NOISE FORUM SUMMARY

North/South Field Working Groups

NOISE ABATEMENT REPORT

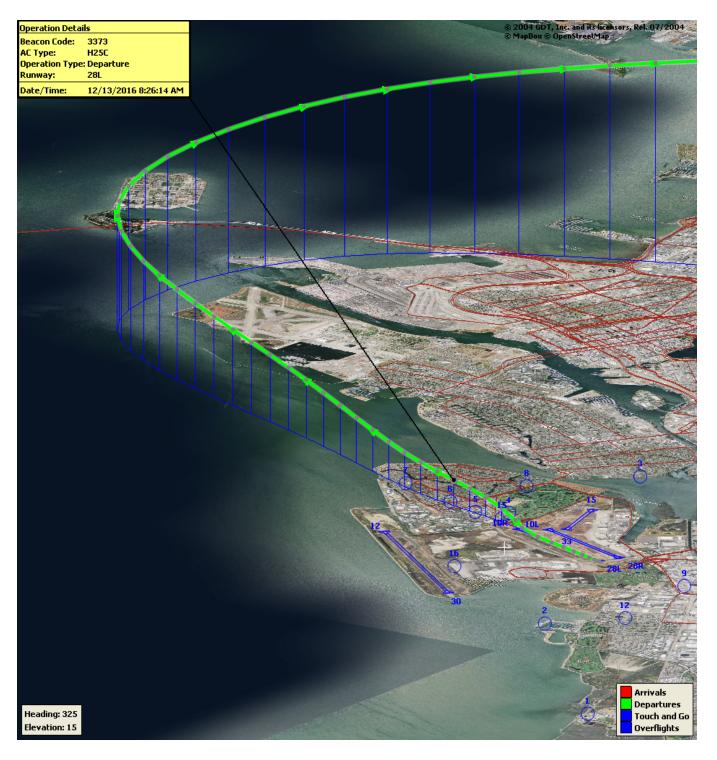
FOURTH QUARTER 2017

Compliance Monitoring Quarterly Summary Comparison Fourth Quarter 2017

	2016Q4		2017Q4			
	Compl.	N/C	Compl.	N/C		
Runway 28R/L Jet Departure Compliance	95%	5%	94%	6%		
Total Airport-wide Corporate Jet Departures	2,747	158	2,856	178		
Runway 10R/L Jet Landing Compliance	73%	27%	76%	24%		
Total Southeast Plan Corporate Jet Landings	231	84	97	30		
North Field VFR Departure Compliance	94%	6%	94%	6%		
Total Runways 28R/L & 33 Departures	376	22	369	25		
North Field Quiet Hours Compliance	69%	31%	82%	18%		
Total North Field Quiet Hours Departures	130	59	265	60		
Runway 30 BFI Right Turn Departure Compliance	100%	0%	100%	0%		
Total Runway 30 Turbojet Departures	16,627	5	18,845	·		
Night Time Departure Compliance	98%	2%	99%	1%		
Total Runway 30 Night Turbojet Departures	3,089	49	3,638	50		
Runway 12 Night Departure Compliance	88%	12%	86%	14%		
Total Runway 12 Night Turbojet Departures	161	22	131	22		
Runway 30 East Turn Departure Compliance	100%	0%	100%	0%		
Total Runway 30 East Turn Departures	5,174	0	5,764	8		
100 Degree Radial Turbojet Landing Compliance	92%	8%	99%	1%		
Total 100 Degree Radial Turbojet Landings	2,154	186	3,028	46		
Engine Runup Program Compliance	100%	0%	100%	0%		
Total Evening and Nighttime Engine Runups	6	0	7			
Note: N/C means non-compliant. Percentage values are rounded out.						

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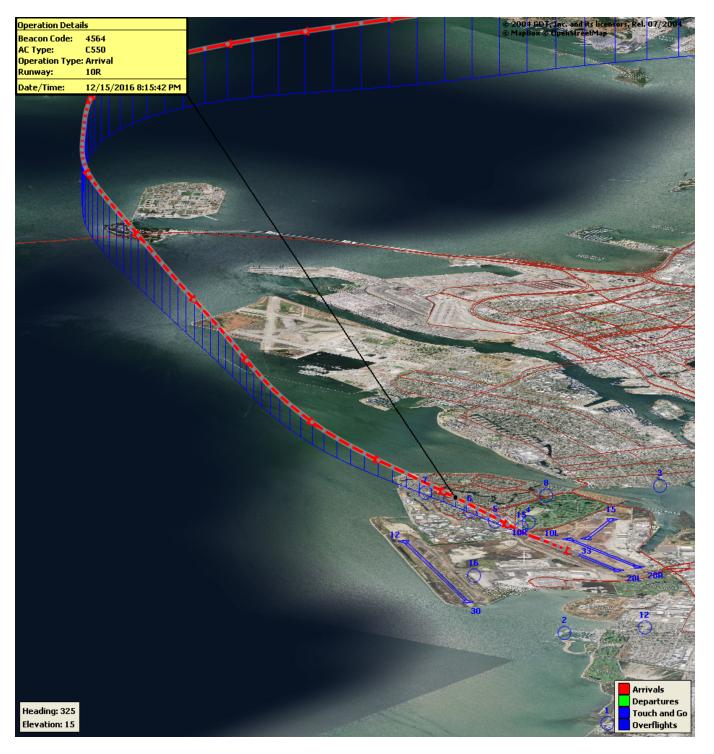
Link to full report: http://flyquietoak.com/pages/reports/quarterly_noise_compliance.html



Runway 28R/L Jet Departure NAP

2017Q4 94% Compliance (3,034 total departures) (178 non-compliant)

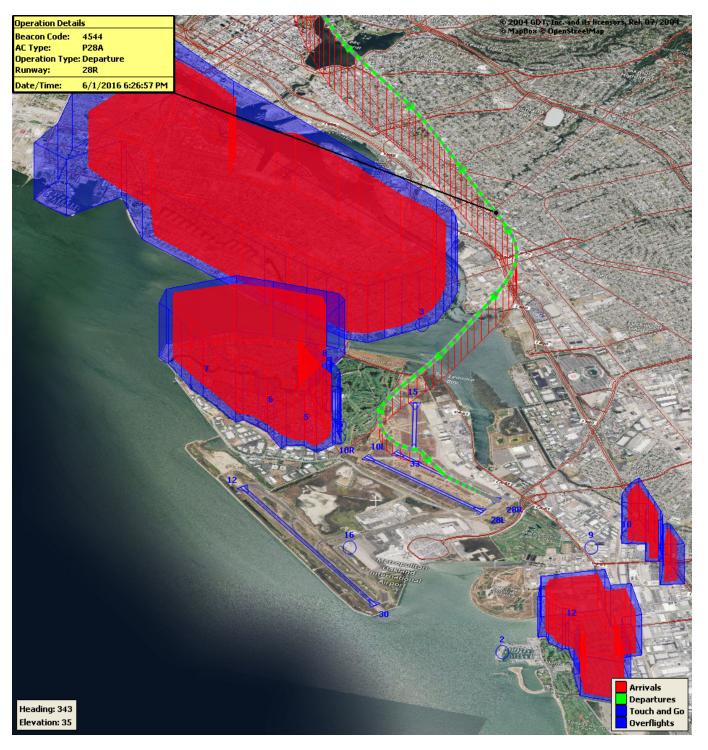
2016Q4 95% Compliance (2,905 total departures) (158 non-compliant)



Runway 10R/L Jet Landing NAP

2017Q4 76% Compliance (127 total landings) (30 non-compliant)

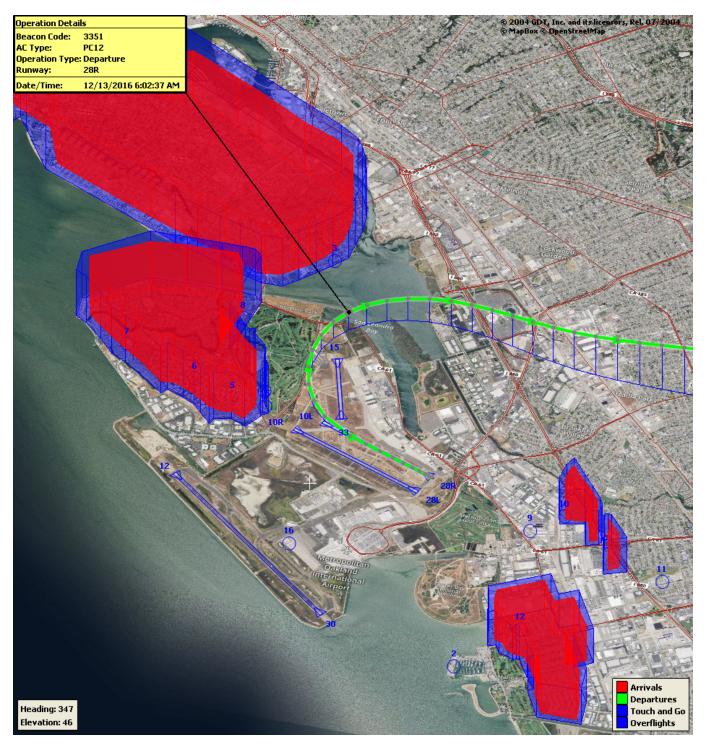
2016Q4 73% Compliance (315 total landings) (84 non-compliant)



VFR Aircraft Departure NAP

2017Q4
94% Compliance
(394 total departures)
(25 non-compliant)

2016Q4 94% Compliance (398 total departures) (22 non-compliant)



North Field Quiet Hours NAP

2017Q4 82% Compliance (325 total departures) (60 non-compliant)

2016Q4
69% Compliance
(189 total departures)
(59 non-compliant)

North Field Quiet Hours NAP Non-Compliant by Hour





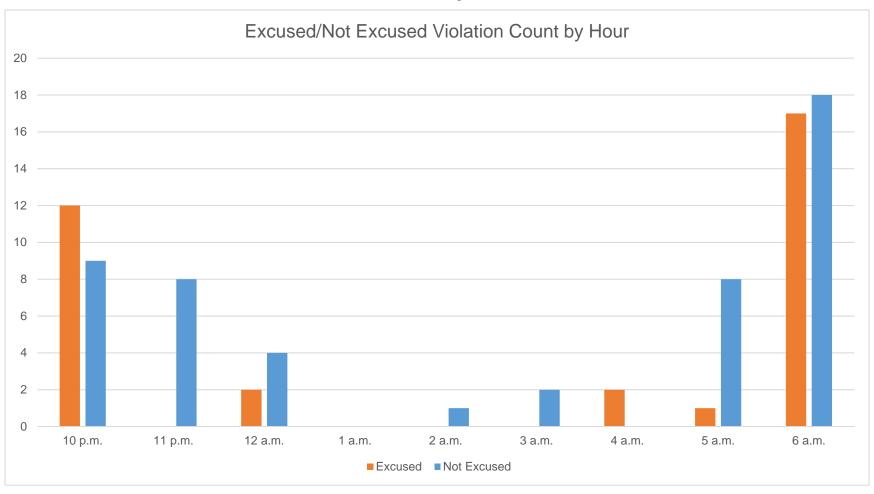
Night Time Departure NAP

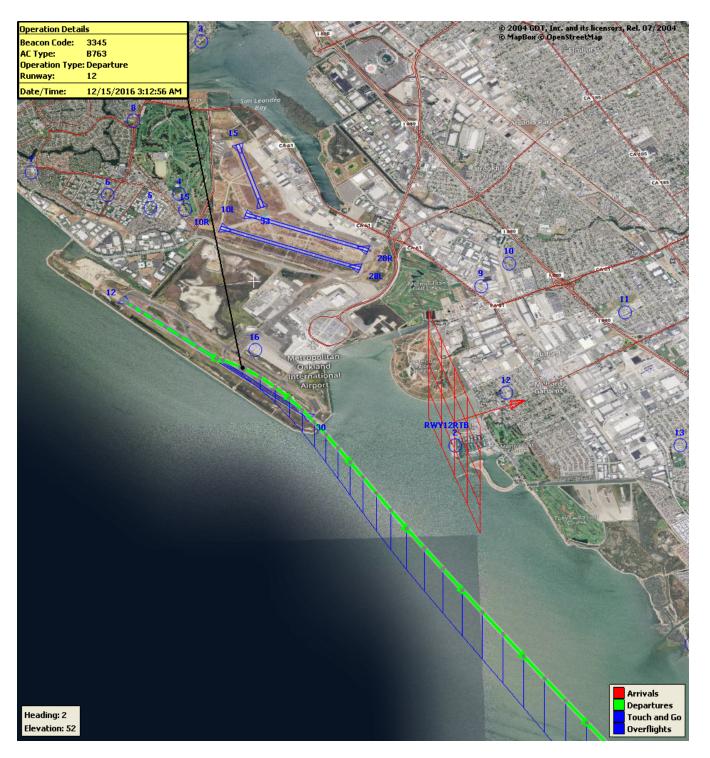
2017Q4 99% Compliance (3,688 total departures) (50 non-compliant)

*REBAS Gate non-compliant = 48

2016Q4*
98% Compliance
(3,138 total departures)
(49 non-compliant)

Night Time NAP Non-Compliant Count by Hour



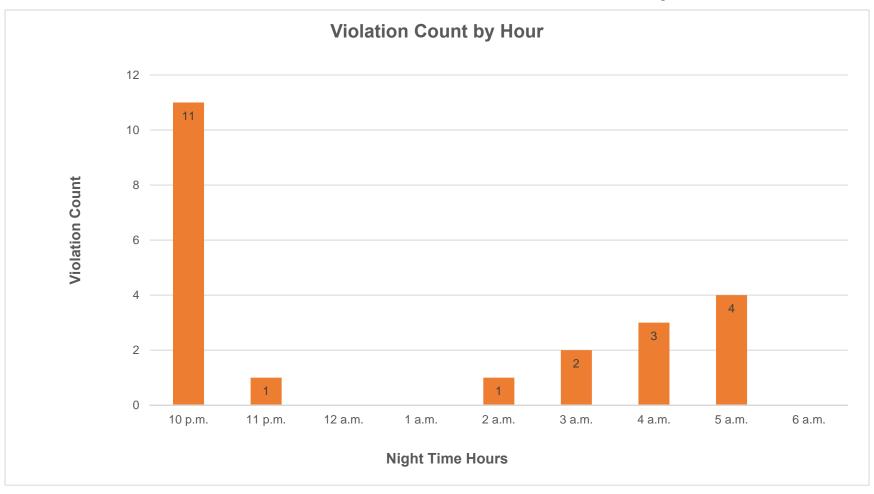


Runway 12 Night Departure NAP

2017Q4 86% Compliance (153 total departures) (22 non-compliant)

2016Q4 88% Compliance (183 total departures) (22 non-compliant)

Runway 12 Night Departure Non-Compliant Count by Hour

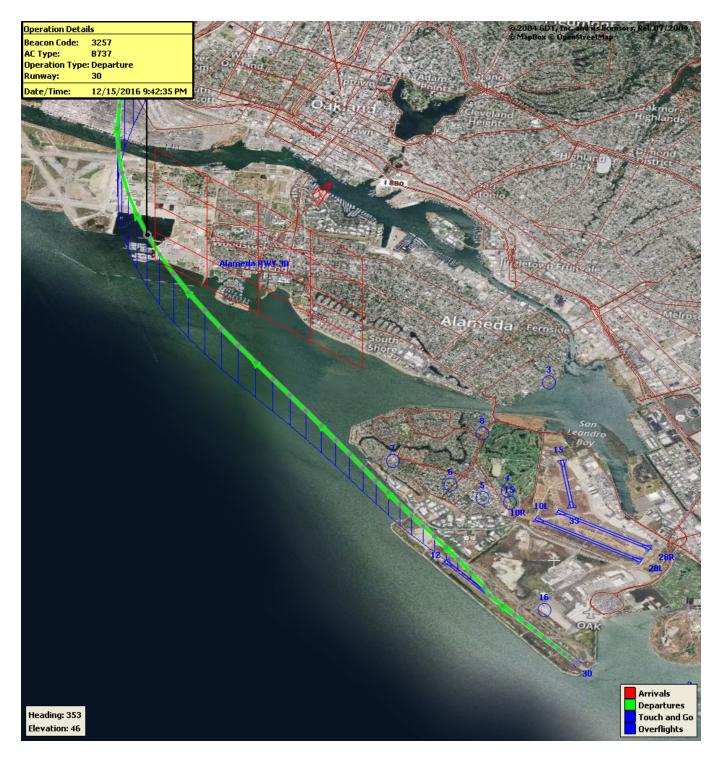




Runway 30 Bay Farm Right Turn NAP

2017Q4 100% Compliance (18,846 total departures) (1 non-compliant)

2016Q4 100% Compliance (16,632 total departures) (5 non-compliant)

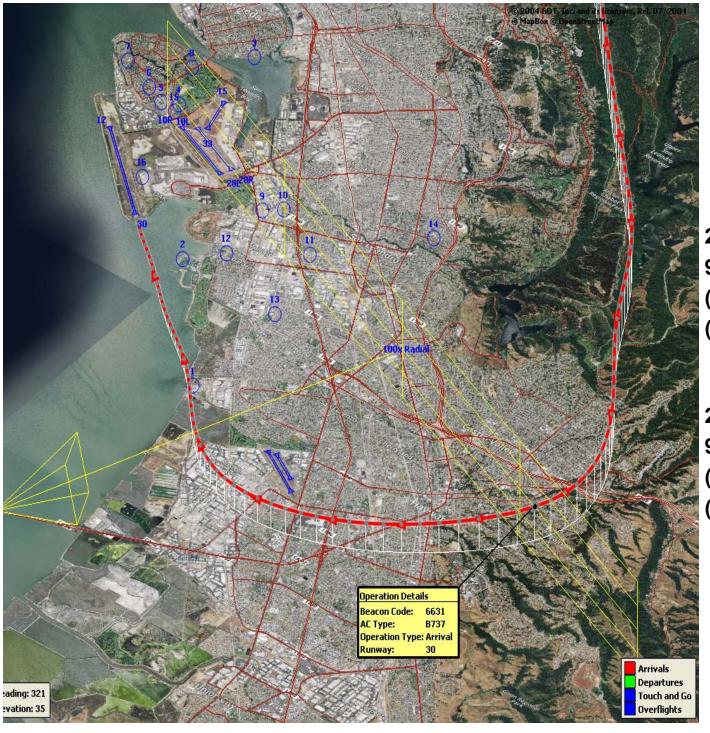


Runway 30 East Turn NAP

2017Q4 100% Compliance (5,772 total departures) (8 non-compliant)

* Excused Departures = 112

2016Q4 100% Compliance (5,174 total departures) (0 non-compliant)



100 Degree Radial At 3,000 ft. NAP

2017Q4 99% Compliance (3,074 total landings) (46 non-compliant)

2016Q4 92% Compliance (2,340 total landings) (186 non-compliant)



Engine Run-up NAP

2017Q4 100% Compliance (7 engine run-ups)* (0 non-compliant)

2016Q4 100% Compliance (6 engine run-ups) (0 non-compliant)

^{*}Only above idle-power run-ups recorded.

Table 1. North Field Night Aircraft Departure SEL Noise Measurements Total Aircraft Departures = 172

Fourth Quarter 2017 (10:00 p.m. to 7:00 a.m.)

NMT	Aircraft Noise	Aircraft Noise Events SEL 80 - 84.9 dBA			A	Aircraft Noise Events SEL 85 - 89.9 dBA		Aircraft Noise Events SEL ≥ 90 dBA			Total Aircraft
Number	SEL 80 dBA	Amount	Nightly Average	As Percentage of Departures	Amount	Nightly Average	As Percentage of Departures	Amount	Nightly Average	As Percentage of Departures	Noise Events
1	1	6	0.1	1.1%	1	0.0	0.2%	0	0.0	0.0%	8
2	43	3	0.0	0.5%	2	0.0	0.4%	0	0.0	0.0%	48
3	44	2	0.0	0.4%	0	0.0	0.0%	0	0.0	0.0%	46
4	40	35	0.4	6.2%	29	0.3	5.1%	48	0.5	8.5%	152
5	36	25	0.3	4.4%	13	0.1	2.3%	54	0.6	9.5%	128
6	18	19	0.2	3.4%	41	0.5	7.2%	62	0.7	10.9%	140
7	19	17	0.2	3.0%	47	0.5	8.3%	2	0.0	0.4%	85
8	31	33	0.4	5.8%	3	0.0	0.5%	0	0.0	0.0%	67
9	8	4	0.0	0.7%	6	0.1	1.1%	0	0.0	0.0%	18
10	31	13	0.1	2.3%	1	0.0	0.2%	0	0.0	0.0%	45
11	1	1	0.0	0.2%	0	0.0	0.0%	0	0.0	0.0%	2
12	10	6	0.1	1.1%	3	0.0	0.5%	0	0.0	0.0%	19
13	2	2	0.0	0.4%	0	0.0	0.0%	0	0.0	0.0%	4
14	9	1	0.0	0.2%	0	0.0	0.0%	0	0.0	0.0%	10
All NMTs	293	167	2	0	146	2	0	166	2	0	772

^{*}SEL > 90 dBA increase due to commercial jet departures from the North Field during Monday Morning closure. Runway Overlay Project

Table 2. Aircraft SEL Noise Measurements in Alameda - Total Aircraft Departures = 155

Fourth Quarter 2017 (10:00 p.m. to 7:00 a.m.)

NMT	NMT Aircraft Noise Events Below		Aircraft Noise Events SEL 80 - 84.9 dBA		Aircraft Noise Events SEL 85 - 89.9 dBA		Aircraft Noise Events SEL ≥ 90 dBA			Total Aircraft	
Number	SEL 80 dBA	Amount	Nightly Average	As Percentage of Departures	Amount	Nightly Average	As Percentage of Departures	Amount	Nightly Average	As Percentage of Departures	Noise Events
3	44	2	0.0	0.8%	0	0.0	0.0%	0	0.0	0.0%	46
4	40	35	0.4	14.6%	29	0.3	12.1%	48	0.5	20.1%	152
5	36	25	0.3	10.5%	13	0.1	5.4%	54	0.6	22.6%	128
6	18	19	0.2	7.9%	41	0.5	17.2%	62	0.7	25.9%	140
7	19	17	0.2	7.1%	47	0.5	19.7%	2	0.0	0.8%	85
8	31	33	0.4	13.8%	3	0.0	1.3%	0	0.0	0.0%	67
Total	188	131	1.5		133	1.5		166	1.8		618

Table 3. Aircraft SEL Noise Measurements in San Leandro - Total Aircraft Departures = 17

Fourth Quarter 2017 (10:00 p.m. to 7:00 a.m.)

NMT	Aircraft Noise	SEL 00 - 04.9 UBA		Aircraft Noise Events SEL 85 - 89.9 dBA		Aircraft Noise Events SEL ≥ 90 dBA			Total Aircraft		
Number	SEL 80 dBA	Amount	Nightly Average	As Percentage of Departures	Amount	Nightly Average	As Percentage of Departures	Amount	Nightly Average	As Percentage of Departures	Nois e Events
2	43	3	0.0	0.9%	2	0.0	0.6%	0	0.0	0.0%	48
9	8	4	0.0	1.2%	6	0.1	1.8%	0	0.0	0.0%	18
10	31	13	0.1	4.0%	1	0.0	0.3%	0	0.0	0.0%	45
11	1	1	0.0	0.3%	0	0.0	0.0%	0	0.0	0.0%	2
12	10	6	0.1	1.8%	3	0.0	0.9%	0	0.0	0.0%	19
13	2	2	0.0	0.6%	0	0.0	0.0%	0	0.0	0.0%	4
14	9	1	0.0	0.3%	0	0.0	0.0%	0	0.0	0.0%	10
Total	104	30	0.3		12	0.1		0	0.0		146

Rolling Take-off Night Departure Procedure (1:00 to 5:00 AM) Fourth Quarter 2017, NMT 2 Aircraft Recorded Noise Avg. Duration Lmax Average SEL Average Departures Events (a) (seconds) Baseline (November 2002) [A] DC10/MD10 87 32 69 78 22 MD11 32 13 70 79 24 67 21 77 A306 67 25 Fourth Quarter 2017 [B] Est. Avg. Total [X] Monthly [X/3] B763 65 74 135 45 38 15 DC10/MD10 72 38 76 24 66 18 MD11 249 83 178 68 77 20 A306 87 29 41 66 75 17 B757 192 64 83 66 75 16 72 B77L 24 22 66 75 17 Difference [A-B] DC10/MD10 -63 -2 6 -3 -4 MD11 51 165 -2 -2 -4 -2 -8 A306 -38 20 -1

⁽a) For the current calendar quarter reported, A NOM S 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: A NOM S (Airport Noise and Operations Monitoring System)

Rolling Take-off Night Departure Procedure (1:00 to 5:00 AM) Fourth Quarter 2016, NMT 2 Aircraft Recorded Noise Avg. Duration Lmax Average SEL Average Departures Events (a) (seconds) Baseline (November 2002) [A] DC10/MD10 87 32 69 78 22 MD11 32 13 70 79 24 67 21 77 A306 67 25 Fourth Quarter 2016 [B] Est. Avg. Total [X] Monthly [X/3] B763 22 65 74 56 19 14 DC10/MD10 75 25 37 76 66 18 MD11 216 72 145 67 77 20 A306 92 31 43 66 75 17 B757 177 59 69 66 74 16 74 B77L 67 22 30 65 13 Difference [A-B] DC10/MD10 -62 -2 5 -3 -4 MD11 40 132 -3 -2 -4 -2 -8 A306 -36 22 -1

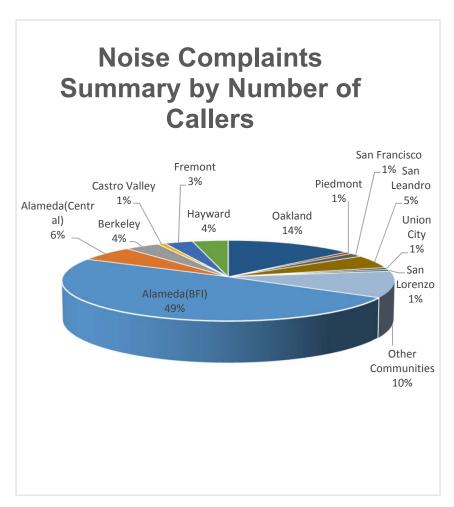
⁽a) For the current calendar quarter reported, A NOM S does not correlate all departures to their respective noise events; that is most, but not all, aircraft back-blast noise events are effectively correlated as the program software algorithms may misidentify an aircraft noise event.

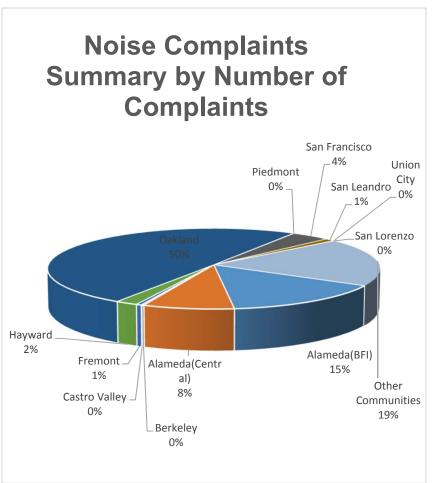
Source: A NOM S (Airport Noise and Operations Monitoring System)

Oakland International Airport Noise Complaint Summary October 2017

Community	Callers	Complaints					
Alameda(BFI)	65	346					
Alameda(Central)	8	188					
Berkeley	5	5					
Castro Valley	1	1					
Fremont	4	11					
Hayw ard	5	46					
Oakland	18	1156					
Piedmont	1	1					
San Francisco	2	96					
San Leandro	7	24					
Union City	1	1					
San Lorenzo	1	1					
Other Communities	14	450					
Total	132	2326					
Complaints by Time of Day							
Day (0700 - 1900) 995							
Evening (1900 - 2200)	247						
Night (2200 - 0700)	1	084					
Complair	nts by Type of Operation						
Arrivals	1	289					
Departures	1022						
Over-flights		8					
Touch & Go	7						
Not Linked to an Operation	0						
Compla	ints by Type of Aircraft						
Business Jet	191						
Helicopter	19						
Jet	1737						
Military	10						
Not Reported	0						
Other	16						
Propeller	162						
Turbo-prop		191					

Noise Complaint Charts October 2017

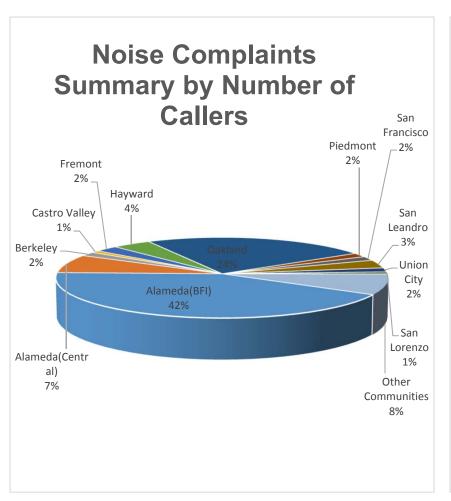


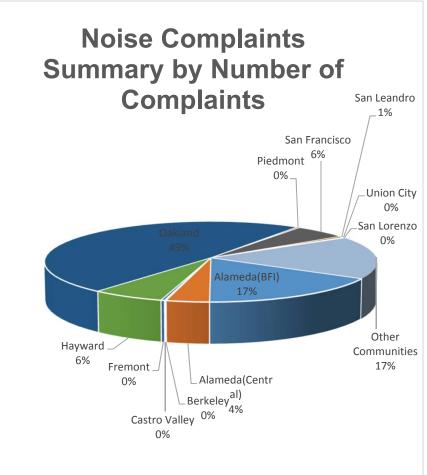


Oakland International Airport Noise Complaint Summary November 2017

Community	Callers	Complaints					
Alameda(BFI)	51	477					
Alameda(Central)	9	109					
Berkeley	2	3					
Castro Valley	1	1					
Fremont	3	9					
Hayw ard	5	184					
Oakland	29	1380					
Piedmont	2	9					
San Francisco	2	160					
San Leandro	4	14					
Union City	2	2					
San Lorenzo	1	6					
Other Communities	10	488					
Total	121	2842					
Complaints by Time of Day							
Day (0700 - 1900)	1776						
Evening (1900 - 2200)	380						
Night (2200 - 0700)	686						
Compla	ints by Type of Operation						
Arrivals		691					
Departures	953						
Over-flights	,	1194					
Touch & Go		4					
Not Linked to an Operation		0					
Comp	laints by Type of Aircraft						
Business Jet	121						
Helicopter	25						
Jet	2338						
Military	0						
Not Reported	0						
Other	65						
Propeller	121						
Turbo-prop		172					

Noise Complaint Charts November 2017





Oakland International Airport Noise Complaint Summary December 2017

Community	Callers	Complaints				
Alameda(BFI)	35	156				
Alameda(Central)	8	87				
Berkeley	0	0				
Castro Valley	0	0				
Fremont	0	0				
Hayw ard	2	178				
Oakland	18	1127				
Piedmont	0	0				
San Francisco	1	59				
San Leandro	5	9				
Union City	0	0				
San Lorenzo	1	6				
Other Communities	11	221				
Total	81	1843				
Comp	laints by Time of Day					
Day (0700 - 1900)	788					
Evening (1900 - 2200)	450					
Night (2200 - 0700)	605					
Complair	nts by Type of Operation					
Arrivals	1	197				
Departures	604					
Over-flights	37					
Touch & Go	5					
Not Linked to an Operation	0					
Compla	ints by Type of Aircraft					
Business Jet	89					
Helicopter	5					
Jet	1581					
Military	1					
Not Reported	0					
Other	9					
Propeller	81					
Turbo-prop	77					

Noise Complaint Charts December 2017

