NOISE FORUM SUMMARY

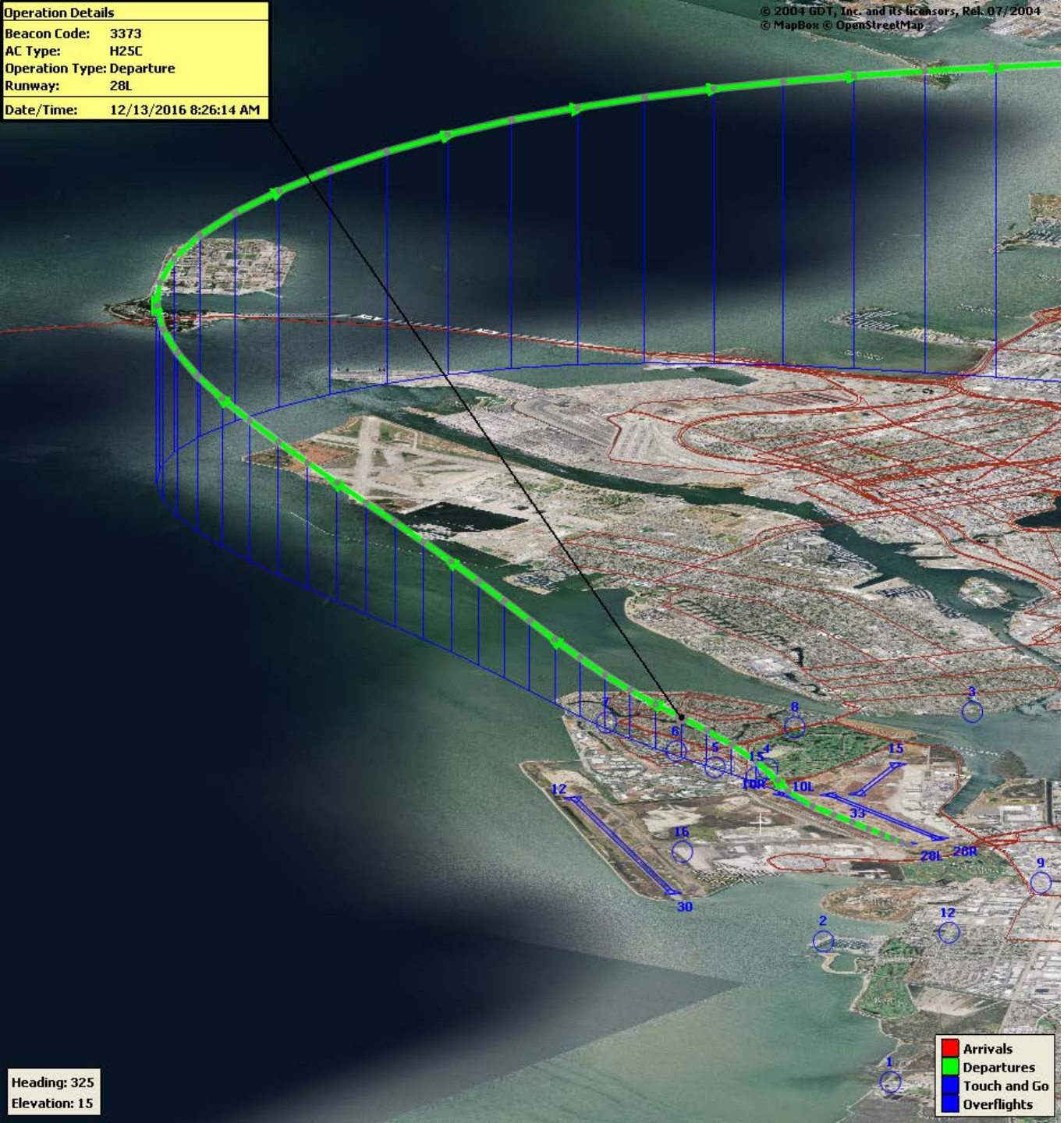
North/South Field Working Groups

NOISE ABATEMENT REPORT

THIRD QUARTER 2016

Compliance Monitoring Quarterly Summary Comparison Third Quarter 2016				
	2015Q3		2016Q3	
	Compl.	N/C	Compl.	N/C
Runway 28R/L Jet Departure Compliance	94%	6%	92%	8%
Total Airport-wide Corporate Jet Departures	2,363	151	2,290	205
Runway 10R/L Jet Landing Compliance	81%	19%	100%	0%
Total Southeast Plan Corporate Jet Landings	22	5	13	0
North Field VFR Departure Compliance	95%	5%	98%	2%
Total Runways 28R/L & 33 Departures	582	29	387	8
North Field Quiet Hours Compliance	71%	29%	63%	37%
Total North Field Quiet Hours Departures	105	43	100	60
Runway 30 BFI Right Turn Departure Compliance	100%	0%	100%	0%
Total Runway 30 Turbojet Departures	16,883	7	17,699	1
Night Time Departure Compliance	99%	1%	98%	2%
Total Runway 30 Night Turbojet Departures	3,255	40	3,265	57
Runway 12 Night Departure Compliance	100%	0%	0%	100%
Total Runway 12 Night Turbojet Departures	2	0	0	1
Runway 30 East Turn Departure Compliance	97%	3%	97%	3%
Total Runway 30 East Turn Departures	4,974	177	5,635	164
100 Degree Radial Turbojet Landing Compliance	92%	8%	95%	5%
Total 100 Degree Radial Turbojet Landings	2,335	194	2,386	138
Engine Runup Program Compliance	100%	0%	100%	0%
Total Evening and Nighttime Engine Runups	17	0	21	0

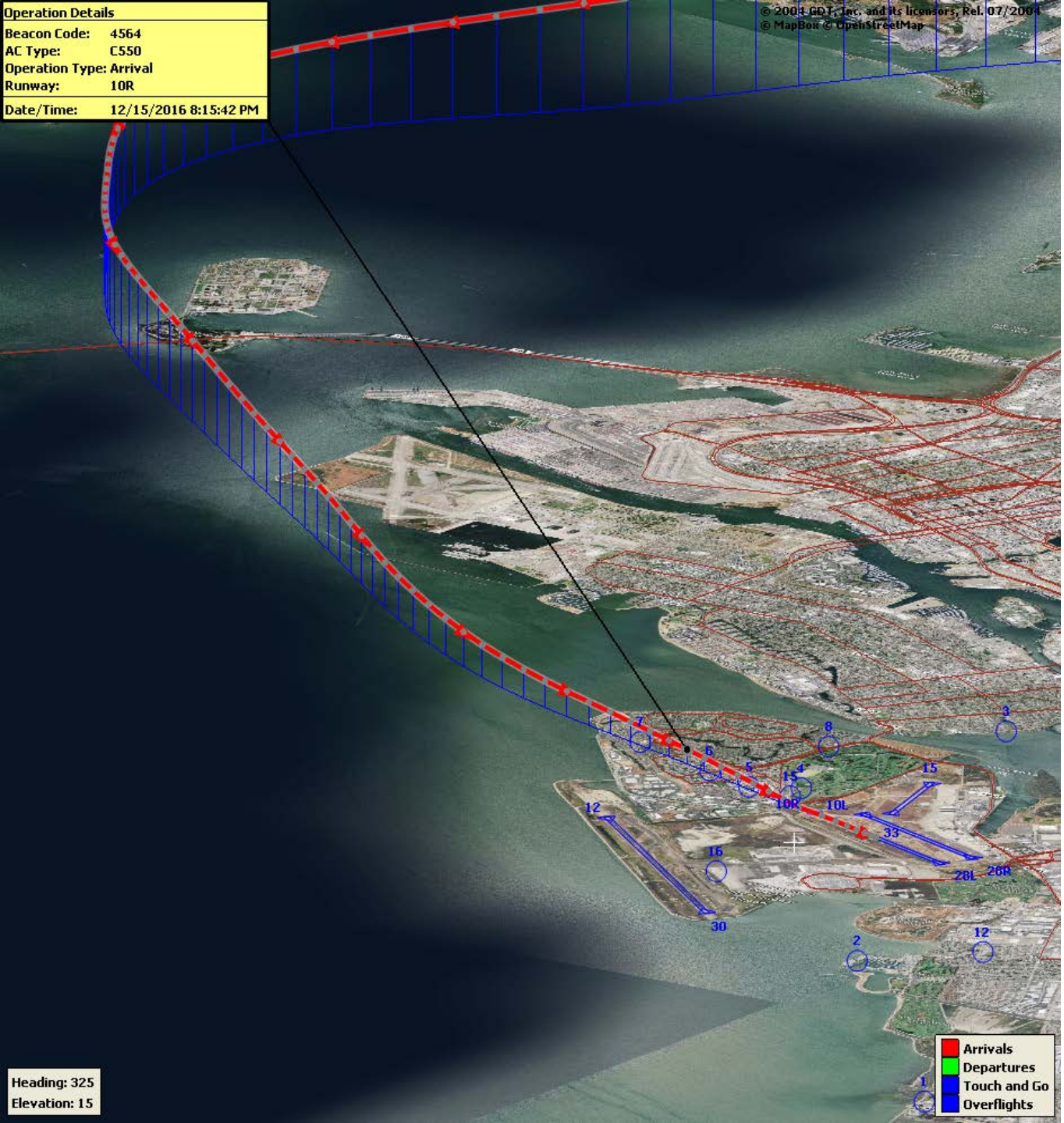
Link to full report: http://flyquietoak.com/pages/reports/quarterly_noise_compliance.html



Runway 28R/L
Jet Departure NAP

2016Q3
92% Compliance
(2,495 departures)
(205 non-compliant)

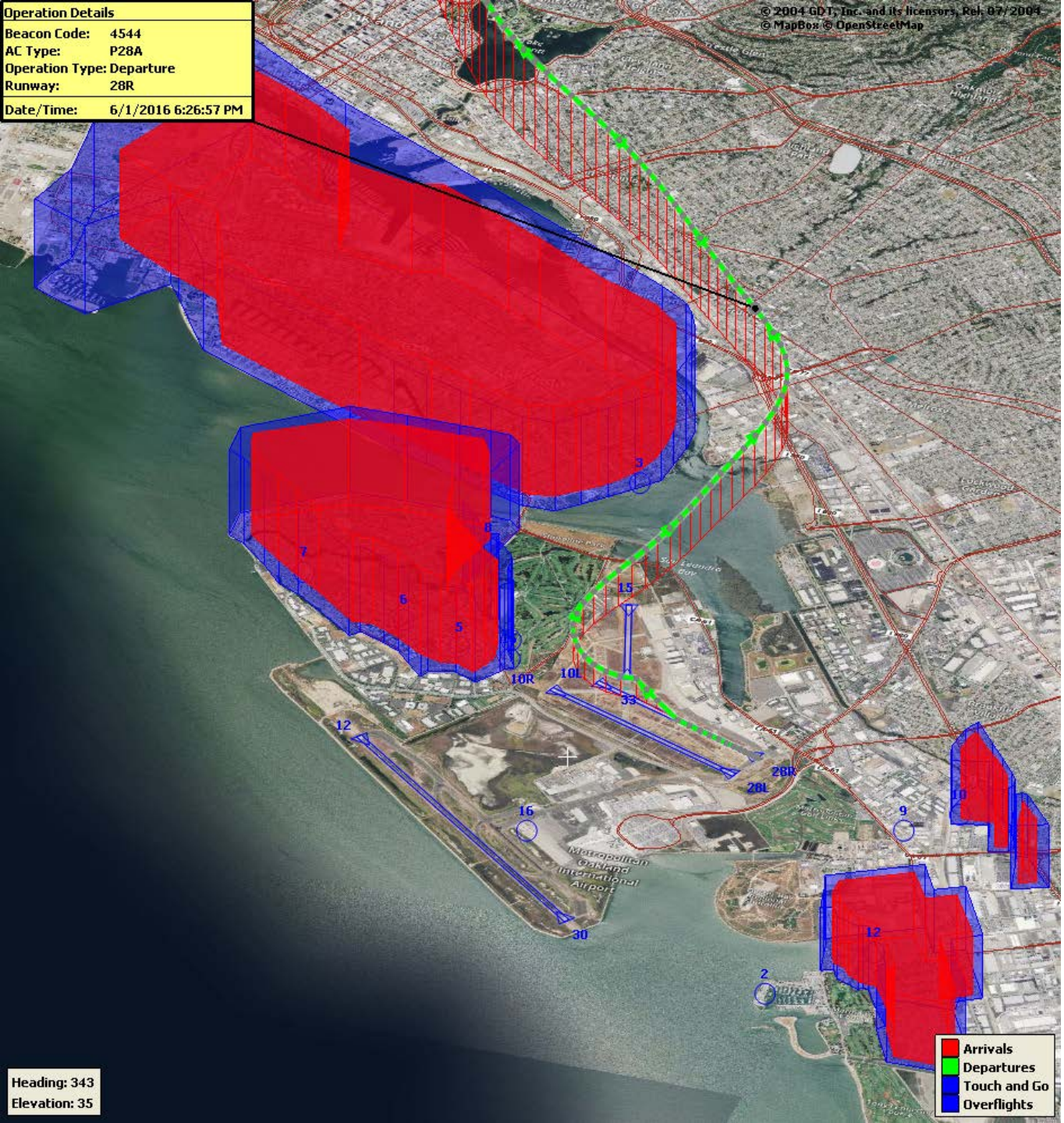
2015Q3
94% Compliance
(2,514 departures)
(151 non-compliant)



Runway 10R/L Jet Landing NAP

2016Q3
100% Compliance
(13 landings)
(0 non-compliant)

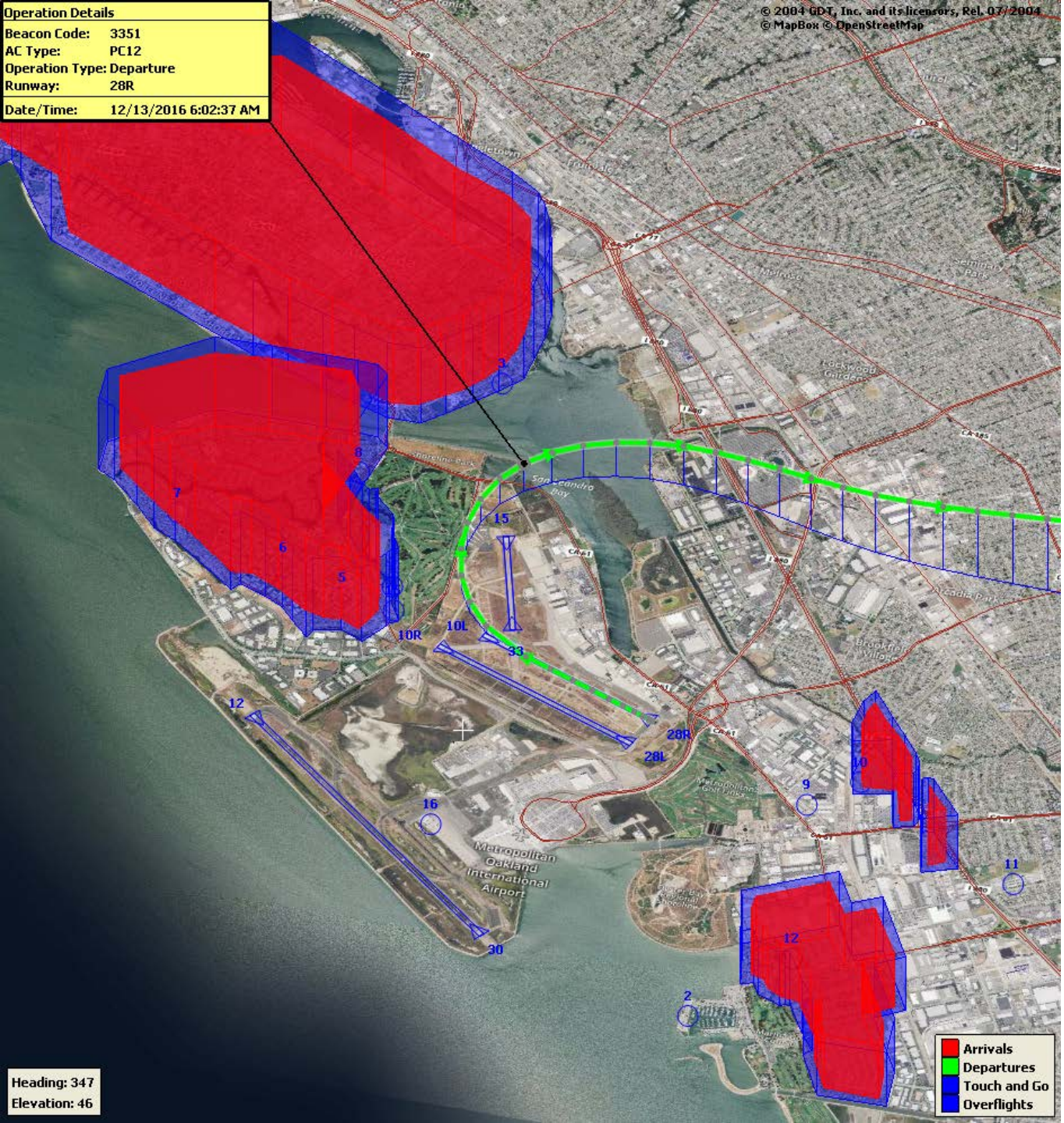
2015Q3
81% Compliance
(27 landings)
(5 non-compliant)



VFR Aircraft Departure NAP

2016Q3
98% Compliance
(395 departures)
(8 non-compliant)

2015Q3
95% Compliance
(611 departures)
(29 non-compliant)



North Field
Quiet Hours NAP

2016Q3
63% Compliance
(160 departures)
(60 non-compliant)

2015Q3
71% Compliance
(148 departures)
(43 non-compliant)

Runway 30 Bay Farm Right Turn NAP

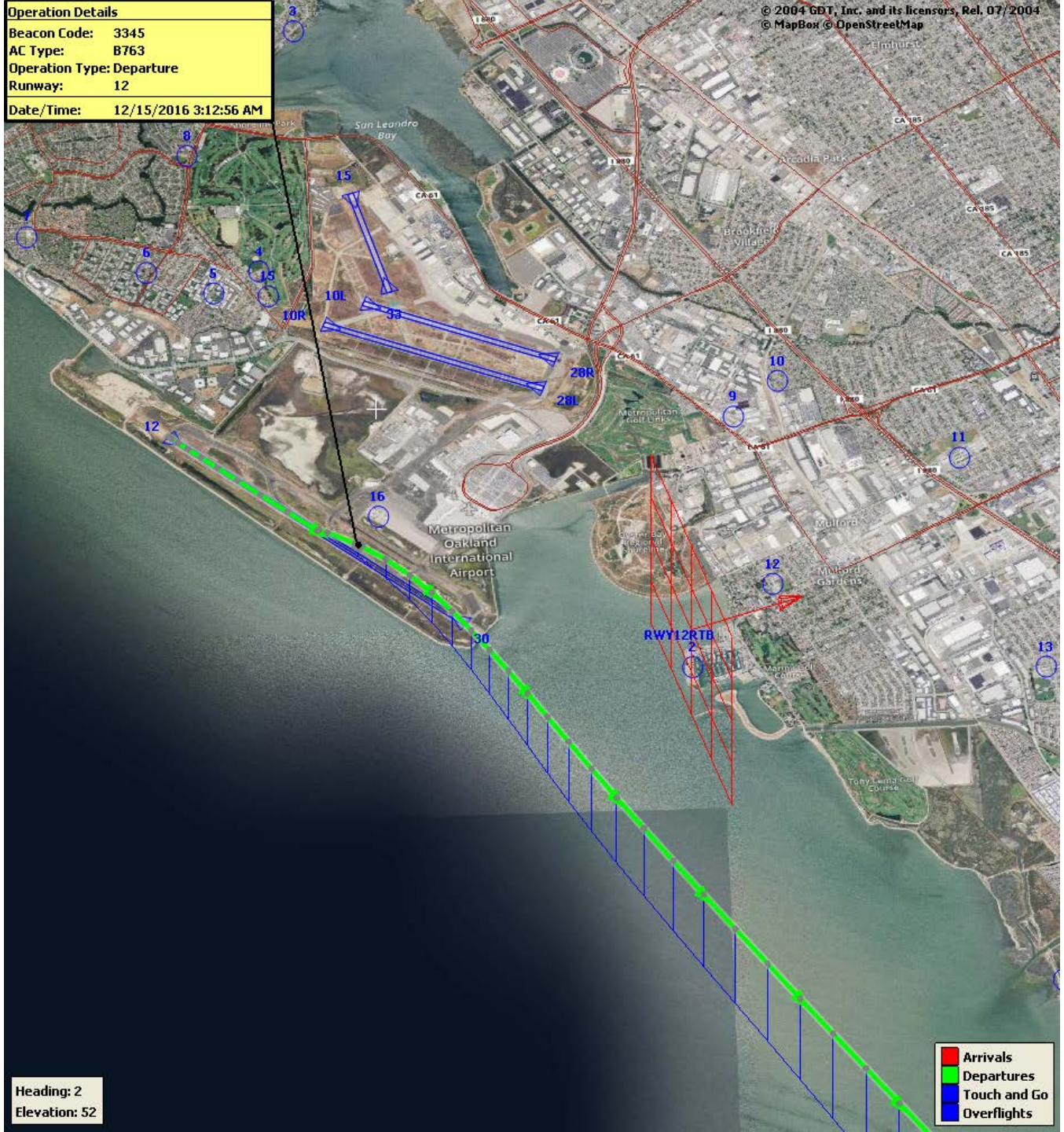
2016Q3
100% Compliance
(17,700 departures)
(1 non-compliant)

2015Q3
100% Compliance
(16,890 departures)
(7 non-compliant)

Night Time Departure NAP

2016Q3
98% Compliance
(3,322 departures)
(57 non-compliant)

2015Q3
99% Compliance
(3,295 departures)
(40 non-compliant)



Runway 12 Night Departure NAP

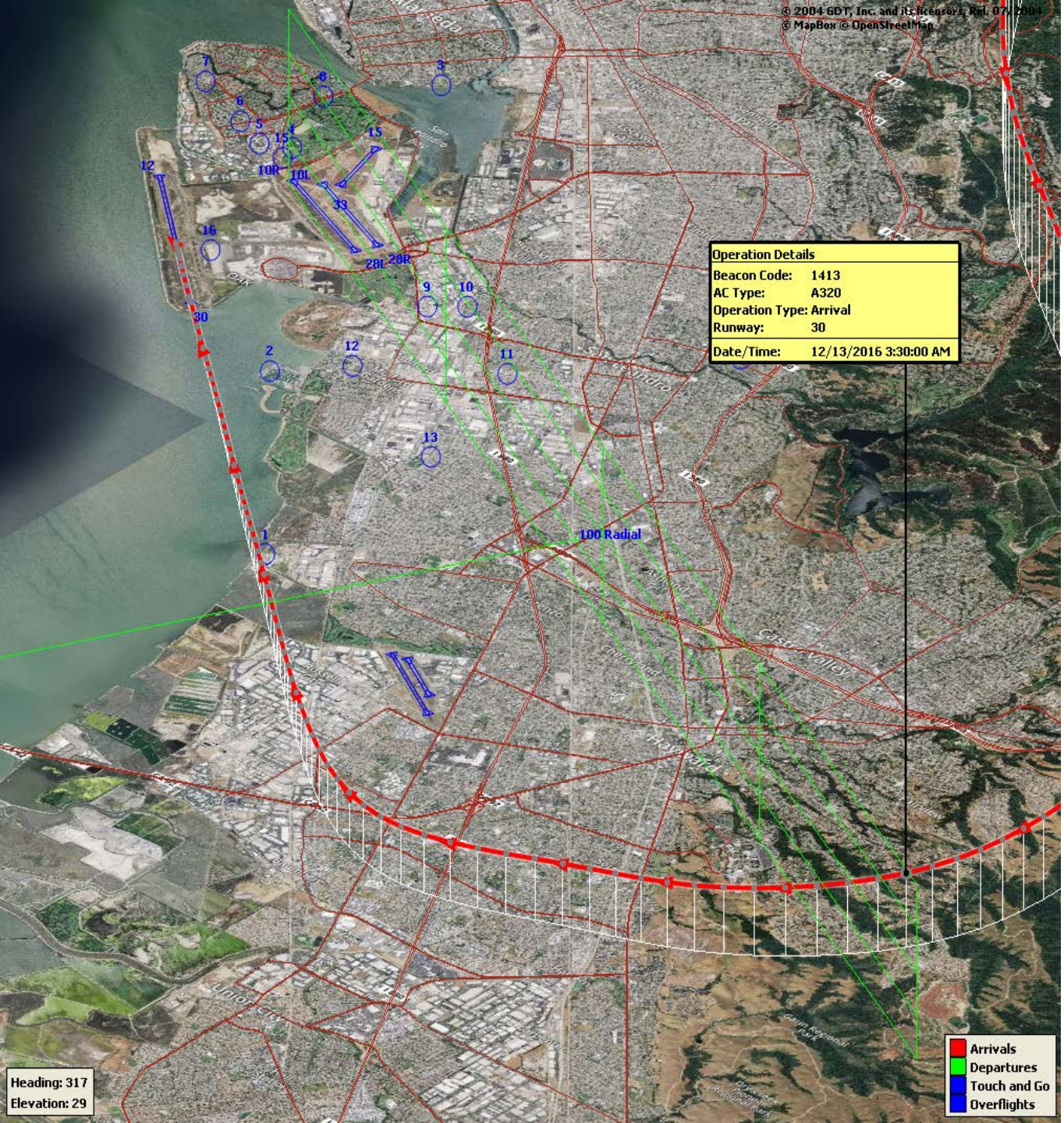
2016Q3
0% Compliance
(1 departures)
(1 non-compliant)

2015Q3
100% Compliance
(2 departures)
(0 non-compliant)

Runway 30 East Turn NAP

2016Q3
97% Compliance
(5,799 departures)
(164 non-compliant)

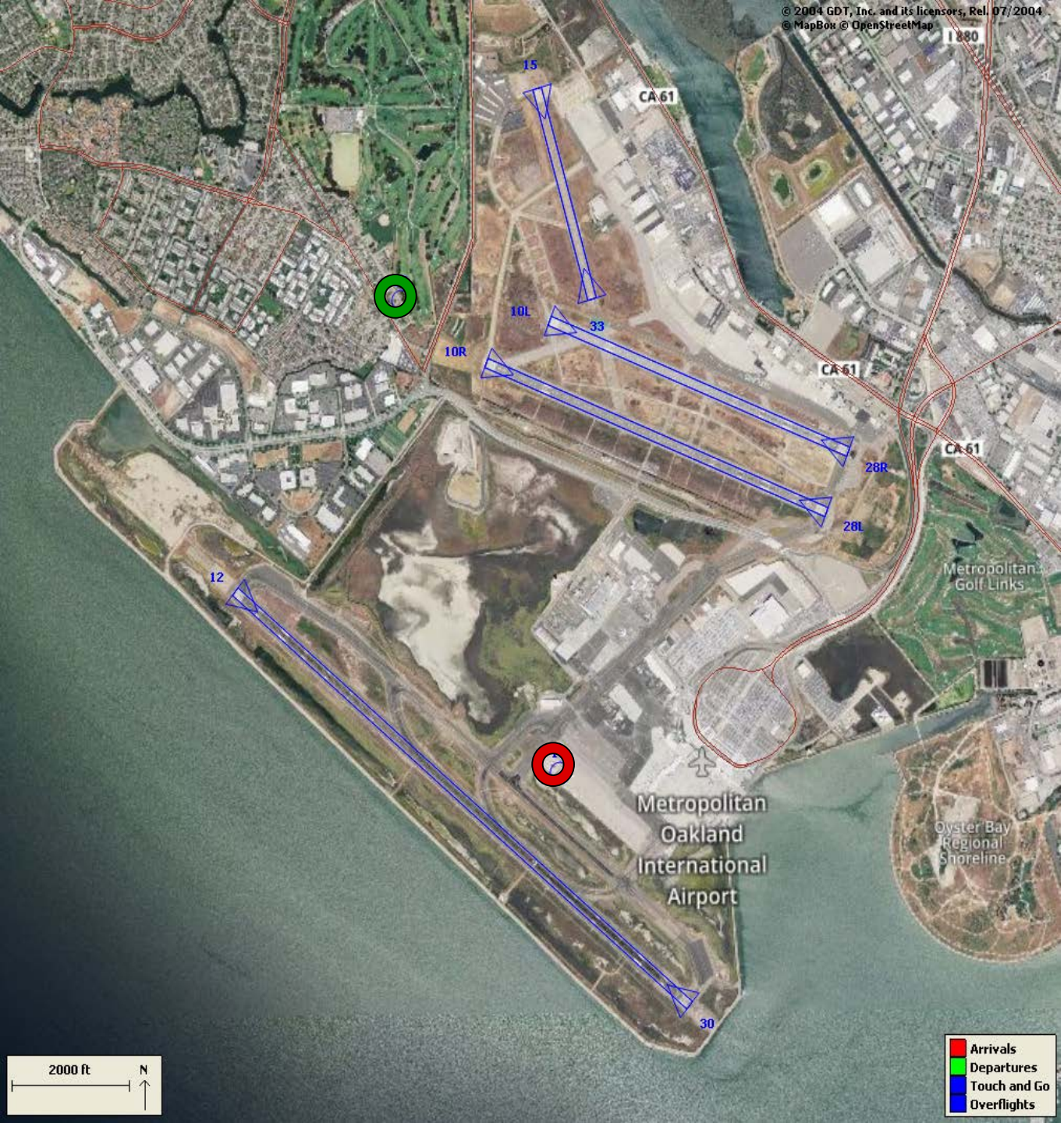
2015Q3
97% Compliance
(5,151 departures)
(177 non-compliant)



100 Degree Radial
At 3,000 ft. NAP

2016Q3
95% Compliance
(2,524 landings)
(138 non-compliant)

2015Q3
92% Compliance
(2,529 landings)
(194 non-compliant)



Engine Run-up NAP

2016Q3
100% Compliance
(21 engine run-ups)*
(0 non-compliant)

2015Q3
100% Compliance
(17 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 = 160

Third 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	2	0.0	0.4%	0	0.0	0.0%	0	0.0	0.0%	2
2	6	3	0.0	0.5%	0	0.0	0.0%	0	0.0	0.0%	9
3	42	6	0.1	1.1%	2	0.0	0.4%	0	0.0	0.0%	50
4	48	43	0.5	7.6%	30	0.3	5.3%	5	0.1	0.9%	126
5	50	25	0.3	4.4%	9	0.1	1.6%	8	0.1	1.4%	92
6	20	19	0.2	3.4%	15	0.2	2.6%	7	0.1	1.2%	61
7	19	10	0.1	1.8%	2	0.0	0.4%	1	0.0	0.2%	32
8	22	14	0.2	2.5%	3	0.0	0.5%	0	0.0	0.0%	39
9	1	2	0.0	0.4%	0	0.0	0.0%	0	0.0	0.0%	3
10	15	2	0.0	0.4%	0	0.0	0.0%	0	0.0	0.0%	17
11	1	0	0.0	0.0%	0	0.0	0.0%	0	0.0	0.0%	1
12	0	0	0.0	0.0%	1	0.0	0.2%	0	0.0	0.0%	1
13	1	0	0.0	0.0%	0	0.0	0.0%	0	0.0	0.0%	1
14	3	0	0.0	0.0%	0	0.0	0.0%	0	0.0	0.0%	3
All NMTs	228	126	1	0	62	1	0	21	0	0	437

Table 2. Aircraft SEL Noise Measurements in Alameda - Total Aircraft Departures = 158											
Third 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	42	6	0.1	2.5%	2	0.0	0.8%	0	0.0	0.0%	50
4	48	43	0.5	18.0%	30	0.3	12.6%	5	0.1	2.1%	126
5	50	25	0.3	10.5%	9	0.1	3.8%	8	0.1	3.3%	92
6	20	19	0.2	7.9%	15	0.2	6.3%	7	0.1	2.9%	61
7	19	10	0.1	4.2%	2	0.0	0.8%	1	0.0	0.4%	32
8	22	14	0.2	5.9%	3	0.0	1.3%	0	0.0	0.0%	39
Total	**201**	**117**	**1.3**		**61**	**0.7**		**21**	**0.2**		**400**

Table 3. Aircraft SEL Noise Measurements in San Leandro - Total Aircraft Departures = 2											
Third 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	6	3	0.0	0.9%	0	0.0	0.0%	0	0.0	0.0%	9
9	1	2	0.0	0.6%	0	0.0	0.0%	0	0.0	0.0%	3
10	15	2	0.0	0.6%	0	0.0	0.0%	0	0.0	0.0%	17
11	1	0	0.0	0.0%	0	0.0	0.0%	0	0.0	0.0%	1
12	0	0	0.0	0.0%	1	0.0	0.3%	0	0.0	0.0%	1
13	1	0	0.0	0.0%	0	0.0	0.0%	0	0.0	0.0%	1
14	3	0	0.0	0.0%	0	0.0	0.0%	0	0.0	0.0%	3
Total	**27**	**7**	**0.1**		**1**	**0.0**		**0**	**0.0**		**35**

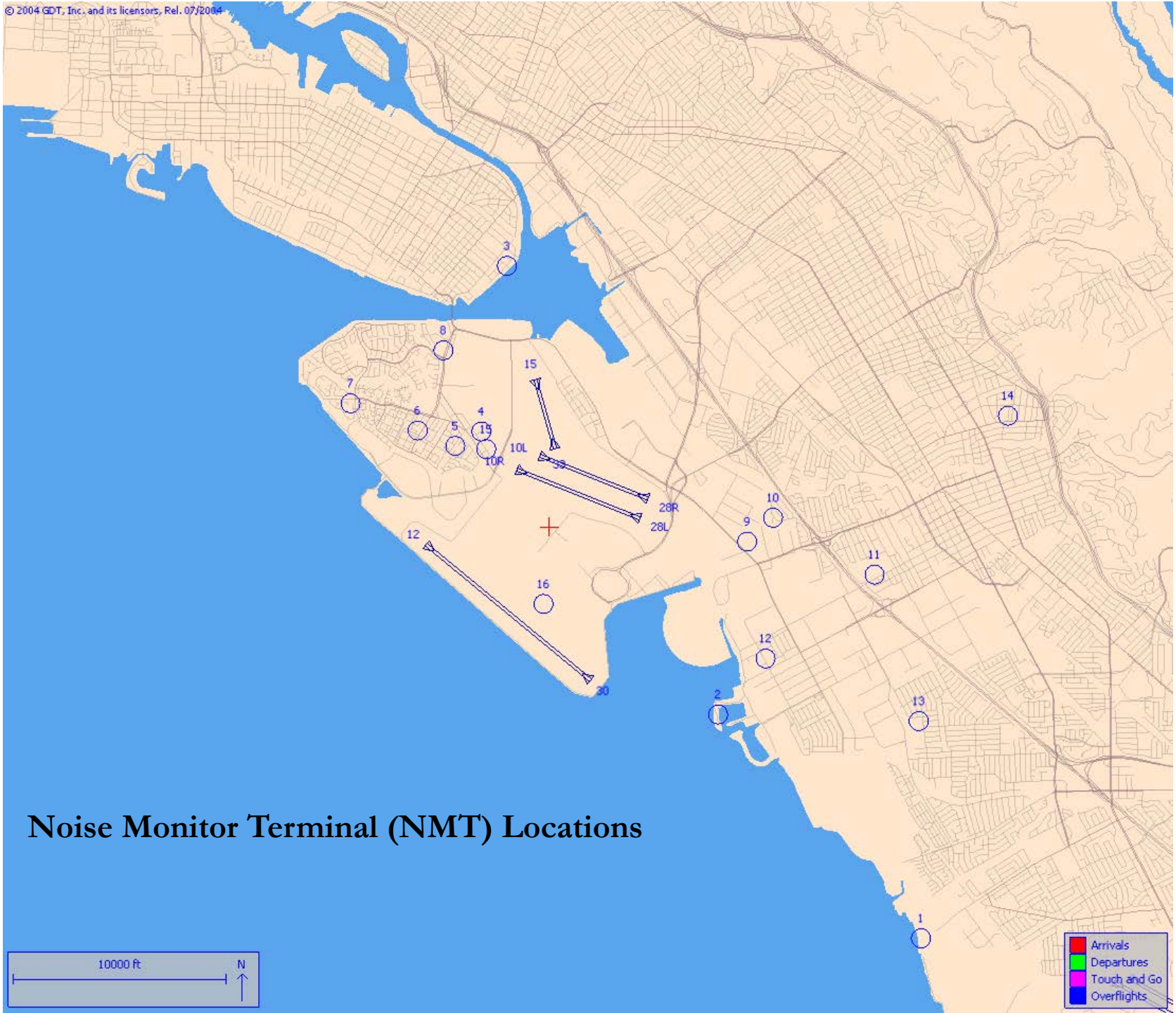
Rolling Take-off Night Departure Procedure (1:00 to 5:00 AM)
Third Quarter 2016, NMT 2

	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
Third Quarter 2016 [B]						
	Total [X]	Est. Avg. Monthly [X/3]				
B763	113	38	4	65	73	11
DC10/MD10	71	24	14	65	73	13
MD11	203	68	53	65	73	12
A306	115	38	9	65	72	10
B757	183	61	10	65	75	17
B77L	78	26	4	69	77	26
Difference [A-B]						
DC10/MD10		-63	-18	-4	-5	-9
MD11		36	40	-5	-6	-12
A306		-29	-12	-2	-5	-15

(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 2015, NMT 2						
	Aircraft Departures		Recorded Noise Events (a)	Lmax Average	SEL Average	Avg. Duration (seconds)
Baseline (November 2002) [A]						
B727	104		101	76	87	44
DC10/MD10	87		32	69	78	22
MD11	32		13	70	79	24
A306	67		21	67	77	25
Third Quarter 2015 [B]						
	Total [X]	Est. Avg. Monthly [X/3]				
B727	0	-	-	-	-	-
DC10/MD10	90	30	26	65	73	12
MD11	166	55	50	65	73	11
A306	119	40	8	66	74	14
B757	177	59	13	66	72	9
B777	0	-	-	-	-	-
Difference [A-B]						
B727		-104	-101	-76	-87	-44
DC10/MD10		-57	-6	-4	-5	-10
MD11		23	37	-5	-6	-13
A306		-27	-13	-1	-3	-11

(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