 [B]						
	Total [X]	Est. Avg. Monthly [X/3]				
B763	267	89	16	67	74	11
DC10/MD10	39	13	8	67	75	13
MD11	228	76	70	66	75	16
A306	16	5	-	-	-	-
B757	165	55	15	-	73	12
B77L	150	50	7	68	76	15
Difference [A-B]						
DC10/MD10		-74	-24	-2	-3	-9
MD11		44	57	-4	-4	-8
A306		-62	-21	-67	-77	-25

(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)

Rolling Take-off Night Departure Procedure (1:00 to 5:00 AM)
Third Quarter 2020, 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 2020 [B]					
	Total [X]	Est. Avg. Monthly [X/3]			
B763	186	62	11	65	73
DC10/MD10	48	16	9	65	73
MD11	205	68	42	65	74
A306	100	33	3	70	79
B757	149	50	5	70	74
B77L	126	42	2	76	80
Difference [A-B]					
DC10/MD10		-71	-23	-4	-5
MD11		36	29	-5	-5
A306		-34	-18	3	2

(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.

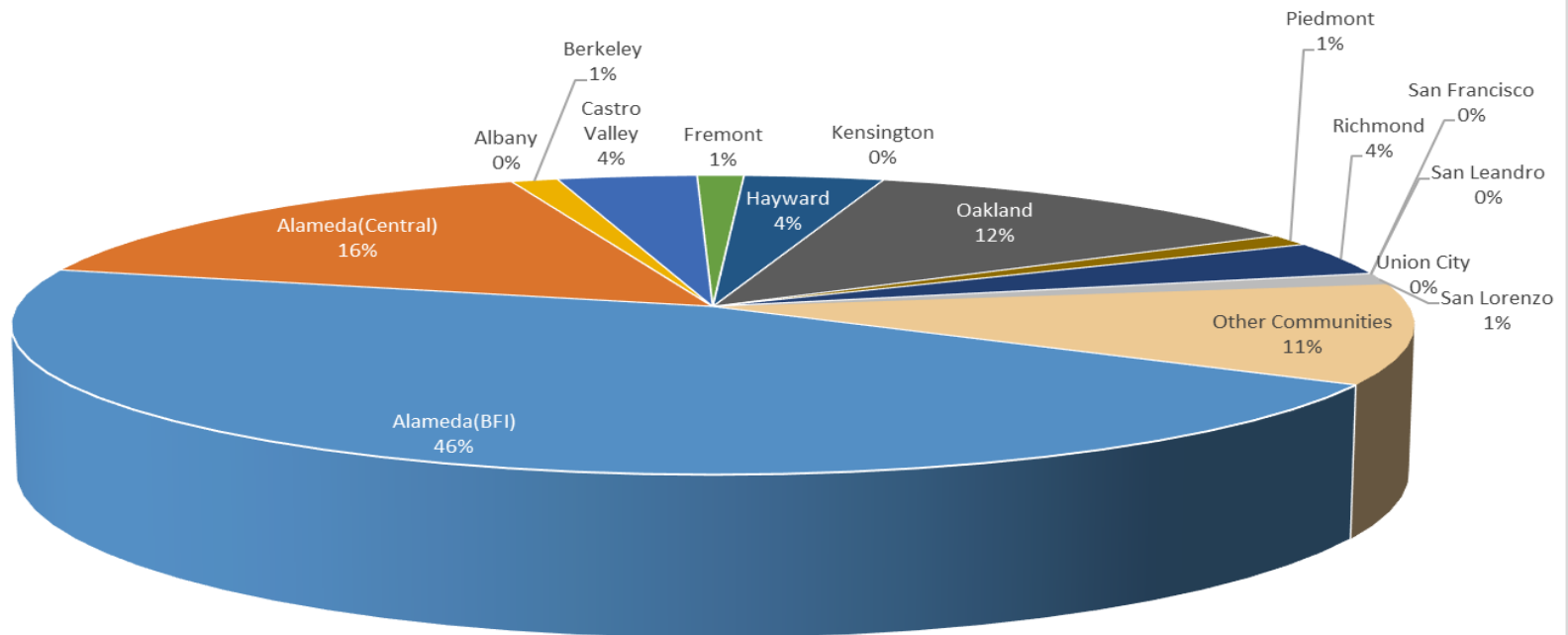
Source: ANOMS (Airport Noise and Operations Monitoring System)

Oakland International Airport Noise Complaint Summary July 2021		
Community	Callers	Complaints
Alameda(BFI)	38	2434
Alameda(Central)	13	90
Albany	0	0
Berkeley	1	1
Castro Valley	3	68
Fremont	1	135
Hayward	3	3
Kensington	0	0
Oakland	10	2450
Piedmont	1	1
Richmond	3	141
San Francisco	0	0
San Leandro	0	0
Union City	0	0
San Lorenzo	1	1
Other Communities	9	294
Total	83	5618
Complaints by Type		
Website	0	
E-mail	2784	
Phone	0	
View point App	2834	
Complaints by Time of Day		
Day (0700 - 1900)	2441	
Evening (1900 - 2200)	1063	
Night (2200 - 0700)	2114	
Complaints by Type of Operation		
Arrivals	2636	
Departures	2804	
Over-flights	56	
Touch & Go	122	
Not Linked to an Operation	0	
Complaints by Type of Aircraft		
Business Jet	368	
Helicopter	52	
Jet	4676	
Military	0	
Not Reported (not linked to an aircraft)	0	
Other (Type information not available)	5	
Propeller	434	
Turbo-prop	83	

Number of Callers

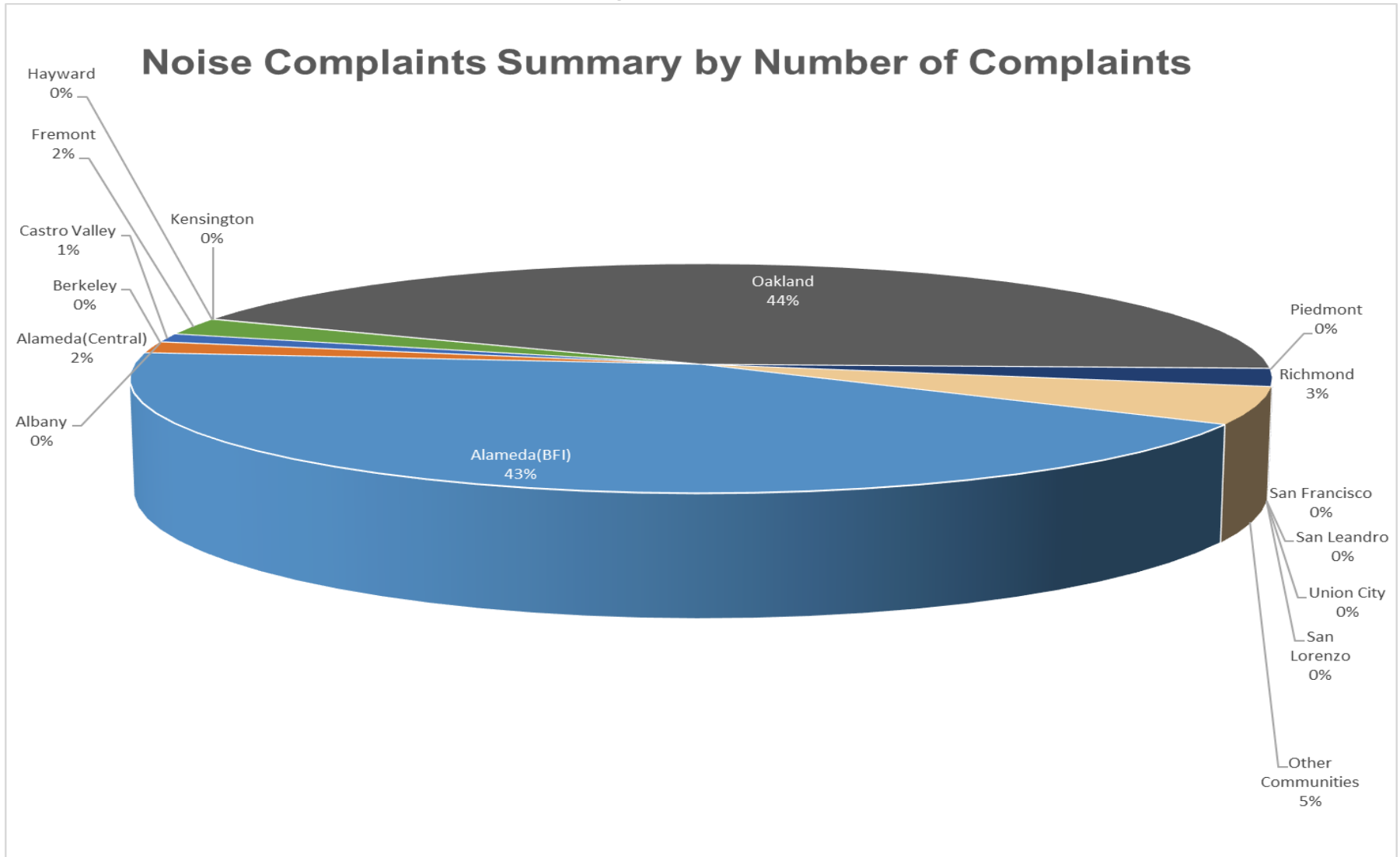
July 2021

Noise Complaints Summary by Number of Callers



Number of Complaints

July 2021

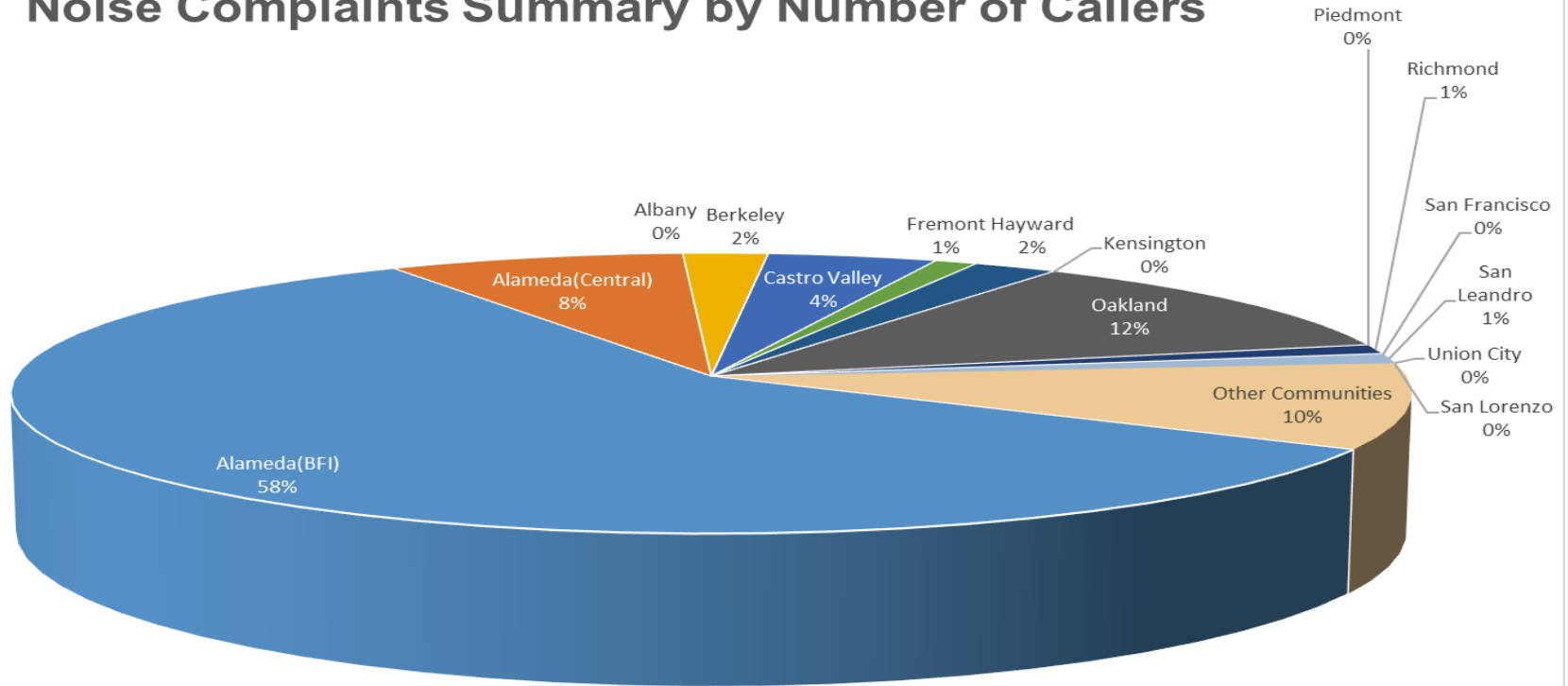


Oakland International Airport Noise Complaint Summary August 2021		
Community	Callers	Complaints
Alameda(BFI)	53	2901
Alameda(Central)	7	128
Albany	0	0
Berkeley	2	3
Castro Valley	4	97
Fremont	1	207
Hayward	2	13
Kensington	0	0
Oakland	11	2070
Piedmont	0	0
Richmond	1	1
San Francisco	0	0
San Leandro	1	1
Union City	0	0
San Lorenzo	0	0
Other Communities	9	367
Total	91	5788
Complaints by Type		
Website	0	
E-mail	2547	
Phone	0	
View point App	3241	
Complaints by Time of Day		
Day (0700 - 1900)	2566	
Evening (1900 - 2200)	828	
Night (2200 - 0700)	2394	
Complaints by Type of Operation		
Arrivals	2749	
Departures	2811	
Over-flights	50	
Touch & Go	178	
Not Linked to an Operation	0	
Complaints by Type of Aircraft		
Business Jet	667	
Helicopter	35	
Jet	4665	
Military	0	
Not Reported (not linked to an aircraft)	0	
Other (Type information not available)	7	
Propeller	305	
Turbo-prop	109	

Number of Callers

August 2021

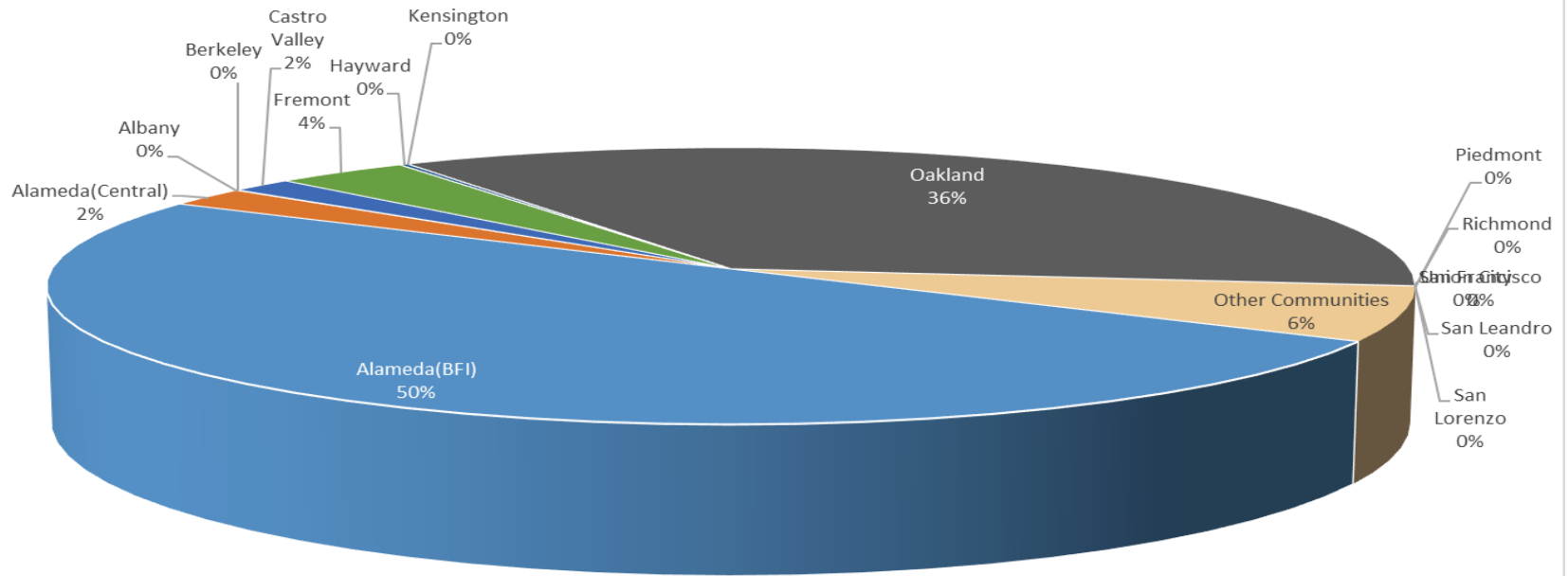
Noise Complaints Summary by Number of Callers



Number of Complaints

August 2021

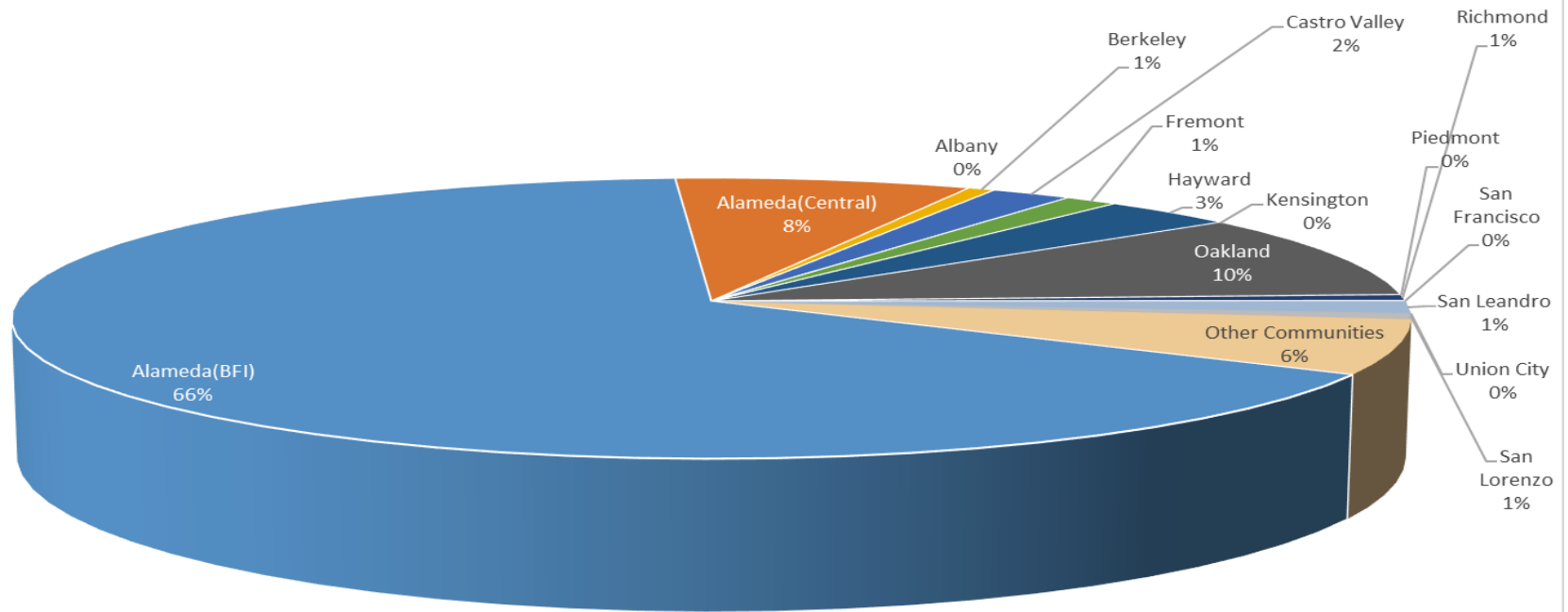
Noise Complaints Summary by Number of Complaints



Oakland International Airport Noise Complaint Summary September 2021		
Community	Callers	Complaints
Alameda(BFI)	94	4242
Alameda(Central)	11	93
Albany	0	0
Berkeley	1	1
Castro Valley	3	73
Fremont	2	233
Hayward	5	28
Kensington	0	0
Oakland	14	2342
Piedmont	0	0
Richmond	1	232
San Francisco	0	0
San Leandro	2	2
Union City	0	0
San Lorenzo	1	1
Other Communities	9	288
Total	143	7535
Complaints by Type		
Website	0	
E-mail	2955	
Phone	0	
View point App	4580	
Complaints by Time of Day		
Day (0700 - 1900)	3396	
Evening (1900 - 2200)	1838	
Night (2200 - 0700)	2301	
Complaints by Type of Operation		
Arrivals	2958	
Departures	4328	
Over-flights	52	
Touch & Go	197	
Not Linked to an Operation	0	
Complaints by Type of Aircraft		
Business Jet	1013	
Helicopter	97	
Jet	5900	
Military	2	
Not Reported (not linked to an aircraft)	0	
Other (Type information not available)	13	
Propeller	405	
Turbo-prop	105	

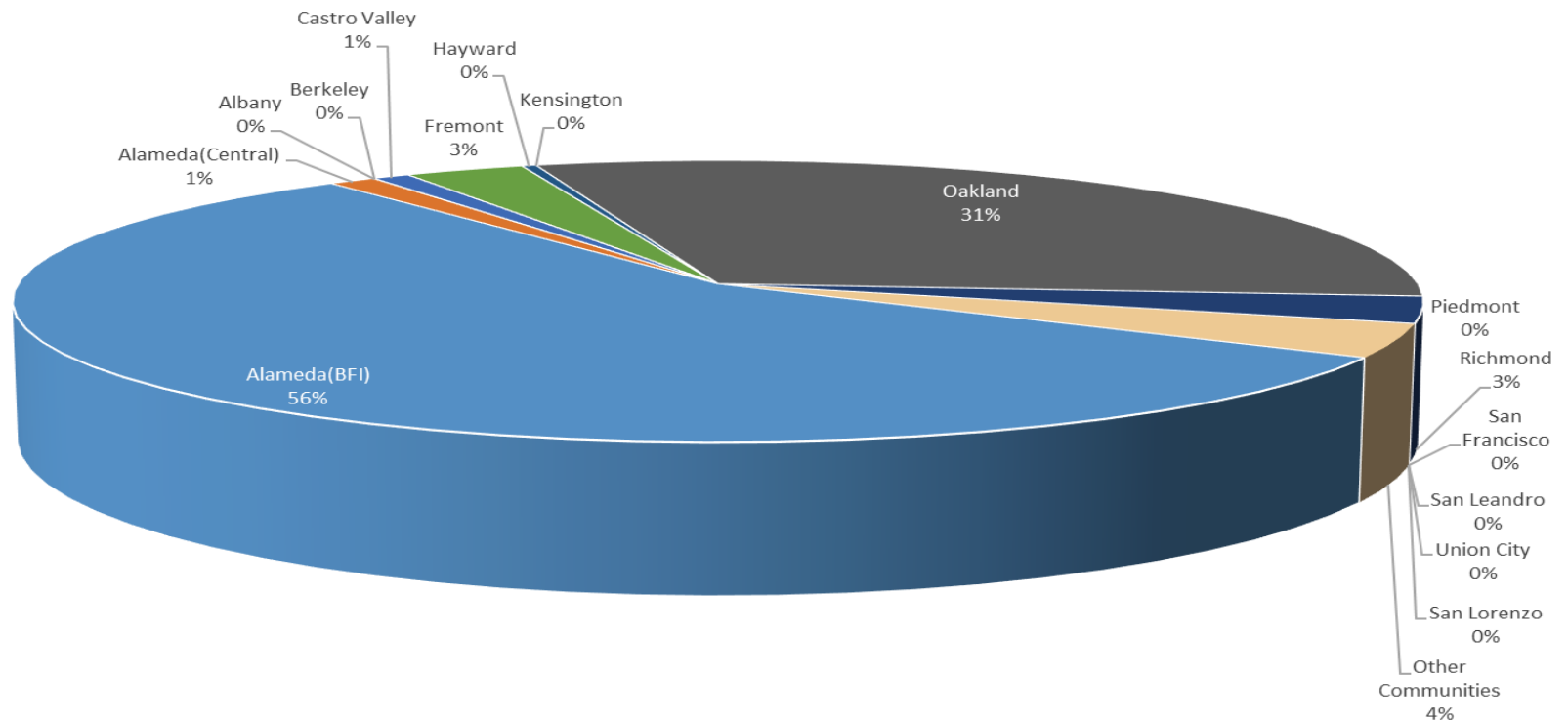
Number of Callers September 2021

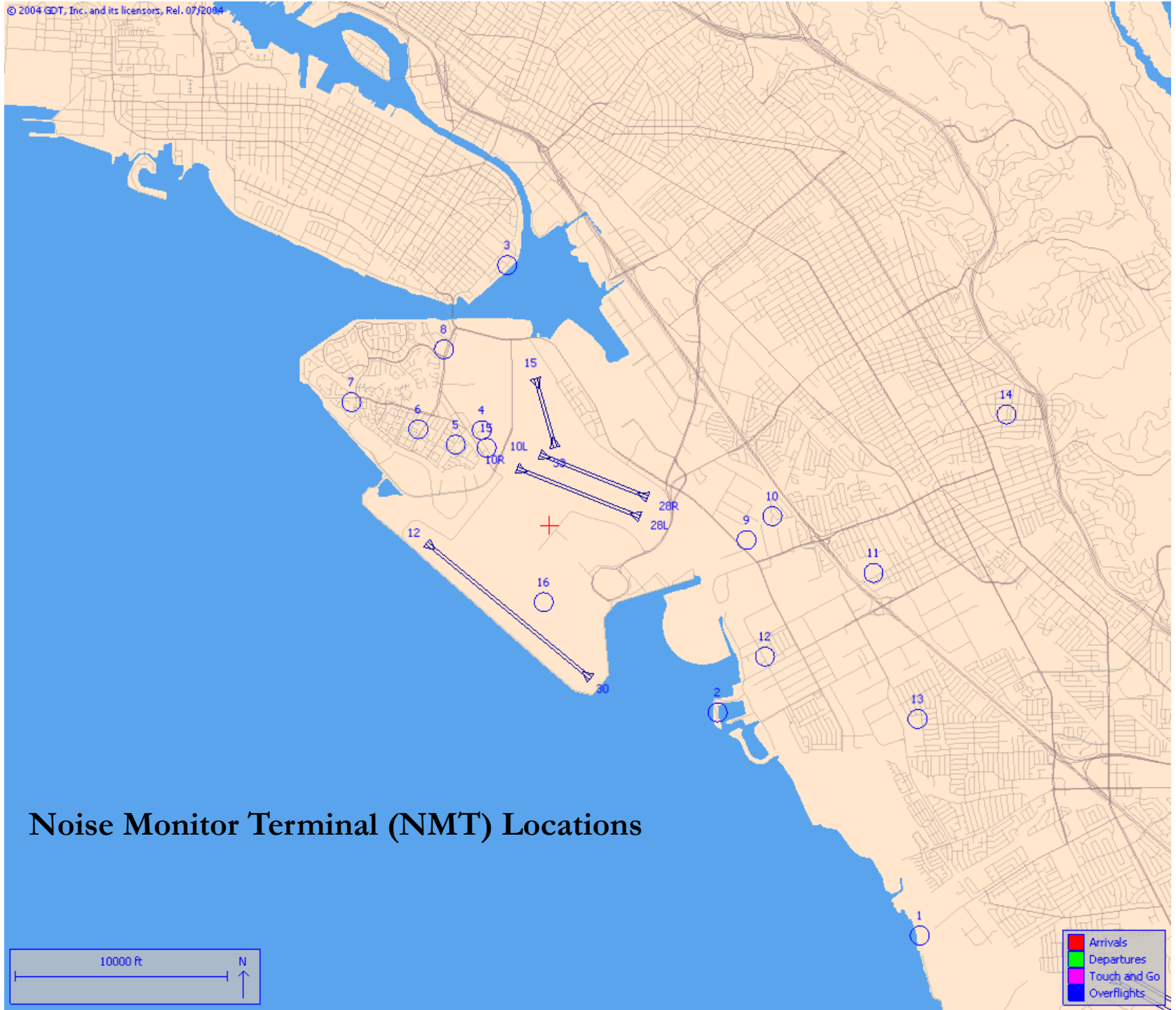
Noise Complaints Summary by Number of Callers



Number of Complaints September 2021

Noise Complaints Summary by Number of Complaints





Noise Monitor Terminal (NMT) Locations