

NOISE MEASUREMENT PROGRAM
EFFECT OF AIRPORT NOISE ON NEIGHBORING STATE
PHILADELPHIA INTERNATIONAL AIRPORT

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LETTER REPORT

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SUMMARY

Measurements of acoustic signals from aircraft operations in Pennsylvania and New Jersey around the Philadelphia International Airport during June 5-8, 1979 are reported. Data was collected for nine types of commercial jet aircraft during both arrival and departure operations for both the predominantly westerly and less prevalent easterly flight directions.

Data collected shows the Douglas DC-8 aircraft was louder than all other aircraft measured at the four measurement sites during the test period.

The noise data collected will be used by the FAA to verify the FAA Integrated Noise Model (INM) which will be used to describe and define the impact of aircraft noise around the airport.

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1. Introduction

This report documents the noise measurements made by the DOT/Transportation Systems Center (TSC) in Pennsylvania and New Jersey around the Philadelphia International Airport. The measurements were made during June 5-8, 1979 in support of a joint study by the Department of Transportation (DOT) and the Environmental Protection Agency (EPA). Section of 8 of the Quiet Community Act of 1978 directs the DOT and EPA to jointly study the aircraft noise effects from an airport on communities located in a state other than a state in which the airport is located.

The objective of the measurements was to obtain actual noise levels produced in selected areas around the airport by aircraft operations to and from the airport. The noise-data will be used by the FAA to verify the FAA Integrated Noise Model (INM) which will be used to describe and define the impact of aircraft noise around the airport taking into account operational parameters.

2. Experimental Approach

2.1 Basic Approach

Four noise measuring systems were deployed during the period June 5-8, 1979 in selected residential areas around Philadelphia International Airport. Measurements were made during two high-density traffic periods of the day (0730-1030 and 1530-1830 hours). During these periods, noise data from "targets-of-opportunity" aircraft were recorded on magnetic tape for subsequent laboratory processing. Instrument operator/observers noted the type of aircraft, their position relative to the microphone, time of day and local intrusive sounds.

In addition to the tape recording of individual aircraft events, community noise analyzers at each site accumulated continuous noise data over four one-hour periods each day beginning at 0730, 0930, 1530, and 1730 hours. Noise data was obtained during both easterly and westerly airport operations.

2.2 Measurement Locations

Four measurement sites were selected in residential areas around the airport, three to the east of the airport in New Jersey and one to the west of the airport in Pennsylvania (see figure 1) as follows:

Site E1 is located east of the airport at the north west corner of Old St. Mary's cemetery at the corner of Cumberland and Westminster Streets in Gloucester, NJ. The site is 30,900 feet from the threshold of runway 27 and 1850 feet south of the runway centerline extended.

Site E2 is located east of the airport on the sidewalk in front of 211 Ward Street, Audubon, NJ. The site is 40,200 feet from the threshold of runway 27 and 5800 feet south of the runway centerline extended.

Site E3 is located east of the airport in a recreation area at McGill and Miami Streets in Cherry Hill, NJ. The site is 61,600 feet from the threshold of runway 27 and 435 feet north of the runway centerline extended.

Site W1 is located west of the airport in Gov. Printz Park at 2nd Street in Chester, PA. The site is 13,100 feet from the threshold of runway 09 and 750 feet north of the runway centerline extended.

Measurements were made at the above locations during both arrival and departure operations for both the predominantly westerly and less prevalent easterly flight directions.

2.3 Acoustical Measurement Instrumentation

A schematic of the acoustical measurement system is shown in figure 2. The typical system consisted of a GenRad (GR) one half inch electret-condenser microphone oriented for grazing incidence, mounted at a height of four feet, driving a GR P-42 preamplifier. Measured noise data was fed through a 100 foot length of cable to the instrumentation vehicle where the analog signal was fed to a GR Community Noise Analyzer model 1945 where after "A"-weighting, the signal was detected, digitized and a histogram of levels stored. At the end of a one hour period statistical indexes, of exceedance levels (L%) and equivalent levels (Leq), were extracted from the unit on site.

In addition the analog signal was recorded for further laboratory analysis as follows:

The analog signal was amplified to adjust the signal level for recording in the top 20 db of the linear range of the instrumentation tape recorder. This signal was then simultaneously recorded on one channel of the tape recorder and applied to a pre-emphasis network prior to recording on the 2nd recorder channel. The pre-emphasis filter rolled off those frequencies below 10 KHz at 20 db per decade. Additional gain was then applied to the filtered signal thus boosting the high frequency portion of the acoustical signal and effectively increasing the dynamic range of the measuring system in the high frequency bands.

2.4 Acoustic Measurements

Manned measuring systems were deployed and measurements made during two high density traffic periods of the day (0730 to 1030 hours and 1530 to 1830 hours) for four consecutive days beginning June 5, 1979. On Friday June 8, 1979 measurements were made only during the 0730-1030 hour time period. During these periods noise data from "targets-of-opportunity" aircraft were recorded on magnetic tape. Recorders were operated only during actual periods of aircraft overflight insuring the complete event was recorded. The operator/observer noted the type of aircraft, its elevation angle and position relative to the microphone and the time of day.

Noise data was accumulated in the community noise analyzers for four continuous one hour periods each day beginning at 0730, 0930, 1530 and 1730 hours. The operator/observer noted any local intrusive sounds during each period. Statistical data in the form of exceedance levels (L%) and equivalent levels (Leq) were extracted from each unit for each one hour period.

Measurements were made during both westerly and easterly operations according to the following schedule: Note that on June 8, 1979 the AM operations changed from westerly to easterly midway during the monitoring period.

Date (1979)	Time (EDST)	Operations	Radar Tracking Data
June 5	1730-1030	westerly	Yes
	1530-1830	westerly	Yes
June 6	0730-1030	westerly	No
	1530-1830	easterly	Yes
June 7	0730-1030	easterly	Yes
	1530-1830	easterly	No
June 8	0730-0900	easterly	No
	0900-1030	westerly	No

2.5 Supporting Data

Supportive data was obtained from local airport sources and includes weather data and flight track data from the ARTS-3 radar. Note that radar tracking data was obtained for only time periods as tabulated in section 2.4. The ARTS-3 extractor tapes were reduced by the FAA/Dulles Noise Laboratory.

2.6 Data Analysis

The analog magnetic tape recording of the noise data were analyzed at the TSC laboratory in Cambridge, MA. The data was filtered and digitized, using a GenRad 1921 One-Third Octave Real Time Analyzer, and stored on magnetic disk storage. The stored data, 24 one-third octave sound pressure levels (SPL's) for each one-half second integration period making up the event, was processed following the basic procedure defined in the Federal Aviation Regulation (FAR) Part 36.

The stored one-third octave spectral data were adjusted by sloping the spectrum shape at -2db per one-third octave for those bands (above 1.2kHz) where the signal to noise ratio was less than 5 db. This procedure was applied in cases involving no more than 9 "missing bands" and was implemented in order to minimize EPNL data loss. The spectral shaping methodology deviates from FAR-36 procedures in which 5 missing bands are allowed. However, in this specific case, it is felt that the use of this technique is justified as the high frequency spectral shape is observed to fall off at at-least 2db per one-third octave at each the measuring locations.

The calculations of EPNL includes the correction for all tones over the frequency range of 50 Hz to 10 KHz. In addition a EPNL value was calculated which is a measure of the change in EPNL when all tones 800 Hz and below are excluded from the EPNL calculation under the presumption they represent pseudotones caused by ground reflections.

All indexes were calculated using measured data uncorrected for temperature, humidity, or aircraft deviation from reference flight tracks.

3. Measurement Data

Presented in this section are tabulations of statistical noise data of four continuous one-hour periods each day, summary noise level indexes of each individual overflight event recorded, and plots of the flight track of typical events,

3.1 Statistical Noise Data

Tables 1-4 contain statistical noise data measured at each of the four measurement locations during four continuous one-hour periods beginning at 0730, 0930, 1530, and 1730 hours. Data is in the form of exceedence levels (L(x)%) ie, the noise level exceeded x percent of the measurement time (one-hour). In addition, the maximum and minimum levels and the Leg (equivalent energy level) measured during each period are provided.

Statistical data does not permit identification of single events, although it is possible to surmise that the L (0.1) represents noise from particular events with high sound levels, however not necessarily from aircraft. Local high level intrusive sounds have been identified in these tables where applicable. The statistical description of the environment noise over the selected measurement period, however, establishes a statistical context within which the environmental impact of the aircraft noise levels can be evaluated.

3.2 Individual Event-Noise Level Data

Table 5-36 contain noise indexes measured at the four sites for arrival and departure overflights during the periods 0730 - 1030 hours and 1530 - 1830 hours on June 5,6,7,8, 1979. Noise dates are provided by aircraft type for the following noise indexes:

- | | | |
|--|--|---------|
| 1. EPNL | - Effective Perceived Noise Level | EPNdB |
| 2. dBA(M) | - Maximum A-Weighted Sound Level | dBA |
| 3. dBD(M) | - Maximum D-Weighted Sound Level | dBD |
| 4. OASPL(M) | - Maximum Overall Sound Pressure Level | dB |
| 5. PNL(M) | - Maximum Perceived Noise Level | PNdB |
| 6. PNLT(M) | - Maximum Tone Corrected Perceived Noise Level | PNdB |
| 7. NEL | - Noise Exposure Level | dBA |
| (NOTE: NEL analysis considers sound energy between the "10-dB-down" points of each flyover noise time history) | | |
| 8. DUR | - Duration between "10-dB-down" points of PNLT time history | seconds |
| 9. EPNL | - The change in EPNL assuming all tone corrections 800 Hz and below result from ground reflections (pseudotones) and are excluded from the PNLT calculation. | EPNdB |

All indexes were calculated using measured data uncorrected for temperature, humidity or aircraft deviation from a reference flight track.

The arithmetic average and standard deviation of each index is provided by aircraft type for each three hour measurement session.

Note, with the exception of data measured at sites E1 and W1 (sites closest to the airport), it was not possible to calculate EPNL values for the majority of events measured. The aircraft noise at these locations did not exceed the local ambient noises by a sufficient margin throughout the over-flight and was thus indistinguishable from the general background noise making a calculation of EPNL impossible. Only events with "clean" maximum A-weighted levels (unaffected by local intrusive sounds) are tabulated.

3.3 Summary Noise Data

Noise data from the tables of section 3.2 have been summarized in tables 37-44 to show, by operation and location, the arithmetic average and standard deviations of the noise indexes measured during the week for each aircraft type. Note the total number of events shown in column 10 reflects the number of events for which a "clean" dBA(M) (maximum A-Weighted Sound Level) measurement was made.

In terms of maximum A-weight sound levels these data show, that for both arrival and departure operations, the Douglas DC-8 aircraft was louder than the other nine types of commercial jet aircraft measured at the four measurement sites.

3.4 Flight Track Data

Tracking data was extracted from the ARTS-3 radar by the local FAA for four of the monitoring time periods; June 5, 1979 0730-1030 and 1530-1830 hours; June 6, 1979 1530-1830 hours; and June 7, 1979 0730-1030 hours. Utilizing these extractor tapes, the FAA Dulles Noise Laboratory prepared flight track plots for each of the events measured.

Figures 3-4 contain typical radar tracks for westerly and easterly arrivals respectively while figure 5-6 contain typical radar tracks for easterly and westerly departures respectively.

An examination of tracking plots (figure 3-4) show a close grouping of the arrival tracks of aircraft in the vicinity of measurement site E1, E2 and W1. This would indicate that a consistency might be expected between the noise levels measured for similar aircraft at each of these locations. The low valued standard deviation calculated for the noise indexes listed in tables 37,38 and 40 show that this is true. Thus, one reason for the larger values for the standard deviations calculated for the noise indexes measured at site E3 (table 39) can be seen to result from the spread of the aircraft tracks around site E3. The departure tracks (figure 5-6) in the vicinity of sites E1, E2 and W1 indicate the standard deviation of the noise indexes measured at E1 and W1 should be low valued while larger values should be expected at Site E2. Data in table 41,42 and 44 show this to be true. The departure tracks of figure 5 indicate that most aircraft initiated a turn well before site E3 and in fact may not even be heard at site E3. The data of table 43 shows that few aircraft were loud enough to be even measured at site E3.

To supplement the plots, slant range data (at the closest point of approach of the aircraft to the measurement location) were extracted and are presented for each aircraft measured in tables 45-46.

Aircraft identification and relative location to each measurement site was also provided by the operator/observer at each measurement location. This data was used for aircraft identification during the periods when no radar tracking information was available.

3.5 Weather Data

Weather data for the Philadelphia area over the periods of interest were obtained from the NOAA weather station at Dulles International Airport from their data services terminal. These are tabulated in table 47.

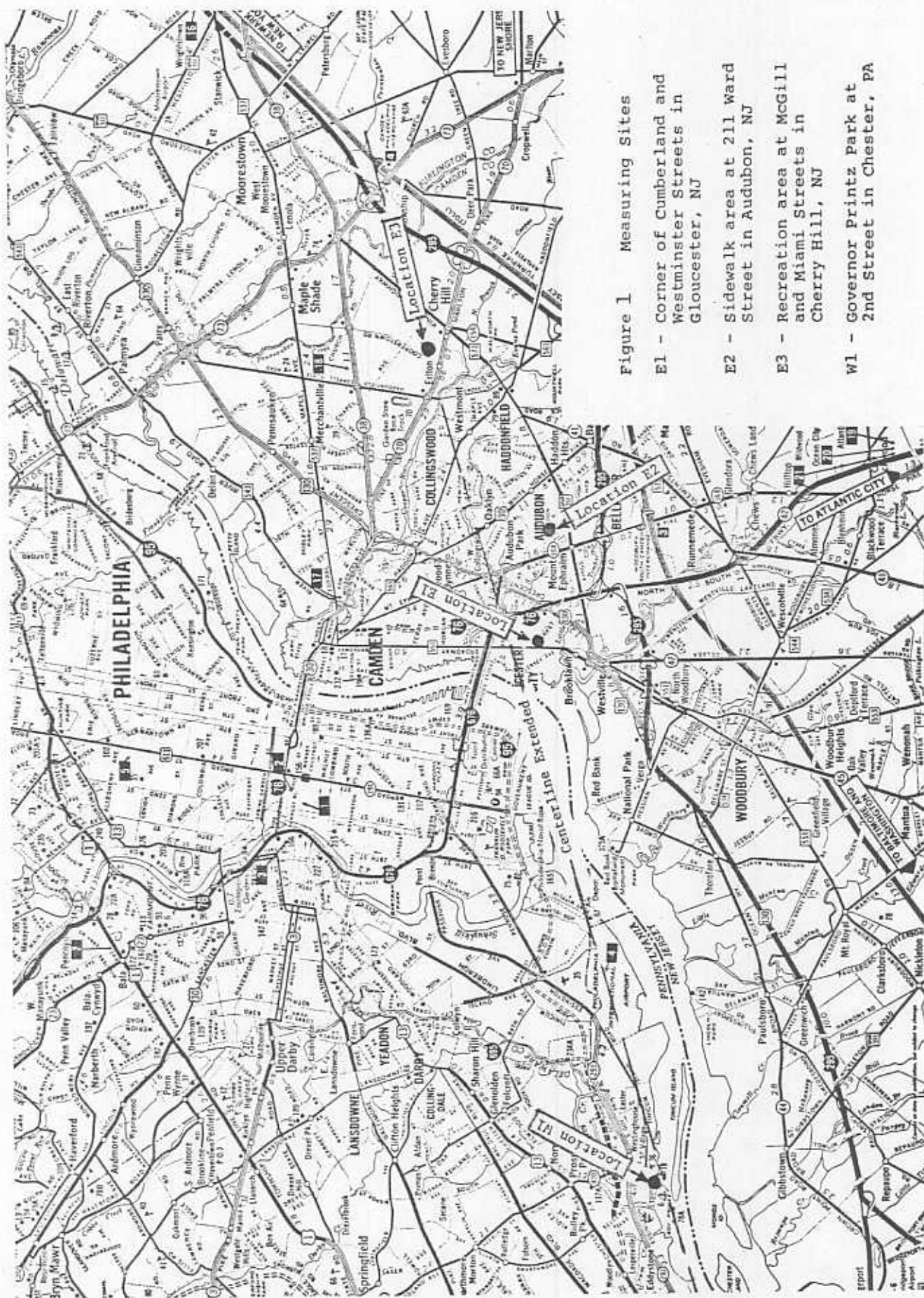


Figure 1 Measuring Sites

- E1 - Corner of Cumberland and Westminister Streets in Gloucester, NJ
- E2 - Sidewalk area at 211 Ward Street in Audubon, NJ
- E3 - Recreation area at McGill and Miami Streets in Cherry Hill, NJ
- W1 - Governor Printz Park at 2nd Street in Chester, PA

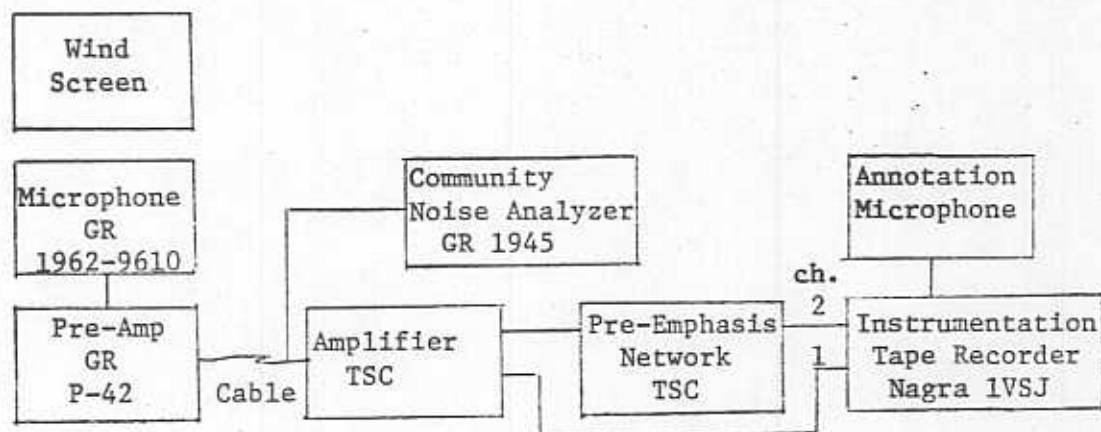


Figure 2- Measuring System Block Diagram

EVENT NO.	FLIGHT	DATE	TIME	AC TYPE
29	○ NW524	6/ 5/79	15:27	B727
31	+ DL552	6/ 5/79	15:27	B727
34	X TW146	6/ 5/79	15:28	B727
36	△ TH462	6/ 5/79	15:35	B727
37	◇ NH59	6/ 5/79	15:36	B727
41	✦ DL236	6/ 5/79	B727	

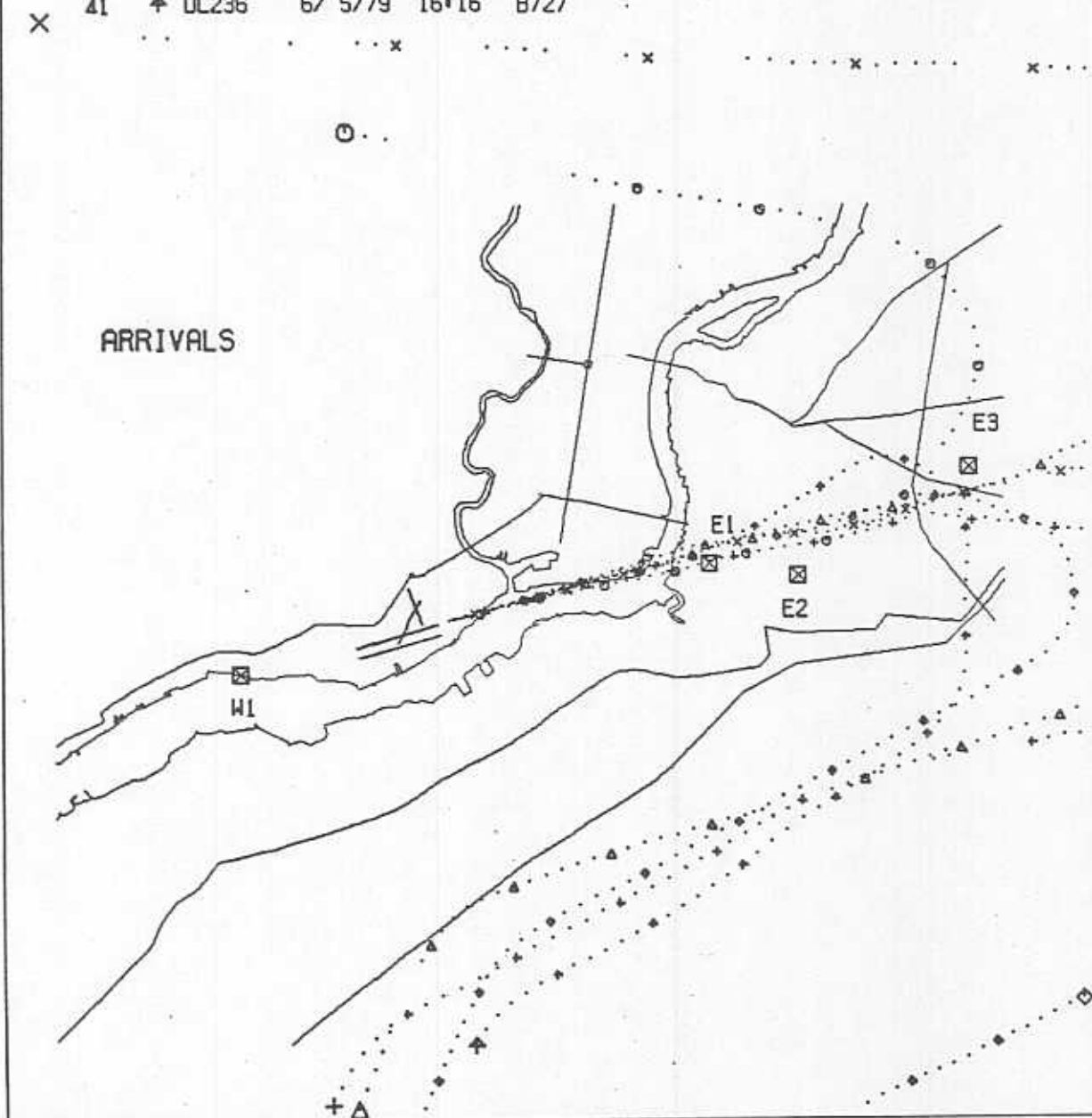
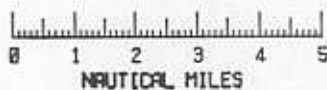


Figure 3

AIRCRAFT RADAR TRACKS
Philadelphia International Airport
June 5, 1979 - PM

Typical Westerly Arrivals

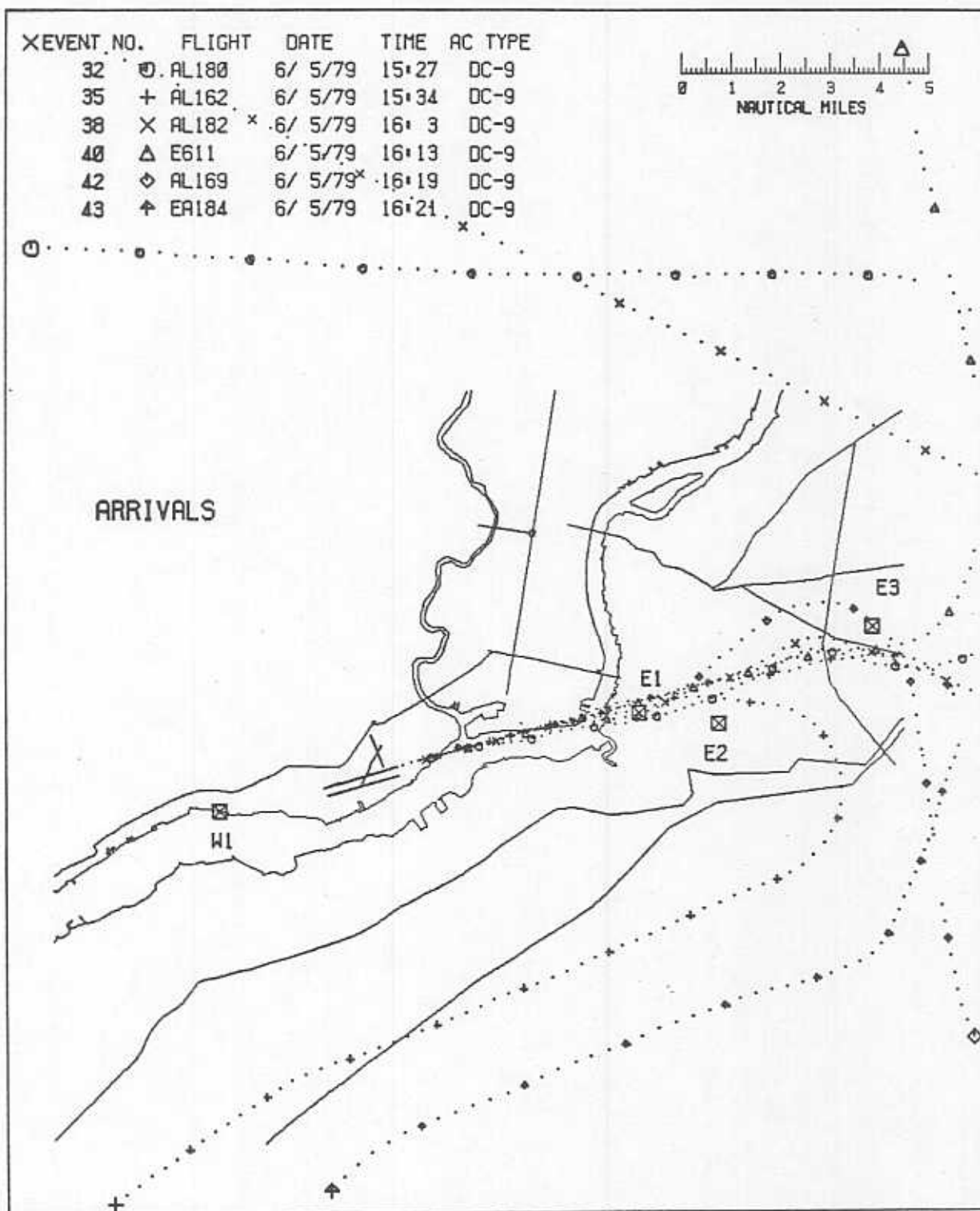


Figure 3(cont.) AIRCRAFT RADAR TRACKS
Philadelphia International Airport
June 5, 1979 - PM

Typical Westerly Arrivals

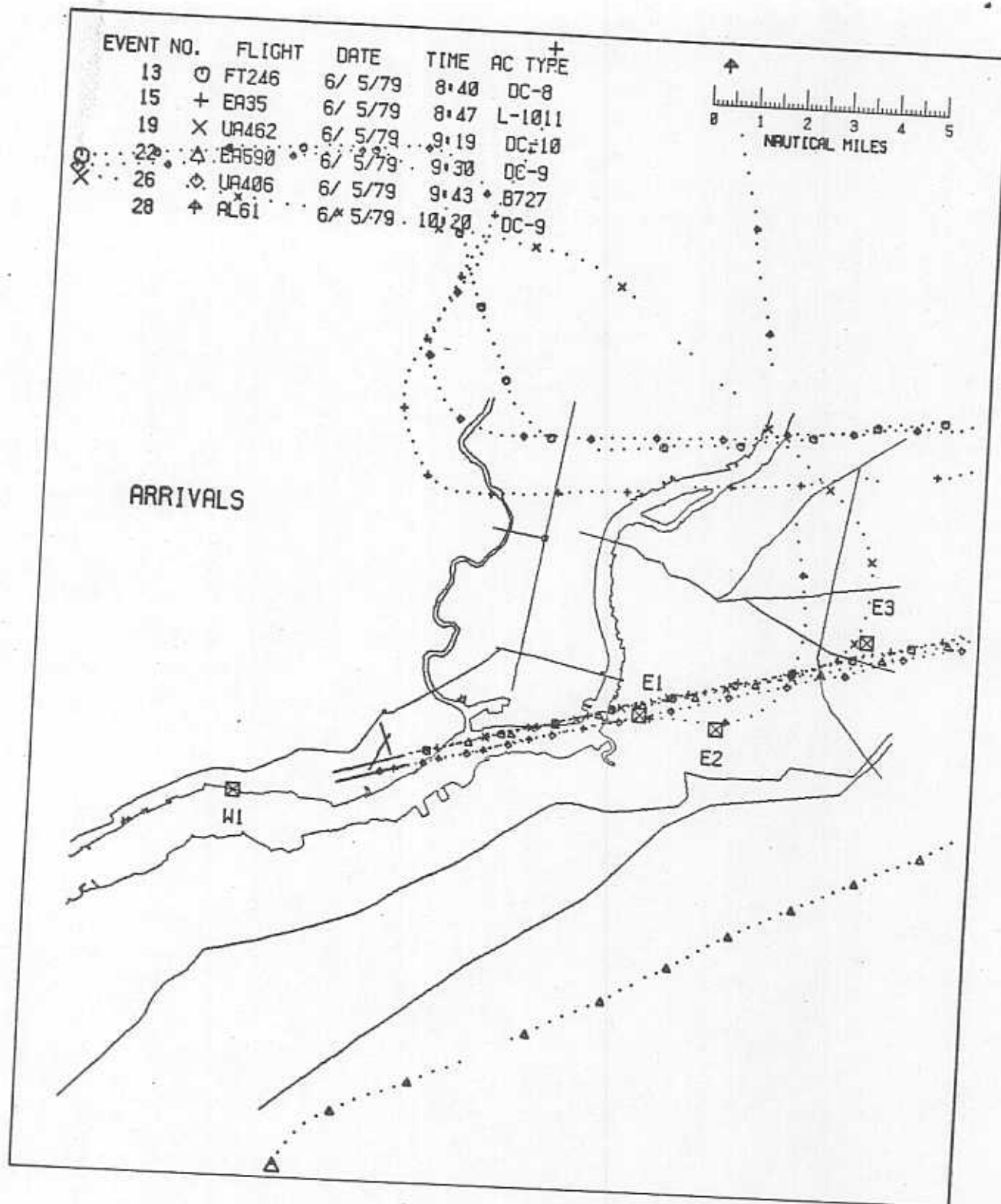


Figure 3(cont.) AIRCRAFT RADAR TRACKS
Philadelphia International Airport
June 5, 1979 - AM
Typical Westerly Arrivals

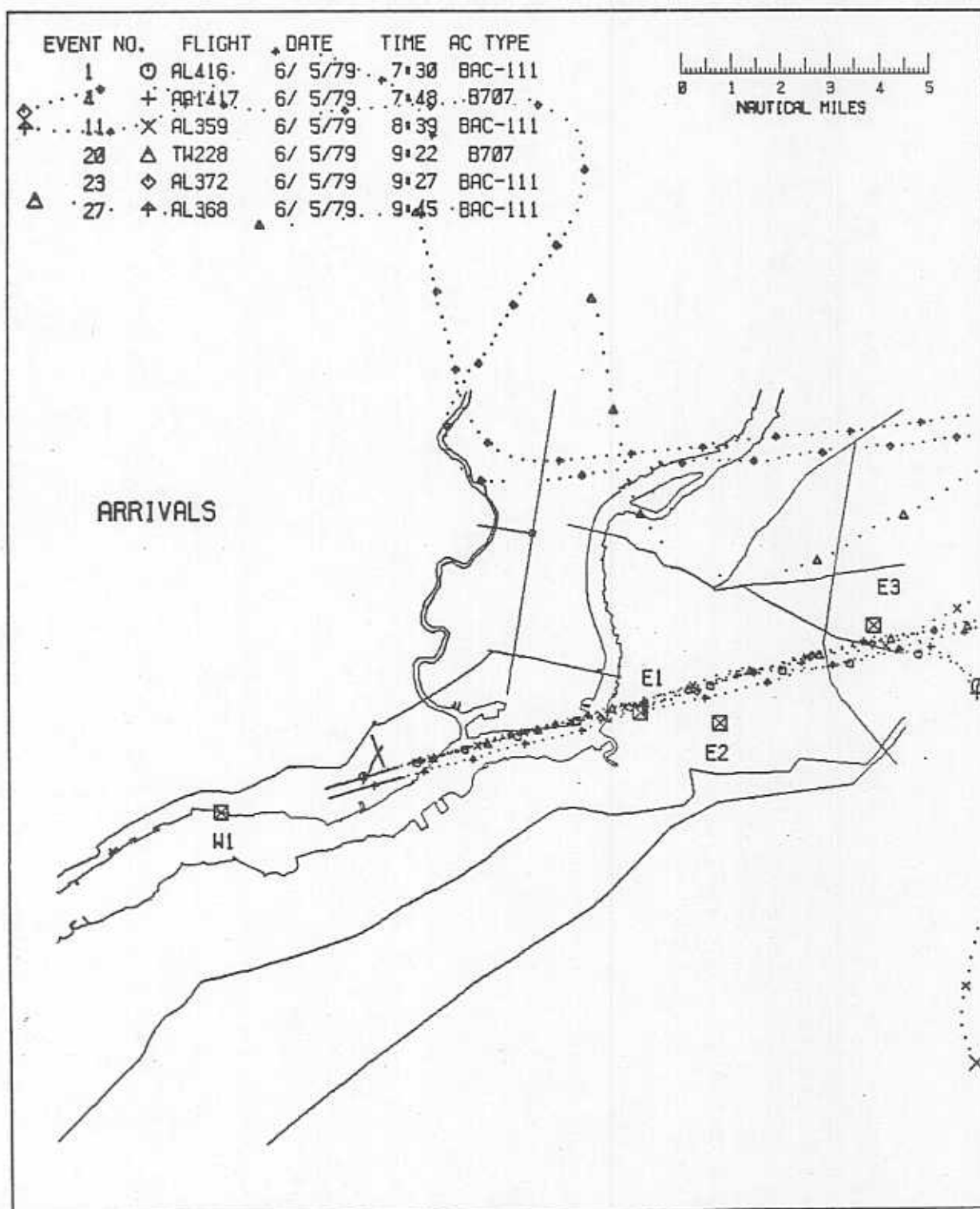


Figure 3(cont.) AIRCRAFT RADAR TRACKS
Philadelphia International Airport
June 5, 1979 - AM

Typical Westerly Arrivals

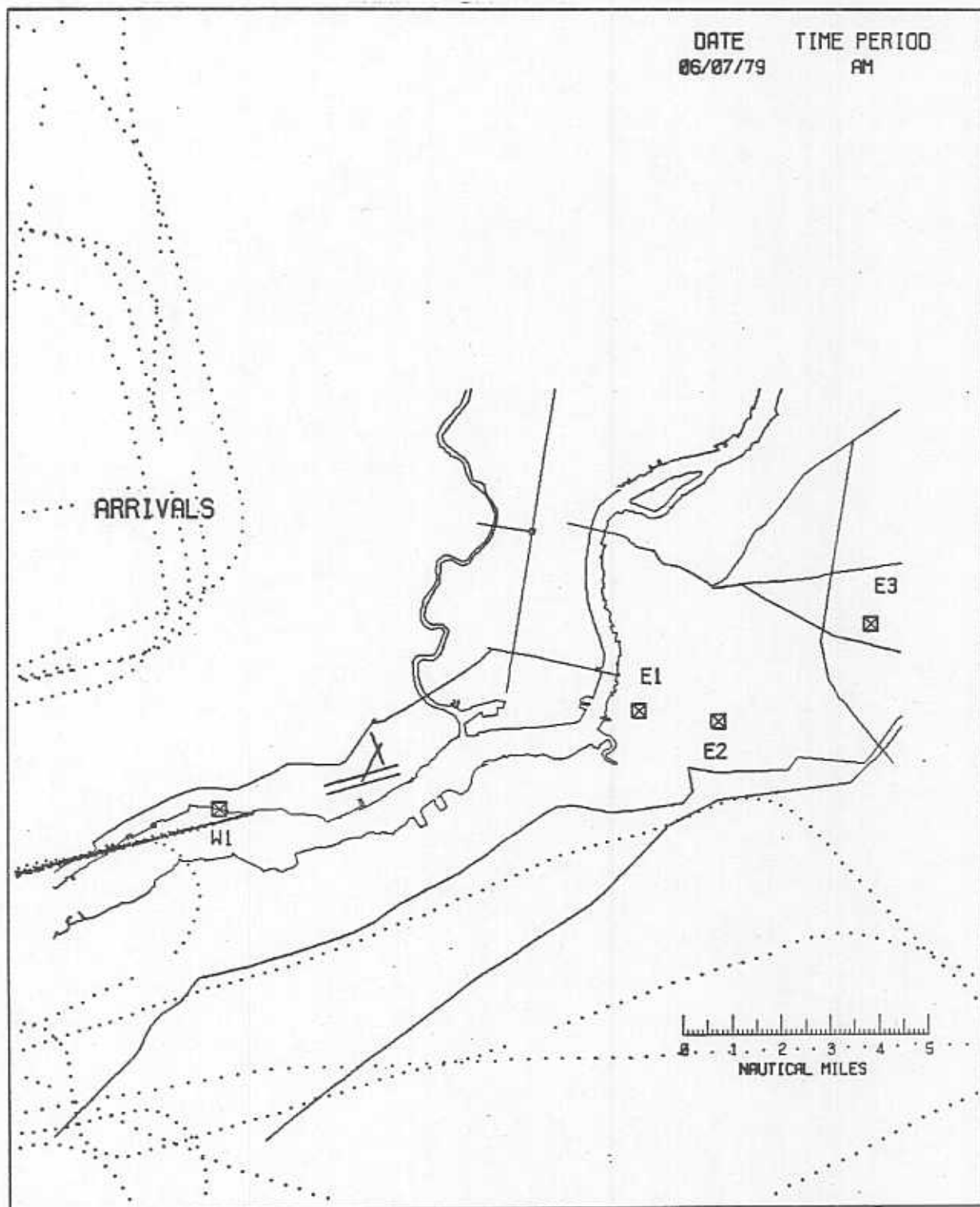


Figure 4

AIRCRAFT RADAR TRACKS
Philadelphia International Airport
June 7, 1979 - AM

Typical Easterly Arrivals

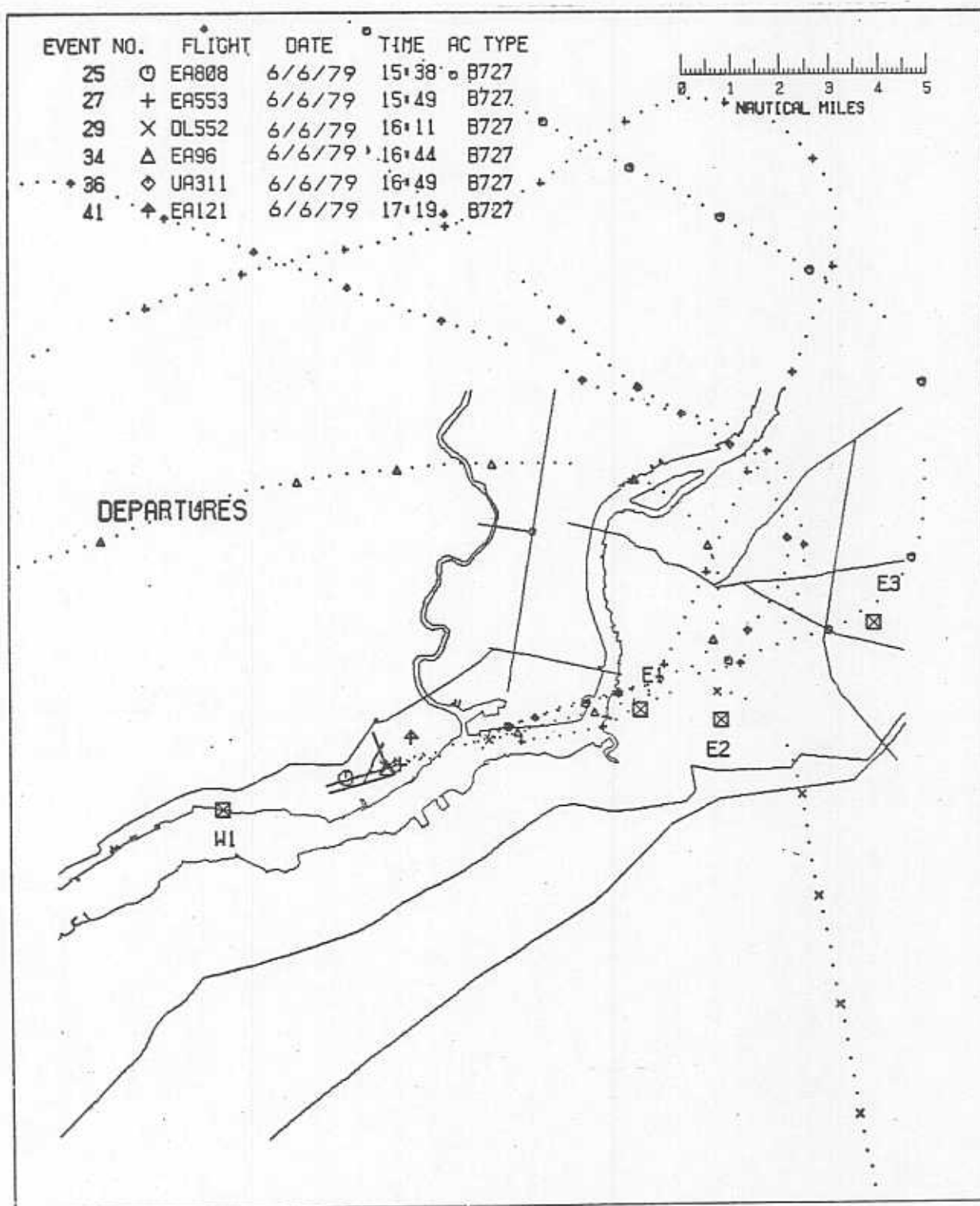


Figure 5

AIRCRAFT RADAR TRACKS
Philadelphia International Airport
June 6, 1979 - PM

Typical Easterly Departures

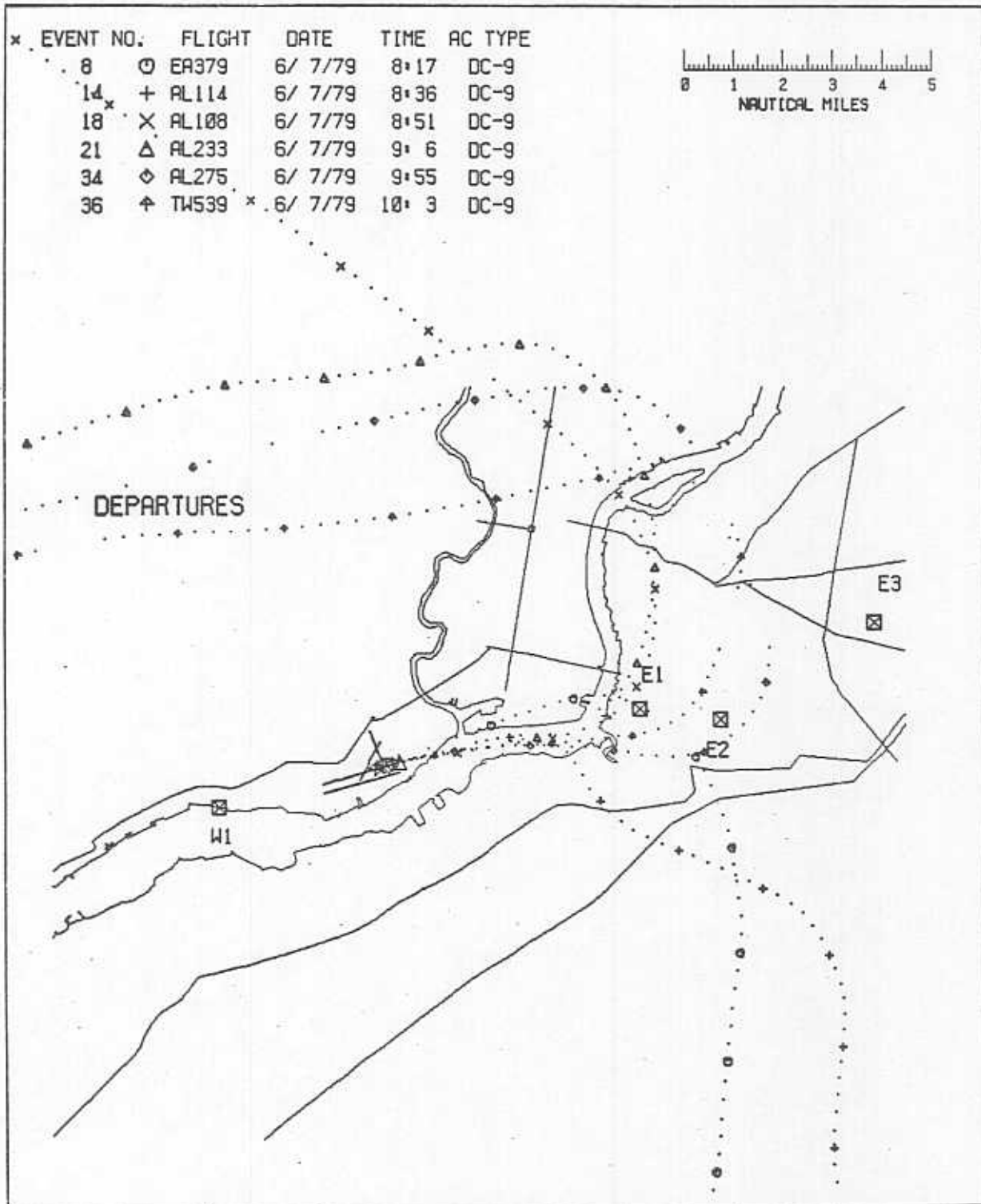


Figure 5(cont.) AIRCRAFT RADAR TRACKS
Philadelphia International Airport
June 7, 1979 - AM
Typical Easterly Departures

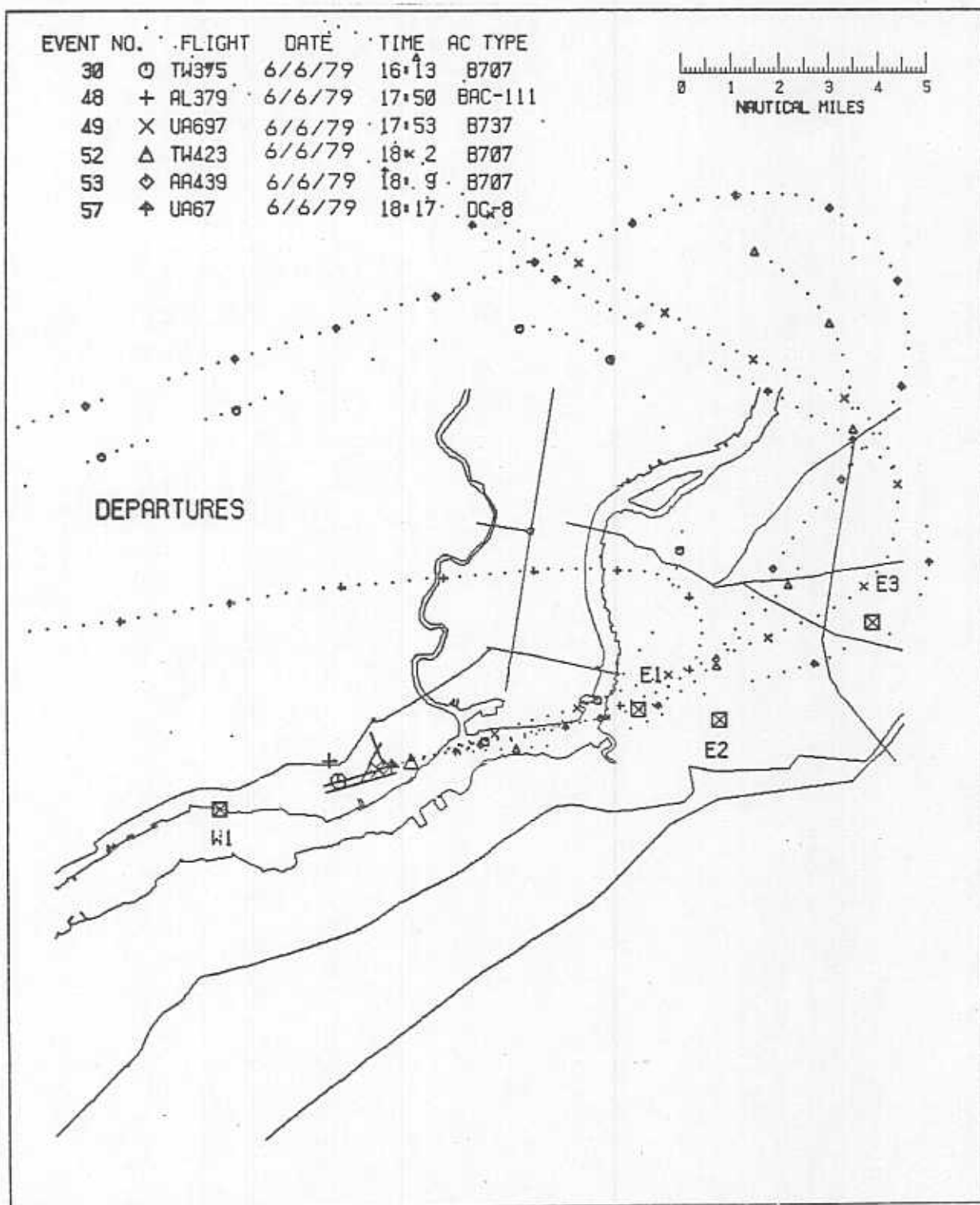


Figure 5(cont.) AIRCRAFT RADAR TRACKS
Philadelphia International Airport
June 6, 1979 - PM
Typical Easterly Departures

EVENT NO.	FLIGHT	DATE	TIME	AC TYPE
12	○ TW115	6/ 7/79	8:27	B707
16	+ TW575	6/ 7/79	8:41	B707
19	× TW68	6/ 7/79	8:52	B707
31	△ AL359	6/ 7/79	9:42	BAC-111
35	◇ UA719	6/ 7/79	10: 2	DC-8
38	⬆ TW107	6/ 7/79	10:23	L-1011

0 1 2 3 4 5
NAUTICAL MILES

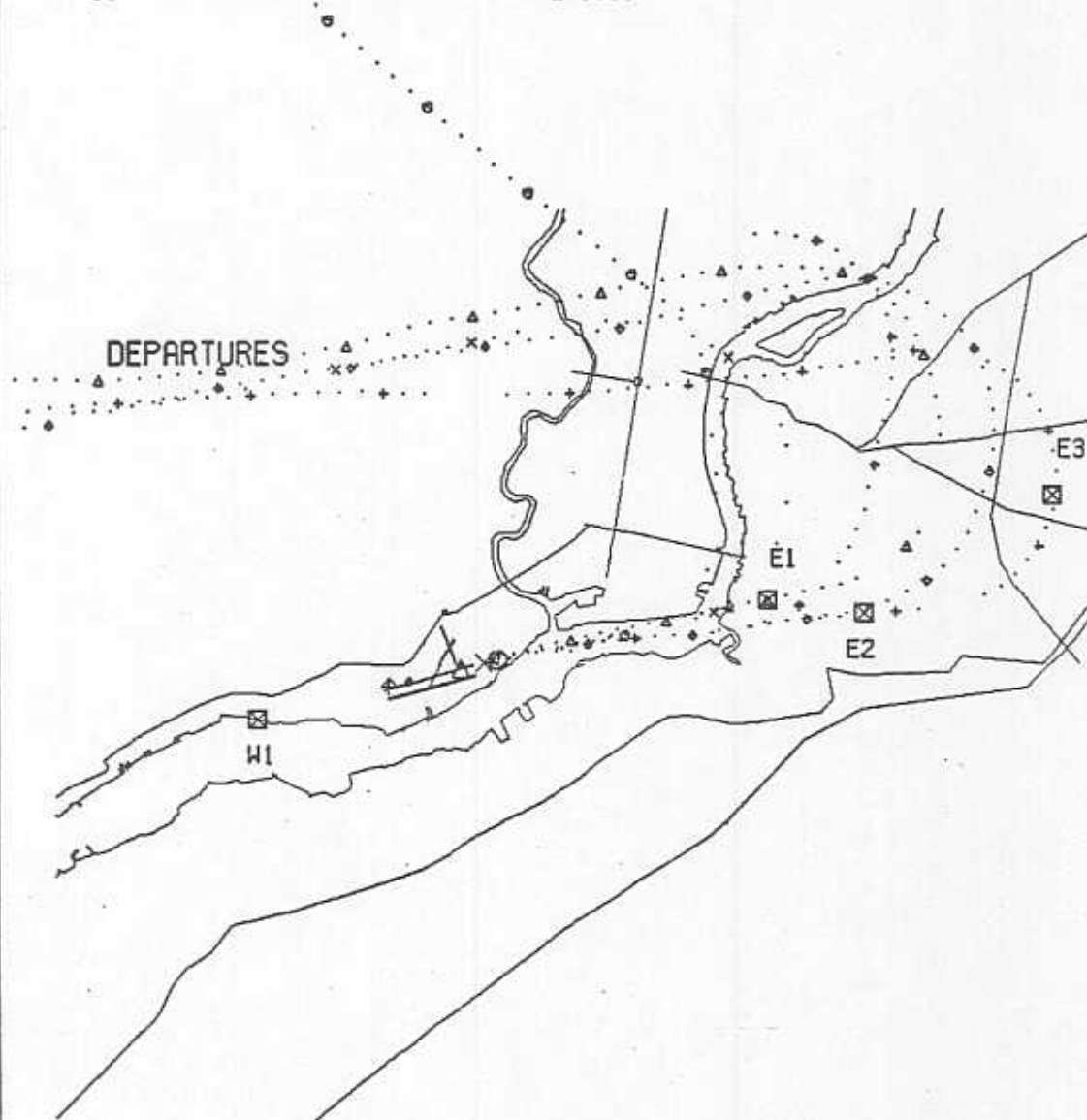


Figure 5(cont.) AIRCRAFT RADAR TRACKS
Philadelphia International Airport
June 7, 1979 - AM

Typical Easterly Departures

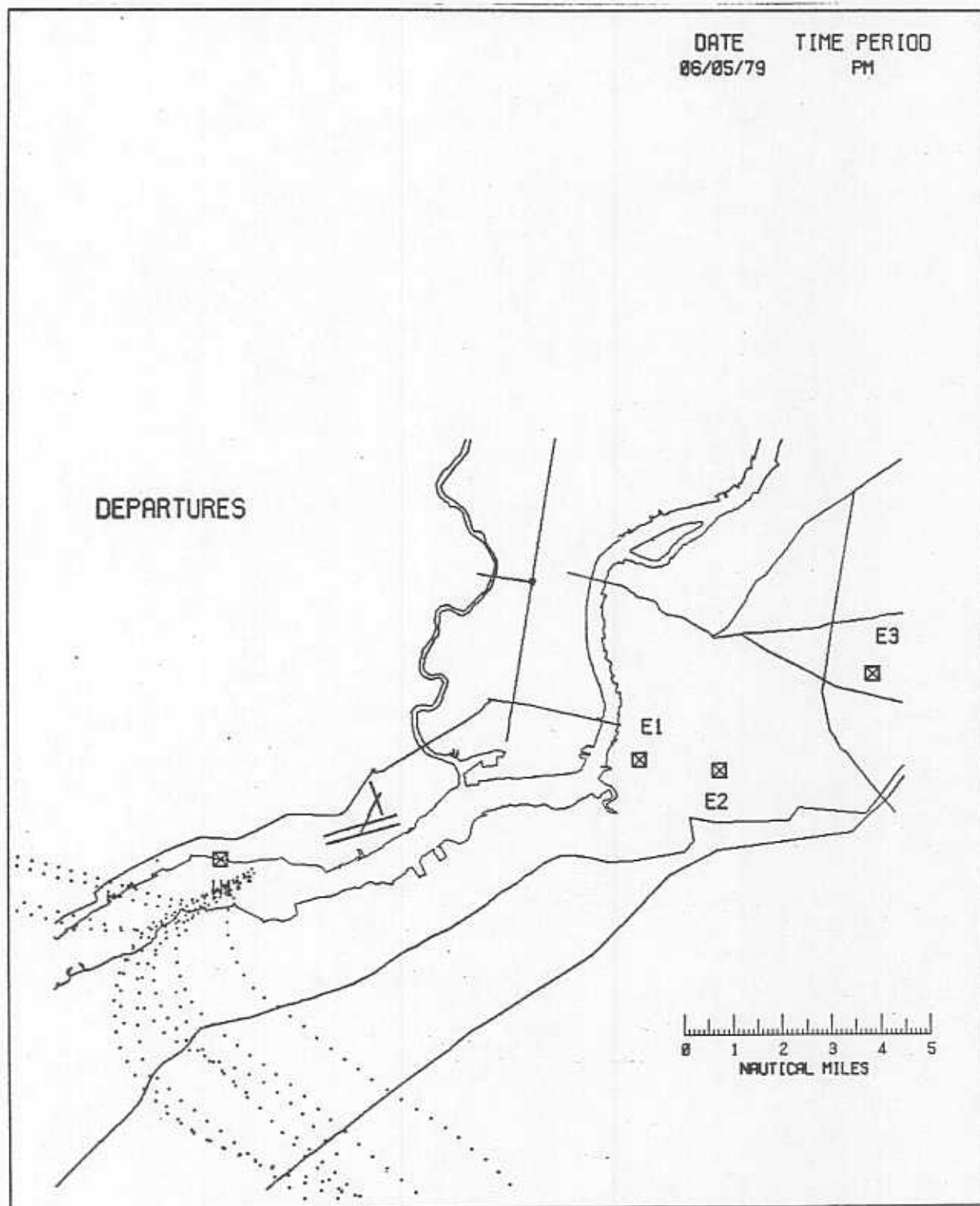


Figure 6

AIRCRAFT RADAR TRACKS
Philadelphia International Airport
June 5, 1979 - PM

Typical Westerly Departures

TABLE NO. 1
STATISTICAL NOISE DATA
PHILADELPHIA INTERNATIONAL AIRPORT

Site E1

Gloucester City, NJ

June 5,6,7,8, 1979

Noise Level - dBA re 20 micro Pa

<u>Time</u>	<u>Lmax</u>	<u>L0.1</u>	<u>L1</u>	<u>L2</u>	<u>L5</u>	<u>L10</u>	<u>L20</u>	<u>L50</u>	<u>L90</u>	<u>L99</u>	<u>LMin</u>	<u>Leq</u>	<u>Remarks</u>
<u>June 5, 1979</u>													
0730-0830	82	79	74	72	67	61	54	49	46	44	43	61	
0930-1030		No Data											
1530-1630	76	75	74	72	69	63	56	49	46	45	44	61	
1730-1830	87	86	78	77	74	69	64	57	51	48	46	67	
<u>June 6, 1979</u>													
0730-0830	80	78	73	72	68	63	56	50	46	44	43	61	
0930-1030	79	77	74	72	68	63	56	49	45	43	42	61	
1530-1630	87	86	80	78	73	68	61	49	44	42	41	67	
1730-1830	87	86	82	80	75	70	61	52	49	47	45	68	
<u>June 7, 1979</u>													
0730-0830	86	85	80	77	70	63	57	49	47	45	44	66	
0930-1030	83	82	79	76	69	64	55	48	45	44	43	64	
1530-1630	84	78	73	69	64	60	56	53	51	50	49	60	
1730-1830	90	83	81	79	74	68	63	55	52	50	49	67	
<u>June 8, 1979</u>													
0730-0830	86	85	81	78	74	68	61	52	49	41	40	67	
0930-1030	79	77	73	70	67	63	55	48	45	44	42	60	

Table No. 2

Statistical Noise Data

Philadelphia International Airport

Site E2

Audubon, NJ

June 5,6,7,8, 1979

Noise Level - dBA re 20 micro Pa

<u>Time</u>	<u>Lmax</u>	<u>L0.1</u>	<u>L1</u>	<u>L2</u>	<u>L5</u>	<u>L10</u>	<u>L20</u>	<u>L50</u>	<u>L90</u>	<u>L99</u>	<u>Lmin</u>	<u>Leq</u>	<u>Remarks</u>
<u>June 5, 1979</u>													
0730-0830	86	83	73	68	64	61	56	50	46	44	43	61	(A)
0930-1030	71	69	67	64	61	58	54	49	46	44	43	55	
1530-1630	73	71	67	65	62	59	56	53	50	48	46	56	
1730-1830	85	82	76	75	72	70	67	59	52	50	49	66	(B)
<u>June 6, 1979</u>													
1730-0830	76	75	65	62	59	57	55	52	50	48	45	55	
0930-1030	76	74	66	65	61	58	54	51	46	43	41	56	
1530-1630	85	78	74	71	68	65	60	51	46	44	42	62	(C)
1730-1830	84	80	76	73	70	65	62	52	44	43	42	63	(C)
<u>June 7, 1979</u>													
0730-0830	84	83	74	71	65	60	54	49	44	43	41	61	(D)
0930-1030	84	83	79	73	67	62	55	49	44	42	41	64	(E)
1530-1630	85	78	70	68	64	61	57	52	47	45	43	59	(F)
1730-1830	77	76	72	69	65	61	56	50	46	44	43	59	
<u>June 8, 1979</u>													
0730-0830	85	82	75	73	69	64	57	51	48	47	46	62	
0930-1030	67	66	63	62	59	56	53	49	46	44	43	53	

- (A) Garbage truck close to microphone
 (B) Power lawn mower
 (C) Children playing, mini-bikes
 (D) Street sweeper, children yelling into microphone
 (E) Sidewalk construction
 (F) Automobile horn

Table No. 3

Statistical Noise Data

Philadelphia International Airport

Site E3

Cherry Hill, NJ

June 5, 6, 7, 8, 1979

Noise Level - dBA re 20 microPa

<u>Time</u>	<u>Lmax</u>	<u>L0.1</u>	<u>L1</u>	<u>L2</u>	<u>L5</u>	<u>L10</u>	<u>L20</u>	<u>L50</u>	<u>L90</u>	<u>L99</u>	<u>Lmin</u>	<u>Leq</u>	<u>Remarks</u>
<u>June 5, 1979</u>													
0730-0830	74	73	69	68	63	58	52	48	45	44	43	56	
0930-1030	77	76	70	68	64	58	54	49	45	44	43	57	
1530-1630	98	87	66	64	61	57	53	50	46	45	43	64	(A)
1730-1830	No Data												
<u>June 6, 1979</u>													
0730-0830	74	72	69	68	65	62	56	48	45	43	41	58	
0930-1030	72	71	68	65	62	58	53	47	43	42	41	55	
1530-1630	75	74	69	65	60	55	51	46	42	40	38	55	
1730-1830	78	77	74	71	65	57	53	50	47	46	45	59	
<u>June 7, 1979</u>													
0730-0839	75	73	69	61	54	50	48	46	44	42	41	54	
0930-1030	73	72	69	64	58	53	49	46	43	42	41	54	
1530-1630	77	75	63	58	54	53	52	49	47	45	44	54	
1730-1830	67	66	61	58	53	50	49	47	46	45	44	50	
<u>June 8, 1979</u>													
0730-0830	75	73	66	62	58	54	51	49	47	46	45	54	
0930-1030	74	72	68	66	62	56	51	46	44	43	42	55	

(A) Trail bike

Table No. 4

Statistical Noise Data

Philadelphia International Airport

Site WI

Chester, PA

June 5,6,7,8, 1979

Noise Level - dBA re 20 microPa

<u>Time</u>	<u>Lmax</u>	<u>L0.1</u>	<u>L1</u>	<u>L2</u>	<u>L5</u>	<u>L10</u>	<u>L20</u>	<u>L50</u>	<u>L90</u>	<u>L99</u>	<u>Lmin</u>	<u>Leq</u>	<u>Remarks</u>
<u>June 5, 1979</u>													
0730-0830	82	81	78	77	75	72	66	54	51	50	49	67	
0930-1030	84	83	80	79	75	70	62	53	50	49	48	67	
1530-1630	82	81	78	77	74	69	61	54	51	50	49	66	
1730-1830	No Data												
<u>June 6, 1979</u>													
0730-0830	85	84	80	79	76	72	67	57	50	48	47	68	
0930-1030	83	82	80	77	73	67	62	52	48	47	47	66	
1530-1630	76	74	72	71	67	63	58	51	48	47	47	60	
1730-1830	88	86	79	74	69	65	59	52	50	49	48	65	
<u>June 7, 1979</u>													
0730-0830	84	82	74	71	66	61	55	50	47	46	46	62	
0930-1030	76	75	72	70	66	61	56	52	48	47	46	59	
1530-1630	100	88	79	76	71	66	61	56	52	51	50	68	(A)
1730-1830	82	80	75	71	67	62	56	51	48	47	46	61	
<u>June 8, 1979</u>													
0730-0830	84	83	72	70	67	60	55	52	50	49	48	61	
0930-1030	92	90	81	79	74	69	62	56	53	52	51	69	

(A) Boat whistle

TABLE NO. 5

PHILADELPHIA INTERNATIONAL AIRPORT

DOT/TSC

10/30/79

ARRIVAL NOISE LEVEL DATA

AS MEASURED *

SITE E1 GLOUCESTER CITY, NJ JUNE 5, 1979 0730-1030 HOURS

EV	EPNL	DBA(M)	DBD(M)	OASPL	PNL(M)	PNLT(M)	DUR(P)	TC	NEL	/\EPNL
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**

DOUGLAS DC-9 AIRCRAFT

2	91.2	78.9	85.6	81.1	92.1	92.6	16.0	0.5	87.4	-0.0
3	88.4	73.9	81.0	76.9	87.8	89.2	18.5	1.4	84.1	-0.0
7	86.7	73.9	79.9	76.1	86.5	87.9	16.5	1.7	82.4	-0.2
10	86.7	72.7	78.4	78.2	85.2	86.6	18.5	1.4	82.8	-0.0
12	90.0	75.1	81.5	78.4	88.3	89.7	27.0	1.3	86.2	-0.1
16	89.1	75.9	82.7	78.3	89.1	90.3	23.5	1.2	84.8	-0.0
17	90.5	75.2	82.0	78.6	88.3	89.3	23.5	1.2	86.5	-0.0
22	88.6	73.8	79.4	76.0	85.4	86.1	28.0	0.6	85.6	-0.0
28	82.6	69.5	74.1	76.7	80.3	81.7	27.0	1.5	80.1	-0.6

Avg.	88.2	74.3	80.5	77.8	87.0	88.1	22.1	1.2	84.4	-0.1
Std.										
Dev.	2.6	2.5	3.2	1.6	3.3	3.1	4.8	0.4	2.3	0.2

BRITISH AEROSPACE BAC-111 AIRCRAFT

1	84.2	71.1	77.5	75.2	84.0	85.8	18.0	1.8	81.0	-0.0
11	80.3	68.6	73.2	73.9	79.6	80.7	20.5	1.0	78.5	-0.2
23	84.2	70.1	75.0	73.9	81.3	82.3	32.0	1.0	81.2	-0.1
27	86.6	76.5	81.5	80.0	87.9	88.5	18.0	0.7	83.8	-0.0

Avg.	83.8	71.6	76.8	75.8	83.2	84.3	22.1	1.1	81.1	-0.1
Std.										
Dev.	2.6	3.4	3.6	2.9	3.6	3.5	6.7	0.5	2.1	0.0

BOEING 707 AIRCRAFT

4	96.0	81.9	89.3	81.9	94.6	96.4	19.5	1.7	90.3	-
20	96.5	81.7	89.4	81.9	95.1	97.9	18.5	2.9	90.6	-
Avg.	96.3	81.8	89.3	81.9	94.8	97.1	19.0	2.3	90.4	-
Std.										
Dev.	0.4	0.1	0.0	0.0	0.4	1.1	0.7	0.8	0.2	-

* - INDEXES (A,D, ETC.) CALCULATED USING MEASURED DATA UNCORRECTED FOR TEMPERATURE, HUMIDITY, AND AIRCRAFT DEVIATION FROM FLIGHT TRACK

** - /\ EPNL, THE CHANGE IN EPNL ASSUMING TONES 800 Hz AND BELOW TO BE PSEUDOTONES AND EXCLUDING THEM FROM THE PNLT CALCULATIONS

TABLE NO. 5 (cont.)

PHILADELPHIA INTERNATIONAL AIRPORT

DOT/TSC

11/ 9/79

ARRIVAL NOISE LEVEL DATA

AS MEASURED *

SITE E1 GLOUCESTER CITY, NJ JUNE 5, 1979 0730-1030 HOURS

EV	EPNL	DBA(M)	DBD(M)	OASPL	PNL(M)	PNLT(M)	DUR(P)	TC	NEL	/\EPNL
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**

BOEING 727 AIRCRAFT

5	86.1	72.7	77.6	77.8	83.7	85.9	25.0	2.2	83.3	-0.0
6	84.2	71.3	76.1	76.6	82.6	83.5	27.5	1.1	81.8	-0.4
8	89.4	74.9	79.4	80.4	86.2	88.1	25.0	2.8	86.0	-0.1
9	90.5	77.6	83.2	82.2	90.0	91.2	20.5	1.2	87.2	-0.1
18	87.6	73.7	78.2	79.2	85.2	88.4	22.5	3.8	84.5	-0.1
21	88.2	74.1	79.0	79.3	86.1	87.2	26.0	1.1	84.9	-0.1
24	91.1	77.6	83.5	81.1	90.5	91.8	19.5	1.3	87.2	-0.0
26	87.9	74.9	81.0	79.3	87.7	88.5	22.5	0.8	84.5	-0.1
Avg.	88.1	74.6	79.8	79.5	86.5	88.1	23.6	1.8	84.9	-0.1
Std.										
Dev.	2.3	2.2	2.6	1.8	2.8	2.7	2.8	1.0	1.8	0.1

DOUGLAS DC-10 AIRCRAFT

19	85.6	71.6	77.5	76.9	84.4	86.3	21.0	1.9	82.5	-0.0
Avg.	85.6	71.6	77.5	76.9	84.4	86.3	21.0	1.9	82.5	-0.0
Std.										
Dev.	-	-	-	-	-	-	-	-	-	-

LOCKHEED L-1011 AIRCRAFT

15	86.5	72.8	77.8	78.4	84.2	85.1	27.0	0.9	84.3	-0.3
Avg.	86.5	72.8	77.8	78.4	84.2	85.1	27.0	0.9	84.3	-0.3
Std.										
Dev.	-	-	-	-	-	-	-	-	-	-

* - INDEXES (A,D, ETC.) CALCULATED USING MEASURED DATA UNCORRECTED FOR TEMPERATURE, HUMIDITY, AND AIRCRAFT DEVIATION FROM FLIGHT TRACK

** - /\ EPNL , THE CHANGE IN EPNL ASSUMING TONES 800 Hz AND BELOW TO BE PSEUDOTONES AND EXCLUDING THEM FROM THE PNLT CALCULATIONS

DOT/TSC
12/10/79

AS MEASURED *

```
EV      EPNL   DBA(M) DBD(M) OASPL   PNL(M) PNLT(M) DUR(P) TC   NEL  /\ EPNL
                                         **
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32	90.6	76.6	83.6	79.7	90.1	91.7	22.0	1.5	86.5	-0.1
38	89.7	76.9	81.8	78.4	88.1	89.3	18.5	1.6	86.4	-0.1
40	88.0	73.3	80.3	77.0	86.6	87.7	21.0	1.2	83.6	-0.1
42	90.4	76.6	83.3	79.6	90.1	91.2	19.5	1.2	86.3	-0.0
45	89.0	77.1	82.5	80.6	89.4	90.9	15.0	1.5	85.5	-0.2
48	-	72.8	77.8	77.3	83.8	84.4	-	0.6	-	-
51	89.5	75.7	82.3	78.9	88.6	89.7	18.5	1.4	85.6	-0.2
54	89.5	76.6	82.4	80.1	89.5	91.1	16.0	1.6	85.7	-0.0
57	82.5	68.8	73.7	75.2	80.1	80.8	28.0	1.0	80.1	-0.2
64	94.2	78.3	85.2	83.6	92.0	93.2	37.0	1.1	90.6	-0.0
68	90.9	75.8	83.1	78.6	89.6	91.3	21.0	1.7	86.3	-0.1
Avg.	89.4	75.3	81.4	79.0	88.0	89.2	21.7	1.3	85.6	-0.1
Std.										
Dev.	2.9	2.7	3.2	2.2	3.4	3.6	6.5	0.3	2.6	0.0

33	85.1	72.8	77.7	76.9	84.0	84.8	23.0	2.5	82.0	-0.1
47	79.0	69.3	73.2	73.1	79.2	80.5	23.5	1.7	76.9	-0.3
65	91.2	78.3	82.6	85.8	89.1	90.3	27.5	1.1	88.8	-0.4
Avg.	85.1	73.5	77.8	78.6	84.1	85.2	24.7	1.8	82.6	-0.3
Std. Dev.	6.1	4.6	4.7	6.5	5.0	4.9	2.5	0.7	6.0	0.1

[illegible][illegible]

TABLE NO. 6(cont.)

PHILADELPHIA INTERNATIONAL AIRPORT

DOT/TSC

12/10/79

ARRIVAL NOISE LEVEL DATA

AS MEASURED *

SITE E1 GLOUCESTER CITY, NJ JUNE 5, 1979 1530-1830 HOURS

EV	EPNL	DBA(M)	DBD(M)	OASPL	PNL(M)	PNLT(M)	DUR(P)	TC	NEL	/\EPNL
										**

BOEING 727 AIRCRAFT

29	86.3	73.7	78.4	79.7	85.2	86.4	19.5	1.4	83.7	-0.1
31	85.1	75.4	79.8	80.1	86.4	87.1	18.0	0.7	83.2	-0.0
34	91.3	77.2	83.1	82.6	90.4	92.3	18.0	2.0	87.4	-
36	-	72.4	76.7	78.0	83.4	84.7	-	1.2	-	-
37	81.3	70.4	74.9	77.1	81.2	82.3	27.0	1.2	79.0	-0.5
39	85.1	72.8	77.9	78.1	84.5	85.9	24.0	1.5	-	-0.2
41	-	70.6	75.4	77.8	82.2	83.1	-	0.9	-	-
49	-	78.0	83.4	81.1	90.0	91.1	-	1.1	85.5	-
50	87.7	74.2	78.7	80.3	85.2	87.0	26.5	3.2	84.8	-0.3
52	88.8	73.9	79.4	79.0	86.3	87.9	22.5	1.6	84.8	-0.1
53	86.2	73.5	78.6	79.0	85.2	86.2	25.5	1.3	83.4	-0.3
55	89.2	76.4	81.5	81.6	88.2	88.9	19.5	0.8	86.8	-0.3
61	93.1	80.0	86.5	83.3	93.2	94.1	23.5	0.9	89.0	-0.2
62	87.4	75.9	81.0	82.6	87.8	89.5	21.0	1.7	84.3	-0.3
66	88.8	75.7	80.5	80.9	87.0	87.8	26.5	0.8	86.2	-0.3
67	88.0	75.5	80.2	80.8	86.5	89.0	20.0	3.2	85.2	-0.2
Avg.	87.6	74.7	79.7	80.1	86.4	87.7	22.4	1.5	84.9	-0.2
Std.										
Dev.	3.0	2.6	3.0	1.9	3.1	3.1	3.3	0.8	2.4	0.1

BOEING 737 AIRCRAFT

56	-	68.6	73.1	73.4	79.3	79.7	-	0.5	-	-
Avg.	-	68.6	73.1	73.4	79.3	79.7	-	0.5	-	-
Std.										
Dev.	-	-	-	-	-	-	-	-	-	-

DOUGLAS DC-10 AIRCRAFT

30	80.9	68.5	73.5	78.2	79.7	80.4	41.0	0.7	78.5	-0.3
Avg.	80.9	68.5	73.5	78.2	79.7	80.4	41.0	0.7	78.5	-0.3
Std.										
Dev.	-	-	-	-	-	-	-	-	-	-

LOCKHEED L-1011 AIRCRAFT

59	87.9	75.0	81.0	80.3	88.2	89.8	20.0	1.6	85.2	-0.3
Avg.	87.9	75.0	81.0	80.3	88.2	89.8	20.0	1.6	85.2	-0.3

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AS MEASURED *

SITE E1 GLOUCESTER CITY, NJ JUNE 6, 1979 0730-1030 HOURS

EV	EPNL	DBA(M)	DBD(M)	OASPL	PNL(M)	PNLT(M)	DUR(P)	TC	NEL	/\EPNL
										**
DOUGLAS DC-9 AIRCRAFT										
1	88.2	73.8	80.3	76.6	86.6	87.7	24.5	1.3	84.6	-0.3
2	89.0	74.3	81.1	77.1	87.8	89.3	18.5	1.5	85.1	-0.0
5	87.3	74.4	80.1	76.5	86.6	87.7	19.5	1.1	84.1	-0.0
13	86.3	72.1	78.2	75.3	84.7	85.8	23.5	1.2	82.7	-0.1
14	88.7	74.2	80.6	77.6	87.4	88.4	25.5	1.1	85.1	-0.1
24	92.8	79.5	86.2	81.2	92.6	94.2	17.5	1.8	87.9	-0.0
Avg.	88.7	74.7	81.1	77.4	87.6	88.9	21.5	1.3	84.9	-0.1
Std.										
Dev.	2.2	2.5	2.7	2.0	2.7	2.8	3.4	0.3	1.7	0.1

4	83.7	69.5	75.0	77.0	81.3	82.6	28.5	1.3	80.5	-0.3
12	78.6	63.7	69.2	72.3	76.4	78.7	32.0	2.4	74.9	-0.1
17	89.8	75.5	82.3	78.5	89.0	90.7	19.5	1.7	85.5	-0.0
21	85.4	72.5	77.4	76.1	83.8	84.8	21.0	1.6	82.0	-0.1
Avg.	84.4	70.3	75.9	76.0	82.6	84.2	25.3	1.7	80.7	-0.1
Std.										
Dev.	4.6	5.1	5.4	2.6	5.3	5.0	6.0	0.5	4.4	0.0

8	95.4	79.6	86.4	81.1	92.7	95.6	19.5	2.9	89.4	-
16	91.5	76.4	84.1	77.5	90.2	93.1	20.0	2.9	86.2	-
Avg.	93.5	78.0	85.2	79.3	91.5	94.3	19.8	2.9	87.8	-
Std. Dev.	2.8	2.3	1.6	2.5	1.8	1.8	0.4	0.1	2.3	-

[illegible]

TABLE NO. 7(cont.)

PHILADELPHIA INTERNATIONAL AIRPORT

DOT/TSC
11/ 9/79

ARRIVAL NOISE LEVEL DATA

AS MEASURED *

SITE E1 GLOUCESTER CITY,NJ JUNE 6,1979 0730-1030 HOURS

EV	EPNL	DBA(M)	DBD(M)	OASPL	PNL(M)	PNLT(M)	DUR(P)	TC	NEL	/\EPNL
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**

BOEING 727 AIRCRAFT

3	88.4	74.6	79.3	80.4	86.0	87.1	28.5	1.1	85.9	-0.2
6	85.3	71.8	76.8	77.2	83.2	84.2	24.0	1.5	83.1	-0.3
9	-	70.8	75.9	76.5	82.5	84.1	-	1.9	-	-
10	88.8	77.0	81.1	82.4	87.8	88.7	29.0	1.1	86.1	-0.2
15	88.5	75.5	79.7	80.3	86.1	88.6	23.5	3.1	85.4	-0.1
18	87.8	75.8	80.4	81.6	86.9	88.2	22.5	1.3	85.7	-0.0
19	86.3	74.0	80.1	79.3	86.9	87.9	17.5	1.1	82.6	-0.0
20	91.0	78.1	83.7	82.3	90.2	90.8	23.0	0.6	87.3	-0.1
22	85.9	72.0	76.7	78.1	83.3	84.0	37.5	1.3	83.5	-0.3
Avg.	87.7	74.4	79.3	79.8	85.9	87.1	25.7	1.4	84.9	-0.2
Std.										
Dev.	1.8	2.5	2.5	2.2	2.5	2.4	6.0	0.7	1.7	0.1

LOCKHEED L-1011 AIRCRAFT

7	86.1	73.9	78.3	79.7	85.1	85.8	21.5	0.7	84.1	-0.3
23	88.8	76.8	82.1	80.6	88.9	89.2	28.0	0.4	86.2	-0.2
Avg.	87.4	75.3	80.2	80.1	87.0	87.5	24.8	0.5	85.1	-0.2
Std.										
Dev.	1.9	2.0	2.7	0.7	2.6	2.4	4.6	0.2	1.5	0.0

* - INDEXES (A,D, .ETC.) CALCULATED USING MEASURED DATA UNCORRECTED FOR TEMPERATURE, HUMIDITY, AND AIRCRAFT DEVIATION FROM FLIGHT TRACK

** - /\ EPNL ,THE CHANGE IN EPNL ASSUMING TONES 800 Hz AND BELOW TO BE PSEUDOTONES AND EXCLUDING THEM FROM THE PNLT CALCULATIONS

[illegible]

TABLE NO. 8(cont.)

PHILADELPHIA INTERNATIONAL AIRPORT

DOT/TSC
12/11/79

DEPARTURE NOISE LEVEL DATA

AS MEASURED *

SITE E1 GLOUCESTER CITY,NJ JUNE 6,1979 1530-1830 HOURS

EV	EPNL	DBA(M)	DBD(M)	DASPL	PNL(M)	PNLT(M)	DUR(P)	TC	NEL	/\EPNL
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BOEING 727 AIRCRAFT

25	-	80.6	84.8	86.0	90.7	91.5	-	0.8	89.2	-
26	99.7	85.7	91.7	94.6	97.9	98.8	24.0	1.2	97.2	-0.3
27	94.8	82.6	86.8	90.4	92.7	93.6	31.0	0.8	92.5	-0.3
29	98.7	87.7	91.2	93.5	97.7	98.5	21.5	0.8	96.8	-0.3
34	97.0	83.7	89.3	92.1	95.2	95.9	24.0	0.7	94.7	-0.3
36	93.3	82.7	86.8	88.0	93.0	93.9	21.5	0.9	91.6	-0.7
39	94.8	82.3	87.4	91.4	92.7	93.5	26.5	1.0	92.1	-0.4
44	96.5	83.7	88.3	91.1	94.7	96.0	24.0	1.3	94.4	-0.4
45	94.8	83.4	88.9	91.7	95.2	96.2	21.0	0.9	92.7	-0.5
47	93.5	82.0	86.3	88.7	93.1	94.0	20.0	0.8	90.9	-0.4
50	-	71.4	75.2	78.0	81.6	82.0	-	0.4	78.9	-
55	96.4	85.8	89.9	91.0	96.3	96.9	20.0	0.6	94.1	-0.4
56	-	86.9	92.8	96.4	99.4	100.0	-	0.6	-	-
Avg.	95.9	83.0	87.6	90.2	93.9	94.7	23.3	0.8	92.1	-0.4
Std.										
Dev.	2.1	4.1	4.4	4.6	4.4	4.5	3.4	0.2	4.8	0.1

BOEING 737 AIRCRAFT

49	89.4	76.3	81.5	83.6	87.5	88.4	28.0	0.9	87.3	-0.4
Avg.	89.4	76.3	81.5	83.6	87.5	88.4	28.0	0.9	87.3	-0.4
Std.										
Dev.	-	-	-	-	-	-	-	-	-	-

* - INDEXES (A,D,.ETC.) CALCULATED USING MEASURED DATA UNCORRECTED FOR TEMPERATURE,HUMIDITY,AND AIRCRAFT DEVIATION FROM FLIGHT TRACK

** - /\ EPNL ,THE CHANGE IN EPNL ASSUMING TONES 800 Hz AND BELOW TO BE PSEUDOTONES AND EXCLUDING THEM FROM THE PNLT CALCULATIONS

DOT/TSC
11/ 9/79

AS MEASURED *

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EV      EPNL      DBA(M) DBD(M) OASPL      PNL(M) PNLT(M) DUR(P) TC      NEL  /\ EPNL
                                                **
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[illegible]

TABLE NO. 9(cont.)

PHILADELPHIA INTERNATIONAL AIRPORT

DOT/TSC
12/11/79

DEPARTURE NOISE LEVEL DATA

AS MEASURED *

SITE E1 GLOUCESTER CITY,NJ JUNE 7,1979 0730-1030 HOURS

EV	EPNL	DBA(M)	DBD(M)	DASPL	PNL(M)	PNLT(M)	DUR(P)	TC	NEL	/\EPNL
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**

BOEING 727 AIRCRAFT

2	96.4	84.9	88.9	90.6	95.3	95.8	24.5	0.6	94.5	-0.3
5	91.3	80.3	85.2	86.7	91.8	92.4	21.0	0.6	89.0	-0.5
6	97.5	85.6	90.7	94.9	96.9	97.7	19.5	0.8	94.8	-0.4
9	94.7	83.9	88.8	90.2	95.1	95.9	16.0	0.8	92.3	-0.1
10	-	72.8	77.9	81.4	83.5	85.3	-	1.8	-	-
15	-	79.1	84.0	85.9	90.2	91.1	-	0.9	-	-
20	84.2	73.8	77.6	81.2	83.9	84.7	20.0	0.8	82.5	-0.0
22	93.9	80.3	85.9	88.9	91.8	93.2	29.0	1.5	91.4	-0.4
29	92.4	82.2	86.1	86.8	92.4	93.3	22.0	0.9	90.7	-0.5
32	93.9	83.0	87.4	89.3	93.4	94.4	24.5	0.9	91.7	-0.3

Avg.	93.0	80.6	85.3	87.6	91.4	92.4	22.1	1.0	90.9	-0.3
Std.										
Dev.	4.1	4.4	4.4	4.2	4.5	4.3	3.9	0.4	3.9	0.2

LOCKHEED L-1011 AIRCRAFT

38	87.6	73.7	78.7	80.0	85.1	85.9	36.0	1.0	84.8	-0.0
Avg.	87.6	73.7	78.7	80.0	85.1	85.9	36.0	1.0	84.8	-0.0
Std.										
Dev.	-	-	-	-	-	-	-	-	-	-

* - INDEXES (A,D,ETC.) CALCULATED USING MEASURED DATA UNCORRECTED FOR TEMPERATURE,HUMIDITY,AND AIRCRAFT DEVIATION FROM FLIGHT TRACK

** - /\ EPNL ,THE CHANGE IN EPNL ASSUMING TONES 800 Hz AND BELOW TO BE PSEUDOTONES AND EXCLUDING THEM FROM THE PNLT CALCULATIONS

TABLE NO.10

PHILADELPHIA INTERNATIONAL AIRPORT

DOT/TSC

11/ 9/79

DEPARTURE NOISE LEVEL DATA

AS MEASURED *

SITE E1 GLOUCESTER CITY,NJ JUNE 7,1979 1530-1830 HOURS

EV	EPNL	DBA(M)	DBD(M)	OASPL	PNL(M)	PNLT(M)	DUR(P)	TC	NEL	/\EPNL
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**

DOUGLAS DC-9 AIRCRAFT

40	-	70.2	79.6	87.2	84.7	85.0	-	0.3	-	-
41	89.8	76.2	80.7	84.9	87.6	88.6	43.5	1.0	87.1	-0.4
43	93.5	81.3	88.1	91.5	93.6	94.3	25.5	0.7	91.4	-0.3
44	85.9	72.7	77.1	83.8	83.3	83.7	42.5	0.4	83.2	-0.1
46	93.4	81.5	85.7	88.3	92.0	93.1	28.0	1.1	90.8	-0.2
50	90.5	78.5	82.8	84.8	89.2	90.1	27.0	0.9	88.2	-0.6
56	-	70.3	74.2	79.5	80.8	81.2	-	0.4	-	-
57	95.3	82.2	87.6	90.6	94.1	94.8	23.5	0.7	92.9	-0.3
70	-	77.4	83.2	87.1	89.4	91.0	-	1.5	-	-
71	92.2	79.8	84.5	86.7	91.3	92.4	20.0	1.1	89.7	-0.2
73	86.5	73.8	78.2	82.8	84.8	86.0	32.5	1.1	83.9	-0.1
Avg.	90.9	76.7	82.0	86.1	88.3	89.1	30.3	0.8	88.4	-0.3
Std.										
Dev.	3.4	4.4	4.5	3.5	4.4	4.6	8.6	0.4	3.5	0.2

BRITISH AEROSPACE BAC-111 AIRCRAFT

58	95.9	82.2	87.7	91.6	93.8	94.3	27.0	0.5	93.3	-0.3
Avg.	95.9	82.2	87.7	91.6	93.8	94.3	27.0	0.5	93.3	-0.3
Std.										
Dev.	-	-	-	-	-	-	-	-	-	-

BOEING 707 AIRCRAFT

49	94.2	78.8	84.0	86.5	91.0	94.3	24.0	3.6	90.1	-
Avg.	94.2	78.8	84.0	86.5	91.0	94.3	24.0	3.6	90.1	-
Std.										
Dev.	-	-	-	-	-	-	-	-	-	-

DOUGLAS DC-8 AIRCRAFT

72	89.8	76.7	82.0	85.9	88.7	89.4	28.0	1.1	86.7	-0.2
Avg.	89.8	76.7	82.0	85.9	88.7	89.4	28.0	1.1	86.7	-0.2

TABLE NO. 10(cont.)

PHILADELPHIA INTERNATIONAL AIRPORT

DOT/TSC

11/ 9/79

DEPARTURE NOISE LEVEL DATA

AS MEASURED *

SITE E1 GLOUCESTER CITY,NJ JUNE 7,1979 1530-1830 HOURS

EV	EPNL	DBA(M)	DBD(M)	OASPL	PNL(M)	PNLT(M)	DUR(P)	TC	NEL	/\EPNL
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**

BOEING 727 AIRCRAFT

45	-	81.3	85.9	89.4	92.2	92.9	-	0.8	-	-
53	99.8	87.6	91.4	95.0	98.0	99.1	25.0	1.0	97.7	-0.4
54	93.7	84.2	88.4	89.3	94.5	95.0	18.5	0.6	91.9	-0.0
55	94.8	83.4	87.2	90.0	94.0	94.5	21.0	0.5	92.7	-0.1
60	92.8	81.3	86.2	88.6	92.7	93.5	20.0	0.8	90.3	-0.2
65	-	76.2	80.2	82.0	86.1	86.6	-	0.4	81.8	-
66	87.3	75.7	80.3	82.7	86.6	88.3	23.0	1.7	84.0	-0.4
68	93.1	79.8	84.5	88.2	92.5	94.8	20.0	2.2	89.8	-0.3
Avg.	93.6	81.2	85.5	88.1	92.1	93.1	21.3	1.0	89.7	-0.3
Std.										
Dev.	4.0	4.0	3.9	4.2	4.0	4.0	2.4	0.6	5.4	0.1

BOEING 737 AIRCRAFT

69	93.7	81.0	85.6	87.5	92.6	93.7	25.0	1.2	90.8	-0.1
Avg.	93.7	81.0	85.6	87.5	92.6	93.7	25.0	1.2	90.8	-0.1
Std.										
Dev.	-	-	-	-	-	-	-	-	-	-

* - INDEXES (A,D,ETC.) CALCULATED USING MEASURED DATA UNCORRECTED FOR TEMPERATURE,HUMIDITY,AND AIRCRAFT DEVIATION FROM FLIGHT TRACK

** - /\ EPNL ,THE CHANGE IN EPNL ASSUMING TONES 800 Hz AND BELOW TO BE PSEUDOTONES AND EXCLUDING THEM FROM THE PNLT CALCULATIONS

TABLE NO. 11

PHILADELPHIA INTERNATIONAL AIRPORT

DOT/TSC
11/19/79

DEPARTURE NOISE LEVEL DATA

AS MEASURED *

SITE E1 GLOUCESTER CITY, NJ JUNE 8, 1979 0730-1030 HOURS

EV	EPNL	DBA(M)	DBD(M)	OASPL	PNL(M)	PNLT(M)	DUR(P)	TC	NEL	/\EPNL
										**

DOUGLAS DC-9 AIRCRAFT

4	91.8	77.6	82.8	86.1	89.6	90.4	30.5	0.8	89.3	-0.2
10	88.7	76.0	81.6	84.3	87.5	87.9	34.0	0.5	87.1	-0.1
13	94.2	80.0	84.5	88.3	91.3	93.8	29.0	3.0	90.2	-0.1
16	-	69.4	74.5	77.3	80.4	81.3	-	0.9	-	-
17	94.0	82.1	85.9	88.0	92.4	93.0	22.0	0.6	91.8	-0.0
Avg.	92.2	77.0	81.9	84.8	88.2	89.3	28.9	1.1	89.6	-0.1
Std.										
Dev.	2.5	4.9	4.5	4.5	4.7	5.0	5.0	1.1	2.0	0.0

BOEING 707 AIRCRAFT

8	91.9	77.8	82.5	82.3	89.3	91.8	24.5	2.8	86.9	-0.0
12	97.5	81.8	88.7	86.3	95.8	98.9	17.5	3.1	91.5	-
19	91.1	76.5	83.0	83.1	90.1	94.6	11.5	4.5	85.8	-
Avg.	93.5	78.7	84.7	83.9	91.7	95.1	17.8	3.5	88.0	-0.0
Std.										
Dev.	3.5	2.7	3.4	2.1	3.6	3.6	6.5	0.9	3.0	-

BOEING 727 AIRCRAFT

1	94.6	82.6	87.2	89.0	93.5	94.9	26.0	1.6	92.4	-0.5
2	93.3	83.9	88.4	90.1	94.8	95.6	17.0	0.8	91.3	-0.5
3	99.3	86.5	91.5	95.5	98.1	98.8	26.0	0.6	96.7	-0.3
5	93.3	82.6	87.4	89.3	93.2	94.5	17.5	1.3	91.4	-0.6
7	-	74.6	80.1	83.7	86.1	87.3	-	1.9	-	-
9	92.9	79.7	84.5	88.1	90.7	92.2	25.5	2.2	90.3	-0.1
11	95.9	84.1	88.7	90.3	95.6	96.5	21.5	0.9	93.3	-0.1
18	97.1	85.1	89.5	92.8	96.1	97.0	22.5	1.0	94.9	-0.4
21	91.6	82.3	87.0	89.0	93.2	93.9	19.0	0.7	89.6	-0.4
Avg.	94.8	82.4	87.1	89.7	93.5	94.5	21.9	1.2	92.5	-0.4
Std.										
Dev.	2.5	3.5	3.3	3.2	3.5	3.3	3.8	0.6	2.4	0.2

LOCKHEED L-1011 AIRCRAFT

15	91.7	76.4	81.6	83.0	88.3	90.9	30.0	2.8	87.0	-
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AIRBUS IND. A0300 AIRBUS

20	89.3	77.3	81.8	82.5	88.6	89.1	23.5	0.5	86.5	-0.2
Avg.	89.3	77.3	81.8	82.5	88.6	89.1	23.5	0.5	86.5	-0.2

TABLE NO. 12

PHILADELPHIA INTERNATIONAL AIRPORT

DOT/TSC

12/11/79

ARRIVAL NOISE LEVEL DATA

AS MEASURED *

SITE E1 GLOUCESTER CITY, NJ JUNE 8, 1979 0730-1030 HOURS

EV	EPNL	DBA(M)	DBD(M)	OASPL	PNL(M)	PNLT(M)	DUR(P)	TC	NEL	/\EPNL
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DOUGLAS DC-9 AIRCRAFT

25	93.0	78.5	84.8	79.4	90.7	91.8	21.5	1.3	89.2	-0.1
31	88.1	76.8	82.3	80.5	89.1	90.7	17.5	1.5	84.3	-0.2
32	89.5	74.9	81.1	77.7	87.5	88.6	23.0	1.0	85.5	-0.2
Avg.	90.2	76.7	82.7	79.2	89.1	90.3	20.7	1.3	86.3	-0.2
Std.										
Dev.	2.5	1.8	1.9	1.4	1.6	1.7	2.8	0.3	2.6	0.0

BRITISH AEROSPACE BAC-111 AIRCRAFT

27	83.1	71.4	77.1	74.2	83.6	84.1	23.0	0.5	79.8	-0.1
30	85.0	73.7	77.8	78.3	84.2	85.4	26.5	1.2	82.1	-0.2
Avg.	84.1	72.5	77.4	76.3	83.9	84.7	24.8	0.8	81.0	-0.2
Std.										
Dev.	1.3	1.6	0.5	2.9	0.4	0.9	2.5	0.5	1.6	0.0

BOEING 727 AIRCRAFT

24	87.8	77.8	82.0	81.5	88.3	88.8	23.5	0.5	85.7	-0.3
26	93.6	81.1	87.7	84.0	94.6	95.7	17.5	1.1	89.3	-0.0
28	93.1	79.9	84.0	84.3	90.1	91.6	30.5	1.2	90.2	-0.1
Avg.	91.5	79.6	84.5	83.3	91.0	92.0	23.8	0.9	88.4	-0.1
Std.										
Dev.	3.2	1.6	2.9	1.5	3.2	3.4	6.5	0.4	2.4	0.1

AIRBUS IND. A-300 AIRBUS

29	87.7	72.9	78.8	75.1	84.9	86.0	28.0	1.3	83.8	-0.2
Avg.	87.7	72.9	78.8	75.1	84.9	86.0	28.0	1.3	83.8	-0.2
Std.										
Dev.	-	-	-	-	-	-	-	-	-	-

* - INDEXES (A,D, ETC.) CALCULATED USING MEASURED DATA UNCORRECTED FOR TEMPERATURE, HUMIDITY, AND AIRCRAFT DEVIATION FROM FLIGHT TRACK

TABLE NO. 13

PHILADELPHIA INTERNATIONAL AIRPORT

DOT/TSC

11/ 6/79

ARRIVAL NOISE LEVEL DATA

AS MEASURED *

SITE E2 AUDUBON, NJ

JUNE 5, 1979 0730-1030 HOURS

EV	EPNL	DBA(M)	DBD(M)	OASPL	PNL(M)	PNLT(M)	DUR(P)	TC	NEL	/\EPNL
DOUGLAS DC-9 AIRCRAFT										
2	-	65.2	69.6	71.6	76.1	77.8	-	2.1	-	-
7	-	58.4	63.1	66.8	69.9	70.9	-	1.1	-	-
12	-	62.7	67.8	68.4	74.4	76.2	-	1.8	73.8	-
16	-	65.4	70.2	72.3	76.4	77.2	-	0.9	-	-
17	79.6	63.6	68.3	71.7	75.1	77.1	58.0	1.8	76.6	-
22	-	63.1	67.1	68.0	73.1	74.5	-	1.5	-	-
28	-	71.5	76.2	76.2	82.7	83.3	-	0.5	-	-
Avg.	79.6	64.3	68.9	70.7	75.4	76.7	58.0	1.4	75.2	-
Std.										
Dev.	-	3.9	4.0	3.2	3.9	3.7	-	0.6	2.0	-
BRITISH AEROSPACE BAC-111 AIRCRAFT										
1	-	63.7	68.2	72.8	74.8	76.8	-	2.0	-	-
11	-	62.1	66.4	69.7	72.8	74.3	-	3.5	-	-
23	-	63.4	67.3	69.1	73.6	75.7	-	3.6	-	-
27	-	67.8	71.3	72.2	77.2	78.4	-	1.2	77.0	-
Avg.	-	64.2	68.3	70.9	74.6	76.3	-	2.6	77.0	-
Std.										
Dev.	-	2.5	2.1	1.8	1.9	1.7	-	1.2	-	-
BOEING 707 AIRCRAFT										
4	82.4	66.3	73.4	72.8	80.2	83.7	24.0	3.5	77.7	-0.0
20	-	58.9	64.0	67.6	70.9	73.6	-	2.7	-	-
Avg.	82.4	62.6	68.7	70.2	75.5	78.6	24.0	3.1	77.7	-0.0
Std.										
Dev.	-	5.2	6.7	3.7	6.5	7.1	-	0.6	-	-
DOUGLAS DC-8 AIRCRAFT										
13	-	68.2	73.3	72.2	80.1	83.6	-	3.5	-	-
Avg.	-	68.2	73.3	72.2	80.1	83.6	-	3.5	-	-
Std.										
Dev.	-	-	-	-	-	-	0.0	-	-	-

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DOUGLAS DC-9 AIRCRAFT

BRITISH AEROSPACE BAC-111 AIRCRAFT

BOEING 707 AIRCRAFT

DOUGLAS DC-8 AIRCRAFT

TABLE NO. 13(cont.)

PHILADELPHIA INTERNATIONAL AIRPORT

DOT/TSC
11/20/79

ARRIVAL NOISE LEVEL DATA

AS MEASURED *

SITE E2 AUDUBON,NJ

JUNE 5,1979 0730-1030 HOURS

EV	EPNL	DBA(M)	DBD(M)	OASPL	PNL(M)	PNLT(M)	DUR(P)	TC	NEL	/\EPNL
BOEING 727 AIRCRAFT										
5	-	70.1	75.1	77.7	81.5	83.3	-	1.8	80.8	-
8	-	64.0	68.1	70.9	74.6	76.5	-	1.9	-	-
14	-	65.4	70.2	72.3	76.4	77.2	-	0.9	-	-
18	-	61.9	68.4	69.0	74.9	77.7	-	2.8	-	-
21	-	62.9	67.5	70.6	73.9	75.3	-	1.4	73.5	-
24	-	64.7	69.1	70.1	75.7	76.9	-	1.3	-	-
26	78.5	65.0	69.6	69.8	75.7	77.0	41.5	1.3	76.1	-0.2
Avg.	78.5	64.8	69.7	71.5	76.1	77.7	41.5	1.6	76.8	-0.2
Std.										
Dev.	-	2.6	2.5	2.9	2.5	2.6	-	0.6	3.7	-
DOUGLAS DC-10 AIRCRAFT										
19	-	62.2	66.8	70.2	72.8	74.7	-	3.1	-	-
Avg.	-	62.2	66.8	70.2	72.8	74.7	-	3.1	-	-
Std.										
Dev.	-	-	-	-	-	-	-	-	-	-
LOCKHEED L-1011 AIRCRAFT										
15	79.6	63.6	68.3	71.7	75.1	77.1	58.0	1.8	76.6	-
Avg.	79.6	63.6	68.3	71.7	75.1	77.1	58.0	1.8	76.6	-
Std.										
Dev.	-	-	-	-	-	-	-	-	-	-

* - INDEXES (A,D,ETC.) CALCULATED USING MEASURED DATA UNCORRECTED FOR TEMPERATURE,HUMIDITY,AND AIRCRAFT DEVIATION FROM FLIGHT TRACK

** - /\ EPNL ,THE CHANGE IN EPNL ASSUMING TONES 800 Hz AND BELOW TO BE PSEUDOTONES AND EXCLUDING THEM FROM THE PNLT CALCULATIONS

TABLE NO. 14

PHILADELPHIA INTERNATIONAL AIRPORT

DOT/TSC
11/ 6/79

ARRIVAL NOISE LEVEL DATA

AS MEASURED *

SITE E2 AUDUBON,NJ

JUNE 5,1979 1530-1830 HOURS

EV	EPNL	DBA(M)	DBD(M)	OASPL	PNL(M)	PNLT(M)	DUR(P)	TC	NEL	/\EPNL
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DOUGLAS DC-9 AIRCRAFT

32	-	65.7	70.3	73.3	77.2	79.4	-	2.1	-	-
35	-	67.0	72.0	73.8	78.6	80.2	-	1.6	-	-
38	-	62.8	68.3	74.3	75.0	76.6	-	1.1	-	-
40	80.8	65.4	72.4	76.4	79.8	81.6	28.0	2.1	-	-
42	-	61.6	66.6	69.8	73.4	74.3	-	1.0	-	-
43	-	61.1	65.9	68.4	72.4	73.9	-	1.5	-	-
45	-	63.7	68.9	73.2	75.9	76.3	-	0.4	-	-
48	-	54.9	60.1	66.6	66.7	67.2	-	0.6	-	-
Avg.	80.8	62.8	68.1	72.0	74.9	76.2	28.0	1.4	-	-
Std.										
Dev.	-	3.8	4.0	3.3	4.2	4.6	-	0.7	-	-

BRITISH AEROSPACE BAC-111 AIRCRAFT

33	-	64.8	70.3	71.4	77.5	78.0	-	0.5	-	-
Avg.	-	64.8	70.3	71.4	77.5	78.0	-	0.5	-	-
Std.										
Dev.	-	-	-	-	-	-	-	-	-	-

BOEING 707 AIRCRAFT

46	-	65.1	69.5	73.7	76.7	78.4	-	2.9	-	-
Avg.	-	65.1	69.5	73.7	76.7	78.4	-	2.9	-	-
Std.										
Dev.	-	-	-	-	-	-	-	-	-	-

* - INDEXES (A,D,ETC.) CALCULATED USING MEASURED DATA UNCORRECTED FOR TEMPERATURE,HUMIDITY,AND AIRCRAFT DEVIATION FROM FLIGHT TRACK

** - /\ EPNL ,THE CHANGE IN EPNL ASSUMING TONES 800 Hz AND BELOW TO BE PSEUDOTONES AND EXCLUDING THEM FROM THE PNLT CALCULATIONS

TABLE NO. 14 (cont.)

PHILADELPHIA INTERNATIONAL AIRPORT

DOT/TSC
11/ 6/79

ARRIVAL NOISE LEVEL DATA

AS MEASURED *

SITE E2 AUDUBON, NJ

JUNE 5, 1979 1530-1830 HOURS

EV	EPNL	DBA(M)	DBD(M)	OASPL	PNL(M)	PNLT(M)	DUR(P)	TC	NEL	/\EPNL
BOEING 727 AIRCRAFT										
29	-	67.7	72.2	73.9	78.7	80.6	-	1.9	-	-
31	-	65.8	70.5	72.6	76.7	78.2	-	1.9	-	-
34	-	69.2	73.9	75.3	80.2	81.3	-	1.1	77.3	-
36	-	60.5	65.0	69.3	72.1	73.6	-	1.5	-	-
37	-	62.2	67.2	70.0	73.6	74.8	-	1.4	-	-
39	-	58.4	64.0	70.9	70.4	71.8	-	1.6	-	-
41	-	57.9	64.2	69.3	69.5	70.1	-	1.1	-	-
49	-	59.6	65.2	68.8	72.0	73.2	-	1.2	-	-
50	-	61.1	66.3	71.7	73.1	73.6	-	0.6	-	-
Avg.	-	62.5	67.6	71.3	74.0	75.2	-	1.4	77.3	-
Std.	-						-			
Dev.	-	4.1	3.7	2.3	3.7	3.9	-	0.4	-	-
DOUGLAS DC-10 AIRCRAFT										
30	-	70.6	75.3	78.4	81.7	82.3	-	0.6	-	-
Avg.	-	70.6	75.3	78.4	81.7	82.3	-	0.6	-	-
Std.	-						-			
Dev.	-						-			

* - INDEXES (A, D, ETC.) CALCULATED USING MEASURED DATA UNCORRECTED FOR TEMPERATURE, HUMIDITY, AND AIRCRAFT DEVIATION FROM FLIGHT TRACK

** - /\ EPNL , THE CHANGE IN EPNL ASSUMING TONES 800 Hz AND BELOW TO BE PSEUDOTONES AND EXCLUDING THEM FROM THE PNLT CALCULATIONS

TABLE NO. 15

PHILADELPHIA INTERNATIONAL AIRPORT

DOT/TSC

11/ 6/79

ARRIVAL NOISE LEVEL DATA

AS MEASURED *

SITE E2 AUDUBON,NJ

JUNE 6,1979 0730-1030 HOURS

EV	EPNL	DBA(M)	DBD(M)	OASPL	PNL(M)	PNLT(M)	DUR(P)	TC	NEL	/\EPNL
DOUGLAS DC-9 AIRCRAFT										
1	-	59.1	66.7	74.2	73.0	75.0	-	2.0	-	-
2	-	60.6	67.7	73.2	74.4	76.4	-	1.9	-	-
5	-	60.7	67.1	73.7	74.6	76.5	-	2.2	-	-
13	-	60.3	64.5	67.1	71.2	72.4	-	1.2	-	-
Avg.	-	60.2	66.5	72.0	73.3	75.1	-	1.8	-	-
Std.	-						-		-	-
Dev.	-	0.7	1.4	3.3	1.6	1.9	-	0.4	-	-
BRITISH AEROSPACE BAC-111 AIRCRAFT										
4	-	57.6	64.7	71.3	71.4	73.6	-	2.2	-	-
12	81.9	64.8	72.7	66.9	77.7	82.9	22.0	5.2	74.4	-
17	-	62.8	66.9	68.0	73.9	76.3	-	2.0	-	-
21	-	63.9	69.2	75.2	74.9	76.9	-	2.0	-	-
Avg.	81.9	62.3	68.4	70.3	74.5	77.4	22.0	2.9	74.4	-
Std.	-						-		-	-
Dev.	-	3.2	3.4	3.7	2.6	3.9	-	1.5	-	-
BOEING 707 AIRCRAFT										
16	83.3	69.2	75.2	71.2	81.5	84.4	26.0	2.9	77.9	-0.0
Avg.	83.3	69.2	75.2	71.2	81.5	84.4	26.0	2.9	77.9	-0.0
Std.	-	-	-	-	-	-	-	-	-	-
Dev.	-	-	-	-	-	-	-	-	-	-

* - INDEXES (A,D,ETC.) CALCULATED USING MEASURED DATA UNCORRECTED FOR TEMPERATURE,HUMIDITY,AND AIRCRAFT DEVIATION FROM FLIGHT TRACK

** - /\ EPNL ,THE CHANGE IN EPNL ASSUMING TONES 800 Hz AND BELOW TO BE PSEUDOTONES AND EXCLUDING THEM FROM THE PNLT CALCULATIONS

TABLE NO. 15 (cont.)

PHILADELPHIA INTERNATIONAL AIRPORT

DOT/TSC

11/ 6/79

ARRIVAL NOISE LEVEL DATA

AS MEASURED *

SITE E2 AUDUBON, NJ

JUNE 6, 1979 0730-1030 HOURS

EV	EPNL	DBA(M)	DBD(M)	OASPL	PNL(M)	PNLT(M)	DUR(P)	TC	NEL	/\EPNL
BOEING 727 AIRCRAFT										
3	-	64.5	69.7	74.9	76.6	78.0	-	1.4	-	-
6	-	60.2	67.4	71.7	73.4	76.1	-	3.0	-	-
10	-	60.7	66.9	72.7	72.7	74.3	-	1.5	-	-
15	-	63.7	68.2	70.4	75.0	77.7	-	2.7	-	-
18	-	60.9	67.9	67.7	74.8	78.6	-	3.8	-	-
19	-	63.6	67.7	69.8	74.4	75.1	-	0.8	-	-
20	-	68.5	73.3	75.6	79.8	80.3	-	0.6	-	-
22	-	64.8	69.6	72.7	75.5	77.3	-	1.8	-	-
Avg.	-	63.4	68.8	71.9	75.3	77.2	-	1.9	-	-
Std.	-						-		-	-
Dev.	-	2.8	2.1	2.6	2.2	2.0	-	1.1	-	-
LOCKHEED L-1011 AIRCRAFT										
7	-	62.5	67.9	74.1	74.1	75.8	-	1.7	-	-
23	-	67.5	72.2	74.6	78.8	80.6	-	1.9	-	-
Avg.	-	65.0	70.1	74.3	76.4	78.2	-	1.8	-	-
Std.	-						-		-	-
Dev.	-	3.5	3.0	0.4	3.3	3.4	-	0.1	-	-

* - INDEXES (A, D, ETC.) CALCULATED USING MEASURED DATA UNCORRECTED FOR TEMPERATURE, HUMIDITY, AND AIRCRAFT DEVIATION FROM FLIGHT TRACK

** - /\ EPNL, THE CHANGE IN EPNL ASSUMING TONES 800 Hz AND BELOW TO BE PSEUDOTONES AND EXCLUDING THEM FROM THE PNLT CALCULATIONS

TABLE NO. 16

PHILADELPHIA INTERNATIONAL AIRPORT

DOT/TSC

11/ 6/79

DEPARTURE NOISE LEVEL DATA

AS MEASURED *

SITE E2 AUDUBON, NJ

JUNE 6, 1979 1530-1830 HOURS

EV	EPNL	DBA(M)	DBD(M)	OASPL	PNL(M)	PNLT(M)	DUR(P)	TC	NEL	/\EPNL
DOUGLAS DC-9 AIRCRAFT										
31	-	78.1	81.6	84.1	87.6	88.2	-	0.6	88.8	-
32	-	68.5	74.5	80.2	80.8	82.7	-	3.0	-	-
37	-	67.8	71.4	75.6	77.8	79.1	-	1.4	-	-
40	89.4	75.5	80.2	83.1	87.1	88.2	31.0	1.0	86.6	-0.4
51	-	67.7	73.0	76.3	78.5	80.3	-	1.8	-	-
54	89.4	74.9	79.9	82.8	85.5	86.2	42.5	1.0	87.6	-0.4
Avg.	89.4	72.1	76.7	80.3	82.9	84.1	36.8	1.5	87.7	-0.4
Std.										
Dev.	0.0	4.6	4.3	3.7	4.4	4.0	8.1	0.8	1.1	0.0
BRITISH AEROSPACE BAC-111 AIRCRAFT										
48	88.9	76.7	82.6	85.5	88.2	89.9	27.5	1.6	86.3	-0.7
Avg.	88.9	76.7	82.6	85.5	88.2	89.9	27.5	1.6	86.3	-0.7
Std.										
Dev.	-	-	-	-	-	-	-	-	-	-
BOEING 707 AIRCRAFT										
52	-	72.3	76.7	80.1	83.7	86.4	-	3.2	-	-
53	88.0	74.6	79.3	80.7	85.2	89.0	25.0	3.8	84.4	-0.3
Avg.	88.0	73.4	78.0	80.4	84.5	87.7	25.0	3.5	84.4	-0.3
Std.										
Dev.	-	1.7	1.8	0.4	1.1	1.8	-	0.4	-	-

* - INDEXES (A,D,.ETC.) CALCULATED USING MEASURED DATA UNCORRECTED FOR TEMPERATURE, HUMIDITY, AND AIRCRAFT DEVIATION FROM FLIGHT TRACK

** - /\ EPNL , THE CHANGE IN EPNL ASSUMING TONES 800 Hz AND BELOW TO BE PSEUDOTONES AND EXCLUDING THEM FROM THE PNLT CALCULATIONS

TABLE NO. 16 (cont.)

PHILADELPHIA INTERNATIONAL AIRPORT

DOT/TSC

11/ 6/79

DEPARTURE NOISE LEVEL DATA

AS MEASURED *

SITE E2 AUDUBON, NJ

JUNE 6, 1979 1530-1830 HOURS

EV	EPNL	DBA(M)	DBD(M)	OASPL	PNL(M)	PNLT(M)	DUR(P)	TC	NEL	/\EPNL **
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BOEING 727 AIRCRAFT

25	85.3	73.6	77.6	78.9	83.0	85.1	34.0	2.1	83.4	-0.7
26	-	70.4	75.3	80.7	80.9	82.0	-	1.1	79.4	-
27	-	67.5	71.6	74.4	78.0	80.0	-	2.1	77.5	-
34	-	73.5	77.8	81.1	84.4	86.1	-	1.6	-	-
36	-	74.2	78.5	80.7	84.5	85.3	-	1.6	84.2	-
39	-	63.3	70.5	77.9	75.0	76.0	-	2.6	-	-
41	89.0	76.2	80.7	83.2	86.5	87.9	35.0	1.9	86.6	-
44	86.7	75.3	79.3	82.1	85.8	87.1	29.0	1.3	84.6	-0.4
45	81.0	69.5	73.9	77.3	79.8	81.3	33.5	1.5	78.3	-0.0
47	91.3	78.4	83.1	84.6	89.7	90.2	34.0	0.5	88.9	-0.6
55	-	67.7	71.6	74.7	77.8	79.3	-	1.5	-	-
56	-	80.9	85.7	87.8	92.3	93.3	-	0.9	-	-
Avg.	86.7	72.5	77.1	80.3	83.1	84.5	33.1	1.6	82.9	-0.4
Std.										
Dev.	3.9	5.0	4.7	3.9	5.1	4.9	2.4	0.6	4.1	0.3

BOEING 737 AIRCRAFT

49	-	69.6	74.0	77.1	80.0	81.5	-	1.3	-	-
Avg.	-	69.6	74.0	77.1	80.0	81.5	-	1.3	-	-
Std.										
Dev.	-	-	-	-	-	-	-	-	-	-

* - INDEXES (A, D, ETC.) CALCULATED USING MEASURED DATA UNCORRECTED FOR TEMPERATURE, HUMIDITY, AND AIRCRAFT DEVIATION FROM FLIGHT TRACK

** - /\ EPNL, THE CHANGE IN EPNL ASSUMING TONES 800 Hz AND BELOW TO BE PSEUDOTONES AND EXCLUDING THEM FROM THE PNLT CALCULATIONS

TABLE NO. 17

PHILADELPHIA INTERNATIONAL AIRPORT

DOT/TSC
11/ 6/79

DEPARTURE NOISE LEVEL DATA

AS MEASURED *

SITE E2 AUDUBON, NJ

JUNE 7, 1979 0730-1030 HOURS

EV	EPNL	DBA(M)	DBD(M)	DASPL	PNL(M)	PNLT(M)	DUR(P)	TC	NEL	/\EPNL
DOUGLAS DC-9 AIRCRAFT										
8	-	74.5	78.6	80.2	84.9	86.5	-	1.7	-	-
18	-	61.1	69.0	75.5	74.0	74.4	-	0.5	-	-
21	-	57.5	65.7	72.8	72.0	73.7	-	1.7	-	-
34	88.2	76.6	81.1	82.7	87.2	88.1	32.0	0.9	86.4	-0.2
36	-	69.7	75.3	78.9	80.7	81.5	-	0.6	-	-
37	86.9	74.8	79.2	81.2	85.2	86.1	37.0	0.8	84.5	-0.6
Avg.	87.6	69.0	74.8	78.5	80.7	81.7	34.5	1.0	85.4	-0.4
Std.										
Dev.	0.9	7.9	6.2	3.7	6.3	6.3	3.5	0.5	1.3	0.3
BOEING 707 AIRCRAFT										
16	-	80.7	86.0	89.5	92.4	93.0	-	0.7	-	-
19	-	64.4	71.5	78.1	76.6	79.9	-	3.5	-	-
Avg.	-	72.5	78.7	83.8	84.5	86.4	-	2.1	-	-
Std.										
Dev.	-	11.6	10.3	8.1	11.2	9.2	-	2.0	-	-
DOUGLAS DC-8 AIRCRAFT										
35	99.2	83.6	91.6	88.1	98.6	102.0	16.0	3.4	93.2	-
Avg.	99.2	83.6	91.6	88.1	98.6	102.0	16.0	3.4	93.2	-
Std.										
Dev.	-	-	-	-	-	-	-	-	-	-

* - INDEXES (A, D, .ETC.) CALCULATED USING MEASURED DATA UNCORRECTED FOR TEMPERATURE, HUMIDITY, AND AIRCRAFT DEVIATION FROM FLIGHT TRACK

** - /\ EPNL , THE CHANGE IN EPNL ASSUMING TONES 800 Hz AND BELOW TO BE PSEUDOTONES AND EXCLUDING THEM FROM THE PNLT CALCULATIONS

TABLE NO. 17(cont.)

PHILADELPHIA INTERNATIONAL AIRPORT

DOT/TSC

11/ 8/79

DEPARTURE NOISE LEVEL DATA

AS MEASURED *

SITE E2 AUDUBON,NJ

JUNE 7,1979 0730-1030 HOURS

EV	EPNL	DBA(M)	DBD(M)	OASPL	PNL(M)	PNLT(M)	DUR(P)	TC	NEL	/\EPNL
										**
BOEING 727 AIRCRAFT										
2	88.8	75.7	80.4	82.8	86.5	88.3	26.5	2.3	85.8	-0.9
5	84.6	73.5	78.0	80.1	85.4	86.3	20.0	0.8	81.8	-0.2
6	90.2	78.4	82.9	84.5	88.9	89.8	26.5	0.9	87.4	-0.4
9	84.2	73.2	77.3	80.0	83.6	85.5	20.5	1.9	81.3	-0.1
11	-	63.7	71.6	78.6	76.8	78.9	-	2.1	-	-
13	87.6	74.2	79.2	81.5	84.7	85.8	44.0	1.1	85.1	-0.7
15	-	71.8	77.0	80.5	82.4	84.9	-	3.4	-	-
22	-	83.2	88.5	90.8	93.7	95.4	-	1.6	94.8	-
29	95.8	83.7	88.0	89.6	94.8	95.2	27.5	0.5	93.4	-0.3
32	-	71.8	76.0	77.5	81.8	82.4	-	0.6	82.4	-
Avg.	88.5	74.9	79.9	82.6	85.9	87.2	27.5	1.5	86.5	-0.4
Std.										
Dev.	4.2	5.9	5.3	4.5	5.5	5.2	8.7	0.9	5.1	0.3

* - INDEXES (A,D,ETC.) CALCULATED USING MEASURED DATA UNCORRECTED FOR TEMPERATURE,HUMIDITY,AND AIRCRAFT DEVIATION FROM FLIGHT TRACK

** - /\ EPNL ,THE CHANGE IN EPNL ASSUMING TONES 800 Hz AND BELOW TO BE PSEUDOTONES AND EXCLUDING THEM FROM THE PNLT CALCULATIONS

TABLE NO. 18

PHILADELPHIA INTERNATIONAL AIRPORT

DOT/TSC
11/ 8/79

DEPARTURE NOISE LEVEL DATA

AS MEASURED *

SITE E2 AUDUBON, NJ

JUNE 7, 1979 1530-1830 HOURS

EV	EPNL	DBA(M)	DBD(M)	DASPL	PNL(M)	PNLT(M)	DUR(P)	TC	NEL	/\EPNL **
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DOUGLAS DC-9 AIRCRAFT

40	-	60.5	71.6	80.3	75.2	77.1	-	2.0	-	-
41	87.8	74.5	78.7	82.9	85.1	86.1	47.5	1.6	85.2	-0.4
43	-	66.3	72.4	75.3	79.5	80.4	-	0.9	-	-
46	-	76.3	82.5	86.0	88.8	91.3	-	2.7	-	-
50	-	68.9	75.3	81.2	80.4	82.7	-	2.5	-	-
56	-	66.1	71.6	74.7	78.6	79.6	-	1.0	-	-
Avg.	87.8	68.8	75.3	80.1	81.3	82.9	47.5	1.8	85.2	-0.4
Std.										
Dev.	-	5.9	4.5	4.4	4.9	5.1	-	0.8	-	-

BRITISH AEROSPACE BAC-111 AIRCRAFT

58	91.9	77.7	82.6	86.2	89.0	90.1	32.0	1.4	89.2	-0.2
Avg.	91.9	77.7	82.6	86.2	89.0	90.1	32.0	1.4	89.2	-0.2
Std.										
Dev.	-	-	-	-	-	-	-	-	-	-

BOEING 707 AIRCRAFT

49	-	72.6	78.7	83.1	84.7	86.3	-	2.2	-	-
62	-	58.3	66.1	72.3	71.1	71.9	-	1.3	-	-
Avg.	-	65.5	72.4	77.7	77.9	79.1	-	1.7	-	-
Std.										
Dev.	-	10.1	8.9	7.7	9.7	10.2	-	0.6	-	-

* - INDEXES (A, D, ETC.) CALCULATED USING MEASURED DATA UNCORRECTED FOR TEMPERATURE, HUMIDITY, AND AIRCRAFT DEVIATION FROM FLIGHT TRACK

** - /\ EPNL, THE CHANGE IN EPNL ASSUMING TONES 800 Hz AND BELOW TO BE PSEUDOTONES AND EXCLUDING THEM FROM THE PNLT CALCULATIONS

TABLE NO. 18 (cont.)

PHILADELPHIA INTERNATIONAL AIRPORT

DOT/TSC
11/ 8/79

DEPARTURE NOISE LEVEL DATA

AS MEASURED *

SITE E2 AUDUBON, NJ

JUNE 7, 1979 1530-1830 HOURS

EV	EPNL	DBA(M)	DBD(M)	OASPL	PNL(M)	PNLT(M)	DUR(P)	TC	NEL	/\EPNL **
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BOEING 727 AIRCRAFT

52	-	80.5	87.2	90.5	93.2	93.8	-	0.5	-	-
53	94.8	81.7	87.5	90.8	93.9	95.1	25.0	1.4	92.7	-0.6
54	-	71.5	77.5	82.4	83.2	83.8	-	0.5	-	-
55	-	73.3	78.7	83.9	85.9	86.5	-	0.6	-	-
60	80.4	68.5	74.4	80.8	79.4	80.6	23.5	2.0	77.0	-0.1
64	83.7	70.5	75.3	79.8	81.4	82.9	35.0	1.5	80.0	-
66	-	56.5	64.8	69.3	71.7	73.5	-	1.8	-	-
Avg.	86.3	71.8	77.9	82.5	84.1	85.2	27.8	1.2	83.2	-0.4
Std.										
Dev.	7.6	8.4	7.8	7.3	7.8	7.5	6.3	0.6	8.3	0.3

BOEING 737 AIRCRAFT

69	89.6	76.3	81.0	83.7	87.7	88.7	33.0	1.0	87.0	-0.2
Avg.	89.6	76.3	81.0	83.7	87.7	88.7	33.0	1.0	87.0	-0.2
Std.										
Dev.	-	-	-	-	-	-	-	-	-	-

* - INDEXES (A, D, .ETC.) CALCULATED USING MEASURED DATA UNCORRECTED FOR TEMPERATURE, HUMIDITY, AND AIRCRAFT DEVIATION FROM FLIGHT TRACK

** - /\ EPNL , THE CHANGE IN EPNL ASSUMING TONES 800 Hz AND BELOW TO BE PSEUDOTONES AND EXCLUDING THEM FROM THE PNLT CALCULATIONS

TABLE NO. 19

PHILADELPHIA INTERNATIONAL AIRPORT

DOT/TSC
11/21/79

DEPARTURE NOISE LEVEL DATA

AS MEASURED *

SITE E2 AUDUBON, NJ

JUNE 8, 1979 0730-1030 HOURS

EV	EPNL	DBA(M)	DBD(M)	OASPL	PNL(M)	PNLT(M)	DUR(P)	TC	NEL	/\EPNL
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DOUGLAS DC-9 AIRCRAFT

4	-	74.8	79.1	81.1	84.9	85.8	-	0.9	84.6	-
13	89.1	76.1	80.0	81.5	86.6	87.6	36.5	1.0	87.2	-0.3
16	-	57.1	66.6	73.7	70.0	70.5	-	0.5	-	-
17	81.3	68.6	73.6	79.3	79.0	79.8	32.0	0.8	77.7	-0.1
Avg.	85.2	69.1	74.8	78.9	80.1	80.9	34.3	0.8	83.2	-0.2
Std.										
Dev.	5.5	8.7	6.2	3.6	7.5	7.7	3.2	0.2	4.9	0.1

BOEING 707 AIRCRAFT

9	85.8	71.8	76.2	77.0	82.3	84.9	29.5	2.6	82.6	-0.0
12	-	72.6	76.9	79.5	83.4	86.2	-	3.2	-	-
Avg.	85.8	72.2	76.6	78.3	82.9	85.6	29.5	2.9	82.6	-0.0
Std.										
Dev.	-	0.6	0.5	1.8	0.8	0.9	-	0.4	-	-

BOEING 727 AIRCRAFT

1	-	74.3	78.6	80.4	84.9	86.2	-	1.3	-	-
3	91.1	81.3	85.5	87.1	91.1	92.9	30.0	1.8	88.4	-0.8
7	87.3	74.9	79.5	82.2	85.5	86.9	36.0	1.4	84.6	-0.6
8	-	62.5	67.7	70.9	73.4	74.4	-	1.0	-	-
10	81.0	75.7	82.5	86.6	87.7	88.6	32.5	0.8	87.7	-0.3
11	95.6	83.4	88.0	90.1	94.5	95.8	22.5	1.3	93.2	-0.3
18	94.2	82.5	86.3	89.3	92.6	93.7	31.5	1.5	91.7	-0.5
21	-	70.1	75.0	78.4	81.5	82.1	-	1.1	79.2	-
Avg.	91.6	75.6	80.4	83.1	86.4	87.6	30.5	1.3	87.5	-0.5
Std.										
Dev.	3.3	7.0	6.7	6.5	6.8	7.0	5.0	0.3	5.1	0.2

LOCKHEED L-1011 AIRCRAFT

15	-	67.1	72.8	76.4	78.7	80.0	-	1.3	-	-
Avg.	-	67.1	72.8	76.4	78.7	80.0	-	1.3	-	-

AIRBUS IND. A-300 AIRBUS

20	-	70.2	74.1	76.8	80.7	82.1	-	2.0	-	-
Avg.	-	70.2	74.1	76.8	80.7	82.1	-	2.0	-	-

TABLE NO. 20

PHILADELPHIA INTERNATIONAL AIRPORT

DOT/TSC

11/21/79

ARRIVAL NOISE LEVEL DATA

AS MEASURED *

SITE E2 AUDUBON, NJ

JUNE 8, 1979 0730-1030 HOURS

EV	EPNL	DBA(M)	DBD(M)	OASPL	PNL(M)	PNLT(M)	DUR(P)	TC	NEL	/\EPNL **
DOUGLAS DC-9 AIRCRAFT										
25	85.3	67.9	77.0	73.0	81.5	84.9	35.5	3.4	-	-0.0
31	-	64.2	69.7	74.7	76.3	76.9	-	0.5	-	-
32	-	64.2	69.2	73.1	75.9	77.0	-	1.1	-	-
Avg.	85.3	65.4	72.0	73.6	77.9	79.6	35.5	1.7	-	-0.0
Std.	-	-	-	-	-	-	-	-	-	-
Dev.	-	2.2	4.4	1.0	3.1	4.6	-	1.5	-	-

BRITISH AEROSPACE BAC-111 AIRCRAFT

22	-	63.7	68.7	73.3	75.2	76.9	-	1.7	-	-
27	-	62.1	68.0	68.4	74.2	77.1	-	2.9	-	-
Avg.	-	62.9	68.4	70.9	74.7	77.0	-	2.3	-	-
Std.	-	-	-	-	-	-	-	-	-	-
Dev.	-	1.1	0.5	3.5	0.7	0.2	-	0.9	-	-

BOEING 727 AIRCRAFT

23	-	60.3	65.3	70.0	71.7	73.1	-	1.6	-	-
24	-	53.8	62.8	71.6	67.2	68.4	-	1.3	-	-
26	-	66.5	71.6	75.8	78.1	79.4	-	1.3	-	-
Avg.	-	60.2	66.6	72.5	72.3	73.7	-	1.4	-	-
Std.	-	-	-	-	-	-	-	-	-	-
Dev.	-	6.4	4.5	3.0	5.5	5.5	-	0.2	-	-

AIRBUS IND. A-300 AIRBUS

29	-	60.9	65.8	67.8	73.0	74.1	-	1.0	-	-
Avg.	-	60.9	65.8	67.8	73.0	74.1	-	1.0	-	-
Std.	-	-	-	-	-	-	-	-	-	-
Dev.	-	-	-	-	-	-	-	-	-	-

* - INDEXES (A, D, ETC.) CALCULATED USING MEASURED DATA UNCORRECTED
FOR TEMPERATURE, HUMIDITY, AND AIRCRAFT DEVIATION FROM FLIGHT TRACK

TABLE NO. 21

PHILADELPHIA INTERNATIONAL AIRPORT

DOT/TSC

11/ 9/79

ARRIVAL NOISE LEVEL DATA

AS MEASURED *

SITE E3 CHERRY HILL, NJ

JUNE 5, 1979 0730-1030 HOURS

EV	EPNL	DBA(M)	DBD(M)	OASPL	PNL(M)	PNLT(M)	DUR(P)	TC	NEL	/\EPNL
DOUGLAS DC-9 AIRCRAFT										
2	-	65.1	69.5	71.4	75.4	76.6	-	1.5	-	-
3	-	67.5	72.1	72.8	78.0	79.3	-	1.3	77.6	-
7	-	67.4	71.8	71.9	78.3	79.1	-	0.7	-	-
10	83.6	69.4	75.1	73.4	81.9	84.6	24.5	2.8	80.5	-0.1
16	-	63.8	68.6	69.0	75.3	76.0	-	0.7	-	-
17	80.8	66.6	70.8	70.7	77.2	78.4	37.0	1.4	78.3	-0.0
22	82.4	67.6	72.8	71.2	79.4	80.7	39.5	1.2	79.6	-0.2
Avg.	82.3	66.8	71.5	71.5	77.9	79.2	33.7	1.4	79.0	-0.0
Std.										
Dev.	1.4	1.8	2.2	1.4	2.3	2.9	8.0	0.7	1.3	0.0
BRITISH AEROSPACE BAC-111 AIRCRAFT										
1	-	61.9	66.4	68.3	72.8	75.4	-	2.7	-	-
11	-	63.3	66.9	68.1	73.3	74.9	-	1.6	-	-
23	79.9	64.6	69.6	69.8	76.4	78.7	35.5	2.3	76.8	-0.2
27	-	67.2	71.6	72.6	78.1	78.8	-	0.7	-	-
Avg.	79.9	64.3	68.6	69.7	75.1	77.0	35.5	1.8	76.8	-0.2
Std.										
Dev.	-	2.3	2.4	2.1	2.6	2.1	-	0.9	-	-
BOEING 707 AIRCRAFT										
4	86.6	71.0	78.3	74.9	84.8	88.2	19.5	3.4	82.5	-
20	90.2	76.9	83.6	76.9	89.1	92.9	17.5	3.8	84.3	-
Avg.	88.4	73.9	80.9	75.9	87.0	90.6	18.5	3.6	83.4	-
Std.										
Dev.	2.5	4.2	3.7	1.4	3.0	3.4	1.4	0.3	1.2	-
DOUGLAS DC-8 AIRCRAFT										
13	93.9	78.3	85.7	80.0	92.2	96.1	21.0	3.9	87.4	-
Avg.	93.9	78.3	85.7	80.0	92.2	96.1	21.0	3.9	87.4	-
Std.										
Dev.	-	-	-	-	-	-	-	-	-	-

TABLE NO. 21(cont.)

PHILADELPHIA INTERNATIONAL AIRPORT

DOT/TSC
12/12/79

ARRIVAL NOISE LEVEL DATA

AS MEASURED *

SITE E3 CHERRY HILL,NJ

JUNE 5,1979 0730-1030 HOURS

EV	EPNL	DBA(M)	DBD(M)	OASPL	PNL(M)	PNLT(M)	DUR(P)	TC	NEL	/\EPNL **
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BOEING 727 AIRCRAFT

5	85.9	73.5	77.8	78.5	84.0	85.2	29.5	1.4	83.6	-0.4
6	84.2	70.7	74.8	76.6	81.2	82.1	40.0	0.9	82.4	-0.2
8	83.4	69.2	73.2	74.3	79.4	80.4	45.0	1.1	81.5	-
9	83.2	70.2	74.2	75.6	81.1	81.8	30.0	0.8	81.5	-0.4
14	83.3	69.9	74.0	75.7	80.6	81.4	44.0	0.8	81.7	-0.3
18	-	56.0	61.3	67.8	67.5	69.0	-	1.7	-	-
21	84.8	70.0	75.1	77.6	80.7	81.5	51.5	0.7	82.3	-0.4
24	90.3	77.0	83.7	80.0	90.6	92.9	18.0	2.3	86.2	-0.1
26	83.8	70.6	75.6	75.4	82.0	84.1	27.5	2.3	-	-0.1
Avg.	84.9	69.7	74.4	75.7	80.8	82.1	35.7	1.3	82.8	-0.3
Std.										
Dev.	2.4	5.7	5.9	3.5	6.0	6.2	11.2	0.6	1.7	0.1

DOUGLAS DC-10 AIRCRAFT

19	-	67.1	71.4	73.9	77.5	78.0	-	0.5	-	-
Avg.	-	67.1	71.4	73.9	77.5	78.0	-	0.5	-	-
Std.										
Dev.	-	-	-	-	-	-	-	-	-	-

LOCKHEED L-1011 AIRCRAFT

15	88.7	75.7	81.2	79.7	87.9	89.1	21.0	1.2	86.0	-0.2
Avg.	88.7	75.7	81.2	79.7	87.9	89.1	21.0	1.2	86.0	-0.2
Std.										
Dev.	-	-	-	-	-	-	-	-	-	-

* - INDEXES (A,D,ETC.) CALCULATED USING MEASURED DATA UNCORRECTED FOR TEMPERATURE,HUMIDITY,AND AIRCRAFT DEVIATION FROM FLIGHT TRACK

** - /\ EPNL ,THE CHANGE IN EPNL ASSUMING TONES 800 Hz AND BELOW TO BE PSEUDOTONES AND EXCLUDING THEM FROM THE PNLT CALCULATIONS

TABLE NO. 22

PHILADELPHIA INTERNATIONAL AIRPORT

DOT/TSC

11/ 9/79

ARRIVAL NOISE LEVEL DATA

AS MEASURED *

SITE E3 CHERRY HILL, NJ

JUNE 5, 1979 1530-1830 HOURS

EV	EPNL	DBA(M)	DBD(M)	OASPL	PNL(M)	PNLT(M)	DUR(P)	TC	NEL	/\EPNL
DOUGLAS DC-9 AIRCRAFT										
32	-	67.6	72.9	74.8	79.3	81.0	-	2.2	-	-
38	80.9	69.4	74.6	73.5	81.3	82.7	27.0	1.4	77.6	-0.1
40	-	65.0	69.6	73.3	75.7	76.3	-	0.6	-	-
42	-	59.4	64.1	69.3	70.1	71.0	-	0.9	-	-
43	-	68.2	73.2	72.8	79.3	80.0	-	0.7	-	-
45	-	58.4	63.6	68.0	70.4	72.9	-	3.4	-	-
51	-	64.0	69.7	74.0	75.0	77.6	-	2.8	-	-
Avg.	80.9	64.6	69.6	72.2	75.9	77.3	27.0	1.7	77.6	-0.1
Std.	-	-	-	-	-	-	-	-	-	-
Dev.	-	4.3	4.4	2.6	4.4	4.3	-	1.1	-	-
BRITISH AEROSPACE BAC-111 AIRCRAFT										
33	-	62.8	68.0	71.2	74.0	75.9	-	1.9	-	-
47	-	64.7	69.0	70.1	75.6	77.6	-	2.1	-	-
Avg.	-	63.8	68.5	70.7	74.8	76.8	-	2.0	-	-
Std.	-	-	-	-	-	-	-	-	-	-
Dev.	-	1.4	0.7	0.8	1.1	1.2	-	0.1	-	-
BOEING 707 AIRCRAFT										
46	79.8	68.0	72.3	73.6	78.4	81.1	24.5	2.7	76.6	-0.0
Avg.	79.8	68.0	72.3	73.6	78.4	81.1	24.5	2.7	76.6	-0.0
Std.	-	-	-	-	-	-	-	-	-	-
Dev.	-	-	-	-	-	-	-	-	-	-

* - INDEXES (A, D, .ETC.) CALCULATED USING MEASURED DATA UNCORRECTED FOR TEMPERATURE, HUMIDITY, AND AIRCRAFT DEVIATION FROM FLIGHT TRACK

** - /\ EPNL , THE CHANGE IN EPNL ASSUMING TONES 800 Hz AND BELOW TO BE PSEUDOTONES AND EXCLUDING THEM FROM THE PNLT CALCULATIONS

TABLE NO.22 (cont.)

PHILADELPHIA INTERNATIONAL AIRPORT

DOT/TSC

11/ 9/79

ARRIVAL NOISE LEVEL DATA

AS MEASURED *

SITE E3 CHERRY HILL,NJ

JUNE 5,1979 1530-1830 HOURS

EV	EPNL	DBA(M)	DBD(M)	OASPL	PNL(M)	PNLT(M)	DUR(P)	TC	NEL	/\EPNL **
BOEING 727 AIRCRAFT										
36	82.1	69.8	74.1	75.1	80.4	81.3	39.0	0.9	80.2	-0.3
37	-	61.8	66.1	68.4	71.8	74.6	-	2.8	-	-
39	-	60.1	64.5	70.5	70.3	70.9	-	0.6	-	-
41	-	62.8	66.1	67.5	72.2	74.1	-	1.9	71.4	-
44	76.6	60.1	64.9	67.0	71.5	74.6	39.0	3.3	72.2	-
49	82.5	69.9	75.2	72.6	81.5	82.4	27.5	1.3	79.5	-0.2
50	-	68.6	73.7	75.5	80.0	81.8	-	2.3	-	-
52	-	67.5	71.7	73.1	77.8	80.4	-	2.6	79.6	-
Avg.	80.4	65.1	69.5	71.2	75.7	77.5	35.2	2.0	76.6	-0.2
Std.										
Dev.	3.3	4.3	4.6	3.4	4.7	4.4	6.6	1.0	4.4	0.0

* - INDEXES (A,D,ETC.) CALCULATED USING MEASURED DATA UNCORRECTED FOR TEMPERATURE,HUMIDITY,AND AIRCRAFT DEVIATION FROM FLIGHT TRACK

** - /\ EPNL ,THE CHANGE IN EPNL ASSUMING TONES 800 Hz AND BELOW TO BE PSEUDOTONES AND EXCLUDING THEM FROM THE PNLT CALCULATIONS

TABLE NO. 23

PHILADELPHIA INTERNATIONAL AIRPORT

DOT/TSC

11/26/79

ARRIVAL NOISE LEVEL DATA

AS MEASURED *

SITE E3 CHERRY HILL, NJ

JUNE 6, 1979 0730-1030 HOURS

EV	EPNL	DBA(M)	DBD(M)	OASPL	PNL(M)	PNLT(M)	DUR(P)	TC	NEL	/\EPNL **
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DOUGLAS DC-9 AIRCRAFT

1	81.5	65.9	70.8	70.6	77.6	79.5	37.5	2.1	78.6	-0.0
2	-	62.2	66.7	68.5	73.2	74.2	-	1.0	75.5	-
5	-	66.8	70.7	70.2	77.0	78.6	-	1.7	79.2	-
13	84.3	70.2	76.0	73.3	83.0	84.7	39.0	1.8	81.5	-0.1
14	85.4	71.3	76.2	77.3	82.9	84.1	37.5	2.4	82.6	-0.1
24	81.3	68.4	73.4	75.3	80.3	81.5	36.0	1.2	78.5	-0.3
Avg.	83.1	67.5	72.3	72.5	79.0	80.4	37.5	1.7	79.3	-0.2
Std.										
Dev.	2.0	3.3	3.6	3.4	3.8	3.9	1.2	0.5	2.5	0.0

BRITISH AEROSPACE BAC-111 AIRCRAFT

4	81.9	69.1	73.1	73.6	79.6	80.3	42.5	0.8	79.7	-0.1
12	-	60.0	64.1	66.9	70.7	72.7	-	2.3	72.8	-
17	86.3	71.6	77.2	75.3	84.0	85.8	28.5	2.6	82.9	-0.1
Avg.	84.1	66.9	71.5	71.9	78.1	79.6	35.5	1.9	78.5	-0.1
Std.										
Dev.	3.1	6.1	6.7	4.4	6.8	6.6	9.9	1.0	5.2	0.0

BOEING 707 AIRCRAFT

8	88.6	74.3	80.7	75.6	86.9	90.7	20.0	3.8	83.3	-
16	-	59.4	63.7	66.2	70.2	72.0	-	1.8	70.0	-
Avg.	88.6	66.8	72.2	70.9	78.5	81.3	20.0	2.8	76.7	-
Std.										
Dev.	-	10.5	12.0	6.7	11.8	13.2	-	1.4	9.4	-

* - INDEXES (A, D, .ETC.) CALCULATED USING MEASURED DATA UNCORRECTED FOR TEMPERATURE, HUMIDITY, AND AIRCRAFT DEVIATION FROM FLIGHT TRACK

** - /\ EPNL , THE CHANGE IN EPNL ASSUMING TONES 800 Hz AND BELOW TO BE PSEUDOTONES AND EXCLUDING THEM FROM THE PNLT CALCULATIONS

TABLE NO.23 (cont.)

PHILADELPHIA INTERNATIONAL AIRPORT

DOT/TSC
11/ 9/79

ARRIVAL NOISE LEVEL DATA

AS MEASURED *

SITE E3 CHERRY HILL,NJ

JUNE 6,1979 0730-1030 HOURS

EV	EPNL	DBA(M)	DBD(M)	OASPL	PNL(M)	PNLT(M)	DUR(P)	TC	NEL	/\EPNL
BOEING 727 AIRCRAFT										
3	82.9	67.5	71.7	73.4	78.1	80.0	46.0	2.2	80.1	-0.0
6	80.7	65.0	69.5	71.8	76.0	76.9	48.5	1.1	78.4	-0.1
18	80.5	64.7	69.3	71.6	75.9	78.7	46.5	2.9	77.9	-0.2
19	-	63.5	67.7	69.5	74.3	76.1	-	1.8	-	-
20	85.1	72.1	76.5	76.1	82.8	84.5	38.0	1.9	81.5	-0.1
22	-	61.5	65.8	68.0	72.0	73.6	-	3.2	74.3	-
Avg.	82.3	65.7	70.1	71.7	76.5	78.3	44.8	2.2	78.4	-0.1
Std.										
Dev.	2.2	3.7	3.7	2.9	3.7	3.7	4.6	0.8	2.8	0.0
LOCKHEED L-1011 AIRCRAFT										
7	84.8	71.9	76.2	76.5	82.5	84.0	30.5	2.0	82.6	-0.0
23	83.2	70.5	74.9	75.7	81.3	82.4	34.0	1.2	81.3	-0.4
Avg.	84.0	71.2	75.5	76.1	81.9	83.2	32.3	1.6	81.9	-0.2
Std.										
Dev.	1.1	1.0	0.9	0.5	0.8	1.1	2.5	0.6	0.9	0.2

* - INDEXES (A,D,ETC.) CALCULATED USING MEASURED DATA UNCORRECTED FOR TEMPERATURE,HUMIDITY,AND AIRCRAFT DEVIATION FROM FLIGHT TRACK

** - /\ EPNL ,THE CHANGE IN EPNL ASSUMING TONES 800 Hz AND BELOW TO BE PSEUDOTONES AND EXCLUDING THEM FROM THE PNLT CALCULATIONS

PHILADELPHIA INTERNATIONAL AIRPORT

DOT/TSC
12/12/79

DEPARTURE NOISE LEVEL DATA

AS MEASURED *

SITE E3 CHERRY HILL, NJ

JUNE 6, 1979 1530-1830 HOURS

EV	EPNL	DBA(M)	DBD(M)	OASPL	PNL(M)	PNLT(M)	DUR(P)	TC	NEL	/\EPNL
DOUGLAS DC-9 AIRCRAFT										
31	84.3	68.0	73.8	76.7	79.7	81.6	52.5	3.1	80.4	-0.0
43	86.0	72.3	77.1	79.5	83.0	84.8	36.5	1.8	84.3	-0.2
54	87.4	74.8	78.6	80.2	84.4	84.9	48.0	0.6	85.9	-0.4
Avg.	85.9	71.7	76.5	78.8	82.4	83.8	45.7	1.8	83.6	-0.2
Std.										
Dev.	1.6	3.4	2.5	1.9	2.4	1.9	8.3	1.3	2.8	0.2
BOEING 707 AIRCRAFT										
52	-	63.0	68.5	71.3	74.0	76.3	-	2.3	-	-
Avg.	-	63.0	68.5	71.3	74.0	76.3	-	2.3	-	-
Std.										
Dev.	-	-	-	-	-	-	-	-	-	-
DOUGLAS DC-8 AIRCRAFT										
57	91.7	75.8	80.7	83.0	87.0	90.2	34.0	3.2	88.9	-0.1
Avg.	91.7	75.8	80.7	83.0	87.0	90.2	34.0	3.2	88.9	-0.1
Std.										
Dev.	-	-	-	-	-	-	-	-	-	-

* - INDEXES (A, D, ETC.) CALCULATED USING MEASURED DATA UNCORRECTED FOR TEMPERATURE, HUMIDITY, AND AIRCRAFT DEVIATION FROM FLIGHT TRACK

** - /\ EPNL, THE CHANGE IN EPNL ASSUMING TONES 800 Hz AND BELOW TO BE PSEUDOTONES AND EXCLUDING THEM FROM THE PNLT CALCULATIONS

PHILADELPHIA INTERNATIONAL AIRPORT

DOT/TSC
11/14/79

DEPARTURE NOISE LEVEL DATA

AS MEASURED *

SITE E3 CHERRY HILL, NJ

JUNE 6, 1979 1530-1830 HOURS

EV	EPNL	DBA(M)	DBD(M)	OASPL	PNL(M)	PNLT(M)	DUR(P)	TC	NEL	/\EPNL **
BOEING 727 AIRCRAFT										
25	87.8	74.6	79.3	82.0	85.1	85.9	33.0	0.8	86.6	-0.4
41	-	67.9	72.7	77.5	77.9	79.6	-	1.9	79.3	-
47	89.6	77.5	81.1	82.3	86.9	87.5	33.0	0.7	88.7	-0.5
Avg.	88.7	73.3	77.7	80.6	83.3	84.3	33.0	1.1	84.9	-0.4
Std.										
Dev.	1.3	4.9	4.4	2.6	4.7	4.2	0.0	0.6	4.9	0.1

BOEING 737 AIRCRAFT

49	84.9	71.0	75.4	77.7	81.5	82.6	44.5	1.1	82.5	-0.2
Avg.	84.9	71.0	75.4	77.7	81.5	82.6	44.5	1.1	82.5	-0.2
Std.										
Dev.	-	-	-	-	-	-	-	-	-	-

* - INDEXES (A,D, ETC.) CALCULATED USING MEASURED DATA UNCORRECTED FOR TEMPERATURE, HUMIDITY, AND AIRCRAFT DEVIATION FROM FLIGHT TRACK

** - /\ EPNL, THE CHANGE IN EPNL ASSUMING TONES 800 Hz AND BELOW TO BE PSEUDOTONES AND EXCLUDING THEM FROM THE PNLT CALCULATIONS

PHILADELPHIA INTERNATIONAL AIRPORT

DOT/TSC
12/12/79

DEPARTURE NOISE LEVEL DATA

AS MEASURED *

SITE E3 CHERRY HILL, NJ

JUNE 7, 1979 0730-1030 HOURS

EV	EPNL	DBA(M)	DBD(M)	OASPL	PNL(M)	PNLT(M)	DUR(P)	TC	NEL	/\EPNL **
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DOUGLAS DC-9 AIRCRAFT

34	-	61.4	67.6	70.7	73.8	76.2	-	3.0	-	-
37	-	57.7	65.8	72.5	70.5	73.9	-	3.4	-	-
Avg.	-	59.6	66.7	71.6	72.2	75.0	-	3.2	-	-
Std.	-	-	-	-	-	-	-	-	-	-
Dev.	-	2.6	1.3	1.3	2.3	1.6	-	0.3	-	-

DOUGLAS DC-8 AIRCRAFT

35	85.4	70.3	75.8	79.0	82.0	83.7	37.5	3.0	82.1	-0.2
Avg.	85.4	70.3	75.8	79.0	82.0	83.7	37.5	3.0	82.1	-0.2
Std.	-	-	-	-	-	-	-	-	-	-
Dev.	-	-	-	-	-	-	-	-	-	-

BOEING 727 AIRCRAFT

32	87.7	73.9	77.8	80.3	83.9	84.9	53.5	1.0	85.8	-0.6
Avg.	87.7	73.9	77.8	80.3	83.9	84.9	53.5	1.0	85.8	-0.6
Std.	-	-	-	-	-	-	-	-	-	-
Dev.	-	-	-	-	-	-	-	-	-	-

* - INDEXES (A, D, .ETC.) CALCULATED USING MEASURED DATA UNCORRECTED FOR TEMPERATURE, HUMIDITY, AND AIRCRAFT DEVIATION FROM FLIGHT TRACK

** - /\ EPNL , THE CHANGE IN EPNL ASSUMING TONES 800 Hz AND BELOW TO BE PSEUDOTONES AND EXCLUDING THEM FROM THE PNLT CALCULATIONS

TABLE NO. 26

PHILADELPHIA INTERNATIONAL AIRPORT

DOT/TSC
12/12/79

DEPARTURE NOISE LEVEL DATA

AS MEASURED *

SITE E3 CHERRY HILL,NJ

JUNE 7,1979 1530-1830 HOURS

EV	EPNL	DBA(M)	DBD(M)	OASPL	PNL(M)	PNLT(M)	DUR(P)	TC	NEL	/\EPNL
BRITISH AEROSPACE BAC-111 AIRCRAFT										
58	-	68.1	73.9	76.4	78.9	80.3	-	1.5	-	-
Avg.	-	68.1	73.9	76.4	78.9	80.3	-	1.5	-	-
Std.	-	-	-	-	-	-	-	-	-	-
Dev.	-	-	-	-	-	-	-	-	-	-
BOEING 737 AIRCRAFT										
69	80.7	66.9	71.9	77.1	76.9	78.6	46.0	1.7	77.9	-0.7
Avg.	80.7	66.9	71.9	77.1	76.9	78.6	46.0	1.7	77.9	-0.7
Std.	-	-	-	-	-	-	-	-	-	-
Dev.	-	-	-	-	-	-	-	-	-	-

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BOEING 737 AIRCRAFT

69	80.7	66.9	71.9	77.1	76.9	78.6	46.0	1.7	77.9	-0.7
Avg.	80.7	66.9	71.9	77.1	76.9	78.6	46.0	1.7	77.9	-0.7
Std.	-	-	-	-	-	-	-	-	-	-
Dev.	-	-	-	-	-	-	-	-	-	-

* - INDEXES (A,D,ETC.) CALCULATED USING MEASURED DATA UNCORRECTED FOR TEMPERATURE,HUMIDITY,AND AIRCRAFT DEVIATION FROM FLIGHT TRACK

** - /\ EPNL ,THE CHANGE IN EPNL ASSUMING TONES 800 Hz AND BELOW TO BE PSEUDOTONES AND EXCLUDING THEM FROM THE PNLT CALCULATIONS

TABLE NO. 27

PHILADELPHIA INTERNATIONAL AIRPORT

DOT/TSC
11/26/79

DEPARTURE NOISE LEVEL DATA

AS MEASURED *

SITE E3 CHERRY HILL, NJ

JUNE 8, 1979 0730-1030 HOURS

EV	EPNL	DBA(M)	DBD(M)	OASPL	PNL(M)	PNLT(M)	DUR(P)	TC	NEL	/\EPNL **
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DOUGLAS DC-9 AIRCRAFT

4	-	61.1	67.7	73.7	73.6	75.4	-	1.8	-	-
Avg.	-	61.1	67.7	73.7	73.6	75.4	-	1.8	-	-
Std.	-	-	-	-	-	-	-	-	-	-
Dev.	-	-	-	-	-	-	-	-	-	-

BOEING 707 AIRCRAFT

8	-	64.3	70.7	71.8	77.8	82.1	-	4.5	-	-
Avg.	-	64.3	70.7	71.8	77.8	82.1	-	4.5	-	-
Std.	-	-	-	-	-	-	-	-	-	-
Dev.	-	-	-	-	-	-	-	-	-	-

BOEING 727 AIRCRAFT

3	-	63.9	69.4	76.6	75.7	78.4	-	2.7	75.9	-
6	-	59.4	65.1	70.1	71.2	72.6	-	1.4	-	-
9	-	61.8	67.1	70.3	73.3	76.6	-	3.3	-	-
11	88.3	75.3	79.1	80.8	85.3	86.7	41.0	1.8	85.2	-0.0
Avg.	88.3	65.1	70.2	74.5	76.4	78.6	41.0	2.3	80.6	-0.0
Std.	-	-	-	-	-	-	-	-	-	-
Dev.	-	7.0	6.2	5.2	6.2	5.9	-	0.9	6.6	-

* - INDEXES (A,D, ETC.) CALCULATED USING MEASURED DATA UNCORRECTED FOR TEMPERATURE, HUMIDITY, AND AIRCRAFT DEVIATION FROM FLIGHT TRACK

** - /\ EPNL, THE CHANGE IN EPNL ASSUMING TONES 800 Hz AND BELOW TO BE PSEUDOTONES AND EXCLUDING THEM FROM THE PNLT CALCULATIONS

PHILADELPHIA INTERNATIONAL AIRPORT

DOT/TSC

11/26/79

ARRIVAL NOISE LEVEL DATA

AS MEASURED *

SITE E3 CHERRY HILL, NJ

JUNE 8, 1979 0730-1030 HOURS

EV	EPNL	DBA(M)	DBD(M)	OASPL	PNL(M)	PNLT(M)	DUR(P)	TC	NEL	/\EPNL
DOUGLAS DC-9 AIRCRAFT										
25	83.1	70.9	76.6	75.0	83.3	84.6	19.5	1.2	79.8	-0.1
31	85.2	74.6	79.5	80.4	86.3	87.2	14.5	0.9	82.8	-0.3
32	84.2	70.5	76.3	74.4	82.7	83.6	33.0	0.9	81.1	-0.0
Avg.	84.1	72.0	77.5	76.6	84.1	85.1	22.3	1.0	81.2	-0.2
Std.										
Dev.	1.0	2.2	1.8	3.3	1.9	1.9	9.6	0.2	1.5	0.1
BRITISH AEROSPACE BAC-111 AIRCRAFT										
27	-	69.1	72.7	72.8	79.0	81.2	-	2.2	-	-
30	83.0	71.4	75.6	74.1	81.7	83.2	34.0	1.6	79.3	-
Avg.	83.0	70.2	74.1	73.4	80.3	82.2	34.0	1.9	79.3	-
Std.										
Dev.	-	1.6	2.1	0.9	1.9	1.4	-	0.4	-	-
BOEING 727 AIRCRAFT										
23	83.4	72.1	76.6	78.2	83.0	84.1	25.0	1.1	81.2	-0.2
Avg.	83.4	72.1	76.6	78.2	83.0	84.1	25.0	1.1	81.2	-0.2
Std.										
Dev.	-	-	-	-	-	-	-	-	-	-

* - INDEXES (A,D,.ETC.) CALCULATED USING MEASURED DATA UNCORRECTED FOR TEMPERATURE, HUMIDITY, AND AIRCRAFT DEVIATION FROM FLIGHT TRACK

** - /\ EPNL , THE CHANGE IN EPNL ASSUMING TONES 800 Hz AND BELOW TO BE PSEUDOTONES AND EXCLUDING THEM FROM THE PNLT CALCULATIONS

TABLE NO. 29

PHILADELPHIA INTERNATIONAL AIRPORT

DOT/TSC

12/ 6/79

DEPARTURE NOISE LEVEL DATA

AS MEASURED *

SITE W1 CHESTER, PA

JUNE 5, 1979 0730-1030 HOURS

EV	EPNL	DBA(M)	DBD(M)	OASPL	PNL(M)	PNLT(M)	DUR(P)	TC	NEL	/\EPNL
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DOUGLAS DC-9 AIRCRAFT

6	90.5	75.8	79.7	82.8	86.8	87.7	46.0	1.0	88.0	-0.4
18	91.6	78.6	82.6	84.2	90.0	90.7	32.0	0.8	89.1	-0.3
19	88.4	74.7	78.6	80.7	84.8	86.3	32.0	1.8	86.4	-0.4
21	95.3	79.2	84.8	85.3	91.8	95.1	29.5	3.4	91.3	-
22	93.1	80.1	84.1	84.9	90.7	92.5	29.5	1.7	90.8	-0.5
23	-	68.8	73.7	77.1	80.3	82.7	-	2.4	-	-
30	91.2	77.6	81.9	84.1	88.4	89.6	36.5	1.2	88.9	-0.4
36	91.3	77.6	82.4	85.9	89.6	90.7	29.0	1.1	89.3	-0.3
37	91.9	78.3	83.0	85.2	89.7	91.3	36.0	1.6	89.5	-0.3
Avg.	91.7	76.8	81.2	83.4	88.0	89.6	33.8	1.6	89.2	-0.4
Std.										
Dev.	2.0	3.4	3.4	2.8	3.6	3.6	5.7	0.8	1.5	0.0

BRITISH AEROSPACE BAC-111 AIRCRAFT

16	97.0	83.7	86.6	87.9	92.8	93.7	42.0	1.1	95.8	-0.5
29	96.3	84.6	87.3	87.4	92.6	94.2	37.5	1.6	95.0	-0.7
41	95.4	85.5	87.2	88.3	92.8	94.2	43.5	1.4	93.6	-0.2
Avg.	96.2	84.6	87.0	87.9	92.7	94.0	41.0	1.4	94.8	-0.5
Std.										
Dev.	0.8	0.9	0.4	0.5	0.1	0.3	3.1	0.3	1.1	0.3

BOEING 707 AIRCRAFT

24	95.1	80.2	85.0	84.9	91.5	93.5	29.5	2.9	91.2	-
26	94.9	79.2	84.7	84.3	91.8	95.0	28.0	3.2	90.4	-0.0
33	97.1	82.2	87.9	87.4	95.3	98.2	23.0	3.0	93.0	-0.0
34	98.3	81.5	87.6	88.5	94.9	98.4	25.5	3.6	93.7	-
Avg.	96.4	80.8	86.3	86.3	93.4	96.3	26.5	3.2	92.1	-0.0
Std.										
Dev.	1.7	1.3	1.7	2.0	2.0	2.4	2.9	0.3	1.5	0.0

* - INDEXES (A,D, .ETC.) CALCULATED USING MEASURED DATA UNCORRECTED FOR TEMPERATURE, HUMIDITY, AND AIRCRAFT DEVIATION FROM FLIGHT TRACK

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DEPARTURE NOISE LEVEL DATA

AS MEASURED *

SITE W1 CHESTER, PA

JUNE 5, 1979 0730-1030 HOURS

EV	EPNL	DBA(M)	DBD(M)	OASPL	PNL(M)	PNLT(M)	DUR(P)	TC	NEL	/\EPNL
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BOEING 727 AIRCRAFT

1	92.3	77.3	81.7	84.3	88.1	89.5	40.0	1.4	89.9	-0.5
3	95.0	80.4	84.6	86.3	91.2	92.7	39.0	1.5	92.4	-0.6
4	94.0	79.7	83.9	85.4	90.4	91.5	41.5	1.1	91.5	-0.5
5	91.5	76.2	80.5	83.0	87.2	88.6	48.0	1.4	88.9	-0.6
7	-	75.0	79.2	82.5	85.9	87.3	-	1.4	88.8	-
8	91.0	75.2	79.8	83.9	86.9	88.0	42.0	1.1	88.2	-0.3
9	92.9	78.5	82.7	85.2	89.5	90.1	38.5	1.0	90.5	-0.4
10	91.0	76.6	81.0	83.1	87.7	89.3	35.0	1.6	88.3	-0.6
14	92.8	78.9	83.2	85.6	89.7	90.9	32.0	1.1	90.6	-0.4
15	91.9	78.1	82.4	84.0	89.1	90.4	34.5	1.4	-	-0.4
17	92.5	77.8	81.9	84.6	88.4	90.4	38.5	2.0	89.8	-0.5
25	98.3	86.5	90.4	91.2	97.0	98.7	22.0	1.7	96.0	-1.1
27	94.7	81.5	85.7	86.3	92.3	93.1	35.0	0.9	92.3	-0.6
31	92.9	79.9	84.1	85.9	90.8	92.2	36.0	1.5	90.8	-0.4
40	94.3	80.5	84.7	88.1	91.9	92.8	37.0	0.8	92.0	-0.4

Avg.	93.2	78.8	83.7	85.3	89.7	91.7	37.1	1.3	90.7	-0.5
Std.										
Dev.	1.9	2.9	4.0	2.2	2.8	3.0	5.9	0.3	2.1	0.2

BOEING 737 AIRCRAFT

28	-	70.9	76.2	79.2	83.1	84.2	-	1.0	-	-
Avg.	-	70.9	76.2	79.2	83.1	84.2	-	1.0	-	-
Std.										
Dev.	-	-	-	-	-	-	-	-	-	-

DOUGLAS DC-8 AIRCRAFT

2	93.3	77.0	82.6	83.0	89.7	94.1	28.5	4.4	89.1	-0.0
32	98.1	81.8	87.5	88.1	94.6	97.7	27.5	3.0	93.9	-
Avg.	95.7	79.4	85.0	85.5	92.1	95.9	28.0	3.7	91.5	-0.0
Std.										
Dev.	3.4	3.3	3.5	3.6	3.5	2.5	0.7	1.0	3.4	-

DOUGLAS DC-10 AIRCRAFT

12	-	72.1	77.3	81.7	84.3	85.2	-	1.7	-	-
13	86.0	72.3	75.2	78.5	82.0	85.3	37.5	3.3	82.9	-0.4
Avg.	86.0	72.2	76.2	80.1	83.1	85.2	37.5	2.5	82.9	-0.4
Std.										
Dev.	-	0.2	1.5	2.2	1.7	0.0	-	1.1	-	-

LOCKHEED L-1011 AIRCRAFT

38	88.6	74.7	79.7	82.2	87.2	88.4	22.5	1.2	85.3	-0.1
39	90.8	75.8	80.8	83.5	88.1	90.5	23.0	2.9	87.0	-0.1
Avg.	89.7	75.2	80.3	82.8	87.6	89.4	22.8	2.1	86.2	-0.0
Std.										
Dev.	1.6	0.8	0.8	0.9	0.7	1.5	0.4	1.2	1.2	0.0

* - INDEXES (A,D, ETC.) CALCULATED USING MEASURED DATA UNCORRECTED FOR TEMPERATURE, HUMIDITY, AND AIRCRAFT DEVIATION FROM FLIGHT TRACK

** - /\ EPNL, THE CHANGE IN EPNL ASSUMING TONES 800 Hz AND BELOW TO BE PSEUDOTONES AND EXCLUDING THEM FROM THE PNLT CALCULATIONS

PHILADELPHIA INTERNATIONAL AIRPORT

DOT/TSC
12/ 6/79

DEPARTURE NOISE LEVEL DATA

AS MEASURED *

SITE W1 CHESTER, PA

JUNE 5, 1979 1530-1830 HOURS

EV	EPNL	DBA(M)	DBD(M)	OASPL	PNL(M)	PNLT(M)	DUR(F)	TC	NEL	/\EPNL
DOUGLAS DC-9 AIRCRAFT										
44	92.4	79.1	83.6	88.4	89.7	91.0	35.0	1.3	89.9	-0.3
51	90.3	77.2	81.2	86.4	88.2	89.2	33.5	1.0	87.3	-0.2
52	94.7	81.4	88.0	92.0	93.3	94.5	22.0	1.2	91.6	-0.2
54	94.8	81.4	86.0	88.9	92.4	94.0	33.5	1.6	91.7	-
58	93.9	80.9	85.6	88.3	91.9	93.7	30.0	1.8	90.9	-0.6
Avg.	93.2	80.0	84.9	88.8	91.1	92.5	30.8	1.4	90.3	-0.3
Std.										
Dev.	1.9	1.8	2.6	2.0	2.1	2.3	5.3	0.3	1.8	0.2
BRITISH AEROSPACE BAC-111 AIRCRAFT										
43	-	77.9	82.0	85.6	88.5	89.9	-	2.5	-	-
50	92.8	79.7	84.0	87.2	90.8	92.0	32.0	1.2	90.6	-0.5
Avg.	92.8	78.8	83.0	86.4	89.6	90.9	32.0	1.8	90.6	-0.5
Std.										
Dev.	-	1.3	1.4	1.1	1.6	1.5	-	0.9	-	-
BOEING 707 AIRCRAFT										
49	97.2	84.1	88.8	90.6	95.4	98.2	21.0	2.8	93.3	-0.0
53	100.2	84.9	89.9	93.4	96.4	98.4	41.5	2.1	96.6	-0.2
Avg.	98.7	84.5	89.4	92.0	95.9	98.3	31.3	2.5	94.9	-0.1
Std.										
Dev.	2.1	0.6	0.8	2.0	0.7	0.1	14.5	0.5	2.3	0.1
BOEING 727 AIRCRAFT										
42	92.1	79.2	83.7	86.7	90.2	91.6	36.0	1.5	89.5	-0.6
45	-	80.8	84.7	85.9	91.7	93.1	-	1.4	-	-
46	94.8	83.0	86.6	90.2	92.9	94.4	50.0	1.6	92.0	-0.8
47	92.0	78.7	83.1	85.6	89.9	91.8	25.0	1.9	89.3	-0.7
48	94.9	83.2	87.2	90.0	93.9	95.5	30.5	1.8	92.2	-0.6
56	-	76.1	81.2	85.1	88.3	89.8	-	1.7	-	-
57	-	75.5	79.7	83.9	86.7	87.4	-	1.3	-	-
Avg.	93.4	79.5	83.7	86.8	90.5	91.9	35.4	1.6	90.8	-0.7
Std.										
Dev.	1.6	3.0	2.7	2.4	2.5	2.8	10.7	0.2	1.6	0.1

PHILADELPHIA INTERNATIONAL AIRPORT

DOT/TSC
12/ 7/79

DEPARTURE NOISE LEVEL DATA

AS MEASURED *

SITE W1 CHESTER, PA

JUNE 6, 1979 0730-1030 HOURS

EV	EPNL	DBA(M)	DBD(M)	DASPL	PNL(M)	PNLT(M)	DUR(P)	TC	NEL	/\EPNL
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DOUGLAS DC-9 AIRCRAFT

1	-	77.0	81.6	84.6	88.6	89.9	-	1.3	-	-
4	86.9	72.5	76.7	80.4	83.4	84.4	49.5	1.0	84.6	-0.2
15	94.0	81.3	85.4	87.2	92.0	93.0	31.5	1.0	91.6	-0.4
18	90.5	76.2	80.5	83.3	87.1	88.6	45.5	1.5	87.7	-0.4
19	91.4	77.6	82.0	84.5	89.3	91.1	34.5	1.8	88.9	-0.3
24	95.1	80.8	84.4	86.9	91.0	92.8	47.0	1.8	92.7	-0.7
26	93.2	78.8	83.2	85.4	90.2	91.2	53.0	1.0	90.4	-1.0
29	93.1	80.7	84.8	86.6	91.3	92.3	23.5	1.0	91.1	-0.3
35	88.1	73.9	78.0	80.7	84.2	86.2	41.0	2.0	85.5	-0.7
Avg.	91.5	77.6	81.8	84.4	88.6	89.9	40.7	1.4	89.1	-0.5
Std.										
Dev.	2.9	3.1	3.0	2.5	3.1	3.0	10.1	0.4	2.9	0.3

BRITISH AEROSPACE BAC-111 AIRCRAFT

17	95.4	83.8	86.6	85.9	92.5	94.4	34.5	1.9	93.9	-0.4
30	95.8	82.4	86.8	88.2	93.5	94.3	37.0	0.8	94.7	-0.4
Avg.	95.6	83.1	86.7	87.0	93.0	94.3	35.8	1.4	94.3	-0.4
Std.										
Dev.	0.3	1.0	0.1	1.6	0.7	0.0	1.8	0.7	0.5	0.0

BOEING 707 AIRCRAFT

23	97.0	82.4	87.3	88.5	94.2	96.6	22.5	2.4	93.2	-0.0
25	99.9	83.8	90.2	90.5	97.6	100.9	21.5	3.3	95.0	-
27	96.2	80.9	86.1	87.9	93.0	95.6	28.0	2.7	92.6	-0.0
28	92.6	76.9	81.0	83.0	87.6	90.0	36.0	3.3	89.2	-0.2
31	93.2	77.8	83.3	84.9	89.8	93.3	29.0	3.5	88.9	-0.0
32	92.9	79.2	83.9	84.2	90.8	93.2	19.5	3.3	89.1	-
Avg.	95.3	80.2	85.3	86.5	92.2	94.9	26.1	3.1	91.3	-0.0
Std.										
Dev.	2.9	2.7	3.2	2.9	3.5	3.7	6.1	0.5	2.6	0.0

* - INDEXES (A, D, ETC.) CALCULATED USING MEASURED DATA UNCORRECTED FOR TEMPERATURE, HUMIDITY, AND AIRCRAFT DEVIATION FROM FLIGHT TRACK

TABLE NO. 31(cont.)

PHILADELPHIA INTERNATIONAL AIRPORT

DOT/TSC

12/ 7/79

DEPARTURE NOISE LEVEL DATA

AS MEASURED *

SITE W1 CHESTER, PA

JUNE 6, 1979 0730-1030 HOURS

EV	EPNL	DBA(M)	DBD(M)	OASPL	PNL(M)	PNLT(M)	DUR(P)	TC	NEL	/\EPNL **
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BOEING 727 AIRCRAFT

2	92.0	78.3	82.5	84.7	88.9	90.2	44.5	1.3	89.9	-0.4
3	90.5	76.1	80.3	84.7	86.7	87.9	47.5	1.2	87.9	-0.4
5	88.8	73.4	78.4	83.6	84.6	85.5	47.5	0.9	86.4	-
6	92.3	78.5	82.9	85.6	89.5	90.3	37.0	1.3	90.0	-0.6
7	96.7	84.6	88.8	90.3	95.8	96.6	26.5	0.8	94.7	-0.3
8	94.8	81.5	85.7	87.3	92.5	93.2	34.0	0.5	92.6	-0.4
9	90.3	76.4	80.8	83.3	87.1	87.7	54.0	0.6	87.8	-0.3
10	92.2	77.9	82.1	85.3	89.1	90.6	31.5	1.6	89.8	-0.3
11	94.9	79.0	83.5	87.9	90.8	92.2	53.0	2.1	92.0	-0.3
12	93.2	79.2	83.5	86.2	90.2	91.1	31.0	1.3	91.0	-0.3
13	90.5	75.2	79.7	82.9	86.1	86.9	57.5	1.2	87.7	-0.4
14	93.8	79.8	84.3	86.1	90.7	91.6	47.0	0.9	91.1	-0.3
16	97.1	81.8	86.9	87.9	93.5	96.0	29.5	2.5	93.3	-0.0
20	-	80.0	84.0	86.6	91.2	91.9	-	0.7	90.5	-
21	-	76.8	81.0	86.1	87.3	88.3	-	1.0	89.4	-
22	92.5	77.7	81.8	87.3	88.4	89.1	45.0	0.7	89.6	-0.6
33	92.0	79.0	82.8	85.0	89.8	90.7	36.5	1.0	89.5	-0.5
Avg.	92.8	78.5	82.9	85.9	89.5	90.6	41.5	1.2	90.2	-0.4
Std.										
Dev.	2.4	2.7	2.6	1.9	2.8	3.0	9.8	0.5	2.1	0.1

LOCKHEED L-1011 AIRCRAFT

34	90.3	74.8	81.8	88.6	88.2	89.5	26.0	1.3	86.6	-0.3
Avg.	90.3	74.8	81.8	88.6	88.2	89.5	26.0	1.3	86.6	-0.3
Std.										
Dev.	-	-	-	-	-	-	-	-	-	-

* - INDEXES (A, D, ETC.) CALCULATED USING MEASURED DATA UNCORRECTED FOR TEMPERATURE, HUMIDITY, AND AIRCRAFT DEVIATION FROM FLIGHT TRACK

** - /\ EPNL & THE CHANGE IN EPNL ASSUMING TONES 800 Hz AND BELOW TO BE PSEUDOTONES AND EXCLUDING THEM FROM THE PNLT CALCULATIONS

TABLE NO. 32

PHILADELPHIA INTERNATIONAL AIRPORT

DOT/TSC

12/ 7/79

ARRIVAL NOISE LEVEL DATA

AS MEASURED *

SITE W1 CHESTER, PA

JUNE 6, 1979 1530-1830 HOURS

EV	EPNL	DBA(M)	DBD(M)	OASPL	PNL(M)	PNLT(M)	DUR(P)	TC	NEL	/\EPNL
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DOUGLAS DC-9 AIRCRAFT

38	91.6	76.6	83.6	80.9	90.5	91.8	25.5	1.3	86.7	-0.1
41	91.4	75.6	82.5	79.5	89.6	91.4	23.0	1.8	86.2	-0.0
42	88.9	72.4	79.6	77.6	86.8	88.3	31.5	1.6	83.9	-0.1
44	90.3	75.8	83.1	78.7	90.0	92.7	15.5	2.7	85.3	-0.1
48	87.2	72.4	79.3	76.9	86.1	87.2	20.0	2.6	82.1	-0.0
51	88.6	72.7	80.1	78.6	87.3	89.0	23.5	1.6	83.6	-0.0
59	90.3	76.2	83.8	79.9	90.8	93.6	12.0	2.9	84.9	-0.0
62	89.3	73.9	80.7	79.9	87.7	89.2	29.0	1.4	84.6	-0.1
67	85.0	70.5	77.1	76.8	84.0	85.3	28.5	1.3	81.0	-0.0
69	-	71.4	78.3	77.6	85.3	86.6	-	1.3	-	-
70	99.6	87.5	92.6	92.2	99.5	100.4	16.5	0.9	95.3	-0.4
Avg.	90.2	75.0	81.9	79.9	88.9	90.5	22.5	1.8	85.4	-0.0
Std.										
Dev.	3.8	4.6	4.2	4.3	4.2	4.2	6.4	0.6	3.9	0.1

BRITISH AEROSPACE BAC-111 AIRCRAFT

36	91.1	75.7	82.5	79.8	89.4	91.0	26.5	1.6	86.7	-0.1
73	-	67.5	72.7	78.2	79.4	81.2	-	1.9	-	-
Avg.	91.1	71.6	77.6	79.0	84.4	86.1	26.5	1.7	86.7	-0.1
Std.										
Dev.	-	5.8	7.0	1.2	7.0	6.9	-	0.2	-	-

BRITISH AEROSPACE SUPER VC-10 AIRCRAFT

55	92.0	77.3	81.2	80.5	87.7	90.7	34.5	3.0	89.2	-0.2
Avg.	92.0	77.3	81.2	80.5	87.7	90.7	34.5	3.0	89.2	-0.2
Std.										
Dev.	-	-	-	-	-	-	-	-	-	-

* - INDEXES (A,D,.ETC.) CALCULATED USING MEASURED DATA UNCORRECTED FOR TEMPERATURE, HUMIDITY, AND AIRCRAFT DEVIATION FROM FLIGHT TRACK

** - /\ EPNL ,THE CHANGE IN EPNL ASSUMING TONES 800 Hz AND BELOW TO BE PSEUDOTONES AND EXCLUDING THEM FROM THE PNLT CALCULATIONS

PHILADELPHIA INTERNATIONAL AIRPORT

DOT/TSC

12/ 7/79

ARRIVAL NOISE LEVEL DATA

AS MEASURED *

SITE W1 CHESTER, PA

JUNE 6, 1979 1530-1830 HOURS

EV	EPNL	DBA(M)	DBD(M)	OASPL	PNL(M)	PNLT(M)	DUR(P)	TC	NEL	/\EPNL
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BOEING 727 AIRCRAFT

37	88.4	74.2	79.8	78.4	87.2	88.8	24.0	1.7	83.6	-0.0
39	91.4	76.4	83.6	79.1	90.4	92.0	22.5	1.6	86.4	-0.1
40	90.4	74.0	80.7	79.6	87.9	91.4	22.5	3.5	85.2	-0.0
43	89.3	73.1	79.8	77.4	86.9	88.8	33.0	1.9	84.6	-0.0
46	87.0	72.3	77.4	81.8	84.2	85.3	30.0	1.5	83.3	-0.2
49	86.7	72.7	77.4	79.2	84.1	85.3	28.5	1.6	83.6	-0.3
52	86.7	72.2	76.6	79.3	83.3	86.0	28.5	3.7	82.8	-0.1
53	-	71.8	76.3	79.1	82.7	84.0	-	1.3	-	-
54	88.1	72.3	77.4	80.9	84.2	88.4	31.5	4.2	83.0	-0.0
56	87.3	71.5	77.0	78.2	83.3	88.7	24.0	5.5	-	-0.0
58	90.0	74.4	81.2	78.0	88.1	89.9	27.5	1.7	85.6	-0.2
60	89.0	74.8	81.5	79.3	88.6	90.4	19.0	1.8	84.6	-0.0
63	90.4	75.9	82.8	79.7	89.8	91.6	20.0	2.2	85.2	-0.0
64	-	73.4	78.8	79.2	85.6	87.8	-	3.8	-	-
65	87.3	74.3	79.2	79.2	85.8	87.1	29.0	1.3	84.2	-0.0
66	87.6	74.1	78.5	80.1	85.1	86.4	28.5	1.8	83.4	-0.1
72	88.2	74.3	80.5	79.3	87.7	89.5	22.0	1.8	84.4	-0.0
74	-	68.4	73.5	77.9	80.2	81.1	-	1.4	-	-
Avg.	88.5	73.3	79.0	79.2	85.8	87.9	26.0	2.4	84.3	-0.0
Std.										
Dev.	1.5	1.8	2.5	1.1	2.7	2.9	4.3	1.2	1.1	0.0

BOEING 707 AIRCRAFT

50	98.6	82.1	90.3	83.4	96.2	99.3	21.0	3.1	92.4	-
57	98.2	80.4	88.6	81.2	94.6	98.3	25.5	3.7	91.7	-0.0
61	95.6	78.5	86.5	79.6	92.8	96.3	25.5	3.5	89.2	-
68	99.3	82.4	90.3	84.4	96.8	100.3	21.0	3.5	92.3	-
75	99.2	82.2	89.9	83.3	95.9	98.3	23.0	2.4	91.9	-
Avg.	98.2	81.1	89.1	82.4	95.2	98.5	23.2	3.2	91.5	-0.0
Std.										
Dev.	1.5	1.7	1.6	2.0	1.6	1.5	2.3	0.5	1.3	-

DOUGLAS DC-8 AIRCRAFT

45	97.6	80.5	88.4	82.4	95.0	98.5	24.0	3.5	90.4	-
Avg.	97.6	80.5	88.4	82.4	95.0	98.5	24.0	3.5	90.4	-
Std.										
Dev.	-	-	-	-	-	-	-	-	-	-

BOEING 737 AIRCRAFT

47	91.5	76.3	82.9	79.5	89.6	91.5	19.0	1.9	86.6	-0.0
Avg.	91.5	76.3	82.9	79.5	89.6	91.5	19.0	1.9	86.6	-0.0
Std.										
Dev.	-	-	-	-	-	-	-	-	-	-

* - INDEXES (A,D, ETC.) CALCULATED USING MEASURED DATA UNCORRECTED FOR TEMPERATURE, HUMIDITY, AND AIRCRAFT DEVIATION FROM FLIGHT TRACK

** - /\ EPNL, THE CHANGE IN EPNL ASSUMING TONES 800 Hz AND BELOW TO BE PSEUDOTONES AND EXCLUDING THEM FROM THE PNLT CALCULATIONS

TABLE NO. 33

PHILADELPHIA INTERNATIONAL AIRPORT

DOT/TSC
12/10/79

ARRIVAL NOISE LEVEL DATA

AS MEASURED *

SITE W1 CHESTER, PA

JUNE 7, 1979 0730-1030 HOURS

EV	EPNL	DBA(M)	DBD(M)	OASPL	PNL(M)	PNLT(M)	DUR(P)	TC	NEL	/\EPNL
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DOUGLAS DC-9 AIRCRAFT

6	92.5	77.7	85.7	79.4	92.2	94.3	19.5	2.0	86.4	-0.0
15	91.3	76.6	84.6	79.1	91.4	94.1	15.5	2.7	85.3	-0.0
16	91.0	75.6	82.8	79.6	89.9	91.4	29.5	1.4	85.6	-0.0
17	90.2	75.4	83.5	78.8	90.2	92.4	17.5	2.2	84.6	-
20	89.4	74.9	82.5	77.4	89.1	90.6	16.5	1.4	84.0	-0.0
Avg.	90.9	76.0	83.8	78.8	90.6	92.6	19.7	2.0	85.2	-0.1
Std.										
Dev.	1.2	1.1	1.3	0.9	1.2	1.6	5.7	0.6	0.9	0.0

BRITISH AEROSPACE BAC-111 AIRCRAFT

12	83.6	69.0	74.3	75.3	80.9	81.6	36.5	0.8	79.9	-0.1
22	86.1	74.8	79.1	78.3	85.6	86.2	34.0	0.7	83.2	-0.3
Avg.	84.8	71.9	76.7	76.8	83.2	83.9	35.3	0.7	81.5	-0.2
Std.										
Dev.	1.7	4.1	3.4	2.1	3.3	3.2	1.8	0.0	2.4	0.0

* - INDEXES (A, D, .ETC.) CALCULATED USING MEASURED DATA UNCORRECTED FOR TEMPERATURE, HUMIDITY, AND AIRCRAFT DEVIATION FROM FLIGHT TRACK

** - /\ EPNL , THE CHANGE IN EPNL ASSUMING TONES 800 Hz AND BELOW TO BE PSEUDOTONES AND EXCLUDING THEM FROM THE PNLT CALCULATIONS

TABLE NO. 33 (cont.)

PHILADELPHIA INTERNATIONAL AIRPORT

DOT/TSC
12/10/79

ARRIVAL NOISE LEVEL DATA

AS MEASURED *

SITE W1 CHESTER, PA

JUNE 7, 1979 0730-1030 HOURS

EV	EPNL	DBA(M)	DBD(M)	OASPL	PNL(M)	PNLT(M)	DUR(P)	TC	NEL	/\EPNL
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BOEING 727 AIRCRAFT

4	-	75.3	80.3	80.4	87.2	88.2	-	1.0	-	-
7	87.6	71.7	78.8	76.6	85.6	88.4	25.0	2.8	82.8	-0.0
8	92.1	79.6	83.0	83.7	89.9	91.7	24.5	4.1	87.9	-0.1
9	82.8	70.4	75.1	78.2	82.2	83.7	21.5	1.4	79.6	-0.4
10	87.4	73.9	79.3	79.3	85.9	86.7	29.5	1.1	84.2	-0.2
11	86.9	72.7	77.8	77.7	84.8	85.9	31.5	1.1	83.6	-0.0
14	87.9	71.7	77.0	78.3	84.1	86.9	32.0	2.8	82.8	-0.0
18	86.4	70.5	75.4	76.0	82.4	84.8	29.5	3.7	81.8	-0.1
19	89.4	73.4	80.8	78.8	87.0	88.0	29.5	2.1	84.7	-0.2
21	85.2	69.5	74.4	76.2	81.3	84.4	29.0	3.0	80.4	-0.0
Avg.	87.3	72.9	78.2	78.5	85.0	86.9	28.0	2.3	83.1	-0.1
Std.										
Dev.	2.6	2.9	2.8	2.3	2.6	2.4	3.5	1.1	2.5	0.1

DOUGLAS DC-8 AIRCRAFT

13	100.2	82.4	90.4	83.5	96.8	100.3	22.5	3.8	93.5	-
Avg.	100.2	82.4	90.4	83.5	96.8	100.3	22.5	3.8	93.5	-
Std.										
Dev.	-	-	-	-	-	-	-	-	-	-

* - INDEXES (A,D, .ETC.) CALCULATED USING MEASURED DATA UNCORRECTED FOR TEMPERATURE, HUMIDITY, AND AIRCRAFT DEVIATION FROM FLIGHT TRACK

** - /\ EPNL , THE CHANGE IN EPNL ASSUMING TONES 800 Hz AND BELOW TO BE PSEUDOTONES AND EXCLUDING THEM FROM THE PNLT CALCULATIONS

PHILADELPHIA INTERNATIONAL AIRPORT

DOT/TSC
12/10/79

ARRIVAL NOISE LEVEL DATA

AS MEASURED *

SITE W1 CHESTER, PA

JUNE 7, 1979 1530-1830 HOURS

EV	EPNL	DBA(M)	DBD(M)	OASPL	PNL(M)	PNLT(M)	DUR(P)	TC	NEL	/\EPNL
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DOUGLAS DC-9 AIRCRAFT

26	-	72.3	77.5	80.4	84.3	85.5	-	1.2	82.4	-
33	93.1	79.1	85.7	84.5	93.3	95.0	18.5	1.8	87.4	-
37	92.0	76.6	84.2	82.9	91.6	93.6	15.5	1.9	86.2	-
38	90.2	76.1	83.3	80.6	90.5	91.6	21.5	1.3	85.2	-0.2
40	90.5	76.5	83.9	80.8	91.0	92.7	13.5	1.7	85.0	-
44	88.8	75.3	82.1	80.4	89.2	90.6	23.0	1.3	-	-0.0
49	87.3	74.2	81.2	78.2	87.9	89.0	15.0	1.0	-	-0.0
53	90.3	77.3	83.9	81.5	91.0	92.4	14.0	1.4	85.2	-0.0
54	90.9	77.4	84.3	82.3	91.4	92.9	16.5	1.4	85.8	-0.0
Avg.	90.4	76.1	82.9	81.3	90.0	91.5	17.2	1.5	85.3	-0.0
Std.										
Dev.	1.8	2.0	2.4	1.8	2.6	2.8	3.5	0.3	1.5	0.0

BRITISH AEROSPACE BAC-111 AIRCRAFT

36	88.7	72.8	79.9	79.2	87.2	88.5	29.5	1.4	83.8	-0.1
Avg.	88.7	72.8	79.9	79.2	87.2	88.5	29.5	1.4	83.8	-0.1
Std.										
Dev.	-	-	-	-	-	-	-	-	-	-

BOEING 737 AIRCRAFT

47	92.2	79.0	85.7	82.0	92.5	93.6	19.0	1.2	87.4	-0.0
Avg.	92.2	79.0	85.7	82.0	92.5	93.6	19.0	1.2	87.4	-0.0
Std.										
Dev.	-	-	-	-	-	-	-	-	-	-

AIRBUS IND. A-300 AIRBUS

58	-	72.6	77.3	81.6	83.7	84.8	-	1.0	81.8	-
Avg.	-	72.6	77.3	81.6	83.7	84.8	-	1.0	81.8	-
Std.										
Dev.	-	-	-	-	-	-	-	-	-	-

BRITISH AEROSPACE SUPER VC-10 AIRCRAFT

34	93.5	80.0	85.1	83.9	92.0	93.7	28.0	1.8	90.4	-0.2
Avg.	93.5	80.0	85.1	83.9	92.0	93.7	28.0	1.8	90.4	-0.2

PHILADELPHIA INTERNATIONAL AIRPORT

DOT/TSC
12/10/79

ARRIVAL NOISE LEVEL DATA

AS MEASURED *

SITE W1 CHESTER, PA

JUNE 7, 1979 1530-1830 HOURS

[illegible]

BOEING 727 AIRCRAFT

23	88.3	73.8	80.9	79.0	88.1	89.5	25.0	1.3	83.2	-0.0
24	87.8	73.9	78.5	80.4	85.8	86.9	27.0	1.4	83.5	-0.1
25	90.0	75.7	82.5	81.6	90.0	91.7	19.0	1.8	84.7	-0.0
28	-	73.3	80.0	79.3	87.2	88.7	-	1.4	-	-
29	88.9	74.5	81.0	79.5	87.8	89.4	31.5	1.6	83.6	-0.1
30	91.3	76.1	82.9	81.2	90.3	92.0	27.0	1.6	86.2	-0.0
31	91.0	76.7	83.0	81.7	89.9	91.1	28.0	1.3	85.9	-0.0
35	88.5	73.9	78.6	80.2	85.8	88.2	27.5	2.4	83.8	-0.0
39	88.5	72.9	77.6	80.3	84.7	86.5	40.5	2.1	83.8	-0.0
42	90.9	78.9	85.0	82.6	91.9	93.4	19.5	1.5	86.5	-0.2
43	85.6	72.0	77.2	77.9	84.1	85.6	27.5	1.5	81.4	-
46	87.0	71.3	77.0	81.5	84.5	87.3	25.0	2.8	82.4	-0.0
48	87.9	74.7	80.7	80.1	88.0	89.9	20.0	1.9	83.3	-0.0
51	88.2	74.7	81.0	80.6	88.2	89.6	25.0	1.3	84.1	-0.0
55	-	70.9	76.0	80.9	82.6	83.5	-	0.9	80.7	-
56	86.3	73.0	77.9	81.6	85.4	86.4	24.5	1.0	82.0	-0.0
57	-	74.1	79.0	80.1	85.9	86.8	-	1.0	-	-

Avg.	88.6	74.1	79.9	80.5	87.1	88.6	26.2	1.6	83.7	-0.1
Std.										
Dev.	1.7	2.0	2.5	1.2	2.5	2.6	5.4	0.5	1.7	0.0

BOEING 707 AIRCRAFT

27	99.2	82.5	89.9	83.6	96.2	98.8	24.0	2.9	93.0	-
32	99.0	80.9	89.1	83.2	95.0	98.3	22.5	3.3	91.9	-
41	99.7	81.1	88.9	82.2	94.8	98.0	26.5	3.2	93.2	-
52	88.2	71.8	79.6	72.7	85.6	88.1	23.5	2.5	81.7	-

Avg.	96.5	79.1	86.9	80.4	92.9	95.8	24.1	2.9	89.9	-
Std.										
Dev.	5.5	4.9	4.9	5.2	4.9	5.1	1.7	0.3	5.5	-

DOUGLAS DC-8 AIRCRAFT

[illegible]

TABLE NO. 35

PHILADELPHIA INTERNATIONAL AIRPORT

DOT/TSC

12/10/79

ARRIVAL NOISE LEVEL DATA

AS MEASURED *

SITE W1 CHESTER, PA

JUNE 8, 1979 0730-1030 HOURS

EV	EPNL	DBA(M)	DBD(M)	OASPL	PNL(M)	PNLT(M)	DUR(P)	TC	NEL	/\EPNL
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DOUGLAS DC-9 AIRCRAFT

2	85.8	72.1	77.8	80.8	84.8	86.7	18.0	1.9	81.9	-0.4
4	90.5	76.0	83.2	79.4	90.0	91.5	22.5	1.5	85.2	-0.3
10	-	67.9	72.4	75.3	78.9	79.8	-	0.9	-	-
11	87.0	72.6	79.0	77.0	86.1	87.8	27.0	1.8	82.4	-0.0
13	89.0	73.1	80.1	77.3	87.0	89.2	20.0	2.3	83.9	-0.1
15	90.0	73.9	81.3	78.1	88.1	89.3	30.5	1.9	84.4	-0.1
Avg.	88.5	72.6	79.0	78.0	85.8	87.4	23.6	1.7	83.6	-0.2
Std.										
Dev.	2.0	2.7	3.7	1.9	3.8	4.1	5.1	0.5	1.4	0.1

DOUGLAS DC-8 AIRCRAFT

8	98.4	83.3	91.2	85.2	97.7	100.6	13.5	3.5	91.4	-0.5
9	94.6	78.7	85.5	80.8	91.9	94.4	20.0	2.4	89.0	-
Avg.	96.5	81.0	88.4	83.0	94.8	97.5	18.8	2.9	90.2	-0.5
Std.										
Dev.	2.7	3.3	4.0	3.1	4.1	4.4	4.6	0.7	1.7	-

BOEING 727 AIRCRAFT

1	88.6	73.5	80.4	77.5	87.3	88.7	24.5	1.4	83.9	-0.1
3	85.2	71.1	75.7	78.0	82.8	86.0	26.0	4.0	81.0	-0.0
5	-	68.0	73.3	76.4	80.2	83.2	-	3.6	-	-
7	87.0	73.3	78.9	80.1	85.5	86.9	24.5	1.4	83.3	-0.1
12	86.4	69.9	76.9	76.7	84.0	87.3	26.5	3.3	81.1	-0.1
Avg.	86.8	71.1	77.1	77.7	83.9	86.4	25.4	2.7	82.3	-0.0
Std.										
Dev.	1.4	2.3	2.8	1.4	2.7	2.0	1.0	1.3	1.5	0.0

LOCKHEED L-1011 AIRCRAFT

6	85.7	72.0	76.9	79.4	83.6	84.5	26.0	1.4	82.7	-0.2
14	84.7	70.8	76.0	77.9	82.7	84.3	27.0	1.6	81.6	-0.4
Avg.	85.2	71.4	76.4	78.6	83.2	84.4	26.5	1.5	82.1	-0.3
Std.										
Dev.	0.8	0.8	0.6	1.1	0.6	0.0	0.7	0.2	0.8	0.1

TABLE NO. 36

PHILADELPHIA INTERNATIONAL AIRPORT

DOT/TSC

12/10/79

DEPARTURE NOISE LEVEL DATA

AS MEASURED *

SITE W1 CHESTER, PA

JUNE 8, 1979 0730-1030 HOURS

EV	EPNL	DBA(M)	DBD(M)	DASPL	PNL(M)	PNLT(M)	DUR(P)	TC	NEL	/\EPNL
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DOUGLAS DC-9 AIRCRAFT

21	96.4	83.8	86.9	89.5	93.2	94.9	39.0	1.7	94.8	-0.7
23	93.0	79.6	83.8	86.2	90.4	91.0	46.5	0.6	90.1	-0.5
25	90.6	76.2	80.8	83.9	87.7	89.0	53.0	1.3	86.9	-0.3
27	90.1	74.5	79.0	81.9	85.5	87.0	59.5	1.4	86.8	-
Avg.	92.5	78.5	82.6	85.4	89.2	90.5	49.5	1.3	89.6	-0.5
Std.										
Dev.	2.9	4.1	3.4	3.2	3.3	3.3	8.8	0.5	3.8	0.2

BOEING 707 AIRCRAFT

18	99.5	83.3	89.3	90.8	96.8	99.6	25.0	2.8	94.3	-0.0
26	104.0	90.1	95.6	97.0	103.0	105.4	17.0	2.5	99.3	-0.0
28	99.9	84.4	89.3	93.8	96.5	98.3	34.5	1.8	95.9	-0.2
Avg.	101.1	85.9	91.4	93.9	98.7	101.1	25.5	2.4	96.5	-0.0
Std.										
Dev.	2.5	3.6	3.6	3.1	3.7	3.8	8.8	0.5	2.6	0.0

BOEING 727 AIRCRAFT

16	95.9	83.7	88.2	89.6	94.0	95.5	26.0	3.1	92.5	-1.9
17	93.1	79.3	83.8	86.2	90.3	92.6	37.5	2.3	90.1	-0.9
22	93.1	79.2	83.9	86.1	90.9	92.1	40.5	1.2	90.0	-0.5
24	96.8	84.0	88.5	91.1	95.3	96.4	26.5	1.1	94.2	-0.5
30	-	82.2	86.3	87.9	92.7	94.1	-	1.3	91.8	-
31	95.3	84.6	88.9	89.9	95.7	97.7	15.5	2.0	92.7	-1.0
32	-	81.4	85.8	89.7	92.5	93.5	-	1.0	92.4	-
Avg.	94.8	82.1	86.5	88.6	93.0	94.5	29.2	1.7	92.0	-0.9
Std.										
Dev.	1.7	2.2	2.1	1.9	2.1	2.1	10.0	0.8	1.5	0.6

BOEING 737 AIRCRAFT

20	93.1	78.6	83.0	86.6	89.9	91.4	35.0	1.5	90.2	-0.7
Avg.	93.1	78.6	83.0	86.6	89.9	91.4	35.0	1.5	90.2	-0.7

LOCKHEED L-1011 AIRCRAFT

29	88.3	72.9	78.5	83.5	85.3	86.0	36.0	2.0	84.7	-0.3
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TABLE NO. 37

PHILADELPHIA INTERNATIONAL AIRPORT
SUMMARY ARRIVAL NOISE LEVEL DATA

DOT/TSC
1/7/80

AS MEASURED *

SITE E1 GLOUCESTER CITY, NJ JUNE 5,6,8,1979										TOT NO
EPNL	DBA(M)	DBD(M)	OASPL	PNL(M)	PNLT(M)	DUR(P)	TC	NEL	EVENTS	
DOUGLAS DC-9 AIRCRAFT										
AVG.	88.9	75.0	81.2	78.3	87.7	88.9	21.7	1.3	85.1	29
STD.										
DEV.	2.6	2.5	2.9	1.9	3.0	3.0	4.9	0.3	2.3	
BRITISH AEROSPACE BAC-111 AIRCRAFT										
AVG.	84.3	71.8	76.9	76.6	83.3	83.7	24.1	1.4	81.3	13
STD.										
DEV.	3.7	3.8	3.8	3.6	3.8	3.7	4.9	0.6	3.6	
BOEING 707 AIRCRAFT										
AVG.	94.6	79.5	86.8	80.5	92.8	95.5	19.6	2.8	88.9	5
STD.										
DEV.	2.0	2.4	2.4	1.8	2.0	1.8	0.7	0.6	1.8	
DOUGLAS DC-8 AIRCRAFT										
AVG.	95.6	80.9	88.8	81.8	94.9	98.4	17.0	3.5	91.0	2
STD.										
DEV.	2.3	2.1	2.3	1.1	1.7	2.1	1.4	0.4	-	
BOEING 727 AIRCRAFT										
AVG.	88.4	75.1	80.4	79.9	87.0	88.3	23.2	1.4	85.3	47
STD.										
DEV.	2.8	2.7	3.1	2.2	3.2	3.1	4.9	0.7	2.3	
BOEING 737 AIRCRAFT										
AVG.	-	68.6	73.1	73.4	79.3	79.7	-	0.5	-	1
STD.										
DEV.	-	-	-	-	-	-	-	-	-	
DOUGLAS DC-10 AIRCRAFT										
AVG.	83.2	70.1	75.5	77.6	82.1	83.3	31.0	1.3	80.5	2
STD.										
DEV.	3.3	2.2	2.8	0.9	3.3	4.1	14.1	0.8	2.8	
LOCKHEED L-1011 AIRCRAFT										
AVG.	87.2	77.1	79.7	79.3	86.5	87.5	24.1	0.9	84.9	4
STD.										
DEV.	1.2	4.0	2.2	1.7	2.2	2.4	3.9	0.5	1.0	
AIRBUS IND. A-300 AIRBUS										
AVG.	87.7	72.9	78.8	75.1	84.9	86.0	28.0	1.3	83.8	1
STD.										
DEV.	-	-	-	-	-	-	-	-	-	

* - INDEXES (A,D, ETC.) CALCULATED USING MEASURED DATA UNCORRECTED FOR TEMPERATURE, HUMIDITY, AND AIRCRAFT DEVIATION FROM FLIGHT TRACK

TABLE NO. 38

PHILADELPHIA INTERNATIONAL AIRPORT
SUMMARY ARRIVAL NOISE LEVEL DATA

DOT/TSC
1/8/80

AS MEASURED *

SITE E2 AUDUBON, NJ

JUNE 5,6,8,1979

	EPNL	DBA(M)	DBD(M)	OASPL	PNL(M)	PNLT(M)	DUR(P)	TC	TOT NO NEL EVENTS
DOUGLAS DC-9 AIRCRAFT									
AVG.	81.9	63.2	68.6	71.8	75.2	76.6	40.5	1.5	22
STD.									
DEV.	3.0	3.5	3.8	3.0	3.6	3.9	15.6	0.8	-
BRITISH AEROSPACE BAC-111 AIRCRAFT									
AVG.	-	63.3	68.6	70.8	75.0	77.0	-	2.5	11
STD.									
DEV.	-	2.4	2.3	2.6	2.0	2.4	-	1.3	-
BOEING 707 AIRCRAFT									
AVG.	-	64.9	70.5	71.3	77.3	80.0	-	-	4
STD.									
DEV.	-	4.3	4.9	2.7	4.8	5.0	-	-	-
DOUGLAS DC-8 AIRCRAFT									
AVG.	-	68.2	73.3	72.2	80.1	83.6	-	3.5	1
STD.									
DEV.	-	-	-	-	-	-	-	-	-
BOEING 727 AIRCRAFT									
AVG.	-	63.1	68.4	71.6	74.7	76.3	-	1.6	76.9 27
STD.									
DEV.	-	3.7	3.1	2.5	3.3	3.4	-	0.7	3.0
DOUGLAS DC-10 AIRCRAFT									
AVG.	-	66.4	71.1	74.3	77.3	78.5	-	1.8	2
STD.									
DEV.	-	5.9	6.0	5.8	6.3	5.4	-	1.8	-
LOCKHEED L-1011 AIRCRAFT									
AVG.	79.6	64.5	69.0	73.4	76.0	77.8	58.0	1.8	76.6 3
STD.									
DEV.	-	2.6	2.9	1.5	2.5	2.5	-	0.7	-
AIRBUS IND. A-300 AIRBUS									
AVG.	-	60.9	65.8	67.8	73.0	74.1	-	1.0	1
STD.									
DEV.	-	-	-	-	-	-	-	-	-

* -INDEXES (A,D,ETC.) CALCULATED USING MEASURED DATA UNCORRECTED
FOR TEMPERATURE,HUMIDITY,AND AIRCRAFT DEVIATION FROM FLIGHT TRACK

PHILADELPHIA INTERNATIONAL AIRPORT

DOT/TSC
1/8/80

SUMMARY ARRIVAL NOISE LEVEL DATA

AS MEASURED *

SITE E3 CHERRY HILL,NJ

JUNE 5,6,8,1979

	EPNL	DBA(M)	DBD(M)	OASPL	PNL(M)	PNLT(M)	DUR(P)	TC	NEL	TOT NO EVENTS
DOUGLAS DC-9 AIRCRAFT										
AVG.	82.9	67.0	71.9	72.6	78.4	79.7	31.3	1.5	79.5	23
STD.										
DEV.	1.6	3.7	4.0	3.1	4.1	4.1	8.7	0.8	2.1	
BRITISH AEROSPACE BAC-111 AIRCRAFT										
AVG.	-	66.0	70.3	71.1	76.7	78.6	-	1.8	-	9
STD.										
DEV.	-	4.0	4.0	2.7	4.0	3.8	-	0.6	-	
BOEING 707 AIRCRAFT										
AVG.	86.3	69.9	75.7	73.4	81.9	85.0	20.4	3.1	79.4	5
STD.										
DEV.	4.6	6.8	7.9	4.2	7.7	8.5	2.9	0.8	6.0	
DOUGLAS DC-8 AIRCRAFT										
AVG.	93.9	78.3	85.7	80.0	92.2	96.1	21.0	3.9	87.4	1
STD.										
DEV.	-	-	-	-	-	-	-	-	-	
BOEING 727 AIRCRAFT										
AVG.	83.3	67.3	71.8	73.3	78.1	79.7	37.6	1.7	80.0	24
STD.										
DEV.	2.9	5.1	5.2	3.9	5.4	5.2	9.6	0.9	3.9	
LOCKHEED L-1011 AIRCRAFT										
AVG.	85.5	72.7	77.4	77.4	83.9	85.1	28.5	1.4	83.2	3
STD.										
DEV.	2.8	2.7	3.3	2.0	3.5	3.5	6.7	0.5	2.4	

* -INDEXES (A,D,.ETC.) CALCULATED USING MEASURED DATA UNCORRECTED FOR TEMPERATURE,HUMIDITY,AND AIRCRAFT DEVIATION FROM FLIGHT TRACK

TABLE NO. 40

PHILADELPHIA INTERNATIONAL AIRPORT
SUMMARY ARRIVAL NOISE LEVEL DATA

DOT/TSC
1/9/80

AS MEASURED *

SITE W1 CHESTER,PA						JUNE 6,7,8,1979			TOT NO	
EPNL	DBA(M)	DBD(M)	OASPL	PNL(M)	PNLT(M)	DUR(P)	TC	NEL	EVENTS	
DOUGLAS DC-9 AIRCRAFT										
AVG.	90.1	75.0	82.0	79.8	88.9	90.6	20.6	1.7	85.0	31
STD.										
DEV.	2.7	3.3	3.6	3.0	3.6	3.8	5.6	0.5	2.6	
BRITISH AEROSPACE BAC-111 AIRCRAFT										
AVG.	87.4	72.0	77.7	78.2	84.5	85.7	31.6	1.2	83.4	5
STD.										
DEV.	3.3	3.6	4.1	1.8	4.2	4.3	4.5	0.5	2.9	
BOEING 707 AIRCRAFT										
AVG.	97.4	80.2	88.1	81.5	94.2	97.3	23.6	3.1	90.8	9
STD.										
DEV.	3.6	3.4	3.4	3.6	3.4	3.6	2.0	0.4	3.6	
DOUGLAS DC-8 AIRCRAFT										
AVG.	98.5	82.3	90.0	84.1	96.4	99.2	19.8	3.0	91.8	5
STD.										
DEV.	2.8	2.9	3.3	2.9	3.1	3.1	4.0	0.8	2.3	
BOEING 727 AIRCRAFT										
AVG.	88.0	73.2	78.9	79.3	85.8	87.7	26.4	2.1	83.5	50
STD.										
DEV.	1.8	2.2	2.6	1.7	2.7	2.6	4.2	1.0	1.7	
BOEING 737 AIRCRAFT										
AVG.	91.8	77.6	84.3	80.8	91.1	92.6	19.0	1.6	87.0	2
STD.										
DEV.	0.5	1.9	2.0	1.9	2.1	1.5	0.0	0.5	0.6	
LOCKHEED L-1011 AIRCRAFT										
AVG.	85.2	71.4	76.4	78.6	83.2	84.4	26.5	1.5	82.1	2
STD.										
DEV.	0.8	0.8	0.6	1.1	0.6	0.0	0.7	0.2	0.8	
AIRBUS IND. A-300 AIRBUS										
AVG.	-	72.6	77.3	81.6	83.7	84.8	-	1.0	81.8	1
STD.										
DEV.	-	-	-	-	-	-	-	-	-	
BRITISH AEROSPACE SUPER VC-10 AIRCRAFT										
AVG.	92.7	78.7	83.2	82.2	89.8	92.2	31.3	2.4	89.8	2
STD.										
DEV.	1.1	1.9	2.8	2.4	3.0	2.1	4.6	0.8	0.8	

* - INDEXES (A,D,ETC.) CALCULATED USING MEASURED DATA UNCORRECTED
FOR TEMPERATURE, HUMIDITY, AND AIRCRAFT DEVIATION FROM FLIGHT TRACK

TABLE NO. 41

PHILADELPHIA INTERNATIONAL AIRPORT

DOT/TSC

SUMMARY DEPARTURE NOISE LEVEL DATA

1/7/80

AS MEASURED *

SITE E1 GLOUCESTER CITY, NJ

JUNE 6,7,8,1979

	EPNL	DBA(M)	DBD(M)	OASPL	PNL(M)	PNLT(M)	DUR(P)	TC	TOT NO NEL EVENTS
DOUGLAS DC-9 AIRCRAFT									
AVG.	90.3	75.8	80.9	84.7	87.1	88.1	32.4	1.0	87.9 31
STD.									
DEV.	3.3	5.0	4.7	3.6	4.8	4.9	8.2	0.5	3.3
BRITISH AEROSPACE BAC-111 AIRCRAFT									
AVG.	95.0	81.7	87.0	89.1	92.6	93.4	30.7	0.8	93.0 3
STD.									
DEV.	1.9	0.6	1.5	2.7	1.5	1.6	3.3	0.3	1.6
BOEING 707 AIRCRAFT									
AVG.	91.8	77.2	82.9	84.1	89.8	92.7	23.4	3.1	87.4 10
STD.									
DEV.	3.7	3.4	3.4	1.8	3.7	4.3	6.2	1.0	3.6
DOUGLAS DC-8 AIRCRAFT									
AVG.	98.9	83.0	89.4	88.4	96.5	98.9	21.7	2.5	92.0 3
STD.									
DEV.	6.1	5.4	6.4	2.6	6.7	8.1	8.5	1.3	4.7
BOEING 727 AIRCRAFT									
AVG.	94.5	81.9	86.5	89.0	92.8	93.8	22.3	1.0	91.4 40
STD.									
DEV.	3.2	4.0	4.0	4.1	4.1	4.1	3.4	0.5	4.2
BOEING 737 AIRCRAFT									
AVG.	91.6	78.7	83.5	85.5	90.0	94.2	26.5	1.1	89.0 2
STD.									
DEV.	3.0	3.3	2.9	2.8	3.6	3.7	1.0	0.1	1.3
LOCKHEED L-1011 AIRCRAFT									
AVG.	89.6	75.0	80.8	81.5	86.7	88.4	33.0	1.9	85.9 2
STD.									
DEV.	4.1	1.9	3.0	2.1	2.3	3.5	4.2	1.3	1.6
AIRBUS IND. A-300 AIRBUS									
AVG.	89.3	77.3	81.8	82.5	88.6	89.1	23.5	0.5	86.5 1
STD.									
DEV.	3.0	3.3	2.9	2.8	3.6	3.7	1.0	0.1	-

* - INDEXES (A,D,ETC.) CALCULATED USING MEASURED DATA UNCORRECTED FOR TEMPERATURE, HUMIDITY, AND AIRCRAFT DEVIATION FROM FLIGHT TRACK

TABLE NO. 42

PHILADELPHIA INTERNATIONAL AIRPORT
SUMMARY DEPARTURE NOISE LEVEL DATA

DOT/TSC
1/8/80

AS MEASURED *

SITE E2		AUDUBON, NJ		JUNE 6, 7, 8, 1979						TOT NO
EPNL	DBA(M)	DBD(M)	DASPL	PNL(M)	PNLT(M)	DUR(P)	TC	NEL	EVENTS	
DOUGLAS DC-9 AIRCRAFT										
AVG.	87.5	69.8	75.5	79.5	81.4	82.5	37.0	1.4	85.4	22
STD.										
DEV.	2.9	6.4	4.9	3.7	5.4	5.4	6.1	0.7	3.2	
BRITISH AEROSPACE BAC-111 AIRCRAFT										
AVG.	90.4	77.2	82.6	85.9	88.6	90.0	29.8	1.5	87.8	2
STD.										
DEV.	2.1	0.7	0.0	0.5	0.6	0.1	3.1	0.1	2.1	
BOEING 707 AIRCRAFT										
AVG.	86.9	71.0	76.5	80.1	82.5	84.7	27.3	2.6	83.5	8
STD.										
DEV.	1.6	6.8	5.8	5.0	6.3	6.4	3.2	1.1	1.3	
DOUGLAS DC-8 AIRCRAFT										
AVG.	99.2	83.6	91.6	88.1	98.6	102.0	16.0	3.4	93.2	1
STD.										
DEV.	-	-	-	-	-	-	-	-	-	
BOEING 727 AIRCRAFT										
AVG.	88.7	73.7	78.7	81.9	84.7	86.1	29.8	1.5	85.2	37
STD.										
DEV.	4.6	6.3	5.8	5.3	6.0	5.9	6.1	0.6	5.3	
BOEING 737 AIRCRAFT										
AVG.	89.6	73.0	75.2	80.4	83.8	85.1	33.0	1.2	87.0	2
STD.										
DEV.	-	4.7	1.6	4.7	5.4	5.1	-	0.2	-	
LOCKHEED L-1011 AIRCRAFT										
AVG.	-	67.1	72.8	76.4	78.7	80.0	-	1.3	-	1
STD.										
DEV.	-	-	-	-	-	-	-	-	-	
AIRBUS IND. A-300 AIRBUS										
AVG.	-	70.2	74.1	76.8	80.7	82.1	-	2.0	-	1
STD.										
DEV.	-	-	-	-	-	-	-	-	-	

* -INDEXES (A,D, .ETC) CALCULATED USING MEASURED DATA UNCORRECTED FOR TEMPERATURE, HUMIDITY, AND AIRCRAFT DEVIATION FROM FLIGHT TRACK

PHILADELPHIA INTERNATIONAL AIRPORT

DOT/TSC
1/8/80

SUMMARY DEPARTURE NOISE LEVEL DATA

AS MEASURED *

SITE E3 CHERRY HILL,NJ

JUNE 6,7,8,1979

TOT NO

EPNL DBA(M) DBD(M) OASPL PNL(M) PNLT(M) DUR(P) TC NEL EVENTS

DOUGLAS DC-9 AIRCRAFT

AVG.	-	66.0	71.8	75.6	77.5	79.5	-	2.3	-	6
STD.										
DEV.	-	6.8	5.5	3.9	5.7	5.0	-	1.1	-	

BRITISH AEROSPACE BAC-111 AIRCRAFT

AVG.	-	68.1	73.9	76.4	78.9	80.3	-	1.5	-	1
STD.										
DEV.	-	-	-	-	-	-	-	-	-	

BOEING 707 AIRCRAFT

AVG.	-	63.7	69.6	71.6	75.9	79.2	-	3.4	-	2
STD.										
DEV.	-	0.9	1.6	0.4	2.7	4.1	-	1.6	-	

DOUGLAS DC-8 AIRCRAFT

AVG.	88.5	73.0	78.3	81.0	84.5	87.0	35.7	3.1	85.5	2
STD.										
DEV.	4.5	3.8	3.5	2.8	3.5	4.6	2.5	0.1	4.8	

BOEING 727 AIRCRAFT

AVG.	88.4	69.3	74.0	77.5	79.9	81.6	40.2	1.7	83.6	8
STD.										
DEV.	0.9	6.9	6.2	4.9	6.1	5.4	9.7	0.9	4.9	

BOEING 737 AIRCRAFT

AVG.	82.8	69.0	73.7	77.4	79.2	80.6	45.2	1.4	80.2	2
STD.										
DEV.	3.0	2.9	2.5	0.4	3.3	2.8	1.1	0.4	3.3	

* - INDEXES (A,D,.ETC) CALCULATED USING MEASURED DATA UNCORRECTED FOR TEMPERATURE,HUMIDITY,AND AIRCRAFT DEVIATION FROM FLIGHT TRACK

TABLE NO. 44

PHILADELPHIA INTERNATIONAL AIRPORT
SUMMARY DEPARTURE NOISE LEVEL DATA

DOT/TSC
1/9/80

AS MEASURED *

SITE W1 CHESTER,PA				JUNE 5,6,8,1979					TOT NO	
EPNL	DBA(M)	DBD(M)	OASPL	PNL(M)	PNLT(M)	DUR(P)	TC	NEL	EVENTS	
DOUGLAS DC-9 AIRCRAFT										
AVG.	92.1	77.9	82.3	85.1	90.3	90.4	37.9	1.5	89.4	22
STD.										
DEV.	2.4	3.2	3.2	3.1	4.7	3.2	9.8	0.6	2.4	
BRITISH AEROSPACE BAC-111 AIRCRAFT										
AVG.	95.5	82.5	85.8	87.2	91.9	93.2	37.8	1.5	93.9	7
STD.										
DEV.	1.4	2.8	2.0	1.1	1.7	1.7	4.3	0.5	1.8	
BOEING 707 AIRCRAFT										
AVG.	97.2	82.1	87.3	88.6	94.3	97.0	26.8	2.9	93.0	15
STD.										
DEV.	3.2	3.3	3.5	4.1	3.8	3.7	6.6	0.5	2.9	
DOUGLAS DC-8 AIRCRAFT										
AVG.	95.7	79.4	85.0	85.5	92.1	95.9	28.0	3.7	91.5	2
STD.										
DEV.	3.4	3.3	3.5	3.6	3.5	2.5	0.7	1.0	3.4	
BOEING 727 AIRCRAFT										
AVG.	93.2	79.3	83.9	86.3	90.2	91.7	37.6	1.3	90.7	46
STD.										
DEV.	2.1	3.0	3.2	2.3	2.8	3.0	9.2	0.5	2.0	
BOEING 737 AIRCRAFT										
AVG.	93.1	74.8	79.6	82.9	86.5	87.8	35.0	1.2	90.2	2
STD.										
DEV.	-	5.4	4.8	5.2	4.8	5.1	-	0.3	-	
DOUGLAS DC-10 AIRCRAFT										
AVG.	86.0	72.2	76.2	80.1	83.1	85.2	37.5	2.5	82.9	2
STD.										
DEV.	-	0.2	1.5	2.2	1.7	0.0	-	1.1	-	
LOCKHEED L-1011 AIRCRAFT										
AVG.	89.5	74.6	80.2	84.4	87.2	88.6	26.9	1.9	85.9	4
STD.										
DEV.	1.2	1.2	1.4	2.9	1.3	1.9	6.3	0.8	1.1	

* - INDEXES (A,D,ETC.) CALCULATED USING MEASURED DATA UNCORRECTED FOR TEMPERATURE, HUMIDITY, AND AIRCRAFT DEVIATION FROM FLIGHT TRACK

Table No. 45

Slant Range DistancesPhiladelphia International Airport

June 5, 1979

0730 - 1030 Hrs

Slant Range (Nautical Miles) at Site

<u>Aircraft Type</u>	<u>Event No.</u>	<u>E1</u>	<u>E2</u>	<u>E3</u>
DC-9	2	0.1	0.8	0.7
DC-9	3	0.2	0.8	0.6
DC-9	7	0.2	0.9	0.3
DC-9	10		No Data	
DC-9	12	0.2	0.8	0.3
DC-9	16	0.2	0.8	0.4
DC-9	17	0.2	0.8	0.3
DC-9	22	0.2	0.7	0.5
DC-9	28	0.1	0.1	1.4
BAC-111	1	0.2	0.8	0.6
BAC-111	11	0.2	0.9	0.5
BAC-111	23	0.1	0.8	0.3
BAC-111	27	0.1	0.5	0.6
707	4	0.2	0.8	0.3
707	20	0.3	0.8	0.4
727	5	0.2	0.8	0.5
727	6	0.2	0.8	0.3
727	8	0.2	0.8	0.3
727	9	0.2	0.8	0.2
727	14	0.2	0.8	0.5
727	18	0.2	0.9	1.0
727	21	0.2	0.8	0.5
727	24	0.3	0.8	0.3
727	26	0.1	0.6	0.5
DC-10	19	0.2	0.8	0.3
L-1011	15	0.2	0.8	0.3
DC-8	13	0.2	0.8	0.3

Table No. 45 (cont.)

Slant Range DistancesPhiladelphia International Airport

June 5, 1979

1530 - 1830 Hrs

Slant Range (Nautical Miles) at Site

<u>Aircraft Type</u>	<u>Event No.</u>	<u>E1</u>	<u>E2</u>	<u>E3</u>
DC-9	32	0.2	0.5	0.7
DC-9	35	0.2	0.5	2.3
DC-9	38	0.1	0.8	0.5
DC-9	40	0.2	0.8	0.5
DC-9	42	0.1	1.0	0.1
DC-9	43	0.2	0.8	0.6
DC-9	45	0.3	0.8	0.7
DC-9	48	0.3	0.7	1.4
DC-9	51	0.4	1.0	1.1
DC-9	54	0.2	1.2	4.3
DC-9	57	0.2	0.8	1.5
DC-9	64	0.2	0.9	0.2
DC-9	68	0.2	0.8	0.3
BAC-111	33	0.0	0.6	0.1
BAC-111	47	0.4	0.8	0.5
BAC-111	65	0.2	0.8	0.6
707	46	0.2	0.8	0.3
DC-8	63	0.3	0.9	1.1
727	29	0.0	0.5	0.6
727	31	0.1	0.5	1.0
727	34	0.2	0.7	0.5
727	36	0.2	0.9	0.5
727	37	0.3	0.7	0.6
727	39	0.2	0.8	0.4
727	41	0.3	1.1	0.6
727	44	0.2	0.8	1.0
727	49	0.2	0.9	0.1
727	50	0.2	0.9	0.3
727	52	0.2	0.8	0.2
727	53	0.2	0.8	1.4
727	55	0.2	1.0	1.2
727	61	0.2	0.8	0.3
727	62	0.4	0.8	0.4
727	66	0.2	0.9	0.1
727	67	0.2	0.7	1.7
737	56	0.2	0.6	1.7
DC-10	30	0.5	0.2	0.8
L-1011	59	0.2	0.8	0.2

Slant Range DistancesPhiladelphia International Airport

June 6, 1979

1530 - 1830 Hrs

Slant Range (Nautical Miles) at Site

<u>Aircraft Type</u>	<u>Event No.</u>	<u>E1</u>	<u>E2</u>	<u>E3</u>
DC-9	31	0.3	0.3	1.3
DC-9	32	0.2	0.5	1.1
DC-9	37	No Data		
DC-9	38	No Data		
DC-9	40	0.1	0.8	2.0
DC-9	42	1.2	2.7	5.5
DC-9	43	0.1	0.5	0.3
DC-9	46	1.5	2.7	6.3
DC-9	51	0.2	1.0	3.0
DC-9	54	0.2	0.9	0.1
BAC-111	48	0.2	1.1	3.5
707	30	0.8	2.1	4.1
707	52	0.3	1.1	1.8
707	53	0.3	0.9	2.3
DC-8	57	0.1	0.6	0.4
727	25	0.4	1.2	0.3
727	26	0.4	1.5	3.5
727	27	0.1	1.5	3.5
727	29	0.4	0.5	3.0
727	34	0.2	1.4	3.1
727	36	0.5	1.2	2.0
727	39		No Data	
727	41	0.4	1.0	1.6
727	44	0.5	1.3	4.9
727	45	1.0	1.6	3.7
727	47	0.4	0.6	0.6
727	50		No Data	
727	55	0.4	1.4	5.1
727	56		No Data	
737	49	0.5	1.2	0.7

Slant Range DistancesPhiladelphia International Airport

June 7, 1979

0730 - 1030 Hrs

Slant Range (Nautical Miles) at Site

<u>Aircraft Type</u>	<u>Event No.</u>	<u>E1</u>	<u>E2</u>	<u>E3</u>
DC-9	8	0.1	0.9	4.5
DC-9	14	1.7	2.8	5.8
DC-9	18	0.3	1.8	4.5
DC-9	21	0.5	2.0	4.5
DC-9	34	0.9	0.4	2.2
DC-9	36	0.5	0.6	2.8
DC-9	37	0.0	1.0	2.4
BAC-111	31	0.0	0.6	2.1
707	12	1.1	2.8	5.6
707	16	0.4	0.4	0.1
707	19	0.6	1.9	4.4
DC-8	35	0.4	0.1	1.1
727	2		No Data	
727	5	0.4	0.9	4.5
727	6	0.7	0.8	2.5
727	9	0.0	1.2	3.4
727	10	1.1	2.7	5.7
727	11	0.3	1.8	4.4
727	13	0.3	1.1	0.8
727	15	0.4	1.0	1.2
727	20	1.1	1.9	5.6
727	22	0.5	1.0	0.3
727	29	0.5	0.5	2.0
727	32	0.8	1.1	0.7
L-1011	38	0.4	0.9	3.0

Table No. 46Slant Range DistancesPhiladelphia International AirportJune 5, 19790730-1030 Hrs.Slant Range (Nautical Miles)Slant Range (Nautical Miles)

<u>Aircraft Type</u>	<u>Event No.</u>	<u>Site W1</u>	<u>Aircraft Type</u>	<u>Event No.</u>	<u>Site W1</u>
DC-9	6	0.7	727	7	0.7
DC-9	18	0.5	727	8	0.6
DC-9	19	0.7	727	9	0.6
DC-9	21	0.5	727	10	0.6
DC-9	22	0.5	727	11	0.5
DC-9	23	No Data	727	14	0.6
DC-9	30	0.6	727	15	0.6
DC-9	36	No Data	727	17	0.6
DC-9	37	0.6	727	20	0.5
BAC-11	16	0.6	727	25	0.4
BAC-11	29	0.5	727	27	0.5
BAC-11	41	0.5	727	31	0.5
707	24	0.6	727	40	0.6
707	26	0.7	737	28	No Data
707	33	0.6	DC-8	2	No Data
707	34	No Data	DC-8	32	0.5
727	1	0.6	DC-10	12	0.5
727	3	0.5	DC-10	13	No Data
727	4	No Data	L-1011	38	0.5
727	5	0.6	L-1011	39	0.4

June 5, 19791530-1830 Hrs.

DC-9	44	0.7	727	42	0.7
DC-9	51	0.7	727	45	0.6
DC-9	52	0.7	727	46	0.5
DC-9	54	0.6	727	47	0.6
DC-9	58	No Data	727	48	0.5
BAC-111	43	0.7	727	55	No Data
BAC-111	50	0.5	727	56	No Data
707	49	0.6	727	57	No Data
707	53	No Data			

Table No. 46 (cont.)

Slant Range DistancesPhiladelphia International AirportJune 6, 1979 1530 - 1830 HrsSlant Range (Nautical Miles)Slant Range (Nautical Miles)

<u>Aircraft Type</u>	<u>Event No.</u>	<u>Site W1</u>	<u>Aircraft Type</u>	<u>Event No.</u>	<u>Site W1</u>
DC-9	38	0.3	727	60	No Data
DC-9	41	0.3	727	63	0.3
DC-9	42	0.3	727	64	0.3
DC-9	44	0.3	727	65	0.3
DC-9	48	0.3	727	66	0.3
DC-9	51	0.3	727	72	0.3
DC-9	59	No Data	727	74	0.3
DC-9	62	0.3			
DC-9	67	0.3	BAC-111	36	No Data
DC-9	69	0.3	BAC-111	73	0.3
DC-9	70	0.2			
727	37	No Data	707	50	0.3
727	39	0.3	707	57	No Data
727	40	0.4	707	61	0.3
727	43	0.3	707	68	0.3
727	46	0.3	707	75	No Data
727	49	0.3			
727	52	0.3	DC-8	45	0.3
727	53	0.3			
727	54	0.3	737	47	0.3
727	56	No Data			
727	58	No Data	VC-15	55	0.3

June 7, 1979 0730 - 1030 Hrs

DC-9	6	0.3	727	4	0.3
DC-9	15	0.3	727	7	0.3
DC-9	16	0.3	727	8	0.3
DC-9	17	0.3	727	9	No Data
DC-9	20	0.3	727	10	0.3
			727	11	0.3
BAC-111	12	0.3	727	14	0.3
BAC-111	22	0.3	727	18	0.3
			727	19	0.3
707	2	0.3	727	21	0.3
DC-8	13	0.3			

Table No. 47

Philadelphia International AirportWeather Data

Date & Time	Sea Level Pressure (Millibars)	Temperature (°F)	Dew Point (°F)	Wind	Wind	Sky Condition
				Direction (Degrees)	Speed (Knots)	
<u>6/5/79</u>						
0753	1009.5	62	59	240	3	clear/sunny
0857	1009.8	66	59	250	4	clear/sunny
0953	1009.1	71	60	230	5	clear/sunny
1652	1007.1	82	64	220	11	partly cloudy/haze
1751	1008.5	76	57	310	26	thunderstorm/heavy rain
<u>6/6/79</u>						
0752	1012.9	69	62	330	3	partly cloudy/haze
0850	1013.2	72	60	330	2	partly cloudy/haze
0951	1013.2	75	61	130	4	partly cloudy/haze
1650	1013.5	76	63	90	6	cloudy/light rain showers
1755	1013.5	74	64	80	8	cloudy/haze
<u>6/7/79</u>						
0751	1018.6	64	61	50	6	cloudy/fog
0850	1019.0	66	61	80	6	cloudy/fog
0952	1019.6	68	62	100	7	cloudy/haze
1651	1019.3	74	67	130	7	partly cloudy/light rain
1751	1019.3	78	69	140	7	cloudy/haze
<u>6/8/79</u>						
0753	1023.0	70	73	180	6	partly cloudy/haze
0851	1023.4	73	65	240	5	partly cloudy/haze
0950	1023.4	76	65	250	4	partly cloudy/haze