

NOISE FORUM SUMMARY

North/South Field Working Groups



NOISE ABATEMENT REPORT

FOURTH QUARTER 2020

Compliance Monitoring Quarterly Summary Comparison Fourth Quarter 2020				
	2019Q4		2020Q4	
	Compl.	N/C	Compl.	N/C
Runway 28R/L Jet Departure Compliance	95%	5%	94%	6%
Total Airport-wide Corporate Jet Departures	2,709	147	2,083	132
Runway 10R/L Jet Landing Compliance	69%	31%	84%	16%
Total Southeast Plan Corporate Jet Landings	220	97	46	9
North Field VFR Departure Compliance	91%	9%	92%	8%
Total Runways 28R/L & 33 Departures	214	22	278	24
North Field Quiet Hours Compliance	77%	23%	76%	24%
Total North Field Quiet Hours Departures	174	51	102	32
Runway 30 BFI Right Turn Departure Compliance	100%	0%	100%	0%
Total Runway 30 Turbojet Departures	19,170	73	11,926	1
Night Time Departure Compliance	99%	1%	99%	1%
Total Runway 30 Night Turbojet Departures	3,658	52	2,154	17
Runway 12 Night Departure Compliance	99%	1%	98%	2%
Total Runway 12 Night Turbojet Departures	276	3	55	1
Runway 30 East Turn Departure Compliance	99%	1%	100%	0%
Total Runway 30 East Turn Departures	5,220	59	4,009	4
100 Degree Radial Turbojet Landing Compliance	99%	1%	99%	1%
Total 100 Degree Radial Turbojet Landings	1,245	11	805	10
Engine Runup Program Compliance	100%	0%	100%	0%
Total Evening and Nighttime Engine Runups	8	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

2020Q4
94% Compliance
(2,215 total departures)
(132 non-compliant)

2019Q4
95% Compliance
(2,856 total departures)
(147 non-compliant)

Heading: 325
Elevation: 15

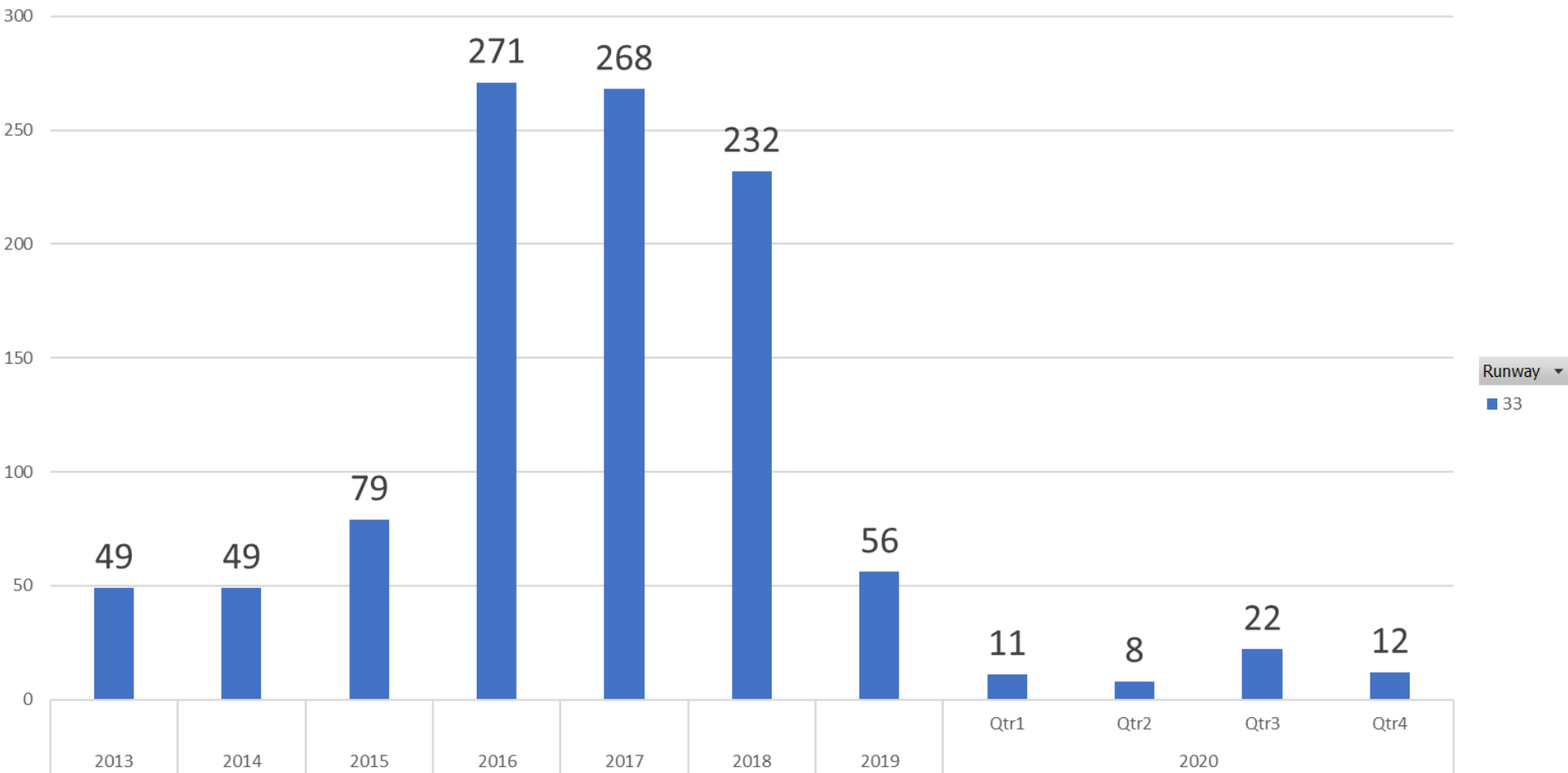
■ Arrivals
■ Departures
■ Touch and Go
■ Overflights

RUNWAY 33 JET DEPARTURES

Fourth Quarter 2020

Count of Aircraft Type

Runway 33 Jet Departure Trend Analysis



Runway

33

Years Quarters Date Time

+ -

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

2020Q4

84% Compliance
(55 total landings)
(9 non-compliant)

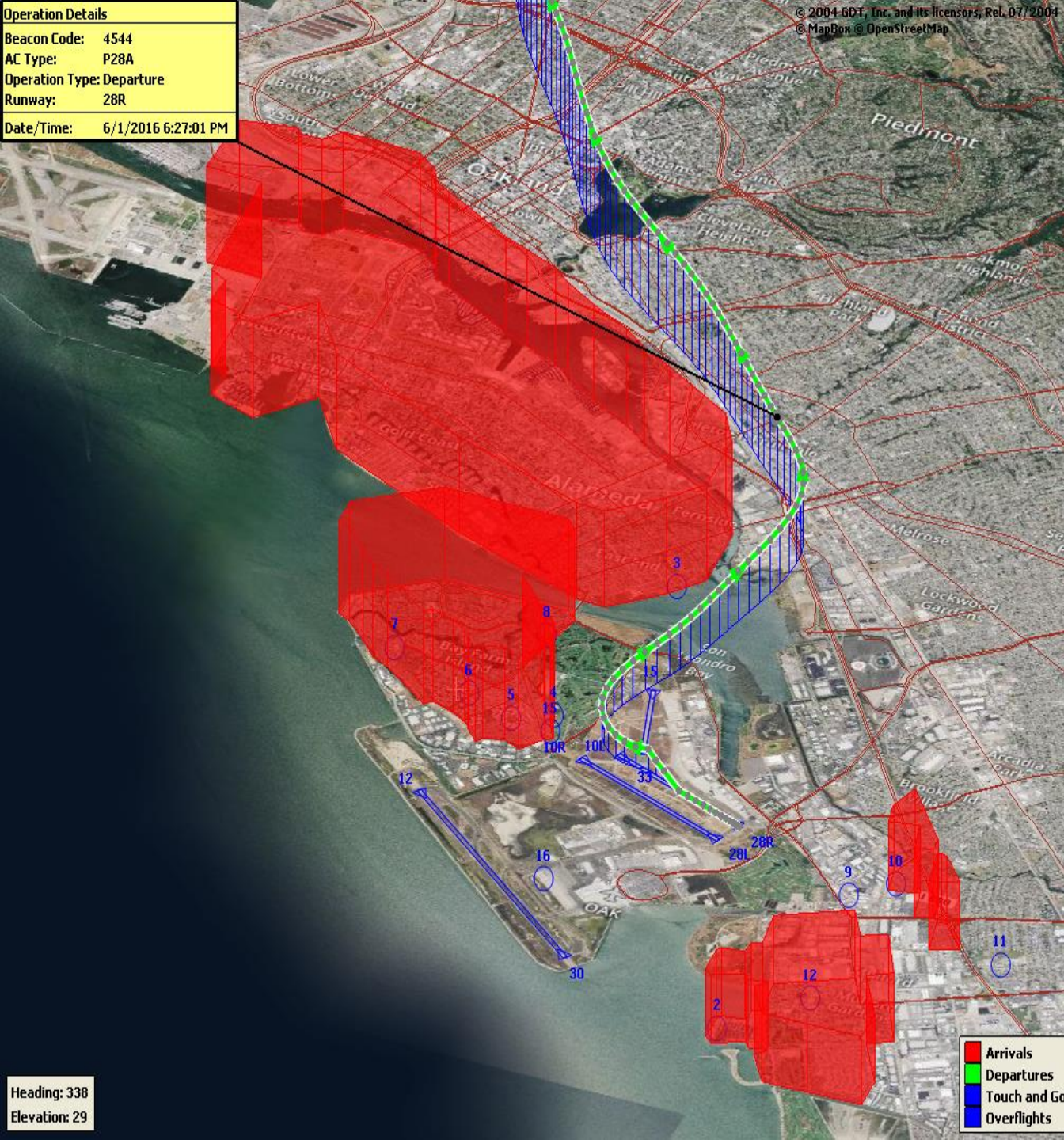
2019Q4

69% Compliance
(317 total landings)
(97 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

2020Q4
92% Compliance
(302 total departures)
(24 non-compliant)

2019Q4
91% Compliance
(236 total departures)
(22 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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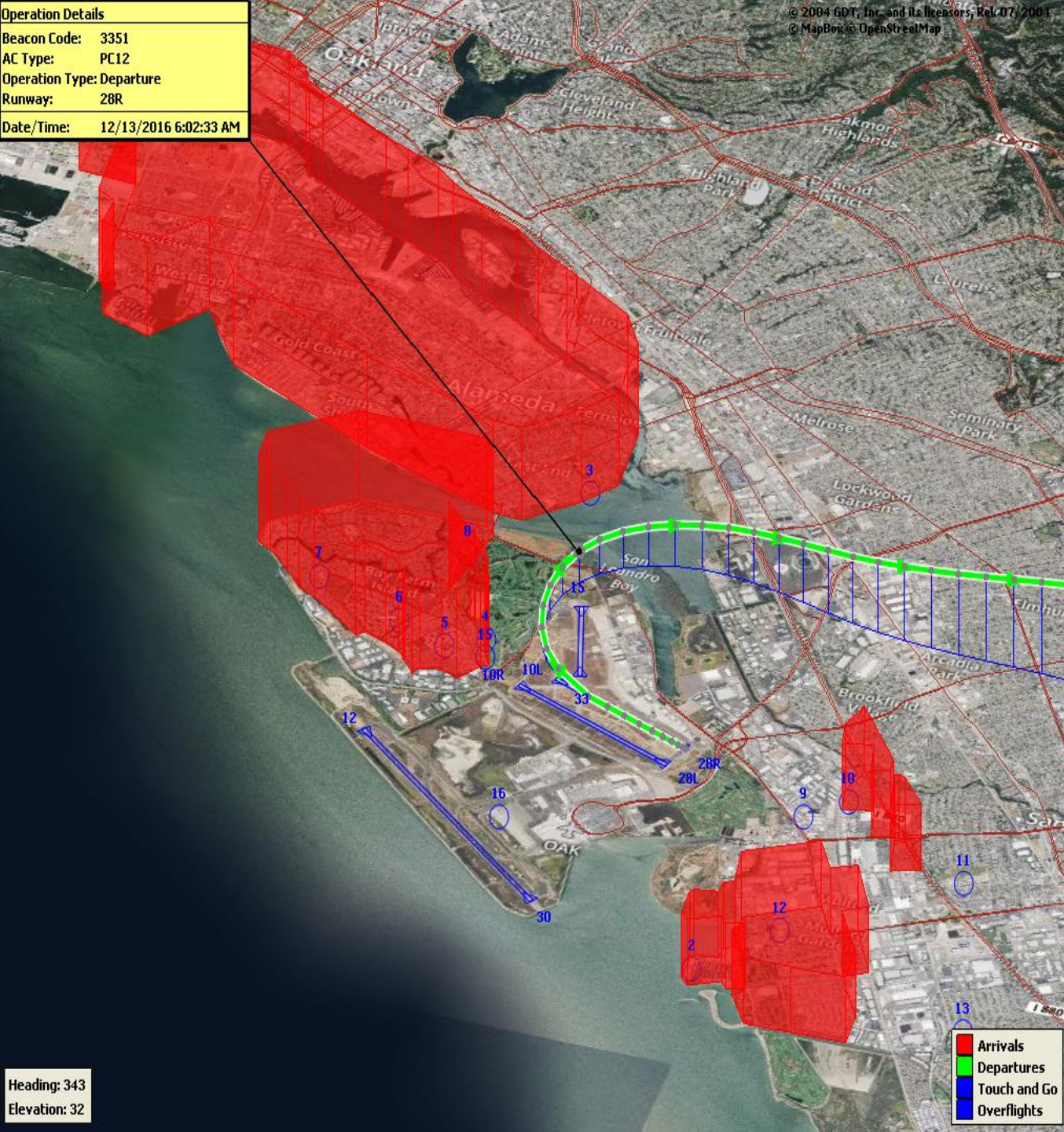
North Field Quiet Hours NAP

2020Q4
76% Compliance
(134 total departures)
(32 non-compliant)

2019Q4
77% Compliance
(225 total departures)
(51 non-compliant)

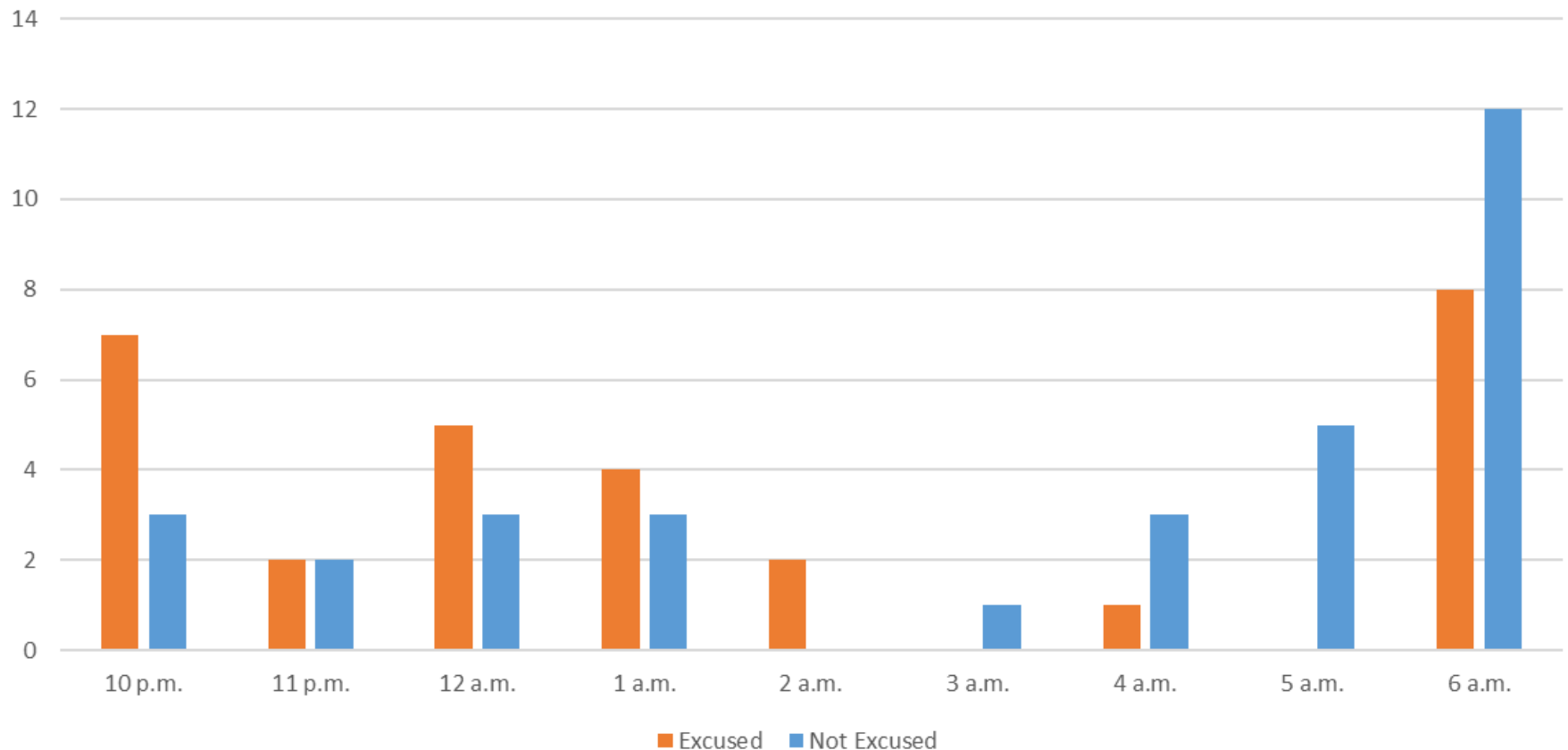
Heading: 343
Elevation: 32

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



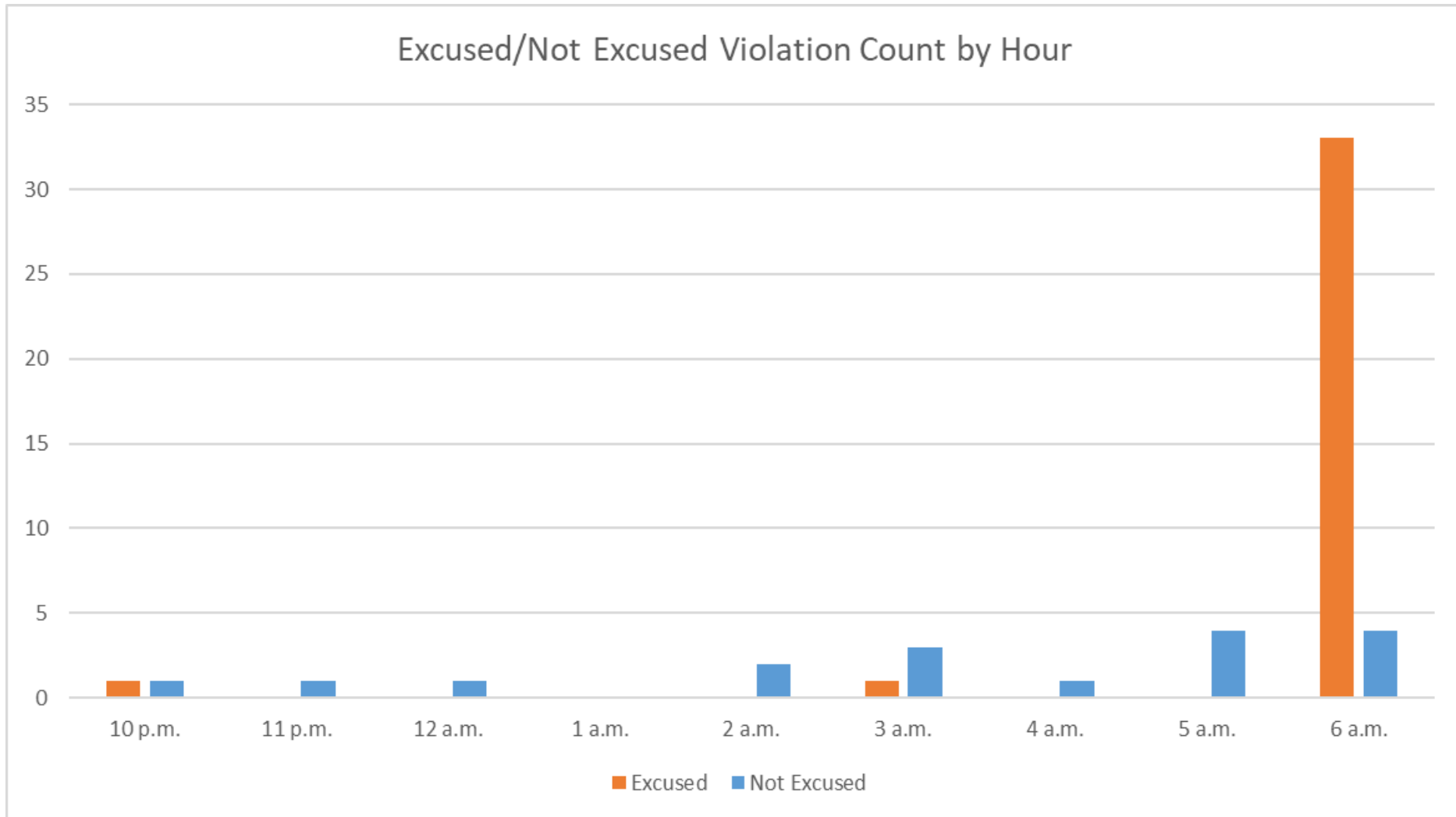
Night Time Departure NAP

2020Q4
99% Compliance
(2,171 total departures)
(17 non-compliant)

*REBAS Gate non-compliant = 16

2019Q4
99% Compliance
(3,710 total departures)
(52 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



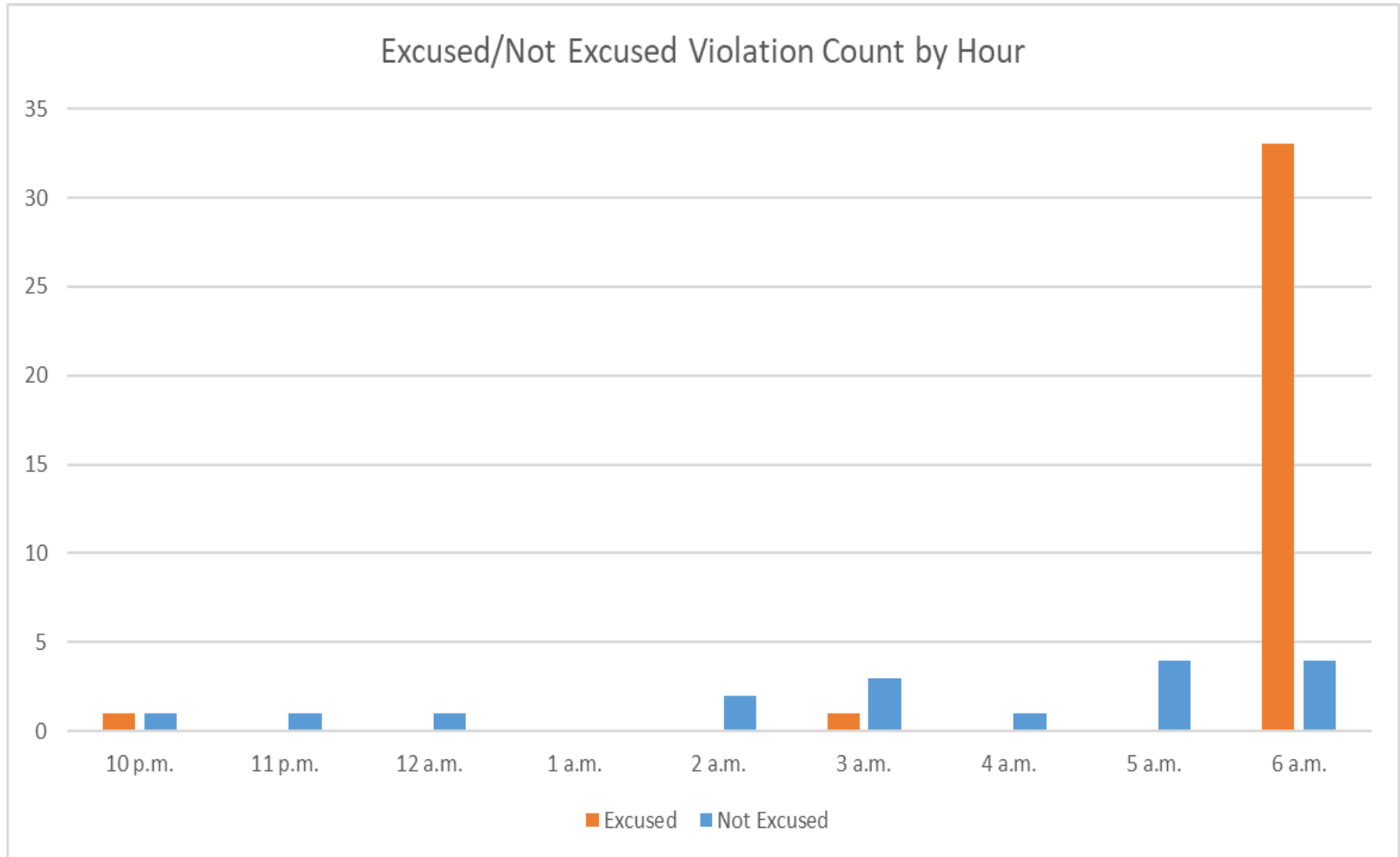
Runway 12 Night Departure NAP

2020Q4
98% Compliance
(56 total departures)
(1 non-compliant)

2019Q4
99% Compliance
(279 total departures)
(3 non-compliant)

Arrivals
Departures
Touch and Go
Overflights

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

2020Q4
100% Compliance
(11,927 total departures)
(1 non-compliant)

2019Q4
100% Compliance
(19,243 total departures)
(73 non-compliant)

Heading: 299
Elevation: 36



Runway 30 East Turn NAP

2020Q4
100% Compliance
(4,013 total departures)
(4 non-compliant)

*Excused Departures = 20

2019Q4
99% Compliance
(5,279 total departures)
(59 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

Arrivals
Departures
Touch and Go
Overflights

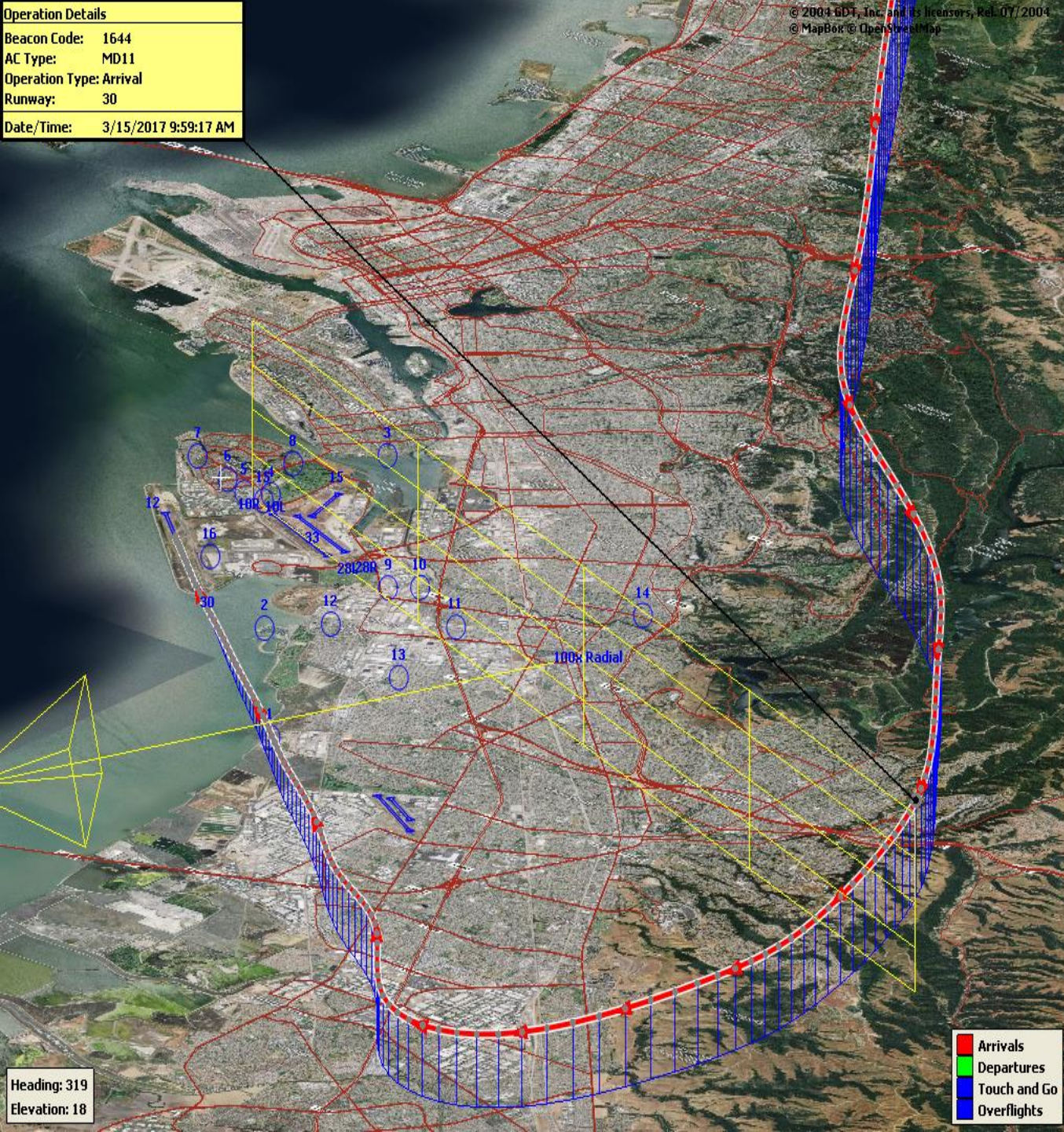
Operation Details
Beacon Code: 1644
AC Type: MD11
Operation Type: Arrival
Runway: 30
Date/Time: 3/15/2017 9:59:17 AM

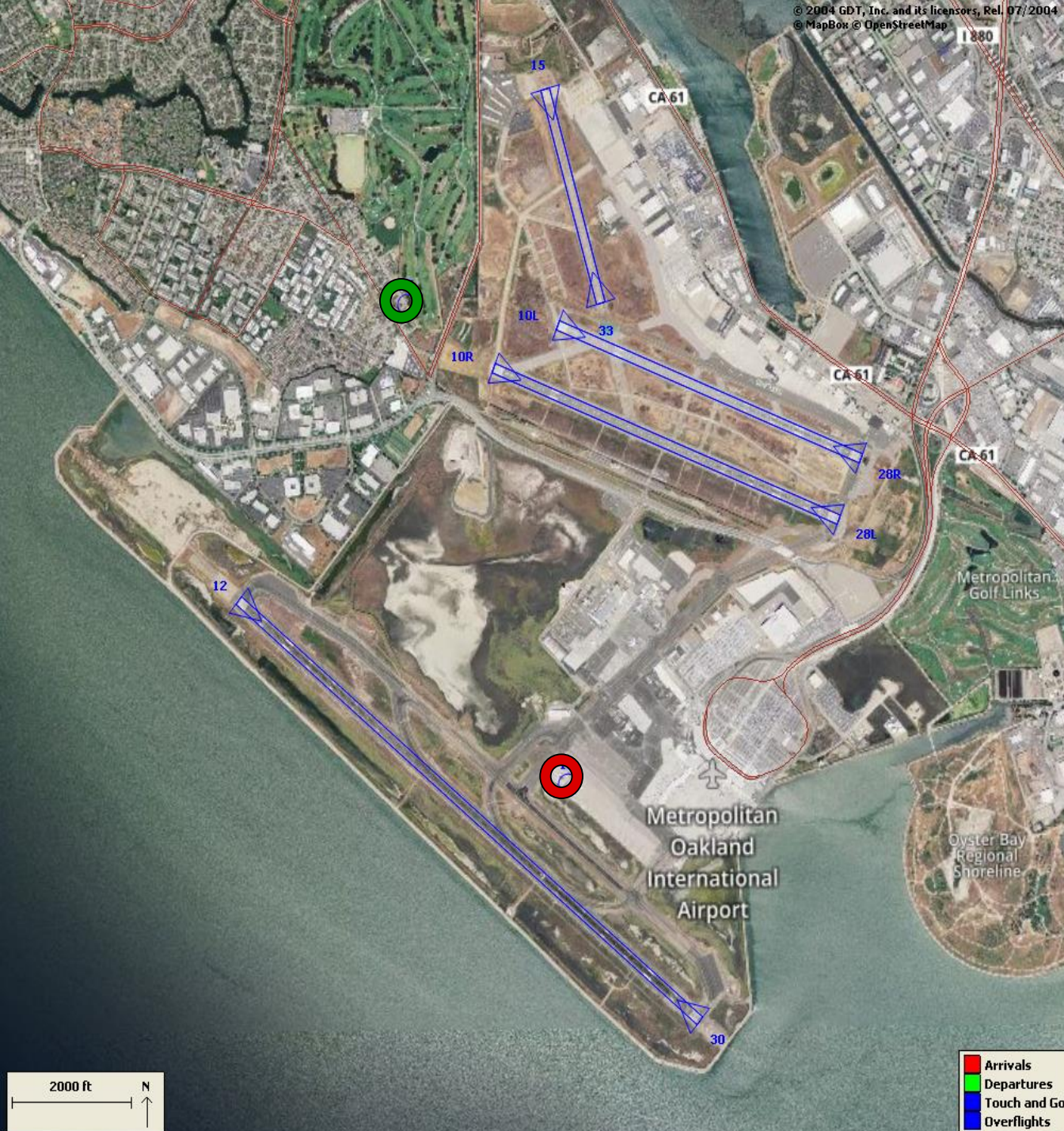
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100 Degree Radial At 3,000 ft. NAP

2020Q4
99% Compliance
(815 total landings)
(10 non-compliant)

2019Q4
99% Compliance
(1,256 total landings)
(11 non-compliant)





Engine Run-up NAP

2020Q4

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

2019Q4

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

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

Compliance Monitoring Quarterly Summary Comparison
Fourth Quarter 2020 - Quarter-to-Quarter

	2020Q3		2020Q4	
	Compl.	N/C	Compl.	N/C
Runway 28R/L Jet Departure Compliance	96%	4%	94%	6%
Total Airport-wide Corporate Jet Departures	2,098	84	2,083	132
Runway 10R/L Jet Landing Compliance	N/A	N/A	84%	16%
Total Southeast Plan Corporate Jet Landings	0	0	46	9
North Field VFR Departure Compliance	93%	7%	92%	8%
Total Runways 28R/L & 33 Departures	236	19	278	24
North Field Quiet Hours Compliance	66%	33%	76%	24%
Total North Field Quiet Hours Departures	123	62	102	32
Runway 30 BFI Right Turn Departure Compliance	100%	0%	100%	0%
Total Runway 30 Turbojet Departures	11,698	7	11,926	1
Night Time Departure Compliance	99%	1%	99%	1%
Total Runway 30 Night Turbojet Departures	2,182	32	2,154	17
Runway 12 Night Departure Compliance	N/A	N/A	98%	2%
Total Runway 12 Night Turbojet Departures	0	0	55	1
Runway 30 East Turn Departure Compliance	100%	0%	100%	0%
Total Runway 30 East Turn Departures	4,220	17	4,009	4
100 Degree Radial Turbojet Landing Compliance	98%	2%	99%	1%
Total 100 Degree Radial Turbojet Landings	704	12	805	10
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.

Table 1. North Field Night Aircraft Departure SEL Noise Measurements
Total Aircraft Departures = 134

Fourth Quarter 2020 (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	12	2	0.0	0.4%	1	0.0	0.2%	0	0.0	0.0%	15
3	23	6	0.1	1.1%	1	0.0	0.2%	0	0.0	0.0%	30
4	47	44	0.5	7.8%	18	0.2	3.2%	6	0.1	1.1%	115
5	67	17	0.2	3.0%	5	0.1	0.9%	9	0.1	1.6%	98
6	12	11	0.1	1.9%	4	0.0	0.7%	5	0.1	0.9%	32
7	14	5	0.1	0.9%	6	0.1	1.1%	0	0.0	0.0%	25
8	27	8	0.1	1.4%	0	0.0	0.0%	0	0.0	0.0%	35
9	4	4	0.0	0.7%	1	0.0	0.2%	2	0.0	0.4%	11
10	27	8	0.1	1.4%	2	0.0	0.4%	0	0.0	0.0%	37
11	1	1	0.0	0.2%	0	0.0	0.0%	0	0.0	0.0%	2
12	1	0	0.0	0.0%	1	0.0	0.2%	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	235	106	1	0	39	0	0	22	0	0	402

Table 2. Aircraft SEL Noise Measurements in Alameda - Total Aircraft Departures = 129

Fourth Quarter 2020 (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	23	6	0.1	2.5%	1	0.0	0.4%	0	0.0	0.0%	30
4	47	44	0.5	18.4%	18	0.2	7.5%	6	0.1	2.5%	115
5	67	17	0.2	7.1%	5	0.1	2.1%	9	0.1	3.8%	98
6	12	11	0.1	4.6%	4	0.0	1.7%	5	0.1	2.1%	32
7	14	5	0.1	2.1%	6	0.1	2.5%	0	0.0	0.0%	25
8	27	8	0.1	3.3%	0	0.0	0.0%	0	0.0	0.0%	35
Total	190	91	1.0		34	0.4		20	0.2		335

Table 3. Aircraft SEL Noise Measurements in San Leandro - Total Aircraft Departures = 5

Fourth Quarter 2020 (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	12	2	0.0	0.6%	1	0.0	0.3%	0	0.0	0.0%	15
9	4	4	0.0	1.2%	1	0.0	0.3%	2	0.0	0.6%	11
10	27	8	0.1	2.4%	2	0.0	0.6%	0	0.0	0.0%	37
11	1	1	0.0	0.3%	0	0.0	0.0%	0	0.0	0.0%	2
12	1	0	0.0	0.0%	1	0.0	0.3%	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	45	15	0.2		5	0.1		2	0.0		67

Rolling Take-off Night Departure Procedure (1:00 to 5:00 AM)
Fourth 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	
Fourth Quarter 2020 [B]						
	Total [X]	Est. Avg. Monthly [X/3]				
B763	173	58	83	65	75	18
DC10/MD10	52	17	40	68	77	23
MD11	202	67	184	67	77	21
A306	76	25	42	65	74	17
B757	168	56	88	65	74	15
B77L	127	42	35	65	74	17
Difference [A-B]						
DC10/MD10		-70	8	-1	-1	1
MD11		35	171	-3	-2	-3
A306		-42	21	-2	-3	-8

(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)
Fourth Quarter 2019, 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	
Fourth Quarter 2019 [B]						
	Total [X]	Est. Avg. Monthly [X/3]				
B763	131	44	41	66	74	14
DC10/MD10	46	15	20	66	76	19
MD11	254	85	134	67	77	18
A306	92	31	28	66	74	15
B757	166	55	60	66	74	15
B77L	101	34	18	65	74	17
Difference [A-B]						
DC10/MD10		-72	-12	-3	-2	-3
MD11		53	121	-3	-2	-6
A306		-36	7	-1	-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.

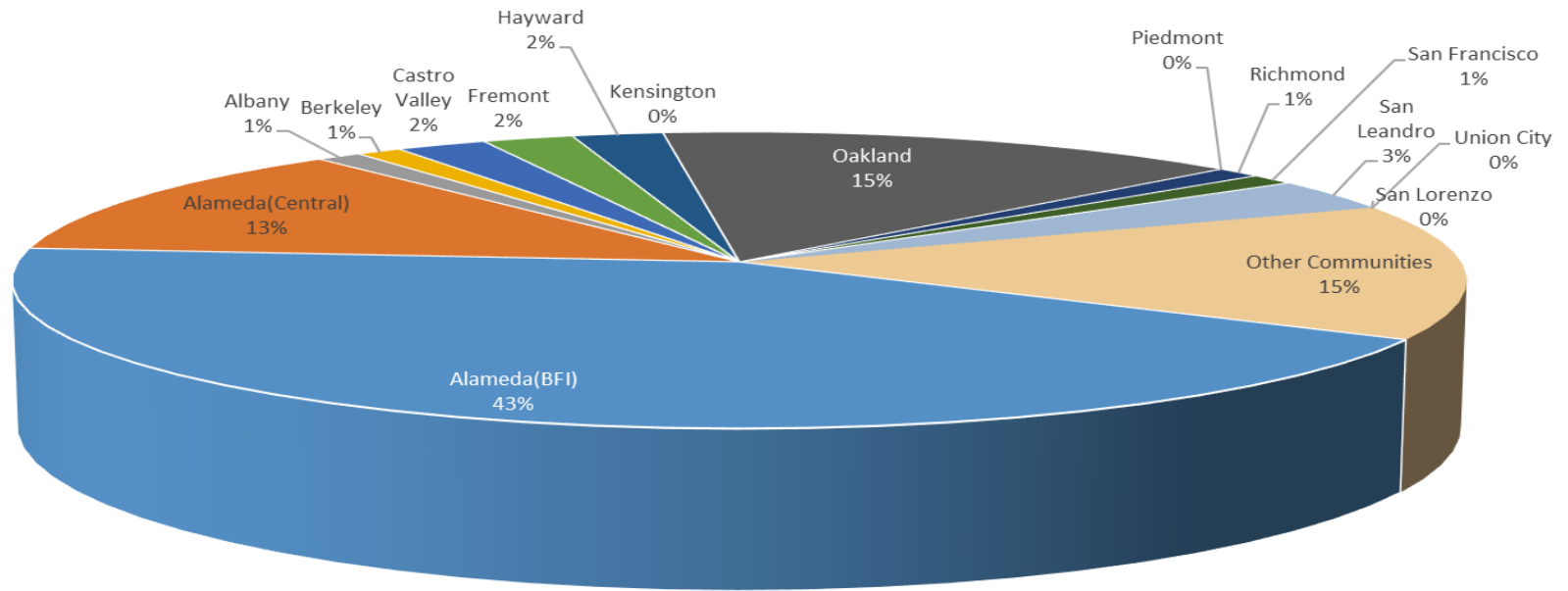
Source: ANOMS (Airport Noise and Operations Monitoring System)

Oakland International Airport Noise Complaint Summary October 2020		
Community	Callers	Complaints
Alameda(BFI)	38	1733
Alameda(Central)	11	115
Albany	1	1
Berkeley	1	1
Castro Valley	2	57
Fremont	2	16
Hayw ard	2	2
Kensington	0	0
Oakland	13	1909
Piedmont	0	0
Richmond	1	491
San Francisco	1	1
San Leandro	3	42
Union City	0	0
San Lorenzo	0	0
Other Communities	13	741
Total	88	5109
Complaints by Type		
Website	0	
E-mail	1895	
Phone	0	
View point App	3214	
Complaints by Time of Day		
Day (0700 - 1900)	3055	
Evening (1900 - 2200)	781	
Night (2200 - 0700)	1273	
Complaints by Type of Operation		
Arrivals	2150	
Departures	2472	
Over-flights	388	
Touch & Go	99	
Not Linked to an Operation	0	
Complaints by Type of Aircraft		
Business Jet	215	
Helicopter	48	
Jet	3863	
Military	0	
Not Reported (not linked to an aircraft)	0	
Other (Type information not available)	203	
Propeller	588	
Turbo-prop	192	

Number of Callers

October 2020

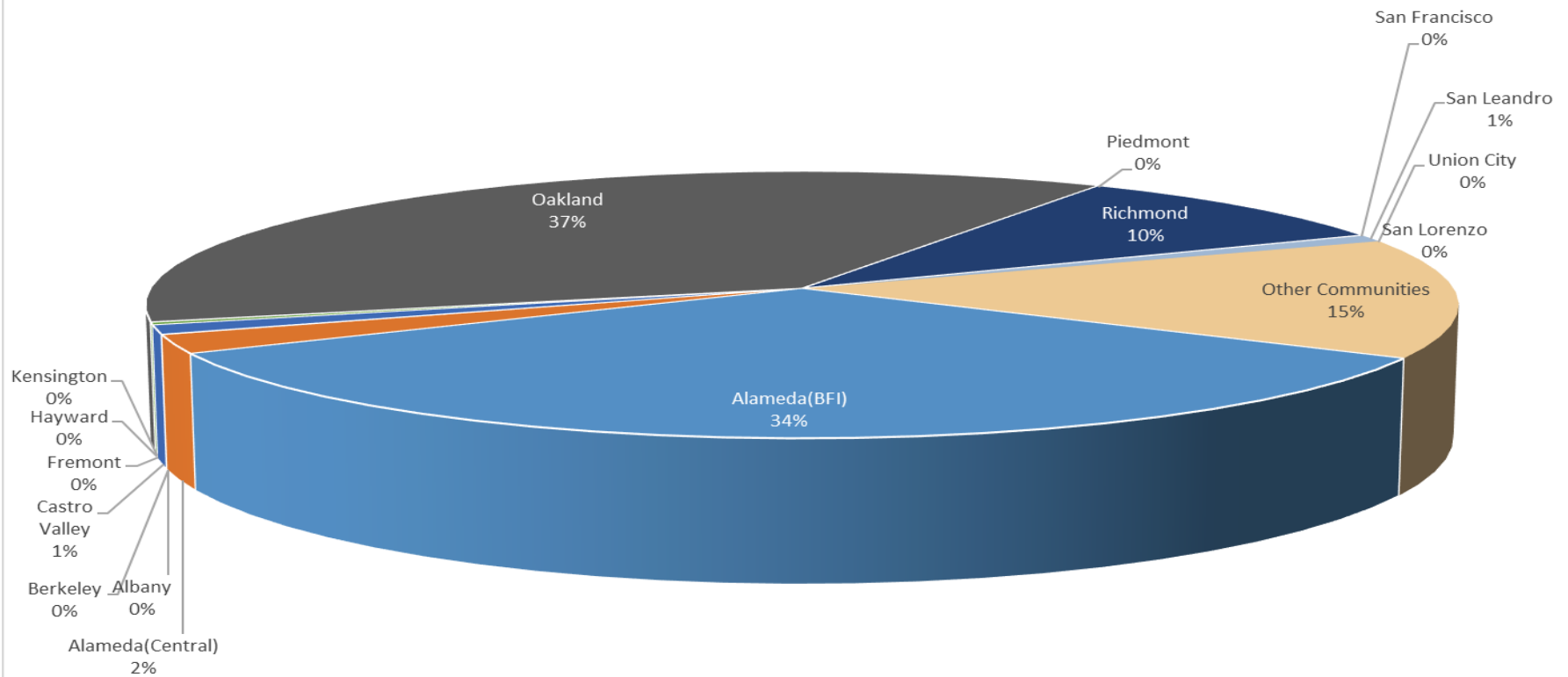
Noise Complaints Summary by Number of Callers



Number of Complaints

October 2020

Noise Complaints Summary by Number of Complaints

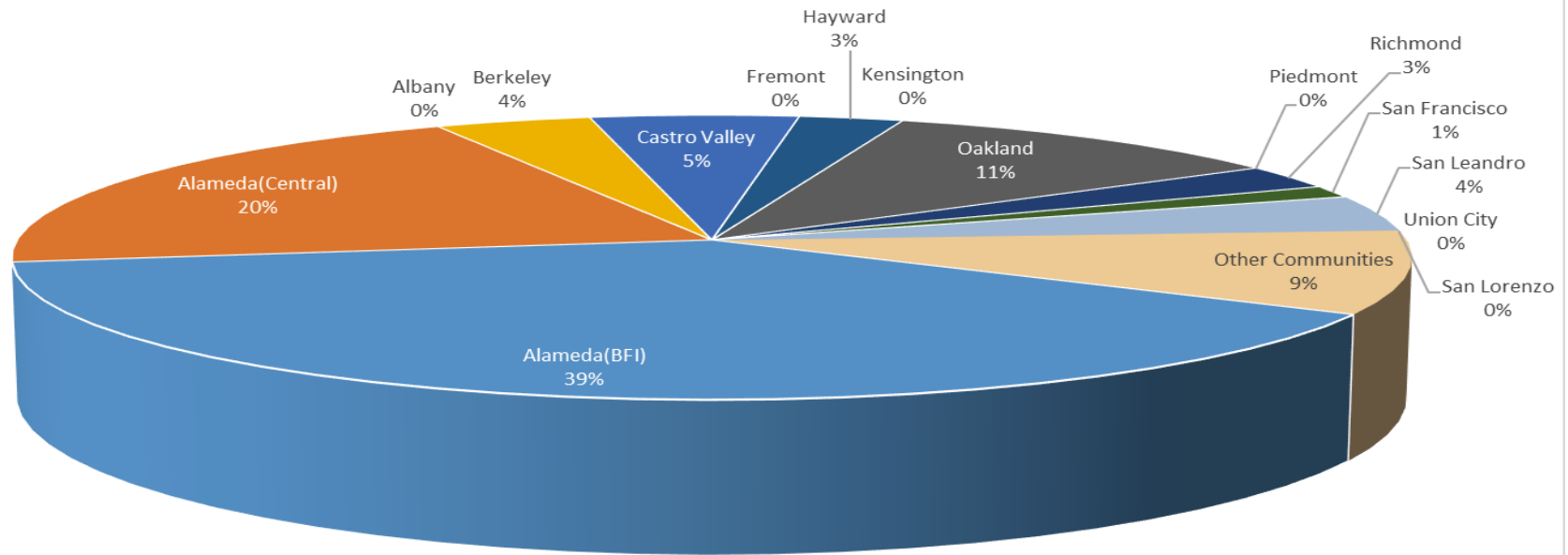


Oakland International Airport Noise Complaint Summary November 2020		
Community	Callers	Complaints
Alameda(BFI)	29	1949
Alameda(Central)	15	88
Albany	0	0
Berkeley	3	8
Castro Valley	4	69
Fremont	0	0
Hayward	2	2
Kensington	0	0
Oakland	8	3613
Piedmont	0	0
Richmond	2	697
San Francisco	1	1
San Leandro	3	7
Union City	0	0
San Lorenzo	0	0
Other Communities	7	1062
Total	74	7496
Complaints by Type		
Website	0	
E-mail	3349	
Phone	0	
View point App	4147	
Complaints by Time of Day		
Day (0700 - 1900)	4016	
Evening (1900 - 2200)	1834	
Night (2200 - 0700)	1646	
Complaints by Type of Operation		
Arrivals	3708	
Departures	3188	
Over-flights	494	
Touch & Go	106	
Not Linked to an Operation	0	
Complaints by Type of Aircraft		
Business Jet	729	
Helicopter	114	
Jet	5474	
Military	0	
Not Reported (not linked to an aircraft)	0	
Other (Type information not available)	24	
Propeller	972	
Turbo-prop	183	

Number of Callers

November 2020

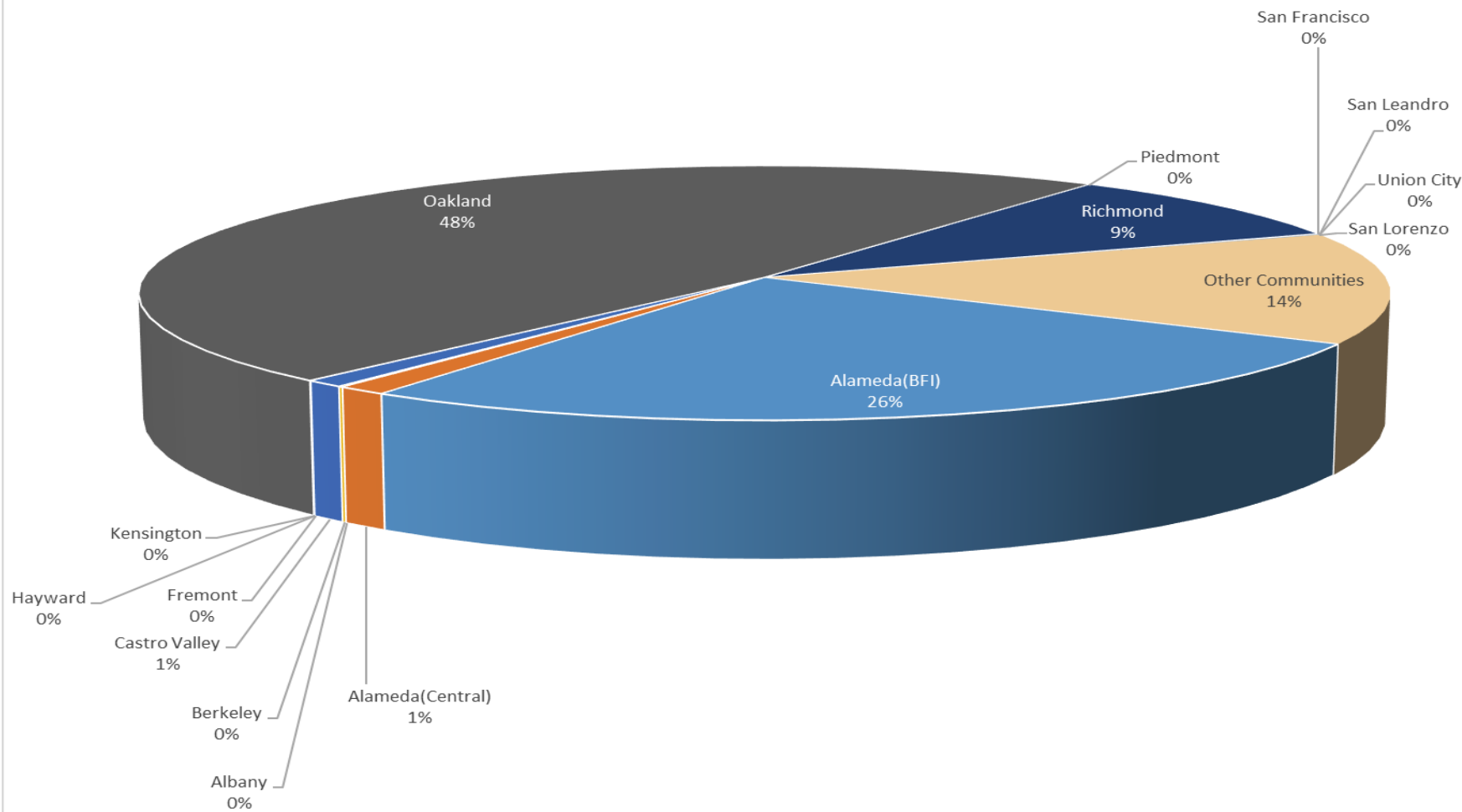
Noise Complaints Summary by Number of Callers



Number of Complaints

November 2020

Noise Complaints Summary by Number of Complaints

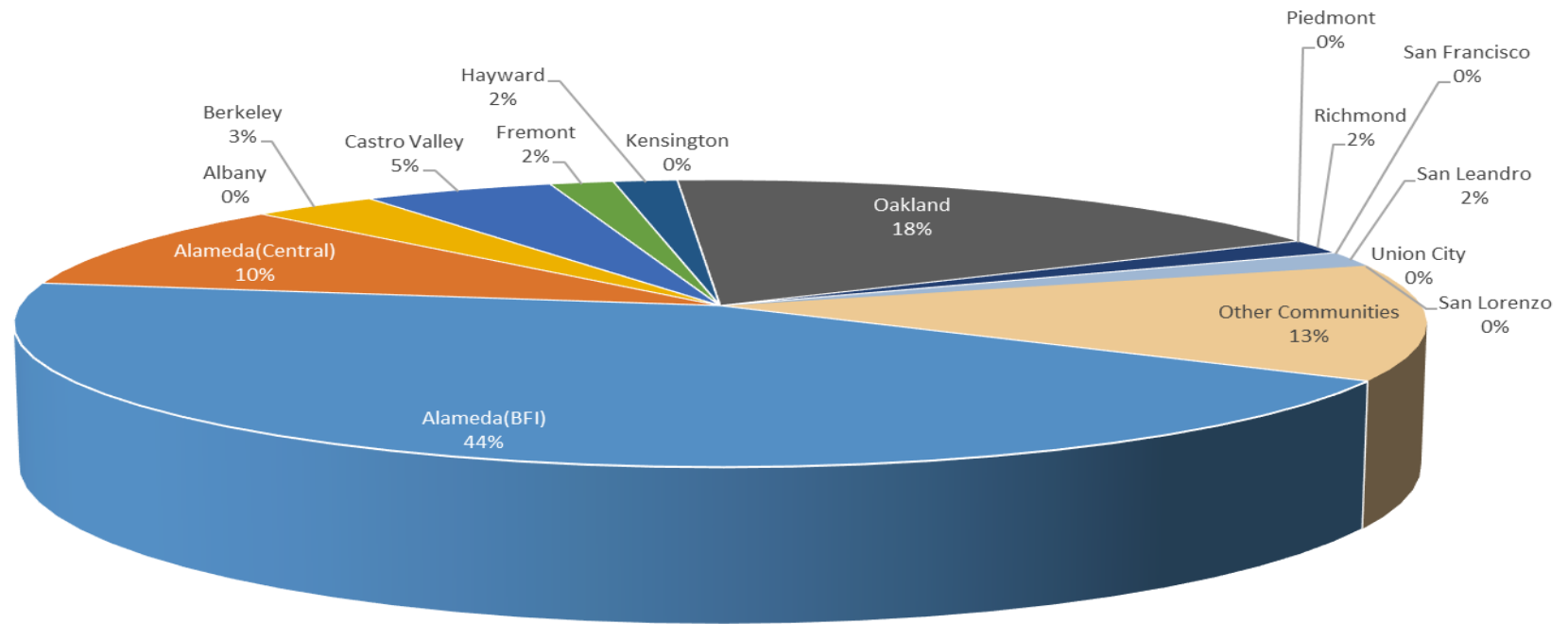


Oakland International Airport Noise Complaint Summary December 2020		
Community	Callers	Complaints
Alameda(BFI)	27	2100
Alameda(Central)	6	106
Albany	0	0
Berkeley	2	2
Castro Valley	3	99
Fremont	1	1
Hayward	1	1
Kensington	0	0
Oakland	11	2286
Piedmont	0	0
Richmond	1	699
San Francisco	0	0
San Leandro	1	3
Union City	0	0
San Lorenzo	0	0
Other Communities	8	469
Total	61	5766
Complaints by Type		
Website	0	
E-mail	2062	
Phone	0	
View point App	3704	
Complaints by Time of Day		
Day (0700 - 1900)	3284	
Evening (1900 - 2200)	1069	
Night (2200 - 0700)	1413	
Complaints by Type of Operation		
Arrivals	2365	
Departures	2945	
Over-flights	348	
Touch & Go	108	
Not Linked to an Operation	0	
Complaints by Type of Aircraft		
Business Jet	199	
Helicopter	65	
Jet	4659	
Military	0	
Not Reported (not linked to an aircraft)	0	
Other (Type information not available)	28	
Propeller	702	
Turbo-prop	113	

Number of Callers

December 2020

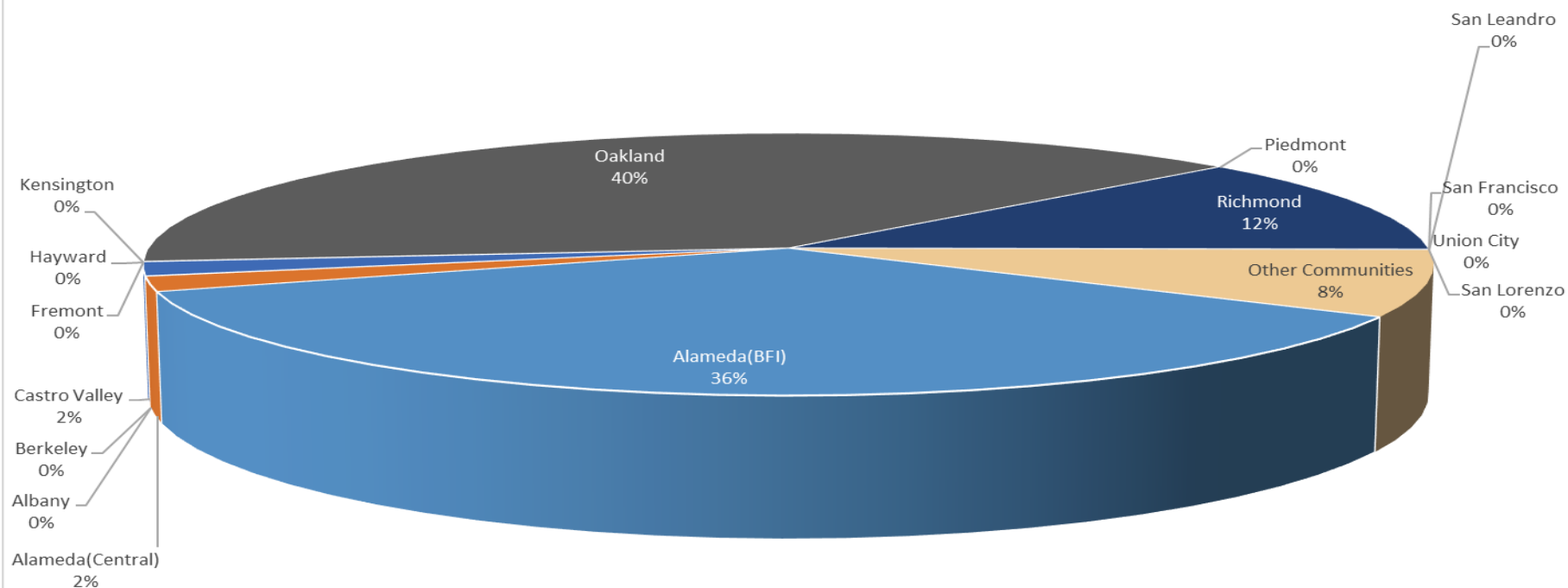
Noise Complaints Summary by Number of Callers

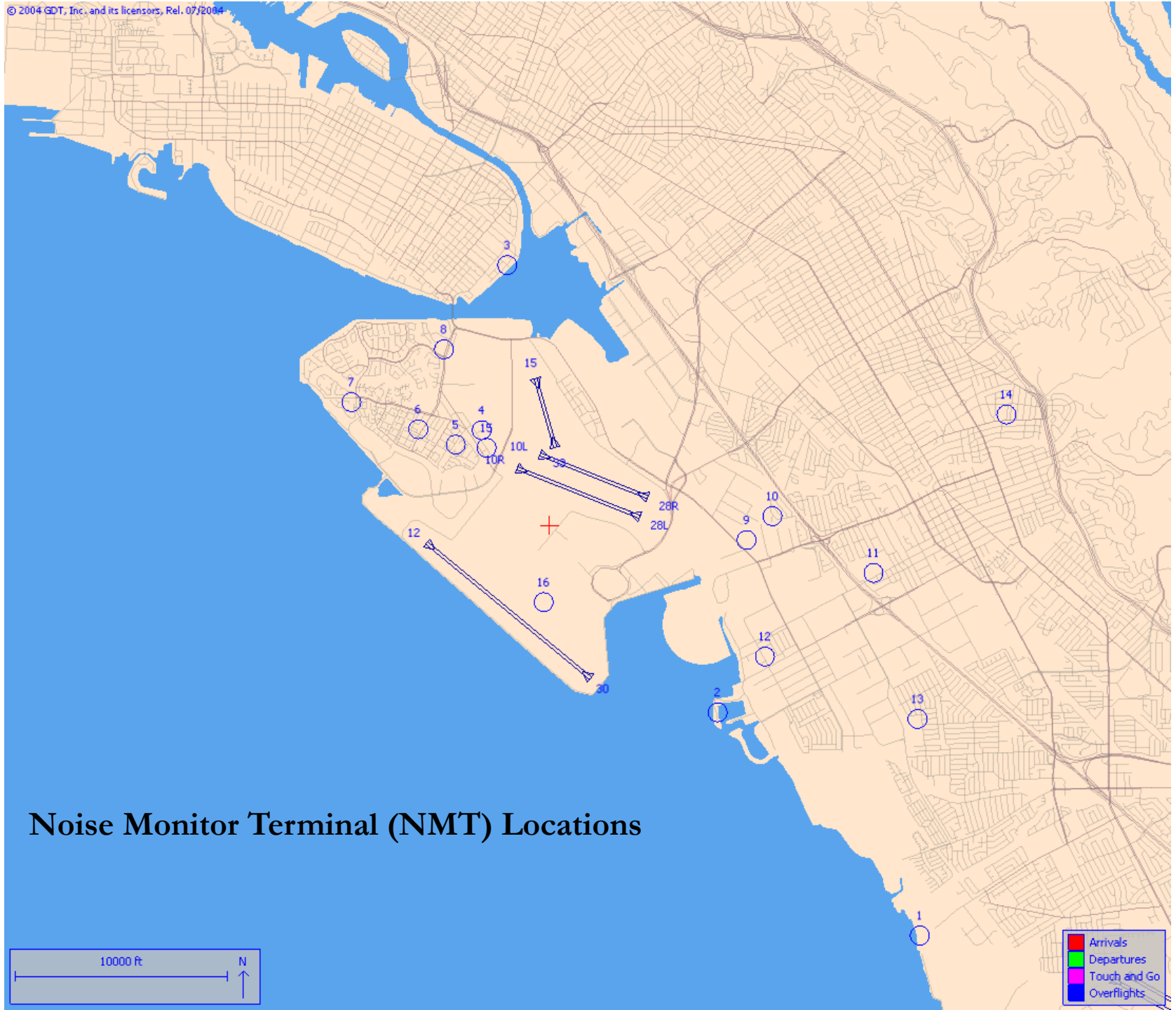


Number of Complaints

December 2020

Noise Complaints Summary by Number of Complaints





Noise Monitor Terminal (NMT) Locations