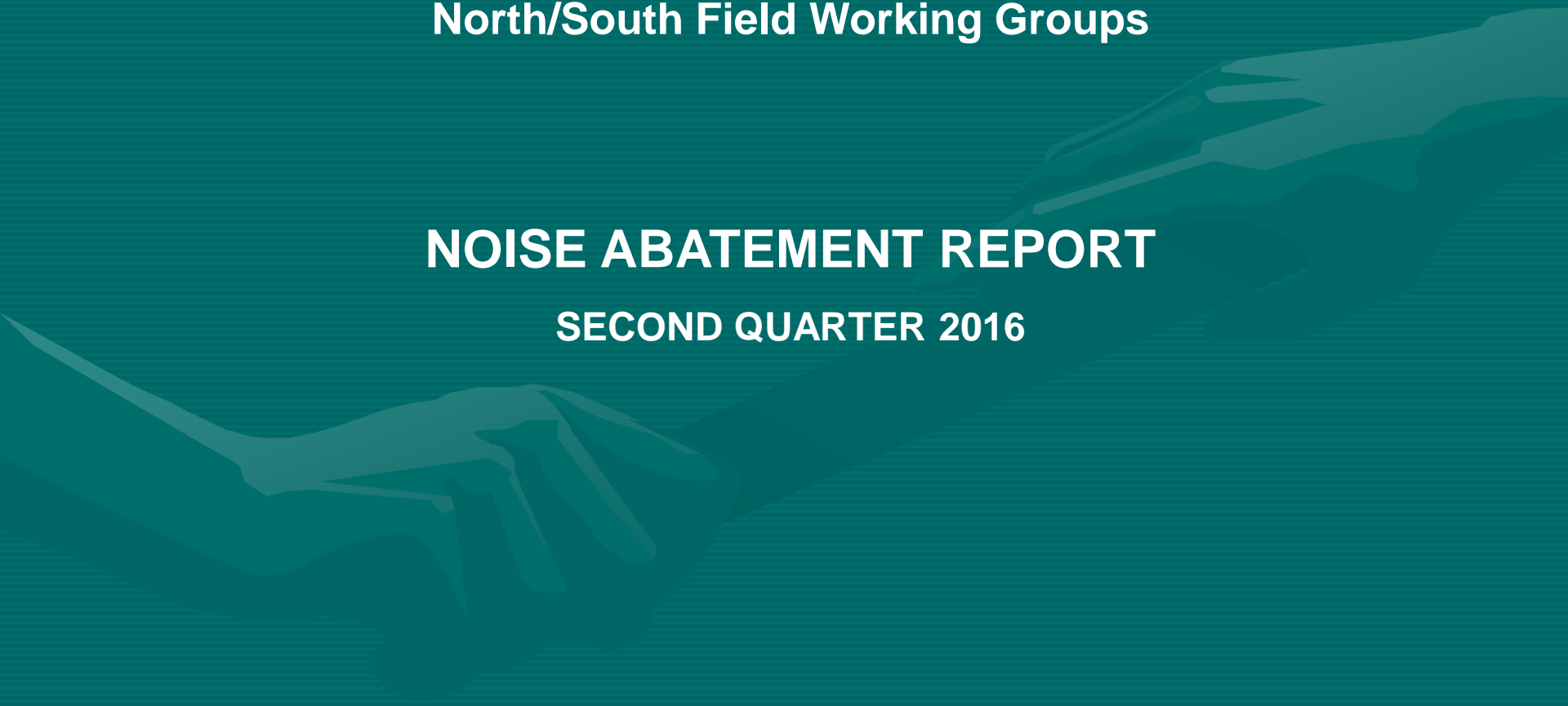


# **NOISE FORUM SUMMARY**

**North/South Field Working Groups**

## **NOISE ABATEMENT REPORT**

**SECOND QUARTER 2016**



Compliance Monitoring Quarterly Summary Comparison Second Quarter 2016				
	2015Q2		2016Q2	
	Compl.	N/C	Compl.	N/C
Runway 28R/L Jet Departure Compliance	95%	5%	94%	6%
Total Airport-wide Corporate Jet Departures	2,450	124	2,680	159
Runway 10R/L Jet Landing Compliance	86%	14%	100%	0%
Total Southeast Plan Corporate Jet Landings	19	3	10	0
North Field VFR Departure Compliance	95%	5%	97%	3%
Total Runways 28R/L & 33 Departures	422	23	557	19
North Field Quiet Hours Compliance	65%	35%	79%	21%
Total North Field Quiet Hours Departures	91	48	180	48
Runway 30 BFI Right Turn Departure Compliance	100%	0%	100%	0%
Total Runway 30 Turbojet Departures	15,654	3	17,218	11
Night Time Procedure Departure Compliance	99%	1%	98%	2%
Total Runway 30 Night Turbojet Departures	2,950	37	3,353	59
Runway 12 Night Departure Compliance	62%	38%	100%	0%
Total Runway 12 Night Turbojet Departures	13	8	11	0
Runway 30 East Turn Departure Compliance	97%	3%	96%	4%
Total Runway 30 East Turn Departures	4,218	129	4,919	214
100 Degree Radial Turbojet Landing Compliance	96%	4%	92%	8%
Total 100 Degree Radial Turbojet Landings	2,231	102	2,252	185
Engine Runup Program Compliance	100%	0%	100%	0%
Total Evening and Nighttime Engine Runups	8	0	10	0
Note: N/C means non-compliant. Percentage values are rounded out.				

Link to full report: [http://flyquiotoak.com/pages/reports/quarterly\\_noise\\_compliance.html](http://flyquiotoak.com/pages/reports/quarterly_noise_compliance.html)

Operation Details  
Beacon Code: 3271  
AC Type: GLF3  
Operation Type: Departure  
Runway: 27R  
Target Details  
Date/Time: 4/2/2009 09:58:59

## Runway 28R/L Jet Departure NAP

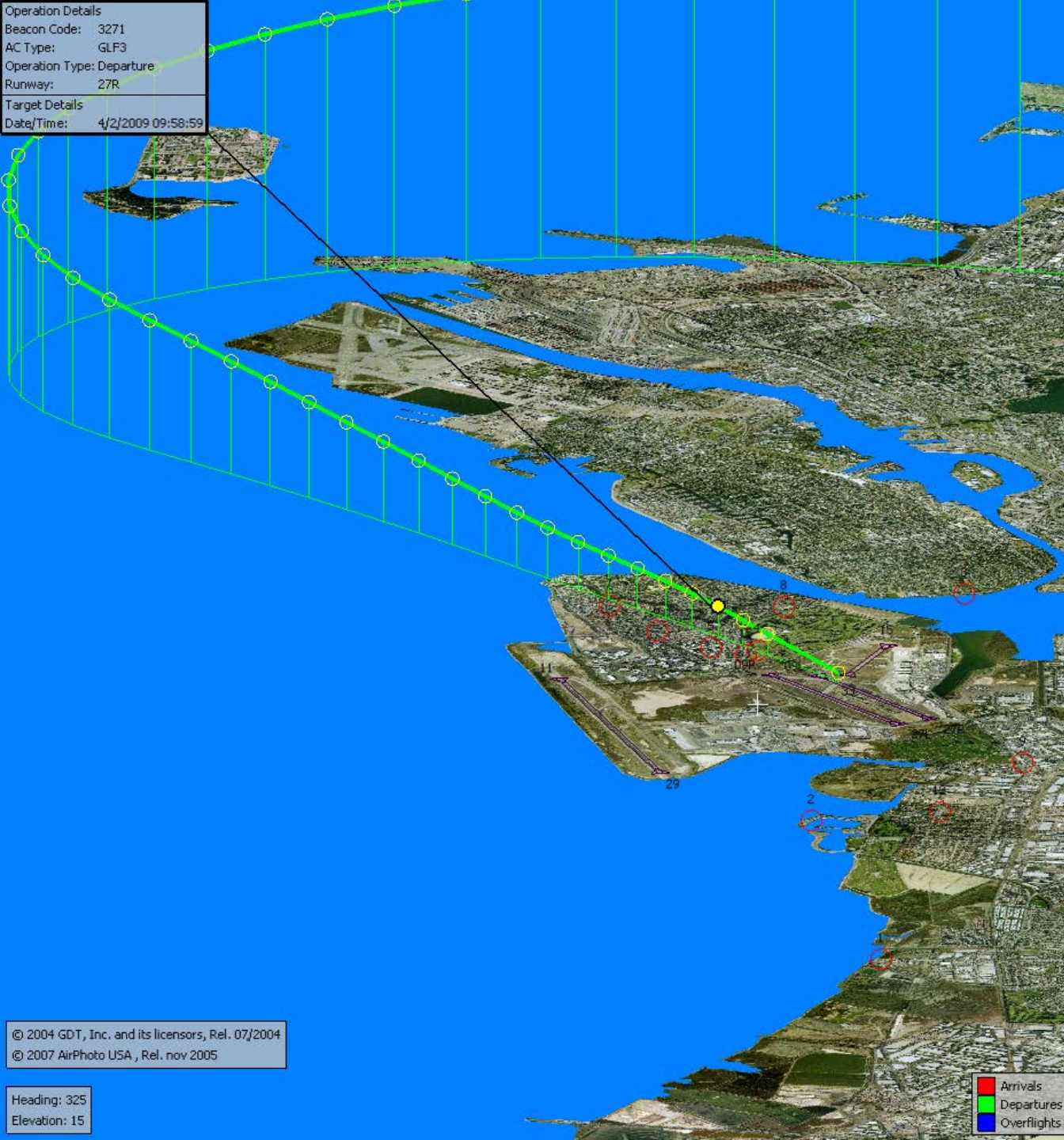
**2016Q2**  
**94% Compliance**  
**(2,839 departures)**  
**(159 non-compliant)**

**2015Q2**  
**95% Compliance**  
**(2,574 departures)**  
**(124 non-compliant)**

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© 2007 AirPhoto USA, Rel. nov 2005

Heading: 325  
Elevation: 15

Arrivals  
Departures  
Overflights





Operation Details  
Beacon Code: 1002  
AC Type: BE40  
Operation Type: Arrival  
Runway: 09R

Target Details  
Date/Time: 4/7/2009 12:09:00

## Runway 10R/L Jet Landing NAP

**2016Q2**

**100% Compliance  
(10 landings)  
(0 non-compliant)**

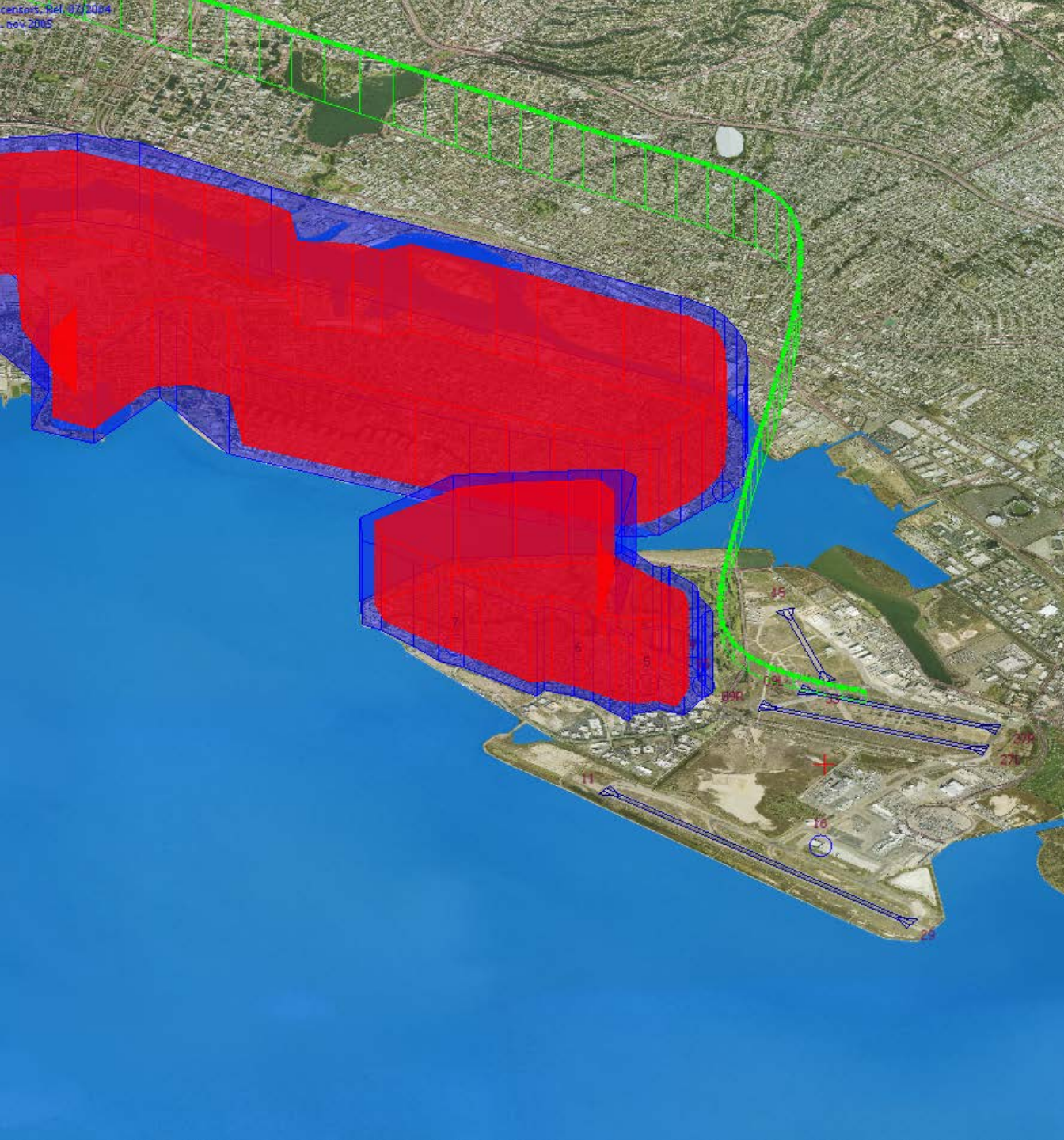
**2015Q2**

**86% Compliance  
(22 landings)  
(3 non-compliant)**

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Heading: 325  
Elevation: 15

Arrivals  
Departures  
Overflights



## VFR Aircraft Departure NAP

**2016Q2**

**97% Compliance  
(576 departures)  
(19 non-compliant)**

**2015Q2**

**95% Compliance  
(445 departures)  
(23 non-compliant)**



## North Field Quiet Hours NAP

**2016Q2**

**79% Compliance**  
**(228 departures)**  
**(48 non-compliant)**

**2015Q2**

**65% Compliance**  
**(139 departures)**  
**(48 non-compliant)**





## Runway 30 Bay Farm Right Turn NAP

**2016Q2**  
**100% Compliance**  
**(17,229 departures)**  
**(11 non-compliant)**

**2015Q2**  
**100% Compliance**  
**(15,657 departures)**  
**(3 non-compliant)**



## Night Time Departure NAP

**2016Q2**  
**98% Compliance**  
**(3,412 departures)**  
**(59 non-compliant)**

**2015Q2**  
**99% Compliance**  
**(2,987 departures)**  
**(37 non-compliant)**



## Runway 12 Night Departure NAP

**2016Q2**  
**100% Compliance**  
**(11 departures)**  
**(0 non-compliant)**

**2015Q2**  
**62% Compliance**  
**(21 departures)**  
**(8 non-compliant)**





Operation Details	
Aircraft ID:	SWA771
Tail Number:	
Beacon Code:	1156
AC Type:	B737
Operation Type:	Departure
Runway:	29
Origin:	OAK
Destination:	BOI
Altitude (ft):	4833
Ground Speed (kt):	231.3
Date/Time:	11/28/2011 10:37:46

## Runway 30 East Turn NAP

**2016Q2**  
**96% Compliance**  
**(5,133 departures)**  
**(214 non-compliant)**

**2015Q2**  
**97% Compliance**  
**(4,347 departures)**  
**(129 non-compliant)**





Operation Details	
Aircraft ID:	SWA273
Tail Number:	
Beacon Code:	6675
AC Type:	B737
Operation Type:	Arrival
Runway:	29
Origin:	GEG
Destination:	OAK
Altitude (ft):	3251
Ground Speed (kt):	159.4
Date/Time:	4/18/2012 19:58:23

**100 Degree Radial  
At 3,000 ft. NAP**

**2016Q2  
92% Compliance  
(2,437 landings)  
(185 non-compliant)**

**2015Q2  
96% Compliance  
(2,333 landings)  
(102 non-compliant)**

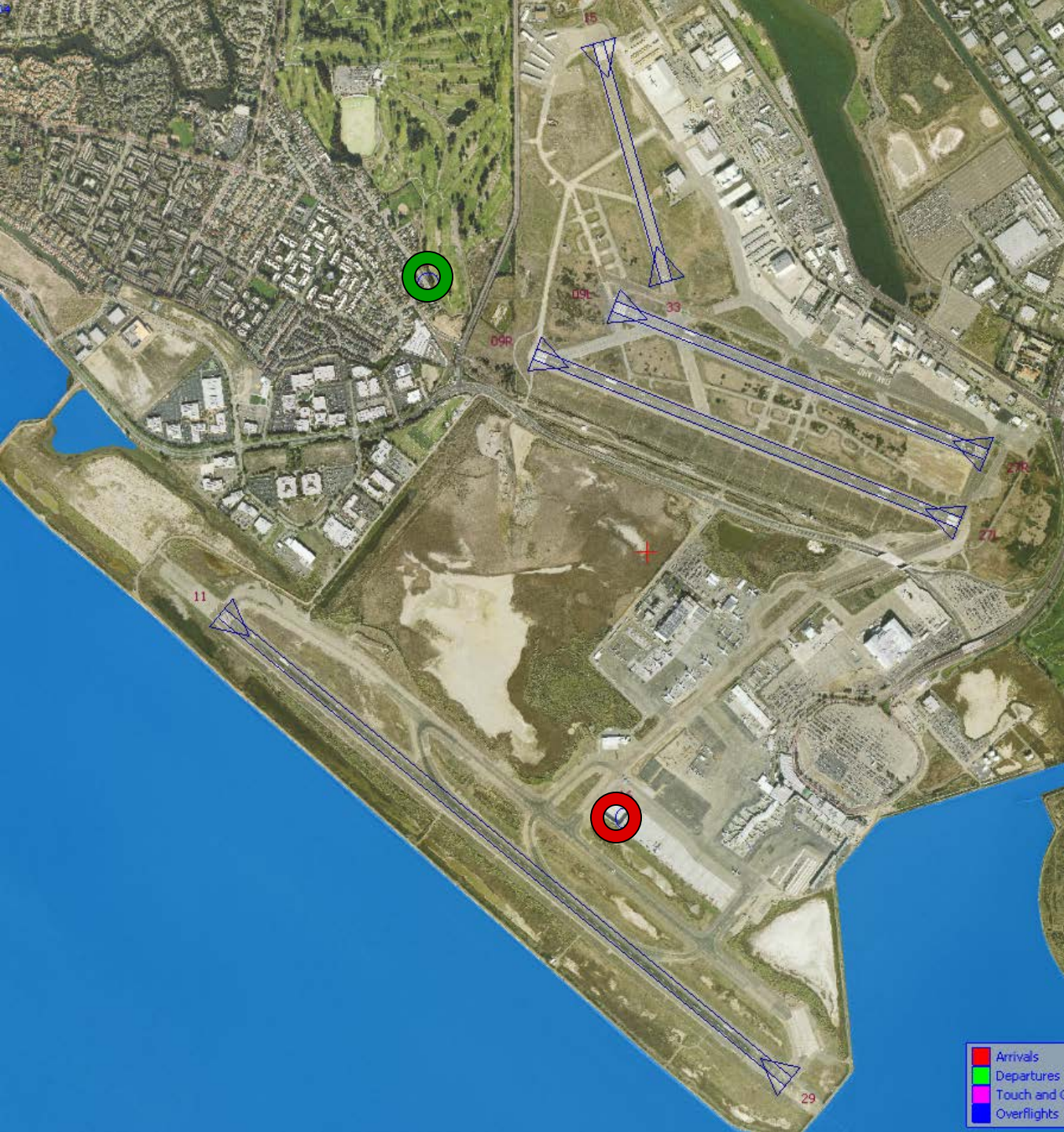


## Engine Run-up NAP

**2016Q2**  
**100% Compliance**  
**(10 engine run-ups)\***  
**(0 non-compliant)**

**2015Q2**  
**100% Compliance**  
**(8 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 = 228**

**Second Quarter 2016 (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	13	0	0.0	0.0%	0	0.0	0.0%	0	0.0	0.0%	13
3	58	6	0.1	1.1%	2	0.0	0.4%	0	0.0	0.0%	66
4	76	59	0.7	10.4%	43	0.5	7.6%	25	0.3	4.4%	203
5	78	29	0.3	5.1%	23	0.3	4.1%	20	0.2	3.5%	150
6	29	21	0.2	3.7%	29	0.3	5.1%	8	0.1	1.4%	87
7	31	22	0.2	3.9%	12	0.1	2.1%	0	0.0	0.0%	65
8	42	26	0.3	4.6%	6	0.1	1.1%	0	0.0	0.0%	74
9	4	2	0.0	0.4%	3	0.0	0.5%	0	0.0	0.0%	9
10	10	7	0.1	1.2%	0	0.0	0.0%	0	0.0	0.0%	17
11	1	3	0.0	0.5%	0	0.0	0.0%	0	0.0	0.0%	4
12	3	0	0.0	0.0%	0	0.0	0.0%	0	0.0	0.0%	3
13	0	0	0.0	0.0%	0	0.0	0.0%	0	0.0	0.0%	0
14	5	0	0.0	0.0%	0	0.0	0.0%	0	0.0	0.0%	5
<b>All NMTs</b>	350	175	2	0	118	1	0	53	1	0	696

**Table 2. Aircraft SEL Noise Measurements in Alameda - Total Aircraft Departures = 224**

Second Quarter 2016 (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	58	6	0.1	2.5%	2	0.0	0.8%	0	0.0	0.0%	66
4	76	59	0.7	24.7%	43	0.5	18.0%	25	0.3	10.5%	203
5	78	29	0.3	12.1%	23	0.3	9.6%	20	0.2	8.4%	150
6	29	21	0.2	8.8%	29	0.3	12.1%	8	0.1	3.3%	87
7	31	22	0.2	9.2%	12	0.1	5.0%	0	0.0	0.0%	65
8	42	26	0.3	10.9%	6	0.1	2.5%	0	0.0	0.0%	74
<b>Total</b>	<b>314</b>	<b>163</b>	<b>1.8</b>		<b>115</b>	<b>1.3</b>		<b>53</b>	<b>0.6</b>		<b>645</b>

**Table 3. Aircraft SEL Noise Measurements in San Leandro - Total Aircraft Departures = 4**

Second Quarter 2016 (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	13	0	0.0	0.0%	0	0.0	0.0%	0	0.0	0.0%	13
9	4	2	0.0	0.6%	3	0.0	0.9%	0	0.0	0.0%	9
10	10	7	0.1	2.1%	0	0.0	0.0%	0	0.0	0.0%	17
11	1	3	0.0	0.9%	0	0.0	0.0%	0	0.0	0.0%	4
12	3	0	0.0	0.0%	0	0.0	0.0%	0	0.0	0.0%	3
13	0	0	0.0	0.0%	0	0.0	0.0%	0	0.0	0.0%	0
14	5	0	0.0	0.0%	0	0.0	0.0%	0	0.0	0.0%	5
<b>Total</b>	<b>36</b>	<b>12</b>	<b>0.1</b>		<b>3</b>	<b>0.0</b>		<b>0</b>	<b>0.0</b>		<b>51</b>



**Rolling Take-off Night Departure Procedure (1:00 to 5:00 AM)  
Second Quarter 2016, 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	
Second Quarter 2016 [B]						
	Total [X]	Est. Avg. Monthly [X/3]				
B763	112	37	5	69	77	26
DC10/MD10	65	22	17	66	75	16
MD11	210	70	65	66	75	19
A306	115	38	14	65	74	20
B757	186	62	23	65	74	22
B77L	77	26	6	65	74	20
Difference [A-B]						
DC10/MD10		-65	-15	-3	-3	-6
MD11		38	52	-4	-4	-5
A306		-29	-7	-2	-3	-5

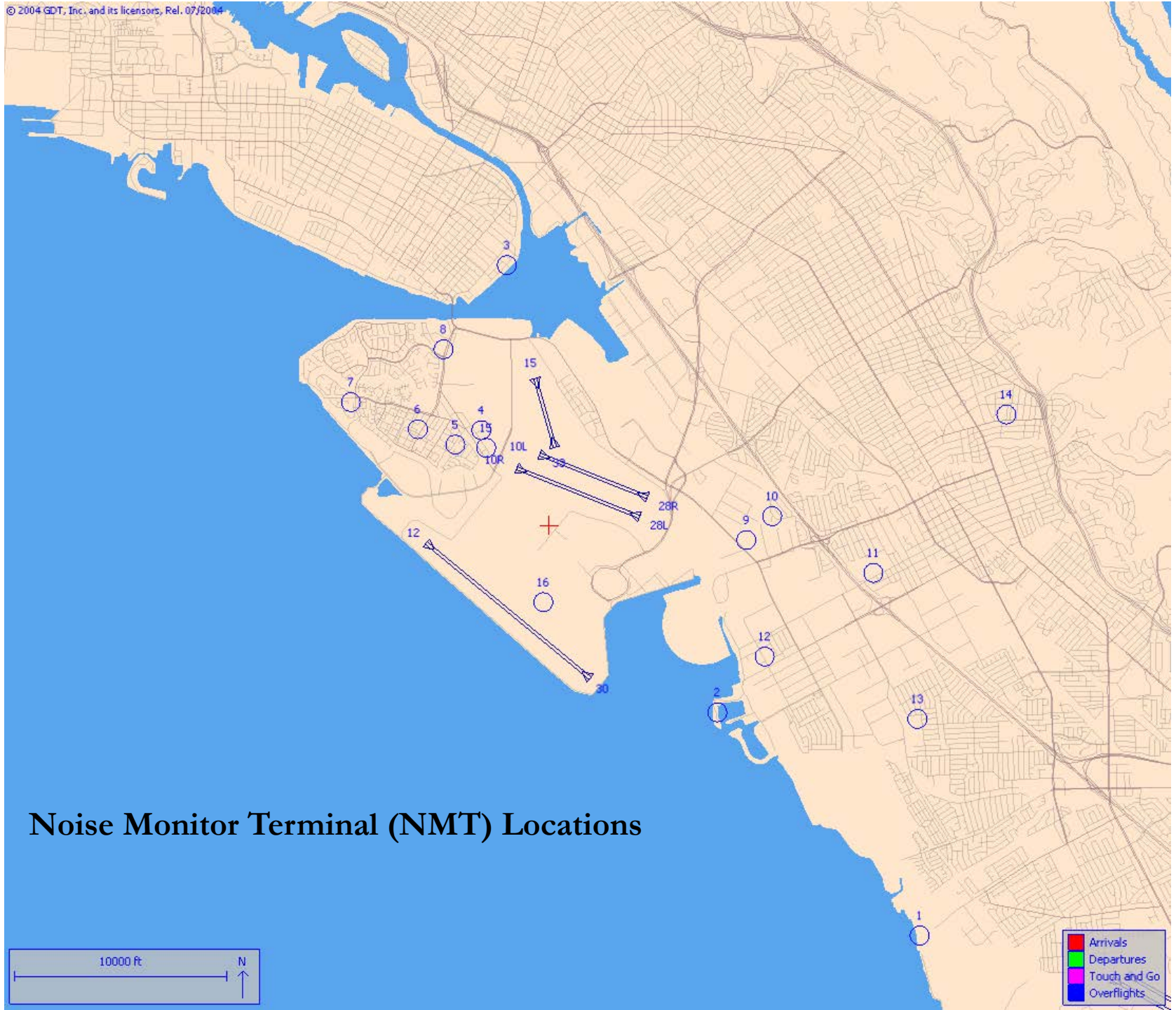
(a) For the current calendar quarter reported, ANOMS does not correlate all departures to their respective noise events; that is most, but not all, aircraft back-blast noise events are effectively correlated as the program software algorithms may misidentify an aircraft noise event.  
Source: ANOMS (Airport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

**Rolling Take-off Night Departure Procedure (1:00 to 5:00 AM)  
Second Quarter 2015, 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	
Second Quarter 2015 [B]						
	Total [X]	Est. Avg. Monthly [X/3]				
B763	32	11	3	65	73	11
DC10/MD10	115	38	45	66	74	15
MD11	142	47	58	66	75	15
A306	75	25	17	65	74	15
B757	114	38	24	65	74	11
B77L	63	21	2	65	73	14
Difference [A-B]						
DC10/MD10		-49	13	-3	-4	-7
MD11		15	45	-4	-4	-9
A306		-42	-4	-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)





## Noise Monitor Terminal (NMT) Locations