BOB HOPE AIRPORT





MAY 2015





AAAI Report 1468 AAAI Project 88018

QUARTERLY NOISE MONITORING AT BOB HOPE AIRPORT FIRST QUARTER 2015

MAY 2015

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QUARTERLY NOISE MONITORING AT BOB HOPE AIRPORT FIRST QUARTER 2015

I. INTRODUCTION

In compliance with the California Noise Standards (Reference 1) and the current variance from certain provisions of the Standards (Reference 2), the operator of the Bob Hope Airport is required to perform noise monitoring in the vicinity of the airport for the purpose of establishing a noise impact boundary. The Noise Standards currently specify a community noise equivalent level (CNEL) of 65 dB for the noise impact boundary¹. The airport is required to provide, each quarter, an updated annual noise impact contour based on measurement data over the four preceding quarters.

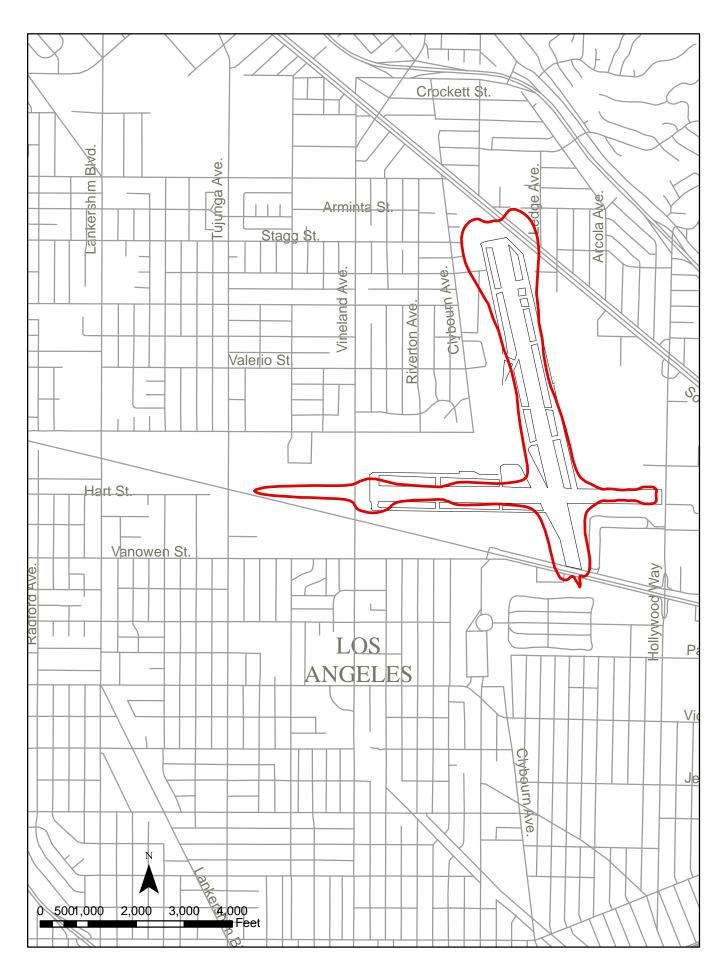
A permanent noise monitoring system became operational in April 1980 and, with brief interruption for system expansion, maintenance, and program changes, has been operational since that time. Of the original nine noise monitor sites, eight have remained unchanged since 1980. The monitor at site 8 was removed in 1997 and replaced by a monitor at site 18. Two sites were added east of the airport in late 1980. Four sites were added south of the airport in January 1986 in response to the requirement to determine the 65 dB contour. Three more locations were added in February 1997. Two of these, identified as 16 and 17, are south of the airport, and one, 18, is to the west. These locations were added to permit monitoring closer to the 65 dB contour. The noise monitoring computer at the airport was replaced in August 1995.

The Bob Hope Airport Noise Monitoring System was modernized and augmented in late December 2012 by replacing the noise and flight track matching software, the noise monitoring hardware, and by adding sites 19, 20, 21, and 22 to allow closer monitoring to the current 65 dB CNEL contour. The old site 17 was removed as redundant with site 15, so the updated noise monitoring system contains 20 permanent microphone locations.

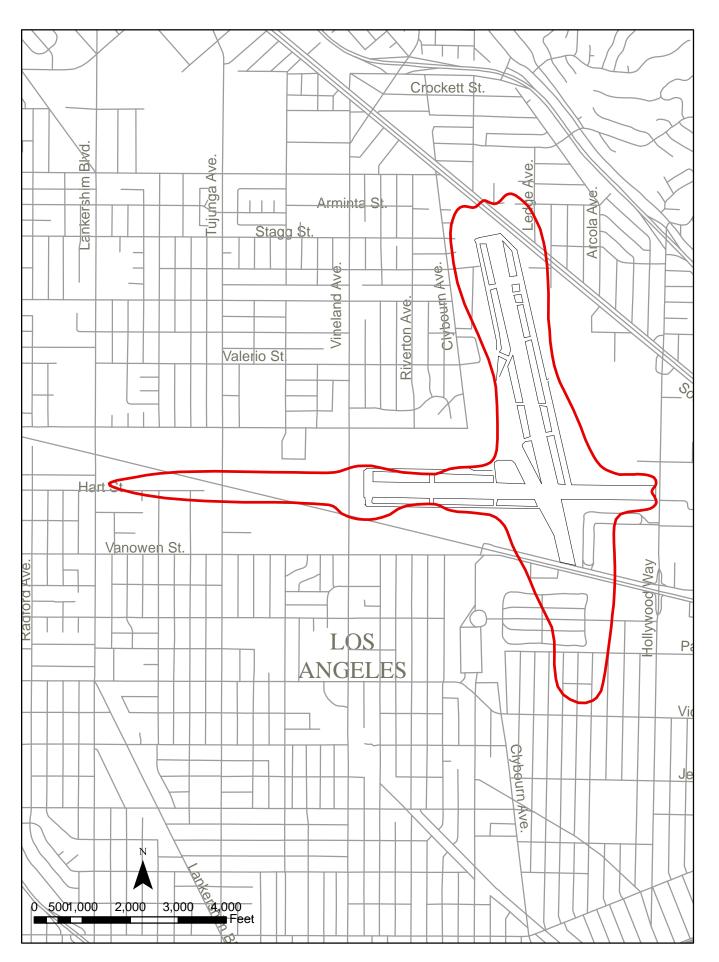
This report describes the data acquired by the monitoring system during the first quarter of 2015. Noise impact boundaries for 65 dB and 70 dB are shown based on these measurements and measurements obtained during the second, third, and fourth quarter 2014 reported in

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¹ Prior to January 1, 1986, a CNEL of 70 dB defined the noise impact boundary.



BOB HOPE AIRPORT 70 dB CNEL CONTOUR 1st Quarter 2015



BOB HOPE AIRPORT 65 dB CNEL CONTOUR 1st Quarter 2015

References 3, 4 and 5. Figure 1 shows the 70 dB contour and Figure 2 shows the 65 dB contour, based on the measured noise data.

II. NOISE MEASUREMENTS

A. Sites

Aircraft noise levels were monitored at 15 locations prior to February, 1997. Two sites were added in February 1997, and equipment at one site west of the airport was moved to a new location. In July 2003, the monitor station at site 9 was moved 105 feet further west to accommodate new construction at the Fire Station. In December 2012, four new monitor sites were added and one existing site removed as redundant, leaving a total of twenty noise monitoring locations. The noise monitor sites are shown in Figure 3.

B. Noise Measurement Equipment

Each of the microphone locations uses an identical set of equipment connected to a central control unit. The noise level at each site is stored locally and transmitted by broad band connection to the central site once per 24-hour period. The automated noise and flight track monitoring software processes the data to produce (among other measures) the CNEL at each site. Appendix A provides a brief description of the system.

C. Noise Data

During this quarter, there were occasional power interruptions and monitor equipment failures, causing some loss of data. Tables 1, 2, and 3 show the aircraft CNEL measured at each monitoring site for each day of the quarter. The dashed lines indicate days for which a monitor was operating for less than 94% of the time. The data for these days was excluded from the averages.

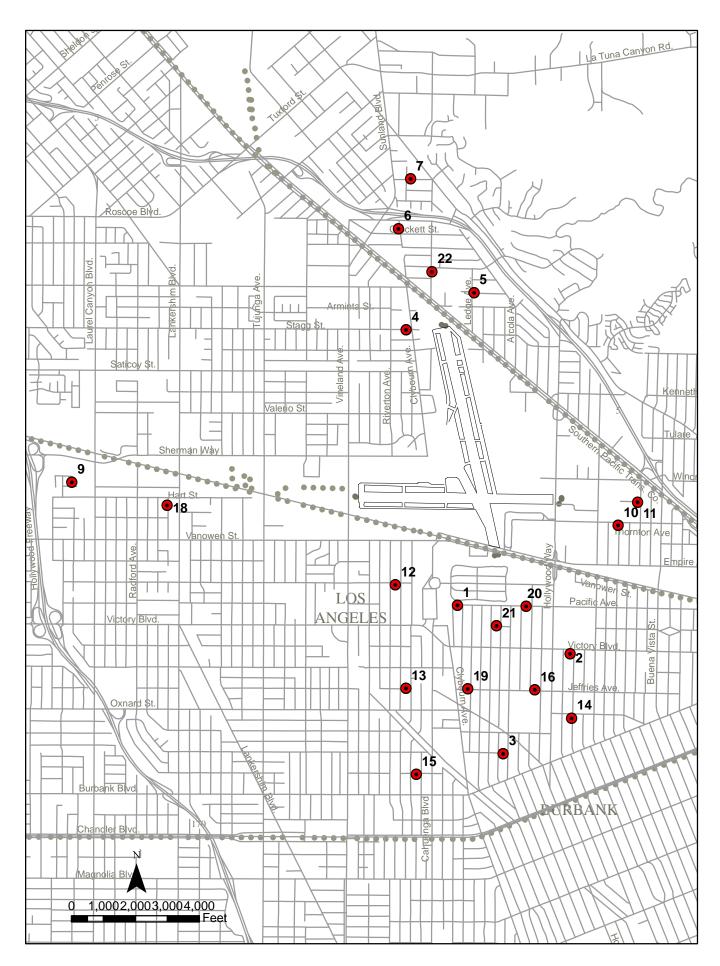


FIGURE 3 - BOB HOPE AIRPORT NOISE MONITOR LOCATIONS

D. Operational Data

Departure and arrival schedules are provided by the airlines. In addition, operations of air carrier, general aviation and rotary-wing aircraft are determined from the airport's computerized flight tracking system.

III. MEASURED NOISE DATA

Daily CNEL values for the noise monitoring system are listed in Tables 1, 2, and 3. Table 4 lists the average values for each quarter together with the annual average.

IV. SCHEDULED AIRLINE AND AIR TAXI OPERATIONS

The scheduled air carrier and commuter operations for the quarter are shown in Table 5.

V. CNEL CONTOUR DEVELOPMENT

The contours shown in Figures 1 and 2 are based upon computer-generated "master" contours which are adjusted to reflect the monitoring data. Beginning with the second quarter 2009, noise contours are developed using the master contours produced by Version 7.0 of the Integrated Noise Model (INM), a sophisticated aircraft noise modeling program developed for the Federal Aviation Administration. Inputs to the program consist of aircraft types and performance data, flight paths, numbers of operations, and day/evening/night distribution of flights. The program calculates CNEL values at equally spaced grid points and produces CNEL contour lines at 1 dB intervals. The annual average CNEL values at each site were marked at the appropriate locations on the contour map and the locations of the 65 and 70 dB CNEL contours were determined in the vicinity of each measuring point. These points were then joined following the general shape of the computed contours.

The master contours, used in developing the contours for this quarter are based on operations for the 12-month period from January 1, 2014 through December 31, 2014. This replaced the previous master set of CNEL Contours which were based on operations for the 12-month period from July 2008 through June 2009.

TABLE 1. CNEL VALUES FOR JANUARY 2015

RMS NUMBER

2 3 4 5 6 7 9 10 11 12 13 14 15 16 18 19 20 21 01/01/15 60.1 58.4 59.7 58.0 58.3 51.4 51.1 --- 53.2 56.8 53.6 56.5 56.4 58.5 60.8 59.1 61.2 65.0 65.5 53.8 01/02/15 61.2 59.5 60.5 57.5 58.7 55.6 56.1 --- 54.2 54.0 55.1 57.9 56.3 59.4 60.9 61.8 62.1 64.6 66.2 60.5 01/03/15 59.1 57.4 57.6 52.2 55.8 52.0 51.9 --- 53.3 52.6 53.7 56.8 54.2 57.8 58.7 60.7 59.7 62.4 63.8 54.3 01/04/15 60.7 59.6 61.2 56.9 58.9 49.6 51.2 --- 52.1 51.4 54.3 56.5 57.0 59.6 61.8 60.9 62.1 65.0 66.4 56.0 01/05/15 59.4 58.5 59.4 55.3 56.6 50.7 53.2 --- 54.2 54.5 53.9 56.0 55.6 58.1 60.3 60.4 60.9 63.8 65.3 55.6 01/06/15 60.5 59.5 59.6 54.0 58.8 53.8 53.7 --- 56.2 58.4 54.8 56.3 56.3 58.8 61.1 60.6 61.3 64.5 66.0 59.0 01/07/15 60.6 58.2 59.0 61.1 60.6 53.0 51.5 --- 55.1 54.8 56.1 56.9 55.5 58.2 60.2 61.0 61.2 63.7 65.1 56.4 01/08/15 60.9 59.8 60.1 56.4 54.4 50.8 53.3 --- 54.0 54.4 54.7 57.8 56.6 58.8 60.9 61.4 61.9 64.7 65.9 57.6 01/09/15 62.5 59.7 60.8 63.5 62.0 49.8 52.5 57.9 56.3 58.5 54.4 58.7 56.9 59.6 61.8 61.4 62.3 65.4 66.7 57.3 01/10/15 60.4 57.5 58.8 49.8 47.2 43.9 43.5 --- 58.3 55.0 53.3 57.2 55.0 57.9 59.7 58.0 59.8 63.2 64.6 54.8 01/11/15 61.3 59.6 61.0 53.2 53.0 45.6 45.1 --- 50.9 48.8 53.2 57.2 56.9 60.3 61.9 60.4 62.5 65.0 66.8 51.4 01/12/15 60.3 58.4 59.3 51.1 53.1 42.4 43.8 --- 53.3 52.5 52.2 57.0 56.0 58.7 60.5 60.5 61.6 64.1 65.7 50.8 01/13/15 61.1 59.3 60.2 55.2 56.6 51.6 55.7 --- 56.4 54.7 54.9 57.9 56.7 59.7 61.4 61.6 62.1 64.7 66.7 60.6 01/14/15 60.7 58.9 59.4 59.5 60.0 57.1 55.6 --- 53.6 54.0 55.5 58.1 56.2 59.1 60.6 60.8 62.0 64.2 65.7 63.5 01/15/15 60.6 59.4 60.3 54.0 55.7 57.6 54.4 58.8 52.8 52.1 54.9 57.4 56.9 58.9 61.7 61.1 62.1 65.0 66.5 59.8 01/16/15 61.1 60.1 60.7 59.0 60.5 55.5 54.9 --- 55.5 56.1 55.8 56.7 57.3 59.4 61.9 61.0 62.7 65.6 66.8 60.9 01/17/15 58.2 57.4 59.0 56.6 59.1 53.7 50.4 --- 52.4 52.2 51.6 54.5 54.8 57.1 60.5 56.6 61.5 63.4 65.0 54.7 01/18/15 59.9 58.8 60.3 55.7 54.5 50.2 51.2 --- 54.2 52.9 53.1 56.2 56.2 57.7 61.3 58.8 60.4 64.3 65.4 56.9 01/19/15 61.3 59.4 60.8 59.0 56.3 52.0 50.8 --- 53.3 55.2 53.9 58.0 56.8 60.0 61.6 60.5 63.2 65.2 67.5 58.5 01/20/15 61.3 58.7 60.1 55.5 54.3 52.5 50.4 60.2 56.2 55.9 53.3 57.8 56.2 59.6 60.8 61.8 62.7 64.3 66.4 57.9 01/21/15 59.7 58.8 59.5 56.1 56.7 58.9 55.0 61.0 56.3 51.8 52.4 55.6 56.9 58.1 61.8 60.4 61.1 63.9 65.6 61.7 01/22/15 59.7 59.2 58.7 57.1 56.1 54.3 55.6 60.1 54.8 56.2 53.0 56.4 55.4 57.7 60.2 59.7 61.2 63.9 65.2 61.3 01/23/15 59.3 57.1 58.2 57.3 56.5 53.7 53.1 56.2 53.1 55.6 52.9 55.9 54.4 58.0 59.4 59.8 61.2 63.4 65.0 58.7 01/24/15 55.9 52.8 55.3 58.9 58.4 59.6 55.9 --- 52.5 53.6 51.0 51.1 52.7 51.7 58.4 54.9 55.3 60.5 60.6 60.5 01/25/15 58.9 57.6 58.8 62.6 65.0 48.1 50.0 --- 52.4 53.5 52.1 55.6 54.7 57.8 59.7 58.7 59.7 63.1 64.5 56.0 01/26/15 60.9 57.8 58.4 54.7 54.5 54.2 54.0 --- 51.8 51.7 53.5 57.4 55.0 58.1 59.7 60.2 61.3 63.3 64.9 61.1 01/27/15 61.5 59.5 60.3 49.7 54.6 53.5 53.7 --- 53.7 53.2 54.1 58.7 56.8 60.0 61.5 60.8 62.7 65.2 66.6 61.0 01/28/15 62.0 60.5 61.0 54.0 54.4 56.0 58.5 --- 53.8 55.5 55.7 58.4 57.4 59.8 62.0 61.2 62.9 65.5 67.0 64.2 01/29/15 61.1 59.1 60.0 57.4 56.7 54.9 54.5 --- 53.2 54.4 53.7 57.7 56.5 59.7 61.3 61.6 62.7 64.8 66.5 61.5 01/30/15 61.5 59.8 60.3 55.2 53.5 52.5 54.2 --- 54.9 56.0 55.5 57.3 57.2 59.0 61.6 62.8 62.1 64.9 66.5 59.8 01/31/15 58.0 56.8 58.8 54.2 54.1 54.3 52.8 --- 54.3 48.7 51.0 55.0 54.4 57.0 59.5 58.5 59.6 61.3 63.9 58.3 AVERAGE 60.5 58.8 59.7 57.4 57.9 54.0 53.5 59.3 54.4 54.6 54.0 57.0 56.1 58.7 60.9 60.5 61.6 64.3 65.8 59.3 NO. DAYS 31 31 31 31 31 31 6 31 31 31 31 31 31 31 31 31 31

TABLE 2. CNEL VALUES FOR FEBRUARY 2015

RMS NUMBER

Date/Time:	1	2	3	4	5	6	7	9	10	11	12	13	14	15	16	18	19	20	21	22
02/01/15	59.2	57.8	58.9	55.4	56.7	50.0	49.5		50.6	51.1	52.0	55.9	55.1	58.5	60.0	59.2	60.9	63.2	65.1	54.9
02/02/15	61.0	58.7	59.9	54.5	55.7	52.2	49.7		54.2	56.2	54.5	57.1	56.6	58.4	61.2	60.1	61.5	64.5	65.8	55.5
02/03/15	61.8	60.5	60.3	58.5	58.2	56.0	56.5	60.8	56.5	57.6	56.5	58.0	57.0	59.6	61.6	61.5	62.5	65.2	66.7	59.1
02/04/15	60.7	58.6	59.1	53.4	51.6	47.8	48.0	61.2	51.7	53.5	53.7	57.7	55.8	59.2	60.4	60.7	62.0	64.1	65.6	54.4
02/05/15	62.8	59.3	59.7	57.9	55.1	53.4	53.7	63.6	53.2	57.8	55.2	59.0	56.0	59.1	61.0	62.9	62.3	64.7	66.1	60.1
02/06/15	60.7	58.2	58.1	60.9	56.7	54.1	53.7	63.4	55.5	58.6	53.9	56.6	54.8	57.8	59.5	62.5	60.8	63.5	65.0	59.0
02/07/15	59.1	55.8	56.6	49.1	52.7	51.6	48.6	59.3	50.7	54.0	51.1	55.2	52.9	56.5	57.4	58.7	59.3	61.3	63.1	55.9
02/08/15	60.9	59.9	61.4	48.4	52.6	50.0	56.4	60.4	51.8	51.8	53.6	56.7	57.4	59.5	62.6	60.0	62.5	65.5	67.0	61.2
02/09/15	60.6	59.2	60.3	56.0	58.2	58.1	55.8	61.2	57.9	56.4	54.9	56.2	56.3	58.2	61.6	60.5	61.2	64.3	65.4	61.5
02/10/15	61.0	59.6	60.2	60.0	59.9	51.6	54.9	61.5	54.4	55.1	56.4	57.5	57.2	59.3	61.2	60.9	61.9	64.7	66.0	59.2
02/11/15	60.2	59.1	59.9	58.5	55.9	49.5	50.9	61.2	56.3	56.5	53.8	55.8	56.5	58.3	61.0	60.4	61.4	64.6	65.9	55.8
02/12/15	59.8	58.7	59.6	58.6	56.4	51.8	54.7	61.5	53.2	55.4	53.7	57.2	55.7	58.8	60.8	60.5	61.8	64.5	66.2	59.2
02/13/15	60.0	59.4	59.6	56.2	57.9	52.4	54.2	62.6	57.7	56.5	53.9	55.7	57.0	57.4	61.6	61.1	60.8	64.8	66.0	59.3
02/14/15	60.1	57.5	57.3	63.1	66.1	53.7	49.8	57.7	51.5	52.7	54.6	55.6	53.8	57.2	59.2	56.8	61.8	63.8	66.1	56.4
02/15/15	59.7	57.9	59.4	52.1	54.5	48.7	52.8	60.6	51.3	51.6	52.6	56.4	55.1	58.5	59.9	60.0	60.8	63.2	64.9	57.1
02/16/15	61.4	59.0	60.3	54.2	56.5	48.5	52.5	61.8	57.3	53.6	52.8	58.2	56.4	59.5	61.1	61.4	62.1	64.6	66.2	58.4
02/17/15	60.7	59.1	59.8	55.2	54.6	52.1	53.4	61.6	53.7	52.6	53.2	57.5	56.1	59.4	60.5	61.1	61.9	64.3	65.7	59.7
02/18/15					_				-							-				-
02/19/15	-		_		_			_	-						-					
02/20/15																				
02/21/15																				
02/22/15							_										-	_		_
02/23/15		_							-					_						
02/24/15																				
02/25/15								_		_	_						-	_		
02/26/15																				
02/27/15	_				_	_					_						-			
02/28/15	59.2	57.2	58.3	54.8	56.4	52.1	51.7	59.5	53.4	51.5	51.3	56.1	54.4	57.3	58.5	58.5	59.7	63.8	63.6	57.2
AVERAGE	61.0	59.0	59.8	57.1	57.4	53.4	53.4	61.6	54.6	54.7	54.3	57.4	56.3	58.9	60.9	60.8	61.8	64.5	65.9	58.7
NO. DAYS	28	28	28	28	28	28	28	26	28	28	28	28	28	28	28	28	28	28	28	28

TABLE 3. CNEL VALUES FOR MARCH 2015

RMS NUMBER

Date	1	2	3	4	5	6	7	9	10	11	12	13	14	15	16	18	19	20	21	22
20/04/45	20.4			50.0	= 0.0	40.4		20.4		45.0					24.0			0= 0	07.0	=0.0
03/01/15						_	_													
03/02/15																				
03/03/15	_								_						_				_	
03/04/15 03/05/15						-	-	-				-				-				
03/05/15																				
03/00/15																	_	-	_	
03/07/13																				
03/09/15					-		_		_								_			_
03/03/15																				
03/11/15	_					_		_			_						_			
03/12/15					_				_		_						-	_		
03/13/15																				
03/14/15																	58.6	_		
03/15/15	59.4	58.6	60.5														61.0			
03/16/15	59.3	57.9	58.9	55.3	55.0	52.0	53.5	60.6	50.5	50.0	52.7	57.3	54.9	58.3	59.5	60.0	61.0	63.3	64.8	60.9
03/17/15																				
03/18/15	62.3	60.0	60.9	54.7	53.8	50.9	51.9	63.6	55.0	55.4	55.3	59.0	57.6	60.8	61.7	62.7	63.5	65.4	67.2	58.5
03/19/15	62.4	60.7	64.6	55.4	56.1	52.6	53.8	62.5	53.3	55.4	54.5	58.8	58.4	60.3	64.1	61.6	63.4	66.7	68.7	60.4
03/20/15	60.6	59.5	60.2	53.1	55.1	53.0	55.7	63.0	52.5	52.4	52.5	56.2	56.9	58.8	61.5	63.0	62.0	65.0	66.2	59.9
03/21/15	59.0	57.3	58.7	52.9	51.9	46.4	50.9	58.9	50.2	51.5	50.9	55.6	54.2	57.1	59.2	61.1	59.4	63.1	64.3	56.7
03/22/15	60.9	58.4	59.2	53.3	54.2	47.7	51.1	61.1	51.5	49.0	53.0	58.3	55.3	59.4	60.3	60.0	62.0	64.0	65.8	55.9
03/23/15	60.6	58.8	59.1	58.1	58.4	57.9	57.2	60.9	53.3	55.9	53.3	57.1	56.3	59.2	60.7	60.2	61.8	63.8	65.3	62.2
03/24/15	60.1	58.0	58.9	60.2	60.5	60.6	57.9	59.7	53.6	54.3	57.4	55.9	56.4	57.4	62.9	59.4	60.5	63.3	64.7	63.5
03/25/15	62.2	59.7	60.3	55.8	56.2	52.6	57.3	61.5	52.8	55.0	54.6	58.2	57.0	59.3	61.5	60.9	62.6	65.0	66.5	60.9
03/26/15	60.9	59.4	59.9	54.2	56.5	53.5	54.7	61.4	54.3	65.2	53.4	56.5	56.6	58.2	61.4	60.7	61.6	64.9	65.7	59.3
03/27/15	59.8	59.0	59.8	54.1	58.5	57.7	56.7	61.8	56.6	55.3	53.1	55.0	56.4	57.7	61.4	61.1	60.9	64.6	65.8	61.7
03/28/15	58.0	57.3	56.5		52.7	50.3	52.8	59.3	50.9	50.5	51.2	54.3	52.9	55.9	57.5	58.0	58.9	61.2	63.0	57.7
03/29/15							_			-	-						60.9			-
03/30/15	62.1	59.4	60.5		58.4	50.7	52.0	60.7	54.5	50.7	54.0	58.5	56.7	59.8	61.5	60.7	62.8	65.0	66.6	58.4
03/31/15	62.5	60.6	61.6	58.1	54.8	51.0	53.1	62.8	53.9	53.4	54.4	58.6	58.4	59.7	62.9	61.9	63.2	65.9	67.4	59.9
AVERAGE																				
NO. DAYS	31	31	31	26	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31
QTR. AVG.	60 P	50 0	50 P	57 1	57 <i>1</i>	5.1 G	54 O	61.2	5 <i>1</i> 1	54 P	<i>511</i>	57 O	56 O	50 7	60.0	60.7	61.6	64.2	65 P	50 F
NO. DAYS	90	90	90	85	90	90	90	63	_	90	90	90	90	90	90	90	90	90	90	90
110. DA 13	90	90	90	00	90	90	90	03	90	90	90	90	90	90	90	90	90	90	90	30

TABLE 4. AVERAGE CNEL VALUES

Site	2nd Quarter	3rd Quarter	4th Quarter	1st Quarter	4 Quarter
No.	2014	2014	2014	2015	Average
1	60.8	61.0	60.7	60.8	60.8
2	58.4	58.6	58.7	58.8	58.6
3	59.3	59.7	59.6	59.8	59.6
4	56.6	56.2	57.1	57.1	56.7
5	55.9	55.6	57.4	57.4	56.7
6	53.9	52.4	54.0	54.6	53.8
7	55.2	54.4	55.0	54.2	54.7
9	61.4	61.5	62.2	61.3	61.6
10	53.5	53.1	53.4	54.1	53.5
11	53.7	53.0	53.9	54.8	53.9
12	53.1	52.7	53.9	54.1	53.5
13	57.7	57.4	57.1	57.2	57.4
14	55.7	56.2	56.1	56.2	56.0
15	58.7	59.0	58.6	58.7	58.7
16	60.6	60.9	60.9	60.9	60.8
18	60.7	60.8	60.7	60.7	60.7
19	61.4	61.9	61.6	61.6	61.6
20	64.0	64.5	64.3	64.3	64.3
21	65.4	65.9	65.8	65.8	65.7
22	60.5	59.7	59.5	59.5	59.8

Table 5. WEEKLY SCHEDULED AIR CARRIER AND AIR TAXI FLIGHTS FOR THE FIRST QUARTER 2015

			ULE IN E			1/1/15	to	1/5/15	5 DAYS	
AIRCRAFT	AS D8-0 DEP	Q400 ARR	AS B73 DEP	377 ARR	AS CR. DEP	J7 ARR	AS CRJ DEP	ARR	AS B73 DEP	78 ARR
DAY	0	0	7	7	14	14	0	0	14	7
EVENING	0	0	0	0	5	5	0	0	0	7
NIGHT TOTAL	0 0	0 0	0 7	0 7	0 19	0 19	0	0	0 14	0 14
101712	Ü	Ü	•	•	10	10	Ü	Ü		• •
	110 424		OLLE IN E	_	-	1/1/15	to US CRJ	1/5/15		
	DEP	ARR	0US B73 DEP	ARR	US B73 DEP	ARR	DEP	ARR	DEP	ARR
DAY	0	0	0	0	0	0	0	0	0	0
EVENING NIGHT	0 0	0 0	0 0	0 0	0 0	0 0	0	0	0	0 0
TOTAL	0	0	0	0	0	0	0	0	0	0
		001155			EDOM.	4/4/45		4/5/45		
	US CR.		ULE IN E US CR	_	AA MD	1/1/15 80	to WN B73	1/5/15 373	WN B73	375
	DEP	ARR	DEP	ARR	DEP	ARR	DEP	ARR	DEP	ARR
DAY	0	0	20	27	0	0	0	0	0	0
EVENING NIGHT	0 0	0 0	7 7	7 0	0 0	0 0	0	0	0	0 0
TOTAL	Ö	Ö	34	34	Ö	Ö	0	Ö	Ö	Ö
		SCHED	ULE IN E	EEECT	EDOM.	1/1/15	to	1/5/15		
	WN B73		WN B7	_	-	20UA B73		UA B73	75	
	DEP	ARR	DEP	ARR	DEP	ARR	DEP	ARR	DEP	ARR
DAY EVENING	236 49	213 72	0 0	0 0	0 0	0 0	0	0	0	0 0
NIGHT	0	0	0	0	0	0	0	0	0	0
TOTAL	285	285	0	0	0	0	0	0	0	0
		SCHED	ULE IN E	FFFCT	FROM	1/1/15	to	1/5/15		
		7UA RJ		UA CR	J7	FE A30	0	FE A31	-	
DAY	DEP	ARR	DEP	ARR	DEP	ARR	DEP	ARR	DEP	ARR
DAY EVENING	0 0	0 0	44 6	31 19	0 0	0 0	0	0	0 5	1 0
NIGHT	0	0	0	0	0	0	0	0	0	4
TOTAL	0	0	50	50	0	0	0	0	5	5
		SCHED	ULE IN E	EFFECT	FROM	1/1/15	to	1/5/15		
	UPS A3		UPS B7		DL B75		DL CRJ	4.0.0	DL CRJ	
DAY	DEP 3	ARR 4	DEP 0	ARR 0	DEP 0	ARR 0	DEP 20	ARR 13	DEP 0	ARR 0
EVENING	5	0	0	0	0	0	0	7	0	0
NIGHT	0	4	0	0	0	0	0	0	0	0
TOTAL	8	8	0	0	0	0	20	20	0	0
			ULE IN E			1/1/15	to	1/5/15		
	DL CRJ		B6 A32		FW2 A				TOTAL	
DAY	DEP 0	ARR 0	DEP 0	ARR 0	DEP 0	ARR 0			DEP 358	ARR 317
EVENING	0	0	7	7	0	0			84	124
NIGHT	0	0	0	0	0	0			7	8
TOTAL	0	0	7	7	0	0			449	449

Table 5. WEEKLY SCHEDULED AIR CARRIER AND AIR TAXI FLIGHTS FOR THE FIRST QUARTER 2015

			ULE IN E			1/6/15	to	2/28/15	54 DAY	
AIRCRAFT	AS D8-0 DEP	Q400 ARR	AS B73	77 ARR	AS CRJ DEP	7 ARR	AS CRJ DEP	ARR	AS B737 DEP	78 ARR
DAY	0	0	7	7	14	14	0	0	14	7
EVENING	0	0	0	0	5	5	0	0	0	7
NIGHT TOTAL	0	0	0 7	0 7	0 19	0 19	0	0	0 14	0 14
. 0 . 7 . 2	Ü	Ü	•	•	.0	.0	Ü	Ü		• •
	110 121	SCHED 9US A32	ULE IN E	-	FROM US B73	1/6/15	to US CRJ	2/28/15		
	DEP	ARR	DEP	ARR	DEP	ARR	DEP	ARR	DEP	ARR
DAY	0	0	0	0	0	0	0	0	0	0
EVENING NIGHT	0	0	0	0	0	0	0	0	0	0
TOTAL	0	0	0	0	0	0	0	0	0	0
		COLIED		·CCCOT I	-DOM	1/0/15	4-	0/00/45		
	US CRJ		ULE IN E US CRJ	-	-ROM AA MD8	1/6/15 30	to WN B73	2/28/15 73	WN B73	375
	DEP	ARR	DEP	ARR	DEP	ARR	DEP	ARR	DEP	ARR
DAY	0	0	20	27	0	0	0	0	0	0
EVENING NIGHT	0	0	7 7	7 0	0	0	0	0	0	0
TOTAL	0	0	34	34	Ö	Ö	0	0	0	0
		SCHED	ULE IN E	EEECT I	EP∩M	1/6/15	to	2/28/15		
	WN B73		WN B73			0UA B73		UA B737	75	
	DEP	ARR	DEP	ARR	DEP	ARR	DEP	ARR	DEP	ARR
DAY EVENING	237 44	217 64	0	0	0	0	0	0	0	0
NIGHT	0	0	0	0	0	0	0	0	0	0
TOTAL	281	281	0	0	0	0	0	0	0	0
		SCHED	ULE IN E	FFECT F	FROM	1/6/15	to	2/28/15		
	UA B75	7UA RJ		UA CRJ	17	FE A300		FE A310)	
DAY	DEP	ARR	DEP	ARR	DEP	ARR	DEP	ARR	DEP	ARR
DAY EVENING	0	0	44 6	31 19	0	0 0	0	0	0 5	1 0
NIGHT	Ö	Ö	0	0	0	0	0	Ö	0	4
TOTAL	0	0	50	50	0	0	0	0	5	5
		SCHED	ULE IN E	FFECT F	FROM	1/6/15	to	2/28/15		
	UPS A3	00	UPS B7	57	DL B752	2	DL CRJ		DL CRJ	-
DAY	DEP 3	ARR 4	DEP 0	ARR 0	DEP 0	ARR 0	DEP 20	ARR 13	DEP 0	ARR 0
EVENING	5	0	0	0	0	0	0	7	0	0
NIGHT	0	4	0	0	0	0	0	0	0	0
TOTAL	8	8	0	0	0	0	20	20	0	0
		SCHED	ULE IN E	FFECT F	FROM	1/6/15	to	2/28/15		
	DL CRJ		B6 A320		FW2 A3				TOTALS	
DAY	DEP 0	ARR	DEP	ARR 0	DEP	ARR			DEP 359	ARR 321
EVENING	0	0 0	0 7	7	0	0 0			359 79	321 116
NIGHT	Ö	0	0	0	0	0			7	8
TOTAL	0	0	7	7	0	0			445	445

Table 5. WEEKLY SCHEDULED AIR CARRIER AND AIR TAXI FLIGHTS FOR THE FIRST QUARTER 2015

				ULE IN E			3/1/15	to	3/7/15	7 DAYS	
Α	IRCRAFT	AS D8-0 DEP	Q400 ARR	AS B73	77 ARR	AS CRJ DEP	7 ARR	AS CRJ DEP	ARR	AS B73	78 ARR
	DAY	0	0	7	7	14	14	0	0	14	7
	EVENING NIGHT	0	0 0	0	0 0	5 0	5 0	0	0	0	7 0
	TOTAL	0	0	7	7	19	19	0	0	14	14
			SCHED	ULE IN E	FFECT	FROM	3/1/15	to	3/7/15		
		US A31 DEP	9US A32 ARR	0US B73 DEP	72 ARR	US B73 DEP	73 ARR	US CRJ DEP	ARR	DEP	ARR
	DAY	0	0	0	0	0	0	0	0	0	0
	EVENING	0	0	0	0	0	0	0	0	0	0
	NIGHT TOTAL	0 0	0 0	0 0	0 0	0 0	0	0 0	0	0 0	0 0
			COUED	ULE IN E	FEECT	EDOM.	3/1/15	40	3/7/15		
		US CR.		US CR.	_	AA MD8		to WN B73		WN B73	375
	DAY	DEP	ARR	DEP	ARR 27	DEP	ARR	DEP	ARR	DEP	ARR
	DAY EVENING	0	0	20 7	7	0 0	0	0	0	0	0 0
	NIGHT	0	0	7	0	0	0	0	0	0	0
	TOTAL	0	0	34	34	0	0	0	0	0	0
		\A\A\ D.70		ULE IN E			3/1/15	to	3/7/15	 -	
		WN B73 DEP	ARR	WN B73 DEP	ARR	DEP	0UA B73 ARR	73 DEP	UA B73 ARR	75 DEP	ARR
	DAY	237	217	0	0	0	0	0	0	0	0
	EVENING NIGHT	44 0	64 0	0	0	0 0	0	0	0	0	0 0
	TOTAL	281	281	Ö	Ö	Ö	Ö	Ö	0	0	0
			SCHED	ULE IN E	FFECT	FROM	3/1/15	to	3/7/15		
			7UA RJ		UA CR.	J7	FE A30)	FE A310		
	DAY	DEP 0	ARR 0	DEP 44	ARR 31	DEP 0	ARR 0	DEP 0	ARR 0	DEP 0	ARR 1
	EVENING	0	0	6	19	0	0	0	0	5	0
	NIGHT TOTAL	0	0	0 50	0 50	0	0	0	0	0 5	4 5
	TOTAL	U	U	30	50	U	U	U	U	5	5
		UPS A3		ULE IN E		FROM DL B75	3/1/15	to DL CRJ	3/7/15	DL CRJ	7
		DEP	ARR	DEP	ARR	DEP DEP	ARR	DEP	ARR	DEP	ARR
	DAY	3	4	0	0	0	0	18	11	0	0
	EVENING NIGHT	5 0	0 4	0	0 0	0 0	0	0	7 0	0	0 0
	TOTAL	8	8	0	0	0	0	18	18	0	0
			SCHED	ULE IN E	FFECT I	FROM	3/1/15	to	3/7/15		
		DL CRJ	9	B6 A32	0	FW2 A3	-			TOTAL	
	DAY	DEP 0	ARR 0	DEP 0	ARR 0	DEP 0	ARR 0			DEP 357	ARR 319
	EVENING	0	0	7	7	0	0			79	116
	NIGHT	0	0	0 7	0 7	0	0			7 443	8
	TOTAL	0	0	1	1	0	0			443	443

Table 5. WEEKLY SCHEDULED AIR CARRIER AND AIR TAXI FLIGHTS FOR THE FIRST QUARTER 2015

			ULE IN E			3/8/15	to	3/8/15	1.00	DAYS
AIRCRAFT	AS D8-0 DEP	Q400 ARR	AS B73 DEP	77 ARR	AS CR.	J7 ARR	AS CRJ DEP	ARR	AS B73 DEP	78 ARR
DAY	0 0	0 0	0	0	14	14	0 0	0 0	20	13
EVENING	0	0	0	0	6	6	0	0	0	7
NIGHT	0	0	0	0	0	0	0	0	0	0
TOTAL	0	0	0	0	20	20	0	0	20	20
		SCHED	ULE IN E	FFFCT	FROM	3/8/15	to	3/8/15		
	US A31		0US B73	_	US B73		US CRJ			
	DEP	ARR	DEP	ARR	DEP	ARR	DEP	ARR	DEP	ARR
DAY	0	0	0	0	0	0	0	0	0	0
EVENING	0	0	0	0	0	0	0	0	0	0
NIGHT	0	0	0	0	0	0	0	0	0	0
TOTAL	0	0	0	0	0	0	0	0	0	0
		SCHED	ULE IN E	EFFECT		3/8/15	to	3/8/15		
	US CR.		US CR.		AA MD		WN B73	_	WN B7	
541/	DEP	ARR	DEP	ARR	DEP	ARR	DEP	ARR	DEP	ARR
DAY EVENING	0	0	20 7	27 7	0	0 0	0	0	0	0
NIGHT	0 0	0	7	0	0 0	0	0	0	0	0 0
TOTAL	0	0	, 34	34	0	0	0	0	0	0
							-			
			ULE IN E			3/8/15	to	3/8/15		
	WN B73		WN B7			20UA B73		UA B73		٨٥٥
DAY	DEP 237	ARR 217	DEP 0	ARR 0	DEP 0	ARR 0	DEP 0	ARR 0	DEP 0	ARR 0
EVENING	44	64	0	0	0	0	0	0	0	0
NIGHT	0	0	Ö	0	Ö	0	0	0	0	0
TOTAL	281	281	0	0	0	0	0	0	0	0
		SCHED	ULE IN E	FFFCT	FROM	3/8/15	to	3/8/15		
	UA B75	7UA RJ	OLL IIV L	UA CR	_	FE A30		FE A31	0	
	DEP	ARR	DEP	ARR	DEP	ARR	DEP	ARR	DEP	ARR
DAY	0	0	28	21	13	6	0	0	0	1
EVENING	0	0	1	8	5	12	0	0	5	0
NIGHT	0	0	0	0	0	0	0	0	0	4
TOTAL	0	0	29	29	18	18	0	0	5	5
		SCHED	ULE IN E	FFECT	FROM	3/8/15	to	3/8/15		
	UPS A3		UPS B7		DL B75		DL CRJ		DL CRJ	17
		ARR		ARR	DEP	ARR	DEP	ARR	DEP	ARR
DAY	3	4	0	0	0	0	18	11	0	0
EVENING NIGHT	5 0	0 4	0 0	0 0	0 0	0 0	0	7 0	0 0	0 0
TOTAL	8	8	0	0	0	0	18	18	0	0
101712	Ü	Ü	Ü	Ü	Ü	Ü	.0	.0	Ü	Ü
			ULE IN E			3/8/15	to	3/8/15		
	DL CRJ		B6 A32		FW2 A3				TOTAL	
DAV	DEP	ARR	DEP	ARR	DEP	ARR			DEP	ARR
DAY EVENING	0	0 0	0 7	0 7	0 0	0 0			353 80	314 118
NIGHT	0 0	0	0	0	0	0			80 7	8
TOTAL	0	0	7	7	0	0			, 440	440

Table 5. WEEKLY SCHEDULED AIR CARRIER AND AIR TAXI FLIGHTS FOR THE FIRST QUARTER 2015

AIRCRAFT DAY EVENING NIGHT TOTAL	AS D8- DEP 0 0 0		DULE IN AS B7 DEP 0 0 0	EFFECT 377 ARR 0 0 0 0	FROM AS CR DEP 14 6 0 20	3/9/15 3J7 ARR 14 6 0 20	to AS CR. DEP 0 0 0		23 DA AS B73 DEP 20 0 0 20	
DAY EVENING NIGHT TOTAL	US A3 DEP 0 0 0	SCHEI 19US A32 ARR 0 0 0 0	-	EFFECT 372 ARR 0 0 0 0	FROM US B7 DEP 0 0 0	3/9/15 373 ARR 0 0 0	to US CR. DEP 0 0 0	3/31/15 J ARR 0 0 0	DEP 0 0 0	ARR 0 0 0 0
DAY EVENING NIGHT TOTAL	US CR DEP 0 0 0		DULE IN US CR DEP 19 0 7 26	EFFECT RJ9 ARR 19 7 0 26	FROM AA ME DEP 0 0 0 0	3/9/15 080 ARR 0 0 0	to WN B73 DEP 0 0 0	3/31/15 373 ARR 0 0 0 0	WN B7 DEP 0 0 0	7375 ARR 0 0 0 0
DAY EVENING NIGHT TOTAL	WN B7 DEP 237 44 0 281		DULE IN WN B7 DEP 0 0 0 0	EFFECT 7378 ARR 0 0 0 0		3/9/15 20UA B73 ARR 0 0 0 0	to 373 DEP 0 0 0	3/31/15 UA B73 ARR 0 0 0		ARR 0 0 0
DAY EVENING NIGHT TOTAL	UA B75 DEP 0 0 0	SCHEI 57UA RJ ARR 0 0 0 0	DULE IN DEP 28 1 0 29	EFFECT UA CR ARR 21 8 0 29	_	3/9/15 FE A30 ARR 6 12 0 18	to 00 DEP 0 0 0	3/31/15 FE A31 ARR 0 0 0		ARR 1 0 4 5
DAY EVENING NIGHT TOTAL	UPS A DEP 3 5 0		UPS B		FROM DL B79 DEP 0 0 0 0		to DL CRJ DEP 18 0 0	3/31/15 ARR 11 7 0 18	DL CR	
DAY EVENING NIGHT TOTAL	DL CR DEP 0 0 0		DULE IN B6 A32 DEP 0 7 0 7	EFFECT 20 ARR 0 7 0 7	FROM FW2 A DEP 0 0 0	3/9/15 A319 ARR 0 0 0	to	3/31/15	TOTAL DEP 352 73 7 432	ARR 306 118 8 432

TABLE 5. (CONTINUED)

FIRST QUARTER 2015

PERIOD TOTALS FOR AIR CARRIERS AND AIR TAXIS

AIR CARRIERS

	<u>DEP</u>	<u>ARR</u>
DAY	3939	3610
EVE	883	1009
NIGHT	0	103
TOTAL	4722	4722

AIR TAXIS

	<u>DEP</u>	<u>ARR</u>
DAY	1237	1044
EVE	212	495
NIGHT	90	0
TOTAL	1539	1539
		0

AIR CARRIERS AND AIR TAXIS

	<u>DEP</u>	<u>ARR</u>
DAY	5076	4654
EVE	1095	1504
NIGHT	90	103
TOTAL	6261	6261

VI. INCOMPATIBLE LAND USE

The contours shown in Figures 1 and 2 were digitized and overlaid on a digital land use map of the area around the Airport. The total areas enclosed by the 65 and 70 dB CNEL contours were 549.1 and 234.5 acres, respectively. The areas of incompatible land uses enclosed by the contours were then computed. The incompatible land use areas were 6.17 acres within the 65 dB contour of which 0.37 acres were also within the 70 dB contour.

It should be noted that the above incompatible land areas do not include the soundproofed schools in the vicinity of the Airport (the Luther Burbank Middle School, St. Patrick and Glenwood Schools). The above incompatible land use areas also do not include those residences to which the Airport has acquired avigation easements. Within the 65 dB contour, the Airport has acquired avigation easements, through its ongoing residential sound insulation program, to 113 parcels of land. Those 113 parcels total 16.08 acres. One of the 113 parcels is also located within the 70 dB contour. Within the 65 dB contour, the Airport has also acquired avigation easements, under the Court of Appeal decision in Baker v. Burbank-Glendale-Pasadena Airport Authority, 220 Cal. App. 3d 1602 (1990), to 56 parcels of land. For 48 of the 56 parcels, the Authority has acquired avigation easements both through Baker and through its ongoing sound insulation program. Those 48 parcels are included in the total number of sound insulation program avigation easements set forth above. The 7 remaining Baker easement parcels total 0.89 acres.

It should be noted that the Airport Authority has made repeated attempts over the past several years to acoustically treat and obtain avigation easements at 42 single family residential parcels, totaling approximately 6.04 acres of the incompatible land use area within the 65 dB contour. Owners of these parcels have either refused to respond to notices regarding the sound insulation program, have withdrawn from the program, or own properties with major building code deficiencies that prevent them from participating.

The estimated numbers of incompatible residences are 44 within the 65 dB contour, of which 2 are also within the 70 dB contour. The estimated numbers of people residing within the 65 and 70 dB CNEL contours are 124 and 5, respectively.

REFERENCES

- California Department of Transportation, Division of Aeronautics, "Noise Standards", California Code of Regulations, Title 21, Chapter 2.5, Subchapter 6.
- 2. L-30488, Department of Transportation, State of California, 27 June 1984.
- "Quarterly Noise Monitoring at Bob Hope Airport, Second Quarter 2014",
 AAAI Report 1443.
- "Quarterly Noise Monitoring at Burbank Airport, Third Quarter 2014",
 AAAI Report 1444.
- "Quarterly Noise Monitoring at Burbank Airport, Fourth Quarter 2014",
 AAAI Report 1446.

APPENDIX A NOISE MONITOR INSTRUMENTATION

APPENDIX A NOISE MONITOR INSTRUMENTATION

The permanent noise monitor system, manufactured by Bruel & Kjaer, consists of 20 noise monitoring terminals (NMT) connected to a central site by DSL or wireless connections. The system block diagram showing the major elements is shown in Figure A-1. The electrical signal generated by the microphone/preamplifier assembly at each site is processed and saved locally in the B & K sound level meter. The signal is passed through an A-weighting filter and is then detected and converted to a digital level signal in decibels with a resolution of 0.1 dB.

The stored sound level data at each site is dumped once every 24-hour period via wireless or DSL connection to the central site. The data received by the central site are processed by the ANOMS computer software. According to preset parameters, the noise is separated into two categories--aircraft noise and community noise. Each event attributed to an aircraft is saved in a noise event file. Computations are made of hourly noise level, community noise equivalent level, runway use, and other parameters. A wide variety of data presentations is available by exercising a number of routines provided by B & K, as well as special-purpose routines that can be generated by the user.

The locations of the remote sites (shown in Figure 3) are listed by latitude and longitude in Table A-1.

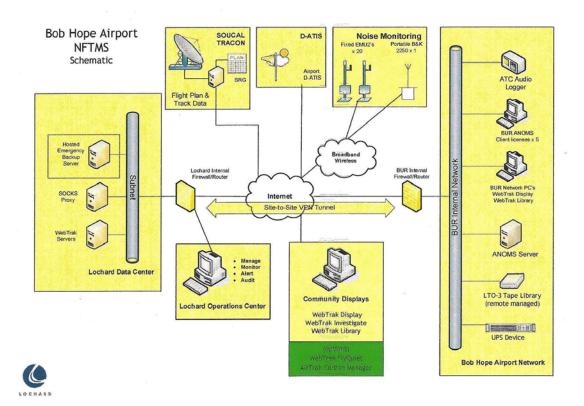


Figure A-1. Permanent Noise Monitor System Schematic

TABLE A-1
NOISE MONITOR SITE LOCATIONS

NMT	Latitude	Longitude
1	34.188424	-118.358983
2	34.184296	-118.347330
3	34.175731	-118.354197
4	34.212022	-118.364391
5	34.215261	-118.357381
6	34.220705	-118.365214
7	34.224979	-118.363989
9	34.198871	-118.398889
10	34.195336	-118.342392
11	34.197321	-118.340376
12	34.190175	-118.365404
13	34.181303	-118.345270
14	34.178786	-118.347134
15	34.173922	-118.363157
16	34.181185	-118.350949
18	34.196899	-118.389014
19	34.181277	-118.357866
20	34.188378	-118.351878
21	34.186700	-118.354939
22	34.217035	-118.361725

APPENDIX B CALIBRATION

APPENDIX B CALIBRATION

The system was calibrated during setup using a Bruel and Kjaer acoustic calibrator. Acoustic calibrations are performed annually. Electrical calibrations are performed automatically four times per 24-hour day. Figure B-1 shows the calibration summary for January 2013 and Figure B-2 shows the detailed electrical calibration report for Noise Monitor Site 1.



Devices Report

RMT Calibration Results

Bob Hope Airport

Start Date: 04-Jan-2013

End Date: 31-Jan-2013

М	onitor Location	04-Jan-2013	11-Jan-2013	18-Jan-2013	25-Jan-2013
1	1	0.1	0.1	0.1	0.1
2	2	0.4	0.4	0.3	0.3
3	3	0.5	0.0	0.0	0.0
4	4	0.3	0.3	0.3	0.3
5	#5	0.2	0,2	0.2	0.2
6	6	0.0	0.0	0.0	0.0
7	7	0.3	0.3	0.3	0.3
9	9	0.2	0.2	0.2	0.2
10	10	0.2	0.2	0.2	0.2
11	11	0.6	0.0	0.0	0.0
12	12	0.3	0.3	0.3	0.3
13	13	0.0	0.0	0.0	0.0
14	14	0.0	0.0	0.0	0.0
15	15	0.0	0.0	0.0	0.0
16	16	0.4	0.4	0.4	0.4
18	18	0.0	0.0	0.1	0.1
19	19	0.0	0.0	0.0	0.0
20	20	0.1	0.0	0.1	0.1
21	21	0.0	0.0	0.0	0.0
22	22	0.0	0.0	0.0	0.0

15-May-2013 Page 1 of 2



Devices Report

RMT Calibration Results

Bob Hope Airport

Start Date: 04-Jan-2013

End Date: 31-Jan-2013

Monitor Location: 1 - 1, (Fixed)

Seven Day Period Commencing: Friday January 04, 2013

Calibrated with Sound Calibrator : Never

Number of Calibrations: 27

Average adjustment for this RMT over this period: 0.10 dB

Date Time	Expected Result	Value Measured	Calibration Error
04-Jan-2013 0:00	87.1	87.2	0.1
04-Jan-2013 6:00	87.1	87.2	0.1
04-Jan-2013 12:00	87.1	87.2	0.1
04-Jan-2013 18:00	87.1	87.2	0.1
05-Jan-2013 0:00	87.1	87.2	0.1
05-Jan-2013 6:00	87.1	87.2	0.1
05-Jan-2013 12:00	87.1	87.2	0.1
05-Jan-2013 18:00	87.1	87.2	0.1
06-Jan-2013 0:00	87.1	87.2	0.1
06-Jan-2013 6:00	87.1	87.2	0.1
06-Jan-2013 12:00	87.1	87.2	0.1
06-Jan-2013 18:00	87.1	87.2	0.1
07-Jan-2013 0:00	87.1	87.2	0.1
07-Jan-2013 6:00	87.1	87.2	0.1
07-Jan-2013 12:00	87.1	87.2	0.1
07-Jan-2013 18:00	87.1	87.2	0.1
08-Jan-2013 0:00	87.1	87.2	0.1
08-Jan-2013 6:00	87.1	87.2	0.1
08-Jan-2013 12:00	87.1	87.3	0.2
08-Jan-2013 18:00	87.1	87.2	0.1
09-Jan-2013 0:00	87.1	87.2	0.1
09-Jan-2013 6:00	87.1	87.2	0.1
09-Jan-2013 12:00	87.1	87.2	0.1
09-Jan-2013 18:00	87.1	87.2	0.1
10-Jan-2013 0:00	87.1	87.2	0.1
10-Jan-2013 6:00	87.1	87.2	0.1
10-Jan-2013 12:00	87.1	87.2	0.1

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Acoustical Analysis Associates, Inc.

AAAI Report 1468 AAAI Project 88018

QUARTERLY NOISE MONITORING AT BOB HOPE AIRPORT FIRST QUARTER 2015

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QUARTERLY NOISE MONITORING AT BOB HOPE AIRPORT FIRST QUARTER 2015

I. INTRODUCTION

In compliance with the California Noise Standards (Reference 1) and the current variance from certain provisions of the Standards (Reference 2), the operator of the Bob Hope Airport is required to perform noise monitoring in the vicinity of the airport for the purpose of establishing a noise impact boundary. The Noise Standards currently specify a community noise equivalent level (CNEL) of 65 dB for the noise impact boundary¹. The airport is required to provide, each quarter, an updated annual noise impact contour based on measurement data over the four preceding quarters.

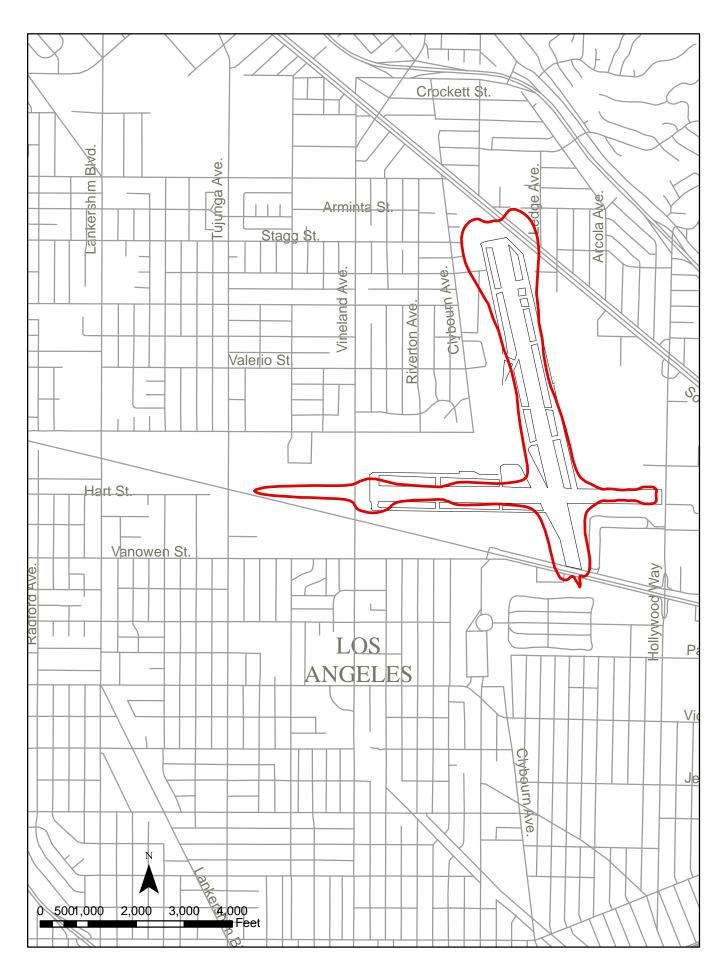
A permanent noise monitoring system became operational in April 1980 and, with brief interruption for system expansion, maintenance, and program changes, has been operational since that time. Of the original nine noise monitor sites, eight have remained unchanged since 1980. The monitor at site 8 was removed in 1997 and replaced by a monitor at site 18. Two sites were added east of the airport in late 1980. Four sites were added south of the airport in January 1986 in response to the requirement to determine the 65 dB contour. Three more locations were added in February 1997. Two of these, identified as 16 and 17, are south of the airport, and one, 18, is to the west. These locations were added to permit monitoring closer to the 65 dB contour. The noise monitoring computer at the airport was replaced in August 1995.

The Bob Hope Airport Noise Monitoring System was modernized and augmented in late December 2012 by replacing the noise and flight track matching software, the noise monitoring hardware, and by adding sites 19, 20, 21, and 22 to allow closer monitoring to the current 65 dB CNEL contour. The old site 17 was removed as redundant with site 15, so the updated noise monitoring system contains 20 permanent microphone locations.

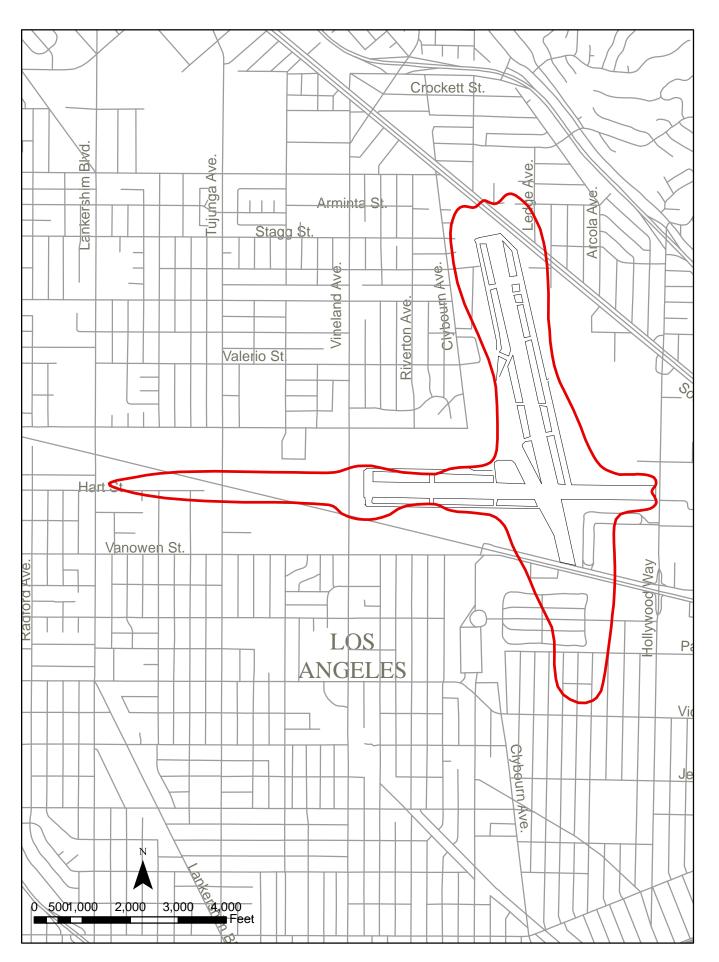
This report describes the data acquired by the monitoring system during the first quarter of 2015. Noise impact boundaries for 65 dB and 70 dB are shown based on these measurements and measurements obtained during the second, third, and fourth quarter 2014 reported in

-1-

¹ Prior to January 1, 1986, a CNEL of 70 dB defined the noise impact boundary.



BOB HOPE AIRPORT 70 dB CNEL CONTOUR 1st Quarter 2015



BOB HOPE AIRPORT 65 dB CNEL CONTOUR 1st Quarter 2015

References 3, 4 and 5. Figure 1 shows the 70 dB contour and Figure 2 shows the 65 dB contour, based on the measured noise data.

II. NOISE MEASUREMENTS

A. Sites

Aircraft noise levels were monitored at 15 locations prior to February, 1997. Two sites were added in February 1997, and equipment at one site west of the airport was moved to a new location. In July 2003, the monitor station at site 9 was moved 105 feet further west to accommodate new construction at the Fire Station. In December 2012, four new monitor sites were added and one existing site removed as redundant, leaving a total of twenty noise monitoring locations. The noise monitor sites are shown in Figure 3.

B. Noise Measurement Equipment

Each of the microphone locations uses an identical set of equipment connected to a central control unit. The noise level at each site is stored locally and transmitted by broad band connection to the central site once per 24-hour period. The automated noise and flight track monitoring software processes the data to produce (among other measures) the CNEL at each site. Appendix A provides a brief description of the system.

C. Noise Data

During this quarter, there were occasional power interruptions and monitor equipment failures, causing some loss of data. Tables 1, 2, and 3 show the aircraft CNEL measured at each monitoring site for each day of the quarter. The dashed lines indicate days for which a monitor was operating for less than 94% of the time. The data for these days was excluded from the averages.

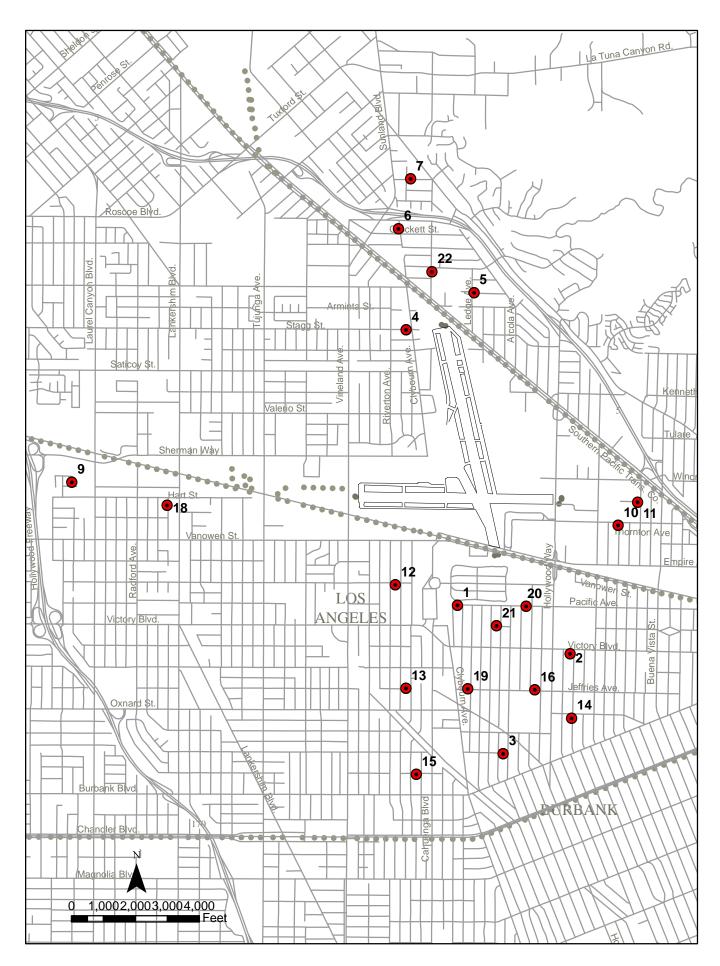


FIGURE 3 - BOB HOPE AIRPORT NOISE MONITOR LOCATIONS

D. Operational Data

Departure and arrival schedules are provided by the airlines. In addition, operations of air carrier, general aviation and rotary-wing aircraft are determined from the airport's computerized flight tracking system.

III. MEASURED NOISE DATA

Daily CNEL values for the noise monitoring system are listed in Tables 1, 2, and 3. Table 4 lists the average values for each quarter together with the annual average.

IV. SCHEDULED AIRLINE AND AIR TAXI OPERATIONS

The scheduled air carrier and commuter operations for the quarter are shown in Table 5.

V. CNEL CONTOUR DEVELOPMENT

The contours shown in Figures 1 and 2 are based upon computer-generated "master" contours which are adjusted to reflect the monitoring data. Beginning with the second quarter 2009, noise contours are developed using the master contours produced by Version 7.0 of the Integrated Noise Model (INM), a sophisticated aircraft noise modeling program developed for the Federal Aviation Administration. Inputs to the program consist of aircraft types and performance data, flight paths, numbers of operations, and day/evening/night distribution of flights. The program calculates CNEL values at equally spaced grid points and produces CNEL contour lines at 1 dB intervals. The annual average CNEL values at each site were marked at the appropriate locations on the contour map and the locations of the 65 and 70 dB CNEL contours were determined in the vicinity of each measuring point. These points were then joined following the general shape of the computed contours.

The master contours, used in developing the contours for this quarter are based on operations for the 12-month period from January 1, 2014 through December 31, 2014. These replaced the previous master set of CNEL Contours which were based on operations for the 12-month period from July 2008 through June 2009.

TABLE 1. CNEL VALUES FOR JANUARY 2015

RMS NUMBER

01/01/15 60.1 58.4 59.7 58.0 58.3 51.4 51.1 53.2 56.8 53.6 56.5 56.4 58.5 60.8 59.1 61.2 65.0 65.5 53.8 01/02/15 61.2 59.5 60.5 57.5 58.7 55.6 56.1 54.2 54.0 55.1 57.9 56.3 59.4 60.9 61.8 62.1 64.6 66.2 60.5 01/03/15 59.1 57.4 57.6 52.2 55.8 52.0 51.9 53.3 52.6 53.7 56.8 54.2 57.8 58.7 60.7 59.7 62.4 63.8 54.3 01/04/15 60.7 59.6 61.2 56.9 58.9 49.6 51.2 53.3 52.6 53.7 56.8 54.2 57.0 59.6 61.8 60.9 62.1 65.0 66.4 56.0 01/05/15 59.4 58.5 59.4 55.3 56.6 50.7 53.2 54.2 54.5 53.9 56.0 55.6 58.1 60.3 60.4 60.9 63.8 65.3 55.6 01/06/15 60.6 58.2 59.0 61.1 60.6 53.0 51.5 55.1 54.8 56.1 56.9 55.8 26.0 2.6 61.0 61.2 63.7 65.1 56.4 01/08/15 60.9 59.8 60.1 56.4 54.4 50.8 53.3 55.1 54.8 56.1 56.9 55.5 58.2 60.2 61.0 61.2 63.7 65.1 56.4 01/08/15 60.3 59.8 60.1 56.4 54.4 50.8 53.3 55.1 54.8 56.1 56.9 59.6 61.8 61.4 62.3 65.4 66.7 57.3 01/10/15 60.4 57.5 58.8 49.8 47.2 43.9 43.5 56.4 54.4 54.7 57.8 56.6 58.8 60.9 61.4 61.9 64.7 65.9 57.6 01/10/15 60.3 58.4 59.3 51.1 53.1 42.4 43.8 56.4 54.7 54.9 57.9 56.7 59.7 61.4 61.6 62.1 64.7 66.7 50.8 01/13/15 61.1 59.3 60.2 55.2 56.6 51.6 55.7 56.4 54.7 54.9 57.9 56.7 59.7 61.4 61.6 62.1 64.7 66.7 50.8 01/13/15 61.1 59.3 60.2 55.2 56.6 51.6 55.7 56.4 54.7 54.9 57.9 56.7 59.7 61.4 61.6 62.1 64.7 66.7 60.6 01/14/15 60.7 58.9 59.4 59.5 60.0 57.1 55.6 56.4 54.7 54.9 57.9 56.7 59.7 61.4 61.6 62.1 64.7 66.7 50.8 01/13/15 61.3 59.4 60.3 55.7 54.5 50.2 51.2 54.2 52.9 53.1 56.2 56.2 57.7 61.3 58.8 60.3 65.7 54.5 50.2 51.2 54.2 52.9 53.1 56.2 56.9 58.1 61.8 60.4 61.1 63.9 65.4 57.9 01/21/15 59.7 58.8 59.5 56.1 56.7 58.9 55.0 61.0 56.3 58.0 61.2 53.1 56.2 53.1 56.2 53.0 56.4 55.7 57.5 59.4 59.8 63.9 65.0 60.5 61.8 60.9 60.2 56.2 55.9 53.3 57.8 56.2 59.7 61.2 63.9 65.2 61.3 60.2 59.7 61.2 63.9 65.0 60.8 61.2 60.5 63.2 65.0 60.2 61.3 60.2 61
01/02/15 61.2 59.5 60.5 57.5 58.7 55.6 56.1 54.2 54.0 55.1 57.9 56.3 59.4 60.9 61.8 62.1 64.6 66.2 60.5 01/03/15 59.1 57.4 57.6 52.2 55.8 52.0 51.9 53.3 52.6 53.7 56.8 54.2 57.8 58.7 60.7 59.7 62.4 63.8 54.3 01/04/15 60.7 59.6 61.2 56.9 58.9 49.6 51.2 52.1 51.4 54.3 56.5 57.0 59.6 61.8 60.9 62.1 65.0 66.4 56.0 01/05/15 59.4 58.5 59.6 54.0 58.8 53.8 53.7 54.2 54.5 53.9 56.0 55.6 58.1 60.3 60.4 60.9 63.8 65.3 55.6 01/06/15 60.5 59.5 59.6 54.0 58.8 53.8 53.7 56.2 58.4 54.8 56.3 55.5 58.2 60.2 61.0 61.2 63.7 65.1 56.4 01/08/15 60.9 59.8 60.1 56.4 54.4 50.8 53.3 56.2 58.5 54.4 58.7 56.9 59.6 61.8 61.4 62.3 65.4 66.7 57.3 01/10/15 60.4 57.5 58.8 49.8 47.2 43.9 43.5 58.3 55.0 59.6 54.2 57.2 56.9 59.6 61.8 61.4 62.3 65.4 66.7 57.3 01/11/15 61.3 59.6 61.0 53.2 53.0 45.6 45.1 56.4 54.5 59.9 59.6 61.8 61.4 62.3 65.4 66.7 57.3 01/14/15 60.3 58.4 59.3 51.1 53.1 42.4 43.8 53.8 55.0 53.3 57.2 55.0 57.9 59.7 58.0 59.8 63.2 64.6 54.8 01/14/15 60.3 58.4 59.3 51.1 53.1 42.4 43.8 53.8 55.0 59.8 59.4 59.5 60.2 55.2 56.6 51.6 55.7 56.4 54.5 59.9 59.4 60.3 54.0 55.7 57.6 54.4 58.8 52.8 52.1 54.9 57.4 56.9 58.9 61.4 61.6 62.1 64.7 66.7 60.8 01/14/15 60.3 58.4 60.3 55.7 57.6 54.4 58.8 52.8 52.1 54.9 57.4 56.9 58.9 61.2 61.3 60.9 01/14/15 61.3 59.4 60.8 59.0 56.3 52.0 50.8 53.6 54.0 55.5 58.1 60.2 59.8 60.2 61.0 61.8 62.1 64.6 66.2 60.5 62.2 67.5 58.8 60.9 01/19/15 61.3 59.4 60.8 59.0 55.5 54.9 53.6 55.0 59.8 59.1 53.7 50.4 60.2 55.5 54.3 52.5 50.4 60.2 55.5 59.3 59.3 57.1 58.8 59.5 56.1 55.5 54.3 55.0 60.2 56.2 59.9 53.3 57.8 56.6 56.9 58.1 60.3 60.4 60.9 61.8 62.1 64.6 66.2 60.5 59.8 60.0 61.2 63.7 62.5 62.0 64.5 62.0 64.5 62.0 64.5 62.0 64.5 62.0 64.0 62.7 62.0 64.5 62.0 64.0 62.0 64.2 65.7 62.0 64.0 64.1 62.0 66.5 62.0 64.0 64.1 65.7 62.0 64.0 64.1 62.0 66.5 62.0 64.0 64.1 65.7 62.0 64.0 64.1 64.0 64.1 64.7 66.7 60.0 64.1 64.0 64.1 64.0 64.1 64.0 64.1 64.0 64.1 64.0 64.1 64.0 64.1 64.0 64.1 64.0 64.1 64.0 64.1 64.0 64.1 64.0 64.1 64.0 64.1 64.0 64.1 64.0 64.1 64.0 64.1 64.0 64.1 64
01/03/15 59.1 57.4 57.6 52.2 55.8 52.0 51.9 53.3 52.6 53.7 56.8 54.2 57.8 58.7 60.7 59.7 62.4 63.8 54.3 01/04/15 60.7 59.6 61.2 56.9 58.9 49.6 51.2 52.1 51.4 54.3 56.5 57.0 59.6 61.8 60.9 62.1 65.0 66.4 56.0 01/05/15 59.4 58.5 59.4 55.3 56.6 50.7 53.2 54.2 54.5 53.9 56.0 55.6 58.1 60.3 60.4 60.9 63.8 65.3 55.6 01/06/15 60.5 59.5 59.6 54.0 58.8 53.8 53.7 56.2 58.4 54.8 56.3 56.3 58.8 61.1 60.6 61.3 64.5 66.0 59.0 01/07/15 60.6 58.2 59.0 61.1 60.6 53.0 51.5 55.1 54.8 56.1 56.9 55.5 58.2 60.2 61.0 61.2 63.7 65.1 56.4 01/08/15 60.9 59.8 60.1 56.4 54.4 50.8 53.3 54.0 54.4 54.7 57.8 56.6 58.8 60.9 61.4 61.9 64.7 65.9 57.6 01/09/15 60.4 57.5 58.8 49.8 47.2 43.9 43.5 58.3 55.0 53.3 57.2 55.0 57.9 59.7 58.0 59.8 63.2 64.6 54.8 01/11/15 61.3 59.6 61.0 53.2 53.0 45.6 45.1 50.9 48.8 53.2 57.2 56.9 60.3 61.9 60.4 62.5 65.0 66.8 51.4 01/12/15 60.3 58.4 59.3 51.1 53.1 42.4 43.8 50.9 48.8 53.2 57.2 56.9 60.3 61.9 60.4 62.5 65.0 66.8 51.4 01/13/15 61.1 59.3 60.2 55.2 56.6 51.6 55.7 56.4 54.7 54.9 57.9 56.7 59.7 61.4 61.6 62.1 64.7 66.7 60.6 01/14/15 60.7 58.9 59.4 59.0 56.6 59.1 53.7 50.4 55.5 56.1 56.8 56.2 59.8 60.3 57.1 58.8 59.5 56.1 56.7 58.9 55.0 60.1 56.3 52.0 56.3 52.0 56.3 52.0 56.3 52.0 56.3 52.0 56.3 52.0 56.3 52.0 56.3 56.3 56.3 58.8 60.9 61.7 61.1 62.1 65.0 66.5 59.8 01/19/15 61.3 59.4 60.8 59.0 56.3 52.0 50.8 55.5 56.1 56.5 54.9 57.0 56.3 58.7 57.1 56.1 56.7 58.9 55.0 61.0 56.3 51.8 52.4 55.6 56.9 58.1 61.8 60.4 61.1 63.9 65.6 61.7 01/22/15 59.7 59.2 58.7 57.1 56.1 56.7 58.9 55.0 61.0 56.3 51.8 52.4 55.6 56.9 58.1 61.8 60.4 61.1 63.9 65.2 61.3 01/23/15 59.3 57.1 58.2 57.3 56.5 53.7 53.1 56.2 53.1 56.2 53.0 56.4 55.9 59.4 59.8 61.2 63.4 65.0 58.7
01/04/15 60.7 59.6 61.2 56.9 58.9 49.6 51.2 01/05/15 59.4 58.5 59.4 55.3 56.6 50.7 53.2 01/06/15 60.5 59.5 59.6 54.0 58.8 53.8 53.7 01/07/15 60.6 58.2 59.0 61.1 60.6 53.0 51.5 01/08/15 60.9 59.8 60.1 56.4 54.4 50.8 53.3 01/09/15 60.5 59.7 60.8 63.5 62.0 49.8 52.5 57.9 56.3 58.5 54.4 54.7 57.8 56.6 58.8 60.9 61.4 61.9 64.7 65.9 57.6 01/09/15 60.4 57.5 58.8 49.8 47.2 43.9 43.5 01/10/15 60.3 58.4 59.3 51.1 53.1 42.4 43.8 01/11/15 61.3 59.6 61.0 53.2 53.0 45.6 45.1 01/14/15 60.7 58.9 59.4 59.5 60.0 57.1 55.6 01/15/15 60.6 59.4 60.3 54.0 55.7 57.6 54.4 58.8 52.8 52.1 54.9 57.9 56.7 58.9 59.4 60.3 65.9 56.3 58.5 54.9 01/11/15 59.9 58.8 60.3 55.7 54.5 50.2 50.4 60.2 56.2 59.9 56.0 56.9 58.1 60.3 60.4 60.9 62.1 65.0 66.4 56.0 59.0 01/21/15 59.7 59.2 58.7 57.1 56.1 54.3 55.6 60.1 54.8 56.2 57.0 59.6 61.8 60.9 59.6 61.8 60.9 62.1 65.0 66.4 56.0 59.0 01/21/15 59.7 59.2 58.7 57.1 56.1 54.3 55.6 60.1 54.8 56.3 56.5 57.0 59.6 61.8 60.9 62.1 65.0 66.4 56.0 59.0 01/21/15 59.7 59.2 58.7 57.1 56.1 54.3 55.6 60.1 54.8 56.3 56.3 58.8 61.1 60.3 60.4 60.9 62.1 65.0 66.4 56.0 59.0 01/21/15 59.7 59.2 58.7 57.1 56.1 54.8 56.3 58.8 56.3 58.8 61.1 60.6 61.3 64.5 66.0 59.0 01/21/15 59.7 59.2 58.7 57.1 56.1 54.3 55.6 60.1 54.8 56.2 57.0 56.0 55.6 58.1 60.3 60.4 60.9 62.1 65.0 66.4 56.0 59.0 01/21/15 59.7 59.2 58.7 57.1 56.1 54.3 55.6 60.1 54.8 56.2 53.1 56.2 59.9 54.4 58.0 59.4 59.8 61.2 63.4 65.0 58.7 01/22/15 59.7 59.2 58.7 57.1 56.1 54.3 55.6 60.1 54.8 56.2 53.1 56.2 53.1 56.2 55.9 54.4 58.0 59.4 59.8 61.2 63.4 65.0 58.7 01/22/15 59.7 59.2 58.7 57.1 56.1 54.3 55.6 60.1 54.8 56.2 53.1 55.6 52.9 55.9 54.4 58.0 59.4 59.8 61.2 63.4 65.0 58.7 01/22/15 59.3 57.1 58.2 57.3 56.5 53.7 53.1 56.2 53.1 55.6 52.9 55.9 54.4 58.0 59.4 59.8 61.2 63.4 65.0 58.7 61.3 63.2 63.2 63.2 63.2 63.2 63.2 63.2 63
01/05/15 59.4 58.5 59.4 55.3 56.6 50.7 53.2 54.2 54.5 53.9 56.0 55.6 58.1 60.3 60.4 60.9 63.8 65.3 55.6 01/06/15 60.5 59.5 59.6 54.0 58.8 53.8 53.7 56.2 58.4 54.8 56.3 56.3 58.8 61.1 60.6 61.3 64.5 66.0 59.0 01/07/15 60.6 58.2 59.0 61.1 60.6 53.0 51.5 55.1 54.8 56.1 56.9 55.5 58.2 60.2 61.0 61.2 63.7 65.1 56.4 01/08/15 60.9 59.8 60.1 56.4 54.4 50.8 53.3 54.0 54.4 54.7 57.8 56.6 58.8 60.9 61.4 61.9 64.7 65.9 57.6 01/09/15 62.5 59.7 60.8 63.5 62.0 49.8 52.5 57.9 56.3 58.5 54.4 58.7 56.9 59.6 61.8 61.4 62.3 65.4 66.7 57.3 01/10/15 60.4 57.5 58.8 49.8 47.2 43.9 43.5 58.3 55.0 53.3 57.2 55.0 57.9 59.7 58.0 59.8 63.2 64.6 54.8 01/11/15 61.3 59.6 61.0 53.2 53.0 45.6 45.1 50.9 48.8 53.2 57.2 56.9 60.3 61.9 60.4 62.5 65.0 66.8 51.4 01/12/15 60.3 58.4 59.3 51.1 53.1 42.4 43.8 50.9 48.8 53.2 57.2 56.9 60.3 61.9 60.4 62.5 65.0 66.8 51.4 01/13/15 61.1 59.3 60.2 55.2 56.6 51.6 55.7 56.4 54.7 54.9 57.9 56.7 59.7 61.4 61.6 62.1 64.7 66.7 60.6 01/14/15 60.7 58.9 59.4 59.5 60.0 57.1 55.6 53.6 54.0 55.5 58.1 56.2 59.1 60.6 60.8 62.0 64.2 65.7 63.5 01/16/15 61.1 60.1 60.7 59.0 60.5 55.5 54.9 55.5 56.1 56.5 56.7 57.3 59.4 61.9 61.0 62.7 65.6 66.8 60.9 01/17/15 58.2 57.4 59.0 56.6 59.1 53.7 50.4 52.4 52.2 51.6 54.5 54.8 57.1 60.5 56.6 61.5 63.4 65.0 54.7 01/18/15 59.9 58.8 60.3 55.7 54.5 50.2 51.2 54.2 52.9 53.1 56.2 56.2 57.7 61.3 58.8 60.4 64.3 65.4 56.9 01/19/15 61.3 58.7 60.1 55.5 54.3 52.5 50.4 60.2 56.2 55.9 53.3 57.8 56.2 59.6 60.8 61.8 62.7 64.3 66.4 57.9 01/21/15 59.7 58.8 59.5 56.1 56.7 58.9 55.0 61.0 56.3 51.8 52.4 55.6 56.9 58.1 61.8 60.4 61.1 63.9 65.6 61.7 01/22/15 59.7 59.2 58.7 57.1 56.1 54.3 55.6 60.1 54.8 56.2 53.0 56.4 55.4 57.7 60.2 59.7 61.2 63.9 65.2 61.3 01/23/15 59.3 57.1 58.2 57.3 56.5 53.7 53.1 56.2 53.1 55.6 52.9 55.9 54.4 58.0 59.4 59.8 61.2 63.4 65.0 58.7
01/06/15 60.5 59.5 59.6 54.0 58.8 53.8 53.7 01/07/15 60.6 58.2 59.0 61.1 60.6 53.0 51.5 01/08/15 60.9 59.8 60.1 56.4 54.4 50.8 53.3 01/09/15 62.5 59.7 60.8 63.5 62.0 49.8 52.5 57.9 56.3 58.5 54.4 58.7 56.9 59.6 61.8 61.4 62.3 65.4 66.7 57.3 01/10/15 60.4 57.5 58.8 49.8 47.2 43.9 43.5 01/11/15 61.3 59.6 61.0 53.2 53.0 45.6 45.1 01/11/15 60.3 58.4 59.3 51.1 53.1 42.4 43.8 01/11/15 60.7 58.9 59.4 60.3 54.0 55.7 57.6 54.4 58.8 52.8 52.1 54.9 57.9 56.7 59.7 61.4 61.6 62.1 64.7 66.7 60.6 01/11/1/15 60.6 59.4 60.3 54.0 55.7 57.6 54.4 58.8 52.8 52.1 54.9 57.3 59.4 61.9 61.0 62.7 65.6 66.8 60.9 01/11/1/15 59.9 58.8 60.3 55.7 54.5 50.2 51.2 01/11/1/15 61.3 59.4 60.8 59.0 56.3 52.0 56.3 52.0 56.0 60.1 54.8 56.2 53.0 56.4 55.4 57.7 60.2 59.7 61.2 63.9 65.2 61.3 01/22/15 59.7 59.2 58.7 57.1 56.1 54.3 55.6 60.1 54.8 56.2 53.0 56.4 55.4 57.7 60.2 59.7 61.2 63.9 65.2 61.3 01/22/15 59.7 59.2 58.7 57.1 56.1 54.3 55.6 60.1 54.8 56.2 53.0 56.4 55.4 57.7 60.2 59.7 61.2 63.9 65.2 61.3 01/22/15 59.7 59.2 58.7 57.1 56.1 54.3 55.6 60.1 54.8 56.2 53.0 56.4 55.4 57.7 60.2 59.7 61.2 63.9 65.2 61.3 01/22/15 59.7 59.2 58.7 57.1 56.1 54.3 55.6 60.1 54.8 56.2 53.0 56.4 55.4 57.7 60.2 59.7 61.2 63.9 65.2 61.3 01/22/15 59.7 59.2 58.7 57.1 56.1 54.3 55.6 60.1 54.8 56.2 53.0 56.4 55.4 57.7 60.2 59.7 61.2 63.9 65.2 61.3 01/22/15 59.7 59.2 58.7 57.1 56.1 54.3 55.6 60.1 54.8 56.2 53.0 56.4 55.4 58.0 59.4 59.8 61.2 63.4 65.0 58.7 61.2 63.9 65.2 61.3 01/22/15 59.7 59.2 58.7 57.1 56.1 54.3 55.6 60.1 54.8 56.2 53.0 56.4 55.4 57.7 60.2 59.7 61.2 63.9 65.2 61.3 01/22/15 59.7 59.2 58.7 57.1 56.1 54.3 55.6 60.1 54.8 56.2 53.0 56.4 55.4 57.7 60.2 59.7 61.2 63.9 65.2 61.3 01/22/15 59.3 57.1 58.2 57.3 56.5 53.7 53.1 56.2 53.1 56.2 53.0 56.4 55.4 58.0 59.4 59.8 61.2 63.4 65.0 58.7 60.1 58.7 60.1 56.2 56.2 57.7 60.2 59.7 61.2 63.9 65.2 61.3 61.2 63.4 65.0 58.7 60.1 56.2 56.2 57.7 60.2 59.7 61.2 63.9 65.2 61.3 61.2 63.4 65.0 59.0 60.2 61.3 61.2 63.4 65.0 59.0 60.2 61.3 61.2 63.4 65.0 59.0 60.2 61.3 61.2 63.4 65.0 59.0 60.2 61.2 63.2 63
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01/08/15 60.9 59.8 60.1 56.4 54.4 50.8 53.3 54.0 54.4 54.7 57.8 56.6 58.8 60.9 61.4 61.9 64.7 65.9 57.6 01/09/15 62.5 59.7 60.8 63.5 62.0 49.8 52.5 57.9 56.3 58.5 54.4 58.7 56.9 59.6 61.8 61.4 62.3 65.4 66.7 57.3 01/10/15 60.4 57.5 58.8 49.8 47.2 43.9 43.5 58.3 55.0 53.3 57.2 55.0 57.9 59.7 58.0 59.8 63.2 64.6 54.8 01/11/15 61.3 59.6 61.0 53.2 53.0 45.6 45.1 50.9 48.8 53.2 57.2 56.9 60.3 61.9 60.4 62.5 65.0 66.8 51.4 01/12/15 60.3 58.4 59.3 51.1 53.1 42.4 43.8 53.3 52.5 52.2 57.0 56.0 58.7 60.5 60.5 61.6 64.1 65.7 50.8 01/13/15 61.1 59.3 60.2 55.2 56.6 51.6 55.7 56.4 54.7 54.9 57.9 56.7 59.7 61.4 61.6 62.1 64.7 66.7 60.6 01/14/15 60.7 58.9 59.4 59.5 60.0 57.1 55.6 53.6 54.0 55.5 58.1 56.2 59.1 60.6 60.8 62.0 64.2 65.7 63.5 01/16/15 61.1 60.1 60.7 59.0 60.5 55.5 54.9 55.5 56.1 55.8 56.7 57.3 59.4 61.9 61.0 62.7 65.6 66.8 60.9 01/17/15 58.2 57.4 59.0 56.6 59.1 53.7 50.4 55.2 52.9 53.1 56.2 59.5 56.2 57.7 61.3 58.8 60.4 64.3 65.4 56.9 01/19/15 61.3 59.4 60.8 59.0 56.3 52.0 50.8 53.3 55.2 53.9 58.0 56.8 60.0 61.6 60.5 63.2 65.2 67.5 58.5 01/20/15 61.3 58.7 60.1 55.5 54.3 52.5 50.4 60.2 56.2 55.9 53.3 57.8 56.2 59.6 60.8 61.8 62.7 64.3 66.4 57.9 01/22/15 59.7 58.8 59.5 56.1 56.2 53.7 53.1 56.2 53.1 55.6 52.9 55.9 54.4 58.0 59.4 59.8 61.2 63.4 65.0 58.7 01/23/15 59.3 57.1 58.2 57.3 56.5 53.7 53.1 56.2 53.1 55.6 52.9 55.9 54.4 58.0 59.4 59.8 61.2 63.4 65.0 58.7 01/23/15 59.3 57.1 58.2 57.3 56.5 53.7 53.1 56.2 53.1 55.6 52.9 55.9 54.4 58.0 59.4 59.8 61.2 63.4 65.0 58.7 01/23/15 59.3 57.1 58.2 57.3 56.5 53.7 53.1 56.2 53.1 55.6 52.9 55.9 54.4 58.0 59.4 59.8 61.2 63.4 65.0 58.7 01/23/15 59.3 57.1 58.2 57.3 56.5 53.7 53.1 56.2 53.1 55.6 52.9 55.9 54.4 58.0 59.4 59.8 61.2 63.4 65.0 58.7 01/23/15 59.3 57.1 58.2 57.3 56.5 53.7 53.1 56.2 53.1 55.6 52.9 55.9 54.4 58.0 59.4 59.8 61.2 63.4 65.0 58.7 01/23/15 59.3 57.1 58.2 57.3 56.5 53.7 53.1 56.2 53.1 55.6 52.9 55.9 54.4 58.0 59.4 59.8 61.2 63.4 65.0 58.7 01/23/15 59.3 57.1 58.2 57.3 56.5 53.7 53.1 56.2 53.1 55.6 52.9 55.9 54.4 58.0 59.4 59.8
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01/10/15 60.4 57.5 58.8 49.8 47.2 43.9 43.5 58.3 55.0 53.3 57.2 55.0 57.9 59.7 58.0 59.8 63.2 64.6 54.8 01/11/15 61.3 59.6 61.0 53.2 53.0 45.6 45.1 50.9 48.8 53.2 57.2 56.9 60.3 61.9 60.4 62.5 65.0 66.8 51.4 01/12/15 60.3 58.4 59.3 51.1 53.1 42.4 43.8 53.3 52.5 52.2 57.0 56.0 58.7 60.5 60.5 61.6 64.1 65.7 50.8 01/13/15 61.1 59.3 60.2 55.2 56.6 51.6 55.7 56.4 54.7 54.9 57.9 56.7 59.7 61.4 61.6 62.1 64.7 66.7 60.6 01/14/15 60.7 58.9 59.4 59.5 60.0 57.1 55.6 53.6 54.0 55.5 58.1 56.2 59.1 60.6 60.8 62.0 64.2 65.7 63.5 01/15/15 60.6 59.4 60.3 54.0 55.7 57.6 54.4 58.8 52.8 52.1 54.9 57.4 56.9 58.9 61.7 61.1 62.1 65.0 66.5 59.8 01/16/15 61.1 60.1 60.7 59.0 60.5 55.5 54.9 55.5 56.1 55.8 56.7 57.3 59.4 61.9 61.0 62.7 65.6 66.8 60.9 01/17/15 58.2 57.4 59.0 56.6 59.1 53.7 50.4 52.4 52.2 51.6 54.5 54.8 57.1 60.5 56.6 61.5 63.4 65.0 54.7 01/18/15 59.9 58.8 60.3 55.7 54.5 50.2 51.2 54.2 52.9 53.1 56.2 59.6 60.8 60.0 61.6 60.5 63.2 65.2 67.5 58.5 01/20/15 61.3 58.7 60.1 55.5 54.3 52.5 50.4 60.2 56.2 55.9 53.3 57.8 56.2 59.6 60.8 61.8 62.7 64.3 66.4 57.9 01/21/15 59.7 58.8 59.5 56.1 56.3 58.9 55.0 61.0 56.3 51.8 52.4 55.6 56.9 58.1 61.8 60.4 61.1 63.9 65.6 61.7 01/22/15 59.7 59.2 58.7 57.1 56.1 54.3 55.6 60.1 54.8 56.2 53.0 56.4 55.4 57.7 60.2 59.7 61.2 63.9 65.2 61.3 01/23/15 59.3 57.1 58.2 57.3 56.5 53.7 53.1 56.2 53.1 55.6 52.9 55.9 54.4 58.0 59.4 59.8 61.2 63.4 65.0 58.7
01/11/15 61.3 59.6 61.0 53.2 53.0 45.6 45.1 50.9 48.8 53.2 57.2 56.9 60.3 61.9 60.4 62.5 65.0 66.8 51.4 01/12/15 60.3 58.4 59.3 51.1 53.1 42.4 43.8 53.3 52.5 52.2 57.0 56.0 58.7 60.5 60.5 61.6 64.1 65.7 50.8 01/13/15 61.1 59.3 60.2 55.2 56.6 51.6 55.7 56.4 54.7 54.9 57.9 56.7 59.7 61.4 61.6 62.1 64.7 66.7 60.6 01/14/15 60.7 58.9 59.4 60.3 54.0 55.7 57.6 54.4 58.8 52.8 52.1 54.9 57.4 56.9 58.9 61.7 61.1 62.1 65.0 66.5 59.8 01/16/15 61.1 60.1 60.7 59.0 60.5 55.5 54.9 55.5 56.1 55.8 56.7 57.3 59.4 61.9 61.0 62.7 65.6 66.8 60.9 01/17/15 58.2 57.4 59.0 56.6 59.1 53.7 50.4 52.4 52.2 51.6 54.5 54.8 57.1 60.5 56.6 61.5 63.4 65.0 54.7 01/18/15 59.9 58.8 60.3 55.7 54.5 50.2 51.2 54.2 52.9 53.1 56.2 59.6 60.8 60.0 61.6 60.5 63.2 65.2 67.5 58.5 01/20/15 61.3 58.7 60.1 55.5 54.3 52.5 50.4 60.2 56.2 55.9 53.3 57.8 56.2 59.6 60.8 61.8 62.7 64.3 66.4 57.9 01/21/15 59.7 58.8 59.5 56.1 56.7 58.9 55.0 61.0 56.3 51.8 52.4 55.6 56.9 58.1 61.8 60.4 61.1 63.9 65.6 61.7 01/22/15 59.7 59.2 58.7 57.1 56.1 54.3 55.6 60.1 54.8 56.2 53.0 56.4 55.4 57.7 60.2 59.7 61.2 63.9 65.2 61.3 01/23/15 59.3 57.1 58.2 57.3 56.5 53.7 53.1 56.2 53.1 55.6 52.9 55.9 54.4 58.0 59.4 59.8 61.2 63.4 65.0 58.7
01/12/15 60.3 58.4 59.3 51.1 53.1 42.4 43.8 53.3 52.5 52.2 57.0 56.0 58.7 60.5 60.5 61.6 64.1 65.7 50.8 01/13/15 61.1 59.3 60.2 55.2 56.6 51.6 55.7 56.4 54.7 54.9 57.9 56.7 59.7 61.4 61.6 62.1 64.7 66.7 60.6 01/14/15 60.7 58.9 59.4 59.5 60.0 57.1 55.6 53.6 54.0 55.5 58.1 56.2 59.1 60.6 60.8 62.0 64.2 65.7 63.5 01/15/15 60.6 59.4 60.3 54.0 55.7 57.6 54.4 58.8 52.8 52.1 54.9 57.4 56.9 58.9 61.7 61.1 62.1 65.0 66.5 59.8 01/16/15 61.1 60.1 60.7 59.0 60.5 55.5 54.9 55.5 56.1 55.8 56.7 57.3 59.4 61.9 61.0 62.7 65.6 66.8 60.9 01/17/15 58.2 57.4 59.0 56.6 59.1 53.7 50.4 52.4 52.2 51.6 54.5 54.8 57.1 60.5 56.6 61.5 63.4 65.0 54.7 01/18/15 59.9 58.8 60.3 55.7 54.5 50.2 51.2 54.2 52.9 53.1 56.2 56.2 57.7 61.3 58.8 60.4 64.3 65.4 56.9 01/20/15 61.3 59.4 60.8 59.0 56.3 52.0 50.8 53.3 55.2 53.9 58.0 56.8 60.0 61.6 60.5 63.2 65.2 67.5 58.5 01/20/15 59.7 58.8 59.5 56.1 56.7 58.9 55.0 61.0 56.3 51.8 52.4 55.6 56.9 58.1 61.8 60.4 61.1 63.9 65.6 61.7 01/22/15 59.7 59.2 58.7 57.1 56.1 54.3 55.6 60.1 54.8 56.2 53.0 56.4 55.4 57.7 60.2 59.7 61.2 63.9 65.2 61.3 01/23/15 59.3 57.1 58.2 57.3 56.5 53.7 53.1 56.2 53.1 55.6 52.9 55.9 54.4 58.0 59.4 59.8 61.2 63.4 65.0 58.7
01/13/15 61.1 59.3 60.2 55.2 56.6 51.6 55.7 56.4 54.7 54.9 57.9 56.7 59.7 61.4 61.6 62.1 64.7 66.7 60.6 01/14/15 60.7 58.9 59.4 59.5 60.0 57.1 55.6 53.6 54.0 55.5 58.1 56.2 59.1 60.6 60.8 62.0 64.2 65.7 63.5 01/15/15 60.6 59.4 60.3 54.0 55.7 57.6 54.4 58.8 52.8 52.1 54.9 57.4 56.9 58.9 61.7 61.1 62.1 65.0 66.5 59.8 01/16/15 61.1 60.1 60.7 59.0 60.5 55.5 54.9 55.5 56.1 55.8 56.7 57.3 59.4 61.9 61.0 62.7 65.6 66.8 60.9 01/17/15 58.2 57.4 59.0 56.6 59.1 53.7 50.4 52.4 52.2 51.6 54.5 54.8 57.1 60.5 56.6 61.5 63.4 65.0 54.7 01/18/15 59.9 58.8 60.3 55.7 54.5 50.2 51.2 54.2 52.9 53.1 56.2 56.2 57.7 61.3 58.8 60.4 64.3 65.4 56.9 01/19/15 61.3 59.4 60.8 59.0 56.3 52.0 50.8 53.3 55.2 53.9 58.0 56.8 60.0 61.6 60.5 63.2 65.2 67.5 58.5 01/20/15 61.3 58.7 60.1 55.5 54.3 52.5 50.4 60.2 56.2 55.9 53.3 57.8 56.2 59.6 60.8 61.8 62.7 64.3 66.4 57.9 01/21/15 59.7 58.8 59.5 56.1 56.7 58.9 55.0 61.0 56.3 51.8 52.4 55.6 56.9 58.1 61.8 60.4 61.1 63.9 65.6 61.7 01/22/15 59.7 59.2 58.7 57.1 56.1 54.3 55.6 60.1 54.8 56.2 53.0 56.4 55.4 57.7 60.2 59.7 61.2 63.9 65.2 61.3 01/23/15 59.3 57.1 58.2 57.3 56.5 53.7 53.1 56.2 53.1 55.6 52.9 55.9 54.4 58.0 59.4 59.8 61.2 63.4 65.0 58.7
01/14/15 60.7 58.9 59.4 59.5 60.0 57.1 55.6 53.6 54.0 55.5 58.1 56.2 59.1 60.6 60.8 62.0 64.2 65.7 63.5 01/15/15 60.6 59.4 60.3 54.0 55.7 57.6 54.4 58.8 52.8 52.1 54.9 57.4 56.9 58.9 61.7 61.1 62.1 65.0 66.5 59.8 01/16/15 61.1 60.1 60.7 59.0 60.5 55.5 54.9 55.5 56.1 55.8 56.7 57.3 59.4 61.9 61.0 62.7 65.6 66.8 60.9 01/17/15 58.2 57.4 59.0 56.6 59.1 53.7 50.4 52.4 52.2 51.6 54.5 54.8 57.1 60.5 56.6 61.5 63.4 65.0 54.7 01/18/15 59.9 58.8 60.3 55.7 54.5 50.2 51.2 54.2 52.9 53.1 56.2 56.2 57.7 61.3 58.8 60.4 64.3 65.4 56.9 01/19/15 61.3 59.4 60.8 59.0 56.3 52.0 50.8 53.3 55.2 53.9 58.0 56.8 60.0 61.6 60.5 63.2 65.2 67.5 58.5 01/20/15 61.3 58.7 60.1 55.5 54.3 52.5 50.4 60.2 56.2 55.9 53.3 57.8 56.2 59.6 60.8 61.8 62.7 64.3 66.4 57.9 01/21/15 59.7 58.8 59.5 56.1 56.7 58.9 55.0 61.0 56.3 51.8 52.4 55.6 56.9 58.1 61.8 60.4 61.1 63.9 65.6 61.7 01/22/15 59.7 59.2 58.7 57.1 56.1 54.3 55.6 60.1 54.8 56.2 53.0 56.4 55.4 57.7 60.2 59.7 61.2 63.9 65.2 61.3 01/23/15 59.3 57.1 58.2 57.3 56.5 53.7 53.1 56.2 53.1 55.6 52.9 55.9 54.4 58.0 59.4 59.8 61.2 63.4 65.0 58.7
01/15/15 60.6 59.4 60.3 54.0 55.7 57.6 54.4 58.8 52.8 52.1 54.9 57.4 56.9 58.9 61.7 61.1 62.1 65.0 66.5 59.8 01/16/15 61.1 60.1 60.7 59.0 60.5 55.5 54.9 55.5 56.1 55.8 56.7 57.3 59.4 61.9 61.0 62.7 65.6 66.8 60.9 01/17/15 58.2 57.4 59.0 56.6 59.1 53.7 50.4 52.4 52.2 51.6 54.5 54.8 57.1 60.5 56.6 61.5 63.4 65.0 54.7 01/18/15 59.9 58.8 60.3 55.7 54.5 50.2 51.2 54.2 52.9 53.1 56.2 56.2 57.7 61.3 58.8 60.4 64.3 65.4 56.9 01/19/15 61.3 59.4 60.8 59.0 56.3 52.0 50.8 53.3 55.2 53.9 58.0 56.8 60.0 61.6 60.5 63.2 65.2 67.5 58.5 01/20/15 61.3 58.7 60.1 55.5 54.3 52.5 50.4 60.2 56.2 55.9 53.3 57.8 56.2 59.6 60.8 61.8 62.7 64.3 66.4 57.9 01/21/15 59.7 58.8 59.5 56.1 56.7 58.9 55.0 61.0 56.3 51.8 52.4 55.6 56.9 58.1 61.8 60.4 61.1 63.9 65.6 61.7 01/22/15 59.7 59.2 58.7 57.1 56.1 54.3 55.6 60.1 54.8 56.2 53.0 56.4 55.4 57.7 60.2 59.7 61.2 63.9 65.2 61.3 01/23/15 59.3 57.1 58.2 57.3 56.5 53.7 53.1 56.2 53.1 55.6 52.9 55.9 54.4 58.0 59.4 59.8 61.2 63.4 65.0 58.7
01/16/15 61.1 60.1 60.7 59.0 60.5 55.5 54.9 55.5 56.1 55.8 56.7 57.3 59.4 61.9 61.0 62.7 65.6 66.8 60.9 01/17/15 58.2 57.4 59.0 56.6 59.1 53.7 50.4 52.4 52.2 51.6 54.5 54.8 57.1 60.5 56.6 61.5 63.4 65.0 54.7 01/18/15 59.9 58.8 60.3 55.7 54.5 50.2 51.2 54.2 52.9 53.1 56.2 56.2 57.7 61.3 58.8 60.4 64.3 65.4 56.9 01/19/15 61.3 59.4 60.8 59.0 56.3 52.0 50.8 53.3 55.2 53.9 58.0 56.8 60.0 61.6 60.5 63.2 65.2 67.5 58.5 01/20/15 61.3 58.7 60.1 55.5 54.3 52.5 50.4 60.2 56.2 55.9 53.3 57.8 56.2 59.6 60.8 61.8 62.7 64.3 66.4 57.9 01/21/15 59.7 58.8 59.5 56.1 56.7 58.9 55.0 61.0 56.3 51.8 52.4 55.6 56.9 58.1 61.8 60.4 61.1 63.9 65.6 61.7 01/22/15 59.7 59.2 58.7 57.1 56.1 54.3 55.6 60.1 54.8 56.2 53.0 56.4 55.4 57.7 60.2 59.7 61.2 63.9 65.2 61.3 01/23/15 59.3 57.1 58.2 57.3 56.5 53.7 53.1 56.2 53.1 55.6 52.9 55.9 54.4 58.0 59.4 59.8 61.2 63.4 65.0 58.7
01/17/15 58.2 57.4 59.0 56.6 59.1 53.7 50.4 52.4 52.2 51.6 54.5 54.8 57.1 60.5 56.6 61.5 63.4 65.0 54.7 01/18/15 59.9 58.8 60.3 55.7 54.5 50.2 51.2 54.2 52.9 53.1 56.2 56.2 57.7 61.3 58.8 60.4 64.3 65.4 56.9 01/19/15 61.3 59.4 60.8 59.0 56.3 52.0 50.8 53.3 55.2 53.9 58.0 56.8 60.0 61.6 60.5 63.2 65.2 67.5 58.5 01/20/15 61.3 58.7 60.1 55.5 54.3 52.5 50.4 60.2 56.2 55.9 53.3 57.8 56.2 59.6 60.8 61.8 62.7 64.3 66.4 57.9 01/21/15 59.7 58.8 59.5 56.1 56.7 58.9 55.0 61.0 56.3 51.8 52.4 55.6 56.9 58.1 61.8 60.4 61.1 63.9 65.6 61.7 01/22/15 59.7 59.2 58.7 57.1 56.1 54.3 55.6 60.1 54.8 56.2 53.0 56.4 55.4 57.7 60.2 59.7 61.2 63.9 65.2 61.3 01/23/15 59.3 57.1 58.2 57.3 56.5 53.7 53.1 56.2 53.1 55.6 52.9 55.9 54.4 58.0 59.4 59.8 61.2 63.4 65.0 58.7
01/18/15 59.9 58.8 60.3 55.7 54.5 50.2 51.2 54.2 52.9 53.1 56.2 56.2 57.7 61.3 58.8 60.4 64.3 65.4 56.9 01/19/15 61.3 59.4 60.8 59.0 56.3 52.0 50.8 53.3 55.2 53.9 58.0 56.8 60.0 61.6 60.5 63.2 65.2 67.5 58.5 01/20/15 61.3 58.7 60.1 55.5 54.3 52.5 50.4 60.2 56.2 55.9 53.3 57.8 56.2 59.6 60.8 61.8 62.7 64.3 66.4 57.9 01/21/15 59.7 58.8 59.5 56.1 56.7 58.9 55.0 61.0 56.3 51.8 52.4 55.6 56.9 58.1 61.8 60.4 61.1 63.9 65.6 61.7 01/22/15 59.7 59.2 58.7 57.1 56.1 54.3 55.6 60.1 54.8 56.2 53.0 56.4 55.4 57.7 60.2 59.7 61.2 63.9 65.2 61.3 01/23/15 59.3 57.1 58.2 57.3 56.5 53.7 53.1 56.2 53.1 55.6 52.9 55.9 54.4 58.0 59.4 59.8 61.2 63.4 65.0 58.7
01/19/15 61.3 59.4 60.8 59.0 56.3 52.0 50.8 53.3 55.2 53.9 58.0 56.8 60.0 61.6 60.5 63.2 65.2 67.5 58.5 01/20/15 61.3 58.7 60.1 55.5 54.3 52.5 50.4 60.2 56.2 55.9 53.3 57.8 56.2 59.6 60.8 61.8 62.7 64.3 66.4 57.9 01/21/15 59.7 58.8 59.5 56.1 56.7 58.9 55.0 61.0 56.3 51.8 52.4 55.6 56.9 58.1 61.8 60.4 61.1 63.9 65.6 61.7 01/22/15 59.7 59.2 58.7 57.1 56.1 54.3 55.6 60.1 54.8 56.2 53.0 56.4 55.4 57.7 60.2 59.7 61.2 63.9 65.2 61.3 01/23/15 59.3 57.1 58.2 57.3 56.5 53.7 53.1 56.2 53.1 55.6 52.9 55.9 54.4 58.0 59.4 59.8 61.2 63.4 65.0 58.7
01/20/15 61.3 58.7 60.1 55.5 54.3 52.5 50.4 60.2 56.2 55.9 53.3 57.8 56.2 59.6 60.8 61.8 62.7 64.3 66.4 57.9 01/21/15 59.7 58.8 59.5 56.1 56.7 58.9 55.0 61.0 56.3 51.8 52.4 55.6 56.9 58.1 61.8 60.4 61.1 63.9 65.6 61.7 01/22/15 59.7 59.2 58.7 57.1 56.1 54.3 55.6 60.1 54.8 56.2 53.0 56.4 55.4 57.7 60.2 59.7 61.2 63.9 65.2 61.3 01/23/15 59.3 57.1 58.2 57.3 56.5 53.7 53.1 56.2 53.1 55.6 52.9 55.9 54.4 58.0 59.4 59.8 61.2 63.4 65.0 58.7
01/21/15 59.7 58.8 59.5 56.1 56.7 58.9 55.0 61.0 56.3 51.8 52.4 55.6 56.9 58.1 61.8 60.4 61.1 63.9 65.6 61.7 01/22/15 59.7 59.2 58.7 57.1 56.1 54.3 55.6 60.1 54.8 56.2 53.0 56.4 55.4 57.7 60.2 59.7 61.2 63.9 65.2 61.3 01/23/15 59.3 57.1 58.2 57.3 56.5 53.7 53.1 56.2 53.1 55.6 52.9 55.9 54.4 58.0 59.4 59.8 61.2 63.4 65.0 58.7
01/22/15 59.7 59.2 58.7 57.1 56.1 54.3 55.6 60.1 54.8 56.2 53.0 56.4 55.4 57.7 60.2 59.7 61.2 63.9 65.2 61.3 01/23/15 59.3 57.1 58.2 57.3 56.5 53.7 53.1 56.2 53.1 55.6 52.9 55.9 54.4 58.0 59.4 59.8 61.2 63.4 65.0 58.7
01/23/15 59.3 57.1 58.2 57.3 56.5 53.7 53.1 56.2 53.1 55.6 52.9 55.9 54.4 58.0 59.4 59.8 61.2 63.4 65.0 58.7
01/24/15 55 0 52 8 55 3 58 0 58 4 50 6 55 0 52 5 53 6 51 0 51 1 52 7 51 7 58 4 54 0 55 3 60 5 60 6 60 5
01/24/10 00.9 02.0 00.0 00.9 00.4 09.0 00.9 02.0 00.0 01.1 02.7 01.7 00.4 04.9 00.0 00.0 00.0
01/25/15 58.9 57.6 58.8 62.6 65.0 48.1 50.0 52.4 53.5 52.1 55.6 54.7 57.8 59.7 58.7 59.7 63.1 64.5 56.0
01/26/15 60.9 57.8 58.4 54.7 54.5 54.2 54.0 51.8 51.7 53.5 57.4 55.0 58.1 59.7 60.2 61.3 63.3 64.9 61.1
01/27/15 61.5 59.5 60.3 49.7 54.6 53.5 53.7 53.7 53.2 54.1 58.7 56.8 60.0 61.5 60.8 62.7 65.2 66.6 61.0
01/28/15 62.0 60.5 61.0 54.0 54.4 56.0 58.5 53.8 55.5 55.7 58.4 57.4 59.8 62.0 61.2 62.9 65.5 67.0 64.2
01/29/15 61.1 59.1 60.0 57.4 56.7 54.9 54.5 53.2 54.4 53.7 57.7 56.5 59.7 61.3 61.6 62.7 64.8 66.5 61.5
01/30/15 61.5 59.8 60.3 55.2 53.5 52.5 54.2 54.9 56.0 55.5 57.3 57.2 59.0 61.6 62.8 62.1 64.9 66.5 59.8
01/31/15 58.0 56.8 58.8 54.2 54.1 54.3 52.8 54.3 48.7 51.0 55.0 54.4 57.0 59.5 58.5 59.6 61.3 63.9 58.3
AVEDAGE CO. F. FO. D. FO. 7. F.7. A. F.7. D. F.A. D. F.A. F.A. C. F.A. D. F.7. D. F.O. A. F.O. 7. C. C. C. C. C. A. C. C. A. C.
AVERAGE 60.5 58.8 59.7 57.4 57.9 54.0 53.5 59.3 54.4 54.6 54.0 57.0 56.1 58.7 60.9 60.5 61.6 64.3 65.8 59.3 NO. DAYS 31 31 31 31 31 31 31 31 31 31 31 31 31

TABLE 2. CNEL VALUES FOR FEBRUARY 2015

RMS NUMBER

Date/Time:	1	2	3	4	5	6	7	9	10	11	12	13	14	15	16	18	19	20	21	22
02/01/15	59.2	57.8	58.9	55.4	56.7	50.0	49.5		50.6	51.1	52.0	55.9	55.1	58.5	60.0	59.2	60.9	63.2	65.1	54.9
02/02/15	61.0	58.7	59.9	54.5	55.7	52.2	49.7		54.2	56.2	54.5	57.1	56.6	58.4	61.2	60.1	61.5	64.5	65.8	55.5
02/03/15	61.8	60.5	60.3	58.5	58.2	56.0	56.5	60.8	56.5	57.6	56.5	58.0	57.0	59.6	61.6	61.5	62.5	65.2	66.7	59.1
02/04/15	60.7	58.6	59.1	53.4	51.6	47.8	48.0	61.2	51.7	53.5	53.7	57.7	55.8	59.2	60.4	60.7	62.0	64.1	65.6	54.4
02/05/15	62.8	59.3	59.7	57.9	55.1	53.4	53.7	63.6	53.2	57.8	55.2	59.0	56.0	59.1	61.0	62.9	62.3	64.7	66.1	60.1
02/06/15	60.7	58.2	58.1	60.9	56.7	54.1	53.7	63.4	55.5	58.6	53.9	56.6	54.8	57.8	59.5	62.5	60.8	63.5	65.0	59.0
02/07/15	59.1	55.8	56.6	49.1	52.7	51.6	48.6	59.3	50.7	54.0	51.1	55.2	52.9	56.5	57.4	58.7	59.3	61.3	63.1	55.9
02/08/15			-	_									-							-
02/09/15								_			-						-	-		
02/10/15							-		_				_		_			_		
02/11/15	60.2	59.1	59.9	58.5	55.9	49.5	50.9	61.2	56.3	56.5	53.8	55.8	56.5	58.3	61.0	60.4	61.4	64.6	65.9	55.8
02/12/15	59.8	58.7	59.6	58.6	56.4	51.8	54.7	61.5	53.2	55.4	53.7	57.2	55.7	58.8	60.8	60.5	61.8	64.5	66.2	59.2
02/13/15	60.0	59.4	59.6	56.2	57.9	52.4	54.2	62.6	57.7	56.5	53.9	55.7	57.0	57.4	61.6	61.1	60.8	64.8	66.0	59.3
02/14/15	60.1	57.5	57.3	63.1	66.1	53.7	49.8	57.7	51.5	52.7	54.6	55.6	53.8	57.2	59.2	56.8	61.8	63.8	66.1	56.4
02/15/15																				
02/16/15	61.4	59.0	60.3	54.2	56.5	48.5	52.5	61.8	57.3	53.6	52.8	58.2	56.4	59.5	61.1	61.4	62.1	64.6	66.2	58.4
02/17/15	60.7	59.1	59.8	55.2	54.6	52.1	53.4	61.6	53.7	52.6	53.2	57.5	56.1	59.4	60.5	61.1	61.9	64.3	65.7	59.7
02/18/15	61.5	59.1	60.2	54.8	51.4	48.3	50.0	62.0	54.4	54.3	56.6	58.0	56.8	59.1	59.8	61.4	62.0	64.8	66.2	54.7
02/19/15	_		_		_	-		_	_						_					
02/20/15																				
02/21/15	59.1	57.2	57.5	50.5	52.5	42.8	44.6	58.4	52.6	51.1	51.7	56.7	54.2	57.5	58.7	57.7	60.2	62.3	63.7	51.0
02/22/15	62.3	59.0	59.9	58.7	54.8	45.3	45.1	62.6	56.1	51.0	54.5	59.2	55.9	59.7	61.0	61.8	62.3	64.7	66.3	54.3
02/23/15	63.5	61.4	63.0	56.6	56.7	55.3	53.4	60.7	54.7	56.2	56.8	59.8	59.3	61.4	63.8	60.0	63.8	66.9	68.3	60.0
02/24/15	59.5	57.1	58.6	60.7	60.9	61.8	58.2	60.2	55.7	56.3	53.9	55.2	55.5	56.7	61.7	59.5	59.7	62.7	64.2	63.6
02/25/15	61.0	58.6	59.1	55.7	54.8	52.3	54.8	61.7	51.5	52.7	54.1	57.9	55.1	58.7	59.7	60.7	61.5	64.1	65.7	60.1
02/26/15	62.1	60.0	61.6	57.1	57.5	54.2	54.3	62.0	56.5	52.8	54.8	57.8	57.6	59.6	62.1	61.3	62.8	65.8	66.9	60.1
02/27/15	61.7	59.5	59.6	54.5	54.2	51.7	51.6	63.9	55.0	54.6	54.1	58.5	56.5	59.5	60.8	63.1	62.3	64.5	66.1	58.5
02/28/15	59.2	57.2	58.3	54.8	56.4	52.1	51.7	59.5	53.4	51.5	51.3	56.1	54.4	57.3	58.5	58.5	59.7	63.8	63.6	57.2
AVERAGE	-			_	_					_	-	_						-		
NO. DAYS	28	28	28	28	28	28	28	26	28	28	28	28	28	28	28	28	28	28	28	28

TABLE 3. CNEL VALUES FOR MARCH 2015

RMS NUMBER

Date	1	2	3	4	5	6	7	9	10	11	12	13	14	15	16	18	19	20	21	22
03/01/15						-	_													
03/02/15																				
03/03/15																				
03/04/15																				
03/05/15						_					_									
03/06/15																	-	-	-	-
03/07/15								_												
03/08/15																				
03/09/15	62.4	59.3	61.0	54.6	51.9	50.6	60.8	62.0	52.4	49.6	54.9	58.9	57.0	59.8	61.4	62.0	62.9	65.0	66.8	57.0
03/10/15	62.1	59.3	60.8	55.6	55.4	54.4	53.0	61.2	53.3	53.3	54.2	58.9	56.7	59.5	62.0	60.8	62.4	65.0	66.7	58.0
03/11/15									-		-						-	-		
03/12/15	58.8	55.5	57.5	61.1	63.3	64.6	61.2	62.7	49.5	49.8	54.6	53.5	53.5	56.5	59.5	62.7	59.7	61.8	63.5	66.3
03/13/15	60.8	58.3	59.7	60.5	60.5	62.5	59.1	61.3	55.9	56.0	55.4	55.1	56.4	57.6	61.9	60.3	61.0	64.2	65.6	64.5
03/14/15	56.7	55.6	58.0		50.8	47.2	50.0	56.7	51.1	49.6	50.4	53.3	53.3	55.7	58.9	55.9	58.6	61.7	63.4	55.5
03/15/15	59.4	58.6	60.5		55.6	51.5	51.5	59.1	52.3	49.5	54.9	54.0	56.9	57.3	62.3	59.3	61.0	64.7	66.1	58.1
03/16/15	59.3	57.9	58.9	55.3	55.0	52.0	53.5	60.6	50.5	50.0	52.7	57.3	54.9	58.3	59.5	60.0	61.0	63.3	64.8	60.9
03/17/15	61.9	59.2	59.3	56.8	56.9	52.6	54.8	62.1	54.7	55.8	54.8	58.7	56.7	59.4	60.7	61.7	62.3	64.5	66.1	59.9
03/18/15	62.3	60.0	60.9	54.7	53.8	50.9	51.9	63.6	55.0	55.4	55.3	59.0	57.6	60.8	61.7	62.7	63.5	65.4	67.2	58.5
03/19/15	62.4	60.7	64.6	55.4	56.1	52.6	53.8	62.5	53.3	55.4	54.5	58.8	58.4	60.3	64.1	61.6	63.4	66.7	68.7	60.4
03/20/15	60.6	59.5	60.2	53.1	55.1	53.0	55.7	63.0	52.5	52.4	52.5	56.2	56.9	58.8	61.5	63.0	62.0	65.0	66.2	59.9
03/21/15	59.0	57.3	58.7	52.9	51.9	46.4	50.9	58.9	50.2	51.5	50.9	55.6	54.2	57.1	59.2	61.1	59.4	63.1	64.3	56.7
03/22/15	60.9	58.4	59.2	53.3	54.2	47.7	51.1	61.1	51.5	49.0	53.0	58.3	55.3	59.4	60.3	60.0	62.0	64.0	65.8	55.9
03/23/15	60.6	58.8	59.1	58.1	58.4	57.9	57.2	60.9	53.3	55.9	53.3	57.1	56.3	59.2	60.7	60.2	61.8	63.8	65.3	62.2
03/24/15	60.1	58.0	58.9	60.2	60.5	60.6	57.9	59.7	53.6	54.3	57.4	55.9	56.4	57.4	62.9	59.4	60.5	63.3	64.7	63.5
03/25/15	62.2	59.7	60.3	55.8	56.2	52.6	57.3	61.5	52.8	55.0	54.6	58.2	57.0	59.3	61.5	60.9	62.6	65.0	66.5	60.9
03/26/15	60.9	59.4	59.9	54.2	56.5	53.5	54.7	61.4	54.3	65.2	53.4	56.5	56.6	58.2	61.4	60.7	61.6	64.9	65.7	59.3
03/27/15	59.8	59.0	59.8	54.1	58.5	57.7	56.7	61.8	56.6	55.3	53.1	55.0	56.4	57.7	61.4	61.1	60.9	64.6	65.8	61.7
03/28/15	58.0	57.3	56.5		52.7	50.3	52.8	59.3	50.9	50.5	51.2	54.3	52.9	55.9	57.5	58.0	58.9	61.2	63.0	57.7
03/29/15	60.6	58.6	59.4		57.0	43.9	47.9	60.7	53.2	51.2	52.1	56.3	55.8	58.4	60.2	60.1	60.9	63.9	65.2	51.4
03/30/15	62.1	59.4	60.5		58.4	50.7	52.0	60.7	54.5	50.7	54.0	58.5	56.7	59.8	61.5	60.7	62.8	65.0	66.6	58.4
03/31/15	62.5	60.6	61.6	58.1	54.8	51.0	53.1	62.8	53.9	53.4	54.4	58.6	58.4	59.7	62.9	61.9	63.2	65.9	67.4	59.9
AVERAGE	60.9	58.8	59.9	56.7	57.1	56.0	55.3	61.3	53.3	55.1	54.0	57.2	56.2	58.7	61.1	60.8	61.7	64.3	65.8	60.2
NO. DAYS	31	31	31	26	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31
QTR. AVG.	60.8	58.8	59.8	57.1	57.4	54.6	54.2	61.3	54.1	54.8	54.1	57.2	56.2	58.7	60.9	60.7	61.6	64.3	65.8	59.5
NO. DAYS	90	90	90	85	90	90	90	63	90	90	90	90	90	90	90	90	90	90	90	90

TABLE 4. AVERAGE CNEL VALUES

Site	2nd Quarter	3rd Quarter	4th Quarter	1st Quarter	4 Quarter
No.	2014	2014	2014	2015	Average
1	60.8	61.0	60.7	60.8	60.8
2	58.4	58.6	58.7	58.8	58.6
3	59.3	59.7	59.6	59.8	59.6
4	56.6	56.2	57.1	57.1	56.7
5	55.9	55.6	57.4	57.4	56.7
6	53.9	52.4	54.0	54.6	53.8
7	55.2	54.4	55.0	54.2	54.7
9	61.4	61.5	62.2	61.3	61.6
10	53.5	53.1	53.4	54.1	53.5
11	53.7	53.0	53.9	54.8	53.9
12	53.1	52.7	53.9	54.1	53.5
13	57.7	57.4	57.1	57.2	57.4
14	55.7	56.2	56.1	56.2	56.0
15	58.7	59.0	58.6	58.7	58.7
16	60.6	60.9	60.9	60.9	60.8
18	60.7	60.8	60.7	60.7	60.7
19	61.4	61.9	61.6	61.6	61.6
20	64.0	64.5	64.3	64.3	64.3
21	65.4	65.9	65.8	65.8	65.7
22	60.5	59.7	59.5	59.5	59.8

Table 5. WEEKLY SCHEDULED AIR CARRIER AND AIR TAXI FLIGHTS FOR THE FIRST QUARTER 2015

			ULE IN E			1/1/15	to	1/5/15	5 DAYS	
AIRCRAFT	AS D8-0 DEP	Q400 ARR	AS B73 DEP	377 ARR	AS CR. DEP	J7 ARR	AS CRJ DEP	ARR	AS B73 DEP	78 ARR
DAY	0	0	7	7	14	14	0	0	14	7
EVENING	0	0	0	0	5	5	0	0	0	7
NIGHT TOTAL	0 0	0 0	0 7	0 7	0 19	0 19	0	0	0 14	0 14
101712	Ü	Ü	•	•	10	10	Ü	Ü		• •
	110 424		OLLE IN E	_	-	1/1/15	to US CRJ	1/5/15		
	DEP	ARR	0US B73 DEP	ARR	US B73 DEP	ARR	DEP	ARR	DEP	ARR
DAY	0	0	0	0	0	0	0	0	0	0
EVENING NIGHT	0 0	0 0	0 0	0 0	0 0	0 0	0	0	0	0 0
TOTAL	0	0	0	0	0	0	0	0	0	0
		001155			EDOM.	4 /4 /4 5		4/5/45		
	US CR.		ULE IN E US CR	_	AA MD	1/1/15 80	to WN B73	1/5/15 373	WN B73	375
	DEP	ARR	DEP	ARR	DEP	ARR	DEP	ARR	DEP	ARR
DAY	0	0	20	27	0	0	0	0	0	0
EVENING NIGHT	0 0	0 0	7 7	7 0	0 0	0 0	0	0	0	0 0
TOTAL	Ö	Ö	34	34	Ö	Ö	Ö	Ö	Ö	Ö
		SCHED	ULE IN E	EEECT	EDOM.	1/1/15	to	1/5/15		
	WN B73		WN B7	_	-	20UA B73		UA B73	75	
	DEP	ARR	DEP	ARR	DEP	ARR	DEP	ARR	DEP	ARR
DAY EVENING	236 49	213 72	0 0	0 0	0 0	0 0	0	0	0	0 0
NIGHT	0	0	0	0	0	0	0	0	0	0
TOTAL	285	285	0	0	0	0	0	0	0	0
		SCHED	ULE IN E	FFFCT	FROM	1/1/15	to	1/5/15		
		7UA RJ		UA CR	J7	FE A30	0	FE A31	-	
DAY	DEP	ARR	DEP	ARR	DEP	ARR	DEP	ARR	DEP	ARR
DAY EVENING	0 0	0 0	44 6	31 19	0 0	0 0	0	0	0 5	1 0
NIGHT	0	0	0	0	0	0	0	0	0	4
TOTAL	0	0	50	50	0	0	0	0	5	5
		SCHED	ULE IN E	EFFECT	FROM	1/1/15	to	1/5/15		
	UPS A3		UPS B7		DL B75		DL CRJ	4.0.0	DL CRJ	
DAY	DEP 3	ARR 4	DEP 0	ARR 0	DEP 0	ARR 0	DEP 20	ARR 13	DEP 0	ARR 0
EVENING	5	0	0	0	0	0	0	7	0	0
NIGHT	0	4	0	0	0	0	0	0	0	0
TOTAL	8	8	0	0	0	0	20	20	0	0
			ULE IN E			1/1/15	to	1/5/15		
	DL CRJ		B6 A32		FW2 A				TOTAL	
DAY	DEP 0	ARR 0	DEP 0	ARR 0	DEP 0	ARR 0			DEP 358	ARR 317
EVENING	0	0	7	7	0	0			84	124
NIGHT	0	0	0	0	0	0			7	8
TOTAL	0	0	7	7	0	0			449	449

Table 5. WEEKLY SCHEDULED AIR CARRIER AND AIR TAXI FLIGHTS FOR THE FIRST QUARTER 2015

		SCHED	ULE IN E	FFECT I	FROM	1/6/15	to	2/28/15	54 DAY	′S
AIRCRAFT	AS D8-0		AS B73		AS CRJ		AS CRJ		AS B73	
DAY	DEP	ARR		ARR	DEP	ARR	DEP	ARR	DEP	ARR
DAY EVENING	0	0	7 0	7 0	14 5	14 5	0	0	14 0	7 7
NIGHT	0	0	0	0	0	0	0	0	0	0
TOTAL	0	0	7	7	19	19	0	0	14	14
			ULE IN E			1/6/15	to	2/28/15		
			0US B73		US B73 DEP		US CRJ		חבח	۸۵۵
DAY	DEP 0	ARR 0	DEP 0	ARR 0	0 0	ARR 0	DEP 0	ARR 0	DEP 0	ARR 0
EVENING	0	0	0	0	0	0	0	0	0	0
NIGHT	0	0	0	0	0	0	0	0	0	Ö
TOTAL	0	0	0	0	0	0	0	0	0	0
		001155	= =			4/0/45		0/00/45		
	US CR.		US CR.		FROM AA MD8		to WN B73	2/28/15	WN B73	275
	DEP	ARR	DEP	ARR	DEP	ARR	DEP	ARR	DEP	ARR
DAY	0	0	20	27	0	0	0	0	0	0
EVENING	0	0	7	7	0	0	0	0	0	0
NIGHT	0	0	7	0	0	0	0	0	0	0
TOTAL	0	0	34	34	0	0	0	0	0	0
		SCHED	ULE IN E	FFFCT I	FROM	1/6/15	to	2/28/15		
	WN B73		WN B73			0UA B73		UA B73	75	
	DEP	ARR	DEP	ARR	DEP	ARR	DEP	ARR	DEP	ARR
DAY	237	217	0	0	0	0	0	0	0	0
EVENING	44	64	0	0	0	0	0	0	0	0
NIGHT TOTAL	0 281	0 281	0	0	0	0	0	0	0	0
TOTAL	201	201	U	U	U	0	U	0	U	U
		SCHED	ULE IN E	FFECT I	FROM	1/6/15	to	2/28/15		
		7UA RJ		UA CR.		FE A300		FE A310	-	
DAY	DEP	ARR	DEP	ARR	DEP	ARR	DEP	ARR	DEP	ARR
DAY EVENING	0 0	0	44 6	31 19	0 0	0	0	0	0 5	1 0
NIGHT	0	0	0	0	0	0	0	0	0	4
TOTAL	0	0	50	50	0	0	0	0	5	5
	1100 40		ULE IN E			1/6/15		2/28/15	DI 00 I	-
	UPS A3		UPS B7		DL B75	ARR	DL CRJ		DL CRJ	
DAY	3	4	0	0	0	0	20	13	0	0
EVENING	5	0	0	0	0	0	0	7	0	0
NIGHT	0	4	0	0	0	0	0	0	0	0
TOTAL	8	8	0	0	0	0	20	20	0	0
		ecurb	ULE IN E	EEECT !		1/6/15	to	2/28/15		
	DL CRJ		B6 A320		FW2 A3		to	2/26/13	TOTAL	s
	DEP	ARR	DEP	ARR	DEP	ARR			DEP	ARR
DAY	0	0	0	0	0	0			359	321
EVENING	0	0	7	7	0	0			79	116
NIGHT	0	0	0	0	0	0			7	8
TOTAL	0	0	7	7	0	0			445	445

Table 5. WEEKLY SCHEDULED AIR CARRIER AND AIR TAXI FLIGHTS FOR THE FIRST QUARTER 2015

AIRCRAFT	AS D8 DEP 0		DULE IN AS B7 DEP 7	EFFECT 377 ARR 7	FROM AS CF DEP 14	3/1/15 RJ7 ARR 14	to AS CR DEP 0	3/7/15 J ARR 0	7 DAY AS B7: DEP 14	
EVENING NIGHT TOTAL	0 0 0	0 0 0	0 0 7	0 0 7	5 0 19	5 0 19	0 0 0	0 0 0	0 0 14	7 0 14
	US A3	SCHEI 19US A3		EFFECT 372	FROM US B7	3/1/15 373	to US CR	3/7/15 J		
DAY	DEP 0	ARR 0	DEP 0	ARR 0	DEP 0	ARR 0	DEP 0	ARR 0	DEP 0	ARR 0
EVENING NIGHT	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
TOTAL	0	0	0	0	0	0	0	0	0	0
	US CR	.J7	US CF		AA ME		to WN B73		WN B7	
DAY	DEP	ARR	DEP	ARR	DEP	ARR	DEP	ARR	DEP	ARR
DAY EVENING	0 0	0 0	20 7	27 7	0 0	0 0	0 0	0 0	0 0	0 0
NIGHT	0	0	7	0	0	0	0	0	0	0
TOTAL	0	0	34	34	0	0	0	0	0	0
	WN B7		DULE IN WN B7	EFFECT	_	3/1/15 20UA B7	to	3/7/15	75	
	DEP	ARR	DEP	ARR	DEP	ARR	DEP	UA B73 ARR	DEP	ARR
DAY	237	217	0	0	0	0	0	0	0	0
EVENING	44	64	0	0	0	0	0	0	0	0
NIGHT	0	0	0	0	0	0	0	0	0	0
TOTAL	281	281	0	0	0	0	0	0	0	0
	IIA D7	SCHEI 57UA RJ		EFFECT UA CR	_	3/1/15 FE A30	to	3/7/15 FE A31	0	
	DEP	ARR	DEP	ARR	DEP	ARR	DEP	ARR	DEP	ARR
DAY	0	0	44	31	0	0	0	0	0	1
EVENING	0	0	6	19	0	0	0	0	5	0
NIGHT	0	0	0	0	0	0	0	0	0	4
TOTAL	0	0	50	50	0	0	0	0	5	5
				EFFECT		3/1/15	to	3/7/15		
	UPS A		UPS B		DL B7	-	DL CRJ		DL CR	-
DAY	DEP 3	ARR 4	DEP 0	ARR 0	DEP 0	ARR 0	DEP 18	ARR 11	DEP 0	ARR 0
EVENING	5	0	0	0	0	0	0	7	0	0
NIGHT	0	4	0	0	0	0	0	0	0	0
TOTAL	8	8	0	0	0	0	18	18	0	0
				EFFECT		3/1/15	to	3/7/15		_
	DL CR		B6 A3		FW2 A				TOTAL	
DAY	DEP 0	ARR 0	DEP 0	ARR 0	DEP 0	ARR 0			DEP 357	ARR 319
EVENING	0	0	7	7	0	0			35 <i>1</i> 79	116
NIGHT	0	0	0	0	0	0			7	8
TOTAL	Ö	Ö	7	7	Ö	0			443	443

Table 5. WEEKLY SCHEDULED AIR CARRIER AND AIR TAXI FLIGHTS FOR THE FIRST QUARTER 2015

AIRCRAFT	AS D8-		OULE IN I AS B73 DEP	EFFECT 377 ARR	FROM AS CR DEP	3/8/15 J7 ARR	to AS CRJ DEP	3/8/15 ARR	1.00 AS B73 DEP	DAYS 378 ARR
DAY	0	0	0	0	14	14	0	0	20	13
EVENING	0	0	0	0	6	6	0	0	0	7
NIGHT	0	0	0	0	0	0	0	0	0	0
TOTAL	0	0	0	0	20	20	0	0	20	20
TOTAL	U	U	U	U	20	20	U	U	20	20
		SCHEE	III F IN I	EFFECT	FROM	3/8/15	to	3/8/15		
	US A31	9US A32			US B73		US CR.			
	DEP	ARR	DEP	ARR	DEP	ARR	DEP	ARR	DEP	ARR
DAY	0	0	0	0	0	0	0	0	0	0
EVENING	0	0	0	0	0	0	0	0	0	0
NIGHT	Ö	Ö	0	0	0	0	0	0	0	0
TOTAL	0	0	0	0	0	0	0	0	0	0
	Ü	Ü	Ū	Ü	Ü	Ü	Ü	Ü	Ü	Ü
		SCHED	ULE IN I	EFFECT	FROM	3/8/15	to	3/8/15		
	US CR.	J7	US CR	J9	AA MD	80	WN B73	373	WN B7	375
	DEP	ARR	DEP	ARR	DEP	ARR	DEP	ARR	DEP	ARR
DAY	0	0	20	27	0	0	0	0	0	0
EVENING	0	0	7	7	0	0	0	0	0	0
NIGHT	0	0	7	0	0	0	0	0	0	0
TOTAL	0	0	34	34	0	0	0	0	0	0
				EFFECT		3/8/15	to	3/8/15		
	WN B7		WN B7			20UA B73		UA B73	-	
	DEP	ARR	DEP	ARR	DEP	ARR	DEP	ARR	DEP	ARR
DAY	237	217	0	0	0	0	0	0	0	0
EVENING	44	64	0	0	0	0	0	0	0	0
NIGHT	0	0	0	0	0	0	0	0	0	0
TOTAL	281	281	0	0	0	0	0	0	0	0
		SCHED	ULFINI	EFFECT	FROM	3/8/15	to	3/8/15		
	UA B75	7UA RJ	OLL III.	UA CR		FE A30		FE A31	0	
	DEP	ARR	DEP	ARR	DEP	ARR	DEP	ARR	DEP	ARR
DAY	0	0	28	21	13	6	0	0	0	1
EVENING	Ō	0	1	8	5	12	0	0	5	0
NIGHT	0	0	0	0	0	0	0	0	0	4
TOTAL	0	0	29	29	18	18	0	0	5	5
				EFFECT		3/8/15		3/8/15		
	UPS A3		UPS B		DL B75	_	DL CRJ		DL CR.	
						ARR				
DAY	3	4	0	0	0	0	18	11	0	0
EVENING	5	0	0	0	0	0	0	7	0	0
NIGHT	0	4	0	0	0	0	0	0	0	0
TOTAL	8	8	0	0	0	0	18	18	0	0
		001155				0/0/45	4-	0/0/45		
	DI 05			EFFECT		3/8/15	to	3/8/15	TOT 4:	<u> </u>
	DL CR.		B6 A32		FW2 A				TOTAL	
DAY	DEP	ARR	DEP	ARR	DEP	ARR			DEP	ARR
DAY	0	0	0	0	0	0			353	314
EVENING	0	0	7	7	0	0			80	118
NIGHT	0	0	0	0	0	0			7	8
TOTAL	0	0	7	7	0	0			440	440

Table 5. WEEKLY SCHEDULED AIR CARRIER AND AIR TAXI FLIGHTS FOR THE FIRST QUARTER 2015

AIRCRAFT DAY EVENING NIGHT TOTAL	AS D8- DEP 0 0 0		DULE IN AS B7 DEP 0 0 0	EFFECT 377 ARR 0 0 0 0	FROM AS CR DEP 14 6 0 20	3/9/15 3J7 ARR 14 6 0 20	to AS CR. DEP 0 0 0		23 DA AS B73 DEP 20 0 0 20	
DAY EVENING NIGHT TOTAL	US A3 DEP 0 0 0	SCHEI 19US A32 ARR 0 0 0 0	-	EFFECT 372 ARR 0 0 0 0	FROM US B7 DEP 0 0 0	3/9/15 373 ARR 0 0 0	to US CR. DEP 0 0 0	3/31/15 J ARR 0 0 0	DEP 0 0 0	ARR 0 0 0 0
DAY EVENING NIGHT TOTAL	US CR DEP 0 0 0		DULE IN US CR DEP 19 0 7 26	EFFECT RJ9 ARR 19 7 0 26	FROM AA ME DEP 0 0 0 0	3/9/15 080 ARR 0 0 0	to WN B73 DEP 0 0 0	3/31/15 373 ARR 0 0 0 0	WN B7 DEP 0 0 0	7375 ARR 0 0 0 0
DAY EVENING NIGHT TOTAL	WN B7 DEP 237 44 0 281		DULE IN WN B7 DEP 0 0 0 0	EFFECT 7378 ARR 0 0 0 0		3/9/15 20UA B73 ARR 0 0 0 0	to 373 DEP 0 0 0	3/31/15 UA B73 ARR 0 0 0		ARR 0 0 0
DAY EVENING NIGHT TOTAL	UA B75 DEP 0 0 0	SCHEI 57UA RJ ARR 0 0 0 0	DULE IN DEP 28 1 0 29	EFFECT UA CR ARR 21 8 0 29	_	3/9/15 FE A30 ARR 6 12 0 18	to 00 DEP 0 0 0	3/31/15 FE A31 ARR 0 0 0		ARR 1 0 4 5
DAY EVENING NIGHT TOTAL	UPS A DEP 3 5 0		UPS B		FROM DL B79 DEP 0 0 0 0		to DL CRJ DEP 18 0 0	3/31/15 ARR 11 7 0 18	DL CR	
DAY EVENING NIGHT TOTAL	DL CR DEP 0 0 0		DULE IN B6 A32 DEP 0 7 0 7	EFFECT 20 ARR 0 7 0 7	FROM FW2 A DEP 0 0 0	3/9/15 A319 ARR 0 0 0	to	3/31/15	TOTAL DEP 352 73 7 432	ARR 306 118 8 432

TABLE 5. (CONTINUED)

FIRST QUARTER 2015

PERIOD TOTALS FOR AIR CARRIERS AND AIR TAXIS

AIR CARRIERS

	<u>DEP</u>	<u>ARR</u>
DAY	3939	3610
EVE	883	1009
NIGHT	0	103
TOTAL	4722	4722

AIR TAXIS

	<u>DEP</u>	<u>ARR</u>
DAY	1237	1044
EVE	212	495
NIGHT	90	0
TOTAL	1539	1539

AIR CARRIERS AND AIR TAXIS

	<u>DEP</u>	<u>ARR</u>
DAY	5076	4654
EVE	1095	1504
NIGHT	90	103
TOTAL	6261	6261

VI. INCOMPATIBLE LAND USE

The contours shown in Figures 1 and 2 were digitized and overlaid on a digital land use map of the area around the Airport. The total areas enclosed by the 65 and 70 dB CNEL contours were 549.1 and 234.5 acres, respectively. The areas of incompatible land uses enclosed by the contours were then computed. The incompatible land use areas were 6.17 acres within the 65 dB contour of which 0.37 acres were also within the 70 dB contour.

It should be noted that the above incompatible land areas do not include the soundproofed schools in the vicinity of the Airport (the Luther Burbank Middle School, St. Patrick and Glenwood Schools). The above incompatible land use areas also do not include those residences to which the Airport has acquired avigation easements. Within the 65 dB contour, the Airport has acquired avigation easements, through its ongoing residential sound insulation program, to 113 parcels of land. Those 113 parcels total 16.08 acres. One of the 113 parcels is also located within the 70 dB contour. Within the 65 dB contour, the Airport has also acquired avigation easements, under the Court of Appeal decision in Baker v. Burbank-Glendale-Pasadena Airport Authority, 220 Cal. App. 3d 1602 (1990), to 56 parcels of land. For 48 of the 56 parcels, the Authority has acquired avigation easements both through Baker and through its ongoing sound insulation program. Those 48 parcels are included in the total number of sound insulation program avigation easements set forth above. The 7 remaining Baker easement parcels total 0.89 acres.

It should be noted that the Airport Authority has made repeated attempts over the past several years to acoustically treat and obtain avigation easements at 42 single family residential parcels, totaling approximately 6.04 acres of the incompatible land use area within the 65 dB contour. Owners of these parcels have either refused to respond to notices regarding the sound insulation program, have withdrawn from the program, or own properties with major building code deficiencies that prevent them from participating.

The estimated numbers of incompatible residences are 44 within the 65 dB contour, of which 2 are also within the 70 dB contour. The estimated numbers of people residing within the 65 and 70 dB CNEL contours are 119 and 5, respectively.

REFERENCES

- California Department of Transportation, Division of Aeronautics, "Noise Standards", California Code of Regulations, Title 21, Chapter 2.5, Subchapter 6.
- 2. L-30488, Department of Transportation, State of California, 27 June 1984.
- "Quarterly Noise Monitoring at Bob Hope Airport, Second Quarter 2014",
 AAAI Report 1443.
- "Quarterly Noise Monitoring at Burbank Airport, Third Quarter 2014",
 AAAI Report 1444.
- "Quarterly Noise Monitoring at Burbank Airport, Fourth Quarter 2014",
 AAAI Report 1446.

APPENDIX A NOISE MONITOR INSTRUMENTATION

APPENDIX A NOISE MONITOR INSTRUMENTATION

The permanent noise monitor system, manufactured by Bruel & Kjaer, consists of 20 noise monitoring terminals (NMT) connected to a central site by DSL or wireless connections. The system block diagram showing the major elements is shown in Figure A-1. The electrical signal generated by the microphone/preamplifier assembly at each site is processed and saved locally in the B & K sound level meter. The signal is passed through an A-weighting filter and is then detected and converted to a digital level signal in decibels with a resolution of 0.1 dB.

The stored sound level data at each site is dumped once every 24-hour period via wireless or DSL connection to the central site. The data received by the central site are processed by the ANOMS computer software. According to preset parameters, the noise is separated into two categories--aircraft noise and community noise. Each event attributed to an aircraft is saved in a noise event file. Computations are made of hourly noise level, community noise equivalent level, runway use, and other parameters. A wide variety of data presentations is available by exercising a number of routines provided by B & K, as well as special-purpose routines that can be generated by the user.

The locations of the remote sites (shown in Figure 3) are listed by latitude and longitude in Table A-1.

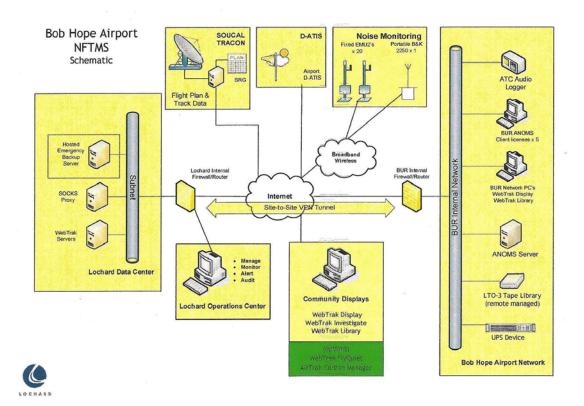


Figure A-1. Permanent Noise Monitor System Schematic

TABLE A-1
NOISE MONITOR SITE LOCATIONS

NMT	Latitude	Longitude
1	34.188424	-118.358983
2	34.184296	-118.347330
3	34.175731	-118.354197
4	34.212022	-118.364391
5	34.215261	-118.357381
6	34.220705	-118.365214
7	34.224979	-118.363989
9	34.198871	-118.398889
10	34.195336	-118.342392
11	34.197321	-118.340376
12	34.190175	-118.365404
13	34.181303	-118.345270
14	34.178786	-118.347134
15	34.173922	-118.363157
16	34.181185	-118.350949
18	34.196899	-118.389014
19	34.181277	-118.357866
20	34.188378	-118.351878
21	34.186700	-118.354939
22	34.217035	-118.361725

APPENDIX B CALIBRATION

APPENDIX B CALIBRATION

The system was calibrated during setup using a Bruel and Kjaer acoustic calibrator. Acoustic calibrations are performed annually. Electrical calibrations are performed automatically four times per 24-hour day. Figure B-1 shows the calibration summary for January 2013 and Figure B-2 shows the detailed electrical calibration report for Noise Monitor Site 1.



Devices Report

RMT Calibration Results

Bob Hope Airport

Start Date: 04-Jan-2013 End Date: 31-Jan-2013

Monitor Location: 1 - 1, (Fixed)

Seven Day Period Commencing: Friday January 04, 2013

Calibrated with Sound Calibrator: Never

Number of Calibrations: 27

Average adjustment for this RMT over this period: 0.10 dB

Date Time	Expected Result	Value Measured	Calibration Error
04-Jan-2013 0:00	87.1	87.2	0,1
04-Jan-2013 6:00	87.1	87.2	0.0
04-Jan-2013 12:00	87.1	87.2	0.1
04-Jan-2013 18:00	87.1	87.2	0.1
05-Jan-2013 0:00	87.1	87.2	0.1
05-Jan-2013 6:00	87.1	87.2	0.1
05-Jan-2013 12:00	87.1	87.2	0.1
05-Jan-2013 18:00	87.1	87.2	0.1
06-Jan-2013 0:00	87.1	87.2	0.1
06-Jan-2013 6:00	87.1	87.2	0.1
06-Jan-2013 12:00	87.1	87.2	0.1
06-Jan-2013 18:00	87.1	87.2	0.1
07-Jan-2013 0:00	87.1	87.2	0.1
07-Jan-2013 6:00	87.1	87.2	0.1
07-Jan-2013 12:00	87.1	87.2	0.1
07-Jan-2013 18:00	87.1	87.2	0.1
08-Jan-2013 0:00	87.1	87.2	0.1
08-Jan-2013 6:00	87.1	87.2	0.1
08-Jan-2013 12:00	87.1	87.3	0.2
08-Jan-2013 18:00	87.1	87.2	0.1
09-Jan-2013 0:00	87.1	87.2	0.1
09-Jan-2013 6:00	87.1	87.2	0.1
09-Jan-2013 12:00	87.1	87.2	0.1
09-Jan-2013 18:00	87.1	87.2	0.1
10-Jan-2013 0:00	87.1	87.2	0.1
10-Jan-2013 6:00	87.1	87.2	0.1
10-Jan-2013 12:00	87.1	87.2	0.1

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Devices Report

RMT Calibration Results

Bob Hope Airport

Start Date: 04-Jan-2013

End Date: 31-Jan-2013

18-Jan-2013 25-Jan-2013		11-Jan-2013	04-Jan-2013	Monitor Location	
0.:	0.1	0.1	0.1	1	1
0.3	0.3	0.4	0.4	2	2
0.0	0.0	0.0	0.5	3	3
0.3	0.3	0.3	0.3	4	4
0.2	0.2	0.2	0.2	#5	5
0.0	0.0	0.0	0.0	6	6
0.3	0.3	0.3	0.3	7	7
0.2	0.2	0.2	0.2	9	9
0.2	0.2	0.2	0.2	10	10
0.0	0.0	0,0	0.6	11	11
0.3	0.3	0.3	0.3	12	12
0.0	0.0	0.0	0.0	13	13
0.0	0.0	0,0	0.0	14	14
0.0	0.0	0,0	0.0	15	15
0.4	0.4	0.4	0.4	16	16
0.:	0.1	0.0	0.0	18	18
0.0	0.0	0.0	0.0	19	19
0.:	0.1	0,0	0.1	20	20
0.0	0.0	0.0	0.0	21	21
0.0	0.0	0.0	0.0	22	22

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