

REPORT NO. DOT-TSC-OST-72-1

PB 211 975

A COMMUNITY NOISE SURVEY OF MEDFORD, MASSACHUSETTS

NOISE ABATEMENT GROUP
TRANSPORTATION SYSTEMS CENTER
55 BROADWAY
CAMBRIDGE, MA 02142

AUGUST 1971
TECHNICAL REPORT

Available from the National Technical Information Service, Springfield, MA 01104
For the National Transportation Statistics Service, Washington, D.C. 20591

Prepared by
**NATIONAL TECHNICAL
INFORMATION SERVICE**
U.S. Department of Commerce
Springfield, MA 01104

Prepared for
**OFFICE OF NOISE ABATEMENT
DEPARTMENT OF TRANSPORTATION
WASHINGTON, D. C. 20591**

1. Report No. DOT-TSC-OST-72-1	7. Government Acquisition No.	2. Project's Coding No. PB-211 975
4. Title and Subtitle A Community Noise Survey of Medford, Massachusetts	8. Performing Organization Code OTM2	3. Report Date August 1971
7. Author(s) Noise Abatement Group	9. Performing Organization Name and Address Transportation Systems Center U.S. Department of Transportation 55 Broadway, Cambridge, MA 02142	5. Performing Organization Report No.
15. Demanding Agency Name and Address Office of Noise Abatement U.S. Department of Transportation Washington, D.C. 20591	16. Work Order No. OS-207	14. Sponsoring Agency Code TST-50
12. Funding Number	11. Contract or Grant No.	13. Type of Report and Period Covered February-May 1971
18. Abstract A noise measurement survey was conducted in Medford, Massachusetts, in order to assess the effect of transportation noise sources on the noise levels in a typical small city, and to obtain data to validate a mathematical simulation model developed for the prediction of community noise levels. Weekday measurements were made at 20 locations in the city. At five of these locations, measurements were taken for approximately 40 minutes each hour for an entire 24-hour period. At the remaining 15 locations, measurements were made for approximately one hour during the morning traffic rush hour, and for 40 hours at midday. This report of the noise measurement survey contains detailed tabulations of the noise levels measured, the history charts, noise level analyses, site descriptions, and other information pertinent to the evaluation of community noise levels. The overall average median noise level from all locations was 55.0 dBA for the morning rush hour, and 51.8 dBA for the midday period. The highest noise levels were measured near heavily traveled highways. Railroad traffic had no significant influence on the community noise levels, and aircraft influenced the overall noise levels only to a limited extent.	17. Key Words Noise Abatement, Transportation Noise, Community Noise Levels	
19. Security Class. of this report UNCLASSIFIED	20. Security Class. of this page UNCLASSIFIED	21. No. of Pages 605 594
	22. Price \$4.00	

PREFACE

This survey was sponsored by the Secretary of Transportation through his office of Noise Abatement. This office is under the direction of Mr. Charles R. Foster.

The survey was made during the period 25 February 1971 to 12 May 1971 to obtain noise data of a typical small city and to examine this data to determine the influence of transportation and nontransportation noise sources on overall community noise levels.

The following individuals at the Transportation Systems Center contributed significantly to the conduct of this survey and the preparation of this report: G. E. Byron, R. L. Mason, R. W. Quinn, E. J. Rickley, S. C. Skelber, and J. E. Wesler.

TABLE OF CONTENTS

	Page
INTRODUCTION	1
SURVEY PLAN	2
Community Selection	2
Selection of Measurement Sites	3
Time of Measurements	4
Measurements	5
Traffic Information	5
DISCUSSION	7
Twenty-four-hour Surveys	7
Morning Rush Hour and Midday Surveys	21
Aircraft Noise	24
CONCLUSIONS	26
APPENDIX A	A-1
APPENDIX B	B-1
APPENDIX C	C-1
APPENDIX D	D-1
APPENDIX E	E-1
APPENDIX F	F-1
APPENDIX G	G-1

LIST OF ILLUSTRATIONS

Figure	Page
1. Hourly Variation of Median (L50) Sound Levels for Five (5) Areas	14
2. Hourly Variation of Sound Levels 270 Ft. from Median Strip of Interstate Route 93	15
3. Hourly Variation of Sound Levels in a Commercial Area	16
4. Hourly Variation of Sound Levels in an Industrial Area	17
5. Hourly Variation of Sound Levels in a Residential Area	18
6. Hourly Variation of Sound Levels in a Wooded Reservation	19
A-1. Sound Measuring System - Mobile Noise Laboratory. Station	A-3
A-2. Sound Measuring System - Satellite Measuring Station	A-4
A-3. Data Reduction System	A-5
C-1. Time History Grid Location 6-3 April 22 1971 - 11:40 to 11:55.	C-2
C-2. Time History Grid Location 7-5 April 22 1971 - 11:40 to 11:55.	C-2
C-3. Time History Grid Location 7-9 April 27 1971 - 07:40 to 07:55.	C-3
C-4. Time History Grid Location 7-9 April 27 1971 - 07:40 to 07:55.	C-3
C-5. Time History Grid Location 4-6 April 30 1971 - 07:45 to 08:00.	C-4
C-6. Time History Grid Location 4-6 April 30 1971 - 07:45 to 08:00.	C-4
D-1. Mobile Noise Laboratory, Transportation Systems Center, Cambridge, Massachusetts.	D-2
D-2. Noise Analyzing Instrumentation Inside Mobile Noise Laboratory.	D-2
D-3. Hewlett Packard Model 3960 Tape Recorder and Wang 700 Series Advanced Programming Calculator Inside Mobile Laboratory	D-3
D-4. Microphone System Being Assembled by TSC Technician.	D-3

LIST OF ILLUSTRATIONS (CONT)

Figure	<u>Page</u>
D-5. Microphone System at Grid Location 3-5, Facing East.	D-4
D-6. Microphone System at Grid Location 4-7, Facing North.	D-4
D-7. Microphone System at Grid Location 6-4, Facing South.	D-5
D-8. Microphone System at Grid Location 8-2, Facing South.	D-5
D-9. Microphone System at Grid Location 10-3, Facing North.	D-6
D-10. Interstate Route 93 in Medford Facing South from a Lookout Tower Facing Grid.	D-6
G-1. Grid System Measurement Locations & Median Noise Levels.	G-7
G-2. Traffic Volumes on Main Traffic Routes in Medford.	G-3
G-3. Medford Traffic Control Zones.	G-4
G-4.	G-5

LIST OF TABLES

Table	<u>Page</u>
1. 24 HOUR SURVEY OF NOISE LEVELS.	8
2. 24 HOUR SURVEY OF NOISE LEVELS.	9
3. 24 HOUR SURVEY OF NOISE LEVELS.	10
4. 24 HOUR SURVEY OF NOISE LEVELS.	11
5. 24 HOUR SURVEY OF NOISE LEVELS.	12
6. 24 HOUR SURVEY OF NOISE LEVELS.	13
7. SUMMARY OF NOISE LEVELS.	22
8. A COMPARISON OF AVERAGE COMMUNITY NOISE LEVELS LOGAN RUNWAY 33/15R - ACTIVE AND NOT ACTIVE.	25
A-1. SYSTEM DYNAMIC RANGE.	A-7
F-1. TRAFFIC VOLUMES ON MAIN ROUTES IN MEDFORD.	F-2
F-2. ARITHMETIC MEAN NOISE LEVELS FOR THE COMMUNITY.	F-3
F-3. NOISE LEVELS MEASURED IN TRAFFIC ZONE 229.	F-4
F-4. NOISE LEVELS MEASURED IN TRAFFIC ZONE 230.	F-4
F-5. NOISE LEVELS MEASURED IN TRAFFIC ZONE 231.	F-5
F-6. NOISE LEVELS MEASURED IN TRAFFIC ZONE 232.	F-5
F-7. NOISE LEVELS MEASURED IN TRAFFIC ZONE 233.	F-6
F-8. NOISE LEVELS MEASURED IN TRAFFIC ZONE 234.	F-6
F-9. NOISE LEVELS MEASURED IN TRAFFIC ZONE 235.	F-7
F-10. NOISE LEVELS MEASURED IN TRAFFIC ZONE 236.	F-7
F-11. TRAFFIC VOLUMES NEAR SURVEY LOCATIONS.	F-8
F-12. NUMBER OF AIRCRAFT PRODUCING PEAK NOISE LEVELS IN EXCESS OF 50 dba.	F-23

LIST OF ABBREVIATIONS

TERM	ABBREVIATION	DEFINITION
A-Weighted Sound Level	dBA (A wt.)	Sound level obtained by measuring the sound pressure through a filter network having a frequency response (A-weight) conforming to American National Standards Institute (ANSI), S1.4, 1961.
Median Noise Level	L 50	Sound level (dBA) exceeded by 50% of total measurements.
10% Decile	L 10	Sound level (dBA) exceeded by 10% of total measurements.
90% Decile	L 90	Sound level (dBA) exceeded by 90% of total measurements.
Noise Pollution Level	L NP	A composite index (see Appendix E)

SUMMARY

Noise levels and other data obtained in the survey of Medford, Massachusetts are tabulated and summarized in this report. The average of the measured median noise levels for all locations was 55.0 dBA for the morning rush hour and 51.8 dBA for the midday period, for weekdays during the interval from 25 February to 12 May 1971.

The highest noise levels exist near heavily traveled highways. Railroad traffic had no significant influence on community ambient noise levels, while aircraft did influence the ambient community noise levels to a limited extent.

INTRODUCTION

During January 1971, in cooperation with the Office of Noise Abatement, Department of Transportation; the Transportation Systems Center (TSC) began measuring the ambient noise levels existing in a typical urban community. The information obtained from this survey is an assessment of the overall effect of transportation noise sources on the noise levels in a community, and will be used to aid in validating a mathematical simulation model of community noise, previously formulated by Serendipity, Incorporated, Arlington, Virginia, under Contract DOT-QS-A9-01B to the Office of Noise Abatement.

This report documents the results of that program of community noise measurement.

SURVEY PLAN

Community Selection

In order to include all possible effects of transportation noises, the community to be selected for a noise level survey should present the following characteristics:

- a. include at least one major highway
- b. include at least one railway
- c. be located under the flight path from a major airport
- d. be divisible into residential, commercial, and light industrial areas, with corresponding information describing traffic densities, land use, and population distributions.

The eastern Massachusetts region was studied initially for potential site selection, because of its proximity to Cambridge, Massachusetts, and the Transportation Systems Center. With this general area as a base, the Metropolitan Area Planning Council of Boston was contacted, and Land Use Maps for 1963 (the most recent available) were obtained for eastern Massachusetts. The Federal Aviation Administration at Logan International Airport provided flight path information, and the Massachusetts Department of Public Works provided locations of traffic counting stations, traffic volumes, and samples of information available describing land use and population distribution. The Boston and Maine Corporation, Penn Central Corporation, and the Massachusetts Bay Transportation Authority furnished information describing rail routes in current use.

Based on this information, the city of Medford, Massachusetts, was selected as well-suited for the survey because it met all of the selection criteria established for a suitable location. The limits of Medford are shown in detail in Figure G-1, Appendix C of this report. Medford is a city containing a land area of 5,800 acres, and a population (1970 census) of 63,500 people. Its population has been relatively stable since 1930, as evidenced from the previous census figures: 59,600 people in 1930; 63,200 in 1940; 65,700 in 1950; 64,300 in 1960, and 63,500 in 1970. Interstate Highway 93, running in a north-south direction, roughly bisects the city. Two commuter rail lines are present, one through the southeastern section and the second through the southwestern section of the city. The central business district is 5.5 miles northwest of Logan International Airport, and is

under the flight path of aircraft using Runway 15R-33L, the longest runway existing at Logan (10,090 feet in length). In addition to these features, Medford contains a large undeveloped wooded reservation, somewhat insulated from urban activities, within its boundaries.

Following the selection of Medford for the noise survey, personnel from the Transportation Systems Center met with the City Manager, Mr. James O. Nicholson, and the Mayor, the Honorable John J. McGlynn, to obtain their approval for the intended measurement program. Following official city approval, the City Planner, Mr. Robert Mayerson, furnished copies of all pertinent maps and city statistics.

Selection of Measurement Sites

Personnel, funding, time, and technical considerations dictated that three months could be allotted for carrying out the planned survey, and that measurements could reasonably be taken at approximately 50 locations throughout the city, allowing for probable weather and technical delays. To establish complete and uniform coverage of the city area, a rectilinear grid-line network, similar to a military grid concept, was applied. The grid was scaled to 2,200 feet between lines, and was superimposed on the map of Medford in a north-south, east-west orientation. Measurements could then be taken at each of the intersections of the grid-lines, to insure uniform coverage. For identification purposes, the grid lines were numbered from one to ten, proceeding west to east, and from one to nine, south to north. Thus, a grid location such as 6-4 would identify the intersection of the sixth north-south grid line (counting from the west) and the fourth east-west grid line (counting from the south). The grid arrangement is superimposed on the map of Medford shown in Figure G-1, Appendix G to this report.

The grid system described above located 51 potential measurement points within the city limits of Medford. After field examinations of the grid-line intersections, actual microphone locations were selected as close to the grid intersections as practical, depending on the physical environment and the desire to avoid unusual local noise sources. The actual locations selected are also marked on Figure G-1. No measurements were made at two of the grid locations (5-8 and 5-9) because access to those sites was impractical. Measurements were eventually made at the remaining 49 locations.

Time of Measurements

All measurements were taken on weekdays (Monday through Friday). To determine typical hourly variations in noise level with time of day, measurements were made over a 24-hour period at each of five locations in Medford. A different type of environment was selected for each of these five locations to provide a comparison of the noise characteristics measured for a broad range of land uses. The five locations selected for these 24-hour surveys were: an area near a major highway (Grid location 6-9); a commercial area (6-4); an industrial area (10-3); a residential area (3-5); and an undeveloped, wooded reservation (4-7).

Measurements at the remaining 44 locations throughout the city were made only at two periods during weekdays - the morning traffic rush hour, and midday. The morning measurements were made for periods of 40 to 60 minutes, centered at approximately 8:00 AM. This time coincided with the maximum morning traffic volume on Interstate Route 93 on weekdays through Medford. The midday measurements were taken for similar lengths of time, centered approximately at noon.

For convenience in identifying each of the measurement periods and analyzing its results, the measurement runs were assigned mnemonic codes. Each run was identified in accordance with the following coding scheme:

- An initial number, indicating the consecutive sequence of measurements at that grid location.
- The letter "A" if the data were obtained from analyzing a magnetic tape recording of the noise measurement; otherwise, the data for that run were obtained by analyzing directly the input noise signal at the site.
- The letter "P" indicates measurements were made by a satellite mobile unit, not the primary noise-measurement van. This also implies that the data were recorded on magnetic tape, since the smaller satellite mobile unit did not include sufficient instrumentation for direct analysis of the measured data.
- The letter "R" indicates redistributed data, implying that the final analysis was a composite of two analyses obtained at two different recording instrumentation gain settings, or that the instrumentation malfunctioned briefly during the measurement run and the data collected during the malfunction period was deleted.

Thus, the identification designation "LAPR of 2" indicates that the data were obtained from the first of two runs at the location associated with this identification, that the data were obtained by analyzing a magnetic tape recording made with the smaller satellite mobile unit, and that the final analysis was corrected either by combining two analyses using different gain settings or by deleting data taken during a period of instrument malfunction. For a detailed explanation of the measurement, calibration, and data reduction systems see Appendix A.

Measurements

As described in the preceding sections, measurements were taken at 49 locations in the city of Medford, for periods of 40 to 60 minutes for each run. An initial analysis, either in real time directly from the microphone signal or later from recorded magnetic tape, was made for each run as follows:

- a. the rms (root-mean square) value of the A-weighted sound pressure level was measured four times-per-second, using a one-eighth-second period of integration for each value;
- b. the measured values were sorted in one-decibel increments, using a portable programmable computer, in order to obtain dBa values versus the number of occurrences during the run.
- c. the sorted values of dBa versus number of occurrences were programmed into a time-shared computer at the Transportation Systems Center (TSC) to produce the individual analyses contained in Appendix B of this report.

For each measurement run, a histogram presentation of dBa value versus frequency of occurrence and a cumulative distribution curve of dBa value versus frequency of occurrence were plotted by computer, while pertinent values were calculated for the number of samples during the run; average noise value (dBa) and standard deviation, energy mean, range of values measured, median, selected percentiles and deciles, and the Noise Pollution Level. A complete description of these calculated values is contained in Appendix E to this report.

Traffic Information

Traffic volumes and vehicle types were monitored for streets and highways close to measurement points used for this report. This information is contained in Table F-11, Appendix F. Major routes and average daily traffic count information obtained from

latest published sources are recorded in Figure G-2, Appendix G, and Table F-1, Appendix F. Aerial photographs were also taken during a morning rush hour and a midday period, for reference purposes. Figure G-3, Appendix G, displays the area breakdown by traffic zone, and Tables F-2 through F-10 summarize information obtained by traffic zone. These data are recorded in this report for completeness, and will be used in future developmental work with a mathematical simulation model for predicting community noise levels.

DISCUSSION

Twenty-four-hour Surveys

The results of the five 24-hour surveys taken in the city of Medford are summarized in Tables 1 through 6 and Figures 1 through 6.

Grid location 6-9 was chosen to represent conditions existing near a major highway (Interstate Route 93). The average daily traffic flow on this highway is 65,000 vehicles per day. The microphone was located on a small hill, approximately 20 feet above and 270 feet away from the highway centerline. Figure 2 displays the variations in the measured values of the median noise level, and the 10 and 90 percentile levels, with the time of day at this location. Broad peaks in these values at 8:00 AM and 5:00 PM indicate the effect of morning and evening rush hour traffic volume on I-93. Relatively high values were measured through most of the day, with the exception of the very early morning hours, reflecting the corresponding traffic conditions. The average value of the hourly median noise levels at this location was 61.7 dBA over the 24-hour period.

The site selected as representative of a commercial area (Grid 6-4) was an old cemetery, which is now completely surrounded by Medford's central business district. Figure 3 displays the hourly median, 10, and 90 percentile noise levels at this location. These values reflect the relatively continuous activity during a weekday in a commercial area, and the relative inactivity during the early morning hours. The unexpected lull in noise levels around 9:AM apparently represents the decrease in area activity following the morning rush hour and prior to the opening of area stores at 9:30 AM. The average median hourly noise level over the 24-hour period in this commercial area was 58.0 dBA.

The industrial area measurement site (Grid 10-3) was located in the southeastern section of Medford, near truck terminals and a rail line with a freight spur line. Figure 4 displays the hourly values of median, 10 and 90 percentile noise levels at this location. The typically high noise levels during the morning traffic rush hour, and low noise levels during early morning hours are present here, but the influence of individual vehicular noise sources easily overwhelms the expected ambient levels. A diesel-powered truck, idling at a nearby freight yard added approximately 6 dBA to the normally quiet noise levels from 3:00 to 4:00 AM. The intermittent noise

TABLE 1. 24 HOUR SURVEY OF NOISE LEVELS

GRID	DATE	RUN NO.	TIME FROM--TO	L10 DBA	L50 DBA	L90 DBA	LNP	RANGE DBA
6-9	3/29	1A	0647-0729	68.0	65.6	63.4	70.6	21
6-9	3/29	2	0730-0812	68.7	66.0	63.8	71.2	17
6-9	3/29	3	0845-0927	67.2	63.6	60.2	71.4	23
6-9	3/29	4	0930-1012	66.6	62.8	59.5	70.7	22
6-9	3/29	5	1045-1127	66.4	62.5	59.0	71.1	26
6-9	3/29	6	1130-1212	66.5	62.1	58.4	71.9	30
6-9	3/29	7	1245-1327	65.8	62.1	58.8	69.9	24
6-9	3/29	8	1331-1413	66.2	62.8	59.9	70.6	28
6-9	3/29	9	1445-1527	68.3	64.7	61.7	73.1	27
6-9	3/29	10	1530-1612	68.0	65.3	62.8	70.8	20
6-9	3/29	11	1645-1727	69.0	66.4	64.2	73.2	29
6-9	3/29	12	1731-1828	68.4	65.8	63.6	71.1	23
6-9	3/29	13	1845-1927	66.5	63.6	60.8	69.7	22
6-9	3/29	14A	1936-2020	64.8	61.5	58.5	68.6	22
6-9	3/29	15A	2045-2135	65.0	61.7	58.0	69.8	29
6-9	3/29	16	2134-2217	65.3	61.7	58.1	69.5	23
6-9	3/29	17	2245-2327	65.4	61.5	57.6	70.1	26
6-9	3/29	18	2333-0015	65.7	61.5	56.5	72.0	32
6-9	3/30	19	0045-0127	63.5	56.7	49.0	73.9	34
6-9	3/30	20	0133-0215	63.2	55.7	46.5	75.0	35
6-9	3/30	21	0249-0331	62.1	53.0	44.2	74.7	42
6-9	3/30	22A	0336-0420	63.0	54.2	46.9	74.1	36
6-9	3/30	23	0445-0527	64.8	58.6	52.1	73.2	35
6-9	3/30	24	0533-0615	66.0	61.8	57.4	71.3	28

TABLE 2. 24 HOUR SURVEY OF NOISE LEVELS

GRID	DATE	RUN NO.	TIME FROM--TO	L10 DBA	L50 DBA	L90 DBA	LNP	RANGE DBA
6-4	5/10	1	1110-1150	65.1	61.2	58.3	68.9	24
6-4	5/10	2	1210-1250	64.4	60.8	58.1	68.2	23
6-4	5/10	3	1310-1350	64.2	60.9	58.3	67.5	25
6-4	5/10	4	1410-1450	65.0	60.7	58.1	69.0	27
6-4	5/10	5	1510-1550	64.5	61.0	58.7	67.9	21
6-4	5/10	6	1610-1650	64.7	60.9	58.6	69.4	21
6-4	5/10	7	1710-1750	64.7	61.5	59.2	68.4	22
6-4	5/10	8	1810-1850	63.2	59.5	56.7	67.5	26
6-4	5/10	9	1910-1950	62.6	58.8	56.6	66.2	18
6-4	5/10	10	2010-2050	62.5	58.5	55.7	68.1	27
6-4	5/10	11	2110-2150	61.8	58.2	55.4	66.0	26
6-4	5/10	12	2210-2250	61.7	57.2	54.3	66.6	24
6-4	5/10	13	2310-2350	59.3	56.0	52.5	65.1	26
6-4	5/11	14	0010-0050	59.0	53.8	48.7	66.3	30
6-4	5/11	15	0110-0150	56.8	51.0	47.0	64.2	28
6-4	5/11	16	0210-0250	56.3	49.4	45.3	64.1	28
6-4	5/11	17	0311-0351	54.7	49.0	45.7	59.9	27
6-4	5/11	18	0410-0450	62.2	52.6	45.6	73.3	31
6-4	5/11	19	0510-0550	61.7	57.2	52.1	68.7	28
6-4	5/11	20	0610-0650	63.8	60.3	57.1	67.8	28
6-4	5/11	21	0710-0750	66.5	63.0	60.7	69.9	22
6-4	5/11	22	0810-0850	66.0	61.0	57.5	71.8	27
6-4	5/11	23	0910-0950	63.9	58.8	55.8	68.8	22
6-4	5/11	24	1010-1050	65.2	59.5	56.3	70.4	22

TABLE 3. 24 HOUR SURVEY OF NOISE LEVELS

GRID	DATE	RUN NO.	TIME FROM--TO	L10 DBA	L50 DBA	L90 DBA	LNP	RANGE DBA
10-3	3/10	1AR	0648-0732	62.9	55.4	50.1	80.8	45
10-3	3/10	2	0740-0825	67.7	56.3	52.5	89.3	44
10-3	3/10	3	0857-0942	67.4	55.6	51.4	85.8	45
10-3	3/10	4	0946-1032	65.7	55.1	51.8	78.0	41
10-3	3/10	5	1059-1145	65.3	53.1	49.3	78.1	43
10-3	3/10	6	1152-1234	56.8	51.0	48.9	68.9	41
10-3	3/10	7	1258-1340	69.0	52.4	48.6	86.8	38
10-3	3/10	8	1346-1428	56.6	51.5	49.2	67.8	44
10-3	3/10	9R	1452-1534	59.8	51.4	48.1	81.9	55
10-3	3/10	10R	1540-1622	65.4	55.3	48.8	91.7	51
10-3	3/10	11AR	1647-1729	80.8	57.6	47.5	110.8	61
10-3	3/10	12AR	1739-1821	62.2	51.8	47.5	88.2	49
10-3	3/10	13	1842-1927	58.1	53.0	49.9	68.2	44
10-3	3/10	14	1935-2017	59.1	49.8	48.0	78.9	45
10-3	3/10	15	2044-2126	55.4	50.6	48.5	66.3	44
10-3	3/10	16	2133-2216	54.9	50.1	48.2	68.3	45
10-3	3/10	17	2240-2322	53.7	49.0	47.0	63.7	42
10-3	3/10	18	2328-0010	52.6	47.9	45.0	63.1	44
10-3	3/11	19	0045-0128	50.2	45.3	43.5	55.6	26
10-3	3/11	20	0148-0230	49.7	44.3	42.2	55.3	30
10-3	3/11	21	0253-0332	54.8	50.8	49.1	59.1	20
10-3	3/11	22	0345-0428	54.0	48.9	44.7	61.8	33
10-3	3/11	23R	0452-0535	47.5	45.1	43.6	65.8	46
10-3	3/11	24	0553-0636	54.3	51.2	49.1	75.8	44

TABLE 4. 24 HOUR SURVEY OF NOISE LEVELS

GRID	DATE	RUN NO.	TIME FROM--TO	L10 DBA	L50 DBA	L90 DBA	LNP	RANGE DBA
3-5	3/30	1	0745-0827	59.0	50.1	47.1	73.5	45
3-5	3/30	2	0838-0924	57.7	50.0	46.6	68.2	39
3-5	3/30	3	0945-1027	57.0	49.8	46.2	78.2	49
3-5	3/30	4	1037-1123	63.4	50.9	46.4	85.9	50
3-5	3/30	5	1145-1227	58.0	48.8	45.0	70.9	41
3-5	3/30	6	1232-1314	57.3	50.2	45.6	68.5	45
3-5	3/30	7	1345-1427	52.7	49.8	46.3	68.8	47
3-5	3/30	8	1432-1517	61.9	53.0	47.6	79.7	48
3-5	3/30	9	1545-1627	62.9	50.6	45.4	83.6	51
3-5	3/30	10	1636-1718	66.0	52.9	47.0	85.7	49
3-5	3/30	11	1745-1827	59.0	49.5	44.8	76.9	52
3-5	3/30	12A	1835-1917	57.9	47.9	44.1	72.4	46
3-5	3/30	13	1959-2041	56.1	45.1	41.7	68.1	39
3-5	3/30	14	2046-2129	60.2	46.3	42.0	73.7	39
3-5	3/30	15A	2149-2231	51.7	43.6	42.0	68.3	41
3-5	3/30	16A	2236-2319	47.8	43.6	41.7	57.7	32
3-5	3/30	17	2345-0027	48.5	39.6	37.8	61.1	34
3-5	3/31	18	0030-0116	39.9	37.5	36.0	48.1	33
3-5	3/31	19	0145-0229	39.1	36.5	35.2	52.1	37
3-5	3/31	20A	0237-0319	37.6	36.1	35.1	39.2	22
3-5	3/31	21	0345-0431	38.6	36.5	35.2	40.8	23
3-5	3/31	22	0437-0520	44.6	38.6	36.5	52.8	35
3-5	3/31	23A	0545-0622	48.5	44.0	42.6	59.5	33
3-5	3/31	24A	0645-0727	58.5	46.0	44.0	73.2	38

TABLE 5. 24 HOUR SURVEY OF NOISE LEVELS

GRID	DATE	RUN NO.	TIME FROM--TO	L10 DBA	L50 DBA	L90 DBA	LNP	RANGE DBA
4-7	5/11	1	1241-1321	53.5	39.8	38.0	68.1	42
4-7	5/11	2	1340-1420	44.9	40.4	38.9	57.3	35
4-7	5/11	3A	1440-1520	58.3	42.4	40.4	77.0	41
4-7	5/11	4	1545-1625	51.7	44.1	41.9	59.4	32
4-7	5/11	5	1650-1730	47.8	43.7	41.9	54.9	30
4-7	5/11	6	1746-1820	47.5	42.5	40.9	54.4	26
4-7	5/11	7	1840-1920	52.5	45.0	43.1	62.1	31
4-7	5/11	8	1940-2020	57.8	52.6	46.1	68.7	33
4-7	5/11	9	2042-2122	57.2	55.3	53.2	58.9	26
4-7	5/11	10	2140-2220	51.9	49.3	46.6	54.4	16
4-7	5/11	11	2240-2320	48.3	43.9	41.7	58.5	32
4-7	5/11	12	2340-0020	44.6	41.9	40.2	46.8	16
4-7	5/12	13	0047-0127	43.6	40.0	37.6	46.8	21
4-7	5/12	14	0140-0220	42.2	38.0	35.1	45.7	19
4-7	5/12	15	0249-0329	41.6	36.9	33.7	45.7	19
4-7	5/12	16	0340-0420	42.9	37.9	34.6	48.1	27
4-7	5/12	17	0440-0523	53.5	43.6	39.6	65.3	43
4-7	5/12	18	0540-0620	48.5	43.1	40.2	56.5	40
4-7	5/12	19	0640-0720	50.2	46.8	45.1	54.5	24
4-7	5/12	20	0740-0820	60.5	49.6	46.6	70.7	29
4-7	5/12	21	0840-0920	53.3	45.1	43.0	62.7	30
4-7	5/12	22	0940-1020	56.8	46.0	42.4	69.3	40
4-7	5/12	23	1047-1120	52.9	44.2	41.7	69.7	40
4-7	5/12	24	1140-1220	57.0	44.2	41.5	71.0	40

TABLE 6. 24-HOUR ARITHMETIC MEAN NOISE LEVELS

GRID	DATE 1971	L10 DBA	L50 DBA	L90 DBA	LNP	AVERAGE RANGE DBA
3-5	3/30-31	53.7	46.0	42.6	67.0	40
4-7	5/11-12	50.8	44.0	41.4	59.4	30.5
6-4	5/10-11	62.5	58.0	54.7	67.7	25.1
6-9	3/29-30	66.0	61.7	57.5	71.6	27.3
10-3	3/10-11	59.3	51.4	48.0	74.6	42.5

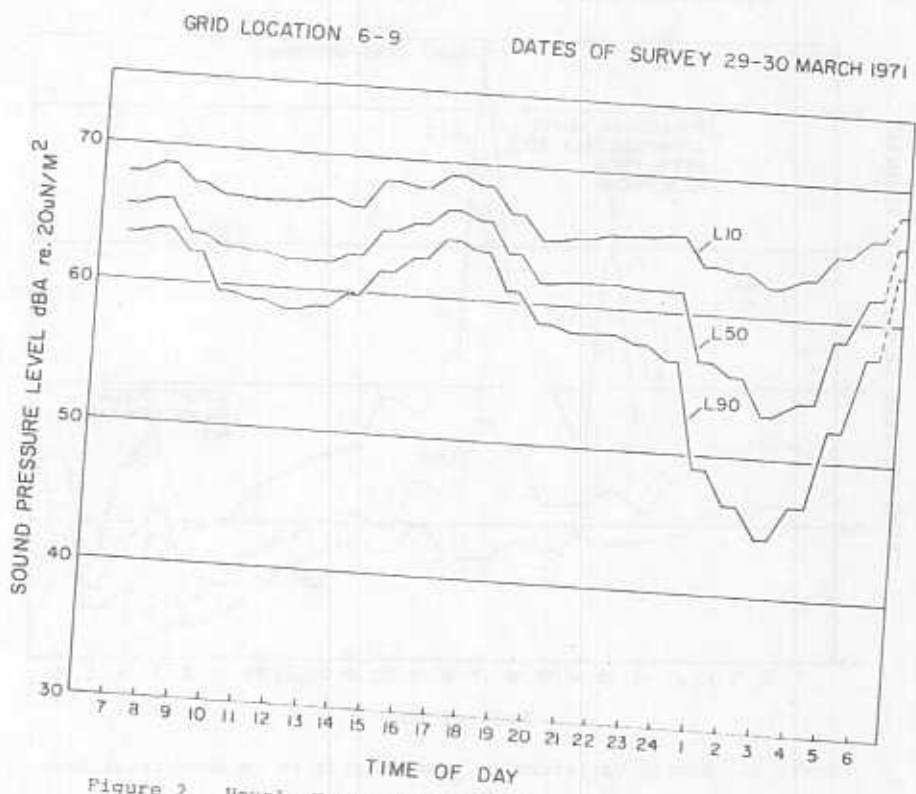


Figure 2. Hourly Variation of Sound Levels 270 Ft. From Median Strip of Interstate Route 43

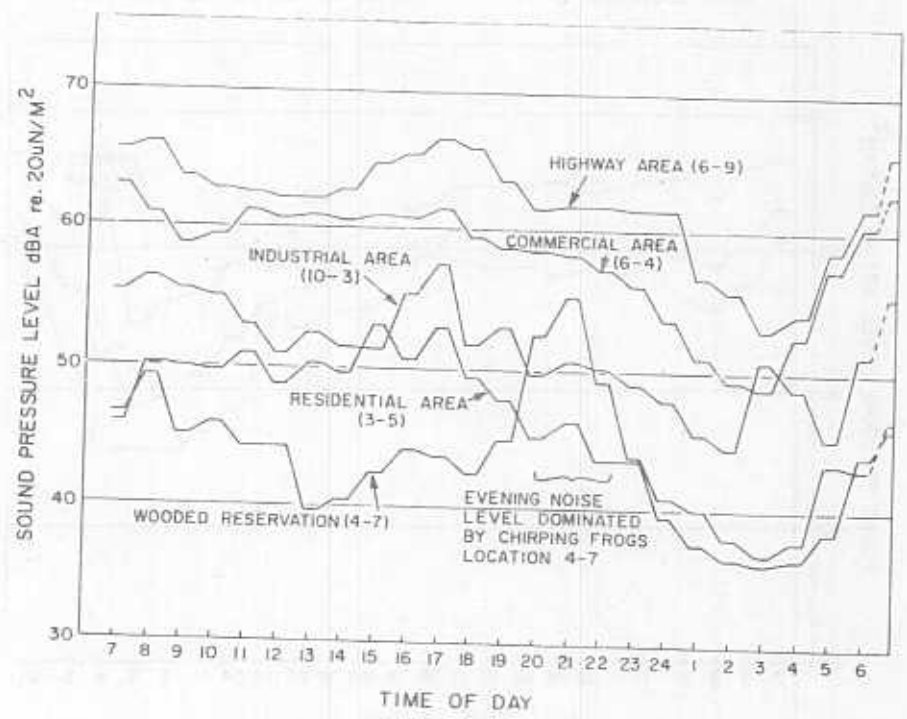


Figure 1. Hourly Variation of Median (L50) Sound Levels for Five (5) Areas

-11-

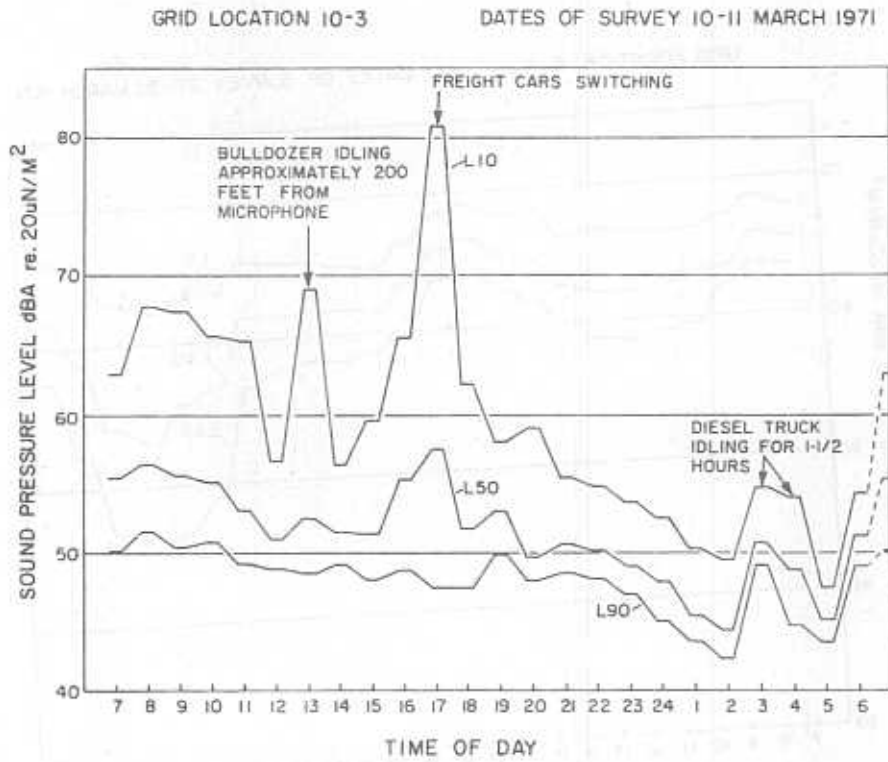


Figure 4. Hourly Variation of Sound Levels in an Industrial Area

-16-

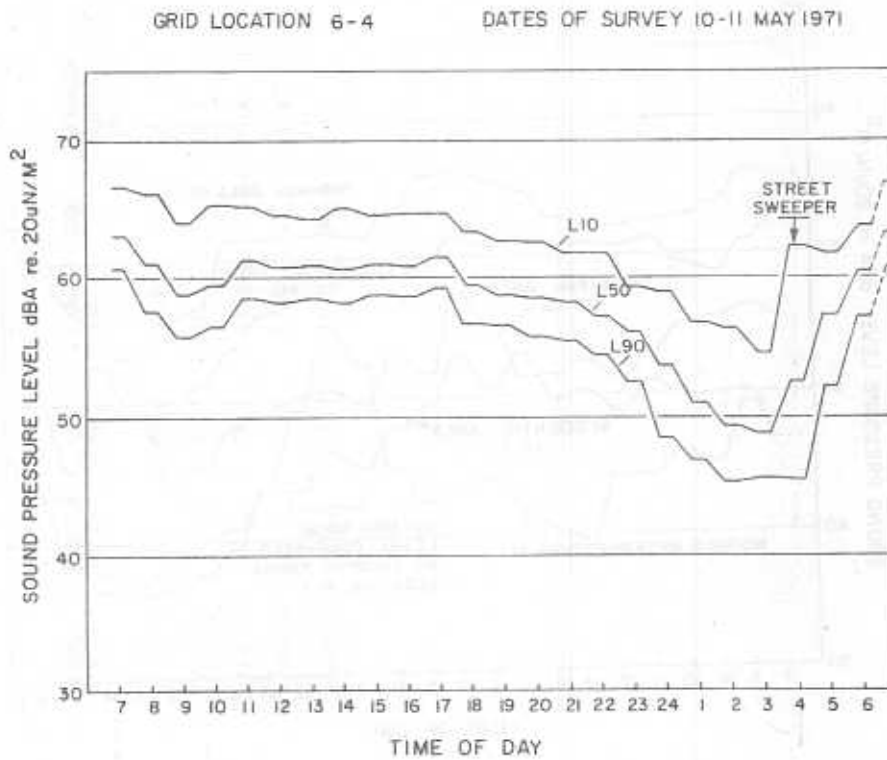


Figure 3. Hourly Variation of Sound Levels in a Commercial Area

GRID LOCATION 4-7

DATES OF SURVEY 11-12 MAY 1971

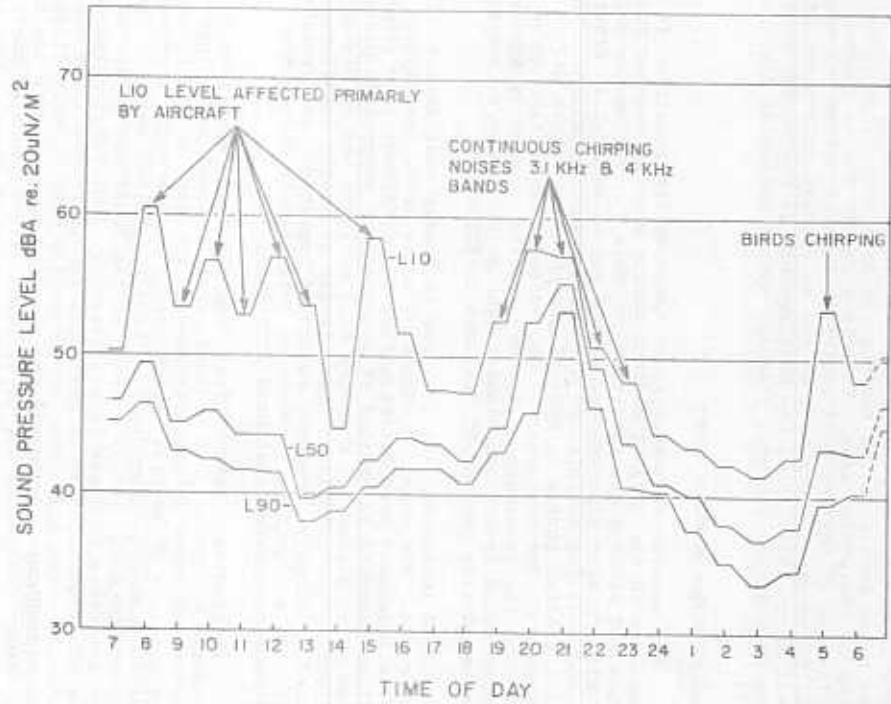


Figure 6. Hourly Variation of Sound Levels in a Wooded Reservation

GRID LOCATION 3-5

DATES OF SURVEY 30-31 MARCH, 1971

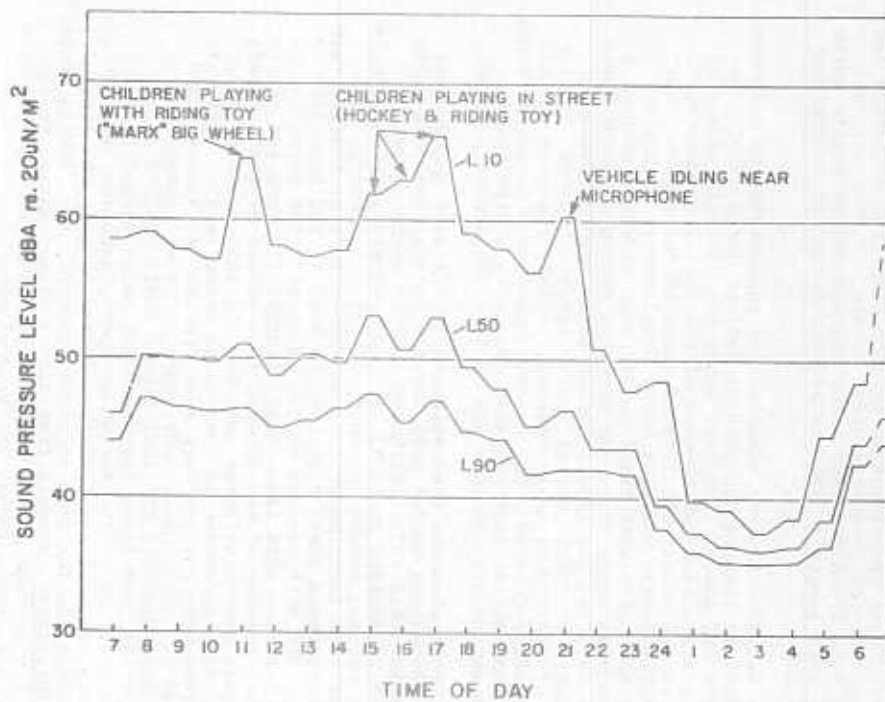


Figure 5. Hourly Variation of Sound Levels in a Residential Area

of switching freight cars raised the median noise level approximately 5 dBA between 4:00 and 5:00 PM, while increasing the L10 level roughly 25 dBA. A nearby bulldozer produced similar effects of somewhat lesser magnitude around 1:00 P.M. Thus, individual operations associated with transportation can impact severely on community noise levels - a fact painfully aware to most urban dwellers. The average median hourly noise level at this location over the 24-hour period of measurement was 51.4 dBA.

The residential area selected for representative measurement was located in the western part of Medford (Grid 3-5). The microphone was placed five feet above the sidewalk of a residential street, along which most of the dwellings were multi-stories wooden structures located close to the street. The hourly noise levels measured here, displayed in Figure 5, indicate no appreciable traffic rush hour effect. Rather, a uniformly high noise level was measured during daylight hours, with the expected low levels during early morning hours. Superimposed on these "normal" noise levels, however, are the effects of individual noise sources, in this instance not all transportation-related. The average hourly median noise level in this residential area was 46.0 dBA, with a high value of 53.0 dBA around 3:00 PM to a low of 36.1 dBA around 3:00 AM.

The most pleasant area selected for 24-hour measurement was an undeveloped wooded area located in the Middlesex Fells Reservation (Grid 4-7). Although located approximately one mile from Interstate Route 93, and approximately one-half mile from the nearest street (Winthrop Street), the hourly noise levels at this location still show some effect of traffic rush hours, with broad peaks from 6:00 to 9:00 AM and from 3:00 to 6:00 PM. The most obvious events which affected noise levels at this location were individual aircraft flyovers and nearby wildlife. Because of the intermittent nature of the aircraft noise, this source affected only the L10 values and produced insignificant increases in the median noise levels. The wildlife noises when present were more continuous, however, and increased all three noise indicators. The microphone was located approximately 200 feet from a small pond, and the "chirping" of many frogs dominated the noise values between 7:00 and 10:00 PM. (The Bureau of Sport Fisheries and Wildlife, U. S. Department of the Interior, indicated that the type of frog responsible for this noise was probably the "Spring Peeper", or Hyla-crucifer, a small frog with a cross marking on its back.) The average hourly median noise level at this location was 44.0 dBA, the quietest location measured.

The hourly median noise levels for all five locations at which 24-hour measurements were taken are plotted in Figure 1

for comparison. In general, the chart indicates decreasing ambient noise levels in the highway, commercial, industrial, residential, and wooded areas, respectively. The frog chirping event is considered to be a seasonal anomaly only. The nighttime noise levels in the residential area were slightly below those in the wooded area. This is probably due to seasonal variations in neighborhood activity, however, since the residential measurements were made on the relatively cold night of 30-31 March 1971, while the measurements in the wooded area were made during the more pleasant spring period of 11-12 May 1971.

Morning Rush Hour and Midday Surveys

The results of measurements taken at the remaining 44 locations in the city of Medford during weekday morning rush hours and middays are tabulated in Table 7. The median noise levels are also superimposed on the map of Medford in Figure G-1, Appendix G, for correlation with measurement locations. The major traffic routes in Medford are shown on Figure G-2, Appendix G, for comparison. The correlation of high noise level to the proximity of highway traffic is readily apparent. Median noise levels are highest near major highways, and are highest during periods of heaviest traffic flow.

Grid locations 3-5, 5-2, and 10-3 were near active railroads. The measured values of noise level descriptors at these locations were not significantly different from other values measured in Medford at locations of comparable distance from major highways. Commuter rail activity had no discernible effect on the calculated noise levels at nearby locations. As noted previously, however, switching operations for freight cars had a significant effect on noise levels during the 24-hour measurements at Grid location 10-3.

To provide a better "feel" for the noise environment measured in the city of Medford, graphic level recordings of A-weighted sound levels with respect to time (a Time History) for portions of several measurement runs are shown in Figures C-1 through C-6, Appendix C. These recordings show the general background noise levels present at the locations indicated, and the increases in these levels caused by individual noise sources. The short-duration noise peaks are caused primarily by road vehicles which are either exceptionally loud or very close to the microphone. Spikes in the recorded noise levels are caused by impact noises nearby, or by local effects such as curious children speaking or shouting near the microphone. Peak noise levels exhibiting longer rise and fall times (up to two minutes) are caused by aircraft flying over the measurement site. The relatively high background noise levels of Figures C-1 through

TABLE 7. SUMMARY OF NOISE LEVELS

GRID	DATE	RUN NO.	TIME FROM--TO	L10 DBA	L50 DBA	L90 DBA	LNP	RANGE DBA
1-7	3/25	1A	0730-0816	76.6	62.5	52.7	93.8	39
1-7	3/25	2A	1130-1212	71.2	53.4	47.8	88.7	40
2-4	3/19	1A	0730-0830	60.8	58.1	55.2	64.5	25
2-4	3/19	2	1130-1230	58.9	55.2	50.6	64.3	31
2-5	3/26	1	0730-0830	59.9	47.7	43.9	78.5	50
2-5	3/26	2	1130-1230	53.8	42.9	38.1	73.1	45
2-6	4/28	1APR	0735-0818	53.1	48.7	46.2	58.0	22
2-6	4/28	2AP	1135-1227	49.0	43.9	41.0	55.3	28
2-7	4/28	1	0730-0830	58.0	54.3	50.9	62.1	27
2-7	4/28	2	1130-1230	53.9	47.8	43.2	61.3	33
3-4	4/16	1AP	0730-0830	56.3	51.5	49.0	61.3	28
3-4	4/16	2AP	1130-1230	57.3	49.8	46.7	65.5	32
3-5	3/30	1	0745-0827	59.0	50.1	47.1	73.5	45
3-5	3/30	5	1145-1227	58.0	48.8	45.0	70.9	41
3-6	4/26	1AP	0735-0825	64.8	51.5	46.1	78.6	34
3-6	4/26	2AP	1135-1225	60.0	46.6	39.6	78.0	45
3-7	4/26	1	0730-0830	63.4	52.9	48.3	73.9	37
3-7	4/26	2	1137-1232	55.6	48.1	42.1	69.0	49
4-3	4/20	1AP	0734-0834	64.6	51.1	47.7	77.9	43
4-3	4/20	2AP	1130-1230	54.6	47.8	43.7	66.9	39
4-4	4/16	1	0730-0830	65.7	57.6	50.5	76.1	33
4-4	4/16	2	1135-1235	62.4	53.6	44.4	76.1	47
4-5	4/21	1AP	0730-0824	64.1	49.2	44.9	78.6	36
4-5	4/21	2AP	1130-1224	62.7	50.0	45.4	75.9	42
4-6	4/30	1	0730-0830	60.7	53.0	49.7	70.3	36
4-6	4/30	2	1130-1230	55.4	50.7	47.1	70.3	46
4-7	5/12	20	0740-0820	60.5	49.6	46.6	70.7	29
4-7	5/12	24	1140-1220	57.0	44.2	41.5	71.0	40
5-2	4/23	1APR	0730-0830	63.6	56.3	51.5	88.6	48
5-2	4/23	2AP	1130-1230	60.1	53.0	49.1	74.1	44
5-3	4/20	1	0730-0830	65.1	53.2	50.1	75.7	33
5-3	4/20	2	1130-1230	54.7	48.4	45.8	69.2	48
5-4	4/23	1	0731-0831	62.7	54.8	51.4	70.8	30
5-4	4/23	2	1130-1230	60.8	54.4	51.3	69.1	36
5-5	4/21	1	0731-0831	58.6	46.7	43.7	74.9	37
5-5	4/21	2	1130-1230	59.0	47.7	44.5	72.2	37
5-6	4/30	1APR	0735-0825	60.2	43.0	40.8	77.8	42
5-6	4/30	2AP	1138-1227	55.9	43.5	37.5	74.5	45
5-7	2/25	1A	0730-0830	60.6	53.5	48.5	70.2	37
5-7	2/25	2A	1130-1230	63.3	54.6	48.5	72.7	40
5-8	NO DATA - ACCESS TO LOCATION IMPRACTICAL							
5-9	NO DATA - ACCESS TO LOCATION IMPRACTICAL							
6-1	3/2	1A	0735-0835	60.6	51.1	46.6	73.4	39
6-1	3/2	2A	1130-1230	59.3	47.0	43.1	71.7	40
6-2	3/9	1A	0730-0830	65.6	55.5	50.6	85.1	52
6-2	3/9	2	1130-1230	62.7	52.5	48.7	81.3	46
6-3	4/22	1	0730-0830	61.5	55.1	52.7	68.2	31
6-3	4/22	2	1130-1230	60.8	52.7	49.2	70.0	33

TABLE 7. SUMMARY OF NOISE LEVELS (Cont)

GRID	DATE	RUN NO.	TIME FROM--TO	L10	L50	L90	LNP	RANGE
				DBA	DBA	DBA		DBA
6-4	5/11	22	0810-0850	66.0	61.0	57.5	71.8	27
6-4	5/10	1	1110-1150	65.1	61.2	58.3	68.9	24
6-5	3/24	1A	0730-0830	74.3	65.4	56.8	86.4	40
6-5	3/24	2A	1130-1230	71.3	59.6	55.0	82.4	24
6-6	4/15	1	0730-0830	56.8	48.4	45.1	60.3	40
6-6	4/15	2	1130-1230	57.0	48.0	42.7	75.7	50
6-7	5/7	1	0730-0830	61.3	53.1	49.1	70.2	30
6-7	5/7	2	1130-1230	58.5	48.8	44.5	68.9	37
6-8	6/24	1AP	0730-0830	59.3	55.1	52.6	66.0	30
6-8	6/24	2AP	1130-1230	60.0	52.5	49.2	69.3	33
6-9	3/29	2	0730-0812	68.7	66.0	63.8	71.2	17
6-9	3/29	6	1130-1212	66.5	62.1	58.4	71.9	30
7-1	3/8	1AR	0730-0830	61.0	48.8	45.5	74.2	43
7-1	3/8	2A	1130-1230	58.2	48.3	44.6	69.7	34
7-2	3/16	1	0730-0830	67.8	61.3	58.4	79.5	35
7-2	3/16	2AP	1130-1230	63.3	58.3	55.0	69.5	35
7-3	5/5	1	0730-0830	66.5	61.9	59.1	72.0	25
7-3	5/5	2	1130-1230	65.7	60.6	57.7	73.2	32
7-4	3/23	1R	0736-0836	70.8	60.0	53.3	84.6	41
7-4	3/23	2A	1130-1230	63.0	51.0	46.8	76.8	38
7-5	4/22	1AP	0730-0830	62.4	57.2	54.1	68.5	28
7-5	4/22	2AP	1131-1231	60.9	55.4	52.2	70.6	41
7-6	4/15	1AP	0730-0812	72.3	62.5	57.5	82.7	39
7-6	4/15	2AP	1130-1230	69.8	56.7	49.4	84.7	47
7-7	4/27	1	0730-0830	61.9	53.1	50.4	79.3	42
7-7	4/27	2	1130-1230	54.1	46.6	42.6	62.9	26
7-8	3/17	1A	0730-0830	59.9	56.5	54.5	65.1	25
7-8	3/17	2AR	1130-1230	56.5	51.8	49.0	69.5	40
7-9	4/27	1AP	0735-0825	61.2	54.0	51.5	70.6	33
7-9	4/27	2AP	1137-1227	50.8	45.4	41.9	57.6	31
8-2	4/14	1	0740-0840	76.5	71.6	67.7	81.7	28
8-2	4/14	2	1130-1230	75.2	69.8	65.4	81.8	35
8-3	5/25	1AR	0730-0820	64.4	57.1	50.3	75.4	35
8-3	5/25	2	1150-1227	64.3	56.8	51.3	74.6	37
8-4	4/13	1	0730-0830	58.7	50.6	47.7	67.6	37
8-4	4/13	2	1130-1230	60.9	47.9	44.3	76.3	43
8-5	2/26	1A	0730-0830	61.7	55.4	52.3	68.5	29
8-5	2/26	2A	1130-1230	59.7	51.9	48.1	67.5	31
8-6	3/1	1A	0730-0830	55.2	47.8	45.1	66.7	36
8-6	3/1	2A	1130-1230	53.5	44.8	41.8	64.6	37
8-7	4/6	1	0730-0830	56.0	50.4	47.5	68.4	43
8-7	4/6	2	1130-1230	52.2	47.1	44.7	66.6	45
8-8	4/5	1	0733-0833	62.0	50.8	46.2	75.0	38
8-8	4/5	2	1130-1230	58.8	48.1	42.3	73.3	43
9-2	4/14	1AP	0801-0843	72.0	66.8	64.4	78.2	27
9-2	4/14	2AP	1135-1235	69.1	65.1	62.5	73.6	32
9-3	5/6	1	0730-0830	61.7	50.2	45.2	75.8	45
9-3	5/6	2	1130-1230	59.1	47.4	43.2	80.0	50
10-2	3/3	1A	0730-0830	73.5	66.6	62.6	81.4	32
10-2	3/3	2A	1130-1230	73.0	67.0	63.3	80.4	33
10-3	3/10	2	0740-0825	67.7	56.3	52.5	89.3	44
10-3	3/10	6	1152-1234	56.8	51.0	48.0	68.0	41

Reproduced from
best available copy.

TABLE 8. A COMPARISON OF AVERAGE COMMUNITY NOISE LEVELS
LOGAN RUNWAY 33L/15R - ACTIVE AND NOT ACTIVE

	MORNING RUSH HOUR (0730 AM-0830 AM)						MIDDAY (1130AM-1230 PM)					
	NO. OF MEAS. PTS.	L10 DBA	L50 DBA	L90 DBA	LNP	RANGE DBA	NO. OF MEAS. PTS.	L10 DBA	L50 DBA	L90 DBA	LNP	RANGE
Numerical Average Runway 33L/15R IN Use	32	63.8	55.6	51.6	75.1	36	27	60.7	52.0	47.4	73.1	40
Runway 33L/15R NOT in Use	17	62.6	53.9	50.3	72.8	33	22	59.5	51.6	48.1	70.3	37
Community Mean*	49	63.4	55.0	51.1	74.3	35	40	60.2	51.8	47.7	71.8	39

*Average of Values for all locations measured.

-25-

C-4 are created by highway traffic on the Interstate Route 93 corridor. The relatively high background noise level of Figure C-5 was caused by street traffic on Winthrop Street and local traffic in the high school parking area. Figure C-6 represents a quiet residential area with no through traffic.

Aircraft Noise

In an effort to identify the effects of aircraft noise on the ambient noise levels in Medford, the measured noise levels during periods in which Runway 33L-15R was in use, at Logan International Airport, were compared with measurements during periods in which the other runways were in use. Runway 33L-15R is directly in line with Medford, and approximately 6.5 statute miles away. Aircraft landing on Runway 15R or taking off on Runway 33L tend to fly near Medford, while those using other Logan runways should approach or leave the Metropolitan Boston area over other sectors. The results of these comparisons are tabulated in Table 8. The measured and calculated values shown in this table were not significantly different for those periods in which Runway 33L-15R was in use as compared with periods in which other runways were in use.

It was noted during analysis of the morning rush hour and midday time history charts (such as those excerpts displayed in Figures C-1 through C-6, Appendix C, described above) that an average of six aircraft per hour were detected with peak noise levels in excess of 60 dBA. A tabulation of these flyovers is contained in Table P-12, Appendix F. Again, on the average, aircraft noise appeared above the background noise level for a period of 90 seconds per flyover (for example, see Figure C-1). Therefore, from these averages, aircraft noise influenced the noise levels in Medford roughly nine minutes per hour, or 15% of the measurement time. This finding would seem to imply that the 10 percentile noise level (L10) should be significantly higher for periods of high aircraft activity over Medford (that is, when Runway 33L-15R was in use). The average differences were 1.2 dBA for both the morning rush hour and the midday measurement periods. Further study showed that on the average, 6.0 aircraft per hour exceeded 60 dBA over Medford when runway 33L-15R was in use and that 5.2 aircraft per hour exceeded 60 dBA when other Logan runways were in use. This probably accounts for the small difference in the L10 levels shown in Table 8 and further indicates a rather random distribution of aircraft over Medford resulting from operations at Logan regardless of the particular runway in use.

CONCLUSIONS

Measured noise levels in the city of Medford, Massachusetts, varied from a median value of 71.6 dBA near Route 16 (Mystic Valley Parkway) during the morning traffic rush hour, to 35.1 dBA at 3:00 AM in a residential area (3-5). Noise levels were influenced predominantly by highway traffic in Medford. The corridor containing I-93, the southeastern portion of the Mystic Valley Parkway (Route 16), and the Revere Beach Parkway (Route 1) contained the highest noise levels in the city. The one exception noted in the measurements occurred at Grid location 6-6, where the nearby highway was depressed and shielded from the microphone location by a small hill.

Rail noise from commuter trains and through freight trains did not significantly affect the noise level measurements. The only significant effect observed was that at Grid location 10-3, when considerable freight car switching occurred.

Although aircraft flying near Medford generated noise levels in excess of 60 dBA for roughly 15% of the measurement time, there was no significant correlation with the direction of airport flight activity at nearby Logan International Airport.

APPENDIX A

MEASUREMENT, CALIBRATION AND DATA REDUCTION SYSTEMS

Measuring Systems

For this survey, a mobile laboratory was equipped with noise data-gathering and analyzing equipment. In addition, a panel truck was outfitted with portable measuring equipment and used as a satellite station to the mobile laboratory.

The mobile laboratory system is shown in Figure A-1. In this system, 500 feet of interconnecting cable was used from the measuring point to the mobile laboratory. This distance was required to insure that the noise generated by a gasoline driven generator in the mobile laboratory did not affect the measurements. The satellite station system is shown in Figure A-2. One hundred feet of interconnecting cable was used in this system to allow the vehicle to be parked at a sufficient distance from the measuring point to reduce its influence on any local traffic flow. The satellite station equipment was battery operated and therefore generated no audible noise at the microphone.

In both systems magnetic tape recordings were made of the noise data. The tape recordings from the satellite station were returned to the mobile noise laboratory for analysis. The system in the mobile noise laboratory however was capable of real time analysis and data reduction while simultaneously recording the noise data on magnetic tape. By analyzing the data in real time the full 60-dB dynamic range of the data reduction equipment (Figure A-3) could be utilized.

Similar magnetic tape recorders, capable of essentially flat recordings from 30 Hz to 15 kHz, were used in both systems. These recorders were operated in the direct mode at a tape speed of 3 3/4 inches per second. The dynamic range of these recorders was limited to 47 dBA. To overcome this limitation and preserve on magnetic tape the full dynamic range of the noise data measured, the signal was applied to two channels simultaneously with 10-or 20-dB gain differential. The two channels were then recorded on separate tape tracks. The dynamic range of the tape recorder was thus effectively increased by the amount of the gain differential between channels.

The major difference between the mobile laboratory system (Figure A-1) and that used in the satellite station (Figure A-2) was the addition of an amplifier at the microphone location in the mobile laboratory system. Amplification of the signal at the microphone location increased the signal level in the 500-foot lead-in cable and thus reduced the effect of electro-magnetic and electrostatic noise fields on signal quality.

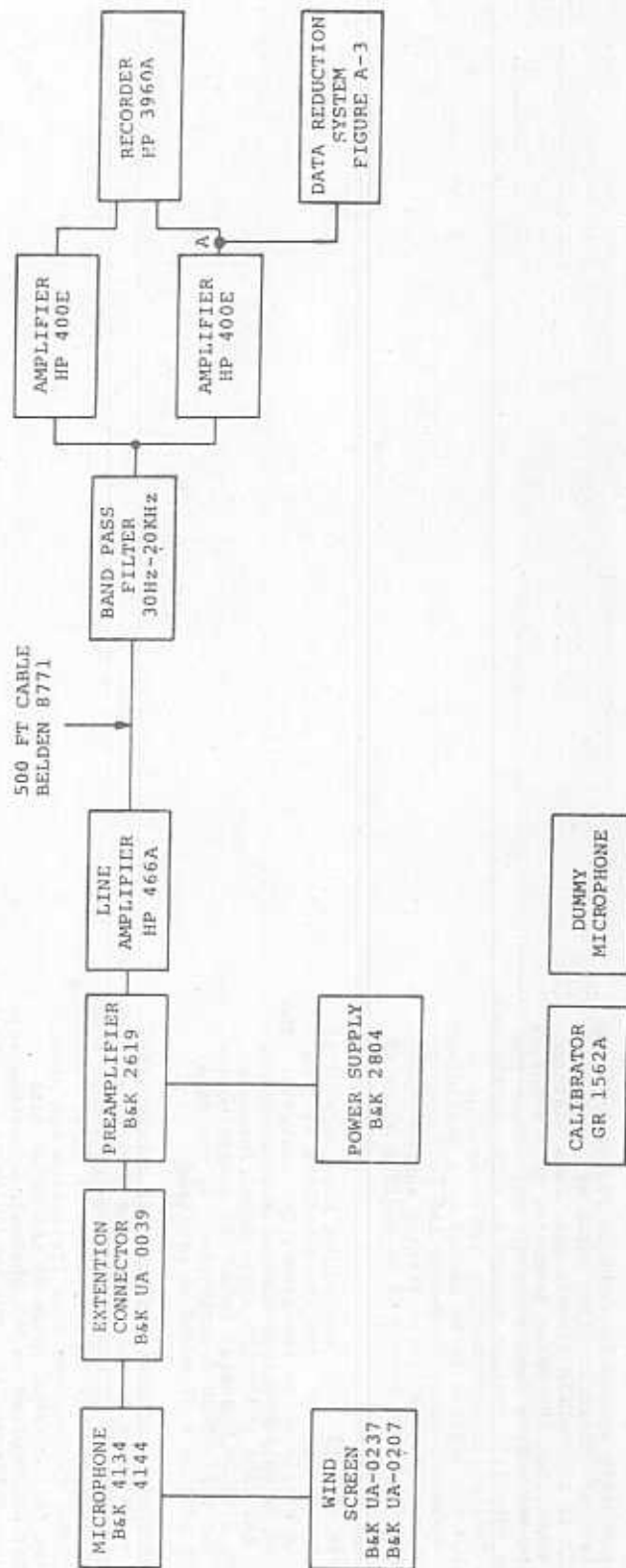


Figure A-1. Sound Measuring System - Mobile Noise Laboratory

A-5

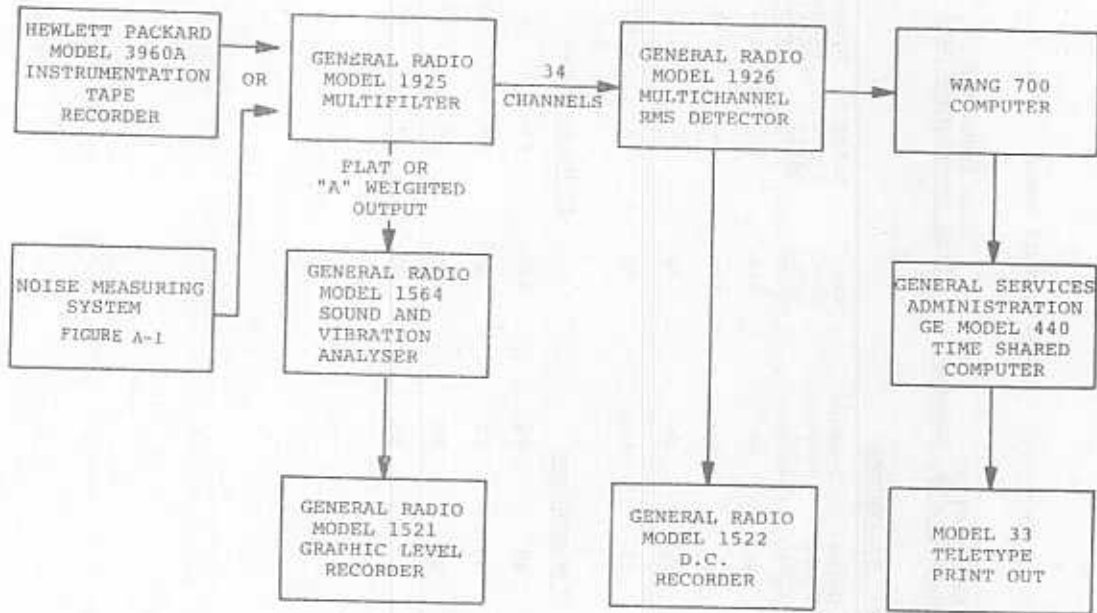


Figure A-3. Data Reduction System

A-4

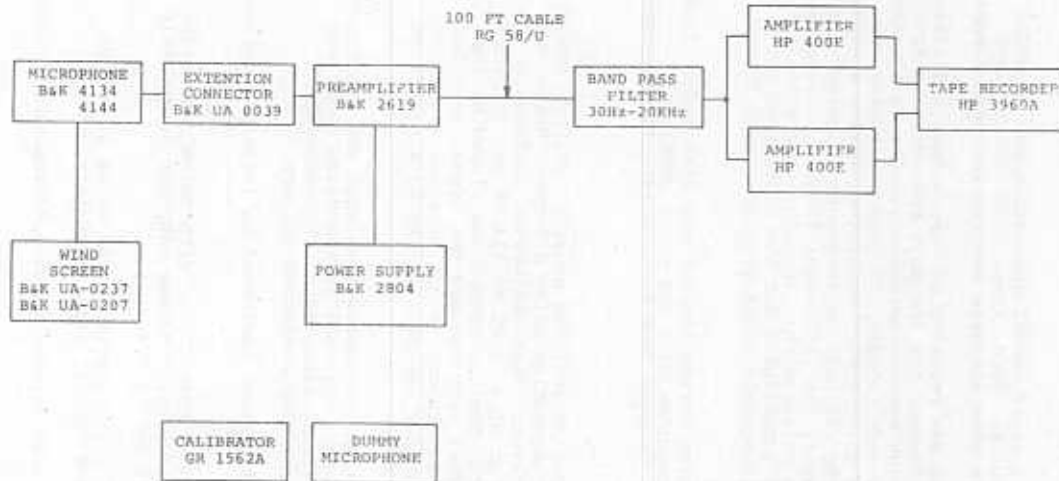


Figure A-2. Sound Measuring System - Satellite Measuring Station

TABLE A-1. SYSTEM DYNAMIC RANGE

Data Reduction By-passing Magnetic Tape Recorder		Data Reduction From Prerecorded Data	
1/2" Microphone			
Max. Level (dBA)	Noise Floor (dBA)	Dynamic Range (dBA)	Max. Level (dBA)
110	50	60	110
100	40	60	100
90	33	57	90
80	27	53	80
1" Microphone			
Max. Level (dBA)	Noise Floor (dBA)	Dynamic Range (dBA)	Max. Level (dBA)
100	40	60	100
90	30	60	90
80	20	60	80
70	17	53	70
1" Microphone			
Max. Level (dBA)	Noise Floor (dBA)	Dynamic Range (dBA)	Max. Level (dBA)
100	40	60	100
90	30	60	90
80	20	60	80
70	17	53	70

Prior to each run, a short verbal annotation was recorded on tape giving the following: date, time, grid number, tape number, recorder channels used and gain setting for each channel.

A calibration signal was recorded on tape before and after each run to provide a reference for the data reduction instrumentation and to detect any system instability. The calibrator used was a General Radio Model 1562A. In this calibrator the signal is generated by a solid-state oscillator driving a small magnetic loudspeaker. The calibration frequency selected, 1000 Hz, eliminated any necessity for "A" weight frequency response correction during system calibration. In addition a passive microphone simulator was substituted for the microphone to determine the minimum discernable sound pressure level (Noise Floor) for the system.

Weather data collected during the run was dictated on tape at the end of each run together with any other pertinent information such as gain changes from those originally announced.

Calibration Procedure

System field calibration included acoustic calibration of the data-gathering instrumentation using a General Radio (GR) 1562A Sound Level Calibrator. This calibrator produces an acoustic signal of 1000 Hz at a level of 114 dB re. 20 microwatts per-square-meter. The calibrator was placed on the microphone before and after each run and the signal recorded on tape. In the mobile laboratory the calibration signal was used simultaneously to adjust the gain in the data reduction instrumentation, Figure A-3.

In addition, a passive microphone simulator was substituted for the microphone to insure that the system Noise Floor was below the minimum noise level expected at the measurement location. This signal was also preserved on tape.

Complete system calibration performed at intervals during the survey included:

1. Frequency Response test using "pink noise" (constant energy per band-width). System response essentially flat from 30 Hz and 15 kHz.
2. System linearity and overload test using pure sine wave signals and "USASI" noise (Haystack Noise).
3. Dynamic range test using a passive microphone simulator. See Table A-1.

Data Reduction

The configuration of the data reduction system is shown in Figure A-3. The noise data plus the calibration signal either directly from the noise data gathering instrumentation or reproduced from prerecorded magnetic tape were fed to a General Radio (GR) 1921 Real Time Analyzing System made up of GR 1925 Multifilter and a GR 1926 Multichannel RMS Detector. The necessary gain adjustments were made in the Multifilter and Graphic Level Recorder with the calibration signals.

The GR 1921 Multifilter contains a set of 30 parallel 1/3 octave band filter channels ranging from 25 Hz to 20 KHz, plus additional channels with standard "A", "B" and "C" sound-level meter weighting networks and an unfiltered channel with a flat frequency response. The output of any channel can be selected and fed through the GR Sound and Vibration Analyzer to the Graphic Level Recorder to produce a chart of Sound Level vs. time (Time History) for that channel. Both the "A" weighted channel and the flat channels were used in analyzing the data obtained and time history charts were made of all recorded data. All 34 outputs from the Multifilter are fed into the Multichannel Detector. The Multichannel Detector simultaneously computes the rms level (root mean square) for each channel and converts this level to a digital output. The Detector was programmed to integrate for 1/8th second, compute the dB value of the "A" weighted filter output, and provide a binary coded decimal signal to the Wang computing Calculator four times every second. This computer counted and totaled the number of samples at each sound level for a selected time period and displayed the results. These data were recorded and subsequently entered into a time-shared computer to produce the statistical analysis printouts appearing in Appendix B.

APPENDIX B

ANALYSES AND SIZE DESCRIPTIONS

SITE DATA

Community: Medford, Massachusetts

Grid Location: 1-7

Microphone Location: Mystic Valley Parkway, 20 feet west of center and 1,200 feet south of the intersection of Pine Ridge Road

Date of Run: March 25, 1971

Time of Run: 7:10 to 8:14 AM

Recorded Tape No.: MAL 20-71; 5500 1; TK 4

ROAD SURFACE AND WEATHER CONDITIONS

Road surface: Dry Temperature: 54 °F. Sky Condition: Clear

Relative Humidity: 26 % Barometric Pressure: 760 mm of Mercury

Wind Direction From: Southwest

Velocity (MPH): 14 to 16 with gusts to 19

Site Description:

Parkway area with trees along roadway and frozen lake west of the microphone location.

Special Events:

Truck idling near microphone raised base level approximately 8 dBA for 7.9 minutes. Analysis time reduced to eliminate effects of a road sweeper and a highway maintenance crew near microphone after 8:16 AM.

SITE DATA

Community: Medford, Massachusetts

Grid Location: 1-7

Microphone Location: SEE SHEET 1 of 2

Date of Run: March 25, 1971

Time of Run: 11:30 AM to 12:11 PM

Recorded Tape No.: MAL 20-71; Side 1; TK 3

ROAD SURFACE AND WEATHER CONDITIONS

Road surface: Dry Temperature: 61 °F. Sky Condition: Clear

Relative Humidity: 52 % Barometric Pressure: 759 mm of Mercury

Wind Direction From: West

Velocity (MPH): 8 to 15 with gusts to 20

Site Description:

SEE SHEET 1 of 2

Special Events:

Analysis time reduced because of wind gusts 25 to 30 mph after 12:15 PM.

US DEPARTMENT OF TRANSPORTATION
TRANSPORTATION SYSTEMS CENTER
NOISE ABATEMENT GROUP

NOISE DATA FROM RUN 1A OF B OF THE MOBILE NOISE LAB. ON
MARCH 25 1971 FROM 07:30 TO 08:30 AT WEDFORD GRID LOCATION 1-7

DISTRIB UTION DBA*	11000
8	84
12	83
28	82
69	81
133	80
183	79
250	78
288	77
311	76
355	75
349	74
331	73
324	72
277	71
298	70
320	68
269	67
269	65
281	64
305	63
346	62
388	61
419	60
539	59
685	58
546	57
429	56
411	55
366	54
364	53
325	52
248	51
201	50
207	49
138	48
65	47
9	46
1	45
0	44

SAMPLES=	11000
AVERAGE=	63.4 DBA*
STANDARD DEVIATION=	8.9 DBA*
ENERGY MEAN=	71 DB**
NOISE POLLUTION LEVEL=	93.8
1% PERCENTILE=	81.1 DBA*
10% DECILE=	76.6 DBA*
MEDIAN=	68.5 DBA*
90% DECILE=	58.7 DBA*
99% PERCENTILE=	48.3 DBA*
RANGE=	39 DB



B-4

NOISE DATA FROM RUN 1A OF B OF THE MOBILE NOISE LAB. ON
MARCH 25 1971 FROM 07:30 TO 08:30 AT WEDFORD GRID LOCATION 1-7

DISTRIB UTION DBA*	11000
8	84
12	83
28	82
69	81
133	80
183	79
250	78
288	77
311	76
355	75
349	74
331	73
324	72
277	71
298	70
320	68
269	67
269	65
281	64
305	63
346	62
388	61
419	60
539	59
685	58
546	57
429	56
411	55
366	54
364	53
325	52
248	51
201	50
207	49
138	48
65	47
9	46
1	45
0	44

LEVEL (DBA*) VS DISTRIBUTION (PERCENT)

*-A WEIGHTED DECIBEL-RE. 20 MICRONEWTONS PER SQUARE METER
*-DBA RE. 20 MICRONEWTONS PER SQUARE METER FROM AN AVERAGE OF
THE SQUARES OF THE SOUND PRESSURES.

B-5

NOISE DATA FROM RUN 2A OF 2 OF THE MOBILE NOISE LAB. ON
 MARCH 25 1971 FROM 11:30 TO 12:15 AT MEDFORD GRID LOCATION 1-7

US DEPARTMENT OF TRANSPORTATION
 TRANSPORTATION SYSTEMS CENTER
 NOISE ABATEMENT GROUP

NOISE DATA FROM RUN 2A OF 2 OF THE MOBILE NOISE LAB. ON
 MARCH 25 1971 FROM 11:30 TO 12:15 AT MEDFORD GRID LOCATION 1-7

DISTRIBUTION DBA*

SAMPLES= 10000
 AVERAGE= 55.8 DBA*
 STANDARD DEVIATION= 8.7 DBA*
 ENERGY MEAN= 66.4 DBA*
 NOISE POLLUTION LEVEL= 88.7
 1% PERCENTILE= 78.9 DBA*
 10% DECILE= 71.2 DBA*
 MEDIAN= 53.4 DBA*
 90% DECILE= 47.8 DBA*
 99% PERCENTILE= 46 DBA*
 RANGE= 40 DB

2	84	0
2	83	0
9	82	0
14	81	0
26	80	0
44	79	0
57	78	0
84	77	0
98	76	0
125	75	0
153	74	0
181	73	0
209	72	0
237	71	0
265	70	0
293	69	0
321	68	0
349	67	0
377	66	0
405	65	0
433	64	0
461	63	0
489	62	0
517	61	0
545	60	0
573	59	0
601	58	0
629	57	0
657	56	0
685	55	0
713	54	0
741	53	0
769	52	0
797	51	0
825	50	0
853	49	0
881	48	0
909	47	0
937	46	0
965	45	0
993	44	0
10000	43	0

DIST. DBA*
 10%
 LEVEL (DBA*) VS DISTRIBUTION (PERCENT)

*-A WEIGHTED DECIBELS-RE. 20 MICRONEWTONS PER SQUARE METER
 **-DBA RE. 20 MICRONEWTONS PER SQUARE METER FROM AN AVERAGE OF
 THE SQUARES OF THE SOUND PRESSURES.

LEVEL (DBA*) VS CUMULATIVE DISTRIBUTION (PERCENT)

SITE DATA

Community: Medford, Massachusetts

Grid Location: 2-4

Microphone Location: Near Mystic River, 290 feet southeast on Mystic River Road from the intersection of Fairfield Street, then 190 feet southwest from the center of Mystic River Road.

Date of Run: March 19, 1971

Time of Run: 7:30 to 8:30 AM

Recorded Tape No.: MAL 17-71; Side 1; TK 4

ROAD SURFACE AND WEATHER CONDITIONS

Road surface: Dry Temperature: 44 °F. Sky Condition: Clear

Relative Humidity: 45 % Barometric Pressure 762 MM of Mercury

Wind Direction From: West

Velocity (MPH): 5

Site Description:

Open field with Mystic River to the southwest.

Special Events:

None

B-8

SITE DATA

Community: Medford, Massachusetts

Grid Location: 2-4

Microphone Location: SEE SHEET 1 of 2

Date of Run: March 19, 1971

Time of Run: 11:30 AM to 12:30 PM

Recorded Tape No.: MAL 17-71; Side 1; TK 3

ROAD SURFACE AND WEATHER CONDITIONS

Road surface: Dry Temperature: 42 °F. Sky Condition: Cloudy

Relative Humidity: 40 % Barometric Pressure 759 MM of Mercury

Wind Direction From: South

Velocity (MPH): 3 to 7

Site Description:

SEE SHEET 1 of 2

Special Events:

Children in playground northwest of microphone.

B-9

NOISE DATA FROM RUN 1A OF 2 OF THE MOBILE NOISE LAB. ON
 MARCH 19 1971 FROM 07:30 TO 08:30 AT MEDFORD GRID LOCATION 2-4

US DEPARTMENT OF TRANSPORTATION
 TRANSPORTATION SYSTEMS CENTER
 NOISE ABATEMENT GROUP

NOISE DATA FROM RUN 1A OF 2 OF THE MOBILE NOISE LAB. ON
 MARCH 19 1971 FROM 07:30 TO 08:30 AT MEDFORD GRID LOCATION 2-4

DISTRI UTION DBA*	5	73	0
	3	72	0
	6	71	0
	6	78	0
	18	69	0
	15	68	0
	22	67	0
	31	66	0
	62	65	00
	76	64	00
	136	63	000
	267	62	0000
	621	61	00000000
	1112	60	00000000000000
	2100	59	000000000000000000
	2986	58	00000000000000000000
	2714	57	0000000000000000000000
	1953	56	000000000000000000000000
	1203	55	00000000000000000000000000
	682	54	00000000
	271	53	0000
	174	52	000
	62	51	00
	35	50	0
	7	49	0
	1	48	0
	0	47	0

SAMPLES= 14400
 AVERAGE= 57.6 DBA*
 STANDARD DEVIATION= 2.4 DBA*
 ENERGY MEAN= 58.4 DB**
 NOISE POLLUTION LEVEL* 64.5
 1% PERCENTILE= 65.3 DBA*
 10% DECILE= 68.8 DBA*
 MEDIAN= 68.1 DBA*
 90% DECILE= 55.2 DBA*
 99% PERCENTILE= 52.2 DBA*
 RANGE= 25 DB

LEVEL(DBA*) VS DISTRIBUTION (PERCENT)

* - A WEIGHTED DECIBEL-S-RE. 20 MICROWATTS PER SQUARE METER
 ** - DBA RE. 20 MICROWATTS PER SQUARE METER FROM AN AVERAGE OF
 THE SQUARES OF THE SOUND PRESSURES.

LEVEL(DBA*) VS CUMULATIVE DISTRIBUTION (PERCENT)

US DEPARTMENT OF TRANSPORTATION
TRANSPORTATION SYSTEMS CENTER
NOISE ABATEMENT GROUP

NOISE DATA FROM RUN 2 OF 2 OF THE MOBILE NOISE LAB. ON
MARCH 19 1971 FROM 11:30 TO 12:30 AT MEDFORD GRID LOCATION 2-4

DISTRIB
UTION DBA*
4 75 0
1 74 0
1 73 0
2 72 0
1 71 0
2 69 0
8 68 0
9 67 0
8 66 0
19 65 0
32 64 0
43 63 0
70 62 0
175 61 0
314 60 0
688 59 0
1025 58 0
1361 57 0
1798 56 0
2048 55 0
1713 54 0
1452 53 0
1285 52 0
822 51 0
588 50 0
478 49 0
386 48 0
177 47 0
102 46 0
29 45 0
6 44 0
8 43 0

SAMPLES= 1400
AVERAGE= 54.5 DBA*
STANDARD DEVIATION= 3.3 DBA*
ENERGY MEAN= 55.9 DB**
NOISE POLLUTION LEVEL= 64.3
1% PERCENTILE= 62.8 DBA*
10% DECILE= 58.9 DBA*
MEDIAN= 55.2 DBA*
90% DECILE= 50.6 DBA*
99% PERCENTILE= 47 DBA*
RANGE= 31 DB



NOISE DATA FROM RUN 2 OF 2 OF THE MOBILE NOISE LAB. ON
MARCH 19 1971 FROM 11:30 TO 12:30 AT MEDFORD GRID LOCATION 2-4

4 75 0
1 74 0
1 73 0
2 72 0
1 71 0
1 70 0
2 69 0
8 68 0
9 67 0
8 66 0
19 65 0
32 64 0
43 63 0
70 62 0
175 61 0
314 60 0
688 59 0
1025 58 0
1361 57 0
1798 56 0
2048 55 0
1713 54 0
1452 53 0
1285 52 0
822 51 0
588 50 0
478 49 0
386 48 0
177 47 0
102 46 0
29 45 0
6 44 0
8 43 0

DIST. DBA* 10 20 30

LEVEL (DBA*) VS DISTRIBUTION (PERCENT)
*-A WEIGHTED DECIBEL 5-RE, 20 MICROMETONS PER SQUARE METER
**-DBA RE, 20 MICROMETONS PER SQUARE METER FROM AN AVERAGE OF
THE SQUARES OF THE SOUND PRESSURES.

SITE DATA

Community: Medford, Massachusetts
 Grid Location: 2-5
 Microphone Location: Tree lawn on west side of Sagamore Avenue, 174 feet northwest of Sagamore Park intersection.

Date of Run: March 26, 1971
 Time of Run: 7:30 - 8:30 AM
 Recorded Tape No.: NAL 20-71; Side 2; TX 3

ROAD SURFACE AND WEATHER CONDITIONS

Road surface: Dry Temperature: 31 °F. Sky Condition: Clear
 Relative Humidity: 44 % Barometric Pressure: 765 MM of Mercury
 Wind Direction From: Northwest
 Velocity (MPH): 5 to 7

Site Description:
 Residential area - large houses set back from street.

Special Events:
 Children near microphone on way to school bus stop.

SITE DATA

Community: Medford, Massachusetts
 Grid Location: 2-5
 Microphone Location: SEE SHEET 1 of 2

Date of Run: March 26, 1971
 Time of Run: 11:30 AM to 12:30 PM
 Recorded Tape No.: NAL 20-71; Side 1; TX A

ROAD SURFACE AND WEATHER CONDITIONS

Road surface: Dry Temperature: 47 °F. Sky Condition: Clear
 Relative Humidity: 27 % Barometric Pressure: 763 MM of Mercury
 Wind Direction From: Northeast
 Velocity (MPH): less than 1

Site Description:
 SEE SHEET 1 of 2

Special Events:
 None

US DEPARTMENT OF TRANSPORTATION
TRANSPORTATION SYSTEMS CENTER
NOISE ABATEMENT GROUP

NOISE DATA FROM RUN 1 OF 2 OF THE MOBILE NOISE LAB. ON
MARCH 26 1971 FROM 07:30 TO 08:30 AT MEDFORD GRID LOCATION 2-5

DISTRIB
UTION DBA*
1 94 +
1 89 +
0 88 +
1 87 +
0 86 +
2 85 +
0 84 +
1 83 +
3 82 +
4 81 +
6 80 +
11 79 +
12 78 +
13 77 +
12 76 +
19 75 +
37 74 +
47 73 +
48 72 +
58 71 +
75 70 +
61 69 +
79 68 +
74 67 +
88 66 +
121 65 +
122 64 +
138 63 +
115 62 +
149 61 +
120 60 +
170 59 +
212 58 +
191 57 +
238 56 +
338 55 +
362 54 +
394 53 +
511 52 +
610 51 +
638 50 +
818 49 +
947 48 +
1207 47 +
1549 46 +
1593 45 +
1671 44 +
1137 43 +
389 42 +
52 41 +
2 40 +
8 39 +

SAMPLES= 1480
AVERAGE= 49.5 DBA*
STANDARD DEVIATION= 6.9 DBA*
ENERGY MEAN= 60.8 DB**
NOISE POLLUTION LEVEL= 78.5
1% PERCENTILE= 73.6 DBA*
10% DECILE= 59.9 DBA*
MEDIAN= 47.7 DBA*
90% DECILE= 43.9 DBA*
99% PERCENTILE= 42.3 DBA*
RANGE= 50 DB

LEVEL (DBA*) VS CUMULATIVE DISTRIBUTION (PERCENT)
B-15

NOISE DATA FROM RUN 1 OF 2 OF THE MOBILE NOISE LAB. ON
MARCH 26 1971 FROM 07:30 TO 08:30 AT MEDFORD GRID LOCATION 2-5

1 90 0
1 89 0
0 88 0
1 87 0
2 86 0
0 85 0
1 84 0
3 83 0
4 82 0
6 81 0
11 79 0
12 78 0
13 77 0
12 76 0
19 75 0
37 74 0
47 73 00
48 72 00
58 71 00
75 70 00
61 69 00
79 68 00
74 67 00
88 66 00
121 65 00
122 64 00
138 63 000
115 62 00
149 61 000
120 60 00
170 59 000
212 58 000
191 57 000
238 56 0000
338 55 00000
362 54 00000
394 53 00000
511 52 000000
610 51 0000000
638 50 00000000
818 49 000000000
947 48 00000000000
1207 47 000000000000
1549 46 000000000000000
1593 45 00000000000000000
1671 44 000000000000000000
1137 43 00000000000000000
389 42 00000
52 41 00
2 40 0
8 39 0

DIST. DBA*8 10 20 30
LEVEL (DBA*) VS DISTRIBUTION (PERCENT)

**A WEIGHTED DECIBEL-S-RE. 80 MICRONOTONS PER SQUARE METER
**DBA RE. 20 MICRONOTONS PER SQUARE METER FROM AN AVERAGE OF
THE SQUARES OF THE SOUND PRESSURES.

LS DEPARTMENT OF TRANSPORTATION
TRANSPORTATION SYSTEMS CENTER
NOISE ABATEMENT UNIT

NOISE DATA FROM RUN 2 OF 2 OF THE MOBILE NOISE LAB. ON
MARCH 26 1971 FROM 11:30 TO 12:30 AT MEDFORD GRID LOCATION 2-5

 L1: 1 51
 L2: 1 79
 L3: 1 78
 L4: 0 77
 L5: 9 76
 L6: 9 75
 L7: 16 74
 L8: 13 73
 L9: 18 72
 L10: 29 71
 L11: 41 70
 L12: 37 69
 L13: 48 68
 L14: 42 67
 L15: 55 65
 L16: 58 64
 L17: 54 63
 L18: 68 62
 L19: 76 61
 L20: 71 59
 L21: 81 58
 L22: 91 57
 L23: 137 56
 L24: 143 55
 L25: 187 54
 L26: 171 53
 L27: 216 52
 L28: 239 51
 L29: 261 50
 L30: 377 49
 L31: 481 48
 L32: 533 47
 L33: 669 46
 L34: 853 45
 L35: 981 44
 L36: 1162 42
 L37: 1198 41
 L38: 1185 40
 L39: 1278 39
 L40: 1197 38
 L41: 903 37
 L42: 342 36
 L43: 37 35
 L44: 0 34

SAMPLES= 1440
 AVERAGE= 44.2
 STANDARD DEVIATION= 6.9
 ENERGY MEAN= 55.4
 NOISE POLLUTION LEVEL= 73.1
 15-PERCENTILE= 69.2
 50-PERCENTILE= 53.4
 85-PERCENTILE= 42.5
 90-PERCENTILE= 38.1
 95-PERCENTILE= 36.3
 RANGE= 45.0

NOISE DATA FROM RUN 2 OF 2 OF THE MOBILE NOISE LAB. ON
MARCH 26 1971 FROM 11:30 TO 12:30 AT MEDFORD GRID LOCATION 2-5

1 80 0
 1 79 0
 0 77 0
 9 76 0
 9 75 0
 16 74 0
 13 73 0
 18 72 0
 29 71 0
 41 70 0
 37 69 0
 48 68 0
 42 67 0
 55 65 0
 58 64 0
 54 63 0
 68 62 0
 76 61 0
 82 60 0
 71 59 0
 81 58 0
 91 57 0
 137 56 0
 143 55 0
 187 54 0
 171 53 0
 216 52 0
 239 51 0
 261 50 0
 377 49 0
 481 48 0
 533 47 0
 669 46 0
 853 45 0
 981 44 0
 1162 42 0
 1198 41 0
 1185 40 0
 1278 39 0
 1197 38 0
 903 37 0
 342 36 0
 37 35 0
 0 34 0

DIST. DBA*0 10 20 30
 LEVEL(DBA*) VS DISTRIBUTION (PERCENT)
 **A WEIGHTED DECIBEL-NE. 20 MICRONEWTONS PER SQUARE METER
 **DBA RE. 20 MICRONEWTONS PER SQUARE METER FROM AN AVERAGE OF
 THE SQUARES OF THE SOUND PRESSURES.

LEVEL(DBA*) VS CUMULATIVE DISTRIBUTION (PERCENT)

SITE DATA

Community: Medford, Massachusetts

Grid Location: 2-6

Microphone Location: On fill area in cemetery at grid location

Date of Run: April 28, 1971

Time of Run: 7:35 to 8:10 AM

Recorded Tape No.: MAL 50-71; Side 1; TKS 3 & 4

ROAD SURFACE AND WEATHER CONDITIONS

Road surface: Dry Temperature: 43 °F. Sky Condition: Clear

Relative Humidity: 74 % Barometric Pressure 768 MM of Mercury

Wind Direction From: Northeast

Velocity (MPH): 1 to 2

Site Description:

Open area with no reflecting surfaces.

Special Events:

Equipment problem at 8:18 AM cut run short.

B-20

SITE DATA

Community: Medford, Massachusetts

Grid Location: 2-6

Microphone Location: SEE SHEET 1 of 2

Date of Run: April 28, 1971

Time of Run: 11:35 AM to 12:27 PM

Recorded Tape No.: MAL 50-71; Side 2; TKS 3 & 4

ROAD SURFACE AND WEATHER CONDITIONS

Road surface: Dry Temperature: 54 °F. Sky Condition: Cloudy

Relative Humidity: 58 % Barometric Pressure 766 MM of Mercury

Wind Direction From: East

Velocity (MPH): 1 to 2

Site Description:

SEE SHEET 1 of 2

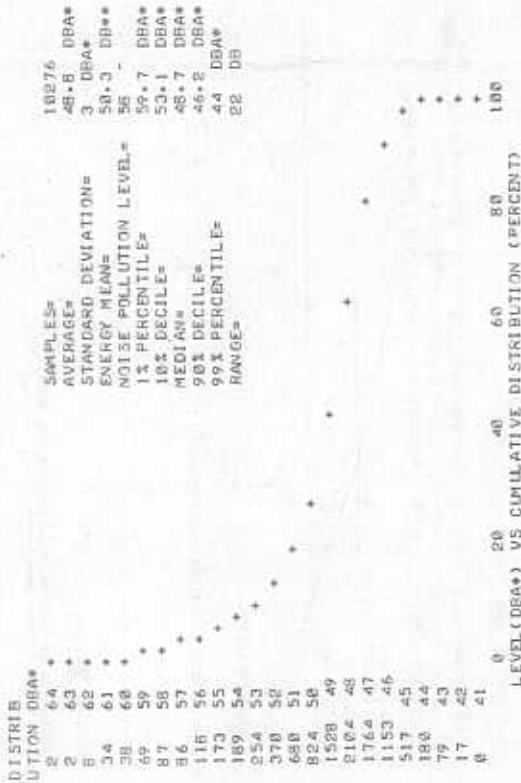
Special Events:

NONE

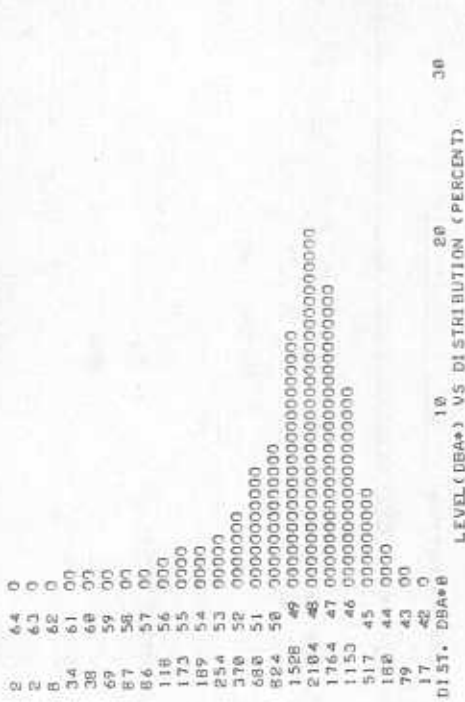
B-21

U.S. DEPARTMENT OF TRANSPORTATION
TRANSPORTATION SYSTEMS CENTER
NOISE ABATEMENT GROUP

NOISE DATA FROM RUN 1A9R OF 2 OF THE MOBILE NOISE LAB. ON
APRIL 28 1971 FROM 07:35 TO 08:18 AT MEDFORD GRID LOCATION 2-6



NOISE DATA FROM RUN 1A9R OF 2 OF THE MOBILE NOISE LAB. ON
APRIL 28 1971 FROM 07:35 TO 08:18 AT MEDFORD GRID LOCATION 2-6



*-A WEIGHTED DECIBEL-S-RE. 20 MICRONEWTONS PER SQUARE METER
**-DBA RE. 20 MICRONEWTONS PER SQUARE METER FROM AN AVERAGE OF
THE SQUARES OF THE SOUND PRESSURES.

U.S. DEPARTMENT OF TRANSPORTATION
TRANSPORTATION SYSTEMS CENTER
NOISE ABATEMENT GROUP

NOISE DATA FROM RUN 2AP OF 2 OF THE MOBILE NOISE LAB. ON
APRIL 28 1971 FROM 11:35 TO 12:27 AT MEDFORD GRID LOCATION 2-6

NOISE DATA FROM RUN 2AP OF 2 OF THE MOBILE NOISE LAB. ON
APRIL 28 1971 FROM 11:35 TO 12:27 AT MEDFORD GRID LOCATION 2-6

DISTRIBUTION DBA*

2	66	0
1	65	0
0	64	0
3	63	0
2	62	0
5	61	0
14	60	0
22	59	0
27	58	0
48	57	03
68	56	07
58	55	00
63	54	00
93	53	05
148	52	033
189	51	070
194	50	000
312	49	000000
474	48	0000000
593	47	00000000
878	46	000000000000
1323	45	0000000000000000
1582	44	000000000000000000
1786	43	00000000000000000000
2858	42	0000000000000000000000
1483	41	0000000000000000000000
885	40	0000000000000000000000
275	39	00000
43	38	00

SAMPLES= 12521
AVERAGE= 44.1 DBA*
STANDARD DEVIATION= 3.5 DBA*
ENERGY MEAN= 46.3 DBA*
NOISE POLLUTION LEVEL= 55.3
1% PERCENTILE= 56.9 DBA*
10% DECILE= 49 DBA*
MEDIAN= 43.9 DBA*
90% DECILE= 41 DBA*
99% PERCENTILE= 39.3 DBA*
RANGE= 28 DB



DIST. DBA*8 10 20 30
LEVEL (DBA*) VS. DISTRIBUTION (PERCENT)

*-A WEIGHTED DECIBEL-S-RE. 20 MICROMENTONS PER SQUARE METER
*-DBA RE. 20 MICROMENTONS PER SQUARE METER FROM AN AVERAGE OF
THE SQUARES OF THE SOUND PRESSURES.

LEVEL (DBA*) VS. CUMULATIVE DISTRIBUTION (PERCENT)

SITE DATA

Community: Medford, Massachusetts

Grid Location: 2-7

Microphone Location: Top of hill 300 feet west of grid point 2-7.

Date of Run: April 28, 1971

Time of Run: 7:30 AM to 8:30 AM

Recorded Tape No.: MAL 51-71; Side 1; Tracks 3 & 4

ROAD SURFACE AND WEATHER CONDITIONS

Road surface: Dry Temperature: 61 °F. Sky Condition: Clear

Relative Humidity: 74 % Barometric Pressure: 768 mm of Mercury

Wind Direction From: Northeast

Velocity (MPH): 1 to 2

Site Description:

Wooded area on top of hill.

Special Events:

Truck truck noise from 8:10 - 8:12 AM

SITE DATA

Community: Medford, Massachusetts

Grid Location: 2-7

Microphone Location: SEE SHEET 1 of 2

Date of Run: April 28, 1971

Time of Run: 11:30 AM to 12:30 PM

Recorded Tape No.: MAL 51-71; Side 2; Tracks 3 & 4

ROAD SURFACE AND WEATHER CONDITIONS

Road surface: Dry Temperature: 54 °F. Sky Condition: Cloudy

Relative Humidity: 58 % Barometric Pressure: 766 mm of Mercury

Wind Direction From: East

Velocity (MPH): 1 to 2

Site Description:

SEE SHEET 1 of 2

Special Events:

Mini-bike at 12:12 PM

NOISE DATA FROM RUN 1 OF 2 OF THE MOBILE NOISE LAB. ON
 APRIL 28 1971 FROM 07:30 TO 08:30 AT MEDFORD GRID LOCATION 2-7

US DEPARTMENT OF TRANSPORTATION
 TRANSPORTATION SYSTEMS CENTER
 NOISE ABATEMENT GROUP

NOISE DATA FROM RUN 1 OF 2 OF THE MOBILE NOISE LAB. ON
 APRIL 28 1971 FROM 07:30 TO 08:30 AT MEDFORD GRID LOCATION 2-7

DISTRIB UTION DBA*
 2 72 +
 1 71 +
 1 78 +
 0 69 +
 3 68 +
 3 67 +
 1 66 +
 5 65 +
 11 64 +
 16 63 +
 44 62 +
 88 61 +
 157 60 +
 316 59 +
 643 58 +
 1334 57 +
 2824 56 +
 5811 55 +
 12244 54 +
 26477 53 +
 53954 52 +
 117751 51 +
 244481 50 +
 508961 49 +
 1034481 48 +
 2111177 47 +
 4344455 46 +
 8888911 45 +
 1811177 44 +

SAMPLES= 10000
 AVERAGE= 51.9 DBA*
 STANDARD DEVIATION= 2.8 DBA*
 ENERGY MEAN= 54.9 DB**
 NOISE POLLUTION LEVEL= 62.1
 1% PERCENTILE= 61.5 DBA*
 10% DECILE= 58 DBA*
 MEDIAN= 54.3 DBA*
 90% DECILE= 50.9 DBA*
 99% PERCENTILE= 48.5 DBA*
 RANGE= 27 DB

2 72 0
 1 71 0
 1 78 0
 0 69 0
 3 68 0
 3 67 0
 1 66 0
 5 65 0
 11 64 0
 16 63 0
 44 62 0
 88 61 0
 157 60 0
 316 59 0
 643 58 0
 1334 57 0
 2824 56 0
 5811 55 0
 12244 54 0
 26477 53 0
 53954 52 0
 117751 51 0
 244481 50 0
 508961 49 0
 1034481 48 0
 2111177 47 0
 4344455 46 0
 8888911 45 0
 1811177 44 0

DIST. DBA*0 10 20 30
 LEVEL (DBA*) VS DISTRIBUTION (PERCENT)

--A WEIGHTED DECIBEL 5-RE. 20 MICROMETONS PER SQUARE METER FROM AN AVERAGE OF
 THE SQUARES OF THE SOUND PRESSURES.

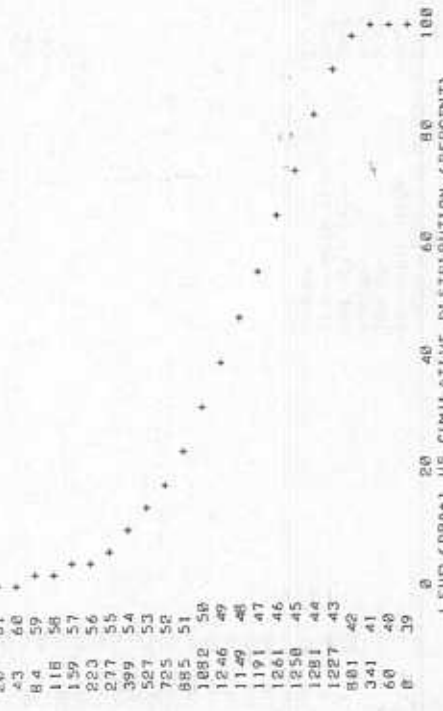
LEVEL (DBA*) VS CUMULATIVE DISTRIBUTION (PERCENT)

US DEPARTMENT OF TRANSPORTATION
TRANSPORTATION SYSTEMS CENTER
NOISE ABATEMENT GROUP

NOISE DATA FROM RUN 2 OF 2 OF THE MOBILE NOISE LAB. ON
APRIL 28 1971 FROM 11:30 TO 12:30 AT MEDFORD GRID LOCATION 2-7

DISTRIB
UTION DBA*
2 73 0
1 72 0
1 71 0
2 70 0
3 69 0
2 68 0
2 67 0
2 66 0
6 65 0
5 64 0
7 63 0
17 62 0
20 61 0
118 58 0
84 59 0
159 57 0
223 56 0
399 54 0
507 53 0
725 52 0
885 51 0
1246 49 0
1191 47 0
1261 46 0
1258 45 0
1281 44 0
1227 43 0
881 42 0
341 41 0
60 40 0
8 39 0

SAMPLES= 14400
AVERAGE= 47.8 DBA*
STANDARD DEVIATION= 4.2 DBA*
ENERGY MEAN= 50.5 DB**
NOISE POLLUTION LEVEL= 61.3
1% PERCENTILE= 59.6 DBA*
10% DECILE= 53.9 DBA*
MEDIAN= 47.8 DBA*
90% DECILE= 43.2 DBA*
99% PERCENTILE= 41.2 DBA*
RANGE= 33 DB



LEVEL(DBA*) VS CUMULATIVE DISTRIBUTION (PERCENT)

NOISE DATA FROM RUN 2 OF 2 OF THE MOBILE NOISE LAB. ON
APRIL 28 1971 FROM 11:30 TO 12:30 AT MEDFORD GRID LOCATION 2-7

2	73	0
1	72	0
1	71	0
2	70	0
3	69	0
2	68	0
2	67	0
2	66	0
6	65	0
5	64	0
7	63	0
17	62	0
28	61	0
43	60	00
84	59	00
118	58	00
159	57	000
223	56	000
277	55	0000
399	54	00000
527	53	0000000
725	52	000000000
885	51	0000000000
1246	49	0000000000000
1191	48	0000000000000
1191	47	00000000000000
1261	46	000000000000000
1258	45	000000000000000
1281	44	000000000000000
1227	43	000000000000000
881	42	000000000000000
341	41	000000
60	40	00
DIST. DBA**	10	LEVEL(DBA*) VS DISTRIBUTION (PERCENT)
	20	
	30	

**A WEIGHTED DECIBEL-S-RE-20 MICRONETONS PER SQUARE METER
**DBA RE-20 MICRONETONS PER SQUARE METER FROM AN AVERAGE OF
THE SQUARES OF THE SOUND PRESSURES.

SITE DATA

Community: Medford, Massachusetts
 Grid Location: 3-4
 Microphone Location: Near Mystic River, 50 feet northeast from south end of Sharon Street.

Date of Run: April 16, 1971
 Time of Run: 7:30 to 8:30 AM
 Recorded Tape No.: MAL 37-71; Side 1; Tracks 3 & 4

ROAD SURFACE AND WEATHER CONDITIONS

Road surface: Dry Temperature: 45 °F. Sky Condition: Clear
 Relative Humidity: 44 % Barometric Pressure: 765 mm of Mercury
 Wind Direction From: Northwest
 Velocity (MPH): 3 to 5 with gusts to 10

Site Description:
 Grass area near Mystic River.

Special Events:
 NONE

SITE DATA

Community: Medford, Massachusetts
 Grid Location: 3-4
 Microphone Location: SEE SHEET 1 of 2

Date of Run: April 16, 1971
 Time of Run: 11:50 AM to 12:30 PM
 Recorded Tape No.: MAL 37-71; Side 2; Tracks 3 & 4

ROAD SURFACE AND WEATHER CONDITIONS

Road surface: Dry* Temperature: 40 °F. Sky Condition: Cloudy
 Relative Humidity: 54 % Barometric Pressure: 763 mm of Mercury
 Wind Direction From: North
 Velocity (MPH): 3

Site Description:
 SEE SHEET 1 of 2

Special Events:
 NONE

* Light snow started at 12:27 PM

NOISE DATA FROM RUN 1AP OF 2 OF THE MOBILE NOISE LAB. ON APRIL 16 1971 FROM 07:30 TO 08:30 AT MEDFORD GRID LOCATION 3-4

US DEPARTMENT OF TRANSPORTATION
TRANSPORTATION SYSTEMS CENTER
NOISE ABATEMENT GROUP

NOISE DATA FROM RUN 1AP OF 2 OF THE MOBILE NOISE LAB. ON APRIL 16 1971 FROM 07:30 TO 08:30 AT MEDFORD GRID LOCATION 3-4

DISTRIB	2	72	0
UTION DBA*	1	71	0
	3	78	0
	2	69	0
	5	68	0
	5	67	0
	18	64	0
	22	65	0
	41	64	0
	49	63	0
	73	62	0
	102	61	0
	128	60	0
	178	59	0
	228	58	0
	385	57	0
	396	56	0
	477	55	0
	702	54	0
	1132	53	0
	1937	52	0
	2655	51	0
	2512	50	0
	2895	49	0
	993	48	0
	249	47	0
	67	46	0
	24	45	0
	7	44	0
	0	43	0

SAMPLES= 14400
 AVERAGE= 51.6 DBA*
 STANDARD DEVIATION= 3.1 DBA*
 ENERGY MEAN= 53.4 DB**
 NOISE POLLUTION LEVEL* 61.3
 1% PERCENTILE* 63.1 DBA*
 10% DECILES 56.3 DBA*
 MEDIAN* 49 DBA*
 98% DECILE* 47.2 DBA*
 99% PERCENTILE* 28 DB
 RANGE*

DIST. DBA*0 20 40 60 80 100
LEVEL(DBA*) VS DISTRIBUTION (PERCENT)

*-A WEIGHTED DECIBEL-S-RE-20 MICRONEWTONS PER SQUARE METER
**-DBA RE. 80 MICRONEWTONS PER SQUARE METER FROM AN AVERAGE OF THE SQUARES OF THE SOUND PRESSURES.

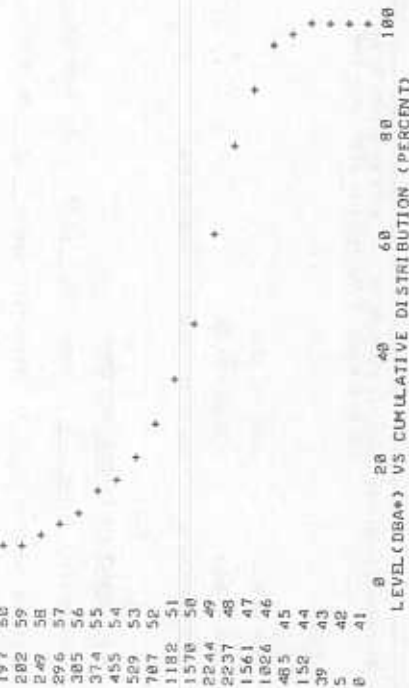
LEVEL(DBA*) VS CUMULATIVE DISTRIBUTION (PERCENT)

US DEPARTMENT OF TRANSPORTATION
TRANSPORTATION SYSTEMS CENTER
NOISE ABATEMENT GROUP

NOISE DATA FROM RUN 2AP OF 2 OF THE MOBILE NOISE LAB. ON
APRIL 16 1971 FROM 11:30 TO 12:30 AT MEDFORD GRID LOCATION 3-4

DISTRI BUTION	DBA*
3	74
2	73
4	72
4	71
18	70
28	69
25	68
26	67
42	66
54	65
56	64
76	63
184	62
159	61
197	60
282	59
249	58
296	57
385	56
374	55
455	54
589	53
787	52
1182	51
1578	50
2244	49
2237	48
1561	47
1826	46
485	45
152	44
39	43
5	42
8	41

SAMPLES= 14480
AVERAGE= 58.4 DBA*
STANDARD DEVIATION= 4.4 DBA*
ENERGY MEAN= 54.2 DB**
NOISE POLLUTION LEVEL= 65.5
1% PERCENTILE= 68.9 DBA*
10% DECILE= 57.3 DBA*
MEDIAN= 49.8 DBA*
90% DECILE= 46.7 DBA*
99% PERCENTILE= 44.7 DBA*
RANGES= 32 DB



NOISE DATA FROM RUN 2AP OF 2 OF THE MOBILE NOISE LAB. ON
APRIL 16 1971 FROM 11:30 TO 12:30 AT MEDFORD GRID LOCATION 3-4

3	74	0
2	73	0
4	72	0
4	71	0
18	70	0
28	69	0
25	68	0
26	67	0
42	66	00
54	65	00
56	64	00
76	63	00
184	62	00
159	61	000
197	60	000
282	59	000
249	58	0000
296	57	0000
385	56	0000
374	55	00000
455	54	000000
589	53	0000000
787	52	00000000
1182	51	00000000000000
1578	50	000000000000000000
2244	49	00000000000000000000
2237	48	0000000000000000000000
1561	47	0000000000000000000000
1826	46	0000000000000000000000
485	45	0000000
152	44	000
39	43	00
5	42	0
8	41	0

DIST. DBA** LEVEL (DBA*) VS DISTRIBUTION (PERCENT) 36

* - A WEIGHTED DECIBEL-S-RE. 20 MICRONETONS PER SQUARE METER
** - DBA RE. 20 MICRONETONS PER SQUARE METER FROM AN AVERAGE OF
THE SQUARES OF THE SOUND PRESSURES.

SITE DATA

Community: Medford, Massachusetts

Grid location: 3-6

Microphone Location: Just off sidewalk on west side of Mobern Street;
126 feet north of Intersection of Shirley Road

Date of Run: April 26, 1971

Time of Run: 7:35 to 8:25 AM

Recorded Tape No.: MAL 47-71; Side 1; Tracks 3 & 4

ROAD SURFACE AND WEATHER CONDITIONS

Road surface: Dry Temperature: 43 °F. Sky Condition: Clear

Relative Humidity: 72 % Barometric Pressure 762 MM of Mercury

Wind Direction From: North

Velocity (MPH): 5

Site Description:

Wooded residential area with single family - 2 story dwellings.

Special Events:

None

B-38

SITE DATA

Community: Medford, Massachusetts

Grid location: 3-6

Microphone Location: SEE SHEET 1 of 2

Date of Run: April 26, 1971

Time of Run: 11:35

Recorded Tape No.: MAL 47-71; Side 2; Tracks 3 & 4

ROAD SURFACE AND WEATHER CONDITIONS

Road surface: Dry Temperature: 53 °F. Sky Condition: Partly Cloudy

Relative Humidity: 55 % Barometric Pressure 761 MM of Mercury

Wind Direction From: North

Velocity (MPH): 2 to 4

Site Description:

SEE SHEET 1 of 2

Special Events:

NONE

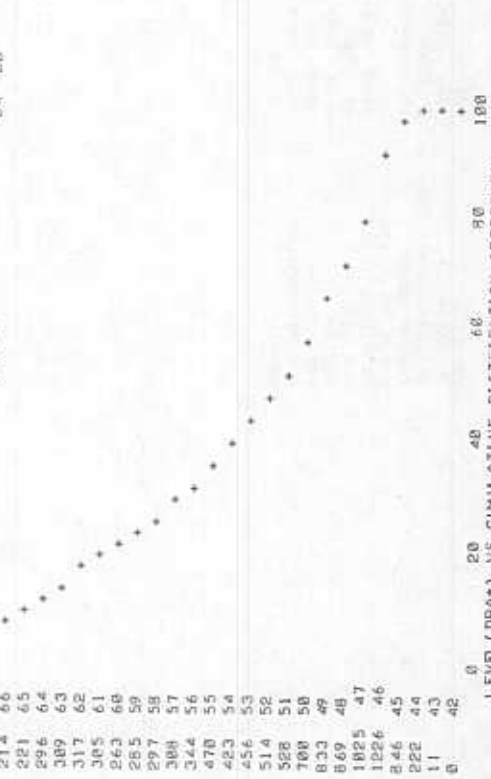
B-39

NOISE DATA FROM RUN LAP OF 2 OF THE MOBILE NOISE LAB. ON
 APRIL 26 1971 FROM 07:35 TO 08:25 AT MEDFORD GRID LOCATION 3-6

US DEPARTMENT OF TRANSPORTATION
 TRANSPORTATION SYSTEMS CENTER
 NOISE ABATEMENT GROUP

NOISE DATA FROM RUN LAP OF 2 OF THE MOBILE NOISE LAB. ON
 APRIL 26 1971 FROM 07:35 TO 08:25 AT MEDFORD GRID LOCATION 3-6

3	77	0	SAMPLES=	12000
6	76	0	AVERAGE=	53.2 DBA*
8	75	0	STANDARD DEVIATION=	7.9 DBA*
13	74	0	ENERGY MEAN=	68.2 DB*
27	73	0	NOISE POLLUTION LEVEL=	78.6
45	72	00	1% PERCENTILE=	71.7 DBA*
70	71	00	10% DECILE=	64.8 DBA*
92	70	00	MEDIAN=	51.5 DBA*
120	69	00	90% DECILE=	46.1 DBA*
147	68	00	99% PERCENTILE=	44.5 DBA*
187	67	00	RANGE=	34 DB
214	66	0000		
221	65	00000		
296	64	000000		
309	63	0000000		
317	62	00000000		
305	61	000000000		
263	60	0000000000		
285	59	00000000000		
297	58	000000000000		
308	57	0000000000000		
344	56	00000000000000		
470	55	0000000000000000		
423	54	00000000000000000		
456	53	000000000000000000		
514	52	00000000000000000000		
528	51	0000000000000000000000		
700	50	000000000000000000000000		
833	49	00000000000000000000000000		
869	48	0000000000000000000000000000		
1025	47	000000000000000000000000000000		
1226	46	00000000000000000000000000000000		
846	45	0000000000000000000000000000000000		
222	44	000000000000000000000000000000000000		
11	43	0		
0	42	0		



LEVEL (DBA*) VS CUMULATIVE DISTRIBUTION (PERCENT)

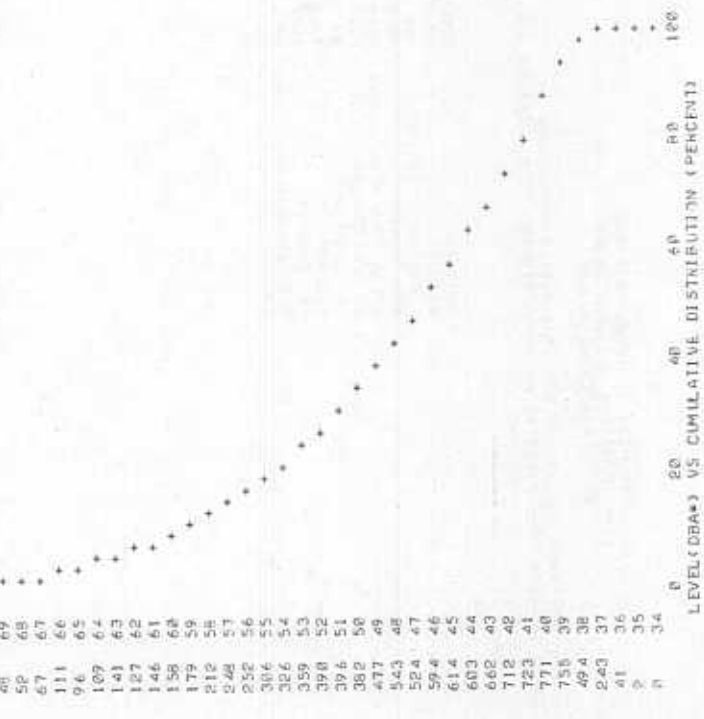
DIST. DBA*0 LEVEL (DBA*) VS DISTRIBUTION (PERCENT) 30

*-A WEIGHTED DECIBEL-S-RE. 20 MICRONOTONS PER SQUARE METER
 **-DBA RE. 20 MICRONOTONS PER SQUARE METER FROM AN AVERAGE OF
 THE SQUARES OF THE SOUND PRESSURES.

NOISE DATA FROM RUN 2AP OF 2 OF THE MOBILE NOISE LAB. ON
 APRIL 26 1971 FROM 11:35 TO 12:38 AT MEDFORD GRID LOCATION 3-6

DISTRI
 BUTION DBA**

SAMPLES: 1 120AP
 AVERAGE: 47.9 DBA**
 STANDARD DEVIATION: 8 DBA**
 ENERGY MEAN: 57.5 DB**
 NOISE POLLUTION LEVEL: 78
 1% PERCENTILE: 78.5 DBA**
 10% DECILE: 68 DBA**
 MEDIAN: 46.6 DBA**
 90% DECILE: 39.6 DBA**
 99% PERCENTILE: 37.3 DBA**
 RANGE: 45 DB



NOISE DATA FROM RUN 2AP OF 2 OF THE MOBILE NOISE LAB. ON
 APRIL 26 1971 FROM 11:35 TO 12:38 AT MEDFORD GRID LOCATION 3-6

DIST. DBA**	LEVEL (DBA*) VS DISTRIBUTION (PERCENT)
3	80 7
0	79 7
0	78 0
4	77 0
5	76 0
7	75 0
25	74 0
16	73 0
28	72 0
22	71 0
33	70 0
48	69 00
58	68 00
67	67 00
111	66 00
96	65 00
189	64 00
141	63 000
127	62 000
146	61 000
158	60 000
179	59 000
212	58 0000
248	57 0000
252	56 0000
386	55 00000
326	54 00000
359	53 000000
396	52 000000
396	51 000000
382	50 000000
277	49 0000000
543	48 00000000
524	47 00000000
594	46 00000000
614	45 000000000
683	44 000000000
668	43 000000000
712	42 0000000000
723	41 0000000000
771	40 0000000000
755	39 00000000000
494	38 000000000
243	37 0000
41	36 00
2	35 0
DI ST. DBA**	10 20 30

**A WEIGHTED DECIBEL-NE. 28 MICRONEWTONS PER SQUARE METER
 **DBA RE. 28 MICRONEWTONS PER SQUARE METER FROM AN AVERAGE OF
 THE SQUARES OF THE SOUND PRESSURES.

SITE DATA

Community: Medford, Massachusetts
 Grid Location: 3-7
 Microphone Location: On lawn west of Pincella Lane, 150 feet north of Winford Way intersection.
 Date of Run: April 26, 1971
 Time of Run: 7:30 to 8:30 AM
 Recorded Tape No.: MAL 48-71; Side 1; Tracks 3 & 4.

ROAD SURFACE AND WEATHER CONDITIONS

Road surface: Dry Temperature: 61 °F. Sky Condition: Clear
 Relative Humidity: 72 % Barometric Pressure: 763 MM of Mercury
 Wind Direction From: North
 Velocity (MPH): 5

Site Description:

Single family residential area - relatively open area.

Special Events:

None

B-44

SITE DATA

Community: Medford, Massachusetts
 Grid Location: 3-7
 Microphone Location: SEE SHEET 1 of 2
 Date of Run: April 26, 1971
 Time of Run: 11:37 AM to 12:32 PM
 Recorded Tape No.: MAL 48-71; Side 2; Track 4

ROAD SURFACE AND WEATHER CONDITIONS

Road surface: Dry Temperature: 53 °F. Sky Condition: Cloudy
 Relative Humidity: 55 % Barometric Pressure: 761 MM of Mercury
 Wind Direction From: North
 Velocity (MPH): 2 to 4

Site Description:

SEE SHEET 1 of 2

Special Events:

NONE

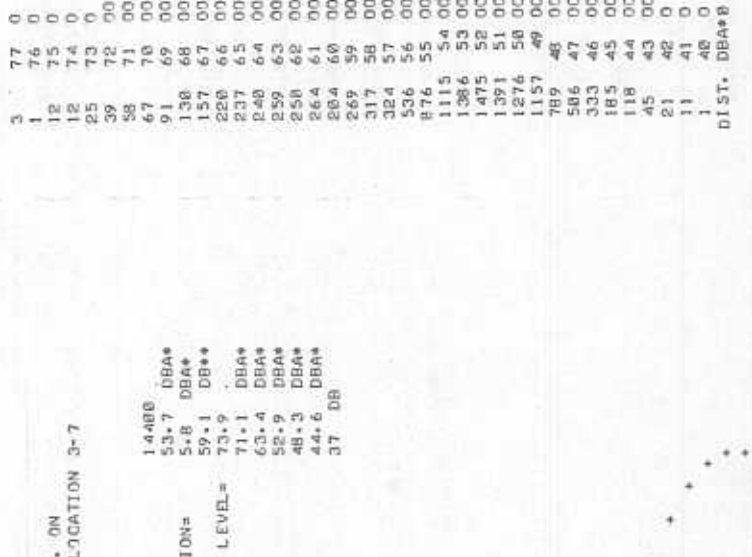
B-45

NOISE DATA FROM RUN 1 OF 2 OF THE MOBILE NOISE LAB. ON
 APRIL 26 1971 FROM 07:30 TO 08:30 AT MEDFORD GRID LOCATION 3-7

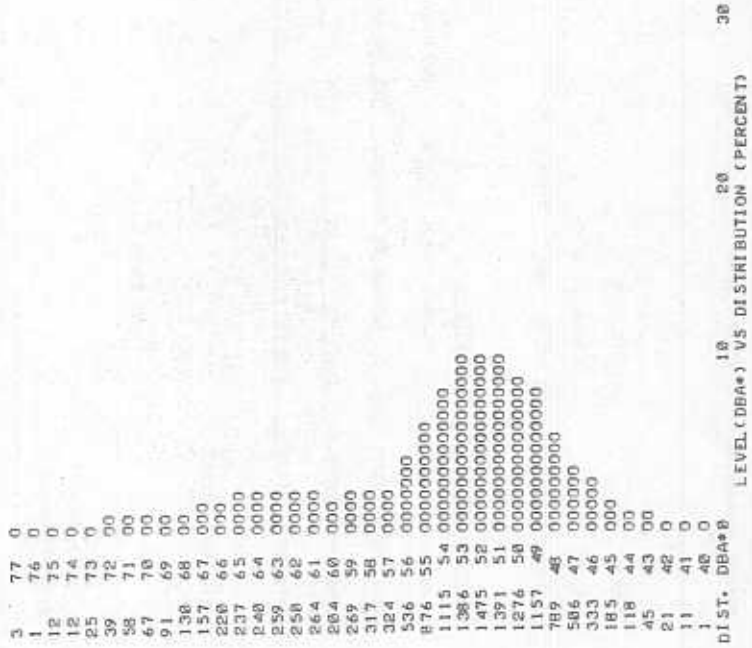
US DEPARTMENT OF TRANSPORTATION
 TRANSPORTATION SYSTEMS CENTER
 NOISE ABATEMENT GROUP

NOISE DATA FROM RUN 1 OF 2 OF THE MOBILE NOISE LAB. ON
 APRIL 26 1971 FROM 07:30 TO 08:30 AT MEDFORD GRID LOCATION 3-7

DISTRIBUTION DBA*	3	77	0
SAMPLES*	14400		
AVERAGE*	53.7	DBA*	
STANDARD DEVIATION*	5.8	DBA*	
ENERGY MEAN*	59.1	DB**	
NOISE POLLUTION LEVEL*	73.9		
1% PERCENTILE*	71.1	DBA*	
10% DECILES*	63.4	DBA*	
MEDIAN*	52.9	DBA*	
90% DECILES*	48.3	DBA*	
99% PERCENTILE*	44.6	DBA*	
RANGE*	37	DB	



LEVEL (DBA*) VS. CUMULATIVE DISTRIBUTION (PERCENT)



LEVEL (DBA*) VS. DISTRIBUTION (PERCENT)

*-A WEI (GATED DECIBELS-RE, 20 MICRONEWTONS PER SQUARE METER FROM AN AVERAGE OF THE SQUARES OF THE SOUND PRESSURES.

U.S. DEPARTMENT OF TRANSPORTATION
TRANSPORTATION SYSTEMS CENTER
NOISE ABATEMENT GROUP

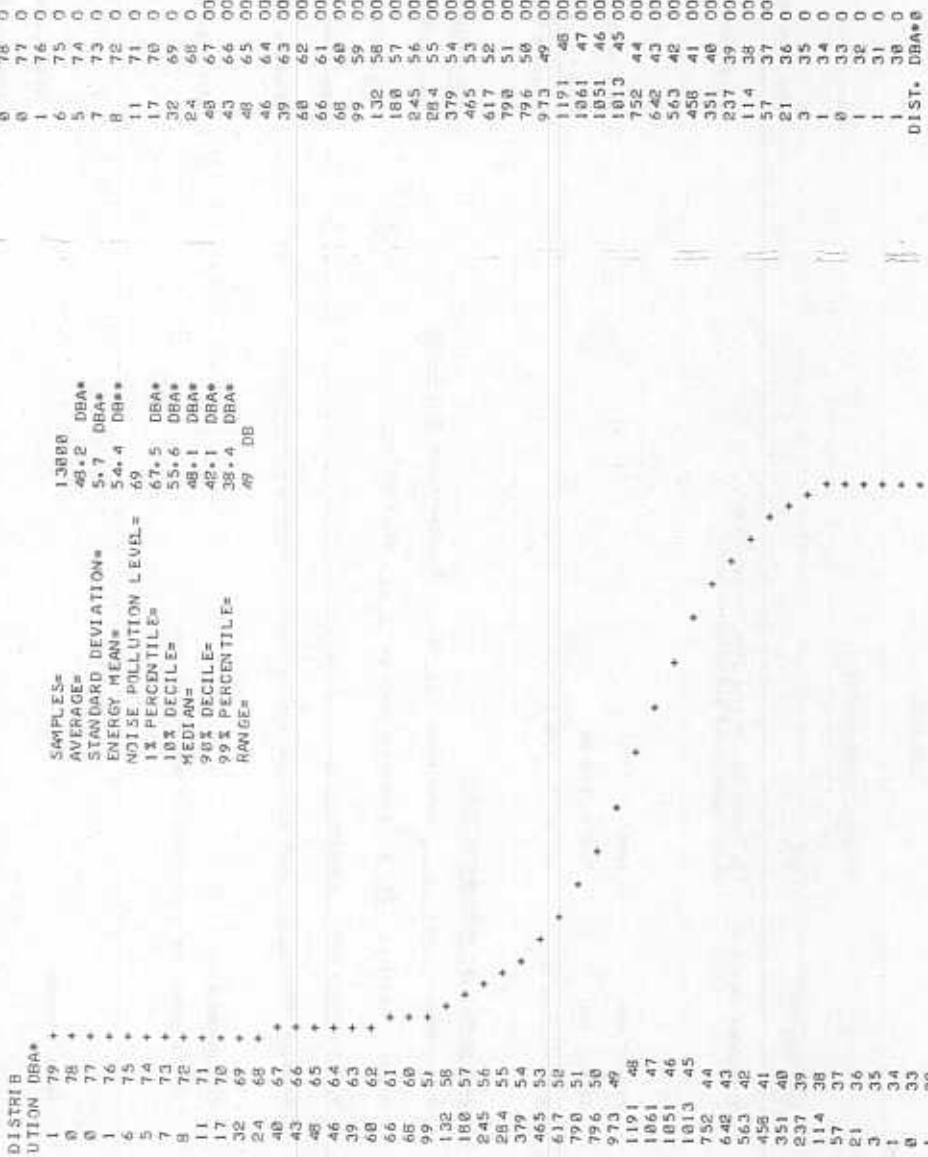
PAGE 2

NOISE DATA FROM RUN 2 OF 2 OF THE MOBILE NOISE LAB. ON
APRIL 26 1971 FROM 11:37 TO 12:32 AT MEDFORD GRID LOCATION 3-7

DISTRIBUTION DBA*
1 79 0
0 78 0
0 77 0
1 76 0
6 75 0
5 74 0
7 73 0
8 72 0
1 71 0
1 70 0
32 69 0
24 68 0
48 67 0
43 66 0
48 65 0
46 64 0
39 63 0
68 62 0
66 61 0
68 60 0
99 59 0
132 58 0
180 57 0
245 56 0
284 55 0
379 54 0
465 53 0
617 52 0
790 51 0
796 50 0
973 49 0
1191 48 0
1861 47 0
1851 46 0
1813 45 0
752 44 0
642 43 0
563 42 0
458 41 0
351 40 0
237 39 0
114 38 0
3 35 0
1 34 0
0 33 0
1 32 0
1 31 0
1 30 0

SAMPLES= 13888
AVERAGE= 48.2 DBA*
STANDARD DEVIATION= 5.7 DBA*
ENERGY MEAN= 54.4 DB**
NOISE POLLUTION LEVEL= 69
1% PERCENTILE= 67.5 DBA*
10% DECILE= 55.6 DBA*
MEDIAN= 48.1 DBA*
90% DECILE= 42.1 DBA*
99% PERCENTILE= 38.4 DBA*
RANGE= 47 DB

NOISE DATA FROM RUN 2 OF 2 OF THE MOBILE NOISE LAB. ON
APRIL 26 1971 FROM 11:37 TO 12:32 AT MEDFORD GRID LOCATION 3-7



LEVEL (DBA*) VS CUMULATIVE DISTRIBUTION (PERCENT)

B-48

LEVEL (DBA*) VS DISTRIBUTION (PERCENT)

B-49

*-A WEIGHTED DECIBEL 5-RE. 20 MICRONEWTNS PER SQUARE METER
*-DBA RE. 20 MICRONEWTNS PER SQUARE METER FROM AN AVERAGE OF
THE SQUARES OF THE SOUND PRESSURES.

SITE DATA

Community: Medford, Massachusetts

Grid Location: 4-3

Microphone Location: In vacant lot 54 feet from the center of both Capen Street and Edison Avenue.

Date of Run: April 20, 1971

Time of Run: 7:34 to 8:34 AM

Recorded Taps No.: NAL 39-71; Side 1; Track 4

ROAD SURFACE AND WEATHER CONDITIONS

Road surface: Dry Temperature: 52 °F. Sky Condition: Partly Cloudy

Relative Humidity: 59 % Barometric Pressure: 766 MM of Mercury

Wind Direction From: Northwest

Velocity (MPH): 6 to 10

Site Description:

Vacant corner lot in multi-family residential area.

Special Events:

None

SITE DATA

Community: Medford, Massachusetts

Grid Location: 4-3

Microphone Location: SEE SHEET 1 of 2

Date of Run: April 20, 1971

Time of Run: 11:30 AM to 12:30 PM

Recorded Taps No.: NAL 39-71; Side 2; Tracks 3 & 4

ROAD SURFACE AND WEATHER CONDITIONS

Road surface: Dry Temperature: 59 °F. Sky Condition: Cloudy

Relative Humidity: 53 % Barometric Pressure: 767 MM of Mercury

Wind Direction From: East

Velocity (MPH): 4

Site Description:

SEE SHEET 1 of 2

Special Events:

Power saw operation under porch at southwest corner of Winthrop and Capen Streets.

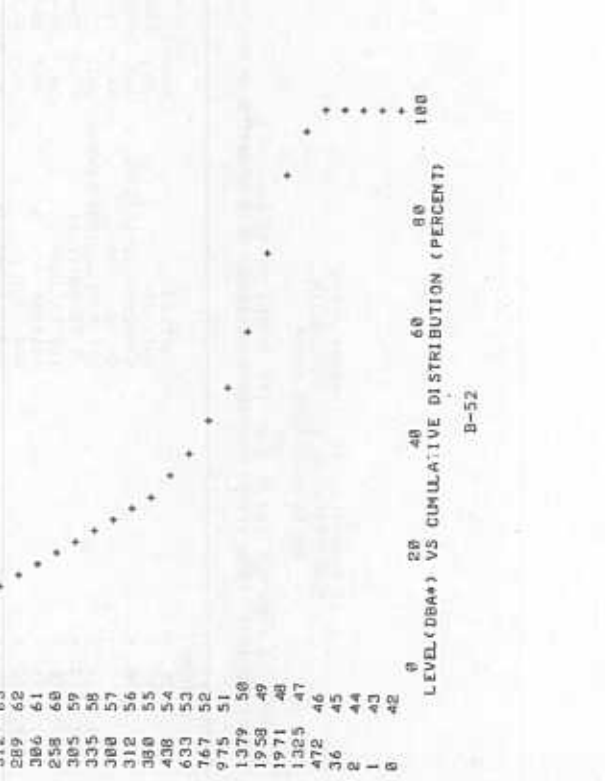
NOISE DATA FROM RUN 1AP OF 2 OF THE MOBILE NOISE LAB. ON
 APRIL 28 1971 FROM 07:34 TO 08:34 AT MEDFORD GRID LOCATION 4-3

US DEPARTMENT OF TRANSPORTATION
 TRANSPORTATION SYSTEMS CENTER
 NOISE ABATEMENT GROUP

NOISE DATA FROM RUN 1AP OF 2 OF THE MOBILE NOISE LAB. ON
 APRIL 28 1971 FROM 07:34 TO 08:34 AT MEDFORD GRID LOCATION 4-3

DISTRIBUTION DBA*	1	86	0
1	85	0	
2	84	0	
3	83	0	
4	82	0	
5	81	0	
6	80	0	
7	79	0	
8	78	0	
9	77	0	
10	76	0	
11	75	0	
12	74	0	
13	73	0	
14	72	0	
15	71	0	
16	70	0	
17	69	0	
18	68	0	
19	67	0	
20	66	0	
21	65	0	
22	64	0	
23	63	0	
24	62	0	
25	61	0	
26	60	0	
27	59	0	
28	58	0	
29	57	0	
30	56	0	
31	55	0	
32	54	0	
33	53	0	
34	52	0	
35	51	0	
36	50	0	
37	49	0	
38	48	0	
39	47	0	
40	46	0	
41	45	0	
42	44	0	
43	43	0	
44	42	0	

SAMPLES*	14488
AVERAGE*	53.3 DBA*
STANDARD DEVIATION*	6.7 DBA*
ENERGY MEAN*	68.7 DB**
NOISE POLLUTION LEVEL*	77.9
1% PERCENTILE*	72.7 DBA*
10% PERCENTILE*	64.6 DBA*
MEDIAN*	51.1 DBA*
90% PERCENTILE*	47.7 DBA*
99% PERCENTILE*	46.2 DBA*
RANGE*	43 DB



LEVEL (DBA*) VS DISTRIBUTION (PERCENT)

10 20 30

0 20 40 60 80 100

LEVEL (DBA*) VS CUMULATIVE DISTRIBUTION (PERCENT)

0 20 40 60 80 100

DBA RE. 20 MICROMETONS PER SQUARE METER FROM AN AVERAGE OF THE SQUARES OF THE SOUND PRESSURES.

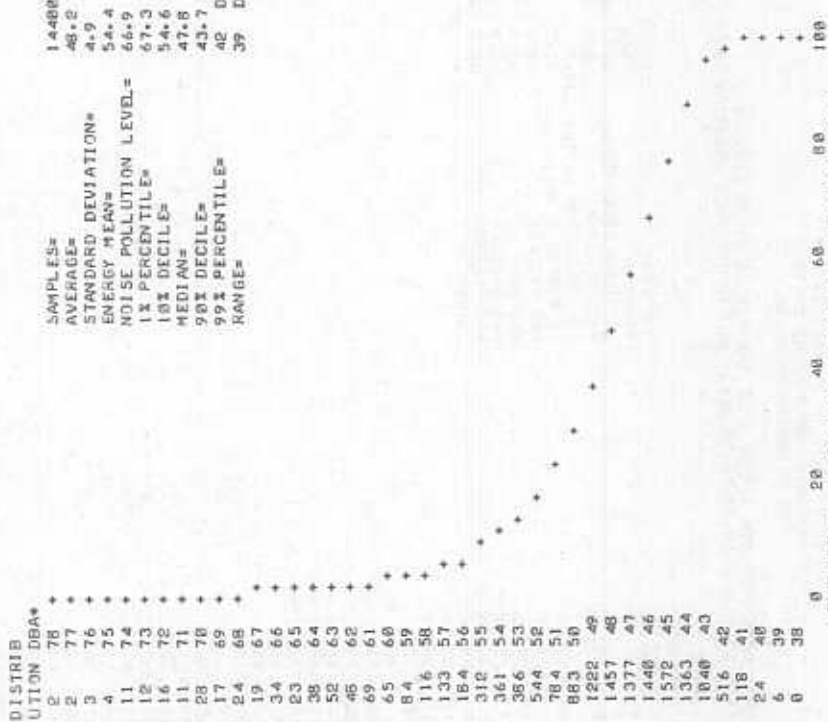
NOISE DATA FROM RUN 2AP OF 2 OF THE MOBILE NOISE LAB. ON
 APRIL 20 1971 FROM 11:30 TO 12:30 AT MEDFORD GRID LOCATION 4-3

US DEPARTMENT OF TRANSPORTATION
 TRANSPORTATION SYSTEMS CENTER
 NOISE ABATEMENT GROUP

NOISE DATA FROM RUN 2AP OF 2 OF THE MOBILE NOISE LAB. ON
 APRIL 20 1971 FROM 11:30 TO 12:30 AT MEDFORD GRID LOCATION 4-3

DISTRI UTION DBA*	2	78	0
	3	77	0
	4	75	0
	11	74	0
	12	73	0
	16	72	0
	11	71	0
	28	70	0
	17	69	0
	24	68	0
	19	67	0
	34	66	0
	23	65	0
	38	64	0
	52	63	0
	46	62	0
	69	61	0
	84	59	0
	116	58	0
	133	57	0
	184	56	0
	312	55	0
	361	54	0
	386	53	0
	544	52	0
	784	51	0
	883	50	0
	1288	49	0
	1457	48	0
	1377	47	0
	1448	46	0
	1572	45	0
	1363	44	0
	1848	43	0
	516	42	0
	118	41	0
	24	40	0
	6	39	0
	0	38	0

SAMPLES= 1448
 AVERAGE= 48.2 DBA*
 STANDARD DEVIATION= 4.9 DBA*
 ENERGY MEAN= 54.4 DB**
 NOISE POLLUTION LEVEL= 66.9
 1% PERCENTILE= 67.3 DBA*
 10% DECILE= 54.6 DBA*
 MEDIAN= 47.8 DBA*
 90% DECILE= 43.7 DBA*
 99% PERCENTILE= 42 DBA*
 RANGE= 39 DB



DIST. DBA*0 10 20 30
 LEVEL (DBA*) VS DISTRIBUTION (PERCENT)

*-A WEIGHTED DECIBELS-RE. 20 MICRONEWTONS PER SQUARE METER
 **-DBA RE. 20 MICRONEWTONS PER SQUARE METER FROM AN AVERAGE OF
 THE SQUARES OF THE SOUND PRESSURES.

SITE DATA

Community: Medford, Massachusetts

Grid Location: 4-4

Microphone Location: South side of Cotting Street at intersection of West Street - microphone located 20 feet from center of roadway.

Date of Run: April 16, 1971

Time of Run: 7:30 to 8:30 AM

Recorded Tape No.: MAL 38-71; Side 1; Tracks 1 & 4

ROAD SURFACE AND WEATHER CONDITIONS

Road surface: Dry Temperature: 45 °F. Sky Condition: Clear

Relative Humidity: 44 % Barometric Pressure: 765 MM of Mercury

Wind Direction From: Northwest

Velocity (MPH): 3 to 5

Site Description:

Residential area with single and multi-family dwellings located close to street.

Special Events:

Garbage truck passed near microphone at start of run.

SITE DATA

Community: Medford, Massachusetts

Grid Location: 4-4

Microphone Location: SEE SHEET 1 of 2

Date of Run: April 16, 1971

Time of Run: 11:35 AM to 12:35 PM

Recorded Tape No.: MAL 38-71; Side 2; Tracks 3 & 4

ROAD SURFACE AND WEATHER CONDITIONS

Road surface: Dry Temperature: 40 °F. Sky Condition: Cloudy

Relative Humidity: 54 % Barometric Pressure: 763 MM of Mercury

Wind Direction From: North

Velocity (MPH): 3

Site Description:

SEE SHEET 1 of 2

Special Events:

NONE

* Very light snow started at 12:23 PM.

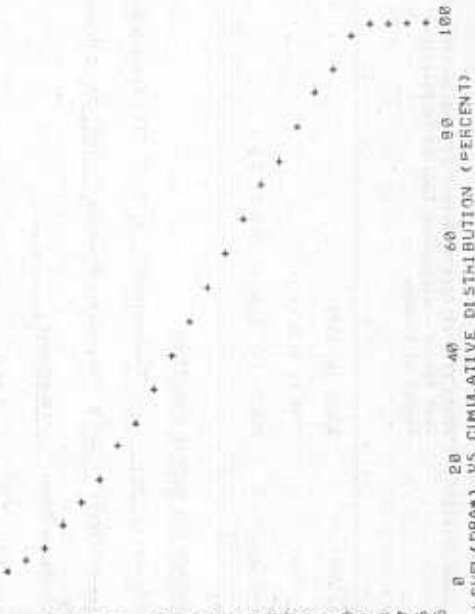
NOISE DATA FROM RUN 1 OF 2 OF THE MOBILE NOISE LAB. ON
 APRIL 16 1971 FROM 07:30 TO 08:30 AT MEDFORD GRID LOCATION 4-4

US DEPARTMENT OF TRANSPORTATION
 TRANSPORTATION SYSTEMS CENTER
 NOISE ABATEMENT GROUP

NOISE DATA FROM RUN 1 OF 2 OF THE MOBILE NOISE LAB. ON
 APRIL 16 1971 FROM 07:30 TO 08:30 AT MEDFORD GRID LOCATION 4-4

DISTRIE
 UTEFN DBA*
 3 79 0
 8 78 0
 0 77 0
 6 76 0
 16 75 1
 21 74 1
 37 73 0
 48 72 0
 102 70 0
 144 69 0
 286 68 0
 345 66 0
 488 65 0
 580 64 0
 616 63 0
 713 62 0
 697 60 0
 888 59 0
 935 58 0
 886 57 0
 892 56 0
 884 55 0
 751 54 0
 750 53 0
 796 52 0
 764 51 0
 735 50 0
 664 49 0
 259 48 0
 107 47 0
 24 46 0
 0 45 0

SAMPLES 14488
 AVERAGE* 57.5 DBA*
 STANDARD DEVIATION* 5.7 DBA*
 ENERGY MEAN* 61.5 DB**
 NOISE POLLUTION LEVEL* 76.1
 1% PERCENTILE* 71.9 DBA*
 10% DECILE* 65.7 DBA*
 MEDIAN* 57.6 DBA*
 90% DECILE* 50.5 DBA*
 99% PERCENTILE* 48.1 DBA*
 RANGE* 33 DB



3 79 0
 8 78 0
 0 77 0
 6 76 0
 16 75 1
 21 74 1
 37 73 0
 48 72 0
 102 70 0
 144 69 0
 286 68 0
 345 66 0
 488 65 0
 580 64 0
 616 63 0
 713 62 0
 697 60 0
 888 59 0
 935 58 0
 886 57 0
 892 56 0
 884 55 0
 751 54 0
 750 53 0
 796 52 0
 764 51 0
 735 50 0
 664 49 0
 259 48 0
 107 47 0
 24 46 0
 0 45 0

DIST. DBA** 10 20 30

LEVEL (DBA*) VS. DISTRIBUTION (PERCENT)
 **-A WEIGHTED DECIBEL-S-RE. 20 MICRONEWTONS PER SQUARE METER
 ***-DBA RE. 20 MICRONEWTONS PER SQUARE METER FROM AN AVERAGE OF
 THE SQUARES OF THE SOUND PRESSURES.

US DEPARTMENT OF TRANSPORTATION
TRANSPORTATION SYSTEMS CENTER
NOISE ABATEMENT GROUP

PAGE 2

NOISE DATA FROM RUN 2 OF 2 OF THE MOBILE NOISE LAB. ON
APRIL 16, 1971 FROM 11:35 TO 12:35 AT MEDFORD GRID LOCATION 4-4

DISTRIBUTION DBA*

1	85	+
0	84	+
1	83	+
0	82	+
1	81	+
0	80	+
2	79	+
1	78	+
0	77	+
3	75	+
1	74	+
3	73	+
15	72	+
30	71	+
55	70	+
68	69	+
77	68	+
98	67	+
150	66	+
165	65	+
247	64	+
382	63	+
533	62	+
658	61	+
663	60	+
694	59	+
719	58	+
719	56	+
667	55	+
867	54	+
867	53	+
849	52	+
747	51	+
787	50	+
597	49	+
588	48	+
588	47	+
588	46	+
587	45	+
527	44	+
518	43	+
398	42	+
223	41	+
189	40	+
19	39	+
1	38	+
0	37	+

SAMPLES= 1400
AVERAGE= 53.1 DBA*
STANDARD DEVIATION= 6.8 DBA*
ENERGY MEAN= 58.7 DB**
NOISE POLLUTION LEVEL= 76.1
1% PERCENTILE= 69.7 DBA*
10% DECILE= 62.4 DBA*
MEDIAN= 53.6 DBA*
90% DECILE= 44.4 DBA*
99% PERCENTILE= 41.1 DBA*
RANGE= 47 DB

NOISE DATA FROM RUN 2 OF 2 OF THE MOBILE NOISE LAB. ON
APRIL 16, 1971 FROM 11:35 TO 12:35 AT MEDFORD GRID LOCATION 4-4

1	85	0
0	84	0
1	83	0
0	82	0
1	81	0
0	80	0
2	79	0
1	78	0
0	77	0
3	75	0
1	74	0
3	73	0
15	72	0
30	71	0
55	70	0
68	69	0
77	68	0
98	67	0
150	66	0
165	65	0
247	64	0
290	63	0
382	62	0
431	61	0
533	60	0
658	59	0
663	58	0
694	57	0
719	56	0
667	55	0
867	54	0
849	53	0
747	52	0
787	51	0
597	49	0
588	48	0
582	47	0
588	46	0
587	45	0
527	44	0
518	43	0
398	42	0
223	41	0
189	40	0
19	39	0
1	38	0
0	37	0

DIST. DBA**8 LEVEL (DBA*) VS DISTRIBUTION (PERCENT) 30

*-A WEIGHTED DECIBEL-S-RE. 20 MICRONEWTONS PER SQUARE METER
**-DBA RE. 20 MICRONEWTONS PER SQUARE METER FROM AN AVERAGE OF
THE SQUARES OF THE SOUND PRESSURES.

B-61

LEVEL (DBA*) VS CUMULATIVE DISTRIBUTION (PERCENT)

B-60

SITE DATA

Community: Medford, Massachusetts
 Grid Location: 4-5
 Microphone Location: Suffolk Street, 24 feet south of the center and 162 feet west of the intersection with Woburn Street.
 Date of Run: April 21, 1971
 Time of Run: 7:30 to 8:24 AM
 Recorded Tape No.: MAL 41-71; Side 1; Tracks 3 & 4

ROAD SURFACE AND WEATHER CONDITIONS

Road surface: Dry Temperature: 53 °F. Sky Condition: Partly Cloudy
 Relative Humidity: 62 % Barometric Pressure: 761 mm of Mercury
 Wind Direction From: Southeast
 Velocity (MPH): 2

Site Description:

Single family residential area with trees and shrubs near roadway.

Special Events:

None.

B-62

SITE DATA

Community: Medford, Massachusetts
 Grid Location: 4-5
 Microphone Location: SEE SHEET 1 of 2
 Date of Run: April 21, 1971
 Time of Run: 11:30 AM to 12:24 PM
 Recorded Tape No.: MAL 41-71; Side 2; Tracks 3 & 4

ROAD SURFACE AND WEATHER CONDITIONS

Road surface: Dry Temperature: 61 °F. Sky Condition: Cloudy
 Relative Humidity: 43 % Barometric Pressure: 756 mm of Mercury
 Wind Direction From: West
 Velocity (MPH): 2

Site Description:

SEE SHEET 1 of 2

Special Events:

NONE

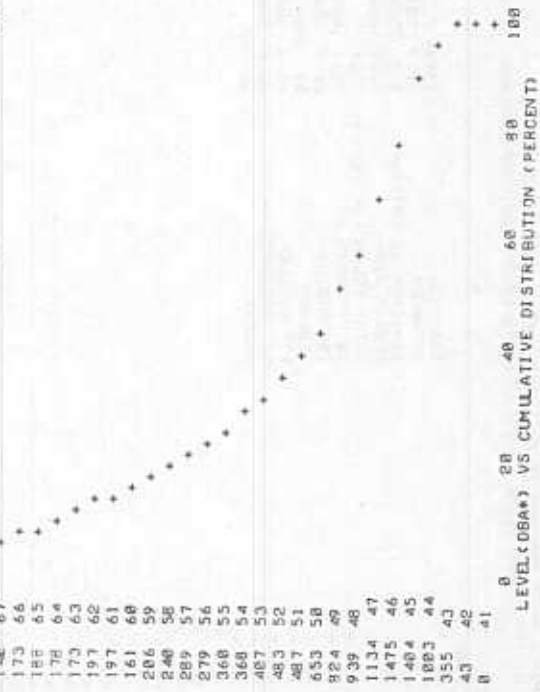
* Very light rain started at 12:17 PM.

B-63

US DEPARTMENT OF TRANSPORTATION
TRANSPORTATION SYSTEMS CENTER
NOISE ABATEMENT GROUP

NOISE DATA FROM RUN IAP OF 2 OF THE MOBILE NOISE LAB. ON
APRIL 21 1971 FROM 07:30 TO 08:24 AT MEDFORD GRID LOCATION 4-5

DISTRIBUTION DBA*	SAMPLES-	13000
1 76	AVERAGE*	51.3 DBA*
2 77	STANDARD DEVIATION*	7.4 DBA*
7 76	ENERGY MEAN*	59.7 DB**
13 75	NOISE POLLUTION LEVEL=	78.6
13 74	1% PERCENTILE=	71.9 DBA*
38 73	18% DECILE=	64.1 DBA*
51 72	MEDIAN*	49.2 DBA*
88 71	90% DECILE=	46.9 DBA*
128 70	99% PERCENTILE=	43.2 DBA*
152 69	RANGE*	3.6 DB
159 68		
148 67		
173 66		
186 65		
178 64		
173 63		
197 62		
197 61		
161 60		
206 59		
240 58		
279 57		
368 55		
368 54		
487 53		
483 52		
279 56		
368 55		
368 54		
487 53		
483 52		
487 51		
553 50		
824 49		
939 48		
1134 47		
1475 46		
1484 45		
1883 44		
355 43		
43 42		
0 41		



LEVEL (DBA*) VS CUMULATIVE DISTRIBUTION (PERCENT)

NOISE DATA FROM RUN IAP OF 2 OF THE MOBILE NOISE LAB. ON
APRIL 21 1971 FROM 07:30 TO 08:24 AT MEDFORD GRID LOCATION 4-5

1 76	0
2 77	0
7 76	0
13 75	0
13 74	0
38 73	00
51 72	00
88 71	00
128 70	000
152 69	000
159 68	000
148 67	000
173 66	000
188 65	000
178 64	000
173 63	000
197 62	000
197 61	000
161 60	000
206 59	000
240 58	0000
289 57	0000
279 56	0000
368 55	00000
368 54	00000
487 53	000000
483 52	000000
487 51	0000000
553 50	00000000
824 49	0000000000
939 48	00000000000
1134 47	000000000000
1475 46	00000000000000
1484 45	00000000000000
1883 44	00000000000000
355 43	00000
43 42	00
0 41	

LEVEL (DBA*) VS DISTRIBUTION (PERCENT)

*-A WEIGHTED DECIBEL-S-RE-20 MICRONEWTONS PER SQUARE METER
*-DBA RE-20 MICRONEWTONS PER SQUARE METER FROM AN AVERAGE OF
THE SQUARES OF THE SOUND PRESSURES.

NOISE DATA FROM RUN 2AP OF 2 OF THE MOBILE NOISE LAB. ON
 APRIL 21 1971 FROM 11:38 TO 12:24 AT MEDFORD GRID LOCATION 4-5

DISTRI- BUTION	DBA*
1	82
0	81
4	80
0	79
1	78
4	77
5	76
6	75
11	74
16	73
28	72
43	71
61	70
76	69
89	68
139	67
129	66
167	65
207	64
246	63
244	62
270	61
287	60
329	59
317	58
389	57
398	56
373	55
446	54
456	53
559	52
632	51
788	50
1011	49
1034	48
1177	47
1367	46
1861	45
586	44
188	43
31	42
14	41
2	40
2	39

NOISE DATA FROM RUN 2AP OF 2 OF THE MOBILE NOISE LAB. ON
 APRIL 21 1971 FROM 11:38 TO 12:24 AT MEDFORD GRID LOCATION 4-5

DIST. DBA**	10	20	30
1	82	0	0
0	81	0	0
4	80	0	0
0	79	0	0
1	78	0	0
4	77	0	0
5	76	0	0
6	75	0	0
11	74	0	0
16	73	0	0
28	72	0	0
43	71	0	0
61	70	0	0
76	69	0	0
89	68	0	0
139	67	0	0
129	66	0	0
167	65	0	0
207	64	0	0
246	63	0	0
244	62	0	0
270	61	0	0
287	60	0	0
329	59	0	0
317	58	0	0
389	57	0	0
398	56	0	0
373	55	0	0
446	54	0	0
456	53	0	0
559	52	0	0
632	51	0	0
788	50	0	0
1011	49	0	0
1034	48	0	0
1177	47	0	0
1367	46	0	0
1861	45	0	0
586	44	0	0
188	43	0	0
31	42	0	0
14	41	0	0
2	40	0	0
2	39	0	0

LEVEL (DBA**) VS DISTRIBUTION (PERCENT)

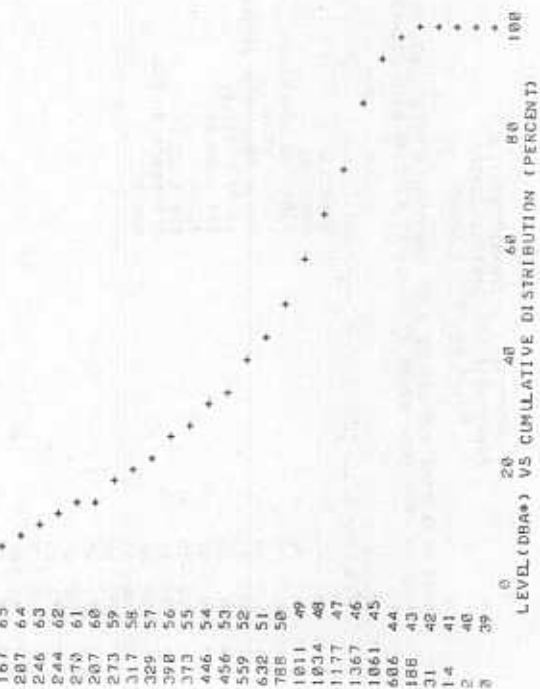
** - A WEIGHTED DECIBEL-S-RE. 28 MICRONEWTONS PER SQUARE METER
 ** - DBA RE. 28 MICRONEWTONS PER SQUARE METER FROM AN AVERAGE OF
 THE SQUARES OF THE SOUND PRESSURES.

US DEPARTMENT OF TRANSPORTATION
 TRANSPORTATION SYSTEMS CENTER
 NOISE ABATEMENT GROUP

NOISE DATA FROM RUN 2AP OF 2 OF THE MOBILE NOISE LAB. ON
 APRIL 21 1971 FROM 11:38 TO 12:24 AT MEDFORD GRID LOCATION 4-5

DISTRI- BUTION	DBA*
1	82
0	81
4	80
0	79
1	78
4	77
5	76
6	75
11	74
16	73
28	72
43	71
61	70
76	69
89	68
139	67
129	66
167	65
207	64
246	63
244	62
270	61
287	60
329	59
317	58
389	57
398	56
373	55
446	54
456	53
559	52
632	51
788	50
1011	49
1034	48
1177	47
1367	46
1861	45
586	44
188	43
31	42
14	41
2	40
2	39

SAMPLES= 13000
 AVERAGE= 51.7 DBA*
 STANDARD DEVIATION= 6.7 DBA*
 ENERGY MEAN= 58.7 DBA*
 NOISE POLLUTION LEVEL= 75.9
 1% PERCENTILE= 70.7 DBA*
 10% DECILE= 60.7 DBA*
 MEDIAN= 50 DBA*
 90% DECILE= 45.4 DBA*
 99% PERCENTILE= 43.4 DBA*
 RANGE= 42 DB



LEVEL (DBA**) VS CUMULATIVE DISTRIBUTION (PERCENT)

SITE DATA

Community: Medford, Massachusetts

Grid Location: 4-6

Microphone Location: 15 feet east of southeast corner of high school tennis court fence; 800 feet from closest point on Winthrop Street.

Date of Run: April 30, 1971

Time of Run: 7:30 to 8:30 AM

Recorded Tape No.: NAL 54-71; Side 1; Tracks 3 & 4

ROAD SURFACE AND WEATHER CONDITIONS

Road surface: DRY Temperature: 46 °F. Sky Condition: Cloudy

Relative Humidity: 80 % Barometric Pressure: 768 MM of Mercury

Wind Direction From: Northwest

Velocity (MPH): 2 to 3

Site Description:

Open area except for a tree-covered hill east of microphone location.

Special Events:

None

B-68

SITE DATA

Community: Medford, Massachusetts

Grid Location: 4-6

Microphone Location: SEE SHEET 1 of 2

Date of Run: April 30, 1971

Time of Run: 11:30 AM to 12:30 PM

Recorded Tape No.: NAL 54-71; Side 1; Tracks 3 & 4

ROAD SURFACE AND WEATHER CONDITIONS

Road surface: Dry Temperature: 56 °F. Sky Condition: Cloudy

Relative Humidity: 61 % Barometric Pressure: 767 MM of Mercury

Wind Direction From: West

Velocity (MPH): 0 to 2

Site Description:

SEE SHEET 1 of 2.

Special Events:

NONE

B-69

NOISE DATA FROM RUN 1 OF 2 OF THE MOBILE NOISE LAB. ON
APRIL 30 1971 FROM 07:38 TO 08:38 AT MEDFORD GRID LOCATION 4-6

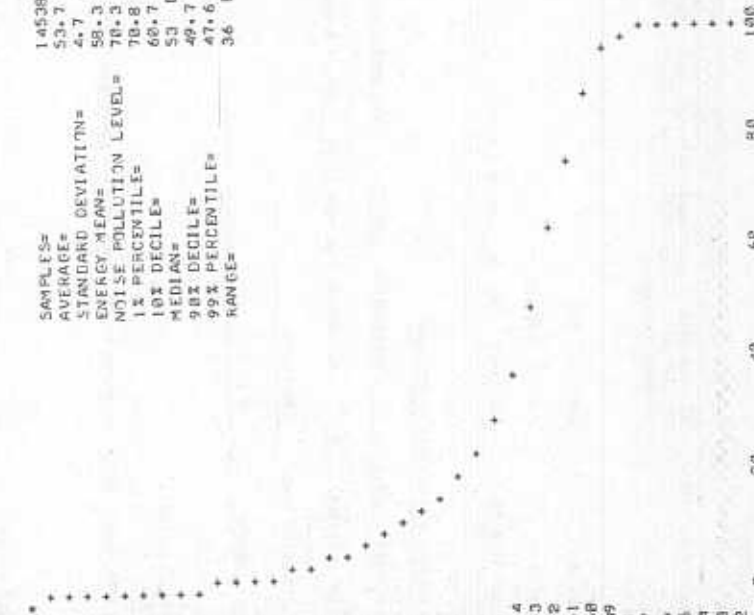
1 79 0
1 78 0
4 77 0
8 76 0
5 75 0
13 74 0
29 73 0
38 72 0
48 71 0
64 70 0
58 69 0
65 68 0
88 67 0
96 66 0
118 65 0
131 64 0
157 63 0
289 62 0
251 61 0
247 60 0
315 59 0
416 58 0
473 57 0
633 56 0
951 55 0
1244 54 0
1522 53 0
2844 52 0
1975 51 0
1683 50 0
1897 49 0
451 48 0
134 47 0
39 46 0
19 45 0
6 44 0
1 43 0

US DEPARTMENT OF TRANSPORTATION
TRANSPORTATION SYSTEMS CENTER
NOISE ABATEMENT GROUP

NOISE DATA FROM RUN 1 OF 2 OF THE MOBILE NOISE LAB. ON
APRIL 30 1971 FROM 07:38 TO 08:38 AT MEDFORD GRID LOCATION 4-6

DISTRIBUTION DBA*
1 79 +
1 78 +
4 77 +
8 76 +
5 75 +
13 74 +
29 73 +
38 72 +
48 71 +
64 70 +
58 69 +
65 68 +
85 67 +
96 66 +
118 65 +
131 64 +
157 63 +
289 62 +
251 61 +
247 60 +
315 59 +
416 58 +
473 57 +
633 56 +
951 55 +
1244 54 +
1522 53 +
2844 52 +
1975 51 +
1683 50 +
1897 49 +
451 48 +
134 47 +
39 46 +
19 45 +
6 44 +
1 43 +
0 42 +

SAMPLES= 14538
AVERAGE= 53.7 DBA*
STANDARD DEVIATION= 4.7 DBA*
ENERGY MEAN= 58.3 DB**
NOISE POLLUTION LEVEL= 70.3 DBA*
1% PERCENTILE= 70.8 DBA*
10% DECILE= 68.7 DBA*
MEDIAN= 53 DBA**
90% DECILE= 49.7 DBA*
99% PERCENTILE= 47.6 DBA*
RANGE= 36 DB



LEVEL (DBA*) VS CUMULATIVE DISTRIBUTION (PERCENT)

LEVEL (DBA*) VS DISTRIBUTION (PERCENT)

*-A WEIGHTED DECIBEL-S-RE. 20 MICRONETONS PER SQUARE METER
**-DBA RE. 20 MICRONETONS PER SQUARE METER FROM AN AVERAGE OF
THE SQUARES OF THE SOUND PRESSURES.

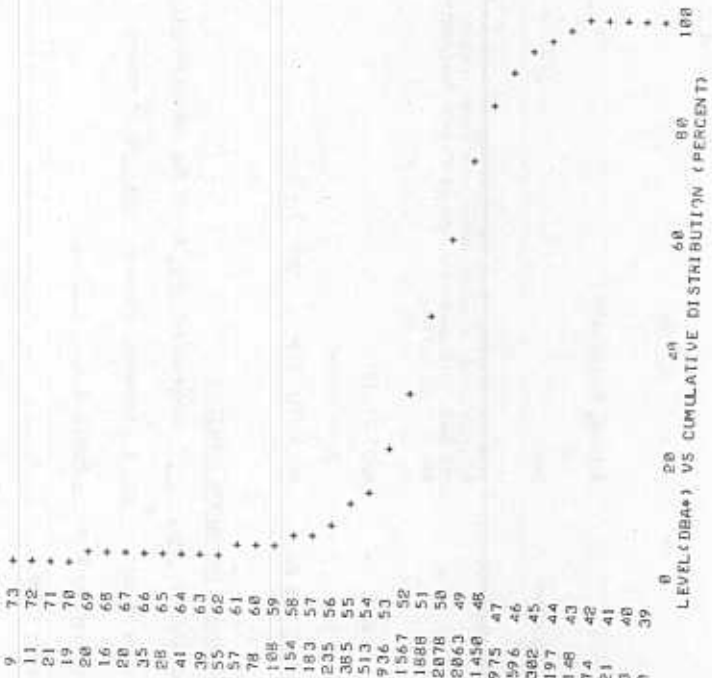
U.S. DEPARTMENT OF TRANSPORTATION
TRANSPORTATION SYSTEMS CENTER
NOISE ABATEMENT GROUP

PAGE 2

NOISE DATA FROM RUN 2 OF 2 OF THE MOBILE NOISE LAB. ON
APRIL 30 1971 FROM 11:30 TO 12:30 AT MEDFORD GRID LOCATION 4-6

NOISE DATA FROM RUN 2 OF 2 OF THE MOBILE NOISE LAB. ON
APRIL 30 1971 FROM 11:30 TO 12:30 AT MEDFORD GRID LOCATION 4-6

DISTRIBUTION DBA*	1 86	SAMPLES	14400
	1 85	AVERAGE	50.7 DBA*
	6 84	STANDARD DEVIATION	4.4 DBA*
	4 83	ENERGY MEAN	59 DB**
	8 82	NOISE POLLUTION LEVEL	78.3
	8 81	1% PERCENTILE	69.5 DBA*
	6 80	10% DECILE	55.4 DBA*
	7 79	MEDIAN	50.7 DBA*
	5 78	90% DECILE	47.1 DBA*
	7 77	99% PERCENTILE	43.3 DBA*
	8 76	RANGE	46 DB
	7 75		
	7 74		
	9 73		
	11 72		
	21 71		
	19 70		
	20 69		
	16 68		
	20 67		
	35 66		
	28 65		
	41 64		
	39 63		
	55 62		
	57 61		
	78 60		
	108 59		
	154 58		
	183 57		
	235 56		
	385 55		
	513 54		
	936 53		
	1567 52		
	1888 51		
	2078 50		
	2063 49		
	1450 48		
	975 47		
	596 46		
	382 45		
	197 44		
	148 43		
	74 42		
	21 41		
	3 40		
	0 39		



LEVEL (DBA*) VS CUMULATIVE DISTRIBUTION (PERCENT)

LEVEL (DBA*) VS DISTRIBUTION (PERCENT)

*-A WEIGHTED DECIBEL-S-RE. 20 MICRONOTONS PER SQUARE METER
*-DBA RE. 20 MICRONOTONS PER SQUARE METER FROM AN AVERAGE OF
THE SQUARES OF THE SOUND PRESSURES.

SITE DATA

Community: Medford, Massachusetts

Grid Location: 5-2

Microphone Location: From the intersection of Boston Avenue and Dearborn St; 325 feet north on Boston Avenue then normal (right) 115 feet. Microphone was located 45 feet from center of double track railway.

Date of Run: April 23, 1971

Time of Run: 7:30 to 8:30 AM

Recorded Tape No.: MAL 45-71; Side 1; Tracks 3 & 4

ROAD SURFACE AND WEATHER CONDITIONS

Road surface: dry Temperature: 60 °F. Sky Condition: Ptly Cloudy

Relative Humidity: 50 % Barometric Pressure 756 MM of Mercury

Wind Direction From: Northwest

Velocity (MPH): 5

Site Description:

Open area to the north and east; two-story masonry buildings to the south and west.

Special Events:

One freight train and nine (9) Budd car commuter trains passed microphone.

B-74

SITE DATA

Community: Medford, Massachusetts

Grid Location: 5-2

Microphone Location: SEE SHEET 1 of 2

Date of Run: April 23, 1971

Time of Run: 11:30 AM to 12:30 PM

Recorded Tape No.: MAL 45-71, side 2, track 3 and 4.

ROAD SURFACE AND WEATHER CONDITIONS

Road surface: dry Temperature: 57 °F. Sky Condition: Cloudy

Relative Humidity: 43 % Barometric Pressure 756 MM of Mercury

Wind Direction From: West

Velocity (MPH): 3 to 5 with gusts to 10.

Site Description:

SEE SHEET 1 of 2

Special Events:

Three (3) Budd car commuter trains.

B-75

US DEPARTMENT OF TRANSPORTATION
TRANSPORTATION SYSTEMS CENTER
NOISE ABATEMENT GROUP

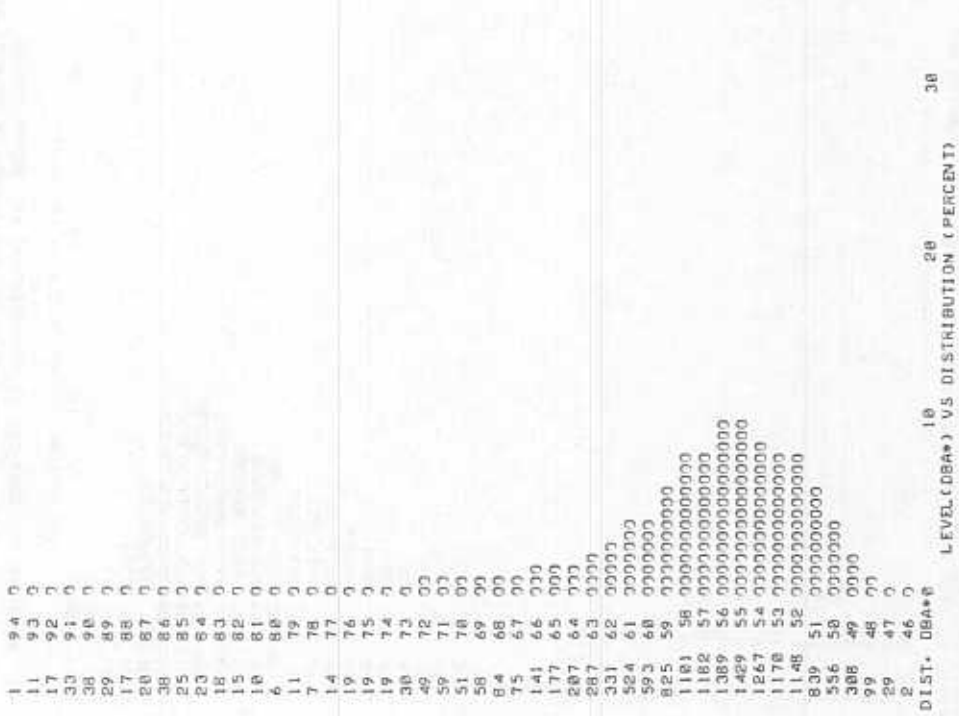
PAGE 2

NOISE DATA FROM RUN 1APR OF 2 OF THE MOBILE NOISE LAB. ON
APRIL 23 1971 FROM 07:30 TO 08:30 AT MEDFORD GRID LOCATION 5-2

NOISE DATA FROM RUN 1APR OF 2 OF THE MOBILE NOISE LAB. ON
APRIL 23 1971 FROM 07:30 TO 08:30 AT MEDFORD GRID LOCATION 5-2

DISTRIBUTION DBA*	1 94	0
11 93	0	
17 92	0	
33 91	0	
38 90	0	
29 89	0	
17 88	0	
38 86	0	
25 85	0	
23 84	0	
18 83	0	
15 82	0	
10 81	0	
6 80	0	
11 79	0	
7 78	0	
14 77	0	
19 76	0	
19 75	0	
30 74	0	
49 72	00	
59 71	00	
51 70	00	
58 69	00	
84 68	00	
75 67	00	
141 66	000	
177 65	000	
287 64	000	
331 62	00000	
524 61	0000000	
593 60	00000000	
825 59	0000000000	
1101 58	00000000000000	
1182 57	0000000000000000	
1389 56	000000000000000000	
1429 55	00000000000000000000	
1267 54	0000000000000000000000	
1178 53	000000000000000000000000	
1148 52	00000000000000000000000000	
839 51	000000000000	
556 50	00000000	
308 49	0000	
99 48	00	
29 47	0	
2 46	0	
0 45	0	

SAMPLES	14000
AVERAGE	56.9 DBA*
STANDARD DEVIATION	6.5 DBA*
ENERGY MEAN	72 DB**
NOISE POLLUTION LEVEL*	88.6
1% PERCENTILE*	88.1 DBA*
10% DECILE*	83.6 DBA*
MEDIAN*	56.3 DBA*
90% DECILE*	51.5 DBA*
99% PERCENTILE*	49 DBA*
RANGES	48 DB



LEVEL (DBA*) VS CUMULATIVE DISTRIBUTION (PERCENT)

LEVEL (DBA*) VS DISTRIBUTION (PERCENT)

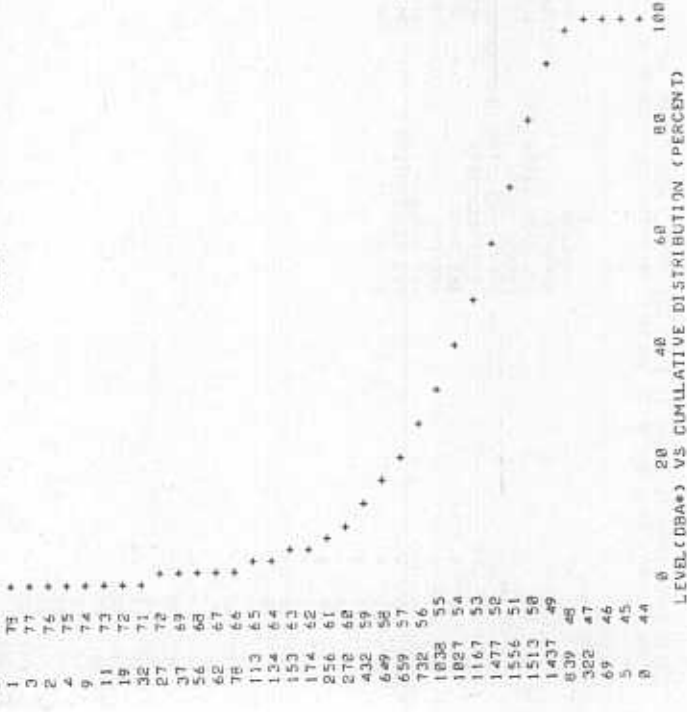
*-A WEIGHTED DECIBEL-RE. 20 MICRONEWTONS PER SQUARE METER
**-DBA RE. 20 MICRONEWTONS PER SQUARE METER FROM AN AVERAGE OF
THE SQUARES OF THE SOUND PRESSURES.

US DEPARTMENT OF TRANSPORTATION
TRANSPORTATION SYSTEMS CENTER
NOISE ABATEMENT GROUP

NOISE DATA FROM RUN 2AP OF 2 OF THE MOBILE NOISE LAB. ON
APRIL 23 1971 FROM 11:30 TO 12:30 AT MEDFORD GRID LOCATION 5-2

DISTRI
UTION DBA*
2 89 0
2 88 0
8 87 0
6 86 0
5 85 0
1 84 0
2 83 0
1 82 0
3 81 0
5 80 0
2 79 0
1 78 0
2 77 0
2 76 0
4 75 0
9 74 0
11 73 0
19 72 0
32 71 0
27 70 0
37 69 0
56 68 00
62 67 00
78 66 00
113 65 00
134 64 00
153 63 000
174 62 000
256 61 0000
270 60 0000
432 59 000000
649 58 0000000
659 57 00000000
732 56 000000000
1838 55 000000000000
1827 54 000000000000
1167 53 000000000000
1477 52 00000000000000
1556 51 000000000000000
1513 50 0000000000000000
1437 49 0000000000000000
839 48 0000000000000000
322 47 0000
69 46 00
5 45 0
0 44

SAMPLES= 1480
AVERAGE= 53.6 DBA*
STANDARD DEVIATION= 4.9 DBA*
ENERGY MEAN= 61.6 DB**
NOISE POLLUTION LEVEL= 74.1
1% PERCENTILE= 70 DBA*
10% DECILE= 68.1 DBA*
MEDIAN= 53 DBA*
90% DECILE= 49.1 DBA*
99% PERCENTILE= 47.2 DBA*
RANGE= 44 DB



NOISE DATA FROM RUN 2AP OF 2 OF THE MOBILE NOISE LAB. ON
APRIL 23 1971 FROM 11:30 TO 12:30 AT MEDFORD GRID LOCATION 5-2

2 89 0
2 88 0
8 87 0
6 86 0
5 85 0
1 84 0
2 83 0
1 82 0
3 81 0
5 80 0
2 79 0
1 78 0
2 77 0
2 76 0
4 75 0
9 74 0
11 73 0
19 72 0
32 71 0
27 70 0
37 69 0
56 68 00
62 67 00
78 66 00
113 65 00
134 64 00
153 63 000
174 62 000
256 61 0000
270 60 0000
432 59 000000
649 58 0000000
659 57 00000000
732 56 000000000
1838 55 000000000000
1827 54 000000000000
1167 53 000000000000
1477 52 00000000000000
1556 51 000000000000000
1513 50 0000000000000000
1437 49 0000000000000000
839 48 0000000000000000
322 47 0000
69 46 00
5 45 0
0 44

DIST. DBA*0 10 20 30 40 50 60 70 80 90 100
LEVEL (DBA*) VS DISTRIBUTION (PERCENT)

*-A WEIGHTED DECIBEL-S-RE. 20 MICRONEWTONS PER SQUARE METER
*-DBA RE. 20 MICRONEWTONS PER SQUARE METER FROM AN AVERAGE OF
THE SQUARES OF THE SOUND PRESSURES.

SITE DATA

Community: Medford, Massachusetts

Grid Location: 5-3

Microphone Location: 50 feet southwest of end of Woodbine Street

Date of Run: April 20, 1971

Time of Run: 7:30 to 8:30 AM

Recorded Tape No.: MAL 40-71; Side 1; Tracks 3 & 4

ROAD SURFACE AND WEATHER CONDITIONS

Road surface: Dry Temperature: 52 °F. Sky Condition: Cloudy

Relative Humidity: 59 % Barometric Pressure: 768 mm of Mercury

Wind Direction From: North

Velocity (MPH): 6 to 10

Site Description:

Open field south and west; single and multi-family dwellings north and west.

Special Events:

None

B-80

SITE DATA

Community: Medford, Massachusetts

Grid Location: 5-3

Microphone Location: SEE SHEET 1 of 2

Date of Run: April 20, 1971

Time of Run: 11:30 AM to 12:30 PM

Recorded Tape No.: MAL 40-71; Side 2; Tracks 3 & 4

ROAD SURFACE AND WEATHER CONDITIONS

Road surface: Dry Temperature: 59 °F. Sky Condition: Cloudy

Relative Humidity: 53 % Barometric Pressure: 767 mm of Mercury

Wind Direction From: Northeast

Velocity (MPH): 4

Site Description:

SEE SHEET 1 of 2

Special Events:

NONE

B-81

NOISE DATA FROM RUN 1 OF 2 OF THE MOBILE NOISE LAB. ON
 APRIL 20 1971 FROM 07:30 TO 08:30 AT MEDFORD GRID LOCATION 5-3

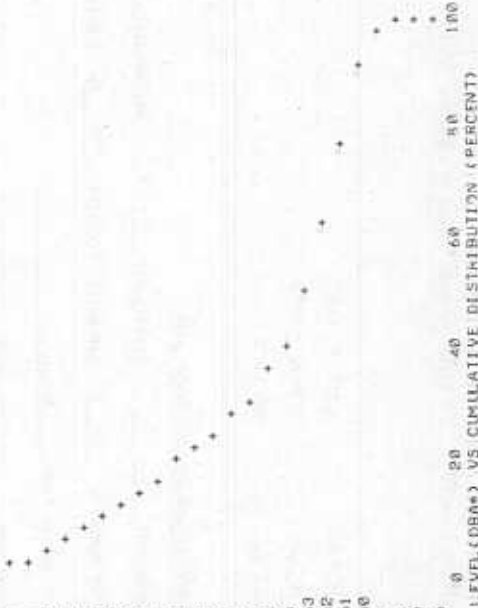
US DEPARTMENT OF TRANSPORTATION
 TRANSPORTATION SYSTEMS CENTER
 NOISE ABATEMENT GROUP

NOISE DATA FROM RUN 1 OF 2 OF THE MOBILE NOISE LAB. ON
 APRIL 20 1971 FROM 07:30 TO 08:30 AT MEDFORD GRID LOCATION 5-3

DISTRIB
 LUTION DBA**

2	80	0
2	79	0
4	78	0
7	77	0
6	76	0
18	75	0
36	74	0
33	73	0
68	71	0
101	70	0
146	69	0
178	68	0
257	67	0
260	66	0
284	65	0
285	64	0
294	63	0
335	62	0
347	61	0
320	60	0
324	59	0
447	58	0
411	57	0
482	56	0
684	55	0
789	54	0
1834	53	0
1928	52	0
2027	51	0
1755	50	0
959	49	0
284	48	0
38	47	0
0	46	0

SAMPLES= 14400
 AVERAGE= 55 DBA**
 STANDARD DEVIATION= 5.9 DBA**
 ENERGY MEAN= 68.6 DBA**
 NOISE POLLUTION LEVEL= 75.7
 1% PERCENTILE= 72.4 DBA**
 MEDIAN= 65.1 DBA**
 90% DECILE= 50.1 DBA**
 99% PERCENTILE= 48.4 DBA**
 RANGE= 33 DB



2 80 0
 2 79 0
 4 78 0
 7 77 0
 6 76 0
 18 75 0
 36 74 0
 33 73 0
 68 71 0
 101 70 0
 146 69 0
 178 68 0
 257 67 0
 260 66 0
 284 65 0
 285 64 0
 294 63 0
 335 62 0
 347 61 0
 320 60 0
 324 59 0
 447 58 0
 411 57 0
 482 56 0
 684 55 0
 789 54 0
 1834 53 0
 1928 52 0
 2027 51 0
 1755 50 0
 959 49 0
 284 48 0
 38 47 0
 0 46 0

LEVEL (DBA*) VS DISTRIBUTION (PERCENT)

**A WEIGHTED DECIBEL-SQ RE. 20 MICRONETONS PER SQUARE METER
 ***DBA RE. 20 MICRONETONS PER SQUARE METER FROM AN AVERAGE OF
 THE SQUARES OF THE SOUND PRESSURES.

US DEPARTMENT OF TRANSPORTATION
TRANSPORTATION SYSTEMS CENTER
NOISE ABATEMENT GROUP

NOISE DATA FROM RUN 2 OF 2 OF THE MOBILE NOISE LAB. ON
APRIL 20 1971 FROM 11:30 TO 12:30 AT MEDFORD GRID LOCATION 5-3

DISTRI-
UTION DBA*
1 90 +
0 89 +
0 88 +
1 87 +
0 86 +
0 85 +
0 84 +
1 83 +
0 82 +
0 81 +
5 79 +
7 78 +
10 77 +
8 76 +
15 75 +
20 74 +
14 73 +
17 72 +
14 71 +
25 70 +
26 69 +
29 68 +
18 67 +
42 66 +
48 65 +
40 64 +
46 63 +
46 62 +
70 61 +
64 60 +
112 59 +
148 58 +
136 57 +
182 56 +
231 55 +
269 54 +
360 53 +
494 52 +
742 51 +
1066 50 +
1703 49 +
2118 48 +
2439 47 +
2930 46 +
1891 45 +
434 44 +
83 43 +
14 42 +
0 41 +

SAMPLES= 14000
AVERAGE= 49.1 DBA*
STANDARD DEVIATION= 4.5 DBA*
ENERGY MEAN= 57.4 DB**
NOISE POLLUTION LEVEL= 69.0
1% PERCENTILE= 69.8 DBA*
10% PERCENTILE= 54.7 DBA*
MEDIAN= 48.4 DBA*
90% DECILE= 45.8 DBA*
99% PERCENTILE= 44.1 DBA*
RANGE= 48 DB

PAGE 2

NOISE DATA FROM RUN 2 OF 2 OF THE MOBILE NOISE LAB. ON
APRIL 20 1971 FROM 11:30 TO 12:30 AT MEDFORD GRID LOCATION 5-3

1 90 0
0 89 0
0 88 0
1 87 0
0 86 0
0 85 0
0 84 0
1 83 0
0 82 0
0 81 0
0 80 0
5 79 0
7 78 0
10 77 0
8 76 0
15 75 0
20 74 0
14 73 0
17 72 0
14 71 0
25 70 0
26 69 0
29 68 0
18 67 0
42 66 0
48 65 0
40 64 0
46 63 0
46 62 0
70 61 0
64 60 0
112 59 0
148 58 0
136 57 0
182 56 0
231 55 0
269 54 0
360 53 0
494 52 0
742 51 0
1066 50 0
1703 49 0
2118 48 0
2439 47 0
2930 46 0
1891 45 0
434 44 0
83 43 0
14 42 0
0 41 0

LEVEL (DBA*) VS DISTRIBUTION (PERCENT) 30

*-A WEIGHTED DECIBEL-S-RE. 20 MICROWATONS PER SQUARE METER.
**-DBA RE. 20 MICROWATONS PER SQUARE METER FROM AN AVERAGE OF
THE SQUARES OF THE SOUND PRESSURES.

B-85

LEVEL (DBA*) VS CUMULATIVE DISTRIBUTION (PERCENT) 100

B-84

SITE DATA

Community: Medford, Massachusetts
 Grid Location: 5-4
 Microphone Location: East side of Tour Avenue on sidewalk; 225 feet south of intersection with South Street.
 Date of Run: April 23, 1971
 Time of Run: 7:11 to 8:31 AM
 Recorded Tape No.: NAL 46-71; Side 1; Tracks 1 & 4

ROAD SURFACE AND WEATHER CONDITIONS

Road surface: Dry Temperature: 60 °F. Sky Condition: Fly Cloudy
 Relative Humidity: 50 % Barometric Pressure 756 mm of Mercury
 Wind Direction From: Northwest
 Velocity (MPH): 5

Site Description:

Residential area with multi-family dwellings located near street.

Special Events:

None

B-86

SITE DATA

Community: Medford, Massachusetts
 Grid Location: 5-4
 Microphone Location: SEE SHEET 1 of 2
 Date of Run: April 23, 1971
 Time of Run: 11:30 AM to 12:30 PM
 Recorded Tape No.: NAL 46-71; Side 2; Tracks 3 & 4

ROAD SURFACE AND WEATHER CONDITIONS

Road surface: Dry Temperature: 57 °F. Sky Condition: Cloudy
 Relative Humidity: 43 % Barometric Pressure 756 mm of Mercury
 Wind Direction From: West
 Velocity (MPH): 4 to 7

Site Description:

SEE SHEET 1 of 2

Special Events:

None

B-87

NOISE DATA FROM RUN 1 OF 2 OF THE MOBILE NOISE LAB. ON
 APRIL 23 1971 FROM 07:31 TO 08:31 AT MEDFORD GRID LOCATION 5-4

1	78	0
2	77	0
3	76	0
5	75	0
16	74	0
9	73	0
17	72	0
39	71	00
28	70	0
58	69	00
77	68	00
93	67	00
137	66	000
213	65	000
255	64	0000
354	63	00000
495	62	000000
603	61	00000000
579	60	00000000
682	59	000000000
789	58	000000000
638	57	000000000
803	56	0000000000
1125	55	00000000000000
1382	54	0000000000000000
1828	53	00000000000000000000
2834	52	0000000000000000000000
1385	51	0000000000000000000000
625	50	000000000
258	49	0000
35	48	0

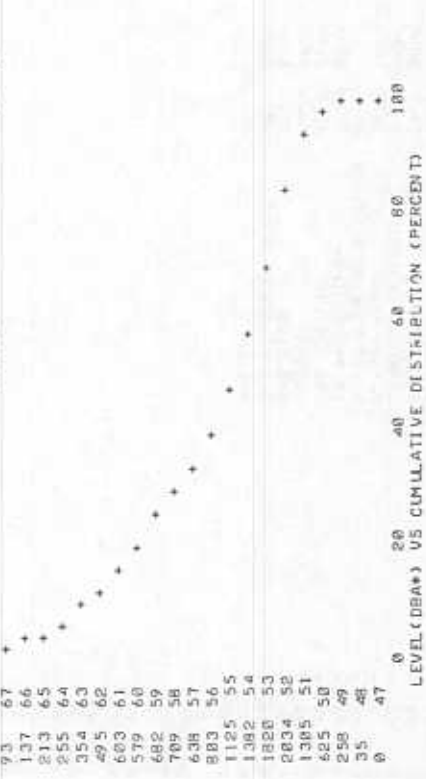
DIST. DBA**8 10 20 30
 LEVEL(DBA**) VS DISTRIBUTION (PERCENT)

**A WEIGHTED DECIBELS-RE. 28 MICRONEWTONS PER SQUARE METER
 ***DBA RE. 28 MICRONEWTONS PER SQUARE METER FROM AN AVERAGE OF
 THE SQUARES OF THE SOUND PRESSURES.

US DEPARTMENT OF TRANSPORTATION
 TRANSPORTATION SYSTEMS CENTER
 NOISE ABATEMENT GROUP

NOISE DATA FROM RUN 1 OF 2 OF THE MOBILE NOISE LAB. ON
 APRIL 23 1971 FROM 07:31 TO 08:31 AT MEDFORD GRID LOCATION 5-4

DISTRIB			
UTION DBA*			
1	78	14400	
2	77	55.7 DBA*	
3	76	4.6 DBA*	
5	75	59 DB**	
16	74		
9	73	70.8 DBA*	
17	72	69.6 DBA*	
39	71	62.7 DBA*	
28	70	54.8 DBA*	
58	69	51.4 DBA*	
77	68	49.4 DBA*	
93	67	30 DB	
137	66		
213	65		
255	64		
354	63		
495	62		
603	61		
579	60		
682	59		
789	58		
638	57		
803	56		
1125	55		
1382	54		
1828	53		
2834	52		
1385	51		
625	50		
258	49		
35	48		
0	47		

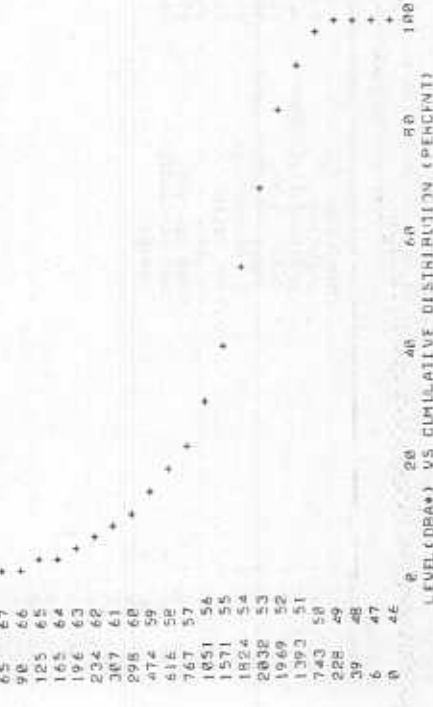


US DEPARTMENT OF TRANSPORTATION
TRANSPORTATION SYSTEMS CENTER
NOISE ABATEMENT GROUP

NOISE DATA FROM RUN 2 OF 2 OF THE MOBILE NOISE LAB. ON
APRIL 23 1971 FROM 11:30 TO 12:30 AT MEDFORD GRID LOCATION 5-4

DISTRI- UTION IPR*	SAMPLES*	1.4dB*
1 83	54.9	DBA*
0 82	4.1	DBA*
5 81	58.6	IP**
3 80	69.1	DBA*
1 79	69.4	DBA*
4 78	60.8	DBA*
3 77	54.4	DBA*
7 76	51.3	DBA*
7 75	49.4	DBA*
5 74	36	DB
9 73		
21 72		
17 71		
36 70		
41 69		
47 68		
65 67		
98 66		
125 65		
165 64		
196 63		
234 62		
387 61		
298 60		
474 59		
616 58		
767 57		
1851 56		
1571 55		
1824 54		
2832 53		
1969 52		
1393 51		
743 50		
228 49		
39 48		
6 47		
0 46		

STATISTICS:
AVERAGE = 69.1 DBA
STANDARD DEVIATION = 4.1 DBA
ENERGY MEAN = 58.6 IP**
NOISE POLLUTION LEVEL = 69.1 DBA
1% PERCENTILE = 69.4 DBA
10% DECILE = 60.8 DBA
MEDIAN = 54.4 DBA
90% DECILE = 51.3 DBA
99% PERCENTILE = 49.4 DBA
RANGES = 36 DB



NOISE DATA FROM RUN 2 OF 2 OF THE MOBILE NOISE LAB. ON
APRIL 23 1971 FROM 11:30 TO 12:30 AT MEDFORD GRID LOCATION 5-4

DIST. DBA*	10	20	30
1 83	0		
0 82	0		
5 81	0		
3 80	0		
1 79	0		
4 78	0		
3 77	0		
7 76	0		
7 75	0		
5 74	0		
9 73	0		
21 72	0		
17 71	0		
36 70	0		
41 69	0		
47 68	0		
65 67	0		
98 66	0		
125 65	0		
165 64	0		
196 63	0		
234 62	0		
387 61	0		
298 60	0		
474 59	0		
616 58	0		
767 57	0		
1851 56	0		
1571 55	0		
1824 54	0		
2832 53	0		
1969 52	0		
1393 51	0		
743 50	0		
228 49	0		
39 48	0		
6 47	0		
0 46	0		

*--A WEIGHTED DECIBEL S-RE. 20 MICROWATTS PER SQUARE METER
**--DBA RE. 20 MICROWATTS PER SQUARE METER FROM AN AVERAGE OF
THE SQUARES OF THE SOUND PRESSURES.

SITE DATA

Community: Medford, Massachusetts
 Grid Location: 5-5

Microphone Location: West side of Lincoln Road, 135 feet north of
 Traineroff Street.

Date of Run: April 21, 1971
 Time of Run: 7:30 to 8:30 AM
 Recorded Tape No.: MAL 42-71; Side 3; Track 3 & 4

ROAD SURFACE AND WEATHER CONDITIONS

Road surface: Dry Temperature: 53 °F. Sky Condition: Partly Cloudy
 Relative Humidity: 62 % Barometric Pressure 761 mm of Mercury
 Wind Direction From: Southeast
 Velocity (MPH): 2

Site Description:

Hooded residential area with large single family dwellings.

Special Events:

None

B-92

SITE DATA

Community: Medford, Massachusetts
 Grid Location: 5-3

Microphone Location: SEE SHEET 1 of 2

Date of Run: April 21, 1971
 Time of Run: 11:30 AM to 12:30 PM
 Recorded Tape No.: MAL 42-71; Side 2; Tracks 3 & 4

ROAD SURFACE AND WEATHER CONDITIONS

Road surface: Dry Temperature: 61 °F. Sky Condition: Cloudy
 Relative Humidity: 43 % Barometric Pressure 756 mm of Mercury
 Wind Direction From: West
 Velocity (MPH): 2

Site Description:

SEE SHEET 1 of 2

Special Events:

NONE

B-93

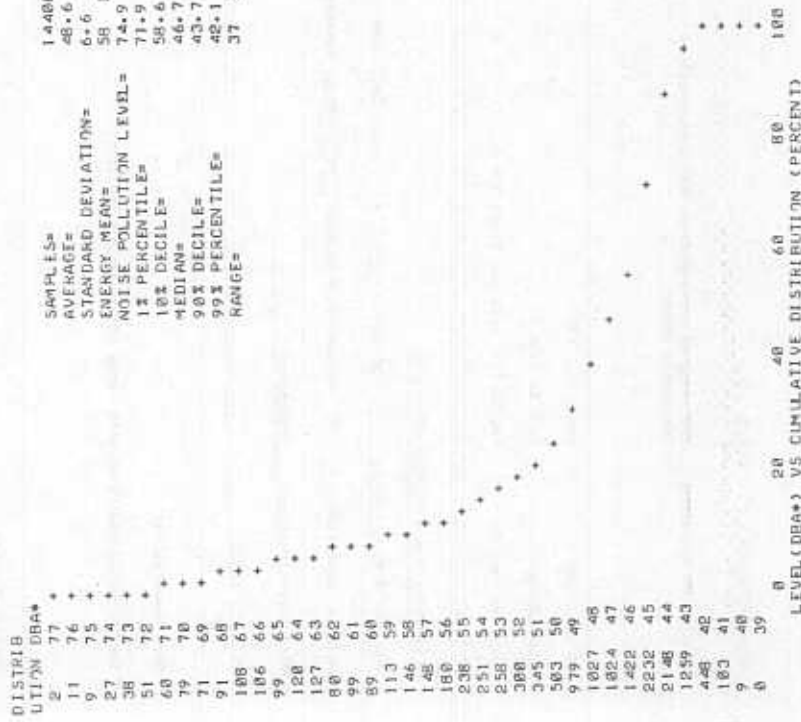
NOISE DATA FROM RUN 1 OF 2 OF THE MOBILE NOISE LAB. ON
APRIL 21 1971 FROM 07:31 TO 08:31 AT MEDFORD GRID LOCATION 5-5

US DEPARTMENT OF TRANSPORTATION
TRANSPORTATION SYSTEMS CENTER
NOISE ABATEMENT GROUP

NOISE DATA FROM RUN 1 OF 2 OF THE MOBILE NOISE LAB. ON
APRIL 21 1971 FROM 07:31 TO 08:31 AT MEDFORD GRID LOCATION 5-5

2	77	0	1.400
11	76	0	48.6 DBA*
9	75	0	6.6 DBA*
27	74	0	58 DB**
38	73	0	74.9 DBA*
51	72	0	71.9 DBA*
68	71	0	58.6 DBA*
79	70	0	46.7 DBA*
91	69	0	43.7 DBA*
188	67	0	42.1 DBA*
186	66	0	37 DB
99	65	0	
128	64	0	
127	63	0	
88	62	0	
99	61	0	
89	60	0	
113	59	0	
146	58	0	
148	57	0	
180	56	0	
238	55	0	
251	54	0	
258	53	0	
388	52	0	
345	51	0	
583	50	0	
979	49	0	
1827	48	0	
1824	47	0	
1422	46	0	
2232	45	0	
2148	44	0	
1259	43	0	
448	42	0	
183	41	0	
9	40	0	
0	39	0	

SAMPLES= 1400
AVERAGE= 48.6 DBA*
STANDARD DEVIATION= 6.6 DBA*
ENERGY MEAN= 58 DB**
NOISE POLLUTION LEVEL= 74.9 DBA*
1% PERCENTILE= 71.9 DBA*
10% DECILE= 58.6 DBA*
MEDIAN= 46.7 DBA*
90% DECILE= 43.7 DBA*
95% PERCENTILE= 42.1 DBA*
RANGE= 37 DB



DIST. DBA** LEVEL (DBA*) VS DISTRIBUTION (PERCENT) 38

*-A WEIGHTED DECIBEL-S-RE. 20 MICRONETONS PER SQUARE METER
**-DBA RE. 20 MICRONETONS PER SQUARE METER FROM AN AVERAGE OF
THE SQUARES OF THE SOUND PRESSURES.

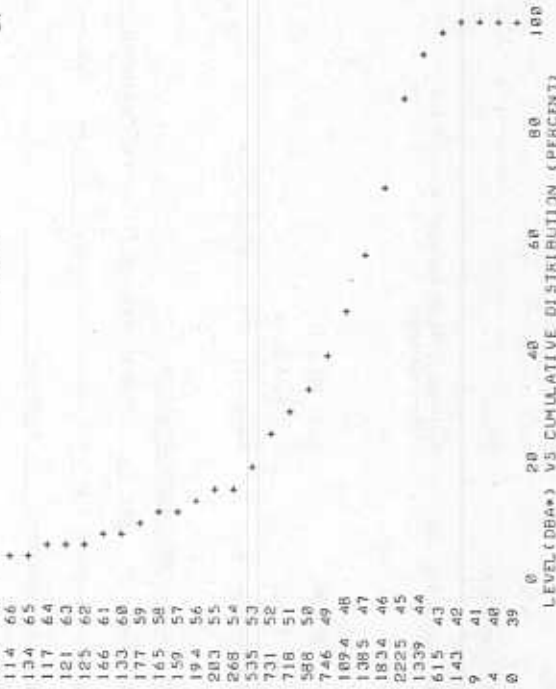
NOISE DATA FROM RUN 2 OF 2 OF THE MOBILE NOISE LAB. ON
 APRIL 21 1971 FROM 11:30 TO 12:30 AT MEDFORD GRID LOCATION 5-5

U.S. DEPARTMENT OF TRANSPORTATION
 TRANSPORTATION SYSTEMS CENTER
 NOISE ABATEMENT GROUP

NOISE DATA FROM RUN 2 OF 2 OF THE MOBILE NOISE LAB. ON
 APRIL 21 1971 FROM 11:30 TO 12:30 AT MEDFORD GRID LOCATION 5-5

DISTRIBUTION DBA*	SAMPLES*	14400
1	77	49.3 DBA*
4	76	6.1 DBA*
5	75	56.6 DB**
7	74	72.2
11	73	69.5 DBA*
14	72	59 DBA*
36	71	47.7 DBA*
55	70	44.5 DBA*
68	69	42.9 DBA*
85	68	37 DB
100	67	
114	66	
134	65	
117	64	
121	63	
125	62	
166	61	
133	60	
177	59	
165	58	
159	57	
194	56	
203	55	
268	54	
535	53	
731	52	
718	51	
588	50	
746	49	
1094	48	
1385	47	
1834	46	
2225	45	
1339	44	
615	43	
141	42	
9	41	
4	40	
0	39	

STANDARD DEVIATION= 1.4400
 ENERGY MEAN= 49.3 DBA*
 NOISE POLLUTION LEVEL= 6.1 DBA*
 1% PERCENTILE= 56.6 DB**
 10% DECILE= 72.2
 MEDIAN= 69.5 DBA*
 90% DECILE= 59 DBA*
 99% PERCENTILE= 47.7 DBA*
 RANGE= 44.5 DBA*
 37 DB



DIST. DBA*0	10	20	30
1	77	0	
4	76	0	
5	75	0	
7	74	0	
11	73	0	
14	72	0	
36	71	0	
55	70	00	
60	69	00	
65	68	00	
100	67	00	
114	66	00	
134	65	00	
117	64	00	
121	63	00	
125	62	00	
166	61	000	
133	60	00	
177	59	000	
165	58	000	
159	57	000	
194	56	000	
203	55	000	
268	54	0000	
535	53	000000	
731	52	00000000	
718	51	000000000	
588	50	000000000	
746	49	0000000000	
1094	48	000000000000	
1385	47	0000000000000000	
1834	46	000000000000000000	
2225	45	00000000000000000000	
1339	44	00000000000000000000	
615	43	0000000000	
141	42	000	
9	41	0	
4	40	0	
0	39	0	

*-A WEIGHTED DECIBEL-S-RE. 20 MICRONETONS PER SQUARE METER
 **-DBA RE. 20 MICRONETONS PER SQUARE METER FROM AN AVERAGE OF
 THE SQUARES OF THE SOUND PRESSURES.

SITE DATA

SITE DATA

City: Medford, Massachusetts
 Grid Location: 5-6
 Microphone Location: Southeast side of cul-de-sac at north end of Lincoln Road.
 Date of Run: April 30, 1971
 Time of Run: 7:35 to 8:25 AM
 Recorded Tape No.: WAL 53-71; Side 1; Tracks 3 & 4

Community: Medford, Massachusetts
 Grid Location: 5-6
 Microphone Location: SEE SHEET 1 of 2
 Date of Run: April 30, 1971
 Time of Run: 11:35 AM to 12:25 PM
 Recorded Tape No.: WAL 53-71; Side 2; Tracks 3 & 4

ROAD SURFACE AND WEATHER CONDITIONS

Road surface: Dry Temperature: 46 °F. Sky Condition: Cloudy
 Relative Humidity: 80 % Barometric Pressure: 768 mm of Mercury
 Wind Direction From: Northwest
 Velocity (MPH): 1 to 3

ROAD SURFACE AND WEATHER CONDITIONS

Road surface: Dry Temperature: 56 °F. Sky Condition: Cloudy
 Relative Humidity: 61 % Barometric Pressure: 767 mm of Mercury
 Wind Direction From: West
 Velocity (MPH): 0 to 2

Description:
 Dog's family dwelling area with woods at rear of houses.
 Special Events:
 Insufficient tape for full hour run.

Description:
 SEE SHEET 1 of 2
 Special Events:
 Dog barking most of run. Insufficient tape for full hour run.

B-98

B-99

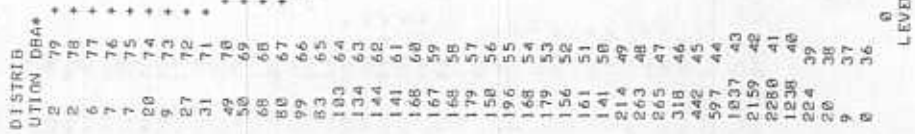
NOISE DATA FROM RUN 1 APR OF 2 OF THE MOBILE NOISE LAB. ON
 APRIL 30 1971 FROM 07:30 TO 08:30 AT MEDFORD GRID LOCATION NO. 5-6

US DEPARTMENT OF TRANSPORTATION
 TRANSPORTATION SYSTEMS CENTER
 NOISE ABATEMENT GROUP

NOISE DATA FROM RUN 1 APR OF 2 OF THE MOBILE NOISE LAB. ON
 APRIL 30 1971 FROM 07:30 TO 08:30 AT MEDFORD GRID LOCATION NO. 5-6

2	79	0	11961
2	78	0	46.4 DBA*
6	77	0	7.9 DBA*
7	76	0	57.6 DB**
7	75	0	77.8
20	74	0	78.8 DBA*
9	73	0	48.2 DBA*
27	72	0	43 DBA*
31	71	0	48.8 DBA*
50	69	0	39.4 DBA*
68	68	0	42 DB
80	67	0	
99	66	0	
83	65	0	
100	64	0	
134	63	0	
144	62	0	
141	61	0	
168	60	0	
167	59	0	
168	58	0	
179	57	0	
150	56	0	
196	55	0	
168	54	0	
179	53	0	
156	52	0	
161	51	0	
141	50	0	
214	49	0	
263	48	0	
265	47	0	
318	46	0	
442	45	0	
597	44	0	
1837	43	0	
2159	42	0	
2280	41	0	
1238	40	0	
224	39	0	
28	38	0	
9	37	0	
0	36	0	

SAMPLES= 11961
 AVERAGES= 46.4 DBA*
 STANDARD DEVIATION= 7.9 DBA*
 ENERGY MEAN= 57.6 DB**
 NOISE POLLUTION LEVEL= 77.8
 1% PERCENTILE= 78.8 DBA*
 10% DECILE= 48.2 DBA*
 MEDIAN= 43 DBA*
 90% DECILE= 48.8 DBA*
 99% PERCENTILE= 39.4 DBA*
 RANGE= 42 DB



B-100

2	79	0
2	78	0
6	77	0
7	76	0
7	75	0
20	74	0
9	73	0
27	72	0
31	71	0
49	70	0
58	69	0
80	68	0
88	67	0
99	66	0
83	65	0
100	64	0
134	63	0
144	62	0
141	61	0
168	60	0
167	59	0
168	58	0
179	57	0
150	56	0
196	55	0
168	54	0
179	53	0
156	52	0
161	51	0
141	50	0
214	49	0
263	48	0
265	47	0
318	46	0
442	45	0
597	44	0
1837	43	0
2159	42	0
2280	41	0
1238	40	0
224	39	0
28	38	0
9	37	0
0	36	0

DIST. DBA** LEVEL (DBA*) VS DISTRIBUTION (PERCENT)

*-A WEIGHTED DECIBEL-SQ. 20 MICRONETONS PER SQUARE METER
 **-DBA RE. 20 MICRONETONS PER SQUARE METER FROM AN AVERAGE OF
 THE SQUARES OF THE SOUND PRESSURES.

NOISE DATA FROM RUN 2AP OF 2 OF THE MOBILE NOISE LAB. ON
APRIL 30 1971 FROM 11:38 TO 12:27 AT MEDFORD GRID LOCATION 5-6

US DEPARTMENT OF TRANSPORTATION
TRANSPORTATION SYSTEMS CENTER
NOISE ABATEMENT GROUP

NOISE DATA FROM RUN 2AP OF 2 OF THE MOBILE NOISE LAB. ON
APRIL 30 1971 FROM 11:38 TO 12:27 AT MEDFORD GRID LOCATION 5-6

1	79	0	12000
1	78	0	44.8 DBA*
9	77	0	7.4 DBA*
13	76	0	55.6 DB**
20	75	0	74.5 DB**
4	74	0	68.2 DBA*
14	73	0	55.9 DBA*
9	72	0	43.5 DBA*
15	71	0	37.5 DBA*
13	70	0	35.9 DBA*
11	69	0	45 DB
12	68	0	
11	67	0	
11	66	0	
29	65	0	
34	64	0	
64	63	0	
81	62	0	
97	61	0	
181	60	0	
122	59	0	
153	58	0	
171	57	0	
189	56	0	
213	55	0	
217	54	0	
272	53	0	
308	52	0	
316	51	0	
348	49	0	
436	48	0	
444	47	0	
514	46	0	
567	45	0	
593	44	0	
589	43	0	
787	42	0	
731	41	0	
694	40	0	
769	39	0	
974	38	0	
1162	37	0	
549	36	0	
186	35	0	
18	34	0	
8	33	0	

SAMPLES= 12000
AVERAGE= 44.8 DBA*
STANDARD DEVIATION= 7.4 DBA*
ENERGY MEAN= 55.6 DB**
NOISE POLLUTION LEVEL= 74.5 DB**
1% PERCENTILE= 68.2 DBA*
10% DECILE= 55.9 DBA*
MEDIAN= 43.5 DBA*
90% DECILE= 37.5 DBA*
99% PERCENTILE= 35.9 DBA*
RANGE= 45 DB

1	79	0
1	78	0
9	77	0
13	76	0
20	75	0
4	74	0
14	73	0
9	72	0
15	71	0
13	70	0
11	69	0
12	68	0
11	67	0
11	66	0
29	65	0
34	64	0
64	63	0
81	62	0
97	61	0
181	60	0
122	59	0
153	58	0
171	57	0
189	56	0
213	55	0
217	54	0
272	53	0
308	52	0
316	51	0
348	49	0
436	48	0
444	47	0
514	46	0
567	45	0
593	44	0
589	43	0
787	42	0
731	41	0
694	40	0
769	39	0
974	38	0
1162	37	0
549	36	0
186	35	0
18	34	0
8	33	0

LEVEL(DBA*) VS CUMULATIVE DISTRIBUTION (PERCENT)
B-102

1	79	0
1	78	0
9	77	0
13	76	0
20	75	0
4	74	0
14	73	0
9	72	0
15	71	0
13	70	0
11	69	0
12	68	0
11	67	0
11	66	0
29	65	0
34	64	0
64	63	0
81	62	0
97	61	0
181	60	0
122	59	0
153	58	0
171	57	0
189	56	0
213	55	0
217	54	0
272	53	0
308	52	0
316	51	0
348	49	0
436	48	0
444	47	0
514	46	0
567	45	0
593	44	0
589	43	0
787	42	0
731	41	0
694	40	0
769	39	0
974	38	0
1162	37	0
549	36	0
186	35	0
18	34	0
8	33	0

LEVEL(DBA*) VS DISTRIBUTION (PERCENT)
B-103

*-A WEIGHTED DECIBEL-S-RE. 20 MICRONEWTONS PER SQUARE METER
**-DBA RE. 20 MICRONEWTONS PER SQUARE METER FROM AN AVERAGE OF
THE SQUARES OF THE SOUND PRESSURES.

SITE DATA

Community: Medford, Massachusetts

Grid Location: 5-7

Microphone Location: 100 feet north of center of South Border Road at bridge.

Date of Run: February 25, 1971

Time of Run: 7:30 to 8:30 AM

Recorded Tape No.: MAL 1-71; Side 1; Track 4

ROAD SURFACE AND WEATHER CONDITIONS

Road surface: Wet & Slippery Temperature: 34 °F. Sky Condition: Cloudy

Relative Humidity: 82 % Barometric Pressure 734.5 mm of Mercury

Wind Direction From: Northwest

Velocity (MPH): 1

Site Description:

Wooded area near brook.

Special Events:

None

B-104

SITE DATA

Community: Medford, Massachusetts

Grid Location: 5-7

Microphone Location: SEE SHEET 1 of 2

Date of Run: February 25, 1971

Time of Run: 11:30 AM to 12:30 PM

Recorded Tape No.: MAL 1-71; Side 2; Track 4

ROAD SURFACE AND WEATHER CONDITIONS

Road surface: Wet Temperature: 46 °F. Sky Condition: Cloudy

Relative Humidity: 53 % Barometric Pressure 754.0 mm of Mercury

Wind Direction From: East

Velocity (MPH): 2

Site Description:

SEE SHEET 1 of 2

Special Events:

NONE

B-105

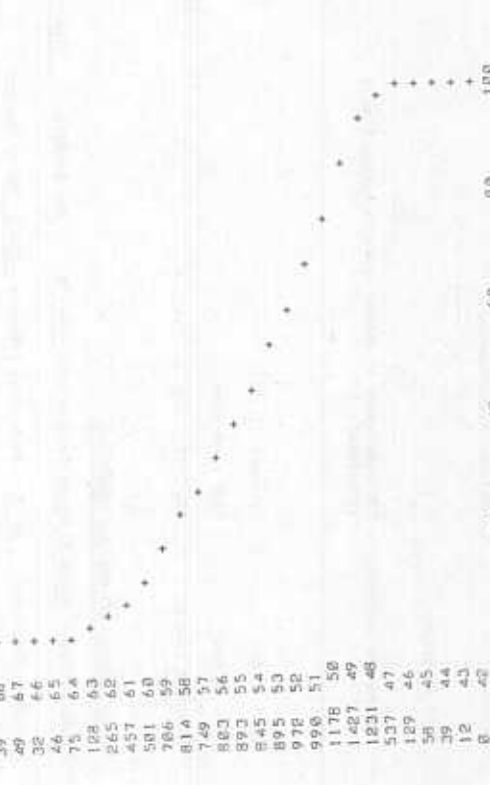
NOISE DATA FROM RUN 1A OF 2 OF THE MOBILE NOISE LAB. ON
 FEBRUARY 25 1971 FROM 07:30 TO 08:30 AT MEDFORD GRID LOCATION NO. 5-7

U.S. DEPARTMENT OF TRANSPORTATION
 TRANSPORTATION SYSTEMS CENTER
 NOISE ABATEMENT GROUP

NOISE DATA FROM RUN 1A OF 2 OF THE MOBILE NOISE LAB. ON
 FEBRUARY 25 1971 FROM 07:30 TO 08:30 AT MEDFORD GRID LOCATION NO. 5-7

DISTRI- BUTION	DBA*	SAMPLES*	14000 DBA*
1	89	0	53.7
0	79	0	4.9
3	78	0	57.7
4	77	0	DR**
3	76	0	78.2
11	75	0	DBA*
9	74	0	68.7
26	73	0	DBA*
14	72	0	53.5
14	71	0	DBA*
23	70	0	46.2
28	69	0	DBA*
39	68	00	37
49	67	00	DB
32	66	0	
46	65	00	
75	64	07	
128	63	00	
265	62	0000	
457	61	000000	
581	60	0000000	
786	59	000000000	
814	58	0000000000	
749	57	0000000000	
583	56	0000000000	
893	55	0000000000	
845	54	0000000000	
895	53	0000000000	
972	52	0000000000	
998	51	0000000000	
1178	50	0000000000	
1427	49	0000000000	
1231	48	0000000000	
537	47	0000000	
129	46	00	
58	45	00	
39	44	00	
12	43	0	
0	42		

STANDARD DEVIATION =
 ENERGY MEAN =
 NOISE POLLUTION LEVEL =
 1% PERCENTILES =
 10% DECILES =
 MEDIAN =
 90% DECILE =
 99% PERCENTILES =
 RANGE*



LEVEL (DBA*) VS CUMULATIVE DISTRIBUTION (PERCENT)

B-106

B-107

0151. DBA*0 10 20 30
 LEVEL (DBA*) VS DISTRIBUTION (PERCENT)

**A WEIGHTED DECIBELS-RE. 20 MICRONEWTONS PER SQUARE METER

**DBA RE. 20 MICRONEWTONS PER SQUARE METER FROM AN AVERAGE OF
 THE SQUARES OF THE SOUND PRESSURES.

NOISE DATA FROM RUN 2A OF 2 OF THE MOBILE NOISE LAB. ON
 FEBRUARY 25 1971 FROM 11:30 TO 12:30 AT MEDFORD GRID LOCATION NO. 5-7

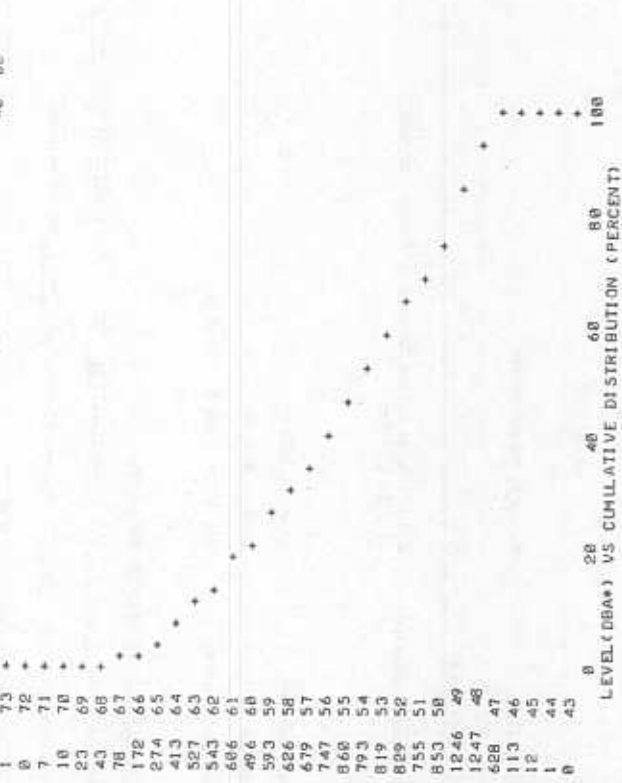
US DEPARTMENT OF TRANSPORTATION
 TRANSPORTATION SYSTEMS CENTER
 NOISE ABATEMENT GROUP

NOISE DATA FROM RUN 2A OF 2 OF THE MOBILE NOISE LAB. ON
 FEBRUARY 25 1971 FROM 11:30 TO 12:30 AT MEDFORD GRID LOCATION NO. 5-7

DISTRIBUTION DBA*

1	84	+
1	83	+
0	82	+
0	81	+
1	80	+
1	79	+
0	78	+
0	77	+
1	76	+
1	75	+
0	74	+
1	73	+
0	72	+
7	71	+
10	70	+
23	69	+
43	68	+
78	67	+
172	66	+
274	65	+
413	64	+
527	63	+
543	62	+
686	61	+
829	60	+
993	59	+
1246	58	+
1628	57	+
2047	56	+
2513	55	+
3026	54	+
3587	53	+
4196	52	+
4853	51	+
5558	50	+
6311	49	+
7122	48	+
7991	47	+
8918	46	+
9903	45	+
10946	44	+
12077	43	+

SAMPLES= 14800
 AVERAGE= 54.8 DBA*
 STANDARD DEVIATION= 5.5 DBA*
 ENERGY MEAN= 58.6 DB**
 NOISE POLLUTION LEVEL= 72.7
 1% PERCENTILE= 67.4 DBA*
 10% DECILE= 63.3 DBA*
 MEDIAN= 54.6 DBA*
 90% DECILE= 48.5 DBA*
 99% PERCENTILE= 47 DBA*
 RANGE= 46 DE



B-108

LEVEL (DBA) VS DISTRIBUTION (PERCENT)

**A WEIGHTED DECIBEL S-RE. 20 MICRONEWTONS PER SQUARE METER
 **DBA RE. 20 MICRONEWTONS PER SQUARE METER FROM AN AVERAGE OF
 THE SQUARES OF THE SOUND PRESSURES.

B-109

SITE DATA

Community: Medford, Massachusetts

Grid Location: 6-1

Microphone Location: SEE SHEET 1 of 2

Date of Run: March 2, 1971

Time of Run: 11:30 AM to 12:30 PM

Recorded Tape No.: NAL 4-71; Side 2; Track 4

ROAD SURFACE AND WEATHER CONDITIONS

Road surface: Dry Temperature: 42 °F. Sky Condition: Clear & Sunny

Relative Humidity: 42 % Barometric Pressure: 760.2 MM of Mercury

Wind Direction From: West

Velocity (MPH): 1

Site Description:

SEE SHEET 1 of 2

Special Events:

Chain saw raised ambient by 10 dBA during approximately five minutes of run.

B-111

SITE DATA

Community: Medford, Massachusetts

Grid Location: 6-1

Microphone Location: South side of Alfred Terrace, 175 feet northeast of Alfred Street.

Date of Run: March 2, 1971

Time of Run: 7:30 to 8:30 AM

Recorded Tape No.: NAL 4-71; Side 1; Track 4

ROAD SURFACE AND WEATHER CONDITIONS

Road surface: Dry Temperature: 34 °F. Sky Condition: Clear & Sunny

Relative Humidity: 36 % Barometric Pressure: 762.3 MM of Mercury

Wind Direction From: West

Velocity (MPH): 1

Site Description:

Residential area with frame buildings close to street.

Special Events:

Dog and children active.

B-110

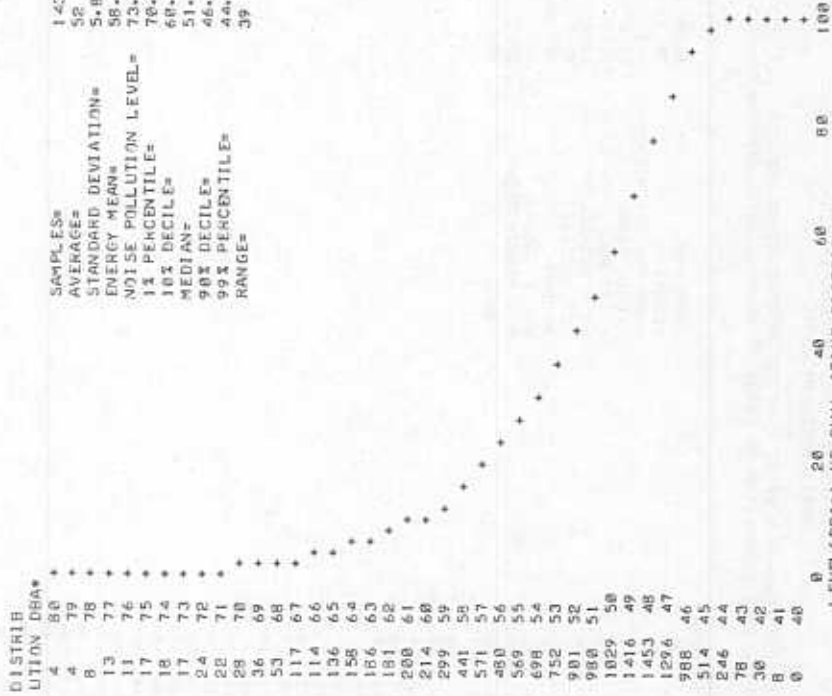
NOISE DATA FROM RUN 1A OF 2 OF THE MOBILE NOISE LAB. ON MARCH 2 1971 FROM 07:35 TO 08:35 AT MEDFORD GRID LOCATIO NO. 6-1

US DEPARTMENT OF TRANSPORTATION
TRANSPORTATION SYSTEMS CENTER
NOISE ABATEMENT GROUP

NOISE DATA FROM RUN 1A OF 2 OF THE MOBILE NOISE LAB. ON MARCH 2 1971 FROM 07:35 TO 08:35 AT MEDFORD GRID LOCATIO NO. 6-1

DISTRI UTION DBA*	4	80	
	4	79	
	8	78	
	13	77	
	11	76	
	17	75	
	18	74	
	17	73	
	24	72	
	28	70	
	36	69	
	53	68	
	117	67	
	114	66	
	136	65	
	158	64	
	166	63	
	181	62	
	200	61	
	214	60	
	299	59	
	441	58	
	571	57	
	569	55	
	698	54	
	752	53	
	988	51	
	1029	50	
	1416	49	
	1453	48	
	1296	47	
	988	46	
	246	44	
	78	43	
	36	42	
	8	41	
	0	40	

SAMPLES= 14310
AVERAGE= 52 DBA*
STANDARD DEVIATION= 5.8 DBA*
ENERGY MEAN= 58.6 DB**
NOISE POLLUTION LEVEL= 73.4
1% PERCENTILE= 70.8 DBA*
10% DECILE= 69.6 DBA*
MEDIAN= 51.1 DBA*
90% DECILE= 46.6 DBA*
99% PERCENTILE= 44.1 DBA*
RANGE= 39 DB



LEVEL (DBA*) VS CUMULATIVE DISTRIBUTION (PERCENT)

DIST. DBA*0 10 20 30
LEVEL (DBA*) VS DISTRIBUTION (PERCENT)

*-A WEIGHTED DECIBEL-S-RE-28 MICRONETONS PER SQUARE METER
**-DBA RE-28 MICRONETONS PER SQUARE METER FROM AN AVERAGE OF THE SQUARES OF THE SOUND PRESSURES.

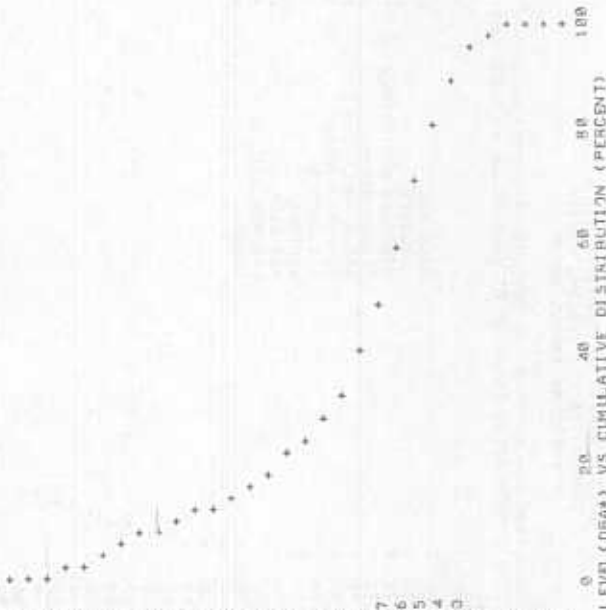
NOISE DATA FROM RUN 2A OF 2 OF THE MOBILE NOISE LAB. ON
MARCH 2 1971 FROM 11:30 TO 12:30 AT MEDFORD GRID LOCATION NO. 6-1

U.S. DEPARTMENT OF TRANSPORTATION
TRANSPORTATION SYSTEMS CENTER
NOISE ABATEMENT GROUP

NOISE DATA FROM RUN 2A OF 2 OF THE MOBILE NOISE LAB. ON
MARCH 2 1971 FROM 11:30 TO 12:30 AT MEDFORD GRID LOCATION NO. 6-1

DISTRIB
UTION DBA*
1 78 0
1 77 0
3 76 0
2 75 0
3 74 0
1 73 0
18 72 0
18 71 0
28 70 0
32 69 0
28 68 0
47 67 0
67 66 0
88 65 0
168 64 0
158 63 0
195 62 0
226 61 0
282 60 0
179 59 0
171 58 0
199 57 0
235 56 0
268 55 0
289 54 0
308 53 0
334 52 0
435 51 0
446 50 0
696 49 0
991 48 0
1138 47 0
1342 46 0
1676 45 0
1512 44 0
1146 43 0
764 42 0
338 41 0
115 40 0
42 39 0
21 38 0
8 37 0

SAMPLES= 13893
AVERAGE= 48.5 DBA*
STANDARD DEVIATION= 6.3 DBA*
ENERGY MEAN= 55.6 DB**
NOISE POLLUTION LEVEL= 71.7
1% PERCENTILE= 67.8 DBA*
1% DECILE= 59.3 DBA*
MEDIAN= 47 DBA*
98% DECILE= 43.1 DBA*
99% PERCENTILE= 40.7 DBA*
RANGE= 40 DB



LEVEL(DBA*) VS CUMULATIVE DISTRIBUTION (PERCENT)

DIST. DBA* 10 20 30

**A WEIGHTED DECIBEL-S-RE. 20 MICRONEWTONS PER SQUARE METER
** DBA RE. 20 MICRONEWTONS PER SQUARE METER FROM AN AVERAGE OF
THE SQUARES OF THE SOUND PRESSURES.

U.S. DEPARTMENT OF TRANSPORTATION
TRANSPORTATION SYSTEMS CENTER
NOISE ABATEMENT GROUP

NOISE DATA FROM RUN 1A OF 2 OF THE MOBILE NOISE LAB. ON
MARCH 9 1971 FROM 07:30: TO 08:30 AT MEDFORD GRID LOCATION 6-2

SITE DATA

1 of 2

DISTRIBUTION DBA*
1 98 +
4 97 +
4 96 +
5 95 +
2 94 +
1 93 +
0 92 +
2 91 +
1 90 +
1 89 +
0 88 +
3 87 +
3 86 +
5 85 +
6 84 +
6 83 +
4 82 +
13 81 +
6 80 +
16 79 +
16 78 +
41 77 +
46 76 +
45 75 +
55 74 +
71 73 +
91 72 +
111 71 +
96 70 +
111 69 +
143 68 +
162 67 +
209 66 +
295 65 +
330 64 +
400 63 +
509 62 +
533 61 +
543 60 +
564 59 +
592 58 +
675 57 +
809 56 +
970 55 +
1189 54 +
1328 53 +
1200 52 +
1183 51 +
840 50 +
489 49 +
317 48 +
107 47 +
9 46 +
0 45

SAMPLES= 14000
AVERAGE= 56.6 DBA*
STANDARD DEVIATION= 6.4 DBA*
ENERGY MEAN= 60.7 DB**
NOISE POLLUTION LEVEL= 85.1
1% PERCENTILE= 77 DBA*
10% DECILE= 65.6 DBA*
MEDIAN= 55.5 DBA*
90% DECILE= 58.6 DBA*
99% PERCENTILE= 46.1 DBA*
RANGE= 52 DB

Community: Medford, Massachusetts

Grid Location: 6-2

Microphone Location: South side of Alexander Avenue, 250 feet northeast of Main Street.

Date of Run: March 9, 1971

Time of Run: 7:30 to 8:30 AM

Recorded Tape No.: NAL 8-71; Side 1; Track 4

ROAD SURFACE AND WEATHER CONDITIONS

Road surface: Dry Temperature: 24 °F. Sky Condition: Sunny

Relative Humidity: 54 % Barometric Pressure: 770 MM of Mercury

Wind Direction From: Northeast

Velocity (MPH): 7

Site Description:

Residential area - 2 family houses.

Special Events:

None

B-117

LEVEL (DBA*) VS CUMULATIVE DISTRIBUTION (PERCENT)

0 20 40 60 80 100

0 20 40 60 80 100

NOISE DATA FROM RUN 1A OF 2 OF THE MOBILE NOISE LAB. ON
MARCH 9 1971 FROM 07:30: TO 08:30 AT HENFORD GRID LOCATION 6-2

2 of 2

SITE DATA

Community: Medford, Massachusetts

Grid Location: 6-2

Microphone Location: SEE SHEET 1 of 2

Date of Run: March 9, 1971

Time of Run: 11:30 AM to 12:30 PM

Recorded Tape No.: NAL 8-71; Side 2; Track 4

ROAD SURFACE AND WEATHER CONDITIONS

Road surface: Dry Temperature: 39 °F. Sky Condition: Clear & Sunny

Relative Humidity: 50 % Barometric Pressure: 773 MM of Mercury

Wind Direction From: Southeast

Velocity (MPH): 8 to 9

Site Description:

SEE SHEET 1 of 2

Special Events:

NONE

1	98	0
4	97	0
4	96	0
5	95	0
2	94	0
1	93	0
0	92	0
1	91	0
2	90	0
1	89	0
0	88	0
3	87	0
3	86	0
5	85	0
6	84	0
6	83	0
4	82	0
13	81	0
6	80	0
16	79	0
16	78	0
41	77	00
46	76	00
45	75	00
55	74	00
71	73	00
91	72	00
111	71	00
96	70	00
111	69	00
143	68	000
162	67	000
209	66	000
295	65	0000
338	64	00000
408	63	00000
509	62	0000000
533	61	0000000
543	60	0000000
564	59	0000000
592	58	0000000
673	57	00000000
689	56	0000000000
978	55	000000000000
1109	54	0000000000000
1328	53	00000000000000
1288	52	000000000000000
1193	51	000000000000000
648	50	000000000000
489	49	000000
317	48	0000
187	47	00
9	46	0
0	45	0

LEVEL (DBA*) VS DISTRIBUTION (PERCENT) 28 30
DIST. DBA*0

* - A WEIGHTED DECIBEL-S-RE. 20 MICROWATTS PER SQUARE METER
** - DBA RE. 20 MICROWATTS PER SQUARE METER FROM AN AVERAGE OF
THE SQUARES OF THE SOUND PRESSURES.
B-119

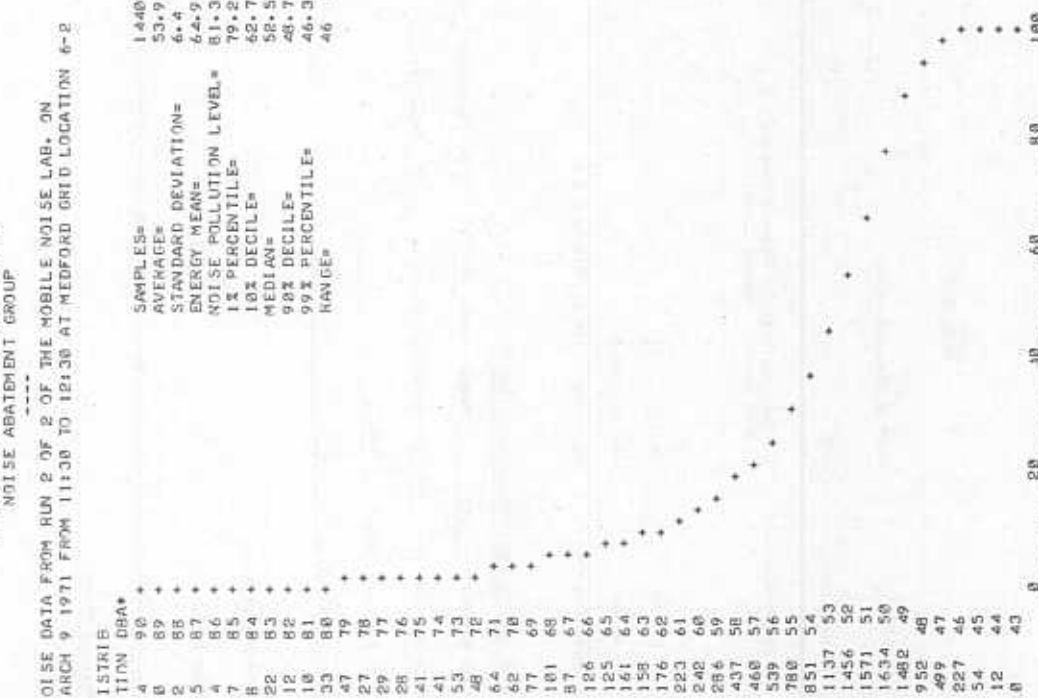
NOISE DATA FROM RUN 2 OF 2 OF THE MOBILE NOISE LAB. ON
 MARCH 9, 1971 FROM 11:30 TO 12:30 AT MEDFORD GRID LOCATION 6-2

US DEPARTMENT OF TRANSPORTATION
 TRANSPORTATION SYSTEMS CENTER
 NOISE ABATEMENT GROUP

NOISE DATA FROM RUN 2 OF 2 OF THE MOBILE NOISE LAB. ON
 MARCH 9, 1971 FROM 11:30 TO 12:30 AT MEDFORD GRID LOCATION 6-2

DISTRIB
 UTION DBA*
 4 90 +
 8 89 +
 2 88 +
 5 87 +
 4 86 +
 7 85 +
 6 84 +
 22 83 +
 12 82 +
 18 81 +
 33 80 +
 47 79 +
 27 78 +
 29 77 +
 28 76 +
 41 75 +
 53 74 +
 48 73 +
 64 72 +
 69 71 +
 77 70 +
 181 69 +
 37 67 +
 126 66 +
 125 65 +
 161 64 +
 158 63 +
 176 62 +
 223 61 +
 242 60 +
 286 59 +
 437 58 +
 460 57 +
 539 56 +
 780 55 +
 851 54 +
 1137 53 +
 1456 52 +
 1571 51 +
 1634 50 +
 1482 49 +
 952 48 +
 499 47 +
 227 46 +
 54 45 +
 12 44 +
 0 43 +

SAMPLES= 14400
 AVERAGE= 53.9 DBA*
 STANDARD DEVIATION= 6.4 DBA*
 ENERGY MEAN= 64.9 DB**
 NOISE POLLUTION LEVEL= 81.3
 1% PERCENTILE= 79.2 DBA*
 10% DECILE= 68.7 DBA*
 MEDIAN= 58.5 DBA*
 90% DECILE= 48.7 DBA*
 99% PERCENTILE= 46.3 DBA*
 RANGE= 46 DB



LEVEL (DBA*) VS CUMULATIVE DISTRIBUTION (PERCENT)
 B-120

LEVEL (DBA*) VS DISTRIBUTION (PERCENT)
 B-121

DIST. DBA**	18	20	30
4	90	7	
8	89	0	
2	88	0	
5	87	0	
4	86	0	
7	85	0	
6	84	0	
22	83	0	
12	82	0	
18	81	0	
33	80	0	
47	79	0	
27	78	0	
29	77	0	
28	76	0	
41	75	0	
53	74	0	
48	73	0	
64	72	0	
69	71	0	
77	70	0	
181	69	0	
37	67	0	
126	66	0	
125	65	0	
161	64	0	
158	63	0	
176	62	0	
223	61	0	
242	60	0	
286	59	0	
437	58	0	
460	57	0	
539	56	0	
780	55	0	
851	54	0	
1137	53	0	
1456	52	0	
1571	51	0	
1634	50	0	
1482	49	0	
952	48	0	
499	47	0	
227	46	0	
54	45	0	
12	44	0	
0	43	0	

** - A WEIGHTED DECIBEL-S-RE, 20 MICRONETONS PER SQUARE METER
 *** - DBA RE. 20 MICRONETONS PER SQUARE METER FROM AN AVERAGE OF
 THE SQUARES OF THE SOUND PRESSURES.

SITE DATA

SITE DATA

Community: Medford, Massachusetts

Community: Medford, Massachusetts

Grid Location: 6-3

Grid Location: 6-3

Microphone Location: 125 feet northeast of Hancock Avenue,
20 feet north of Hancock Street.

Microphone Location: SEE SHEET 1 of 2

Date of Run: April 22, 1971

Date of Run: April 22, 1971

Time of Run: 7:30 to 8:30 AM

Time of Run: 11:30 AM to 12:30 PM

Recorded Tape No.: NAL 44-71; Side 1; Tracks 3 & 4

Recorded Tape No.: NAL 44-71; Side 2; Tracks 3 & 4

ROAD SURFACE AND WEATHER CONDITIONS

ROAD SURFACE AND WEATHER CONDITIONS

Road surface: Dry Temperature: 48 °F. Sky Condition: Clear

Road surface: Dry Temperature: 61 °F. Sky Condition: Cloudy

Relative Humidity: 60 % Barometric Pressure 755 MM of Mercury

Relative Humidity: 44 % Barometric Pressure 752 MM of Mercury

Wind Direction From: West

Wind Direction From: Northwest

Velocity (MPH): 2

Velocity (MPH): 5 to 8

Site Description:

Site Description:

Open field

SEE SHEET 1 of 2

Special Events:

Special Events:

None

NONE

B-122

B-123

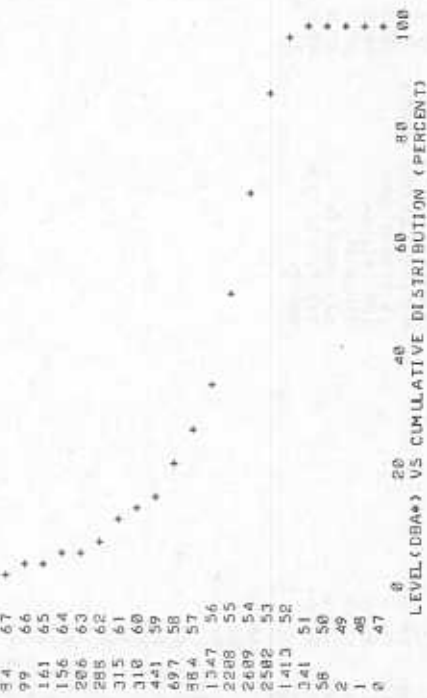
NOISE DATA FROM RUN 1 OF 2 OF THE MOBILE NOISE LAB. ON
APRIL 22 1971 FROM 07:30 TO 08:30 AT MEDFORD GRID LOCATION 6-3

US DEPARTMENT OF TRANSPORTATION
TRANSPORTATION SYSTEMS CENTER
NOISE ABATEMENT GROUP

NOISE DATA FROM RUN 1 OF 2 OF THE MOBILE NOISE LAB. ON
APRIL 22 1971 FROM 07:30 TO 08:30 AT MEDFORD GRID LOCATION 6-3

DISTRIBUTION	DBA*
1	79
0	78
0	77
1	76
5	75
12	74
16	73
21	72
32	71
39	70
41	69
54	68
54	67
99	66
161	65
156	64
286	63
288	62
315	61
318	60
441	59
697	58
884	57
1347	56
2288	55
2609	54
2582	53
1413	52
341	51
58	50
2	49
1	48
0	47

SAMPLES=	14400
AVERAGE=	55.7 DBA*
STANDARD DEVIATION=	3.8 DBA*
ENERGY MEAN=	58.5 DB**
NOISE POLLUTION LEVEL=	68.2
1% PERCENTILE=	69.7 DBA*
10% DECILE=	61.5 DBA*
MEDIAN=	55.1 DBA*
90% DECILE=	50.7 DBA*
99% PERCENTILE=	51.2 DBA*
RANGE=	31 DB



NOISE DATA FROM RUN 1 OF 2 OF THE MOBILE NOISE LAB. ON
APRIL 22 1971 FROM 07:30 TO 08:30 AT MEDFORD GRID LOCATION 6-3

1	79	0
0	78	0
0	77	0
1	76	0
5	75	0
12	74	0
16	73	0
21	72	0
32	71	0
39	70	00
41	69	00
54	68	00
54	67	00
99	66	00
161	65	000
156	64	000
286	63	000
288	62	0000
315	61	0000
318	60	0000
441	59	000000
697	58	00000000
884	57	0000000000
1347	56	00000000000000
2288	55	000000000000000000
2609	54	0000000000000000000000
2582	53	000000000000000000000000
1413	52	000000000000000000000000
341	51	000000
58	50	00
2	49	0
1	48	0

DIST. DBA*0 10 20 30
LEVEL (DBA*) VS DISTRIBUTION (PERCENT)

** A WEIGHTED DECIBEL-RE. 28 MICRONETONS PER SQUARE METER
** DBA RE. 28 MICRONETONS PER SQUARE METER FROM AN AVERAGE OF
THE SQUARES OF THE SOUND PRESSURES.

NOISE DATA FROM RUN 2 OF 2 OF THE MOBILE NOISE LAB. ON
 APRIL 22 1971 FROM 11:30 TO 12:30 AT MEDFORD GRID LOCATION 6-3

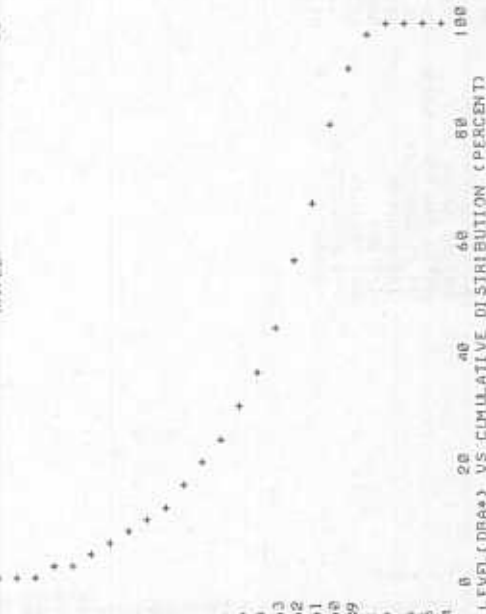
US DEPARTMENT OF TRANSPORTATION
 TRANSPORTATION SYSTEMS CENTER
 NOISE ABATEMENT GROUP

NOISE DATA FROM RUN 2 OF 2 OF THE MOBILE NOISE LAB. ON
 APRIL 22 1971 FROM 11:30 TO 12:30 AT MEDFORD GRID LOCATION 6-3

DISTRI
 BUTION DBA*

1 78 0
 4 76 0
 3 76 0
 6 75 0
 11 74 0
 13 73 0
 16 72 0
 26 71 0
 42 70 00
 30 69 7
 58 68 00
 88 67 03
 89 66 07
 125 65 00
 176 64 000
 205 63 000
 230 62 000
 270 61 0000
 272 60 0000
 357 59 000001
 554 58 0000000
 563 57 00000000
 668 56 000000000
 837 55 0000000000
 931 54 00000000000
 1139 53 0000000000000
 1536 52 000000000000000
 1665 51 00000000000000000
 1889 50 0000000000000000000
 1567 49 0000000000000000000
 797 48 0000000000000000000
 266 47 0000
 51 46 0
 3 45 0
 0 44 0

SAMPLES* 14488
 AVERAGE* 53.5 DBA*
 STANDARD DEVIATION* 4.8 DBA*
 ENERGY MEAN* 51.7 DB*
 NOISE POLLUTION LEVEL= 70
 1% PERCENTILE= 69.3 DBA*
 10% DECILE= 68.8 DBA*
 MEDIAN= 52.7 DBA*
 90% DECILE= 49.2 DBA*
 99% PERCENTILE= 47.3 DBA*
 RANGE= 33 DB



B-126

DIST. DBA*0 10 20 30

*-A WEIGHTED DECI BELS-RE. 20 MICRONEWTONS PER SQUARE METER
 **-DBA RE. 20 MICRONEWTONS PER SQUARE METER FROM AN AVERAGE OF
 THE SQUARES OF THE SOUND PRESSURES.

B-127

SITE DATA

Community: Medford, Massachusetts

Grid Location: 6-5

Microphone Location: On tree lawn on west side of Forrest Street, 170 feet north of intersection with Webster Street.

Date of Run: March 24, 1971

Time of Run: 7:30 to 8:30 AM

Recorded Tape No.: MAI 18-71; Side 2; Track 4

ROAD SURFACE AND WEATHER CONDITIONS

Road surface: Dry Temperature: 30 °F. Sky Condition: Clear

Relative Humidity: 55 % Barometric Pressure 769 MM of Mercury

Wind Direction From: Northeast

Velocity (MPH): 3

Site Description:

Residential area with large single and multi-family dwellings.

Special Events:

Car idling near microphone for 7 minutes.

SITE DATA

Community: Medford, Massachusetts

Grid Location: 6-3

Microphone Location: SEE SHEET 1 of 2

Date of Run: March 24, 1971

Time of Run: 11:30 AM to 12:30 PM

Recorded Tape No.: MAI 18-71; Side 2; Track 3

ROAD SURFACE AND WEATHER CONDITIONS

Road surface: Dry Temperature: 36 °F. Sky Condition: Clear

Relative Humidity: 44 % Barometric Pressure 767 MM of Mercury

Wind Direction From: Northeast

Velocity (MPH): 5

Site Description:

SEE SHEET 1 of 2

Special Events:

NONE

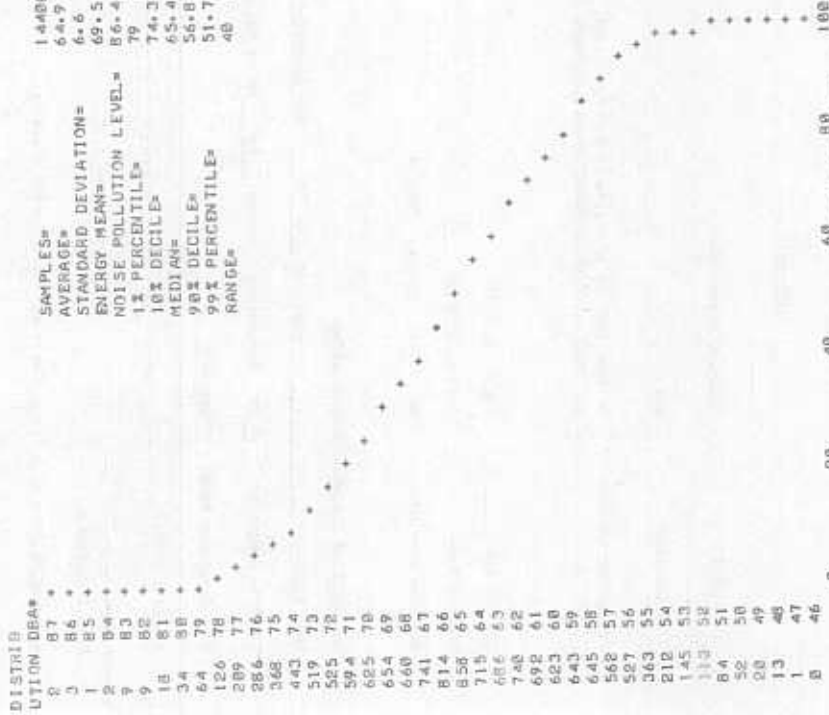
NOISE DATA FROM RUN 1A OF 2 OF THE MOBILE NOISE LAB. ON
 MARCH 24 1971 FROM 07:30: TO 08:30 AT MEDFORD GRID LOCATION 6-5

US DEPARTMENT OF TRANSPORTATION
 TRANSPORTATION SYSTEMS CENTER
 NOISE ABATEMENT GROUP

NOISE DATA FROM RUN 1A OF 2 OF THE MOBILE NOISE LAB. ON
 MARCH 24 1971 FROM 07:30: TO 08:30 AT MEDFORD GRID LOCATION 6-5

DISTRIBUTION DBA*	14400
0	64.9
1	6.6
2	69.5
3	86.4
4	79
5	74.3
6	65.4
7	56.8
8	51.7
9	40

SAMPLES= 14400
 AVERAGE= 64.9 DBA*
 STANDARD DEVIATION= 6.6 DBA*
 ENERGY MEAN= 69.5 DB**
 NOISE POLLUTION LEVEL= 86.4
 1% PERCENTILE= 79 DBA*
 10% PERCENTILE= 74.3 DBA*
 MEDIAN= 65.4 DBA*
 90% PERCENTILE= 56.8 DBA*
 99% PERCENTILE= 51.7 DBA*
 RANGE= 40 DB



LEVEL (DBA*) VS CUMULATIVE DISTRIBUTION (PERCENT)

B-130

2	87	0
3	86	0
1	85	0
2	84	0
9	83	0
9	82	0
18	81	0
34	80	0
64	79	00
126	78	00
209	77	000
368	76	0000
519	75	00000
741	74	000000
1025	73	0000000
1394	72	00000000
1854	71	000000000
2414	70	0000000000
3184	69	00000000000
4184	68	000000000000
5444	67	0000000000000
6984	66	00000000000000
8844	65	000000000000000
11084	64	0000000000000000
13844	63	00000000000000000
17184	62	000000000000000000
21184	61	0000000000000000000
25984	60	00000000000000000000
31684	59	000000000000000000000
38384	58	0000000000000000000000
46184	57	00000000000000000000000
55184	56	000000000000000000000000
65484	55	0000000000000000000000000
77184	54	00000000000000000000000000
90484	53	000000000000000000000000000
105484	52	0000000000000000000000000000
122484	51	00000000000000000000000000000
141484	50	000000000000000000000000000000
162484	49	0000000000000000000000000000000
185484	48	00000000000000000000000000000000
210484	47	000000000000000000000000000000000
237484	46	0000000000000000000000000000000000

DIST. DBA** LEVEL (DBA*) VS DISTRIBUTION (PERCENT)

*-A WEIGHTED DECIBEL-SQ. RE. 20 MICRONEWTONS PER SQUARE METER
 **-DBA RE. 20 MICRONEWTONS PER SQUARE METER FROM AN AVERAGE OF
 THE SQUARES OF THE SOUND PRESSURES.

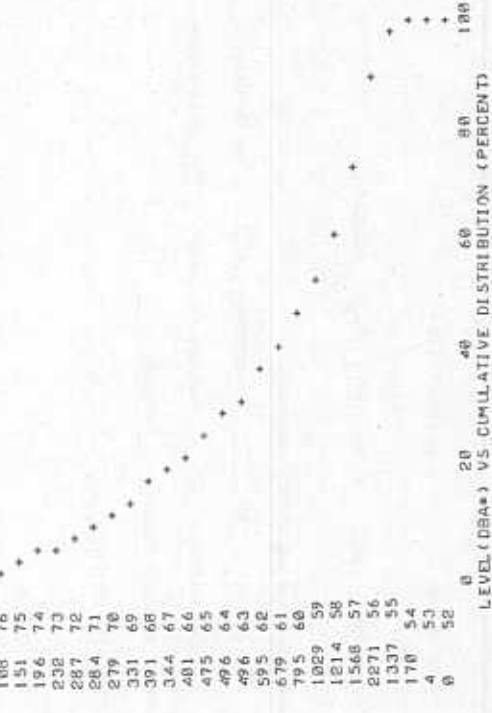
NOISE DATA FROM RUN 2A OF 2 OF THE MOBILE NOISE LAB. ON MARCH 24 1971 FROM 11:30 TO 12:30 AT MEDFORD GRID LOCATION 6-5

US DEPARTMENT OF TRANSPORTATION
TRANSPORTATION SYSTEMS CENTER
NOISE ABATEMENT GROUP

NOISE DATA FROM RUN 2A OF 2 OF THE MOBILE NOISE LAB. ON MARCH 24 1971 FROM 11:30 TO 12:30 AT MEDFORD GRID LOCATION 6-5

DISTRIB
 2 87 +
 2 86 +
 4 85 +
 5 84 +
 5 83 +
 12 82 +
 17 81 +
 26 80 +
 41 79 +
 60 78 +
 93 77 +
 108 76 +
 151 75 +
 196 74 +
 238 73 +
 287 72 +
 331 71 +
 391 69 +
 481 66 +
 595 62 +
 679 61 +
 795 60 +
 1029 59 +
 1214 58 +
 1568 57 +
 2271 56 +
 3337 55 +
 5170 54 +
 7744 53 +
 11480 52 +

SAMPLES= 14480
 AVERAGE= 61.2 DBA*
 STANDARD DEVIATION= 6 DBA*
 ENERGY MEAN= 67 DB**
 NOISE POLLUTION LEVEL* 82.4
 1% PERCENTILE= 78.5 DBA*
 10% DECILE= 71.3 DBA*
 MEDIAN= 59.6 DBA*
 90% DECILE= 54.8 DBA*
 RANGE= 34 DB



LEVEL (DBA*) VS DISTRIBUTION (PERCENT)
 28 30
 10
 20
 40
 60
 80
 100

**A WEIGHTED DECIBELS-RE. 20 MICRONEWTONS PER SQUARE METER
 **DBA RE. 20 MICRONEWTONS PER SQUARE METER FROM AN AVERAGE OF THE SQUARES OF THE SOUND PRESSURES.

SITE DATA

Community: Medford, Massachusetts

Grid Location: 6-6

Microphone Location: 18 feet east of center of Circuit Road,
90 feet north from southeast corner.

Date of Run: April 15, 1971

Time of Run: 7:30 to 8:30 AM

Recorded Tape No.: MA 35-71; Side 1; Tracks 3 & 4

ROAD SURFACE AND WEATHER CONDITIONS

Road surface: Dry Temperature: 34 °F. Sky Condition: Clear

Relative Humidity: 38 % Barometric Pressure: 770 MM of Mercury

Wind Direction From: Northwest

Velocity (MPH): 10

Site Description:

Single family residential area shielded by hill from Route 93.

Special Events:

None

B-134

SITE DATA

Community: Medford, Massachusetts

Grid Location: 6-6

Microphone Location: SEE SHEET 1 of 2

Date of Run: April 15, 1971

Time of Run: 11:30 AM to 12:30 PM

Recorded Tape No.: MA 35-71; Side 2; Tracks 3 & 4

ROAD SURFACE AND WEATHER CONDITIONS

Road surface: Dry Temperature: 44 °F. Sky Condition: Dry

Relative Humidity: 20 % Barometric Pressure: 767 MM of Mercury

Wind Direction From: Northwest

Velocity (MPH): 7 to 8 with gusts to 13

Site Description:

SEE SHEET 1 of 2

Special Events:

Children added local noise to system for approximately two minutes.

B-135

US DEPARTMENT OF TRANSPORTATION
TRANSPORTATION SYSTEMS CENTER
NOISE ABATEMENT GROUP

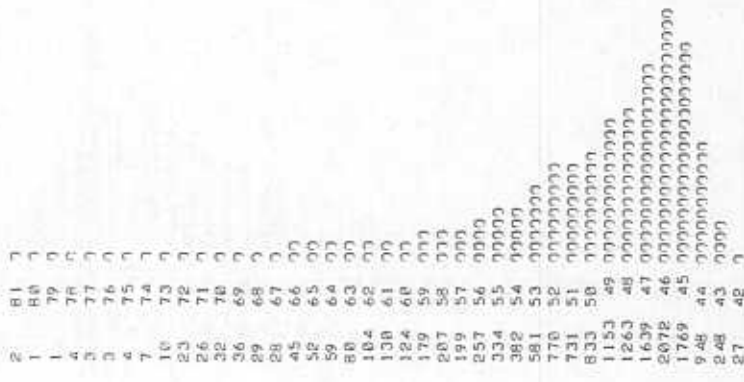
NOISE DATA FROM RUN 1 OF 2 OF THE MOBILE NOISE LAB. ON
APRIL 15 1971 FROM 07:30 TO 08:30 AT MEDFORD GRID LOCATION 6-6

 SAMPLES= 1,400
 AVERAGES= 49.4 DBA*
 STANDARD DEVIATION= 5.2 DBA*
 ENERGY MEAN= 56 DB**
 NOISE POLLUTION LEVEL* 69.3
 1% PERCENTILE= 69.2 DBA*
 10% DECILE= 56.8 DBA*
 MEDIAN= 48.4 DBA*
 90% DECILE= 45.1 DBA*
 99% PERCENTILE= 43.5 DBA*
 RANGE= 40 DB



LEVEL (DBA) VS CUMULATIVE DISTRIBUTION (PERCENT)

NOISE DATA FROM RUN 1 OF 2 OF THE MOBILE NOISE LAB. ON
APRIL 15 1971 FROM 07:30 TO 08:30 AT MEDFORD GRID LOCATION 6-6



LEVEL (DBA) VS DISTRIBUTION (PERCENT)

**A WEIGHTED DECIBEL-S-RE. 20 MICRONEWTONS PER SQUARE METER
 **DBA RE. 20 MICRONEWTONS PER SQUARE METER FROM AN AVERAGE OF
 THE SQUARES OF THE SOUND PRESSURES.

US DEPARTMENT OF TRANSPORTATION
TRANSPORTATION SYSTEMS CENTER
NOISE ABATEMENT GROUP

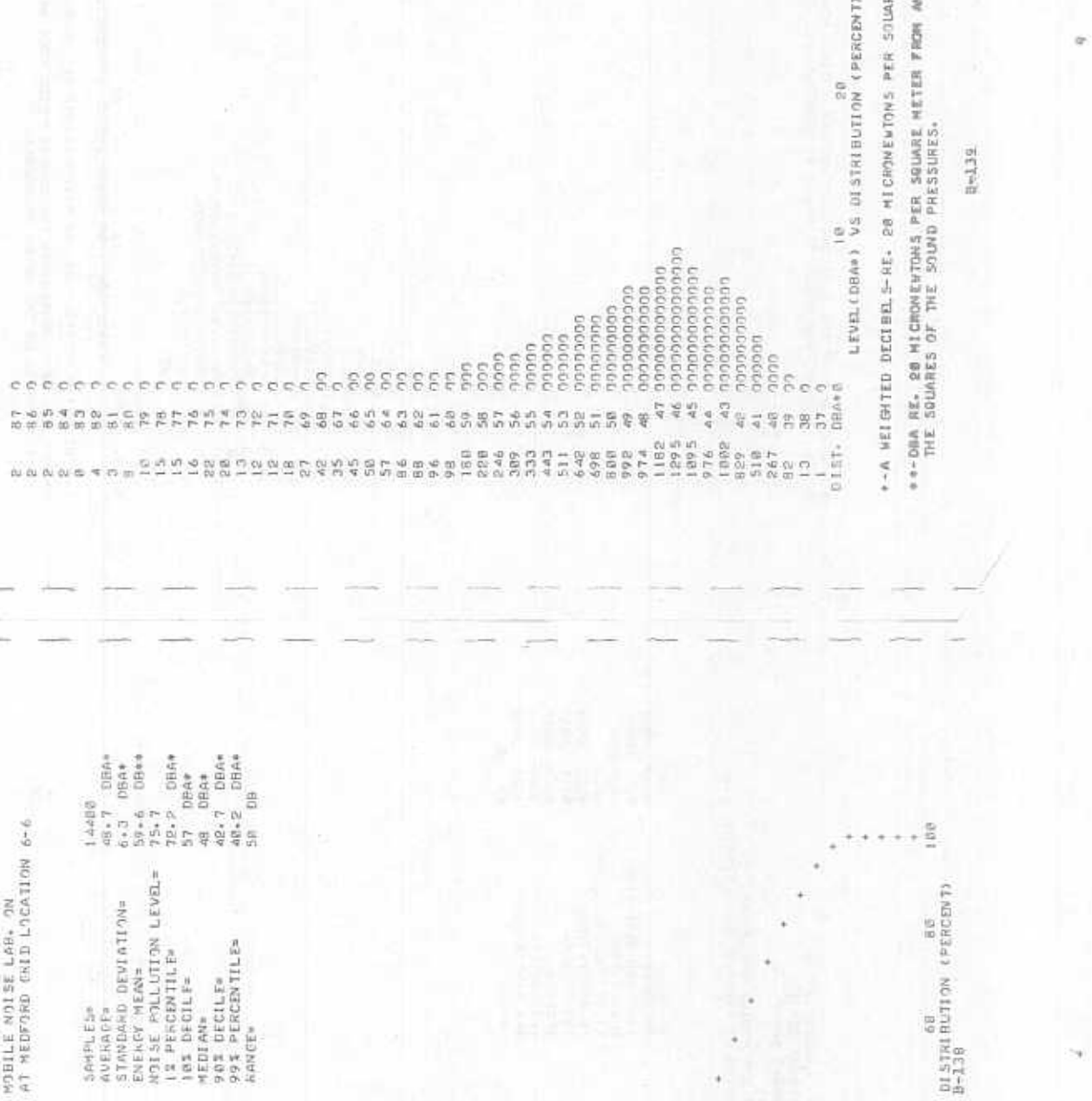
PAGE 2

NOISE DATA FROM RUN 2 OF 2 OF THE MOBILE NOISE LAB. ON
APRIL 15 1971 FROM 11:30 TO 12:30 AT MEDFORD GRID LOCATION 6-6

NOISE DATA FROM RUN 2 OF 2 OF THE MOBILE NOISE LAB. ON
APRIL 15 1971 FROM 11:30 TO 12:30 AT MEDFORD GRID LOCATION 6-6

DISTRI-
BUTION DBA*

SAMPLES= 14400
AVERAGE= 48.7 DBA*
STANDARD DEVIATION= 6.3 DBA*
ENERGY MEAN= 59.6 DB**
NOISE POLLUTION LEVEL= 75.7
1% PERCENTILE= 70.2 DBA*
10% DECILE= 57 DBA*
MEDIAN= 48 DBA*
90% DECILE= 42.7 DBA*
99% PERCENTILE= 40.2 DBA*
RANGE= 58 DB



0	87	0
2	86	0
2	85	0
2	84	0
0	83	0
4	82	0
3	81	0
8	80	0
10	79	0
15	78	0
15	77	0
16	76	0
22	75	0
28	74	0
15	73	0
12	72	0
12	71	0
18	70	0
27	69	0
42	68	0
35	67	0
45	66	0
50	65	0
57	64	0
84	63	0
88	62	0
96	61	0
98	60	0
158	59	0
228	58	0
246	57	0
309	56	0
333	55	0
443	54	0
511	53	0
642	52	0
698	51	0
800	50	0
922	49	0
974	48	0
1182	47	0
1295	46	0
1895	45	0
1976	44	0
1982	43	0
829	42	0
510	41	0
267	40	0
82	39	0
13	38	0
1	37	0
0	36	0

LEVEL (DBA*) VS DISTRIBUTION (PERCENT) 30

*-A WEIGHTED DECIBEL S-RE. 20 MICRONEUTONS PER SQUARE METER
**-DBA RE. 20 MICRONEUTONS PER SQUARE METER FROM AN AVERAGE OF
THE SQUARES OF THE SOUND PRESSURES.

SITE DATA

Community: Medford, Massachusetts

Grid Location: 6-7

Microphone Location: In Middlesex Falls Reservation - off Mud Road

Date of Run: May 7, 1971

Time of Run: 7:30 to 8:30 AM

Recorded Tape No.: MAL 57-71; Side 1; Tracks 3 & 4

ROAD SURFACE AND WEATHER CONDITIONS

Road surface: Dry Temperature: 52 °F. Sky Condition: Clear

Relative Humidity: 56 % Barometric Pressure 269 MM of Mercury

Wind Direction From: East

Velocity (MPH): 1

Site Description:

Wooded area with some exposed rock ledge

Special Events:

None

B-140

SITE DATA

Community: Medford, Massachusetts

Grid Location: 6-7

Microphone Location: SEE SHEET 1 of 2

Date of Run: May 7, 1971

Time of Run: 11:30 AM to 12:30 PM

Recorded Tape No.: MAL 57-71; Side 2; Tracks 3 & 4

ROAD SURFACE AND WEATHER CONDITIONS

Road surface: Dry Temperature: 67 °F. Sky Condition: Clear

Relative Humidity: 23 % Barometric Pressure 767 MM of Mercury

Wind Direction From: West

Velocity (MPH): 10

Site Description:

SEE SHEET 1 of 2

Special Events:

NONE

B-141

NOISE DATA FROM RUN 1 OF 2 OF THE MOBILE NOISE LAB. ON
MAY 7 1971 FROM 07:30 TO 08:30 AT MEDFORD GRID LOCATION 6-7

US DEPARTMENT OF TRANSPORTATION
TRANSPORTATION SYSTEMS CENTER
NOISE ABATEMENT GROUP

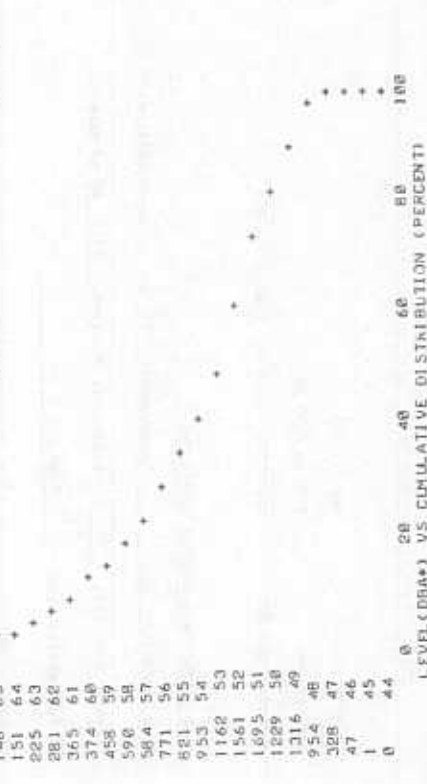
DISTRIBUTION DBA*
6 75 7
1 74 0
16 73 0
15 72 0
26 71 0
41 70 7
51 69 7
64 68 7
63 67 7
185 66 7
146 65 7
151 64 7
225 63 7
281 62 7
365 61 7
374 60 7
458 59 7
598 58 7
771 56 7
821 55 7
953 54 7
1162 53 7
1561 52 7
1695 51 7
1229 50 7
1316 49 7
954 48 7
328 47 7
47 46 7
1 45 7
0 44 7

SAMPLES= 14400 DBA*
AVERAGE= 53.9 DBA*
STANDARD DEVIATION= 4.9 DBA*
ENERGY MEAN= 57.7 DB**
NOISE POLLUTION LEVEL= 70.8 DBA*
1% PERCENTILE= 69.2 DBA*
10% DECILE= 61.3 DBA*
MEDIAN= 53.1 DBA*
90% DECILE= 49.1 DBA*
99% PERCENTILE= 47.3 DBA*
RANGE= 30 DB

NOISE DATA FROM RUN 1 OF 2 OF THE MOBILE NOISE LAB. ON
MAY 7 1971 FROM 07:30 TO 08:30 AT MEDFORD GRID LOCATION 6-7

DISTRIBUTION DBA*
6 75 7
1 74 0
16 73 0
15 72 0
26 71 0
41 70 7
51 69 7
64 68 7
63 67 7
185 66 7
146 65 7
151 64 7
225 63 7
281 62 7
365 61 7
374 60 7
458 59 7
598 58 7
771 56 7
821 55 7
953 54 7
1162 53 7
1561 52 7
1695 51 7
1229 50 7
1316 49 7
954 48 7
328 47 7
47 46 7
1 45 7
0 44 7

SAMPLES= 14400 DBA*
AVERAGE= 53.9 DBA*
STANDARD DEVIATION= 4.9 DBA*
ENERGY MEAN= 57.7 DB**
NOISE POLLUTION LEVEL= 70.8 DBA*
1% PERCENTILE= 69.2 DBA*
10% DECILE= 61.3 DBA*
MEDIAN= 53.1 DBA*
90% DECILE= 49.1 DBA*
99% PERCENTILE= 47.3 DBA*
RANGE= 30 DB



LEVEL (DBA*) VS. DISTRIBUTION (PERCENT)

*-A WEIGHTED DECIBEL S-RE. 20 MICRONETONS PER SQUARE METER
**-DBA RE. 20 MICRONETONS PER SQUARE METER FROM AN AVERAGE OF
THE SQUARES OF THE SOUND PRESSURES.

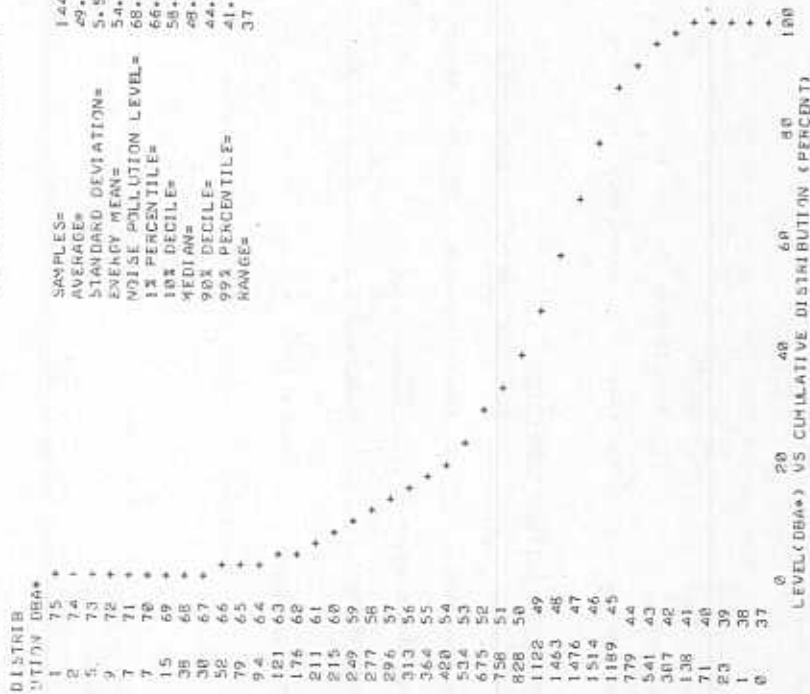
NOISE DATA FROM RUN 2 OF 2 OF THE MOBILE NOISE LAB. ON
MAY 7 1971 FROM 11:30 TO 12:30 AT MEDFORD GRID LOCATION 6-7

US DEPARTMENT OF TRANSPORTATION
TRANSPORTATION SYSTEMS CENTER
NOISE ABATEMENT GROUP

NOISE DATA FROM RUN 2 OF 2 OF THE MOBILE NOISE LAB. ON
MAY 7 1971 FROM 11:30 TO 12:30 AT MEDFORD GRID LOCATION 6-7

1	75	0
2	74	0
5	73	0
9	72	0
7	71	0
7	70	0
15	69	0
38	68	0
30	67	0
52	66	0
79	65	0
94	64	0
121	63	0
176	62	0
211	61	0
215	60	0
249	59	0
277	58	0
296	57	0
313	56	0
364	55	0
428	54	0
534	53	0
675	52	0
758	51	0
828	50	0
1122	49	0
1463	48	0
1476	47	0
1514	46	0
1189	45	0
779	44	0
541	43	0
367	42	0
138	41	0
71	40	0
23	39	0
1	38	0
1	38	0

SAMPLES= 14400
AVERAGE= 59.7 DBA*
STANDARD DEVIATION= 5.5 DBA*
ENERGY MEAN= 54.8 DB**
NOISE POLLUTION LEVEL= 66.9
1% PERCENTILE= 66.4 DBA*
10% DECILE= 58.5 DBA*
MEDIAN= 48.8 DBA*
90% DECILE= 44.5 DBA*
99% PERCENTILE= 41.4 DBA*
RANGES= 37 DB



LEVEL (DBA*) VS DISTRIBUTION (PERCENT) 30

*-A WEIGHTED DECIBEL-S-RE. 20 MICROMETONS PER SQUARE METER
**-DBA RE. 20 MICROMETONS PER SQUARE METER FROM AN AVERAGE OF
THE SQUARES OF THE SOUND PRESSURES.

SITE DATA

Community: Medford, Massachusetts

Grid Location: 6-8

Microphone Location: See sheet 1 of 2

Date of Run: June 24, 1971

Time of Run: 11:30 AM to 12:30 PM

Recorded Tape No.: NAL 74-71, side 2, tracks 3 and 4

ROAD SURFACE AND WEATHER CONDITIONS

Road surface: dry Temperature: 66 °F. Sky Condition: clear

Relative Humidity: 2 Barometric Pressure: 758 mm of Mercury

Wind Direction From: _____

Velocity (MPH): _____ Less than 1

Site Description: See sheet 1 of 2

Special Events:
None

B-146

SITE DATA

Community: Medford, Massachusetts

Grid Location: 6-8

Microphone Location: Approximately 750 feet west of Interstate Route 93.

Date of Run: June 24, 1971

Time of Run: 7:30 to 8:30 AM

Recorded Tape No.: NAL 74-71, side 1, tracks 3 and 4

ROAD SURFACE AND WEATHER CONDITIONS

Road surface: dry Temperature: 71 °F. Sky Condition: hazy

Relative Humidity: 2 Barometric Pressure: 758 mm of Mercury

Wind Direction From: _____

Velocity (MPH): _____ Less than 1

Site Description: Wooded, undeveloped area in Middlesex Falls Reservation.

Special Events:
None

B-147

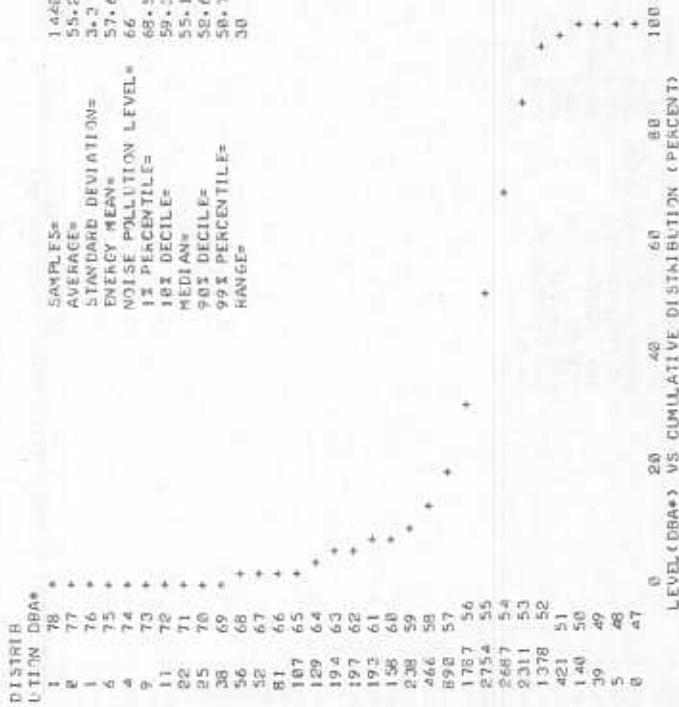
NOISE DATA FROM RUN 1AP OF 2 OF THE MOBILE NOISE LAB. ON
 JUNE 24 1971 FROM 07:30 TO 08:30 AT MEDFORD GRID LOCATION NO. 6-B

US DEPARTMENT OF TRANSPORTATION
 TRANSPORTATION SYSTEMS CENTER
 NOISE ABATEMENT GROUP

NOISE DATA FROM RUN 1AP OF 2 OF THE MOBILE NOISE LAB. ON
 JUNE 24 1971 FROM 07:30 TO 08:30 AT MEDFORD GRID LOCATION NO. 6-B

DISTRIB	DBA*	SAMPLES=
1	78	1,620
2	77	55.2
3	76	34.3
4	75	57.6
5	74	66
6	73	68.5
7	72	59.3
8	71	55.1
9	70	58.6
10	69	58.7
11	68	30
12	67	DB
13	66	
14	65	
15	64	
16	63	
17	62	
18	61	
19	60	
20	59	
21	58	
22	57	
23	56	
24	55	
25	54	
26	53	
27	52	
28	51	
29	49	
30	47	

AVERAGE= 55.2 DBA*
 STANDARD DEVIATION= 34.3 DBA*
 ENERGY MEAN= 57.6 DB**
 NOISE POLLUTION LEVEL= 66
 1% PERCENTILE= 68.5 DBA**
 10% DECILE= 59.3 DBA**
 MEDIAN= 55.1 DBA**
 90% DECILE= 58.6 DBA**
 99% PERCENTILE= 58.7 DBA**
 RANGE= 30 DB



LEVEL (DBA*) VS CUMULATIVE DISTRIBUTION (PERCENT)

1ST- DBA**	10	20	30
1	78	0	
2	77	0	
3	76	0	
4	75	0	
5	74	0	
6	73	0	
7	72	0	
8	71	0	
9	70	0	
10	69	0	
11	68	0	
12	67	0	
13	66	0	
14	65	0	
15	64	0	
16	63	0	
17	62	0	
18	61	0	
19	60	0	
20	59	0	
21	58	0	
22	57	0	
23	56	0	
24	55	0	
25	54	0	
26	53	0	
27	52	0	
28	51	0	
29	49	0	
30	47	0	

LEVEL (DBA*) VS DISTRIBUTION (PERCENT)

-A WEIGHTED DECIBELS-RE. 20 MICRONEWTONS PER SQUARE METER
 *-DBA RE. 20 MICRONEWTONS PER SQUARE METER FROM AN AVERAGE OF
 THE SQUARES OF THE SOUND PRESSURES.

US DEPARTMENT OF TRANSPORTATION
TRANSPORTATION SYSTEMS CENTER
NOISE ABATEMENT GROUP

NOISE DATA FROM RUN 2AP OF 2 OF THE MOBILE NOISE LAB. ON
JUNE 24 1971 FROM 11:30 TO 12:30 AT MEDFORD GRID LOCATION NO. 6-8

DISTRIB: 1 77 0
L1(N) DBA* 1 76 0
2 75 0
6 74 0
7 73 0
17 72 0
28 71 0
39 70 0
79 69 0
88 68 0
99 66 0
123 65 0
149 64 0
165 63 0
181 62 0
204 61 0
243 59 0
319 58 0
398 57 0
571 56 0
857 55 0
1066 54 0
1423 53 0
1769 52 0
1926 51 0
1858 50 0
1361 49 0
662 48 0
333 47 0
137 46 0
36 45 0
5 44 0
8 43 0

SAMPLES= 14400
AVERAGE= 53.1 DBA*
STANDARD DEVIATION= 4.7 DBA*
ENERGY MEAN= 57.3 DB**
NOISE POLLUTION LEVEL= 69.3
1% PERCENTILE= 69.5 DBA*
10% DECILE= 68 DBA*
MEDIAN= 58.5 DBA*
90% DECILE= 49.2 DBA*
99% PERCENTILE= 46.8 DBA*
RANGE= 33 DB

LEVEL (DBA*) VS CUMULATIVE DISTRIBUTION (PERCENT)

B-150

PAGE 2

NOISE DATA FROM RUN 2AP OF 2 OF THE MOBILE NOISE LAB. ON
JUNE 24 1971 FROM 11:30 TO 12:30 AT MEDFORD GRID LOCATION NO. 6-8

1 77 0
1 76 0
2 75 0
6 74 0
7 73 0
17 72 0
28 71 0
39 70 0
79 69 0
88 68 0
99 66 0
123 65 0
149 64 0
165 63 0
181 62 0
204 61 0
243 59 0
319 58 0
398 57 0
571 56 0
857 55 0
1066 54 0
1423 53 0
1769 52 0
1926 51 0
1858 50 0
1361 49 0
662 48 0
333 47 0
137 46 0
36 45 0
5 44 0
8 43 0

DIST. DBA*8 LEVEL (DBA*) VS DISTRIBUTION (PERCENT) 28 39

*-A WEIGHTED DECIBEL-S-RE. 28 MICROWENTONS PER SQUARE METER
**-DBA RE. 28 MICROWENTONS PER SQUARE METER FROM AN AVERAGE OF
THE SQUARES OF THE SOUND PRESSURES.

B-151

SITE DATA

Community: Medford, Massachusetts

Grid Location: 7-1

Microphone Location: Sidewalk, west side of Joseph Street, 100 feet south of Leyden Street.

Date of Run: March 8, 1971

Time of Run: 7:30 to 8:30 AM

Recorded Tape No.: NAL 7-71; Side 1; Track 4

ROAD SURFACE AND WEATHER CONDITIONS

Road surface: Dry Temperature: 36 °F. Sky Condition: Clear & Sunny

Relative Humidity: 52 % Barometric Pressure 762 MM of Mercury

Wind Direction From: East

Velocity (MPH): 2

Site Description:

Residential area with frame dwelling close to street.

Special Events:

None

B-152

SITE DATA

Community: Medford, Massachusetts

Grid Location: 7-1

Microphone Location: SEE SHEET 1 of 2

Date of Run: March 8, 1971

Time of Run: 11:30 AM to 12:30 PM

Recorded Tape No.: NAL 7-71; Side 2; Track 4

ROAD SURFACE AND WEATHER CONDITIONS

Road surface: Dry Temperature: 36 °F. Sky Condition: Pety Cloudy

Relative Humidity: 48 % Barometric Pressure 764 MM of Mercury

Wind Direction From: Northeast

Velocity (MPH): 7

Site Description:

SEE SHEET 1 of 2

Special Events:

NONE

B-153

NOISE DATA FROM RUN 1A OF 2 OF THE MOBILE NOISE LAB. ON MARCH 8 1971 FROM 07:30:10 TO 08:30 AT MEDFORD GRID LOCATION NO. 7-1

US DEPARTMENT OF TRANSPORTATION
TRANSPORTATION SYSTEMS CENTER
NOISE ABATEMENT GROUP

NOISE DATA FROM RUN 1A OF 2 OF THE MOBILE NOISE LAB. ON MARCH 8 1971 FROM 07:30:10 TO 08:30 AT MEDFORD GRID LOCATION NO. 7-1

DIETHER	1.498*
UTION DBA*	58.7 DBA*
1 84	6.2 DBA*
1 83	58.1 DB*
1 82	74.8
2 81	69.7 DBA*
4 80	61 DBA*
3 79	48.8 DBA*
1 78	45.5 DBA*
4 77	44.1 DBA*
5 76	43 DB
6 75	
8 74	
17 73	
28 72	
30 71	
25 70	
72 69	
78 68	
100 67	
117 66	
138 65	
168 64	
184 63	
188 62	
241 61	
255 60	
250 59	
298 58	
291 57	
366 56	
414 55	
437 54	
451 53	
476 52	
559 51	
612 50	
913 49	
1257 48	
1722 47	
2099 46	
1671 45	
459 44	
63 43	
8 42	
1 41	
0 40	

SAMPLES= 1.498*
AVERAGE= 58.7 DBA*
STANDARD DEVIATION= 6.2 DBA*
ENERGY MEAN= 58.1 DB*
NOISE POLLUTION LEVEL= 74.8
1% PERCENTILE= 69.7 DBA*
10% PERCENTILE= 61 DBA*
MEDIAN= 48.8 DBA*
90% DECILE= 45.5 DBA*
99% PERCENTILE= 44.1 DBA*
RANGE= 43 DB

LEVEL (DBA) VS CUMULATIVE DISTRIBUTION (PERCENT)

DIST. DBA*B LEVEL (DBA) VS DISTRIBUTION (PERCENT)

18 20 30

*-A WEIGHTED DECIBELS-RE. 20 MICRONEWTONS PER SQUARE METER
*-DBA RE. 20 MICRONEWTONS PER SQUARE METER FROM AN AVERAGE OF THE SQUARES OF THE SOUND PRESSURES.

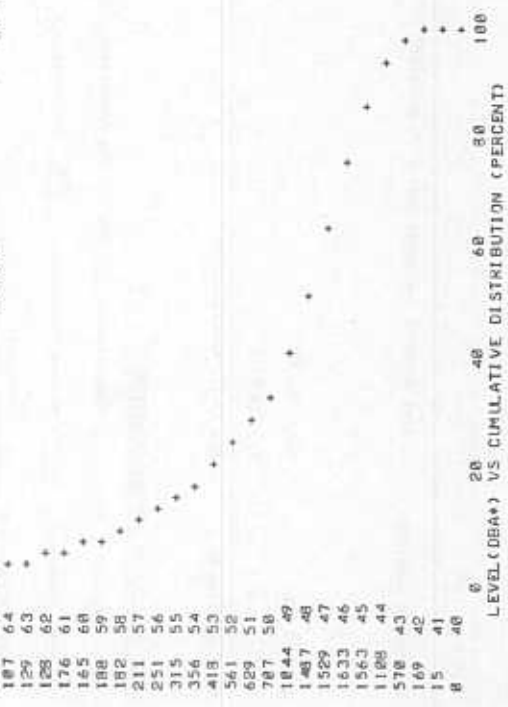
NOISE DATA FROM RUN 2A OF 2 OF THE MOBILE NOISE LAB. ON
MARCH 8 1971 FROM 11:30 TO 12:30 AT MEDFORD GRID LOCATION NO. 7-1

US DEPARTMENT OF TRANSPORTATION
TRANSPORTATION SYSTEMS CENTER
NOISE ABATEMENT GROUP

NOISE DATA FROM RUN 2A OF 2 OF THE MOBILE NOISE LAB. ON
MARCH 8 1971 FROM 11:30 TO 12:30 AT MEDFORD GRID LOCATION NO. 7-1

DISTRIB	2	75	0
UTI'N DBA*	5	74	0
	7	73	0
	12	72	0
	12	71	0
	34	70	0
	23	69	0
	37	68	0
	59	67	0
	73	66	0
	95	65	0
	187	64	0
	129	63	0
	128	62	0
	176	61	0
	165	60	0
	188	59	0
	182	58	0
	211	57	0
	251	56	0
	356	54	0
	418	53	0
	561	52	0
	629	51	0
	707	50	0
	1044	49	0
	1487	48	0
	1529	47	0
	1633	46	0
	1563	45	0
	1188	44	0
	578	43	0
	169	42	0
	15	41	0
	8	40	0

SAMPLES= 14800
AVERAGE= 49.4 DBA*
STANDARD DEVIATION= 5.6 DBA*
ENERGY MEAN= 55.4 DB**
NOISE POLLUTION LEVEL= 69.7
1% PERCENTILE= 67.9 DBA*
10% DECILE= 58.2 DBA*
MEDIAN= 48.3 DBA*
90% DECILE= 44.6 DBA*
99% PERCENTILE= 42.7 DBA*
RANGE= 34 DB



LEVEL (DBA*) VS CUMULATIVE DISTRIBUTION (PERCENT)

LEVEL (DBA*) VS DISTRIBUTION (PERCENT)

*-A WEIGHTED DECIBEL S-RE-20 MICRONETONS PER SQUARE METER
**-DBA RE-20 MICRONETONS PER SQUARE METER FROM AN AVERAGE OF
THE SQUARES OF THE SOUND PRESSURES.

SITE DATA

Community: Medford, Massachusetts
 Grid Location: 7-2
 Microphone Location: 75 feet north of northwest corner of Fulbright Street.
 Date of Run: March 16, 1971
 Time of Run: 7:30 to 8:30
 Recorded Tape No.: MAL 15-17, side 1, track 4

ROAD SURFACE AND WEATHER CONDITIONS

Road surface: dry Temperature: 62 °F. Sky Condition: clear
 Relative Humidity: 58 % Barometric Pressure: 768 MM of Mercury
 Wind Direction From: northeast
 Velocity (MPH): 3

Site Description: Relatively open area with low buildings to south and west and an embankment north and east. The embankment supports an extension for Interstate Route 93 with north lane active and south lane inactive.
 Special Events: Front-end loader ran over and destroyed tripod.

SITE DATA

Community: Medford, Massachusetts
 Grid Location: 7-2
 Microphone Location: See sheet 1 of 2
 Date of Run: April 12, 1971
 Time of Run: 11:30 to 12:30
 Recorded Tape No.: MAL 31-71 side 1, track 4

ROAD SURFACE AND WEATHER CONDITIONS

Road surface: dry Temperature: 55 °F. Sky Condition: clear
 Relative Humidity: 70 % Barometric Pressure: 771 MM of Mercury
 Wind Direction From: southeast
 Velocity (MPH): 5-7

Site Description: See sheet 1 of 2
 Special Events: None

US DEPARTMENT OF TRANSPORTATION
TRANSPORTATION SYSTEMS CENTER
NOISE ABATEMENT GROUP

NOISE DATA FROM RUN 1 OF 2 OF THE MOBILE NOISE LAB. ON
MARCH 16 1971 FROM 07:30 TO 08:30 AT MEDFORD GRID LOCATION 7-2

DISTRI
UTION DBA*
7 90
5 89
2 88
6 87
3 86
4 85
11 84
9 83
6 82
13 81
21 80
24 79
13 78
24 77
39 76
45 75
46 74
33 73
42 72
57 71
98 70
99 69
166 68
174 67
268 65
399 64
554 63
842 62
1160 61
1178 59
798 58
333 57
147 56
28 55
8 54

SAMPLES* 8000
AVERAGE* 61.9 DBA*
STANDARD DEVIATION* 4.5 DBA*
ENERGY MEAN* 68 DB**
NOISE POLLUTION LEVEL= 79.5
1% PERCENTILE* 80.3 DBA*
10% PERCENTILE* 67.8 DBA*
MEDIAN* 61.3 DBA*
90% DECILE* 58.4 DBA*
99% PERCENTILE* 56.4 DBA*
RANGE* 35 DB

LEVEL (DBA*) VS CUMULATIVE DISTRIBUTION (PERCENT)

PAGE 2

NOISE DATA FROM RUN 1 OF 2 OF THE MOBILE NOISE LAB. ON
MARCH 16 1971 FROM 07:30 TO 08:30 AT MEDFORD GRID LOCATION 7-2

7 90 0
5 89 0
2 88 0
6 87 0
3 86 0
4 85 0
11 84 0
9 83 0
6 82 0
13 81 0
21 80 0
24 79 0
13 78 0
24 77 0
39 76 0
45 75 0
46 74 0
33 73 0
42 72 0
57 71 0
98 70 0
99 69 0
166 68 0
174 67 0
268 65 0
399 64 0
554 63 0
842 62 0
1160 61 0
1178 59 0
798 58 0
333 57 0
147 56 0
28 55 0
8 54 0

DIST. DBA* 10 20 30 40 50 60 70 80 90 100
LEVEL (DBA*) VS DISTRIBUTION (PERCENT)

*-A WEIGHTED DECIBEL-S-RE. 20 MICRONETONS PER SQUARE METER
**-DBA RE. 20 MICRONETONS PER SQUARE METER FROM AN AVERAGE OF
THE SQUARES OF THE SOUND PRESSURES.

NOISE DATA FROM RUN GAP OF 2 OF THE MOBILE NOISE LAB. ON
 APRIL 12 1971 FROM 11:30 TO 12:30 AT MEDFORD GRID LOCATION 7-2

U.S. DEPARTMENT OF TRANSPORTATION
 TRANSPORTATION SYSTEMS CENTER
 NOISE ABATEMENT GROUP

NOISE DATA FROM RUN GAP OF 2 OF THE MOBILE NOISE LAB. ON
 APRIL 12 1971 FROM 11:30 TO 12:30 AT MEDFORD GRID LOCATION 7-2

DISTRIBUTION DBA*	2	83	0
AVERAGE	82	0	58.3 DBA*
STANDARD DEVIATION	11	73	3.5 DBA*
NOISE POLLUTION LEVEL	23	71	60.5 DB**
1% PERCENTILE	29	70	69.4 DBA*
10% DECILE	35	69	63.3 DBA*
MEDIAN	44	68	58.3 DBA*
90% PERCENTILE	55	67	52.3 DBA*
RANGE	6	49	35 DB

2	83	0
1	81	0
1	80	0
4	79	0
4	78	0
5	77	0
5	76	0
5	75	0
11	73	0
17	72	0
23	71	0
29	70	0
35	69	0
44	68	0
55	67	0
66	66	0
82	65	0
106	64	0
146	63	0
206	62	0
291	61	0
406	60	0
566	59	0
791	58	0
1106	57	0
1546	56	0
2146	55	0
2966	54	0
4066	53	0
5666	52	0
7966	51	0
11066	50	0
15466	49	0
21466	48	0
29666	47	0

LEVEL (DBA*) VS DISTRIBUTION (PERCENT)

*-A WEIGHTED DECIBELS-RE. 20 MICROWATTS PER SQUARE METER
 **-DBA RE. 20 MICROWATTS PER SQUARE METER FROM AN AVERAGE OF
 THE SQUARES OF THE SOUND PRESSURES.

SITE DATA

Community: Medford, Massachusetts

Grid Location: 7-3

Microphone Location: 350 feet south-southwest of the intersection of Foster Street and Light Guard Drive.

Date of Run: May 5, 1971

Time of Run: 7:30 to 8:30 AM

Recorded Tape No.: NAL 55-71, side 1, track 3 and 4

ROAD SURFACE AND WEATHER CONDITIONS

Road surface: dry Temperature: 49 °F. Sky Condition: Partly cloudy

Relative Humidity: 56 % Barometric Pressure 766 mm of Mercury

Wind Direction From: West

Velocity (MPH): 10-12 gust to 18

Site Description: Open field.

Special Events:
None

B-164

SITE DATA

Community: Medford, Massachusetts

Grid Location: 7-3

Microphone Location: See sheet 1 of 2

Date of Run: May 5, 1971

Time of Run: 11:30 AM to 12:30 PM

Recorded Tape No.: NAL 55-71, side 2, tracks 3 and 4

ROAD SURFACE AND WEATHER CONDITIONS

Road surface: dry Temperature: 62 °F. Sky Condition: Mostly cloudy

Relative Humidity: 47 % Barometric Pressure 747.2 mm of Mercury

Wind Direction From: West

Velocity (MPH): 10-12 gust to 30

Site Description: See sheet 1 of 2

Special Events:
None

B-165

U.S. DEPARTMENT OF TRANSPORTATION
 TRANSPORTATION SYSTEMS CENTER
 NOISE ABATEMENT GROUP

NOISE DATA FROM RUN 1 OF 2 OF THE MOBILE NOISE LAB. ON
 MAY 5 1971 FROM 07:30 TO 08:30 AT MEDFORD GRID LOCATION 7-3

DISTRIBUTION DBA*
 1 80 0
 4 79 0
 8 78 0
 12 77 0
 25 76 0
 38 75 0
 48 74 0
 61 73 0
 80 72 0
 111 71 0
 128 70 0
 203 69 0
 229 68 0
 269 67 0
 413 66 0
 609 65 0
 1038 64 0
 1571 63 0
 2138 62 0
 2489 61 0
 1948 60 0
 1713 59 0
 1885 58 0
 288 57 0
 58 56 0
 1 55 0
 0 54 0

SAMPLES= 14400
 AVERAGE= 67 DBA*
 STANDARD DEVIATION= 3.2 DBA*
 ENERGY MEAN= 63.8 DB**
 NOISE POLLUTION LEVEL= 72
 1% PERCENTILE= 73.9 DBA*
 10% DECILE= 66.5 DBA*
 MEDIAN= 61.9 DBA*
 90% DECILE= 59.1 DBA*
 99% PERCENTILE= 57.3 DBA*
 RANGE= 25 DB

LEVEL (DBA*) VS CUMULATIVE DISTRIBUTION (PERCENT)
 0 20 40 60 80 100

NOISE DATA FROM RUN 1 OF 2 OF THE MOBILE NOISE LAB. ON
 MAY 5 1971 FROM 07:30 TO 08:30 AT MEDFORD GRID LOCATION 7-3

1 80 0
 4 79 0
 8 78 0
 12 77 0
 25 76 0
 38 75 0
 48 74 0
 61 73 0
 80 72 0
 111 71 0
 128 70 0
 203 69 0
 229 68 0
 269 67 0
 413 66 0
 609 65 0
 1038 64 0
 1571 63 0
 2138 62 0
 2489 61 0
 1948 60 0
 1713 59 0
 1885 58 0
 288 57 0
 58 56 0
 1 55 0
 0 54 0

LEVEL (DBA*) VS DISTRIBUTION (PERCENT)
 10 20 30

*-A WEIGHTED DECIBELS-RE. 20 MICROMENTONS PER SQUARE METER
 **-DBA RE. 20 MICROMENTONS PER SQUARE METER FROM AN AVERAGE OF
 THE SQUARES OF THE SOUND PRESSURES.

US DEPARTMENT OF TRANSPORTATION
TRANSPORTATION SYSTEMS CENTER
NOISE ABATEMENT GROUP

NOISE DATA FROM RUN 2 OF 2 OF THE MOBILE NOISE LAB. ON
MAY 5 1971 FROM 11:30 TO 12:30 AT MEDFORD GRID LOCATION 7-3

DIST. IN
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52

SAMPLES= 14400 DBA*
AVRAGE= 60.8 DBA*
STANDARD DEVIATION= 3.7 DBA*
ENERGY MEAN= 53.7 DB*
NOISE POLLUTION LEVEL= 13.0
1% PERCENTILE= 7.4 DBA*
10% PERCENTILE= 65.7 DBA*
MEDIAN= 60.6 DBA*
90% PERCENTILE= 57.7 DBA*
99% PERCENTILE= 55.9 DBA*
RANGE= 32 DB

LEVEL (DBA) VS CUMULATIVE DISTRIBUTION (PERCENT)

B-168

PAGE 2

NOISE DATA FROM RUN 2 OF 2 OF THE MOBILE NOISE LAB. ON
MAY 5 1971 FROM 11:30 TO 12:30 AT MEDFORD GRID LOCATION 7-3

1 85 0
2 84 0
3 83 0
4 82 0
5 81 0
6 80 0
7 79 0
8 78 0
9 77 0
10 76 0
11 75 0
12 74 0
13 73 0
14 72 0
15 71 0
16 70 0
17 69 0
18 68 0
19 67 0
20 66 0
21 65 0
22 64 0
23 63 0
24 62 0
25 61 0
26 60 0
27 59 0
28 58 0
29 57 0
30 56 0
31 55 0
32 54 0
33 53 0
34 52 0
35 51 0
36 50 0
37 49 0
38 48 0
39 47 0
40 46 0
41 45 0
42 44 0
43 43 0
44 42 0
45 41 0
46 40 0
47 39 0
48 38 0
49 37 0
50 36 0
51 35 0
52 34 0
53 33 0
54 32 0
55 31 0
56 30 0
57 29 0
58 28 0
59 27 0
60 26 0
61 25 0
62 24 0
63 23 0
64 22 0
65 21 0
66 20 0
67 19 0
68 18 0
69 17 0
70 16 0
71 15 0
72 14 0
73 13 0
74 12 0
75 11 0
76 10 0
77 9 0
78 8 0
79 7 0
80 6 0
81 5 0
82 4 0
83 3 0
84 2 0
85 1 0

LEVEL (DBA) VS DISTRIBUTION (PERCENT)

*-A WEIGHTED DECIBEL-S-RE, 20 MICRONEWTONS PER SQUARE METER
**-DBA RE. 88 MICRONEWTONS PER SQUARE METER FROM AN AVERAGE OF
THE SQUARES OF THE SOUND PRESSURES.

B-169

SITE DATA

Community: Medford, Massachusetts

Grid Location: 7-4

Microphone Location: See sheet 1 of 2

Date of Run: March 23, 1971

Time of Run: 11:30 AM to 12:30 PM

Recorded Tape No.: MAL 19-71, side 2, track 3 and 4

ROAD SURFACE AND WEATHER CONDITIONS

Road surface: dry Temperature: 32 °F. Sky Condition: clear

Relative Humidity: 40 % Barometric Pressure: 765 MM of Mercury

Wind Direction From: Southeast

Velocity (MPH): 4-7

Site Description: See sheet 1 of 2

Special Events:

None

B-171

SITE DATA

Community: Medford, Massachusetts

Grid Location: 7-4

Microphone Location: South side of Washington Street 112 feet east of intersection of Washington Street and Dudley Street.

Date of Run: March 23, 1971

Time of Run: 7:30 to 8:30 AM

Recorded Tape No.: MAL 19-71, side 1, track 3 and 4

ROAD SURFACE AND WEATHER CONDITIONS

Road surface: dry Temperature: 35 °F. Sky Condition: clear

Relative Humidity: 43 % Barometric Pressure: 768 MM of Mercury

Wind Direction From: Southeast

Velocity (MPH): 3-7

Site Description: Multifamily frame dwellings on north side of Washington Street and inactive rail spur on south side.

Special Events:

None

B-170

NOISE DATA FROM RUN 1R OF 2 OF THE MOBILE NOISE LAB. ON
 MARCH 23 1971 FROM 07:36 TO 08:36 AT MEDFORD GRID LOCATION 7-4

US DEPARTMENT OF TRANSPORTATION
 TRANSPORTATION SYSTEMS CENTER
 NOISE ABATEMENT GROUP

NOISE DATA FROM RUN 1R OF 2 OF THE MOBILE NOISE LAB. ON
 MARCH 23 1971 FROM 07:36 TO 08:36 AT MEDFORD GRID LOCATION 7-4

DISTRIB
 3 88 0
 4 87 0
 6 86 0
 13 85 0
 18 84 0
 13 83 0
 14 82 0
 18 81 0
 27 80 0
 48 79 0
 59 78 0
 92 77 0
 118 76 0
 144 75 000
 188 74 000
 187 73 000
 204 72 000
 240 71 0000
 247 70 0000
 317 69 0000
 385 68 00000
 365 67 00000
 414 66 00000
 485 65 000000
 548 64 0000000
 661 63 00000000
 762 62 000000000
 794 61 000000000
 878 60 0000000000
 964 59 00000000000
 977 58 00000000000
 1873 57 000000000000
 1819 56 000000000000
 657 55 000000000
 571 54 000000000
 620 53 000000000
 495 52 0000000
 484 51 000000
 244 0000
 97 49 00
 33 48 0
 9 47 0
 0 46 0

SAMPLES= 14480
 AVERAGE= 66.7 DBA*
 STANDARD DEVIATION= 6.7 DBA*
 ENERGY MEAN= 67.4 DB**
 NOISE POLLUTION LEVEL= 84.6
 1% PERCENTILE= 79.3 DBA*
 10% DECILE= 70.8 DBA*
 MEDIAN= 68 DBA*
 90% PERCENTILE= 53.3 DBA*
 RANGE= 50 DBA*
 41 DB

LEVEL (DBA*) VS DISTRIBUTION (PERCENT)
 10 20 30
 40 50 60 70 80 90 100

*-A WEIGHTED DECIBELS-RE. 20 MICRONEWTONS PER SQUARE METER
 **-DBA RE. 20 MICRONEWTONS PER SQUARE METER FROM AN AVERAGE OF
 THE SQUARES OF THE SOUND PRESSURES.

NOISE DATA FROM RUN 2A OF 2 OF THE MOBILE NOISE LAB. ON
MARCH 23 1971 FROM 11:30 TO 12:30 AT MEDFORD GRID LOCATION 7-4

US DEPARTMENT OF TRANSPORTATION
TRANSPORTATION SYSTEMS CENTER
NOISE ABATEMENT GROUP

NOISE DATA FROM RUN 2A OF 2 OF THE MOBILE NOISE LAB. ON
MARCH 23 1971 FROM 11:30 TO 12:30 AT MEDFORD GRID LOCATION 7-4

DISTRIB
L.T.M. DBA*
2 81
2 80
6 79
8 78
10 77
18 76
14 75
49 74
46 73
58 72
81 71
93 70
105 69
129 67
138 66
186 65
192 64
199 63
234 62
255 61
223 60
362 58
385 57
458 56
596 55
587 54
717 53
829 52
841 51
1059 50
1387 49
1619 48
1511 47
1132 46
495 45
73 44
2 43
42

SAMPLES= 14400
AVERAGE= 52.6 DBA*
STANDARD DEVIATION= 6.5 DBA*
ENERGY MEAN= 68.2 DBA*
NOISE POLLUTION LEVEL= 76.0
1% PERCENTILE= 73.2 DBA*
10% DECILE= 63 DBA*
MEDIAN= 51 DBA*
90% DECILE= 46.8 DBA*
95% PERCENTILE= 45.2 DBA*
RANGE= 38 DB

2 81
2 80
6 79
8 78
10 77
18 76
14 75
49 74
46 73
58 72
81 71
93 70
105 69
129 67
138 66
186 65
192 64
199 63
234 62
255 61
223 60
362 58
385 57
458 56
596 55
587 54
717 53
829 52
841 51
1059 50
1387 49
1619 48
1511 47
1132 46
495 45
73 44
2 43
42

LEVEL (DBA*) VS DISTRIBUTION (PERCENT)

*-A WEIGHTED DECIBEL-RE. 20 MICRONEWTONS PER SQUARE METER
**-DBA RE. 20 MICRONEWTONS PER SQUARE METER FROM AN AVERAGE OF
THE SQUARES OF THE SOUND PRESSURES.

LEVEL (DBA*) VS CUMULATIVE DISTRIBUTION (PERCENT)

SITE DATA

Community: Medford, Massachusetts

Grid Location: 7-5

Microphone Location: From the intersection of Tainter and Court Streets
104 feet south on Court Street than 48 feet east.

Date of Run: April 22, 1971

Time of Run: 7:30 to 8:30 AM

Recorded Tape No.: NAL 43-71, side 1, track 3 and 4.

ROAD SURFACE AND WEATHER CONDITIONS

Road surface: dry Temperature: 48 °F. Sky Condition: clear

Relative Humidity: 60 % Barometric Pressure: 755 MM of Mercury

Wind Direction From: West

Velocity (MPH): 2

Site Description: Concrete pavement are with frame buildings north
and east and a 3 story brick school south east.

Special Events:
None

SITE DATA

Community: Medford, Massachusetts

Grid Location: 7-5

Microphone Location: See sheet 1 of 2

Date of Run: April 22, 1971

Time of Run: 11:30 AM to 12:30 PM

Recorded Tape No.: NAL 43-71, side 2, track 3 and 4

ROAD SURFACE AND WEATHER CONDITIONS

Road surface: dry Temperature: 61 °F. Sky Condition: Partly Cloudy

Relative Humidity: 44 % Barometric Pressure: 752 MM of Mercury

Wind Direction From: Northwest

Velocity (MPH): 48 gust to 10

Site Description: See sheet 1 of 2

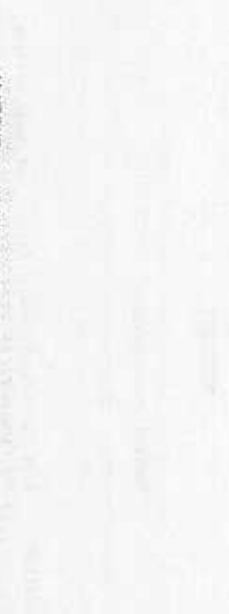
Special Events:
None

US DEPARTMENT OF TRANSPORTATION
TRANSPORTATION SYSTEMS CENTER
NOISE ABATEMENT GROUP

NOISE DATA FROM RUN IAP OF E 7F THE MOBILE NOISE LAB. ON
APRIL 22 1971 FROM 07:30 TO 08:30 AT MEDFORD GRID LOCATION 7-5

DISTRI- BUTION DBA*	1 78	SAMPLES=	14400
2 77	AVERAGE*	57.3	DBA*
1 76	STANDARD DEVIATION*	31.5	DBA*
1 75	ENERGY MEAN*	59.5	DB**
4 74	NOISE POLLUTION LEVEL*	68.5	DBA*
15 73	1% PERCENTILE*	69.9	DBA*
28 72	MEDIAN*	68.4	DBA*
36 71	90% DECILE*	57.2	DBA*
46 70	99% PERCENTILE*	54.1	DBA*
83 69	RANGE*	52	DBA*
94 68		28	DB
108 67			
157 66			
191 65			
225 64			
261 63			
303 62			
439 61			
597 60			
1105 59			
1792 58			
2178 57			
2175 56			
2860 55			
1190 54			
794 53			
385 52			
106 51			
23 50			
0 49			

LEVEL (DBA*) VS CUMULATIVE DISTRIBUTION (PERCENT)



B-178

NOISE DATA FROM RUN IAP OF 2 OF THE MOBILE NOISE LAB. ON
APRIL 22 1971 FROM 07:30 TO 08:30 AT MEDFORD GRID LOCATION 7-5

1 78	0
2 77	0
1 76	0
1 75	0
4 74	0
15 73	0
28 72	0
36 71	0
46 70	00
83 69	00
94 68	00
108 67	00
157 66	000
191 65	000
225 64	000
261 63	0000
303 62	0000
439 61	000000
597 60	0000000
1105 59	00000000000000
1792 58	00000000000000000000
2178 57	000000000000000000000000
2175 56	00000000000000000000000000
2860 55	000000000000000000000000000
1190 54	000000000000000000000000000
794 53	0000000000
385 52	000000
106 51	00
23 50	0
0 49	0

LEVEL (DBA*) VS DISTRIBUTION (PERCENT)

**A WEIGHTED DECIBELS-RE. 20 MICRONETONS PER SQUARE METER
**DBA RE. 20 MICRONETONS PER SQUARE METER FROM AN AVERAGE OF
THE SQUARES OF THE SOUND PRESSURES.

B-179

NOISE DATA FROM RUN 2AP OF 2 OF THE MOBILE NOISE LAB. ON
 APRIL 22 1971 FROM 11:31 TO 12:31 AT MEDFORD GRID LOCATION 7-5

US DEPARTMENT OF TRANSPORTATION
 TRANSPORTATION SYSTEMS CENTER
 NOISE ABATEMENT GROUP

NOISE DATA FROM RUN 2AP OF 2 OF THE MOBILE NOISE LAB. ON
 APRIL 22 1971 FROM 11:31 TO 12:31 AT MEDFORD GRID LOCATION 7-5

DISTRI-
 BUTION DBA*

1	89	0	SAMPLES=	14400
0	88	0	AVERAGE=	55.7 DBA*
4	87	0	STANDARD DEVIATION*	4 DBA*
0	86	0	ENERGY MEAN=	68.4 DB**
1	85	0	NOISE POLLUTION LEVEL=	78.6 DB**
1	84	0	1% PERCENTILE=	78.5 DBA*
1	83	0	10% DECILE=	68.9 DBA*
4	82	0	MEDIAN=	55.4 DBA*
5	81	0	90% DECILE=	52.2 DBA*
5	80	0	99% PERCENTILE=	50.3 DBA*
0	79	0	RANGE=	41 DB
4	78	0		
7	77	0		
4	76	0		
10	75	0		
18	74	0		
17	73	0		
21	72	0		
28	71	0		
35	70	0		
54	69	0		
57	68	0		
75	67	0		
183	66	0		
125	65	0		
114	64	0		
151	63	0		
247	62	0		
389	61	0		
391	60	0		
632	59	0		
959	58	0		
1112	57	0		
1558	56	0		
1982	55	0		
1861	54	0		
1843	53	0		
1648	52	0		
763	51	0		
876	50	0		
65	49	0		
3	48	0		
0	47	0		

LEVEL(DBA*) VS DISTRIBUTION (PERCENT)

**A WEIGHTED DECIBELS-RE. 20 MICRONETONS PER SQUARE METER
 **DBA RE. 20 MICRONETONS PER SQUARE METER FROM AN AVERAGE OF
 THE SQUARES OF THE SOUND PRESSURES.

LEVEL(DBA*) VS CUMULATIVE DISTRIBUTION (PERCENT)

SITE DATA

Community: Medford, Massachusetts

Grid Location: 7-6

Microphone Location: Sidewalk west side of Fulton Street 30 feet south of intersection with Fulton Spring Rd.

Date of Run: April 15, 1971

Time of Run: 7:30 to 8:12 AM

Recorded Tape No.: MAL 36-71, side 1, track 3 and 4

ROAD SURFACE AND WEATHER CONDITIONS

Road surface: dry Temperature: 34 °F. Sky Condition: clear

Relative Humidity: 38 % Barometric Pressure 776 mm of Mercury

Wind Direction From: Northwest

Velocity (MPH): 10

Site Description: Residential area with single family frame structures.

Special Events: Short run because of low battery voltage.

B-182

SITE DATA

Community: Medford, Massachusetts

Grid Location: 7-6

Microphone Location: See sheet 1 of 2

Date of Run: April 15, 1971

Time of Run: 11:30 AM to 12:30 PM

Recorded Tape No.: MAL 36-71, side 2, track 3 and 4

ROAD SURFACE AND WEATHER CONDITIONS

Road surface: dry Temperature: 44 °F. Sky Condition: clear

Relative Humidity: 20 % Barometric Pressure 767 mm of Mercury

Wind Direction From: Northwest

Velocity (MPH): 7-8 with gust to 12.

Site Description: See sheet 1 of 2

Special Events:

None

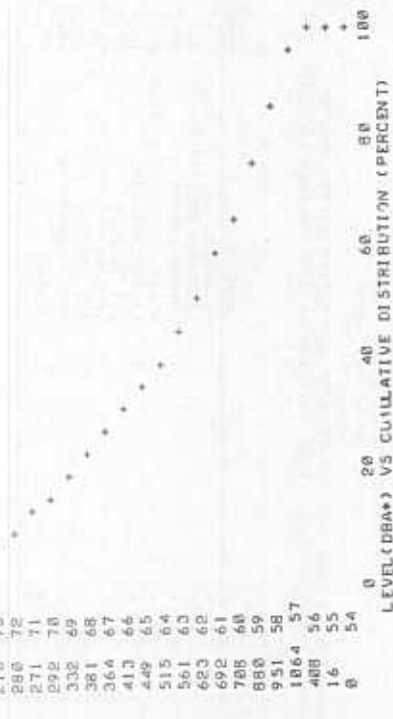
B-183

NOISE DATA FROM RUN 1AP OF 2 OF THE MOBILE NOISE LAB. ON
 APRIL 15 1971 FROM 07:30 TO 08:12 AT MEDFORD GRID LOCATION 7-6

US DEPARTMENT OF TRANSPORTATION
 TRANSPORTATION SYSTEMS CENTER
 NOISE ABATEMENT GROUP

NOISE DATA FROM RUN 1AP OF 2 OF THE MOBILE NOISE LAB. ON
 APRIL 15 1971 FROM 07:30 TO 08:12 AT MEDFORD GRID LOCATION 7-6

DISTRIB	UTION DBA*	SAMPLES=	10000
1	9.4	AVERAGE*	63.3 DBA*
0	9.3	STANDARD DEVIATION*	5.7 DBA*
0	9.2	ENERGY MEAN*	68.1 DB**
1	9.1	NOISE POLLUTION LEVEL=	82.7 DBA*
0	9.0	1% PERCENTILE*	78.5 DBA*
0	8.9	10% DECILE*	72.3 DBA*
1	8.8	MEDIAN*	62.5 DBA*
0	8.7	90% DECILE*	57.5 DBA*
0	8.6	99% PERCENTILE=	56.2 DBA*
3	8.5	RANGE*	39 DB
7	8.4		
1	8.3		
12	8.2		
10	8.1		
15	8.0		
24	7.9		
46	7.8		
69	7.7		
83	7.6		
134	7.5		
175	7.4		
216	7.3		
280	7.2		
271	7.1		
592	7.0		
332	6.9		
381	6.8		
364	6.7		
413	6.6		
449	6.5		
515	6.4		
561	6.3		
623	6.2		
692	6.1		
788	6.0		
880	5.9		
951	5.8		
1864	5.7		
488	5.6		
16	5.5		
0	5.4		



B-104

LEVEL (DBA*) VS DISTRIBUTION (PERCENT) 30
 20
 10
 DIST. DBA*0

** - A WEIGHTED DECIBEL-S-RE. 20 MICRONEWTONS PER SQUARE METER
 *** - DBA RE. 20 MICRONEWTONS PER SQUARE METER FROM AN AVERAGE OF
 THE SQUARES OF THE SOUND PRESSURES.

B-105

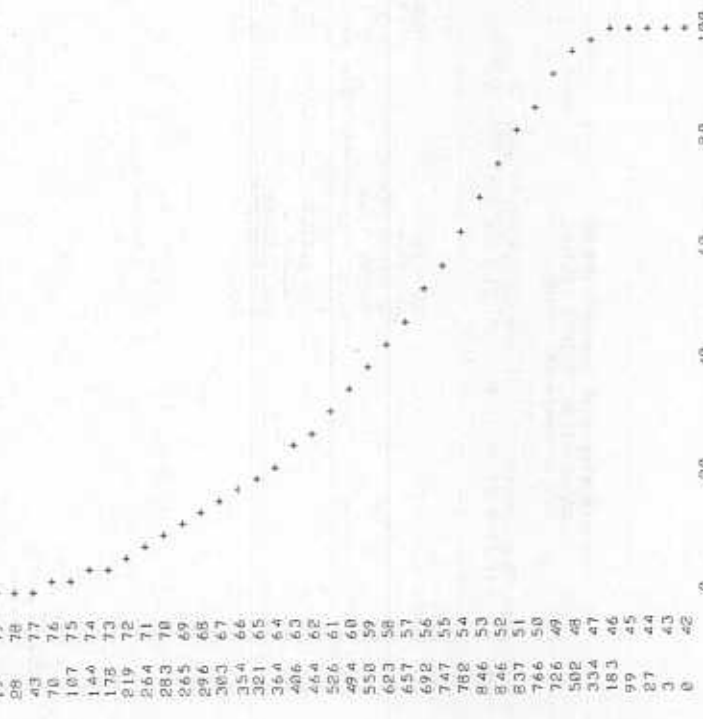
NOISE DATA FROM RUN 2AP OF 2 OF THE MOBILE NOISE LAB. ON
 APRIL 15 1971 FROM 11:30 TO 12:30 AT MEDFORD GRID LOCATION 7-6

U.S. DEPARTMENT OF TRANSPORTATION
 TRANSPORTATION SYSTEMS CENTER
 NOISE ABATEMENT GROUP

NOISE DATA FROM RUN 2AP OF 2 OF THE MOBILE NOISE LAB. ON
 APRIL 15 1971 FROM 11:30 TO 12:30 AT MEDFORD GRID LOCATION 7-6

DISTRIB
 UTION DBA*
 1 98 0
 0 89 0
 0 88 0
 0 87 0
 1 86 0
 0 85 0
 2 84 0
 0 83 0
 5 82 0
 9 81 0
 12 80 0
 19 79 0
 28 78 0
 43 77 0
 70 76 0
 107 75 0
 144 74 0
 178 73 0
 219 72 0
 264 71 0
 283 70 0
 265 69 0
 296 68 0
 303 67 0
 354 66 0
 321 65 0
 364 64 0
 406 63 0
 464 62 0
 526 61 0
 494 60 0
 550 59 0
 623 58 0
 657 57 0
 692 56 0
 747 55 0
 782 54 0
 846 53 0
 846 52 0
 837 51 0
 766 50 0
 726 49 0
 502 48 0
 334 47 0
 183 46 0
 99 45 0
 27 44 0
 3 43 0
 0 42 0

SAMPLES= 14400
 AVERAGE= 57.7 DBA*
 STANDARD DEVIATION= 7.6 DBA*
 ENERGY MEAN= 65.2 DBA*
 NOISE POLLUTION LEVEL= 84.7
 1% PERCENTILE= 76.7 DBA*
 10% PERCENTILE= 69.8 DBA*
 MEDIAN= 56.7 DBA*
 90% DECILE= 49.4 DBA*
 99% PERCENTILE= 46.1 DBA*
 RANGE= 47 DB



LEVEL (DBA*) VS CUMULATIVE DISTRIBUTION (PERCENT)
 B-186

DIST. DBA* 18 20 30
 LEVEL (DBA*) VS DISTRIBUTION (PERCENT)

*-A WEIGHTED DECIBEL-S-RE. 20 MICRONEWTNS PER SQUARE METER
 *-DBA RE. 20 MICRONEWTNS PER SQUARE METER FROM AN AVERAGE OF
 THE SQUARES OF THE SOUND PRESSURES.

SITE DATA

Community: Medford, Massachusetts

Grid Location: 7-7

Microphone Location: See sheet 1 of 2

Date of Run: April 27, 1971

Time of Run: 11:30 AM to 12:30 PM

Recorded Tape No.: MAL 50-71, side 2, track 3 and 4

ROAD SURFACE AND WEATHER CONDITIONS

Road surface: dry Temperature: 52 °F. Sky Condition: cloudy

Relative Humidity: 63 % Barometric Pressure: 765 mm of Mercury

Wind Direction From: North

Velocity (MPH): 2-6

Site Description: See sheet 1 of 2

Special Events:

None

B-188

SITE DATA

Community: Medford, Massachusetts

Grid Location: 7-7

Microphone Location: Top of hill at the end of Scott Street

Date of Run: April 27, 1971

Time of Run: 7:30 to 8:30 AM

Recorded Tape No.: MAL 50-71, side 1, track 3 and 4

ROAD SURFACE AND WEATHER CONDITIONS

Road surface: dry Temperature: 42 °F. Sky Condition: Partly cloudy

Relative Humidity: 92 % Barometric Pressure: 763 mm of Mercury

Wind Direction From: North

Velocity (MPH): 2-5

Site Description: Wooded area with single family frame buildings adjacent to microphone site.

Special Events:

None

B-189

NOISE DATA FROM RUN 1 OF 2 OF THE MOBILE NOISE LAB. ON
APRIL 27 1971 FROM 07:30 TO 08:30 AT MEDFORD GRID LOCATION 7-7

US DEPARTMENT OF TRANSPORTATION
TRANSPORTATION SYSTEMS CENTER
NOISE ABATEMENT GROUP

NOISE DATA FROM RUN 1 OF 2 OF THE MOBILE NOISE LAB. ON
APRIL 27 1971 FROM 07:30 TO 08:30 AT MEDFORD GRID LOCATION 7-7

DISTRI UTION DBA*	1 89	+	SAMPLES*	14400
0 88	+	AVERAGE*	54.5	DBA*
0 87	+	STANDARD DEVIATION*	5.9	DBA*
1 86	+	ENERGY MEAN*	44.2	DBA*
1 85	+	NOISE POLLUTION LEVEL*	79.3	
7 84	+	1% PERCENTILE*	78.7	DBA*
15 83	+	10% DECILE*	61.9	DBA*
20 82	+	MEDIAN*	50.1	DBA*
28 81	+	90% DECILE*	58.4	DBA*
24 80	+	99% PERCENTILE*	49.1	DBA*
34 79	+	RANGES	40	DB
45 78	+			
53 77	+			
48 76	+			
63 75	+			
55 74	+			
51 72	+			
38 70	+			
55 69	+			
64 67	+			
96 66	+			
122 65	+			
114 64	+			
148 63	+			
175 62	+			
284 61	+			
214 60	+			
322 59	+			
420 58	+			
470 57	+			
578 56	+			
913 55	+			
1221 54	+			
1599 53	+			
2314 52	+			
3203 51	+			
4200 50	+			
5780 49	+			
8640 48	+			
12600 47	+			
18000 46	+			

1 89	+
0 88	+
0 87	+
1 86	+
1 85	+
7 84	+
15 83	+
20 82	+
28 81	+
24 80	+
34 79	+
45 78	+
53 77	+
48 76	+
63 75	+
55 74	+
51 72	+
38 70	+
55 69	+
64 67	+
96 66	+
122 65	+
114 64	+
148 63	+
175 62	+
284 61	+
214 60	+
322 59	+
420 58	+
470 57	+
578 56	+
913 55	+
1221 54	+
1599 53	+
2314 52	+
3203 51	+
4200 50	+
5780 49	+
8640 48	+
12600 47	+
18000 46	+

**A WEIGHTED DECIBELS-RE. 20 MICROWATTS PER SQUARE METER
VS DISTRIBUTION (PERCENT)

**DBA RE. 20 MICROWATTS PER SQUARE METER FROM AN AVERAGE OF
THE SQUARES OF THE SOUND PRESSURES.

LEVEL (DBA*) VS CUMULATIVE DISTRIBUTION (PERCENT)

SITE DATA

Community: Medford, Massachusetts
 Grid Location: 7-8
 Microphone Location: East side of Wrights Pond
 Date of Run: March 17, 1971
 Time of Run: 7:30 to 8:30 AM
 Recorded Tape No.: MAL 16-71, side 1, track 4

ROAD SURFACE AND WEATHER CONDITIONS

Road surface: dry Temperature: 36 °F. Sky Condition: cloudy
 Relative Humidity: 72 % Barometric Pressure: 752 MM of Mercury
 Wind Direction From: Northeast
 Velocity (MPH): 8-12

Site Description: Wooded area with pond west of microphone.

Special Events:

None

B-194

SITE DATA

Community: Medford, Massachusetts
 Grid Location: 7-8
 Microphone Location: See sheet 1 of 2
 Date of Run: March 17, 1971
 Time of Run: 11:30 AM to 12:30 PM
 Recorded Tape No.: MAL 16-17, side 1, track 3

ROAD SURFACE AND WEATHER CONDITIONS

Road surface: dry Temperature: 38 °F. Sky Condition: cloudy
 Relative Humidity: 54 % Barometric Pressure: 750.5 MM of Mercury
 Wind Direction From: Northeast
 Velocity (MPH): 5-10

Site Description: See sheet 1 of 2

Special Events:

None

B-195

NOISE DATA FROM RUN 2A OF 2 OF THE MOBILE NOISE LAB. ON
MARCH 17 1971 FROM 11:30 TO 12:30 AT MEDFORD GRID LOCATION 7-8

US DEPARTMENT OF TRANSPORTATION
TRANSPORTATION SYSTEMS CENTER
NOISE ABATEMENT GROUP

NOISE DATA FROM RUN 2A OF 2 OF THE MOBILE NOISE LAB. ON
MARCH 17 1971 FROM 11:30 TO 12:30 AT MEDFORD GRID LOCATION 7-8

DISTRI- BUTION DBA*	1 85	2 84	3 82	7 81	13 80	6 79	16 78	11 77	6 75	11 74	13 72	14 71	17 70	27 67	23 66	27 67	65 65	70 64	65 63	73 62	101 61	184 60	143 59	192 58	248 57	311 56	541 55	940 54	1526 53	2165 52	2588 51	1995 50	1671 49	935 48	392 47	184 46	17 45	0 44							
SAMPLES*	52.1	4.1	59	69.5	78.1	56.5	51.8	49	47.1	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48			
AVERAGES	52.1	4.1	59	69.5	78.1	56.5	51.8	49	47.1	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48			
STANDARD DEVIATION*	52.1	4.1	59	69.5	78.1	56.5	51.8	49	47.1	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48		
ENERGY MEAN*	52.1	4.1	59	69.5	78.1	56.5	51.8	49	47.1	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48		
NOISE POLLUTION LEVEL*	52.1	4.1	59	69.5	78.1	56.5	51.8	49	47.1	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48		
1% PERCENTILE*	52.1	4.1	59	69.5	78.1	56.5	51.8	49	47.1	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	
10% DECILE*	52.1	4.1	59	69.5	78.1	56.5	51.8	49	47.1	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	
50% DECILE*	52.1	4.1	59	69.5	78.1	56.5	51.8	49	47.1	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	
90% PERCENTILE*	52.1	4.1	59	69.5	78.1	56.5	51.8	49	47.1	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48
NOISE*	52.1	4.1	59	69.5	78.1	56.5	51.8	49	47.1	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	

1	85	0
2	84	0
3	82	0
7	81	0
13	80	0
6	79	0
16	78	0
11	77	0
6	75	0
11	74	0
13	72	0
14	71	0
17	70	0
27	69	0
23	68	0
27	67	0
65	66	0
65	65	00
70	64	00
65	63	00
73	62	00
101	61	00
184	60	00
143	59	000
192	58	000
248	57	0000
311	56	0000
541	55	00000000
940	54	0000000000
1526	53	0000000000000000
2165	52	00000000000000000000
2588	51	0000000000000000000000
1995	50	0000000000000000000000
1671	49	0000000000000000000000
935	48	00000000000000000000
392	47	000000
184	46	00
17	45	0
DIST.	DBA*0	10
	LEVEL(DBA*)	V5 DISTRIBUTION (PERCENT)
		20
		30

*-A WEIGHTED DECIBEL-S-RE. 20 MICRONETONS PER SQUARE METER
**-DBA RE. 28 MICRONETONS PER SQUARE METER FROM AN AVERAGE OF
THE SQUARES OF THE SOUND PRESSURES.

LEVEL(DBA*) VS CUMULATIVE DISTRIBUTION (PERCENT)

NOISE DATA FROM RUN 9 OF 2 OF THE MOBILE NOISE LAB. ON
APRIL 27 1971 FROM 11:30 TO 12:30 AT MEDFORD GRID LOCATION 7-7

U.S. DEPARTMENT OF TRANSPORTATION
TRANSPORTATION SYSTEMS CENTER
NOISE ABATEMENT GROUP

NOISE DATA FROM RUN 2 OF 9 OF THE MOBILE NOISE LAB. ON
APRIL 27 1971 FROM 11:30 TO 12:30 AT MEDFORD GRID LOCATION 7-7

DISTRIB UTION (DBA*)	SAMPLES=	12600
1 74 0	AVERAGE=	47.1 DBA*
3 73 0	STANDARD DEVIATION=	4.6 DBA*
8 72 0	ENERGY MEAN=	51.1 DBA*
2 71 0	NOISE POLLUTION LEVEL=	69.9
6 70 0	1% PERCENTILE=	41.6 DBA*
10 69 0	10% DECTILE=	34.1 DBA*
6 68 0	MEDIANS	48.6 DBA*
11 67 0	90% DECTILE=	48.6 DBA*
9 66 0	99% PERCENTILE=	48.3 DBA*
7 65 0	RANGES	0.5 DB
18 64 0		
23 63 0		
33 62 0		
55 61 0		
49 60 0		
97 59 0		
141 58 0		
182 57 0		
287 56 0		
285 55 0		
382 54 0		
381 53 0		
526 52 0		
576 51 0		
695 50 0		
899 49 0		
977 48 0		
1136 47 0		
1434 46 0		
1532 45 0		
1597 44 0		
1427 43 0		
860 42 0		
588 41 0		
281 40 0		
46 39 0		
2 38 0		
2 37 0		

LEVEL (DBA*) VS CUMULATIVE DISTRIBUTION (PERCENT)



DIST. DBA*8 10 20 30

LEVEL (DBA*) VS DISTRIBUTION (PERCENT)

*-A WEIGHTED DECIBEL-RE-20 MICROMETONS PER SQUARE METER

**-DBA RE-20 MICROMETONS PER SQUARE METER FROM AN AVERAGE OF THE SQUARES OF THE SOUND PRESSURES.

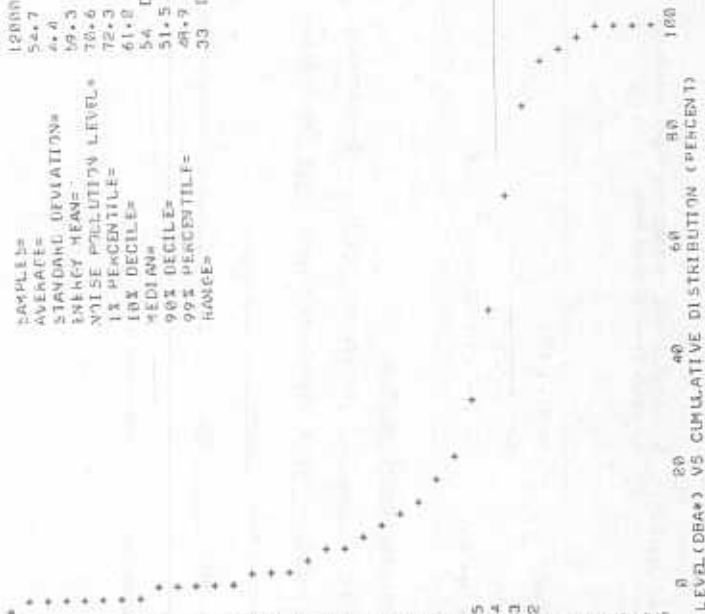
NOISE DATA FROM RUN 1AP OF 2 OF THE MOBILE NOISE LAB. ON
MAY 3 1971 FROM 07:35 TO 08:25 AT MEDFORD GRID LOCATION 7-9

U.S. DEPARTMENT OF TRANSPORTATION
TRANSPORTATION SYSTEMS CENTER
NOISE ABATEMENT GROUP

NOISE DATA FROM RUN 1AP OF 2 OF THE MOBILE NOISE LAB. ON
MAY 3 1971 FROM 07:35 TO 08:25 AT MEDFORD GRID LOCATION 7-9

LISTED DISTRIBUTION DBA*
1 79 0
4 78 0
5 77 0
13 76 0
16 75 0
23 74 0
29 73 0
42 72 0
43 71 0
48 70 0
57 69 0
56 68 0
71 67 0
106 66 0
87 65 0
126 64 0
137 63 0
176 62 0
213 61 0
233 59 0
269 58 0
355 57 0
561 56 0
1169 55 0
2049 54 0
2481 53 0
1981 52 0
897 51 0
336 50 0
265 49 0
189 48 0
17 47 0
1 46 0
1 45 0

SAMPLES= 12000
AVERAGE= 54.7 DBA*
STANDARD DEVIATION= 7.0 DBA*
ENERGY MEAN= 59.3 DB**
NOISE POLLUTION LEVEL= 70.6
1% PERCENTILE= 72.3 DBA*
10% DECILE= 61.8 DBA*
MEDIAN= 54 DBA*
90% DECILE= 51.5 DBA*
99% PERCENTILE= 49.9 DBA*
RANGE= 33 DB



DIST. DBA* 10 20 30
LEVEL (DBA*) VS DISTRIBUTION (PERCENT)

*-A WEIGHTED DECIBEL S-RE. 20 MICRONEWTONS PER SQUARE METER
**-DBA RE. 20 MICRONEWTONS PER SQUARE METER FROM AN AVERAGE OF
THE SQUARES OF THE SOUND PRESSURES.

US DEPARTMENT OF TRANSPORTATION
TRANSPORTATION SYSTEMS CENTER
NOISE ABATEMENT GROUP

NOISE DATA FROM RUN 1A OF 2 OF THE MOBILE NOISE LAB. ON
MARCH 17 1971 FROM 07:30 TO 08:30 AT MEDFORD GRID LOCATION 7-8

DISTRIB
UTION DBA*
4 76 +
10 75 +
7 74 +
11 73 +
16 72 +
15 71 +
15 70 +
44 69 +
36 68 +
54 67 +
64 66 +
66 65 +
96 64 +
97 63 +
154 62 +
245 61 +
412 60 +
739 59 +
1480 58 +
2215 57 +
3236 56 +
3271 55 +
1671 54 +
452 53 +
68 52 +
0 51 +
0 50 +

SAMPLES= 14400
AVERAGE= 56.6 DBA*
STANDARD DEVIATION= 2.7 DBA*
ENERGY MEAN= 58.2 DB**
NOISE POLLUTION LEVEL= 65.1
1% PERCENTILE= 58.4 DBA*
10% DECILE= 59.9 DBA*
MEDIAN= 56.5 DBA*
90% DECILE= 54.5 DBA*
99% PERCENTILE= 53.2 DBA*
RANGES= 2.5 DB

LEVEL (DBA*) VS CUMULATIVE DISTRIBUTION (PERCENT)

PAGE 2

NOISE DATA FROM RUN 1A OF 2 OF THE MOBILE NOISE LAB. ON
MARCH 17 1971 FROM 07:30 TO 08:30 AT MEDFORD GRID LOCATION 7-8

4 76 0
10 75 0
7 74 0
11 73 0
16 72 0
15 71 0
15 70 0
44 69 00
36 68 0
54 67 00
64 66 00
66 65 00
96 64 00
97 63 00
154 62 000
245 61 0000
412 60 00000
739 59 000000000
1480 58 000000000000000
2215 57 000000000000000000000
3236 56 0000000000000000000000000
3271 55 000000000000000000000000000
1671 54 000000000000000000000000000
452 53 000000
68 52 00
0 51 0
0 50 0

DIST. DBA** LEVEL (DBA*) VS DISTRIBUTION (PERCENT)

*-A WEIGHTED DECIBEL-S-RE. 20 MICROWATTS PER SQUARE METER
**-DBA RE. 20 MICROWATTS PER SQUARE METER FROM AN AVERAGE OF
THE SQUARES OF THE SOUND PRESSURES.

B-196

B-197

SITE DATA

Community: Medford, Massachusetts
 Grid Location: B-2
 Microphone Location: 300 feet southeast of Locust Street and 85 feet north of Revere Beach Parkway median strip.
 Date of Run: April 14, 1971
 Time of Run: 7:30 to 8:30 AM
 Recorded Tape No.: NAL 33-71, side 1, track 3 and 4.

ROAD SURFACE AND WEATHER CONDITIONS

Road surface: dry Temperature: 55 °F. Sky Condition: cloudy
 Relative Humidity: 63 % Barometric Pressure: 764 mm of Mercury
 Wind Direction From: Northwest
 Velocity (MPH): 10-15 gust to 20

Site Description: Drive-in theater entrance. Metal fence 9 feet high approximately 100 feet north of microphone location.

Special Events:
 None

B-206

SITE DATA

Community: Medford, Massachusetts
 Grid Location: B-2
 Microphone Location: See sheet 1 of 2
 Date of Run: April 14, 1971
 Time of Run: 11:30 AM to 12:30 PM
 Recorded Tape No.: NAL 33-71, side 2, track 3 and 4

ROAD SURFACE AND WEATHER CONDITIONS

Road surface: wet Temperature: 42 °F. Sky Condition: cloudy-cat. showers
 Relative Humidity: 82 % Barometric Pressure: 765 mm of Mercury
 Wind Direction From: Northwest
 Velocity (MPH): 10-15 gust to 20

Site Description: See sheet 1 of 2

Special Events:
 None

B-207

SITE DATA

Community: Medford, Massachusetts

Grid Location: 7-9

Microphone Location: On Half Mile Road in Middlesex Fells Reservation
0.2 miles from Fellsway West.

Date of Run: April 27, 1971

Time of Run: 7:35 to 8:25 AM

Recorded Tape No.: NAL 49-71, side 1, track 3 and 4

ROAD SURFACE AND WEATHER CONDITIONS

Road surface: dry Temperature: 62 °F. Sky Condition: clear

Relative Humidity: 92 % Barometric Pressure 765 MM of Mercury

Wind Direction From: North

Velocity (MPH): 2-5

Site Description: Undeveloped wooded area.

Special Events:

None

B-200

SITE DATA

Community: Medford, Massachusetts

Grid Location: 7-9

Microphone Location: See sheet 1 of 2

Date of Run: April 27, 1971

Time of Run: 11:35 AM to 12:25 PM

Recorded Tape No.: NAL 49-71, side 2 track 3 and 4

ROAD SURFACE AND WEATHER CONDITIONS

Road surface: dry Temperature: 52 °F. Sky Condition: cloudy

Relative Humidity: 63 % Barometric Pressure 765 MM of Mercury

Wind Direction From: North

Velocity (MPH): 2-4

Site Description: See sheet 1 of 2

Special Events:

None

B-201

NOISE DATA FROM RUN 2 OF 2 OF THE MOBILE NOISE LAB. ON
APRIL 14 1971 FROM 11:30 TO 12:30 AT MEDFORD GRID LOCATION B-2

1	92	0
1	91	0
3	90	0
1	89	0
4	88	0
8	87	0
4	86	0
7	85	0
6	84	0
10	83	0
15	82	0
39	81	00
57	80	00
109	79	00
183	78	000
237	77	0000
376	76	00000
588	75	000000
669	74	0000000
862	73	000000000
1121	72	00000000000
1380	71	0000000000000
1645	70	000000000000000
1896	69	00000000000000000
1548	68	000000000000000000
1353	67	0000000000000000000
1096	66	00000000000000000000
835	65	000000000000000000000
582	64	00000000
386	63	00000
285	62	000
63	61	00
27	60	0
12	59	0
4	58	0
1	57	0
0	56	0

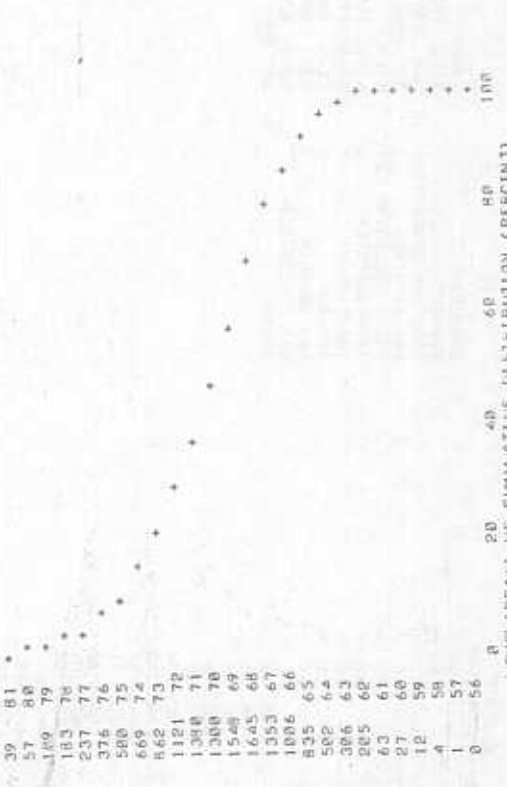
LEVEL(DBA*) VS DISTRIBUTION (PERCENT) 30

**--A WEIGHTED DECIBEL-S-RE-20 MICRONETONS PER SQUARE METER
**--DBA RE-20 MICRONETONS PER SQUARE METER FROM AN AVERAGE OF
THE SQUARES OF THE SOUND PRESSURES.

US DEPARTMENT OF TRANSPORTATION
TRANSPORTATION SYSTEMS CENTER
NOISE ABATEMENT GROUP

NOISE DATA FROM RUN 2 OF 2 OF THE MOBILE NOISE LAB. ON
APRIL 14 1971 FROM 11:30 TO 12:30 AT MEDFORD GRID LOCATION B-2

1	92	0
1	91	0
3	90	0
1	89	0
4	88	0
8	87	0
4	86	0
7	85	0
6	84	0
10	83	0
15	82	0
39	81	00
57	80	00
109	79	00
183	78	000
237	77	0000
376	76	00000
588	75	000000
669	74	0000000
862	73	00000000
1121	72	000000000
1380	71	0000000000
1645	70	00000000000
1896	69	000000000000
1548	68	0000000000000
1353	67	00000000000000
1096	66	000000000000000
835	65	0000000000000000
582	64	00000000
386	63	000000
285	62	0000
63	61	00
27	60	0
12	59	0
4	58	0
1	57	0
0	56	0



US DEPARTMENT OF TRANSPORTATION
TRANSPORTATION SYSTEMS CENTER
NOISE ABATEMENT GROUP

NOISE DATA FROM RUN 2AP OF 2 OF THE MOBILE NOISE LAB. ON
MAY 3 1971 FROM 11:37 TO 12:27 AT MEDFORD GRID LOCATION 7-9

DISTRIBUTION DBA*	SAMPLES=	12000
2	69	0
4	68	0
5	67	0
6	66	0
7	65	0
8	64	0
9	63	0
10	62	0
11	61	0
12	60	0
13	59	0
14	58	0
15	57	0
16	56	0
17	55	0
18	54	0
19	53	0
20	52	0
21	51	0
22	50	0
23	49	0
24	48	0
25	47	0
26	46	0
27	45	0
28	44	0
29	43	0
30	42	0
31	41	0
32	40	0
33	39	0
34	38	0
35	37	0

LEVEL (DBA*) VS CUMULATIVE DISTRIBUTION (PERCENT)

PAGE 2

NOISE DATA FROM RUN 2AP OF 2 OF THE MOBILE NOISE LAB. ON
MAY 3 1971 FROM 11:37 TO 12:27 AT MEDFORD GRID LOCATION 7-9

DIST. DBA*0	LEVEL (DBA*)	VS DISTRIBUTION (PERCENT)
2	69	0
4	68	0
5	67	0
6	66	0
7	65	0
8	64	0
9	63	0
10	62	0
11	61	0
12	60	0
13	59	0
14	58	0
15	57	0
16	56	0
17	55	0
18	54	0
19	53	0
20	52	0
21	51	0
22	50	0
23	49	0
24	48	0
25	47	0
26	46	0
27	45	0
28	44	0
29	43	0
30	42	0
31	41	0
32	40	0
33	39	0
34	38	0
35	37	0

LEVEL (DBA*) VS DISTRIBUTION (PERCENT)

*-A WEIGHTED DECIBEL-RE. 20 MICRONEWTONS PER SQUARE METER
*-DBA RE. 20 MICRONEWTONS PER SQUARE METER FROM AN AVERAGE OF
THE SQUARES OF THE SOUND PRESSURES.

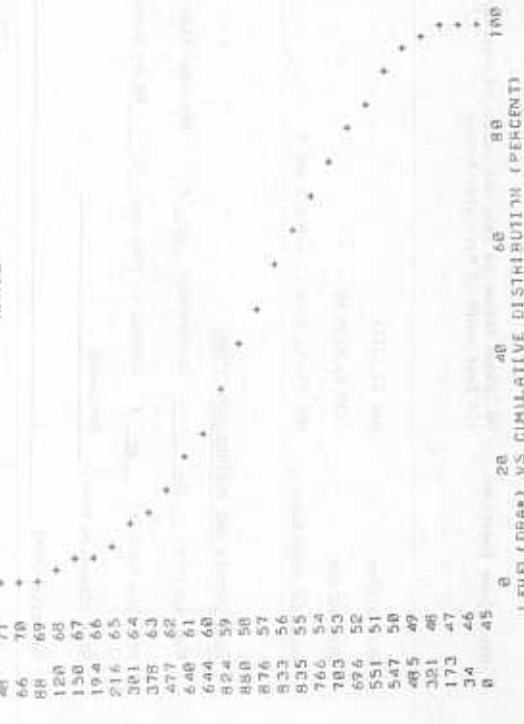
NOISE DATA FROM RUN 1AR OF 2 OF THE MOBILE NOISE LAB. ON
MAY 25 1971 FROM 07:30 TO 08:20 AT MEDFORD GRID LOCATION NO. B-3

U.S. DEPARTMENT OF TRANSPORTATION
TRANSPORTATION SYSTEMS CENTER
NOISE ABATEMENT GROUP

NOISE DATA FROM RUN 1AS OF 2 OF THE MOBILE NOISE LAB. ON
MAY 25 1971 FROM 07:30 TO 08:20 AT MEDFORD GRID LOCATION NO. B-3

DISPERSED
UTILIZATION DBA*

AVERAGES 11990
STANDARD DEVIATION= 5.5 DBA*
ENERGY MEAN= 61.3 DB**
NOISE POLLUTION LEVEL= 75.4
1% PERCENTILE= 72.7 DBA*
10% DECILE= 64.4 DBA*
MEDIAN= 57.1 DBA*
90% DECILE= 58.3 DBA*
99% PERCENTILE= 47.5 DBA*
RANGE= 35 DB



LEVEL (DBA*) VS CUMULATIVE DISTRIBUTION (PERCENT)

2 81 7
3 80 3
4 79 3
8 79 7
12 77 7
17 75 7
25 74 7
24 73 7
35 72 7
48 71 7
66 70 7
88 69 7
120 68 7
150 67 7
194 66 7
216 65 7
301 64 7
378 63 7
477 62 7
640 61 7
824 59 7
880 58 7
876 57 7
833 56 7
835 55 7
766 54 7
783 53 7
694 52 7
551 51 7
547 50 7
485 49 7
321 48 7
173 47 7
34 46 7

10 20 30
LEVEL (DBA*) VS DISTRIBUTION (PERCENT)

*-A WEIGHTED DECIBEL-S-RE. 20 MICRONEWTONS PER SQUARE METER
*-DBA RE. 20 MICRONEWTONS PER SQUARE METER FROM AN AVERAGE OF
THE SQUARES OF THE SOUND PRESSURES.

NOISE DATA FROM RUN 1 OF 2 OF THE MOBILE NOISE LAB. ON
APRIL 14 1971 FROM 07:40 TO 08:40 AT MEDFORD GRID LOCATION B-2

US DEPARTMENT OF TRANSPORTATION
TRANSPORTATION SYSTEMS CENTER
NOISE ABATEMENT GROUP

NOISE DATA FROM RUN 1 OF 2 OF THE MOBILE NOISE LAB. ON
APRIL 14 1971 FROM 07:40 TO 08:40 AT MEDFORD GRID LOCATION B-2

DISTRIBUTION DBA*	SAMPLES*	AVERAGE*	STANDARD DEVIATION*	ENERGY MEAN*	NOISE POLLUTION LEVEL*	1% PERCENTILE*	10% PERCENTILE*	MEDIAN*	90% PERCENTILE*	RANGE*
3	89	16.00	11.4	DBA*						
1	88	11.4	3.4	DBA*						
2	87	7.0	7.0	DBA**						
9	86	7.0	7.0	DBA**						
7	85	81.7	81.7	DBA*						
14	84	81.3	81.3	DBA*						
26	83	74.5	74.5	DBA*						
31	82	71.6	71.6	DBA*						
71	81	67.7	67.7	DBA*						
92	80	65.2	65.2	DBA*						
130	79	28	28	DB						

3	89	0
1	88	0
2	87	0
9	86	0
7	85	0
14	84	0
26	83	0
31	82	0
71	81	0
92	80	0
130	79	0
294	78	0
436	77	0
626	76	0
877	75	0
1100	74	0
1380	73	0
1590	72	0
1632	71	0
1536	70	0
1587	69	0
1373	68	0
866	67	0
489	66	0
216	65	0
71	64	0
19	63	0
1	62	0
1	61	0
1	60	0
DIST.	DBA**	
	10	
	20	
	30	

*-A WEIGHTED DECIBELS-RE. 20 MICRONEMTIONS PER SQUARE METER
**-DBA RE. 20 MICRONEMTIONS PER SQUARE METER FROM AN AVERAGE OF
THE SQUARES OF THE SOUND PRESSURES.

LEVEL (DBA**) VS CUMULATIVE DISTRIBUTION (PERCENT)



SITE DATA

1 of 2

Community: Medford, Massachusetts

Grid Location: B-4

Microphone Location: On east side of Chinman Street 15 feet from center of road, 150 feet north of center of Lawrence Street

Date of Run: April 13, 1971

Time of Run: 7:30 to 8:30 AM

Recorded Tape No.: MAL 32-71, side 1, track 3 and 4

ROAD SURFACE AND WEATHER CONDITIONS

Road surface: dry Temperature: 54 °F. Sky Condition: clear

Relative Humidity: 76 % Barometric Pressure: 771 MM of Mercury

Wind Direction From: North

Velocity (MPH): 3

Site Description: Residential area, 2 family frame dwellings close to street

Special Events:

None

B-218

SITE DATA

2 of 2

Community: Medford, Massachusetts

Grid Location: B-4

Microphone Location: See sheet 1 of 2

Date of Run: April 13, 1971

Time of Run: 11:30 AM to 12:30 PM

Recorded Tape No.: MAL 32-71, side 2, track 3 and 4

ROAD SURFACE AND WEATHER CONDITIONS

Road surface: dry Temperature: 70 °F. Sky Condition: clear

Relative Humidity: 31 % Barometric Pressure: 769 MM of Mercury

Wind Direction From: South

Velocity (MPH): 3 with gust to 8

Site Description: See sheet 1 of 2

Special Events:

None

B-219

SITE DATA

Community: Medford, Massachusetts
 Grid Location: B-1
 Microphone Location: On Linden Street 12 feet off center of roadway,
 174 feet south of Riverside Avenue.
 Date of Run: May 25, 1971
 Time of Run: 7:30 to 8:30 AM
 Recorded Tape No.: MAL 73-71, side 1, track 3 and 4

ROAD SURFACE AND WEATHER CONDITIONS

Road surface: dry Temperature: 61 °F. Sky Condition: cloudy
 Relative Humidity: 85 % Barometric Pressure 26.7 mm of Mercury
 Wind Direction From: Northeast
 Velocity (MPH): 2

Site Description: Single, two and three family frame dwellings.

Special Events: Microphone problem at end of run.

B-212

SITE DATA

Community: Medford, Massachusetts
 Grid Location: B-1
 Microphone Location: See sheet 1 of 2
 Date of Run: May 25, 1971
 Time of Run: 11:30 AM to 12:30 PM
 Recorded Tape No.: MAL 73-71, side 2, track 3 and 4

ROAD SURFACE AND WEATHER CONDITIONS

Road surface: dry Temperature: 72 °F. Sky Condition: Partly cloudy
 Relative Humidity: 63 % Barometric Pressure 766 mm of Mercury
 Wind Direction From: West
 Velocity (MPH): 2-3

Site Description: See sheet 1 of 2

Special Events: Microphone changed at beginning of run.

B-213

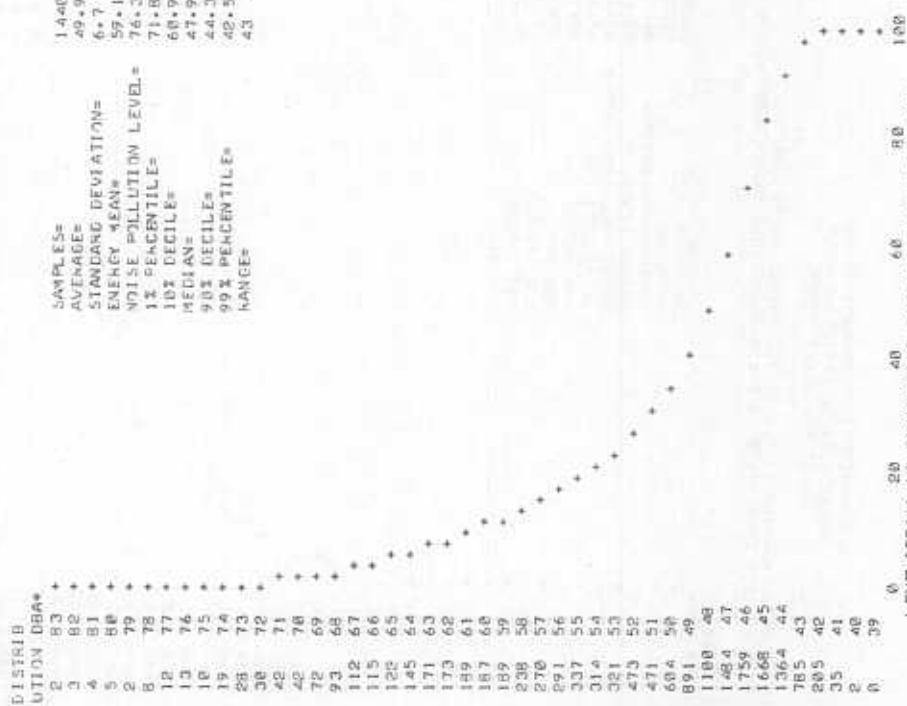
NOISE DATA FROM RUN 2 OF 2 OF THE MOBILE NOISE LAB. ON
 APRIL 13 1971 FROM 11:30 TO 12:30 AT MEDFORD GRID LOCATION 8-4

US DEPARTMENT OF TRANSPORTATION
 TRANSPORTATION SYSTEMS CENTER
 NOISE ABATEMENT GROUP

NOISE DATA FROM RUN 2 OF 2 OF THE MOBILE NOISE LAB. ON
 APRIL 13 1971 FROM 11:30 TO 12:30 AT MEDFORD GRID LOCATION 8-4

DISTRIB	2	83	0
UTION DBA*	3	82	0
	4	81	0
	5	80	0
	2	79	0
	8	78	0
	12	77	0
	13	76	0
	18	75	0
	19	74	0
	28	73	0
	38	72	0
	42	71	00
	42	70	00
	72	69	00
	93	68	00
	112	67	00
	115	66	00
	129	65	00
	145	64	00
	171	63	000
	173	62	000
	189	61	000
	187	60	000
	189	59	000
	238	58	0000
	278	57	0000
	291	56	0000
	337	55	00000
	314	54	00000
	321	53	00000
	473	52	000000
	471	51	000000
	604	50	0000000
	591	49	000000000
	1180	48	00000000000000
	1484	47	0000000000000000
	1759	46	0000000000000000
	1668	45	0000000000000000
	1364	44	0000000000000000
	785	43	0000000000
	285	42	000
	35	41	0
	2	40	0
	0	39	0

SAMPLES= 14400
 AVERAGE= 49.9 DBA*
 STANDARD DEVIATION= 6.7 DBA*
 ENERGY MEAN= 59.1 DB**
 NOISE POLLUTION LEVEL= 76.3
 1% PERCENTILE= 71.8 DB**
 10% DECILE= 68.9 DB**
 MEDIAN= 47.9 DBA*
 90% DECILE= 44.3 DBA*
 99% PERCENTILE= 42.5 DBA*
 RANGE= 43 DB



LEVEL(DBA*) VS CUMULATIVE DISTRIBUTION (PERCENT)

2	83	0
3	82	0
4	81	0
5	80	0
2	79	0
8	78	0
12	77	0
13	76	0
18	75	0
19	74	0
28	73	0
38	72	0
42	71	00
42	70	00
72	69	00
93	68	00
112	67	00
115	66	00
122	65	00
145	64	000
171	63	000
173	62	000
189	61	000
187	60	000
189	59	000
238	58	0000
278	57	0000
291	56	0000
337	55	00000
314	54	00000
321	53	00000
473	52	000000
471	51	000000
604	50	0000000
591	49	000000000
1180	48	00000000000000
1484	47	0000000000000000
1759	46	0000000000000000
1668	45	0000000000000000
1364	44	0000000000000000
785	43	0000000000
285	42	000
35	41	0
2	40	0
DIST.	DBA**	
	10	28
	20	30

*-A WEIGHTED DECIBEL-S-RE. 20 MICROMETONS PER SQUARE METER
 **-DBA RE. 20 MICROMETONS PER SQUARE METER FROM AN AVERAGE OF
 THE SQUARES OF THE SOUND PRESSURES.

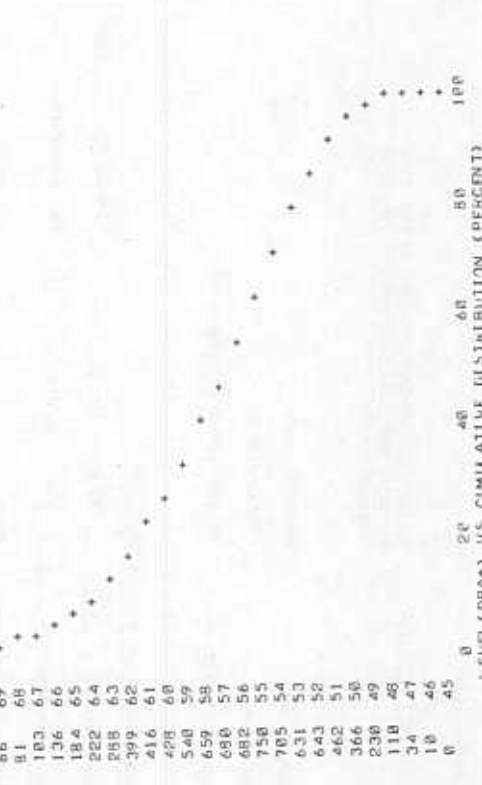
NOISE DATA FROM RUN 2 OF 2 OF THE MOBILE NOISE LAB. ON
MAY 25 1971 FROM 11:50 TO 12:27 AT MEDFORD GRID LOCATION NO. 8-3

US DEPARTMENT OF TRANSPORTATION
TRANSPORTATION SYSTEMS CENTER
NOISE ABATEMENT GROUP

NOISE DATA FROM RUN 2 OF 2 OF THE MOBILE NOISE LAB. ON
MAY 25 1971 FROM 11:50 TO 12:27 AT MEDFORD GRID LOCATION NO. 8-3

DISTRIB UTIM DBA*	SAMPLES*	9000*
2	83	0
3	82	0
4	81	0
5	80	0
6	79	0
7	78	0
8	77	0
9	76	0
10	75	0
11	74	0
12	73	0
13	72	0
14	71	0
15	70	0
16	69	0
17	68	0
18	67	0
19	66	0
20	65	0
21	64	0
22	63	0
23	62	0
24	61	0
25	60	0
26	59	0
27	58	0
28	57	0
29	56	0
30	55	0
31	54	0
32	53	0
33	52	0
34	51	0
35	50	0
36	49	0
37	48	0
38	47	0
39	46	0
40	45	0

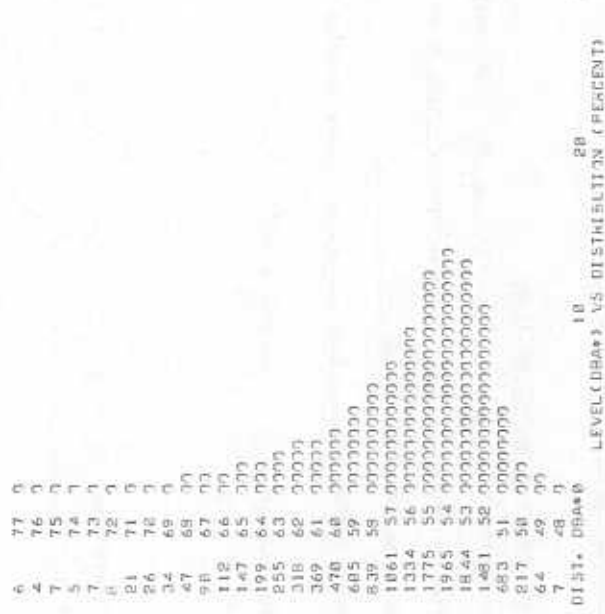
9000*	5000*	37 DB
9000	56.9	DBA*
5000	5.2	DBA*
37 DB	61.3	DBA*
	74.6	DBA*
	72.4	DBA*
	64.3	DBA*
	56.5	DBA*
	51.3	DBA*
	48.4	DBA*
	37	DB



LEVEL (DBA*) VS DISTRIBUTION (PERCENT)

*-A WEIGHTED DECIBEL-S-RE. 20 MICRONEMTONS PER SQUARE METER
***-DBA RE. 20 MICRONEMTONS PER SQUARE METER FROM AN AVERAGE OF
THE SQUARES OF THE SOUND PRESSURES.

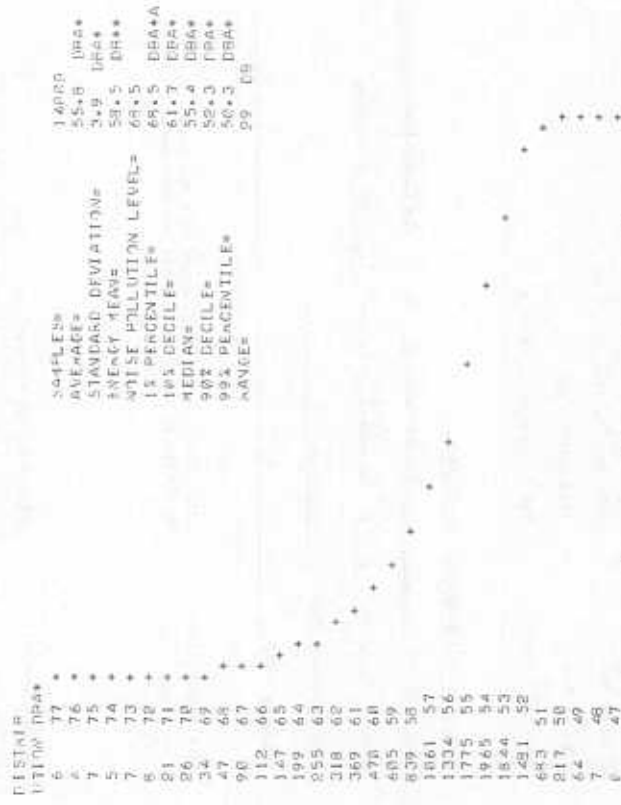
NOISE DATA FROM RUN 1A OF 2 OF THE MOBILE NOISE LAB. 7N
 FEBRUARY 26 1971 FROM 07:30 TO 08:30 AT MEDFORD GRID LOCATION NO. B-5



***-A WEIGHTED DECIBEL-S-RE. 20 MICRONEWTONS PER SQUARE METER
 ***-DBA RE. 20 MICRONEWTONS PER SQUARE METER FROM AN AVERAGE OF
 THE SQUARES OF THE SOUND PRESSURES.

US DEPARTMENT OF TRANSPORTATION
 TRANSPORTATION SYSTEMS CENTER
 NOISE ABATEMENT GROUP

NOISE DATA FROM RUN 1A OF 2 OF THE MOBILE NOISE LAB. 7N
 FEBRUARY 26 1971 FROM 07:30 TO 08:30 AT MEDFORD GRID LOCATION NO. B-5



***-A WEIGHTED DECIBEL-S-RE. 20 MICRONEWTONS PER SQUARE METER
 ***-DBA RE. 20 MICRONEWTONS PER SQUARE METER FROM AN AVERAGE OF
 THE SQUARES OF THE SOUND PRESSURES.

NOISE DATA FROM RUN 1 OF 2 OF THE MOBILE NOISE LAB. ON
APRIL 13 1971 FROM 07:30 TO 08:30 AT MEDFORD GRID LOCATION B-4

US DEPARTMENT OF TRANSPORTATION
TRANSPORTATION SYSTEMS CENTER
NOISE ABATEMENT GROUP

NOISE DATA FROM RUN 1 OF 2 OF THE MOBILE NOISE LAB. ON
APRIL 13 1971 FROM 07:30 TO 08:30 AT MEDFORD GRID LOCATION B-4

DISTRIB	UTION DBA*	SAMPLES=	14400
1	82	AVERAGE*	51.5 DBA*
0	81	STANDARD DEVIATION*	4.6 DBA*
0	80	ENERGY MEAN*	55.8 DB**
0	79	NOISE POLLUTION LEVEL*	67.6
0	78	1% PERCENTILE*	67.6 DBA*
1	77	10% DECILE*	58.7
2	76	MEDIAN*	50.6 DBA*
1	75	90% DECILE*	49.7 DBA*
0	74	99% PERCENTILE*	46.2 DBA*
7	73	RANGE*	37 DB

1	82	0
0	81	0
0	80	0
0	79	0
0	78	0
1	77	0
2	76	0
1	75	0
0	74	0
7	73	0
12	72	0
18	71	0
17	70	0
37	69	0
53	68	0
60	67	0
70	66	0
82	65	0
141	64	0
183	63	0
254	62	0
329	61	0
326	60	0
337	59	0
440	58	0
586	57	0
559	56	0
694	55	0
983	54	0
1223	53	0
1663	52	0
2248	51	0
2159	50	0
1378	49	0
412	48	0
47	47	0
0	46	0
0	45	0
0	44	0

LEVEL (DBA*) VS. DISTRIBUTION (PERCENT)

*-A WEIGHTED DECIBEL-S-RE. 20 MICRONEWTONS PER SQUARE METER

**-DBA RE. 20 MICRONEWTONS PER SQUARE METER FROM AN AVERAGE OF THE SQUARES OF THE SOUND PRESSURES.

LEVEL (DBA*) VS. CUMULATIVE DISTRIBUTION (PERCENT)

SITE DATA

Community: Medford, Massachusetts

Grid Location: 8-6

Microphone Location: End of Five Road

Date of Run: March 1, 1971

Time of Run: 7:30 to 8:30 AM

Recorded Tape No.: MAL 3-71, side 1, track 4

ROAD SURFACE AND WEATHER CONDITIONS

Road surface: dry with puddles Temperature: 38 °F. Sky Condition: clear

Relative Humidity: 56 % Barometric Pressure: 753 MM of Mercury

Wind Direction From: West-Southwest

Velocity (MPH): 1

Site Description: Dense foliage north and west of microphone.
Residential dead end street.Special Events: Catch-basin noise in background, car idling next
to microphone for 5 min. raining level 3.8BA

B-230

SITE DATA

Community: Medford, Massachusetts

Grid Location: 8-6

Microphone Location: See sheet 1 of 2

Date of Run: March 1, 1971

Time of Run: 11:30 AM to 12:30 PM

Recorded Tape No.: MAL 3-71, side 2, track 4

ROAD SURFACE AND WEATHER CONDITIONS

Road surface: dry with puddles Temperature: 45 °F. Sky Condition: clear-sunny

Relative Humidity: 43 % Barometric Pressure: 755 MM of Mercury

Wind Direction From: Southwest

Velocity (MPH): 1

Site Description: See sheet 1 of 2

Special Events: Catch-basin noise in background.

B-231

SITE DATA

Community: Melford, Massachusetts
 Grid Location: 8-5
 Microphone Location: South side fo Yeomans Street, 110 feet east of Spring Street.
 Date of Run: February 26, 1971
 Time of Run: 7:10 to 8:30 AM
 Recorded Tape No.: NAL 2-71, side 1, track 4

ROAD SURFACE AND WEATHER CONDITIONS

Road surface: dry Temperature: 36 °F. Sky Condition: clear
 Relative Humidity: 66 % Barometric Pressure 765 mm of Mercury
 Wind Direction From: Southwest
 Velocity (MPH): 1

Site Description: Eight foot wooden fence around MFA bus barn northeast of microphone, empty lot southeast.

Special Events: Noise from bus barn at start of run.

B-224

SITE DATA

Community: Melford, Massachusetts
 Grid Location: 8-5
 Microphone Location: See sheet 1 of 2
 Date of Run: February 26, 1971
 Time of Run: 11:30 AM to 12:30 PM
 Recorded Tape No.: NAL 2-71, side 2, track 4

ROAD SURFACE AND WEATHER CONDITIONS

Road surface: dry Temperature: 46 °F. Sky Condition: sunny
 Relative Humidity: 54 % Barometric Pressure 764 mm of Mercury
 Wind Direction From: West
 Velocity (MPH): 1

Site Description: See sheet 1 of 2

Special Events: None

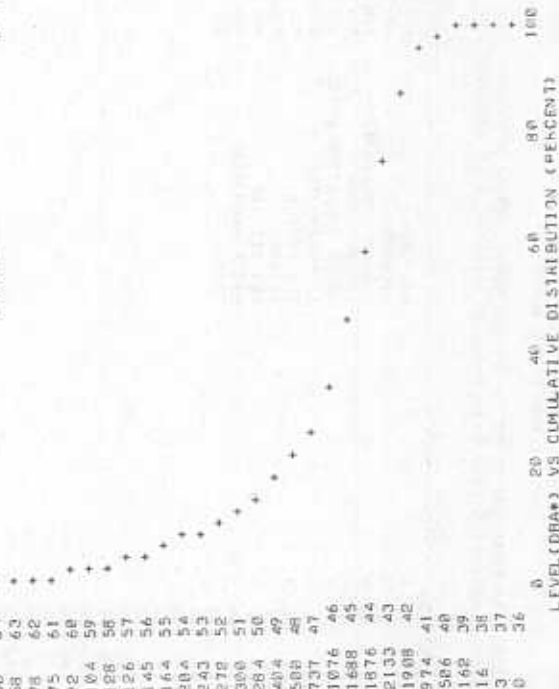
B-225

US DEPARTMENT OF TRANSPORTATION
TRANSPORTATION SYSTEMS CENTER
NOISE ABATEMENT GROUP

NOISE DATA FROM RUN 2A OF 2 OF THE MOBILE NOISE LAB. ON
MARCH 1 1971 FROM 11:30 TO 12:30 AT MEDFORD GRID LOCATION NO. 8-6

DISTRIBUTION DBA*
1 74 0
1 73 0
1 72 0
2 71 0
14 70 0
7 69 0
17 68 0
13 67 0
26 66 0
32 65 0
38 64 0
58 63 0
78 62 0
75 61 0
104 59 0
128 58 0
126 57 0
143 56 0
164 55 0
204 54 0
243 53 0
278 52 0
300 51 0
284 50 0
404 49 0
508 48 0
737 47 0
1076 46 0
1688 45 0
1876 44 0
2133 43 0
1908 42 0
974 41 0
586 40 0
182 39 0
16 38 0
3 37 0
37 0

SAMPLES= 14400
AVERAGE= 45.8 DBA
STANDARD DEVIATION= 5.1 DBA
ENERGY MEAN= 51.5 DBA
NOISE POLLUTION LEVEL= 64.6
1% PERCENTILE= 64 DBA
10% PERCENTILE= 53.5 DBA
MEDIAN= 44.8 DBA
90% PERCENTILE= 41.8 DBA
99% PERCENTILE= 39.6 DBA
RANGE= 37 DB



B-234

NOISE DATA FROM RUN 2A OF 2 OF THE MOBILE NOISE LAB. ON
MARCH 1 1971 FROM 11:30 TO 12:30 AT MEDFORD GRID LOCATION NO. 8-6

1 74 0
1 73 0
1 72 0
2 71 0
14 70 0
7 69 0
17 68 0
13 67 0
26 66 0
32 65 0
38 64 0
58 63 0
78 62 0
75 61 0
104 59 0
128 58 0
126 57 0
143 56 0
164 55 0
204 54 0
243 53 0
278 52 0
300 51 0
284 50 0
404 49 0
508 48 0
737 47 0
1076 46 0
1688 45 0
1876 44 0
2133 43 0
1908 42 0
974 41 0
586 40 0
182 39 0
16 38 0
3 37 0
37 0

DIST. DBA* 10 20 30
LEVEL (DBA*) VS DISTRIBUTION (PERCENT)

*-A WEIGHTED DECIBEL-S-RE. 20 MICROWATTS PER SQUARE METER
**-DBA RE. 20 MICROWATTS PER SQUARE METER FROM AN AVERAGE OF
THE SQUARES OF THE SOUND PRESSURES.

B-235

NOISE DATA FROM RUN 2A OF 2 OF THE MOBILE NOISE LAB. ON
 FEBRUARY 26 1971 FROM 11:00 TO 12:30 AT MEDFORD GRID LOCATION NO. B-5

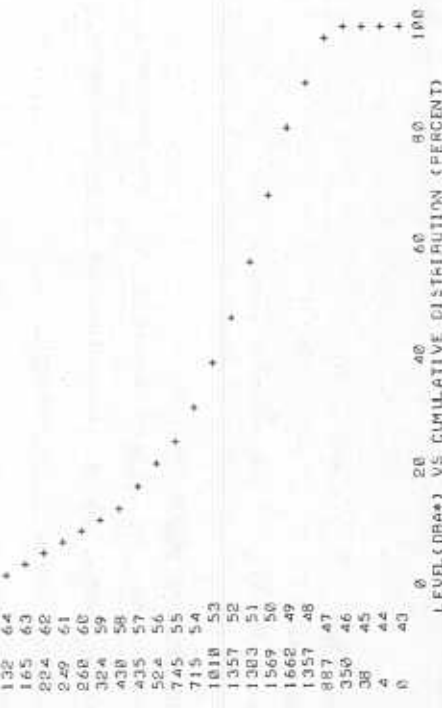
US DEPARTMENT OF TRANSPORTATION
 TRANSPORTATION SYSTEMS CENTER
 NOISE ABATEMENT GROUP

NOISE DATA FROM RUN 2A OF 2 OF THE MOBILE NOISE LAB. ON
 FEBRUARY 26 1971 FROM 11:00 TO 12:30 AT MEDFORD GRID LOCATION NO. 3-5

DISTRI-
 BUTION DBA*

1	75	0
0	74	0
1	73	0
0	72	0
7	71	0
7	70	0
21	69	0
35	67	0
67	66	0
100	65	0
132	64	0
165	63	0
224	62	0
249	61	0
324	60	0
430	58	0
524	56	0
745	55	0
1115	54	0
1810	53	0
1357	52	0
1303	51	0
1569	50	0
1662	49	0
1357	48	0
887	47	0
350	46	0
38	45	0
4	44	0
0	43	0

SAMPLES= 14000
 AVERAGE= 50.4 DBA*
 STANDARD DEVIATION= 4.6 DBA*
 ENERGY MEAN= 55.7 DB**
 NOISE POLLUTION LEVEL= 67.5
 1% PERCENTILE= 66.3 DBA*
 10% PERCENTILE= 59.7 DBA*
 MEDIAN= 51.9 DBA*
 90% PERCENTILE= 48.1 DBA*
 99% PERCENTILE= 46.3 DBA*
 RANGE= 31 DB



LEVEL (DBA) VS CUMULATIVE DISTRIBUTION (PERCENT)

B-22B

DIST. DBA*
 LEVEL (DBA) VS DISTRIBUTION (PERCENT)

**A WEIGHTED DECIBEL-RE. 20 MICRONEWTONS PER SQUARE METER
 **B DBA RE. 20 MICRONEWTONS PER SQUARE METER FROM AN AVERAGE OF
 THE SQUARES OF THE SOUND PRESSURES.

B-229

NOISE DATA FROM RUN 1 OF 2 OF THE MOBILE NOISE LAB. ON
APRIL 6 1971 FROM 07:30 TO 08:30 AT MEDFORD GRID LOCATION B-7

US DEPARTMENT OF TRANSPORTATION
TRANSPORTATION SYSTEMS CENTER
NOISE ABATEMENT GROUP

NOISE DATA FROM RUN 1 OF 2 OF THE MOBILE NOISE LAB. ON
APRIL 6 1971 FROM 07:30 TO 08:30 AT MEDFORD GRID LOCATION B-7

DISTRI
UTION DBA*
 1 86 0
 1 85 0
 2 84 0
 8 83 0
 2 82 0
 3 81 0
 3 80 0
 2 79 0
 3 78 0
 4 77 0
 2 76 0
 4 75 0
 2 73 0
 2 72 0
 4 71 0
 7 70 0
 18 69 0
 19 68 0
 35 67 0
 50 66 0
 79 65 0
 52 64 0
 67 63 0
 75 62 0
 121 61 0
 155 60 0
 159 59 0
 153 58 0
 136 57 0
 256 56 0
 439 55 0
 545 54 0
 847 53 0
 1236 52 0
 1569 51 0
 1991 50 0
 2333 49 0
 1900 48 0
 1372 47 0
 579 46 0
 127 45 0
 18 44 0
 1 43 0
 0 42 0

SAMPLES= 14600
 AVERAGE= 50.9 DBA*
 STANDARD DEVIATION= 4.7 DBA*
 ENERGY MEAN= 57.6 DB**
 NOISE POLLUTION LEVEL= 68.4
 1% PERCENTILE= 66.5 DBA*
 10% DECILE= 56 DBA*
 MEDIAN= 50.4 DBA*
 90% DECILE= 47.5 DBA*
 99% PERCENTILE= 46 DBA*
 RANGE= 43 DB

LEVEL (DBA*) VS DISTRIBUTION (PERCENT)
 10 20 30
 DIST. DBA*8

*-A WEIGHTED DECIBELS-RE. 20 MICRONEWTONS PER SQUARE METER
 **-DBA RE. 20 MICRONEWTONS PER SQUARE METER FROM AN AVERAGE OF
 THE SQUARES OF THE SOUND PRESSURES.

LEVEL (DBA*) VS CUMULATIVE DISTRIBUTION (PERCENT)
 0 20 40 60 80 100

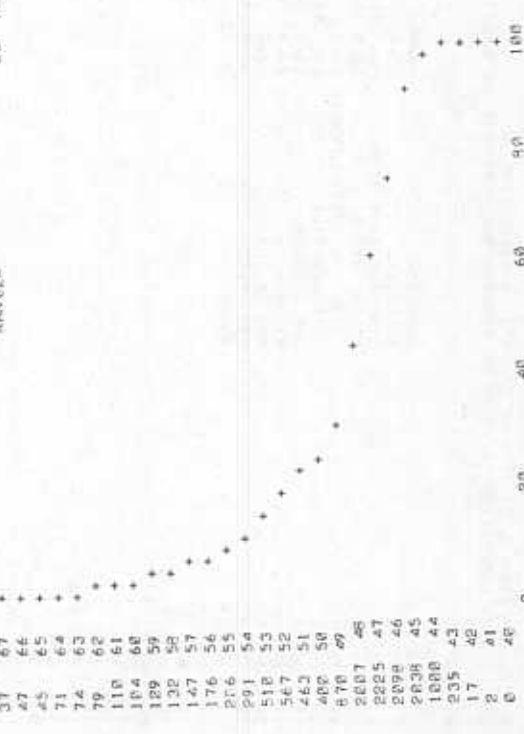
NOISE DATA FROM RUN 1A OF 2 OF THE MOBILE NOISE LAB. ON
 MARCH 1 1971 FROM 07:30:1 TO 08:30 AT MEDFORD GRID LOCATION NO. B-6

U.S. DEPARTMENT OF TRANSPORTATION
 TRANSPORTATION SYSTEMS CENTER
 NOISE ABATEMENT GROUP

NOISE DATA FROM RUN 1A OF 2 OF THE MOBILE NOISE LAB. ON
 MARCH 1 1971 FROM 07:30:1 TO 08:30 AT MEDFORD GRID LOCATION NO. B-6

DIST. DBA** 14193
 2 77 0
 2 76 0
 2 75 0
 7 74 0
 11 73 0
 15 72 0
 14 71 0
 14 70 0
 11 69 0
 35 68 0
 37 67 0
 43 66 0
 45 65 0
 71 64 0
 74 63 0
 79 62 0
 110 61 0
 104 60 0
 129 59 0
 132 58 0
 147 57 0
 176 56 0
 206 55 0
 291 54 0
 510 53 0
 567 52 0
 463 51 0
 480 50 0
 870 49 0
 2087 48 0
 2225 47 0
 2098 46 0
 2038 45 0
 1000 44 0
 235 43 0
 17 42 0
 2 41 0
 0 40 0

SAMPLES= 14193
 AVERAGE= 48.7 DBA*
 STANDARD DEVIATION= 4.8 DBA*
 ENERGY MEAN= 54.6 DB**
 NOISE POLLUTION LEVEL= 66.7
 1% PERCENTILE= 67.8 DBA*
 10% DECILE= 55.2 DBA*
 MEDIAN= 47.8 DBA*
 90% DECILE= 45.1 DBA*
 99% PERCENTILE= 43.5 DBA*
 RANGE= 36 DB



DIST. DBA** 10 20 30
 LEVEL (DBA*) VS DISTRIBUTION (PERCENT)
 * - A WEIGHTED DECIBEL-S-RE. 20 MICRONEWTONS PER SQUARE METER
 ** - DBA RE. 20 MICRONEWTONS PER SQUARE METER FROM AN AVERAGE OF
 THE SQUARES OF THE SOUND PRESSURES.

SITE DATA

2 of 2

Community: Medford, Massachusetts

Community: Medford, Massachusetts

Grid Location: B-8

Grid Location: B-8

Microphone Location: North side of East Borden Road 33 feet in from center of road; 114 feet east of Highland Avenue.

Microphone Location: See sheet 1 of 2

Date of Run: April 5, 1971

Date of Run: April 5, 1971

Time of Run: 7:30 to 8:30 AM

Time of Run: 11:30 AM to 12:30 PM

Recorded Tape No.: NAL 14-17, side 2, track 4

Recorded Tape No.: NAL 14-71, side 2, track 3

ROAD SURFACE AND WEATHER CONDITIONS

ROAD SURFACE AND WEATHER CONDITIONS

Road surface: dry Temperature: 38 °F. Sky Condition: Partly Cloudy

Road surface: dry Temperature: 48 °F. Sky Condition: clear

Relative Humidity: 45 % Barometric Pressure: 766 mm of Mercury

Relative Humidity: 37 % Barometric Pressure: 766.5 mm of Mercury

Wind Direction From: Northwest

Wind Direction From: West

Velocity (MPH): 1-2

Velocity (MPH): 2-3

Site Description: Wooded area north of microphone, single family home south of microphone location.

Site Description: See sheet 1 of 2

Special Events:

None

Special Events: Vehicle idling approximately 3 minutes at end of run.

B-242

B-243

SITE DATA

Community: Medford, Massachusetts

Grid Location: B-7

Microphone Location: West side of Torlison Street, 170 feet south of center of Clematis Road.

Date of Run: April 6, 1971

Time of Run: 7:30 to 8:30 AM

Recorded Tape No.: NAL 30-71, side 1, track 3 and 4

ROAD SURFACE AND WEATHER CONDITIONS

Road surface: dry Temperature: 43 °F. Sky Condition: clear

Relative Humidity: 70 % Barometric Pressure: 764.5 MM of Mercury

Wind Direction From: East

Velocity (MPH): 4-8

Site Description: Residential area single family homes

Special Events:

None

B-236

SITE DATA

Community: Medford, Massachusetts

Grid Location: B-7

Microphone Location: See sheet 1 of 2

Date of Run: April 6, 1971

Time of Run: 11:30 AM to 12:30 PM

Recorded Tape No.: NAL 30-71, side 2, track 3 and 4

ROAD SURFACE AND WEATHER CONDITIONS

Road surface: dry Temperature: 45 °F. Sky Condition: cloudy

Relative Humidity: 69 % Barometric Pressure: 762 MM of Mercury

Wind Direction From: East

Velocity (MPH): 2-6

Site Description: See sheet 1 of 2

Special Events:

None

B-237

NOISE DATA FROM RUN 2 OF 2 OF THE MOBILE NOISE LAB. ON
APRIL 5 1971 FROM 11:30 TO 12:30 AT MEDFORD GRID LOCATION B-8

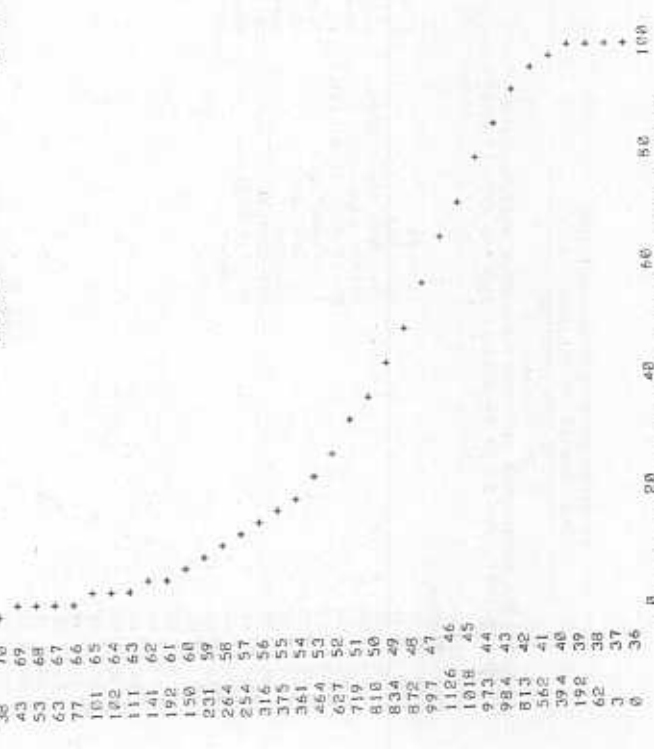
US DEPARTMENT OF TRANSPORTATION
TRANSPORTATION SYSTEMS CENTER
NOISE ABATEMENT GROUP

NOISE DATA FROM RUN 2 OF 2 OF THE MOBILE NOISE LAB. ON
APRIL 5 1971 FROM 11:30 TO 12:30 AT MEDFORD GRID LOCATION B-8

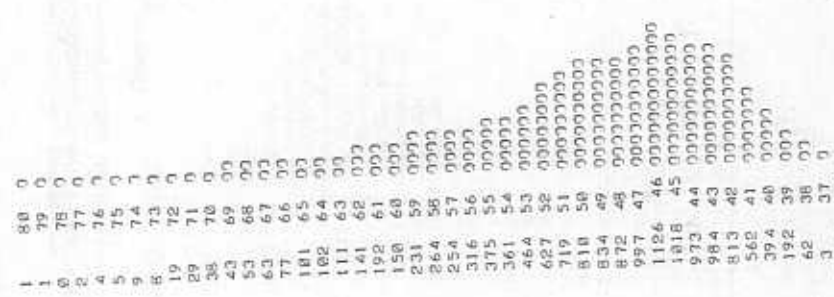
DISTRIB
UTION DBA**

1 80 0
1 79 0
0 78 0
2 77 0
4 76 0
5 75 0
9 74 0
8 73 0
29 71 0
38 70 0
43 69 0
53 68 0
63 67 0
77 66 0
101 65 0
122 64 0
111 63 0
141 62 0
192 61 0
150 60 0
231 59 0
264 58 0
254 57 0
316 56 0
375 55 0
361 54 0
464 53 0
627 52 0
719 51 0
810 50 0
834 49 0
872 48 0
997 47 0
1126 46 0
1018 45 0
973 44 0
984 43 0
813 42 0
562 41 0
394 40 0
192 39 0
62 38 0
3 37 0
0 36 0

SAMPLES= 14400
AVERAGE= 48.9 DBA*
STANDARD DEVIATION= 6.6 DBA*
ENERGY MEAN= 56.4 DB**
NOISE POLLUTION LEVEL= 73.3 DBA*
1% PERCENTILE= 69.3 DBA*
10% DECILE= 58.8 DBA*
MEDIAN= 48.1 DBA*
90% DECILE= 42.3 DBA*
99% PERCENTILE= 39.4 DBA*
RANGE= 43 DB



LEVEL (DBA*) VS CUMULATIVE DISTRIBUTION (PERCENT)
B-246



DI ST. DBA*
10 20 30
LEVEL (DBA*) VS DISTRIBUTION (PERCENT)
B-247

*-A WEIGHTED DECIBEL-S-RE. 20 MICRONEWTONS PER SQUARE METER
**-DBA RE. 20 MICRONEWTONS PER SQUARE METER FROM AN AVERAGE OF
THE SQUARES OF THE SOUND PRESSURES.

NOISE DATA FROM RUN 2 OF 2 OF THE MOBILE NOISE LAB. ON
 APRIL 6 1971 FROM 11:30 TO 12:30 AT MEDFORD GRID LOCATION 8-7

US DEPARTMENT OF TRANSPORTATION
 TRANSPORTATION SYSTEMS CENTER
 NOISE ABATEMENT GROUP

NOISE DATA FROM RUN 2 OF 2 OF THE MOBILE NOISE LAB. ON
 APRIL 6 1971 FROM 11:30 TO 12:30 AT MEDFORD GRID LOCATION 8-7

DISTRIB UTION DBA*	SAMPLES= AVERAGE=	14400 47.6 DBA*
1	86	+
1	85	+
0	84	+
1	83	+
0	82	+
2	81	+
5	80	+
2	79	+
5	78	+
6	77	+
9	76	+
6	75	+
4	74	+
6	73	+
7	72	+
3	71	+
11	70	+
11	69	+
24	68	+
21	67	+
19	66	+
21	65	+
27	64	+
35	63	+
39	62	+
54	61	+
67	60	+
75	59	+
86	58	+
86	57	+
122	56	+
138	55	+
138	54	+
235	53	+
335	52	+
438	51	+
658	50	+
1121	49	+
1579	48	+
2174	47	+
2692	46	+
2280	45	+
1500	44	+
396	43	+
46	42	+
3	41	+
0	40	+

STANDARD DEVIATION= 4.2 DBA*
 ENERGY MEAN= 55.8 DB**
 NOISE POLLUTION LEVEL= 66.6
 1% PERCENTILE= 60.5 DBA*
 10% PERCENTILE= 58.2 DBA*
 MEDIAN= 47.1 DBA*
 90% DECILE= 44.7 DBA*
 99% PERCENTILE= 43.2 DBA*
 RANGE= 45 DB

DISTRIB UTION DBA*	LEVEL (DBA*) VS CUMULATIVE DISTRIBUTION (PERCENT)
1	86
1	85
0	84
1	83
0	82
2	81
5	80
2	79
5	78
6	77
9	76
6	75
4	74
6	73
7	72
3	71
11	70
11	69
24	68
21	67
19	66
21	65
27	64
35	63
39	62
54	61
67	60
75	59
86	58
86	57
122	56
138	55
138	54
235	53
335	52
438	51
658	50
1121	49
1579	48
2174	47
2692	46
2280	45
1500	44
396	43
46	42
3	41
0	40

LEVEL (DBA*) VS CUMULATIVE DISTRIBUTION (PERCENT)

DIST. DBA**	1*	20	50	80	90	95	99
1	86	0					
1	85	0					
0	84	0					
1	83	0					
0	82	0					
2	81	0					
5	80	0					
2	79	0					
5	78	0					
6	77	0					
9	76	0					
6	75	0					
4	74	0					
6	73	0					
7	72	0					
3	71	0					
11	70	0					
11	69	0					
24	68	0					
21	67	0					
25	66	0					
19	65	0					
27	64	0					
35	63	0					
39	62	00					
54	61	00					
67	60	00					
75	59	00					
86	58	00					
86	57	00					
122	56	00					
138	55	00					
138	54	00					
235	53	0000					
335	52	00000					
438	51	000000					
658	50	00000000					
1121	49	000000000000					
1579	48	0000000000000000					
2174	47	00000000000000000000					
2692	46	000000000000000000000000					
2280	45	0000000000000000000000000000					
1500	44	000000000000000000000000000000					
396	43	000000000000000000000000					
46	42	00000000000000000000					
3	41	0					
0	40	0					

LEVEL (DBA*) VS DISTRIBUTION (PERCENT)

*-A WEIGHTED DECIBEL-S-RE. 20 MICRONEWTONS PER SQUARE METER
 **-DBA RE. 20 MICRONEWTONS PER SQUARE METER FROM AN AVERAGE OF
 THE SQUARES OF THE SOUND PRESSURES.

NOISE DATA FROM RUN IAP OF 2 OF THE MOBILE NOISE LAB. ON
 APRIL 14 1971 FROM 08101 TO 08143 AT MEDFORD GRID LOCATION 9-2

US DEPARTMENT OF TRANSPORTATION
 TRANSPORTATION SYSTEMS CENTER
 NOISE ABATEMENT GROUP

NOISE DATA FROM RUN IAP OF 2 OF THE MOBILE NOISE LAB. ON
 APRIL 14 1971 FROM 08101 TO 08143 AT MEDFORD GRID LOCATION 9-2

DISTRI UTION DBA*	SAMPLES*	10000
3 88 0	AVERAGE*	67.2 DBA*
2 87 0	STANDARD DEVIATION*	3.4 DBA*
8 86 0	ENERGY MEAN*	69.5 DB**
9 85 0	NOISE POLLUTION LEVEL=	78.2
6 84 0	1% PERCENTILE*	80.1 DBA*
9 83 0	10% DECILES*	72 DBA*
19 82 0	MEDIAN*	66.8 DBA*
19 81 0	90% DECILES*	64.4 DBA*
38 80 0	99% PERCENTILE*	62.6 DBA*
55 78 00	WAVGE=	27 DB
84 77 00		
78 76 00		
122 75 000		
139 74 000		
154 73 000		
229 72 00000		
356 71 000000		
393 70 0000000		
551 69 000000000		
941 68 0000000000000		
1359 67 00000000000000000		
1913 66 0000000000000000000		
1833 65 000000000000000000000		
1813 64 0000000000000000000000		
477 63 000000000		
147 62 000		
18 61 0		
8 60 0		

LEVEL (DBA*) VS CUMULATIVE DISTRIBUTION (PERCENT)



LEVEL (DBA*) VS DISTRIBUTION (PERCENT)

*-A WEIGHTED DECIBELS-RE. 28 MICRONEWTONS PER SQUARE METER

**-DBA RE. 28 MICRONEWTONS PER SQUARE METER FROM AN AVERAGE OF
 THE SQUARES OF THE SOUND PRESSURES.

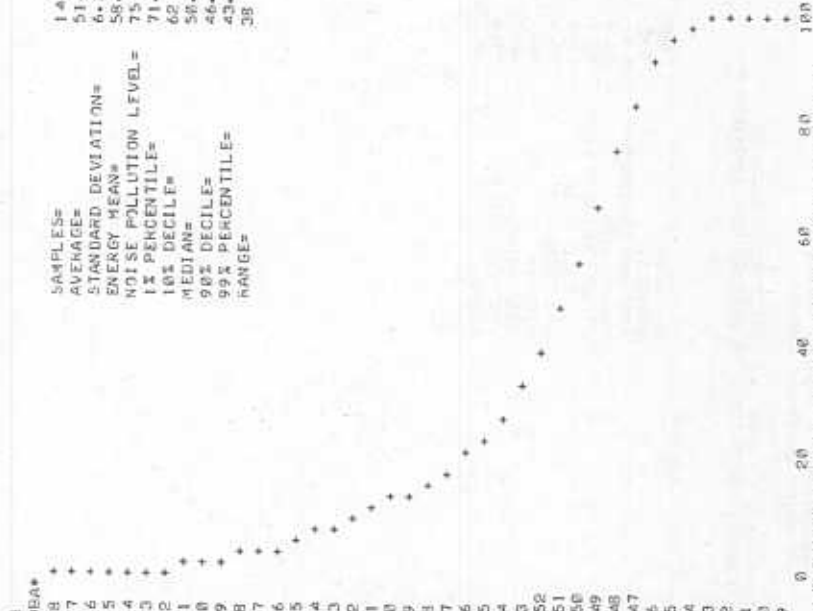
NOISE DATA FROM RUN 1 OF 2 OF THE MOBILE NOISE LAB. ON
 APRIL 5 1971 FROM 07:33 TO 08:33 AT MEDFORD GRID LOCATION 8-8

US DEPARTMENT OF TRANSPORTATION
 TRANSPORTATION SYSTEMS CENTER
 NOISE ABATEMENT GROUP

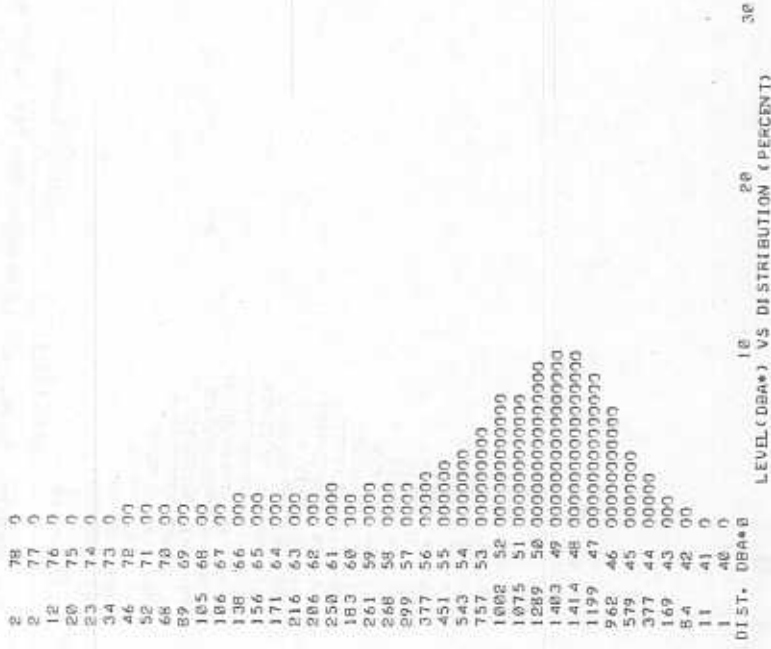
NOISE DATA FROM RUN 1 OF 2 OF THE MOBILE NOISE LAB. ON
 APRIL 5 1971 FROM 07:33 TO 08:33 AT MEDFORD GRID LOCATION 8-8

DISTRIB UTION DBA*
 2 78 0
 2 77 0
 12 76 0
 20 75 0
 23 74 0
 34 73 0
 46 72 0
 52 71 0
 68 70 0
 89 69 0
 105 68 0
 186 67 0
 138 66 0
 156 65 0
 171 64 0
 216 63 0
 286 62 0
 250 61 0
 183 60 0
 261 59 0
 268 58 0
 299 57 0
 377 56 0
 451 55 0
 543 54 0
 757 53 0
 1002 52 0
 1075 51 0
 1289 50 0
 1414 49 0
 1199 47 0
 962 46 0
 579 45 0
 377 44 0
 169 43 0
 84 42 0
 11 41 0
 1 40 0
 0 39 0

SAMPLES= 1400 DBA*
 AVERAGE= 51.9 DBA*
 STANDARD DEVIATION= 6.3 DBA*
 ENERGY MEAN= 58.9 DB**
 NOISE POLLUTION LEVEL= 75
 1% PERCENTILE= 71.9 DBA*
 10% DECILE= 62 DBA*
 MEDIAN= 58.8 DBA*
 90% DECILE= 46.2 DBA*
 99% PERCENTILE= 43.3 DBA*
 RANGE= 38 DB



LEVEL (DBA) VS CUMULATIVE DISTRIBUTION (PERCENT)



LEVEL (DBA) VS DISTRIBUTION (PERCENT)

*-A WEIGHTED DECIBEL-RE. 20 MICRONETONS PER SQUARE METER
 **-DBA RE. 20 MICRONETONS PER SQUARE METER FROM AN AVERAGE OF
 THE SQUARES OF THE SOUND PRESSURES.

SITE DATA

Community: Medford, Massachusetts

Grid location: 9-3

Microphone location: 516 feet east of Fellowship on South sidewalk on Third Street.

Date of Run: May 6, 1971

Time of Run: 7:35 to 8:25 AM

Recorded Tape No.: NML 56-71, side 1, track 3 and 4

ROAD SURFACE AND WEATHER CONDITIONS

Road surface: dry Temperature: 56 °F. Sky Condition: cloudy

Relative Humidity: 62 % Barometric Pressure 766 MM of Mercury

Wind Direction From: Variable

Velocity (MPH): less than 1

Site Description: Residential area 2 and 3 family homes.

Special Events:

None

B-254

SITE DATA

Community: Medford, Massachusetts

Grid location: 9-3

Microphone location: See sheet 1 of 2

Date of Run: May 6, 1971

Time of Run: 11:30 AM to 12:30 PM

Recorded Tape No.: NML 56-71, side 2, track 3 and 4

ROAD SURFACE AND WEATHER CONDITIONS

Road surface: dry Temperature: 56 °F. Sky Condition: cloudy

Relative Humidity: 59 % Barometric Pressure 765 MM of Mercury

Wind Direction From: Northwest

Velocity (MPH): 2

Site Description: See sheet 1 of 2

Special Events:

None

B-255

SITE DATA

1 of 2

Community: Medford, Massachusetts

Grid Location: 9-2

Microphone Location: West side of Fellowship, south of traffic circle - on bank above drainage ditch - 180 feet west of highway median.

Date of Run: April 14, 1971

Time of Run: 7:50 to 8:50 AM

Recorded Tape No.: MA. 34-71, side 1, track 3 and 4

ROAD SURFACE AND WEATHER CONDITIONS

Road surface: dry (most of run) Temperature: 55 °F. Sky Condition: cloudy

Relative Humidity: 69 % Barometric Pressure: 766 MM of Mercury

Wind Direction: From: North

Velocity (MPH): 6-8 Sust to 10

Site Description: Open area near major highways - no reflecting surfaces.

Special Events: A few rain drops at start of run.

B-24B

SITE DATA

2 of 2

Community: Medford, Massachusetts

Grid Location: 9-2

Microphone Location: See sheet 1 of 2

Date of Run: April 14, 1971

Time of Run: 11:30 AM to 12:30 PM

Recorded Tape No.: MA. 34-71, side 2, track 3 and 4.

ROAD SURFACE AND WEATHER CONDITIONS

Road surface: wet Temperature: 58 °F. Sky Condition: cloudy

Relative Humidity: 77 % Barometric Pressure: 765 MM of Mercury

Wind Direction: From: Northwest

Velocity (MPH): 6-9

Site Description: See sheet 1 of 2

Special Events: Light rain falling

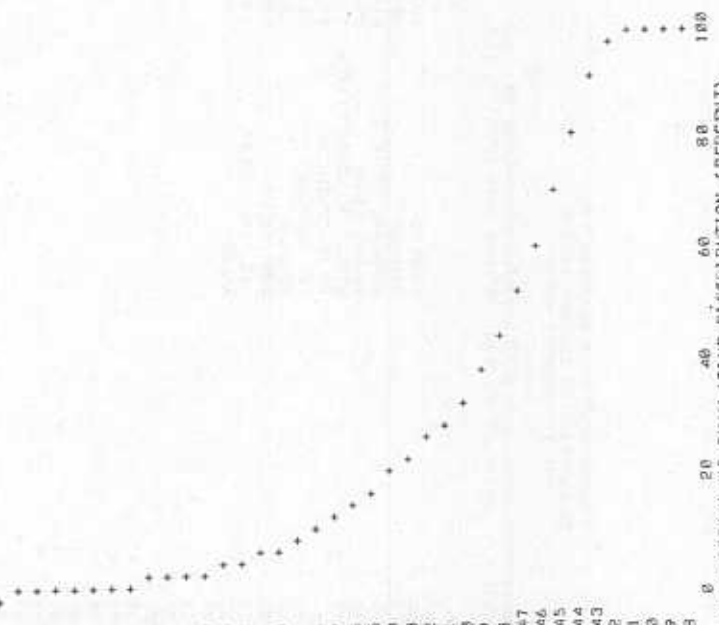
B-249

US DEPARTMENT OF TRANSPORTATION
TRANSPORTATION SYSTEMS CENTER
NOISE ABATEMENT GROUP

NOISE DATA FROM RUN 2 OF 2 OF THE MOBILE NOISE LAB. ON
MAY 6 1971 FROM 11:30 TO 12:30 AT MEDFORD GRID LOCATION 9-3

DISTRIB	1	89	0
LITION DBA*	8	88	0
	6	87	0
	2	86	0
	7	85	0
	8	84	0
	7	84	0
	8	83	0
	9	81	0
	14	80	0
	14	79	0
	10	78	0
	14	77	0
	9	76	0
	22	75	0
	24	74	0
	27	73	0
	34	71	0
	46	70	00
	47	69	00
	55	68	00
	74	67	00
	73	66	00
	75	65	00
	96	64	00
	126	63	00
	145	62	000
	138	61	000
	151	60	000
	185	59	000
	254	58	0000
	343	57	00000
	356	56	00000
	324	55	0000
	344	54	00000
	382	53	00000
	447	52	000000
	470	51	000000
	551	50	0000000
	767	49	000000000
	879	48	00000000000
	1064	47	0000000000000
	1358	46	000000000000000
	1437	45	0000000000000000
	1446	44	00000000000000000
	1386	43	00000000000000000
	854	42	000000000000000
	310	41	0000
	50	40	00
	8	39	0
	0	38	0

SAMPLES= 14400
AVERAGE= 49.2 DBA*
STANDARD DEVIATION= 7.1 DBA*
ENERGY MEAN= 61.8 DB**
NOISE POLLUTION LEVEL= 80
1% PERCENTILE= 74.3 DBA*
10% DECILE= 59.1 DBA*
MEDIAN= 47.4 DBA*
90% DECILE= 43.2 DBA*
99% PERCENTILE= 41.3 DBA*
RANGE= 50 DB



PAGE 2
NOISE DATA FROM RUN 2 OF 2 OF THE MOBILE NOISE LAB. ON
MAY 6 1971 FROM 11:30 TO 12:30 AT MEDFORD GRID LOCATION 9-3

1	89	0
8	88	0
6	87	0
2	86	0
7	85	0
7	84	0
8	83	0
11	82	0
9	81	0
14	80	0
14	79	0
10	78	0
14	77	0
9	76	0
22	75	0
24	74	0
27	73	0
32	72	0
34	71	0
46	70	00
47	69	00
55	68	00
74	67	00
73	66	00
75	65	00
96	64	00
126	63	00
145	62	000
138	61	000
151	60	000
185	59	000
254	58	0000
343	57	00000
356	56	00000
324	55	0000
344	54	00000
382	53	00000
447	52	000000
470	51	000000
551	50	0000000
767	49	000000000
879	48	00000000000
1064	47	0000000000000
1358	46	000000000000000
1437	45	0000000000000000
1446	44	00000000000000000
1386	43	00000000000000000
854	42	000000000000000
310	41	0000
50	40	00
8	39	0
0	38	0

LEVEL (DBA*) VS DISTRIBUTION (PERCENT) 20 30
DIST. DBA* 10
* - A WEIGHTED DECIBEL-RE. 20 MICRONENTONS PER SQUARE METER
** - DBA RE. 20 MICRONENTONS PER SQUARE METER FROM AN AVERAGE OF
THE SQUARES OF THE SOUND PRESSURES. B-259

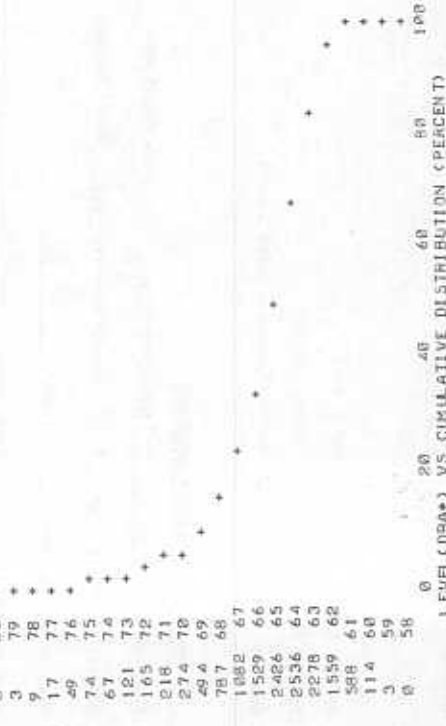
US DEPARTMENT OF TRANSPORTATION
TRANSPORTATION SYSTEMS CENTER
NOISE ABATEMENT GROUP

NOISE DATA FROM RUN 2AP OF 2 OF THE MOBILE NOISE LAB. ON
APRIL 14 1971 FROM 11:35 TO 12:35 AT MEDFORD GRID LOCATION 9-2

DISTRIB
UTION DBA*

1	91	14400
0	90	65 DBA*
0	89	248 DBA*
0	88	66.4 DB**
0	87	73.6 DBA*
0	86	73.2 DBA*
0	85	69.1 DBA*
0	84	65.1 DBA*
0	83	62.5 DBA*
1	82	61 DBA*
2	81	32 DB

SAMPLES= 14400
AVERAGE= 65 DBA*
STANDARD DEVIATION= 248 DBA*
ENERGY MEAN= 66.4 DB**
NOISE POLLUTION LEVEL= 73.6 DBA*
1% PERCENTILE= 73.2 DBA*
10% DECILE= 69.1 DBA*
MEDIAN= 65.1 DBA*
90% DECILE= 62.5 DBA*
99% PERCENTILE= 61 DBA*
RANGE= 32 DB

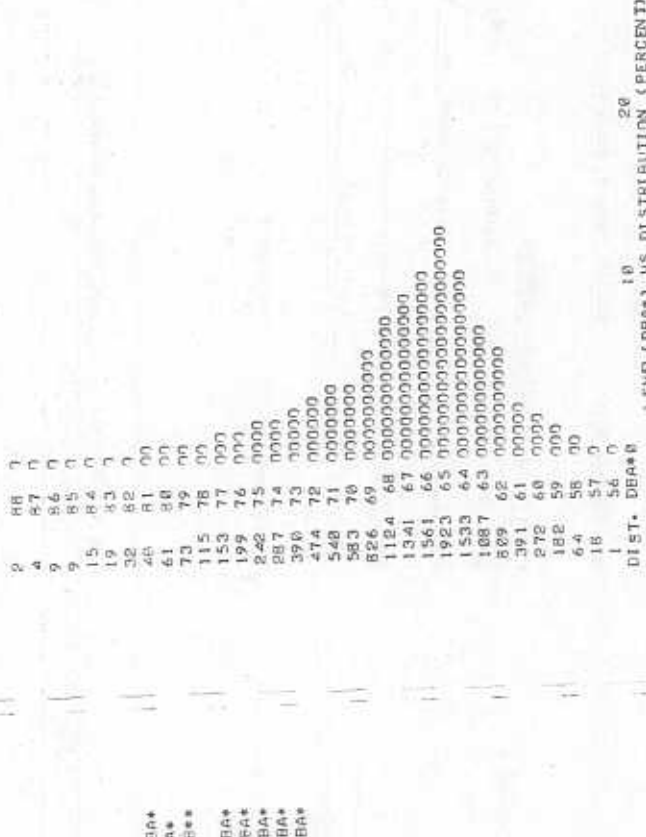


SAMPLES= 14400
AVERAGE= 65 DBA*
STANDARD DEVIATION= 248 DBA*
ENERGY MEAN= 66.4 DB**
NOISE POLLUTION LEVEL= 73.6 DBA*
1% PERCENTILE= 73.2 DBA*
10% DECILE= 69.1 DBA*
MEDIAN= 65.1 DBA*
90% DECILE= 62.5 DBA*
99% PERCENTILE= 61 DBA*
RANGE= 32 DB



*-A WEIGHTED DECIBEL-S-RE. 20 MICRONEWTONS PER SQUARE METER.
**-DBA RE. 20 MICRONEWTONS PER SQUARE METER FROM AN AVERAGE OF
THE SQUARES OF THE SOUND PRESSURES.

NOISE DATA FROM RUN 1A OF 2 OF THE MOBILE NOISE LAB. ON
 MARCH 3 1971 FROM 07:30 TO 08:30 AT WEDFORD GRID LOCATION 10-2



NOISE DATA FROM RUN 1A OF 2 OF THE MOBILE NOISE LAB. ON
 MARCH 3 1971 FROM 07:30 TO 08:30 AT WEDFORD GRID LOCATION 10-2

DISTRIBUTION DBA* 14379

2 88 7 66.9 DBA*

4 87 0 4.4 DBA*

9 86 0 70.1 DB**

9 85 0 81.4 DBA*

15 84 0 40.8 DBA*

19 83 0 73.5 DBA*

32 82 0 66.6 DBA*

48 81 0 59.3 DBA*

61 80 0 32 DB

73 79 0

115 78

153 77

199 76

242 75

287 74

390 73

474 72

548 71

583 70

826 69

1124 68

1341 67

1561 66

1923 65

1533 64

1857 63

289 62

391 61

272 60

192 59

64 58

18 57

1 56

0 55

SAMPLES= 14379

AVERAGE= 66.9 DBA*

STANDARD DEVIATION= 4.4 DBA*

ENERGY MEAN= 70.1 DB**

NOISE POLLUTION LEVEL= 81.4 DBA*

1% PERCENTILE= 40.8 DBA*

10% PERCENTILE= 73.5 DBA*

MEDIAN= 66.6 DBA*

90% PERCENTILE= 59.3 DBA*

RANGE= 32 DB

LEVEL (DBA*) VS CUMULATIVE DISTRIBUTION (PERCENT)

NOISE DATA FROM RUN 1A OF 2 OF THE MOBILE NOISE LAB. ON
 MARCH 3 1971 FROM 07:30 TO 08:30 AT WEDFORD GRID LOCATION 10-2

DISTRIBUTION DBA* 14379

2 88 7 66.9 DBA*

4 87 0 4.4 DBA*

9 86 0 70.1 DB**

9 85 0 81.4 DBA*

15 84 0 40.8 DBA*

19 83 0 73.5 DBA*

32 82 0 66.6 DBA*

48 81 0 59.3 DBA*

61 80 0 32 DB

73 79 0

115 78

153 77

199 76

242 75

287 74

390 73

474 72

548 71

583 70

826 69

1124 68

1341 67

1561 66

1923 65

1533 64

1857 63

289 62

391 61

272 60

192 59

64 58

18 57

1 56

0 55

LEVEL (DBA*) VS DISTRIBUTION (PERCENT)

*-A WEIGHTED DECIBELS-RE. 20 MICRONEWTONS PER SQUARE METER

**-DBA RE. 20 MICRONEWTONS PER SQUARE METER FROM AN AVERAGE OF THE SQUARES OF THE SOUND PRESSURES.

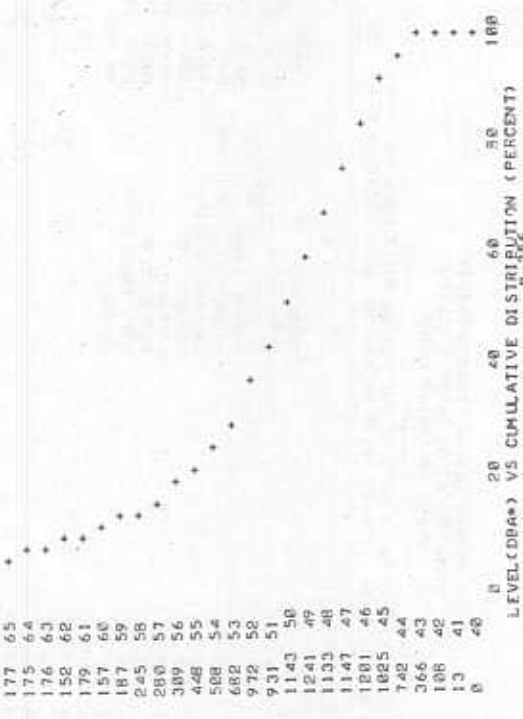
NOISE DATA FROM RUN 1 OF 2 OF THE MOBILE NOISE LAB. ON
MAY 6 1971 FROM 07:30 TO 08:30 AT MEDFORD GRID LOCATION 9-3

US DEPARTMENT OF TRANSPORTATION
TRANSPORTATION SYSTEMS CENTER
NOISE ABATEMENT GROUP

NOISE DATA FROM RUN 1 OF 2 OF THE MOBILE NOISE LAB. ON
MAY 6 1971 FROM 07:30 TO 08:30 AT MEDFORD GRID LOCATION 9-3

DISTRIB
UTION DBA*
1 86 0
0 85 0
0 84 0
0 83 0
1 82 0
5 80 0
5 79 0
3 78 0
4 77 0
17 75 0
19 74 0
25 73 0
36 72 0
52 71 0
52 70 0
114 69 0
100 68 0
101 67 0
133 66 0
175 64 0
176 63 0
152 62 0
179 61 0
133 60 0
187 59 0
245 58 0
288 57 0
309 56 0
448 55 0
588 54 0
682 53 0
972 52 0
931 51 0
1143 50 0
1241 49 0
1133 48 0
1147 47 0
1581 46 0
1625 45 0
742 44 0
366 43 0
188 42 0
13 41 0
13 41 0
DIST. DBA*
10 20 30

SAMPLES= 1480
AVERAGE= 51.3 DBA*
STANDARD DEVIATION= 6.5 DBA*
ENERGY MEAN= 59.2 DBE**
NOISE POLLUTION LEVEL= 75.8 DBA*
1% PERCENTILE= 71.6 DBA*
10% DECILE= 61.7 DBA*
MEDIAN= 50.2 DBA*
90% DECILE= 45.2 DBA*
99% PERCENTILE= 43.1 DBA*
RANGE= 43 DB



LEVEL (DBA*) VS DISTRIBUTION (PERCENT)

*-A WEIGHTED DECIBEL-S-RE. 20 MICROWATTS PER SQUARE METER
**-DBA RE. 20 MICROWATTS PER SQUARE METER FROM AN AVERAGE OF
THE SQUARES OF THE SOUND PRESSURES.

SITE DATA

Community: Medford, Massachusetts

Grid Location: 3-5

Microphone: Sidewalk on South side of Usher Street, 50 feet west of the center of Warren Street.

Site Description: Residential area with frame dwelling located close to street.

DATE (March 1971)	30	30	30	30	30	30	30
TIME (From)	0745	0945	1145	1345	1545	1745	1945
(To)	0945	1145	1345	1545	1745	1945	2145
TAPE NO. (HAL)	27-71	27-71	27-71	27-71	28-71	28-71	28-71
SIDE	1	2	3	4	1	1	2
TRACK	4	3	3	4	4	3	3
ROAD SURFACE	dry	dry	dry	dry	dry	dry	dry
TEMPERATURE (F ^o)	42	51	48	48	47	40	37
SKY CONDITION	clear	clear	clear	clear	clear	clear	clear
RELATIVE HUMIDITY (%)	51	47	43	40	47	50	52
BAROMETRIC PRESSURE IN. of MERCURY	768	768	768	767	769	771	772
WIND DIRECTION	NE	NE	NE	NE	NE	N	N
VELOCITY (MPH)	6-12	6-12	4-8	4-7	5-9	3	6

Special Events: 10AM to 11AM and 2 PM to 5 PM - children playing in street adjacent to microphone location.
B-265

SITE DATA

Community: Medford, Massachusetts

Grid Location: 3-5

Microphone: See sheet 1 of 2

Site Description: See sheet 1 of 2

DATE	March 1971	30	30/31	31	31	31
TIME (From)		2145	2345	0145	0345	0545
(To)		2345	0145	0345	0545	0745
TAPE NO. (HAL)		28-71	29-71	29-71	29-71	29-71
SIDE		2	1	1	2	2
TRACK		4	4	3	3	4
ROAD SURFACE		dry	dry	dry	dry	dry
TEMPERATURE (F ^o)		33	31	31	30	33
SKY CONDITION		Clear	Clear	Clear	Clear	Clear
RELATIVE HUMIDITY (%)		70	82	87	82	68
BAROMETRIC PRESSURE IN. of MERCURY		773	773	773	773	774
WIND DIRECTION		SH	NW	SW	SW	NE
VELOCITY (MPH)		4	1	6	7	6

Special Events: 6:30 AM - Junk collector attempted to remove microphone system.
B-267

SITE DATA

Community: Medford, Massachusetts

Grid Location: 10-2

Microphone Location: 105 feet north of west bound lane of Revere Beach Parkway, 402 feet east of railroad tracks.

Date of Run: March 3, 1971

Time of Run: 7:30 to 8:30 AM

Recorded Tape No.: MAL 5-71, side 1, track 4

ROAD SURFACE AND WEATHER CONDITIONS

Road surface: dry Temperature: 35 °F. Sky Condition: cloudy

Relative Humidity: 78 % Barometric Pressure 762 MM of Mercury

Wind Direction From: East-northeast

Velocity (MPH): gust 10-15

Site Description:

Open area near drive-in theater, on-off ramp to
parkway to southeast side

Special Events:

Many trucks on Parkway

B-260

SITE DATA

Community: Medford, Massachusetts

Grid Location: 10-2

Microphone Location: See sheet 1 of 2

Date of Run: March 3, 1971

Time of Run: 11:30 AM to 12:30 PM

Recorded Tape No.: MAL 5-71, side 2, track 4

ROAD SURFACE AND WEATHER CONDITIONS

Road surface: Slightly wet Temperature: 35 °F. Sky Condition: cloudy, mmu.
Flurries

Relative Humidity: 87 % Barometric Pressure 764 MM of Mercury

Wind Direction From: East

Velocity (MPH): gust 10 to 15

Site Description:

See sheet 1 of 2

Special Events:

Many trucks on Parkway.

B-261

NOISE DATA FROM RUN 2 OF 24 OF THE MOBILE NOISE LAB. ON
MARCH 30 1971 FROM 08:38 TO 09:24 AT MEDFORD GRID LOCATION NO. 3-5

1	81	0
1	80	0
1	79	0
0	78	0
3	77	0
1	76	0
6	75	0
7	74	0
6	73	0
10	72	0
4	71	0
5	70	0
11	69	0
16	68	0
19	67	0
39	66	00
63	65	00
59	64	00
78	63	00
90	62	00
138	61	000
99	60	000
123	59	000
161	58	0000
188	57	0000
287	56	0000
382	55	000000
436	54	00000000
519	53	0000000000
699	52	000000000000
767	51	00000000000000
895	50	0000000000000000
1225	49	000000000000000000
1313	48	00000000000000000000
1155	47	0000000000000000000000
789	46	0000000000000000000000
488	45	00000000
127	44	000
26	43	0
3	42	0
8	41	0

DIST. DBA*0 10 20 30
LEVEL (DBA*) VS DISTRIBUTION (PERCENT)

*-A WEIGHTED DECIBEL-S-RE. 20 MICRONETONS PER SQUARE METER
**-DBA RE. 20 MICRONETONS PER SQUARE METER FROM AN AVERAGE OF
THE SQUARES OF THE SOUND PRESSURES.

US DEPARTMENT OF TRANSPORTATION
TRANSPORTATION SYSTEMS CENTER
NOISE ABATEMENT GROUP

NOISE DATA FROM RUN 2 OF 24 OF THE MOBILE NOISE LAB. ON
MARCH 30 1971 FROM 08:38 TO 09:24 AT MEDFORD GRID LOCATION NO. 3-5

1	81	10000
1	80	58.7 DBA*
1	79	4.8 DBA*
0	78	55.9 DB**
3	77	68.2
1	76	66.8 DBA*
6	75	57.7 DBA*
7	74	58 DBA*
6	73	46.6 DBA*
10	72	44.6 DBA*
4	71	39 DB
5	70	
11	69	
16	68	
19	67	
39	66	
63	65	
59	64	
78	63	
90	62	
138	61	
99	60	
123	59	
161	58	
188	57	
207	56	
302	55	
436	54	
519	53	
699	52	
767	51	
895	50	
1225	49	
1313	48	
1155	47	
789	46	
488	45	
127	44	
26	43	
3	42	
8	41	

LEVEL (DBA*) VS CUMULATIVE DISTRIBUTION (PERCENT)

THE DEPARTMENT OF TRANSPORTATION
TRANSPORTATION SYSTEMS CENTER
NOISE ABATEMENT GROUP

NOISE DATA FROM RUN 2A OF 8 OF THE MOBILE NOISE LAB. ON
MARCH 3 1971 FROM 11:30 TO 12:30 AT MEDFORD GRID LOCATION 10-2

DISTRIB
UNION DBA*
2 91
4 90
3 89
2 88
8 87
14 86
9 85
14 84
28 83
28 82
27 81
64 79
69 78
119 77
154 76
215 75
270 74
371 73
503 72
571 71
626 70
691 69
1513 68
1580 67
1686 66
1800 65
1433 64
1188 63
753 62
263 61
111 60
32 59
1 58
0 57

SAMPLES= 14400
AVERAGE= 67.2 DBA*
STANDARD DEVIATION= 4 DBA*
ENERGY MEAN= 70.2 DB**
NOISE POLLUTION LEVEL= 80.4
1% PERCENTILE= 80.6 DBA*
MEDIAN= 73 DBA*
90% DECILE= 67 DBA*
99% PERCENTILE= 63.3 DBA*
RANGE= 61 DBA*
33 DB

LEVEL (DBA*) VS CUMULATIVE DISTRIBUTION (PERCENT)

B-264

PAGE 2

NOISE DATA FROM RUN 2A OF 8 OF THE MOBILE NOISE LAB. ON
MARCH 3 1971 FROM 11:30 TO 12:30 AT MEDFORD GRID LOCATION 10-2

2 91 0
4 90 0
3 89 0
2 88 0
8 87 0
14 86 0
9 85 0
14 84 0
28 83 0
28 82 0
27 81 0
37 80 0
64 79 0
69 78 0
119 77 0
154 76 0
215 75 0
270 74 0
371 73 0
503 72 0
571 71 0
626 70 0
691 69 0
1513 68 0
1580 67 0
1686 66 0
1800 65 0
1433 64 0
1188 63 0
753 62 0
263 61 0
111 60 0
32 59 0
1 58 0
0 57 0

LEVEL (DBA*) VS DISTRIBUTION (PERCENT)

10 20 30

*-A WEIGHTED DECIBELS-RE. 20 MICRONEWTONS PER SQUARE METER
**-DBA RE. 20 MICRONEWTONS PER SQUARE METER FROM AN AVERAGE OF
THE SQUARES OF THE SOUND PRESSURES.

B-265

U.S. DEPARTMENT OF TRANSPORTATION
TRANSPORTATION SYSTEMS CENTER
NOISE ABATEMENT GROUP

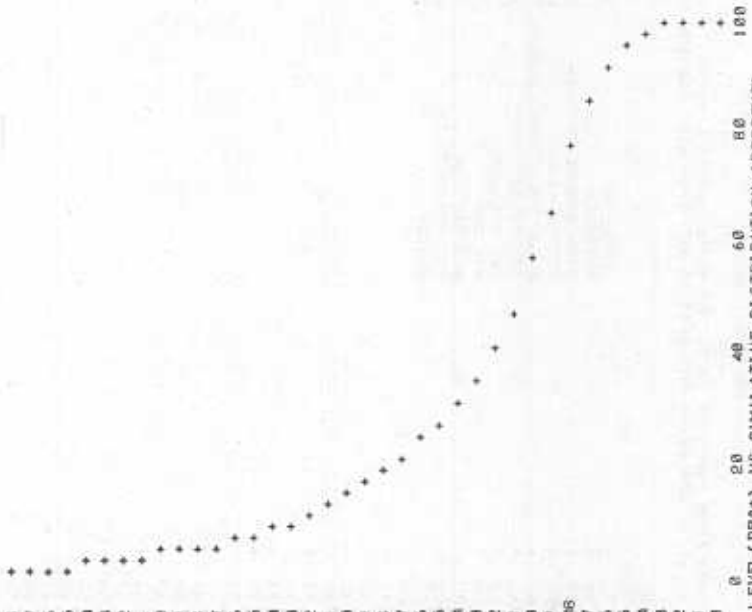
PAGE 2

NOISE DATA FROM RUN 4 OF 24 OF THE MOBILE NOISE LAB. ON
MARCH 30 1971 FROM 18137 TO 11123 AT MEDFORD GRID LOCATION NO. 3-5

NOISE DATA FROM RUN 4 OF 24 OF THE MOBILE NOISE LAB. ON
MARCH 30 1971 FROM 18137 TO 11123 AT MEDFORD GRID LOCATION NO. 3-5

DISTRIB. UTION DBA*
1 91 0
2 90 0
1 89 0
1 88 0
1 88 0
4 87 0
18 85 0
9 83 0
21 82 0
38 80 0
42 79 0
31 78 0
36 77 0
37 75 0
39 74 0
38 73 0
43 72 0
42 70 0
59 68 0
64 67 0
83 65 0
92 64 0
95 63 0
144 62 0
157 61 0
182 60 0
247 59 0
245 58 0
262 57 0
384 56 0
354 54 0
434 53 0
590 52 0
644 51 0
835 50 0
962 49 0
1025 48 0
859 47 0
694 46 0
361 45 0
242 44 0
185 43 0
18 42 0
2 41 0
0 40 0

SAMPLES= 10000
AVERAGE= 52.8 DBA*
STANDARD DEVIATION= 7.7 DBA*
ENERGY MEAN= 66.2 DB**
NOISE POLLUTION LEVEL= 85.9
1% PERCENTILE= 80.5 DBA*
10% DECILE= 63.4 DBA*
MEDIAN= 50.9 DBA*
90% DECILE= 46.4 DBA*
99% PERCENTILE= 43.7 DBA*
RANGE= 50 DB



LEVEL (DBA*) VS CUMULATIVE DISTRIBUTION (PERCENT)
B-274

1 91 0
2 90 0
1 89 0
1 88 0
4 87 0
5 86 0
18 85 0
18 84 0
9 83 0
21 82 0
38 80 0
42 79 0
31 78 0
36 77 0
37 75 0
39 74 0
38 73 0
43 72 0
42 70 0
59 71 0
68 69 0
59 68 0
64 67 0
83 65 0
92 64 0
95 63 0
144 62 0
157 61 0
182 60 0
247 59 0
245 58 0
262 57 0
384 56 0
354 54 0
434 53 0
590 52 0
644 51 0
835 50 0
962 49 0
1025 48 0
859 47 0
694 46 0
361 45 0
242 44 0
185 43 0
18 42 0
2 41 0
0 40 0

LEVEL (DBA*) VS DISTRIBUTION (PERCENT)
30

■ - A WEIGHTED DECIBEL-S-RE. 20 MICRONEWTONS PER SQUARE METER
● - DBA RE. 20 MICRONEWTONS PER SQUARE METER FROM AN AVERAGE OF THE SQUARES OF THE SOUND PRESSURES.

B-377

US DEPARTMENT OF TRANSPORTATION
TRANSPORTATION SYSTEMS CENTER
NOISE ABATEMENT GROUP

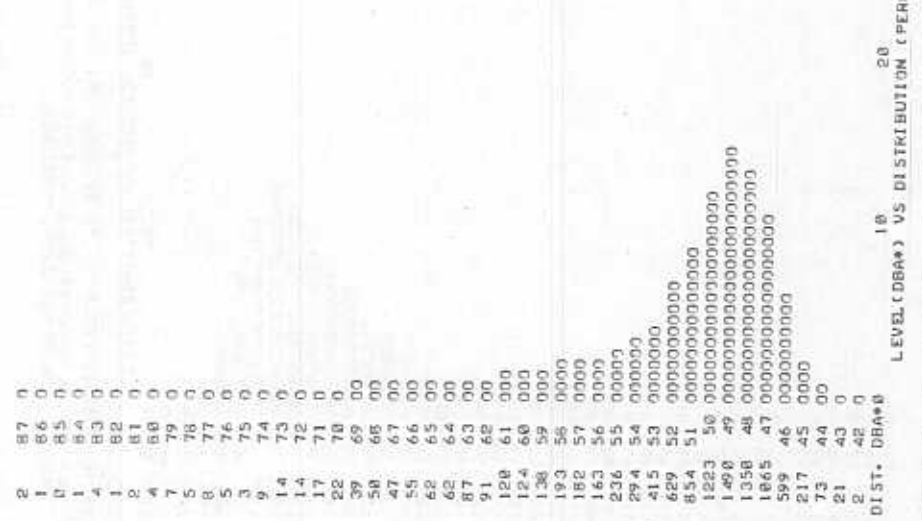
PAGE 2

NOISE DATA FROM RUN 1 OF 24 OF THE MOBILE NOISE LAB. ON
MARCH 30 1971 FROM 07:45 TO 08:27 AT MEDFORD GRID LOCATION NO. 3-5

NOISE DATA FROM RUN 1 OF 24 OF THE MOBILE NOISE LAB. ON
MARCH 30 1971 FROM 07:45 TO 08:27 AT MEDFORD GRID LOCATION NO. 3-5

DISTRIBUTION DBA*
2 87 0
1 86 0
0 85 0
1 84 0
4 83 0
1 82 0
2 81 0
4 80 0
7 79 0
5 78 0
8 77 0
5 76 0
3 75 0
9 74 0
1 73 0
1 72 0
17 71 0
22 70 0
39 69 00
58 68 00
47 67 00
55 66 00
62 65 00
62 64 00
87 63 00
91 62 00
120 61 000
124 60 000
138 59 000
193 58 0000
182 57 0000
163 56 0000
236 55 00000
294 54 000000
415 53 0000000
629 52 0000000000
854 51 000000000000
1223 50 00000000000000
1498 49 0000000000000000
1358 48 000000000000000000
1865 47 000000000000000000
599 46 0000000000000000
217 45 0000
73 44 00
21 43 0
2 42 0
0 41 0

SAMPLES= 10000
AVERAGE= 51.2 DBA*
STANDARD DEVIATION= 5.4 DBA*
ENERGY MEAN= 59.7 DBA*
NOISE POLLUTION LEVEL= 73.5
1% PERCENTILE= 70.9 DBA*
10% DECILE= 59 DBA*
MEDIAN= 50.1 DBA*
90% DECILE= 47.1 DBA*
99% PERCENTILE= 45 DBA*
RANGE= 45 DB



LEVEL (DBA*) VS DISTRIBUTION (PERCENT)
10 20 30
*A WEIGHTED DECIBEL S-RE. 20 MICRONETONS PER SQUARE METER
**DBA RE. 20 MICRONETONS PER SQUARE METER FROM AN AVERAGE OF
THE SQUARES OF THE SOUND PRESSURES.

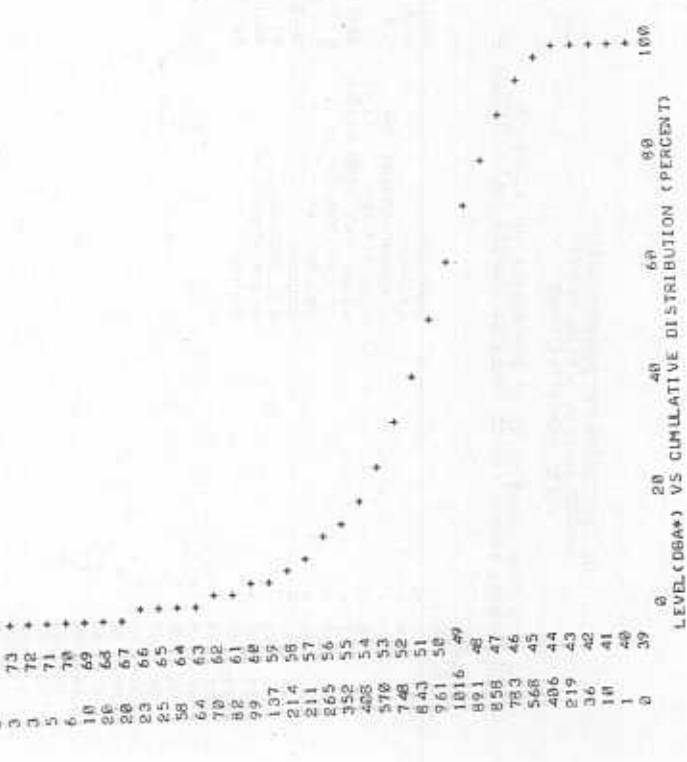
US DEPARTMENT OF TRANSPORTATION
TRANSPORTATION SYSTEMS CENTER
NOISE ABATEMENT GROUP

PAGE 2
NOISE DATA FROM RUN 6 OF 24 OF THE MOBILE NOISE LAB. ON
MARCH 30 1971 FROM 12:32 TO 13:14 AT MEDFORD GRID LOCATION NO. 3-5

NOISE DATA FROM RUN 6 OF 24 OF THE MOBILE NOISE LAB. ON
MARCH 30 1971 FROM 12:32 TO 13:14 AT MEDFORD GRID LOCATION NO. 3-5

DISTRI
UTION DBA*
1 85
1 84
1 83
1 82
1 81
1 80
0 79
0 78
2 77
2 76
3 75
3 74
3 73
3 72
5 71
6 70
10 69
20 68
20 67
23 66
25 65
58 64
64 63
70 62
82 61
99 60
137 59
214 58
211 57
265 56
352 55
408 54
570 53
748 52
843 51
961 50
1816 49
891 48
858 47
783 46
568 45
406 44
219 43
36 42
18 41
1 40
0 39

SAMPLES= 10000 DBA*
AVERAGE= 50.5 DBA*
STANDARD DEVIATION= 4.8 DBA*
ENERGY MEAN= 56.2 DBA*
NOISE POLLUTION LEVEL= 48.5 DBA*
1% PERCENTILE= 66.2 DBA*
10% PERCENTILE= 57.3 DBA*
MEDIAN= 50.2 DBA*
90% DECILE= 45.6 DBA*
99% PERCENTILE= 43.2 DBA*
RANGE= 45 DB



B-278

PAGE 2

NOISE DATA FROM RUN 6 OF 24 OF THE MOBILE NOISE LAB. ON
MARCH 30 1971 FROM 12:32 TO 13:14 AT MEDFORD GRID LOCATION NO. 3-5

1 85 0
1 84 0
1 83 0
1 82 0
1 81 0
1 80 0
0 79 0
0 78 0
2 77 0
2 76 0
3 75 0
3 74 0
3 73 0
5 72 0
6 71 0
6 70 0
10 69 0
20 68 0
20 67 0
23 66 0
25 65 0
58 64 0
64 63 0
70 62 0
82 61 0
99 60 0
137 59 0
214 58 0
211 57 0
265 56 0
352 55 0
408 54 0
570 53 0
748 52 0
843 51 0
961 50 0
1816 49 0
891 48 0
858 47 0
783 46 0
568 45 0
406 44 0
219 43 0
36 42 0
18 41 0
1 40 0
0 39 0

DIST. DBA*8 LEVEL (DBA*) VS. DISTRIBUTION (PERCENT) 30

*-A WEIGHTED DECIBEL S-RE. 20 MICRONEWTONS PER SQUARE METER
**-DBA RE. 20 MICRONEWTONS PER SQUARE METER FROM AN AVERAGE OF
THE SQUARES OF THE SOUND PRESSURES.

R-279

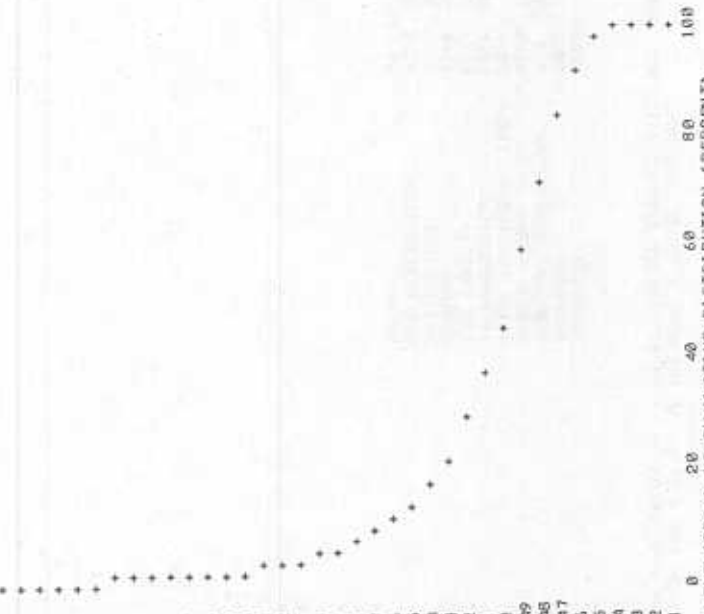
US DEPARTMENT OF TRANSPORTATION
TRANSPORTATION SYSTEMS CENTER
NOISE ABATEMENT GROUP

NOISE DATA FROM RUN 3 OF 24 OF THE MOBILE NOISE LAB. ON
MARCH 30 1971 FROM 09:45 TO 10:27 AT MEDFORD GRID LOCATION NO. 3-5

DISTRI
UTION DBA*

8	91	+
3	90	+
5	89	+
2	88	+
2	87	+
3	86	+
4	85	+
6	84	+
1	83	+
2	82	+
2	80	+
8	79	+
9	78	+
4	77	+
3	76	+
9	75	+
8	74	+
8	73	+
8	72	+
13	71	+
18	70	+
26	69	+
19	68	+
17	67	+
21	66	+
35	65	+
48	64	+
35	63	+
68	62	+
81	61	+
86	60	+
111	59	+
154	58	+
208	56	+
277	55	+
325	54	+
464	53	+
680	52	+
989	51	+
1325	49	+
1218	48	+
1865	47	+
2064	46	+
324	45	+
209	44	+
50	43	+
5	42	+
8	41	+

SAMPLES= 10000
AVERAGE= 50.5 DBA*
STANDARD DEVIATION= 5.3 DBA*
ENERGY MEAN= 64.6 DB**
NOISE POLLUTION LEVEL= 78.2 DBA*
1% PERCENTILE= 71.6 DBA*
10% DECILE= 57 DBA*
MEDIAN= 49.8 DBA*
90% DECILE= 46.2 DBA*
99% PERCENTILE= 44.2 DBA*
RANGE= 49 DB



B-272

NOISE DATA FROM RUN 3 OF 24 OF THE MOBILE NOISE LAB. ON
MARCH 30 1971 FROM 09:45 TO 10:27 AT MEDFORD GRID LOCATION NO. 3-5

8	91	0
3	90	0
5	89	0
2	88	0
2	87	0
3	86	0
4	85	0
6	84	0
1	83	0
2	82	0
8	81	0
2	80	0
8	79	0
9	78	0
4	77	0
3	76	0
9	75	0
8	74	0
8	73	0
8	72	0
13	71	0
18	70	0
26	69	0
19	68	0
17	67	0
21	66	0
35	65	0
48	64	0
35	63	0
68	62	0
81	61	0
86	60	0
111	59	0
154	58	0
208	56	0
277	55	0
325	54	0
464	53	0
680	52	0
754	51	0
989	50	0
1325	49	0
1218	48	0
1865	47	0
2064	46	0
324	45	0
209	44	0
50	43	0
5	42	0
8	41	0

DIST. DBA**

LEVEL (DBA) VS DISTRIBUTION (PERCENT) 30

*-A WEIGHTED DECIBEL-S-RE. 20 MICRONEWTONS PER SQUARE METER
**-DBA RE. 20 MICRONEWTONS PER SQUARE METER FROM AN AVERAGE OF
THE SQUARES OF THE SOUND PRESSURES.

B-273

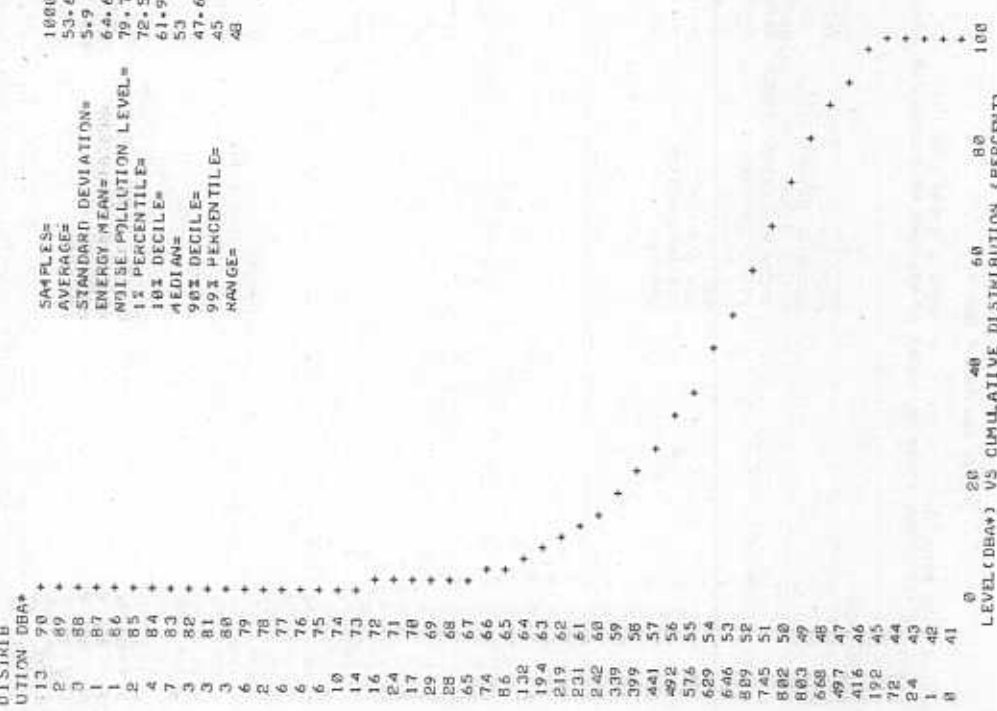
US DEPARTMENT OF TRANSPORTATION
TRANSPORTATION SYSTEMS CENTER
NOISE ABATEMENT GROUP

NOISE DATA FROM RUN NO. 8 OF 24 OF THE MOBILE NOISE LAB. ON
MARCH 30 1971 FROM 14:32 TO 15:17 AT MEDFORD GRID LOCATION NO. 3-5

DI STRIB
UTION DBA*

13	98	0
2	89	0
3	88	0
1	87	0
1	86	0
2	85	0
4	84	0
7	83	0
3	82	0
3	81	0
3	80	0
6	79	0
2	78	0
6	77	0
6	76	0
6	75	0
18	74	0
14	73	0
16	72	0
24	71	0
17	70	0
29	69	00
28	68	00
65	67	00
74	66	00
86	65	00
132	64	000
194	63	0000
219	62	0000
231	61	00000
242	60	00000
339	59	000000
399	58	0000000
441	57	00000000
492	56	00000000
576	55	0000000000
629	54	00000000000
646	53	000000000000
809	52	0000000000000
745	51	00000000000000
802	50	000000000000000
803	49	0000000000000000
668	48	00000000000000000
497	47	000000000000000000
416	46	00000000
192	45	0000
72	44	00
24	43	0
1	42	0
0	41	0

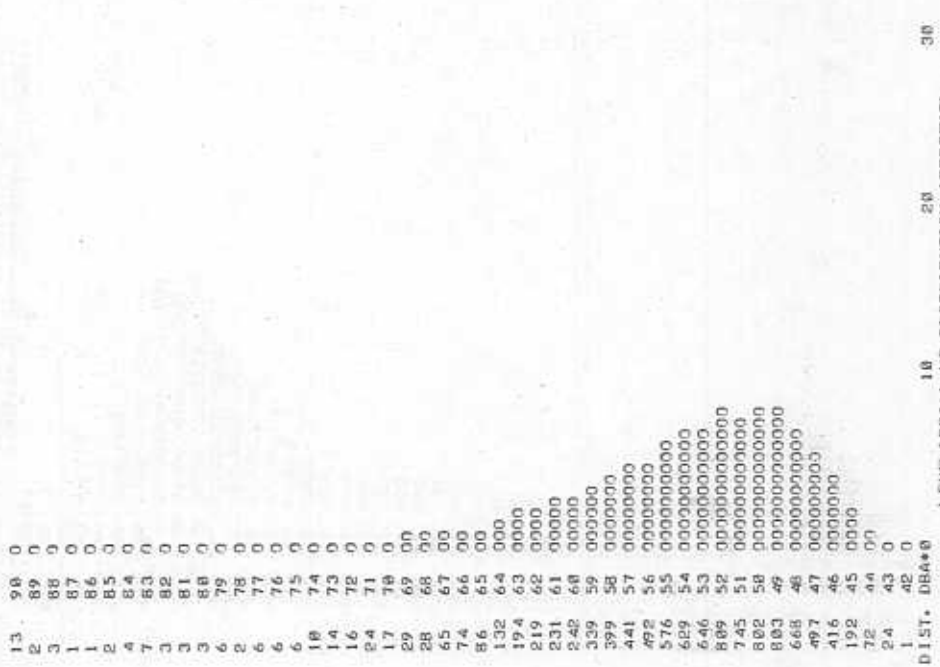
SAMPLES= 10000
AVERAGE= 53.6 DBA*
STANDARD DEVIATION= 5.9 DBA*
ENERGY MEAN= 64.6 DB**
NOISE POLLUTION LEVEL= 79.7
1% PERCENTILE= 72.5 DBA*
MEDIAN= 61.9 DBA*
90% DECILE= 53 DBA*
99% PERCENTILE= 47.6 DBA*
RANGE= 45 DBA*
48 DB



LEVEL (DBA*) VS CUMULATIVE DISTRIBUTION (PERCENT)

B-282

NOISE DATA FROM RUN NO. 8 OF 24 OF THE MOBILE NOISE LAB. ON
MARCH 30 1971 FROM 14:32 TO 15:17 AT MEDFORD GRID LOCATION NO. 3-5



LEVEL (DBA*) VS DISTRIBUTION (PERCENT)

*-A WEIGHTED DECIBELS-RE. 20 MICRONEWTONS PER SQUARE METER
*-DBA RE. 20 MICRONEWTONS PER SQUARE METER FROM AN AVERAGE OF
THE SQUARES OF THE SOUND PRESSURES.

B-283

NOISE DATA FROM RUN 5 OF 24 OF THE MOBILE NOISE LAB. ON
 MARCH 30 1971 FROM 11:45 TO 12:27 AT MEDFORD GRID LOCATION NO. 3-5

US DEPARTMENT OF TRANSPORTATION
 TRANSPORTATION SYSTEMS CENTER
 NOISE ABATEMENT GROUP

NOISE DATA FROM RUN 5 OF 24 OF THE MOBILE NOISE LAB. ON
 MARCH 30 1971 FROM 11:45 TO 12:27 AT MEDFORD GRID LOCATION NO. 3-5

DISTRIBUTION DBA**

1	81	+
0	80	+
0	79	+
1	78	+
1	77	+
3	76	+
5	75	+
11	74	+
14	73	+
13	72	+
26	71	+
23	70	+
19	69	+
36	68	+
59	67	+
37	66	+
68	65	+
57	64	+
88	63	+
74	62	+
73	61	+
114	60	+
123	59	+
178	58	+
152	57	+
185	56	+
279	55	+
386	54	+
367	53	+
469	52	+
562	51	+
645	50	+
798	49	+
950	48	+
1898	47	+
1237	46	+
949	45	+
648	44	+
265	43	+
64	42	+
10	41	+
1	40	+
0	39	+

SAMPLES= 10000
 AVERAGE= 49.8 DBA*
 STANDARD DEVIATION= 5.6 DBA*
 ENERGY MEAN= 56.6 DB**
 NOISE POLLUTION LEVEL= 78.9
 1% PERCENTILE= 69.9 DBA*
 10% DECILE= 58 DBA*
 MEDIAN= 48.8 DBA*
 90% DECILE= 45 DBA*
 99% PERCENTILE= 43.1 DBA*
 RANGE= 41 DB

LEVEL (DBA*) VS CUMULATIVE DISTRIBUTION (PERCENT)

B-276

LEVEL (DBA*) VS DISTRIBUTION (PERCENT)

**A WEIGHTED DECIBEL-S-RE. 20 MICROWATTS PER SQUARE METER
 **DBA RE. 20 MICROWATTS PER SQUARE METER FROM AN AVERAGE OF
 THE SQUARES OF THE SOUND PRESSURES.

B-277

US DEPARTMENT OF TRANSPORTATION
TRANSPORTATION SYSTEMS CENTER
NOISE ABATEMENT GROUP

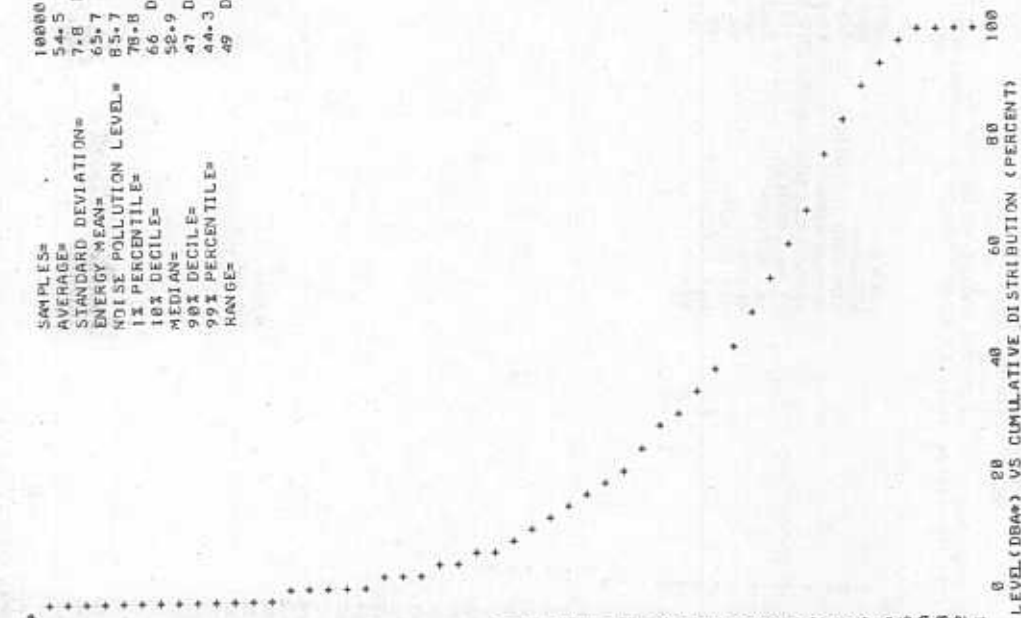
PAGE 2

NOISE DATA FROM RUN 10 OF 24 OF THE MOBILE NOISE LAB. ON
MARCH 30 1971 FROM 16:36 TO 17:18 AT MEDFORD GRID LOCATION 3-5

DISTRIBUTION DBA*

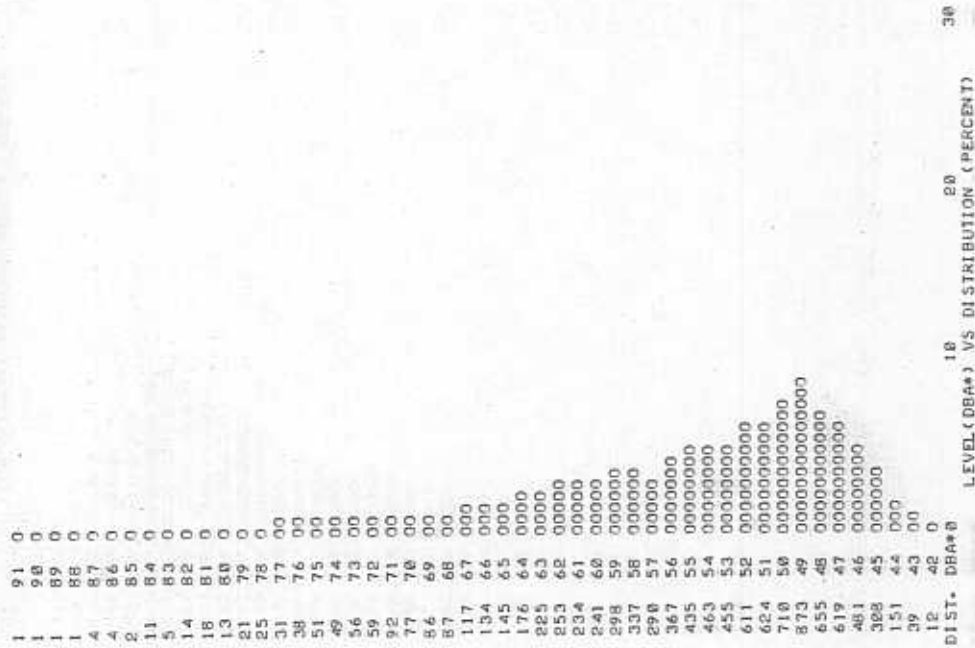
1	91
1	90
1	89
1	88
4	87
2	85
5	83
11	84
14	82
18	81
13	80
21	79
25	78
31	77
38	76
51	75
49	74
56	73
77	72
86	71
87	70
117	69
134	68
145	67
176	66
225	65
253	64
234	63
241	62
298	61
337	60
390	59
527	58
367	57
435	56
463	55
455	54
611	53
624	52
455	51
611	50
624	49
655	48
619	47
481	46
461	45
368	44
151	43
39	42
12	41
0	40

SAMPLES= 10000
AVERAGES= 54.5 DBA*
STANDARD DEVIATION= 7.8 DBA*
ENERGY MEAN= 65.7 DB**
NOISE POLLUTION LEVEL= 85.7
1% PERCENTILE= 78.8 DBA*
10% DECILE= 66 DBA*
MEDIAN= 58.9 DBA*
90% DECILE= 47 DBA*
99% PERCENTILE= 44.3 DBA*
RANGE= 49 DB



B-286

NOISE DATA FROM RUN 10 OF 24 OF THE MOBILE NOISE LAB. ON
MARCH 30 1971 FROM 16:36 TO 17:18 AT MEDFORD GRID LOCATION 3-5



**A WEIGHTED DECIBEL-RE. 20 MICROMETONS PER SQUARE METER
**DBA-RE. 80 MICROMETONS PER SQUARE METER FROM AN AVERAGE OF
THE SQUARES OF THE SOUND PRESSURES.

B-287

US DEPARTMENT OF TRANSPORTATION
TRANSPORTATION SYSTEMS CENTER
NOISE ABATEMENT GROUP

PAGE 2

NOISE DATA FROM RUN 7 OF 24 OF THE MOBILE NOISE LAB. ON
MARCH 30 1971 FROM 13:45 TO 14:27 AT MEDFORD GRID LOCATION NO. 3-5

NOISE DATA FROM RUN 7 OF 24 OF THE MOBILE NOISE LAB. ON
MARCH 30 1971 FROM 13:45 TO 14:27 AT MEDFORD GRID LOCATION NO. 3-5

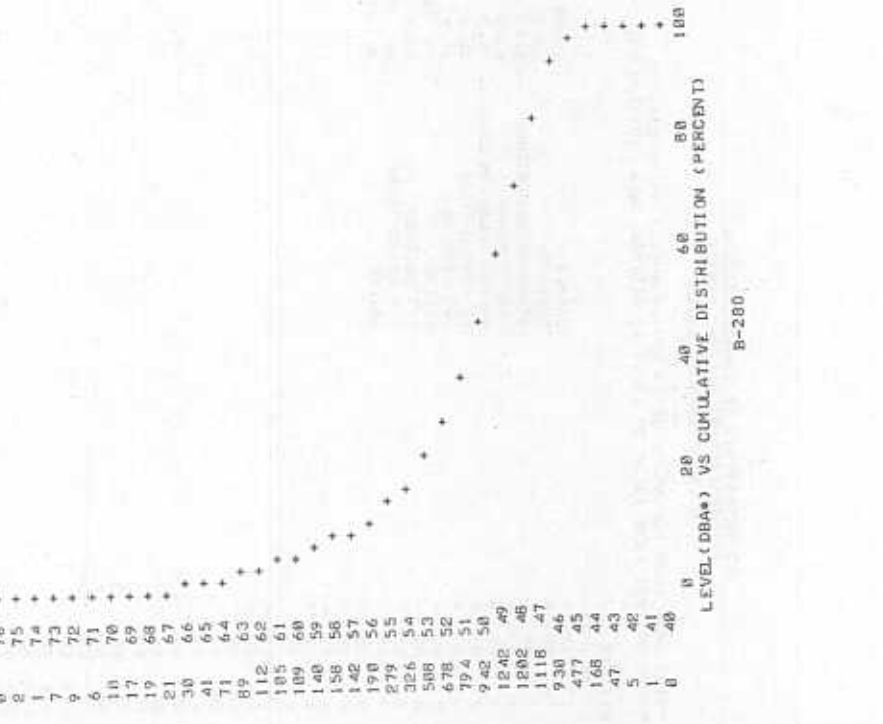
DISTRI-
BUTION DBA*
1 88
1 87
0 86
0 85
0 84
0 83
0 82
0 81
1 80
0 79
1 78
0 77
0 76
0 75
1 74
1 73
9 72
6 71
10 70
17 69
17 68
21 67
30 66
41 65
71 64
89 63
112 62
185 61
189 60
140 59
158 58
142 57
170 56
279 55
326 54
588 53
678 52
794 51
942 50
1242 49
1202 48
1118 47
930 46
477 45
168 44
47 43
5 42
1 41
0 40

SAMPLES=
AVERAGE=
STANDARD DEVIATION=
ENERGY MEAN=
NOISE POLLUTION LEVEL=
1% PERCENTILE=
10% DECILE=
MEDIAN=
90% DECILE=
99% PERCENTILE=
RANGE=
DOWN
50.5 DBA*
4.8 DBA*
56.5 DB**
68.8
66.9 DBA*
57.7 DBA*
49.8 DBA*
46.3 DB**
44.3 DBA*
47 DB

NOISE DATA FROM RUN 7 OF 24 OF THE MOBILE NOISE LAB. ON
MARCH 30 1971 FROM 13:45 TO 14:27 AT MEDFORD GRID LOCATION NO. 3-5

DISTRI-
BUTION DBA*
1 88
1 87
0 86
0 85
0 84
0 83
0 82
0 81
1 80
0 79
1 78
0 77
0 76
0 75
1 74
1 73
9 72
6 71
10 70
17 69
17 68
21 67
30 66
41 65
71 64
89 63
112 62
185 61
189 60
140 59
158 58
142 57
170 56
279 55
326 54
588 53
678 52
794 51
942 50
1242 49
1202 48
1118 47
930 46
477 45
168 44
47 43
5 42
1 41
0 40

SAMPLES=
AVERAGE=
STANDARD DEVIATION=
ENERGY MEAN=
NOISE POLLUTION LEVEL=
1% PERCENTILE=
10% DECILE=
MEDIAN=
90% DECILE=
99% PERCENTILE=
RANGE=
DOWN
50.5 DBA*
4.8 DBA*
56.5 DB**
68.8
66.9 DBA*
57.7 DBA*
49.8 DBA*
46.3 DB**
44.3 DBA*
47 DB



B-280

LEVEL (DBA*) VS DISTRIBUTION (PERCENT)

10 20 30

DIST. DBA*0

*-A WEIGHTED DECIBEL 5-RE. 28 MICRONETONS PER SQUARE METER
**-DBA RE. 28 MICRONETONS PER SQUARE METER FROM AN AVERAGE OF
THE SQUARES OF THE SOUND PRESSURES.

B-281

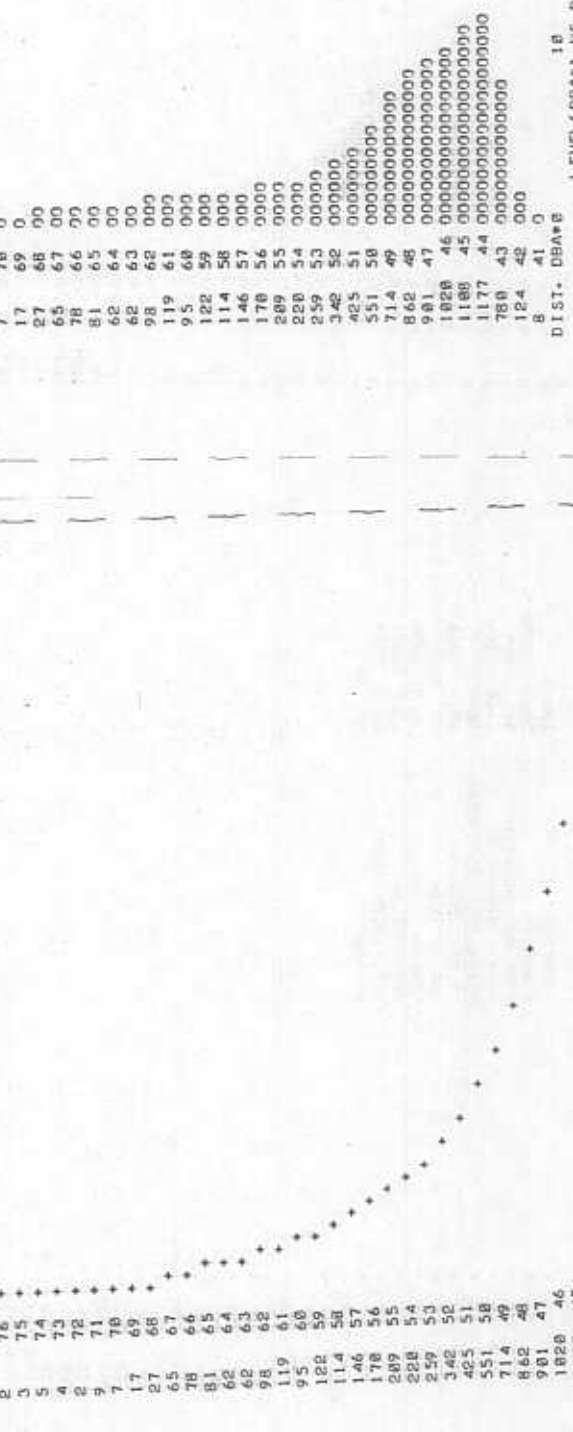
NOISE DATA FROM RUN 12A OF 24 OF THE MOBILE NOISE LAB. ON
 MARCH 30 1971 FROM 18:35 TO 19:17 AT MEDFORD GRID LOCATION NO. 3-5

US DEPARTMENT OF TRANSPORTATION
 TRANSPORTATION SYSTEMS CENTER
 NOISE ABATEMENT GROUP

NOISE DATA FROM RUN 12A OF 24 OF THE MOBILE NOISE LAB. ON
 MARCH 30 1971 FROM 18:35 TO 19:17 AT MEDFORD GRID LOCATION NO. 3-5

DISTRI
 UTION DBA*
 2 87 0
 0 86 0
 0 85 0
 1 84 0
 1 83 0
 2 82 0
 2 81 0
 1 80 0
 1 79 0
 0 78 0
 2 77 0
 2 76 0
 3 75 0
 5 74 0
 4 73 0
 2 72 0
 9 71 0
 7 70 0
 1 69 0
 17 68 0
 27 68 00
 65 67 00
 78 66 00
 81 65 00
 62 64 00
 62 63 00
 98 62 000
 119 61 000
 95 60 000
 122 59 000
 114 58 000
 146 57 000
 178 56 0000
 289 55 0000
 228 54 0000
 259 53 00000
 342 52 000000
 425 51 0000000
 551 50 00000000
 714 49 00000000000
 862 48 0000000000000
 981 47 000000000000000
 1020 46 0000000000000000
 1188 45 00000000000000000
 1177 44 000000000000000000
 780 43 000000000000000000
 124 42 000
 8 41 0
 0 40 0

SAMPLES= 49 DBA*
 AVERAGE= 5.8 DBA*
 STANDARD DEVIATION= 57.6 DB**
 ENERGY MEAN= 72.4 DBA*
 NOISE POLLUTION LEVEL= 67.8 DBA*
 1% PERCENTILE= 57.9 DBA*
 10% DECILE= 47.9 DBA*
 MEDIAN= 44.1 DBA*
 90% DECILE= 42.7 DBA*
 RANGE= 46 DB



LEVEL (DBA*) VS DISTRIBUTION (PERCENT)

**A WEIGHTED DECIBEL-S-RE. 20 MICRONOTIONS PER SQUARE METER
 ***DBA RE. 20 MICRONOTIONS PER SQUARE METER FROM AN AVERAGE OF
 THE SQUARES OF THE SOUND PRESSURES.

US DEPARTMENT OF TRANSPORTATION
TRANSPORTATION SYSTEMS CENTER
NOISE ABATEMENT GROUP

NOISE DATA FROM RUN 9 OF 24 OF THE MOBILE NOISE LAB. ON
MARCH 30 1971 FROM 15:45 TO 16:27 AT MEDFORD GRID LOCATION NO. 3-5

DISTRIB
UTION DBA*
5 91 +
2 90 +
2 89 +
2 88 *
1 86 *
6 85 +
7 84 +
5 83 *
7 82 *
7 81 *
14 79 +
12 78 +
16 77 +
14 76 +
25 75 +
38 74 +
23 73 +
34 72 +
45 71 +
45 70 +
61 69 +
54 68 +
55 67 +
92 66 +
128 65 +
139 64 +
155 63 +
197 62 +
213 61 +
208 60 +
258 59 +
278 58 +
278 57 +
308 56 +
308 55 +
336 54 +
378 53 +
525 52 +
563 51 +
653 50 +
784 49 +
795 48 +
831 47 +
793 46 +
623 45 +
420 44 +
241 43 +
79 42 +
11 41 +
1 40 +
0 39 +

10000
SAMPLES= 52.2 DBA*
AVERAGE= 7.3 DBA*
STANDARD DEVIATION= 64.9 DB**
ENERGY MEAN= 83.6
NOISE POLLUTION LEVEL= 76.6 DBA*
1% PERCENTILE= 62.9 DBA*
10% DECILE= 58.6 DBA*
MEDIAN= 45.4 DBA*
90% PERCENTILE= 43 DBA*
RANGE= 51 DB

NOISE DATA FROM RUN 9 OF 24 OF THE MOBILE NOISE LAB. ON
MARCH 30 1971 FROM 15:45 TO 16:27 AT MEDFORD GRID LOCATION NO. 3-5

5	91	0
2	90	0
2	89	0
2	88	0
1	86	0
6	85	0
7	84	0
5	83	0
7	82	0
7	81	0
7	80	0
14	79	0
12	78	0
16	77	0
14	76	0
25	75	0
38	74	0
23	73	0
34	72	0
45	71	0
45	70	0
61	69	0
54	68	0
55	67	0
92	66	0
128	65	0
139	64	0
155	63	0
197	62	0
213	61	0
208	60	0
258	59	0
278	58	0
278	57	0
308	56	0
308	55	0
336	54	0
378	53	0
525	52	0
563	51	0
653	50	0
784	49	0
795	48	0
831	47	0
793	46	0
623	45	0
420	44	0
241	43	0
79	42	0
11	41	0
1	40	0
0	39	0

LEVEL (DBA*) VS DISTRIBUTION (PERCENT)
DIST. DBA* 10 20 30
LEVEL (DBA*) VS DISTRIBUTION (PERCENT)
10 20 30
*--A WEIGHTED DECIBEL-S-RE. 20 MICRONEWTONS PER SQUARE METER
*--DBA RE. 20 MICRONEWTONS PER SQUARE METER FROM AN AVERAGE OF
THE SQUARES OF THE SOUND PRESSURES.

LEVEL (DBA*) VS CUMULATIVE DISTRIBUTION (PERCENT)
0 20 40 60 80 100
B-284

NOISE DATA FROM RUN 1.4 OF 2.4 OF THE MOBILE NOISE LAB. ON
 MARCH 30 1971 FROM 20:46 TO 21:29 AT MEDFORD GRID LOCATION NO. 3-5

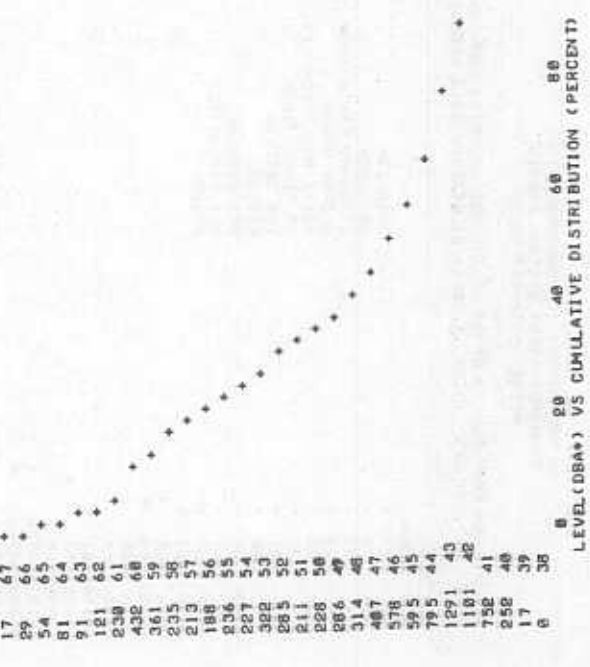
DISTRI- BUTION	DBA*	10	20	30
2	78	0		
2	77	0		
2	76	0		
2	75	0		
3	74	0		
2	73	0		
1	72	0		
6	71	0		
4	70	0		
11	69	0		
16	68	0		
17	67	0		
29	66	00		
54	65	00		
81	64	00		
91	63	00		
121	62	000		
230	61	00000		
432	60	00000000		
361	59	00000000		
235	58	000000		
213	57	00000		
188	56	0000		
236	55	00000		
227	54	00000		
322	53	000000		
285	52	00000		
211	51	0000		
228	50	00000		
286	49	00000		
314	48	000000		
487	47	00000000		
578	46	0000000000		
595	45	0000000000		
795	44	000000000000		
1291	43	0000000000000000		
1181	42	0000000000000000		
752	41	000000000000		
252	40	00000		
17	39	0		
0	38	0		

LEVEL (DBA*) VS DISTRIBUTION (PERCENT)
 **A WEIGHTED DECIBEL 5-RE-20 MICRONEWTONS PER SQUARE METER
 **DBA RE-20 MICRONEWTONS PER SQUARE METER FROM AN AVERAGE OF
 THE SQUARES OF THE SOUND PRESSURES.

US DEPARTMENT OF TRANSPORTATION
 TRANSPORTATION SYSTEMS CENTER
 NOISE ABATEMENT GROUP

NOISE DATA FROM RUN 1.4 OF 2.4 OF THE MOBILE NOISE LAB. ON
 MARCH 30 1971 FROM 20:46 TO 21:29 AT MEDFORD GRID LOCATION NO. 3-5

DISTRI- BUTION	DBA*	10000	40-5	DBA*
2	78	0	40-5	DBA*
2	77	0	7-1	DBA**
2	76	0	55-5	DB**
2	75	0	73-7	
3	74	0	65-9	DBA*
2	73	0	68-2	DBA*
1	72	0	46-3	DBA*
6	71	0	42	DBA*
4	70	0	48-3	DBA*
11	69	0	39	DB
16	68	0		
17	67	0		
29	66	00		
54	65	00		
81	64	00		
91	63	00		
121	62	000		
230	61	00000		
432	60	00000000		
361	59	00000000		
235	58	000000		
213	57	00000		
188	56	0000		
236	55	00000		
227	54	00000		
322	53	000000		
285	52	00000		
211	51	0000		
228	50	00000		
286	49	00000		
314	48	000000		
487	47	00000000		
578	46	0000000000		
595	45	0000000000		
795	44	000000000000		
1291	43	0000000000000000		
1181	42	0000000000000000		
752	41	000000000000		
252	40	00000		
17	39	0		
0	38	0		



US DEPARTMENT OF TRANSPORTATION
TRANSPORTATION SYSTEMS CENTER
NOISE ABATEMENT GROUP

PAGE 2

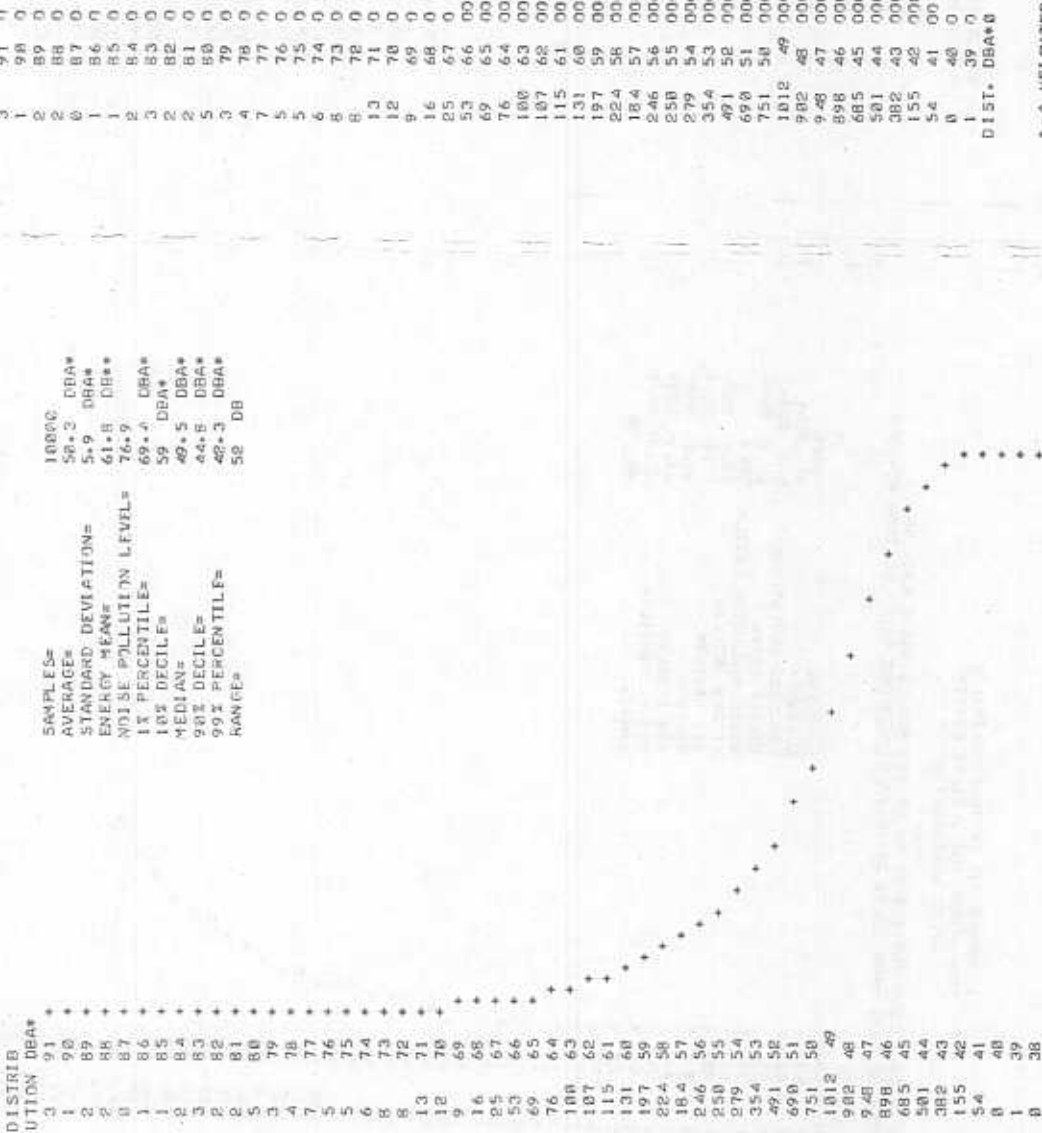
NOISE DATA FROM RUN 11 OF 24 OF THE MOBILE NOISE LAB. ON
MARCH 30 1971 FROM 17:45 TO 18:27 AT MEDFORD GRID LOCATION NO. 3-5

NOISE DATA FROM RUN 11 OF 24 OF THE MOBILE NOISE LAB. ON
MARCH 30 1971 FROM 17:45 TO 18:27 AT MEDFORD GRID LOCATION NO. 3-5

DISTRIBUTION DBA*

3	91	0
1	98	0
2	89	0
2	88	0
6	87	0
1	86	0
1	85	0
2	84	0
3	83	0
2	82	0
2	81	0
5	80	0
3	79	0
4	78	0
7	77	0
5	76	0
6	74	0
8	73	0
13	71	0
12	70	0
9	69	0
16	68	0
25	67	0
53	66	00
69	65	00
76	64	00
100	63	000
107	62	000
115	61	000
131	60	000
197	59	0000
224	58	0000
184	57	0000
246	56	00000
258	55	00000
279	54	00000
354	53	000000
491	52	00000000
690	51	0000000000
751	50	00000000000
1012	49	00000000000000
982	48	00000000000000
948	47	00000000000000
898	46	00000000000000
685	45	00000000000000
501	44	00000000000000
382	43	00000000000000
155	42	00000000000000
54	41	00000000000000
0	40	00000000000000
1	39	00000000000000
0	38	00000000000000

10000
AVERAGE= 58.3 DBA*
STANDARD DEVIATION= 5.9 DBA*
ENERGY MEAN= 61.8 DBA*
NOISE POLLUTION LEVEL= 76.9
1% PERCENTILE= 69.4 DBA*
10% DECILE= 59 DBA*
MEDIAN= 49.5 DBA*
90% DECILE= 44.8 DBA*
99% PERCENTILE= 42.3 DBA*
RANGE= 50 DB



LEVEL (DBA) VS CUMULATIVE DISTRIBUTION (PERCENT)
B-288

LEVEL (DBA) VS DISTRIBUTION (PERCENT)
B-289

*-A WEIGHTED DECIBEL-S-RE, 20 MICRONETONS PER SQUARE METER
*-DBA RE. 20 MICRONETONS PER SQUARE METER FROM AN AVERAGE OF
THE SQUARES OF THE SOUND PRESSURES.

US DEPARTMENT OF TRANSPORTATION
TRANSPORTATION SYSTEMS CENTER
NOISE ABATEMENT GROUP

NOISE DATA FROM RUN 16A OF 24 OF THE MOBILE NOISE LAB. ON
MARCH 30 1971 FROM 22:36 TO 23:19 AT MEDFORD GRID LOCATION NO. 3-5

DISTRIBUTION DBA*	2	78	0
AVERAGE*	2	69	0
STANDARD DEVIATION*	9	68	0
ENERGY MEAN*	11	67	0
NOISE POLLUTION LEVEL*	10	66	0
1% PERCENTILE*	14	65	0
10% DECILE*	18	64	0
MEDIAN*	12	63	0
90% DECILE*	15	62	0
99% PERCENTILE*	28	61	0
RANGE*	20	60	0
	23	59	0
	25	58	0
	16	57	0
	33	56	0
	33	55	0
	26	54	0
	45	53	0
	73	52	0
	93	51	0
	184	50	0
	176	49	0
	255	47	0
	485	46	0
	844	45	0
	1527	44	0
	2378	43	0
	991	41	0
	262	40	0
	34	39	0
	4	38	0
	6	37	0

LEVEL (DBA*) VS CUMULATIVE DISTRIBUTION (PERCENT)

100

80

60

40

20

0

NOISE DATA FROM RUN 16A OF 24 OF THE MOBILE NOISE LAB. ON
MARCH 30 1971 FROM 22:36 TO 23:19 AT MEDFORD GRID LOCATION NO. 3-5

2	78	0
9	69	0
11	67	0
10	66	0
14	65	0
18	64	0
12	63	0
15	62	0
28	61	0
20	60	0
23	59	0
25	58	0
16	57	0
33	56	0
33	55	0
26	54	0
45	53	0
73	52	0
93	51	0
184	50	0
176	49	0
255	47	0
485	46	0
844	45	0
1527	44	0
2378	43	0
991	41	0
262	40	0
34	39	0
4	38	0
6	37	0

LEVEL (DBA*) VS DISTRIBUTION (PERCENT)

100

80

60

40

20

0

*-A WEIGHTED DECIBEL-RE-28 MICRONETONS PER SQUARE METER
**-DBA RE-28 MICRONETONS PER SQUARE METER FROM AN AVERAGE OF
THE SQUARES OF THE SOUND PRESSURES.

US DEPARTMENT OF TRANSPORTATION
TRANSPORTATION SYSTEMS CENTER
NOISE ABATEMENT GROUP

NOISE DATA FROM RUN 13 OF 24 OF THE MOBILF NOISE LAB. ON
MARCH 30 1971 FROM 19:59 TO 20:41 AT MEDFORD GRID LOCATION NO. 3-5

DISTRIB
UTION DBA*
1 77 +
0 76 +
1 75 +
0 74 +
2 73 +
0 72 +
5 71 +
13 69 +
19 67 +
18 66 +
36 65 +
43 64 +
67 63 +
87 62 +
106 61 +
103 60 +
136 59 +
135 58 +
104 57 +
123 56 +
149 55 +
176 54 +
178 53 +
232 52 +
263 51 +
389 50 +
387 49 +
424 48 +
441 47 +
662 46 +
826 45 +
957 44 +
1369 43 +
1348 42 +
922 41 +
319 40 +
35 39 +
2 38 +
0 37 +

SAMPLES= 10000
AVERAGE= 46.6 DBA*
STANDARD DEVIATION= 5.9 DBA*
ENERGY MEAN= 53 DB**
NOISE POLLUTION LEVEL= 68.1
1% PERCENTILE= 65.1 DBA*
10% DECILE= 56.1 DBA*
MEDIAN= 45.1 DBA*
90% DECILE= 41.7 DBA*
99% PERCENTILE= 40.2 DBA*
RANGE= 39 DB

LEVEL (DBA*) VS CUMULATIVE DISTRIBUTION (PERCENT)

B-292

PAGE 2

NOISE DATA FROM RUN 13 OF 24 OF THE MOBILE NOISE LAB. ON
MARCH 30 1971 FROM 19:59 TO 20:41 AT MEDFORD GRID LOCATION NO. 3-5

1 77 0
0 76 0
1 75 0
0 74 0
2 73 0
0 72 0
2 71 0
5 70 0
13 69 0
0 68 0
19 67 0
18 66 0
36 65 0
43 64 0
67 63 0
87 62 0
106 61 0
103 60 0
136 59 0
135 58 0
104 57 0
123 56 0
149 55 0
176 54 0
178 53 0
232 52 0
263 51 0
389 50 0
387 49 0
424 48 0
441 47 0
662 46 0
826 45 0
957 44 0
1369 43 0
1348 42 0
922 41 0
319 40 0
35 39 0
2 38 0
0 37 0

DIST. DBA*0 18 20 30
LEVEL (DBA*) VS DISTRIBUTION (PERCENT)

*-A WEIGHTED DECIBELS-RE. 20 MICRONEWTONS PER SQUARE METER
**-DBA RE. 20 MICRONEWTONS PER SQUARE METER FROM AN AVERAGE OF
THE SQUARES OF THE SOUND PRESSURES.

B-293

US DEPARTMENT OF TRANSPORTATION
TRANSPORTATION SYSTEMS CENTER
NOISE ABATEMENT GROUP

NOISE DATA FROM RUN 18 OF 24 OF THE MOBILE NOISE LAB. ON
MARCH 31 1971 FROM 08:38 TO 8:16 AT MEDFORD GRID LOCATION NO. 3-5

DISTRIBUTION DBA*
1 67
8 66
1 65
8 64
2 63
4 62
2 61
8 60
5 59
4 58
5 57
4 56
12 55
15 54
32 53
29 52
27 51
19 50
42 49
23 48
22 47
35 46
45 45
56 44
98 43
132 42
262 41
783 39
1734 38
2972 37
2724 36
883 35
71 34
8 33

STATISTICS:
SAMPLES= 18888
AVERAGE= 37.5 DBA*
STANDARD DEVIATION= 2.9 DBA*
ENERGY MEAN= 48.7 DB**
NOISE POLLUTION LEVEL= 48.1
1% PERCENTILE= 58.6 DBA*
10% PERCENTILE= 39.9 DBA*
MEDIAN= 37.5 DBA*
90% PERCENTILE= 36 DBA*
99% PERCENTILE= 35 DBA*
RANGE= 33 DB

LEVEL (DBA*) VS CUMULATIVE DISTRIBUTION (PERCENT)

B-302

PAGE 2

NOISE DATA FROM RUN 18 OF 24 OF THE MOBILE NOISE LAB. ON
MARCH 31 1971 FROM 08:38 TO 8:16 AT MEDFORD GRID LOCATION NO. 3-5

1	67	0	
8	66	0	
1	65	0	
8	64	0	
2	63	0	
1	62	0	
4	61	0	
2	60	0	
1	59	0	
8	58	0	
5	57	0	
4	56	0	
12	55	0	
15	54	0	
32	53	00	
29	52	00	
27	51	00	
19	50	0	
42	49	03	
23	48	0	
22	47	0	
35	46	03	
45	45	00	
43	44	00	
56	43	00	
98	42	00	
132	41	000	
262	40	00000	
783	39	0000000000000000	
1734	38	00000000000000000000	
2972	37	00000000000000000000000000	
2724	36	0000000000000000000000000000	
883	35	0000000000000000000000000000	
71	34	00	
8	33	00	

LEVEL (DBA*) VS DISTRIBUTION (PERCENT)

*-A WEIGHTED DECIBELS-RE. 20 MICRONEWTONS PER SQUARE METER
*-DBA RE. 20 MICRONEWTONS PER SQUARE METER FROM AN AVERAGE OF
THE SQUARES OF THE SOUND PRESSURES.

B-303

U.S. DEPARTMENT OF TRANSPORTATION
TRANSPORTATION SYSTEMS CENTER
NOISE ABATEMENT GROUP

NOISE DATA FROM RUN 15A OF 24 OF THE MOBILE NOISE LAB. ON
MARCH 30 1971 FROM 21:49 TO 22:13 AT MEDFORD GRID LOCATION NO. 3-5

DISTRIE
UTION DBA*
6 88 +
8 79 +
8 78 +
2 77 +
8 76 +
2 75 +
5 74 +
5 73 +
5 72 +
8 71 +
14 70 +
15 69 +
26 68 +
33 67 +
36 66 +
35 65 +
37 64 +
41 63 +
38 61 +
51 60 +
62 59 +
75 58 +
64 57 +
67 56 +
63 55 +
66 54 +
82 53 +
93 52 +
97 51 +
143 50 +
182 49 +
199 48 +
264 47 +
462 46 +
688 45 +
1113 44 +
2532 43 +
2395 42 +
841 41 +
171 40 +
28 39 +
8 38 +

SAMPLES= 10000
AVERAGE= 45 DBA*
STANDARD DEVIATION= 5.4 DBA*
ENERGY MEAN= 54.5 DB**
NOISE POLLUTION LEVEL= 68.3
1% PERCENTILE= 67.6 DBA*
10% PERCENTILE= 61.7 DBA*
MEDIAN= 43.6 DBA*
90% DECILE= 42 DBA*
99% PERCENTILE= 41.4 DBA*
RANGE= 41 DB

LEVEL (DBA*) VS CUMULATIVE DISTRIBUTION (PERCENT)
0 20 40 60 80 100

B-296

PAGE 2

NOISE DATA FROM RUN 15A OF 24 OF THE MOBILE NOISE LAB. ON
MARCH 30 1971 FROM 21:49 TO 22:13 AT MEDFORD GRID LOCATION NO. 3-5

6 88 0
8 79 0
8 78 0
2 77 0
8 76 0
2 75 0
5 74 0
5 73 0
5 72 0
8 71 0
14 70 0
15 69 0
26 68 0
33 67 0
36 66 0
35 65 0
37 64 0
41 63 0
38 61 0
51 60 0
62 59 0
75 58 0
64 57 0
67 56 0
63 55 0
66 54 0
82 53 0
93 52 0
97 51 0
143 50 0
182 49 0
199 48 0
264 47 0
462 46 0
688 45 0
1113 44 0
2532 43 0
2395 42 0
841 41 0
171 40 0
28 39 0
8 38 0

LEVEL (DBA*) VS DISTRIBUTION (PERCENT)
DIST. DBA*8 10 20 30 40 50 60 70 80 90 100

*-A WEIGHTED DECIBEL 5-RE. 28 MICRONEWTONS PER SQUARE METER
**-DBA RE. 28 MICRONEWTONS PER SQUARE METER
THE SQUARES OF THE SOUND PRESSURES.

B-297

US DEPARTMENT OF TRANSPORTATION
 TRANSPORTATION SYSTEMS CENTER
 NOISE ABATEMENT GROUP

NOISE DATA FROM RUN 22A OF 24 OF THE MOBILE NOISE LAB. ON
 MARCH 31 1971 FROM 02:37 TO 03:19 AT MEDFORD GRID LOCATION NO. 3-5

DISTRIB	10000	DBA*
UTION DBA*	35.8	DBA*
1 55 *	1.2	DBA*
1 54 *	36.1	DB**
0 53 *	39.2	
0 52 *	40	DBA*
0 51 *	37.6	DBA*
4 50 *	36.1	DBA*
2 49 *	35.1	DBA*
2 48 *	34.1	DBA*
5 47 *	22	DB
1 46 *		
9 45 *		
4 44 *		
6 43 *		
1.4 42 *		
1.6 41 *		
32 40 *		
181 39 *		
375 38 *		
11.47 37 *		
38.53 36 *		
3628 35 *		
775 34 *		
2.4 33 *		
0 32 *		

LEVEL(DBA*) VS CUMULATIVE DISTRIBUTION (PERCENT)

NOISE DATA FROM RUN 28A OF 24 OF THE MOBILE NOISE LAB. ON
 MARCH 31 1971 FROM 02:17 TO 03:19 AT MEDFORD GRID LOCATION NO. 3-5

1 55 0	
1 54 0	
0 53 0	
0 52 0	
0 51 0	
4 50 0	
2 49 0	
2 48 0	
5 47 0	
1 46 0	
9 45 0	
4 44 0	
6 43 0	
1.4 42 0	
1.6 41 0	
32 40 00	
181 39 000	
375 38 00000000	
11.47 37 00	
38.53 36 00	
3628 35 00	
775 34 00	
2.4 33 0	

DIST. DBA*0 18 28 38

**A WEIGHTED DECIBELS-RE. 28 MICRONEWTONS PER SQUARE METER
 **-DBA RE. 20 MICRONEWTONS PER SQUARE METER FROM AN AVERAGE OF
 THE SQUARES OF THE SOUND PRESSURES.

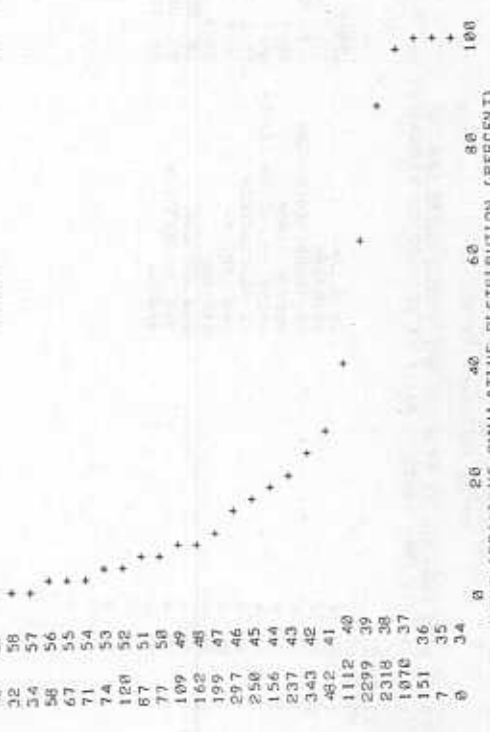
US DEPARTMENT OF TRANSPORTATION
TRANSPORTATION SYSTEMS CENTER
NOISE ABATEMENT GROUP

NOISE DATA FROM RUN NO. 17 OF 24 OF THE MOBILE NOISE LAB. ON
MARCH 30/31 1971 FROM 23:45 TO 00:27 AT MEDFORD GRID LOCATION NO. 3-5

DISTRIBUTION DBA*

1	69	0
2	67	0
9	66	0
11	65	0
17	64	0
22	63	0
23	62	0
26	61	0
33	60	0
40	59	0
54	57	0
58	56	0
67	55	0
71	54	0
77	53	0
87	51	0
109	49	0
162	48	0
199	47	0
297	46	0
258	45	0
156	44	0
237	43	0
343	42	0
482	41	0
1112	40	0
2299	39	0
2318	38	0
1070	37	0
151	36	0
7	35	0
0	34	0

SAMPLES= 10000
AVERAGE= 41.1 DBA*
STANDARD DEVIATION= 5.2 DBA*
ENERGY MEAN= 47.8 DB**
NOISE POLLUTION LEVEL= 61.1 DBA*
1% PERCENTILE= 61.6 DBA*
10% DECILE= 48.5 DBA*
MEDIAN= 39.6 DBA*
90% DECILE= 37.8 DBA*
99% PERCENTILE= 36.6 DBA*
RANGE= 3.4 DB



B-300

NOISE DATA FROM RUN NO. 17 OF 24 OF THE MOBILE NOISE LAB. ON
MARCH 30/31 1971 FROM 23:45 TO 00:27 AT MEDFORD GRID LOCATION NO. 3-5

1	69	0
2	67	0
9	66	0
11	65	0
17	64	0
22	63	0
23	62	0
26	61	0
33	60	0
40	59	0
54	57	0
58	56	0
67	55	0
71	54	0
77	53	0
87	51	0
109	49	0
162	48	0
199	47	0
297	46	0
258	45	0
156	44	0
237	43	0
343	42	0
482	41	0
1112	40	0
2299	39	0
2318	38	0
1070	37	0
151	36	0
7	35	0
0	34	0

LEVEL (DBA*) VS. DISTRIBUTION (PERCENT)

*-A WEIGHTED DECIBEL-S-RE. 20 MICRONEWTONS PER SQUARE METER
**-DBA RE. 20 MICRONEWTONS PER SQUARE METER FROM AN AVERAGE OF
THE SQUARES OF THE SOUND PRESSURES.

B-301

US DEPARTMENT OF TRANSPORTATION
TRANSPORTATION SYSTEMS CENTER
NOISE ABATEMENT GROUP

NOISE DATA FROM RUN 22 OF 24 OF THE MOBILE NOISE LAB. ON
MARCH 31 1971 FROM 04:37 TO 05:28 AT MEDFORD GRID LOCATION NO. 3-5

DISTRIB UTION DBA*	10000
1	68
0	67
0	66
0	65
1	64
1	63
5	62
11	61
13	60
15	59
13	58
13	57
10	56
18	55
21	54
15	53
13	52
13	51
18	50
18	49
21	48
14	47
156	46
156	45
192	44
266	43
475	42
823	41
1433	39
1886	38
2173	37
1414	36
227	35
15	34
1	33
0	32

SAMPLES=
AVERAGE=
STANDARD DEVIATION=
ENERGY MEAN=
NOISE POLLUTION LEVEL=
1% PERCENTILE=
10% PERCENTILE=
MEDIAN=
90% PERCENTILE=
99% PERCENTILE=
RANGE=

10000
39.2 DBA*
3.8 DBA*
43.1 DBA*
52.8
55.1 DBA*
44.6 DBA*
38.6 DBA*
36.5 DBA*
35.4 DBA*
35 DB

LEVEL (DBA*) VS CUMULATIVE DISTRIBUTION (PERCENT)

PAGE 2

NOISE DATA FROM RUN 22 OF 24 OF THE MOBILE NOISE LAB. ON
MARCH 31 1971 FROM 04:37 TO 05:28 AT MEDFORD GRID LOCATION NO. 3-5

DIST. DBA*	10	20	30
1	68	0	
0	67	0	
0	66	0	
0	65	0	
1	64	0	
1	63	0	
5	62	0	
11	61	0	
13	60	0	
15	59	0	
13	58	0	
13	57	0	
10	56	0	
18	55	0	
21	54	0	
15	53	0	
13	52	0	
13	51	0	
18	50	0	
18	49	0	
21	48	0	
14	47	0	
15	46	0	
156	45	0	
156	44	0	
192	43	0	
266	42	0	
475	41	0	
823	40	0	
1433	39	0	
1886	38	0	
2173	37	0	
1414	36	0	
227	35	0	
15	34	0	
1	33	0	
0	32	0	

*-A WEIGHTED DECIBEL-SQ. RE. 20 MICRONETONS PER SQUARE METER
*-DBA RE. 20 MICRONETONS PER SQUARE METER FROM AN AVERAGE OF
THE SQUARES OF THE SOUND PRESSURES.

B-310

B-311

US DEPARTMENT OF TRANSPORTATION
TRANSPORTATION SYSTEMS CENTER
NOISE ABATEMENT GROUP

NOISE DATA FROM RUN 19 OF 24 OF THE MOBILE NOISE LAB. ON
MARCH 31 1971 FROM 01:45 TO 02:29 AT MEDFORD GRID LOCATION NO. 3-5

DISTRIBUTION DBA*
 1 70 +
 5 69 +
 4 68 +
 3 67 +
 4 66 +
 5 65 +
 4 64 +
 1 63 +
 2 62 +
 4 61 +
 4 60 +
 12 59 +
 7 58 +
 9 57 +
 7 56 +
 6 55 +
 11 54 +
 10 53 +
 15 52 +
 21 51 +
 16 50 +
 22 49 +
 38 48 +
 34 47 +
 38 46 +
 47 45 +
 68 44 +
 54 43 +
 89 42 +
 84 41 +
 135 40 +
 268 39 +
 595 38 +
 1591 37 +
 3483 36 +
 2736 35 +
 554 34 +
 21 33 +
 8 32 +

SAMPLES= 18000
 AVERAGES= 36.7 DBA*
 STANDARD DEVIATION= 3.3 DBA*
 ENERGY MEAN= 43.7 DB**
 NOISE POLLUTION LEVEL= 52.1
 1% PERCENTILE= 52.9 DBA*
 10% DECILE= 39.1 DBA*
 MEDIAN= 36.5 DBA*
 98% DECILE= 35.2 DBA*
 99% PERCENTILE= 34.1 DBA*
 RANGE= 37 DB

LEVEL (DBA*) VS. RELATIVE DISTRIBUTION (PERCENT)

B-304

NOISE DATA FROM RUN 19 OF 24 OF THE MOBILE NOISE LAB. ON
MARCH 31 1971 FROM 01:45 TO 02:29 AT MEDFORD GRID LOCATION NO. 3-5

1 70 0
 5 69 0
 4 68 0
 3 67 0
 4 66 0
 5 65 0
 4 64 0
 1 63 0
 2 62 0
 4 61 0
 4 60 0
 12 59 0
 7 58 0
 9 57 0
 7 56 0
 6 55 0
 11 54 0
 10 53 0
 15 52 0
 21 51 0
 16 50 0
 22 49 0
 38 48 0
 34 47 0
 38 46 0
 47 45 0
 68 44 0
 54 43 0
 89 42 0
 84 41 0
 135 40 0
 268 39 0
 595 38 0
 1591 37 0
 3483 36 0
 2736 35 0
 554 34 0
 21 33 0
 8 32 0

LEVEL (DBA*) VS. DISTRIBUTION (PERCENT)

*--A WEIGHTED DECIBELS-RE. 20 MICRONEWTONS PER SQUARE METER
 **--DBA RE. 20 MICRONEWTONS PER SQUARE METER FROM AN AVERAGE OF
 THE SQUARES OF THE SOUND PRESSURES.

B-305

US DEPARTMENT OF TRANSPORTATION
TRANSPORTATION SYSTEMS CENTER
NOISE ABATEMENT GROUP

NOISE DATA FROM RUN 24A OF 24 OF THE MOBILE NOISE LAB. ON
MARCH 31 1971 FROM 06:45 TO 07:27 AT MEDFORD GRID LOCATION NO. 3-5

DISTRIB
UTION DBA*
1 88 +
2 79 +
3 77 +
8 76 +
9 75 +
13 74 +
23 73 +
28 72 +
25 71 +
48 69 +
44 67 +
56 66 +
85 65 +
85 64 +
91 63 +
83 62 +
29 68 +
44 67 +
56 66 +
85 65 +
85 64 +
91 63 +
83 62 +
104 61 +
181 60 +
187 59 +
103 58 +
114 57 +
103 56 +
102 55 +
189 54 +
135 53 +
138 52 +
227 51 +
278 50 +
386 49 +
453 48 +
652 47 +
1164 46 +
1842 45 +
2243 44 +
918 43 +
79 42 +
8 41

SAMPLES= 10000
AVERAGE= 48 DBA*
STANDARD DEVIATION= 6.3 DBA*
ENERGY MEAN= 57.1 DB**
NOISE POLLUTION LEVEL= 73.2
1% PERCENTILE= 78.9 DBA*
10% DECILE= 58.5 DBA*
MEDIAN= 46 DBA*
90% DECILE= 44 DBA*
99% PERCENTILE= 43 DBA*
RANGE= 38 DB

LEVEL (DBA*) VS CUMULATIVE DISTRIBUTION (PERCENT)

B-314

NOISE DATA FROM RUN 24A OF 24 OF THE MOBILE NOISE LAB. ON
MARCH 31 1971 FROM 06:45 TO 07:27 AT MEDFORD GRID LOCATION NO. 3-5

1 88 0
2 79 0
3 77 0
8 76 0
9 75 0
13 74 0
23 73 0
28 72 0
25 71 0
48 69 0
44 67 0
56 66 0
85 65 0
85 64 0
91 63 0
83 62 0
104 61 0
181 60 0
187 59 0
103 58 0
114 57 0
103 56 0
102 55 0
189 54 0
135 53 0
138 52 0
227 51 0
278 50 0
386 49 0
453 48 0
652 47 0
1164 46 0
1842 45 0
2243 44 0
918 43 0
79 42 0
8 41

LEVEL (DBA*) VS DISTRIBUTION (PERCENT)

** A WEIGHTED DECIBEL-RE. 20 MICRONEWTONS PER SQUARE METER
** DBA RE. 20 MICRONEWTONS PER SQUARE METER FROM AN AVERAGE OF
THE SQUARES OF THE SOUND PRESSURES.

NOISE DATA FROM RUN NO. 21 OF 24 OF THE MOBILE NOISE LAB. ON
 MARCH 31 1971 FROM 03:45 TO 04:31 AT MEDFORD GRID LOCATION NO. 3-5

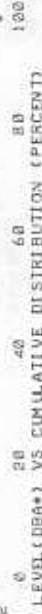
US DEPARTMENT OF TRANSPORTATION
 TRANSPORTATION SYSTEMS CENTER
 NOISE ABATEMENT GROUP

NOISE DATA FROM RUN NO. 21 OF 24 OF THE MOBILE NOISE LAB. ON
 MARCH 31 1971 FROM 03:45 TO 04:31 AT MEDFORD GRID LOCATION NO. 3-5

DISTRIBUTION DBA*
 1 56 +
 0 55 +
 0 54 +
 1 53 +
 0 52 +
 0 51 +
 0 49 +
 3 48 +
 2 46 +
 4 45 +
 11 44 +
 40 43 +
 85 42 +
 182 41 +
 153 40 +
 341 39 +
 616 38 +
 1638 37 +
 3817 36 +
 2651 35 +
 518 34 +
 19 33 +
 0 32 +

SAMPLES= 18000
 AVERAGE= 36.2 DBA*
 STANDARD DEVIATION= 1.6 DBA*
 ENERGY MEAN= 36.7 DB**
 NOISE POLLUTION LEVEL= 40.8
 1% PERCENTILE= 42.6 DBA*
 10% DECILE= 38.6 DBA*
 MEDIAN= 36.5 DBA*
 90% DECILE= 35.2 DBA*
 99% PERCENTILE= 34.2 DBA*
 RANGE= 23 DB

LEVEL (DBA*) VS CUMULATIVE DISTRIBUTION (PERCENT)



DIST. DBA*0 LEVEL (DBA*) 10 20 30 3B

**A WEIGHTED DECIBELS-RE. 20 MICRONETONS PER SQUARE METER
 ***DBA RE. 20 MICRONETONS PER SQUARE METER FROM AN AVERAGE OF
 THE SQUARES OF THE SOUND PRESSURES.

US DEPARTMENT OF TRANSPORTATION
TRANSPORTATION SYSTEMS CENTER
NOISE ABATEMENT GROUP

NOISE DATA FROM RUN 1 OF 24 OF THE MOBILE NOISE LAB. ON
MAY 11 1971 FROM 12:41 TO 13:21 AT MEDFORD GRID LOCATION 4-7

DISTRIBUTION DBA*
 1 77 *
 0 76 *
 1 75 *
 0 74 *
 0 73 *
 0 72 *
 1 71 *
 2 70 *
 6 69 *
 10 68 *
 16 67 *
 15 66 *
 24 65 *
 37 64 *
 46 63 *
 53 62 *
 57 61 *
 42 60 *
 73 59 *
 110 58 *
 88 57 *
 121 56 *
 105 55 *
 107 54 *
 92 53 *
 116 52 *
 121 51 *
 158 50 *
 155 49 *
 127 48 *
 122 47 *
 114 46 *
 136 45 *
 185 44 *
 268 43 *
 318 42 *
 512 41 *
 1852 40 *
 1857 39 *
 2377 38 *
 897 37 *
 75 36 *
 3 35 *
 0 34 *

SAMPLES= 9600
 AVERAGE= 42.1 DBA*
 STANDARD DEVIATION= 6.6 DBA*
 ENERGY MEAN= 51.2 DB**
 NOISE POLLUTION LEVEL= 60.1
 1% PERCENTILE= 64.5 DBA*
 10% DECILE= 53.5 DBA*
 MEDIAN= 39.8 DBA*
 90% DECILE= 38 DBA*
 99% PERCENTILE= 37 DBA*
 RANGE= 42 DB

0 20 40 60 80 100
 LEVEL (DBA*) VS CUMULATIVE DISTRIBUTION (PERCENT)

B-318

NOISE DATA FROM RUN 1 OF 24 OF THE MOBILE NOISE LAB. ON
MAY 11 1971 FROM 12:41 TO 13:21 AT MEDFORD GRID LOCATION 4-7

1 77 0
 0 76 0
 1 75 0
 0 74 0
 0 73 0
 0 72 0
 1 71 0
 2 70 0
 6 69 0
 10 68 0
 16 67 0
 15 66 0
 24 65 0
 37 64 0
 46 63 0
 53 62 0
 57 61 0
 42 60 0
 73 59 0
 110 58 0
 88 57 0
 121 56 0
 105 55 0
 107 54 0
 92 53 0
 116 52 0
 121 51 0
 158 50 0
 155 49 0
 127 48 0
 122 47 0
 114 46 0
 136 45 0
 185 44 0
 268 43 0
 318 42 0
 512 41 0
 1852 40 0
 1857 39 0
 2377 38 0
 897 37 0
 75 36 0
 3 35 0
 0 34 0

LEVEL (DBA*) VS DISTRIBUTION (PERCENT)

**A WEIGHTED DECIBELS-RE. 20 MICRONEWTONS PER SQUARE METER
 **DBA RE. 20 MICRONEWTONS PER SQUARE METER FROM AN AVERAGE OF
 THE SQUARES OF THE SOUND PRESSURES.

B-319

US DEPARTMENT OF TRANSPORTATION
TRANSPORTATION SYSTEMS CENTER
NOISE ABATEMENT GROUP

NOISE DATA FROM RUN 23A OF 24 OF THE MOBILE NOISE LAB. ON
MARCH 31 1971 FROM 05:15 TO 06:22 AT MEDFORD GRID LOCATION NO. 3-5

DISTRIB		
UTION DBA*		
1 73 0		8900
8 72 0	AVERAGE=	44.7 DBA*
8 71 0	STANDARD DEVIATION=	3.9 DBA*
8 70 0	ENERGY MEAN=	49.5 DB**
1 69 0	NOISE POLLUTION LEVEL=	59.5
2 68 0	1% PERCENTILE*	63.2 DBA*
7 67 0	10% DECILE=	68.5 DBA*
6 66 0	MEDIAN*	74.4 DBA*
15 65 0	90% DECILE=	82.6 DBA*
23 64 0	99% PERCENTILE=	91.6 DBA*
41 63 0	RANGE*	33 DB
47 62 0		
46 61 0		
35 60 0		
34 59 0		
28 58 0		
28 57 0		
18 56 0		
43 55 0		
51 54 0		
49 53 0		
73 52 0		
67 51 0		
78 50 0		
137 49 000		
150 48 0000		
280 47 0000000		
445 46 0000000000		
792 45 00000000000000		
1874 44 000000000000000000000000000000		
3876 43 000000000000000000000000000000		
1313 42 000000000000000000000000000000		
151 41 0000		
4 40 0		
8 39 0		



LEVEL (DBA) 28 48 68 88 100
DISTRIBUTION DBA* 1 8

NOISE DATA FROM RUN 23A OF 24 OF THE MOBILE NOISE LAB. ON
MARCH 31 1971 FROM 05:45 TO 06:22 AT MEDFORD GRID LOCATION NO. 3-5

1 73 0		
8 72 0		
8 71 0		
8 70 0		
1 69 0		
2 68 0		
7 67 0		
6 66 0		
15 65 0		
23 64 0		
41 63 00		
47 62 00		
46 61 00		
35 60 00		
34 59 00		
28 58 00		
28 57 0		
18 56 0		
43 55 00		
51 54 00		
42 53 00		
73 52 00		
67 51 00		
78 50 00		
137 49 000		
150 48 0000		
280 47 0000000		
445 46 0000000000		
792 45 00000000000000		
1874 44 000000000000000000000000000000		
3876 43 000000000000000000000000000000		
1313 42 000000000000000000000000000000		
151 41 0000		
4 40 0		
8 39 0		

LEVEL (DBA) 10 20 30
DISTR. DBA* 8 30

*-A WEIGHTED DECIBELS-RE. 28 MICROWATTS PER SQUARE METER
*-DBA RE. 28 MICROWATTS PER SQUARE METER FROM AN AVERAGE OF
THE SQUARES OF THE SOUND PRESSURES.

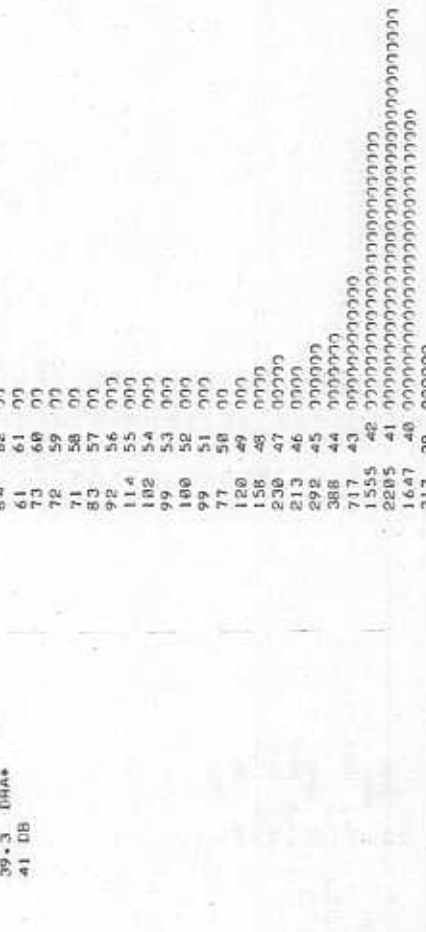
NOISE DATA FROM RUN 3A OF 24 OF THE MOBILE NOISE LAB. ON
MAY 11 1971 FROM 14:40 TO 15:20 AT MEDFORD GRID LOCATION 4-7

US DEPARTMENT OF TRANSPORTATION
TRANSPORTATION SYSTEMS CENTER
NOISE ABATEMENT GROUP

NOISE DATA FROM RUN 3A OF 24 OF THE MOBILE NOISE LAB. ON
MAY 11 1971 FROM 14:40 TO 15:20 AT MEDFORD GRID LOCATION 4-7

UNITS*	96dB
1	45.2 DBA*
2	7.7 DBA*
3	57.3 DB**
4	77
5	71.1 DBA*
6	58.3 DBA*
7	42.4 DBA*
8	48.4 DBA*
9	39.3 DBA*
10	41 DB

SAMPLES= 9600
AVERAGE= 45.2 DBA*
STANDARD DEVIATION= 7.7 DBA*
ENERGY MEAN= 57.3 DB**
NOISE POLLUTION LEVEL= 77
13 PERCENTILE= 71.1 DBA*
10% DECILE= 58.3 DBA*
MEDIAN= 42.4 DBA*
90% DECILE= 48.4 DBA*
99% PERCENTILE= 39.3 DBA*
RANGE= 41 DB



DIST. DBA* 10 20 30
LEVEL (DBA*) VS DISTRIBUTION (PERCENT)

*-A WEIGHTED DECIBELS-RE. 20 MICROMETONS PER SQUARE METER
**-DBA RE. 20 MICROMETONS PER SQUARE METER FROM AN AVERAGE OF
THE SQUARES OF THE SOUND PRESSURES.

SITE DATA

Community: Medford, Massachusetts

Grid Location: 4-7

Microphone: Approximately 300 ft. east-northeast of the intersection of Playstead Road and Winthrop Street

Site Description: Microphone located on small hill with exposed ledge in undeveloped wooded area.

DATE	May 1971	11	11	11	11	11	11	11/12
TIME (From)	1240	1440	1640	1840	2040	2240	2040	2240
(To)	1420	1620	1820	2020	2220	0020	2220	0020
TAPE NO. (SAL)	67-71	67-71	58-71	68-71	68-71	69-71	69-71	69-71
SIDE	1	2	1	2	2	1	1	2
TRACK	3 6 4	3 6 4	3 6 4	3 6 4	3 6 4	3 6 4	3 6 4	3 6 4
ROAD SURFACE	dry	dry	dry	dry	dry	dry	dry	dry
TEMPERATURE (F°)	76	77	72	70	65	68	68	54
SKY CONDITION	Clear	Clear	Clear	Clear	Clear	Clear	Clear	Clear
RELATIVE HUMIDITY (%)	30	31	25	29	42	60	60	64
BAROMETRIC PRESSURE MH of MERCURY	767	767	766	767	767	767	767	767
WIND DIRECTION	var.	E	E	var.	var.	var.	var.	var.
VELOCITY (MPH)	1	3-5	3	1	1	0	0	0

Special Events: 1940-2:20 Frog Chirping Event

B-316

SITE DATA

Community: Medford, Massachusetts

Grid Location: 4-7

Microphone: See sheet 1 of 2

Site Description: See sheet 1 of 2

DATE	12	12	12	12	12	12	12	12
TIME (From)	0040	0240	0440	0640	0840	1040	0840	1040
(To)	0220	0420	0620	0820	1020	1220	1020	1220
TAPE NO. (SAL)	70-71	70-71	71-71	71-71	71-71	72-71	72-71	72-71
SIDE	1	2	1	2	1	2	1	2
TRACK	3 6 4	3 6 4	3 6 4	3 6 4	3 6 4	3 6 4	3 6 4	3 6 4
ROAD SURFACE	dry	dry	dry	dry	dry	dry	dry	dry
TEMPERATURE (F°)	52	51	49	60	75	75	75	75
SKY CONDITION	Clear	Clear	Clear	Clear	Clear	P. C.	P. C.	P. C.
RELATIVE HUMIDITY (%)	80	84	86	60	39	39	39	39
BAROMETRIC PRESSURE MH of MERCURY	767	767	767	767	766	765	765	765
WIND DIRECTION	---	---	---	S	SE	SE	SE	SE
VELOCITY (MPH)	0	0	0	0	1	2	4	4

Special Events:

B-317

US DEPARTMENT OF TRANSPORTATION
TRANSPORTATION SYSTEMS CENTER
NOISE ABATEMENT GROUP

NOISE DATA FROM RUN 5 OF 24 OF THE MOBILE NOISE LAB. ON
MAY 11 1971 FROM 16:58 TO 17:30 AT MEDFORD GRID LOCATION 4-7

DISTRIB
UTION DBA**

1	69	9.688
1	68	4.4
0	67	3.2
2	66	46.7
2	65	54.9
2	64	58.4
1.4	63	47.8
15	62	43.7
15	61	41.9
13	60	40.5
1.4	59	38
28	58	
28	57	
22	56	
28	55	
36	54	
49	53	
75	52	
105	51	
97	50	
165	49	
165	48	
334	47	
589	46	
867	45	
1467	44	
2470	43	
1990	42	
817	41	
174	40	
15	39	
0	38	

SAMPLES= 9.688
AVERAGE= 4.4 DBA*
STANDARD DEVIATION= 3.2 DBA*
ENERGY MEAN= 46.7 DB**
NOISE POLLUTION LEVEL= 54.9
1% PERCENTILE= 58.4 DBA*
10% DECILE= 47.8 DBA*
MEDIAN= 43.7 DBA*
90% DECILE= 41.9 DBA*
99% PERCENTILE= 40.5 DBA*
RANGE= 38 DB

LEVEL (DBA**) VS CUMULATIVE DISTRIBUTION (PERCENT)

NOISE DATA FROM RUN 5 OF 24 OF THE MOBILE NOISE LAB. ON
MAY 11 1971 FROM 16:58 TO 17:30 AT MEDFORD GRID LOCATION 4-7

1	69	0
1	68	0
0	67	0
2	66	0
2	65	0
2	64	0
1.4	63	0
15	62	0
15	61	0
13	60	0
1.4	59	0
28	58	00
28	57	00
22	56	0
28	55	00
36	54	00
49	53	00
75	52	00
105	51	0000
97	50	0000
165	49	0000
165	48	0000
334	47	000000
589	46	0000000000
867	45	00000000000000
1467	44	000000000000000000
2470	43	00000000000000000000
1990	42	0000000000000000000000
817	41	0000000000000000
174	40	00000
15	39	0
0	38	0

DIST. DBA** LEVEL (DBA**) VS DISTRIBUTION (PERCENT) 20 30

** - A WEIGHTED DECIBEL-S-RE-20 MICRONEWTONS PER SQUARE METER
** - DBA RE-20 MICRONEWTONS PER SQUARE METER FROM AN AVERAGE OF
THE SQUARES OF THE SOUND PRESSURES.

US DEPARTMENT OF TRANSPORTATION
TRANSPORTATION SYSTEMS CENTER
NOISE ABATEMENT GROUP

NOISE DATA FROM RUN 2 OF 24 OF THE MOBILE NOISE LAB. ON
MAY 11 1971 FROM 13:40 TO 14:28 AT MEDFORD GRID LOCATION 4-7

DISTRI
BUTION DBA*

SAMPLES* 9600
AVERAGE= 41 DBA*
STANDARD DEVIATION= 4 DBA*
ENERGY MEAN= 47.1 DB**
NOISE POLLUTION LEVEL= 57.3
1% PERCENTILE= 60 DBA*
10% DECILE= 44.9 DBA*
MEDIAN= 40.4 DBA*
90% DECILE= 38.9 DBA*
99% PERCENTILE= 35 DB

2 71 +
4 70 +
1 69 +
4 68 +
5 67 +
8 66 +
5 64 +
7 63 +
12 62 +
25 61 +
15 60 +
19 59 +
23 58 +
30 57 +
27 56 +
29 55 +
39 54 +
42 53 +
48 52 +
50 51 +
73 50 +
58 49 +
76 48 +
86 47 +
110 46 +
133 45 +
214 44 +
435 43 +
781 42 +
1007 41 +
2275 40 +
2868 39 +
1009 38 +
69 37 +
1 36 +
8 35

LEVEL (DBA*) VS CUMULATIVE DISTRIBUTION (PERCENT)

NOISE DATA FROM RUN 2 OF 24 OF THE MOBILE NOISE LAB. ON
MAY 11 1971 FROM 13:40 TO 14:28 AT MEDFORD GRID LOCATION 4-7

2 71 0
4 70 0
1 69 0
4 68 0
5 67 0
8 66 0
8 65 0
5 64 0
7 63 0
12 62 0
25 61 0
15 60 0
19 59 0
23 58 0
30 57 0
27 56 0
29 55 0
39 54 0
42 53 0
48 52 0
58 51 0
58 49 0
76 48 0
88 47 0
118 46 0
133 45 0
214 44 0
435 43 0
781 42 0
1007 41 0
2275 40 0
2868 39 0
1009 38 0
69 37 0
1 36 0

DIST. DBA*0 10 20 30
LEVEL (DBA*) VS DISTRIBUTION (PERCENT)

*-A WEIGHTED DECIBELS-RE. 28 MICRONETONS PER SQUARE METER
*-DBA RE. 28 MICRONETONS PER SQUARE METER FROM AN AVERAGE OF
THE SQUARES OF THE SOUND PRESSURES.

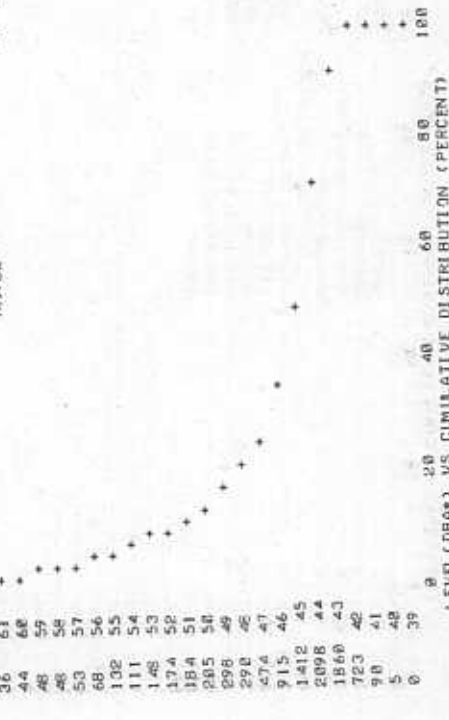
NOISE DATA FROM RUN 7 OF 24 OF THE MOBILE NOISE LAB. ON
MAY 11 1971 FROM 18:48 TO 19:28 AT MEDFORD GRID LOCATION 4-7

US DEPARTMENT OF TRANSPORTATION
TRANSPORTATION SYSTEMS CENTER
NOISE ABATEMENT GROUP

NOISE DATA FROM RUN 7 OF 24 OF THE MOBILE NOISE LAB. ON
MAY 11 1971 FROM 18:40 TO 19:28 AT MEDFORD GRID LOCATION 4-7

DISTRIB
UTION DBA*
1 71 0
1 70 0
5 69 0
6 68 0
13 67 0
18 66 0
28 65 0
37 64 0
47 63 0
47 62 0
36 61 0
44 60 0
48 59 0
48 58 0
53 57 0
68 56 0
132 55 0
111 54 0
148 53 0
174 52 0
184 51 0
205 50 0
208 49 0
298 48 0
276 47 0
915 46 0
2098 44 0
1868 43 0
723 42 0
98 41 0
5 40 0
0 39 0

SAMPLES= 9600
AVERAGE= 46 DBA*
STANDARD DEVIATION= 4.4
ENERGY MEAN= 58.8 DB**
NOISE POLLUTION LEVEL= 62.1
1% PERCENTILE= 64.1 DBA*
10% DECILE= 58.5 DBA*
MEDIAN= 45 DBA*
90% DECILE= 43.1 DBA*
99% PERCENTILE= 40 DBA*
RANGE= 31 DB



LEVEL (DBA*) VS CUMULATIVE DISTRIBUTION (PERCENT)

1 71 0
1 70 0
5 69 0
6 68 0
13 67 0
18 66 0
28 65 0
37 64 0
47 63 0
47 62 0
36 61 0
44 60 0
48 59 0
48 58 0
53 57 0
68 56 0
132 55 0
111 54 0
148 53 0
174 52 0
184 51 0
205 50 0
208 49 0
298 48 0
276 47 0
915 46 0
2098 44 0
1868 43 0
723 42 0
98 41 0
5 40 0
0 39 0

DIST. DBA*8 18 20 28 30

LEVEL (DBA*) VS DISTRIBUTION (PERCENT)

**-- DBA RE. 28 MICRONEWTONS PER SQUARE METER FROM AN AVERAGE OF

THE SQUARES OF THE SOUND PRESSURES.

NOISE DATA FROM RUN 4 OF 24 OF THE MOBILE NOISE LAB. ON
MAY 11 1971 FROM 15:45 TO 16:25 AT MEDFORD GRID LOCATION 4-7

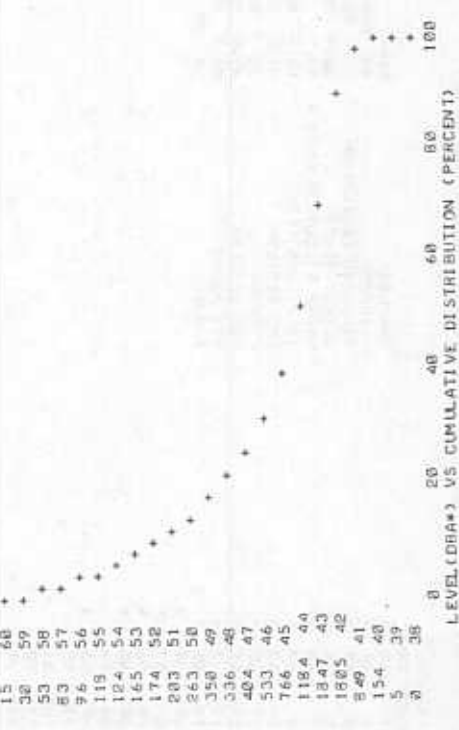
1	71	0
3	69	0
4	68	0
1	67	0
3	66	0
4	65	0
4	64	0
6	63	0
4	62	0
12	61	0
15	60	0
30	59	00
53	58	00
83	57	00
96	56	000
119	55	000
124	54	000
165	53	0000
174	52	0000
203	51	0000
263	50	00000
336	49	0000000
336	48	0000000
484	47	00000000
533	46	000000000
766	45	000000000000000
1184	44	0000000000000000000
1847	43	000000000000000000000
1805	42	00000000000000000000000
849	41	00000000000000000000000
154	40	0000
5	39	0
0	38	0

*-A WEIGHTED DECIBEL-S-RE. 20 MICRONEWTONS PER SQUARE METER
**-DBA RE. 20 MICRONEWTONS PER SQUARE METER FROM AN AVERAGE OF
THE SQUARES OF THE SOUND PRESSURES.

US DEPARTMENT OF TRANSPORTATION
TRANSPORTATION SYSTEMS CENTER
NOISE ABATEMENT GROUP

NOISE DATA FROM RUN 4 OF 24 OF THE MOBILE NOISE LAB. ON
MAY 11 1971 FROM 15:45 TO 16:25 AT MEDFORD GRID LOCATION 4-7

DISTRI	1	71	+	9.680	DBA*
UTION	3	69	+	45.1	DBA*
	4	68	+	4.2	DBA*
	1	67	+	25.6	DB**
	3	66	+	59.4	DBA*
	4	65	+	58.8	DBA*
	4	64	+	51.7	DBA*
	6	63	+	44.1	DBA*
	4	62	+	41.9	DBA*
	12	61	+	40.6	DBA*
	15	60	+	32	DB
	30	59	+		
	53	58	+		
	83	57	+		
	96	56	+		
	119	55	+		
	124	54	+		
	165	53	+		
	174	52	+		
	203	51	+		
	263	50	+		
	336	49	+		
	336	48	+		
	484	47	+		
	533	46	+		
	766	45	+		
	1184	44	+		
	1847	43	+		
	1805	42	+		
	849	41	+		
	154	40	+		
	5	39	+		
	0	38	+		



NOISE DATA FROM RUN NO. 9 OF 24 OF THE MOBILE NOISE LAB. ON
MAY 11 1971 FROM 20:42 TO 21:22 AT MEDFORD GRID LOCATION 4-7

US DEPARTMENT OF TRANSPORTATION
TRANSPORTATION SYSTEMS CENTER
NOISE ABATEMENT GROUP

NOISE DATA FROM RUN NO. 9 OF 24 OF THE MOBILE NOISE LAB. ON
MAY 11 1971 FROM 20:42 TO 21:22 AT MEDFORD GRID LOCATION 4-7

DISTRIB	UTION DBA*	9.600	DBA*
1	75	54.8	DBA*
0	74	1.5	DB**
0	73	55.1	DB**
0	72	58.9	
0	71	38.7	DBA*
0	70	57.2	DBA*
0	69	55.3	DBA*
1	68	53.2	DBA*
0	67	51.7	DBA*
0	66		
0	65		
0	64	26	DB
0	63		
0	62		
1	61		
1	60		
2.4	59		
239	58		
836	57		
1981	56		
2599	55		
2847	54		
1245	53		
574	52		
187	51		
21	50		
3	49		
0	48		

SAMPLES= 9.600
 AVERAGE= 54.8 DBA*
 STANDARD DEVIATION= 1.5 DBA*
 ENERGY MEAN= 55.1 DB**
 NOISE POLLUTION LEVEL= 58.9
 1% PERCENTILE= 38.7 DBA*
 10% DECILE= 57.2 DBA*
 MEDIAN= 55.3 DBA*
 90% DECILE= 53.2 DBA*
 99% PERCENTILE= 51.7 DBA*
 RANGE= 26 DB

DIST. DBA*0 10 20 30
LEVEL (DBA*) VS DISTRIBUTION (PERCENT)

*-A WEIGHTED DECIBELS-RE. 20 MICROWATTS PER SQUARE METER
*-DBA RE. 20 MICROWATTS PER SQUARE METER FROM AN AVERAGE OF
THE SQUARES OF THE SOUND PRESSURES.

0	20	40	60	80	100
+					
+					
+					
+					
+					

LEVEL (DBA*) VS CUMULATIVE DISTRIBUTION (PERCENT)

NOISE DATA FROM RUN 6 OF 24 OF THE MOBILE NOISE LAB. ON
MAY 11 1971 FROM 17:46 TO 18:28 AT MEDFORD GRID LOCATION 4-7

US DEPARTMENT OF TRANSPORTATION
TRANSPORTATION SYSTEMS CENTER
NOISE ABATEMENT GROUP

NOISE DATA FROM RUN 6 OF 24 OF THE MOBILE NOISE LAB. ON
MAY 11 1971 FROM 17:46 TO 18:28 AT MEDFORD GRID LOCATION 4-7

DISTRIB
 UTION DBA*
 1 64 +
 1 63 +
 1 62 +
 8 61 +
 9 60 +
 21 59 +
 29 58 +
 35 56 +
 37 55 +
 44 53 +
 72 52 +
 84 51 +
 81 50 +
 113 49 +
 188 48 +
 147 47 +
 213 46 +
 271 45 +
 486 44 +
 1216 43 +
 2879 42 +
 1945 41 +
 828 40 +
 86 39 +
 1 38 +
 0 37 +

SAMPLES= 8000
 AVERAGE= 43 DBA*
 STANDARD DEVIATION= 3.4 DBA*
 ENERGY MEAN= 45.7 DBA*
 NOISE POLLUTION LEVEL= 54.4
 1% PERCENTILE= 57.8 DBA*
 10% DECILE= 47.5 DBA*
 MEDIAN= 42.5 DBA*
 90% DECILE= 40.9 DBA*
 99% PERCENTILE= 39.9 DBA*
 RANGE= 2.6 DB

LEVEL (DBA*) VS DISTRIBUTION (PERCENT)

*-A WEIGHTED DECIBEL-S-RE. 20 MICRONEMTONS PER SQUARE METER
**-DBA RE. 20 MICRONEMTONS PER SQUARE METER FROM AN AVERAGE OF
THE SQUARES OF THE SOUND PRESSURES.

LEVEL (DBA*) VS CUMULATIVE DISTRIBUTION (PERCENT)

US DEPARTMENT OF TRANSPORTATION
TRANSPORTATION SYSTEMS CENTER
NOISE ABATEMENT GROUP

NOISE DATA FROM RUN NO. 11 OF 24 OF THE MOBILE NOISE LAB. ON
MAY 11 1971 FROM 22:48 TO 23:28 AT MEDFORD GRID LOCATION 4-7

DISTRI-
UTION DBA*
1 70 0
1 69 0
13 68 0
16 67 0
13 66 0
22 65 0
20 64 0
15 63 0
17 62 0
18 61 0
8 60 0
11 58 0
16 57 0
20 56 0
24 55 0
33 54 0
18 53 0
8 52 0
98 51 000
147 50 000
196 49 0000
274 48 00000
419 47 0000000
628 46 0000000000
1127 45 0000000000000000000
1463 44 00000000000000000000000
1827 43 0000000000000000000000000
1785 42 0000000000000000000000000
985 41 0000000000000000000000000
279 40 00000
34 39 00
2 38 0
8 37 0

SAMPLES= 9600
AVERAGE= 44.3 DBA*
STANDARD DEVIATION= 3.7 DBA*
ENERGY MEAN= 49 DB**
NOISE POLLUTION LEVEL= 58.5
1% PERCENTILE= 63.3 DBA*
10% DECILE= 48.3 DBA*
MEDIAN= 43.9 DBA*
90% DECILE= 41.7 DBA*
99% PERCENTILE= 40.2 DBA*
RANGE= 32 DB

LEVEL (DBA*) VS CUMULATIVE DISTRIBUTION (PERCENT)
80 80 100

B-338

NOISE DATA FROM RUN NO. 11 OF 24 OF THE MOBILE NOISE LAB. ON
MAY 11 1971 FROM 22:48 TO 23:28 AT MEDFORD GRID LOCATION 4-7

1 70 0
1 69 0
13 68 0
16 67 0
13 66 0
22 65 0
20 64 0
15 63 0
17 62 0
18 61 0
8 60 0
11 58 0
16 57 0
20 56 0
24 55 0
33 54 00
18 53 0
62 52 00
98 51 000
147 50 000
196 49 0000
274 48 00000
419 47 0000000
628 46 0000000000
1127 45 0000000000000000000
1463 44 00000000000000000000000
1827 43 0000000000000000000000000
1785 42 0000000000000000000000000
985 41 0000000000000000000000000
279 40 00000
34 39 00
2 38 0
8 37 0

DIST. DBA*8 10 20 30
LEVEL (DBA*) VS DISTRIBUTION (PERCENT)

*-A WEIGHTED DECIBEL S-RE. 20 MICRONETONS PER SQUARE METER
**-DBA RE. 20 MICRONETONS PER SQUARE METER FROM AN AVERAGE OF
THE SQUARES OF THE SOUND PRESSURES.

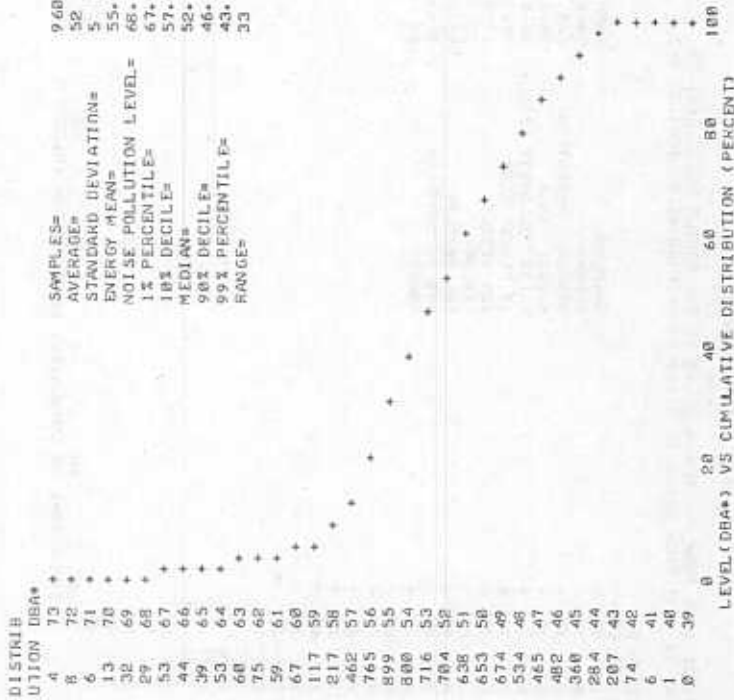
B-339

US DEPARTMENT OF TRANSPORTATION
TRANSPORTATION SYSTEMS CENTER
NOISE ABATEMENT GROUP

NOISE DATA FROM RUN 8 OF 24 OF THE MOBILE NOISE LAB. ON
MAY 11 1971 FROM 19:40 TO 20:20 AT MEDFORD GRID LOCATION A-7

DISTRI- BUTION	4	73	0
UTION	8	72	0
	6	71	0
	13	70	0
	32	69	0
	29	68	00
	53	67	00
	44	66	00
	39	65	00
	53	64	00
	68	63	00
	75	62	00
	59	61	00
	67	60	00
	117	59	000
	217	58	0000
	462	57	00000000
	765	56	000000000000
	899	55	00000000000000
	888	54	00000000000000
	716	53	00000000000000
	704	52	00000000000000
	638	51	00000000000000
	653	50	00000000000000
	674	49	00000000000000
	534	48	00000000000000
	465	47	0000000000
	482	46	0000000000
	360	45	00000000
	284	44	00000000
	207	43	0000
	74	42	00
	6	41	0
	1	40	0
	0	39	0

SAMPLES= 9688
AVERAGE= 52 DBA*
STANDARD DEVIATION= 5 DBA*
ENERGY MEAN= 55.9 DB**
NOISE POLLUTION LEVEL= 66.7
1% PERCENTILE= 67.9 DBA*
10% DECILE= 57.8 DBA*
MEDIAN= 52.6 DBA*
90% DECILE= 46.1 DBA*
99% PERCENTILE= 43.1 DBA*
RANGES= 33 DB



NOISE DATA FROM RUN 8 OF 24 OF THE MOBILE NOISE LAB. ON
MAY 11 1971 FROM 19:40 TO 20:20 AT MEDFORD GRID LOCATION A-7

4	73	0
8	72	0
6	71	0
13	70	0
32	69	00
29	68	00
53	67	00
44	66	00
39	65	00
53	64	00
68	63	00
75	62	00
59	61	00
67	60	00
117	59	000
217	58	0000
462	57	00000000
765	56	000000000000
899	55	00000000000000
888	54	00000000000000
716	53	00000000000000
704	52	00000000000000
638	51	00000000000000
653	50	00000000000000
674	49	00000000000000
534	48	00000000000000
465	47	0000000000
482	46	0000000000
360	45	00000000
284	44	00000000
207	43	0000
74	42	00
6	41	0
1	40	0
0	39	0

DIST. DBA** LEVEL (DBA*) VS DISTRIBUTION (PERCENT) 38

*-A WEIGHTED DECIBEL-SQ. RE. 20 MICRONETONS PER SQUARE METER
**-DBA RE. 20 MICRONETONS PER SQUARE METER FROM AN AVERAGE OF
THE SQUARES OF THE SOUND PRESSURES.

US DEPARTMENT OF TRANSPORTATION
 TRANSPORTATION SYSTEMS CENTER
 NOISE ABATEMENT GROUP

NOISE DATA FROM RUN NO. 13 OF 24 OF THE MOBILE NOISE LAB. ON
 MAY 12 1971 FROM 00:47 TO 01:27 AT MEDFORD GRID LOCATION 4-7

DISTRIB UTION DBA*	9680
1 55 *	39.9 DBA*
1 54 *	2.4 DBA*
3 53 *	48.7 DBA*
2 52 *	46.8
4 51 *	47.6 DBA*
6 50 *	43.6 DBA*
21 49 *	48 DBA*
37 48 *	37.6 DBA*
56 47 *	36.2 DBA*
106 46 *	21 DB
209 45 *	
312 44 *	
528 43 *	
813 42 *	
1179 41 *	
1569 40 *	
1874 39 *	
1511 38 *	
988 37 *	
336 36 *	
42 35 *	
8 34 *	
8 33 *	

SAMPLES= 9680
 AVERAGES= 39.9 DBA*
 STANDARD DEVIATION= 2.4 DBA*
 ENERGY MEAN= 48.7 DBA*
 NOISE POLLUTION LEVEL= 46.8
 1% PERCENTILE= 47.6 DBA*
 10% DECILE= 43.6 DBA*
 MEDIAN= 48 DBA*
 90% DECILE= 37.6 DBA*
 99% PERCENTILE= 36.2 DBA*
 RANGE= 21 DB

0 20 40 60 80 100
 LEVEL (DBA*) VS CUMULATIVE DISTRIBUTION (PERCENT)

1 55 0	
1 54 0	
3 53 0	
2 52 0	
4 51 0	
6 50 0	
21 49 0	
37 48 00	
56 47 00	
106 46 000	
209 45 0000	
312 44 000000	
528 43 00000000	
813 42 0000000000	
1179 41 000000000000	
1569 40 00000000000000	
1874 39 0000000000000000	
1511 38 000000000000000000	
988 37 000000000000000000	
336 36 000000	
42 35 00	
8 34 0	
8 33 0	

LEVEL (DBA*) VS DISTRIBUTION (PERCENT)

*-A WEIGHTED DECIBEL-S-RE. DB MICROWATTS PER SQUARE METER
 **-DBA RE. DB MICROWATTS PER SQUARE METER FROM AN AVERAGE OF
 THE SQUARES OF THE SOUND PRESSURES.

US DEPARTMENT OF TRANSPORTATION
TRANSPORTATION SYSTEMS CENTER
NOISE ABATEMENT GROUP

NOISE DATA FROM RUN NO. 18 OF 24 OF THE MOBILE NOISE LAB. ON
MAY 11 1971 FROM 21:48 TO 22:28 AT MEDFORD GRID LOCATION 4-7

DISTRIBUTION DBA*

0	61	+
0	60	+
0	59	+
0	58	+
1	57	+
12	56	+
36	55	+
68	54	+
186	53	+
558	52	+
1681	51	+
2829	49	+
1674	48	+
1197	47	+
753	46	+
333	45	+
140	44	+
32	43	+
6	42	+
1	41	+
0	40	+

SAMPLES= 9600
AVERAGE= 48.8 DBA*
STANDARD DEVIATION= 2 DBA*
ENERGY MEAN= 49.3 DB**
NOISE POLLUTION LEVEL= 54.4
1% PERCENTILE= 54.3 DBA*
10% DECILE= 51.9 DBA*
MEDIAN= 49.3 DBA*
90% PERCENTILE= 46.6 DBA*
RANGE= 16 DB

NOISE DATA FROM RUN NO. 18 OF 24 OF THE MOBILE NOISE LAB. ON
MAY 11 1971 FROM 21:48 TO 22:28 AT MEDFORD GRID LOCATION 4-7

1	57	0
12	56	0
36	55	00
68	54	00
186	53	0000
558	52	000000000000
973	51	000000000000000000
1681	50	0000000000000000000000
2829	49	00000000000000000000000000
1674	48	0000000000000000000000000000
1197	47	0000000000000000000000000000
753	46	0000000000000000000000000000
333	45	00000000
140	44	000
32	43	00
6	42	0
1	41	0

DIST. DBA*0 LEVEL (DBA*) VS DISTRIBUTION (PERCENT) 20 30

*-A WEIGHTED DECIBEL S-RE. 20 MICRONEWTONS PER SQUARE METER
**-DBA RE. 20 MICRONEWTONS PER SQUARE METER FROM AN AVERAGE OF
THE SQUARES OF THE SOUND PRESSURES.

LEVEL (DBA*) VS CUMULATIVE DISTRIBUTION (PERCENT)

US DEPARTMENT OF TRANSPORTATION
TRANSPORTATION SYSTEMS CENTER
NOISE ABATEMENT GROUP

NOISE DATA FROM RUN NO. 15 OF 24 OF THE MOBILE NOISE LAB. ON
MAY 12 1971 FROM 02:49 TO 03:29 AT MEDFORD GRID LOCATION 4-7

DISTRIB UTION DBA*	SAMPLES=	9600
1 49 0	AVERAGE*	36.8 DBA*
7 48 0	STANDARD DEVIATION*	3 DBA*
11 47 0	ENERGY MEAN*	38 DB**
23 46 0	NOISE POLLUTION LEVEL*	45.7
61 45 00	1% PERCENTILE*	45.1 DBA*
181 44 000	MEDIAN*	41.6 DBA*
199 43 0000	90% DECILE*	36.9 DBA*
365 42 0000000	99% PERCENTILE*	33.7 DBA*
518 41 000000000	RANGE*	32.1 DBA*
626 40 00000000000		19 DB
769 39 0000000000000		
984 38 000000000000000		
1858 37 0000000000000000000		
1297 36 000000000000000000000		
1288 35 000000000000000000000		
1158 34 000000000000000000000		
857 33 000000000000000000000		
318 32 0000000		
51 31 00		
4 30 0		

0 20 40 60 80 100
LEVEL(DBA*) VS CUMULATIVE DISTRIBUTION (PERCENT)

NOISE DATA FROM RUN NO. 15 OF 24 OF THE MOBILE NOISE LAB. ON
MAY 12 1971 FROM 02:49 TO 03:29 AT MEDFORD GRID LOCATION 4-7

DISTRIB UTION DBA*	SAMPLES=	9600
1 49 0	AVERAGE*	36.8 DBA*
7 48 0	STANDARD DEVIATION*	3 DBA*
11 47 0	ENERGY MEAN*	38 DB**
23 46 0	NOISE POLLUTION LEVEL*	45.7
61 45 00	1% PERCENTILE*	45.1 DBA*
181 44 000	MEDIAN*	41.6 DBA*
199 43 0000	90% DECILE*	36.9 DBA*
365 42 0000000	99% PERCENTILE*	33.7 DBA*
518 41 000000000	RANGE*	32.1 DBA*
626 40 00000000000		19 DB
769 39 0000000000000		
984 38 000000000000000		
1858 37 0000000000000000000		
1297 36 000000000000000000000		
1288 35 000000000000000000000		
1158 34 000000000000000000000		
857 33 000000000000000000000		
318 32 0000000		
51 31 00		
4 30 0		

0 20 40 60 80 100
LEVEL(DBA*) VS DISTRIBUTION (PERCENT)

*-A WEIGHTED DECIBEL-S-RE. 20 MICROMENTONS PER SQUARE METER
**-DBA RE. 20 MICROMENTONS PER SQUARE METER FROM AN AVERAGE OF
THE SQUARES OF THE SOUND PRESSURES.

NOISE DATA FROM RUN NO. 12 OF 24 OF THE MOBILE NOISE LAB. ON
MAY 11/12 1971 FROM 23:40 TO 00:20 AT MEDFORD GRID LOCATION 4-7

US DEPARTMENT OF TRANSPORTATION
TRANSPORTATION SYSTEMS CENTER
NOISE ABATEMENT GROUP

NOISE DATA FROM RUN NO. 12 OF 24 OF THE MOBILE NOISE LAB. ON
MAY 11/12 1971 FROM 23:40 TO 00:20 AT MEDFORD GRID LOCATION 4-7

DISTRIBUTION DBA*

4 53 +
6 52 *
5 51 *
6 50 +
13 49 +
36 48 +
68 47 +
172 46 *
389 45 *
730 44 *
1205 43 *
2007 42 *
2482 41 *
1816 40 *
610 39 *
49 38 *
2 37 *
0 36 *

SAMPLES= 2480
AVERAGE= 41.7 DBA*
STANDARD DEVIATION= 1.8 DBA*
ENERGY MEAN= 42.2 DB**
NOISE POLLUTION LEVEL= 46.8 DBA*
1% PERCENTILE= 47.6 DBA*
10% DECILE= 44.6 DBA*
MEDIAN= 41.7 DBA*
90% DECILE= 48.2 DBA*
99% PERCENTILE= 39.1 DBA*
RANGE= 16 DB

LEVEL (DBA*) VS DISTRIBUTION (PERCENT)

0 20 40 60 80 100

4 53 0
6 52 0
5 51 0
6 50 0
13 49 0
36 48 00
68 47 00
172 46 0000
389 45 000000
730 44 0000000000
1205 43 0000000000000000
2007 42 00000000000000000000
2482 41 0000000000000000000000
1816 40 0000000000000000000000
610 39 0000000000000000000000
49 38 00
2 37 0
0 36 0

LEVEL (DBA**) VS DISTRIBUTION (PERCENT)

0 10 20 30

**-A WEIGHTED DECIBELS-RE. 20 MICRONEWTONS PER SQUARE METER
**-DBA RE. 20 MICRONEWTONS PER SQUARE METER FROM AN AVERAGE OF
THE SQUARES OF THE SOUND PRESSURES.

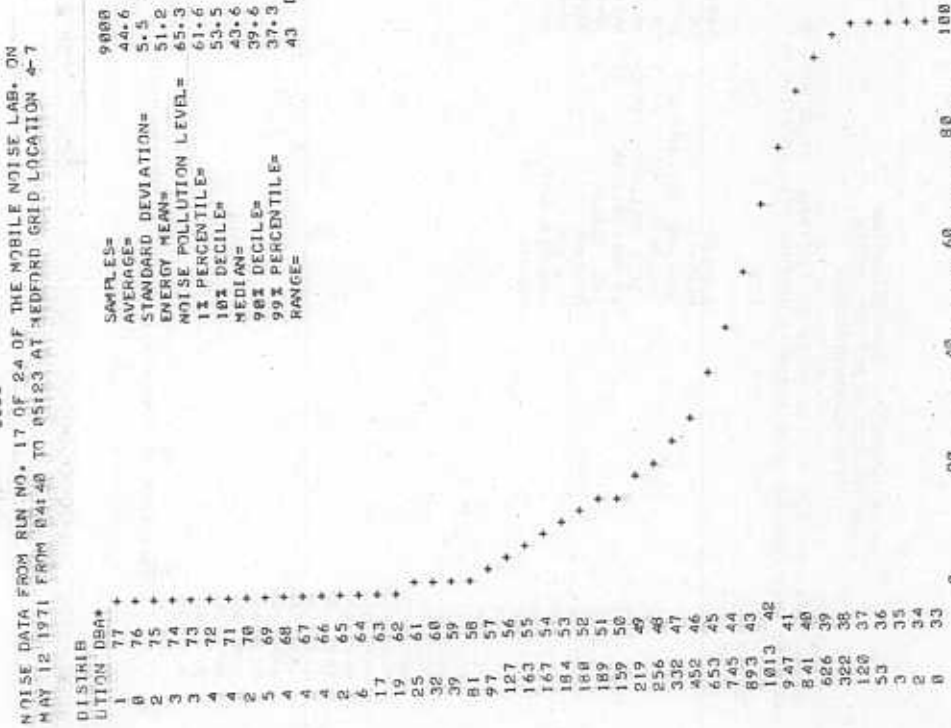
NOISE DATA FROM RUN NO. 17 OF 24 OF THE MOBILE NOISE LAB. ON
MAY 12 1971 FROM 04:40 TO 05:23 AT MEDFORD GRID LOCATION 4-7

US DEPARTMENT OF TRANSPORTATION
TRANSPORTATION SYSTEMS CENTER
NOISE ABATEMENT GROUP

NOISE DATA FROM RUN NO. 17 OF 24 OF THE MOBILE NOISE LAB. ON
MAY 12 1971 FROM 04:40 TO 05:23 AT MEDFORD GRID LOCATION 4-7

DISTRI- BUTION	DBA*	SAMPLES=	9000
1	77	44.6	DBA*
2	76	51.2	DBA*
3	75	61.3	DBA*
4	74	65.3	DBA*
5	73	61.6	DBA*
6	72	53.5	DBA*
7	71	43.6	DBA*
8	70	39.6	DBA*
9	69	37.3	DBA*
10	68	43	DB

STANDARD DEVIATION= 44.6
ENERGY MEAN= 51.2
NOISE POLLUTION LEVEL= 65.3
1% PERCENTILE= 61.6
10% DECILE= 53.5
MEDIAN= 43.6
90% DECILE= 39.6
99% PERCENTILE= 37.3
RANGE= 43 DB



DIST. DBA* ^B	16	20	30
1	77	0	
2	76	0	
3	75	0	
4	74	0	
5	73	0	
6	72	0	
7	71	0	
8	70	0	
9	69	0	
10	68	0	
11	67	0	
12	66	0	
13	65	0	
14	64	0	
15	63	0	
16	62	0	
17	61	00	
18	60	00	
19	59	00	
20	58	00	
21	57	000	
22	56	000	
23	55	0000	
24	54	0000	
25	53	0000	
26	52	0000	
27	51	0000	
28	50	00000	
29	49	00000	
30	48	000000	
31	47	0000000	
32	46	00000000	
33	45	000000000	
34	44	0000000000	
35	43	00000000000	
36	42	000000000000	
37	41	0000000000000	
38	40	00000000000000	
39	39	000000000000000	
40	38	0000000000000000	
41	37	00000000000000000	
42	36	000000000000000000	
43	35	0000000000000000000	
44	34	00000000000000000000	
45	33	000000000000000000000	

**A WEIGHTED DECIBELS-RE. 20 MICRONEWTONS PER SQUARE METER
**DBA RE. 20 MICRONEWTONS PER SQUARE METER FROM AN AVERAGE OF
THE SQUARES OF THE SOUND PRESSURES.

NOISE DATA FROM RUN NO. 14 OF 24 OF THE MOBILE NOISE LAB. ON
MAY 12 1971 FROM 01:40 TO 02:20 AT MEADOW GRID LOCATION 4-7

US DEPARTMENT OF TRANSPORTATION
TRANSPORTATION SYSTEMS CENTER
NOISE ABATEMENT GROUP

NOISE DATA FROM RUN NO. 14 OF 24 OF THE MOBILE NOISE LAB. ON
MAY 12 1971 FROM 01:40 TO 02:20 AT MEADOW GRID LOCATION 4-7

DISTRI
UTION DBA*
1 58 0
8 49 0
4 46 0
9 47 0
36 46 0
78 45 0
175 44 0000
272 43 00000
495 42 00000000
546 41 000000000
788 40 00000000000
1125 39 0000000000000
1278 38 000000000000000
1466 37 00000000000000000
1500 36 000000000000000000
933 35 00000000000000000
513 34 00000000
291 33 000000
98 32 000
8 31 0
0 30

SAMPLES= 9600 DBA*
AVERAGE= 37.8 DBA*
STANDARD DEVIATION= 2.7 DBA*
ENERGY MEAN= 38.8 DB**
NOISE POLLUTION LEVEL= 45.7 DBA*
1% PERCENTILE= 45.4 DBA*
10% DECILE= 42.2 DBA*
MEDIAN= 38 DBA*
90% DECILE= 35.1 DBA*
99% PERCENTILE= 33 DBA*
RANGE= 19 DB

DIST. DBA*0 10 20 30
LEVEL (DBA*) VS DISTRIBUTION (PERCENT)

*-A WEIGHTED DECIBELS-RE. 20 MICRONEWTONS PER SQUARE METER
**-DBA RE. 20 MICRONEWTONS PER SQUARE METER FROM AN AVERAGE OF
THE SQUARES OF THE SOUND PRESSURES.

DISTRI
UTION DBA*
1 58 0
8 49 0
4 46 0
9 47 0
36 46 0
78 45 0
175 44 0
272 43 0
495 42 0
546 41 0
788 40 0
1125 39 0
1278 38 0
1466 37 0
1500 36 0
933 35 0
513 34 0
291 33 0
98 32 0
8 31 0
0 30

LEVEL (DBA*) VS CUMULATIVE DISTRIBUTION (PERCENT)

NOISE DATA FROM RUN NO. 19 OF 24 OF THE MOBILE NOISE LAB. ON
MAY 12 1971 FROM 06:48 TO 07:12B AT MEDFORD GRID LOCATION 4-7

US DEPARTMENT OF TRANSPORTATION
TRANSPORTATION SYSTEMS CENTER
NOISE ABATEMENT GROUP

NOISE DATA FROM RUN NO. 19 OF 24 OF THE MOBILE NOISE LAB. ON
MAY 12 1971 FROM 06:48 TO 07:20 AT MEDFORD GRID LOCATION 4-7

DISTRIB
UTION DBA*
1 66 +
2 65 +
4 64 +
4 63 +
6 62 +
6 61 +
7 60 +
8 59 +
15 58 +
28 57 +
54 56 +
86 55 +
86 54 +
99 53 +
172 52 +
191 51 +
257 50 +
467 49 +
1085 48 +
1889 47 +
2646 46 +
1982 45 +
644 44 +
86 43 +
1 42 +
0 41 +

SAMPLES= 9600
AVERAGE= 46.9 DBA*
STANDARD DEVIATION= 2.5 DBA*
ENERGY MEAN= 48.1 DB**
NOISE POLLUTION LEVEL= 54.5
1% PERCENTILE= 56.6 DBA*
10% PERCENTILE= 58.2 DBA*
MEDIAN= 46.8 DBA*
98% DECILE= 45.1 DBA*
99% PERCENTILE= 44 DBA*
RANGE= 24 DB

LEVEL (DBA*) VS CUMULATIVE DISTRIBUTION (PERCENT)

0 20 40 60 80 100

LEVEL (DBA*) VS DISTRIBUTION (PERCENT)

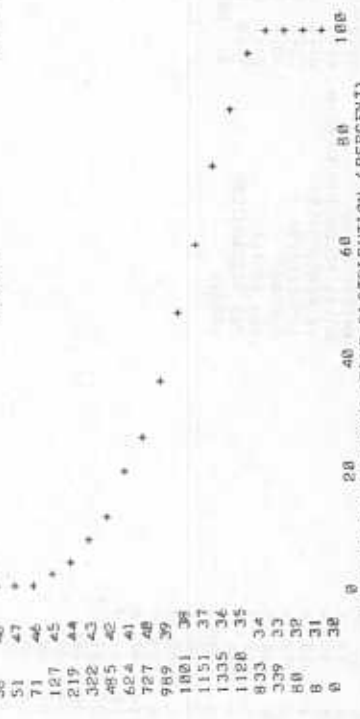
10 20 30

*-A WEIGHTED DECIBELS-RE. 20 MICROWATTS PER SQUARE METER
*-DBA RE. 20 MICROWATTS PER SQUARE METER FROM AN AVERAGE OF
THE SQUARES OF THE SOUND PRESSURES.

US DEPARTMENT OF TRANSPORTATION
TRANSPORTATION SYSTEMS CENTER
NOISE ABATEMENT GROUP

NOISE DATA FROM RUN NO. 16 OF 24 OF THE MOBILE NOISE LAB. ON
MAY 12 1971 FROM 03:40 TO 04:20 AT MEDFORD GRID LOCATION 4-7

DISTRIB UTION DBA**	SAMPLES*	9 688
1 58	AVERAGE=	36 DBA*
2 57	STANDARD DEVIATION=	3.3 DBA*
1 56	ENERGY MEAN=	39.7 DE**
1 55	NOISE POLLUTION LEVEL=	48.1
2 54	1% PERCENTILE=	48.6 DBA*
6 53	10% DECILE=	42.9 DBA*
7 52	MEDIAN=	37.9 DBA*
18 51	90% DECILE=	34.6 DBA*
18 50	99% PERCENTILE=	33 DBA*
38 49	RANGE=	27 DB
51 47		
71 46		
127 45		
219 44		
322 43		
485 42		
624 41		
727 40		
989 39		
1401 38		
1151 37		
1335 36		
1120 35		
833 34		
339 33		
80 32		
8 31		
0 30		



LEVEL (DBA) VS CUMULATIVE DISTRIBUTION (PERCENT)

NOISE DATA FROM RUN NO. 16 OF 24 OF THE MOBILE NOISE LAB. ON
MAY 12 1971 FROM 03:40 TO 04:20 AT MEDFORD GRID LOCATION 4-7

1 58	0
2 57	0
1 56	0
1 55	0
2 54	0
6 53	0
7 52	0
15 51	0
18 50	0
25 49	0
38 48	00
51 47	00
71 46	00
127 45	000
219 44	00000
322 43	000000
485 42	00000000
624 41	0000000000
727 40	000000000000
989 39	0000000000000000
1401 38	000000000000000000
1151 37	00000000000000000000
1335 36	0000000000000000000000
1120 35	000000000000000000000000
833 34	000000000000000000000000
339 33	0000000
80 32	00
8 31	0
DIST. DBA*0	10 20 30

LEVEL (DBA) VS DISTRIBUTION (PERCENT) 30

*-A WEIGHTED DECIBELS-RE. 20 MICRONEWTONS PER SQUARE METER

**-DBA RE. 20 MICRONEWTONS PER SQUARE METER FROM AN AVERAGE OF
THE SQUARES OF THE SOUND PRESSURES.

US DEPARTMENT OF TRANSPORTATION
TRANSPORTATION SYSTEMS CENTER
NOISE ABATEMENT GROUP

NOISE DATA FROM RUN NO. 21 OF 24 OF THE MOBILE NOISE LAB. ON
MAY 12 1971 FROM 08:40 TO 09:28 AT MEDFORD GRID LOCATION 4-7

DISTRIB	9608
UTION DBA*	46.2 DBA*
1 70	4.6 DBA*
2 69	58.9 DB**
7 68	62.7
9 67	63.2 DBA*
9 66	53.3 DBA*
21 65	45.1 DBA*
33 64	43 DBA*
47 62	41.7 DBA*
53 60	38 DB
85 59	
82 58	
85 57	
183 56	
106 55	
121 54	
151 53	
170 52	
185 51	
226 50	
309 49	
356 48	
531 47	
820 46	
1246 45	
1934 44	
1846 43	
763 42	
124 41	
10 40	
0 39	

SAMPLES= 9608
AVERAGE= 46.2 DBA*
STANDARD DEVIATION= 4.6 DBA*
ENERGY MEAN= 58.9 DB**
NOISE POLLUTION LEVEL= 62.7
1% PERCENTILE= 63.2 DBA*
10% DECILE= 53.3 DBA*
MEDIANS= 45.1 DBA*
90% DECILE= 43 DBA*
99% PERCENTILE= 41.7 DBA*
RANGE= 38 DB

LEVEL (DBA*) VS CUMULATIVE DISTRIBUTION (PERCENT)

B-358

NOISE DATA FROM RUN NO. 21 OF 24 OF THE MOBILE NOISE LAB. ON
MAY 12 1971 FROM 08:40 TO 09:28 AT MEDFORD GRID LOCATION 4-7

1	70	0
2	69	0
7	68	0
9	67	0
9	66	0
21	65	0
20	64	0
33	63	00
47	62	00
75	61	00
53	60	00
85	59	00
82	58	00
85	57	00
103	56	000
106	55	000
121	54	000
151	53	000
170	52	0000
185	51	0000
226	50	00000
309	49	000000
356	48	0000000
531	47	00000000
820	46	00000000000000000000
1246	45	000000000000000000000000
1934	44	000000000000000000000000000000
1846	43	000000000000000000000000000000
763	42	000000000000000000000000000000
124	41	000
10	40	0
DIST. DBA*0	17	20
	LEVEL (DBA*) VS DISTRIBUTION (PERCENT)	30

*-A WEIGHTED DECIBEL S-RE. 20 MICROMETRS PER SQUARE METER
**-DBA RE. 20 MICROMETRS PER SQUARE METER FROM AN AVERAGE OF
THE SQUARES OF THE SOUND PRESSURES.

B-359

US DEPARTMENT OF TRANSPORTATION
TRANSPORTATION SYSTEMS CENTER
NOISE ABATEMENT GROUP

NOISE DATA FROM RUN NO. 18 OF 24 OF THE MOBILE NOISE LAB. ON
MAY 12 1971 FROM 05:40 TO 06:20 AT MEDFORD GRID LOCATION 4-7

DISTRIB
UTION DBA*
1 77 *
1 76 *
8 75 +
8 74 +
8 73 +
8 72 +
1 71 +
8 70 +
1 69 +
8 68 +
1 67 +
8 66 +
8 65 +
2 64 +
4 63 +
2 62 +
3 61 +
7 60 +
17 59 +
16 58 +
17 57 +
22 56 +
38 55 +
58 54 +
185 53 +
188 52 +
189 51 +
185 49 +
258 48 +
376 47 +
536 46 +
865 45 +
948 44 +
1883 43 +
1336 42 +
1387 41 +
1238 40 +
646 39 +
183 38 +
4 37 +
8 36 +

SAMPLES= 9500
AVERAGE= 43.4 DBA*
STANDARD DEVIATION= 3.7 DBA*
ENERGY MEAN= 47 DBA*
NOISE POLLUTION LEVEL= 56.5
1% PERCENTILE= 56 DBA*
10% DECILE= 48.5 DBA*
MEDIAN= 43.1 DBA*
90% DECILE= 48.2 DBA*
99% PERCENTILE= 38.9 DBA*
RANGE= 40 DB

LEVEL (DBA*) VS CUMULATIVE DISTRIBUTION (PERCENT)

B-352

NOISE DATA FROM RUN NO. 18 OF 24 OF THE MOBILE NOISE LAB. ON
MAY 12 1971 FROM 05:40 TO 06:20 AT MEDFORD GRID LOCATION 4-7

1 77 0
1 76 0
8 75 0
8 74 0
8 73 0
8 72 0
1 71 0
8 70 0
1 69 0
8 68 0
1 67 0
8 66 0
8 65 0
2 64 0
4 63 0
2 62 0
3 61 0
7 60 0
17 59 0
16 58 0
17 57 0
22 56 0
38 55 0
58 54 0
185 53 000
188 52 000
189 51 000
124 50 000
185 49 0000
258 48 00000
376 47 0000000
536 46 00000000
865 45 000000000000000
948 44 000000000000000
1883 43 00000000000000000
1336 42 0000000000000000000
1387 41 0000000000000000000
1238 40 0000000000000000000
646 39 0000000000000000000
183 38 000
4 37 0
8 36 0

DIST. DBA*8 10 20 38
LEVEL (DBA*) VS DISTRIBUTION (PERCENT)

*-A WEIGHTED DECIBELS-RE-20 MICRONETONS PER SQUARE METER
*-DBA RE-20 MICRONETONS PER SQUARE METER FROM AN AVERAGE OF
THE SQUARES OF THE SOUND PRESSURES.

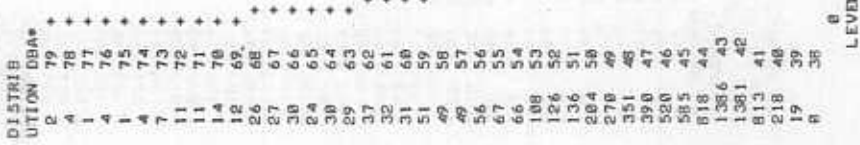
B-353

US DEPARTMENT OF TRANSPORTATION
TRANSPORTATION SYSTEMS CENTER
NOISE ABATEMENT GROUP

NOISE DATA FROM RUN 23 OF 24 OF THE MOBILE NOISE LAB. ON
MAY 12 1971 FROM 18:47 TO 11:28 AT MEDFORD GRID LOCATION 4-7

DISTRIBUTION DBA*	8888
2 79 0	45.7 DBA*
4 78 0	5.7 DBA*
1 77 0	55.1 DB**
1 76 0	69.7 DBA*
1 75 0	68.7 DBA*
4 74 0	52.9 DBA*
7 73 0	44.2 DBA*
11 72 0	41.7 DBA*
11 71 0	48.3 DBA*
14 70 0	48 DB
12 69 0	
26 68 00	
27 67 00	
38 66 00	
24 65 00	
38 64 00	
29 63 00	
37 62 00	
32 61 00	
31 60 00	
51 59 00	
49 58 00	
49 57 00	
56 56 00	
67 55 00	
66 54 00	
108 53 000	
126 52 000	
136 51 0000	
204 50 00000	
278 49 000000	
351 48 00000000	
398 47 00000000	
528 46 0000000000	
585 45 000000000000	
818 44 00000000000000	
1386 43 0000000000000000	
1381 42 0000000000000000	
813 41 0000000000000000	
218 40 00000	
19 39 0	
DIST. DBA**	

SAMPLES= 8888
AVERAGE= 45.7 DBA*
STANDARD DEVIATION= 5.7 DBA*
ENERGY MEAN= 55.1 DB**
NOISE POLLUTION LEVEL= 69.7 DBA*
1% PERCENTILE= 68.7 DBA*
10% DECILE= 52.9 DBA*
MEDIAN= 44.2 DBA*
90% DECILE= 41.7 DBA*
99% PERCENTILE= 48.3 DBA*
RANGE= 48 DB



NOISE DATA FROM RUN 23 OF 24 OF THE MOBILE NOISE LAB. ON
MAY 12 1971 FROM 18:47 TO 11:28 AT MEDFORD GRID LOCATION 4-7

DISTRIBUTION DBA*	8888	18	20	30
2 79 0	45.7 DBA*			
4 78 0	5.7 DBA*			
1 77 0	55.1 DB**			
1 76 0	69.7 DBA*			
1 75 0	68.7 DBA*			
4 74 0	52.9 DBA*			
7 73 0	44.2 DBA*			
11 72 0	41.7 DBA*			
11 71 0	48.3 DBA*			
14 70 0	48 DB			
12 69 0				
26 68 00				
27 67 00				
38 66 00				
24 65 00				
38 64 00				
29 63 00				
37 62 00				
32 61 00				
31 60 00				
51 59 00				
49 58 00				
49 57 00				
56 56 00				
67 55 00				
66 54 00				
108 53 000				
126 52 000				
136 51 0000				
204 50 00000				
278 49 000000				
351 48 00000000				
398 47 00000000				
528 46 0000000000				
585 45 000000000000				
818 44 00000000000000				
1386 43 0000000000000000				
1381 42 0000000000000000				
813 41 0000000000000000				
218 40 00000				
19 39 0				
DIST. DBA**				

* - A WEIGHTED DECIBEL-S-RE. 20 MICRONEWTONS PER SQUARE METER
** - DBA RE. 98 MICRONEWTONS PER SQUARE METER FROM AN AVERAGE OF
THE SQUARES OF THE SOUND PRESSURES.

US DEPARTMENT OF TRANSPORTATION
TRANSPORTATION SYSTEMS CENTER
NOISE ABATEMENT GROUP

NOISE DATA FROM RUN NO. 20 OF 24 OF THE MOBILE NOISE LAB. ON
MAY 12 1971 FROM 07:40 TO 08:20 AT MEDFORD GRID LOCATION 4-7

DISTRIB
TION DBA*

3 73 0
8 72 0
14 71 0
22 70 0
47 69 00
65 68 00
82 66 00
96 65 000
130 64 000
132 63 000
131 62 000
126 61 000
189 60 000
164 59 0000
174 58 0000
193 57 0000
178 56 0000
196 55 0000
223 54 00000
278 53 00000
481 52 00000000
618 51 000000000
832 50 0000000000
1899 49 000000000000000
1317 48 00000000000000000
1512 47 000000000000000000
1838 46 000000000000000000
298 45 000000
29 44 00
0 43

SAMPLES= 9 600
AVERAGE= 51 DBA*
STANDARD DEVIATION= 5.5 DBA*
ENERGY MEAN= 56.6 DB**
NOISE POLLUTION LEVEL= 70.7 DB**
1% PERCENTILE= 69 DBA*
10% DECILE= 68.5 DBA*
MEDIAN= 49.6 DBA*
90% DECILE= 46.6 DBA*
99% PERCENTILE= 45.0 DBA*
RANGE= 29 DB

LEVEL (DBA*) VS CUMULATIVE DISTRIBUTION (PERCENT)

NOISE DATA FROM RUN NO. 20 OF 24 OF THE MOBILE NOISE LAB. ON
MAY 12 1971 FROM 07:40 TO 08:20 AT MEDFORD GRID LOCATION 4-7

3 73 0
8 72 0
14 71 0
22 70 0
47 69 00
65 68 00
82 66 00
96 65 000
130 64 000
132 63 000
131 62 000
126 61 000
189 60 000
164 59 0000
174 58 0000
193 57 0000
178 56 0000
196 55 0000
223 54 00000
278 53 00000
481 52 00000000
618 51 000000000
832 50 0000000000000
1899 49 000000000000000
1317 48 00000000000000000
1512 47 000000000000000000
1838 46 000000000000000000
298 45 000000
29 44 00
0 43

DIST. DBA** LEVEL (DBA*) VS DISTRIBUTION (PERCENT)

*-A WEIGHTED DECIBEL-S-RE. 20 MICRONEWTONS PER SQUARE METER
**-DBA RE. 20 MICRONEWTONS PER SQUARE METER FROM AN AVERAGE OF
THE SQUARES OF THE SOUND PRESSURES.

SITE DATA

Community: Medford, Massachusetts

Grid Location: 6-4

Microphone: From the intersection of Riverside Avenue and River Street, 220 feet north on River Street then 100 feet east.

Site Description: Old cemetery surrounded by 5 feet brick wall on north, south and west and a 2 1/2 story brick building on east.

DATE	May 1971	10	10	10	10	10	10	10	10	10	10/11
TIME (From)		1110	1310	1510	1710	1910	2110	2310			2310
(To)		1250	1450	1650	1850	2050	2250	0050			0050
TAPE NO. (NAL)		61-71	61-71	62-71	62-71	63-71	63-71	63-71	63-71	63-71	64-71
SIDE		1	2	1	2	1	2	1	2	1	1
TRACK		3 6 4	3 6 4	3 6 4	3 6 4	3 6 4	3 6 4	3 6 4	3 6 4	3 6 4	3 6 4
ROAD SURFACE		dry	dry	dry	dry	dry	dry	dry	dry	dry	dry
TEMPERATURE (F°)		57	56	68	54	52	51	49			
SKY CONDITION		Cloudy	Cloudy	Cloudy	P.C.	P.C.	clear	clear			
RELATIVE HUMIDITY (%)		63	60	67	67	70	80	84			
BAROMETRIC PRESSURE MM of MERCURY		771	771	771	771	773	773	773			
WIND DIRECTION		NE	SW	W	E	E	E	E			
VELOCITY (MPH)		10	8	12	1	1	1	1			

Special Events:

B-366

SITE DATA

Community: Medford, Massachusetts

Grid Location: 6-4

Microphone: See sheet 1 of 2

Site Description: See sheet 1 of 2

DATE	11	11	11	11	11	11	11	11
TIME (From)	0110	0310	0510	0710	0910			
(To)	0250	0450	0650	0850	1050			
TAPE NO. (NAL)	64-71	65-71	65-71	66-71	66-71			
SIDE	2	1	2	1	2			
TRACK	3 6 4	3 6 4	3 6 4	3 6 4	3 6 4			
ROAD SURFACE	dry	dry	dry	dry	dry			
TEMPERATURE (F°)	45	43	50	55	65			
SKY CONDITION	Clear	Clear	Clear	Clear	Clear			
RELATIVE HUMIDITY (%)	90	94	66	56	44			
BAROMETRIC PRESSURE MM of MERCURY	773	773	773	773	773			
WIND DIRECTION	E	E	E	N	N			
VELOCITY (MPH)	1	1	4	3	3			

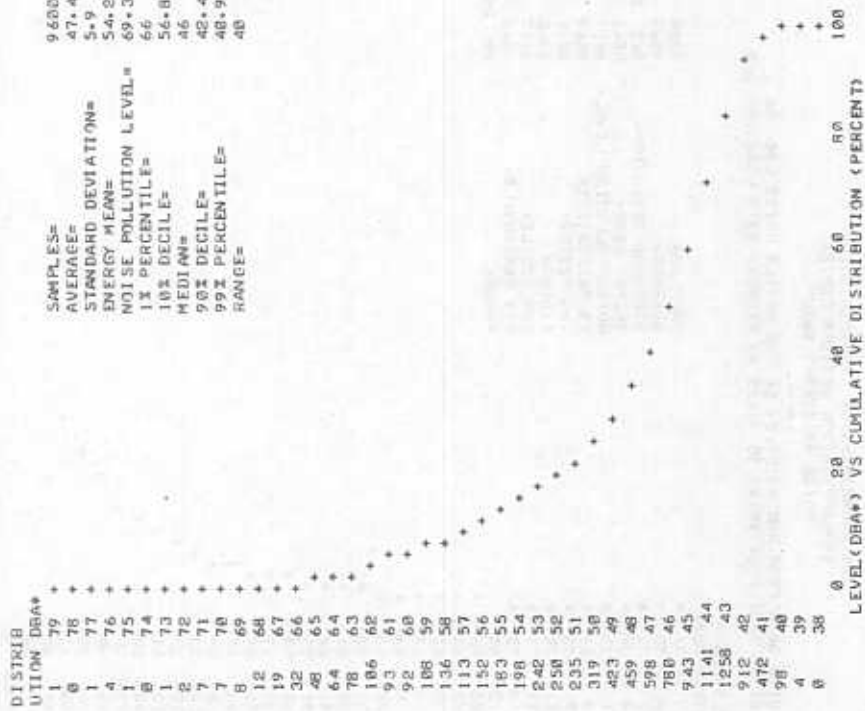
Special Events: 04:35 - 04:45 Sweeper in operation on streets surrounding microphone location.

B-367

US DEPARTMENT OF TRANSPORTATION
TRANSPORTATION SYSTEMS CENTER
NOISE ABATEMENT GROUP

NOISE DATA FROM RUN NO. 22 OF 24 OF THE MOBILE NOISE LAB. ON
MAY 12 1971 FROM 09:40 TO 10:20 AT MEDFORD GRID LOCATION 4-7

DISTRI BUTION DBA*	1	79	+	SAMPLES=	9600
0	78	+	AVERAGE=	47.4	DBA*
1	77	+	STANDARD DEVIATION=	5.9	DBA*
4	76	+	ENERGY MEAN=	54.2	DB**
1	75	+	NOISE POLLUTION LEVEL*	69.3	
0	74	+	1% PERCENTILE=	66	DBA*
1	73	+	10% DECILE=	56.8	DBA*
2	72	+	MEDIAN=	46	DBA*
7	71	+	90% DECILE=	42.4	DBA*
7	70	+	99% PERCENTILE=	40.9	DBA*
8	69	+	RANGE=	40	DB
12	68	+			
19	67	+			
32	66	+			
48	65	+			
64	64	+			
78	63	+			
106	62	+			
93	61	+			
92	60	+			
188	59	+			
136	58	+			
113	57	+			
182	56	+			
183	55	+			
198	54	+			
242	53	+			
250	52	+			
235	51	+			
319	50	+			
423	49	+			
459	48	+			
598	47	+			
780	46	+			
943	45	+			
1141	44	+			
1258	43	+			
912	42	+			
472	41	+			
98	40	+			
4	39	+			
0	38	+			



NOISE DATA FROM RUN NO. 22 OF 24 OF THE MOBILE NOISE LAB. ON
MAY 12 1971 FROM 09:40 TO 10:20 AT MEDFORD GRID LOCATION 4-7

1	79	0
0	78	0
1	77	0
4	76	0
1	75	0
0	74	0
1	73	0
2	72	0
7	71	0
7	70	0
8	69	0
12	68	0
19	67	0
32	66	00
48	65	00
64	64	00
78	63	00
106	62	000
93	61	000
92	60	000
188	59	000
136	58	000
113	57	000
152	56	000
183	55	0000
198	54	0000
242	53	00000
250	52	00000
235	51	00000
319	50	000000
423	49	0000000
459	48	00000000
598	47	000000000
780	46	00000000000
943	45	0000000000000
1141	44	000000000000000
1258	43	00000000000000000
912	42	000000000000000000
472	41	000000000
98	40	000
4	39	0

DIST. DBA**0 10 20 30
LEVEL(DBA**) VS DISTRIBUTION (PERCENT)

*-A WEIGHTED DECIBEL-S-RE, 20 MICRONETONS PER SQUARE METER
**-DBA RE- 20 MICRONETONS PER SQUARE METER FROM AN AVERAGE OF
THE SQUARES OF THE SOUND PRESSURES.

U.S. DEPARTMENT OF TRANSPORTATION
TRANSPORTATION SYSTEMS CENTER
NOISE ABATEMENT GROUP

NOISE DATA FROM RUN 2 OF 24 OF THE MOBILE NOISE LAB. ON
MAY 18 1971 FROM 12:18 TO 12:58 AT MEDFORD GRID LOCATION 6-4

DISTRIB	1	77	0
UTION	0	76	0
	8	75	0
	2	74	0
	2	73	0
	3	72	0
	16	71	0
	28	70	0
	39	69	00
	68	68	00
	187	67	000
	158	66	0000
	294	65	00000
	442	64	0000000
	782	63	0000000000000
	1886	62	0000000000000000000
	1491	61	00000000000000000000000
	1589	60	0000000000000000000000000
	1619	59	00000000000000000000000000
	1872	58	0000000000000000000000000000
	559	57	0000000000000000000000000000
	213	56	0000000000000000000000000000
	39	55	0000000000000000000000000000
	6	54	0000000000000000000000000000
	0	53	0000000000000000000000000000

LEVEL (DBA*) VS CUMULATIVE DISTRIBUTION (PERCENT)



NOISE DATA FROM RUN 2 OF 24 OF THE MOBILE NOISE LAB. ON
MAY 18 1971 FROM 12:18 TO 12:58 AT MEDFORD GRID LOCATION 6-4

1	77	0
0	76	0
8	75	0
2	74	0
2	73	0
3	72	0
16	71	0
28	70	0
39	69	00
68	68	00
187	67	000
158	66	0000
294	65	00000
442	64	0000000
782	63	0000000000000
1886	62	0000000000000000000000000
1491	61	000000000000000000000000000
1589	60	0000000000000000000000000000
1619	59	00000000000000000000000000000
1872	58	000000000000000000000000000000
559	57	000000000000000000000000000000
213	56	000000000000000000000000000000
39	55	000000000000000000000000000000
6	54	000000000000000000000000000000
0	53	000000000000000000000000000000

LEVEL (DBA*) VS DISTRIBUTION (PERCENT)

**A WEIGHTED DECIBELS-RE. 28 MICRONETONS PER SQUARE METER
**DBA RE. 20 MICRONETONS PER SQUARE METER FROM AN AVERAGE OF
THE SQUARES OF THE SOUND PRESSURES.

US DEPARTMENT OF TRANSPORTATION
TRANSPORTATION SYSTEMS CENTER
NOISE ABATEMENT GROUP

NOISE DATA FROM RUN 24 OF 24 OF THE MOBILE NOISE LAB. ON
MAY 12 1971 FROM 11:40 TO 12:20 AT HEDFORD GRID LOCATION A-7

DISTRIBUTION DBA*

1	77	+
8	76	+
1	75	+
2	74	+
6	73	+
5	72	+
13	71	+
12	70	+
38	69	+
28	68	+
34	67	+
44	66	+
49	65	+
46	64	+
71	63	+
74	62	+
97	61	+
81	60	+
187	59	+
133	58	+
125	57	+
148	56	+
169	55	+
138	54	+
177	53	+
174	52	+
143	51	+
188	50	+
264	49	+
273	48	+
393	47	+
515	46	+
628	45	+
837	44	+
1363	43	+
1592	42	+
1266	41	+
361	40	+
19	39	+
8	38	+
1	37	+
0	36	+

SAMPLES= 9600
AVERAGE= 46.3 DBA*
STANDARD DEVIATION= 6.4 DBA*
ENERGY MEAN= 54.6 DB**
NOISE POLLUTION LEVEL* 71
1% PERCENTILE= 65.1 DBA*
10% DECILE= 57 DBA*
MEDIAN= 44.2 DBA*
90% DECILE= 41.5 DBA*
99% PERCENTILE= 40.2 DBA*
RANGE= 40 DB

LEVEL (DBA*) VS CUMULATIVE DISTRIBUTION (PERCENT)

B-364

PAGE 2

NOISE DATA FROM RUN 24 OF 24 OF THE MOBILE NOISE LAB. ON
MAY 12 1971 FROM 11:40 TO 12:20 AT HEDFORD GRID LOCATION A-7

1	77	0
8	76	0
1	75	0
2	74	0
6	73	0
5	72	0
13	71	0
12	70	0
38	69	00
28	68	00
34	67	00
44	66	00
49	65	00
46	64	00
71	63	00
74	62	00
97	61	000
81	60	00
187	59	000
133	58	000
125	57	000
148	56	000
169	55	0000
138	54	000
177	53	0000
174	52	0000
143	51	000
188	50	0000
264	49	00000
273	48	00000
393	47	0000000
515	46	000000000
628	45	00000000000
837	44	0000000000000
1363	43	0000000000000000000
1592	42	000000000000000000000
1266	41	000000000000000000000
361	40	00000000
19	39	0
8	38	0
1	37	0
0	36	0

DIST. DBA*8 LEVEL (DBA*) VS DISTRIBUTION (PERCENT) 30

*-A WEIGHTED DECIBEL S-RE. 20 MICRONETONS PER SQUARE METER
**-DBA RE. 20 MICRONETONS PER SQUARE METER FROM AN AVERAGE OF
THE SQUARES OF THE SOUND PRESSURES.

B-365

NOISE DATA FROM RUN 4 OF 24 OF THE MOBILE NOISE LAB. ON
MAY 10 1971 FROM 14:10 TO 14:50 AT MEDFORD GRID LOCATION 6-4

US DEPARTMENT OF TRANSPORTATION
TRANSPORTATION SYSTEMS CENTER
NOISE ABATEMENT GROUP

NOISE DATA FROM RUN 4 OF 24 OF THE MOBILE NOISE LAB. ON
MAY 10 1971 FROM 14:10 TO 14:50 AT MEDFORD GRID LOCATION 6-4

DISTRIBUTION DBA*

1	81	0
2	80	0
3	79	0
4	78	0
5	77	0
6	76	0
7	75	0
8	74	0
9	73	0
10	72	0
11	71	0
12	70	00
13	69	00
14	68	00
15	67	000
16	66	000
17	65	0000
18	64	000000
19	63	00000000
20	62	0000000000
21	61	000000000000
22	60	00000000000000
23	59	0000000000000000
24	58	000000000000000000
25	57	00000000000000000000
26	56	0000000000000000000000
27	55	000000000000000000000000
28	54	00000000000000000000000000
29	53	0000000000000000000000000000

SAMPLES= 9600
AVERAGE= 60.7 DBA*
STANDARD DEVIATION= 2.8 DBA*
ENERGY MEAN= 61.8 DB**
NOISE POLLUTION LEVEL= 69
1% PERCENTILE= 49.7 DBA*
10% DECILE= 65 DBA*
MEDIAN= 60.7 DBA*
90% DECILE= 58.1 DBA*
99% PERCENTILE= 56.3 DBA*
RANGE= 27 DB

LEVEL (DBA*) VS DISTRIBUTION (PERCENT)

10 20 30

LEVEL (DBA*) VS DISTRIBUTION (PERCENT)

10 20 30

*-A WEIGHTED DECIBEL-S-RE. 20 MICRONETONS PER SQUARE METER
**-DBA RE. 20 MICRONETONS PER SQUARE METER FROM AN AVERAGE OF
THE SQUARES OF THE SOUND PRESSURES.

LEVEL (DBA*) VS CUMULATIVE DISTRIBUTION (PERCENT)

20 40 60 80 100

U.S. DEPARTMENT OF TRANSPORTATION
 TRANSPORTATION SYSTEMS CENTER
 NOISE ABATEMENT GROUP

NOISE DATA FROM RUN 1 OF 24 OF THE MOBILE NOISE LAB. ON
 MAY 18 1971 FROM 11:10 TO 11:50 AT MEDFORD GRID LOCATION 6-4

DISTRI	1	78	0
UTION	0	77	0
DBA**	0	76	0
	0	75	0
	2	74	0
	7	73	0
	5	72	0
	30	71	00
	36	70	00
	57	69	00
	94	68	000
	146	67	000
	208	66	0000
	482	65	0000000
	533	64	000000000
	829	63	0000000000000
	1221	62	00000000000000000
	1529	61	0000000000000000000
	1378	60	0000000000000000000
	1407	59	0000000000000000000
	1046	58	0000000000000000000
	483	57	000000000
	156	56	000
	26	55	00
	1	54	0
	0	53	

SAMPLES= 9500
 AVERAGE= 61 DBA*
 STANDARD DEVIATION= 2.7 DBA*
 ENERGY MEAN= 62 DB**
 NOISE POLLUTION LEVEL= 68.9
 1% PERCENTILE= 69.8 DBA*
 10% DECILE= 65.1 DBA*
 MEDIAN= 61.2 DBA*
 90% DECILE= 58.3 DBA*
 99% PERCENTILE= 56.4 DBA*
 RANGE= 2.4 DB

LEVEL (DBA**) VS CUMULATIVE DISTRIBUTION (PERCENT)

B-368

PAGE 2

NOISE DATA FROM RUN 1 OF 24 OF THE MOBILE NOISE LAB. ON
 MAY 18 1971 FROM 11:10 TO 11:50 AT MEDFORD GRID LOCATION 6-4

1	78	0
0	77	0
0	76	0
0	75	0
2	74	0
7	73	0
5	72	0
30	71	00
36	70	00
57	69	00
94	68	000
146	67	000
208	66	0000
482	65	0000000
533	64	000000000
829	63	0000000000000
1221	62	00000000000000000
1529	61	0000000000000000000
1378	60	0000000000000000000
1407	59	0000000000000000000
1046	58	0000000000000000000
483	57	000000000
156	56	000
26	55	00
1	54	0
0	53	

LEVEL (DBA**) VS DISTRIBUTION (PERCENT)

*-A WEIGHTED DECIBEL S-RE. 28 MICRONEWTONS PER SQUARE METER
 **-DBA RE. 28 MICRONEWTONS PER SQUARE METER FROM AN AVERAGE OF
 THE SQUARES OF THE SOUND PRESSURES.

B-369

US DEPARTMENT OF TRANSPORTATION
TRANSPORTATION SYSTEMS CENTER
NOISE ABATEMENT GROUP

NOISE DATA FROM RUN 6 OF 24 OF THE MOBILE NOISE LAB. ON
MAY 18 1971 FROM 16:10 TO 16:50 AT MEDFORD GRID LOCATION 6-4

DISTRIB
UTION DBA*

3 77 +
1 76 +
6 75 +
15 74 +
19 73 +
28 72 +
51 71 +
86 69 +
181 68 +
181 67 +
145 66 +
238 65 +
391 64 +
638 63 +
1839 62 +
1670 61 +
1866 60 +
1823 59 +
1187 58 +
256 57 +
19 56 +
8 55 +

SAMPLES= 9600 DBA*
AVERAGE= 68.9 DBA*
STANDARD DEVIATION= 2.8 DBA*
ENERGY MEAN= 68.2 DB**
NOISE POLLUTION LEVEL= 69.4
1% PERCENTILE= 71.5 DBA*
10% DECILE= 64.7 DBA*
MEDIAN= 60.9 DBA*
90% DECILE= 58.6 DBA*
99% PERCENTILE= 57.3 DBA*
RANGE= 21 DB

LEVEL (DBA*) VS CUMULATIVE DISTRIBUTION (PERCENT)

20 40 60 80 100

B-378

NOISE DATA FROM RUN 6 OF 24 OF THE MOBILE NOISE LAB. ON
MAY 18 1971 FROM 16:10 TO 16:50 AT MEDFORD GRID LOCATION 6-4

3 77 0
1 76 0
6 75 0
15 74 0
19 73 0
28 72 0
51 71 0
57 70 0
86 69 0
181 68 0
181 67 0
145 66 0
238 65 0
391 64 0
638 63 0
1839 62 0
1670 61 0
1866 60 0
1823 59 0
1187 58 0
256 57 0
19 56 0
8 55 0

LEVEL (DBA*) VS DISTRIBUTION (PERCENT)

DIST. DBA* 20 30 38

*-A WEIGHTED DECIBEL-S-RE. 20 MICRONETONS PER SQUARE METER
*-DBA RE. 80 MICRONETONS PER SQUARE METER FROM AN AVERAGE OF
THE SQUARES OF THE SOUND PRESSURES.

B-379

US DEPARTMENT OF TRANSPORTATION
TRANSPORTATION SYSTEMS CENTER
NOISE ABATEMENT GROUP

NOISE DATA FROM RUN 3 OF 24 OF THE MOBILE NOISE LAB. ON
MAY 10 1971 FROM 13:10 TO 13:50 AT MEDFORD GRID LOCATION 6-4

DISTRIBUTION DBA*
1 79 0
0 78 0
0 77 0
0 76 0
0 75 0
0 74 0
0 73 0
0 72 0
4 71 0
15 70 0
27 69 0
56 68 0
109 67 0
148 66 0
271 65 0
483 64 0
758 63 0
1233 62 0
1614 61 0
1561 60 0
1638 59 0
1151 58 0
475 57 0
122 56 0
13 55 0
1 54 0
0 53 0

SAMPLES= 9600
AVERAGE= 69.6 DBA*
STANDARD DEVIATION= 2.4 DBA*
ENERGY MEAN= 61.4 DBA*
NOISE POLLUTION LEVEL= 67.5
1% PERCENTILE= 68.1 DBA*
10% DECILE= 64.2 DBA*
MEDIAN= 60.9 DBA*
90% DECILE= 58.3 DBA*
99% PERCENTILE= 56.7 DBA*
RANGE= 25 DB

LEVEL (DBA*) VS CUMULATIVE DISTRIBUTION (PERCENT)

NOISE DATA FROM RUN 3 OF 24 OF THE MOBILE NOISE LAB. ON
MAY 10 1971 FROM 13:10 TO 13:50 AT MEDFORD GRID LOCATION 6-4

DISTRIBUTION DBA*
1 79 0
0 78 0
0 77 0
0 76 0
0 75 0
0 74 0
0 73 0
0 72 0
4 71 0
15 70 0
27 69 0
56 68 0
109 67 0
148 66 0
271 65 0
483 64 0
758 63 0
1233 62 0
1614 61 0
1561 60 0
1638 59 0
1151 58 0
475 57 0
122 56 0
13 55 0
1 54 0
0 53 0

LEVEL (DBA*) VS DISTRIBUTION (PERCENT)

*-A WEIGHTED DECIBEL-S-RE. 20 MICRONEWTONS PER SQUARE METER
**-DBA RE. 20 MICRONEWTONS PER SQUARE METER FROM AN AVERAGE OF
THE SQUARES OF THE SOUND PRESSURES.

NOISE DATA FROM RUN 8 OF 24 OF THE MOBILE NOISE LAB. ON
MAY 10 1971 FROM 18:10 TO 18:50 AT MEDFORD GRID LOCATION 6-4

US DEPARTMENT OF TRANSPORTATION
TRANSPORTATION SYSTEMS CENTER
NOISE ABATEMENT GROUP

NOISE DATA FROM RUN 8 OF 24 OF THE MOBILE NOISE LAB. ON
MAY 10 1971 FROM 18:10 TO 18:50 AT MEDFORD GRID LOCATION 6-4

DISTRIB	1	79	0
UTION	2	78	0
	4	77	0
	6	76	0
	8	75	0
	7	74	0
	5	73	0
	7	72	0
	7	71	0
	8	70	0
	24	69	0
	28	68	00
	41	67	00
	74	66	00
	151	65	000
	240	64	00000
	421	63	000000000
	644	62	0000000000000
	1028	61	00000000000000000
	1281	60	0000000000000000000
	1651	59	000000000000000000000
	1659	58	00000000000000000000000
	1155	57	00000000000000000000000
	767	56	00000000000000000000000
	311	55	0000000
	64	54	00
	12	53	0
	0	52	0

SAMPLES= 9.600 DBA*
AVERAGE= 59.3 DBA*
STANDARD DEVIATION= 2.7 DBA*
ENERGY MEAN= 68.6 DB*
NOISE POLLUTION LEVEL= 67.5 DB*
1% PERCENTILE= 68.2 DB*
50% DECILE= 63.2 DB*
MEDI AN= 59.5 DB*
90% DECILE= 56.7 DB*
99% PERCENTILE= 53.1 DB*
RANGE= 26 DB

NOISE DATA FROM RUN 8 OF 24 OF THE MOBILE NOISE LAB. ON
MAY 10 1971 FROM 18:10 TO 18:50 AT MEDFORD GRID LOCATION 6-4

DISTRIB	1	79	0
	2	78	0
	4	77	0
	6	76	0
	8	75	0
	7	74	0
	5	73	0
	7	72	0
	7	71	0
	8	70	0
	24	69	0
	28	68	00
	41	67	00
	74	66	00
	151	65	000
	240	64	00000
	421	63	000000000
	644	62	0000000000000
	1028	61	00000000000000000
	1281	60	000000000000000000000
	1651	59	00000000000000000000000
	1659	58	0000000000000000000000000
	1155	57	0000000000000000000000000
	767	56	0000000000000000000000000
	311	55	0000000
	64	54	00
	12	53	0
	0	52	0

LEVEL (DBA*) VS DISTRIBUTION (PERCENT)

LEVEL (DBA*) VS CUMULATIVE DISTRIBUTION (PERCENT)

**A WEIGHTED DECIBEL-S-RE. 20 MICRONEWTONS PER SQUARE METER
***DBA RE. 20 MICRONEWTONS PER SQUARE METER FROM AN AVERAGE OF
THE SQUARES OF THE SOUND PRESSURES.

US DEPARTMENT OF TRANSPORTATION
TRANSPORTATION SYSTEMS CENTER
NOISE ABATEMENT GROUP

NOISE DATA FROM RUN 5 OF 24 OF THE MOBILE NOISE LAB. ON
MAY 10 1971 FROM 15:10 TO 15:50 AT MEDFORD GRID LOCATION 6-4

DISTRI
UTION DBA*

1	76	+
1	75	+
1	74	+
2	73	+
23	72	+
19	71	+
33	70	+
38	69	+
58	68	+
185	67	+
288	65	+
195	66	+
415	64	+
796	63	+
1118	62	+
1721	61	+
1816	60	+
1757	59	+
914	58	+
235	57	+
65	56	+
7	55	+
0	54	+

SAMPLES= 9600
AVERAGE= 63.9 DBA*
STANDARD DEVIATION= 2.4 DBA*
ENERGY MEAN= 61.8 DB**
NOISE POLLUTION LEVEL= 67.9
1% PERCENTILE= 69.6 DBA*
10% DECILE= 64.5 DBA*
MEDIAN= 61 DBA*
90% DECILE= 58.7 DBA*
99% PERCENTILE= 57.1 DBA*
RANGE= 21 DB

L-LEVEL (DBA*) VS CUMULATIVE DISTRIBUTION (PERCENT)

PAGE 2

NOISE DATA FROM RUN 5 OF 24 OF THE MOBILE NOISE LAB. ON
MAY 10 1971 FROM 15:10 TO 15:50 AT MEDFORD GRID LOCATION 6-4

1	76	0
1	75	0
1	74	0
2	73	0
23	72	0
19	71	0
33	70	00
38	69	00
58	68	00
185	67	000
195	66	0000
288	65	00000
415	64	0000000
796	63	0000000000000
1118	62	000000000000000
1721	61	00000000000000000
1816	60	0000000000000000000
1757	59	000000000000000000000
914	58	00000000000000000000000
235	57	000000
65	56	00
7	55	0

DIST. DBA*0 10 20 30

L-LEVEL (DBA*) VS DISTRIBUTION (PERCENT)

*-A WEIGHTED DECIBEL-S-RE. 20 MICRONEWTONS PER SQUARE METER
*-DBA RE. 20 MICRONEWTONS PER SQUARE METER FROM AN AVERAGE OF
THE SQUARES OF THE SOUND PRESSURES.

US DEPARTMENT OF TRANSPORTATION
TRANSPORTATION SYSTEMS CENTER
NOISE ABATEMENT GROUP

NOISE DATA FROM RUN 18 OF 24 OF THE MOBILE NOISE LAB. ON
MAY 10 1971 FROM 20:10 TO 20:50 AT MEDFORD GRID LOCATION 6-4

DISTRIB UTION DBA*	SAMPLES=	9.600 DBA*
3	77	0
8	76	0
11	74	0
13	73	0
11	72	0
23	71	0
32	70	00
32	69	00
36	68	00
43	67	00
59	66	00
88	65	00
137	64	0000
245	63	000000
397	62	00000000
654	61	0000000000
832	60	000000000000
1287	59	0000000000000000
1625	58	000000000000000000
1598	57	000000000000000000
1278	56	000000000000000000
774	55	0000000000000000
272	54	000000
89	53	00
42	52	00
2	51	0
1	50	0
0	49	0

STATISTICS:
AVERAGE= 58.4 DBA*
STANDARD DEVIATION= 3.1 DBA*
ENERGY MEAN= 60.2 DB**
NOISE POLLUTION LEVEL= 68.1
1% PERCENTILE= 76.4 DBA*
10% DECILE= 62.5 DBA*
MEDIAN= 58.5 DBA*
90% DECILE= 53.7 DBA*
99% PERCENTILE= 53.6 DBA*
RANGE= 27 DB



LEVEL (DBA*) VS CUMULATIVE DISTRIBUTION (PERCENT)

NOISE DATA FROM RUN 18 OF 24 OF THE MOBILE NOISE LAB. ON
MAY 10 1971 FROM 20:10 TO 20:50 AT MEDFORD GRID LOCATION 6-4

DISTRIB UTION DBA*	SAMPLES=	10	20	30
3	77	0		
8	76	0		
11	74	0		
13	73	0		
11	72	0		
23	71	0		
32	70	00		
32	69	00		
36	68	00		
43	67	00		
59	66	00		
88	65	00		
137	64	0000		
245	63	000000		
397	62	00000000		
654	61	0000000000		
832	60	000000000000		
1287	59	0000000000000000		
1625	58	000000000000000000		
1598	57	000000000000000000		
1278	56	000000000000000000		
774	55	0000000000000000		
272	54	000000		
89	53	00		
42	52	00		
2	51	0		
1	50	0		
0	49	0		

LEVEL (DBA*) VS DISTRIBUTION (PERCENT)

*-A WEIGHTED DECIBEL-S-RE. 20 MICRONETONS PER SQUARE METER
**-DBA RE. 20 MICRONETONS PER SQUARE METER FROM AN AVERAGE OF
THE SQUARES OF THE SOUND PRESSURES.

US DEPARTMENT OF TRANSPORTATION
TRANSPORTATION SYSTEMS CENTER
NOISE ABATEMENT GROUP

NOISE DATA FROM RUN 7 OF 24 OF THE MOBILE NOISE LAB. ON
MAY 10 1971 FROM 17:10 TO 17:50 AT MEDFORD GRID LOCATION 6-4

```

DISTRIBUTION DBA*
5 77 +
6 76 +
7 75 *
8 74 *
16 73 *
17 72 *
25 71 *
36 69 *
65 68 *
184 67 *
139 66 *
334 65 *
558 64 *
977 63 *
1548 62 *
2857 61 *
1738 60 *
1318 59 *
526 58 *
95 57 *
17 56 *
8 55 *
8 54 *

STATISTICS
SAMPLES= 9600 DBA*
AVERAGE= 61.3 DBA*
STANDARD DEVIATION= 2.4 DBA*
ENERGY MEAN= 62.3 DB**
NOISE POLLUTION LEVEL= 68.4 DB**
1% PERCENTILE= 70.2 DBA*
10% DECILE= 64.7 DBA*
MEDIAN= 61.5 DBA*
90% DECILE= 59.2 DBA*
99% PERCENTILE= 57.8 DBA*
RANGE= 22 DB
    
```

LEVEL (DBA*) VS CUMULATIVE DISTRIBUTION (PERCENT)

0 20 40 60 80 100

B-380

NOISE DATA FROM RUN 7 OF 24 OF THE MOBILE NOISE LAB. ON
MAY 10 1971 FROM 17:10 TO 17:50 AT MEDFORD GRID LOCATION 6-4

```

5 77 0
6 76 0
7 75 0
8 74 0
16 73 0
17 72 0
25 71 0
36 69 00
65 68 00
184 67 000
139 66 000
334 65 0000000
558 64 0000000000
977 63 000000000000000
1548 62 0000000000000000000
2857 61 0000000000000000000000000
1738 60 0000000000000000000000000
1318 59 0000000000000000000000000
526 58 000000000
95 57 000
17 56 0
8 55 0
8 54 0

LIST. DBA*0 10 20 30
    
```

LEVEL (DBA*) VS DISTRIBUTION (PERCENT)

-A WEIGHTED DECIBELS-RE. 20 MICRONEWTONS PER SQUARE METER
*-DBA RE. 20 MICRONEWTONS PER SQUARE METER FROM AN AVERAGE OF
THE SQUARES OF THE SOUND PRESSURES.

B-381

NOISE DATA FROM RUN 12 OF 24 OF THE MOBILE NOISE LAB. ON
MAY 10 1971 FROM 22:10 TO 22:50 AT MEDFORD GRID LOCATION 6-4

US DEPARTMENT OF TRANSPORTATION
TRANSPORTATION SYSTEMS CENTER
NOISE ABATEMENT GROUP

NOISE DATA FROM RUN 12 OF 24 OF THE MOBILE NOISE LAB. ON
MAY 10 1971 FROM 22:10 TO 22:50 AT MEDFORD GRID LOCATION 6-4

DISTRIBUTION DBA*

1	73	0
4	72	0
7	71	0
9	70	0
22	69	0
36	68	00
46	67	00
51	66	00
100	65	000
135	64	000
151	63	000
269	62	00000
384	61	0000000
489	60	000000000
986	59	0000000000000
1366	58	0000000000000000000
1543	57	000000000000000000000
1468	56	00000000000000000000000
1220	55	0000000000000000000000000
613	54	0000000000000
347	53	00000000
279	52	000000
113	51	000
34	50	00
7	49	0

SAMPLES= 2400
AVERAGE= 57.3 DBA*
STANDARD DEVIATION= 3.1 DBA*
ENERGY MEAN= 58.7 DB**
NOISE POLLUTION LEVEL= 66.6
1% PERCENTILE= 67.6 DBA*
10% DECILE= 61.7 DBA*
MEDIAN= 57.5 DBA*
90% DECILE= 54.3 DBA*
99% PERCENTILE= 51.5 DBA*
RANGE= 24 DB

DIST. DBA*0 10 20 30
LEVEL(DBA*) VS DISTRIBUTION (PERCENT)

*-A WEIGHTED DECIBEL-S-RE-20 MICRONETONS PER SQUARE METER
*-DBA RE-20 MICRONETONS PER SQUARE METER FROM AN AVERAGE OF
THE SQUARES OF THE SOUND PRESSURES.

LEVEL(DBA*) VS CUMULATIVE DISTRIBUTION (PERCENT)

NOISE DATA FROM RUN 9 OF 24 OF THE MOBILE NOISE LAB. ON
MAY 10 1971 FROM 19:10 TO 19:50 AT MEDFORD GRID LOCATION 6-4

US DEPARTMENT OF TRANSPORTATION
TRANSPORTATION SYSTEMS CENTER
NOISE ABATEMENT GROUP

NOISE DATA FROM RUN 9 OF 24 OF THE MOBILE NOISE LAB. ON
MAY 10 1971 FROM 19:10 TO 19:50 AT MEDFORD GRID LOCATION 6-4

DISTRI- BUTION	DBA*		
3	71	0	
15	78	0	
34	69	00	
52	68	00	
56	67	00	
66	66	00	
187	65	000	
168	64	0000	
288	63	000000	
482	62	0000000000	
679	61	000000000000	
932	60	0000000000000000	
1571	59	00000000000000000000	
2847	58	000000000000000000000000	
1732	57	000000000000000000000000	
958	56	000000000000000000000000	
358	55	00000000	
57	54	00	
11	53	0	
8	52	0	

SAMPLES=	9600
AVERAGE=	58.8 DBA*
STANDARD DEVIATION=	2.5 DBA*
ENERGY MEAN=	59.8 DB**
NOISE POLLUTION LEVEL=	66.2 DBA*
1% PERCENTILE=	68.2 DBA*
10% DECILE=	62.8 DBA*
MEDIAN=	58.8 DBA*
90% DECILE=	56.6 DBA*
99% PERCENTILE=	55.1 DBA*
RANGE=	18 DB

LEVEL (DBA*) VS CUMULATIVE DISTRIBUTION (PERCENT)



LEVEL (DBA*) VS DISTRIBUTION (PERCENT)

*-A WEIGHTED DECIBEL-S-RE. 20 MICRONEWTONS PER SQUARE METER

**-DBA RE. 20 MICRONEWTONS PER SQUARE METER FROM AN AVERAGE OF THE SQUARES OF THE SOUND PRESSURES.

NOISE DATA FROM RUN 14 OF 24 OF THE MOBILE NOISE LAB. ON
MAY 11 1971 FROM 08:10 TO 08:50 AT MEDFORD GRID LOCATION 6-4

US DEPARTMENT OF TRANSPORTATION
TRANSPORTATION SYSTEMS CENTER
NOISE ABATEMENT GROUP

NOISE DATA FROM RUN 14 OF 24 OF THE MOBILE NOISE LAB. ON
MAY 11 1971 FROM 08:10 TO 08:50 AT MEDFORD GRID LOCATION 6-4

DISTRI UTION DBA*	1 73 0	SAMPLES=	9600
2 72 0	2 72 0	AVERAGE=	53.5 DBA*
6 71 0	6 71 0	STANDARD DEVIATION=	4.1 DBA*
5 70 0	5 70 0	ENERGY MEAN=	55.8 DB**
6 69 0	6 69 0	NOISE POLLUTION LEVEL=	66.3
10 68 0	10 68 0	1% PERCENTILE*	65.5 DBA*
18 67 0	18 67 0	10% PERCENTILE*	59 DBA*
27 66 0	27 66 0	MEDIAN=	53.8 DBA*
40 65 0	40 65 0	90% PERCENTILE*	48.7 DBA*
63 64 0	63 64 0	RANGE=	46 DBA*
73 63 0	73 63 0		30 DB
90 62 0	90 62 0		
140 61 0	140 61 0		
157 60 0	157 60 0		
300 59 0	300 59 0		
482 58 0	482 58 0		
634 57 0	634 57 0		
728 56 0	728 56 0		
979 55 0	979 55 0		
833 54 0	833 54 0		
901 53 0	901 53 0		
1019 52 0	1019 52 0		
770 51 0	770 51 0		
664 50 0	664 50 0		
586 49 0	586 49 0		
417 48 0	417 48 0		
349 47 0	349 47 0		
287 46 0	287 46 0		
72 45 0	72 45 0		
20 44 0	20 44 0		
1 43 0	1 43 0		
0 42 0	0 42 0		

1 73 0	DI ST. DBA#0	10	LEVEL (DBA*) VS DISTRIBUTION (PERCENT)	30
2 72 0	1 43 0	20		
6 71 0		40		
5 70 0		60		
6 69 0		80		
10 68 0		100		
18 67 0				
27 66 0				
40 65 0				
63 64 0				
73 63 0				
90 62 0				
140 61 0				
157 60 0				
300 59 0				
482 58 0				
634 57 0				
728 56 0				
979 55 0				
833 54 0				
901 53 0				
1019 52 0				
770 51 0				
664 50 0				
586 49 0				
417 48 0				
349 47 0				
287 46 0				
72 45 0				
20 44 0				
1 43 0				
0 42 0				

** - A WEIGHTED DECIBELS-RE. 20 MICRONEWTONS PER SQUARE METER
** - DBA RE. 20 MICRONEWTONS PER SQUARE METER FROM AN AVERAGE OF
THE SQUARES OF THE SOUND PRESSURES.

LEVEL (DBA*) VS CUMULATIVE DISTRIBUTION (PERCENT)

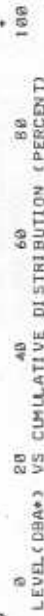
US DEPARTMENT OF TRANSPORTATION
TRANSPORTATION SYSTEMS CENTER
NOISE ABATEMENT GROUP

NOISE DATA FROM RUN 11 OF 24 OF THE MOBILE NOISE LAB. ON
MAY 18 1971 FROM 21:18 TO 21:50 AT MEDFORD GRID LOCATION 6-4

DISTRIBUTION DBA*

3	76	+	SAMPLES=	9600
3	75	0	AVERAGE=	57.9
3	74	0	STANDARD DEVIATION=	2.7
2	73	0	ENERGY MEAN=	59.1
0	72	0	NOISE POLLUTION LEVEL=	66
7	71	0	1% PERCENTILE=	66.9
8	70	0	10% DECILE=	61.8
18	69	0	MEDIAN=	58.2
23	68	0	90% DECILE=	55.4
26	67	0	99% PERCENTILE=	53.1
38	66	0	RANGE=	26 DB
78	65	0		
143	64	0		
285	63	0		
338	62	0		
445	61	0		
678	60	0		
1271	59	0		
1849	58	0		
1691	57	0		
1387	56	0		
812	55	0		
389	54	0		
198	53	0		
64	52	0		
16	51	0		
1	50	0		
0	49	0		

LEVEL (DBA*) VS CUMULATIVE DISTRIBUTION (PERCENT)



NOISE DATA FROM RUN 11 OF 24 OF THE MOBILE NOISE LAB. ON
MAY 18 1971 FROM 21:18 TO 21:50 AT MEDFORD GRID LOCATION 6-4

DISTRIBUTION DBA*

3	76	0
3	75	0
3	74	0
2	73	0
0	72	0
7	71	0
8	70	0
18	69	0
23	68	0
26	67	00
38	66	00
78	65	00
143	64	000
285	63	0000
338	62	000000
445	61	00000000
678	60	000000000000
1271	59	000000000000000000
1849	58	000000000000000000000000
1691	57	000000000000000000000000
1387	56	000000000000000000000000
812	55	0000000000000000
389	54	00000000
198	53	00000
64	52	00
16	51	0
1	50	0
0	49	0

LEVEL (DBA*) VS DISTRIBUTION (PERCENT)

*-A WEIGHTED DECIBEL-RE. 26 MICRONEWTONS PER SQUARE METER
***-DBA RE. 26 MICRONEWTONS PER SQUARE METER FROM AN AVERAGE OF
THE SQUARES OF THE SOUND PRESSURES.

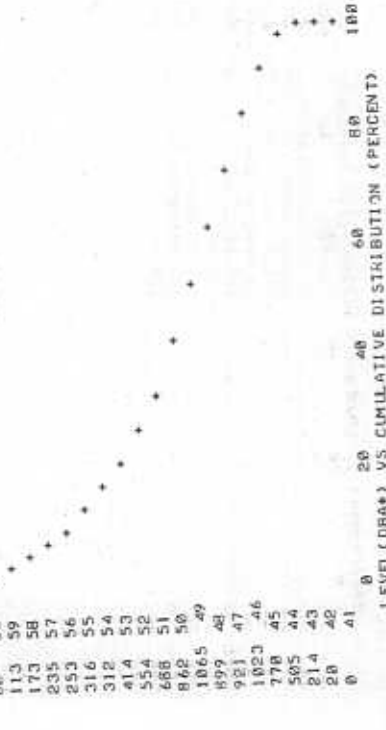
NOISE DATA FROM RUN 16 OF 24 OF THE MOBILE NOISE LAB. ON
MAY 11 1971 FROM 02:10 TO 02:50 AT MEDFORD GRID LOCATION 6-4

US DEPARTMENT OF TRANSPORTATION
TRANSPORTATION SYSTEMS CENTER
NOISE ABATEMENT GROUP

NOISE DATA FROM RUN 16 OF 24 OF THE MOBILE NOISE LAB. ON
MAY 11 1971 FROM 02:10 TO 02:50 AT MEDFORD GRID LOCATION 6-4

DISTRIB
UTION DBA*
2 70 0
4 69 0
9 68 0
16 67 0
17 66 0
20 65 0
26 64 0
32 63 0
28 62 0
47 61 0
62 60 0
113 59 0
173 58 0
235 57 0
253 56 0
316 55 0
414 53 0
554 52 0
688 51 0
862 50 0
1065 49 0
899 48 0
921 47 0
1023 46 0
778 45 0
505 44 0
214 43 0
28 42 0
0 41 0

SAMPLES= 9600
AVERAGE= 49.6 DBA*
STANDARD DEVIATION= 2.4 DBA*
ENERGY MEAN= 50.8 DB**
NOISE POLLUTION LEVEL= 64.1
1% PERCENTILE= 63.9 DBA*
10% DECILE= 56.3 DBA*
MEDIAN= 49.4 DBA*
90% DECILE= 43.3 DBA*
99% PERCENTILE= 43.4 DBA*
RANGE= 28 DB



LEVEL (DBA*) VS CUMULATIVE DISTRIBUTION (PERCENT)

LEVEL (DBA*) VS DISTRIBUTION (PERCENT)

*-A WEIGHTED DECIBELS-RE. 20 MICRONENTONS PER SQUARE METER
*-DBA RE. 20 MICRONENTONS PER SQUARE METER FROM AN AVERAGE OF
THE SQUARES OF THE SOUND PRESSURES.

NOISE DATA FROM RUN 13 OF 24 OF THE MOBILE NOISE LAB. ON
MAY 10 1971 FROM 23:10 TO 23:50 AT MEDFORD GRID LOCATION 6-4

US DEPARTMENT OF TRANSPORTATION
TRANSPORTATION SYSTEMS CENTER
NOISE ABATEMENT GROUP

NOISE DATA FROM RUN 13 OF 24 OF THE MOBILE NOISE LAB. ON
MAY 10 1971 FROM 23:10 TO 23:50 AT MEDFORD GRID LOCATION 6-4

DISTRIH UTION DBA*	2	73	0
	4	72	0
	10	71	0
	14	70	0
	22	69	0
	32	68	0
	40	67	0
	21	66	0
	27	65	0
	30	64	0
	58	63	0
	73	62	0
	133	61	0
	180	60	0
	430	59	0
	829	58	0
	1224	57	0
	1612	56	0
	1781	55	0
	1200	54	0
	719	53	0
	453	52	0
	384	51	0
	237	50	0
	132	49	0
	36	48	0
	6	47	0
	0	46	0

SAMPLES= 9688 DBA*
AVERAGE= 55.6 DBA*
STANDARD DEVIATION= 3.1 DBA*
ENERGY MEAN= 57.2 DB**
NOISE POLLUTION LEVEL= 55.1
1% PERCENTILE= 67.7 DBA*
10% DECILE= 59.3 DBA*
MEDIAN= 56 DBA*
90% DECILE= 52.5 DBA*
99% PERCENTILE= 49.4 DBA*
RANGE= 26 DB

DIST. DBA*0 LEVEL(DBA*) VS DISTRIBUTION (PERCENT) 20 30

*-A WEIGHTED DECIBELS-RE. 20 MICRONETONS PER SQUARE METER
**-DBA RE. 20 MICRONETONS PER SQUARE METER FROM AN AVERAGE OF
THE SQUARES OF THE SOUND PRESSURES.

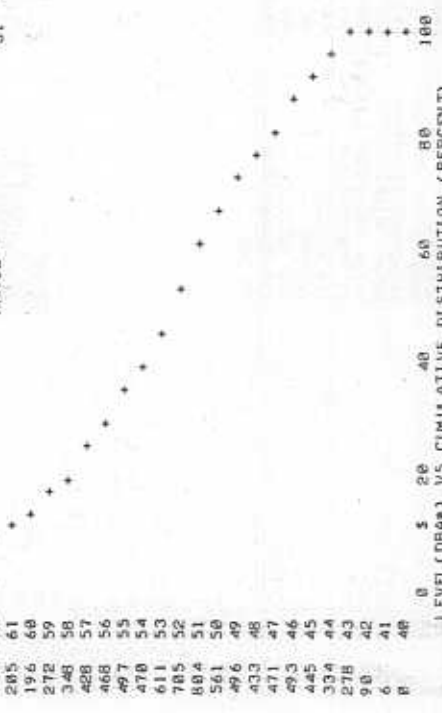
NOISE DATA FROM RUN 18 OF 24 OF THE MOBILE NOISE LAB. ON
MAY 11 1971 FROM 04:10 TO 04:50 AT MEDFORD GRID LOCATION 6-4

US DEPARTMENT OF TRANSPORTATION
TRANSPORTATION SYSTEMS CENTER
NOISE ABATEMENT GROUP

NOISE DATA FROM RUN 18 OF 24 OF THE MOBILE NOISE LAB. ON
MAY 11 1971 FROM 04:10 TO 04:50 AT MEDFORD GRID LOCATION 6-4

DISTRI- BUTION DBA*	9	72	0
8	71	0	9600
28	70	00	52.8 DBA*
42	69	00	6.1 DBA*
59	68	00	57.7 DB**
83	67	00	NOISE POLLUTION LEVEL=
81	66	00	73.3
130	65	00	68.8 DBA*
175	64	00	62.2 DBA*
210	63	00	58.6 DBA*
285	61	00	45.6 DBA*
196	60	00	43 DBA*
272	59	00	31 DB
348	58	00	
428	57	00	
468	56	00	
497	55	00	
470	54	00	
611	53	00	
785	52	00	
894	51	00	
561	50	00	
496	49	00	
471	47	00	
493	46	00	
445	45	00	
334	44	00	
278	43	00	
98	42	00	
6	41	0	
8	40	0	

SAMPLES= 9600
AVERAGE= 52.8 DBA*
STANDARD DEVIATION= 6.1 DBA*
ENERGY MEAN= 57.7 DB**
NOISE POLLUTION LEVEL= 73.3
1% PERCENTILE= 68.8 DBA*
10% DECILE= 62.2 DBA*
MEDIAN= 58.6 DBA*
90% PERCENTILE= 45.6 DBA*
99% PERCENTILE= 43 DBA*
RANGE= 31 DB



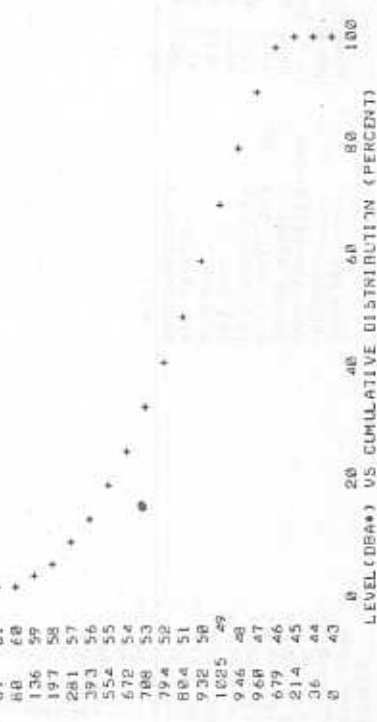
9	72	0	LEVEL (DBA*) VS DISTRIBUTION (PERCENT)
8	71	0	30
28	70	00	
42	69	00	
59	68	00	
83	67	00	
81	66	00	
130	65	00	
175	64	00	
210	63	00	
285	61	00	
196	60	00	
272	59	00	
348	58	00	
428	57	00	
468	56	00	
497	55	00	
470	54	00	
611	53	00	
785	52	00	
894	51	00	
561	50	00	
496	49	00	
471	47	00	
493	46	00	
445	45	00	
334	44	00	
278	43	00	
98	42	00	
6	41	0	
8	40	0	

*-A WEIGHTED DECIBELS-RE, 20 MICRONENTONS PER SQUARE METER
*-DBA RE, 20 MICRONENTONS PER SQUARE METER FROM AN AVERAGE OF
THE SQUARES OF THE SOUND PRESSURES.

US DEPARTMENT OF TRANSPORTATION
TRANSPORTATION SYSTEMS CENTER
NOISE ABATEMENT GROUP

NOISE DATA FROM RUN 15 OF 24 OF THE MOBILE NOISE LAB. ON
MAY 11 1971 FROM 01:18 TO 01:50 AT MEDFORD GRID LOCATION 6-4

5	72	9.680
13	71	51.1 DBA*
8	70	4 DBA*
12	69	54 DB**
4	68	64.2
12	67	63 DBA*
11	66	56.8 DBA*
6	65	51 DBA*
15	63	47 DBA*
27	62	45.3 DBA*
67	61	28 DB
136	59	
197	58	
281	57	
393	56	
554	55	
672	54	
788	53	
794	52	
804	51	
932	50	
1025	49	
946	48	
679	46	
214	45	
36	44	
0	43	



PAGE 2
NOISE DATA FROM RUN 15 OF 24 OF THE MOBILE NOISE LAB. ON
MAY 11 1971 FROM 01:18 TO 01:50 AT MEDFORD GRID LOCATION 6-4

5	72	0
13	71	0
8	70	0
12	69	0
4	68	0
12	67	0
11	66	0
6	65	0
9	64	0
15	63	0
27	62	00
67	61	00
80	60	00
136	59	000
197	58	0000
281	57	00000
393	56	0000000
554	55	000000000
672	54	00000000000
788	53	000000000000
794	52	00000000000000
804	51	000000000000000
932	50	0000000000000000
1025	49	000000000000000000
946	48	000000000000000000
679	46	000000000000000000
214	45	0000000000000000
36	44	00
0	43	00

DIST. DBA*0 10 20 30
LEVEL (DBA*) VS DISTRIBUTION (PERCENT)
*-A WEIGHTED DECIBELS-RE. 20 MICRONEWTONS PER SQUARE METER
***DBA RE. 20 MICRONEWTONS PER SQUARE METER FROM AN AVERAGE OF
THE SQUARES OF THE SOUND PRESSURES.

US DEPARTMENT OF TRANSPORTATION
TRANSPORTATION SYSTEMS CENTER
NOISE ABATEMENT GROUP

NOISE DATA FROM RUN 28 OF 24 OF THE MOBILE NOISE LAB. ON
MAY 11 1971 FROM 06:10 TO 06:50 AT MEDFORD GRID LOCATION 6-4

DISTRIE TION DBA*	1	80
	0	79
	0	78
	0	77
	1	76
	0	75
	0	74
	2	73
	3	72
	2	71
	6	70
	23	69
	36	68
	66	67
	108	66
	197	65
	378	64
	658	63
	1113	62
	1311	61
	1236	60
	1397	59
	1344	58
	837	57
	489	56
	225	55
	112	54
	53	53
	10	52
	0	51

LEVEL (DBA*) VS CUMULATIVE DISTRIBUTION (PERCENT)

100

80

60

40

20

0

SAMPLES= 9680
AVERAGE= 59.9 DBA*
STANDARD DEVIATION= 2.7 DBA*
ENERGY MEAN= 60.9 DB**
NOISE POLLUTION LEVEL= 67.8 DBA*
1% PERCENTILE= 67.7 DBA*
10% DECILE= 63.8 DBA*
MEDIAN= 60.3 DBA*
90% DECILE= 57.1 DBA*
99% PERCENTILE= 54.3 DBA*
RANGE= 28 DB

PAGE 2

NOISE DATA FROM RUN 20 OF 24 OF THE MOBILE NOISE LAB. ON
MAY 11 1971 FROM 06:10 TO 06:50 AT MEDFORD GRID LOCATION 6-4

	1	80
	0	79
	0	78
	0	77
	1	76
	0	75
	0	74
	2	73
	3	72
	2	71
	6	70
	23	69
	36	68
	66	67
	188	66
	197	65
	378	64
	658	63
	1113	62
	1311	61
	1236	60
	1397	59
	1344	58
	837	57
	489	56
	225	55
	112	54
	53	53
	10	52
	0	51

DIST. DBA*0 LEVEL (DBA*) 10 20 30
VS DISTRIBUTION (PERCENT)

*-A WEIGHTED DECIBEL-S-RE. 20 MICRONEWTONS PER SQUARE METER
**-DBA RE. 20 MICRONEWTONS PER SQUARE METER FROM AN AVERAGE OF
THE SQUARES OF THE SOUND PRESSURES.

B-406

B-407

NOISE DATA FROM RUN 17 OF 24 OF THE MOBILE NOISE LAB. ON
MAY 11 1971 FROM 03:11 TO 03:51 AT MEDFORD GRID LOCATION 6-4

US DEPARTMENT OF TRANSPORTATION
TRANSPORTATION SYSTEMS CENTER
NOISE ABATEMENT GROUP

NOISE DATA FROM RUN 17 OF 24 OF THE MOBILE NOISE LAB. ON
MAY 11 1971 FROM 03:11 TO 03:51 AT MEDFORD GRID LOCATION 6-4

DISTRIB UTION DBA* 9.600 DBA*
2 69 0 49.2 DBA*
1 68 0 3.5 DBA*
3 67 0 56.9 DB**
0 66 0 59.9 DBA*
0 65 0 59.1 DBA*
1 64 0 54.7 DBA*
3 63 0 49 DBA*
2 62 0 45.7 DBA*
17 61 0 43.8 DBA*
21 60 0 27 DB
51 59 0
89 58 0
115 57 0
228 56 0
335 55 0
386 54 0
485 53 0
635 52 0
641 51 0
768 50 0
1081 49 0
1148 48 0
1294 47 0
1126 46 0
685 45 0
380 44 0
115 43 0
4 42 0
0 41 0

SAMPLES= 9.600 DBA*
AVERAGE= 49.2 DBA*
STANDARD DEVIATION= 3.5 DBA*
ENERGY MEAN= 56.9 DB**
NOISE POLLUTION LEVEL= 59.9 DBA*
1% PERCENTILE= 59.1 DBA*
10% DECILE= 54.7 DBA*
MEDIAN= 49 DBA*
90% DECILE= 45.7 DBA*
99% PERCENTILE= 43.8 DBA*
RANGE= 27 DB

LEVEL(DBA*) VS DISTRIBUTION (PERCENT)

DBA RE. 20 MICRONETONS PER SQUARE METER FROM AN AVERAGE OF
THE SQUARES OF THE SOUND PRESSURES.

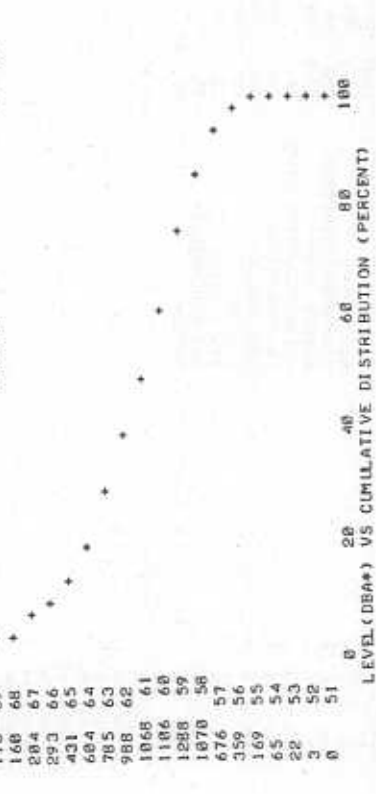
LEVEL(DBA*) VS CUMULATIVE DISTRIBUTION (PERCENT)

NOISE DATA FROM RUN 22 OF 24 OF THE MOBILE NOISE LAB. ON
MAY 11 1971 FROM 08:10 TO 08:50 AT MEDFORD GRID LOCATION 6-4

US DEPARTMENT OF TRANSPORTATION
TRANSPORTATION SYSTEMS CENTER
NOISE ABATEMENT GROUP

NOISE DATA FROM RUN 22 OF 24 OF THE MOBILE NOISE LAB. ON
MAY 11 1971 FROM 08:10 TO 08:50 AT MEDFORD GRID LOCATION 6-4

4	79	0	9680
4	78	0	61 DBA*
6	77	0	3.5 DBA*
6	76	0	62-8 DB**
12	75	0	71-8 DBA*
7	74	0	71-5 DBA*
5	73	0	66 DBA*
20	72	0	61 DBA*
61	71	0	57.5 DBA*
68	70	0	55 DBA*
116	69	0	27 DB
160	68	0	
204	67	0	
293	66	0	
431	65	0	
604	64	0	
785	63	0	
988	62	0	
1068	61	0	
1186	60	0	
1288	59	0	
1870	58	0	
359	56	0	
169	55	0	
65	54	0	
22	53	0	
3	52	0	
0	51	0	



LEVEL (DBA*) VS CUMULATIVE DISTRIBUTION (PERCENT)

DIST. DBA*0 10 20 30
LEVEL (DBA*) VS DISTRIBUTION (PERCENT)

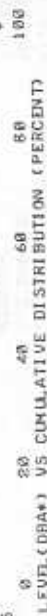
*-A WEIGHTED DECIBEL-S-RE. 20 MICRONEWTONS PER SQUARE METER
**-DBA RE. 20 MICRONEWTONS PER SQUARE METER FROM AN AVERAGE OF
THE SQUARES OF THE SOUND PRESSURES.

US DEPARTMENT OF TRANSPORTATION
TRANSPORTATION SYSTEMS CENTER
NOISE ABATEMENT GROUP

NOISE DATA FROM RUN 21 OF 24 OF THE MOBILE NOISE LAB. ON
MAY 11 1971 FROM 07:10 TO 07:50 AT MEDFORD GRID LOCATION 6-4

DISTRIBUTION DBA*	SAMPLES*	96dB
1 78	AVERAGE*	62.9 DBA*
6 77	STANDARD DEVIATION*	2.4 DBA*
10 76	ENERGY MEAN*	63.8 DB**
3 75	NOISE POLLUTION LEVEL*	69.9
8 74	1% PERCENTILE*	71.2 DBA*
20 73	10% DECILE*	66.5 DBA*
16 72	MEDIAN*	63 DBA*
41 71	90% DECILE*	60.7 DBA*
55 70	99% PERCENTILE*	59 DBA*
92 69	RANGE*	22 DB
184 68		
298 67		
511 66		
754 65		
1113 64		
1596 63		
2823 62		
1680 61		
792 60		
325 59		
78 58		
9 57		
1 56		
0 55		

LEVEL (DBA*) VS CUMULATIVE DISTRIBUTION (PERCENT)



NOISE DATA FROM RUN 21 OF 24 OF THE MOBILE NOISE LAB. ON
MAY 11 1971 FROM 07:10 TO 07:50 AT MEDFORD GRID LOCATION 6-4

DIST. DBA*#	1B	2B	3B
1 78	0		
6 77	0		
10 76	0		
3 75	0		
8 74	0		
20 73	0		
16 72	0		
41 71	00		
55 70	00		
92 69	000		
184 68	0000		
298 67	000000		
511 66	00000000		
754 65	0000000000		
1113 64	000000000000		
1596 63	00000000000000		
2823 62	0000000000000000		
1680 61	000000000000000000		
792 60	0000000000000000		
325 59	000000		
78 58	00		
9 57	0		
1 56	0		
0 55	0		

LEVEL (DBA*) VS DISTRIBUTION (PERCENT)

*-A WEIGHTED DECIBEL-S-RE. 20 MICRONETONS PER SQUARE METER
*-DBA RE. 20 MICRONETONS PER SQUARE METER FROM AN AVERAGE OF
THE SQUARES OF THE SOUND PRESSURES.

NOISE DATA FROM RUN 24 OF 24 OF THE MOBILE NOISE LAB. ON
MAY 11 1971 FROM 18:18 TO 18:58 AT MEDFORD GRID LOCATION 6-4

US. DEPARTMENT OF TRANSPORTATION
TRANSPORTATION SYSTEMS CENTER
NOISE ABATEMENT GROUP

NOISE DATA FROM RUN 24 OF 24 OF THE MOBILE NOISE LAB. ON
MAY 11 1971 FROM 18:18 TO 18:58 AT MEDFORD GRID LOCATION 6-4

DISTRIB UTION DBA*	3 74 0	SAMPLES=	9680
6 73 0	15 72 0	AVERAGE*	59.7 DBA*
30 71 00	42 70 00	STANDARD DEVIATION=	3.5 DBA*
84 69 00	126 68 000	ENERGY MEAN=	61.4 DB**
171 67 0000	225 66 00000	NOISE POLLUTION LEVEL=	70.4
329 65 000000	343 64 000000	1% PERCENTILE=	70 DBA*
482 63 000000000	618 62 00000000000	10% DECILE=	65.2 DBA*
879 61 0000000000000	865 60 00000000000000	MEDIAN=	59.5 DBA*
1146 59 00000000000000000	1430 58 0000000000000000000	90% DECILE=	56.3 DBA*
1224 57 0000000000000000000	158 54 0000	99% PERCENTILE=	54.3 DBA*
989 56 0000000000000000000	39 53 00	RANGE=	22 DB
479 55 0000000000	5 52 0		
158 54 0000			
39 53 00			
5 52 0			

DIST. DBA** 10 20 30

*-A WEIGHTED DECIBEL 5-RE. 20 MICRONETONS PER SQUARE METER
*-DBA RE. 20 MICRONETONS PER SQUARE METER FROM AN AVERAGE OF
THE SQUARES OF THE SOUND PRESSURES.

LEVEL (DBA*) VS CUMULATIVE DISTRIBUTION (PERCENT)

NOISE DATA FROM RUN 23 OF 24 OF THE MOBILE NOISE LAB. ON
MAY 11 1971 FROM 09:10 TO 09:50 AT MEDFORD GRID LOCATION 6-4

US DEPARTMENT OF TRANSPORTATION
TRANSPORTATION SYSTEMS CENTER
NOISE ABATEMENT GROUP

NOISE DATA FROM RUN 23 OF 24 OF THE MOBILE NOISE LAB. ON
MAY 11 1971 FROM 09:10 TO 09:50 AT MEDFORD GRID LOCATION 6-4

DISTRIBUTION DBA*	4	72	0
	11	71	0
	33	70	00
	49	69	00
	79	68	00
	97	67	000
	123	66	000
	220	65	00000
	320	64	000000
	487	63	00000000
	729	61	000000000000
	782	60	00000000000000
	1143	59	000000000000000000
	1542	58	0000000000000000000000
	1389	57	0000000000000000000000
	1136	56	0000000000000000000000
	657	55	0000000000000000000000
	287	54	0000000
	93	53	000
	33	52	00
	16	51	0
	3	50	0

LEVEL (DBA*) VS DISTRIBUTION (PERCENT)

*-A WEIGHTED DECIBEL-S-RE. 20 MICROMETONS PER SQUARE METER
*-DBA RE. 20 MICROMETONS PER SQUARE METER FROM AN AVERAGE OF
THE SQUARES OF THE SOUND PRESSURES.

US DEPARTMENT OF TRANSPORTATION
TRANSPORTATION SYSTEMS CENTER
NOISE ABATEMENT GROUP

NOISE DATA FROM RUN 23 OF 24 OF THE MOBILE NOISE LAB. ON
MAY 11 1971 FROM 09:10 TO 09:50 AT MEDFORD GRID LOCATION 6-4

DISTRIBUTION DBA*	4	72	0
	11	71	0
	33	70	00
	49	69	00
	79	68	00
	97	67	000
	123	66	000
	220	65	00000
	320	64	000000
	487	63	00000000
	729	61	000000000000
	782	60	00000000000000
	1143	59	000000000000000000
	1542	58	0000000000000000000000
	1389	57	0000000000000000000000
	1136	56	0000000000000000000000
	657	55	0000000000000000000000
	287	54	0000000
	93	53	000
	33	52	00
	16	51	0
	3	50	0

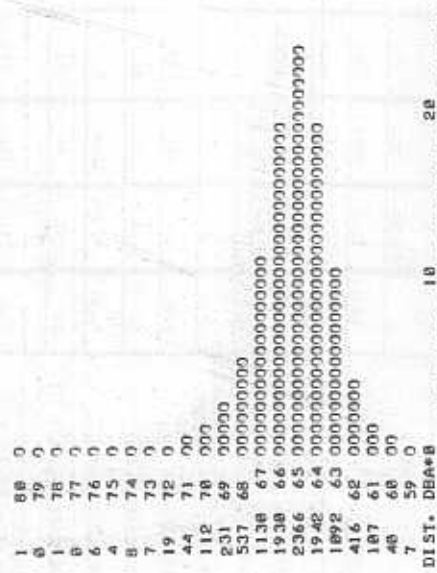
LEVEL (DBA*) VS DISTRIBUTION (PERCENT)

*-A WEIGHTED DECIBEL-S-RE. 20 MICROMETONS PER SQUARE METER
*-DBA RE. 20 MICROMETONS PER SQUARE METER FROM AN AVERAGE OF
THE SQUARES OF THE SOUND PRESSURES.

NOISE DATA FROM RUN 1A OF THE MOBILE NOISE LAB. ON
MARCH 29 1971 FROM 06147 TO 07129 AT MEDFORD GRID LOCATION 6-9

US DEPARTMENT OF TRANSPORTATION
TRANSPORTATION SYSTEMS CENTER
NOISE ABATEMENT GROUP

NOISE DATA FROM RUN 1A OF 24 OF THE MOBILE NOISE LAB. ON
MARCH 29 1971 FROM 06147 TO 07129 AT MEDFORD GRID LOCATION 6-9



LEVEL (DBA*) VS DISTRIBUTION (PERCENT)

*-A WEIGHTED DECIBELS-RE. 20 MICRONEWTONS PER SQUARE METER
 **-DBA RE. 20 MICRONEWTONS PER SQUARE METER FROM AN AVERAGE OF
 THE SQUARES OF THE SOUND PRESSURES.

SITE DATA

Community: Medford, Massachusetts

Grid Location: 6-9

Microphone: South from Fellowship west underpass 375 feet along centerline to Route 1-91 then west 270 feet.

Site Description: Wooded area with microphone located on rock ledge.

DATE	March 1971	29	29	29	29	29	29
TIME (From)	0645	0845	1045	1245	1445	1645	1845
(To)	0845	1045	1245	1445	1645	1845	2045
TAPE NO. (NAL)	24-71	24-71	24-71	24-71	25-71	25-71	25-71
SIDE	1	1	2	2	1	1	2
TRACK	4	3	3	4	4	3	3
ROAD SURFACE	dry	dry	dry	dry	dry	dry	dry
TEMPERATURE (F°)	44	50	55	58	54	49	61
SKY CONDITION	Cloudy	P. C.	P. C.	Cloudy	Cloudy	Cloudy	P. C.
RELATIVE HUMIDITY (%)	47	45	46	48	46	50	61
BAROMETRIC PRESSURE IN of MERCURY	761	761	759	758	758	758	761
WIND DIRECTION	SW	W	SW	SW	W	W	W
VELOCITY (MPH)	4	3	7	4-8	4-10	1-3	3

B-416

Special Events:

SITE DATA

Community: Medford, Massachusetts

Grid Location: 6-9

Microphone: See sheet 1 of 2

Site Description: See sheet 1 of 2

DATE	29	29/30	30	30	30
TIME (From)	2045	2245	0045	0245	0445
(To)	2245	0045	0245	0445	0645
TAPE NO. (NAL)	25-71	26-71	26-71	26-71	26-71
SIDE	2	1	1	2	2
TRACK	4	4	3	3	4
ROAD SURFACE	dry	dry	dry	dry	dry
TEMPERATURE (F°)	42	36	32	32	28
SKY CONDITION	P. C.	P. C.	Clear	P. C.	Hazy
RELATIVE HUMIDITY (%)	61	82	86	85	96
BAROMETRIC PRESSURE IN of MERCURY	761	761	762	762	763
WIND DIRECTION	W	WSW	SE	N	SW
VELOCITY (MPH)	3	1	1	1	1

Special Events:

B-417

U.S. DEPARTMENT OF TRANSPORTATION
TRANSPORTATION SYSTEMS CENTER
NOISE ABATEMENT GROUP

NOISE DATA FROM RUN 3 OF 24 OF THE MOBILE NOISE LAB. ON
MARCH 29 1971 FROM 08:45 TO 09:27 AT MEDFORD GRID LOCATION NO. 6-9

DISTRIBUTION DBA*
 1 78 +
 8 76 +
 6 75 +
 9 74 +
 18 73 +
 22 72 +
 42 71 +
 92 70 +
 156 69 +
 268 68 +
 498 67 +
 786 66 +
 1182 65 +
 1376 64 +
 1585 63 +
 1447 62 +
 1078 61 +
 671 60 +
 492 59 +
 229 58 +
 95 57 +
 27 56 +
 7 55 +
 8 54 +

SAMPLES= 18000
 AVERAGE= 63.2 DBA*
 STANDARD DEVIATION= 2.8 DBA*
 ENERGY MEAN= 64.2 DB**
 NOISE POLLUTION LEVEL= 71.4
 1% PERCENTILE= 71 DBA*
 10% DECILE= 67.2 DBA*
 MEDIAN= 63.6 DBA*
 90% DECILE= 68.2 DBA*
 99% PERCENTILE= 57.7 DBA*
 RANGE= 23 DB

LEVEL (DBA*) VS CUMULATIVE DISTRIBUTION (PERCENT)

B-422

PAGE 2

NOISE DATA FROM RUN 3 OF 24 OF THE MOBILE NOISE LAB. ON
MARCH 29 1971 FROM 08:45 TO 09:27 AT MEDFORD GRID LOCATION NO. 6-9

1 78 0
 8 76 0
 6 75 0
 9 74 0
 18 73 0
 22 72 0
 42 71 0
 92 70 0
 156 69 0
 268 68 0
 498 67 0
 786 66 0
 1182 65 0
 1376 64 0
 1585 63 0
 1447 62 0
 1078 61 0
 671 60 0
 492 59 0
 229 58 0
 95 57 0
 27 56 0
 7 55 0

DIST. DBA*8 10 20 30 40 50 60 70 80 90 100

LEVEL (DBA*) VS DISTRIBUTION (PERCENT)

*-A WEIGHTED DECIBELS-RE. 20 MICRONETONS PER SQUARE METER
 **-DBA RE. 20 MICRONETONS PER SQUARE METER FROM AN AVERAGE OF
 THE SQUARES OF THE SOUND PRESSURES.

B-423

US DEPARTMENT OF TRANSPORTATION
TRANSPORTATION SYSTEMS CENTER
NOISE ABATEMENT GROUP

NOISE DATA FROM RUN 2 OF 24 OF THE MOBILE NOISE LAB. ON
MARCH 29 1971 FROM 07:30 TO 08:12 AT MEDFORD GRID LOCATION NO. 6-9

DISTRIBUTION DBA*
 0 77 +
 8 76 +
 2 75 +
 8 74 +
 17 73 +
 41 72 +
 83 71 +
 185 70 +
 396 69 +
 834 68 +
 1454 67 +
 1913 66 +
 2319 65 +
 1597 64 +
 761 63 +
 294 62 +
 70 61 +
 16 60 +
 8 59 +
 2 58 +
 0 57 +

SAMPLES= 10000
 AVERAGE= 65.6 DBA*
 STANDARD DEVIATION= 2 DBA*
 ENERGY MEAN= 66.1 DB**
 NOISE POLLUTION LEVEL= 71.2
 1% PERCENTILE= 71.6 DBA*
 18% DECILE= 68.7 DBA*
 MEDIAN= 66 DBA*
 90% DECILE= 63.8 DBA*
 99% PERCENTILE= 62 DBA*
 RANGE= 17 DB

0 20 40 60 80 100
 LEVEL(DBA*) VS CUMULATIVE DISTRIBUTION (PERCENT)

B-420

NOISE DATA FROM RUN 2 OF 24 OF THE MOBILE NOISE LAB. ON
MARCH 29 1971 FROM 07:30 TO 08:12 AT MEDFORD GRID LOCATION NO. 6-9

2 75 0
 8 74 0
 17 73 0
 41 72 0
 83 71 0
 185 70 0
 396 69 0
 834 68 0
 1454 67 0
 1913 66 0
 2319 65 0
 1597 64 0
 761 63 0
 294 62 0
 70 61 0
 16 60 0
 8 59 0
 2 58 0
 0 57 0

LEVEL(DBA*) VS DISTRIBUTION (PERCENT)

*-A WEIGHTED DECIBEL-S-RE. 20 MICROMETONS PER SQUARE METER
 **-DBA RE. 20 MICROMETONS PER SQUARE METER FROM AN AVERAGE OF
 THE SQUARES OF THE SOUND PRESSURES.

B-421

NOISE DATA FROM RUN 5 OF 24 OF THE MOBILE NOISE LAB. ON
 MARCH 29 1971 FROM 10:45 TO 11:27 AT MEDFORD GRID LOCATION NO. 6-9

1	79	0
0	78	0
2	77	0
3	76	0
4	75	0
11	74	0
11	73	0
22	72	0
48	71	00
67	70	00
187	69	000
173	68	0000
278	67	00000
441	66	00000000
822	65	000000000000
1121	64	0000000000000000
1225	63	000000000000000000
1399	62	00000000000000000000
1398	61	0000000000000000000000
1183	60	000000000000000000000000
812	59	000000000000000000000000
535	58	000000000000000000000000
261	57	000000000000000000000000
111	56	000000000000000000000000
49	55	000000000000000000000000
11	54	000000000000000000000000
1	53	000000000000000000000000

DIST. DBA*0 10 20 30

*-A WEIGHTED DECIBEL-S-RE-20 MICRONEWTONS PER SQUARE METER
 **-DBA RE-20 MICRONEWTONS PER SQUARE METER FROM AN AVERAGE OF
 THE SQUARES OF THE SOUND PRESSURES.

US DEPARTMENT OF TRANSPORTATION
 TRANSPORTATION SYSTEMS CENTER
 NOISE ABATEMENT GROUP

NOISE DATA FROM RUN 5 OF 24 OF THE MOBILE NOISE LAB. ON
 MARCH 29 1971 FROM 10:45 TO 11:27 AT MEDFORD GRID LOCATION NO. 6-9

DISTRI	1	79	10000
UTION	0	78	62.2 DBA*
DBA*	2	77	3 DBA*
	3	76	63.4 DBA*
	4	75	71.1 DBA*
	11	74	78.9 DBA*
	11	73	66.4 DBA*
	22	72	62.5 DBA*
	48	71	59 DBA*
	67	70	56.4 DBA*
	187	69	26 DB
	173	68	
	278	67	
	441	66	
	822	65	
	1121	64	
	1225	63	
	1399	62	
	1398	61	
	1183	60	
	812	59	
	535	58	
	261	57	
	111	56	
	49	55	
	11	54	
	1	53	
	0	52	



LEVEL (DBA*) VS CUMULATIVE DISTRIBUTION (PERCENT)

U.S. DEPARTMENT OF TRANSPORTATION
TRANSPORTATION SYSTEMS CENTER
NOISE ABATEMENT GROUP

NOISE DATA FROM RUN 4 OF 24 OF THE MOBILE NOISE LAB. ON
MARCH 29 1971 FROM 09:30 TO 10:12 AT MEDFORD GRID LOCATION NO. 6-9

DISTRIBUTION DBA*
 1 75 0
 7 74 0
 14 73 0
 23 72 0
 44 71 0
 68 70 0
 108 69 0
 177 68 0
 327 67 0
 545 66 0
 866 65 0
 1149 64 0
 1420 63 0
 1555 62 0
 1436 61 0
 959 60 0
 674 59 0
 413 58 0
 149 57 0
 55 56 0
 14 55 0
 3 54 0
 1 53 0
 8 52 0

SAMPLES= 10000
 AVERAGE= 62.5 DBA*
 STANDARD DEVIATION= 2.8 DBA*
 ENERGY MEAN= 63.5 DBA*
 NOISE POLLUTION LEVEL= 70.7
 1% PERCENTILE= 70.8 DBA*
 10% DECILE= 66.6 DBA*
 MEDIAN= 62.8 DBA*
 90% DECILE= 59.5 DBA*
 99% PERCENTILE= 57.2 DBA*
 RANGE= 22 DB

LEVEL (DBA*) VS CUMULATIVE DISTRIBUTION (PERCENT)



NOISE DATA FROM RUN 4 OF 24 OF THE MOBILE NOISE LAB. ON
MARCH 29 1971 FROM 09:30 TO 10:12 AT MEDFORD GRID LOCATION NO. 6-9

1 75 0
 7 74 0
 14 73 0
 23 72 0
 44 71 0
 68 70 0
 108 69 0
 177 68 0
 327 67 0
 545 66 0
 866 65 0
 1149 64 0
 1420 63 0
 1555 62 0
 1436 61 0
 959 60 0
 674 59 0
 413 58 0
 149 57 0
 55 56 0
 14 55 0
 3 54 0
 1 53 0
 8 52 0

DIST. DBA*0 10 20 30 40 50 60 70 80 90 100

LEVEL (DBA*) VS DISTRIBUTION (PERCENT)

*-A WEIGHTED DECIBEL-RE. 20 MICRONETONS PER SQUARE METER
 **-DBA RE. 20 MICRONETONS PER SQUARE METER FROM AN AVERAGE OF
 THE SQUARES OF THE SOUND PRESSURES.

US DEPARTMENT OF TRANSPORTATION
TRANSPORTATION SYSTEMS CENTER
NOISE ABATEMENT GROUP

NOISE DATA FROM RUN 7 OF 24 OF THE MOBILE NOISE LAB. ON
MARCH 29, 1971 FROM 12:45 TO 13:27 AT MEDFORD GRID LOCATION NO. 6-9

DISTRIBUTION DBA*

3	75	0
4	74	0
12	73	0
14	72	0
16	71	0
48	70	00
64	69	00
130	68	000
281	67	0000
381	66	00000000
581	65	000000000000
911	64	0000000000000000
1236	63	000000000000000000
1617	62	00000000000000000000
1599	61	0000000000000000000000
1156	60	000000000000000000000000
931	59	000000000000000000000000
540	58	000000000000000000000000
267	57	000000
139	56	000
91	55	00
44	54	00
18	53	0
4	52	0
1	51	0
0	50	0

SAMPLES= 10000
AVERAGE= 61.7 DBA*
STANDARD DEVIATION= 2.8 DBA*
ENERGY MEAN= 62.7 DB**
NOISE POLLUTION LEVEL= 69.9
1% PERCENTILE= 78 DBA*
18% DECILE= 65.8 DBA*
MEDIAN= 62.1 DBA*
90% DECILE= 58.8 DBA*
99% PERCENTILE= 55.5 DBA*
RANGE= 24 DB

LEVEL (DBA*) VS CUMULATIVE DISTRIBUTION (PERCENT)

100

NOISE DATA FROM RUN 7 OF 24 OF THE MOBILE NOISE LAB. ON
MARCH 29, 1971 FROM 12:45 TO 13:27 AT MEDFORD GRID LOCATION NO. 6-9

DISTRIBUTION DBA*

3	75	0
4	74	0
12	73	0
14	72	0
16	71	0
48	70	00
64	69	00
130	68	000
281	67	0000
381	66	00000000
581	65	000000000000
911	64	0000000000000000
1236	63	00000000000000000000
1617	62	0000000000000000000000
1599	61	000000000000000000000000
1156	60	000000000000000000000000
931	59	000000000000000000000000
540	58	0000000000
267	57	00000
139	56	000
91	55	00
44	54	00
18	53	0
4	52	0
1	51	0
0	50	0

LEVEL (DBA*) VS DISTRIBUTION (PERCENT)

*-A WEIGHTED DECIBEL-S-RE. 20 MICRONEWTONS PER SQUARE METER
**-DBA RE. 20 MICRONEWTONS PER SQUARE METER FROM AN AVERAGE OF
THE SQUARES OF THE SOUND PRESSURES.

NOISE DATA FROM RUN 6 OF 24 OF THE MOBILE NOISE LAB. ON
 MARCH 29 1971 FROM 11:30 TO 12:12 AT MEDFORD GRID LOCATION NO. 6-9

US DEPARTMENT OF TRANSPORTATION
 TRANSPORTATION SYSTEMS CENTER
 NOISE ABATEMENT GROUP

NOISE DATA FROM RUN 6 OF 24 OF THE MOBILE NOISE LAB. ON
 MARCH 29 1971 FROM 11:30 TO 12:12 AT MEDFORD GRID LOCATION NO. 6-9

DISTRIBUTION DBA*	1	83	0
	0	82	0
	1	81	0
	2	79	0
	4	78	0
	2	77	0
	9	76	0
	19	75	0
	18	74	0
	33	73	00
	26	72	0
	57	71	00
	182	70	000
	125	69	000
	285	68	0000
	236	67	00000
	373	66	0000000
	576	65	000000000
	861	64	00000000000
	1188	63	000000000000000
	1321	62	00000000000000000
	1341	61	0000000000000000000
	1884	60	00000000000000000000
	971	59	0000000000000000000
	729	58	0000000000000000000
	483	57	0000000000000000000
	198	56	0000
	185	55	0000
	21	54	0
	5	53	0
	0	52	0

SAMPLES= 18000
 AVERAGE= 61.9 DBA*
 STANDARD DEVIATION= 3.3 DBA*
 ENERGY MEAN= 63.5 DB**
 NOISE POLLUTION LEVEL= 71.9
 1% PERCENTILE= 78.3 DBA*
 10% DECILE= 66.5 DBA*
 MEDIAN= 62.1 DBA*
 90% DECILE= 58.4 DBA*
 99% PERCENTILE= 55.7 DBA*
 RANGE= 30 DB

LEVEL (DBA*) VS DISTRIBUTION (PERCENT) 30
 **A WEIGHTED DECIBELS-RE. 20 MICRONETONS PER SQUARE METER
 **DBA RE. 20 MICRONETONS PER SQUARE METER FROM AN AVERAGE OF
 THE SQUARES OF THE SOUND PRESSURES.

LEVEL (DBA*) VS CUMULATIVE DISTRIBUTION (PERCENT) 100

US DEPARTMENT OF TRANSPORTATION
TRANSPORTATION SYSTEMS CENTER
NOISE ABATEMENT GROUP

NOISE DATA FROM RUN 9 OF 24 OF THE MOBILE NOISE LAB. ON
MARCH 29, 1971 FROM 14:45 TO 15:27 AT MEDFORD GRID LOCATION NO. 6-9

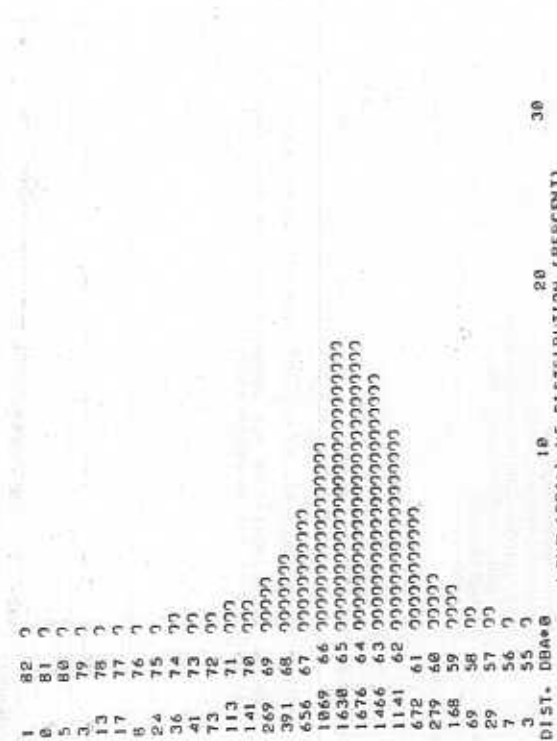
DISTRIBUTION DBA*

1	82	+
0	81	+
5	80	+
3	79	+
13	78	+
17	77	+
8	76	+
36	74	+
41	73	+
113	71	+
141	70	+
269	69	+
391	68	+
656	67	+
1069	66	+
1630	65	+
1676	64	+
1466	63	+
1141	62	+
672	61	+
279	60	+
168	59	+
69	58	+
29	57	+
7	56	+
3	55	+
0	54	+

SAMPLES= 10000
AVERAGE= 64.4 DBA*
STANDARD DEVIATION= 2.9 DBA*
ENERGY MEAN= 65.7 DB**
NOISE POLLUTION LEVEL= 73.1 DBA*
1% PERCENTILE= 74.2 DBA*
10% DECILE= 68.3 DBA*
MEDIAN= 64.7 DBA*
90% DECILE= 61.7 DBA*
99% PERCENTILE= 58.9 DBA*
RANGE= 27 DB

LEVEL (DBA*) VS. CUMULATIVE DISTRIBUTION (PERCENT)

NOISE DATA FROM RUN 9 OF 24 OF THE MOBILE NOISE LAB. ON
MARCH 29, 1971 FROM 14:45 TO 15:27 AT MEDFORD GRID LOCATION NO. 6-9



*-A WEIGHTED DECIBEL-S-RE. 28 MICRONETONS PER SQUARE METER
*-DBA RE. 28 MICRONETONS PER SQUARE METER FROM AN AVERAGE OF
THE SQUARES OF THE SOUND PRESSURES.

U.S. DEPARTMENT OF TRANSPORTATION
TRANSPORTATION SYSTEMS CENTER
NOISE ABATEMENT GROUP

NOISE DATA FROM RUN 8 OF 24 OF THE MOBILE NOISE LAB. ON
MARCH 29 1971 FROM 13:31 TO 14:13 AT MEDFORD GRID LOCATION NO. 6-9

DISTRIB	1	82	7
UTION DBA**	2	81	0
	1	80	0
	3	79	0
	2	78	0
	5	77	0
	6	76	0
	7	75	0
	8	74	0
	15	73	0
	29	72	0
	36	71	0
	51	70	0
	76	69	0
	147	68	0
	269	67	0
	418	66	0
	769	65	0
	1211	64	0
	1639	63	0
	1831	62	0
	1543	61	0
	857	60	0
	589	59	0
	291	58	0
	121	57	0
	78	56	0
	18	55	0
	1	54	0
	0	53	0

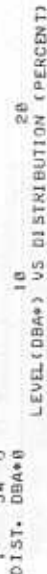
LEVEL(DBA**) VS CUMULATIVE DISTRIBUTION (PERCENT)



NOISE DATA FROM RUN 8 OF 24 OF THE MOBILE NOISE LAB. ON
MARCH 29 1971 FROM 13:31 TO 14:13 AT MEDFORD GRID LOCATION NO. 6-9

	1	82	7
	2	81	0
	1	80	0
	3	79	0
	2	78	0
	5	77	0
	6	76	0
	7	75	0
	8	74	0
	15	73	0
	29	72	0
	36	71	0
	51	70	0
	76	69	0
	147	68	0
	269	67	0
	418	66	0
	769	65	0
	1211	64	0
	1639	63	0
	1831	62	0
	1543	61	0
	857	60	0
	589	59	0
	291	58	0
	121	57	0
	78	56	0
	18	55	0
	1	54	0
	0	53	0

LEVEL(DBA**) VS DISTRIBUTION (PERCENT)



**A WEIGHTED DECIBEL-S-RE. 28 MICRONEWTONS PER SQUARE METER
**DBA RE. 28 MICRONEWTONS PER SQUARE METER FROM AN AVERAGE OF
THE SQUARES OF THE SOUND PRESSURES.

US DEPARTMENT OF TRANSPORTATION
TRANSPORTATION SYSTEMS CENTER
NOISE ABATEMENT GROUP

NOISE DATA FROM RUN 11 OF 24 OF THE MOBILE NOISE LAB. ON
MARCH 29 1971 FROM 16:45 TO 17:27 AT MEDFORD GRID LOCATION NO. 6-9

DISTRI BUTION	1	89	+
	0	88	+
	0	87	+
	1	86	+
	2	85	+
	3	84	+
	8	83	+
	6	82	+
	7	81	+
	10	80	+
	5	79	+
	11	78	+
	14	77	+
	11	76	+
	14	75	+
	25	74	+
	43	73	+
	62	72	+
	144	71	+
	233	70	+
	421	69	+
	926	68	+
	1647	67	+
	2881	66	+
	2118	65	+
	1281	64	+
	565	63	+
	145	62	+
	22	61	+
	2	60	+
	0	59	+

SAMPLES= 10000
 AVERAGE= 66.1 DBA*
 STANDARD DEVIATION= 2.3 DBA*
 ENERGY MEAN= 67.3 DB*
 NOISE POLLUTION LEVEL= 73.2
 1% PERCENTILE= 74.7 DBA*
 10% DECILE= 69 DBA*
 MEDIAN= 66.4 DBA*
 90% DECILE= 64.2 DBA*
 99% PERCENTILE= 68.5 DBA*
 RANGE= 29 DB

LEVEL (DBA*) VS CUMULATIVE DISTRIBUTION (PERCENT)

NOISE DATA FROM RUN 11 OF 24 OF THE MOBILE NOISE LAB. ON
MARCH 29 1971 FROM 16:45 TO 17:27 AT MEDFORD GRID LOCATION NO. 6-9

	1	89	0
	0	88	0
	0	87	0
	1	86	0
	2	85	0
	3	84	0
	8	83	0
	6	82	0
	7	81	0
	10	80	0
	5	79	0
	11	78	0
	14	77	0
	11	76	0
	14	75	0
	25	74	0
	43	73	00
	62	72	00
	144	71	000
	233	70	00000
	421	69	0000000
	926	68	000000000000000000
	1647	67	00000000000000000000000000
	2881	66	00000000000000000000000000000000
	2118	65	00000000000000000000000000000000
	1281	64	00000000000000000000000000000000
	565	63	00000000000000000000000000000000
	145	62	0000
	22	61	0
	2	60	0
	0	59	0

LEVEL (DBA*) VS DISTRIBUTION (PERCENT)
 DIST. DBA*8 10 20 30

**A WEIGHTED DECIBEL-S-RE. 20 MICRONEWTONS PER SQUARE METER
 **DBA RE. 80 MICRONEWTONS PER SQUARE METER FROM AN AVERAGE OF
 THE SQUARES OF THE SOUND PRESSURES.

US DEPARTMENT OF TRANSPORTATION
TRANSPORTATION SYSTEMS CENTER
NOISE ABATEMENT GROUP

NOISE DATA FROM RUN 10 OF 24 OF THE MOBILE NOISE LAB. ON
MARCH 29 1971 FROM 15:30 TO 16:12 AT MEDFORD GRID LOCATION NO. 6-9

DISTRIBUTION DBA*
1 78 +
0 77 *
0 76 *
1 75 *
4 74 *
5 73 *
56 71 *
251 69 *
548 68 *
976 67 *
1652 66 *
2869 65 *
1308 64 *
746 62 *
324 61 *
78 60 *
12 59 *
2 58 *
0 57 *

SAMPLES= 18000
AVERAGE= 64.9 DBA*
STANDARD DEVIATION= 2.1 DBA*
ENERGY MEAN= 65.4 DB**
NOISE POLLUTION LEVEL= 78.8 DBA*
1% PERCENTILE= 78.9 DBA*
10% DECILE= 68 DBA*
MEDIAN= 65.3 DBA*
90% DECILE= 62.8 DBA*
99% PERCENTILE= 61 DBA*
RANGE= 28 DB

LEVEL (DBA*) VS CUMULATIVE DISTRIBUTION (PERCENT)
0 20 40 60 80 100

B-436

NOISE DATA FROM RUN 10 OF 24 OF THE MOBILE NOISE LAB. ON
MARCH 29 1971 FROM 15:30 TO 16:12 AT MEDFORD GRID LOCATION NO. 6-9

1 78 0
0 77 0
0 76 0
1 75 0
4 74 0
5 73 0
23 72 0
56 71 00
100 70 000
251 69 00000
548 68 000000000
976 67 000000000000000
1652 66 0000000000000000000
2869 65 00000000000000000000000
1308 64 0000000000000000000000000
746 63 0000000000000000000000000
324 62 000000000000000
78 61 000000
12 59 0
2 58 0
0 57 0

DIST. DBA** LEVEL (DBA*) VS DISTRIBUTION (PERCENT) 20 30

*-A WEIGHTED DECIBEL-S-RE. 20 MICRONEWTONS PER SQUARE METER
**-DBA RE. 20 MICRONEWTONS PER SQUARE METER FROM AN AVERAGE OF
THE SQUARES OF THE SOUND PRESSURES.

B-437

NOISE DATA FROM RUN 13 OF 24 OF THE MOBILE NOISE LAB. ON
 MARCH 29 1971 FROM 18:45 TO 19:27 AT MEDFORD GRID LOCATION NO. 6-9

1	77	0
8	76	0
2	75	0
8	74	0
18	73	0
14	72	0
25	71	0
54	70	00
81	69	00
174	68	0000
298	67	000000
664	66	000000000000
1171	65	0000000000000000000000
1679	64	000000000000000000000000
1935	63	000000000000000000000000
1714	62	000000000000000000000000
1839	61	000000000000000000000000
576	60	000000000000
369	59	00000000
147	58	000
38	57	00
7	56	0
2	55	0
8	54	0

DIST. DBA*8 18 28 38

• - A WEIGHTED DECIBEL-RE. 28 MICRONETONS PER SQUARE METER FROM AN AVERAGE OF THE SQUARES OF THE SOUND PRESSURES.

US DEPARTMENT OF TRANSPORTATION
 TRANSPORTATION SYSTEMS CENTER
 NOISE ABATEMENT GROUP

NOISE DATA FROM RUN 13 OF 24 OF THE MOBILE NOISE LAB. ON
 MARCH 29 1971 FROM 18:45 TO 19:27 AT MEDFORD GRID LOCATION NO. 6-9

1	77	+	10000
8	76	+	63.1 DBA*
2	75	+	2.3 DBA*
8	74	+	63.8 DB**
18	73	+	69.7
14	72	+	78.1 DBA*
25	71	+	66.5 DBA*
54	70	+	63.6 DBA*
81	69	+	60.8 DBA*
174	68	+	58.4 DBA*
298	67	+	22 DB
664	66	+	
1171	65	+	
1679	64	+	
1935	63	+	
1714	62	+	
1839	61	+	
576	60	+	
369	59	+	
147	58	+	
38	57	+	
7	56	+	
2	55	+	
8	54	+	

STATISTICS	
AVERAGE=	63.1 DBA*
STANDARD DEVIATION=	2.3 DBA*
ENERGY MEAN=	63.8 DB**
NOISE POLLUTION LEVEL=	69.7
1% PERCENTILE=	78.1 DBA*
10% DECILE=	66.5 DBA*
MEDIAN=	63.6 DBA*
90% DECILE=	60.8 DBA*
99% PERCENTILE=	58.4 DBA*
RANGE=	22 DB

LEVEL (DBA*) VS CUMULATIVE DISTRIBUTION (PERCENT)

US DEPARTMENT OF TRANSPORTATION
 TRANSPORTATION SYSTEMS CENTER
 NOISE ABATEMENT GROUP

NOISE DATA FROM RUN 12 OF 24 OF THE MOBILE NOISE LAB. ON
 MARCH 29 1971 FROM 17:31 TO 18:28 AT MEDFORD GRID LOCATION NO. 6-9

DISTRIBUTION DBA*
 1 81
 1 80
 1 79
 5 78
 2 77
 2 76
 5 75
 4 74
 21 73
 37 72
 73 71
 141 70
 382 69
 676 68
 1283 67
 1926 66
 2424 65
 1800 64
 908 63
 341 62
 105 61
 17 60
 4 59
 1 58
 0 57

SAMPLES= 10000
 AVERAGE= 65.4 DBA*
 STANDARD DEVIATION= 2 DBA*
 ENERGY MEANS= 66 DB**
 NOISE POLLUTION LEVEL= 71.1 DBA*
 1% PERCENTILE= 68.4 DBA*
 10% DECILE= 65.8 DBA*
 MEDIAN= 63.6 DBA*
 90% DECILE= 61.7 DBA*
 99% PERCENTILE= 23 DB
 RANGE=

LEVEL (DBA*) VS. CUMULATIVE DISTRIBUTION (PERCENT)
 0 20 40 60 80 100

PAGE 2

NOISE DATA FROM RUN 12 OF 24 OF THE MOBILE NOISE LAB. ON
 MARCH 29 1971 FROM 17:31 TO 18:28 AT MEDFORD GRID LOCATION NO. 6-9

1 81 0
 1 80 0
 1 79 0
 5 78 0
 2 77 0
 2 76 0
 5 75 0
 4 74 0
 21 73 0
 37 72 00
 73 71 00
 141 70 000
 382 69 000000
 676 68 0000000000
 1283 67 000000000000000000
 1926 66 00000000000000000000
 2424 65 0000000000000000000000
 1800 64 000000000000000000000000
 908 63 000000000000000000000000
 341 62 0000000
 105 61 000
 17 60 0
 4 59 0
 1 58 0

DIST. DBA*8 10 20 30
 LEVEL (DBA*) VS. DISTRIBUTION (PERCENT)

* - A WEIGHTED DECIBEL S-RE. 20 MICRONEWTONS PER SQUARE METER
 ** - DBA RE. 20 MICRONEWTONS PER SQUARE METER FROM AN AVERAGE OF
 THE SQUARES OF THE SOUND PRESSURES.

NOISE DATA FROM RUN 15A OF 24 OF THE MOBILE NOISE LAB. ON
MARCH 29 1971 FROM 28145 TO 21135 AT MEDFORD GRID LOCATION NO. 6-9

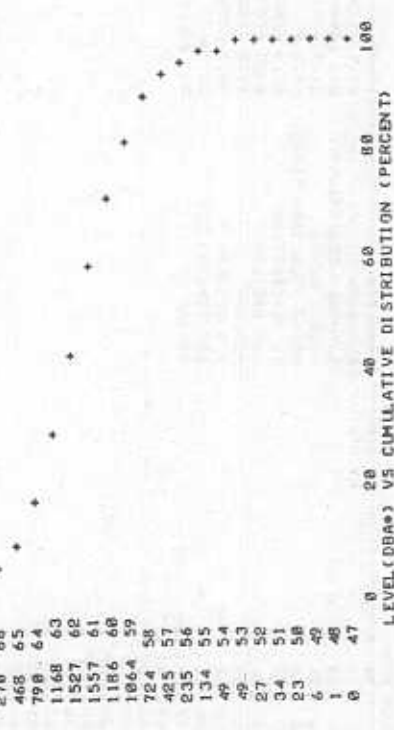
1	77	0
3	75	0
4	74	0
5	73	0
8	72	0
12	71	0
17	70	0
32	69	00
62	68	00
118	67	0000
278	66	00000
468	65	0000000
798	64	00000000000
1168	63	000000000000000
1527	62	0000000000000000000
1864	61	00000000000000000000
235	56	000000
425	57	0000000
724	58	00000000000
134	55	000
49	53	00
27	52	00
34	51	00
23	50	0
6	49	0
1	48	0

LEVEL (DBA*) VS DISTRIBUTION (PERCENT)
 *A WEIGHTED DECIBEL-S-RE. 28 MICROWATTS PER SQUARE METER
 **-DBA RE. 28 MICROWATTS PER SQUARE METER FROM AN AVERAGE OF
 THE SQUARES OF THE SOUND PRESSURES.

US DEPARTMENT OF TRANSPORTATION
TRANSPORTATION SYSTEMS CENTER
NOISE ABATEMENT GROUP

NOISE DATA FROM RUN 15A OF 24 OF THE MOBILE NOISE LAB. ON
MARCH 29 1971 FROM 28145 TO 21135 AT MEDFORD GRID LOCATION NO. 6-9

DISTRIBUTION	DBA*	SAMPLES*	18888
1	77	+	61-1 DBA*
1	76	+	3 DBA*
3	75	+	62-1 DB**
4	74	+	69-8
5	73	+	68-7 DBA*
8	72	+	65 DBA*
12	71	+	61-7 DBA*
17	70	+	58 DBA*
32	69	+	53-2 DBA*
62	68	+	29 DB
118	67	+	
278	66	+	
468	65	+	
798	64	+	
1168	63	+	
1527	62	+	
1864	61	+	
235	56	+	
425	57	+	
724	58	+	
134	55	+	
49	53	+	
27	52	+	
34	51	+	
23	50	+	
6	49	+	
1	48	+	
0	47	+	



US DEPARTMENT OF TRANSPORTATION
TRANSPORTATION SYSTEMS CENTER
NOISE ABATEMENT GROUP

NOISE DATA FROM RUN 14A OF 24 OF THE MOBILE NOISE LAB. ON
MARCH 29 1971 FROM 19:36 TO 20:20 AT MEDFORD GRID LOCATION NO. 6-9

 DISTRIBUTION DBA*
 2 74 0
 3 73 0
 6 72 0
 16 71 0
 18 70 0
 32 69 00
 65 68 00
 95 67 000
 210 66 0000
 488 65 000000
 725 64 0000000000
 1047 63 00000000000000
 1534 62 0000000000000000
 1698 61 0000000000000000
 1383 60 0000000000000000
 1323 59 0000000000000000
 833 58 0000000000000000
 327 57 000000
 181 56 0000
 58 55 00
 27 54 00
 12 53 0
 13 52 0
 0 51 0

SAMPLES= 10000
 AVERAGE= 61.1 DBA*
 STANDARD DEVIATION= 2.6 DBA*
 ENERGY MEAN= 61.9 DB**
 NOISE POLLUTION LEVEL= 68.6
 1% PERCENTILE= 68.6 DBA*
 MEDIAN= 64.8 DBA*
 90% DECILE= 61.5 DBA*
 99% PERCENTILE= 58.5 DBA*
 RANGE= 56 DBA*
 22 DB

LEVEL(DBA*) VS CUMULATIVE DISTRIBUTION (PERCENT)

0 20 40 60 80 100

NOISE DATA FROM RUN 14A OF 24 OF THE MOBILE NOISE LAB. ON
MARCH 29 1971 FROM 19:36 TO 20:20 AT MEDFORD GRID LOCATION NO. 6-9

2 74 0
 3 73 0
 6 72 0
 16 71 0
 18 70 0
 32 69 00
 65 68 00
 95 67 000
 210 66 0000
 488 65 000000
 725 64 0000000000
 1047 63 00000000000000
 1534 62 0000000000000000
 1698 61 0000000000000000
 1383 60 0000000000000000
 1323 59 0000000000000000
 833 58 0000000000000000
 327 57 000000
 181 56 0000
 58 55 00
 27 54 00
 12 53 0
 13 52 0
 0 51 0

DIST. DBA*8 LEVEL(DBA*) VS DISTRIBUTION (PERCENT) 20 30

*-A WEIGHTED DECIBEL-S-RE. 20 MICRONEWTONS PER SQUARE METER
 **-DBA RE. 20 MICRONEWTONS PER SQUARE METER FROM AN AVERAGE OF
 THE SQUARES OF THE SOUND PRESSURES.

US DEPARTMENT OF TRANSPORTATION
TRANSPORTATION SYSTEMS CENTER
NOISE ABATEMENT GROUP

NOISE DATA FROM RUN 17 OF 24 OF THE MOBILE NOISE LAB. ON
MARCH 29 1971 FROM 22:45 TO 23:27 AT MEDFORD GRID LOCATION NO. 6-9

DISTRIBUTION DBA*
1 77 0
2 75 0
4 74 0
11 73 0
13 72 0
18 71 0
32 68 0
51 69 0
189 67 0
291 66 0
497 65 0
718 64 0
1087 63 0
1383 62 0
1487 61 0
1875 59 0
872 58 0
526 57 0
285 55 0
187 54 0
39 53 0
24 52 0
3 51 0
8 50 0

SAMPLES* 18888
AVERAGE* 61 DBA*
STANDARD DEVIATION* 3.1 DBA*
ENERGY MEAN* 62.2 DB**
NOISE POLLUTION LEVEL* 78.1
1% PERCENTILE* 69.6 DBA*
10% DECILE* 65.4 DBA*
MEDIAN* 61.5 DBA*
90% DECILE* 57.6 DBA*
99% PERCENTILE* 54.3 DBA*
RANGE* 2.6 DB

LEVEL (DBA*) VS CUMULATIVE DISTRIBUTION (PERCENT)

PAGE 2

NOISE DATA FROM RUN 17 OF 24 OF THE MOBILE NOISE LAB. ON
MARCH 29 1971 FROM 22:45 TO 23:27 AT MEDFORD GRID LOCATION NO. 6-9

1 77 0
2 75 0
4 74 0
11 73 0
13 72 0
18 71 0
32 70 0
51 69 0
95 68 0
189 67 0
291 66 0
497 65 0
718 64 0
1087 63 0
1383 62 0
1487 61 0
1875 59 0
872 58 0
526 57 0
285 55 0
187 54 0
39 53 0
24 52 0
3 51 0

DIST. DBA*0 10 20 30
LEVEL (DBA*) VS DISTRIBUTION (PERCENT)

*-A WEIGHTED DECIBEL-S-RE. 20 MICRONTONS PER SQUARE METER
**-DBA RE. 20 MICRONTONS PER SQUARE METER FROM AN AVERAGE OF
THE SQUARES OF THE SOUND PRESSURES.

B-450

B-451

US DEPARTMENT OF TRANSPORTATION
TRANSPORTATION SYSTEMS CENTER
NOISE ABATEMENT GROUP

NOISE DATA FROM RUN 16 OF 24 OF THE MOBILE NOISE LAB. ON
MARCH 29 1971 FROM 21:34 TO 22:17 AT MEDFORD GRID LOCATION NO. 6-9

DISTRIB	1	74	10000
UTION	3	73	61.2 DBA*
	2	72	2.9 DBA*
	10	71	62.1 DB**
	24	70	69.5
	42	69	68.8 DBA*
	84	68	65.3 DBA*
	152	67	61.7 DBA*
	292	66	58.1 DBA*
	802	64	54.7 DBA*
	1134	63	83 DB
	1458	62	
	1545	61	
	1213	60	
	1064	59	
	711	58	
	408	57	
	265	56	
	134	55	
	58	54	
	39	53	
	16	52	
	2	51	
	0	50	

LEVEL (DBA*) VS CUMULATIVE DISTRIBUTION (PERCENT)

NOISE DATA FROM RUN 16 OF 24 OF THE MOBILE NOISE LAB. ON
MARCH 29 1971 FROM 21:34 TO 22:17 AT MEDFORD GRID LOCATION NO. 6-9

1	74	0
3	73	0
2	72	0
10	71	0
24	70	0
42	69	00
84	68	00
152	67	000
292	66	00000
541	65	000000000
882	64	0000000000000
1134	63	00000000000000000
1458	62	0000000000000000000
1545	61	000000000000000000000
1213	60	000000000000000000000
1064	59	000000000000000000000
711	58	000000000000000000000
408	57	000000000000000000000
265	56	000000000000000000000
134	55	000000000000000000000
58	54	000000000000000000000
39	53	000000000000000000000
16	52	000000000000000000000
2	51	000000000000000000000
0	50	000000000000000000000

LEVEL (DBA*) VS DISTRIBUTION (PERCENT)

*-A WEIGHTED DECIBEL S-RE. 20 MICRONEWTONS PER SQUARE METER
**-DBA RE. 20 MICRONEWTONS PER SQUARE METER FROM AN AVERAGE OF
THE SQUARES OF THE SOUND PRESSURES.

NOISE DATA FROM RUN 19 OF 24 OF THE MOBILE NOISE LAB. ON
 MARCH 30 1971 FROM 08145 TO 01127 AT MEDFORD GRID LOCATION NO. 6-9

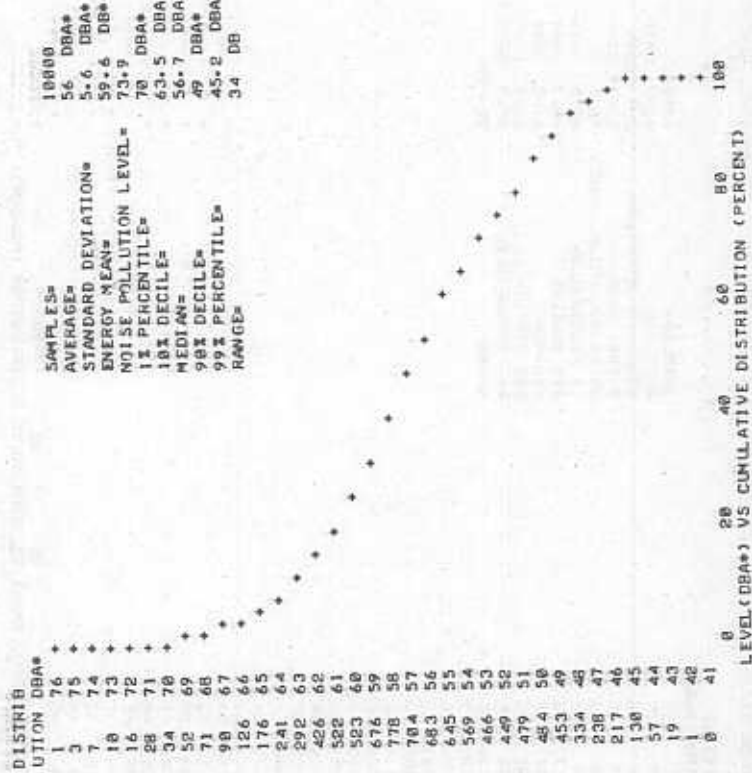
1	76	0
3	75	0
7	74	0
10	73	0
16	72	0
28	71	00
34	70	00
52	69	00
71	68	00
98	67	00
126	66	0000
176	65	0000
241	64	000000
292	63	00000000
426	62	0000000000
522	61	000000000000
523	60	00000000000000
676	59	0000000000000000
778	58	000000000000000000
784	57	00000000000000000000
683	56	0000000000000000000000
645	55	000000000000000000000000
569	54	00000000000000000000000000
466	53	0000000000000000000000000000
449	52	000000000000000000000000000000
479	51	00000000000000000000000000000000
484	50	0000000000000000000000000000000000
453	49	000000000000000000000000000000000000
334	48	00000000000000000000000000000000000000
238	47	00
217	46	00
138	45	00
57	44	000
19	43	000
1	42	000

DIST. DBA*2 LEVEL (DBA*) 18 28 38

*-A WEIGHTED DECIBEL-S-RE. 28 MICROWATTS PER SQUARE METER
 *-DBA RE. 28 MICROWATTS PER SQUARE METER FROM AN AVERAGE OF THE SQUARES OF THE SOUND PRESSURES.

US DEPARTMENT OF TRANSPORTATION
 TRANSPORTATION SYSTEMS CENTER
 NOISE ABATEMENT GROUP

NOISE DATA FROM RUN 19 OF 24 OF THE MOBILE NOISE LAB. ON
 MARCH 30 1971 FROM 08145 TO 01127 AT MEDFORD GRID LOCATION NO. 6-9



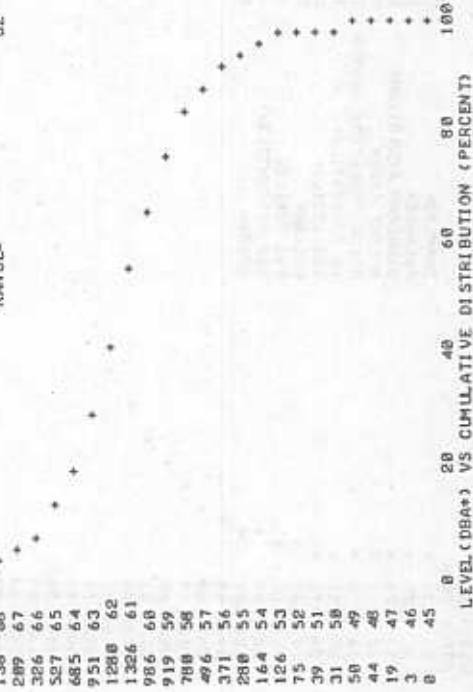
DISTRIBUTION DBA* LEVEL (DBA*) VS CUMULATIVE DISTRIBUTION (PERCENT)

US DEPARTMENT OF TRANSPORTATION
TRANSPORTATION SYSTEMS CENTER
NOISE ABATEMENT GROUP

NOISE DATA FROM RUN 18 OF 24 OF THE MOBILE NOISE LAB. ON
MARCH 29/30 1971 FROM 23:33 TO 00:15 AT MEDFORD GRID LOCATION NO. 6-9

DISTRIB
1 78 +
0 77 +
2 76 +
4 75 +
5 74 +
4 73 +
17 72 +
21 71 +
41 70 +
82 69 +
136 68 +
289 67 +
527 66 +
951 65 +
1288 62 +
986 68 +
919 59 +
788 58 +
496 57 +
371 56 +
288 55 +
164 54 +
126 53 +
75 52 +
39 51 +
31 50 +
58 49 +
44 48 +
19 47 +
3 46 +
0 45

SAMPLES= 10000
AVERAGE= 68.7 DBA*
STANDARD DEVIATION= 3.8 DBA*
ENERGY MEAN= 68.3 DB**
NOISE POLLUTION LEVEL= 78
1% PERCENTILE= 69.9 DBA*
10% DECILE= 65.7 DBA*
MEDIAN= 61.5 DBA*
90% DECILE= 56.5 DBA*
99% PERCENTILE= 49.7 DBA*
RANGE= 32 DB



LEVEL (DBA*) VS CUMULATIVE DISTRIBUTION (PERCENT)

NOISE DATA FROM RUN 18 OF 24 OF THE MOBILE NOISE LAB. ON
MARCH 29/30 1971 FROM 23:33 TO 00:15 AT MEDFORD GRID LOCATION NO. 6-9

1 78 0
0 77 0
2 76 0
4 75 0
5 74 0
4 73 0
17 72 0
21 71 0
41 70 0
82 69 0
136 68 0
289 67 0
527 66 0
951 65 0
1288 62 0
986 68 0
919 59 0
788 58 0
496 57 0
371 56 0
288 55 0
164 54 0
126 53 0
75 52 0
39 51 0
31 50 0
58 49 0
44 48 0
19 47 0
3 46 0
0 45 0

DIST. DBA*8 LEVEL (DBA*) VS DISTRIBUTION (PERCENT) 38

** DBA RE. 20 MICROMETONS PER SQUARE METER FROM AN AVERAGE OF
THE SQUARES OF THE SOUND PRESSURES.

NOISE DATA FROM RUN 21 OF 24 OF THE MOBILE NOISE LAB. ON
 MARCH 30 1971 FROM 821 49 TO 831 31 AT MEDFORD GRID LOCATION NO. 6-9

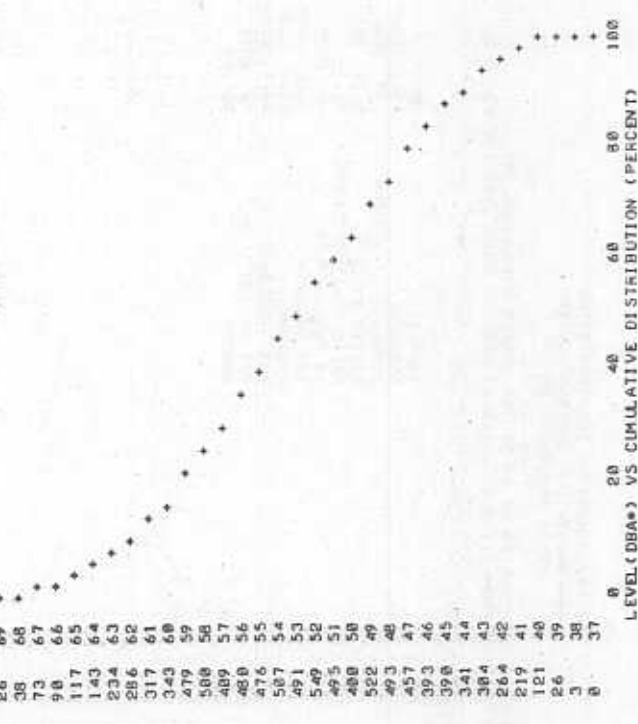
US DEPARTMENT OF TRANSPORTATION
 TRANSPORTATION SYSTEMS CENTER
 NOISE ABATEMENT GROUP

NOISE DATA FROM RUN 21 OF 24 OF THE MOBILE NOISE LAB. ON
 MARCH 30 1971 FROM 821 49 TO 831 31 AT MEDFORD GRID LOCATION NO. 6-9

DISTRIBUTION DBA*

1	88	0
0	79	0
0	78	0
0	77	0
0	76	0
0	75	0
0	74	0
0	73	0
1	72	0
1	71	0
11	70	0
26	69	0
38	68	0
73	67	0
90	66	0
117	65	0
143	64	0
234	63	0
286	62	0
317	61	0
343	60	0
479	59	0
500	58	0
489	57	0
480	56	0
476	55	0
587	54	0
491	53	0
549	52	0
495	51	0
400	50	0
522	49	0
493	48	0
457	47	0
393	46	0
390	45	0
341	44	0
384	43	0
264	42	0
219	41	0
121	40	0
26	39	0
3	38	0
0	37	0

SAMPLES= 10000
 AVERAGE= 52.7 DBA*
 STANDARD DEVIATION= 6.7 DBA*
 ENERGY MEAN= 57.5 DB**
 NOISE POLLUTION LEVEL= 74.7
 1% PERCENTILE= 67.7 DBA*
 10% DECILE= 62.1 DBA*
 MEDIAN= 53 DBA*
 90% DECILE= 44.2 DBA*
 99% PERCENTILE= 48.6 DBA*
 RANGE= 42 DB



B-458

LEVEL (DBA*) VS DISTRIBUTION (PERCENT)

*-A WEIGHTED DECIBEL-S-RE. 20 MICRONETONS PER SQUARE METER
 **-DBA RE. 20 MICRONETONS PER SQUARE METER FROM AN AVERAGE OF
 THE SQUARES OF THE SOUND PRESSURES.

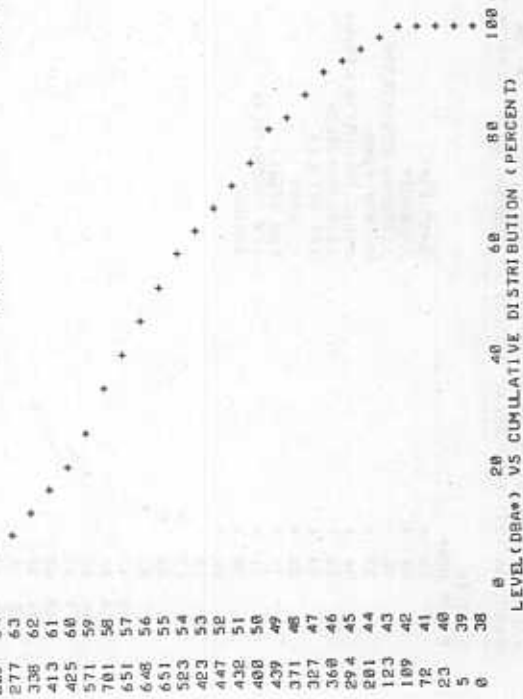
B-459

US DEPARTMENT OF TRANSPORTATION
TRANSPORTATION SYSTEMS CENTER
NOISE ABATEMENT GROUP

NOISE DATA FROM RUN 28 OF 24 OF THE MOBILE NOISE LAB. ON
MARCH 30 1971 FROM 01:33 TO 02:15 AT MEDFORD GRID LOCATION NO. 6-9

DISTRIBUTION DBA*
 1 74 0
 2 73 0
 5 72 0
 19 71 0
 27 70 0
 44 69 00
 56 68 00
 97 67 000
 138 66 000
 178 65 0000
 209 64 0000
 277 63 00000
 338 62 000000
 413 61 0000000
 56 60
 97 67
 138 66
 178 65
 209 64
 277 63
 338 62
 413 61
 485 60
 571 59
 701 58
 823 57
 971 56
 1188 55
 1447 54
 1788 53
 2147 52
 2547 51
 2997 50
 3517 49
 4117 48
 4797 47
 5557 46
 6417 45
 7397 44
 8517 43
 9797 42
 11297 41
 13117 40
 15217 39
 17597 38

SAMPLES= 10000
 AVERAGE= 54.7 DBA*
 STANDARD DEVIATION= 6.3 DBA*
 ENERGY MEAN= 58.9 DB**
 NOISE POLLUTION LEVEL= 75
 1% PERCENTILE= 69 DBA*
 10% DECILE= 63.2 DBA*
 MEDIAN= 55.7 DBA*
 90% DECILE= 46.5 DBA*
 99% PERCENTILE= 42 DBA*
 RANGE= 35 DB



NOISE DATA FROM RUN 28 OF 24 OF THE MOBILE NOISE LAB. ON
MARCH 30 1971 FROM 01:33 TO 02:15 AT MEDFORD GRID LOCATION NO. 6-9

1	74	0
2	73	0
5	72	0
19	71	0
27	70	00
44	69	00
56	68	00
97	67	000
138	66	000
178	65	0000
209	64	0000
277	63	00000
338	62	000000
413	61	0000000
425	60	00000000
571	59	0000000000
701	58	000000000000
823	57	00000000000000
971	56	0000000000000000
1188	55	000000000000000000
1447	54	00000000000000000000
1788	53	0000000000000000000000
2147	52	000000000000000000000000
2547	51	00000000000000000000000000
2997	50	0000000000000000000000000000
3517	49	000000000000000000000000000000
4117	48	00000000000000000000000000000000
4797	47	0000000000000000000000000000000000
5557	46	000000000000000000000000000000000000
6417	45	00000000000000000000000000000000000000
7397	44	00
8517	43	00
9797	42	00
11297	41	00
13117	40	00
15217	39	000
17597	38	000

LEVEL (DBA*) VS. DISTRIBUTION (PERCENT) 30
 **A WEIGHTED DECIBELS-RE. 28 MICRONETONS PER SQUARE METER
 **DBA RE. 28 MICRONETONS PER SQUARE METER FROM AN AVERAGE OF
 THE SQUARES OF THE SOUND PRESSURES.

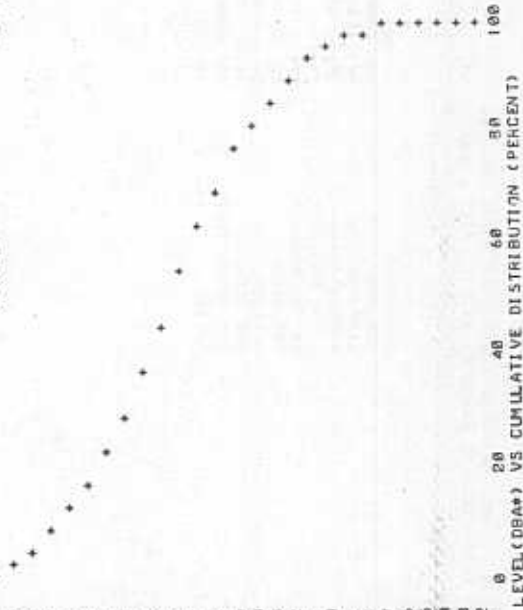
NOISE DATA FROM RUN 23 OF 24 OF THE MOBILE NOISE LAB. ON
 MARCH 30 1971 FROM 084145 TO 085127 AT MEDFORD GRID LOCATION NO. 6-9

US DEPARTMENT OF TRANSPORTATION
 TRANSPORTATION SYSTEMS CENTER
 NOISE ABATEMENT GROUP

NOISE DATA FROM RUN 23 OF 24 OF THE MOBILE NOISE LAB. ON
 MARCH 30 1971 FROM 084145 TO 085127 AT MEDFORD GRID LOCATION NO. 6-9

DISTRIB	1	78	0
UTILTN DBA*	1	77	0
	0	76	0
	1	75	0
	3	74	0
	3	73	0
	8	72	0
	16	71	0
	33	70	0
	68	69	0
	100	68	0
	154	67	0
	243	66	0
	385	65	0
	385	64	0
	495	63	0
	576	62	0
	674	61	0
	728	60	0
	858	59	0
	982	58	0
	793	57	0
	718	56	0
	684	55	0
	461	54	0
	429	53	0
	395	52	0
	284	51	0
	221	50	0
	209	49	0
	123	48	0
	61	47	0
	46	46	0
	18	45	0
	2	44	0
	2	43	0
	0	42	0

SAMPLES= 18000
 AVERAGE= 58 DBA*
 STANDARD DEVIATION= 4.9 DBA*
 ENERGY MEAN= 60.7 DBA*
 NOISE POLLUTION LEVEL= 73.2 DBA*
 1% PERCENTILE= 69.5 DBA*
 10% DECILE= 64.8 DBA*
 MEDIAN= 58.6 DBA*
 90% DECILE= 52.1 DBA*
 99% PERCENTILE= 47.5 DBA*
 RANGE= 35 DB



LEVEL (DBA*) VS CUMULATIVE DISTRIBUTION (PERCENT)

LEVEL (DBA*) VS DISTRIBUTION (PERCENT)

*-A WEIGHTED DECIBEL-5-RE. 20 MICRONETONS PER SQUARE METER
 **-DBA RE. 20 MICRONETONS PER SQUARE METER FROM AN AVERAGE OF
 THE SQUARES OF THE SOUND PRESSURES.

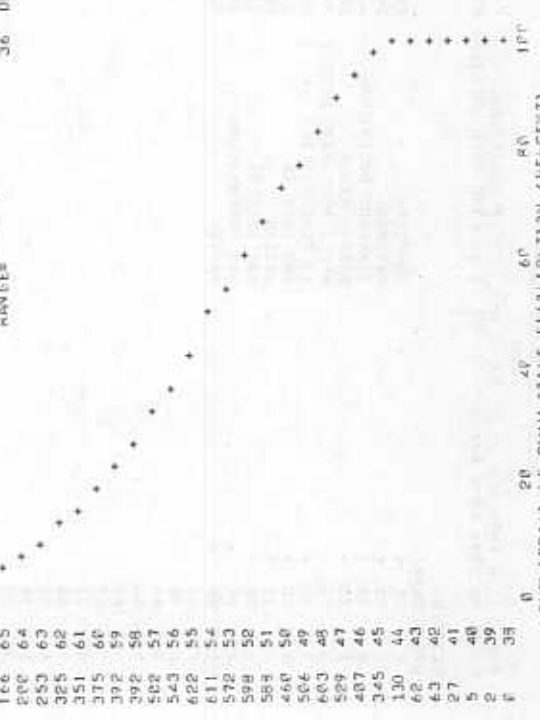
NOISE DATA FROM RUN 22A OF 24 OF THE MOBILE NOISE LAB. ON
 MARCH 30 1971 FROM 03:36 TO 04:20 AT MEDFORD GRID LOCATION NO. 6-9

US DEPARTMENT OF TRANSPORTATION
 TRANSPORTATION SYSTEMS CENTER
 NOISE ABATEMENT GROUP

NOISE DATA FROM RUN 22A OF 24 OF THE MOBILE NOISE LAB. ON
 MARCH 30 1971 FROM 03:36 TO 04:20 AT MEDFORD GRID LOCATION NO. 6-9

DISTRIB
 CTN DBA*
 4 75 0
 1 74 0
 3 73 0
 11 72 0
 11 71 0
 17 70 0
 41 69 0
 64 68 0
 97 67 0
 122 66 0
 166 65 0
 200 64 0
 253 63 0
 325 62 0
 351 61 0
 375 60 0
 392 59 0
 392 58 0
 502 57 0
 543 56 0
 622 55 0
 611 54 0
 572 53 0
 578 52 0
 588 51 0
 460 50 0
 506 49 0
 603 48 0
 529 47 0
 407 46 0
 345 45 0
 598 52 0
 583 51 0
 460 50 0
 506 49 0
 603 48 0
 529 47 0
 407 46 0
 345 45 0
 130 44 0
 62 43 0
 63 42 0
 27 41 0
 5 40 0
 2 39 0
 0 38 0

SAMPLES= 1000
 AVERAGE= 54 DBA*
 STANDARD DEVIATION= 6.1 DBA*
 ENERGY MEAN= 59.5 DB**
 NOISE POLLUTION LEVEL= 74.1 DBA*
 1% PERCENTILE= 68.9 DBA*
 10% DECILE= 63 DBA*
 MEDIAN= 54.2 DBA*
 90% DECILE= 46.9 DBA*
 99% PERCENTILE= 43 DBA*
 RANGE= 36 DB



DISTR. DBA*0 10 20 30
 LEVEL (DBA*) VS DISTRIBUTION (PERCENT)

**A WEIGHTED DECIBEL-S-RE. 20 MICROINVENTIONS PER SQUARE METER
 ***DBA RE. 20 MICROINVENTIONS PER SQUARE METER FROM AN AVERAGE OF
 THE SQUARES OF THE SOUND PRESSURES.

SITE DATA

Community: Medford, Massachusetts

Grid Location: 10-3

Microphone: See sheet 1 of 2

Site Description: See sheet 1 of 2

SITE DATA

Community: Medford, Massachusetts

Grid Location: 10-3

Microphone: 42 feet east of north bound track at Medford -
Malien boundary.

Site Description: Open area near railroad and track terminal.

DATE (March 1971)	10	10/11	11	11	11
TIME (From)	0345	0345	0345	0345	0345
(To)	0345	0345	0345	0345	0345
TAPE NO. (NAL)	12-71	13-71	13-71	14-71	14-71
SIDE	1	1	1	1	2
TRACK	3 4 4	3 4 4	3 4 4	3 4 4	3 4 4
ROAD SURFACE	dry	dry	dry	dry	dry
TEMPERATURE (F°)	55	53	51	52	52
SKY CONDITION	hazy	hazy	cloudy	cloudy	cloudy
RELATIVE HUMIDITY (%)	67	70	69	78	69
BAROMETRIC PRESSURE MM of MERCURY	761	761	760	760	760
WIND DIRECTION	E	SSW	Var.	NE	SW
VELOCITY (MPH)	3	1	MIT	2	6

Special Events: .

B-466

DATE (March 1971)	10	10	10	10	10	10	10	10	10
TIME (From)	0545	0557	1045	1045	1445	1445	1845	1845	1845
(To)	0545	1040	1230	1445	1645	1845	2045	2045	2045
TAPE NO. (NAL)	9-71	9-71	10-71	10-71	11-71	11-71	11-71	11-71	11-71
SIDE	1	2	1	1	1	1	1	1	1
TRACK	3 4 4	3 4 4	3 4 4	3 4 4	3 4 4	3 4 4	3 4 4	3 4 4	3 4 4
ROAD SURFACE	dry	dry	dry	dry	dry	dry	dry	dry	dry
TEMPERATURE (F°)	57	50	49	48	41	38	25	25	25
SKY CONDITION	clear	clear	clear	clear	clear	clear	clear	clear	clear
RELATIVE HUMIDITY (%)	60	59	40	34	31	43	68	68	68
BAROMETRIC PRESSURE MM of MERCURY	764	763	762	761	761	761	761	761	761
WIND DIRECTION	East	SE	SW	SW	SW	SW	NE	W	W
VELOCITY (MPH)	5-4	5-5	6	6	2	2	2	2	1

Special Events: 100-145 Class Radiosending Approximately 200 feet from microphone. 107-1700 freight car switch operation.

B-467

US DEPARTMENT OF TRANSPORTATION
TRANSPORTATION SYSTEMS CENTER
NOISE ABATEMENT GROUP

NOISE DATA FROM RUN 24 OF 24 OF THE MOBILE NOISE LAB. ON
MARCH 30 1971 FROM 05:33 TO 06:15 AT MEDFORD GRID LOCATION NO. 6-9

1	77	SAMPLES=	10000
0	76	AVERAGE=	61.3 DBA*
0	75	STANDARD DEVIATION=	3.4 DBA*
3	74	ENERGY MEAN=	62.6 DB**
10	73	NOISE POLLUTION LEVEL=	71.3 DBA*
14	72	1% PERCENTILES	70.1 DBA*
24	71	10% DECILES	66 DBA*
51	70	MEDIAN*	61.8 DBA*
91	69	90% DECILES	57.4 DBA*
163	68	99% PERCENTILES	53.1 DBA*
232	67	RANGE=	28 DB
396	66		
585	65		
858	64		
1069	63		
1280	62		
1334	61		
1883	60		
944	59		
488	58		
456	57		
348	56		
191	55		
104	54		
67	53		
50	52		
27	51		
16	50		
3	49		
0	48		

LEVEL(DBA*) VS CUMULATIVE DISTRIBUTION (PERCENT)

B-464

PAGE 2

NOISE DATA FROM RUN 24 OF 24 OF THE MOBILE NOISE LAB. ON
MARCH 30 1971 FROM 05:33 TO 06:15 AT MEDFORD GRID LOCATION NO. 6-9

1	77	0
0	76	0
0	75	0
3	74	0
10	73	0
14	72	0
24	71	0
51	70	00
91	69	00
163	68	0000
232	67	00000
396	66	0000000
585	65	000000000
858	64	0000000000000
1069	63	00000000000000000
1280	62	0000000000000000000
1334	61	00000000000000000000
1883	60	000000000000000000000
944	59	000000000000000
488	58	0000000000
456	57	00000000
348	56	0000000
191	55	00000
104	54	000
67	53	00
50	52	00
27	51	00
16	50	0
3	49	0
0	48	0

LEVEL(DBA*) VS DISTRIBUTION (PERCENT)

**A WEIGHTED DECIBEL 5-RE. 20 MICRONEWTONS PER SQUARE METER
**DBA RE. 20 MICRONEWTONS PER SQUARE METER FROM AN AVERAGE OF
THE SQUARES OF THE SOUND PRESSURES.

B-465

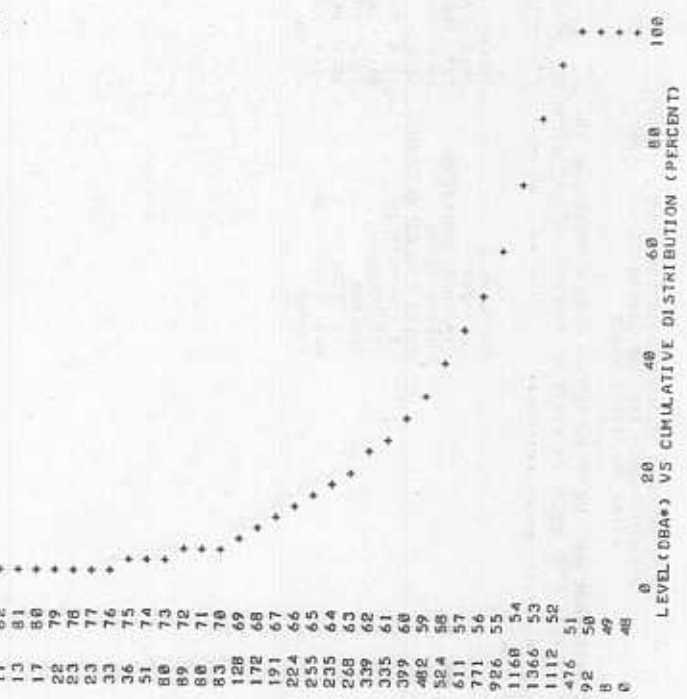
US DEPARTMENT OF TRANSPORTATION
TRANSPORTATION SYSTEMS CENTER
NOISE ABATEMENT GROUP

NOISE DATA FROM RUN 2 OF 24 OF THE MOBILE NOISE LAB. ON
MARCH 10 1971 FROM 07:40 TO 08:25 AT HEDFORD GRID LOCATION NO. 10-3

DISTRIB
TION DBA*

3 93 0
6 92 0
18 91 0
21 90 0
27 89 0
21 88 0
18 87 0
12 86 0
13 85 0
7 84 0
11 82 0
13 81 0
17 80 0
22 79 0
23 78 0
33 77 0
36 76 0
51 74 0
80 73 0
89 72 0
88 71 0
83 70 0
128 69 0
172 68 0
191 67 0
224 66 0
235 65 0
268 64 0
339 62 0
335 61 0
399 60 0
482 59 0
611 57 0
335 61 0
399 60 0
482 59 0
611 57 0
771 56 0
926 55 0
1168 54 0
1366 53 0
1112 52 0
476 51 0
92 50 0
8 49 0
0 48 0

SAMPLES* 10800
AVERAGE= 58.1 DBA*
STANDARD DEVIATION= 7 DBA*
ENERGY MEAN= 71.4 DB**
NOISE POLLUTION LEVEL= 89.3
1% PERCENTILE= 87.4 DBA*
10% DECILE= 67.7 DBA*
MEDIAN= 56.3 DBA*
90% DECILE= 52.5 DBA*
99% PERCENTILE= 51 DBA*
RANGE= 44 DB



PAGE 2
NOISE DATA FROM RUN 2 OF 24 OF THE MOBILE NOISE LAB. ON
MARCH 10 1971 FROM 07:40 TO 08:25 AT HEDFORD GRID LOCATION NO. 10-3

3 93 0
6 92 0
18 91 0
21 90 0
27 89 0
21 88 0
18 87 0
12 86 0
13 85 0
7 84 0
11 82 0
13 81 0
17 80 0
22 79 0
23 78 0
33 77 0
36 76 0
51 74 0
80 73 0
89 72 0
88 71 0
83 70 0
128 69 0
172 68 0
191 67 0
224 66 0
235 65 0
268 64 0
339 62 0
335 61 0
399 60 0
482 59 0
611 57 0
771 56 0
926 55 0
1168 54 0
1366 53 0
1112 52 0
476 51 0
92 50 0
8 49 0
0 48 0

LEVEL (DBA*) VS DISTRIBUTION (PERCENT)

10 20 30

DIST. DBA*8

*-A WEIGHTED DECIBEL-S-RE. 20 MICRONETONS PER SQUARE METER
**-DBA RE. 20 MICRONETONS PER SQUARE METER FROM AN AVERAGE OF
THE SQUARES OF THE SOUND PRESSURES.

NOISE DATA FROM RUN LAB OF 24 OF THE MOBILE NOISE LAB. ON
 MARCH 10 1971 FROM 06:48 TO 07:32 AT MEDFORD GRID LOCATION NO. 10-3

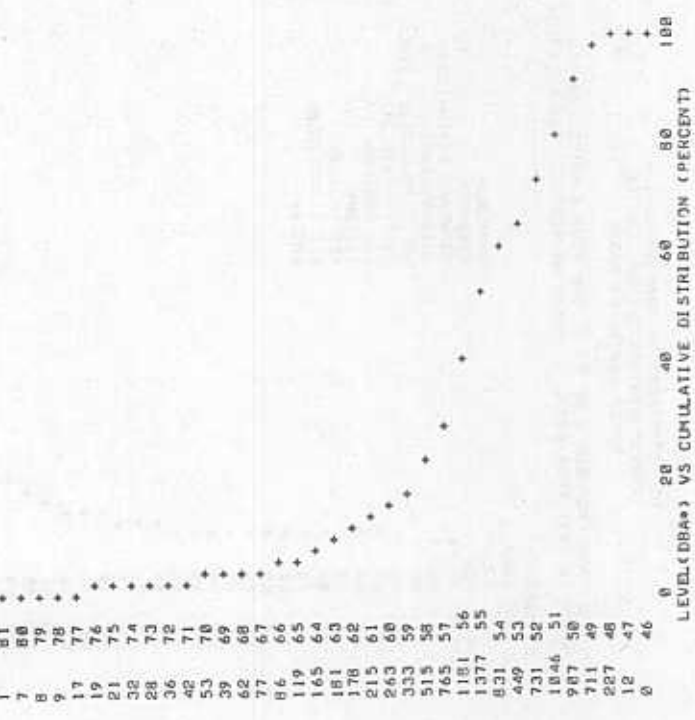
US DEPARTMENT OF TRANSPORTATION
 TRANSPORTATION SYSTEMS CENTER
 NOISE ABATEMENT GROUP

NOISE DATA FROM RUN LAB OF 24 OF THE MOBILE NOISE LAB. ON
 MARCH 10 1971 FROM 06:48 TO 07:32 AT MEDFORD GRID LOCATION NO. 10-3

DISTRIBUTION DBA*

2	92	0
1	91	0
6	90	0
9	89	0
5	88	0
6	87	0
10	86	0
6	85	0
4	84	0
6	83	0
2	82	0
1	81	0
7	80	0
8	79	0
9	78	0
17	77	0
19	76	0
21	75	0
32	74	0
28	73	0
36	72	0
42	71	0
53	70	0
39	69	0
62	68	0
77	67	0
86	66	0
119	65	0
145	64	0
181	63	0
178	62	0
215	61	0
263	60	0
333	59	0
515	58	0
765	57	0
1181	56	0
1377	55	0
831	54	0
449	53	0
731	52	0
1046	51	0
987	50	0
711	49	0
227	48	0
12	47	0
8	46	0

SAMPLES= 10800
 AVERAGE= 55.5 DBA*
 STANDARD DEVIATION= 5.7 DBA*
 ENERGY MEAN= 66.2 DB**
 NOISE POLLUTION LEVEL= 80.8
 1% PERCENTILE= 76.5 DBA*
 10% DECILE= 62.9 DBA*
 MEDIAN= 55.4 DBA*
 90% DECILE= 50.1 DBA*
 99% PERCENTILE= 48.4 DBA*
 RANGE= 45 DB



B-468

DIST. DBA*0 10 20 30
 LEVEL (DBA*) VS DISTRIBUTION (PERCENT)

*-A WEIGHTED DECIBEL-SQ. RE. 20 MICRONEWTONS PER SQUARE METER
 **-DBA RE. 20 MICRONEWTONS PER SQUARE METER FROM AN AVERAGE OF
 THE SQUARES OF THE SOUND PRESSURES.

B-469

NOISE DATA FROM RUN 4 OF 24 OF THE MOBILE NOISE LAB. ON
 MARCH 18 1971 FROM 09:46 TO 10:32 AT MEDFORD GRID LOCATION NO. 10-3

US DEPARTMENT OF TRANSPORTATION
 TRANSPORTATION SYSTEMS CENTER
 NOISE ABATEMENT GROUP

NOISE DATA FROM RUN 4 OF 24 OF THE MOBILE NOISE LAB. ON
 MARCH 18 1971 FROM 09:46 TO 10:32 AT MEDFORD GRID LOCATION NO. 10-3

DISTRIB UTION DBA*	1 89 0	SAMPLES=	10000
0 88 0	0 88 0	AVERAGE=	56.5 DBA*
1 87 0	1 87 0	STANDARD DEVIATION=	5.7 DBA*
4 86 0	4 86 0	ENERGY MEAN=	63.4 DB**
4 85 0	4 85 0	NOISE POLLUTION LEVEL=	78
2 84 0	2 84 0	1% PERCENTILE=	75.4 DBA*
2 83 0	2 83 0	10% DECILE=	65.7 DBA*
3 82 0	3 82 0	MEDIAN=	55.1 DBA*
4 81 0	4 81 0	98% DECILE=	51.8 DBA*
10 80 0	10 80 0	99% PERCENTILE=	58.3 DBA*
9 79 0	9 79 0	RANGE=	41 DB
17 77 0	17 77 0		
26 76 0	26 76 0		
31 75 0	31 75 0		
32 74 0	32 74 0		
57 73 0	57 73 0		
76 72 0	76 72 0		
82 71 0	82 71 0		
84 70 0	84 70 0		
106 69 0	106 69 0		
132 67 0	132 67 0		
174 66 0	174 66 0		
197 65 0	197 65 0		
174 64 0	174 64 0		
182 63 0	182 63 0		
195 62 0	195 62 0		
382 59 0	382 59 0		
479 58 0	479 58 0		
656 57 0	656 57 0		
887 56 0	887 56 0		
849 55 0	849 55 0		
1138 54 0	1138 54 0		
1462 53 0	1462 53 0		
1451 52 0	1451 52 0		
962 51 0	962 51 0		
273 50 0	273 50 0		
25 49 0	25 49 0		
1 48 0	1 48 0		
0 47 0	0 47 0		

1 89 0	1 89 0	LEVEL (DBA*) VS DISTRIBUTION (PERCENT)	38
0 88 0	0 88 0		
1 87 0	1 87 0		
4 86 0	4 86 0		
4 85 0	4 85 0		
2 84 0	2 84 0		
2 83 0	2 83 0		
3 82 0	3 82 0		
3 81 0	3 81 0		
4 80 0	4 80 0		
13 79 0	13 79 0		
9 78 0	9 78 0		
17 77 0	17 77 0		
26 76 0	26 76 0		
31 75 0	31 75 0		
32 74 0	32 74 0		
57 73 0	57 73 0		
76 72 0	76 72 0		
82 71 0	82 71 0		
84 70 0	84 70 0		
106 69 0	106 69 0		
153 68 0	153 68 0		
132 67 0	132 67 0		
174 66 0	174 66 0		
197 65 0	197 65 0		
182 64 0	182 64 0		
195 63 0	195 63 0		
197 62 0	197 62 0		
215 61 0	215 61 0		
313 60 0	313 60 0		
382 59 0	382 59 0		
479 58 0	479 58 0		
656 57 0	656 57 0		
887 56 0	887 56 0		
849 55 0	849 55 0		
1138 54 0	1138 54 0		
1462 53 0	1462 53 0		
1451 52 0	1451 52 0		
962 51 0	962 51 0		
273 50 0	273 50 0		
25 49 0	25 49 0		
1 48 0	1 48 0		
0 47 0	0 47 0		
DIST. DBA**	DIST. DBA**		

*-A WEIGHTED DECIBEL-S-RE. 20 MICRONEWTONS PER SQUARE METER
 **-DBA RE. 20 MICRONEWTONS PER SQUARE METER FROM AN AVERAGE OF
 THE SQUARES OF THE SOUND PRESSURES.

LEVEL (DBA*) VS CUMULATIVE DISTRIBUTION (PERCENT)

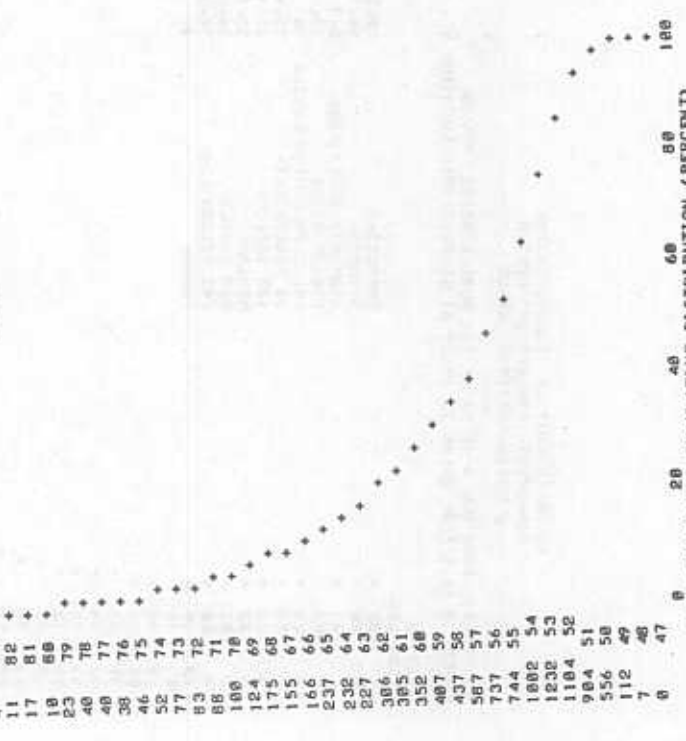
NOISE DATA FROM RUN 3 OF 24 OF THE MOBILE NOISE LAB. ON
 MARCH 10 1971 FROM 08:57 TO 09:42 AT MEDFORD GRID LOCATION 10-3

US DEPARTMENT OF TRANSPORTATION
 TRANSPORTATION SYSTEMS CENTER
 NOISE ABATEMENT GROUP

NOISE DATA FROM RUN 3 OF 24 OF THE MOBILE NOISE LAB. ON
 MARCH 10 1971 FROM 08:57 TO 09:42 AT MEDFORD GRID LOCATION 10-3

DISTRIBUTION DBA*	108.00
1 93 0	57.3 DBA*
5 92 0	6.6 DBA*
6 91 0	68.4 DB**
4 90 0	85.8 DBA*
10 89 0	79.9 DBA*
4 88 0	67.4 DBA*
7 87 0	55.6 DBA*
9 86 0	51.4 DBA*
8 85 0	49.9 DBA*
9 84 0	45 DB
4 83 0	
11 82 0	
17 81 0	
10 80 0	
23 79 0	
40 78 0	
40 77 0	
38 76 0	
46 75 0	
52 74 0	
77 73 0	
83 72 0	
88 71 0	
100 70 0	
124 69 000	
175 68 0000	
155 67 000	
166 66 000	
237 65 0000	
232 64 0000	
227 63 0000	
386 62 00000	
385 61 00000	
352 60 000000	
407 59 0000000	
437 58 0000000	
587 57 000000000	
737 56 0000000000	
744 55 00000000000	
1002 54 00000000000000	
1232 53 0000000000000000	
1104 52 0000000000000000	
904 51 0000000000000000	
556 50 0000000000	
112 49 000	
7 48 0	
0 47 0	

SAMPLES= 10800
 AVERAGE= 57.3 DBA*
 STANDARD DEVIATION= 6.6 DBA*
 ENERGY MEAN= 68.4 DB**
 NOISE POLLUTION LEVEL= 85.8 DBA*
 1% PERCENTILE= 79.9 DBA*
 10% DECILE= 67.4 DBA*
 MEDIAN= 55.6 DBA*
 90% DECILE= 51.4 DBA*
 99% PERCENTILE= 49.9 DBA*
 RANGE= 45 DB



LEVEL (DBA*) VS CUMULATIVE DISTRIBUTION (PERCENT)
 B-472

LEVEL (DBA*) VS DISTRIBUTION (PERCENT)
 B-473

**A WEIGHTED DECIBELS-RE. 20 MICRONEWTONS PER SQUARE METER
 **DBA RE. 20 MICRONEWTONS PER SQUARE METER FROM AN AVERAGE OF
 THE SQUARES OF THE SOUND PRESSURES.

NOISE DATA FROM RUN 6 OF 24 OF THE MOBILE NOISE LAB. ON
MARCH 18 1971 FROM 11:52 TO 12:34 AT MEDFORD GRID LOCATION NO. 18-3

US DEPARTMENT OF TRANSPORTATION
TRANSPORTATION SYSTEMS CENTER
NOISE ABATEMENT GROUP

NOISE DATA FROM RUN 6 OF 24 OF THE MOBILE NOISE LAB. ON
MARCH 18 1971 FROM 11:52 TO 12:34 AT MEDFORD GRID LOCATION NO. 18-3

DISTRIB	UTION DBA*	SAMPLES*	10000
1	86	AVERAGE*	51.7 DBA*
1	85	STANDARD DEVIATION*	4.2 DBA*
0	84	ENERGY MEAN*	58.1 DB**
0	83	NOISE POLLUTION LEVEL*	68.9
1	82	1% PERCENTILE*	67.5 DBA*
9	80	10% DECILE*	56.8 DBA*
3	79	MEDIAN*	51 DBA*
0	78	90% DECILE*	48.9 DBA*
2	77	99% PERCENTILE*	47.4 DBA*
5	76	RANGE*	31 DB
2	75		
4	74		
2	73		
4	72		
6	71		
5	70		
14	69		
21	68		
27	67		
56	66		
82	65		
76	64		
77	62		
73	61		
78	60		
95	59		
116	58		
131	57		
179	56		
239	55		
339	54		
593	53		
974	52		
1639	51		
2233	50		
1725	49		
868	48		
225	47		
19	46		
1	45		
0	44		



LEVEL (DBA*) VS DISTRIBUTION (PERCENT) 20 30
DIST. DBA*0

*-A WEIGHTED DECIBEL S-RE. 20 MICRONEWTONS PER SQUARE METER
*-DBA RE. 20 MICRONEWTONS PER SQUARE METER FROM AN AVERAGE OF
THE SQUARES OF THE SOUND PRESSURES.

US DEPARTMENT OF TRANSPORTATION
TRANSPORTATION SYSTEMS CENTER
NOISE ABATEMENT GROUP

NOISE DATA FROM RUN 5 OF 24 OF THE MOBILE NOISE LAB. ON
MARCH 18 1971 FROM 10:59 TO 11:45 AT MEDFORD GRID LOCATION NO. 18-3

DISTRIBUTION DBA*
1 89 *
5 88 *
1 87 *
1 86 *
4 85 *
1 84 *
2 83 *
2 82 *
0 81 *
1 80 *
2 79 *
2 78 *
4 77 *
4 76 *
11 75 *
24 74 *
37 73 *
43 72 *
57 71 *
86 70 *
132 69 *
176 68 *
166 67 *
179 66 *
196 65 *
142 64 *
152 63 *
183 62 *
158 61 *
186 60 *
236 59 *
384 58 *
375 57 *
367 56 *
478 55 *
793 54 *
1854 53 *
939 52 *
1189 51 *
1382 50 *
236 59 *
384 58 *
375 57 *
367 56 *
478 55 *
793 54 *
1854 53 *
939 52 *
1189 51 *
1382 50 *
1838 49 *
539 48 *
192 47 *
24 46 *
0 45 *

SAMPLES* 18800
AVERAGE* 54.5 DBA*
STANDARD DEVIATION* 6.1 DBA*
ENERGY MEAN* 62.5 DBA*
NOISE POLLUTION LEVEL* 78.1
1% PERCENTILE* 72.9 DBA*
10% DECILE* 65.3 DBA*
MEDIAN* 53.1 DBA*
90% DECILE* 49.3 DBA*
99% PERCENTILE* 47.4 DBA*
RANGE* 43 DB

LEVEL (DBA*) VS CUMULATIVE DISTRIBUTION (PERCENT)

B-476

NOISE DATA FROM RUN 5 OF 24 OF THE MOBILE NOISE LAB. ON
MARCH 18 1971 FROM 10:59 TO 11:45 AT MEDFORD GRID LOCATION NO. 18-3

1 89 0
5 88 0
1 87 0
1 86 0
4 85 0
1 84 0
2 83 0
2 82 0
0 81 0
1 80 0
2 79 0
2 78 0
4 77 0
4 76 0
11 75 0
24 74 0
37 73 0
43 72 0
57 71 0
86 70 0
132 69 0
176 68 0
166 67 0
179 66 0
196 65 0
142 64 0
152 63 0
183 62 0
158 61 0
186 60 0
236 59 0
384 58 0
375 57 0
367 56 0
478 55 0
793 54 0
1854 53 0
939 52 0
1189 51 0
1382 50 0
1838 49 0
539 48 0
192 47 0
24 46 0
0 45 0

LEVEL (DBA*) VS DISTRIBUTION (PERCENT)

**A WEIGHTED DECIBEL-S-RE. 20 MICRONEWTONS PER SQUARE METER
**DBA RE. 20 MICRONEWTONS PER SQUARE METER FROM AN AVERAGE OF
THE SQUARES OF THE SOUND PRESSURES.

B-477

NOISE DATA FROM RUN 8 OF 24 OF THE MOBILE NOISE LAB. ON
MARCH 10 1971 FROM 13:46 TO 14:28 AT MEDFORD GRID LOCATION NO. 10-3

US DEPARTMENT OF TRANSPORTATION
TRANSPORTATION SYSTEMS CENTER
NOISE ABATEMENT GROUP

NOISE DATA FROM RUN 8 OF 24 OF THE MOBILE NOISE LAB. ON
MARCH 10 1971 FROM 13:46 TO 14:28 AT MEDFORD GRID LOCATION NO. 10-3

DISTRIB	1	90	0
UTION DBA*	1	89	0
	1	88	0
	1	87	0
	2	86	0
	0	85	0
	2	84	0
	0	83	0
	1	82	0
	0	81	0
	2	80	0
	0	79	0
	2	78	0
	2	77	0
	4	76	0
	0	75	0
	4	74	0
	2	73	0
	3	72	0
	3	71	0
	4	70	0
	7	69	0
	8	68	0
	12	67	0
	12	66	0
	25	65	0
	30	64	00
	38	63	00
	49	62	00
	65	61	00
	95	60	000
	123	59	000
	181	58	0000
	206	57	0000
	310	56	000000
	358	55	0000000
	511	54	000000000
	934	53	000000000000000
	1281	52	0000000000000000000
	1654	51	000000000000000000000
	2873	50	00000000000000000000000
	1399	49	00000000000000000000000
	596	48	00000000000000000000000
	72	47	00
	4	46	0
	0	45	0

SAMPLES= 10000
AVERAGE= 51.9 DBA*
STANDARD DEVIATION= 3.5 DBA*
ENERGY MEAN= 58.8 DB**
NOISE POLLUTION LEVEL= 67.8
1% PERCENTILE= 65 DBA*
10% DECILE= 56.6 DBA*
MEDIAN= 51.5 DBA*
90% DECILE= 49.2 DBA*
RANGE= 4.4 DB

LEVEL (DBA*) VS DISTRIBUTION (PERCENT)

*-A WEIGHTED DECIBEL S-RE. 20 MICRONEWTONS PER SQUARE METER
*-DBA RE. 20 MICRONEWTONS PER SQUARE METER FROM AN AVERAGE OF THE SQUARES OF THE SOUND PRESSURES.

LEVEL (DBA*) VS CUMULATIVE DISTRIBUTION (PERCENT)

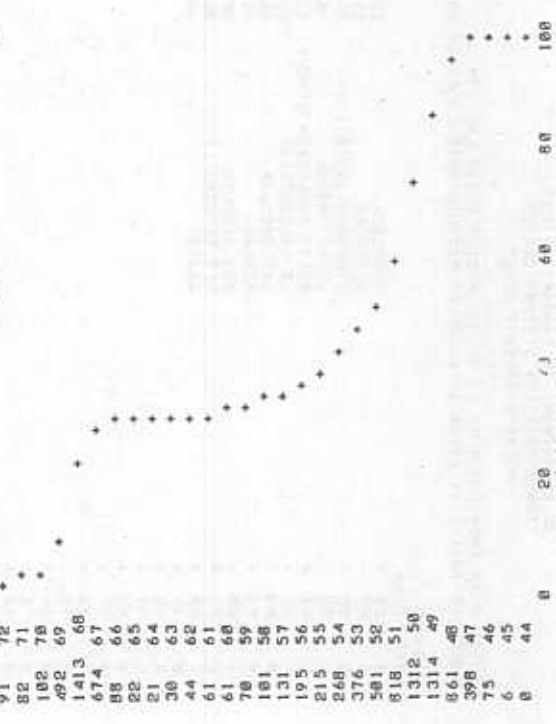
NOISE DATA FROM RUN 7 OF 24 OF THE MOBILE NOISE LAB. ON
MARCH 18 1971 FROM 12:58 TO 13:48 AT MEDFORD GRID LOCATION N7. 18-3

US DEPARTMENT OF TRANSPORTATION
TRANSPORTATION SYSTEMS CENTER
NOISE ABATEMENT GROUP

NOISE DATA FROM RUN 7 OF 24 OF THE MOBILE NOISE LAB. ON
MARCH 18 1971 FROM 12:58 TO 13:48 AT MEDFORD GRID LOCATION NO. 18-3

DISTRIBUTION DBA*	1	83	+
3	82	0	
6	81	0	
4	80	0	
7	79	0	
9	75	0	
7	77	0	
12	76	0	
20	75	0	
53	74	00	
56	73	01	
91	72	00	
82	71	00	
182	70	000	
492	69	000000000	
1413	68	0000000000000000000	
674	67	000000000000000	
88	66	00	
22	65	0	
38	63	00	
44	62	00	
61	61	00	
61	60	00	
78	59	00	
181	58	000	
131	57	000	
195	56	0000	
215	55	0000	
268	54	00000	
376	53	0000000	
581	52	000000000	
818	51	0000000000000	
1312	50	0000000000000000000	
1314	49	0000000000000000000	
861	48	0000000000000000000	
398	47	000000000000000	
75	46	00	
6	45	0	
8	44		

SAMPLES= 18000
AVERAGE= 56.5 DBA*
STANDARD DEVIATION= 8.7 DBA*
ENERGY MEAN= 64.5 DBE**
NOISE POLLUTION LEVEL= 86.8
1% PERCENTILE= 74.4 DBA*
18% DECILE= 69 DBA*
MEDIAN= 52.4 DBA*
98% DECILE= 48.6 DBA*
99% PERCENTILE= 47 DBA*
RANGE= 38 DB



LEVEL (DBA*) VS DISTRIBUTION (PERCENT) 10 20 30

*-A WEIGHTED DECIBEL-S-RE. 20 MICRONEWTONS PER SQUARE METER
**-DBA RE. 20 MICRONEWTONS PER SQUARE METER FROM AN AVERAGE OF
THE SQUARES OF THE SOUND PRESSURES.

US DEPARTMENT OF TRANSPORTATION
TRANSPORTATION SYSTEMS CENTER
NOISE ABATEMENT GROUP

NOISE DATA FROM RUN 18R OF 24 OF THE MOBILE NOISE LAB. ON
MARCH 18 1971 FROM 15:40 TO 16:22 AT MEDFORD GRID LOCATION NO. 18-3

DISTRIB	UTION DBA*	SAMPLES	18900
1	95	0	0
2	94	0	0
4	93	0	0
6	92	0	0
8	91	0	0
16	90	0	0
29	89	0	0
28	88	0	0
28	87	0	0
28	86	0	0
12	85	0	0
20	84	0	0
20	83	0	0
21	82	0	0
21	81	0	0
27	80	0	0
31	79	0	0
25	78	0	0
24	77	0	0
25	76	0	0
34	74	0	0
31	73	0	0
33	72	0	0
31	71	0	0
33	70	0	0
67	69	0	0
74	68	0	0
79	67	0	0
88	66	0	0
186	65	0	0
247	63	0	0
252	62	0	0
357	61	0	0
360	60	0	0
465	59	0	0
505	58	0	0
486	57	0	0
577	56	0	0
685	55	0	0
682	54	0	0
689	53	0	0
616	52	0	0
638	51	0	0
553	50	0	0
655	49	0	0
592	48	0	0
382	47	0	0
135	46	0	0
28	45	0	0
2	44	0	0
0	43	0	0

AVERAGE = 71.7 DBA
STANDARD DEVIATION = 7.8 DBA
ENERGY MEAN = 71.7 DBA
NOISE POLLUTION LEVEL = 91.7 DBA
1% PERCENTILE = 65.4 DBA
MEDIAN = 55.3 DBA
90% DECILE = 46.8 DBA
99% PERCENTILE = 51.0 DBA
RANGE = 51 DBA

PAGE 2
NOISE DATA FROM RUN 18R OF 24 OF THE MOBILE NOISE LAB. ON
MARCH 18 1971 FROM 15:40 TO 16:22 AT MEDFORD GRID LOCATION NO. 18-3

DISTRIB	UTION DBA*	SAMPLES	18900
1	95	0	0
2	94	0	0
4	93	0	0
6	92	0	0
8	91	0	0
16	90	0	0
29	89	0	0
28	88	0	0
28	87	0	0
28	86	0	0
12	85	0	0
20	84	0	0
20	83	0	0
21	82	0	0
21	81	0	0
27	80	0	0
31	79	0	0
25	78	0	0
24	77	0	0
25	76	0	0
34	74	0	0
31	73	0	0
33	72	0	0
31	71	0	0
33	70	0	0
67	69	0	0
74	68	0	0
79	67	0	0
88	66	0	0
186	65	0	0
247	63	0	0
252	62	0	0
357	61	0	0
360	60	0	0
465	59	0	0
505	58	0	0
486	57	0	0
577	56	0	0
685	55	0	0
682	54	0	0
689	53	0	0
616	52	0	0
638	51	0	0
553	50	0	0
655	49	0	0
592	48	0	0
382	47	0	0
135	46	0	0
28	45	0	0
2	44	0	0
0	43	0	0

*A WEIGHTED DECIBEL-S-RE. 28 MICRONEWTONS PER SQUARE METER
**DBA RE. 28 MICRONEWTONS PER SQUARE METER FROM AN AVERAGE OF
THE SQUARES OF THE SOUND PRESSURES. B-487

LEVEL (DBA*) VS CUMULATIVE DISTRIBUTION (PERCENT)
B-486

LEVEL (DBA*) VS DISTRIBUTION (PERCENT)
B-487

US DEPARTMENT OF TRANSPORTATION
TRANSPORTATION SYSTEMS CENTER
NOISE ABATEMENT GROUP

NOISE DATA FROM RUN 98 OF 24 OF THE MOBILE NOISE LAB. ON
MARCH 18 1971 FROM 14:52 TO 15:34 AT MEDFORD GRID LOCATION NO. 10-3

DISTRI
UTION DBA*
3 98 * 10000
2 97 * 52.4 DBA*
2 96 * 5.4 DBA*
2 95 * 68.1 DB**
1 94 * NOISE POLLUTION LEVEL= 81.9
1 93 * 70.4 DBA*
1 92 * 1% PERCENTILE= 59.8 DBA*
1 91 * MEDIAN= 51.4 DBA*
2 90 * 90% DECILE= 48.1 DBA*
2 89 * 99% PERCENTILE= 46.3 DBA*
2 88 * 55 DB
1 87 *
1 86 *
0 85 *
0 84 *
1 83 *
1 82 *
0 81 *
0 80 *
4 79 *
6 78 *
5 77 *
2 76 *
3 75 *
4 74 *
0 73 *
1 72 *
23 70 *
38 69 *
55 68 *
67 67 *
67 66 *
68 66 *
70 65 *
82 64 *
103 63 *
133 62 *
153 61 *
107 60 *
192 59 *
231 58 *
254 57 *
300 56 *
450 55 *
489 54 *
647 53 *
897 52 *
1019 51 *
1229 50 *
1439 49 *
1837 48 *
614 47 *
186 46 *
27 45 *
20 44 *
2 43 *
0 42 *

SAMPLES= 10000
AVERAGE= 52.4 DBA*
STANDARD DEVIATION= 5.4 DBA*
ENERGY MEAN= 68.1 DB**
NOISE POLLUTION LEVEL= 81.9
1% PERCENTILE= 59.8 DBA*
10% DECILE= 51.4 DBA*
MEDIAN= 48.1 DBA*
90% DECILE= 46.3 DBA*
99% PERCENTILE= 46.3 DBA*
RANGE= 55 DB

NOISE DATA FROM RUN 98 OF 24 OF THE MOBILE NOISE LAB. ON
MARCH 10 1971 FROM 14:52 TO 15:34 AT MEDFORD GRID LOCATION NO. 10-3

3 98 0
2 97 0
2 96 0
2 95 0
1 94 0
1 93 0
1 92 0
1 91 0
2 90 0
3 89 0
2 88 0
1 87 0
1 86 0
0 85 0
0 84 0
1 83 0
1 82 0
0 81 0
6 80 0
4 79 0
6 78 0
5 77 0
2 76 0
3 75 0
4 74 0
0 73 0
1 72 0
13 71 0
13 70 0
23 69 0
55 68 0
67 67 0
48 66 0
70 65 0
82 64 0
103 63 0
133 62 0
153 61 0
107 60 0
187 59 0
192 58 0
231 58 0
254 57 0
300 56 0
450 55 0
489 54 0
647 53 0
897 52 0
1019 51 0
1229 50 0
1439 49 0
1837 48 0
614 47 0
186 46 0
27 45 0
20 44 0
2 43 0
0 42 0

DIST. DBA*8 10 20 30
LEVEL (DBA*) VS DISTRIBUTION (PERCENT)

*-A WEIGHTED DECIBEL-S-RE-20 MICROWENTONS PER SQUARE METER
**-DBA RE-20 MICROWENTONS PER SQUARE METER FROM AN AVERAGE OF
THE SQUARES OF THE SOUND PRESSURES. B-485

LEVEL (DBA*) 20 40 60 80 100
VS CUMULATIVE DISTRIBUTION (PERCENT) B-484

U.S. DEPARTMENT OF TRANSPORTATION
TRANSPORTATION SYSTEMS CENTER
NOISE ABATEMENT GROUP

PAGE 2

NOISE DATA FROM RUN 18AR OF 24 OF THE MOBILE NOISE LAB. ON
MARCH 10 1971 FROM 17:39 TO 18:21 AT MEDFORD GRID LOCATION NO. 18-3

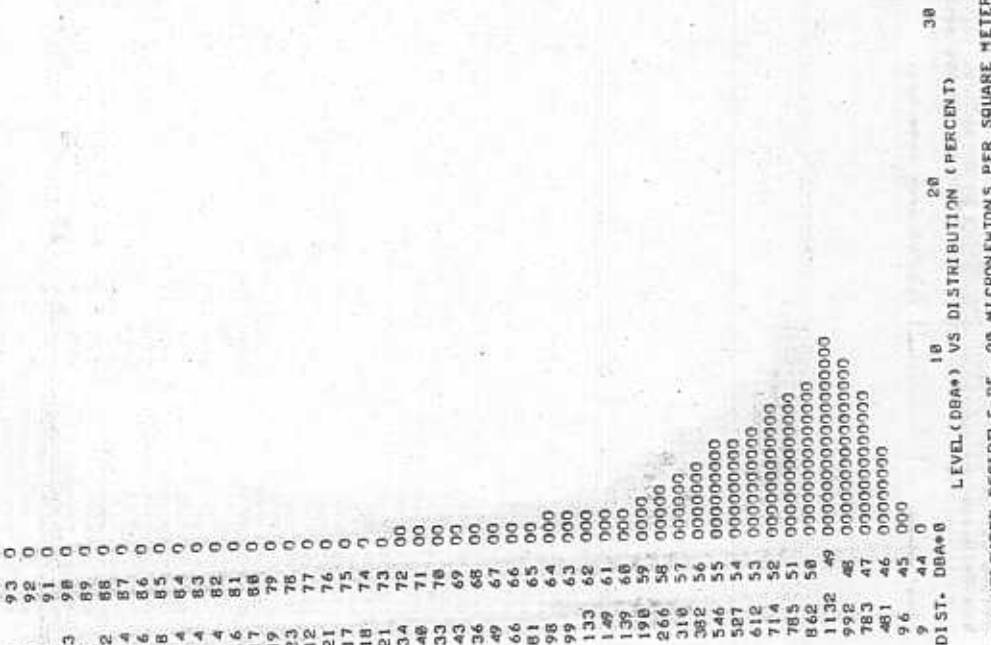
NOISE DATA FROM RUN 12AR OF 24 OF THE MOBILE NOISE LAB. ON
MARCH 10 1971 FROM 17:39 TO 18:21 AT MEDFORD GRID LOCATION NO. 18-3

DISTRIB

1	93	0
3	92	0
8	91	0
13	90	0
22	89	0
36	88	0
49	87	0
66	86	0
81	85	0
98	84	0
133	83	0
149	82	0
198	81	0
266	80	0
382	79	0
546	78	0
785	77	0
1132	76	0
1992	75	0
2881	74	0
4144	73	0
5999	72	0
8888	71	0
12888	70	0
18888	69	0
26888	68	0
38888	67	0
54888	66	0
78888	65	0
113888	64	0
163888	63	0
223888	62	0
303888	61	0
403888	60	0
523888	59	0
663888	58	0
823888	57	0
1003888	56	0
1203888	55	0
1423888	54	0
1663888	53	0
1923888	52	0
2203888	51	0
2503888	50	0
2823888	49	0
3163888	48	0
3523888	47	0
3903888	46	0
4303888	45	0
4723888	44	0
5163888	43	0

STATISTICS

SAMPLES*	18888
AVERAGE*	53.3 DBA*
STANDARD DEVIATION*	7.3 DBA*
ENERGY MEAN*	69.5 DB*
NOISE POLLUTION LEVEL*	88.2 DBA*
1% PERCENTILE*	85.4 DBA*
10% DECILE*	82.2 DBA*
MEDIAN*	81.8 DBA*
90% DECILE*	47.5 DBA*
99% PERCENTILE*	45.9 DBA*
RANGE*	49 DB



LEVEL (DBA*) VS CUMULATIVE DISTRIBUTION (PERCENT)

*-A WEIGHTED DECIBEL-S-REF. 20 MICRONEWTONS PER SQUARE METER
**-DBA RE. 20 MICRONEWTONS PER SQUARE METER FROM AN AVERAGE OF
THE SQUARES OF THE SOUND PRESSURES.

B-491

B-490

U.S. DEPARTMENT OF TRANSPORTATION
TRANSPORTATION SYSTEMS CENTER
NOISE ABATEMENT GROUP

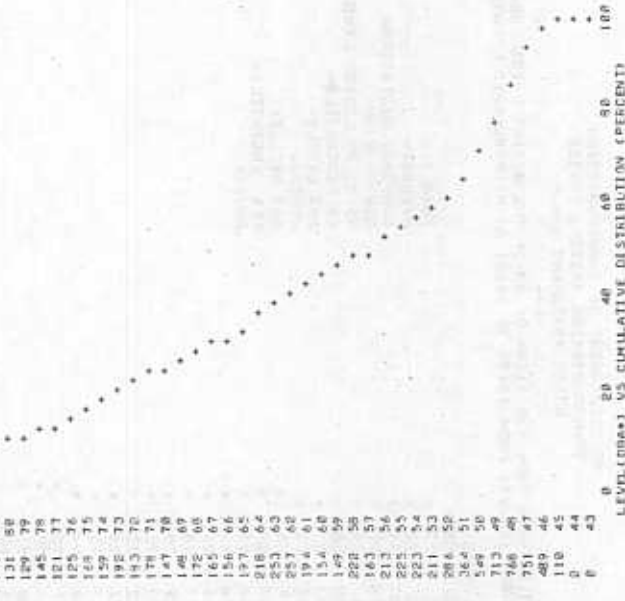
PAGE 2

NOISE DATA FROM RUN 11AR OF 24 OF THE MOBILE NOISE LAB. ON
MARCH 10 1971 FROM 1644T TO 17129 AT MEDFORD GRID LOCATION NO. 10-3

NOISE DATA FROM RUN 11AR OF 24 OF THE MOBILE NOISE LAB. ON
MARCH 10 1971 FROM 1644T TO 17129 AT MEDFORD GRID LOCATION NO. 10-3

DIST. DBA*
1 185.0
2 184.0
3 183.0
4 182.0
5 181.0
6 180.0
7 179.0
8 178.0
9 177.0
10 176.0
11 175.0
12 174.0
13 173.0
14 172.0
15 171.0
16 170.0
17 169.0
18 168.0
19 167.0
20 166.0
21 165.0
22 164.0
23 163.0
24 162.0
25 161.0
26 160.0
27 159.0
28 158.0
29 157.0
30 156.0
31 155.0
32 154.0
33 153.0
34 152.0
35 151.0
36 150.0
37 149.0
38 148.0
39 147.0
40 146.0
41 145.0
42 144.0
43 143.0
44 142.0
45 141.0
46 140.0
47 139.0
48 138.0
49 137.0
50 136.0
51 135.0
52 134.0
53 133.0
54 132.0
55 131.0
56 130.0
57 129.0
58 128.0
59 127.0
60 126.0
61 125.0
62 124.0
63 123.0
64 122.0
65 121.0
66 120.0
67 119.0
68 118.0
69 117.0
70 116.0
71 115.0
72 114.0
73 113.0
74 112.0
75 111.0
76 110.0
77 109.0
78 108.0
79 107.0
80 106.0
81 105.0
82 104.0
83 103.0
84 102.0
85 101.0
86 100.0
87 99.0
88 98.0
89 97.0
90 96.0
91 95.0
92 94.0
93 93.0
94 92.0
95 91.0
96 90.0
97 89.0
98 88.0
99 87.0
100 86.0

SAMPLES* 10000
AVERAGE* 68.5 DBA*
STANDARD DEVIATION* 12.7 DBA*
ENERGY MEAN* 75.3 DB**
NOISE POLLUTION LEVEL* 110-B
10 PENTHILE* 89.4 DBA*
100 PENTHILE* 80.8 DBA*
MEDIAN* 57.4 DBA*
90% DECILE* 47.5 DBA*
99% PENTHILE* 45.9 DBA*
RANGE* 61 DB



LEVEL (DBA) VS DISTRIBUTION (PERCENT)
10 20 30
*A-WEIGHTED DECIBELS-RE. 20 MICRONOTONS PER SQUARE METER
**DBA RE. 20 MICRONOTONS PER SQUARE METER FROM AN AVERAGE OF
THE SQUARES OF THE SOUND PRESSURES. B-489

US DEPARTMENT OF TRANSPORTATION
TRANSPORTATION SYSTEMS CENTER
NOISE ABATEMENT GROUP

NOISE DATA FROM RUN 14 OF 24 OF THE MOBILE NOISE LAB. ON
MARCH 16 1971 FROM 19:35 TO 20:17 AT MEDFORD GRID LOCATION NO. 18-3

DISTRIBUTION DBA*
6 98
4 89
3 88
9 87
8 86
6 84
5 82
7 81
3 80
9 78
4 77
4 76
4 75
4 74
8 72
6 71
15 70
25 69
35 68
64 67
74 66
75 65
65 64
98 63
104 62
105 61
97 60
142 59
196 58
198 57
203 56
265 55
298 54
349 53
505 52
589 51
1812 50
2006 49
2441 48
769 47
163 46
7 45
8 44

SAMPLES* 10000
AVERAGE* 51.4 DBA*
STANDARD DEVIATION* 5.6 DBA*
ENERGY MEAN* 64.6 DB**
NOISE POLLUTION LEVEL* 78.9
1% PERCENTILE* 73.5 DBA*
10% DECILE* 59.1 DBA*
MEDIAN* 49.8 DBA*
90% DECILE* 48 DBA*
99% PERCENTILE* 46.6 DBA*
RANGE* 45 DB

NOISE DATA FROM RUN 14 OF 24 OF THE MOBILE NOISE LAB. ON
MARCH 16 1971 FROM 19:35 TO 20:17 AT MEDFORD GRID LOCATION NO. 18-3

6 98
4 89
3 88
9 87
8 86
6 84
5 82
7 81
3 80
12 79
9 78
4 77
5 76
4 75
7 74
4 73
8 72
6 71
15 70
25 69
35 68
64 67
74 66
75 65
65 64
98 63
104 62
105 61
97 60
142 59
196 58
198 57
203 56
265 55
298 54
349 53
505 52
589 51
1812 50
2006 49
2441 48
769 47
163 46
7 45
8 44

DIST. DBA*0

LEVEL (DBA*) VS DISTRIBUTION (PERCENT)

18 20 28 30

**A WEIGHTED DECIBELS-RE. 20 MICRONETONS PER SQUARE METER
**DBA RE. 20 MICRONETONS PER SQUARE METER FROM AN AVERAGE OF
THE SQUARES OF THE SOUND PRESSURES.

LEVEL (DBA*) VS CUMULATIVE DISTRIBUTION (PERCENT)

0 20 48 68 88 100

NOISE DATA FROM RUN 13 OF 24 OF THE MOBILE NOISE LAB. ON
 MARCH 10 1971 FROM 18:42 TO 19:27 AT MEDFORD GRID LOCATION NO. 10-3

US DEPARTMENT OF TRANSPORTATION
 TRANSPORTATION SYSTEMS CENTER
 NOISE ABATEMENT GROUP

NOISE DATA FROM RUN 13 OF 24 OF THE MOBILE NOISE LAB. ON
 MARCH 10 1971 FROM 18:42 TO 19:27 AT MEDFORD GRID LOCATION NO. 10-3

DISTRIB
 UTION DBA*
 2 90
 0 89
 1 88
 2 87
 1 86
 0 85
 0 84
 2 83
 0 82
 0 81
 2 80
 2 79
 1 78
 0 77
 2 76
 0 75
 1 74
 1 73
 0 72
 2 71
 3 70
 2 69
 5 68
 7 67
 12 66
 19 65
 42 64
 59 63
 114 62
 140 61
 188 60
 268 59
 298 58
 487 57
 687 56
 1878 55
 1496 54
 1892 53
 1286 52
 793 51
 648 49
 341 48
 53 47
 2 46
 0 45

10000
 53.1 DBA*
 3.5 DBA*
 59.2 DBA*
 68.2 DBA*
 64.2 DBA*
 56.1 DBA*
 53 DBA*
 49.9 DBA*
 48.1 DBA*
 4.4 DB

LEVEL (DBA*) VS DISTRIBUTION (PERCENT)
 10 20 30

*-A WEIGHTED DECIBEL-S-RE. 20 MICROWATTS PER SQUARE METER
 **-DBA RE- 20 MICROWATTS PER SQUARE METER FROM AN AVERAGE OF
 THE SQUARES OF THE SOUND PRESSURES.

LEVEL (DBA*) VS CUMULATIVE DISTRIBUTION (PERCENT)
 0 20 40 60 80 100

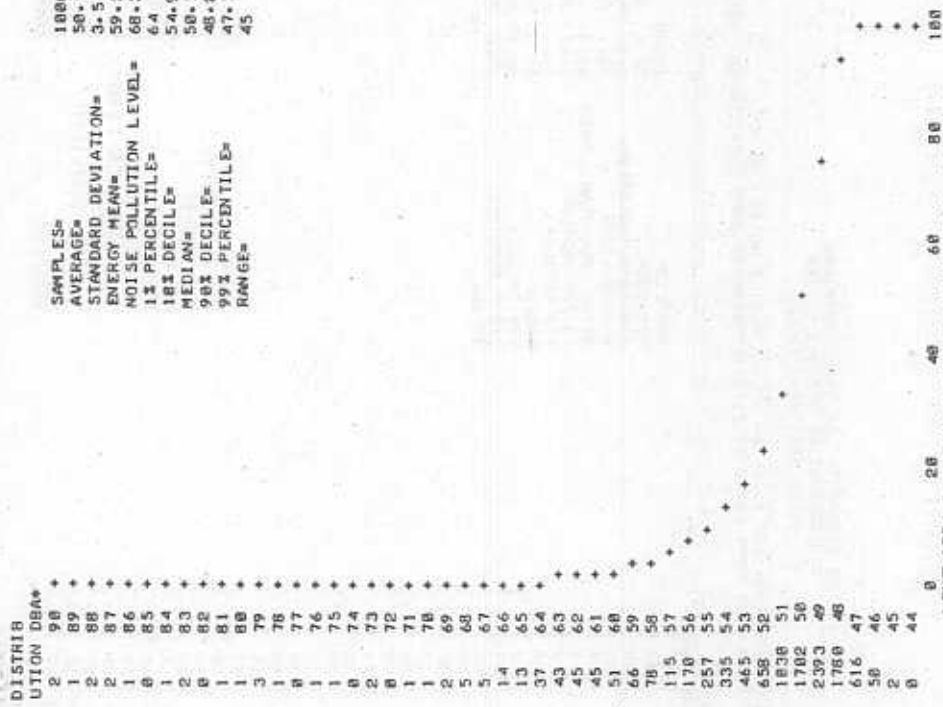
NOISE DATA FROM RUN 16 OF 24 OF THE MOBILE NOISE LAB. ON
MARCH 10 1971 FROM 21:33 TO 22:16 AT MEDFORD GRID LOCATION NO. 10-3

US DEPARTMENT OF TRANSPORTATION
TRANSPORTATION SYSTEMS CENTER
NOISE ABATEMENT GROUP

NOISE DATA FROM RUN 16 OF 24 OF THE MOBILE NOISE LAB. ON
MARCH 10 1971 FROM 21:33 TO 22:16 AT MEDFORD GRID LOCATION NO. 10-3

DISTRI	18000
UTION DBA*	50.5 DBA*
2 98 0	3.5 DBA*
1 89 0	59.3 DB**
2 88 0	68.3
2 87 0	64 DBA*
1 86 0	54.9 DBA*
0 85 0	50.1 DBA*
1 84 0	48.2 DBA*
2 83 0	47.1 DBA*
0 82 0	45 DB
1 81 0	
3 79 0	
1 78 0	
0 77 0	
1 76 0	
1 75 0	
0 74 0	
2 73 0	
1 72 0	
1 71 0	
1 70 0	
2 69 0	
5 68 0	
5 67 0	
14 66 0	
13 65 0	
37 64 00	
43 63 00	
45 62 00	
45 61 00	
51 60 00	
66 59 00	
78 58 00	
115 57 000	
170 56 0000	
257 55 00000	
335 54 000000	
465 53 00000000	
658 52 0000000000	
1838 51 0000000000000000	
1782 50 000000000000000000	
2393 49 00000000000000000000	
1780 48 0000000000000000000000	
616 47 000000000000	
50 46 00	
2 45 0	
0 44	

SAMPLES= 18000
 AVERAGE= 50.5 DBA*
 STANDARD DEVIATION= 3.5 DBA*
 ENERGY MEAN= 59.3 DB**
 NOISE POLLUTION LEVEL= 68.3
 1% PERCENTILE= 64 DBA*
 10% DECILE= 54.9 DBA*
 MEDIAN= 50.1 DBA*
 90% DECILE= 48.2 DBA*
 99% PERCENTILE= 47.1 DBA*
 RANGE= 45 DB



LEVEL (DBA*) VS DISTRIBUTION (PERCENT) 38

*-A WEIGHTED DECIBEL S-RE. 20 MICRONETONS PER SQUARE METER

**-DBA RE. 20 MICRONETONS PER SQUARE METER FROM AN AVERAGE OF THE SQUARES OF THE SOUND PRESSURES.

NOISE DATA FROM RUN 15 OF 24 OF THE MOBILE NOISE LAB. ON
 MARCH 10 1971 FROM 20:44 TO 21:26 AT MEDFORD GRID LOCATION NO. 18-3

US DEPARTMENT OF TRANSPORTATION
 TRANSPORTATION SYSTEMS CENTER
 NOISE ABATEMENT GROUP

NOISE DATA FROM RUN 15 OF 24 OF THE MOBILE NOISE LAB. ON
 MARCH 10 1971 FROM 20:44 TO 21:26 AT MEDFORD GRID LOCATION NO. 18-3

DISTRIBUTION DBA*
 1 98 +
 1 89 +
 1 88 +
 2 87 +
 1 86 +
 0 85 +
 0 84 +
 2 83 +
 0 82 +
 0 81 +
 0 80 +
 0 79 +
 3 78 +
 0 77 +
 2 76 +
 1 75 +
 0 74 +
 1 73 +
 2 72 +
 3 71 +
 1 70 +
 1 69 +
 2 68 +
 0 67 +
 5 66 +
 4 65 +
 9 64 +
 20 63 +
 34 62 +
 59 61 +
 78 60 +
 87 59 +
 102 58 +
 157 57 +
 245 56 +
 323 55 +
 390 54 +
 482 53 +
 839 52 +
 1349 51 +
 1966 50 +
 2246 49 +
 1204 48 +
 358 47 +
 34 46 +
 8 45 +

SAMPLES= 10000
 AVERAGE= 58.9 DBA*
 STANDARD DEVIATION= 3.2 DBA*
 ENERGY MEAN= 58.1 DB**
 NOISE POLLUTION LEVEL= 66.3
 1% PERCENTILE= 61.9 DBA*
 10% DECILE= 55.4 DBA*
 MEDIAN= 50.6 DBA*
 90% DECILE= 48.5 DBA*
 99% PERCENTILE= 47.2 DBA*
 RANGE= 44 DB

DISTRI	UTION	DBA*	10	20	30
1	98	0			
1	89	0			
1	88	0			
2	87	0			
1	86	0			
0	85	0			
0	84	0			
2	83	0			
0	82	0			
0	81	0			
0	80	0			
0	79	0			
3	78	0			
0	77	0			
2	76	0			
0	75	0			
1	74	0			
0	73	0			
2	72	0			
3	71	0			
1	70	0			
2	69	0			
0	68	0			
0	67	0			
5	66	0			
4	65	0			
9	64	0			
20	63	0			
34	62	00			
59	61	00			
78	60	00			
87	59	00			
102	58	000			
157	57	000			
245	56	00000			
323	55	000000			
390	54	0000000			
482	53	00000000			
839	52	0000000000000000			
1349	51	00000000000000000000			
1966	50	000000000000000000000000			
2246	49	0000000000000000000000000000			
1204	48	00000000000000000000000000000000			
358	47	0000000			
34	46	00			
8	45	00			

LEVEL (DBA*) VS DISTRIBUTION (PERCENT)

*-A WEIGHTED DECIBEL S-RE. 20 MICRONETONS PER SQUARE METER
 **-DBA RE. 20 MICRONETONS PER SQUARE METER FROM AN AVERAGE OF
 THE SQUARES OF THE SOUND PRESSURES.

LEVEL (DBA*) VS CUMULATIVE DISTRIBUTION (PERCENT)

NOISE DATA FROM RUN 18 OF 24 OF THE MOBILE NOISE LAB. ON
 MARCH 18/11 1971 FROM 23:26 TO 00:10 AT MEDFORD GRID LOCATION NO. 18-3

1	86	0
0	85	0
1	84	0
1	83	0
3	82	0
1	81	0
0	80	0
1	79	0
0	78	0
3	77	0
1	76	0
1	75	0
0	74	0
2	73	0
2	72	0
0	71	0
1	70	0
1	69	0
1	68	0
1	67	0
0	66	0
6	65	0
4	64	0
0	63	0
1	62	0
25	61	0
18	60	0
22	59	0
45	58	00
69	57	00
97	56	000
148	55	000
187	54	0000
221	53	0000
296	52	000000
428	51	00000000
713	50	000000000000
1189	49	000000000000000000
1325	48	000000000000000000
1378	47	000000000000000000
1500	46	000000000000000000
1253	45	000000000000000000
734	44	000000000000000000
285	43	0000
15	42	0

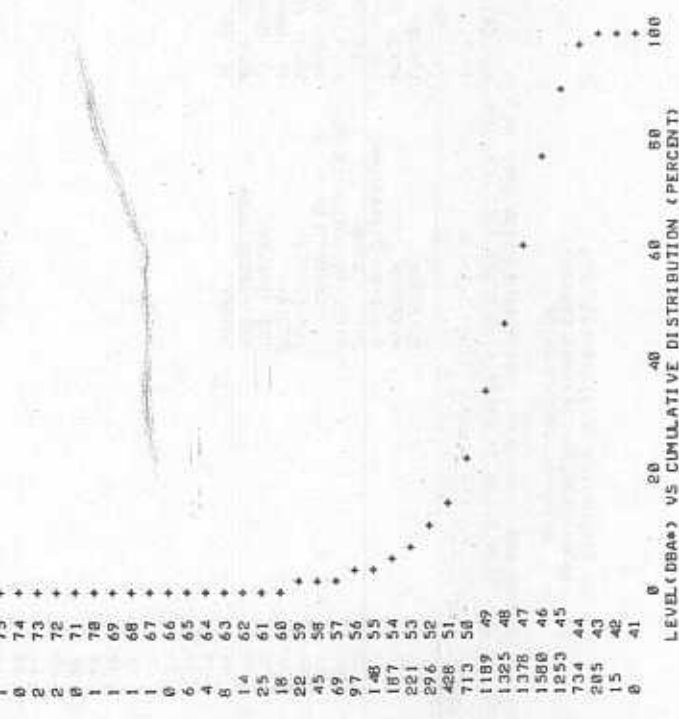
DIST. DBA*0 10 20 30
 LEVEL (DBA*) VS DISTRIBUTION (PERCENT)

*-A WEI BITED DECIBEL-S-RE. 20 MICRONETONS PER SQUARE METER
 **-DBA RE. 20 MICRONETONS PER SQUARE METER FROM AN AVERAGE OF
 THE SQUARES OF THE SOUND PRESSURES.

US DEPARTMENT OF TRANSPORTATION
 TRANSPORTATION SYSTEMS CENTER
 NOISE ABATEMENT GROUP

NOISE DATA FROM RUN 18 OF 24 OF THE MOBILE NOISE LAB. ON
 MARCH 18/11 1971 FROM 23:26 TO 00:10 AT MEDFORD GRID LOCATION NO. 18-3

1	86	+	SAMPLES=	10000
0	85	+	AVERAGE=	46 DBA*
1	84	+	STANDARD DEVIATION=	3.4 DBA*
1	83	+	ENERGY MEAN=	54.4 DB**
3	82	+	NOISE POLLUTION LEVEL=	63.1
1	81	+	1% PERCENTILE=	59.6 DBA*
0	80	+	10% DECILE=	58.6 DBA*
1	79	+	MEDIAN=	47.9 DBA*
0	78	+	90% DECILE=	45 DBA*
3	77	+	99% PERCENTILE=	43.4 DBA*
0	76	+	RANGE=	44 DB
1	75	+		
0	74	+		
2	73	+		
2	72	+		
0	71	+		
1	70	+		
1	69	+		
1	68	+		
1	67	+		
0	66	+		
6	65	+		
4	64	+		
8	63	+		
14	62	+		
25	61	+		
18	60	+		
22	59	+		
45	58	+		
69	57	+		
97	56	+		
148	55	+		
187	54	+		
221	53	+		
296	52	+		
428	51	+		
713	50	+		
1189	49	+		
1325	48	+		
1378	47	+		
1500	46	+		
1253	45	+		
734	44	+		
285	43	+		
15	42	+		
0	41	+		



NOISE DATA FROM RUN 17 OF 24 OF THE MOBILE NOISE LAB. ON
MARCH 18 1971 FROM 22:48 TO 23:22 AT MEDFORD GRID LOCATION NO. 18-3

US DEPARTMENT OF TRANSPORTATION
TRANSPORTATION SYSTEMS CENTER
NOISE ABATEMENT GROUP

NOISE DATA FROM RUN 17 OF 24 OF THE MOBILE NOISE LAB. ON
MARCH 18 1971 FROM 22:48 TO 23:22 AT MEDFORD GRID LOCATION NO. 18-3

DISTRIB
UTION DBA*
1 86 +
2 85 +
1 84 +
2 83 +
1 82 +
1 81 +
2 80 +
0 79 +
0 78 +
2 77 +
0 76 +
2 75 +
0 74 +
0 73 +
2 72 +
0 71 +
1 69 +
1 68 +
2 67 +
1 66 +
4 65 +
4 64 +
17 63 +
12 62 +
31 61 +
48 60 +
53 59 +
76 58 +
119 57 +
152 56 +
177 55 +
217 54 +
272 53 +
388 52 +
581 51 +
992 50 +
1883 49 +
2145 48 +
1849 47 +
837 46 +
133 45 +
2 44 +
0 43 +

10000
49.3 DBA*
3.2 DBA*
55.5 DB**
63.7
68.8 DBA*
53.7 DBA*
49 DBA*
47 DBA*
45.7 DBA*
48 DB

SAMPLES*
AVERAGE*
STANDARD DEVIATION*
ENERGY MEAN*
NOISE POLLUTION LEVEL=
1% PERCENTILE=
10% DECILE*
MEDIAN=
90% DECILE*
99% PERCENTILE*
RANGE*

LEVEL (DBA*) VS DISTRIBUTION (PERCENT)

*-A WEIGHTED DECIBEL-S-RE. 20 MICRONTONS PER SQUARE METER
*-DBA RE. 20 MICRONTONS PER SQUARE METER FROM AN AVERAGE OF
THE SQUARES OF THE SOUND PRESSURES.

LEVEL (DBA*) VS CUMULATIVE DISTRIBUTION (PERCENT)

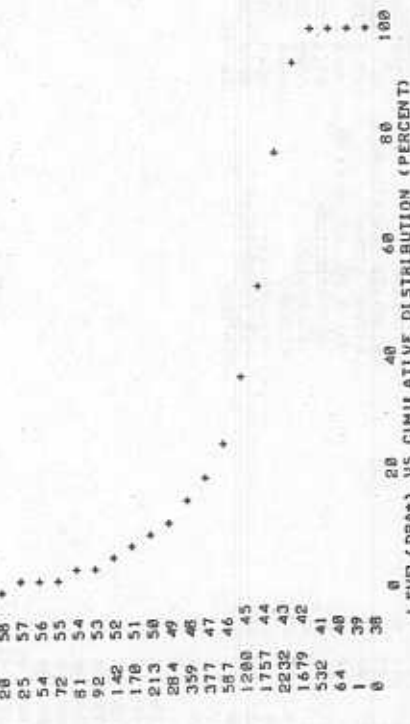
NOISE DATA FROM RUN 28 OF 24 OF THE MOBILE NOISE LAB. ON
MARCH 11 1971 FROM 011:48 TO 02:38 AT MEDFORD GRID LOCATION 1B-3

US DEPARTMENT OF TRANSPORTATION
TRANSPORTATION SYSTEMS CENTER
NOISE ABATEMENT GROUP

NOISE DATA FROM RUN 28 OF 24 OF THE MOBILE NOISE LAB. ON
MARCH 11 1971 FROM 011:48 TO 02:38 AT MEDFORD GRID LOCATION 1B-3

DISTRIB
1 69 0
1 68 0
0 67 0
0 66 0
0 65 0
0 64 0
2 63 0
4 62 0
4 61 0
17 60 0
38 59 00
28 58 0
54 56 00
72 55 00
81 54 00
92 53 00
142 52 000
178 51 0000
213 50 0000
284 49 00000
359 48 000000
377 47 0000000
587 46 0000000000
1288 45 0000000000000000
1757 44 00000000000000000000
2232 43 000000000000000000000000
1679 42 000000000000000000000000
532 41 0000000000
64 40 00
1 39 0
0 38 0

SAMPLES= 10000
AVERAGE= 44.7 DBA*
STANDARD DEVIATION= 3.0 DBA*
ENERGY MEAN= 46.9 DB**
NOISE POLLUTION LEVEL= 55.3
1% PERCENTILE= 57.2 DBA*
10% DECILE= 49.7 DBA*
MEDIAN= 44.3 DBA*
90% DECILE= 42.2 DBA*
99% PERCENTILE= 41.1 DBA*
RANGE= 38 DB



LEVEL (DBA*) VS CUMULATIVE DISTRIBUTION (PERCENT)

B-506

DIST. DBA*0 10 20 30
LEVEL (DBA*) VS DISTRIBUTION (PERCENT)

•-•-•-A WEIGHTED DECIBEL S-RE. 20 MICRONEWTONS PER SQUARE METER
•-•-•-DBA RE. 20 MICRONEWTONS PER SQUARE METER FROM AN AVERAGE OF
THE SQUARES OF THE SOUND PRESSURES.

B-507

NOISE DATA FROM RUN 19 OF 24 OF THE MOBILE NOISE LAB. ON MARCH 11 1971 FROM 08:45 TO 01:28 AT MEDFORD GRID LOCATION 18-3

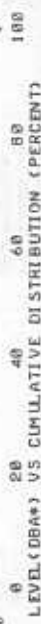
US DEPARTMENT OF TRANSPORTATION
TRANSPORTATION SYSTEMS CENTER
NOISE ABATEMENT GROUP

NOISE DATA FROM RUN 19 OF 24 OF THE MOBILE NOISE LAB. ON MARCH 11 1971 FROM 08:45 TO 01:28 AT MEDFORD GRID LOCATION 18-3

DISTRIBUTION DBA*	
1	67
4	66
2	65
8	64
8	63
15	62
19	61
33	59
42	57
85	55
127	53
171	52
217	50
364	49
469	48
589	47
1165	46
2126	45
2574	44
1582	43
219	42
6	41
8	40

SAMPLES= 10000
 AVERAGE= 45.7 DBA*
 STANDARD DEVIATION= 3.1 DBA*
 ENERGY MEAN= 47.7 DB**
 NOISE POLLUTION LEVEL= 55.6
 1% PERCENTILE= 57.6 DBA*
 10% DECILE= 58.2 DBA*
 MEDIAN= 45.3 DBA*
 90% DECILE= 43.5 DBA*
 99% PERCENTILE= 40.4 DBA*
 RANGE= 26 DB

LEVEL (DBA*) VS CUMULATIVE DISTRIBUTION (PERCENT)



DIST. DBA* 8 6 41 0
LEVEL (DBA*) VS DISTRIBUTION (PERCENT)
20 30

*-A WEIGHTED DECIBEL-S-RE. 20 MICRONETONS PER SQUARE METER
**DBA RE. 20 MICRONETONS PER SQUARE METER FROM AN AVERAGE OF THE SQUARES OF THE SOUND PRESSURES.

NOISE DATA FROM RUN 22 OF 24 OF THE MOBILE NOISE LAB. ON
 MARCH 11 1971 FROM 8:31:45 TO 8:41:28 AT MEDFORD GRID LOCATION 18-3

US DEPARTMENT OF TRANSPORTATION
 TRANSPORTATION SYSTEMS CENTER
 NOISE ABATEMENT GROUP

NOISE DATA FROM RUN 22 OF 24 OF THE MOBILE NOISE LAB. ON
 MARCH 11 1971 FROM 8:31:45 TO 8:41:28 AT MEDFORD GRID LOCATION 18-3

DISTRIB	1	74	+	18000
UTION DBA*	1	73	+	48.8 DBA*
	4	72	+	3.9 DBA*
	4	71	+	51.8 DB**
	1	70	+	NOISE POLLUTION LEVEL = 61.8
	3	69	+	1% PERCENTILE = 62.1 DBA*
	6	68	+	10% PERCENTILE = 5.4 DBA*
	9	67	+	50% PERCENTILE = 46.9 DBA*
	5	66	+	90% PERCENTILE = 44.7 DBA*
	5	65	+	99% PERCENTILE = 43.1 DBA*
	17	64	+	RANGE = 33 DB
	25	63	+	
	22	62	+	
	39	61	+	
	52	60	+	
	82	59	+	
	186	58	+	
	138	57	+	
	128	56	+	
	148	55	+	
	208	54	+	
	222	53	+	
	299	52	+	
	564	51	+	
	1825	50	+	
	1776	49	+	
	1822	48	+	
	787	47	+	
	431	46	+	
	814	45	+	
	823	44	+	
	394	43	+	
	44	42	+	
	3	41	+	
	0	40	+	

LEVEL (DBA*) VS CUMULATIVE DISTRIBUTION (PERCENT)

LEVEL (DBA*) VS DISTRIBUTION (PERCENT)

-A WEIGHTED LEVEL-K. 20 MICROWATTS PER SQUARE METER
 *-DBA RE. 20 MICROWATTS PER SQUARE METER FROM AN AVERAGE OF
 THE SQUARES OF THE SOUND PRESSURES.

NOISE DATA FROM RUN 21 OF 24 OF THE MOBILE NOISE LAB. ON
 MARCH 11 1971 FROM 02:53 TO 03:32 AT MEDFORD GRID LOCATION 1B-3

US DEPARTMENT OF TRANSPORTATION
 TRANSPORTATION SYSTEMS CENTER
 NOISE ABATEMENT GROUP

NOISE DATA FROM RUN 21 OF 24 OF THE MOBILE NOISE LAB. ON
 MARCH 11 1971 FROM 02:53 TO 03:32 AT MEDFORD GRID LOCATION 1B-3

DISTRIB	3	66	0	SAMPLES=	10000
UTION DBA*	5	65	0	AVERAGE=	58.9 DBA*
	5	64	0	STANDARD DEVIATION=	2.7 DBA*
	19	63	0	ENERGY MEAN=	52.2 DB**
	37	62	0	NOISE POLLUTION LEVEL=	59.1
	62	61	0	1% PERCENTILE=	61.5 DBA*
	86	60	0	10% DECILE=	54.8 DBA*
	91	59	0	MEDIAN=	50.8 DBA*
	105	58	0	90% DECILE=	49.1 DBA*
	144	57	0	95% PERCENTILE=	47.8 DBA*
	136	56	0	RANGE=	28 DB
	229	55	0		
	328	54	0		
	381	53	0		
	814	52	0		
	2172	51	0		
	2526	50	0		
	1997	49	0		
	743	48	0		
	189	47	0		
	8	46	0		
	8	45	0		

DIST. DBA**B 10 28 38
 LEVEL (DBA*) VS DISTRIBUTION (PERCENT)

*-A WEIGHTED DECIBEL-S-RE. 28 MICRONETONS PER SQUARE METER
 **-DBA RE. 28 MICRONETONS PER SQUARE METER FROM AN AVERAGE OF
 THE SQUARES OF THE SOUND PRESSURES.

LEVEL (DBA*) VS CUMULATIVE DISTRIBUTION (PERCENT)

NOISE DATA FROM RUN 24 OF 24 OF THE MOBILE NOISE LAB. ON
MARCH 11 1971 FROM 05:53 TO 06:36 AT MEDFORD GRID LOCATION NO. 18-3

US DEPARTMENT OF TRANSPORTATION
TRANSPORTATION SYSTEMS CENTER
NOISE ABATEMENT GROUP

NOISE DATA FROM RUN 24 OF 24 OF THE MOBILE NOISE LAB. ON
MARCH 11 1971 FROM 05:53 TO 06:36 AT MEDFORD GRID LOCATION NO. 18-3

10860

14	98	0
12	89	0
5	88	0
4	87	0
2	86	0
2	85	0
7	84	0
8	83	0
4	82	0
4	81	0
1	79	0
2	78	0
4	77	0
2	76	0
8	75	0
3	74	0
1	73	0
3	72	0
2	71	0
6	70	0
8	69	0
3	68	0
2	67	0
4	66	0
3	65	0
13	64	0
13	63	0
19	62	0
41	61	00
46	60	00
68	59	00
67	58	00
87	57	00
100	56	000
282	55	0000
332	54	000000
683	53	000000000000
1503	52	0000000000000000000000000000000000
2170	51	00
2882	50	00
1628	49	00
715	48	0000000000000000
126	47	000
8	46	0

SAMPLES= 10860
AVERAGE= 51.3 DBA*
STANDARD DEVIATION= 3.9 DBA*
ENERGY MEAN= 65.8 DB**
NOISE POLLUTION LEVEL= 75.8 DBA*
1% PERCENTILE= 66.5 DBA*
10% PERCENTILE= 74.3 DBA*
MEDIAN= 51.2 DBA*
90% PERCENTILE= 49.1 DBA*
99% PERCENTILE= 47.7 DBA*
RANGE= 44 DB

14	98	0
12	89	0
5	88	0
4	87	0
2	86	0
2	85	0
7	84	0
8	83	0
4	82	0
4	81	0
1	79	0
2	78	0
4	77	0
2	76	0
8	75	0
3	74	0
1	73	0
3	72	0
2	71	0
6	70	0
8	69	0
3	68	0
2	67	0
4	66	0
3	65	0
13	64	0
13	63	0
19	62	0
41	61	00
46	60	00
68	59	00
67	58	00
87	57	00
100	56	000
282	55	0000
332	54	000000
683	53	000000000000
1503	52	0000000000000000000000000000000000
2170	51	00
2882	50	00
1628	49	00
715	48	0000000000000000
126	47	000
8	46	0
8	46	0

LEVEL(DBA*) VS CUMULATIVE DISTRIBUTION (PERCENT)

B-514

LEVEL(DBA*) VS DISTRIBUTION (PERCENT)

*-A WEIGHTED DECIBEL-S-RE. 20 MICRONEWTONS PER SQUARE METER
*-DBA RE. 98 MICRONEWTONS PER SQUARE METER FROM AN AVERAGE OF
THE SQUARES OF THE SOUND PRESSURES.

B-515

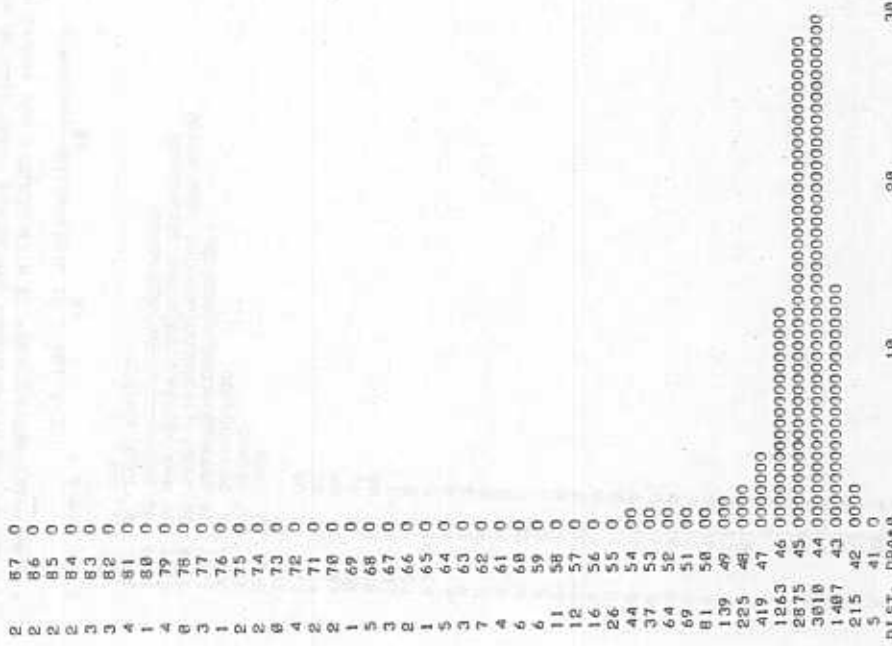
US DEPARTMENT OF TRANSPORTATION
TRANSPORTATION SYSTEMS CENTER
NOISE ABATEMENT GROUP

NOISE DATA FROM RUN 23R OF 24 OF THE MOBILE NOISE LAB. ON
MARCH 11 1971 FROM 04:52 TO 05:35 AT MEDFORD GRID LOCATION NO. 18-3

DISTRIB	18000
UTION DBA*	45.2 DBA*
2 87 +	3.2 DBA*
2 86 +	57.6 DB**
2 85 +	65.8
2 84 +	57.4 DBA*
3 83 +	47.5 DBA*
3 82 +	45.1 DBA*
4 81 +	43.6 DBA*
1 80 +	42.4 DBA*
4 79 +	46 DB
0 78 +	
3 77 +	
1 76 +	
2 75 +	
2 74 +	
0 73 +	
4 72 +	
2 71 +	
1 69 +	
5 68 +	
3 67 +	
2 66 +	
2 65 +	
3 63 +	
4 61 +	
6 60 +	
6 59 +	
11 58 +	
16 56 +	
26 55 +	
44 54 +	
37 53 +	
64 52 +	
69 51 +	
81 50 +	
139 49 +	
225 48 +	
419 47 +	
1263 46 +	
2875 45 +	
3818 44 +	
1487 43 +	
215 42 +	
5 41 +	
0 40 +	

SAMPLES= 18000
 AVERAGE= 45.2 DBA*
 STANDARD DEVIATION= 3.2 DBA*
 ENERGY MEAN= 57.6 DB**
 NOISE POLLUTION LEVEL= 65.8
 1% PERCENTILE= 57.4 DBA*
 10% DECILE= 47.5 DBA*
 MEDIAN= 45.1 DBA*
 90% DECILE= 43.6 DBA*
 99% PERCENTILE= 42.4 DBA*
 RANGE= 46 DB

NOISE DATA FROM RUN 23R OF 24 OF THE MOBILE NOISE LAB. ON
MARCH 11 1971 FROM 04:52 TO 05:35 AT MEDFORD GRID LOCATION NO. 18-3



LEVEL (DBA*) VS DISTRIBUTION (PERCENT) 20 10 0
 DISTRIB UTION DBA* 20 30
 * - A WEIGHTED DECIBEL-S-RE. 20 MICROMETONS PER SQUARE METER
 ** - DBA RE. 20 MICROMETONS PER SQUARE METER FROM AN AVERAGE OF
 THE SQUARES OF THE SOUND PRESSURES.

LEVEL (DBA*) VS CUMULATIVE DISTRIBUTION (PERCENT)
 20 60 80 100
 B-512

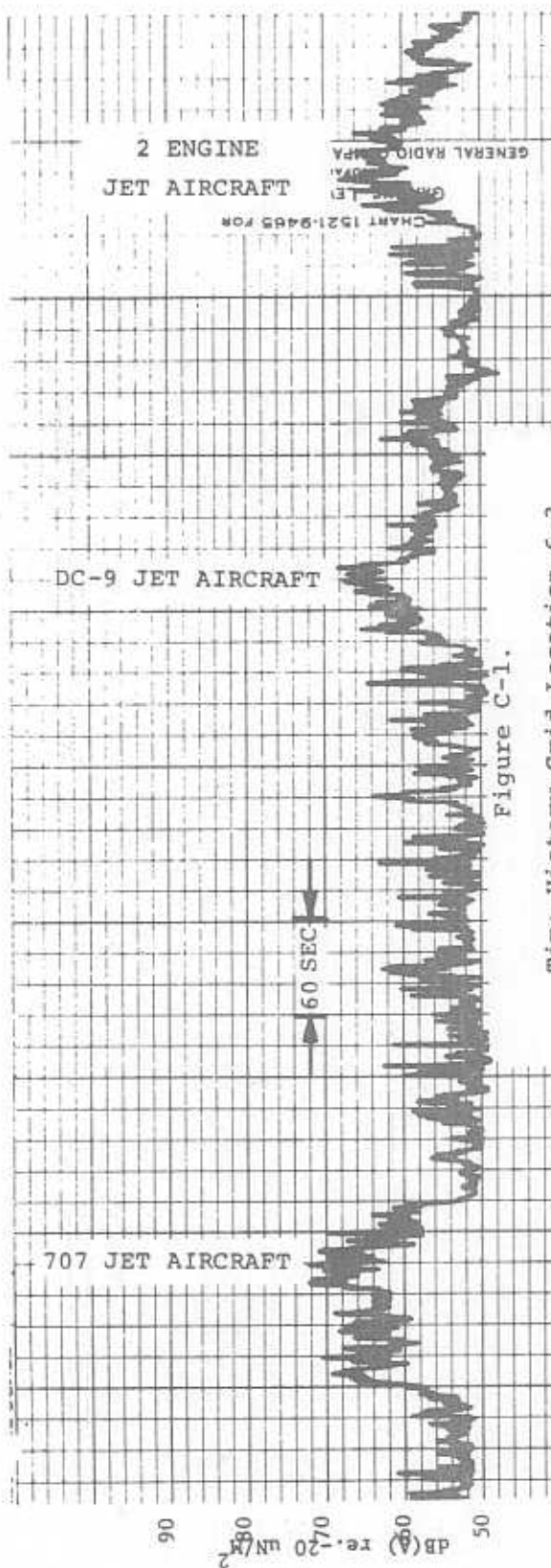


Figure C-1.

Time History Grid Location 6-3
April 22 1971 - 11:40 to 11:55

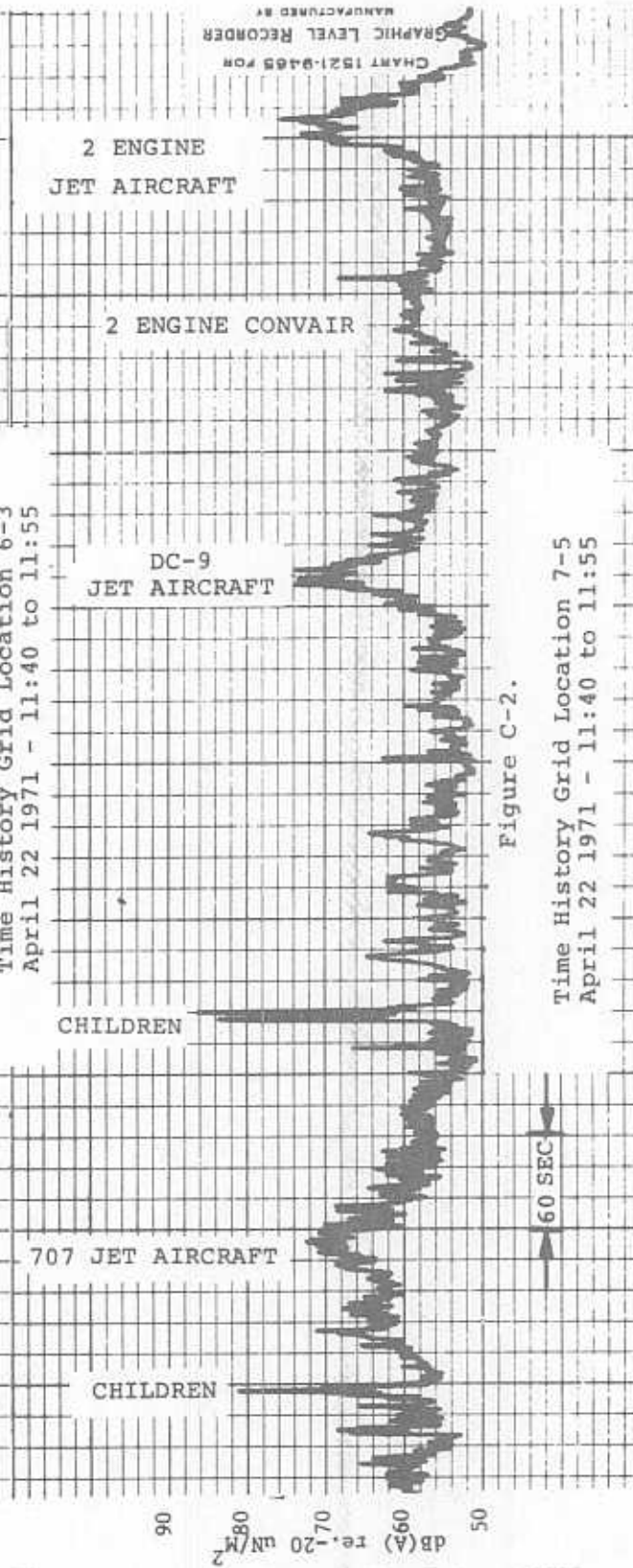


Figure C-2.

Time History Grid Location 7-5
April 22 1971 - 11:40 to 11:55

APPENDIX C

TIME HISTORIES

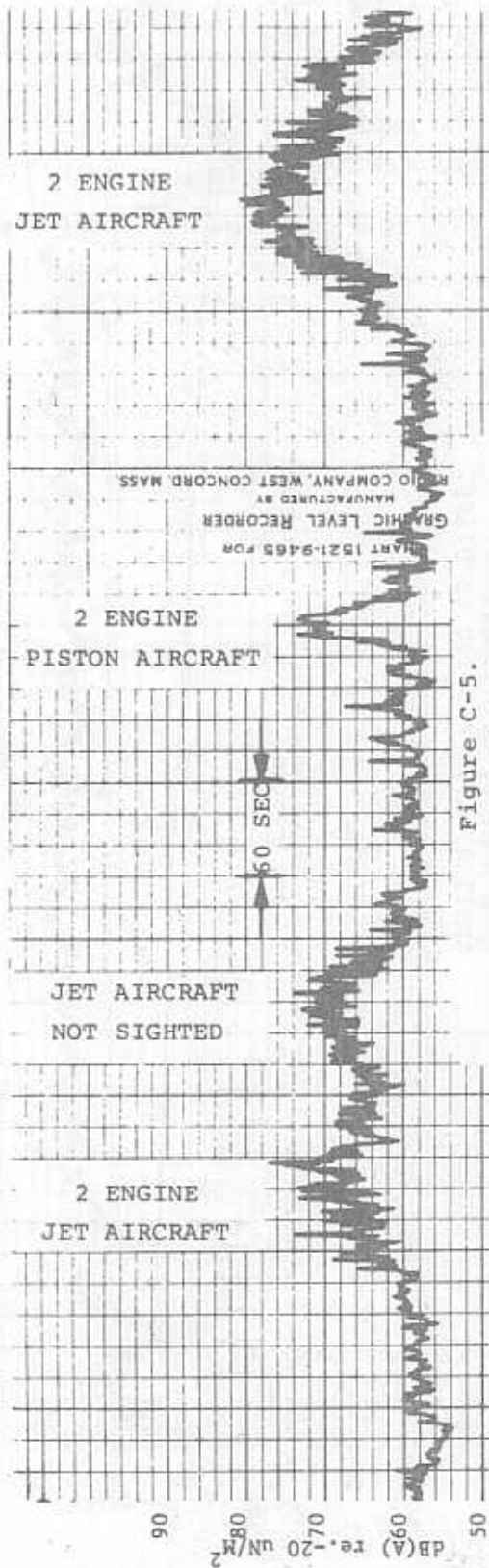


Figure C-5.

Time History Grid Location 4-6
April 30 1971 - 07:45 to 08:00

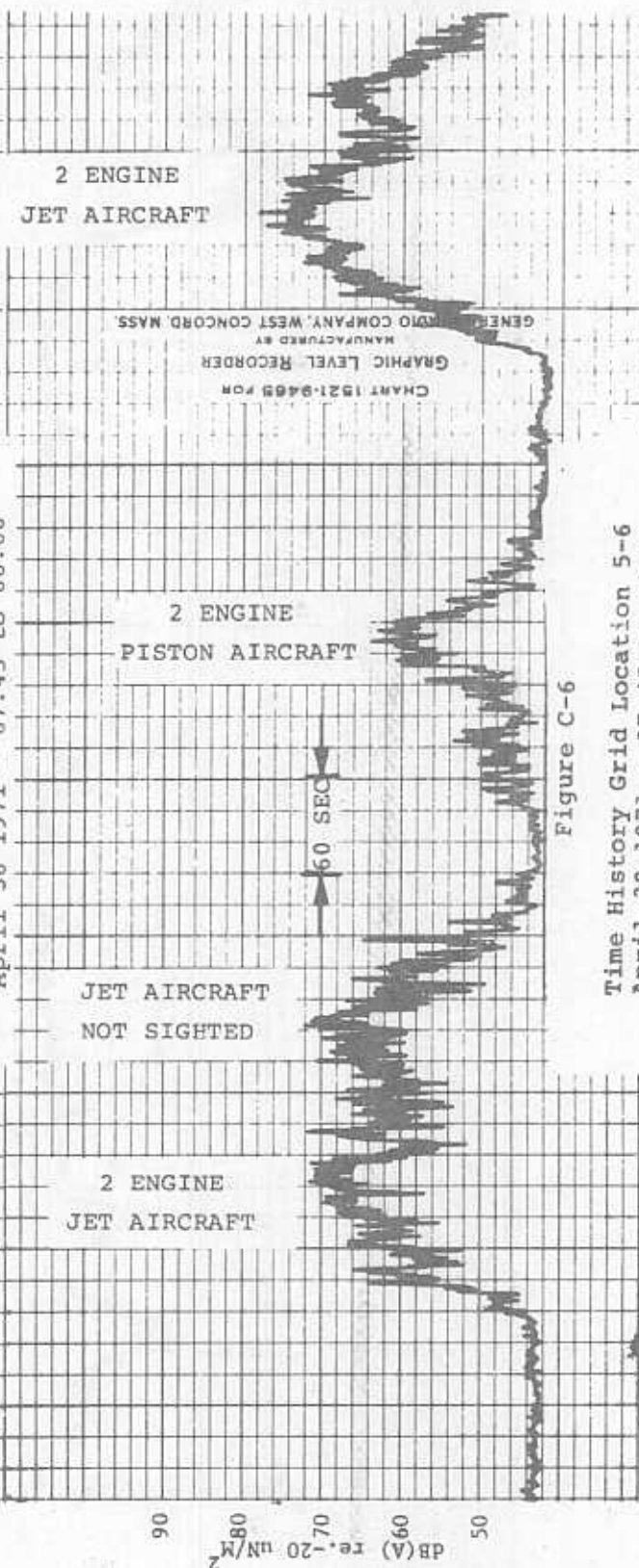


Figure C-6

Time History Grid Location 5-6
April 30 1971 - 07:45 to 08:00

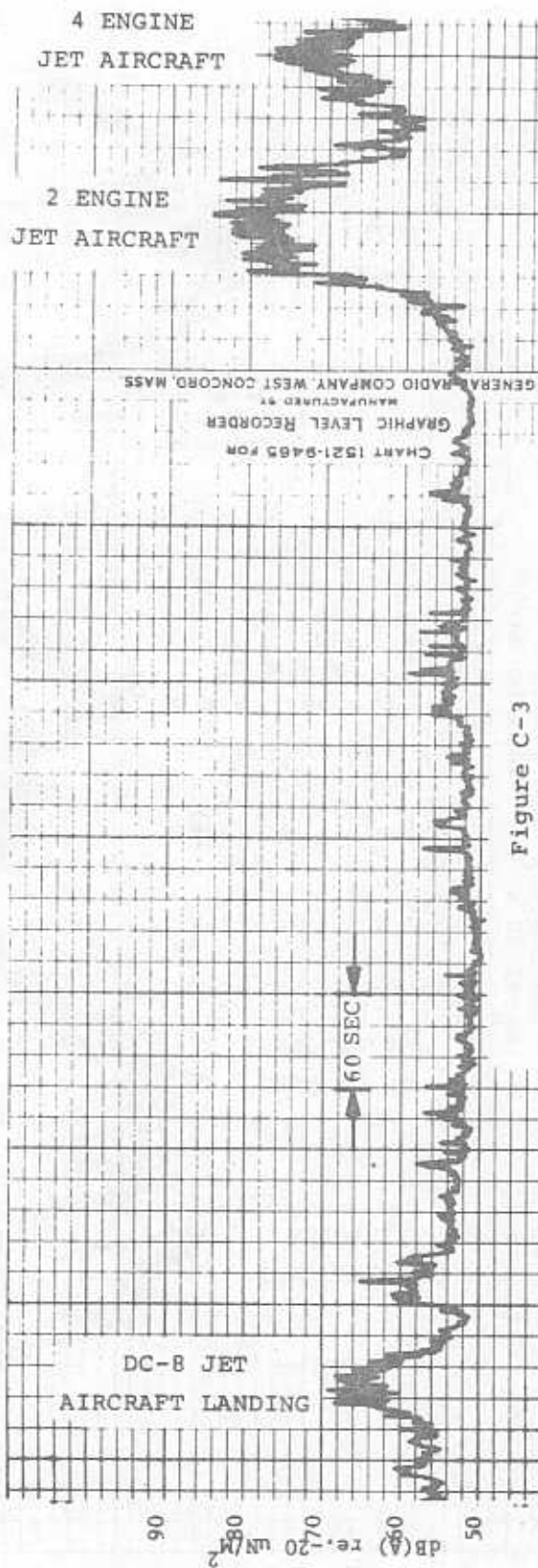


Figure C-3

Time History Grid Location 7-9
 April 27 1971 - 07:40 to 07:55

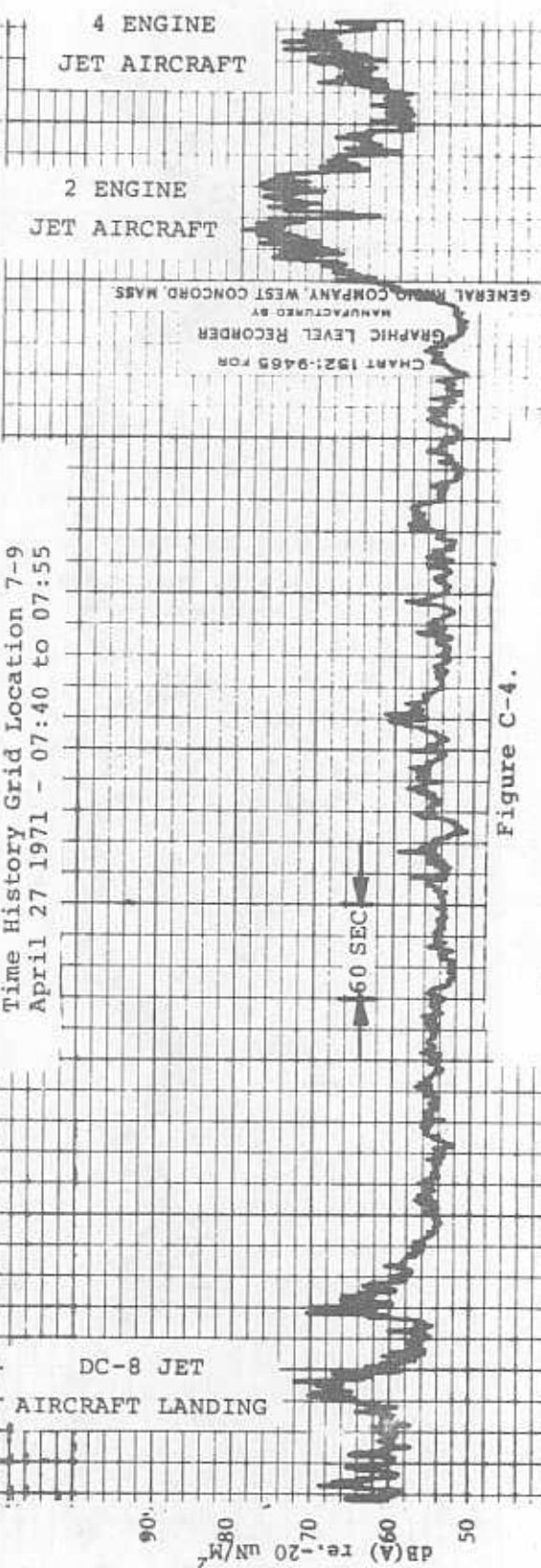


Figure C-4.

Time History Grid Location 7-9
 April 27 1971 - 07:40 to 07:55

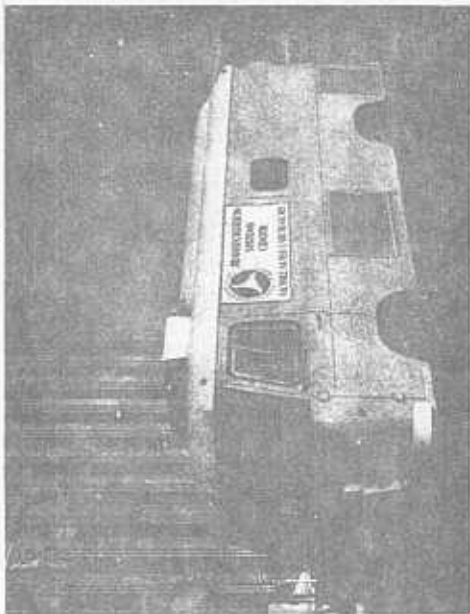


Figure D-1. Mobile Noise Laboratory, Transportation Systems Center, Cambridge, Massachusetts

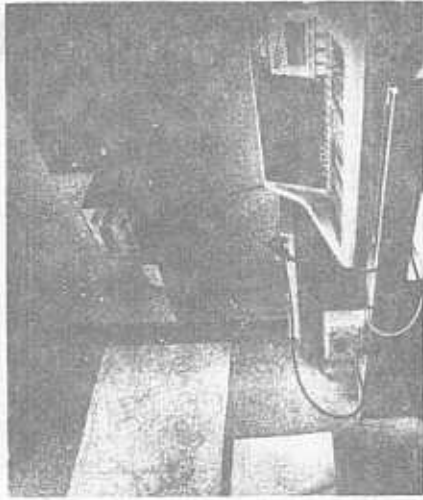


Figure D-3. Hewlett Packard Model 3960 Tape Recorder and Wang 700 Series Advanced Programming Calculator Inside Mobile Laboratory

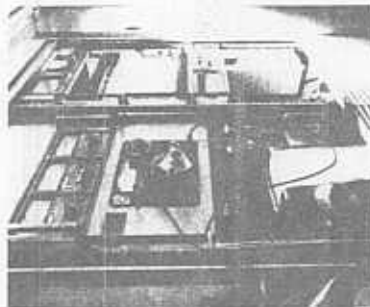


Figure D-2. Noise Analyzing Instrumentation Inside Mobile Noise Laboratory

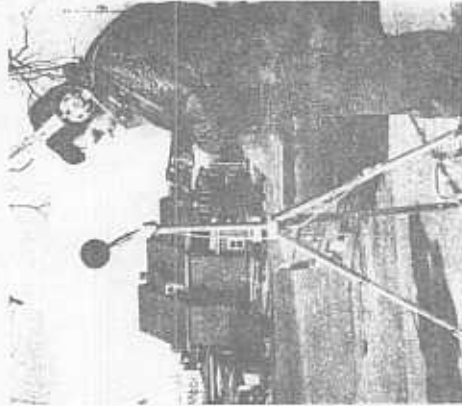


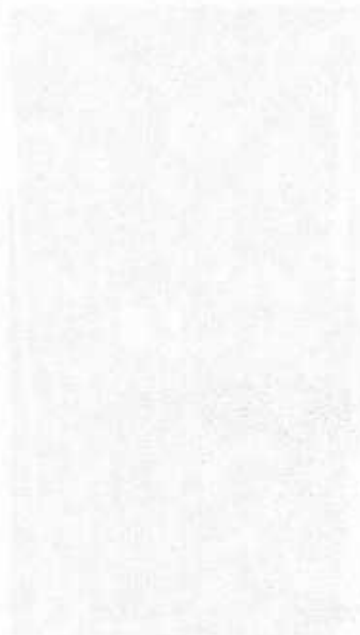
Figure D-4. Microphone System Being Assembled by TSC Technician

ILLUSTRATIONS SIGNIFICANT TO TEXT MATERIAL
HAVE BEEN REPRODUCED USING A DIFFERENT
PRINTING TECHNIQUE AND MAY APPEAR AGAIN IN

THE BACK OF THIS PUBLICATION

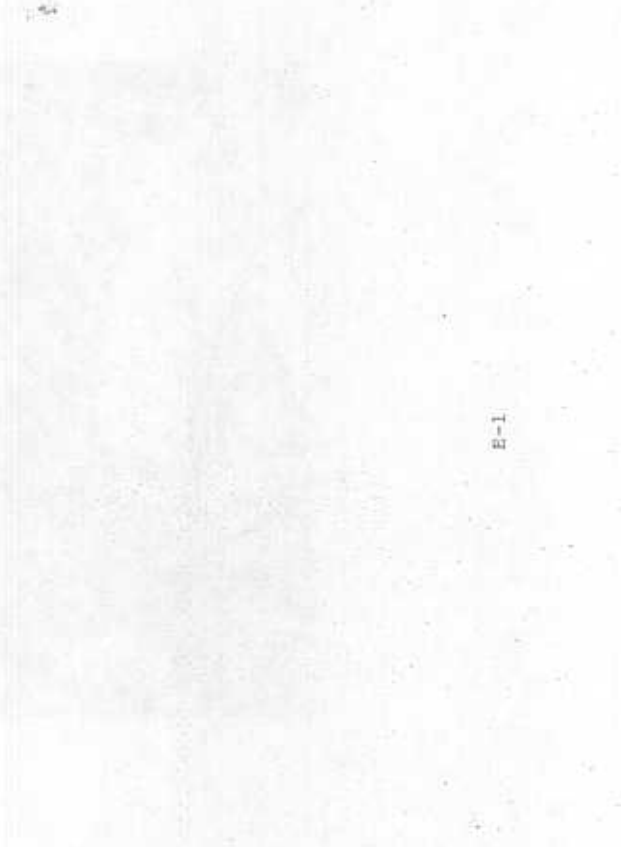
APPENDIX D

PHOTOGRAPHS



APPENDIX E

DEFINITION OF CALCULATED VALUES



E-1

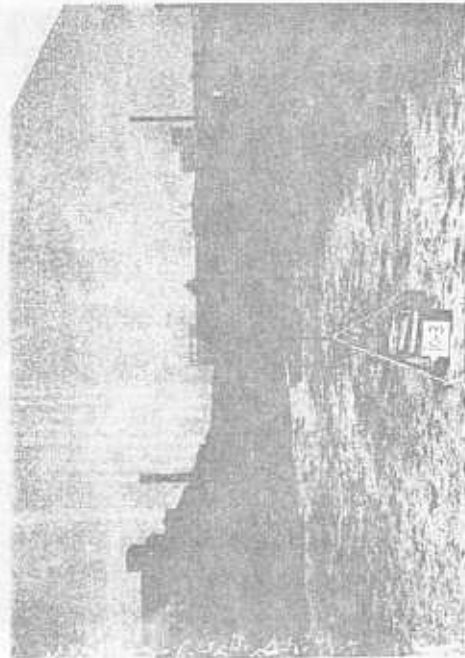


Figure D-9. Microphone System at Grid Location 10-3, Facing North

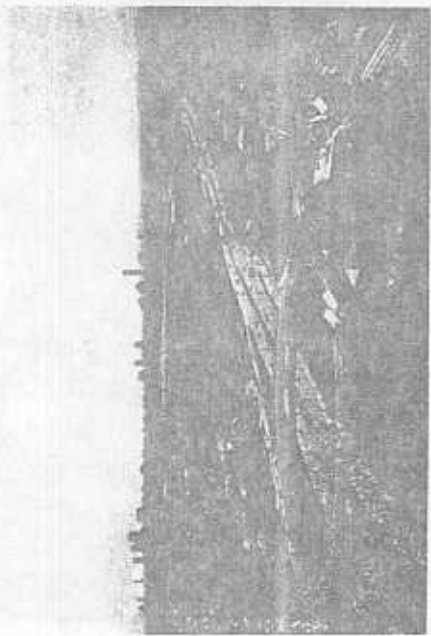


Figure D-10. Interstate Route 93 in Medford Facing South from a Lookout Tower Near Grid 6-7

D-6

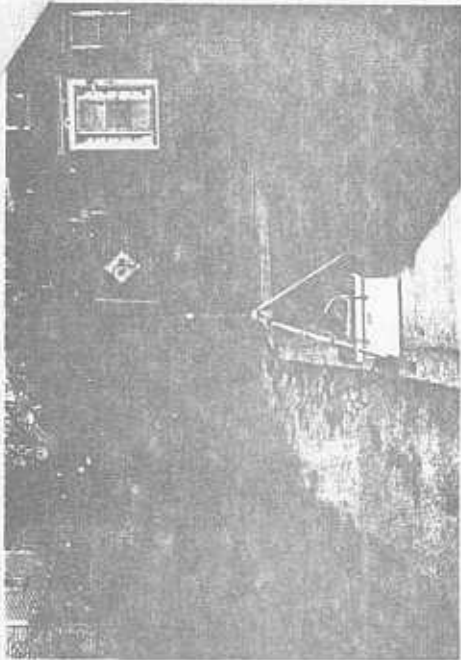


Figure D-5. Microphone System at Grid Location 3-5, Facing East

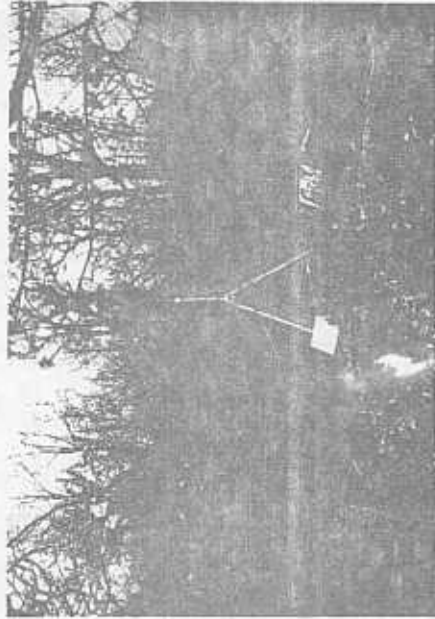


Figure D-6. Microphone System at Grid Location 4-7, Facing North

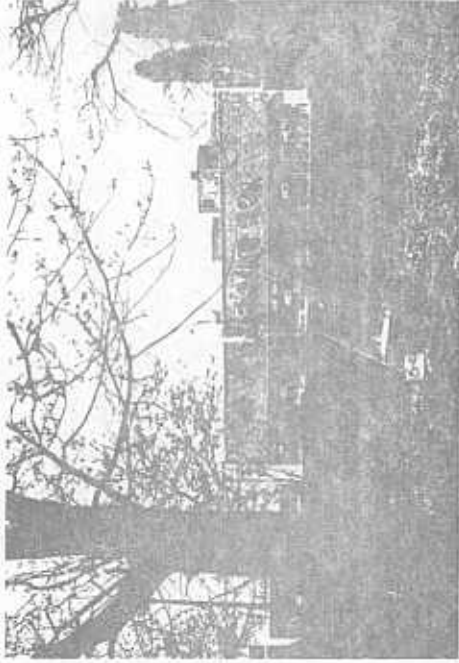


Figure D-7. Microphone System at Grid Location 6-4, Facing South

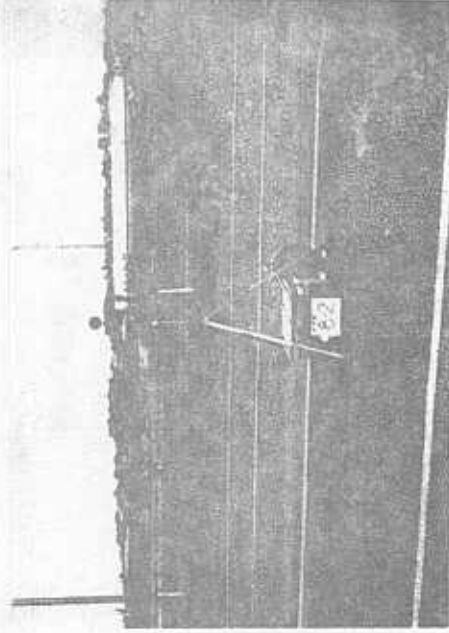


Figure D-8. Microphone System at Grid Location 8-2, Facing South

d. 90% Decile (L_{90}) = Level exceeded by 90% of total samples.

e. 99% Percentile (L_{99}) = Level exceeded by 99% of total samples.

These percentile levels are obtained from linear interpolation of the percentage cumulative distribution values.

8. Range: Highest sound level containing samples minus the lowest sound level containing samples.

$$\text{Range} = \text{SPL}_M - \text{SPL}_1$$

APPENDIX E

CALCULATIONS

To describe the temporal characteristics of the noise data gathered, a statistical analysis of sound pressure level samples was performed. Approximately one hour was chosen as the time interval for describing the community noise in this survey. Rms sound pressure level samples were taken using an integration time of 1/8 second at a sample rate of four (4) samples-per-second to obtain the information contained in Appendix B. The frequency response characteristics of the samples conformed to ANSI Standard for Sound Level Meters, S1.4, 1961 for "A" weighted sound pressure level.

The following terms and equations were used to compute the statistical and single number indexes appearing in this report:

A. Basic Terms

1. Total samples obtained: N
2. Total number of Sound Pressure Levels (from lowest level containing samples to highest level containing samples inclusive): M
3. Sound Pressure Level (lowest to highest) SPL₁, SPL₂, ..., SPL_M
4. Samples at each Sound Pressure Level: C₁, C₂, ..., C_M
5. Relationships

a.
$$\sum_{i=1}^M C_i = N$$

b.
$$SPL_M - SPL_1 + 1 = M$$

6. dBA (A Weight) - Sound level obtained by measuring the sound pressure through a filter network having a frequency response (A weight) conforming to American National Standards Institute (ANSI), S1.4, 1961. Reference sound pressure level - 20 microneutons per-square-meter.

B. Statistical Equations

1. Cumulative Distribution, Percent (D_C)

$$D_{C_i} = \frac{C_m + C_{m-1} + \dots + C_i}{N} \quad (100)$$

2. Statistical Distribution, Percent (D_S)

$$D_{S_i} = \frac{C_i}{N} \quad (100) \quad i = 1, 2, \dots, m$$

3. Average (Arithmetic Mean, SPL)

$$\overline{SPL} = \frac{\sum_{i=1}^M C_i \cdot SPL_i}{N}$$

4. Standard Deviation about average (s)

$$s = \sqrt{\frac{1}{N-1} \sum_{i=1}^M C_i (SPL_i - \overline{SPL})^2}$$

5. Energy Mean (L eq)

$$L \text{ eq} = 10 \log_{10} \left[\frac{\sum_{i=1}^M C_i \cdot 10 \frac{SPL_i}{10}}{N} \right]$$

6. Noise Pollution Level (L_{NP})

$$L_{NP} = L \text{ eq} + 2.56 \text{ s}$$

7. Percentile Noise Levels, dBA

a. 1% Percentile (L₁) = Level exceeded by 1% of total samples.

b. 10% Decile (L₁₀) = Level exceeded by 10% of total samples.

c. Median (L₅₀) = Level exceeded by 50% of total samples.

TABLE F-1. TRAFFIC VOLUMES ON MAIN ROUTES IN MEDFORD

Route	Description	1968	1969 (1)	1970
1-28	At Wellington Bridge	51,100		
1	200 ft. East of Routes 1-16-28		42,150	
16	At Somerville Town Line	11,050		
16	200 ft. West of Route 28			53,200 (July & Aug.)
28	At Malden Town Line	22,050		
28	500 ft. North of Route 60		16,250	
28	200 ft. South of Route 60			12,450 (July)
28	At Stoneham Town Line	2,500		
38	At Somerville Town Line		32,700	
38	Winthrop St. at Winchester Town Line			9,400 (July)
38	200 ft. West of Harvard St.		13,100	
60	Salem St. 200 ft. East of Rte 93			22,500 (July)
60	500 ft. South of Boston Ave.		13,050	
60	500 ft. West of Rte I 93	20,800		
60	At Malden Town Line		16,400	
I-93	600 ft. South of Rte 60			65,750 (Sept. & Oct.)
I-93	At Stoneham Town Line		65,350	
Elm Street	At 195 Elm Street		6,800	
Highland Ave.	At East Dorder Road		6,800	
Main Street	North of Harvard Street			12,300 (Dec.)
Lawrence Road	200 ft. East of Governor's Ave.			17,550 (2)
Governor's Ave.	200 ft. South of Lawrence Road			2,842 (2)

(1) ADT - Average Daily Traffic for 24-hour period during year shown. (Count made and provided by Mass. Dept. of Public Works.)

(2) Count made in March, 1971.

APPENDIX F

TRAFFIC DATA

TABLE F-3. NOISE LEVELS MEASURED IN TRAFFIC ZONE 229

GRID	DATE	RUN NO.	TIME FROM--TO	MORNING RUSH HOUR				LNP RANGE DBA	DATE	RUN NO.	TIME FROM--TO	MIDDAY				LNP RANGE DBA	
				L10 DBA	L50 DBA	L90 DBA	ARITHMETIC MEAN					L10 DBA	L50 DBA	L90 DBA	ARITHMETIC MEAN		
5-2	4/23	1AP	0730-0830	63.6	56.3	51.5	88.6	48	4/23	2AP	1130-1230	60.1	53.0	49.1	74.1	44	
6-1	3/2	1A	0735-0835	60.6	51.1	46.6	73.4	39	3/2	2A	1130-1230	59.3	47.0	43.1	71.7	40	
6-2	3/9	1A	0730-0830	65.6	55.5	50.6	85.1	52	3/9	2	1130-1230	62.7	52.5	48.7	81.3	46	
6-3	4/22	1	0730-0830	61.5	55.1	52.7	68.2	31	4/22	2	1130-1230	60.8	52.7	49.2	70.0	33	
7-1	3/8	1AR	0730-0830	61.0	48.8	45.5	74.2	43	3/8	2A	1130-1230	58.2	48.3	44.6	69.7	34	
7-2	3/16	1	0730-0830	67.8	61.3	58.4	79.5	35	3/16	2AP	1130-1230	63.3	58.3	55.0	69.5	35	
ARITHMETIC MEAN				63.4	54.7	50.8	76.1	41	ARITHMETIC MEAN				60.7	52.0	48.3	72.7	39

TABLE F-4. NOISE LEVELS MEASURED IN TRAFFIC ZONE 230

GRID	DATE	RUN NO.	TIME FROM--TO	MORNING RUSH HOUR				LNP RANGE DBA	DATE	RUN NO.	TIME FROM--TO	MIDDAY				LNP RANGE DBA	
				L10 DBA	L50 DBA	L90 DBA	ARITHMETIC MEAN					L10 DBA	L50 DBA	L90 DBA	ARITHMETIC MEAN		
4-3	4/20	1AP	0734-0834	64.6	51.1	47.7	77.9	43	4/20	2AP	1130-1230	54.6	47.8	43.7	66.9	39	
4-4	4/16	1	0730-0830	65.7	57.6	50.5	76.1	33	4/16	2	1135-1235	62.4	53.6	44.4	76.1	47	
5-3	4/20	1	0730-0830	65.1	53.2	50.1	75.7	33	4/20	2	1130-1230	54.7	48.4	45.8	69.2	48	
5-4	4/23	1	0731-0831	62.7	54.8	51.4	70.8	30	4/23	2	1130-1230	60.8	54.4	51.3	69.1	36	
ARITHMETIC MEAN				64.5	54.2	49.9	75.1	35	ARITHMETIC MEAN				58.1	51.1	46.3	70.3	43

TABLE F-2. ARITHMETIC MEAN NOISE LEVELS FOR THE COMMUNITY

MORNING RUSH HOUR

MIDDAY

ZONE	MEAS. POINTS	L10 DBA	L50 DEA	L90 DBA	LNP	AVE. RANGE DEA	L10 DBA	L50 DBA	L90 DBA	LNP	AVE. RANGE DEA
229	6	63.4	54.7	50.8	78.1	41	60.7	52.0	48.3	72.7	39
230	4	64.5	54.2	49.7	75.1	35	58.1	51.1	46.3	70.3	43
231	9	61.4	52.6	48.4	72.1	34	59.7	49.7	44.2	70.3	37
232	12	62.5	54.0	50.2	72.7	34	60.3	51.8	47.5	72.2	39
233	7	61.2	53.6	50.4	72.5	37	56.5	48.6	44.5	68.5	40
234	4	63.4	55.8	51.9	72.3	34	61.1	51.6	47.9	72.8	38
235	4	69.9	64.4	60.4	76.8	29	68.6	63.1	59.2	75.8	34
236	3	67.6	57.7	53.4	82.2	40	63.0	55.1	51.8	76.4	41
Community Mean	49	63.4	55.0	51.1	74.3	35	60.2	51.8	47.7	71.8	39

TABLE F-7. NOISE LEVELS MEASURED IN TRAFFIC ZONE 233

GRID	MORNING RUSH HOUR										MIDDAY					
	DATE	RUN NO.	TIME FROM--TO	L10 DBA	L50 DBA	L90 DBA	LNP	RANGE DBA	DATE	RUN NO.	TIME FROM--TO	L10 DBA	L50 DBA	L90 DBA	LNP	RANGE DBA
7-6	4/15	1AP	0730-0812	72.3	62.5	57.5	82.7	39	4/15	2AP	1130-1230	69.8	56.7	49.4	84.7	47
7-7	4/27	1	0730-0830	61.9	53.1	50.4	79.3	42	4/27	2	1130-1230	54.1	46.6	42.6	62.9	36
7-8	3/17	1A	0730-0830	59.9	56.5	54.5	65.1	25	3/17	2AR	1130-1230	56.5	51.8	49.0	69.5	40
7-9	4/27	1AP	0735-0825	61.2	54.0	51.5	70.6	33	4/27	2AP	1137-1227	50.8	45.4	41.9	57.6	31
8-6	3/1	1A	0730-0830	55.2	47.8	45.1	66.7	36	3/1	2A	1130-1230	53.5	44.8	41.8	64.6	37
8-7	4/6	1	0730-0830	56.0	50.4	47.5	68.4	43	4/6	2	1130-1230	52.2	47.1	44.7	66.6	45
8-8	4/5	1	0733-0833	62.0	50.8	46.2	75.0	38	4/5	2	1130-1230	58.8	48.1	42.3	73.3	43
		ARITHMETIC MEAN		61.2	53.6	50.4	72.5	37	ARITHMETIC MEAN		56.5	48.6	44.5	68.5	40	

TABLE F-8. NOISE LEVELS MEASURED IN TRAFFIC ZONE 234

GRID	MORNING RUSH HOUR										MIDDAY					
	DATE	RUN NO.	TIME FROM--TO	L10 DBA	L50 DBA	L90 DBA	LNP	RANGE DBA	DATE	RUN NO.	TIME FROM--TO	L10 DBA	L50 DBA	L90 DBA	LNP	RANGE DBA
7-4	3/23	1R	0736-0836	70.8	60.0	53.3	84.6	41	3/23	2A	1130-1230	63.0	51.0	46.8	76.8	38
7-5	4/22	1AP	0730-0830	62.4	57.2	54.1	68.5	28	4/22	2AP	1131-1231	60.9	55.4	52.2	70.6	41
8-4	4/13	1	0730-0830	58.7	50.6	47.7	67.6	37	4/13	2	1130-1230	60.9	47.9	44.3	76.3	43
8-5	2/26	1A	0730-0830	61.7	55.4	52.3	68.5	29	2/26	2A	1130-1230	59.7	51.9	48.1	67.5	31
		ARITHMETIC MEAN		63.4	55.8	51.9	72.3	34	ARITHMETIC MEAN		61.1	51.6	47.9	72.8	38	

TABLE F-5. NOISE LEVELS MEASURED IN TRAFFIC ZONE 231

GRID	DATE	RUN NO.	TIME FROM--TO	MORNING RUSH HOUR			LNP RANGE DBA	DATE	RUN NO.	TIME FROM--TO	MIDDAY			LNP RANGE DBA	
				L10 DBA	L50 DBA	L90 DBA					L10 DBA	L50 DBA	L90 DBA		
1-7	3/25	1A	0730-0816	76.6	62.5	52.7	39	3/25	2A	1130-1212	71.2	53.4	47.8	88.7	
2-4	3/19	1A	0730-0830	60.8	58.1	55.2	25	3/19	2	1130-1230	58.9	55.2	50.6	64.3	
2-5	3/26	1	0730-0830	59.9	47.7	43.9	50	3/26	2	1130-1230	53.8	42.9	38.1	73.1	
2-6	4/28	1APR	0735-0918	53.1	48.7	46.2	58.0	4/28	2AP	1135-1227	49.0	43.9	41.0	55.3	
2-7	4/28	1	0730-0830	58.0	54.3	50.9	62.1	4/28	2	1130-1230	53.9	47.8	43.2	61.3	
3-4	4/16	1AP	0730-0830	56.3	51.5	49.0	61.3	4/16	2AP	1130-1230	57.3	49.8	46.7	65.5	
3-5	3/30	1	0745-0827	59.0	50.1	47.1	73.5	3/30	5	1145-1227	58.0	48.8	45.0	70.9	
3-6	4/26	1AP	0735-0825	64.8	51.5	46.1	78.6	4/26	2AP	1135-1225	60.0	46.6	39.6	78.0	
4-5	4/21	1AP	0730-0824	64.1	49.2	44.9	78.6	4/21	2AP	1130-1224	62.7	50.0	45.4	75.9	
ARITHMETIC MEAN				61.4	52.6	48.4	72.1	ARITHMETIC MEAN				58.3	48.7	44.2	70.3

TABLE F-6. NOISE LEVELS MEASURED IN TRAFFIC ZONE 232

GRID	DATE	RUN NO.	TIME FROM--TO	MORNING RUSH HOUR			LNP RANGE DBA	DATE	RUN NO.	TIME FROM--TO	MIDDAY			LNP RANGE DBA	
				L10 DBA	L50 DBA	L90 DBA					L10 DBA	L50 DBA	L90 DBA		
3-7	4/26	1	0730-0830	63.4	52.9	48.3	37	4/26	2	1137-1232	55.6	48.1	42.1	69.0	
4-6	4/30	1	0730-0830	60.7	53.0	49.7	70.3	4/30	2	1130-1230	55.4	50.7	47.1	70.3	
4-7	5/12	20	0740-0820	60.5	49.6	46.6	70.7	5/12	24	1140-1220	57.0	44.2	41.5	71.0	
5-5	4/21	1	0731-0831	58.6	46.7	43.7	74.9	4/21	2	1130-1230	59.0	47.7	44.5	72.2	
5-6	4/30	1APR	0735-0825	60.2	43.0	40.8	77.8	4/30	28P	1138-1227	55.9	43.5	37.5	74.5	
5-7	2/25	1A	0730-0830	60.6	53.5	48.5	70.2	2/25	2A	1130-1230	63.3	54.6	48.5	72.7	
6-4	5/11	22	0810-0850	66.0	61.0	57.5	71.8	5/10	1	1110-1150	65.1	61.2	58.3	68.9	
6-5	3/14	1A	0730-0830	74.3	65.4	56.8	86.4	3/24	2A	1130-1230	71.3	59.6	55.9	82.4	
6-6	4/15	1	0730-0830	56.8	48.4	45.1	69.3	4/15	2	1130-1230	57.0	48.0	42.7	75.7	
6-7	5/7	1	0730-0830	61.3	53.1	49.1	70.2	5/7	2	1130-1230	58.5	48.8	44.5	68.9	
6-8	6/24	1AP	0730-0830	59.3	55.1	52.6	66.0	6/24	2AP	1130-1230	60.0	52.5	49.2	69.3	
6-9	3/29	2	0730-0817	68.7	66.0	63.8	71.2	3/29	6	1130-1212	66.5	62.1	58.4	71.9	
ARITHMETIC MEAN				62.5	54.0	50.2	72.7	ARITHMETIC MEAN				60.3	51.8	47.5	72.2

TABLE F-11. TRAFFIC VOLUMES NEAR SURVEY LOCATIONS

GRID NO.	DATE 1971	STREET HIGHWAY	TIME		TRUCKS		BUSES		AUTOS TOTAL	VEHICLES TOTAL
			START	END	GASOLINE	DEISEL	GASOLINE	DEISEL		
1-7	3/25	Mystic Valley Parkway	07:30	08:30	8	1	0	0	502	511
			30 mph	30 mph					30-40 mph	
1-7	3/25	Mystic Valley Parkway	11:30	12:30	0	0	0	0	212	212
			-	-					40 mph	
2-4	3/19	Mystic Valley Parkway	07:30	08:30	2	0	0	0	1075	1077
			30 mph	-					30-40 mph	
2-4	3/19	Mystic Valley Parkway	11:30	12:30	5	0	0	0	534	539
			30 mph	-					30-40 mph	
2-5	3/26	Sagamore Street	07:30	08:30	0	0	1	0	40	41
			-	-			stop-start		10 mph	
2-5	3/26	Sagamore Street	11:30	12:30	0	0	0	0	38	38
			-	-					10 mph	
2-6	4/28	Grove St. RR Bridge	07:30	08:30	10	0	5	0	312	327
			10 mph	-			10 mph		10 mph	
2-6	4/28	Grove St. RR Bridge	11:30	12:30	0	0	4	0	186	195
			-	-			10 mph		10 mph	
2-6	4/28	Busse1 Road	07:30	08:30	2	0	7	0	101	110
			10 mph	-			10 mph		10 mph	
2-6	4/28	Busse1 Road	11:30	12:30	3	0	9	0	45	57
			10 mph	-			10 mph		10 mph	
2-7	4/28	Grove Street	07:30	08:30	4	0	2	0	234	240
			30 mph	-			30 mph		30 mph	
2-7	4/28	Grove Street	11:30	12:30	4	0	2	0	143	149
			30 mph	-			30 mph		30 mph	
3-4	4/16	Mystic Valley Parkway	07:30	08:30	0	0	0	0	2388	2388
			-	-			-		15-40 mph	

TABLE F-9. NOISE LEVELS MEASURED IN TRAFFIC ZONE 235

GRID	MORNING RUSH HOUR					MIDDAY							
	DATE	RUN NO.	TIME FROM--TO	L10 DBA	L50 DBA	L90 DBA	RANGE DBA	RUN NO.	TIME FROM--TO	L10 DBA	L50 DBA	L90 DBA	LNP RANGE DBA
8-2	4/14	1	0740-0840	76.5	71.6	67.7	81.7	2	1130-1230	65.7	60.6	57.7	73.2
7-3	5/5	1	0730-0830	66.5	61.9	59.1	72.0	2	1130-1230	75.2	69.8	65.4	81.8
8-3	5/25	1A	0730-0820	64.4	57.1	50.3	75.4	2	1150-1227	64.3	56.8	51.3	74.6
9-2	4/14	1A	0801-0843	72.0	66.8	64.4	78.2	2A	1135-1235	69.1	65.1	62.5	73.6
			ARITHMETIC MEAN	69.9	64.4	60.4	76.8	29	ARITHMETIC MEAN	68.6	63.1	59.2	75.8

F-1

TABLE F-10. NOISE LEVELS MEASURED IN TRAFFIC ZONE 236

GRID	MORNING RUSH HOUR					MIDDAY							
	DATE	RUN NO.	TIME FROM--TO	L10 DBA	L50 DBA	L90 DBA	RANGE DBA	RUN NO.	TIME FROM--TO	L10 DBA	L50 DBA	L90 DBA	LNP RANGE DBA
9-3	5/6	1	0730-0830	61.7	50.2	45.2	75.8	2	1130-1230	59.1	47.4	43.2	80.0
10-2	3/3	1A	0730-0830	73.5	66.6	62.6	81.4	2A	1130-1230	73.0	67.0	63.3	80.4
10-3	3/10	2	0740-0825	67.7	56.3	52.5	89.3	6	1152-1234	56.8	51.0	48.9	68.9
			ARITHMETIC MEAN	67.6	57.7	53.4	82.2	40	ARITHMETIC MEAN	63.0	55.1	51.8	76.4

TABLE F-11. TRAFFIC VOLUMES NEAR SURVEY LOCATIONS

GRID NO.	DATE 1971	STREET HIGHWAY	TIME		TRUCKS		BUSES		AIRCRAFT TOTAL	VEHICLES TOTAL
			START	END	GASOLINE	DEISEL	GASOLINE	DEISEL		
4-5	4/21	Woburn Street	11:30	12:30	0	0	0	0	34	34
4-6	4/30	High School Access Road	07:30	08:30	0	0	12	43	248	303
4-6	4/30	High School Access Road	11:30	12:30	1	0	0	2	80	83
4-6	4/30	Winthrop Street	07:30	08:30	36	0	0	12	720	768
4-6	4/30	Winthrop Street	11:30	12:30	60	12	6	6	660	744
5-2	4/23	Boston SE of College	07:30	08:30	0	11	0	5	576	592
5-2	4/23	Boston SE of College	11:30	12:30	12	2	0	0	348	362
5-2	4/23	College NE of Boston	11:30	12:30	18	0	0	6	330	354
5-2	5/24	Boston NW of College	07:30	08:30	24	6	0	21	798	828
5-2	5/24	Boston NW of College	11:30	12:30	15	0	0	11	531	547
5-2	5/24	Boston SE of College	07:30	08:30	1	0	0	0	663	684
5-2	5/24	Boston SE of College	11:30	12:30	12	0	0	0	471	483
5-2	5/24	College NE of Boston	07:30	08:30	21	6	0	8	651	686

TABLE F-11. TRAFFIC VOLUMES NEAR SURVEY LOCATIONS

GRID NO.	DATE 1971	STREET HIGHWAY	TIME		TRUCKS		BUSES			AUTOS TOTAL	VEHICLES TOTAL
			START	END	GASOLINE	DEISEL	GASOLINE	DEISEL	DEISEL		
3-4	4/16	Mystic Valley Parkway	11:30	12:30	0	0	0	0	0	1260	1260
3-6	4/26	Playstead	07:30	08:30	3	0	6	15	219	15-40 mph	243
3-6	4/26	Playstead	11:30	12:30	3	0	6	9	87	20-35 mph	105
3-6	4/26	Woburn Street	07:30	08:30	0	0	0	0	77	20 mph	77
3-6	4/26	Woburn Street	11:30	12:30	1	0	0	0	50	20 mph	52
3-7	4/26	Priscilla Street	07:30	08:30	2	0	0	0	4	10-20 mph	6
3-7	4/26	Priscilla Street	11:30	12:30	0	0	0	0	2	10-20 mph	2
4-3	4/20	Capen Street	07:30	08:30	0	0	0	0	30	15-25 mph	30
4-3	4/20	Capen Street	11:30	12:30	2	motorcycles	-	-	19	15-25 mph	19
4-4	4/16	Cotting Street	07:30	08:30	7	0	0	0	175	15-25 mph	192
4-5	4/21	Suffolk Street	07:30	08:30	1	0	0	0	94	10 mph	96
4-5	4/21	Suffolk Street	11:30	12:30	0	0	0	0	75	10 mph	75
4-5	4/21	Woburn Street	07:30	08:30	4	0	0	0	64	10-20 mph	68

TABLE F-11. TRAFFIC VOLUMES NEAR SURVEY LOCATIONS

GRID NO.	DATE 1971	STREET HIGHWAY	TIME		TRUCKS		BUSES		AUTOS TOTAL	VEHICLES TOTAL
			START	END	GASOLINE	DEISEL	GASOLINE	DEISEL		
5-5	5/27	High West of Winthrop	11:30	12:30	72	18	6	6	606	708
5-6	4/30	Lincoln	07:30	08:30	0	0	0	0	2	2
5-6	4/30	Lincoln	11:30	12:30	0	0	0	0	start up	1
5-7	2/25	South Border Road	07:30	08:30	3	0	2	0	392	397
5-7	2/25	South Border Road	11:30	12:30	1	0	0	0	182	183
6-2	3/9	Main Street	07:30	08:30	23	5	0	21	947	996
6-2	3/9	Main Street	11:30	12:30	50	3	0	7	587	647
6-3	4/22	Hancock Court	07:30	08:30	0	0	0	0	2	2
6-5	3/24	Forest Street	07:30	08:30	12	1	1	2	544	560
6-5	3/24	Forest Street	11:30	12:30	3	0	0	2	249	254
6-6	4/15	Circuit Road	07:30	08:30	6	0	0	0	11	11
6-6	4/15	Circuit Road	11:30	12:30	0	0	0	0	10 mph	2
7-1	3/8	Joseph Street	07:30	08:30	1	0	0	0	20	21
					10 mph	-	-	-	10 mph	

TABLE F-11. TRAFFIC VOLUMES NEAR SURVEY LOCATIONS

GRID NO.	DATE 1971	STREET HIGHWAY	TIME		TRUCKS		BUSES		AUTOS TOTAL	VEHICLES TOTAL
			START	END	GASOLINE	DEISEL	GASOLINE	DEISEL		
5-2	5/24	College NE of Boston	11:30	12:30	12	0	0	3	372	379
5-2	5/24	College SW of Boston	07:30	08:30	24	3	0	29	660	716
5-2	5/24	College SW of Boston	11:30	12:30	12	0	0	14	411	437
5-3	4/20	Woodbine Road	07:30	08:30	0	0	0	0	2	2
5-3	4/20	Woodbine Road	11:30	12:30	1	0	0	0	2	3
5-4	4/23	Touro Ave	07:30	08:30	1	0	0	0	17	18
5-4	4/23	Touro Ave	11:30	12:30	1	0	0	0	13	14
5-5	4/21	Lincoln	07:30	08:30	3/10 mph	0/-	0/-	0/-	16/10-15mph	19
5-5	4/21	Lincoln	11:30	12:30	1/10 mph	0/-	0/-	0/-	11/10-15mph	12
5-5	5/27	High East of Winthrop	07:30	08:30	36	12	0	66	756	870
5-5	5/27	High East of Winthrop	11:30	12:30	90	-	-	18	918	1026
5-5	5/27	Winthrop South of High	07:30	08:30	24	6	6	6	924	966
5-5	5/27	Winthrop South of High	11:30	12:30	36	-	12	12	966	1026
5-5	5/27	High West of Winthrop	07:30	08:30	69	-	-	26	711	806

TABLE F-11. TRAFFIC VOLUMES NEAR SURVEY LOCATIONS

GRID NO.	DATE 1971	STREET HIGHWAY	TIME		TRUCKS		BUSES		AUTOS TOTAL	VEHICLES TOTAL
			START	END	GASOLINE	DEISEL	GASOLINE	DEISEL		
8-2	4/14	Mystic Valley Parkway	07:30	08:30	235	141	5	2	NC	-
8-2	4/14	Mystic Valley Parkway	11:30	12:30	230	117	30 - 45 mph	-	NC	-
8-3	3/22	Riverside Ave	07:30	08:30	27	5	9	14	786	841
8-3	3/22	Riverside Ave.	11:30	12:30	44	13	25 - 40 mph	4	682	748
8-4	4/13	Chipman Street	07:30	08:30	2	0	0	0	29	31
8-4	4/13	Chipman Street	11:30	12:30	10 mph	-	-	-	10-15 mph	-
8-5	2/26	Salem Street	07:30	08:30	43	17	0	26	730	816
8-5	2/26	Salem Street	11:30	12:30	57	17	15 - 30 mph	10	497	581
8-5	2/26	Yeomans	07:30	08:30	1	0	0	0	21	22
8-5	2/26	Yeomans	11:30	12:30	3	0	0	0	32	35
8-5	2/26	Spring St.	07:30	08:30	9	0	0	0	195	204
8-5	2/26	Spring St.	11:30	12:30	16	0	0	0	145	161
8-7	4/6	Morrison St.	07:30	08:30	1	0	0	0	10	11
					10 mph	-	-	-	10 mph	-

TABLE F-11. TRAFFIC VOLUMES NEAR SURVEY LOCATIONS

GRID NO.	DATE 1971	STREET HIGHWAY	TIME		TRUCKS		BUSES		AUTOS TOTAL	VEHICLES TOTAL
			START	END	GASOLINE	DEISLL	GASOLINE	DEISEL		
7-1	3/8	Joseph Street	11:30	12:30	0	0	0	0	22	22
7-2	4/12	I-93 On-Ramp	11:30	12:30	52	24	6	2	10 mph 600	678
7-2	3/16	Mystic Ave.	07:30	08:30	76	45	1	16	1603	1741
7-3	5/5	I-93 N	07:30	08:30	175	20 + 45 mph	0	2	-	-
7-3	5/5	I-93 N	11:30	12:30	183	20 - 45 mph	1	1	-	-
7-4	3/23	Washington Street	07:30	08:30	7	0	1	0	131	139
7-4	3/23	Washington Street	11:30	12:30	4	0	0	0	89	93
7-5	4/22	Court Street	07:30	08:30	1	0	0	0	20-30mph 8	9
7-5	4/22	Court Street	11:30	12:30	10 mph	0	0	0	10 mph 21	21
7-6	4/15	Fulton Street	07:30	08:30	9	0	9	0	299	317
7-6	4/15	Fulton Street	11:30	12:30	22	0	6	0	166	194
7-7	4/27	Scott Street	07:30	08:30	-	-	-	-	2	2
7-7	4/27	Scott Street	11:30	12:30	-	-	Dead End Street	(Slow)	-	-

TABLE F-11. TRAFFIC VOLUMES NEAR SURVEY LOCATIONS

GRID NO.	DATE 1971	STREET HIGHWAY	TIME		TRUCKS		BUSES		AUTOS TOTAL	VEHICLES TOTAL	VEHICLE SPEED
			START	END	GASOLINE	DEISEL	GASOLINE	DEISEL			
3-5	3/30	Playstead Rd.	08:00	09:25	14	0	0	15	372	401	
3-5	3/30	Playstead Rd.	09:30	11:20	9	0	0	11/hr.	263/hr.	283/hr.	
3-5	3/30	Playstead Rd.	11:45	13:14	5	0	0	4	250	259	
3-5	3/30	Playstead Rd.	13:45	15:15	11	0	0	13	398	422	
3-5	3/30	Playstead Rd.	15:35	17:45	7	0	0	9	268	284	
3-5	3/30	Playstead Rd.	17:45	20:00	21	0	0	23	160	204	
3-5	3/30	Playstead Rd.	20:00	22:00	14	0	0	15	107	136	
3-5	3/30	Playstead Rd.	22:00	24:00	11	0	0	20	558	580	
3-5	3/30	Playstead Rd.	24:00	02:00	5	0	0	9	258	272	
3-5	3/30	Playstead Rd.	02:00	04:15	2	0	0	18	859	879	
3-5	3/30	Playstead Rd.	04:15	06:00	1	0	0	8	382	390	
3-5	3/30	Playstead Rd.	06:00	07:20	0	0	0	4	503	507	10
3-5	3/30	Playstead Rd.			0	0	0	2	252	254	
3-5	3/30	Playstead Rd.			0	0	0	8	253	261	to
3-5	3/31	Playstead Rd.			0	0	0	4	127	131	
3-5	3/31	Playstead Rd.			1	0	0	2	59	62	35
3-5	3/31	Playstead Rd.			1	0	0	1	30	31	
3-5	3/31	Playstead Rd.			1	0	0	0	14	15	mph
3-5	3/31	Playstead Rd.			0	0	0	0	6	7	
3-5	3/31	Playstead Rd.			1	0	0	4	44	49	
3-5	3/31	Playstead Rd.			1	0	0	2	25	28	
3-5	3/31	Playstead Rd.			2	0	0	10	246	258	
3-5	3/31	Playstead Rd.			2	0	0	8	185	193	

TABLE F-11. TRAFFIC VOLUMES NEAR SURVEY LOCATIONS

GRID NO.	DATE 1971	STREET HIGHWAY	TIME		TRUCKS		BUSES		AUTOS TOTAL	VEHICLES TOTAL
			START	END	GASOLINE	DEISEL	GASOLINE	DEISEL		
8-7	4/6	Morrison Street	11:30	12:30	0	0	0	0	5	5
8-8	4/5	Highland Ave.	07:30	08:30	4	0	0	4	460	468
8-8	4/5	Highland Ave.	11:30	12:30	9	0	0	4	190	203
8-8	4/5	East Border Rd.	07:30	08:30	0	0	0	0	46	-
8-8	4/5	East Border Rd.	11:30	12:30	0	0	0	0	34	-
9-2	4/14	Fells. S. of Wellington Circle	07:30	08:30	108	48	0	42	NC	-
9-2	4/14	Fells. S. of Wellington Circle	11:30	12:30	138	58	0	16	NC	-
9-3	5/6	Third St.	07:30	08:30	1	-	6	-	33	40
9-3	5/6	Third St.	11:30	12:30	1	-	6	15 mph	14	21
9-3	5/6	Fellsway	07:30	08:30	8	0	0	32	2178	2218
9-3	5/6	Fellsway	11:30	12:30	4	-	-	6	1050	1060
10-2	3/3	Revere Beach Parkway - West Lane	07:30	08:30	98	79	-	-	-	-
10-2	3/3	Revere Beach Parkway - West Lane	11:30	12:30	135	75	-	-	-	-

TABLE F-11. TRAFFIC VOLUMES NEAR SURVEY LOCATIONS

GRID NO.	DATE 1971	STREET HIGHWAY	TIME		TRUCKS		BUSES		AUTOS TOTAL	VEHICLES TOTAL	VEHICLE SPEED
			START	END	GASOLINE	DEISEL	GASOLINE	DEISEL			
6-4	5/10	Salem St.	13:20	15:06						2465	
6-4	5/10	Salem St.	15:07	15:17	9	1	0	4	-	1395/hr.	
					54/hr.	6/hr.	0	24/hr.	-	-	
6-4	5/10	Salem St.	15:06	16:11						1591	
6-4	5/10	Salem St.	16:11	16:22						1469/hr.	
6-4	5/10	Salem St.	16:22	16:58						266	
										1451/hr.	10
6-4	5/10	Salem St.	16:58							870	
										1450/hr.	to
6-4	5/10	Salem St.	16:58	17:53						1397	
										1524/hr.	25
6-4	5/10	Salem St.	17:53	18:08						299	mph
										1196/hr.	
6-4	5/10	Salem St.	18:08	19:30						1820	
										1332/hr.	
6-4	5/10	Salem St.	19:30	20:30						1368	
										684/hr.	
6-4	5/10	Salem St.	20:30	22:30						2095	
										1049/hr.	
6-4	5/10	Salem St.	22:30	00:30						1238	
										610/hr.	
6-4	5/10	Salem St.	00:30	03:00						242	
										98/hr.	
6-4	5/10	Salem St.	03:00	05:00						105	
										53/hr.	

TABLE F-11. TRAFFIC VOLUMES NEAR SURVEY LOCATIONS

GRID NO.	DATE 1971	STREET HIGHWAY	TIME		TRUCKS		BUSES		AUTOS TOTAL	VEHICLES TOTAL	VEHICLE SPEED
			START	END	GASOLINE	DEISEL	GASOLINE	DEISEL			
6-4	5/11	City Hall Mall	0700	0802						702 679/hr.	10 to
6-4	5/11	City Hall Mall	0802	0913						1121 947/hr.	25 mph
6-4	5/11	City Hall Mall	0913	1050						1423 880/hr.	4596 50-60mph
6-9	2/22	I-93S	0730	0830	138 50-60mph	126 50-60mph	0 -	0 -	4596 50-60mph	4860 -	AS
6-9	2/22	I-93N	0730	0830	84 45 mph	126 45 mph	0 -	0 -	2214 55 mph	2340 -	NOTED
6-9	2/22	Fellsway West	0730	0830	6 45 mph	0 -	6 45 mph	0 -	240 45 mph	252 -	
6-9	3/29	I-93 N&S	0700	0715	48 192/hr	38 152/hr					NORTH LANE TRUCKS
6-9	3/29	I-93 N&S	0800	0815	68 272/hr.	51 204/hr					45 mph
6-9	3/29	I-93 N&S	0900	0915	99 396/hr	77 308/hr					CARS
6-9	3/29	I-93 N&S	1000	1015	78 312/hr	38 152/hr	1 4/hr	- -			50-60 mph
6-9	3/29	I-93 N&S	1100	1115	82 328/hr	41 164/hr					SOUTH LANE TRUCKS
6-9	3/29	I-93 N&S	1200	1215	72 288/hr	43 172/hr					AND CARS
6-9	3/29	I-93 N&S	1400	1415	68 272/hr	46 184/hr					50-70 mph.

TABLE F-11. TRAFFIC VOLUMES NEAR SURVEY LOCATIONS

GRID NO.	DATE 1971	STREET HIGHWAY	TIME		TRUCKS		BUSES		ALYDS TOTAL	VEHICLES TOTAL	VEHICLE SPEED
			START	END	GASOLINE	DEISEL	GASOLINE	DEISEL			
6-4	5/10	Riverside Ave	16:25	16:35	12	1	1	9	201	224	
6-4	5/10	Riverside Ave	17:15	17:31	72/hr.	6/hr.	6/hr.	54/hr.	1206/hr.	1344/hr.	10
6-4	5/10	Riverside Ave	17:15	17:31	6	0	0	14	386	406	to
6-4	5/11	Riverside Ave	07:00	08:00	23/hr.	-	-	53/hr.	1448/hr.	1523/hr.	25
6-4	5/10	River Street	16:11	16:21	35	10	8	44	NC	-	mph
6-4	5/10	River Street	16:11	16:21	35/hr.	10/hr.	8/hr.	44/hr.	-	-	
6-4	5/10	River Street	17:53	18:08	0	0	0	1	19	20	5
6-4	5/10	River Street	17:53	18:08	-	-	-	6/hr.	114/hr.	120/hr.	to
6-4	5/10	City Hall Mall	14:37	14:47	0	0	0	1	22	23	15
6-4	5/10	City Hall Mall	14:37	14:47	5	0	0	4/hr.	88/hr.	92/hr.	
6-4	5/10	City Hall Mall	17:33	17:48	30/hr.	-	-	54/hr.	1242/hr.	1326/hr.	10
6-4	5/10	City Hall Mall	17:33	17:48	6	2	0	9	333	350	
6-4	5/10	City Hall Mall	19:30	20:30	24/hr.	8/hr.	-	36/hr.	1332/hr.	1400/hr.	
6-4	5/10	City Hall Mall	19:30	20:30	4	1	0	4	1306	1315	to
6-4	5/10	City Hall Mall	20:30	22:30	4/hr.	1/hr.	-	4/hr.	1306/hr.	1315/hr.	
6-4	5/10	City Hall Mall	20:30	22:30	0	3	0	7	1845	1855	
6-4	5/10	City Hall Mall	20:30	22:30	0	2/hr.	0	4/hr.	923/hr.	928/hr.	
6-4	5/10	City Hall Mall	22:30	00:30	2	4	0	10	988	1004	25
6-4	5/11	City Hall Mall	00:30	03:00	1/hr.	2/hr.	0	5/hr.	494/hr.	502/hr.	
6-4	5/11	City Hall Mall	03:00	05:00	2	5	0	3	203	213	
6-4	5/11	City Hall Mall	03:00	05:00	1/hr.	2/hr.	0	1/hr.	81/hr.	85/hr.	mph
6-4	5/11	City Hall Mall	05:00	07:00	10	4	0	0	72	86	
6-4	5/11	City Hall Mall	05:00	07:00	5/hr.	2/hr.	0	0	36/hr.	43/hr.	
6-4	5/11	City Hall Mall	05:00	07:00	21	12	2	19	522	576	
6-4	5/11	City Hall Mall	05:00	07:00	11/hr.	6/hr.	1/hr.	10/hr.	261/hr.	288/hr.	

TABLE F-11. TRAFFIC VOLUMES NEAR SURVEY LOCATIONS

GRID NO.	DATE 1971	STREET HIGHWAY	TIME		TRUCKS		BUSES		AUTOS TOTAL	VEHICLES TOTAL	VEHICLE SPEED
			START	END	GASOLINE	DEISEL	GASOLINE	DEISEL			
10-3	3/10	Corporation Way at Coopers Street	1059	1145	4	4					
10-3	3/10	Corporation Way at Coopers Street	1152	1234	5	1					
10-3	3/10	Corporation Way at Coopers Street	1258	1340	17	11					
10-3	3/10	Corporation Way at Coopers Street	1346	1428	8	6					
10-3	3/10	Corporation Way at Coopers Street	1452	1534	11/hr	9/hr					10
10-3	3/10	Corporation Way at Coopers Street	1540	1622	3	4			27	34	
10-3	3/10	Corporation Way at Coopers Street	1647	1719	4/hr	6/hr			39/hr	48/hr	to
10-3	3/10	Corporation Way at Coopers Street	1730	1821	5	3			14	22	
10-3	3/10	Corporation Way at Coopers Street	1855	0045	9/hr	7/hr			26/hr	41/hr	
10-3	3-11	Corporation Way at Coopers Street	0045	0300	7	8			22	37	20
10-3	3-11	Corporation Way at Coopers Street	0300	0540	8/hr	9/hr			25/hr	44/hr	
10-3	3-11	Corporation Way at Coopers Street	0540	0640	1	19			47	67	
					0/hr	3/hr			8/hr	11/hr	mph
					0	10			11	21	
						4/hr			5/hr	9/hr	
					0	2			15	17	
						1/hr			6/hr	6/hr	
										7	
										7/hr	

TABLE F-11. TRAFFIC VOLUMES NEAR SURVEY LOCATIONS

GRID NO.	DATE 1971	STREET HIGHWAY	TIME		TRUCKS		BUSES		AUTOS TOTAL	VEHICLES TOTAL	VEHICLE SPEED
			START	END	GASOLINE	DEISEL	GASOLINE	DEISEL			
6-9	3/29	I-93 N&S	1600	1615	73	37					NORTH LANE
					292/hr	148/hr					LANE
6-9	3/29	I-93 N&S	1700	1715	73	24					TRUCKS
					292/hr	96/hr					45 mph
6-9	3/29	I-93 N&S	1800	1815	56	30	1	2			CARS
					224/hr	120/hr	4/hr	8/hr			50-60 mph
6-9	3/29	I-93 N&S	2000	2015	8	19	0	1			SOUTH LANE
					37/hr	76/hr	-	4/hr			LANE
6-9	3/29	I-93 N&S	2242	2257	5	15	-	1			TRUCKS
					20/hr	60/hr	-	4/hr			AND
6-9	3/30	I-93 N&S	0045	0100	2	8	0	0			CARS
					8/hr	32/hr	-	-			50-70 mph
6-9	3/30	I-93 N&S	0310	0325	3	6	0	0	33	42	
					12/hr	24/hr	-	-	132/hr	168/hr	
6-9	3/30	I-93 N&S	0445	0500	6	21	0	0			
					74/hr	84/hr	-	-			
6-9	3/30	I-93 N&S	0600	0615	31	22	0	0			
					124/hr	88/hr	-	-			
10-3	3/10	Corporation Way at Cooper Street.	0618	0837	4	3					10 to
					2/hr	2/hr					
10-3	3/10	Corporation Way at Cooper Street.	0857	0942	8	2					20
					11/hr	3/hr					
10-3	3/10	Corporation Way at Cooper Street.	0946	1037	5	9					
					6/hr	11/hr					mph

TABLE F-12. NUMBER OF AIRCRAFT PRODUCING PEAK NOISE LEVELS IN EXCESS OF 60 dBA

GRID	DATE 1971	TIME		AIRCRAFT DETECTED SOUND LEVEL RANGE (dBA)			RUNWAYS IN USE	TOTAL LANDINGS AND TAKEOFFS*
		FROM	TO	60-70	70-80	80-90		
4-4	4/16	0730	0830	3	6	0	22, 27 & 33	32
4-4	4/16	1130	1230	3	5	0	22 & 33	32
4-5	4/21	0730	0824	3	1	0	22	33
4-5	4/21	1130	1224	3	1	0	22	27
4-6	4/30	0730	0830	6	4	0	22, 27 & 33	36
4-6	4/30	1130	1230	7	2	0	33	31
5-2	4/23	0730	0830	4	2	0	22, 27, 33	32
5-2	4/23	1130	1230	4	1	0	27 & 33	33
5-3	4/20	0730	0830	5	8	0	4	36
5-3	4/20	1130	1230	1	1	0	4 & 9	32
5-4	4/23	0731	0831	2	4	0	22, 27 & 33	32
5-4	4/23	1130	1230	3	2	0	27 & 33	33
5-5	4/21	0731	0831	2	2	0	22	37
5-5	4/21	1130	1230	2	2	0	22	30
5-6	4/30	0735	0825	6	2	0	22, 27 & 33	30
5-6	4/30	1138	1228	3	2	0	33	26
5-7	2/25	0730	0830	1	1	0	33	29
5-7	2/25	1130	1230	6	1	0	33	31

*By commercial carrier only.

TABLE F-12. NUMBER OF AIRCRAFT PRODUCING PEAK NOISE LEVELS IN EXCESS OF 60 dBA

GRID	DATE 1971	TIME		AIRCRAFT DETECTED SOUND LEVEL RANGE (dBA)			RUNWAYS IN USE	TOTAL LANDINGS AND TAKEOFFS*
		FROM	TO	60-70	70-80	80-90		
6-1	3/2	0735	0835	9	0	0	33 & 4	31
6-1	3/2	1130	1230	4	1	0	33 & 4	29
6-2	3/9	0730	0830	3	1	0	33	31
6-2	3/9	1130	1230	2	0	0	33	28
6-3	4/22	0730	0830	3	1	0	4 & 33	35
6-3	4/22	1130	1230	4	1	0	27 & 33	30
6-5	3/24	0730	0830	1	0	0	33 & 27	39
6-5	3/24	1130	1230	-	1	0	33	28
6-6	4/15	0730	0830	3	2	0	33	34
6-6	4/15	1130	1230	3	2	1	33	33
6-7	5/7	0730	0830	11	1	0	4, 33 & 33	34
6-7	5/7	1130	1230	9	3	0	4 & 9	32
6-8	6/24	0730	0830	7	3	0	9, 15 & 33	30
6-8	6/24	1130	1230	5	5	0	22 & 27	36
7-1	3/8	0730	0830	5	2	0	22 & 27	27
7-1	3/8	1130	1230	2	2	0	22 & 27	27
7-2	3/16	0730	0830	1	2	0	22	34
7-2	4/12	1130	1230	3	2	0	4, 9 & 22	28

*By commercial carriers only.

TABLE F-12. NUMBER OF AIRCRAFT PRODUCING PEAK NOISE LEVELS IN EXCESS OF 60 dBA

GRID	DATE 1971	TIME		AIRCRAFT DETECTED SOUND LEVEL RANGE (dBA)			RUNWAYS IN USE	TOTAL LANDINGS AND TAKEOFFS*
		FROM	TO	60-70	70-80	80-90		
7-3	5/5	0730	0830	7	1	0	22, 27 & 33	37
7-3	5/5	1130	1230	4	2	0	27	36
7-4	3/23	0736	0836	5	4	3	4 & 33	32
7-4	3/23	1130	1230	4	3	0	4 & 15	30
7-5	4/22	0730	0830	4	3	0	4 & 33	35
7-5	4/22	1131	1231	4	1	0	27 & 33	30
7-6	4/15	0730	0812	3	0	0	33	24
7-6	4/15	1130	1230	5	2	0	33	33
7-7	4/27	0730	0830	5	3	2	4, 9 & 33	39
7-7	4/27	1130	1230	2	2	0	4 & 9	37
7-8	3/17	0730	0830	3	4	0	4, 27 & 33	33
7-8	3/17	1130	1230	7	2	1	4, 27 & 33	27
7-9	4/27	0735	0825	5	1	0	4, 9 & 33	33
7-9	4/27	1137	1227	2	0	0	4 & 9	31
8-2	4/14	0740	0840	-	-	3	33	34
8-2	4/14	1130	1230	-	0	0	33	40
8-3	5/25	0730	0830	2	3	0	22	38
8-3	5/25	1150	1238	0	0	0	4, 9 * 22	21

*By commercial carriers only

TABLE F-12. NUMBER OF AIRCRAFT PRODUCING PEAK NOISE LEVELS IN EXCESS OF 60 dBA

GRID	DATE 1971	TIME		AIRCRAFT DETECTED SOUND LEVEL RANGE (dBA)			RUNWAYS IN USE	TOTAL LANDINGS AND TAKEOFFS*
		FROM	TO	60-70	70-80	80-90		
8-4	4/13	0730	0830	0	0	0	4, 9, 15 & 22	30
8-4	4/13	1130	1230	3	2	0	22	36
8-5	2/26	0730	0830	4	0	0	22, 27 & 33	35
8-5	2/26	1130	1230	2	0	0	22	31
8-6	3/1	0730	0830	6	0	0	22 & 27	32
8-6	3/1	1130	1230	6	0	0	22 & 27	28
8-7	4/6	0730	0830	4	0	0	9 & 4	33
8-7	4/6	1130	1230	0	0	0	4 & 9	25
8-8	4/5	0733	0833	2	3	0	4 & 33	31
8-8	4/5	1130	1230	5	1	0	4, 9, 15 & 22	24
9-2	4/14	0801	0843	2	3	0	33	23
9-2	4/14	1132	1235	2	1	0	33	40
9-3	5/6	0730	0830	5	2	0	15, 22 & 27	35
9-3	5/6	1130	1230	3	1	0	4 & 9	40
10-2	3/3	0730	0830	-	3	0	4 & 9	32
10-2	3/3	1130	1230	-	2	0	4 & 9	30

*By commercial carrier only.

APPENDIX G

MAPS



Figure G-1. Grid System, Measurement Locations & Median Noise Levels



Figure G-2. Traffic Volumes on Main Traffic Routes in Medford



Figure G-3. Medford Traffic Control Zones

Reproduced from
best available copy.

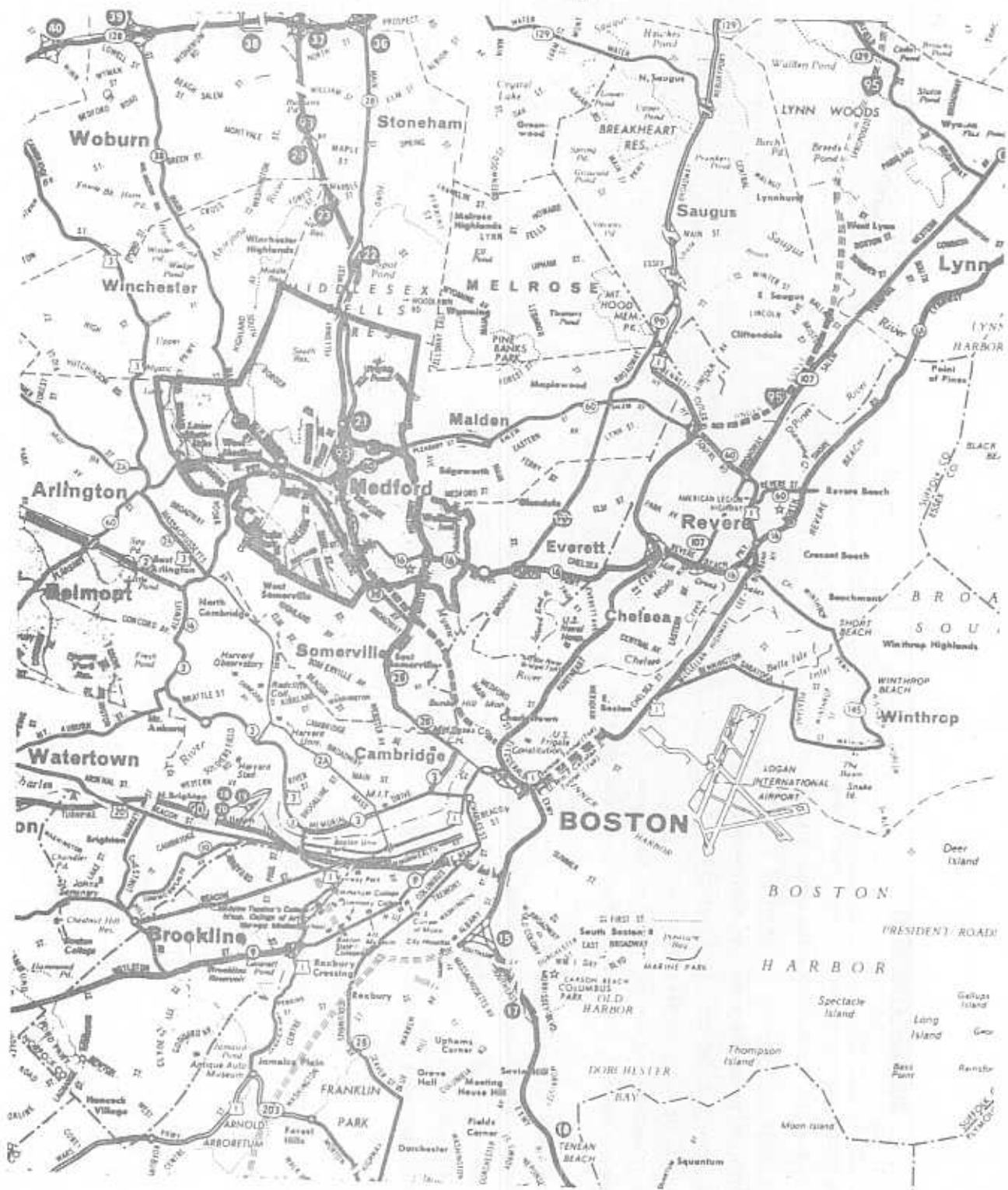


Figure G-4.

ACKNOWLEDGEMENT

The Transportation Systems Center of the Department of Transportation gratefully acknowledges the contributions of the following individuals and agencies who provided invaluable assistance during the preparation for and the conduct of "A Community Noise Survey of Medford, Massachusetts".

City officials of Medford, Massachusetts.

Hon. John J. McGlynn, Mayor; Mr. James O. Nicholson, City Manager; Mr. Robert Mayerson and Charles Sísitsky of the Planning Department.

Personnel of the following agencies:

Medford Police Department; Federal Aviation Administration at Logan International Airport; Massachusetts Department of Public Works; Massachusetts Metropolitan District Commission; and the "Metropolitan Area Planning Council" of Boston, Massachusetts.



Figure D-1. Mobile Noise Laboratory, Transportation Systems Center, Cambridge, Massachusetts

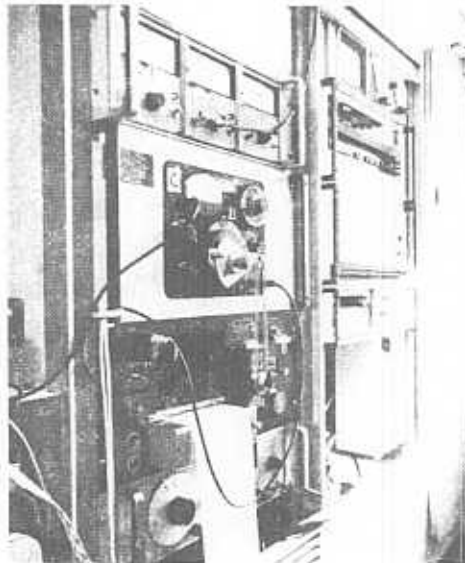
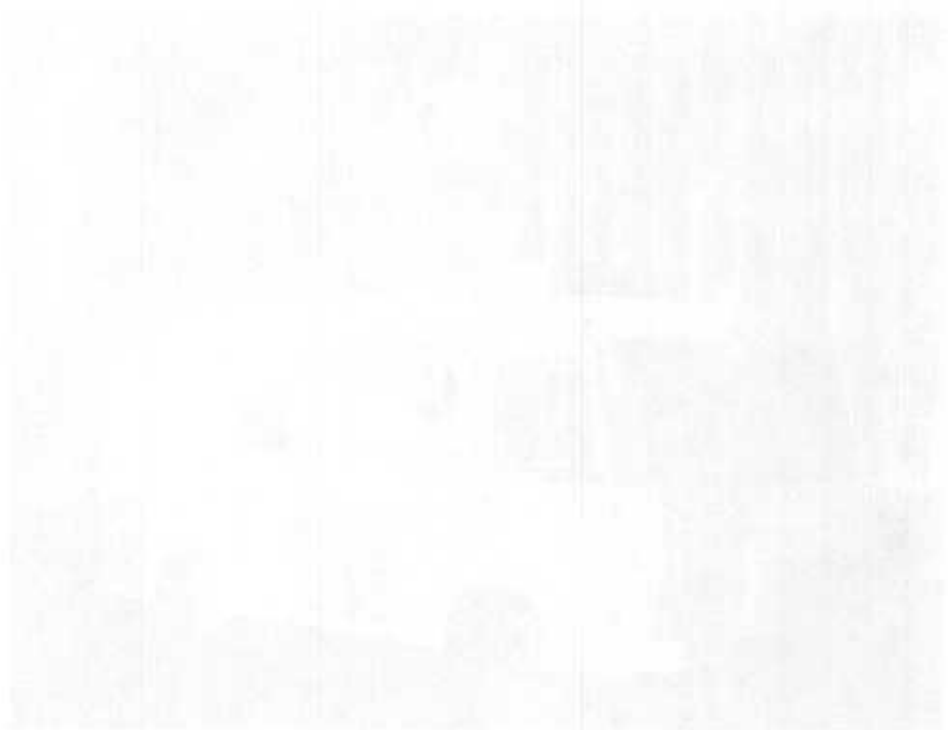
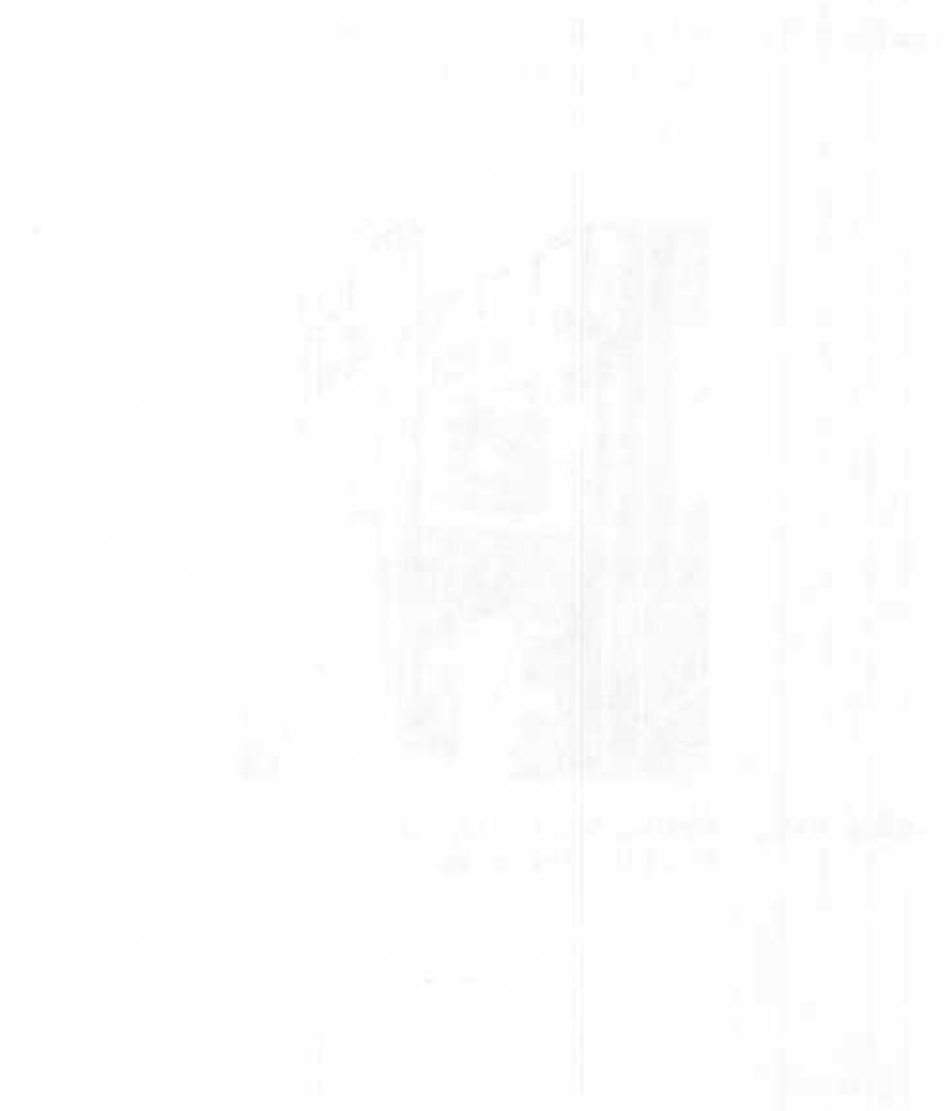


Figure D-2. Noise Analyzing Instrumentation Inside Mobile Noise Laboratory



3
3



4
4

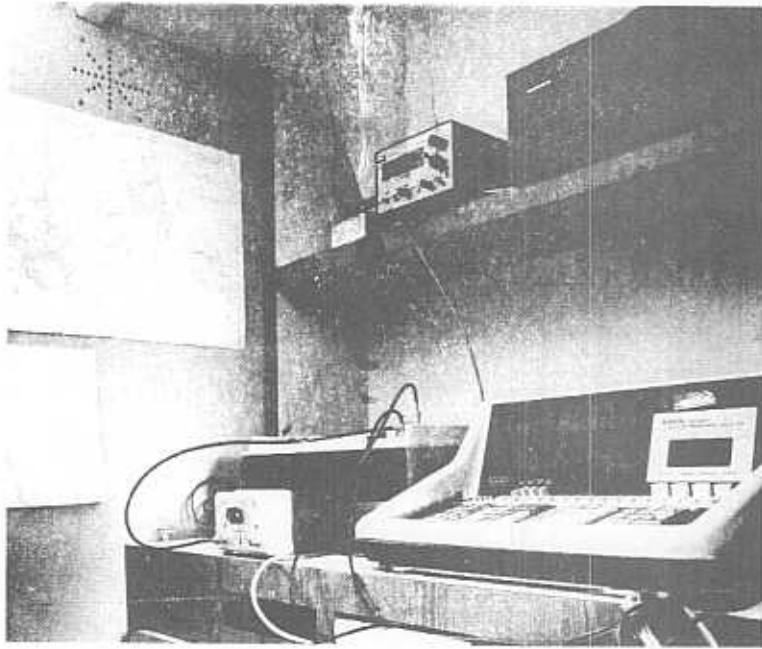
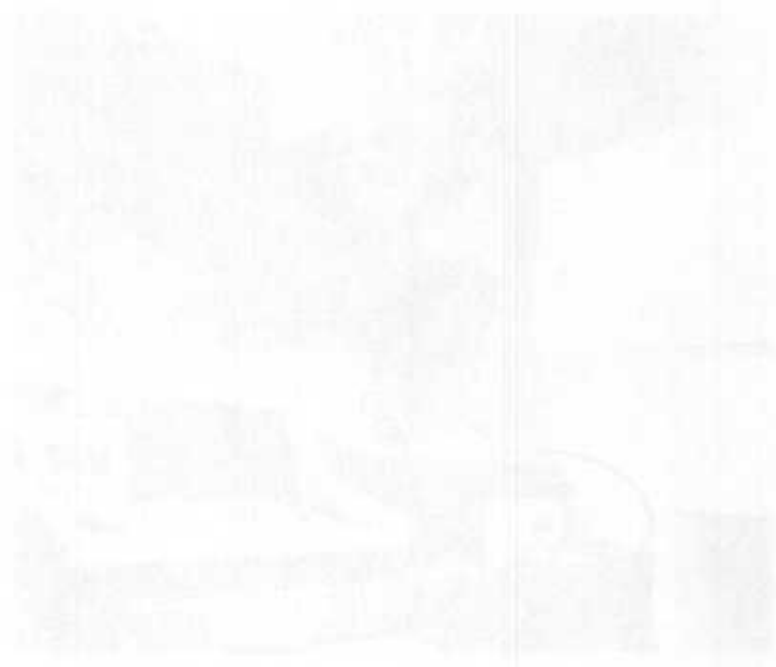


Figure D-3. Hewlett Packard Model 3960 Tape Recorder and Wang 700 Series Advanced Programming Calculator Inside Mobile Laboratory



Figure D-4. Microphone System Being Assembled by TSC Technician



Map of the [illegible] region



Map of the [illegible] region

3

4

5

6



Figure D-5. Microphone System at Grid Location 3-5,
Facing East

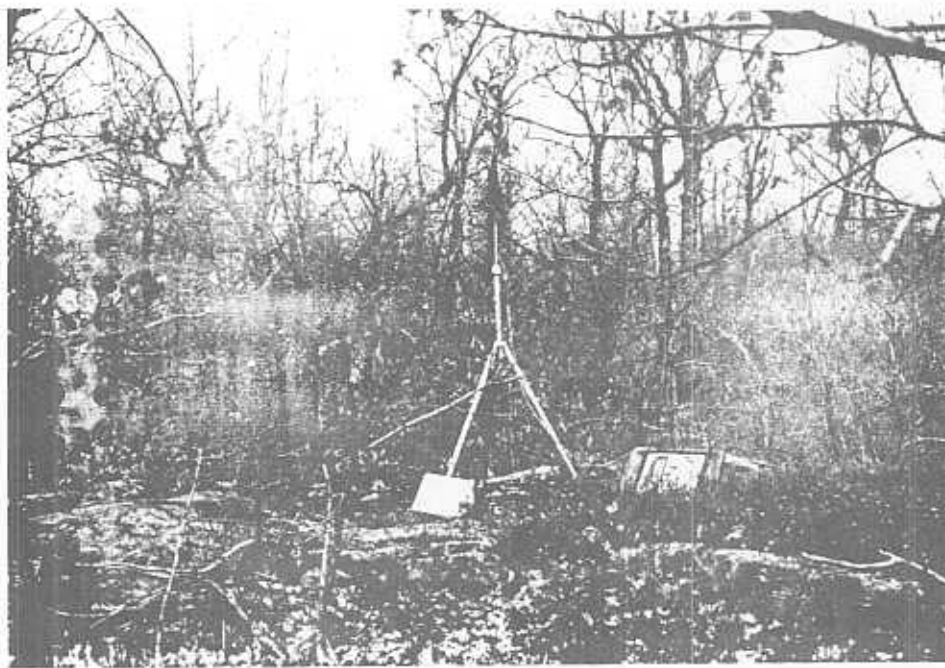


Figure D-6. Microphone System at Grid Location 4-7,
Facing North

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

26

27

28

29

30

31

32

33

34

35

36

37

38

39

40

41

42

43

44

45

46

47

48

49

50

51

52

53

54

55

56

57

58

59

60

61

62

63

64

65

66

67

68

69

70

71

72

73

74

75

76

77

78

79

80

81

82

83

84

85

86

87

88

89

90

91

92

93

94

95

96

97

98

99

100

101

102

103

104

105

106

107

108

109

110

111

112

113

114

115

116

117

118

119

120

121

122

123

124

125

126

127

128

129

130

131

132

133

134

135

136

137

138

139

140

141

142

143

144

145

146

147

148

149

150

151

152

153

154

155

156

157

158

159

160

161

162

163

164

165

166

167

168

169

170

171

172

173

174

175

176

177

178

179

180

181

182

183

184

185

186

187

188

189

190

191

192

193

194

195

196

197

198

199

200

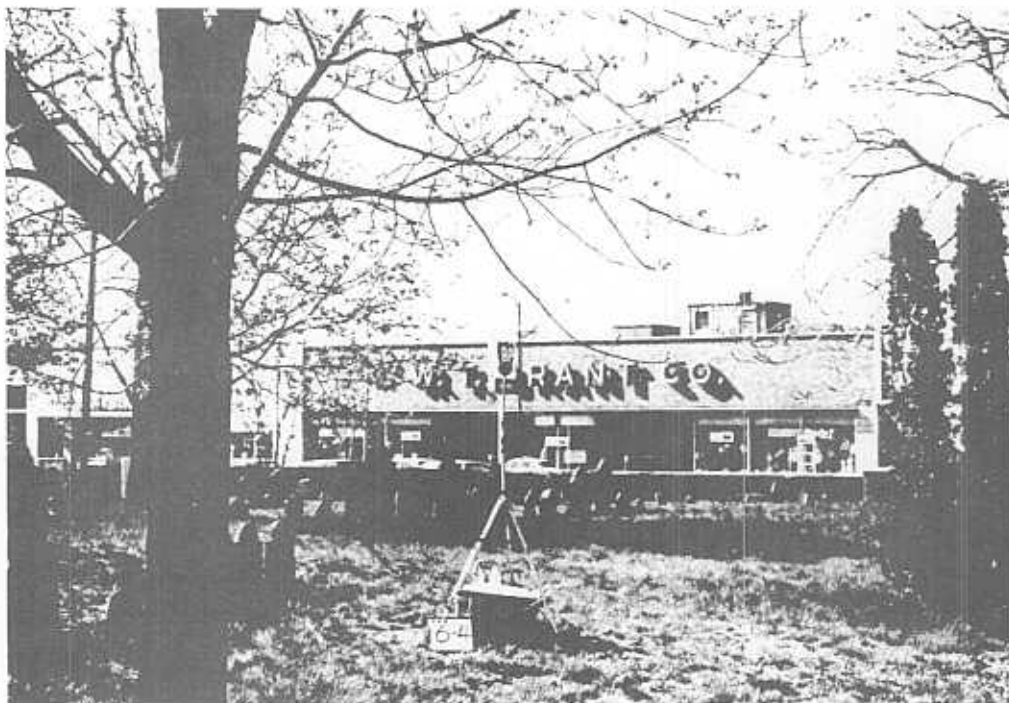


Figure D-7. Microphone System at Grid Location 6-4,
Facing South

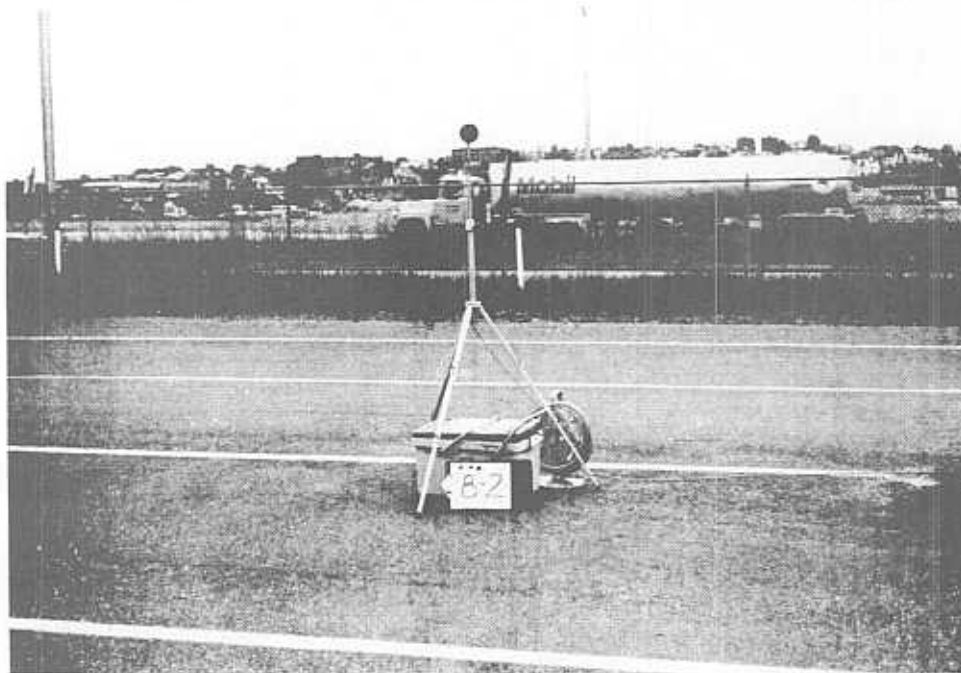
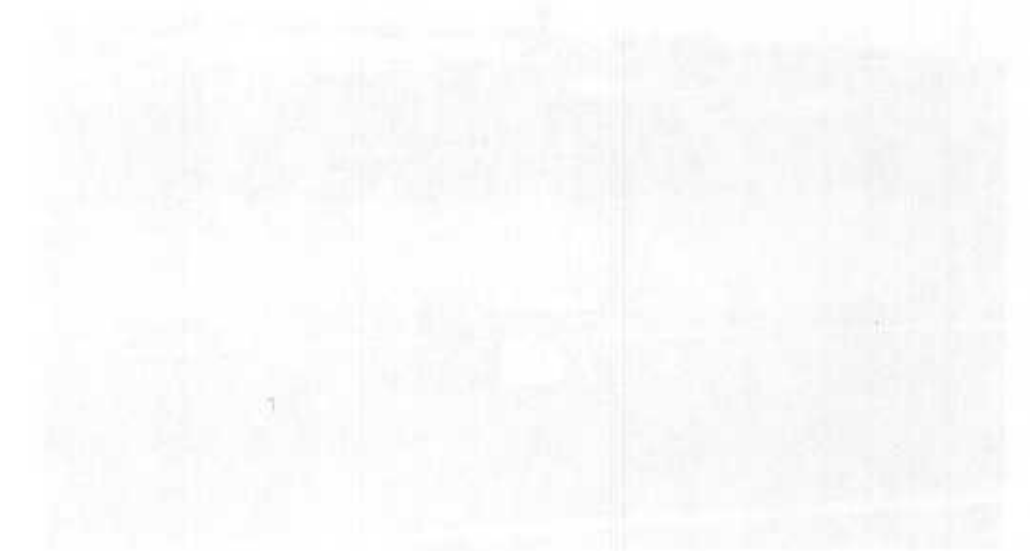
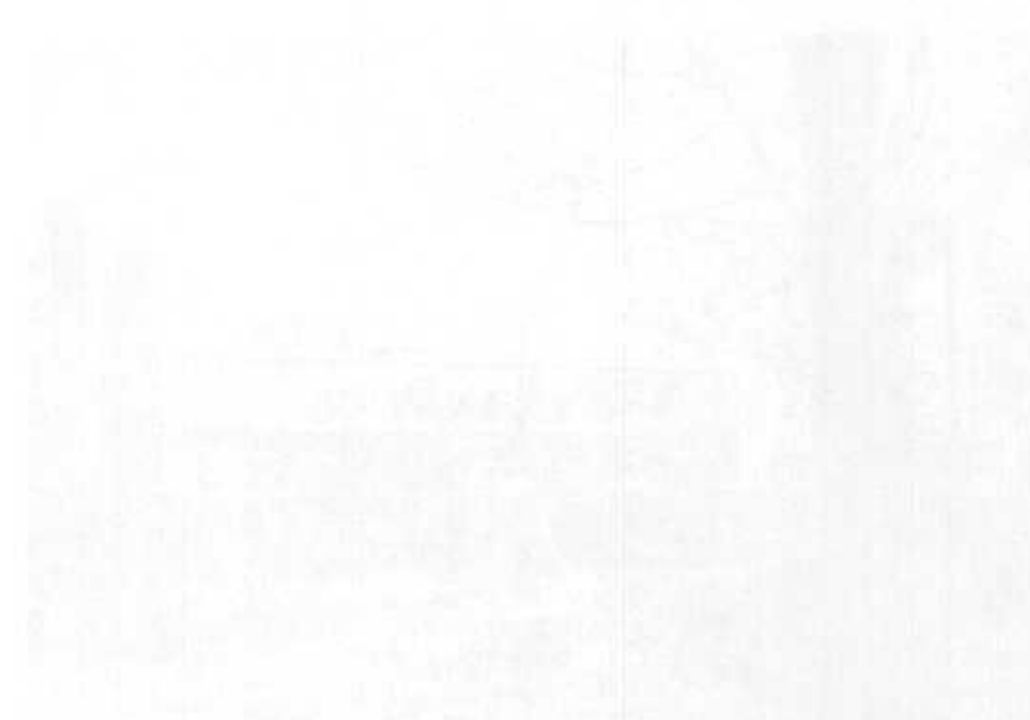


Figure D-8. Microphone System at Grid Location 8-2,
Facing South



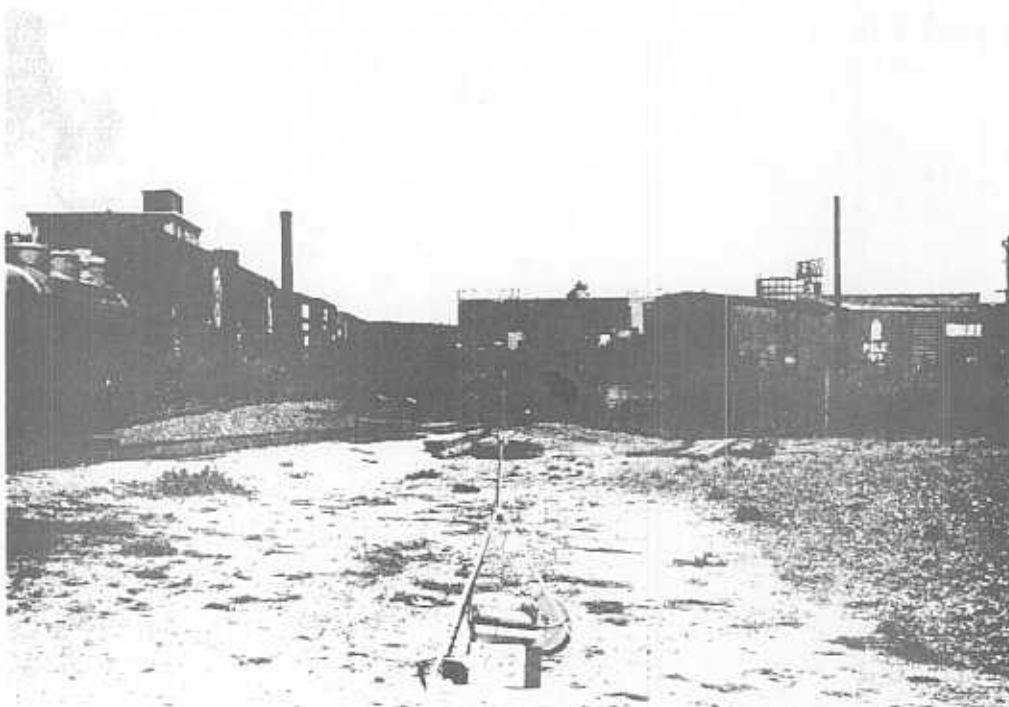


Figure D-9. Microphone System at Grid Location 10-3,
Facing North



Figure D-10. Interstate Route 93 in Medford Facing South
from a Lookout Tower Near Grid 6-7



3
3

4
4

R