

AAAI Report 1397 AAAI Project 88018

QUARTERLY NOISE MONITORING AT BOB HOPE AIRPORT THIRD QUARTER 2012

DECEMBER 2012

Prepared for:



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Prepared for:

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TABLE OF CONTENTS

Section	<u>n</u>	ige
l.	INTRODUCTION	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.	INCOMPATIBLE LAND USE	20
REFE	RENCES	21
APPE	NDIX A - NOISE MONITOR INSTRUMENTATION	
APPE	NDIX B - CALIBRATION	

LIST OF TABLES

<u>Table</u>		<u>Pag</u>	<u>ge</u>
1.	CNEL VALUES FOR JULY 2012		7
2.	CNEL VALUES FOR AUGUST 2012		8
3.	CNEL VALUES FOR SEPTEMBER 2012		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 2012	. 2
2.	CNEL 65 CONTOUR FOR BOB HOPE AIRPORT - THIRD QUARTER 2012	. 3
3.	NOISE MONITOR LOCATIONS	. 5

QUARTERLY NOISE MONITORING AT BOB HOPE AIRPORT THIRD QUARTER 2012

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. The site to the west replaces Site 8. 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.

This report describes the data acquired by the monitoring system during the third quarter of 2012. Noise impact boundaries for 65 dB and 70 dB are shown based on these measurements and measurements obtained during the fourth quarter 2011 and first and second quarter 2012 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.

-1-

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

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. 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 digitized and transmitted by phone line to the central site. The computer at the central site 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 was occasional telephone signal interruption 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.

D. Operational Data

Departure and arrival schedules are provided by the airlines. In addition, airline flight operations are tabulated and provided by airport personnel. Operations of certain general aviation 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 July 2008 through June 2009. This replaced the previous master set of CNEL Contours which were based on operations for the 12-month period from January 2007 through December 2007.

TABLE 1. CNEL VALUES FOR JULY 2012

RMS NUMBER

Date	1	2	3	4	5	6	7	9	10	11	12	13	14	15	16	17	18
7/1/2012	60.0	59.0	59.2	58.5	61.4	52.5	61.9	61.8	45.5	51.2	64.8	58.1	59.0	58.6	63.5	59.0	63.0
7/2/2012	61.9	59.0	59.7	55.5	58.7	52.9	56.5	60.5	46.9	53.0	63.7	60.1	55.4	60.5	61.6	62.0	62.0
7/3/2012	62.2	58.0	59.5	56.5	62.9	56.4	59.2	62.5	62.1	55.2	52.4	61.2	53.0	61.9	60.6	61.1	65.3
7/4/2012	60.8	60.2	58.2	51.5	66.5	51.0	69.1	59.9	54.1	48.2	50.6	59.3	54.9	59.0	60.2	59.0	61.6
7/5/2012 7/6/2012	61.9 	58.9	60.0	55.0 			60.2	62.7	51.0	54.1	51.9	60.8	60.2	60.6	62.1	60.7	63.9
7/7/2012					66.7												
7/8/2012					55.9												
7/9/2012	62.6	59.6	61.1	58.8	66.1		57.6	61.2	45.5	49.8	63.1	59.3	56.2	60.1	62.7	60.8	62.5
7/10/2012	62.0	59.2	60.1	58.1	62.0		59.0	62.7	51.0	51.6	52.2	59.9	56.0	60.1	62.0	60.4	64.8
7/11/2012	61.3	58.1	58.9	56.4	58.8	51.6	58.9	62.1	53.6	53.8	49.2	60.2	54.2	59.8	61.1	60.2	63.0
7/12/2012	59.2	58.3	58.7	54.7	58.6	51.3	54.5	61.0	54.4	50.1	48.0	57.6	54.4	58.0	60.7	58.1	61.5
7/13/2012	61.4	59.9	61.4	56.5	59.4	59.1	62.2	62.4	49.9	55.1	48.3	61.9	56.6	60.9	63.2	60.4	63.1
7/14/2012	58.9	58.1	57.6	57.0	57.1	56.9	62.7	59.8	54.4	47.1	52.1	57.2	50.9	57.8	59.5	58.0	62.1
7/15/2012	60.9	58.1	59.6	55.1	58.2	59.4	55.8	62.0	50.0	49.2	49.6	59.8	54.5	60.6	61.3	60.7	63.2
7/16/2012	62.7	60.5	61.0	57.0	63.4	61.8	61.5	62.4	54.9	58.3	52.5	61.3	57.6	62.2	62.9	62.0	63.5
7/17/2012	62.9	59.6	59.8	58.4	62.1	55.3	59.1	62.5	52.6	56.1	53.1	62.0	55.5	61.9	61.9	61.9	64.0
7/18/2012	60.5	59.7	61.6	52.0	55.3	57.3	61.9	61.9	51.9	52.9	49.3	58.9		60.9	63.6	60.4	62.4
7/19/2012	62.3	60.4	61.4	59.4	58.2	54.9	61.1	62.1	53.7	51.6	50.6	60.0	56.9	60.7	64.1	61.4	63.0
7/20/2012	62.0	60.2	61.9	56.4	55.8	53.8	58.1	62.9	50.6	52.2	48.6	60.2	56.9	61.6	63.8	61.6	63.6
7/21/2012	59.2	57.5	58.5	56.3	56.2	57.4	60.6	59.4	53.5	43.2	42.6	55.9	55.2	58.5	60.4	58.7	60.9
7/22/2012	60.3	57.1	59.3	57.4	52.5		55.4	61.4	51.5	46.1	45.2	59.1	55.8	59.7	61.3	60.0	63.0
7/23/2012	62.3	59.2	59.5	56.7	53.5		57.7	61.0	49.7	52.1	51.1	60.6	55.8	60.6	62.1	60.7	62.1
7/24/2012	62.5	58.7	59.5	58.8	58.5		59.7	62.0	52.2	54.8	51.9	62.0	55.7	61.6	61.3	61.2	66.1
7/25/2012	62.2	59.7	60.4	57.3	60.0	51.9	60.8	62.9	50.9	54.4	50.5	60.2	61.1	60.0	63.0	60.3	64.1
7/26/2012	63.3	60.0	60.9	57.6	54.9	54.7	59.1	62.6	54.1	54.7	53.4	61.3	57.2	61.5	63.0	61.7	64.1
7/27/2012	61.4	59.4	60.2	66.8	56.6		61.5	62.4	51.4	52.3	48.9	59.5	60.7	60.7	62.3	60.1	63.9
7/28/2012	58.8	56.4	57.7	56.2	57.4		58.2	59.5	48.4	51.9	45.4	57.5		58.3	60.6	58.8	60.7
7/29/2012	60.7	57.6	59.3	58.5	62.1		58.2	61.5	48.3	42.6	42.1	59.9	52.6	60.4	60.5	60.4	62.6
7/30/2012	61.4	59.5	60.2	53.9	56.1		57.5	61.5	60.6	51.3	50.7	59.9	56.0	60.8	62.2	61.0	62.9
7/31/2012	60.6	59.0	59.9	54.7	59.4		61.0	62.1	51.8	55.1	51.2	60.3	58.7	61.1	61.5	61.3	63.2
AVERAGE	61.5	59.1	60.0	58.0	61.1	56.3	60.8	61.8	53.9	52.9	55.6	60.0	56.9	60.5	62.1	60.6	63.2
NO. DAYS	28	28	28	28	31	17	28	28	28	28	28	28	26	28	28	28	28
NO. DATO	20	20	20	20	31		20	20	20	20	20	20	20	20	20	20	20

TABLE 2. CNEL VALUES FOR AUGUST 2012

RMS NUMBER

Date	1	2	3	4	5	6	7	9	10	11	12	13	14	15	16	17	18
0/4/0040	00.7	04.0	00.5	F0 F	57. 0	540	50.4	00.0		50.0	E0.4	00.0	57. 0	00.0	00.4	00.4	00.0
8/1/2012	62.7	61.6	60.5	59.5	57.6	54.2	59.1	62.9	55.7	52.6	50.1	60.0		60.3	63.1	60.4	63.8
8/2/2012	62.1	58.4	60.9	57.0	56.6	57.0	59.7	62.7	50.5	51.1	51.6	60.3	56.0	60.8	63.0	60.8	63.8
8/3/2012	·		59.8	53.6	58.7	52.5	57.6	63.0	47.5	55.7	51.2	60.8	55.2	60.5	61.5	60.7	63.4
8/4/2012 8/5/2012	59.3 60.8		59.5	54.2 56.4	57.0 54.1	51.7 49.9	57.9 56.1	59.4 60.6	51.7 44.0	41.6 42.9	45.7 36.6	57.7 58.7	54.2 54.5	58.8 59.5	60.4 60.6	59.0 59.7	60.4 61.7
8/6/2012			59.7 60.4	58.0	56.0	52.8	58.2	60.8	50.6	42.9 54.6	49.5	58.8	55.8	59.5	62.5	60.4	61.8
8/7/2012	61.8		60.9	56.9	57.8	55.9	59.9	61.9	50.5	54.1	48.7	60.5	56.6	61.0	62.4	60.7	64.1
8/8/2012	61.6		60.9	58.4	55.3	52.3	59.9	62.6	53.2	53.9	45.5	58.8	55.0	59.6	62.4	59.7	63.7
8/9/2012	61.8		61.6	55.3	55.1	48.1	59.2	62.0	50.1	55.1	48.1	59.6	56.8	61.3	61.2	61.3	62.8
8/10/2012			60.9	57.7	55.2	41.1	58.4	62.5	55.4	52.9	43.9	58.0	56.4			60.1	63.1
8/11/2012	58.4		58.9	50.6	53.8		54.0	59.9	39.8	47.7	43.8	55.0	54.5	57.2		57.6	61.0
8/12/2012			59.2	55.3	52.2		55.4	60.2	45.3	42.9	42.5	57.0	53.8	59.3		59.4	61.7
8/13/2012	62.1		61.5	58.4	55.2		59.5	61.1	60.9	49.2	49.9	58.8	57.3	60.6		60.5	62.1
8/14/2012	61.5	60.6	60.8	56.0	57.8	55.8	58.4	62.0	49.4	55.4	49.5	59.2	56.4	61.3		61.0	65.3
8/15/2012	61.3	60.2	60.7	57.9	57.6	49.1	57.0	62.1	53.7	60.1	47.1	59.1	57.4	60.5		59.9	62.9
8/16/2012	61.1	60.2	61.3	54.1	58.2	49.4	59.3	61.6	51.3	49.6	47.1	57.9	56.8	60.2		60.4	62.4
8/17/2012	60.1	58.7	58.9	55.1	57.4	50.4	58.2	61.7	49.5	53.3	45.5	57.7	54.5	59.1		59.3	62.3
8/18/2012	57.0	56.6	56.8	52.2	56.4	41.0	54.2	58.9	52.9	53.5	44.7	57.6	55.0	56.7		57.3	60.0
8/19/2012	59.9	58.0	59.8	54.7	55.1	50.0	59.8	60.7	47.1	48.5	42.2	57.9	55.2	59.7		60.0	61.7
8/20/2012	62.4	58.5	61.2	56.2	56.3	48.2	56.9	61.8	53.2	56.2	51.1	60.3	55.6	60.4		60.6	62.9
8/21/2012	63.5	59.6	61.2	57.4	60.2	57.1	61.6	62.9	55.1	54.5	53.6	61.9	56.8	61.8	64.3	60.1	64.4
8/22/2012	58.3	57.0	58.4	53.9	57.0	46.1	56.2	59.6	51.7	51.3	41.9	56.3	54.4	58.4	60.6		60.4
8/23/2012	62.5	61.2	61.3	58.1	58.5	52.2	65.4	62.8	51.6	48.3	52.2	61.2	57.6	61.9	63.3		64.5
8/24/2012	61.2	59.5	60.2	55.5	64.6	52.0	58.7	62.7	58.4	53.0	49.7	60.3	57.3	60.6	61.9		63.1
8/25/2012	60.6	57.2	56.8	54.0	58.7	57.9	60.3	60.4	56.1	52.5	50.2	57.7		59.3	59.1		61.6
8/26/2012	61.1	58.8	59.9	64.3	61.3	55.3	61.2	60.9	45.7	46.7	48.5	58.8	55.4	60.0	62.4		62.0
8/27/2012	58.1	57.1	57.3	52.6	55.0	54.5	56.2	57.3	34.4	48.4	44.7	56.0	53.7	57.9	60.5		58.8
8/28/2012	57.6	55.3	58.0	51.1	57.4	55.3	53.9	57.7	48.5	55.2	51.3	54.4	53.8	60.0	62.1		61.1
8/29/2012	61.7	59.8	59.9	59.5	59.6	54.6	60.7	62.3	56.8	55.1	49.2	66.4	56.2	60.2	65.5		63.3
8/30/2012	58.5	57.3	58.9	52.9	56.3	49.7	56.1	60.7	53.6	52.8	41.9	56.4	54.6	58.2	60.6		61.7
8/31/2012	60.6	59.1	60.4	56.3	59.7	50.8	56.5	62.3	56.3	52.3	56.5	59.9	55.2	60.7	61.8		63.1
AVERAGE	61.0	59.0	60.0	56.9	57.9	53.2	59.0	61.5	53.4	53.3	49.3	59.5	55.8	60.0	62.2	60.0	62.6
NO. DAYS	31	20	31	31	31	28	31	31	31	31	31	31	30	31	20	21	31

TABLE 3. CNEL VALUES FOR SEPTEMBER 2012

RMS NUMBER

Date	1	2	3	4	5	6	7	9	10	11	12	13	14	15	16	17	18
0/4/0040	F7.4		-7 -7	54.0	F0 F	40.0	F0.0	F7.0	55.0	F0.0	40.0	540	50.0	F7.0	F0.0		50 F
9/1/2012	57.1	57.5	57.7	51.8	56.5	49.9	59.3	57.9	55.9	50.6	42.9	54.9	52.9	57.0	59.6		58.5
9/2/2012	58.3 56.1	57.1	57.3	50.5	54.6	48.5	57.2	57.4	46.3	46.8	38.1	55.1	53.4	57.0	59.4		58.5
9/3/2012 9/4/2012	54.0	55.1 54.1	56.7 55.6	51.8 45.2	54.2	50.3	62.0	58.1	36.1	50.1	46.9	52.5	52.3 50.2	55.0 54.0	58.9 57.8		59.4
9/5/2012	61.3	60.9	61.2	58.2	55.1 59.0	36.6 54.5	51.4 56.6	55.4 61.6	49.6 50.0	48.0 49.7	50.1 49.3	50.4 59.4	57.5	60.3	63.6		56.8 63.7
9/6/2012	62.2	61.3	62.0	53.1	56.2	47.6	59.1	61.8	46.1	51.3	49.4	61.1	57.8	61.9			63.5
9/7/2012	61.7	61.4	62.8	53.8	58.7	53.3	62.3	62.6	49.4	53.1	49.4	58.8	59.0	61.3	65.1		63.8
9/8/2012	58.8	58.7	58.9	57.5	56.8	44.9	54.6	61.3	49.4 47.1	48.1	46.2	55.7	56.6	57.0	62.1		61.3
9/9/2012	60.4	57.9	59.6	56.9	53.1	42.6	52.3	60.2	54.5	40.0	47.7	57.5	55.6	58.3	61.7		60.9
9/10/2012	60.3	59.1	59.9	53.5	58.5	44.6	52.5 57.1	58.1	51.3	47.1	49.3	58.5	56.0	59.2	61.9		59.3
9/11/2012	57.8	56.3	58.7	46.5	62.2	51.3	53.2	59.9	52.7	52.7	47.5	56.7	54.5	61.1			62.3
9/11/2012	55.6	55.0	56.9	45.7	56.8	46.2	56.4	58.8	51.3	49.1	45.3	54.4	53.4	56.3	58.8		59.4
9/13/2012	60.2	60.5	61.9	54.5	56.8	52.4	59.1	61.9	48.5	49.7	47.1	58.1	57.2	59.6	64.2		62.9
9/14/2012	58.8	60.0	60.6	54.8	60.4	53.5	56.2	61.0	48.6	51.1	45.4	56.5	56.2	58.9			62.0
9/15/2012	53.5	52.4	54.6	53.1	56.0	38.5		51.2	44.8	43.7	45.1	52.1	46.5	54.8			51.2
9/16/2012	60.1	56.6	59.0	55.8	58.0	50.4	54.8	60.7	41.6	47.7	52.3	57.5	52.5	58.8	59.8		62.9
9/17/2012	61.4	59.2	60.6	49.2	55.7	51.5	56.3	60.4	47.6	52.2	49.5	59.6	56.3	60.5	62.5		61.5
9/18/2012	57.7	55.3	57.4	58.2	60.6	52.9	56.2	59.7	51.2	57.7	45.5	57.4	53.9	60.5	60.4		62.2
9/19/2012	60.8	60.3	60.5	56.4	57.3	55.1	61.0	61.3	55.1	55.4	49.4	58.6	58.9	59.8	62.8		62.5
9/20/2012	60.1	59.9	60.9	50.6	55.3	49.8	57.6	61.2	50.5	57.1	49.7	58.4	57.2	60.1	63.1		62.8
9/21/2012	60.6	60.4	62.7	59.0	58.2	53.3	59.2	61.7	52.5	53.9	49.0	58.3	57.2	60.5	64.6		63.0
9/22/2012	55.6	56.9	56.5	53.1	56.6	56.9	59.2	57.2	47.7	54.3	49.3	55.5	48.5	56.1	59.8		59.0
9/23/2012	59.2	59.9	59.6	51.8	56.0	49.7	55.8	60.0	55.1	50.0	41.7	56.4	58.6	59.1	61.6		61.1
9/24/2012	62.5	60.2	61.3	57.5	57.5	50.9	56.9	60.9	53.6	53.0	48.6	60.5	52.8	61.4	63.0	61.7	62.2
9/25/2012	62.5	60.9	61.6	60.8	60.0	58.5	60.0	62.3	51.0	59.9	54.7	62.3	55.2	64.4	63.4	62.0	63.8
9/26/2012	62.6	60.0	61.1	57.0	58.1	54.1	59.0	61.6	55.6	56.1	54.7	60.6	58.2	60.9	63.3	60.7	63.2
9/27/2012	62.3	60.0	60.8	57.4	58.3	55.3	60.5	62.4	57.9	58.0	51.7	61.5	57.0	61.2	63.2	61.2	64.0
9/28/2012	61.3	60.7	61.4	53.2	56.4	51.5	62.5	61.9	56.9	54.6	51.3	58.2	57.7	60.5	64.0	60.4	63.3
9/29/2012	55.7	56.0	56.7	51.7	54.1	50.9	58.6	56.9	58.8	48.0	46.9	54.4	51.2	57.0	58.4	58.0	63.3
9/30/2012	58.8	58.5	60.3	52.3	59.1	53.8	58.1	59.9	54.0	46.8	55.2	56.0	55.5	59.1	62.2	59.0	61.9
AVERAGE	59.9	59.0	60.0	55.2	57.7	52.3	58.5	60.4	52.8	53.2	49.7	58.0	55.9	59.7	62.1	60.6	61.9
NO. DAYS	30	30	30	30	30	30	29	30	30	30	30	30	30	30	30	7	30
QTR. AVG.	60.8	59.0	60.0	56.8	59.2	53.9	59.5	61.2	53.4	53.1	52.4	59.2	56.2	60.0	62.1	60.4	62.6
NO. DAYS	89	78	89	89	92	75	88	89	89	89	89	89	86	89	78	56	89

TABLE 4. AVERAGE CNEL VALUES

Site	4th Quarter	1st Quarter	2nd Quarter	3rd Quarter	4 Quarter
No.	2011	2012	2012	2012	Average
1	61.6	61.2	61.6	60.8	61.3
2	59.8	59.4	58.8	59.0	59.3
3	60.7	60.0	60.0	60.0	60.2
4	58.8	57.4	56.4	56.8	57.4
5	59.2	58.5	59.6	59.8	59.3
6	56.4	55.5	54.4	53.9	55.2
7	58.1	57.6	58.7	59.5	58.6
9	61.3	60.8	61.6	61.2	61.2
10	54.3	52.6	54.1	53.4	53.7
11	53.2	53.2	54.2	53.1	53.5
12	52.7	52.2	57.0	52.4	54.1
13	59.8	59.9	60.1	59.2	59.8
14	57.2	57.3	56.1	56.2	56.7
15	61.0	60.1	60.3	60.0	60.4
16	63.5	62.1	62.3	62.1	62.5
17	60.7	60.0	60.4	60.4	60.4
18	61.9	62.1	62.8	62.6	62.4

Table 5. WEEKLY SCHEDULED AIR CARRIER AND AIR TAXI FLIGHTS FOR THE THIRD QUARTER 2012

AIRCRAFT DAY EVENING NIGHT TOTAL	AS D8 DEP 0 0 0	DULE IN AS B7 DEP 14 0 0 14	EFFECT '377 ARR 7 7 0 14	FROM AS CF DEP 21 0 0 21	7/1/12 RJ7 ARR 14 7 0 21	to AS CR DEP 0 0 0	7/2/12 J ARR 0 0 0 0	2 DAY: AS B7: DEP 7 0 0	
DAY EVENING NIGHT TOTAL	US A3 DEP 0 0 0	DULE IN US A3 DEP 0 0 0	EFFECT 820 ARR 0 0 0 0	FROM US B7 DEP 0 0 0	7/1/12 /372 ARR 0 0 0	to US B7 DEP 6 7 7 20	7/2/12 373 ARR 13 7 0 20	US CR DEP 0 0 0	ARR 0 0 0 0
DAY EVENING NIGHT TOTAL	US CF DEP 0 0 0	DULE IN US CF DEP 12 0 0 12	EFFECT RJ9 ARR 12 0 0 12	FROM AA MI DEP 0 0 0 0	7/1/12 080 ARR 0 0 0	to WN B7 DEP 0 0 0	7/2/12 7373 ARR 0 0 0	WN B7 DEP 0 0 0	7375 ARR 0 0 0 0
DAY EVENING NIGHT TOTAL	WN BTDEP 272 60 0 332	DULE IN UA A3 DEP 0 0 0 0	EFFECT 319 ARR 0 0 0	FROM UA A3 DEP 0 0 0	7/1/12 520 ARR 0 0 0	to UA B7 DEP 0 0 0	7/2/12 373 ARR 0 0 0 0	UA B7: DEP 0 0 0	375 ARR 0 0 0 0
DAY EVENING NIGHT TOTAL	UA B7 DEP 0 0 0	DULE IN UA RJ DEP 34 6 0 40	EFFECT ARR 27 13 0 40	FROM UA CF DEP 19 0 0	7/1/12 RJ7 ARR 13 6 0	to FE A30 DEP 0 0 0	7/2/12 00 ARR 0 0 0 0	FE A3 ⁻ DEP 0 5 0 5	10 ARR 1 0 4 5
DAY EVENING NIGHT TOTAL	UPS A DEP 3 5 0	DULE IN UPS E DEP 0 0 0	EFFECT 3757 ARR 0 0 0 0	FROM DL B7 DEP 0 0 0	7/1/12 52 ARR 0 0 0 0	to DL CR DEP 14 6 0 20	7/2/12 J ARR 20 0 0 20	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 A3 DEP 14 7 0 21	EFFECT 20 ARR 7 14 0 21	FROM FW2 A DEP 0 0 0	7/1/12 A319 ARR 0 0 0	to	7/2/12	TOTAL DEP 416 96 7 519	-S ARR 370 141 8 519

Table 5. WEEKLY SCHEDULED AIR CARRIER AND AIR TAXI FLIGHTS FOR THE THIRD QUARTER 2012

AIRCRAFT DAY EVENING NIGHT TOTAL	AS D8- DEP 0 0 0	DULE IN AS B7: DEP 14 0 0 14	EFFECT 377 ARR 7 7 0 14	FROM AS CR DEP 21 0 0 21	7/3/12 RJ7 ARR 14 7 0 21	to AS CR. DEP 0 0 0	7/8/12 J ARR 0 0 0	6 DAY AS B73 DEP 7 0 0	
DAY EVENING NIGHT TOTAL	US A31 DEP 0 0 0	DULE IN US A3 DEP 0 0 0	EFFECT 20 ARR 0 0 0	FROM US B7 DEP 0 0 0	7/3/12 372 ARR 0 0 0	to US B73 DEP 6 7 7 20	7/8/12 873 ARR 13 7 0 20	US CR. DEP 0 0 0	J ARR 0 0 0 0
DAY EVENING NIGHT TOTAL	US CR DEP 0 0 0	DULE IN US CR DEP 12 0 0 12	EFFECT RJ9 ARR 12 0 0 12	FROM AA ME DEP 0 0 0 0	7/3/12 080 ARR 0 0 0	to WN B7 DEP 0 0 0	7/8/12 373 ARR 0 0 0	WN B7 DEP 0 0 0	375 ARR 0 0 0 0
DAY EVENING NIGHT TOTAL	WN B7 DEP 272 60 0 332	DULE IN UA A3 DEP 0 0 0 0	EFFECT 19 ARR 0 0 0	FROM UA A3 DEP 0 0 0 0	7/3/12 20 ARR 0 0 0 0	to UA B73 DEP 0 0 0	7/8/12 873 ARR 0 0 0	UA B73 DEP 0 0 0	375 ARR 0 0 0 0
DAY EVENING NIGHT TOTAL	UA B75 DEP 0 0 0 0	DULE IN UA RJ DEP 47 6 0 53	EFFECT ARR 34 19 0 53	FROM UA CF DEP 7 0 0	7/3/12 RJ7 ARR 7 0 0 7	to FE A30 DEP 0 0 0	7/8/12 00 ARR 0 0 0 0	FE A31 DEP 0 5 0	0 ARR 1 0 4 5
DAY EVENING NIGHT TOTAL	UPS A3 DEP 3 5 0	OULE IN UPS B DEP 0 0 0	EFFECT 757 ARR 0 0 0 0	FROM DL B7 DEP 0 0 0	7/3/12 52 ARR 0 0 0 0	to DL CR. DEP 14 6 0 20	7/8/12 J ARR 20 0 0 20	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 14 7 0 21	EFFECT 20 ARR 7 14 0 21	FROM FW2 A DEP 0 0 0 0	7/3/12 A319 ARR 0 0 0	to	7/8/12	TOTAL DEP 417 96 7 520	S ARR 371 141 8 520

Table 5. WEEKLY SCHEDULED AIR CARRIER AND AIR TAXI FLIGHTS FOR THE THIRD QUARTER 2012

AIRCRAFT DAY EVENING NIGHT TOTAL	AS D8- DEP 0 0 0	DULE IN AS B7: DEP 14 0 0 14	EFFECT 377 ARR 7 7 0 14	FROM AS CR DEP 21 0 21	7/9/12 J7 ARR 14 7 0 21	to AS CR. DEP 0 0 0	8/11/12 J ARR 0 0 0 0	34.00 AS B73 DEP 7 0 0 7	DAYS 378 ARR 7 0 0
DAY EVENING NIGHT TOTAL	US A3 ⁻ DEP 0 0 0	DULE IN US A3: DEP 0 0 0 0	EFFECT 20 ARR 0 0 0 0	FROM US B7 DEP 0 0 0	7/9/12 372 ARR 0 0 0	to US B73 DEP 0 7 0	8/11/12 73 ARR 0 7 0 7	US CRODEP 0 0 0 0	J ARR 0 0 0
DAY EVENING NIGHT TOTAL	US CR DEP 0 0 0	DULE IN US CR DEP 19 0 7 26	EFFECT J9 ARR 19 7 0 26	FROM AA MD DEP 0 0 0 0	7/9/12 080 ARR 0 0 0	to WN B7: DEP 0 0 0	8/11/12 373 ARR 0 0 0	WN B7 DEP 0 0 0	375 ARR 0 0 0 0
DAY EVENING NIGHT TOTAL	WN B7 DEP 272 60 0 332	DULE IN UA A3 DEP 0 0 0	EFFECT 19 ARR 0 0 0 0	FROM UA A3 DEP 0 0 0	7/9/12 20 ARR 0 0 0 0	to UA B73 DEP 0 0 0	8/11/12 73 ARR 0 0 0 0	UA B73 DEP 0 0 0	375 ARR 0 0 0 0
DAY EVENING NIGHT TOTAL	UA B75 DEP 0 0 0 0	DULE IN UA RJ DEP 47 6 0 53	EFFECT ARR 34 19 0 53	FROM UA CR DEP 7 0 0	7/9/12 2J7 ARR 7 0 0 7	to FE A30 DEP 0 0 0	8/11/12 0 ARR 0 0 0 0	FE A31 DEP 0 5 0	0 ARR 1 0 4 5
DAY EVENING NIGHT TOTAL	UPS A DEP 3 5 0	OULE IN UPS B DEP 0 0 0	EFFECT 757 ARR 0 0 0	FROM DL B79 DEP 0 0 0 0	7/9/12 52 ARR 0 0 0	to DL CRJ DEP 14 6 0 20	8/11/12 ARR 20 0 0 20	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 14 7 0 21	EFFECT 20 ARR 7 14 0 21	FROM FW2 A DEP 0 0 0	7/9/12 319 ARR 0 0 0	to	8/11/12	TOTAL DEP 418 96 7 521	S ARR 365 148 8 521

Table 5. WEEKLY SCHEDULED AIR CARRIER AND AIR TAXI FLIGHTS FOR THE THIRD QUARTER 2012

AIRCRAFT DAY EVENING NIGHT TOTAL	AS D8- DEP 0 0 0	OULE IN E AS B73 DEP 14 0 0 14	EFFECT 677 ARR 7 7 0 14	FROM AS CR. DEP 21 0 0 21	8/12/12 I7 ARR 14 7 0 21	to AS CRJ DEP 0 0 0		14 DAY AS B73 DEP 7 0 0 7	
DAY EVENING NIGHT TOTAL	US A31 DEP 0 0 0	DULE IN E US A32 DEP 0 0 0	EFFECT 20 ARR 0 0 0 0	FROM US B73 DEP 0 0 0	8/12/12 72 ARR 0 0 0 0	to US B73 DEP 0 7 0	8/25/12 73 ARR 0 7 0 7	US CRUDEP 0 0 0 0	ARR 0 0 0 0
DAY EVENING NIGHT TOTAL	US CR. DEP 0 0 0	ULE IN EUS CR. DEP 19 0 7 26	EFFECT J9 ARR 19 7 0 26	FROM AA MD8 DEP 0 0 0 0	8/12/12 30 ARR 0 0 0 0	to WN B73 DEP 0 0 0	8/25/12 373 ARR 0 0 0	WN B73 DEP 0 0 0	375 ARR 0 0 0 0
DAY EVENING NIGHT TOTAL	WN B7 DEP 261 66 0 327	OULE IN EUA A31 DEP 0 0 0 0	EFFECT 9 ARR 0 0 0	FROM UA A32 DEP 0 0 0 0	8/12/12 0 ARR 0 0 0 0	to UA B73' DEP 0 0 0	8/25/12 73 ARR 0 0 0	UA B73 DEP 0 0 0	75 ARR 0 0 0 0
DAY EVENING NIGHT TOTAL	UA B75 DEP 0 0 0	OULE IN EUA RJ DEP 47 6 0 53	ARR 34 19 0 53	FROM UA CR. DEP 7 0 0 7	8/12/12 J7 ARR 7 0 0 7	to FE A300 DEP 0 0 0	8/25/12) ARR 0 0 0 0	FE A310 DEP 0 5 0 5	0 ARR 1 0 4 5
DAY EVENING NIGHT TOTAL	UPS A3 DEP 3 5 0	ULE IN E UPS B7 DEP 0 0 0	ARR	FROM DL B75 DEP 0 0 0 0	ARR	to DL CRJ DEP 14 6 0 20	8/25/12 ARR 20 0 0 20	DL CRJ DEP 0 0 0	7 ARR 0 0 0 0
DAY EVENING NIGHT TOTAL	DL CR. DEP 0 0 0	DULE IN B B6 A32 DEP 14 7 0 21	EFFECT 0 ARR 7 14 0 21	FROM FW2 A3 DEP 0 0 0	8/12/12 319 ARR 0 0 0	to	8/25/12	TOTAL: DEP 407 102 7 516	S ARR 352 156 8 516

Table 5. WEEKLY SCHEDULED AIR CARRIER AND AIR TAXI FLIGHTS FOR THE THIRD QUARTER 2012

AIRCRAFT DAY EVENING NIGHT TOTAL	AS D8- DEP 0 0 0	OULE IN I AS B73 DEP 13 0 0 13	EFFECT 877 ARR 13 0 0 13	FROM AS CR. DEP 14 7 0 21	8/26/12 J7 ARR 14 7 0 21	to AS CRJ DEP 0 0 0		2 DAYS AS B73 DEP 7 0 0	
DAY EVENING NIGHT TOTAL	US A31 DEP 0 0 0	DULE IN I US A32 DEP 0 0 0 0	EFFECT 20 ARR 0 0 0 0	FROM US B73 DEP 0 0 0	8/26/12 872 ARR 0 0 0	to US B73 DEP 0 7 0 7	8/27/12 73 ARR 0 7 0 7	US CRUDEP 0 0 0 0	J ARR 0 0 0 0
DAY EVENING NIGHT TOTAL	US CR. DEP 0 0 0	US CR. DEP 19 0 7 26	EFFECT J9 ARR 19 7 0 26	FROM AA MDO DEP 0 0 0 0	8/26/12 80 ARR 0 0 0	to WN B73 DEP 0 0 0	8/27/12 373 ARR 0 0 0 0	WN B73 DEP 0 0 0	375 ARR 0 0 0 0
DAY EVENING NIGHT TOTAL	WN B7 DEP 261 66 0 327	DULE IN I UA A31 DEP 0 0 0	EFFECT 19 ARR 0 0 0	FROM UA A32 DEP 0 0 0 0	8/26/12 20 ARR 0 0 0	to UA B73 DEP 0 0 0	8/27/12 73 ARR 0 0 0	UA B73 DEP 0 0 0	75 ARR 0 0 0 0
DAY EVENING NIGHT TOTAL	UA B75 DEP 0 0 0	DULE IN I UA RJ DEP 47 6 0 53	ARR 34 19 0 53	FROM UA CR DEP 7 0 0 7	8/26/12 J7 ARR 7 0 0 7	to FE A300 DEP 0 0 0	8/27/12) ARR 0 0 0 0	FE A310 DEP 0 5 0 5	0 ARR 1 0 4 5
DAY EVENING NIGHT TOTAL	UPS A3 DEP 3 5 0	OULE IN I UPS BT DEP 0 0 0 0	ARR	FROM DL B75 DEP 0 0 0 0	ARR	to DL CRJ DEP 14 6 0 20	8/27/12 ARR 20 0 0 20	DL CRJ DEP 0 0 0	7 ARR 0 0 0 0
DAY EVENING NIGHT TOTAL	DL CR. DEP 0 0 0	DULE IN I B6 A32 DEP 14 7 0 21	EFFECT 00 ARR 7 14 0	FROM FW2 AS DEP 0 0 0 0	8/26/12 319 ARR 0 0 0	to	8/27/12	TOTAL: DEP 399 109 7 515	S ARR 351 156 8 515

Table 5. WEEKLY SCHEDULED AIR CARRIER AND AIR TAXI FLIGHTS FOR THE THIRD QUARTER 2012

AIRCRAFT DAY EVENING	AS D8-0 DEP 0 0		OULE IN I AS B73 DEP 13 0	EFFECT 877 ARR 13 0	FROM AS CR DEP 14 7	8/28/12 J7 ARR 14 7	to AS CRJ DEP 0 0	9/4/12 ARR 0 0	8 DAYS AS B73 DEP 7 0	
NIGHT TOTAL	0	0	0 13	0 13	0 21	0 21	0	0	0 7	0 7
	US A31		ULE IN I	EFFECT	FROM US B73	8/28/12 372	to US B73	9/4/12 73	US CR.	J
DAY EVENING NIGHT TOTAL	DEP 0 0 0 0	ARR 0 0 0 0	DEP 0 0 0 0	ARR 0 0 0 0	DEP 0 0 0 0	ARR 0 0 0 0	DEP 0 7 0 7	ARR 0 7 0 7	DEP 0 0 0 0	ARR 0 0 0 0
DAY	US CR. DEP 0	J7 ARR 0	US CR DEP 19	ARR 19	AA MD DEP 0	ARR 0	WN B73 DEP 0	ARR 0	WN B73 DEP 0	ARR 0
EVENING NIGHT TOTAL	0 0 0	0 0 0	0 7 26	7 0 26	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0
	WN B7		ULE IN E	EFFECT 19	FROM UA A32	8/28/12 20	to UA B73	9/4/12 73	UA B73	75
DAY EVENING NIGHT TOTAL	DEP 261 66 0 327	ARR 232 95 0 327	DEP 0 0 0 0	ARR 0 0 0 0	DEP 0 0 0 0	ARR 0 0 0 0	DEP 0 0 0 0	ARR 0 0 0 0	DEP 0 0 0 0	ARR 0 0 0 0
TOTAL	<i>321</i>			EFFECT		8/28/12	-	9/4/12	O	U
DAY EVENING NIGHT TOTAL	UA B75 DEP 0 0 0 0	67 ARR 0 0 0 0	UA RJ DEP 33 6 0 39	ARR 26 13 0 39	UA CR. DEP 17 0 0 17	J7 ARR 11 6 0 17	FE A300 DEP 0 0 0	O ARR 0 0 0 0	FE A31 DEP 0 5 0 5	0 ARR 1 0 4 5
	UPS A3	300	ULE IN E	EFFECT 757	FROM DL B75	_	to DL CRJ	9/4/12	DL CRJ	17
DAY	DEP 3	ARR 4	•	ARR 0	DEP 0		DEP 14	ARR 20		ARR 0
EVENING NIGHT TOTAL	5 0 8	0 4 8	0 0 0	0 0 0	0 0 0	0 0 0	6 0 20	0 0 20	0 0 0	0 0 0
DAY EVENING NIGHT TOTAL	DL CRJ DEP 0 0 0		DULE IN I B6 A32 DEP 14 7 0 21	EFFECT 0 ARR 7 14 0	FROM FW2 A DEP 0 0 0	8/28/12 319 ARR 0 0 0	to	9/4/12	TOTAL DEP 395 109 7 511	S ARR 347 156 8 511

Table 5. WEEKLY SCHEDULED AIR CARRIER AND AIR TAXI FLIGHTS FOR THE THIRD QUARTER 2012

AIRCRAFT DAY EVENING NIGHT TOTAL	AS D8- DEP 0 0 0	DULE IN AS B73 DEP 13 0 0 13	EFFECT 377 ARR 13 0 0 13	FROM AS CR DEP 14 7 0 21	9/5/12 RJ7 ARR 14 7 0 21	to AS CRJ DEP 0 0 0		25 DAY AS B73 DEP 7 0 0 7	
DAY EVENING NIGHT TOTAL	US A31 DEP 0 0 0	DULE IN US A32 DEP 0 0 0 0	EFFECT 20 ARR 0 0 0 0	FROM US B7 DEP 0 0 0	9/5/12 372 ARR 0 0 0	to US B73 DEP 3 6 1	9/29/12 73 ARR 10 0 0	US CR. DEP 0 0 0	J ARR 0 0 0 0
DAY EVENING NIGHT TOTAL	US CRODEP 0 0 0 0	OULE IN US CR DEP 16 0 6 22	EFFECT J9 ARR 16 6 0 22	FROM AA ME DEP 0 0 0 0	9/5/12 080 ARR 0 0 0	to WN B73 DEP 0 0 0	9/29/12 373 ARR 0 0 0 0	WN B73 DEP 0 0 0	375 ARR 0 0 0 0
DAY EVENING NIGHT TOTAL	WN B7 DEP 261 66 0 327	 DULE IN UA A3: DEP 0 0 0	EFFECT 19 ARR 0 0 0 0	FROM UA A3 DEP 0 0 0 0	9/5/12 20 ARR 0 0 0 0	to UA B73 DEP 0 0 0	9/29/12 73 ARR 0 0 0 0	UA B73 DEP 0 0 0	75 ARR 0 0 0 0
DAY EVENING NIGHT TOTAL	UA B75 DEP 0 0 0	DULE IN UA RJ DEP 33 6 0 39	ARR 26 13 0 39	FROM UA CF DEP 17 0 0 17	9/5/12 RJ7 ARR 11 6 0	to FE A300 DEP 0 0 0	9/29/12 0 ARR 0 0 0 0	FE A31 DEP 0 5 0 5	0 ARR 1 0 4 5
DAY EVENING NIGHT TOTAL	UPS AS DEP 3 5 0 8	OULE IN UPS B DEP 0 0 0	EFFECT 757 ARR 0 0 0 0	FROM DL B7: DEP 0 0 0	9/5/12 52 ARR 0 0 0 0	to DL CRJ DEP 14 6 0 20	9/29/12 ARR 20 0 0 20	DL CRJ DEP 0 0 0	17 ARR 0 0 0 0
DAY EVENING NIGHT TOTAL	DL CR. DEP 0 0 0	DULE IN B6 A32 DEP 14 6 0 20	EFFECT 20 ARR 7 13 0 20	FROM FW2 A DEP 0 0 0 0	9/5/12 A319 ARR 0 0 0	to	9/29/12	TOTAL DEP 395 107 7 509	S ARR 354 147 8 509

Table 5. WEEKLY SCHEDULED AIR CARRIER AND AIR TAXI FLIGHTS FOR THE THIRD QUARTER 2012

AIRCRAFT DAY EVENING NIGHT TOTAL	AS D8-0 DEP 0 0 0	OULE IN E AS B73 DEP 13 0 0 13	FFECT I 77 ARR 13 0 0 13	FROM AS CRJ DEP 14 7 0 21	9/30/12 7 ARR 14 7 0 21	to AS CRJ DEP 0 0 0	9/30/12 ARR 0 0 0 0	1 DAYS AS B73 DEP 7 0 0	
DAY EVENING NIGHT TOTAL	US A31 DEP 0 0 0	ULE IN E US A32 DEP 0 0 0	EFFECT I 0 ARR 0 0 0 0	FROM US B73 DEP 0 0 0	9/30/12 72 ARR 0 0 0	to US B737 DEP 3 6 1	9/30/12 73 ARR 10 0 0	US CRJ DEP 0 0 0	ARR 0 0 0 0
DAY EVENING NIGHT TOTAL	US CRJ DEP 0 0 0	ULE IN E US CR. DEP 16 0 6 22	EFFECT I J9 ARR 16 6 0 22	FROM AA MD8 DEP 0 0 0 0	9/30/12 30 ARR 0 0 0	to WN B73 DEP 0 0 0	9/30/12 i73 ARR 0 0 0	WN B73 DEP 0 0 0	375 ARR 0 0 0 0
DAY EVENING NIGHT TOTAL	WN B73 DEP 269 56 0 325	OULE IN E UA A31 DEP 0 0 0	EFFECT I 9 ARR 0 0 0	FROM UA A32 DEP 0 0 0	9/30/12 0 ARR 0 0 0	to UA B737 DEP 0 0 0	9/30/12 73 ARR 0 0 0	UA B73 DEP 0 0 0	75 ARR 0 0 0 0
DAY EVENING NIGHT TOTAL	UA B75 DEP 0 0 0	ULE IN E UA RJ DEP 33 6 0 39	ARR 26 13 0 39	FROM UA CRJ DEP 17 0 0 17	9/30/12 17 ARR 11 6 0	to FE A300 DEP 0 0 0	9/30/12) ARR 0 0 0	FE A310 DEP 0 5 0 5	ARR 1 0 4 5
DAY EVENING NIGHT0 TOTAL	UPS A3 DEP 3 5 4	OULE IN E UPS B7 DEP 0 0 0	EFFECT I 757 ARR 0 0 0 0	FROM DL B752 DEP 0 0 0 0	9/30/12 2 ARR 0 0 0 0	to DL CRJ DEP 14 6 0 20	9/30/12 ARR 20 0 0 20	DL CRJ DEP 0 0 0	7 ARR 0 0
DAY EVENING NIGHT TOTAL	DL CRJ DEP 0 0 0	DULE IN E B6 A32 DEP 14 6 0 20	EFFECT I 0 ARR 7 13 0 20	FROM FW2 A3 DEP 0 0 0	9/30/12 319 ARR 0 0 0	to	9/30/12	TOTALS DEP 403 97 7 507	S ARR 373 126 8 507

TABLE 5. (CONTINUED)

THIRD QUARTER 2012

PERIOD TOTALS FOR AIR CARRIERS AND AIR TAXIS

AIR CARRIERS

	DEP	<u>ARR</u>
DAY	3992	3519
EVE	1102	1470
NIGHT	0	105
TOTAL	5094	5094

AIR TAXIS

	<u>DEP</u>	<u>ARR</u>
DAY	1363	1249
EVE	282	488
NIGHT	92	0
TOTAL	1737	1737

AIR CARRIERS AND AIR TAXIS

	DEP	ARR
DAY	5355	4768
EVE	1384	1958
NIGHT	92	105
TOTAL	6831	6831

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 691.8 and 324.2 acres, respectively. The areas of incompatible land uses enclosed by the contours were then computed. The incompatible land use areas were 11.22 acres within the 65 dB contour of which 0.51 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 320 parcels of land. Those 320 parcels total 48.50 acres. None of the 320 parcels are 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 77 single family residential parcels, totaling approximately 11.07 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 80 within the 65 dB contour, of which 3 are also within the 70 dB contour. The estimated numbers of people residing within the 65 and 70 dB CNEL contours are 216 and 8, 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 2011",
 AAAI Report 1380.
- "Quarterly Noise Monitoring at Bob Hope Airport, First Quarter 2012",
 AAAI Report 1395.
- "Quarterly Noise Monitoring at Burbank Airport, Second Quarter 2012",
 AAAI Report 1396.

APPENDIX A NOISE MONITOR INSTRUMENTATION

APPENDIX A NOISE MONITOR INSTRUMENTATION

The permanent noise monitor system, manufactured by Tracor, consists of 17 remote monitoring stations (RMS) connected to a central site by telephone lines. 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 in the RMS electronics. 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 digitized sound level is transmitted every half second by telephone line to the central site. The data received by the central site are processed by the computer. 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 Tracor, 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 relative to the runway thresholds in Table A-1.



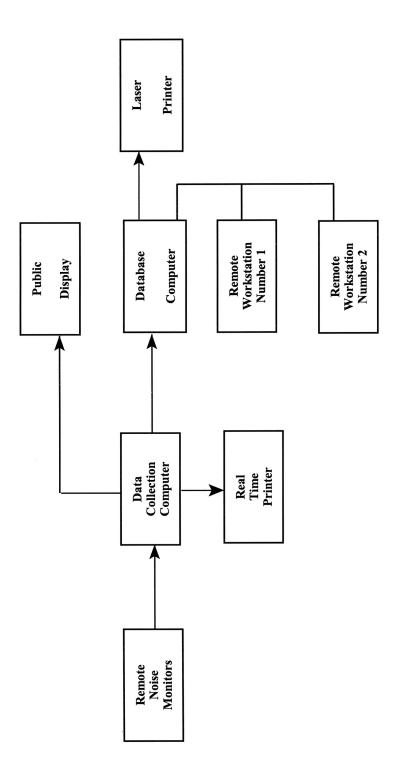


TABLE A-1
NOISE MONITOR SITE LOCATIONS

	Distance From	Distance From
Site No.	N. End of RW 15	Extended Centerline
1	8590	-1490
2	10830	1590
3	13440	-1090
4	-150	1200
5	-810	1100
6	-3280	-740
7	-4720	-50
12	7520	-3320
13	10660	-3600
14	12780	1160
15	13380	-3920
16	11600	360
17	12900	-3520

Note: Positive distances from the runway threshold are to the south; positive distances from the extended centerline are to the east.

	Distance From	Distance From
Site No.	W. End of RW 8	Extended Centerline
9	-8805	225
10	8180	-880
11	8740	-110
18	-5880	-440

Note: Positive distances from the runway threshold are to the east; positive distances from the extended centerline are to the north.

APPENDIX B
CALIBRATION

APPENDIX B CALIBRATION

The system was calibrated during setup using a Bruel and Kjaer pistonphone. Acoustic calibrations are being performed approximately every six months. Electrical calibrations are performed automatically shortly after midnight each day. Figure B-1 shows the latest calibration certificate of the pistonphone employed in the acoustic calibrations and Figure B-2 shows a typical electrical calibration.

Odin Metrology, Inc.

Calibration of Sound & Vibration Instruments

Certificate Number: 17527-4

Certificate of Calibration for Brüel & Kjær Pistonphone

This calibration is performed by comparison with measurement reference standard pistonphones:

Type No.	4220	4228
Serial No.	1048473	1504084
Calibrated by	TS (Brüel & Kjær)	TS (Brüel & Kjær)
Due Date	31 AUG 10	31 AUG 10
Cal. Interval (Mo.)	12	12

a) Estimated uncertainty of comparison: ± 0.04 dB

 Estimated uncertainty of calibration service for standard pistonphone: ± 0.06 dB

c) Total uncertainty: $\sqrt{a^2 + b^2} = \pm 0.07 \text{ dB}$

d) Expanded uncertainty (coverage factor k = 2 for 95% confidence level): = \pm 0.14 dB

If the ambient pressure P_a deviates from the above stated nominal value, 1,013 mbar, a correction ΔSPL should be added to the calibrated sound pressure level:

 $\Delta SPL = 20*log_{10}(P_a [hPa])/1013$

This acoustic calibrator has been calibrated using standards with values traceable to the National Institute of Standards and Technology. This calibration is traceable to NIST Test Number 822/276563-D1269.

CONDITIO	ON OF TEST	
Ambient Pressure	988.69	hPa
Temperature	23	°C
Relative Humidity	40	%
Date of Calibration	21 JUN	V 2010
Re-calibration due on	21 JUN	1 2011

The calibration of this acoustic calibrator was performed using a test system which conforms to the requirements of ANSI/NCSLZ540-1, 1994 ISO Guide 25 and the guidelines of ISO 10012-1, ISO 17025, and ISO 9001:2000, Certification NQA No. 11252.

Calibration performed by

Harold Lynch, Service Manager

ODIN METROLOGY, INC. 3533 OLD CONEJO ROAD, SUITE 125 THOUSAND OAKS, CA 91320 PHONE: (805) 375-0830; FAX: (805) 375-0405 Calibrator type 4228
Serial no. 2245246
Submitted by AAA, Inc

Simi Valley, CA 93065

Purchase order no. Asset no. Verbal N/A

This calibrator has been found to be within the specifications listed below at the normalized conditions stated

SPL produced in coupler	
terminated by a loading	124 ± 0.15 dB
volume of 1.333 cm ³	
Frequency	251.2 Hz ± 0.1%
Second Harmonic Distortion	< 3%
At 1.013 mbar, 20°C, and	65% relative humidity

SPL	124.05	dB re 20 μPa
Frequency	251.15	Hz
Distortion	0.6	%
HF Noise	-55	dB re 124 dB
Battery Voltage	9.4	V

Was repair or adjustment performed?

Were parts replaced?

Were batteries replaced?

No!

FINAL PERFORMANCE		
SPL	124.05	dB re 20 μPa
Frequency	251.15	Hz
Distortion	0.6	%
HF Noise	-55	dB re 124 dB

Note: This pistonphone was **within** manufacturer's specifications as received.

Note: This calibration report shall not be reproduced, except in full, without written consent of Odin Metrology, Inc. Page 1 of 2

Doc. Rev. 19 Feb 2009

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Calibration RMS: 1 Passed Peak:109.9 dB @ 01/25/2006 0:06
Calibration RMS: 2 Passed Peak:109.8 dB @ 01/25/2006 0:06
Calibration RMS: 3 Passed Peak:109.7 dB @ 01/25/2006 0:06
Calibration RMS: 4 Passed Peak:109.7 dB @ 01/25/2006 0:06
Calibration RMS: 5 Passed Peak:109.8 dB @ 01/25/2006 0:06
Calibration RMS: 6 Passed Peak:109.9 dB @ 01/25/2006 0:06
Calibration RMS: 7 Passed Peak:109.9 dB @ 01/25/2006 0:06
Calibration RMS: 9 Passed Peak:109.8 dB @ 01/25/2006 0:06
Calibration RMS:10 Passed Peak:109.8 dB @ 01/25/2006 0:06
Calibration RMS:11 Passed Peak:109.9 dB @ 01/25/2006 0:06
Calibration RMS:12 Passed Peak:109.9 dB @ 01/25/2006 0:06
Calibration RMS:13 Passed Peak:110.0 dB @ 01/25/2006 0:06
Calibration RMS:14 Passed Peak:109.9 dB @ 01/25/2006 0:06
Calibration RMS:15 Passed Peak:110.0 dB @ 01/25/2006 0:06
Calibration RMS:16 Passed Peak:109.7 dB @ 01/25/2006 0:06
Calibration RMS:17 Passed Peak:109.7 dB @ 01/25/2006 0:06
Calibration RMS:18 Passed Peak:109.8 dB @ 01/25/2006 0:06
```

Figure B-2. Typical Daily Electrical Calibration