BOB HOPE AIRPORT





DECEMBER 2015





AAAI Report 1470 AAAI Project 88018

QUARTERLY NOISE MONITORING AT BOB HOPE AIRPORT THIRD QUARTER 2015

DECEMBER 2015

Prepared for:

Burbank-Glendale-Pasadena Airport Authority 2627 Hollywood Way Burbank, CA 91505

Prepared by:

Acoustical Analysis Associates, Inc. 950 Enchanted Way, Suite 105 Simi Valley, CA 93065

TABLE OF CONTENTS

<u>Section</u>	<u>Pa</u>	<u>age</u>
l.	NTRODUCTION	1
II.	NOISE MEASUREMENTS A. Sites B. Noise Measurement Equipment C. Noise Data D. Operational Data	4 4 4
III.	MEASURED NOISE DATA	6
IV.	SCHEDULED AIRLINE AND AIR TAXI OPERATIONS	6
V.	CNEL CONTOUR DEVELOPMENT	6
VI.	NCOMPATIBLE LAND USE	18
REFEI	ENCES	19
APPE	DIX A - NOISE MONITOR INSTRUMENTATION	
APPE	DIX B - CALIBRATION	

LIST OF TABLES

<u>Table</u>		<u>Page</u>
1.	CNEL VALUES FOR JULY 2015	7
2.	CNEL VALUES FOR SEPTEMBER 2015	8
3.	CNEL VALUES FOR OCTOBER 2015	9
4.	AVERAGE CNEL VALUES	. 10
5.	WEEKLY SCHEDULED AIR CARRIER AND AIR TAXI FLIGHTS	. 11

LIST OF FIGURES

<u>Figure</u>	<u>P</u>	age
1.	CNEL 70 CONTOUR FOR BOB HOPE AIRPORT - THIRD QUARTER 2015	. 2
2.	CNEL 65 CONTOUR FOR BOB HOPE AIRPORT - THIRD QUARTER 2015	. 3
3.	NOISE MONITOR LOCATIONS	. 5

QUARTERLY NOISE MONITORING AT BOB HOPE AIRPORT THIRD 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.

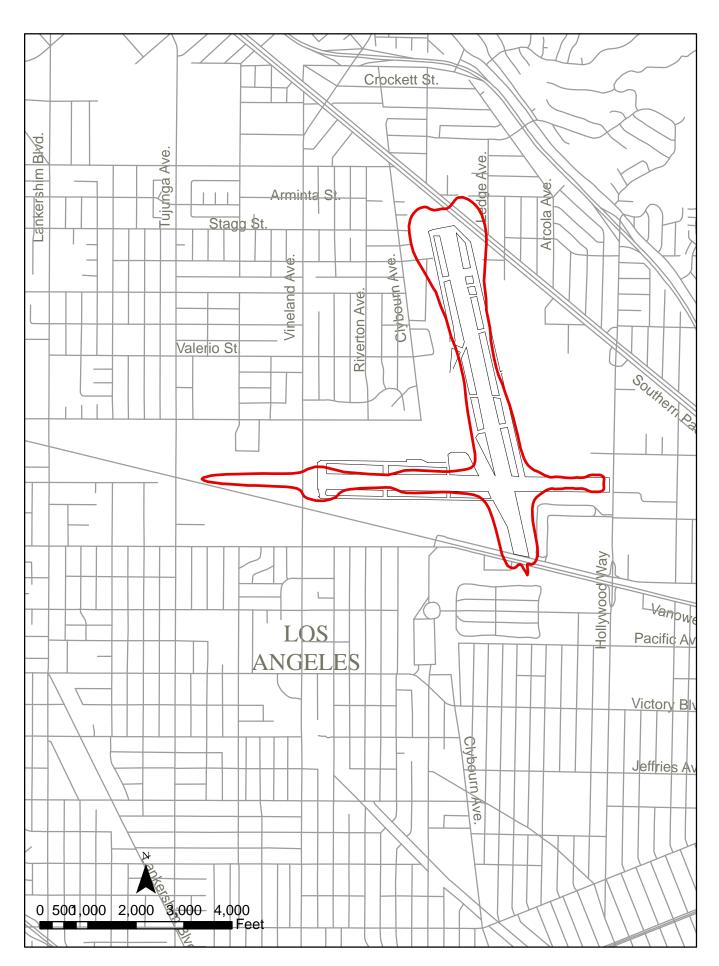
A permanent noise monitoring system became operational in April 1980 and, with brief interruption for system expansion, maintenance, and program changes, has been operational since that time. Of the original nine noise monitor sites, eight have remained unchanged since 1980. The monitor at site 8 was 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.

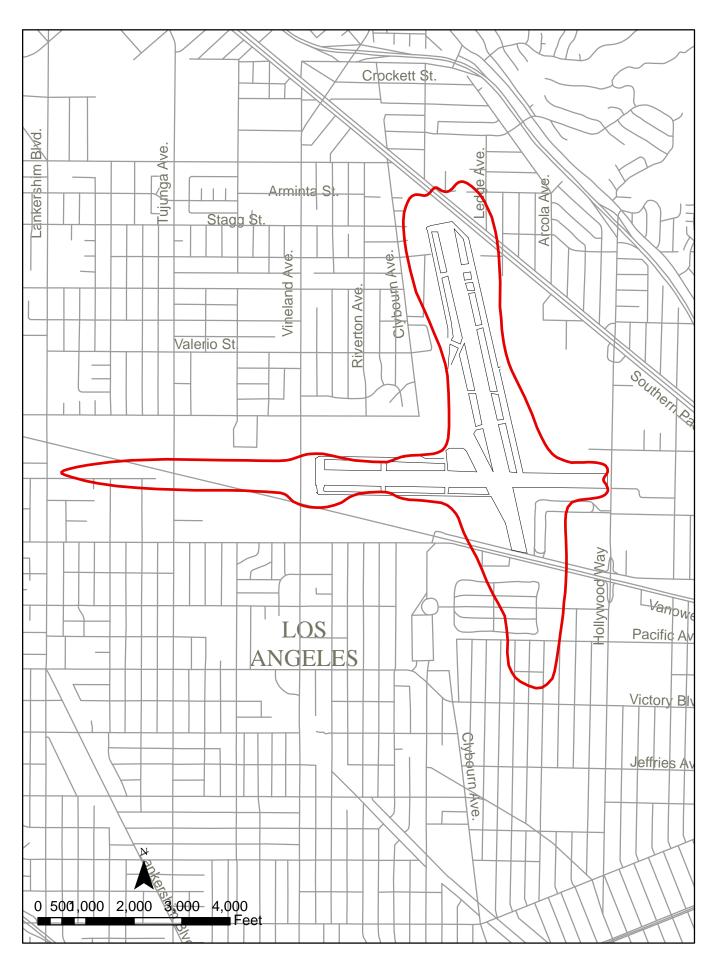
This report describes the data acquired by the monitoring system during the third quarter of 2015. Noise impact boundaries for 65 dB and 70 dB are shown based on these measurements and measurements obtained during the fourth quarter 2014 and first and second quarter 2015

-1-

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



BOB HOPE AIRPORT 70 dB CNEL CONTOUR 3rd Quarter 2015



BOB HOPE AIRPORT 65 dB CNEL CONTOUR 3rd Quarter 2015

reported in 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.

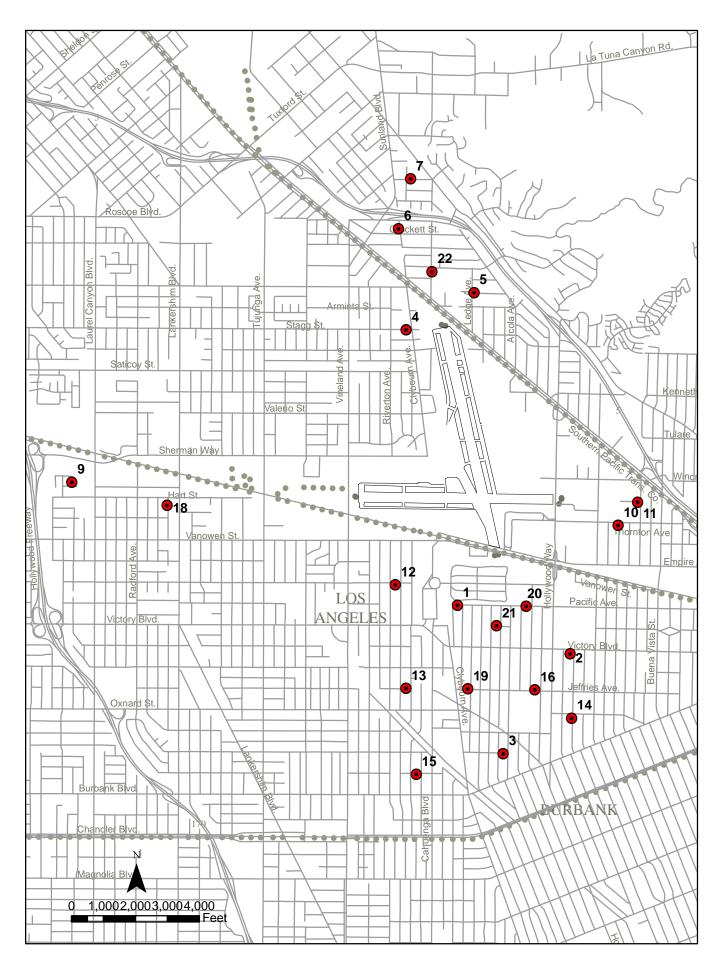


FIGURE 3 - BOB HOPE AIRPORT NOISE MONITOR LOCATIONS

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 JULY 2015

RMS NUMBER

5 6 7 9 10 11 12 13 14 15 16 18 19 20 21 Date 3 4 07/01/15 61.1 58.5 58.5 55.5 53.5 52.3 53.5 62.9 50.6 51.9 52.8 56.9 55.5 58.8 60.3 62.1 62.1 64.2 67.2 58.6 07/02/15 62.0 59.5 57.7 55.7 53.9 53.5 55.5 62.2 56.2 52.2 52.8 58.0 57.0 59.5 61.4 61.6 63.2 65.0 66.8 61.6 07/03/15 60.4 58.2 --- 55.1 52.0 47.1 54.0 61.7 50.5 50.1 52.6 56.8 55.8 58.6 61.0 60.8 61.6 63.8 65.6 56.6 07/04/15 --- 55.7 --- 52.7 51.8 45.7 52.7 57.2 51.8 51.4 48.1 51.8 52.6 53.5 55.2 55.9 56.7 59.9 61.0 56.9 07/05/15 --- 59.0 --- 51.0 56.7 46.2 51.2 61.6 48.7 46.9 52.8 58.7 54.9 59.4 60.1 61.2 62.2 64.4 66.1 55.7 07/06/15 --- 59.4 --- 52.8 57.1 49.6 53.8 61.5 52.4 53.1 53.6 59.6 56.9 60.3 61.6 60.7 63.9 65.2 67.3 57.1 07/07/15 59.2 58.9 60.9 56.8 58.0 52.9 56.0 62.8 52.1 50.9 53.0 58.0 56.7 59.1 62.4 62.2 62.5 64.9 66.7 62.8 07/08/15 62.3 59.2 59.8 54.4 56.0 52.1 51.9 62.8 52.3 52.2 53.7 59.0 56.4 59.9 61.0 62.0 62.8 64.8 66.4 58.0 07/09/15 61.6 60.4 61.4 49.9 55.9 48.6 50.5 63.2 52.7 50.8 53.2 57.9 58.0 60.2 62.4 62.4 63.1 65.8 67.5 53.6 07/10/15 63.4 60.2 60.3 54.4 56.2 53.0 54.6 62.2 52.9 50.1 54.9 60.8 57.6 60.8 62.2 61.5 63.6 65.9 67.4 59.5 07/11/15 61.1 58.1 58.1 55.0 54.6 49.4 50.7 60.2 51.5 49.2 55.4 57.1 59.8 58.0 59.6 59.3 61.3 63.5 65.0 55.5 07/12/15 68.2 58.7 59.1 55.5 54.4 47.9 55.6 60.5 51.5 52.4 57.3 65.4 55.4 60.7 60.4 59.8 65.0 65.0 68.4 60.1 07/13/15 62.3 58.5 59.3 56.1 55.6 51.3 55.1 61.0 51.8 60.9 53.6 58.6 55.6 59.3 60.4 60.0 62.7 64.3 65.9 60.8 07/14/15 62.9 59.0 59.3 57.4 55.5 53.5 55.8 63.1 52.3 62.5 55.1 59.2 55.8 59.3 60.5 62.2 62.2 64.5 66.1 60.5 07/15/15 63.0 60.2 61.4 56.0 57.1 50.1 52.7 62.5 55.7 55.0 54.1 59.2 57.6 60.5 62.3 61.6 63.5 65.9 67.4 59.1 07/16/15 62.4 59.7 61.1 55.0 55.7 51.9 55.3 63.1 58.2 52.8 53.8 59.4 57.4 60.0 62.1 61.7 63.1 65.7 67.3 60.1 07/17/15 61.0 58.7 59.5 54.9 57.0 50.4 51.8 --- 54.7 55.0 52.3 57.3 56.3 58.8 61.6 61.6 62.4 65.7 66.4 57.5 07/18/15 61.4 59.0 60.2 53.2 53.7 51.8 54.4 --- 54.3 53.4 53.6 56.5 56.3 57.8 61.1 60.3 61.0 64.7 65.8 59.9 07/19/15 60.1 58.1 59.2 54.0 54.1 44.5 49.9 --- 49.1 49.5 52.7 57.0 55.9 58.1 60.3 61.7 61.4 64.0 65.6 53.9 07/20/15 62.2 59.3 60.2 54.2 55.7 41.8 45.8 63.6 51.3 54.9 53.7 58.7 56.9 59.7 62.4 60.3 62.9 65.2 66.8 54.6 07/21/15 62.0 59.7 61.4 57.4 56.8 51.8 51.6 --- 53.8 55.3 54.1 59.9 57.6 60.5 62.2 62.8 63.5 65.5 67.4 57.1 07/22/15 61.1 59.4 60.2 53.8 55.6 52.4 51.4 --- 51.3 53.1 53.0 58.7 56.5 59.7 61.1 61.9 62.3 64.7 66.2 60.4 07/23/15 61.2 59.4 60.0 55.4 55.9 53.6 55.8 62.4 52.5 54.5 52.8 57.8 56.4 59.5 61.1 62.4 62.6 64.9 66.5 61.4 07/24/15 61.1 59.4 60.0 54.0 55.4 51.0 53.8 --- 53.8 56.6 53.3 57.5 56.6 59.6 61.6 62.4 63.0 62.3 66.9 59.5 07/25/15 59.5 57.8 59.5 54.3 51.4 46.3 48.6 --- 49.2 48.3 51.9 55.3 55.3 57.3 60.1 58.3 60.2 --- 65.1 ---07/26/15 60.2 57.2 58.3 54.6 54.3 49.2 51.1 --- 49.3 49.3 52.7 58.0 54.3 58.8 59.2 60.4 61.8 --- 65.2 ---07/27/15 61.7 58.5 59.7 55.4 56.2 48.8 50.5 --- 51.9 53.0 53.5 58.9 56.3 59.5 62.0 60.5 62.3 --- 66.2 ---07/28/15 62.3 59.4 60.5 56.5 54.5 50.1 50.7 62.7 54.2 52.8 54.6 58.2 56.7 59.2 61.3 62.0 62.4 63.4 66.7 ---07/29/15 62.9 58.7 59.5 56.5 53.1 52.3 55.9 63.3 52.9 53.8 53.7 59.1 55.6 59.4 60.5 62.2 62.3 66.6 66.1 58.1 07/30/15 61.3 59.0 59.9 58.1 56.1 51.6 53.7 64.2 51.9 53.9 52.7 57.9 56.3 59.5 61.1 63.0 62.9 62.4 66.7 ---07/31/15 61.7 60.1 61.5 56.2 55.0 50.2 53.1 63.4 54.9 52.2 53.0 57.6 57.6 59.6 62.4 62.8 63.0 62.0 67.4 ---AVERAGE 62.2 59.0 60.0 55.2 55.4 50.8 53.4 62.4 53.0 54.4 53.6 58.8 56.6 59.4 61.2 61.4 62.6 64.6 66.5 59.0 NO. DAYS 28 31 27 31 31 31 31 22 31 31 31 31 31 31 31 31 31 31 28 31

TABLE 2. CNEL VALUES FOR AUGUST 2015

RMS NUMBER

Date	1	2	3	4	5	6	7	9	10	11	12	13	14	15	16	18	19	20	21	22
08/01/15	59.8	57.6	59.0	55.9	53.5	50.1	54.2	60.4	50.1	49.6	50.9	55.3	54.9	58.1	60.0	59.5	60.9		65.1	
08/02/15	60.9	57.9	59.2	61.8	56.3	47.5	50.4	61.6	51.0	50.6	52.8	57.5	55.2	58.8	60.1	61.4	62.0		65.8	
08/03/15	62.7	59.8	60.9	55.3	57.2	49.3	54.9	61.8	55.3	53.2	54.2	58.8	57.2	59.7	62.2	61.3	63.2		67.2	
08/04/15	61.8	59.7	61.3	58.0	58.3	53.0	56.1	62.5	56.0	59.9	53.8	57.3	57.4	58.7	62.3	62.3	62.3		67.2	
08/05/15	62.3	60.5	61.3	55.9	54.7	51.8	54.8	62.4	53.4	53.5	53.8	58.0	58.1	59.7	62.8	61.7	63.4	67.4	67.5	59.5
08/06/15	63.0	60.4	61.5	58.8	57.4	54.0	58.5	63.6	54.3	52.2	54.1	59.1	57.5	61.3	62.5	62.5	64.7	66.3	68.4	62.0
08/07/15	60.1	57.7	58.2	53.3	55.4	52.1	55.0	63.5	52.5	52.5	52.1	56.4	55.1	58.2	59.5	62.6	61.2	63.0	64.7	59.5
08/08/15	58.1	55.2	57.1	50.4	54.1	47.2	49.5	59.0	53.1	52.5	49.4	55.0	52.2	55.7	57.3	58.6	59.0	60.8	62.9	55.3
08/09/15	58.3	55.8	56.9	53.2	54.6	48.8	50.0	60.9	51.8	52.0	51.5	54.9	53.0	56.8	57.8	59.7	59.8	61.8	63.5	57.1
08/10/15	61.8	59.9	60.6	55.0	54.6	48.0	52.8	62.1	53.8	53.0	54.2	58.1	58.2	59.1	61.8	61.9	62.4	65.0	66.4	58.4
08/11/15	62.0	59.0	60.1	65.0	59.7	49.8	53.6	63.1	52.3	54.6	55.0	58.5	56.3	59.8	61.2	62.3	62.5	64.8	66.5	58.1
08/12/15	60.7	58.8	60.6	51.5	54.9	52.1	53.6	63.0	53.2	53.4	52.7	56.2	57.2	58.2	61.7	61.9	61.9	64.9	66.3	58.8
08/13/15	60.4		59.7	55.0	53.9	52.5	54.4	62.0	51.5	50.4	50.4	56.3	56.5	58.2	61.0	59.1	61.9	64.7	66.1	59.4
08/14/15	60.6	60.5	60.3	58.4	61.0	52.6	53.5	63.1	53.5	51.3	54.9	53.4	56.6	58.5	61.9		62.2	65.1	66.8	58.5
08/15/15	57.5	55.9	58.5	49.1	54.8	48.7	52.0	59.9	55.7	50.1	49.0		54.7	55.0	59.6		59.3	62.4	63.8	57.8
08/16/15	59.1	57.6	59.1	54.1	57.8	45.7	49.9	58.9	49.5	47.0	50.6		55.2	57.1	60.6		60.9	63.7	65.4	54.9
08/17/15	62.4	58.0	59.1	55.2	54.9	47.2	54.1	61.0	50.9	49.2	52.9	60.9	55.5	58.9	60.2	62.4	61.8	64.2	65.7	58.8
08/18/15	61.8	59.0	59.6	51.9	55.2	53.4	54.4	62.6	53.8	50.6	53.3	58.4	56.9	58.7	61.0	61.6	61.9	64.6	66.0	61.0
08/19/15	62.4	59.6	60.6	55.8	55.0	50.8	57.9	63.7	52.8	50.9	54.3	58.9	57.1	60.2	61.7	62.8	63.0	65.6	67.0	58.9
08/20/15	62.3	60.5	61.8	60.9	59.1	52.9	54.3	63.8	52.6	51.0	54.3	58.4	58.0	60.7	62.9	63.2	64.0	66.4	67.7	59.2
08/21/15	61.2	58.9	60.0	55.2	58.9	52.0	53.4	63.6	53.0	57.2	54.1	57.3	56.4	59.4	61.1	61.9	62.7	64.7	66.5	58.4
08/22/15	58.6	56.2	57.4	54.9	56.0	52.1	49.7	59.1	50.2	48.8	52.9	56.0	54.1	56.8	58.5	59.0	59.5	61.7	63.7	58.6
08/23/15	59.6	56.9	58.4	55.1	52.3	48.6	53.9	60.4	51.5	50.1	50.6	56.3	54.3	58.1	59.2	59.9	61.2	62.5	64.8	59.2
08/24/15	61.5	59.0	59.9	58.1	57.4	52.5	55.8	62.3	51.5	61.0	53.1	57.2	56.2	59.4	61.0	60.6	62.7	64.6	66.3	61.1
08/25/15	60.5	58.8	59.6	54.9	52.6	51.8	54.6	63.0	54.6	54.3	52.2	56.3	56.3	58.0	60.9	62.2	61.5	64.3	65.9	61.3
08/26/15	60.5	58.0	59.3	55.0	55.6	53.1	55.8	61.9	53.5	51.1	52.4	54.8	55.7	58.3	60.0	61.5	61.4	63.7	65.3	60.0
08/27/15																				
08/28/15	60.1	59.2	59.9	56.0	54.6	53.4	56.3	62.2	51.3	49.3	51.0	55.3	56.6	58.0	61.2		61.4	64.7	65.9	66.0
08/29/15																				55.5
08/30/15																				60.4
08/31/15	60.9	58.8	59.3	52.3	53.7	50.8	52.6	61.4	50.6	47.8	51.9	56.6	55.6	58.1	61.3	62.1	60.9	64.3	66	58.2
AVERAGE	60.9	58.6	59 7	57 4	56.3	51 1	54.2	62 N	52.9	53.5	52 7	57.2	56 1	58.6	60.9	61.5	61.9	64.3	66 O	59 7
NO. DAYS	31			31		31		31					31					27		27

TABLE 3. CNEL VALUES FOR SEPTEMBER 2015

RMS NUMBER

Date 1 2 3 4 5 6 7 9 10 11 12 13 14 15 16 18 19 20 21 09/01/15 62.4 59.6 60.8 53.1 58.5 54.3 52.0 62.3 50.4 53.7 53.7 59.6 57.2 60.5 63.1 61.1 63.1 65.8 67.3 56.9 09/02/15 61.4 58.7 59.4 51.4 55.5 52.5 52.3 64.8 51.3 46.4 52.8 58.1 56.0 58.8 60.6 62.3 61.9 64.1 65.8 58.8 09/03/15 61.8 60.1 61.3 55.3 57.3 50.8 53.6 62.2 54.9 54.9 53.3 58.4 57.5 60.3 62.2 61.7 63.1 65.8 67.2 58.8 09/04/15 61.0 59.7 60.5 53.1 58.1 51.8 55.4 --- 52.2 52.7 53.0 57.9 57.1 59.4 61.5 61.8 62.3 65.0 66.3 60.3 09/05/15 56.8 55.0 56.3 50.4 54.6 47.4 51.7 --- 47.4 51.8 48.9 52.6 52.4 55.2 57.1 56.0 58.7 60.8 62.6 57.2 09/06/15 57.5 54.2 54.9 48.2 51.8 43.1 48.2 --- 49.3 45.2 48.5 54.3 51.1 54.5 56.1 53.5 57.0 59.8 61.3 55.0 09/07/15 59.6 57.3 58.2 53.0 56.2 49.4 53.2 --- 52.1 50.2 50.9 55.7 54.5 57.1 59.6 --- 60.2 63.2 64.7 60.1 09/08/15 61.3 59.3 60.5 54.1 53.8 49.5 53.4 62.5 51.6 48.6 53.4 57.1 56.9 58.4 61.6 59.9 60.8 65.1 66.6 57.1 09/09/15 60.4 58.3 60.0 55.7 53.8 53.4 55.5 61.2 --- 52.8 53.2 56.9 55.8 58.2 60.8 --- ---09/10/15 62.3 58.6 59.6 53.1 55.0 50.8 55.1 61.3 51.3 50.7 52.5 59.1 56.1 58.3 60.8 60.5 61.5 64.7 66.4 61.5 09/11/15 60.6 58.7 60.0 55.0 57.9 54.2 58.7 61.4 51.2 52.4 52.6 56.9 56.3 58.4 61.2 --- 64.8 66.1 63.3 09/12/15 58.2 56.7 58.6 49.4 52.4 47.6 50.4 57.1 51.7 47.6 49.7 53.4 54.2 56.3 59.2 --- ---62.9 64.1 56.1 09/13/15 59.0 57.3 58.5 51.1 53.2 48.5 54.8 60.9 49.4 56.6 50.4 55.6 54.7 57.5 59.7 --- 63.0 64.8 60.5 09/14/15 61.1 58.7 59.4 53.1 54.5 50.6 51.3 61.2 51.4 53.0 52.1 57.7 56.3 59.1 61.2 61.8 --- 64.5 66.1 57.3 09/15/15 62.2 59.5 59.7 55.8 56.7 52.7 52.2 62.8 51.0 52.5 54.1 57.8 56.4 59.0 61.2 62.3 63.1 64.7 66.3 58.8 09/16/15 61.5 59.4 60.3 53.7 56.9 54.2 54.6 63.2 54.1 52.2 53.5 58.0 56.6 59.3 61.6 62.2 62.6 65.3 66.8 59.9 09/17/15 61.3 59.4 60.3 53.2 55.0 53.0 58.5 62.4 53.4 53.7 52.8 57.7 56.9 59.1 61.6 61.8 62.4 64.9 66.7 60.8 09/18/15 61.2 59.4 61.0 54.7 56.3 53.5 57.0 61.9 52.3 58.0 53.7 56.6 57.0 59.0 62.4 61.2 62.2 65.2 66.9 59.7 09/19/15 59.4 57.6 58.9 55.9 55.9 49.5 52.8 57.4 52.6 51.2 51.6 54.9 54.9 57.1 59.8 57.4 60.6 63.9 65.6 59.3 09/20/15 59.4 58.5 59.7 49.9 51.7 51.4 57.9 60.0 56.1 47.7 50.5 55.3 54.8 58.0 61.0 59.1 61.7 64.3 65.9 62.6 09/21/15 62.0 59.9 60.6 57.5 57.8 54.5 57.8 60.8 52.6 55.6 53.8 57.5 --- 59.2 61.7 60.4 62.2 65.2 66.7 63.5 09/22/15 61.4 57.7 58.3 57.3 55.7 55.4 57.3 62.8 56.1 50.9 52.7 57.7 56.4 58.3 59.6 62.0 61.7 63.8 65.4 63.9 09/23/15 61.1 58.9 60.1 55.1 54.3 53.8 54.4 62.2 52.7 53.2 53.1 57.2 56.4 58.6 61.2 61.2 62.2 64.7 66.3 60.9 09/24/15 60.6 58.9 59.9 56.3 55.7 54.5 56.0 62.3 52.2 53.4 52.2 55.6 57.0 58.2 61.5 61.9 61.7 64.7 66.3 62.7 09/25/15 60.5 59.0 59.8 55.4 55.4 53.8 56.5 61.6 50.8 53.3 52.4 56.1 56.8 58.6 61.7 60.3 62.4 65.1 66.4 64.2 09/26/15 58.3 55.3 56.3 54.1 52.3 53.9 53.7 58.0 53.7 52.2 50.9 55.1 52.4 56.4 57.7 57.8 59.0 61.4 63.7 62.4 09/27/15 59.0 56.9 58.0 50.0 54.8 52.7 63.5 59.8 50.9 50.9 50.3 54.3 54.4 56.5 59.2 58.9 59.9 62.9 64.5 61.1 09/28/15 59.9 58.6 59.4 53.8 54.4 51.9 56.3 60.3 51.4 51.3 55.9 55.8 58.3 60.6 59.9 61.2 63.9 65.4 61.7 09/29/15 60.9 59.0 60.1 54.8 59.0 53.9 56.0 61.9 50.9 54.4 52.9 57.4 56.4 58.1 61.0 61.4 61.5 64.5 65.9 60.9 09/30/15 61.5 59.8 61.4 56.4 56.3 52.1 55.8 61.9 54.0 52.2 53.1 57.0 57.4 59.3 62.4 61.6 62.7 65.8 67.2 61.1 AVERAGE 60.7 58.5 59.6 54.2 55.8 52.5 56.0 61.6 52.5 52.8 52.4 56.9 56.0 58.4 60.9 60.7 61.6 64.3 65.9 60.8 NO. DAYS 30 30 30 30 30 30 30 26 29 30 30 29 30 30 25 25 30 30 30 QTR. AVG. 61.2 58.7 59.7 55.8 55.8 51.5 54.6 61.9 52.8 53.6 52.9 57.7 56.2 58.8 60.9 61.2 62.0 64.4 66.1 60.0 NO. DAYS 89 91 88 92 92 92 92 79 91 90 92 90 91 92 92 81 87 85 92

TABLE 4. AVERAGE CNEL VALUES

Site	4th Quarter	1st Quarter	2nd Quarter	3rd Quarter	4 Quarter
No.	2014	2015	2015	2015	Average
1	60.7	60.8	60.3	61.2	60.7
2	58.7	58.8	58.3	58.7	58.6
3	59.6	59.8	59.1	59.7	59.5
4	57.1	57.1	55.0	55.8	56.3
5	57.4	57.4	55.7	55.8	56.7
6	54.0	54.6	53.2	51.5	53.5
7	55.0	54.2	54.4	54.6	54.6
9	62.2	61.3	60.1	61.9	61.5
10	53.4	54.1	52.5	52.8	53.2
11	53.9	54.8	51.7	53.6	53.6
12	53.9	54.1	53.1	52.9	53.5
13	57.1	57.2	58.0	57.7	57.5
14	56.1	56.2	55.8	56.2	56.1
15	58.6	58.7	58.4	58.8	58.6
16	60.9	60.9	60.3	60.9	60.8
18	60.7	60.7	60.5	61.2	60.8
19	61.6	61.6	61.4	62.0	61.7
20	64.3	64.3	63.9	64.4	64.2
21	65.8	65.8	64.4	66.1	65.6
22	59.5	59.5	60.6	60.0	59.9

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

				ULE IN E			7/1/15	to	7/4/15	4 DAYS	
AIRCRAFT		AS D8-0		AS B73		AS CR.		AS CRJ		AS B73	-
DAY		DEP 0	ARR 0	DEP 0	ARR 0	DEP 14	ARR 14	DEP 0	ARR 0	DEP 21	ARR 14
EVENING	3	0	0	0	0	7	7	0	0	0	7
NIGHT		0	0	0	0	0	0	0	0	0	0
TOTAL		0	0	0	0	21	21	0	0	21	21
			CCHED	ULE IN E	FEECT		7/1/15	40	7/4/15		
		US A31		0US B73	_	US B73		to US CRJ			
		DEP	ARR	DEP	ARR	DEP	ARR	DEP	ARR	DEP	ARR
DAY		0	0	0	0	0	0	0	0	0	0
EVENING	3	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	FFECT	FROM	7/1/15	to	7/4/15		
		US CR.		US CR.		AA MD		WN B73	_	WN B73	-
		DEP	ARR	DEP	ARR	DEP	ARR	DEP	ARR	DEP	ARR
DAY	,	0	0	21	27	0	0	0	0	21	14
EVENINO NIGHT	,	0 0	0	6 7	7 0	0 0	0 0	0	0	0	7 0
TOTAL		0	0	7 34	34	0	0	0	0	21	21
101712		Ü	Ü	0.	0.	Ü	Ü	Ü	Ü		
				ULE IN E			7/1/15	to	7/4/15		
		WN B73		WN B7			0UA B73		UA B73	-	
DAY		DEP 224	ARR 210	DEP 0	ARR 0	DEP 0	ARR 0	DEP 0	ARR	DEP 0	ARR
EVENING	3	66	80	0	0	0	0	0	0	0	0 0
NIGHT		0	0	0	0	0	0	0	0	0	Ö
TOTAL		290	290	0	0	0	0	0	0	0	0
							_,,,,		_,,,,,		
		IIA D76	SCHED 7UA RJ	ULE IN E	UA CR		7/1/15 FE A30	to	7/4/15 FE A310	1	
		DEP	ARR	DEP	ARR	DEP	ARR	DEP	ARR	DEP	ARR
DAY		0	0	17	10	4	4	0	0	0	1
EVENING	3	0	0	6	13	0	0	0	0	5	0
NIGHT		0	0	0	0	0	0	0	0	0	4
TOTAL		0	0	23	23	4	4	0	0	5	5
			SCHED	ULE IN E	FFFCT	FROM	7/1/15	to	7/4/15		
		UPS A3		UPS B7		DL B75		DL CRJ	77-7710	DL CRJ	7
		DEP	ARR	DEP	ARR	DEP	ARR	DEP	ARR	DEP	ARR
DAY		3	4	0	0	0	0	18	11	0	0
EVENING	3	5	0	0	0	0	0	0	7	0	0
NIGHT TOTAL		0 8	4 8	0 0	0 0	0 0	0 0	0 18	0 18	0	0 0
TOTAL		0	0	U	U	U	U	10	10	U	U
			SCHED	ULE IN E	FFECT	FROM	7/1/15	to	7/4/15		
		DL CRJ	9	B6 A32	0	FW2 A3				TOTAL	S
		DEP	ARR	DEP	ARR	DEP	ARR			DEP	ARR
DAY	_	0	0	0	0	0	0			343	309
EVENING	خ	0	0	7	7	0	0			102	135
NIGHT TOTAL		0 0	0	0 7	0 7	0 0	0 0			7 452	8 452
IOIAL		U	U	,	1	U	U			TJE	732

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

AIRCRAFT DAY EVENING NIGHT TOTAL	AS D8- DEP 0 0 0		OULE IN AS B73 DEP 0 0 0 0	EFFECT 377 ARR 0 0 0 0	FROM AS CR DEP 14 7 0 21	7/5/15 J7 ARR 14 7 0 21	to AS CRJ DEP 0 0 0	8/8/15 ARR 0 0 0	35 DAY AS B73 DEP 21 0 0 21	_
DAY EVENING NIGHT TOTAL	US A31 DEP 0 0 0	SCHED 19US A32 ARR 0 0 0 0		EFFECT 372 ARR 0 0 0 0	FROM US B73 DEP 0 0 0 0	7/5/15 373 ARR 0 0 0	to US CRJ DEP 0 0 0	8/8/15 ARR 0 0 0	DEP 0 0 0	ARR 0 0 0 0
DAY EVENING NIGHT TOTAL	US CRADEP 0 0 0 0		OULE IN US CR DEP 21 6 7 34	EFFECT J9 ARR 27 7 0 34	FROM AA MD DEP 0 0 0 0	7/5/15 080 ARR 0 0 0	to WN B73 DEP 0 0 0	8/8/15 673 ARR 0 0 0	WN B73 DEP 15 0 0	375 ARR 14 1 0
DAY EVENING NIGHT TOTAL	WN B7 DEP 224 66 0 290		DULE IN WN B7 DEP 0 0 0 0	EFFECT '378 ARR 0 0 0		7/5/15 20UA B73 ARR 0 0 0 0	to 373 DEP 0 0 0	8/8/15 UA B73 ARR 0 0 0	75 DEP 0 0 0	ARR 0 0 0
DAY EVENING NIGHT TOTAL	UA B75 DEP 0 0 0 0	SCHED 57UA RJ ARR 0 0 0	DULE IN DEP 33 1 0 34	EFFECT UA CR ARR 21 13 0 34		7/5/15 FE A30 ARR 3 0 0	to 00 DEP 0 0 0	8/8/15 FE A310 ARR 0 0 0	0 DEP 0 5 0	ARR 1 0 4 5
DAY EVENING NIGHT TOTAL	UPS AS DEP 3 5 0		ULE IN UPS B DEP 0 0 0	EFFECT 757 ARR 0 0 0	FROM DL B75 DEP 0 0 0 0	7/5/15 52 ARR 0 0 0	to DL CRJ DEP 18 0 0	8/8/15 ARR 11 7 0 18	DL CR. DEP 0 0 0	J7 ARR 0 0 0 0
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	7/5/15 319 ARR 0 0 0	to	8/8/15	TOTAL DEP 352 97 7 456	S ARR 319 129 8 456

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

AIRCRAFT DAY EVENING NIGHT	AS D8- DEP 0 0		OULE IN AS B7 DEP 0 0 0	EFFECT 377 ARR 0 0 0	FROM AS CR DEP 14 7 0	8/9/15 RJ7 ARR 14 7 0	to AS CR. DEP 0 0		9 DAYS AS B73 DEP 21 0	
TOTAL	0	0	0	0	21	21	0	0	21	21
DAY	US A3 ⁻ DEP 0	SCHEI 19US A32 ARR 0	_	EFFECT 372 ARR 0	FROM US B7 DEP 0	8/9/15 373 ARR 0	to US CR DEP 0	8/17/15 J ARR 0	DEP 0	ARR 0
EVENING NIGHT TOTAL	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0
DAY EVENING NIGHT TOTAL	US CR DEP 0 0 0	J7 ARR 0 0 0 0	US CR DEP 21 6 7 34	ARR 27 7 0 34	AA ME DEP 0 0 0 0	ARR 0 0 0 0	to WN B73 DEP 0 0 0	8/17/15 373 ARR 0 0 0	WN B7 DEP 15 0 0	375 ARR 14 1 0 15
DAY EVENING NIGHT TOTAL	WN B7 DEP 229 57 0 286		OULE IN WN B7 DEP 0 0 0 0	EFFECT 7378 ARR 0 0 0 0		8/9/15 20UA B73 ARR 0 0 0 0	to 373 DEP 0 0 0 0	8/17/15 UA B73 ARR 0 0 0		ARR 0 0 0 0
DAY EVENING NIGHT TOTAL	UA B75 DEP 0 0 0 0	SCHEI 57UA RJ ARR 0 0 0 0	DULE IN DEP 33 1 0 34	EFFECT UA CR ARR 21 13 0 34	_	8/9/15 FE A30 ARR 3 0 0 3	to 00 DEP 0 0 0	8/17/15 FE A31 ARR 0 0 0		ARR 1 0 4 5
DAY EVENING NIGHT TOTAL	UPS A DEP 3 5 0	300	DULE IN UPS B DEP 0 0 0		FROM DL B7: DEP 0 0 0	8/9/15 52 ARR 0 0 0 0	to DL CRJ DEP 18 0 0		DL CR. DEP 0 0 0	J7 ARR 0 0 0 0
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 0	8/9/15 319 ARR 0 0 0	to	8/17/15	TOTAL DEP 357 88 7 452	S ARR 319 125 8 452

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

AIRCRAFT DAY	AS D8- DEP 0		OULE IN AS B7: DEP 0	EFFECT 377 ARR 0	FROM AS CR DEP 14	8/18/15 2J7 ARR 14	to AS CRJ DEP 0		14 DA' AS B73 DEP 21	_
EVENING NIGHT TOTAL	0 0 0	0 0 0	0 0 0	0 0 0	7 0 21	7 0 21	0 0 0	0 0 0	0 0 21	7 0 21
	US A3	SCHEI 19US A32 ARR	_	EFFECT 372 ARR	FROM US B7 DEP	8/18/15 373 ARR	to US CR DEP	8/31/15 J ARR	DEP	ARR
DAY EVENING NIGHT TOTAL	0 0 0	0 0 0 0	0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0	0 0 0 0
DAY EVENING NIGHT TOTAL	US CR DEP 0 0 0		DULE IN US CR DEP 21 6 7 34	EFFECT 2J9 ARR 27 7 0 34	FROM AA ME DEP 0 0 0 0	8/18/15 080 ARR 0 0 0 0	to WN B73 DEP 0 0 0	8/31/15 373 ARR 0 0 0	WN B7 DEP 14 0 0	375 ARR 8 6 0 14
DAY EVENING NIGHT TOTAL	WN B7 DEP 229 57 0 286		DULE IN WN B7 DEP 0 0 0 0	EFFECT 7378 ARR 0 0 0 0		8/18/15 20UA B73 ARR 0 0 0 0		8/31/15 UA B73 ARR 0 0 0	75 DEP 0 0 0	ARR 0 0 0 0
DAY EVENING NIGHT TOTAL	UA B75 DEP 0 0 0 0	SCHEI 57UA RJ ARR 0 0 0 0	DULE IN DEP 24 0 0 24	EFFECT UA CR ARR 18 6 0 24	-	8/18/15 FE A30 ARR 7 1 0		8/31/15 FE A31 ARR 0 0 0		ARR 1 0 4 5
DAY EVENING NIGHT TOTAL	UPS A DEP 3 5 0	300	DULE IN UPS B DEP 0 0 0 0		DL B7	8/18/15 52 ARR 0 0 0 0	DL CRJ		DL CR. DEP 0 0 0	J7 ARR 0 0 0 0
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 0	8/18/15 319 ARR 0 0 0 0	to	8/31/15	TOTAL DEP 351 88 7 446	S ARR 314 124 8 446

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

		SCHEE	NII E IN I	EFFECT	FROM	9/1/15	to	9/5/15	5 DAY	S
AIRCRAFT	AS D8-		AS B73		AS CR		AS CRJ		AS B73	-
DAY	DEP	ARR	DEP	ARR	DEP	ARR	DEP	ARR	DEP	ARR
DAY EVENING	0 0	0	0	0 0	14 7	14 7	0	0	21 0	14 7
NIGHT	0	0	0	0	0	0	0	0	0	Ó
TOTAL	0	0	0	0	21	21	0	0	21	21
		SCHEL		EFFECT	EDOM.	9/1/15	to	9/5/15		
	US A31	9US A32	-	_	US B7		US CRJ			
	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 0	0	0	0	0 0
TOTAL	0	0	0	0	0	0	0	0	0	0
	US CR.		US CR	EFFECT	FROM AA ME	9/1/15	to WN B73	9/5/15	WN B7	375
	DEP	ARR	DEP	ARR	DEP	ARR	DEP	ARR	DEP	ARR
DAY	0	0	18	25	0	0	0	0	14	8
EVENING	0	0	5	5	0	0	0	0	0	6
NIGHT TOTAL	0 0	0	7 30	0 30	0 0	0 0	0 0	0	0 14	0 14
TOTAL	U	U	30	30	U	U	U	U	14	14
				EFFECT		9/1/15	to	9/5/15		
	WN B7	-	WN B7			20UA B73	_	UA B73	_	4 D D
DAY	DEP 229	ARR 210	DEP 0	ARR 0	DEP 0	ARR 0	DEP 0	ARR 0	DEP 0	ARR 0
EVENING	57	76	0	0	0	0	0	0	0	0
NIGHT	0	0	0	0	0	0	0	0	0	0
TOTAL	286	286	0	0	0	0	0	0	0	0
		SCHEE	ULE IN I	EFFECT	FROM	9/1/15	to	9/5/15		
		7UA RJ		UA CR	-	FE A30	-	FE A31	-	
DAV	DEP	ARR	DEP 24	ARR 18	DEP 7	ARR 7	DEP	ARR	DEP	ARR
DAY EVENING	0 0	0 0	0	6	1	1	0 0	0	0 5	1 0
NIGHT	Ö	Ö	Ö	0	0	0	Ö	0	0	4
TOTAL	0	0	24	24	8	8	0	0	5	5
		SCHEE	ULE IN I	EFFECT	FROM	9/1/15	to	9/5/15		
	UPS A3		UPS B		DL B7	52	DL CRJ		DL CR.	J7
541/	DEP	ARR	DEP	ARR	DEP	ARR	DEP	ARR	DEP	ARR
DAY EVENING	3 5	4 0	0 0	0 0	0 0	0 0	20 0	13 7	0 0	0 0
NIGHT	0	4	0	0	0	0	0	0	0	0
TOTAL	8	8	0	0	0	0	20	20	0	0
		SCHEL	N II E IN I	EFFECT	EDOM	9/1/15	to	9/5/15		
	DL CRJ		B6 A32		FW2 A		iU	<i>3</i> /3/13	TOTAL	s
	DEP	ARR	DEP	ARR	DEP	ARR			DEP	ARR
DAY	0	0	0	0	0	0			350	314
EVENING	0	0	7	7	0	0			87	122
NIGHT TOTAL	0 0	0 0	0 7	0 7	0 0	0 0			7 444	8 444
	•	•	•	•	•	•				

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

AIRCRAFT	AS D8-		OULE IN AS B7:	EFFECT 377	FROM AS CR	9/6/15 J7	to AS CRJ		25 DAY AS B73	
DAY EVENING NIGHT TOTAL	DEP 0 0 0 0	ARR 0 0 0 0	DEP 7 0 0 7	ARR 7 0 0 7	DEP 14 5 0 19	ARR 14 5 0 19	DEP 0 0 0 0	ARR 0 0 0 0	DEP 19 0 0 19	ARR 19 0 0 19
TOTAL	U	-	-		-				19	19
	US A3	SCHEL 19US A32	_	EFFECT 372	FROM US B7	9/6/15 373	to US CRJ	9/30/15		
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
TOTAL	0	0	0	0	0	0	0	0	0	0
				EFFECT		9/6/15	to	9/30/15		
	US CR DEP	J7 ARR	US CR DEP	J9 ARR	AA MD DEP	080 ARR	WN B73 DEP	373 ARR	WN B7	375 ARR
DAY	0	0	18	25	0	0	0	0	14	8
EVENING NIGHT	0 0	0 0	5 7	5 0	0 0	0 0	0 0	0	0	6 0
TOTAL	0	0	30	30	0	0	0	0	14	14
	\A\A\ D.7			EFFECT		9/6/15	to	9/30/15		
	WN B7 DEP	377 ARR	WN B7 DEP	378 ARR	DEP	20UA B73 ARR	DEP	UA B73 ARR	/5 DEP	ARR
DAY	229	210	0	0	0	0	0	0	0	0
EVENING NIGHT	57 0	76 0	0 0	0 0	0 0	0 0	0 0	0	0	0 0
TOTAL	286	286	0	0	0	0	0	0	0	0
			DULE IN	EFFECT	_	9/6/15	to	9/30/15		
	UA B75 DEP	57UA RJ ARR	DEP	UA CR ARR	J7 DEP	FE A30 ARR	0 DEP	FE A310 ARR	DEP	ARR
DAY	0	0	24	18	7	7	0	0	0	1
EVENING	0	0	0	6	1	1	0	0	5	0
NIGHT TOTAL	0 0	0 0	0 24	0 24	0 8	0 8	0 0	0 0	0 5	4 5
		SCHEE	DULE IN	EFFECT	FROM	9/6/15	to	9/30/15		
	UPS A		UPS B	-	DL B7	-	DL CRJ		DL CR.	
DAY	DEP 3	ARR 4	DEP 0	ARR 0	DEP 0	ARR 0	DEP 20	ARR 13	DEP 0	ARR 0
EVENING	5	0	Ö	Ö	Ö	Ö	0	7	Ö	Ö
NIGHT TOTAL	0 8	4 8	0 0	0 0	0 0	0 0	0 20	0	0	0 0
TOTAL	0						20	20	U	U
	DL CR		DULE IN B6 A32	EFFECT	FROM FW2 A	9/6/15	to	9/30/15	TOTAL	S
	DEP	ARR	DEP	ARR	DEP	ARR			DEP	ARR
DAY			_	^	^	^			355	326
	0	0	0	0	0	0				
EVENING NIGHT	0 0 0	0 0 0	0 7 0	0 7 0	0 0 0	0			355 85 7	113 8

TABLE 5. (CONTINUED)

THIRD QUARTER 2015

PERIOD TOTALS FOR AIR CARRIERS AND AIR TAXIS

AIR CARRIER	S DEP	ARR
DAY	4009	3830
EVE	1154	1228
NIGHT	0	105
TOTAL	5163	5163
AIR TAXIS	DEP	ARR
DAY	1125	999
EVE	175	393
NIGHT	92	0
TOTAL	1392	1392

AIR CARRIERS AND AIR TAXIS

	<u>DEP</u>	<u>ARR</u>
DAY	5134	4829
EVE	1329	1621
NIGHT	92	105
TOTAL	6555	6555

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 545.1 and 234.5 acres, respectively. The areas of incompatible land uses enclosed by the contours were then computed. The incompatible land use areas were 5.73 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 103 parcels of land. Those 103 parcels total 14.68 acres. One of the 103 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 39 single family residential parcels, totaling approximately 5.60 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 41 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 111 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 Burbank Airport, Fourth Quarter 2014",
 AAAI Report 1446.
- "Quarterly Noise Monitoring at Bob Hope Airport, First Quarter 2015",
 AAAI Report 1468.
- "Quarterly Noise Monitoring at Burbank Airport, Second Quarter 2015",
 AAAI Report 1469.

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.

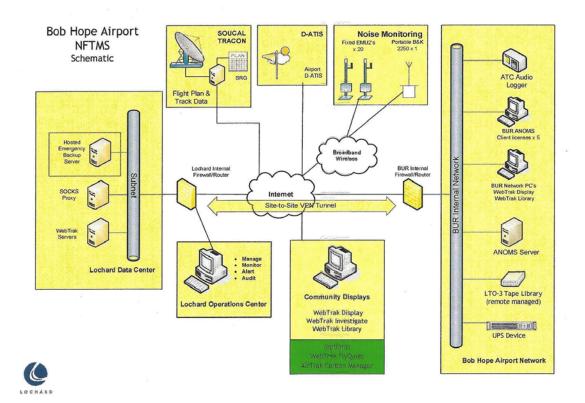


Figure A-1. Permanent Noise Monitor System Schematic

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	1.0
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

15-May-2013 Page 1 of 8



Devices Report

RMT Calibration Results

Bob Hope Airport

Start Date: 04-Jan-2013

End Date: 31-Jan-2013

25-Jan-2013	18-Jan-2013	11-Jan-2013	04-Jan-2013	onitor Location	Me
0.1	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
0.1	0.1	0.0	0.0	18	18
0.0	0.0	0.0	0.0	19	19
0.1	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

15-May-2013 Page 1 of 2