AD-A048 834 AEROSPACE MEDICAL RESEARCH LAB WRIGHT-PATTERSON AFB OHIO F/G 20/1
USAF BIOENVIRONMENTAL NOISE DATA HANDBOOK: VOLUME 74. T-38A AIR--ETC(U)
FEB 77 R G POWELL

UNCLASSIFIED AMRL-TR-75-50-VOL-74 NL

1 OF 3
AD A048834



AD A048834
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AMRL-TR-75-50
Volume 74

USAF BIOENVIRONMENTAL NOISE DATA HANDBOOK

Volume 74

T-38A Aircraft, Near and Far-Field Noise

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AEROSPACE MEDICAL RESEARCH LABORATORY
AEROSPACE MEDICAL DIVISION
AIR FORCE SYSTEMS COMMAND
WRIGHT-PATTERSON AIR FORCE BASE, OHIO 45433

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FOR THE COMMANDER

HENNING E. VON GIERKE
Director
Biodynamics and Bionics Division
Aerospace Medical Research Laboratory

AIR FORCE/56780/3 January 1977 — 300

SECURITY CLASSIFICATION OF THIS PAGE (When Data Entered)

REPORT DOCUMENTATION PAGE

READ INSTRUCTIONS BEFORE COMPLETING FORM

(14) REPORT NUMBER: AMRL-TR-75-58 Vol 74

2. GOVT ACCESSION NO.

(9) 3. RECIPIENT'S CATALOG NUMBER: Technical kept.

(6) 4. TITLE (and Subtitle): USAF BIOENVIRONMENTAL NOISE DATA HANDBOOK: T-38A Aircraft, Near and Far-Field Noise.

5. TYPE OF REPORT & PERIOD COVERED: Volume 74 of a series

6. PERFORMING ORG. REPORT NUMBER

(10) 7. AUTHOR(s): Robert G. Powell

8. CONTRACT OR GRANT NUMBER(s)

9. PERFORMING ORGANIZATION NAME AND ADDRESS
Aerospace Medical Research Laboratory
Aerospace Medical Division, Air Force Systems Command, Wright-Patterson AFB, OH 45433

(16) (17) 10. PROGRAM ELEMENT, PROJECT, TASK AREA & WORK UNIT NUMBERS
62202F 7231-04-33 7231-04-36

11. CONTROLLING OFFICE NAME AND ADDRESS
Same as above

(11) 12. REPORT DATE: February 1977

13. NUMBER OF PAGES: 195

14. MONITORING AGENCY NAME & ADDRESS (if different from Controlling Office)

(12) 195 p.

15. SECURITY CLASS. (of this report): Unclassified

15a. DECLASSIFICATION/DOWNGRADING SCHEDULE

16. DISTRIBUTION STATEMENT (of this Report)
Approved for public release; distribution unlimited

DDC RELEASE JAN 26 1978 RECEIVED F

17. DISTRIBUTION STATEMENT (of the abstract entered in Block 20, if different from Report)

18. SUPPLEMENTARY NOTES

19. KEY WORDS (Continue on reverse side if necessary and identify by block number)
Noise
Noise Environments
Bioenvironmental Noise
Aircraft
T-38A Aircraft

20. ABSTRACT (Continue on reverse side if necessary and identify by block number)
The USAF T-38A aircraft is a supersonic flight trainer powered by two J85-GE-5A turbojet engines. This report provides measured and extrapolated data defining the bioacoustic environments produced by this aircraft operating on a concrete runup pad for eight engine/power configurations. Near-field data are reported for six locations in a wide variety of physical and psychoacoustic measures: overall and band sound pressure levels, C-weighted and A-weighted sound levels, preferred speech interference level, perceived noise → over

DD FORM 1 JAN 73 1473 EDITION OF 1 NOV 65 IS OBSOLETE

SECURITY CLASSIFICATION OF THIS PAGE (When Data Entered)

009850

level, and limiting times for total daily exposure of personnel with and without standard Air Force ear protectors. Far-field data measured at 19 locations are normalized to standard meteorological conditions and extrapolated from 75-8000 meters to derive sets of equal-value contours for these same seven acoustic measures as functions of angle and distances from the source. Refer to Volume 1 of this handbook, "USAF Bioenvironmental Noise Data Handbook, Vol 1: Organization, Content and Application", AMRL-TR-75-50(1) 1975, for discussion of the objective and design of the handbook, the types of data presented, measurement procedures, instrumentation, data processing, definitions of quantities, symbols, equations, applications, limitations, etc.

PREFACE

This report was prepared by the Biodynamic Environment Branch, Aerospace Medical Research Laboratory, under Project/Task 723104, Measurement and Prediction of Noise Environments of Air Force Operations.

The author gratefully acknowledges Mr. John Cole for his assistance in preparing this report, Mr. Robert England for his assistance in acquiring the raw data, Mr. Keith Kettler, Mr. Henry Mohlman and Mr. David Eilerman of the University of Dayton for assistance in the mechancis of data processing and Mrs. Norma Peachey and Mr. Mike Patterson for assistance in typing and preparation of the graphics.

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INTRODUCTION

The USAF T-38A is a supersonic trainer-type aircraft powered by two J85-GE-5A turbojet engines. The aircraft was manufactured by the Northrup Corporation and the engines by the General Electric Company.

This volume provides measured and extrapolated data defining bioacoustic environments produced by this aircraft during ground runup operations. Such data are essential to evaluate ear protection requirements, limiting personnel exposure times, voice communication capabilities, and annoyance problems associated with ground runups of the T-38A aircraft.

This volume is one of a series published by the Aerospace Medical Research Laboratory (AMRL) under the same report number (AMRL-TR-75-50) as a multi-volume handbook that quantifies the noise environments produced at flight/ground crew locations and in surrounding communities by operations of Air Force aircraft and ground support equipment. The far-field, community-type noise data in the handbook describe the noise produced during *ground operations* of aircraft, ground support equipment, and other ground-based equipment or facilities.

Volume 1 of this handbook discusses the objectives and design of the handbook, types of data presented, measurement procedures, instrumentation, data processing, definitions of quantities, symbols, equations, applications, limitations, etc. Volume 2 provides a method and data for adjusting the handbook's far-field noise data, which are for standard meteorological conditions (15 C temperature, 70% rel humidity, 0.760 meters Hg barometric pressure), to derive comparable data for other meteorological conditions. *Refer to Volumes 1 and 2* (references 1 and 2) for such information because it is not repeated in other handbook volumes.

A cumulative index lists those aerospace systems contained in the handbook, and identifies the specific volumes containing each type of environmental noise data available (i.e., inflight/flight crew and passenger noise, near-field/ground crew noise, far-field/community noise). Volume numbers are assigned sequentially as individual volumes are published. This index is periodically updated as individually volumes are published and is available upon request from AMRL/BBE, Wright-Paterson AFB, OH 45433. Organizations on the distribution list for the handbook will automatically receive a copy of each updated index.

Direct any questions concerning the technical data in this report and other handbook volumes to: AMRL/BBE, Wright-Patterson AFB, OH 45433; AUTOVON 78-53675 or 78-53664; Commercial (513) 255-3675 or (513) 255-3664.

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1. Cole, John N., *USAF Bioenvironmental Noise Data Handbook, Volume 1: Organization, Content and Application*, AMRL-TR-75-50 (1), Aerospace Medical Research Laboratory, Wright-Patterson Air Force Base, Ohio, 1975

2. Cole, John N., *USAF Bioenvironmental Noise Data Handbook, Volume 2: Procedure to Evaluate Effects of Non-standard Meteorological Conditions on Far-Field Noise*, AMRL-TR-75-50 (2), AMRL, WPAFB, OH, 1975

NEAR-FIELD NOISE

MEASUREMENTS

AMRL acquired near-field noise data on the T-38A aircraft during ground runup operations of its turbojet engines and ground support equipment. For these tests, the aircraft was located on a concrete runup pad at Eglin AFB with no significant reflecting surfaces in the vicinity except the ground plane. Table 1 gives the surface meteorological conditions and the seven engine, ground support equipment, and power conditions. The ground-crew chief selected power conditions and near-field locations generally used during routine maintenance or engine runup for preflight checks.

At each near-field location a test engineer randomly moved a hand held microphone in and around each location, probing all areas where a crew member's head would normally be located. He recorded all of the noise samples on magnetic tape. During analysis of each sample, he determined the root-mean square sound pressure using a 4- or 8-second integration time to derive a power-averaged level for each location. Figure 1 shows the six near-field locations where ground crew are usually located for maintenance and/or preflight checkout operations. Estimates of noise levels at other locations in the near-field are difficult since the noise source is spatially distributed, i.e., not a point source. The noise levels at near-field locations can vary widely depending upon relative distances from each noise source (intake noise, exhaust noise, panel resonances, internal engine noise through the engine wall, etc.).

Table 1 lists the numeric/alphabetic designators used on the data pages in this report to identify the measurement locations and test conditions. For example, the designator 1/A means ground crew location 1 and test condition A.

RESULTS

The measured data presented in Table 2 define the sound pressure levels (SPL) produced by the T-38A aircraft at the six ground crew locations. This table includes the overall, 1/3 octave band, and octave band levels. From these data one can calculate the variety of measures given in Table 3 which are widely used to assess the effects of noise on personnel and their performance.

All near-field data are for the meteorological conditions at the time of test but are valid for all typical airbase meteorology because of the short sound propagation distances involved.

TABLE 1

MEASUREMENT LOCATIONS AND TEST CONDITIONS
FOR NEAR-FIELD NOISE MEASUREMENTS

T-38A Aircraft, Ground Runup, Eglin AFB, 19 July 1971
Tail # 701571

Ground Crew Location

1	Operator MA-1A (Power Unit)
2	Crew Chief Observer
3	Marshal
4	Trim Personnel
5	Trim Adjustment
6	Wheel Chock Pull

Aircraft Engine and Support Equipment Operation

A	MA-1A Operating (loaded)
B	Engine #1 Idle Power, MA-1A Operating (unloaded)
C	Both Engines Idle Power, MA-1A Operating (unloaded)
D	Both Engines Idle Power
E	Engine #1 Military Power Engine #2 Idle Power
F	Engine #2 Military Power Engine #1 Idle Power
G	Engine #2 Afterburner Power Engine #1 Idle Power

Meteorology

Temperature	30.6 C
Bar Pressure	0.759 M Hg
Rel Humidity	68 %
Wind — Speed	2.1 M/Sec (4 kt)
— Direction	240 °

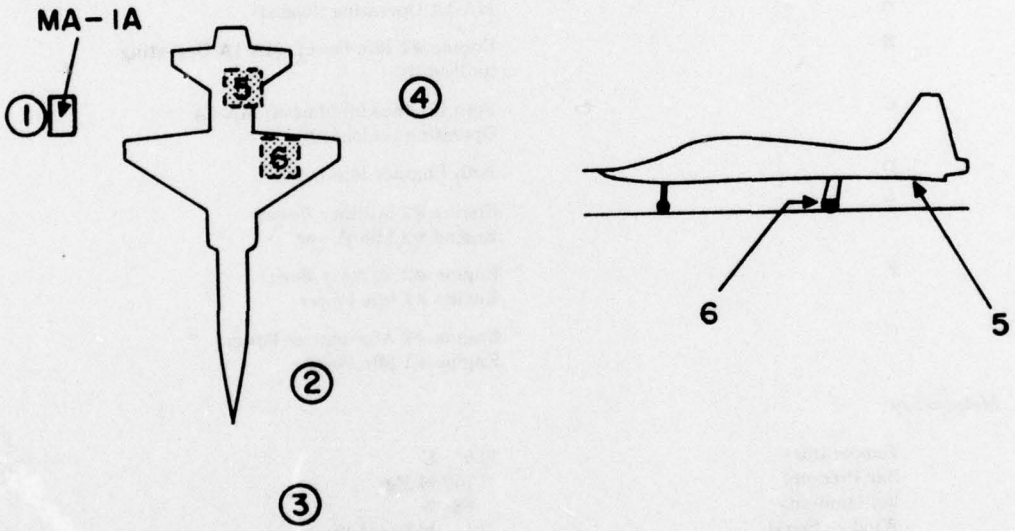


Figure 1. Near-Field Microphone Locations at Eglin AFB FL

FAR-FIELD NOISE

MEASUREMENTS

AMRL acquired far-field data during 1-hour test periods at both Edwards and Eglin AFB bases. Figure 2 shows the ground runup pads, ground cover, aircraft orientation and the 19 microphone measurement sites on each semicircle. The centers of the 75 meter radius semicircles used in surveying the J85-GE-5A engines were on the ground directly below the intersection of the aircraft's centerline and the plane passing through both engines' exhaust-nozzle exits. The ground runup pads did not have blast deflectors; therefore, the jet exhausts were in a "free-flow" condition.

Table 4 provides cockpit readouts of some engine characteristics (% RPM, fuel flow, etc.) for each power setting used in the far-field tests. Also listed in this table are the surface meteorological conditions during data acquisition.

All microphone measurement sites are in the acoustic far-field of the source where the sound wavefronts spherically diverge and the noise source may be regarded as a point source.

Test personnel acquired far-field noise data at Eglin AFB by using a hand-held microphone (1.7 meters/5-1/2 feet above the ground plane and pointed at the noise source, 0°incidence) and sequentially recording 5 to 10 seconds of data at each far-field location on a portable microphone/tape recorder system.

A similar microphone/tape-recorder system was used to sequentially record the noise at each far-field location at Edwards AFB. However, at Edward's the microphone was attached to a hand-held pole, pointed at the source (0° angle of incidence) and vertically scanned from 0.5 to 3 meters for a period of 5-10 seconds during data acquisition at each microphone location. Both Eglin and Edward's samples were then time-integrated to derive a root-mean-square sound pressure level. Vertical scanning and time-integrating together reduce anomalies frequently present in data acquired by a fixed height microphone and now constitute the standard far-field data acquisition/reduction technique used by the AMRL.

RESULTS

Table 5 lists the overall and 1/3 octave band SPL measured at the far-field locations under meteorological conditions at the time of the test. Data in all other figures and tables are based on these levels. These data were normalized to 100 meters distance and standard meteorological conditions (15 C temperature, 70% relative humidity, 0.760 meter Hg barometric pressure) and used to derive the graphic data in Figure 3 which provides a compact summary of the far-field noise characteristics of the T-38A aircraft in a standard format.

Figure 4 and Table 6 present two basic acoustic measures, the acoustic power level and the directivity index, respectively. The acoustic power level describes the power radiated by the source as a function of frequency. The directivity index is a standard acoustical engineering measure that describes the geometric way in which the source radiates this power as a function of both frequency and angle from source. These basic source measures are primarily of interest for acoustical engineers and noise generation /control specialists.

Estimates of noise levels for intermediate power conditions (e.g., 88% engine RPM) and/or different number of engines operating (e.g., single engine) can be determined as explained in Volume 1 of this handbook.

Figures 5 through 11 are sets of equal noise contours describing seven different measures of noise as a function of angle and distance from the source for standard day meteorology. They are respectively, overall sound pressure level, C-weighted sound level, A-weighted sound level, perceived noise level, speech interference level, permissible exposure times for personnel and octave band sound pressure levels.

Data excessively influenced by spurious background/electronic noise were eliminated from all figures and tables. No data are presented at the 170 and/or 180 degree locations for two engine operation at power settings above 70% because of turbulent air flow behind the aircraft. Typically, the A-weighted levels for these angles are 10 to 20 dBA below those at the 160 degree microphone location.

Test personnel performed noise surveys during quiet periods when the background noise was minimal, e.g., early in the morning when no other aircraft or engine test stands were operating. Data eliminated because they were near the background/electronic noise were generally not significant because the levels were so low (e.g., Table 5 and Figure 11 at idle power).

Volume 2 of the handbook describes the influence of meteorology on far-field noise environments, and provides, if required, the factors necessary to adjust the handbook's standard meteorological day data.

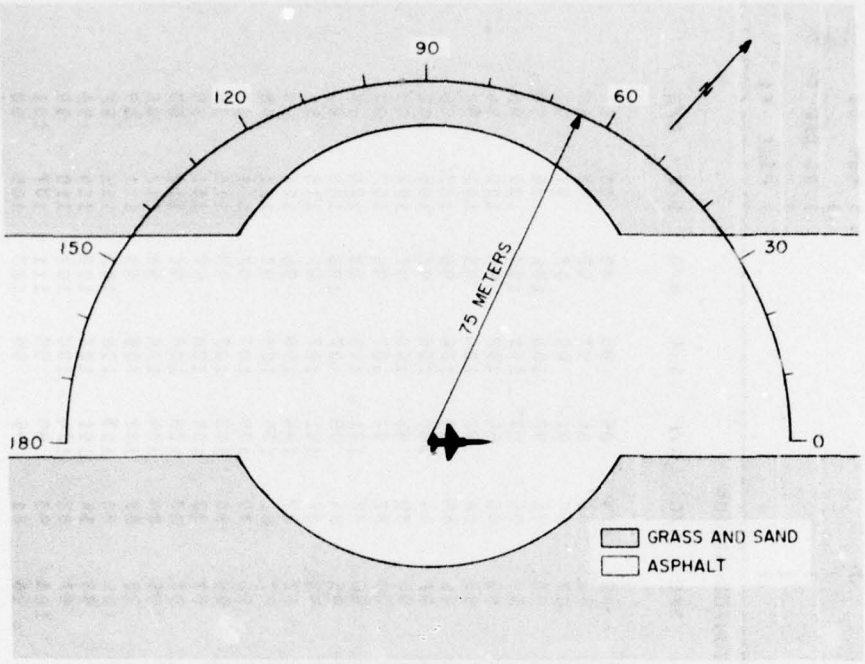


Figure 2 (a). Far-Field Microphone Locations at the Hot Cargo Pad, Eglin AFB FL

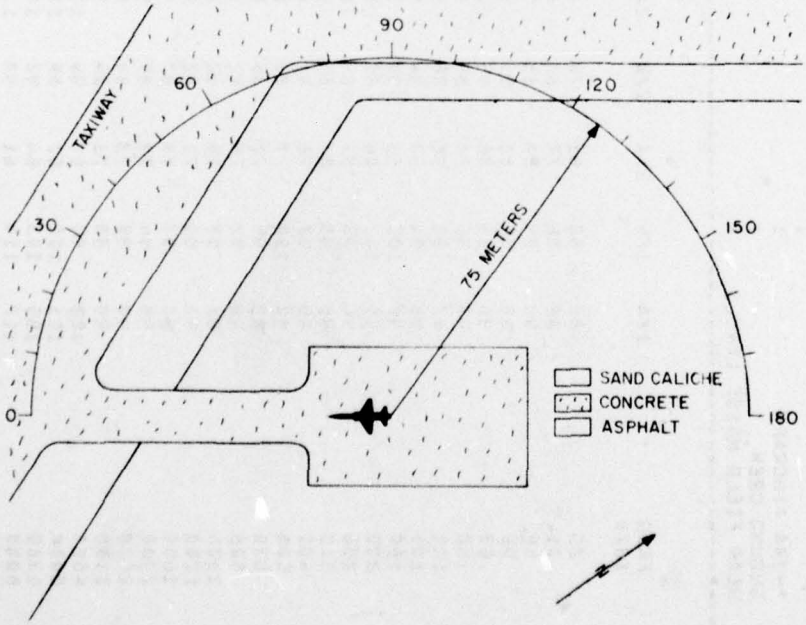


Figure 2(b). Far-Field Microphone Locations at Pad 17, Edwards AFB CA

TABLE: 2 MEASURED SOUND PRESSURE LEVEL (DB)
1/3 OCTAVE BAND

IDENTIFICATION:
OMEGA 3.2
TEST 71-019-111
RUN 01

04 DEC 74

PAGE F1

NOISE SOURCE/SUBJECT:
T-38A AIRCRAFT
GROUND CREW
NEAR FIELD NOISE LEVELS

OPERATION:

LOCATION/CONDITION

FREQ (HZ)	1/A	1/B	2/A	2/B	2/C	3/D	3/E	4/D	4/F	4/G	5/D	5/E	6/D
25	88	83	61	75	79	72	82	74	85	95	89	88	81
31.5	88	86	77	80	85	75	82	80	86	97	92	93	86
40	90	89	87	88	92	78	87	85	91	99	97	97	92
50	88	93	88	91	95	81	90	91	93	100	101	99	98
63	90	94	86	89	93	80	89	90	93	101	100	101	96
80	93	96	78	85	89	79	89	86	94	102	94	100	94
100	87	90	95	96	97	82	95	88	97	104	95	102	98
125	95	94	93	94	95	84	96	89	99	106	96	103	96
160	98	103	93	96	96	85	97	94	100	108	97	105	102
200	95	102	84	88	87	80	94	89	98	108	97	107	93
250	94	98	87	89	88	77	95	87	99	107	96	107	93
315	95	99	80	85	89	78	96	87	101	106	98	108	94
400	96	97	76	81	85	82	96	84	99	107	105	109	94
500	92	100	77	83	86	73	98	80	101	107	97	115	88
630	92	95	77	85	86	76	97	82	104	106	96	114	90
800	90	92	75	82	88	79	97	81	105	108	93	111	88
1000	87	87	75	82	88	80	96	79	105	109	92	111	87
1250	90	90	72	82	90	80	95	80	103	107	93	110	86
1600	93	93	75	87	98	87	97	82	105	108	97	111	89
2000	95	94	72	85	98	91	97	83	105	109	98	112	90
2500	97	95	73	84	93	87	96	84	104	108	98	112	90
3150	99	98	71	84	94	86	95	83	102	105	98	111	89
4000	102	99	69	94	109	102	105	88	103	106	102	112	97
5000	101	101	67	85	100	97	98	84	101	103	100	114	90
6300	105	103	64	90	104	92	97	82	104	100	102	110	90
8000	117	114	61	98	116	102	108	93	99	99	111	107	101
10000	122	116	56	93	105	95	96	81	95	95	103	105	90
OVERALL	123	119	100	105	117	106	112	101	115	120	115	124	109

LEVEL CORRECTED TO REMOVE BACKGROUND/ELECTRONIC NOISE.

TABLE: 2 — MEASURED SOUND PRESSURE LEVEL (DB) OCTAVE BAND

IDENTIFICATION:
OMEGA 3.2
TEST 71-019-111
RUN 01
04 DEC 74
PAGE J1

NOISE SOURCE/SUBJECT:
T-38A AIRCRAFT
GROUND CREW
NEAR FIELD NOISE LEVELS

OPERATION:

FREQ (HZ)	LOCATION/CONDITION 1/A	1/B	2/A	2/B	2/C	3/D	3/E	4/D	4/F	4/G	5/D	5/E	6/D
31.5	93	92	87	89	92	80	89	87	93	102	98	99	93
63	96	99	90	94	98	84	94	94	98	106	104	105	101
125	100	103	98	100	100	88	100	96	103	111	101	108	104
250	99	105	89	92	93	83	100	93	104	111	102	112	98
500	98	102	81	88	90	83	102	87	106	111	106	118	96
1000	94	95	79	87	94	84	101	84	109	113	97	115	92
2000	100	99	78	90	101	93	101	88	109	113	102	116	94
4000	105	104	74	95	109	103	106	90	107	109	105	117	98
8000	123	118	66	100	116	103	108	93	105	103	112	112	101
OVERALL	123	119	100	105	117	106	112	101	115	120	115	124	109

TABLE: MEASURES OF HUMAN NOISE EXPOSURE

3

IDENTIFICATION:

OMEGA 3.2
TEST 71-019-111
RUN 01

04 DEC 74

PAGE H1

NOISE SOURCE/SUBJECT:
T-38A AIRCRAFT
GROUND CREW
NEAR FIELD NOISE LEVELS

OPERATION:

	LOCATION/CONDITION												
	1/A	1/B	2/A	2/B	2/C	3/D	3/E	4/D	4/F	4/G	5/D	5/E	6/D
HAZARD/PROTECTION													
C-WEIGHTED OVERALL SOUND LEVEL (OASLC IN DBC) AT EAR													
A-WEIGHTED OVERALL SOUND LEVEL (OASLA IN DBA) AT EAR													
MAXIMUM PERMISSIBLE TIME (T IN MINUTES) FOR ONE EXPOSURE PER DAY (AFR 161-35, JULY 73)													
NO PROTECTION													
OASLC	119	116	99	104	115	105	111	100	115	120	113	123	108
OASLA	121	117	87	101	117	106	111	97	115	118	113	123	104
T	P	P	285	25	P	11	4.5	50	2.2	P	3.2	P	15
MINIMUM QPL EAR MUFFS													
OASLA*	98	94	78	81	91	80	87	77	89	95	90	98	85
T	42	85	960	807	143	960	285	960	202	71	170	42	404
AMERICAN OPTICAL 1700 EAR MUFFS													
OASLA*	96	92	73	77	88	76	82	73	84	90	86	92	81
T	60	120	960	960	240	960	679	960	480	170	339	120	807
V-51R EAR PLUGS													
OASLA*	92	88	65	73	86	77	83	70	88	92	85	96	77
T	120	240	960	960	339	960	571	960	240	120	404	60	960
AMERICAN OPTICAL 1700 EAR MUFFS PLUS V-51R EAR PLUGS													
OASLA*	83	79	54	62	76	63	70	57	75	78	73	82	65
T	571	960	960	960	960	960	960	960	960	960	960	679	960
H-133 GROUND COMMUNICATION UNIT													
OASLA*	92	88	66	73	86	75	82	69	87	91	84	95	76
T	120	240	960	960	339	960	679	960	285	143	480	71	960
COMMUNICATION													
PREFERRED SPEECH INTERFERENCE LEVEL (PSIL IN DB)													
PSIL	97	99	79	88	95	87	101	86	108	112	102	117	94
ANNOYANCE													
PERCEIVED NOISE LEVEL, TONE CORRECTED (PNLT IN PNDB)													
TONE CORRECTION (C IN DB)													
PNLT	133	131	104	119	133	124	129	114	129	132	129	138	122
C	1	2	2	3	3	3	3	2	1	0	2	1	2

* BASED ON CALCULATED SPL SPECTRUM UNDER PROTECTIVE DEVICE.
P ADDITIONAL EAR PROTECTION REQUIRED.

TABLE 4

TEST CONDITIONS FOR FAR-FIELD NOISE MEASUREMENTS

T-38A Aircraft, Ground Runups
Eglin AFB FL, 14 July 1971
Edwards AFB CA, 21 September 1972

Aircraft Engine Operation

Idle (Eglin AFB)	Both Engines 48 % RPM, Core Speed
70 % Engine Runup (Englin AFB)	Both Engines 70 % RPM, NC
75 % Engine Runup (Edwards AFB)	Both Engines 75 % RPM, NC 330 C. Exhaust Gas Temperature 800 LBS/HR, Fuel Flow
Trim Check (Edwards AFB)	Both Engines 94 % RPM, NC 520 C, EGT 1,500 LBS/HR, FF
Military Power (Eglin AFB)	Single Engine 100 % RPM, NC
Maximum Power (Afterburner, Eglin AFB)	Single Engine 100 % NC
Military (Edwards AFB)	Both Engines 100 % RPM, NC 640 C, EGT 2,100 LBS/HR, FF
Maximum Power (Afterburner, Edwards AFB)	Both Engines 100 % RPM, NC 640 C, EGT 2,100 LBS/HR, FF (Plus afterburner)

Meteorology

Eglin AFB	
Temperature	30.6 C
Bar Pressure	0.760 M Hg
Rel Humidity	63 %
Wind — Speed	1 M/Sec (2 kts)
— Direction	250 Deg
Edwards AFB	
Temperature	11.1 C
Bar Pressure	0.701 M Hg
Rel Humidity	46 %
Wind — Speed	Calm
— Direction	—

TABLE 5: MEASURED SOUND PRESSURE LEVEL (DB)
1/3 OCTAVE BAND
DISTANCE = 75 METERS

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-047
RUN 01
20 OCT 75
PAGE 2

NOISE SOURCE/SUBJECT:
T-38A AIRCRAFT
J85-GE-5A ENGINE
FAR FIELD NOISE

OPERATION:
IDLE
48% RPM,
BOTH ENGINES
FREE FLOW

METEOROLOGY:
TEMP = 31 C
BAR PRESS = .760 M HG
REL HUMID = 63 %

FREQ (HZ)	ANGLE (DEGREES) 0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
25																			
31.5																			
40	66<	66<	67<	65<	67<	69<	69<	70<	66<	70<	70<	70<	67<	71<	71<	69<	69<	66<	70<
50	71<	70<	70<	72<	73	73<	72<	73<	72<	74	75	74	71<	75	75	75	72<	69<	72<
63	68<	68<	70<	69<	72<	72<	70<	71<	72<	72<	73<	73<	73<	74<	75<	73<	68<		70<
80	67<	67<	68<	68<	68<	68<	70<	69<	69<	69<	71<	70<	72<	71<	73	71<	66<		64<
100	69<	68<	70<	69<	66<	70<	70<	70<	69<	71<	72<	73<	73<	75<	76	73<	66<		
125	71<	71<	73	72<	72<	72<	72<	73	73	75	76	75	75	77	79	76	64<		
160	74	75	77	76	76	76	78	79	78	80	80	79	77	79	80	78	66<		61<
200	71<	69<	72<	73<	72<	71<	75	74	74	76	77	74	76	75	76	75			
250	64<	66<	68<	66<	68<	68<	69<	70<	69<	71	72	71	73	72	70<	72			
315	67	70	68	69	73	72	72	72	73	75	74	74	75	74	71	72	62<		
400	66	71	69	72	73	70	70	72	73	75	75	76	75	75	74	72	68	52<	55<
500	67	69	70	69	70	65	68	68	69	73	74	75	75	74	72	67	59		51<
630	64	64	66	65	63	60	63	63	63	66	69	70	73	72	65	64	57<		
800	61	66	62	63	64	63	65	63	64	64	65	69	72	69	66	65	59	43<	48<
1000	63	62	62	62	62	62	61	60	59	61	64	66	69	67	62	62	56	42<	45<
1250	64	63	62	65	64	64	61	59	58	58	61	64	67	65	62	64	56	44<	48<
1600	72	69	71	69	70	69	68	64	62	61	62	65	68	70	68	71	64	53	56
2000	70	68	71	71	72	69	68	62	59	58	59	64	66	68	67	70	63	53	54
2500	66	66	69	66	68	64	59	58	56	55	57	62	66	70	69	71	64	54	55
3150	66	67	68	64	65	64	61	59	55	54	54	60	64	68	66	68	61	50	50
4000	84	84	82	80	79	70	76	74	69	65	64	71	67	72	73	80	73	63	60
5000	70	71	71	72	71	66	69	67	61	58	57	62	64	68	67	68	63	53	52
6300	70	71	72	72	71	69	66	64	58	58	57	63	63	67	65	65	61	51	52
8000	81	81	82	83	82	77	77	76	69	68	66	71	67	74	70	73	68	58	58
10000	69	69	73	73	72	66	68	66	60	58	57	60	61	63	61	63	58	48	50
OVERALL	87	87	88	87	87	84	85	85	84	85	86	86	86	87	87	86	80	72	76

< LEVEL CORRECTED TO REMOVE BACKGROUND/ELECTRONIC NOISE.

TABLE 5 MEASURED SOUND PRESSURE LEVEL (DB)
1/3 OCTAVE BAND
DISTANCE = 75 METERS

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-047
RUN 02
20 OCT 75
PAGE 2

NOISE SOURCE/SUBJECT:
T-38A AIRCRAFT
J85-GE-5A ENGINE
FAR FIELD NOISE

OPERATION:
70% RPM
BOTH ENGINES
FREE FLOW

METEOROLOGY:
TEMP = 31 C
BAR PRESS = .760 M HG
REL HUMID = 63 %

FREQ (HZ)	ANGLE (DEGREES) 0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
25																			
31.5																			
40	67<	67<	67<	67<		66<	68<	68<	70<	69<	70<	70<	71<	71<	70<	69<	68<	67<	69<
50	70<	68<	69<	71<	72<	70<	71<	72<	73<	73	73	74	76	76	75	75	71<	68<	70<
63	68<	67<	68<	69<	72<	67<	70<	71<	72<	71<	71<	72<	75<	76<	75<	74<	69<		68<
80	67<	65<	67<	68<	68<	66<	69<	70<	68<	68<	69<	72<	74	74	72<	71<	67<		62<
100	67<	66<	66<	67<	68<	67<	70<	70<	70<	70<	69<	73<	74<	77	76	74<	71<		
125	71<	69<	72<	72<	72<	71<	73<	75	74	74	75	79	78	81	80	78	73		
160	78	77	80	79	81	78	83	83	83	82	82	84	84	84	84	83	78		66<
200	75	74	78	77	78	77	81	81	80	78	80	81	83	80	80	80	73		
250	69<	66<	68<	69<	71	71	72	72	72	69<	72	76	77	75	71	74	69<		
315	64<	65	68	67	70	67	69	70	70	69	71	74	75	78	73	73	70		
400	69	73	71	73	72	68	73	71	73	70	73	78	79	79	76	73	72		52<
500	67	69	72	71	71	68	72	70	72	69	72	78	80	78	76	72	73	50<	52<
630	64	63	67	65	66	63	65	64	64	62	64	72	77	72	67	64	66		
800	64	66	65	65	65	63	66	64	63	62	65	72	75	76	70	67	67	46<	44<
1000	63	63	63	64	65	64	65	63	62	61	64	71	74	71	66	63	65	44<	42<
1250	63	64	63	65	65	66	64	63	60	59	63	68	72	69	65	64	67	46<	44<
1600	69	66	70	66	67	67	66	63	57	57	60	63	68	72	70	72	74	55	52
2000	72	70	69	69	73	71	69	66	58	59	59	62	67	71	68	73	74	56	51
2500	70	70	72	68	71	68	69	63	58	58	58	60	65	69	70	76	76	58	53
3150	69	68	70	66	69	69	67	62	58	56	55	59	63	68	72	71	73	53	49
4000	75	76	77	74	73	71	71	65	62	61	59	62	64	70	73	75	79	59	54
5000	86	84	86	84	82	78	80	76	74	71	70	69	67	73	73	73	77	59	55
6300	72	71	72	71	70	69	70	66	64	61	60	60	64	68	67	68	72	54	50
8000	76	76	77	74	73	70	70	64	61	59	62	65	70	68	67	70	71	54	52
10000	78	79	81	78	78	76	76	70	67	63	62	65	68	72	71	75	73	57	57
OVERALL	89	88	90	88	88	86	88	87	87	85	86	89	90	90	89	89	87	72	75

< LEVEL CORRECTED TO REMOVE BACKGROUND/ELECTRONIC NOISE.

TABLE 5: MEASURED SOUND PRESSURE LEVEL (DB)
1/3 OCTAVE BAND
DISTANCE = 75 METERS

NOISE SOURCE/SUBJECT:
T-38A AIRCRAFT
J85-GE-5A ENGINE
FAR FIELD NOISE

OPERATION:
75% RPM
BOTH ENGINES
FREE FLOW

METEOROLOGY:
TEMP = 11 C
BAR PRESS = .701 M HG
REL HUMID = 46 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-056
RUN 01
20 OCT 75
PAGE 2

FREQ (HZ)	ANGLE (DEGREES) 0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
25													66<	67<	68<	69<	71<		
31.5							66<	63<	64<	65<	67<	68<	68<	71<	71<	73<	75		
40	63<	63<	64<	65<		67<	68<	66<	67<	69<	69<	69<	72<	74	75	77	76		
50		65<	66<	65<	66<	69<	70<	69<	70<	71<	73<	72<	74<	77	79	79	78		
63		67<	67<	67<	69<	71<	71<	70<	71<	73<	73<	73<	76<	79	80	80	78		
80	70<	69<	69<	69<	71<	71<	72<	72<	71<	74<	75	77	78	80	81	82	80		
100	70<	71<	75<	75<	75<	76<	77<	75<	74<	77<	79	80	80	82	84	85	80		
125	76<	77	76<	78	79	80	80	78	78	80	81	81	80	81	82	82	80		
160	79	78	80	81	82	84	84	82	82	83	85	84	84	83	82	84	80		
200	75	75	78	78	80	80	81	77	78	79	82	81	82	82	79	82	79		
250	74	74	75	76	76	77	77	74	74	77	80	81	83	84	80	79	79		
315	72	73	74	74	74	77	75	73	72	74	77	78	79	80	78	73	75		
400	74	74	75	74	75	76	76	74	72	75	76	75	77	77	75	72	73		
500	75	77	76	75	75	75	73	71	69	72	72	75	75	75	72	71	70		
630	73	73	73	71	72	73	71	68	67	70	70	72	75	74	72	69	68		
800	71	72	71	69	69	69	68	66	64	66	68	70	74	74	73	71	67		
1000	71	71	68	68	67	67	67	66	61	66	69	73	75	74	72	69	62		
1250	69	68	66	67	67	68	66	65	60	65	68	72	74	73	71	69	63		
1600	70	69	69	69	68	70	68	66	63	65	67	70	73	71	72	70	65		
2000	69	69	69	69	69	72	69	66	63	63	66	67	70	69	70	69	63		
2500	72	72	72	72	72	74	71	69	66	64	66	68	68	69	71	71	65		
3150	69	69	69	70	69	71	68	66	64	60	62	64	66	65	69	68	63		
4000	67	67	68	69	67	70	67	64	61	57	60	63	64	63	66	66	62		
5000	75	74	73	72	70	69	65	64	63	58	57	60	62	60	62	63	60		
6300	78	79	77	77	75	74	70	68	66	61	59	60	60	59	62	63	59		
8000	67	68	66	67	66	67	63	63	60	56	54	56	57	54	57	58	55		
10000	62	64	61	64	61	59	57	55	53	51	52	55	54	52	54	56	54		
OVERALL	87	87	87	87	88	89	89	86	86	88	90	90	91	91	91	92	89		

< LEVEL CORRECTED TO REMOVE BACKGROUND/ELECTRONIC NOISE.

TABLE 5: MEASURED SOUND PRESSURE LEVEL (DB)
1/3 OCTAVE BAND
DISTANCE = 75 METERS

NOISE SOURCE/SUBJECT:
T-38A AIRCRAFT
J85-GE-5A ENGINE
FAR FIELD NOISE

OPERATION:
TRIM CHECK
94% RPM
BOTH ENGINES
FREE FLOW

METEOROLOGY:
TEMP = 11 C
BAR PRESS = .701 M HG
REL HUMID = 46 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-056
RUN 02
20 OCT 75
PAGE 2

FREQ (HZ)	ANGLE (DEGREES) 0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
25	67<		67<	69<	68<	70<	70<	72<	72<	73<	73<	74<	79	82	86	84	86	87	
31.5	68<	70<	71<	71<	71<	72<	73<	72<	74	74	76	79	81	84	88	88	90	87	
40	71<	70<	73<	73<	73<	74	75	76	77	77	79	81	83	86	89	92	90	87	
50	73<	72<	73<	72<	73<	76	77	78	79	79	81	82	86	90	94	94	93	87	
63	74<	74<	73<	75<	76<	76<	78	79	80	79	82	84	87	92	95	98	94	86	
80	76	74<	76	77	78	78	79	80	81	82	85	86	89	94	99	100	95	84	
100	78	78	79	80	80	81	82	84	84	85	89	89	93	97	102	102	97	82	
125	80	81	81	82	83	83	84	85	86	89	91	92	96	100	104	103	97	78	
160	82	81	83	83	83	84	84	87	88	89	91	93	96	99	103	105	98	77	
200	82	81	83	83	84	85	86	86	87	88	91	92	96	99	99	103	98	79	
250	85	86	86	87	87	88	88	89	90	92	95	95	98	102	100	104	100	79	
315	84	83	86	86	87	87	87	88	89	89	92	93	95	102	102	100	100	75	
400	83	86	86	85	86	87	86	87	87	89	91	92	95	99	103	101	102	77	
500	85	86	87	86	87	87	85	87	87	87	90	92	94	99	98	101	100	76	
630	82	84	85	85	84	85	84	85	84	85	88	90	93	96	98	98	96	72	
800	82	82	83	83	83	84	83	83	83	84	88	90	94	96	96	95	93	71	
1000	82	82	81	81	82	82	82	82	83	84	88	91	94	96	95	94	91	70	
1250	81	81	80	80	82	81	81	82	82	84	88	91	94	95	94	93	90	68	
1600	80	79	79	80	81	81	82	82	83	85	89	91	93	94	92	92	87	65	
2000	78	79	78	78	80	81	81	82	82	83	87	90	91	92	89	88	83	61	
2500	78	78	78	79	80	81	81	82	82	83	87	88	90	91	87	86	81	59	
3150	74	75	75	76	76	78	79	79	80	80	84	86	87	87	84	82	77	54	
4000	73	73	74	74	75	77	77	78	78	78	84	84	85	85	81	80	75	52	
5000	70	69	71	71	71	73	74	75	75	75	80	80	81	79	76	76	71	49	
6300	67	66	68	68	69	70	71	72	72	72	77	77	78	76	73	72	68	45	
8000	63	63	65	64	65	66	67	68	68	67	71	72	74	71	68	68	64	43	
10000	60	59	61	61	62	62	64	64	65	64	68	70	70	67	65	65	62	41	
OVERALL	94	95	95	95	96	97	96	97	98	99	102	104	107	110	112	112	109	95	

< LEVEL CORRECTED TO REMOVE BACKGROUND/ELECTRONIC NOISE.

BEST AVAILABLE COPY

TABLE 5: MEASURED SOUND PRESSURE LEVEL (DB)
1/3 OCTAVE BAND
DISTANCE = 75 METERS

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-047
RUN 03
20 OCT 75
PAGE 2

NOISE SOURCE/SUBJECT:
T-38A AIRCRAFT
J85-GE-5A ENGINE
FAR FIELD NOISE

OPERATION:
MILITARY POWER
100% RPM
SINGLE ENGINE
FREE FLOW

METEOROLOGY:
TEMP = 31 C
BAR PRESS = .760 M HG
REL HUMID = 63 %

FREQ (HZ)	ANGLE (DEGREES) 0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
25						66<	68<	66<	71<	71<	69<	75<	76<	81	81	79	82	84	82
31.5	67<	68<	67<	66<	69<	68<	71<	72<	73<	74<	74<	75<	79	82	86	84	84	82	83
40	69<	70<	71<	70<	70<	70<	73<	75<	74<	77	75<	79	82	85	88	90	84	81	84
50	71<	72<	70<	72<	74	73<	73	76	77	78	78	81	84	89	92	92	84	81	80
63	72<	73<	73<	75<	77	75<	75<	76<	79	80	81	84	88	92	95	95	86	76<	77
80	74	74	76	77	76	77	79	79	80	82	82	86	91	96	97	97	84	72<	75
100	77	77	78	79	79	80	81	83	83	86	86	89	94	99	102	100	85	73<	71<
125	78	79	80	80	81	82	83	85	86	88	90	92	96	101	106	100	87	76	72<
160	81	82	84	83	85	84	86	88	89	92	93	96	100	103	109	103	89	76	73
200	80	83	83	84	84	84	87	88	89	90	92	96	101	104	106	100	85	74	72<
250	79	81	82	82	83	84	85	86	88	89	92	94	101	106	101	99	84	73	71
315	79	82	82	83	86	86	86	87	90	92	94	97	102	109	105	100	85	78	72
400	81	85	87	86	88	87	88	90	93	96	97	100	105	109	109	102	85	77	72
500	84	88	89	88	90	89	91	93	94	97	98	102	107	112	108	101	86	78	73
630	81	87	85	88	87	86	91	89	90	92	96	98	103	107	103	96	83	77	70
800	79	83	87	86	88	87	88	91	92	96	98	101	105	109	106	95	82	75	67
1000	80	85	86	87	87	87	89	90	91	92	96	99	101	105	103	90	81	71	65
1250	81	84	86	87	88	88	89	91	93	94	96	100	102	102	103	89	79	70	65
1600	79	83	85	86	86	88	90	89	92	91	94	97	101	96	101	86	75	67	62
2000	80	83	86	87	87	88	90	90	93	92	95	97	101	94	99	85	76	66	61
2500	79	82	85	86	86	88	89	90	93	90	94	96	100	95	96	84	73	64	59
3150	76	79	82	84	84	86	87	88	90	88	92	92	97	94	91	80	70	61	57
4000	81	79	82	83	84	86	87	88	90	88	93	91	97	95	88	79	70	61	56
5000	73	74	78	80	80	83	85	86	88	86	89	89	95	89	86	77	66	58	53
6300	73	73	77	79	79	82	84	84	87	84	87	86	93	87	86	75	65	57	54
8000	80	72	75	78	76	80	82	81	85	82	84	85	92	86	84	74	63	54	50
10000	69	66	69	71	71	76	77	77	80	81	83	84	89	81	79	69	59	50	45<
OVERALL	93	96	97	98	99	99	101	102	103	105	107	110	114	118	117	111	97	91	90

< LEVEL CORRECTED TO REMOVE BACKGROUND/ELECTRONIC NOISE.

TABLE 5: MEASURED SOUND PRESSURE LEVEL (DB)
1/3 OCTAVE BAND
DISTANCE = 75 METERS

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-047
RUN 04
20 OCT 75
PAGE 2

NOISE SOURCE/SUBJECT:
T-38A AIRCRAFT
J85-GE-5A ENGINE
FAR FIELD NOISE

OPERATION:
MAXIMUM POWER
100% RPM AND AFTERBURNER
SINGLE ENGINE
FREE FLOW

METEOROLOGY:
TEMP = 31 C
BAR PRESS = .760 M HG
REL HUMID = 63 %

FREQ (HZ)	ANGLE (DEGREES) 0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
25	77	78	78	78	77	79	81	79	78	80	80	82	83	89	91	92	89	87	85
31.5	80	79	80	78	80	81	82	82	81	81	83	84	87	93	94	94	89	86	82
40	81	81	82	81	81	84	84	85	84	83	86	87	92	96	98	97	89	83	77
50	81	82	81	81	84	85	84	85	83	86	86	89	94	98	101	98	85	78	70<
63	82	83	83	84	85	86	87	86	87	89	89	92	98	102	104	102	84	78	71<
80	84	84	84	85	85	87	89	89	89	90	92	95	102	105	107	104	82	78	73
100	87	86	87	88	87	91	91	92	93	94	95	99	106	111	110	107	82	78	75
125	88	87	90	90	90	92	93	94	95	97	100	103	110	114	113	109	82	79	76
160	90	90	91	92	92	94	95	97	96	99	101	105	110	115	114	111	83	80	76
200	88	89	90	90	91	92	94	96	95	97	100	105	111	112	112	111	83	79	75
250	87	87	88	89	90	92	93	95	94	97	99	105	113	110	110	109	81	77	73
315	85	86	88	90	92	92	93	94	95	98	99	105	113	115	110	108	81	76	72
400	87	89	90	92	94	94	96	97	98	101	103	109	115	118	116	110	79	76	72
500	89	91	92	93	96	96	98	100	100	103	107	110	119	119	118	111	79	76	73
630	86	86	88	89	93	92	95	98	95	98	105	107	116	116	113	108	77	73	70
800	80	83	86	89	91	92	93	95	96	99	101	108	110	117	112	105	73	71	68
1000	84	85	82	85	89	90	91	96	93	98	103	106	111	112	108	104	72	69	66
1250	79	82	83	85	88	90	89	95	94	99	100	107	107	110	105	100	71	68	66
1600	80	82	84	85	89	90	89	92	92	96	96	103	107	109	104	100	69	67	66
2000	80	81	81	83	86	88	87	92	92	97	93	103	105	107	101	97	68	67	65
2500	79	81	82	83	86	87	86	92	90	95	93	101	103	104	99	91	65	65	64
3150	74	78	78	80	84	85	82	90	89	93	94	97	101	102	99	89	63	62	62
4000	81	84	83	82	84	85	83	90	88	92	95	98	100	103	99	88	63	62	61
5000	73	77	76	77	81	83	80	86	84	88	91	96	97	101	96	85	59	58	57
6300	73	77	76	77	79	81	79	85	82	85	87	94	94	99	91	82	59	57	55
8000	81	84	84	84	81	81	80	83	81	82	86	93	93	98	90	80	56	55	53
10000	69	72	71	74	73	76	74	78	76	79	83	89	90	96	87	75	51	49	47
OVERALL	98	99	100	101	103	104	105	108	107	110	113	118	124	126	124	120	96	92	89

< LEVEL CORRECTED TO REMOVE BACKGROUND/ELECTRONIC NOISE.

TABLE: 5

MEASURED SOUND PRESSURE LEVEL (DB)
1/3 OCTAVE BAND
DISTANCE = 75 METERS

NOISE SOURCE/SUBJECT:
T-38A AIRCRAFT
J85-GE-5A ENGINE
FAR FIELD NOISE

OPERATION:
MILITARY POWER
100% RPM
BOTH ENGINES
FREE FLOW

METEOROLOGY:
TEMP = 11 C
BAR PRESS = .701 M HG
REL HUMID = 46 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-056
RUN 03
20 OCT 75
PAGE 2

FREQ (HZ)	ANGLE (DEGREES) 0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
25	70<	70<	72<	74<	74<	73<	75<	74<	77	78	77	80	83	86	90	92	91	88	
31.5	74	75	75	75	75	76	77	78	80	80	80	82	85	91	94	94	96	90	
40	76	78	76	76	78	78	79	81	81	82	83	85	89	94	96	99	96	91	
50	78	78	78	79	79	79	81	82	84	84	85	86	91	96	100	100	98	88	
63	79	79	79	81	81	81	83	83	85	85	87	89	93	99	102	104	98	86	
80	80	81	81	81	82	83	84	85	86	88	89	91	94	101	105	104	100	85	
100	82	83	83	84	83	85	86	87	89	91	92	94	98	103	108	107	102	82	
125	84	85	84	84	85	86	87	88	90	93	94	95	99	105	109	107	103	84	
160	85	85	86	87	87	87	88	90	92	93	95	97	100	104	109	108	101	80	
200	87	86	88	88	88	88	89	90	92	94	95	98	101	104	106	107	100	79	
250	89	88	89	91	91	91	91	92	94	95	98	100	104	109	104	108	102	81	
315	89	88	91	89	91	91	91	92	93	94	96	98	101	108	106	106	101	80	
400	90	91	91	91	91	92	91	92	92	95	97	99	102	108	110	107	101	82	
500	90	91	91	90	91	92	90	91	92	93	94	97	101	107	108	108	101	82	
630	88	89	89	90	90	91	89	90	90	91	93	96	100	103	107	106	98	79	
800	87	89	88	89	88	89	87	88	89	91	93	97	101	103	105	106	97	78	
1000	87	89	87	86	86	86	86	87	88	90	93	97	101	103	105	105	95	75	
1250	85	86	85	85	86	85	86	88	89	91	94	98	101	102	104	104	96	75	
1600	83	84	84	86	86	86	88	88	90	91	94	97	100	101	103	103	96	73	
2000	81	84	83	86	86	86	87	88	90	91	93	95	97	99	101	101	95	70	
2500	80	83	83	86	86	86	87	89	90	91	93	96	97	98	100	99	93	68	
3150	76	80	80	82	82	82	84	85	86	88	90	92	93	94	96	96	87	63	
4000	75	79	79	80	80	80	82	83	85	86	88	90	91	92	94	93	85	60	
5000	72	75	75	76	76	77	78	81	82	83	85	87	88	88	90	91	81	56	
6300	68	71	72	72	72	74	75	77	78	80	81	83	84	84	88	88	76	51	
8000	62	66	68	67	67	69	71	72	73	75	76	78	80	79	83	84	71	46	
10000	59	62	64	64	63	65	67	68	69	71	73	75	77	77	80	80	68	42	
OVERALL	99	99	100	100	100	101	101	102	103	105	107	109	112	117	118	118	112	97	

< LEVEL CORRECTED TO REMOVE BACKGROUND/ELECTRONIC NOISE.

TABLE: 5

MEASURED SOUND PRESSURE LEVEL (DB)
1/3 OCTAVE BAND
DISTANCE = 75 METERS

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-056
RUN 04
20 OCT 75
PAGE 2

NOISE SOURCE/SUBJECT:
T-38A AIRCRAFT
J85-GE-5A ENGINE
FAR FIELD NOISE

OPERATION:
MAXIMUM POWER
100% RPM AND AFTERBURNER
BOTH ENGINES
FREE FLOW

METEOROLOGY:
TEMP = 11 C
BAR PRESS = .701 M HG
REL HUMID = 46 %

FREQ (HZ)	ANGLE (DEGREES) 0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
25	84	83	82	84	83	86	86	83	85	87	85	88	92	98	99	100	99		
31.5	87	86	87	87	86	88	87	87	89	88	90	93	96	101	105	103	102		
40	87	88	87	88	88	88	89	90	90	91	92	95	100	104	107	107	104		
50	87	88	88	89	89	91	92	92	93	93	95	98	103	107	111	108	102		
63	88	89	90	90	91	90	93	93	94	95	98	100	105	110	111	109	103		
80	90	90	90	91	93	92	94	95	95	98	99	104	109	114	114	111	106		
100	92	93	92	94	94	94	96	96	98	100	102	106	113	118	115	114	107		
125	96	95	95	97	96	97	98	99	101	103	105	109	115	121	120	118	112		
160	94	93	94	96	96	96	96	97	100	102	103	106	111	118	116	115	108		
200	93	93	95	95	96	95	97	98	100	101	104	108	110	114	114	114	106		
250	94	95	97	97	97	97	98	98	100	102	104	110	113	113	112	114	108		
315	94	95	96	97	97	97	97	98	98	101	104	106	111	113	109	110	104		
400	94	95	96	97	97	97	97	98	100	103	105	108	111	114	112	109	105		
500	93	95	96	96	96	98	96	98	98	100	103	106	110	111	111	107	101		
630	90	93	95	94	94	95	94	95	96	98	102	106	109	111	110	106	99		
800	90	92	93	93	93	95	93	94	95	97	102	106	111	113	109	106	96		
1000	89	91	91	91	92	92	91	93	94	96	100	105	108	110	108	104	95		
1250	87	89	88	88	90	90	90	92	94	97	100	105	108	110	107	102	94		
1600	85	89	87	87	89	90	90	93	95	97	99	103	106	108	105	100	92		
2000	85	89	86	86	89	89	91	92	95	97	99	102	105	107	104	99	90		
2500	82	87	84	85	87	88	90	91	93	95	97	99	103	105	101	96	86		
3150	79	85	81	83	85	86	87	88	90	93	95	97	100	102	98	93	82		
4000	76	84	80	81	83	84	86	87	88	92	94	95	99	101	97	91	81		
5000	73	79	75	77	78	80	81	83	85	88	91	91	95	98	93	88	78		
6300	67	73	70	72	73	75	76	78	80	83	85	86	91	94	89	83	71		
8000	65	70	68	69	71	73	74	76	77	81	82	84	90	95	88	80	66		
10000	59	65	63	64	66	68	69	71	72	76	77	81	86	92	86	78	61		
OVERALL	104	105	106	106	107	107	108	108	110	112	115	118	123	126	125	124	118		

LEVEL CORRECTED TO REMOVE BACKGROUND/ELECTRONIC NOISE.

FIGURE: NORMALIZED FARFIELD NOISE LEVELS

3 DISTANCE = 100 METERS

NOISE SOURCE/SUBJECT:

T-38A AIRCRAFT
J85-GE-5A ENGINE
FAR FIELD NOISE

OPERATION:

IDLE
48% RPM
BOTH ENGINES
FREE FLOW

METEOROLOGY:

TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:

OMEGA 1.4
TEST 75-002-047
RUN 01

20 OCT 75

PAGE 6

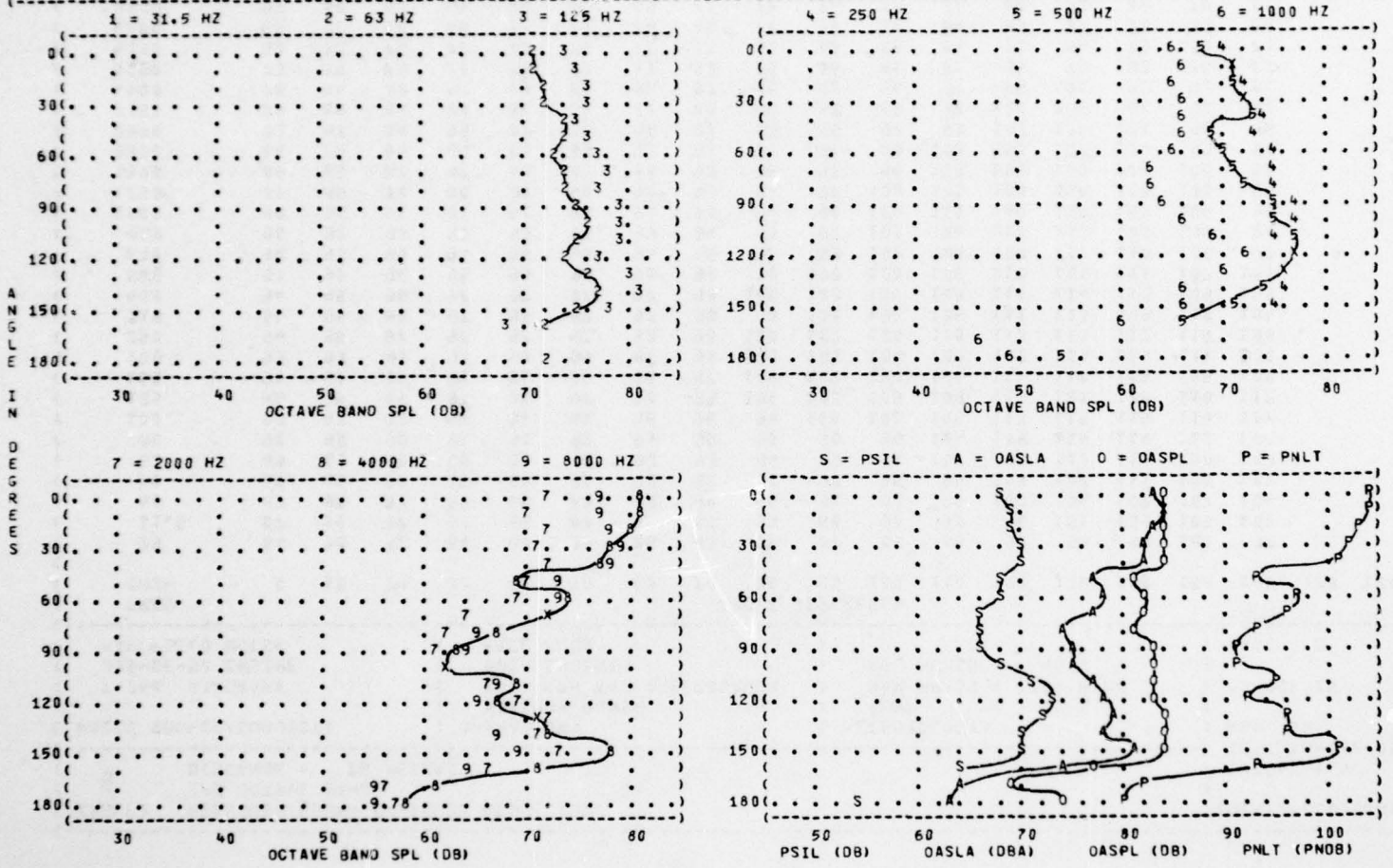


FIGURE: NORMALIZED FARFIELD NOISE LEVELS

3

DISTANCE = 100 METERS

NOISE SOURCE/SUBJECT:

T-38A AIRCRAFT
J85-GE-5A ENGINE
FAR FIELD NOISE

OPERATION:

70% RPM
BOTH ENGINES
FREE FLOW

METEOROLOGY:

TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:

OMEGA 1.4
TEST 75-002-047
RUN 02

20 OCT 75

PAGE 6

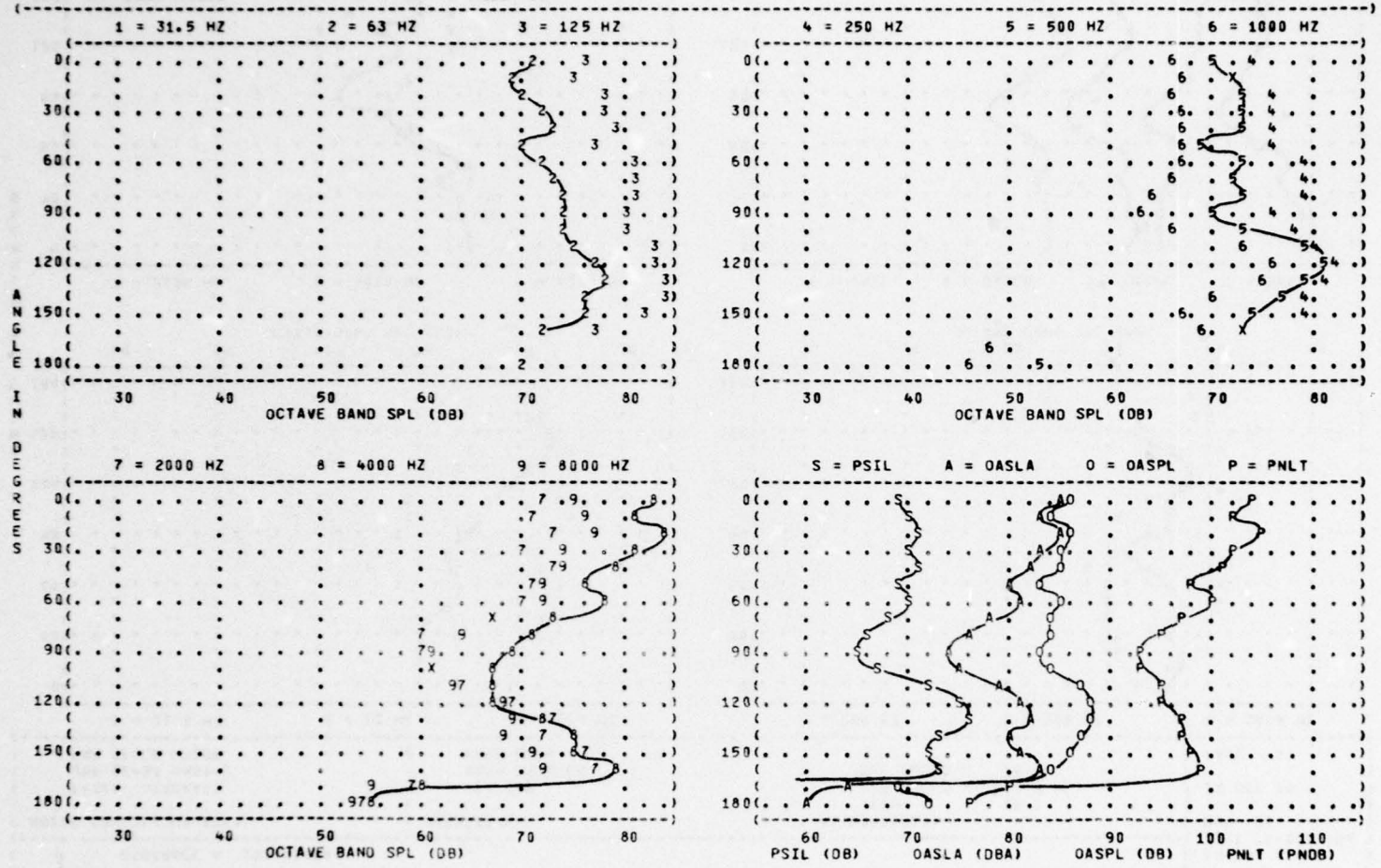


FIGURE: NORMALIZED FARFIELD NOISE LEVELS

3

DISTANCE = 100 METERS

NOISE SOURCE/SUBJECT:

T-38A AIRCRAFT
J85-GE-5A ENGINE
FAR FIELD NOISE

OPERATION:

75% RPM
BOTH ENGINES
FREE FLOW

METEOROLOGY:

TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:

OMEGA 1.4
TEST 75-002-056
RUN 01
20 OCT 75
PAGE 5

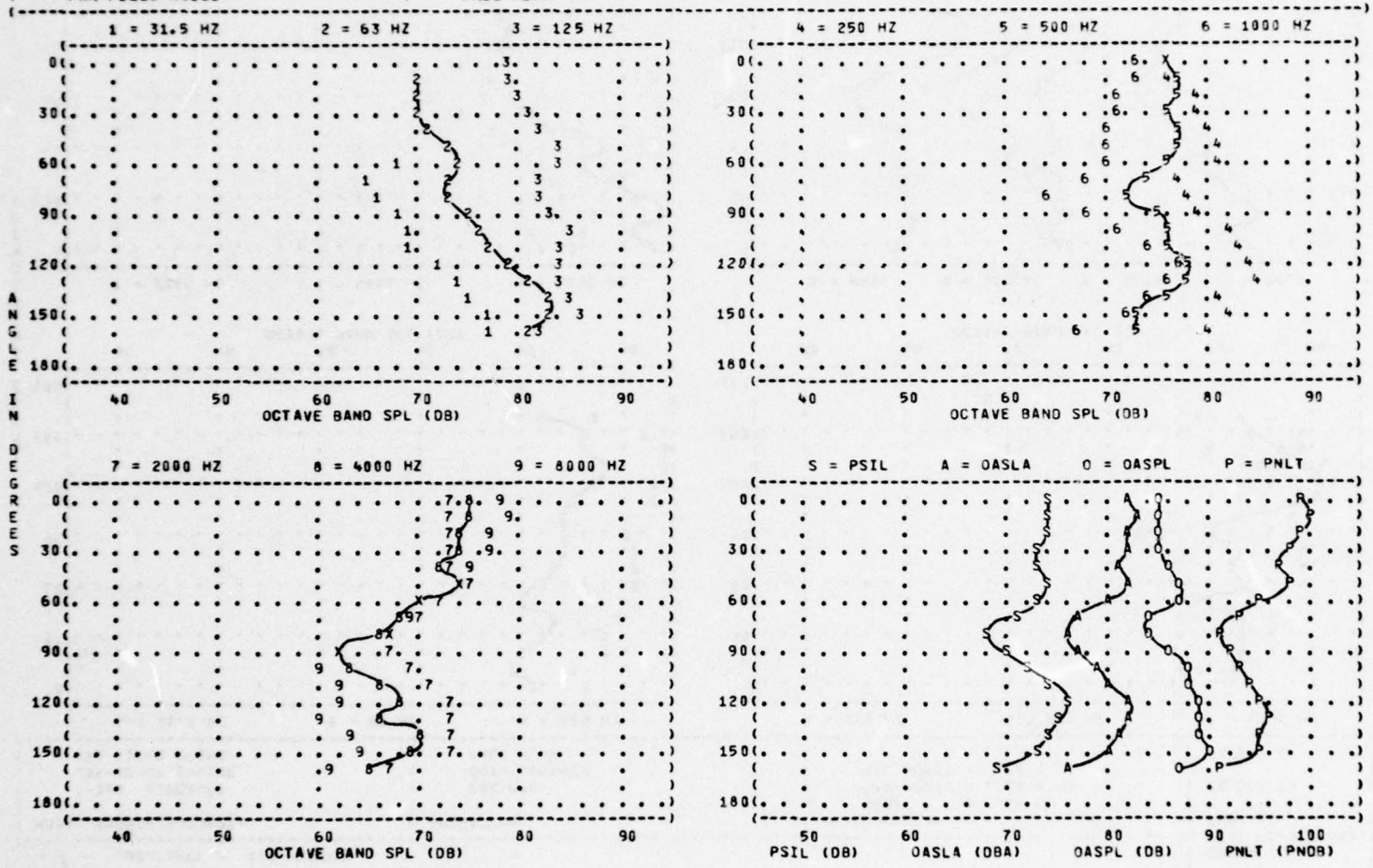


FIGURE: NORMALIZED FARFIELD NOISE LEVELS

3 DISTANCE = 100 METERS

NOISE SOURCE/SUBJECT:
T-38A AIRCRAFT
J85-GE-5A ENGINE
FAR FIELD NOISE

OPERATION:
TRIM CHECK
94% RPM
BOTH ENGINES
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-056
RUN 02
20 OCT 75
PAGE 6

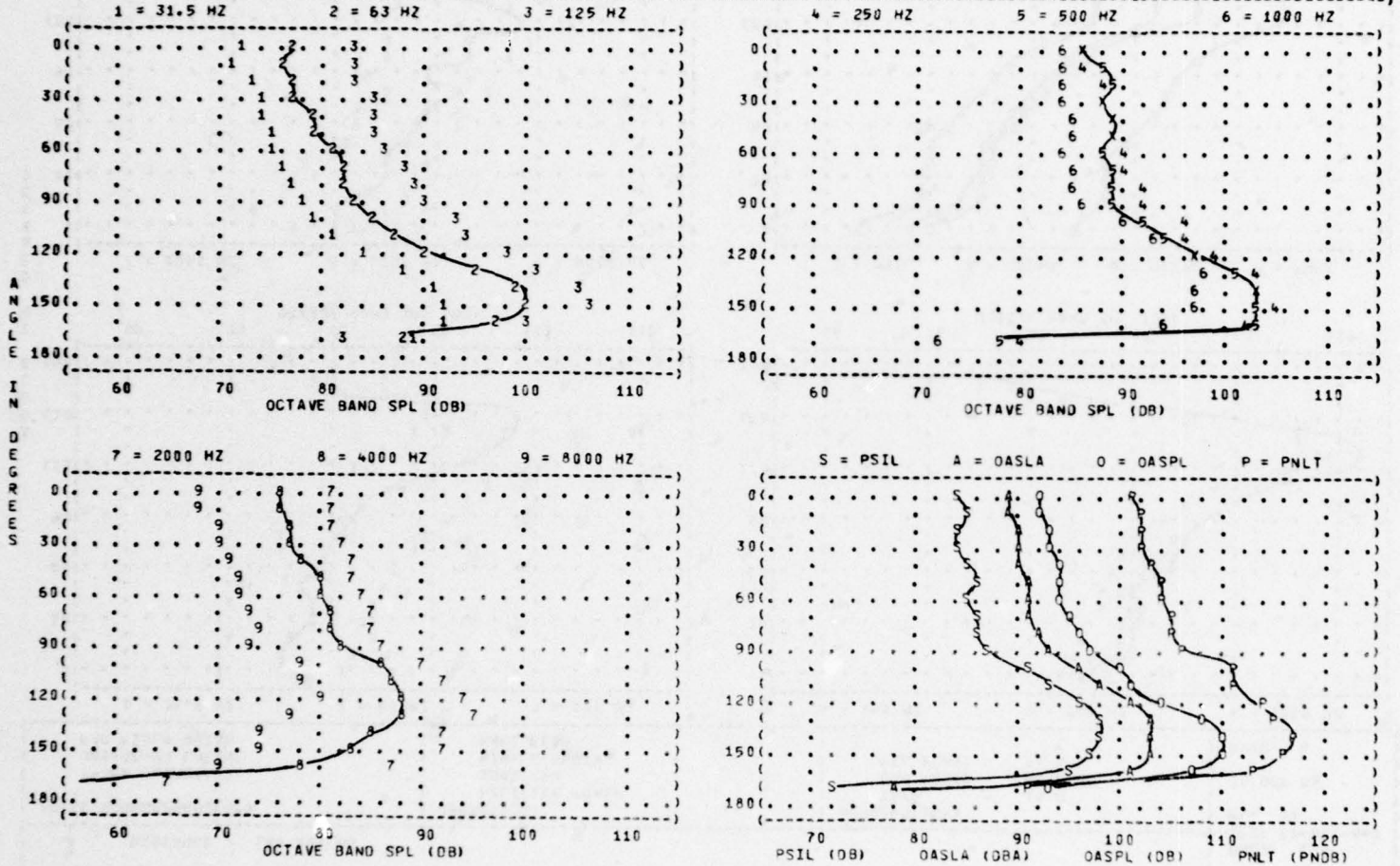


FIGURE: NORMALIZED FARFIELD NOISE LEVELS

3 DISTANCE = 100 METERS

NOISE SOURCE/SUBJECT:

T-38A AIRCRAFT
J85-GE-5A ENGINE
FAR FIELD NOISE

OPERATION:

MILITARY POWER
100% RPM
SINGLE ENGINE
FREE FLOW

METEOROLOGY:

TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:

OMEGA 1.4
TEST 75-002-047
RUN 03

20 OCT 75

PAGE 6

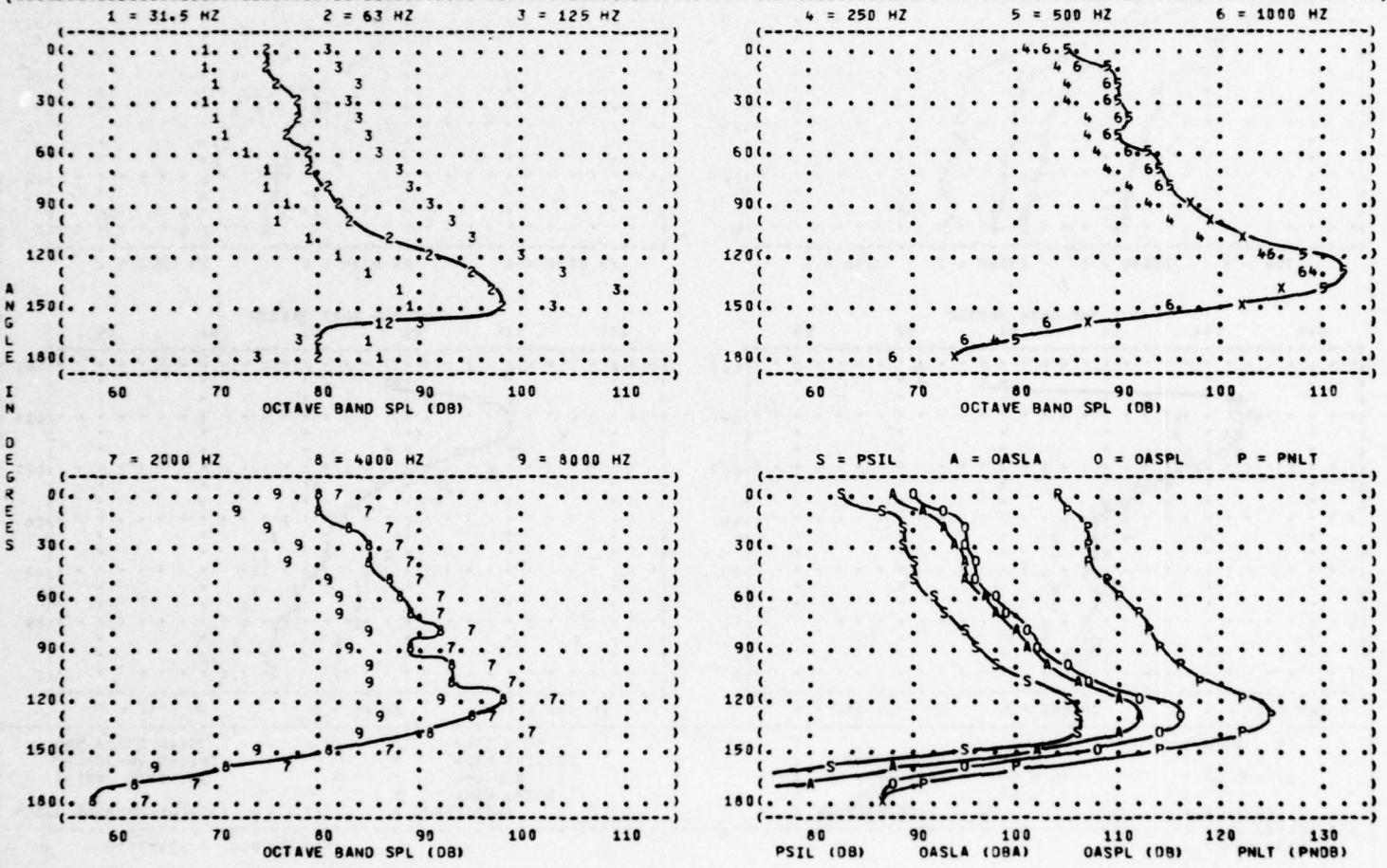


FIGURE: NORMALIZED FARFIELD NOISE LEVELS

3 DISTANCE = 100 METERS

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-047
RUN 04
20 OCT 75
PAGE 6

NOISE SOURCE/SUBJECT:
T-38A AIRCRAFT
J85-GE-5A ENGINE
FAR FIELD NOISE

OPERATION:
MAXIMUM POWER
100% RPM AND AFTERBURNER
SINGLE ENGINE
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

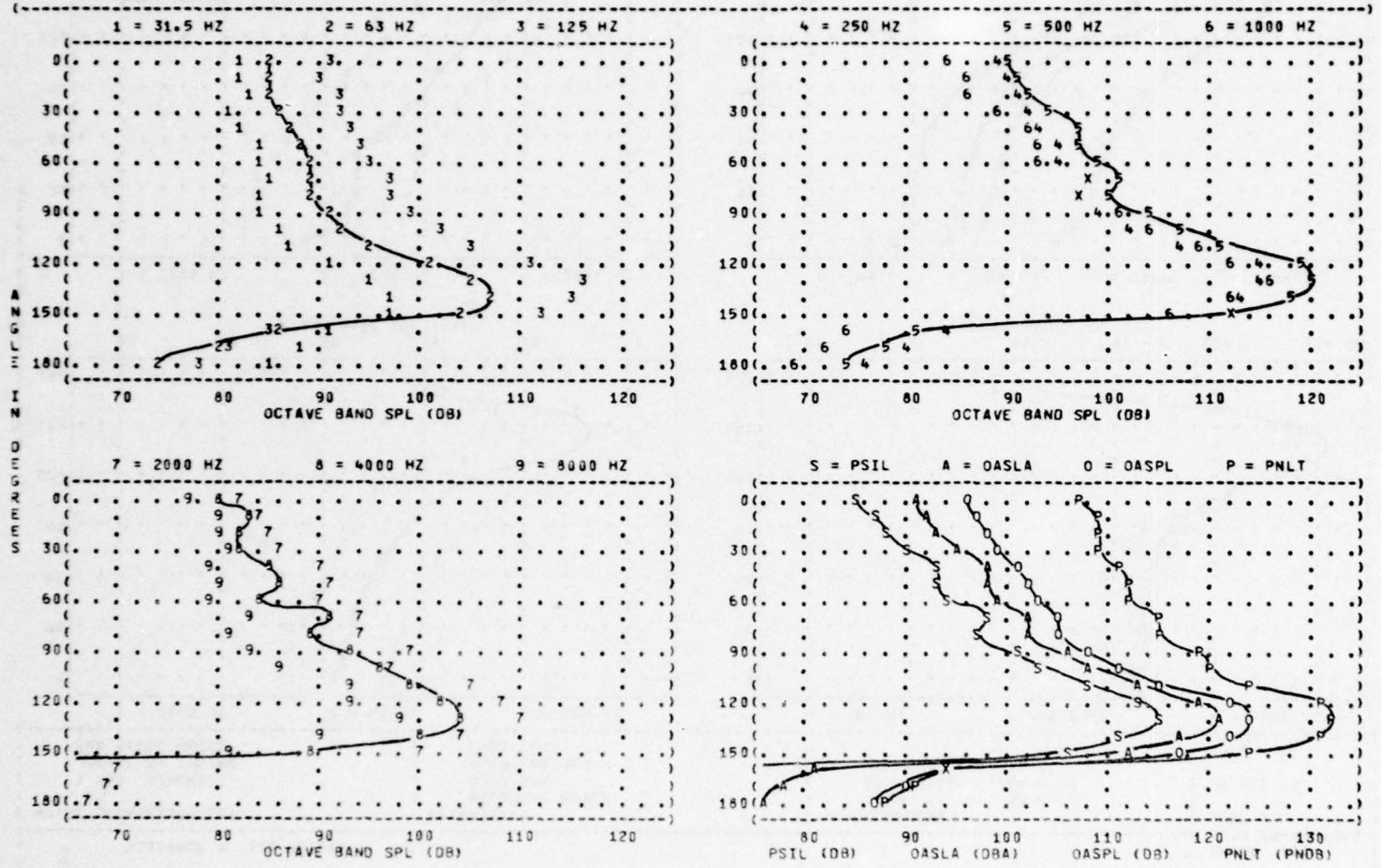


FIGURE: 3 NORMALIZED FARFIELD NOISE LEVELS

DISTANCE = 100 METERS

NOISE SOURCE/SUBJECT:
T-38A AIRCRAFT
J85-GE-5A ENGINE
FAR FIELD NOISE

OPERATION:
MILITARY POWER
100% RPM
BOTH ENGINES
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-056
RUN 03
20 OCT 75
PAGE 6

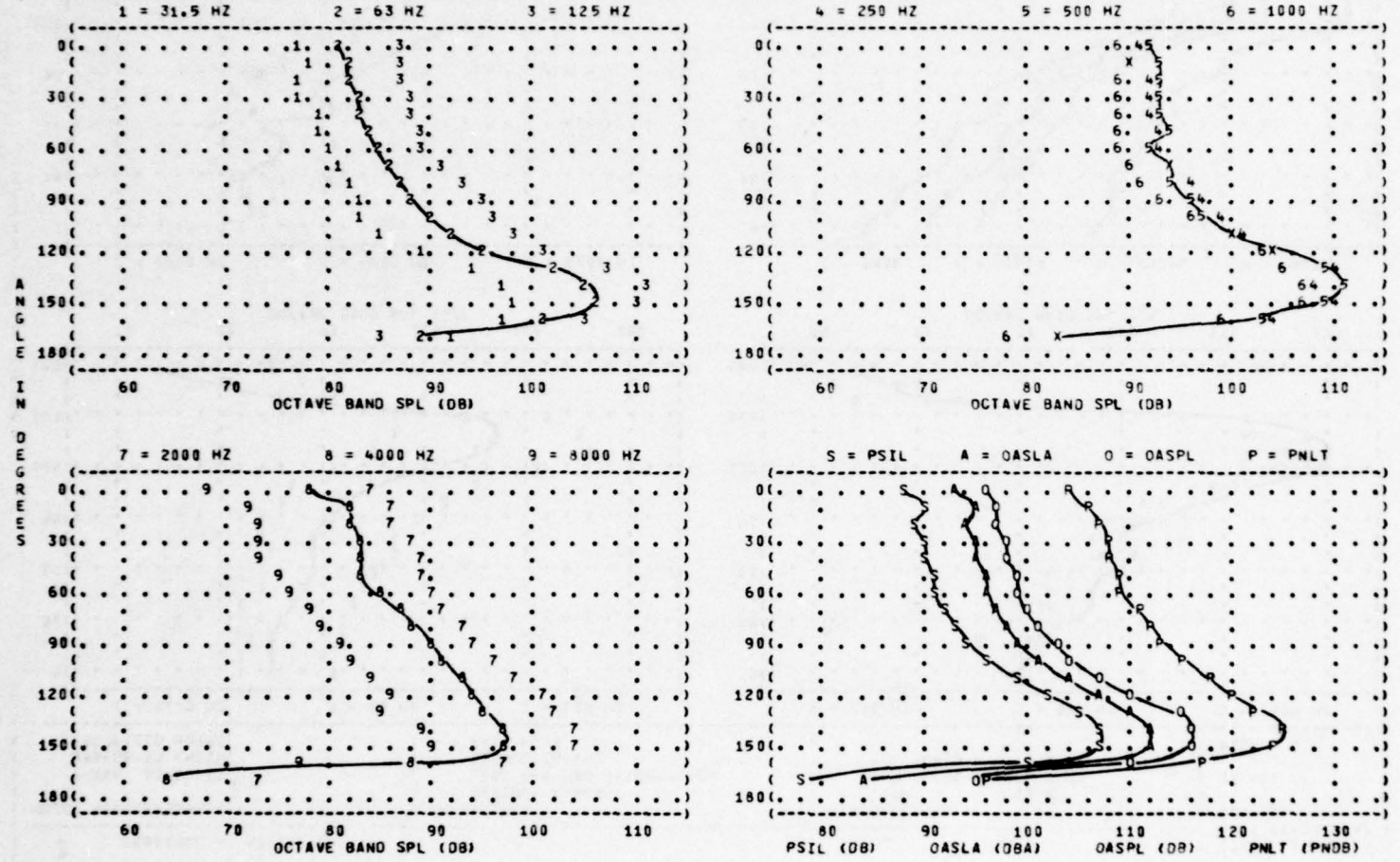


FIGURE: NORMALIZED FARFIELD NOISE LEVELS

3

DISTANCE = 100 METERS

NOISE SOURCE/SUBJECT:
T-38A AIRCRAFT
J85-GE-5A ENGINE
FAR FIELD NOISE

OPERATION:
MAXIMUM POWER
100% RPM AND AFTERBURNER
BOTH ENGINES
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-056
RUN 04
20 OCT 75
PAGE 6

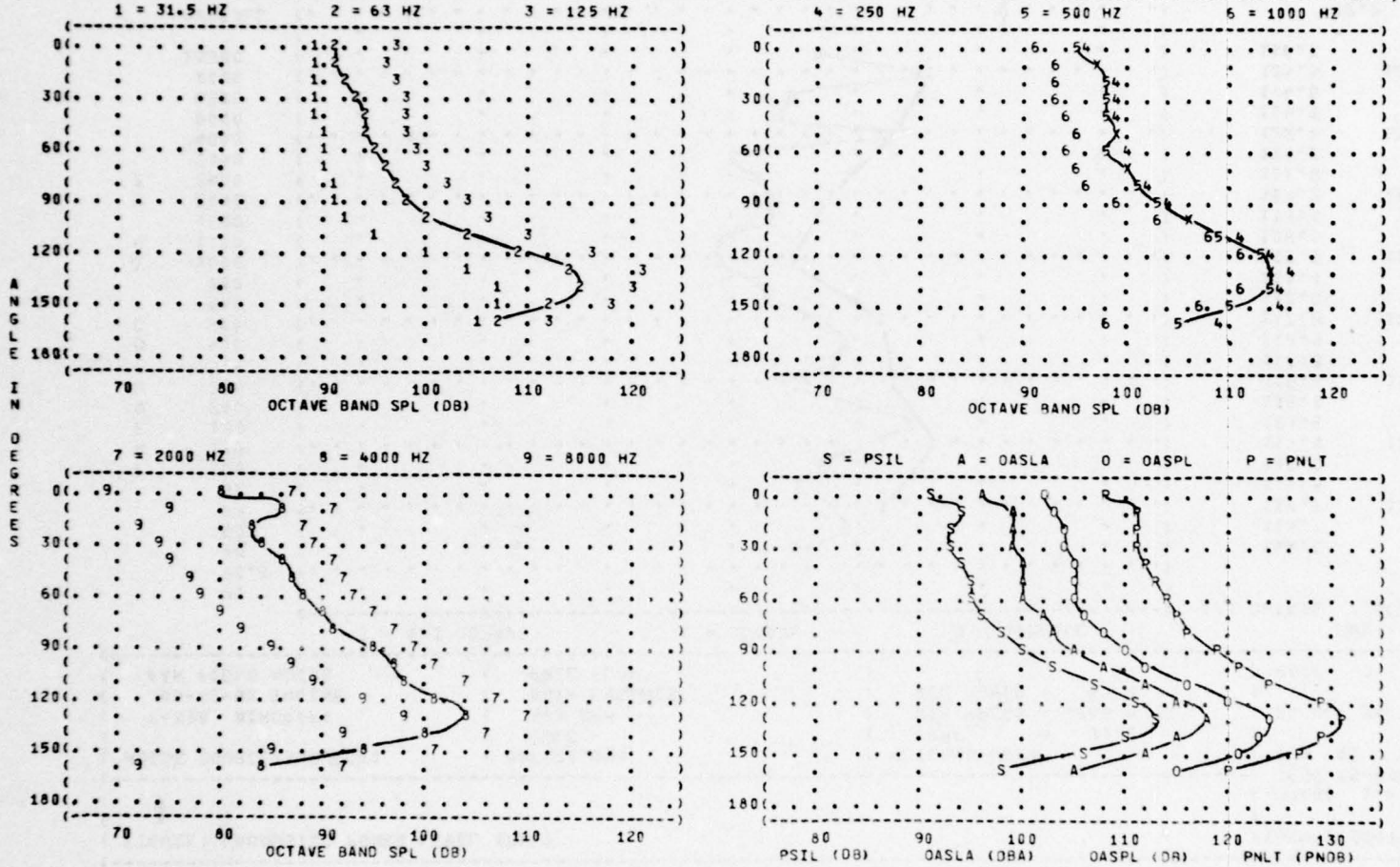


FIGURE: ACOUSTIC POWER LEVEL (PWL)

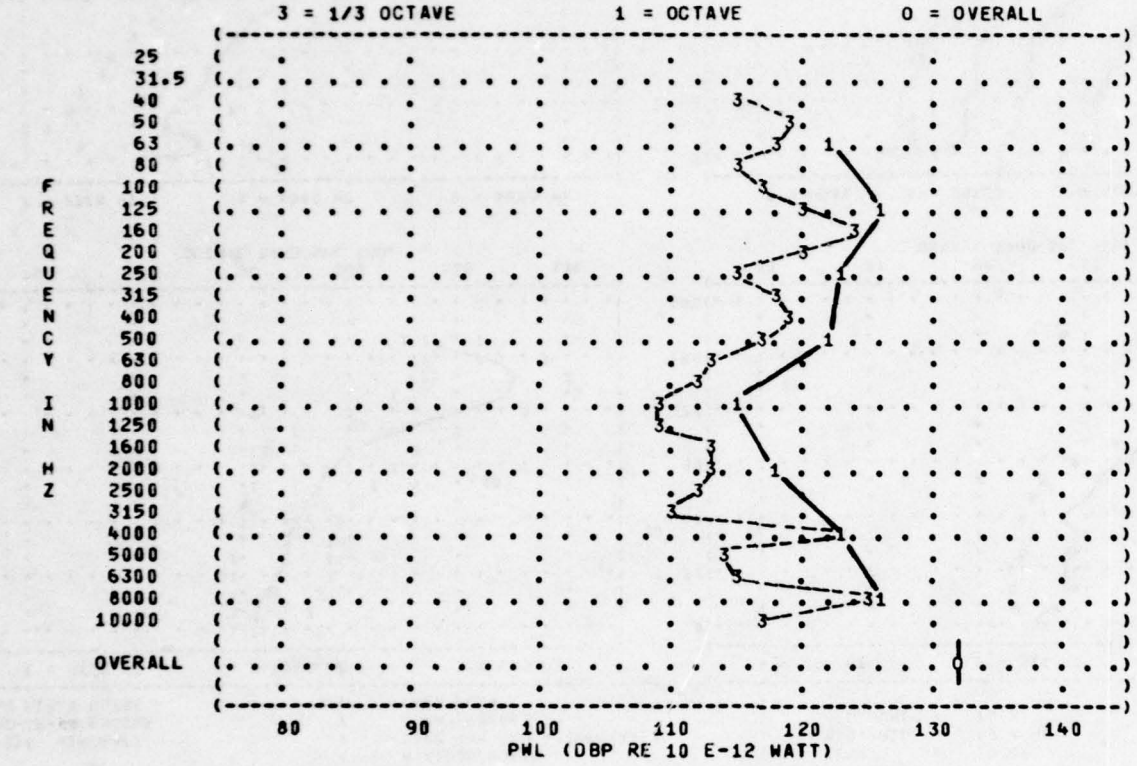
4

NOISE SOURCE/SUBJECT:
T-38A AIRCRAFT
J85-GE-5A ENGINE
FAR FIELD NOISE

OPERATION:
IDLE
48% RPM
BOTH ENGINES
FREE FLOW

METEOROLOGY:
TEMP = 31 C
BAR PRESS = .760 M HG
REL HUMID = 63 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-047
RUN 01
20 OCT 75
PAGE 3



	PWL 1/3 OCTAVE	PWL OCTAVE
40	114.5	
50	118.7	
63	117.7	122.3
80	115.5	
100	117.0	
125	119.8	125.7
160	123.6	
200	119.8	
250	115.4	123.0
315	118.3	
400	118.9	
500	117.2	121.7
630	113.0	
800	111.9	
1000	109.5	115.0
1250	108.8	
1600	113.3	
2000	113.2	117.6
2500	111.8	
3150	110.2	
4000	122.6	123.4
5000	114.5	
6300	114.6	
8000	125.5	126.3
10000	116.7	
OVERALL		132.2

FIGURE: ACOUSTIC POWER LEVEL (PWL)

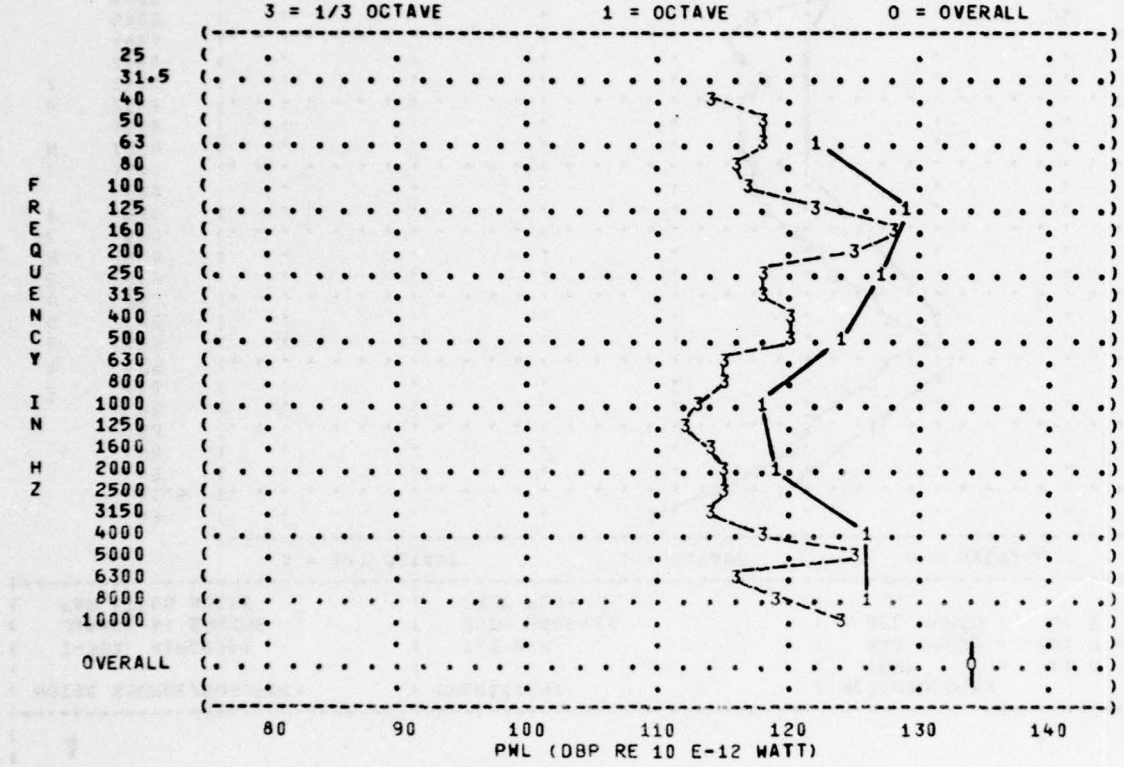
4

NOISE SOURCE/SUBJECT:
T-38A AIRCRAFT
J85-GE-5A ENGINE
FAR FIELD NOISE

OPERATION:
70% RPM
BOTH ENGINES
FREE FLOW

METEOROLOGY:
TEMP = 31 C
BAR PRESS = .760 M HG
REL HUMID = 63 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-047
RUN 02
20 OCT 75
PAGE 3



	PWL 1/3 OCTAVE	PWL OCTAVE
40	114.4	
50	118.5	
63	117.6	122.2
80	115.8	
100	117.3	
125	121.6	129.0
160	127.8	
200	125.1	
250	118.4	126.5
315	117.7	
400	120.0	
500	119.8	123.5
630	114.5	
800	115.1	
1000	113.3	118.4
1250	111.9	
1600	113.6	
2000	114.9	119.3
2500	115.1	
3150	113.8	
4000	118.2	126.4
5000	125.4	
6300	115.8	
8000	118.6	125.5
10000	123.9	
OVERALL		134.2

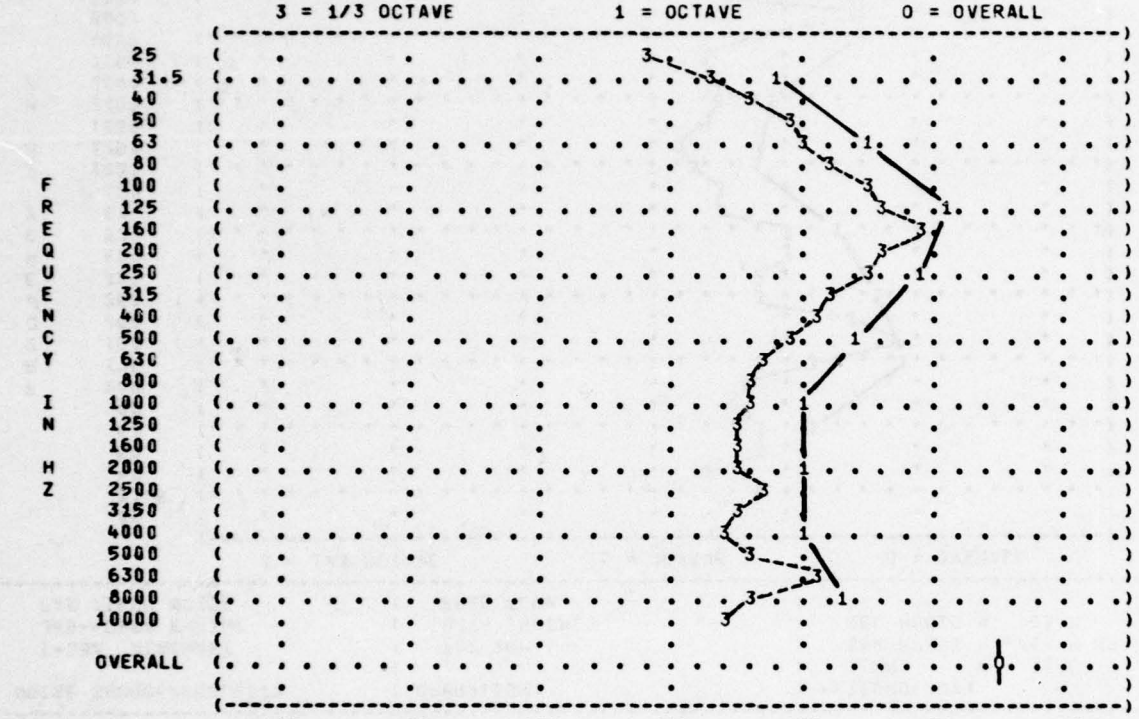
FIGURE: 4 ACOUSTIC POWER LEVEL (PWL)

NOISE SOURCE/SUBJECT:
T-38A AIRCRAFT
J85-GE-5A ENGINE
FAR FIELD NOISE

OPERATION:
75% RPM
BOTH ENGINES
FREE FLOW

METEOROLOGY:
TEMP = 11 C
BAR PRESS = .701 M HG
REL HUMID = 46 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-056
RUN 01
20 OCT 75
PAGE 3



	PWL 1/3 OCTAVE	PWL OCTAVE
25	108.0	
31.5	113.3	118.4
40	116.2	
50	119.2	
63	120.3	125.4
80	121.9	
100	124.8	
125	125.6	131.4
160	128.6	
200	125.6	
250	124.6	129.0
315	121.7	
400	120.6	
500	119.1	123.9
630	117.0	
800	115.8	
1000	115.8	120.4
1250	115.2	
1600	115.2	
2000	114.7	120.4
2500	116.7	
3150	114.6	
4000	114.1	119.6
5000	115.6	
6300	121.4	
8000	115.7	123.0
10000	114.1	
OVERALL		135.3

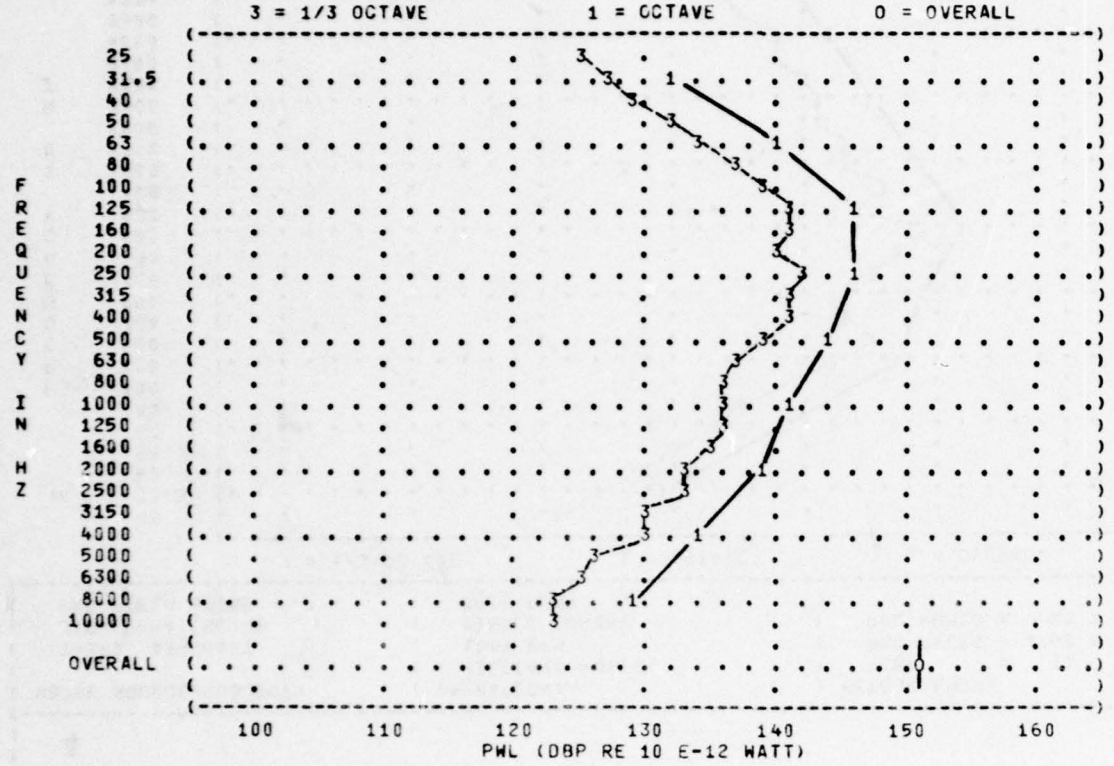
FIGURE: 4 ACOUSTIC POWER LEVEL (PWL)

NOISE SOURCE/SUBJECT:
T-38A AIRCRAFT
J85-GE-5A ENGINE
FAR FIELD NOISE

OPERATION:
TRIM CHECK
94% RPM
BOTH ENGINES
FREE FLOW

METEOROLOGY:
TEMP = 11 C
BAR PRESS = .701 M HG
REL HUMID = 46 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-056
RUN 02
20 OCT 75
PAGE 3



	PWL 1/3 OCTAVE	PWL OCTAVE
25	124.6	
31.5	127.4	132.3
40	129.3	
50	132.2	
63	134.4	139.5
80	136.6	
100	139.1	
125	141.4	145.5
160	141.4	
200	140.0	
250	142.0	145.8
315	140.8	
400	141.1	
500	139.5	144.4
630	137.4	
800	136.3	
1000	135.9	140.7
1250	135.7	
1600	135.0	
2000	133.4	138.6
2500	132.9	
3150	130.5	
4000	129.6	134.0
5000	126.4	
6300	125.0	
8000	122.8	128.5
10000	123.0	
OVERALL	151.3	

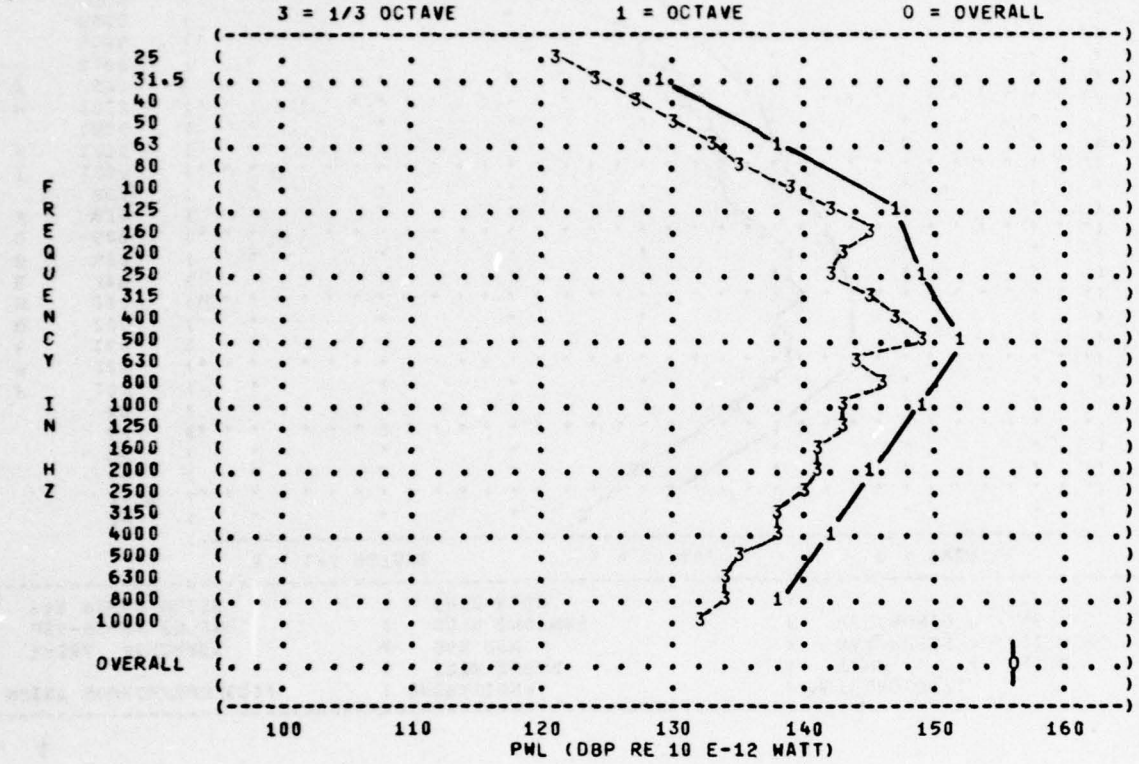
FIGURE: 4 ACOUSTIC POWER LEVEL (PWL)

NOISE SOURCE/SUBJECT:
T-38A AIRCRAFT
J85-GE-5A ENGINE
FAR FIELD NOISE

OPERATION:
MILITARY POWER
100% RPM
SINGLE ENGINE
FREE FLOW

METEOROLOGY:
TEMP = 31 C
BAR PRESS = .760 M HG
REL HUMID = 63 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-047
RUN 03
20 OCT 75
PAGE 3



	PWL 1/3 OCTAVE	PWL OCTAVE
25	121.1	
31.5	123.8	129.3
40	126.9	
50	129.7	
63	132.8	137.8
80	135.0	
100	139.0	
125	141.7	147.1
160	144.6	
200	143.0	
250	142.5	148.6
315	145.4	
400	147.1	
500	149.0	152.0
630	144.5	
800	146.4	
1000	143.2	149.3
1250	143.0	
1600	140.7	
2000	140.7	145.3
2500	140.0	
3150	137.6	
4000	138.1	141.9
5000	135.4	
6300	134.3	
8000	133.6	138.1
10000	131.7	
OVERALL		156.3

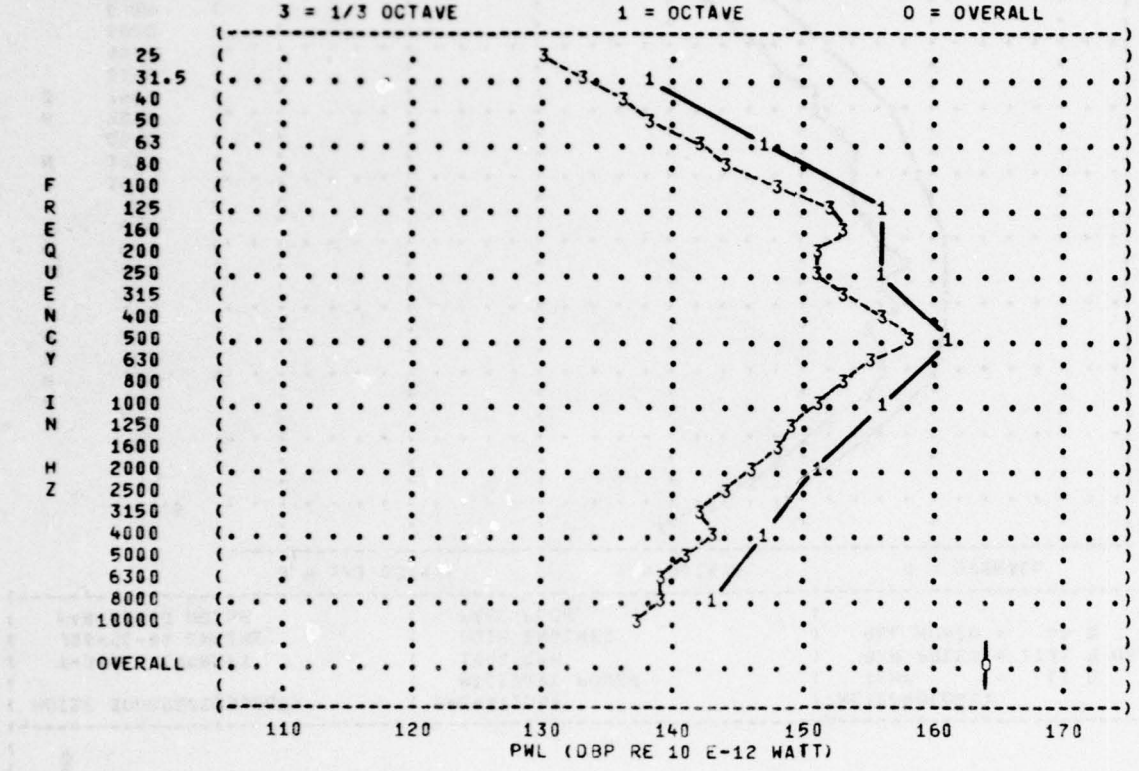
FIGURE: ACOUSTIC POWER LEVEL (PWL) 4

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-047
RUN 04
20 OCT 75
PAGE 3

NOISE SOURCE/SUBJECT:
T-38A AIRCRAFT
J85-GE-5A ENGINE
FAR FIELD NOISE

OPERATION:
MAXIMUM POWER
100% RPM AND AFTERBURNER
SINGLE ENGINE
FREE FLOW

METEOROLOGY:
TEMP = 31 C
BAR PRESS = .760 M HG
REL HUMID = 63 %



1/3 OCTAVE	OCTAVE
130.0	
132.7	138.3
135.9	
138.0	
141.5	146.6
144.1	
148.3	
151.6	156.0
152.7	
151.2	
150.7	156.3
152.5	
155.7	
158.0	161.1
154.7	
153.5	
150.8	156.2
148.7	
147.7	
146.0	150.8
143.6	
142.3	
142.9	146.9
140.7	
138.7	
138.8	143.1
137.3	
	154.5

PWL

FIGURE: ACOUSTIC POWER LEVEL (PWL)

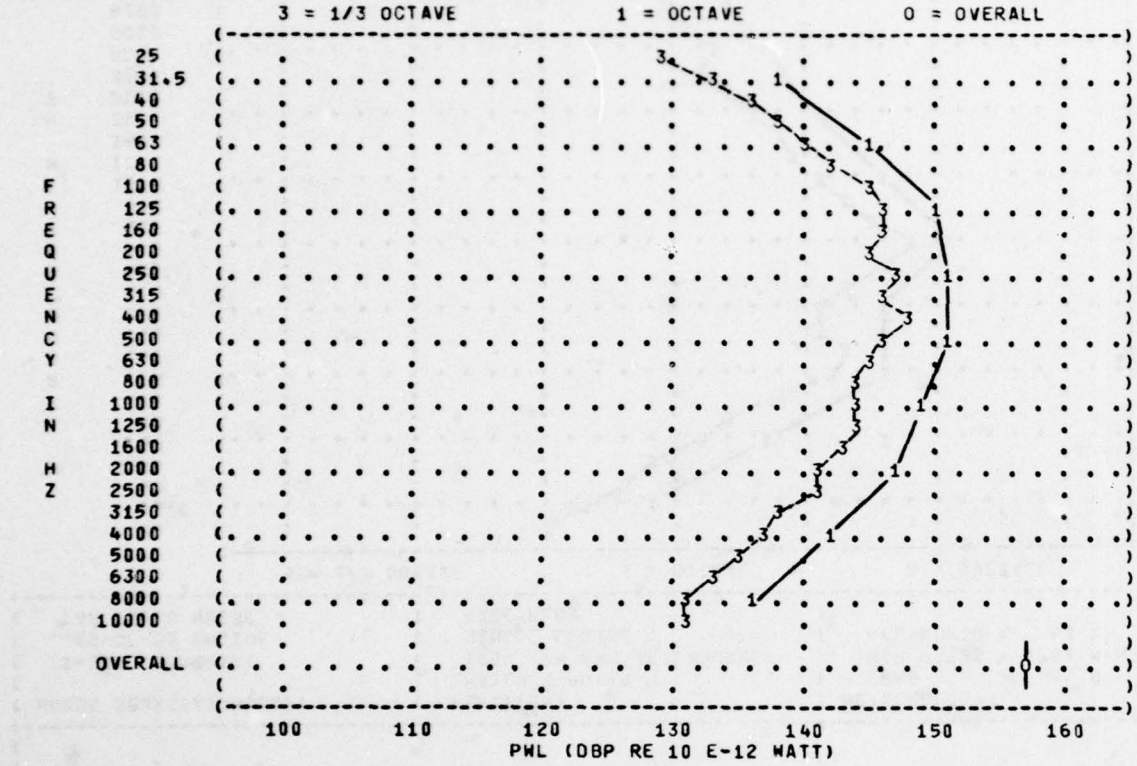
4

NOISE SOURCE/SUBJECT:
T-38A AIRCRAFT
J85-GE-5A ENGINE
FAR FIELD NOISE

OPERATION:
MILITARY POWER
100% RPM
BOTH ENGINES
FREE FLOW

METEOROLOGY:
TEMP = 11 C
BAR PRESS = .701 M HG
REL HUMID = 46 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-056
RUN 03
20 OCT 75
PAGE 3



	PWL 1/3 OCTAVE	PWL OCTAVE
25	129.3	
31.5	132.8	138.1
40	135.7	
50	137.8	
63	140.2	145.1
80	142.1	
100	144.7	
125	145.7	150.2
160	145.9	
200	144.9	
250	146.9	150.8
315	145.9	
400	147.7	
500	146.5	151.2
630	144.8	
800	144.2	
1000	144.0	148.7
1250	143.6	
1600	143.0	
2000	141.3	146.7
2500	141.2	
3150	138.3	
4000	137.4	141.8
5000	134.6	
6300	133.1	
8000	130.9	136.5
10000	130.9	
OVERALL	157.3	

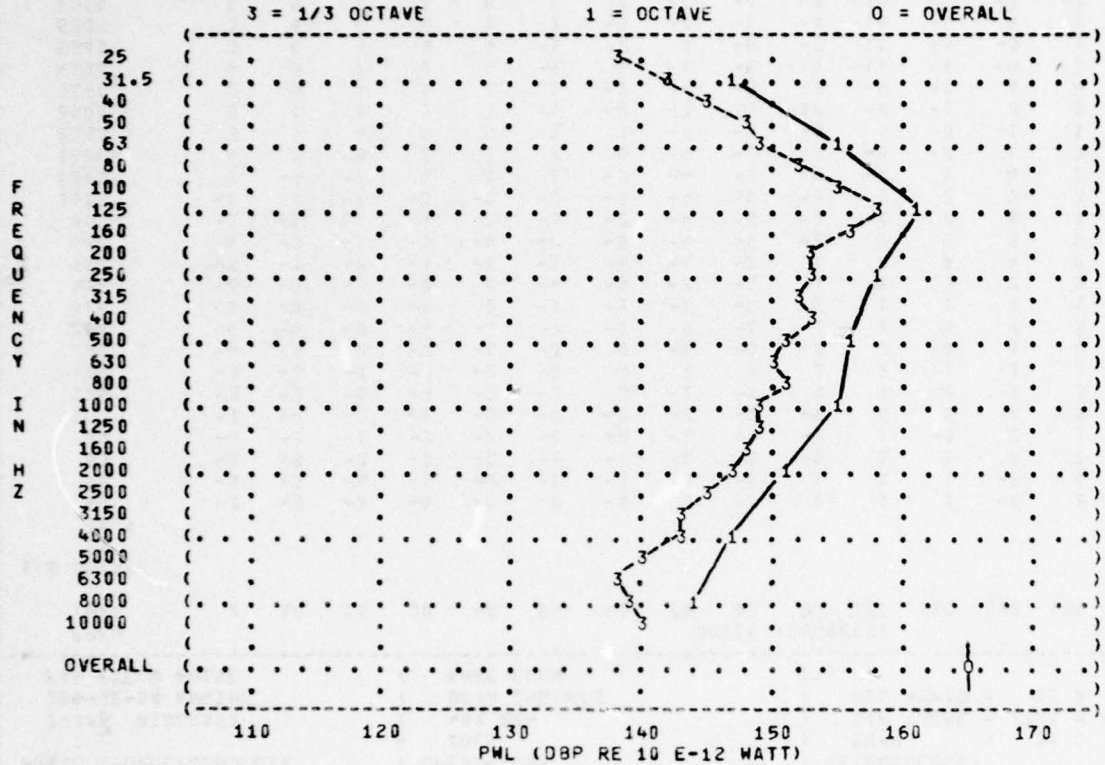
FIGURE: 4 ACOUSTIC POWER LEVEL (PWL)

NOISE SOURCE/SUBJECT:
T-38A AIRCRAFT
J85-GE-5A ENGINE
FAR FIELD NOISE

OPERATION:
MAXIMUM POWER
100% RPM AND AFTERBURNER
BOTH ENGINES
FREE FLOW

METEOROLOGY:
TEMP = 11 C
BAR PRESS = .701 M HG
REL HUMID = 46 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-056
RUN 04
20 OCT 75
PAGE 3



	PWL 1/3 OCTAVE	PWL OCTAVE
25	138.3	
31.5	142.2	147.4
40	145.0	
50	147.8	
63	149.3	154.9
80	152.1	
100	155.0	
125	158.5	161.4
160	155.5	
200	153.5	
250	153.5	157.7
315	151.8	
400	152.8	
500	151.1	156.2
630	150.0	
800	151.1	
1000	149.3	154.6
1250	148.8	
1600	147.6	
2000	146.8	151.3
2500	144.9	
3150	142.9	
4000	142.8	146.9
5000	140.0	
6300	137.5	
8000	139.3	143.7
10000	139.6	
OVERALL	165.1	

TABLE: DIRECTIVITY INDEX (DB)

6

IDENTIFICATION:

OMEGA 1.4
TEST 75-002-047
RUN 01

20 OCT 75

PAGE 4

NOISE SOURCE/SUBJECT:
T-38A AIRCRAFT
J85-GE-5A ENGINE
FAR FIELD NOISE

OPERATION:
IDLE
48% RPM
BOTH ENGINES
FREE FLOW

METEOROLOGY:
TEMP = 31 C
BAR PRESS = .760 M HG
REL HUMID = 63 %

FREQ (HZ)	ANGLE (DEGREES) 0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
1/3 OCTAVE																			
25																			
31.5																			
40	-3	-3	-2	-4	-2	0	-0	1	-3	0	1	1	-2	2	2	-0	-0	-3	1
50	-3	-3	-4	-1	-0	-1	-1	-1	-1	1	1	1	-2	1	2	1	-1	-5	-2
63	-4	-5	-3	-3	-0	-1	-2	-1	-0	-0	1	1	0	2	3	1	-4		-2
80	-3	-3	-2	-2	-2	-2	-0	-1	-1	-1	1	-0	2	1	3	1	-4		-6
100	-3	-4	-2	-2	-5	-2	-2	-2	-2	-1	0	1	1	3	5	1	-5		
125	-3	-3	-1	-3	-3	-3	-3	-1	-1	0	1	0	0	3	5	2	-10		
160	-5	-3	-1	-2	-2	-2	0	0	0	1	2	1	-1	1	2	-0	-13		-17
200	-4	-5	-2	-2	-2	-3	0	-0	-0	2	2	-0	1	0	2	0			
250	-6	-4	-2	-4	-2	-2	-1	-0	-1	1	2	1	3	2	-0	2			
315	-6	-3	-5	-4	0	-1	-1	-1	-0	2	1	1	2	1	-2	-1	-11		
400	-8	-2	-5	-2	-0	-4	-4	-2	-1	1	1	3	2	2	1	-1	-6	-21	-18
500	-5	-3	-2	-3	-2	-6	-4	-4	-3	1	2	3	4	2	1	-5	-12		-21
630	-4	-3	-1	-3	-4	-7	-5	-4	-5	-2	2	2	5	4	-3	-4	-10		
800	-5	-1	-4	-4	-2	-3	-2	-4	-3	-2	-1	2	6	3	-0	-1	-7	-23	-18
1000	-1	-1	-2	-2	-1	-2	-3	-4	-5	-3	0	2	5	3	-1	-2	-8	-22	-18
1250	1	-0	-1	2	1	1	-2	-4	-5	-5	-2	1	4	2	-1	1	-7	-19	-15
1600	4	2	3	2	2	2	0	-4	-5	-7	-5	-2	1	3	1	4	-3	-14	-12
2000	3	1	4	4	5	2	1	-5	-8	-9	-8	-3	-1	1	0	3	-4	-14	-13
2500	0	1	3	1	3	-1	-6	-7	-10	-10	-8	-3	0	5	4	6	-2	-12	-10
3150	2	3	4	1	2	1	-2	-4	-9	-9	-9	-3	1	4	3	5	-2	-13	-13
4000	8	9	7	5	4	-5	0	-1	-6	-10	-11	-5	-9	-3	-2	5	-2	-12	-16
5000	3	4	4	5	4	-1	2	0	-6	-9	-10	-5	-3	1	-0	1	-4	-14	-15
6300	3	5	6	6	5	2	-0	-2	-8	-8	-10	-4	-4	1	-1	-1	-5	-15	-15
8000	5	5	6	7	6	1	1	-0	-8	-9	-10	-5	-9	-2	-6	-4	-8	-18	-18
10000	3	3	6	7	6	-0	2	-0	-7	-9	-9	-6	-6	-3	-5	-3	-8	-18	-17
OCTAVE																			
31.5																			
63	-3	-3	-3	-2	-0	-1	-1	-1	-1	0	1	1	0	2	3	1	-2		-2
125	-4	-3	-1	-2	-2	-2	-1	-0	-1	1	1	1	-1	2	3	0	-10		
250	-5	-4	-3	-3	-1	-2	-0	-0	-0	2	2	0	2	1	0	0			
500	-6	-3	-3	-2	-1	-5	-4	-2	-2	1	2	3	3	2	0	-3	-8		-20
1000	-2	-1	-2	-1	-1	-1	-2	-4	-4	-3	-1	2	5	3	-1	-1	-7	-21	-17
2000	3	1	3	3	4	2	-0	-5	-7	-8	-7	-3	0	3	2	4	-3	-13	-12
4000	8	8	7	5	4	-4	1	-1	-6	-10	-11	-4	-6	-2	-2	5	-3	-12	-15
8000	5	5	6	7	6	1	1	-1	-8	-9	-10	-5	-8	-2	-5	-3	-8	-18	-18
OVERALL	1	2	2	2	1	-1	-1	-1	-2	-0	0	0	0	1	1	1	-6	-14	-9

TABLE: DIRECTIVITY INDEX (DB)

6

NOISE SOURCE/SUBJECT:
T-38A AIRCRAFT
J85-GE-5A ENGINE
FAR FIELD NOISE

OPERATION:
70% RPM
BOTH ENGINES
FREE FLOW

METEOROLOGY:
TEMP = 31 C
BAR PRESS = .760 M HG
REL HUMID = 63 %

IDENTIFICATION:
OR[illegible] 1.4
TE[illegible]75-002-047
RUN 02
20 OCT 75
PAGE 4

FREQ (HZ)	ANGLE (DEGREES) 0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
1/3 OCTAVE																			
25																			
31.5																			
40	-2	-2	-2	-2		-3	-1	-1	1	-0	1	1	2	2	1	0	-1	-2	-0
50	-3	-5	-4	-2	-1	-3	-3	-1	-0	0	-0	0	2	3	1	1	-2	-5	-3
63	-4	-5	-4	-3	-0	-5	-3	-1	-0	-1	-1	0	3	4	3	2	-3		-4
80	-3	-5	-4	-2	-2	-4	-1	-0	-2	-2	-2	2	3	4	2	1	-3		-8
100	-4	-6	-5	-4	-4	-5	-2	-2	-2	-2	-3	1	2	5	4	3	-1		
125	-5	-7	-4	-4	-5	-5	-3	-2	-2	-2	-2	3	2	5	4	2	-3		
160	-5	-6	-3	-3	-2	-4	0	0	0	-1	-1	2	2	2	2	1	-5		-17
200	-5	-6	-2	-2	-2	-3	1	1	0	-2	-0	1	3	1	-0	-0	-6		
250	-4	-6	-5	-3	-2	-2	-1	-1	-1	-4	-1	3	4	2	-2	1	-4		
315	-9	-7	-5	-5	-3	-5	-4	-2	-2	-4	-1	2	3	6	1	1	-2		
400	-5	-2	-3	-2	-2	-7	-2	-3	-2	-5	-1	3	4	4	2	-1	-3		-23
500	-7	-6	-2	-3	-3	-7	-2	-4	-3	-5	-2	4	5	3	1	-2	-1	-24	-22
630	-5	-6	-2	-4	-3	-6	-4	-5	-5	-7	-5	3	8	3	-2	-5	-3		
800	-5	-4	-4	-4	-5	-6	-4	-6	-7	-7	-5	2	5	7	1	-2	-3	-23	-25
1000	-4	-4	-4	-3	-2	-4	-3	-4	-5	-7	-4	3	7	4	-2	-4	-2	-23	-25
1250	-3	-2	-3	-1	-1	-0	-2	-3	-6	-7	-3	2	6	3	-1	-2	1	-20	-22
1600	1	-1	2	-2	-0	-0	-1	-5	-10	-11	-8	-4	1	5	3	5	6	-12	-16
2000	3	2	0	0	4	3	1	-2	-10	-9	-9	-6	-1	3	-0	5	6	-12	-18
2500	1	2	4	-1	3	-0	0	-5	-10	-10	-11	-9	-3	1	1	7	8	-11	-16
3150	2	1	3	-1	2	2	0	-5	-9	-11	-12	-8	-4	1	5	4	6	-14	-18
4000	5	5	6	4	2	0	-0	-6	-9	-10	-12	-9	-6	-1	2	4	8	-12	-17
5000	8	6	8	6	4	0	2	-2	-4	-7	-8	-9	-11	-5	-5	-5	-1	-19	-23
6300	4	3	5	4	3	1	3	-1	-3	-7	-8	-7	-3	0	-0	1	4	-14	-17
8000	6	6	8	4	4	0	0	-5	-8	-10	-8	-5	0	-2	-2	0	2	-15	-18
10000	5	6	7	4	4	3	2	-3	-7	-11	-11	-9	-6	-2	-2	2	-0	-16	-16
OCTAVE																			
31.5																			
63	-3	-5	-4	-2	-1	-4	-2	-1	-1	-1	-1	1	3	3	2	1	-2		-4
125	-5	-6	-3	-3	-2	-4	-0	-0	-0	-1	-1	2	2	3	2	1	-4		
250	-5	-6	-2	-3	-2	-3	1	1	0	-3	-0	2	3	2	-0	0	-5		
500	-6	-3	-3	-3	-3	-7	-2	-4	-2	-5	-2	3	5	4	1	-2	-2		-23
1000	-4	-3	-4	-3	-3	-4	-3	-4	-6	-7	-4	2	6	5	-0	-3	-2	-22	-24
2000	2	1	2	-1	3	1	-0	-4	-10	-10	-9	-6	-1	3	1	6	7	-12	-16
4000	8	6	8	5	4	0	2	-3	-5	-7	-9	-9	-9	-3	-1	-1	3	-16	-21
8000	5	6	7	4	4	2	2	-3	-6	-10	-9	-7	-3	-1	-2	1	1	-16	-17
OVERALL	1	-0	2	-0	-0	-2	0	-1	-1	-3	-2	1	2	2	1	1	-1	-16	-13

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TABLE: 6 DIRECTIVITY INDEX (DB)

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-056
RUN 01
20 OCT 75
PAGE 4

NOISE SOURCE/SUBJECT:
T-38A AIRCRAFT
J85-GE-5A ENGINE
FAR FIELD NOISE

OPERATION:
75% RPM
BOTH ENGINES
FREE FLOW

METEOROLOGY:
TEMP = 11 C
BAR PRESS = .701 M HG
REL HUMID = 46 %

FREQ (HZ)	ANGLE (DEGREES) 0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
1/3 OCTAVE																			
25													3	5	6	6	9		
31.5							-2	-5	-4	-2	-0	0	0	4	4	6	7		
40	-8	-7	-7	-6		-4	-2	-5	-4	-2	-1	-1	1	3	4	6	6		
50		-8	-8	-9	-8	-4	-4	-4	-4	-2	-1	-1	1	4	5	5	4		
63		-8	-8	-8	-6	-4	-4	-4	-4	-2	-1	-1	1	4	5	5	3		
80	-7	-8	-8	-7	-6	-5	-4	-4	-5	-3	-1	0	2	4	5	6	4		
100	-9	-8	-5	-4	-4	-3	-2	-4	-5	-2	-0	0	0	2	5	6	1		
125	-4	-3	-4	-2	-1	0	0	-2	-2	0	1	1	0	1	2	2	-0		
160	-4	-5	-3	-2	-1	1	1	-1	-1	-0	2	1	1	-0	-1	1	-3		
200	-5	-5	-2	-2	-0	0	1	-3	-2	-1	2	1	2	2	-1	2	-1		
250	-5	-5	-4	-3	-3	-2	-2	-5	-5	-2	1	2	4	5	1	0	-0		
315	-4	-3	-2	-2	-2	1	-1	-3	-4	-2	1	2	3	4	2	-3	-1		
400	-1	-1	-0	-1	0	1	1	-1	-3	-0	1	-0	2	2	0	-3	-2		
500	2	4	3	2	2	1	-0	-2	-5	-1	-1	1	2	2	-2	-2	-3		
630	1	2	1	0	1	2	-0	-4	-5	-2	-1	0	3	2	0	-2	-4		
800	1	2	1	-1	-1	-1	-2	-4	-6	-4	-2	0	4	4	3	1	-3		
1000	1	1	-2	-2	-3	-3	-3	-4	-9	-4	-1	3	5	4	2	-1	-8		
1250	0	-1	-3	-2	-2	-1	-3	-4	-9	-5	-1	3	5	3	2	-1	-7		
1600	1	-0	-0	0	-1	1	-1	-3	-6	-4	-2	1	4	2	3	1	-4		
2000	1	1	1	1	1	4	1	-2	-5	-5	-2	-1	2	1	2	1	-5		
2500	2	2	2	3	3	4	1	-1	-3	-6	-4	-2	-1	-1	1	1	-5		
3150	2	2	2	3	2	5	1	-1	-3	-7	-5	-3	-1	-1	2	1	-4		
4000	2	2	3	4	2	5	1	-1	-4	-8	-6	-2	-1	-2	1	0	-3		
5000	9	8	7	6	4	3	-1	-2	-3	-8	-9	-6	-4	-6	-4	-3	-6		
6300	8	9	7	6	5	4	-1	-2	-4	-10	-11	-10	-10	-11	-8	-7	-11		
8000	5	6	4	5	4	5	1	1	-2	-6	-8	-6	-5	-8	-5	-4	-7		
10000	5	7	4	7	4	2	-0	-2	-4	-6	-5	-2	-3	-5	-3	-1	-3		
OCTAVE																			
31.5							-3	-5	-4	-2	-1	-1	1	4	4	6	7		
63		-8	-8	-8	-6	-4	-4	-4	-4	-2	-1	-1	1	4	5	6	4		
125	-4	-5	-3	-3	-1	0	0	-2	-2	-0	1	1	1	1	2	3	-1		
250	-5	-5	-2	-3	-2	-0	-0	-4	-3	-2	1	2	3	3	0	1	-1		
500	0	2	1	0	1	1	1	-2	-4	-1	-0	0	2	2	-0	-3	-3		
1000	1	1	-1	-2	-2	-2	-2	-4	-8	-4	-2	2	5	4	2	-0	-5		
2000	2	1	1	2	1	3	0	-2	-5	-5	-3	-0	2	1	2	1	-5		
4000	5	5	4	4	3	4	1	-1	-3	-8	-6	-3	-2	-3	0	-0	-4		
8000	8	9	7	6	5	4	-0	-1	-4	-9	-10	-9	-9	-10	-7	-6	-10		
OVERALL	-3	-2	-2	-2	-1	0	-0	-3	-3	-1	1	1	2	2	2	2	-0		

TABLE: DIRECTIVITY INDEX (DB)

6

NOISE SOURCE/SUBJECT:
T-38A AIRCRAFT
J85-GE-5A ENGINE
FAR FIELD NOISE

OPERATION:
TRIM CHECK
94% RPM
BOTH ENGINES
FREE FLOW

METEOROLOGY:
TEMP = 11 C
BAR PRESS = .701 M HG
REL HUMID = 46 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-056
RUN 02
20 OCT 75
PAGE 4

FREQ (HZ)	ANGLE (DEGREES) 0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
1/3 OCTAVE																			
25	-12		-12	-10	-11	-9	-9	-7	-7	-6	-6	-5	-1	3	7	5	7	7	
31.5	-14	-12	-11	-11	-11	-9	-9	-10	-8	-8	-6	-3	-1	2	6	6	8	5	
40	-12	-13	-11	-11	-11	-10	-9	-8	-7	-7	-5	-3	-1	4	5	8	6	3	
50	-13	-14	-13	-14	-14	-11	-10	-9	-8	-8	-6	-5	-1	3	7	7	6	0	
63	-15	-15	-16	-14	-13	-13	-11	-10	-9	-10	-7	-5	-2	3	6	9	5	-3	
80	-15	-17	-15	-14	-13	-13	-12	-11	-10	-9	-6	-5	-2	3	8	9	4	-7	
100	-15	-15	-15	-14	-14	-12	-11	-10	-10	-9	-5	-5	-1	3	8	8	3	-12	
125	-16	-15	-15	-14	-13	-13	-12	-11	-10	-7	-5	-4	0	4	8	7	1	-18	
160	-14	-15	-13	-13	-13	-12	-12	-9	-8	-7	-5	-3	0	3	7	9	2	-19	
200	-13	-13	-12	-12	-10	-10	-8	-8	-7	-6	-4	-2	1	5	5	8	4	-16	
250	-11	-10	-10	-9	-9	-8	-8	-7	-6	-5	-1	-1	2	5	4	7	4	-17	
315	-12	-12	-9	-9	-8	-8	-8	-8	-6	-6	-3	-3	-1	6	6	4	5	-21	
400	-12	-10	-9	-10	-9	-9	-9	-9	-8	-7	-5	-4	-0	4	8	5	7	-18	
500	-9	-8	-7	-8	-7	-7	-9	-7	-7	-7	-4	-2	0	5	4	7	6	-18	
630	-10	-8	-7	-7	-7	-7	-8	-7	-7	-7	-3	-2	1	4	0	7	5	-20	
800	-9	-8	-8	-8	-7	-6	-8	-7	-7	-7	-3	-0	3	5	6	5	3	-20	
1000	-8	-8	-9	-9	-8	-8	-8	-8	-7	-6	-2	1	4	6	5	4	1	-20	
1250	-9	-8	-10	-10	-8	-8	-8	-7	-7	-5	-1	1	5	6	4	4	0	-21	
1600	-9	-9	-10	-9	-8	-8	-7	-6	-6	-4	0	2	4	5	3	3	-2	-24	
2000	-8	-8	-9	-9	-7	-6	-5	-5	-4	-4	1	3	4	5	3	1	-4	-25	
2500	-8	-8	-8	-7	-6	-5	-5	-3	-3	-3	1	3	5	5	1	-0	-5	-27	
3150	-8	-8	-8	-7	-7	-5	-4	-3	-3	-3	2	3	4	5	1	-1	-6	-29	
4000	-8	-8	-7	-7	-6	-4	-4	-3	-3	-3	3	3	4	4	-0	-1	-6	-29	
5000	-7	-8	-6	-6	-6	-4	-3	-2	-2	-2	3	3	4	2	-1	-1	-6	-28	
6300	-7	-8	-6	-6	-5	-4	-3	-2	-2	-2	3	3	4	2	-1	-2	-6	-29	
8000	-7	-6	-4	-5	-4	-3	-2	-2	-1	-2	2	3	4	2	-1	-1	-5	-27	
10000	-6	-7	-5	-5	-4	-4	-2	-2	-1	-2	2	4	4	1	-1	-1	-4	-25	
OCTAVE																			
31.5	-13	-14	-11	-11	-11	-9	-9	-8	-7	-7	-5	-3	-1	3	6	7	7	5	
63	-15	-16	-15	-14	-13	-12	-11	-10	-9	-9	-6	-5	-2	3	7	9	5	-3	
125	-15	-15	-14	-13	-13	-12	-12	-10	-9	-7	-5	-4	0	4	8	8	2	-16	
250	-12	-11	-10	-10	-9	-8	-8	-8	-6	-6	-2	-2	1	6	5	7	4	-17	
500	-11	-9	-8	-8	-8	-7	-9	-8	-8	-7	-4	-3	0	4	7	6	6	-18	
1000	-9	-8	-9	-9	-8	-7	-8	-8	-7	-6	-2	1	4	6	5	4	2	-20	
2000	-9	-8	-9	-8	-7	-6	-6	-5	-5	-4	1	3	4	5	2	2	-3	-25	
4000	-8	-8	-7	-7	-6	-4	-4	-3	-3	-2	2	3	4	4	1	-1	-6	-29	
8000	-7	-7	-5	-6	-5	-4	-3	-2	-2	-2	3	3	4	2	-1	-2	-5	-28	
OVERALL	-12	-11	-10	-10	-9	-9	-9	-8	-7	-6	-3	-2	1	5	6	7	4	-10	

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TABLE: DIRECTIVITY INDEX (DB)

6

NOISE SOURCE/SUBJECT:
T-38A AIRCRAFT
J85-GE-5A ENGINE
FAR FIELD NOISE

OPERATION:
MILITARY POWER
100% RPM
SINGLE ENGINE
FREE FLOW

METEOROLOGY:
TEMP = 31 C
BAR PRESS = .760 M HG
REL HUMID = 63 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-047
RUN 03
20 OCT 75
PAGE 4

FREQ (HZ)	ANGLE (DEGREES) 0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
1/3 OCTAVE																			
25						-9	-7	-9	-5	-5	-6	-1	1	5	5	3	6	8	6
31.5	-11	-11	-11	-12	-9	-11	-8	-7	-5	-4	-4	-4	0	4	7	6	6	4	5
40	-12	-12	-10	-12	-11	-11	-8	-6	-7	-5	-6	-2	1	4	7	8	2	-0	3
50	-14	-12	-14	-12	-11	-12	-11	-9	-7	-7	-7	-3	-0	4	8	8	-0	-3	-5
63	-15	-14	-14	-12	-10	-13	-12	-11	-8	-8	-6	-3	1	5	8	8	-2	-12	-10
80	-15	-16	-14	-13	-14	-13	-11	-11	-9	-8	-7	-4	1	6	7	8	-6	-17	-15
100	-16	-17	-15	-15	-15	-14	-13	-10	-10	-8	-8	-5	0	6	9	6	-8	-20	-23
125	-19	-17	-16	-16	-16	-14	-14	-11	-10	-9	-6	-4	-0	5	10	4	-9	-20	-24
160	-18	-17	-15	-16	-15	-15	-13	-12	-10	-8	-6	-4	1	4	10	4	-10	-23	-26
200	-18	-15	-15	-14	-14	-14	-11	-9	-9	-8	-6	-2	3	6	8	3	-13	-24	-25
250	-18	-16	-15	-15	-14	-13	-12	-11	-9	-8	-5	-3	4	9	4	2	-13	-24	-26
315	-21	-18	-18	-17	-14	-14	-14	-13	-10	-8	-6	-3	2	9	5	0	-15	-22	-28
400	-21	-16	-15	-16	-14	-15	-13	-12	-9	-6	-5	-2	4	7	7	0	-17	-24	-30
500	-19	-15	-14	-15	-13	-15	-12	-10	-9	-7	-5	-2	3	9	5	-3	-18	-26	-31
630	-18	-12	-14	-11	-12	-13	-8	-10	-9	-7	-3	-1	4	8	4	-3	-16	-22	-29
800	-21	-18	-14	-15	-13	-14	-13	-10	-8	-5	-3	1	4	8	5	-6	-18	-26	-33
1000	-17	-13	-11	-11	-11	-11	-8	-8	-7	-5	-2	1	4	7	6	-7	-16	-27	-33
1250	-16	-13	-11	-10	-9	-9	-8	-6	-4	-3	-1	3	5	5	6	-8	-18	-27	-32
1600	-15	-12	-10	-9	-8	-6	-5	-6	-3	-3	-0	2	6	1	6	-9	-19	-28	-32
2000	-15	-11	-8	-8	-7	-6	-5	-5	-2	-3	1	3	6	-1	4	-10	-19	-28	-33
2500	-15	-12	-9	-8	-7	-6	-5	-4	-1	-3	1	3	7	1	2	-9	-20	-29	-34
3150	-15	-12	-8	-7	-7	-5	-4	-3	-0	-3	1	1	6	3	0	-11	-21	-29	-34
4000	-10	-11	-8	-7	-7	-5	-3	-3	-0	-3	2	1	6	4	-2	-11	-21	-30	-34
5000	-15	-14	-9	-8	-8	-5	-3	-2	0	-2	1	1	7	1	-1	-11	-21	-30	-35
6300	-13	-13	-9	-7	-7	-4	-2	-2	1	-2	1	0	7	1	-0	-11	-21	-29	-32
8000	-5	-12	-10	-7	-8	-4	-3	-4	0	-2	-0	0	7	1	-1	-10	-21	-30	-34
10000	-12	-16	-12	-10	-10	-6	-5	-5	-1	-0	1	3	7	0	-2	-12	-22	-31	-37
OCTAVE																			
31.5	-13	-12	-11	-13	-11	-11	-8	-7	-6	-5	-6	-3	1	4	7	7	4	3	4
63	-15	-15	-14	-12	-12	-13	-11	-10	-9	-8	-7	-3	1	5	7	8	-3	-10	-10
125	-18	-17	-15	-16	-15	-15	-13	-11	-10	-8	-6	-4	0	5	10	4	-10	-22	-25
250	-19	-16	-16	-15	-14	-14	-12	-11	-10	-8	-6	-3	3	9	6	2	-14	-23	-27
500	-19	-15	-14	-14	-13	-14	-11	-10	-9	-7	-5	-2	4	8	6	-1	-17	-24	-30
1000	-19	-15	-12	-12	-11	-12	-10	-8	-7	-4	-2	1	4	7	5	-6	-18	-26	-33
2000	-15	-12	-9	-8	-8	-6	-5	-5	-2	-3	0	3	6	1	5	-9	-19	-28	-33
4000	-12	-12	-9	-7	-7	-5	-3	-3	-0	-3	2	1	6	3	-1	-11	-21	-30	-34
8000	-8	-13	-10	-7	-8	-4	-3	-3	0	-2	1	1	7	1	-1	-11	-21	-30	-33
OVERALL	-18	-15	-13	-13	-12	-12	-10	-9	-7	-6	-4	-1	4	7	6	0	-13	-20	-21

TABLE: DIRECTIVITY INDEX (DB)

6

NOISE SOURCE/SUBJECT:
T-38A AIRCRAFT
J85-GE-5A ENGINE
FAR FIELD NOISE

OPERATION:
MAXIMUM POWER
100% RPM AND AFTERBURNER
SINGLE ENGINE
FREE FLOW

METEOROLOGY:
TEMP = 31 C
BAR PRESS = .760 M HG
REL HUMID = 63 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-047
RUN 04
20 OCT 75
PAGE 4

FREQ (HZ)	ANGLE (DEGREES) 0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
1/3 OCTAVE																			
25	-7	-6	-7	-7	-8	-6	-4	-6	-7	-5	-5	-3	-2	4	6	7	4	2	1
31.5	-8	-8	-8	-9	-7	-7	-6	-6	-7	-6	-5	-4	-0	5	7	7	2	-2	-5
40	-9	-9	-8	-10	-9	-7	-7	-6	-6	-8	-4	-3	1	5	7	7	-2	-8	-14
50	-12	-10	-12	-11	-9	-8	-9	-8	-10	-7	-6	-4	2	5	8	5	-8	-15	-22
63	-14	-14	-14	-12	-11	-10	-9	-10	-9	-8	-7	-4	2	6	8	6	-12	-19	-26
80	-14	-15	-14	-14	-14	-12	-10	-10	-10	-8	-7	-3	3	6	8	5	-17	-21	-25
100	-16	-17	-16	-15	-16	-12	-12	-11	-10	-9	-8	-4	3	8	7	4	-21	-25	-28
125	-18	-19	-17	-17	-16	-15	-13	-12	-12	-10	-6	-3	4	8	7	3	-24	-27	-30
160	-18	-18	-17	-16	-15	-14	-13	-10	-12	-9	-6	-3	3	7	7	4	-24	-28	-31
200	-17	-17	-16	-16	-15	-13	-12	-9	-10	-9	-6	-1	5	6	6	5	-23	-27	-31
250	-19	-18	-17	-17	-15	-13	-13	-10	-12	-9	-6	-0	7	4	4	3	-25	-29	-33
315	-22	-21	-19	-17	-15	-15	-14	-13	-12	-9	-8	-2	6	8	3	1	-26	-31	-35
400	-23	-22	-20	-18	-16	-16	-15	-14	-12	-9	-7	-1	4	8	6	-1	-31	-34	-38
500	-23	-22	-21	-20	-16	-16	-14	-12	-13	-9	-6	-2	7	7	6	-1	-33	-36	-39
630	-23	-23	-21	-20	-16	-17	-14	-11	-14	-11	-4	-2	7	7	4	-1	-32	-36	-39
800	-28	-25	-22	-19	-17	-16	-15	-13	-12	-8	-6	1	2	9	4	-2	-34	-37	-40
1000	-21	-20	-23	-20	-16	-15	-14	-9	-12	-7	-2	1	6	7	3	-1	-33	-36	-39
1250	-24	-21	-20	-18	-15	-13	-14	-8	-9	-4	-3	4	4	7	2	-3	-32	-35	-37
1600	-21	-20	-18	-16	-13	-11	-12	-10	-10	-5	-5	2	6	8	2	-1	-33	-34	-36
2000	-20	-19	-18	-17	-13	-12	-13	-8	-8	-2	-7	3	5	8	1	-3	-31	-33	-35
2500	-18	-16	-15	-14	-11	-10	-11	-5	-7	-2	-4	4	6	7	2	-6	-32	-32	-33
3150	-21	-18	-18	-15	-12	-11	-14	-6	-7	-3	-1	1	6	7	3	-7	-32	-33	-34
4000	-14	-11	-13	-13	-12	-10	-12	-6	-8	-3	-0	2	4	8	3	-8	-33	-33	-34
5000	-20	-16	-17	-16	-12	-10	-13	-7	-9	-5	-2	3	4	8	3	-8	-34	-35	-36
6300	-17	-14	-15	-13	-11	-9	-12	-6	-9	-6	-4	3	4	8	1	-8	-31	-33	-35
8000	-9	-6	-6	-6	-9	-9	-9	-7	-9	-8	-4	3	3	9	-0	-10	-33	-35	-37
10000	-18	-15	-16	-13	-14	-11	-13	-9	-11	-8	-4	2	3	9	0	-12	-36	-38	-40
OCTAVE																			
31.5	-9	-9	-8	-9	-8	-7	-6	-6	-7	-7	-4	-3	0	5	7	7	1	-3	-6
63	-14	-13	-14	-13	-12	-10	-10	-10	-10	-8	-7	-4	3	6	8	5	-13	-19	-25
125	-17	-18	-17	-16	-15	-14	-13	-11	-11	-9	-6	-3	3	8	7	4	-23	-27	-30
250	-19	-19	-17	-16	-15	-14	-13	-11	-12	-9	-7	-1	6	7	5	3	-25	-29	-33
500	-23	-22	-21	-19	-16	-16	-14	-12	-13	-9	-6	-2	6	7	5	-1	-32	-36	-39
1000	-24	-22	-22	-19	-16	-15	-15	-10	-11	-7	-4	1	4	8	4	-2	-34	-36	-39
2000	-20	-19	-17	-16	-13	-11	-12	-8	-8	-3	-5	2	6	8	2	-2	-32	-33	-35
4000	-17	-14	-15	-15	-12	-10	-13	-6	-8	-3	-1	2	5	7	3	-7	-33	-34	-34
8000	-12	-9	-9	-9	-11	-9	-11	-7	-9	-7	-4	3	4	9	1	-9	-33	-34	-36
OVERALL	-20	-20	-19	-17	-15	-15	-14	-11	-12	-8	-6	-1	6	7	5	1	-23	-26	-30

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TABLE: 6 DIRECTIVITY INDEX (DB)

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-056
RUN 03
20 OCT 75
PAGE 4

NOISE SOURCE/SUBJECT:
T-38A AIRCRAFT
J85-GE-5A ENGINE
FAR FIELD NOISE

OPERATION:
MILITARY POWER
100% RPM
BOTH ENGINES
FREE FLOW

METEOROLOGY:
TEMP = 11 C
BAR PRESS = .701 M HG
REL HUMID = 46 %

FREQ (HZ)	ANGLE (DEGREES) 0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
1/3 OCTAVE																			
25	-14	-14	-12	-10	-9	-11	-9	-10	-7	-6	-7	-4	-1	2	6	8	7	4	
31.5	-13	-12	-13	-13	-12	-11	-10	-9	-8	-7	-7	-5	-2	4	7	6	8	3	
40	-14	-12	-14	-14	-12	-12	-11	-9	-9	-9	-7	-5	-2	4	6	9	6	0	
50	-15	-14	-15	-14	-13	-13	-11	-11	-8	-8	-7	-6	-2	4	8	8	5	-4	
63	-16	-16	-16	-14	-14	-13	-12	-11	-10	-10	-8	-5	-2	4	7	9	3	-9	
80	-16	-16	-15	-15	-15	-13	-12	-12	-11	-9	-8	-6	-2	5	8	8	4	-12	
100	-17	-16	-16	-16	-16	-14	-13	-12	-10	-9	-7	-5	-2	4	8	8	3	-17	
125	-16	-16	-16	-16	-15	-14	-14	-13	-10	-7	-6	-5	-1	4	8	7	2	-16	
160	-15	-15	-14	-13	-14	-13	-12	-10	-9	-7	-5	-4	-1	4	8	8	1	-21	
200	-13	-13	-11	-12	-12	-11	-10	-10	-7	-5	-4	-1	2	5	6	8	1	-20	
250	-12	-13	-12	-11	-11	-10	-10	-9	-7	-6	-4	-2	2	7	3	7	1	-20	
315	-11	-12	-10	-11	-10	-9	-9	-9	-7	-6	-4	-2	1	8	5	5	1	-20	
400	-12	-11	-11	-11	-11	-10	-11	-10	-10	-7	-5	-3	0	6	8	5	-1	-20	
500	-11	-10	-10	-10	-9	-9	-11	-10	-9	-8	-7	-4	-0	6	7	7	0	-19	
630	-11	-10	-10	-9	-9	-8	-10	-9	-9	-8	-6	-3	1	4	8	7	-1	-20	
800	-11	-10	-10	-9	-10	-10	-11	-10	-10	-7	-6	-2	2	5	7	7	-1	-21	
1000	-11	-9	-11	-12	-12	-12	-12	-11	-10	-8	-5	-1	3	5	7	7	-3	-23	
1250	-12	-11	-13	-12	-11	-12	-11	-10	-8	-7	-4	0	3	5	7	6	-1	-23	
1600	-14	-13	-13	-11	-11	-11	-9	-9	-7	-5	-3	-0	3	5	6	6	-0	-24	
2000	-14	-11	-12	-9	-9	-9	-8	-7	-5	-4	-2	0	2	5	6	6	0	-25	
2500	-14	-11	-11	-8	-8	-8	-7	-5	-4	-3	-1	2	3	4	6	5	-1	-26	
3150	-14	-11	-10	-9	-9	-8	-7	-5	-4	-2	-1	2	2	4	6	5	-3	-28	
4000	-14	-10	-9	-8	-9	-8	-7	-5	-4	-2	-1	2	3	4	6	5	-4	-28	
5000	-13	-10	-10	-9	-9	-8	-7	-4	-3	-2	-1	1	3	3	5	6	-4	-29	
6300	-14	-11	-10	-10	-10	-8	-7	-5	-4	-2	-1	1	2	2	6	6	-6	-31	
8000	-15	-12	-10	-10	-10	-9	-7	-5	-4	-2	-1	1	3	2	6	7	-6	-32	
10000	-15	-12	-10	-10	-11	-9	-7	-6	-5	-3	-1	1	3	3	6	6	-6	-32	
OCTAVE																			
31.5	-14	-12	-13	-13	-12	-12	-10	-9	-8	-8	-7	-5	-2	4	6	8	7	2	
63	-16	-15	-15	-15	-14	-13	-12	-11	-10	-9	-8	-6	-2	4	8	8	4	-8	
125	-16	-16	-15	-15	-15	-14	-13	-12	-10	-7	-6	-4	-1	4	8	7	2	-18	
250	-12	-13	-11	-11	-11	-10	-10	-9	-7	-6	-4	-2	2	7	5	7	1	-20	
500	-12	-10	-11	-10	-10	-9	-11	-10	-9	-7	-6	-3	0	6	8	6	-0	-20	
1000	-11	-10	-11	-11	-11	-11	-11	-10	-9	-7	-5	-1	3	5	7	7	-2	-22	
2000	-14	-12	-12	-10	-9	-9	-8	-7	-5	-4	-2	0	3	4	6	6	-0	-25	
4000	-14	-10	-10	-9	-9	-8	-7	-5	-4	-2	-1	2	3	4	6	5	-4	-28	
8000	-15	-11	-10	-10	-10	-8	-7	-5	-4	-2	-1	1	3	2	6	6	-6	-31	
OVERALL	-13	-12	-12	-11	-11	-11	-11	-10	-8	-7	-5	-2	1	5	7	7	1	-14	

TABLE: DIRECTIVITY INDEX (DB)

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NOISE SOURCE/SUBJECT:
T-38A AIRCRAFT
J85-GE-5A ENGINE
FAR FIELD NOISE

OPERATION:
MAXIMUM POWER
100% RPM AND AFTERBURNER
BOTH ENGINES
FREE FLOW

METEOROLOGY:
TEMP = 11 C
BAR PRESS = .701 M HG
REL HUMID = 46 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-056
RUN 04
20 OCT 75
PAGE 4

FREQ (HZ)	ANGLE (DEGREES) 0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
1/3 OCTAVE																			
25	-9	-10	-11	-9	-10	-7	-7	-10	-8	-6	-8	-5	-1	5	6	7	6		
31.5	-10	-11	-9	-10	-11	-9	-9	-10	-8	-9	-7	-4	-1	4	8	6	5		
40	-13	-11	-12	-12	-12	-12	-10	-9	-10	-9	-8	-5	1	4	8	7	4		
50	-15	-15	-14	-13	-13	-12	-10	-10	-9	-9	-7	-4	1	5	9	6	0		
63	-16	-15	-14	-13	-13	-14	-11	-10	-9	-9	-6	-4	2	7	8	5	-0		
80	-17	-16	-16	-15	-14	-14	-13	-12	-11	-9	-8	-3	3	7	7	4	-0		
100	-17	-17	-17	-16	-16	-16	-13	-13	-12	-9	-8	-3	3	8	5	4	-3		
125	-17	-18	-18	-16	-17	-16	-15	-14	-12	-10	-8	-4	2	8	7	5	-1		
160	-16	-17	-16	-14	-14	-14	-14	-13	-10	-8	-7	-4	1	8	6	5	-2		
200	-15	-15	-13	-13	-12	-13	-11	-10	-8	-7	-4	-0	2	6	6	6	-2		
250	-14	-13	-11	-11	-11	-11	-10	-10	-8	-6	-4	2	5	5	4	6	-0		
315	-12	-11	-10	-9	-9	-9	-9	-9	-8	-5	-2	0	5	7	3	3	-2		
400	-14	-12	-11	-11	-11	-10	-11	-9	-7	-5	-2	0	4	6	5	2	-2		
500	-13	-10	-10	-10	-10	-8	-9	-8	-8	-5	-2	1	5	6	6	2	-4		
630	-14	-11	-9	-10	-10	-9	-11	-9	-8	-7	-2	1	4	7	5	1	-6		
800	-15	-13	-12	-12	-12	-11	-12	-12	-11	-8	-4	1	5	8	4	0	-9		
1000	-14	-12	-12	-13	-11	-11	-12	-10	-10	-7	-3	2	5	7	5	1	-8		
1250	-16	-14	-15	-15	-13	-12	-13	-11	-9	-5	-3	2	5	7	4	-1	-9		
1600	-16	-13	-15	-15	-12	-12	-11	-9	-7	-4	-2	2	5	7	4	-1	-10		
2000	-15	-11	-14	-14	-11	-11	-9	-8	-6	-4	-1	1	5	7	3	-2	-11		
2500	-16	-11	-14	-13	-11	-10	-8	-7	-5	-3	-1	1	5	7	3	-2	-12		
3150	-16	-10	-14	-12	-11	-10	-9	-7	-6	-2	-1	1	4	7	3	-2	-13		
4000	-18	-10	-14	-13	-11	-10	-8	-7	-6	-2	0	1	5	7	3	-3	-13		
5000	-18	-12	-15	-13	-12	-10	-10	-7	-6	-2	0	1	5	7	3	-3	-13		
6300	-19	-13	-16	-14	-13	-11	-10	-8	-7	-3	-1	-0	5	8	3	-4	-16		
8000	-21	-15	-18	-16	-15	-13	-12	-10	-8	-5	-3	-1	4	9	3	-6	-19		
10000	-23	-18	-20	-19	-17	-15	-13	-12	-11	-7	-6	-2	3	9	3	-5	-21		
OCTAVE																			
31.5	-11	-11	-11	-10	-11	-10	-9	-9	-9	-8	-7	-5	0	4	8	7	5		
63	-16	-16	-15	-14	-13	-13	-12	-11	-10	-9	-7	-3	2	7	8	5	-0		
125	-17	-17	-17	-15	-16	-15	-14	-13	-11	-10	-7	-4	2	8	6	5	-2		
250	-14	-13	-11	-11	-10	-11	-10	-10	-8	-6	-3	1	4	6	5	6	-1		
500	-13	-11	-10	-10	-10	-9	-10	-9	-8	-5	-2	1	4	6	5	2	-3		
1000	-15	-13	-13	-13	-12	-11	-13	-11	-10	-7	-3	1	5	7	4	0	-9		
2000	-16	-12	-14	-14	-12	-11	-9	-8	-6	-4	-1	2	5	7	4	-1	-10		
4000	-17	-10	-14	-12	-11	-10	-9	-7	-6	-2	-0	1	5	7	3	-2	-13		
8000	-20	-15	-17	-16	-14	-13	-11	-9	-8	-4	-3	-1	4	9	3	-5	-18		
OVERALL	-15	-14	-13	-13	-13	-12	-12	-11	-9	-7	-5	-1	3	7	6	4	-2		

BEST AVAILABLE COPY

FIGURE 5 OVERALL SOUND PRESSURE LEVEL (OASPL) EQUAL LEVEL CONTOURS (DB)

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-047
RUN 01
20 OCT 75
PAGE 13

NOISE SOURCE/SUBJECT:
T-38A AIRCRAFT
J85-GE-5A ENGINE
FAR FIELD NOISE

OPERATION:
IDLE
48% RPM
BOTH ENGINES
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

POINT	DB
A	45
B	50
C	55
D	60
E	65
F	70
G	75
H	80
I	85

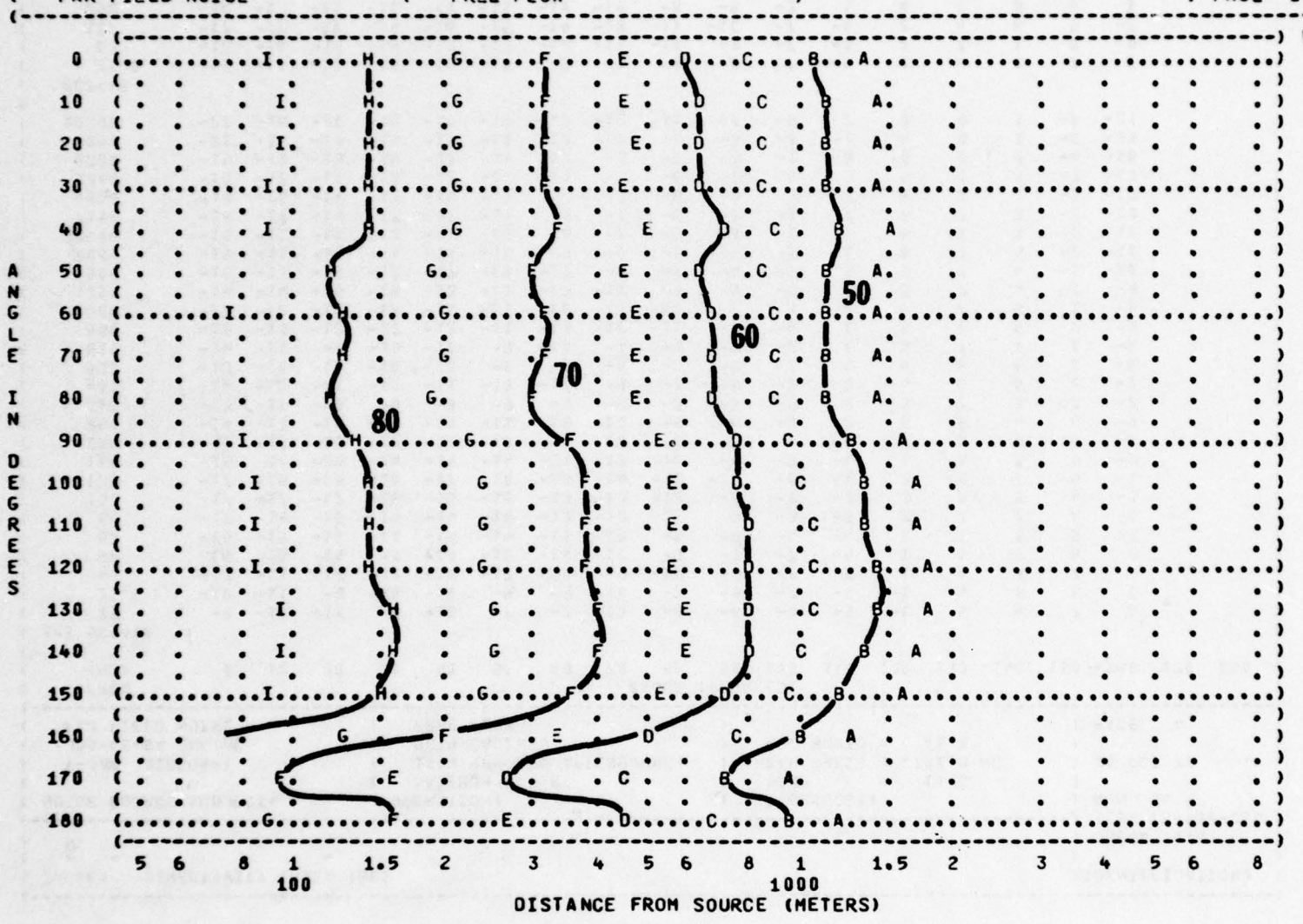


FIGURE 5 OVERALL SOUND PRESSURE LEVEL (OASPL) EQUAL LEVEL CONTOURS (DB)

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-047
RUN 02
20 OCT 75
PAGE 13

NOISE SOURCE/SUBJECT:
T-38A AIRCRAFT
J85-GE-5A ENGINE
FAR FIELD NOISE

OPERATION:
70% RPM
BOTH ENGINES
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

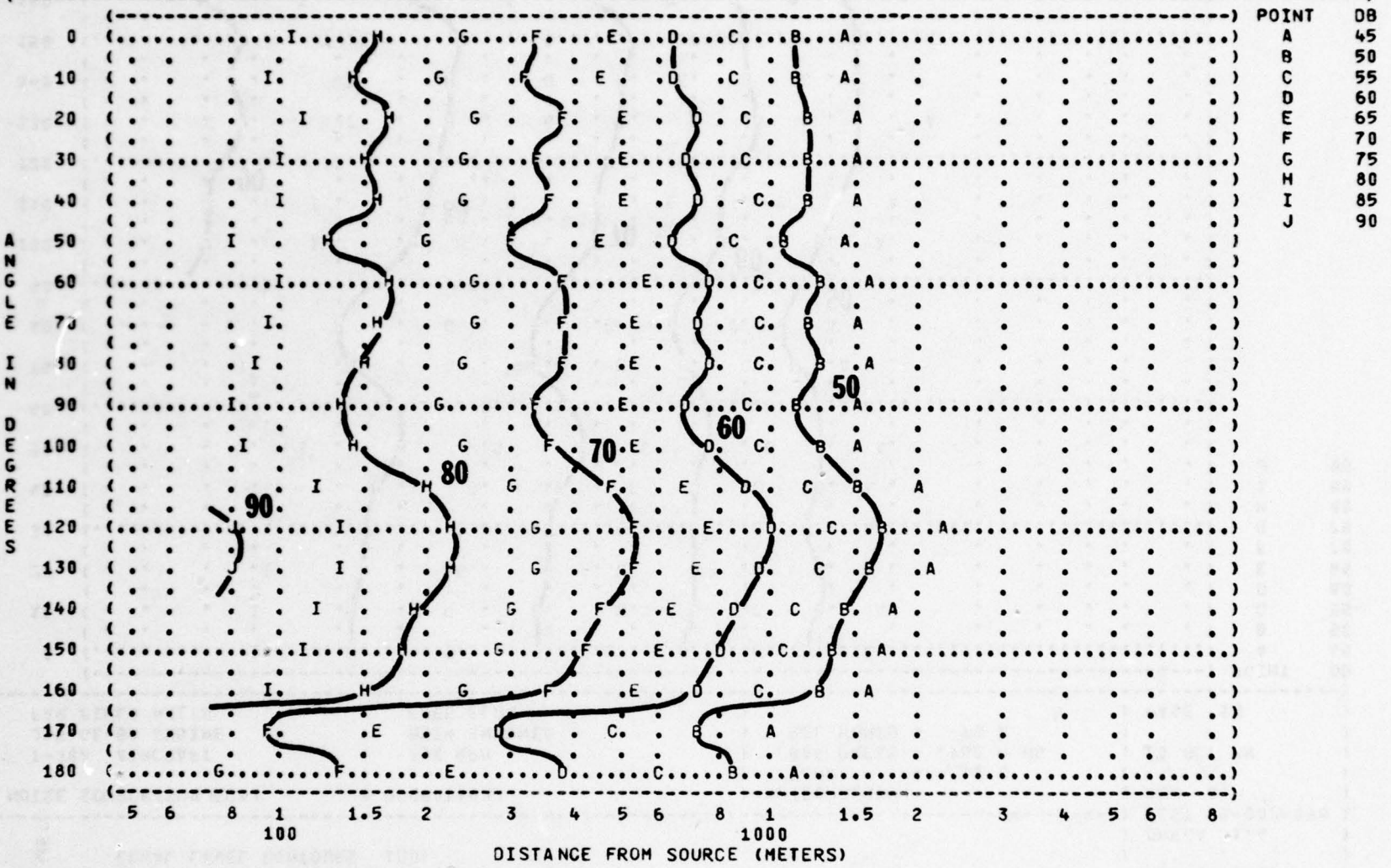


FIGURE: 5 OVERALL SOUND PRESSURE LEVEL (OASPL) EQUAL LEVEL CONTOURS (DB)

NOISE SOURCE/SUBJECT:
T-38A AIRCRAFT
J85-GE-5A ENGINE
FAR FIELD NOISE

OPERATION:
75% RPM
BOTH ENGINES
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-056
RUN 01
20 OCT 75
PAGE 13

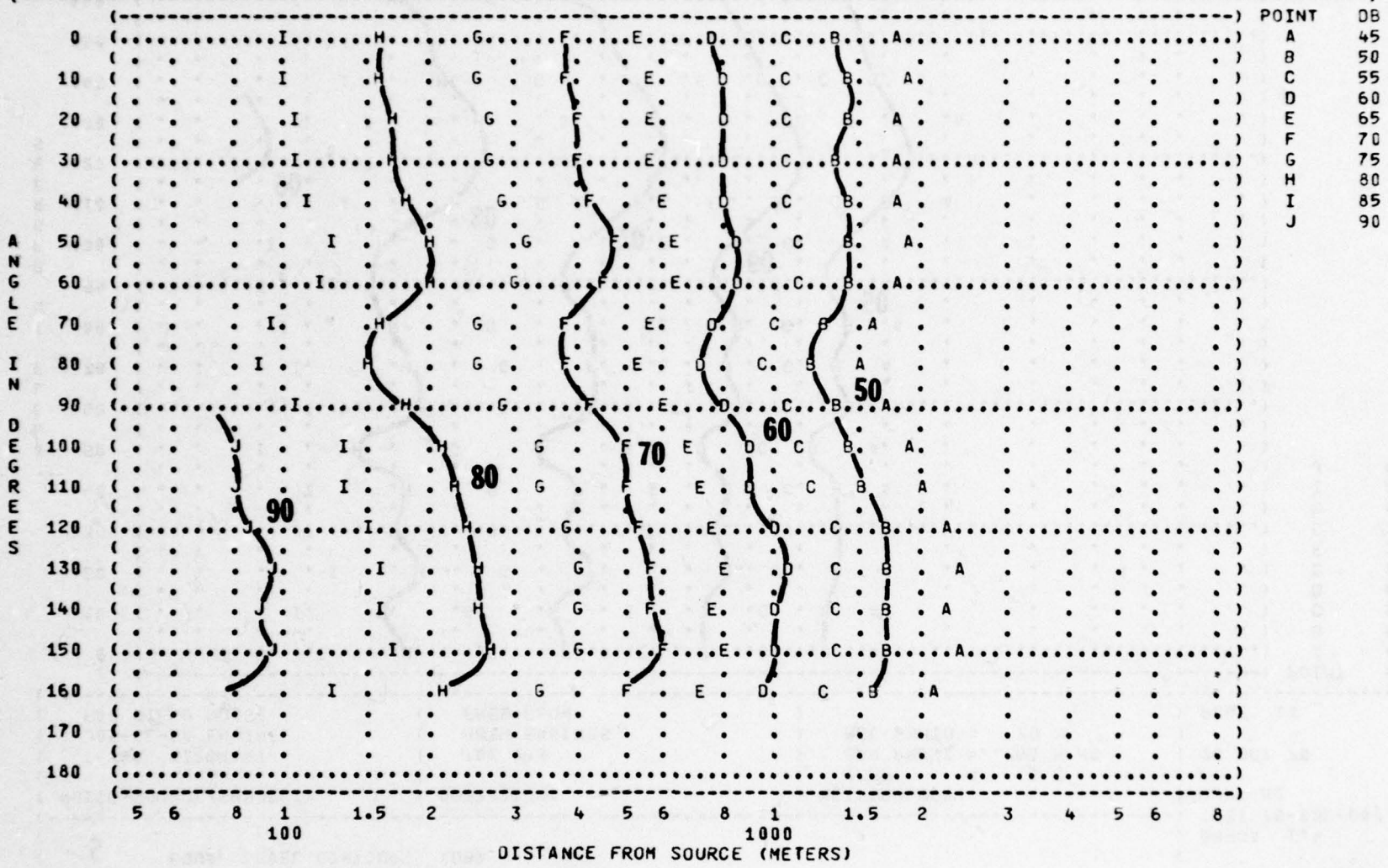


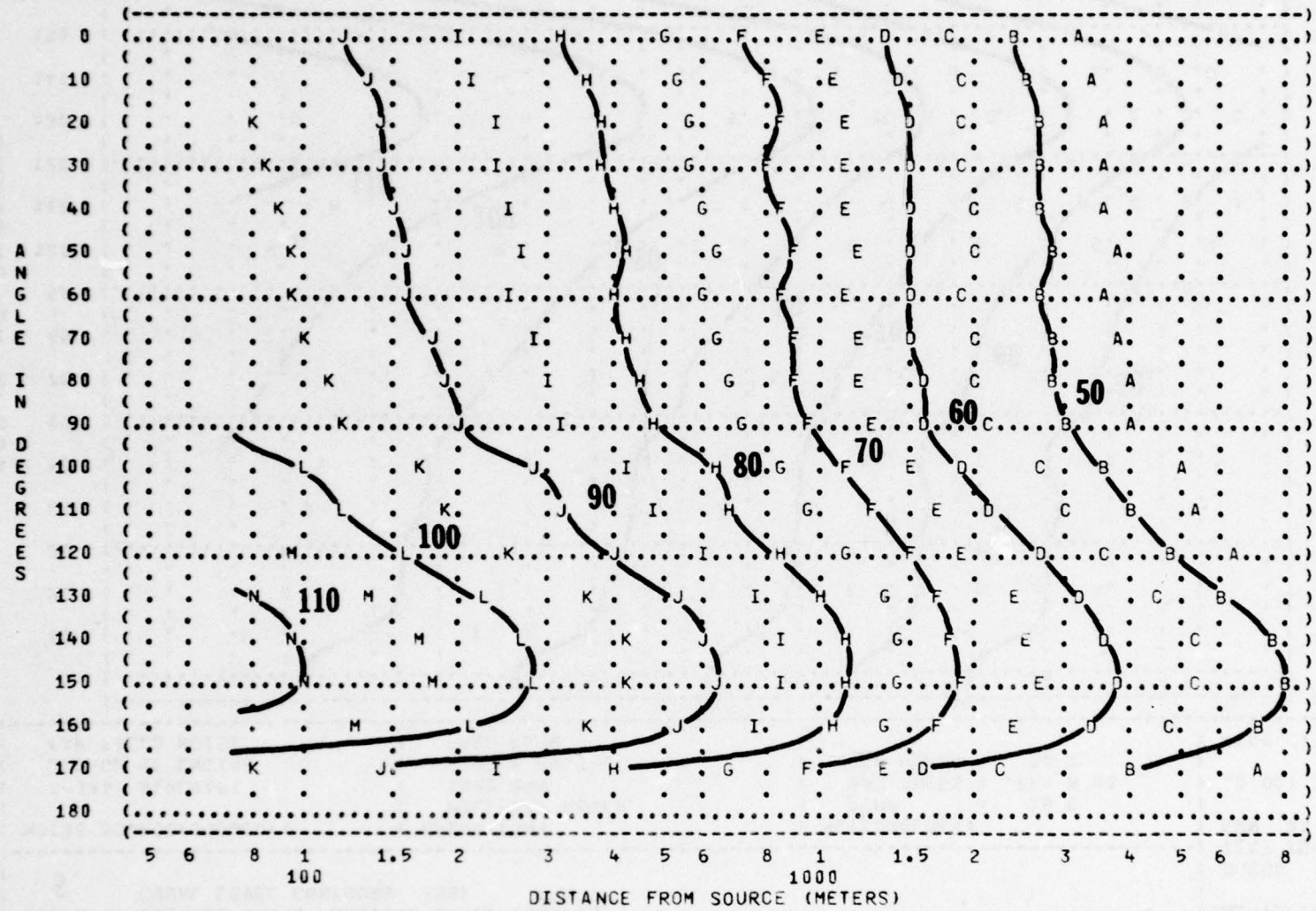
FIGURE: 5 OVERALL SOUND PRESSURE LEVEL (OASPL) EQUAL LEVEL CONTOURS (DB)

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-056
RUN 02
20 OCT 75
PAGE 13

NOISE SOURCE/SUBJECT:
T-38A AIRCRAFT
J85-GE-5A ENGINE
FAR FIELD NOISE

OPERATION:
TRIM CHECK
94% RPM
BOTH ENGINES
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %



POINT	DB
A	45
B	50
C	55
D	60
E	65
F	70
G	75
H	80
I	85
J	90
K	95
L	100
M	105
N	110

FIGURE 5: OVERALL SOUND PRESSURE LEVEL (OASPL) EQUAL LEVEL CONTOURS (DB)

NOISE SOURCE/SUBJECT:
T-38A AIRCRAFT
J85-GE-5A ENGINE
FAR FIELD NOISE

OPERATION:
MILITARY POWER
100% RPM
SINGLE ENGINE
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-047
RUN 03
20 OCT 75
PAGE 13

POINT	DB
A	45
B	50
C	55
D	60
E	65
F	70
G	75
H	80
I	85
J	90
K	95
L	100
M	105
N	110
O	115

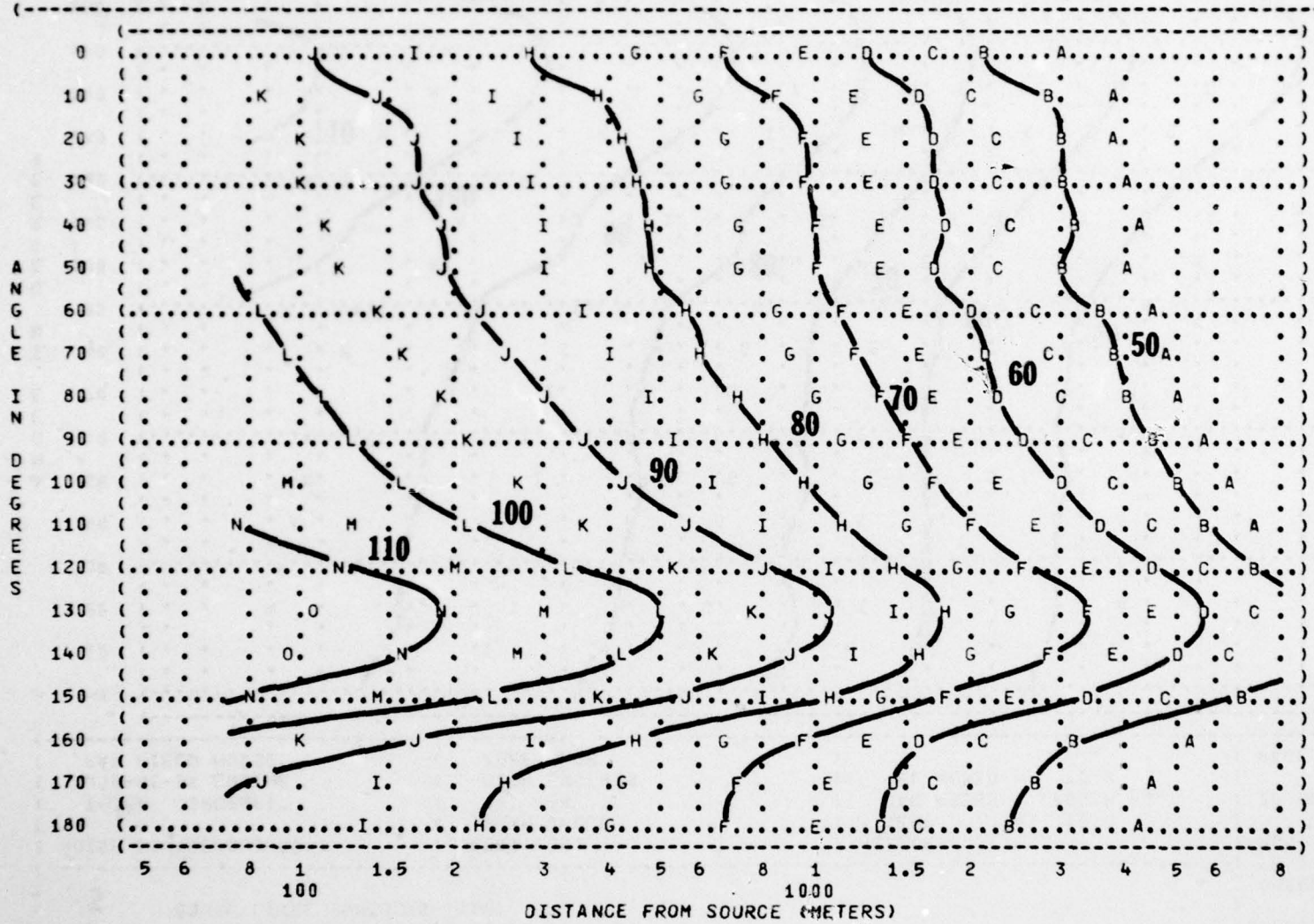


FIGURE 5 OVERALL SOUND PRESSURE LEVEL (OASPL) EQUAL LEVEL CONTOURS (DB)

NOISE SOURCE/SUBJECT:
T-38A AIRCRAFT
J85-GE-5A ENGINE
FAR FIELD NOISE

OPERATION:
MAXIMUM POWER
100% RPM AND AFTERBURNER
SINGLE ENGINE
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-047
RUN 04
20 OCT 75
PAGE 13

POINT	DB
A	45
B	50
C	55
D	60
E	65
F	70
G	75
H	80
I	85
J	90
K	95
L	100
M	105
N	110
O	115
P	120
Q	125

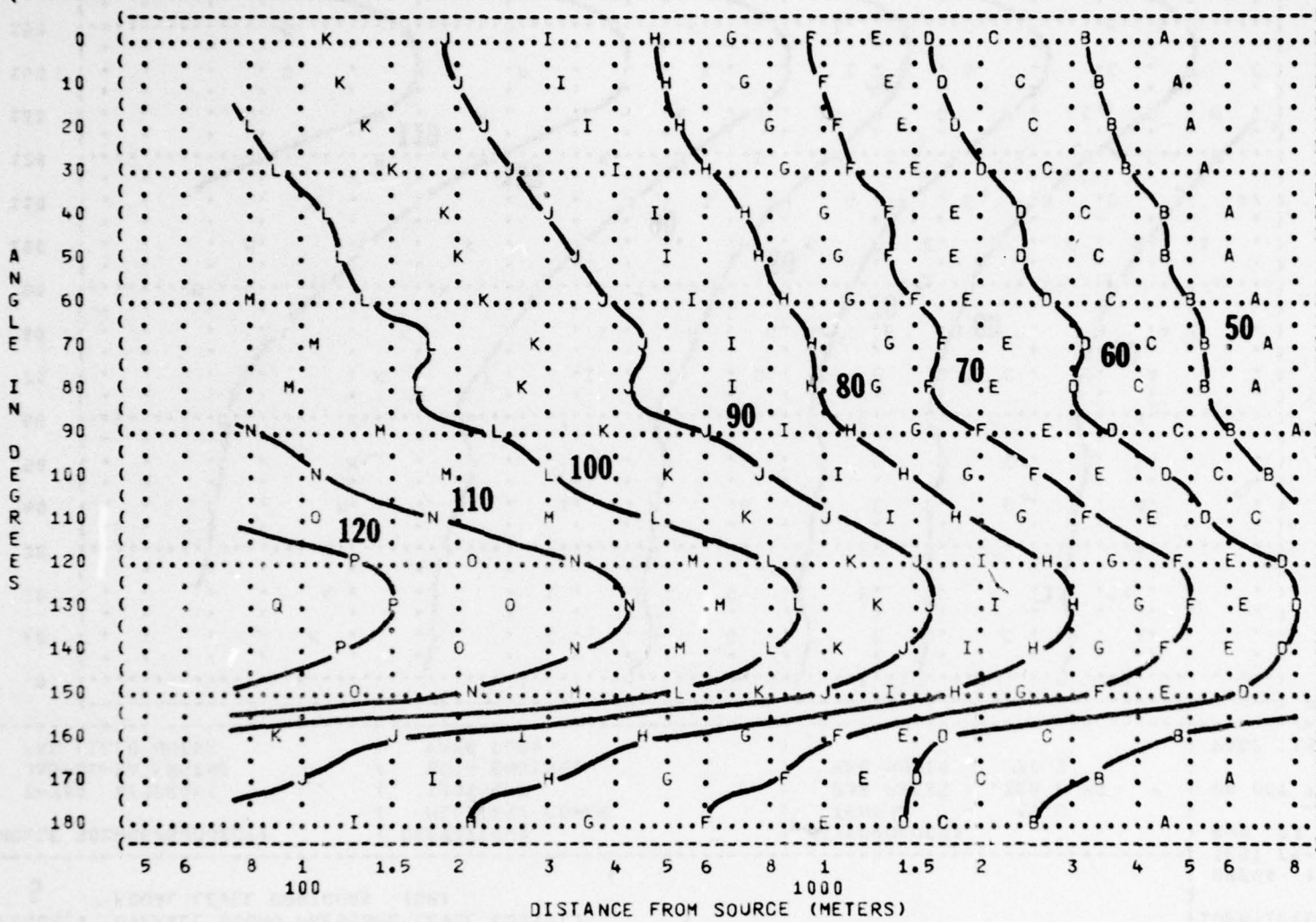


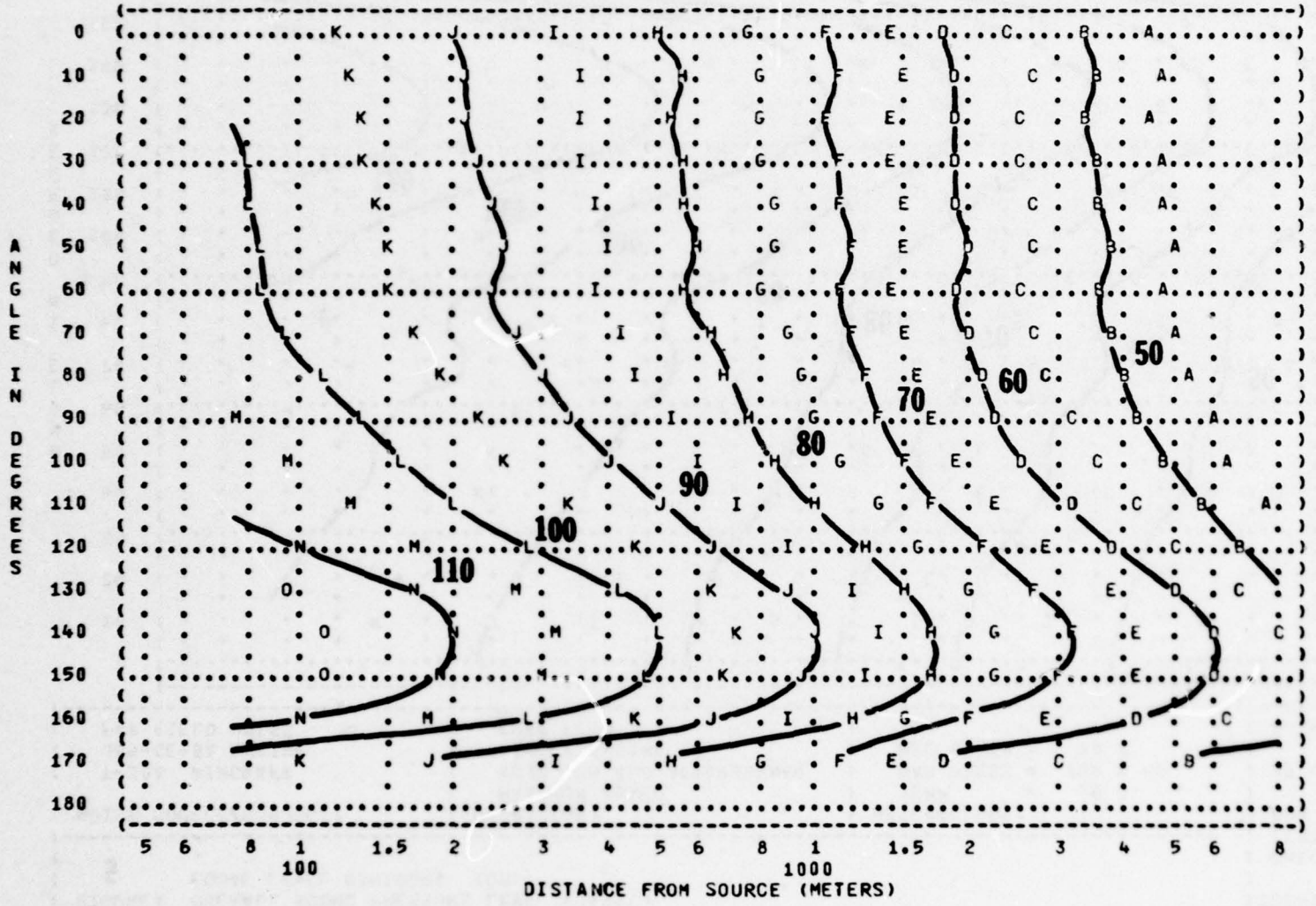
FIGURE 5 OVERALL SOUND PRESSURE LEVEL (OASPL) EQUAL LEVEL CONTOURS (DB)

NOISE SOURCE/SUBJECT:
T-38A AIRCRAFT
J85-GE-5A ENGINE
FAR FIELD NOISE

OPERATION:
MILITARY POWER
100% RPM
BOTH ENGINES
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-056
RUN 03
20 OCT 75
PAGE 13



POINT	DB
A	45
B	50
C	55
D	60
E	65
F	70
G	75
H	80
I	85
J	90
K	95
L	100
M	105
N	110
O	115

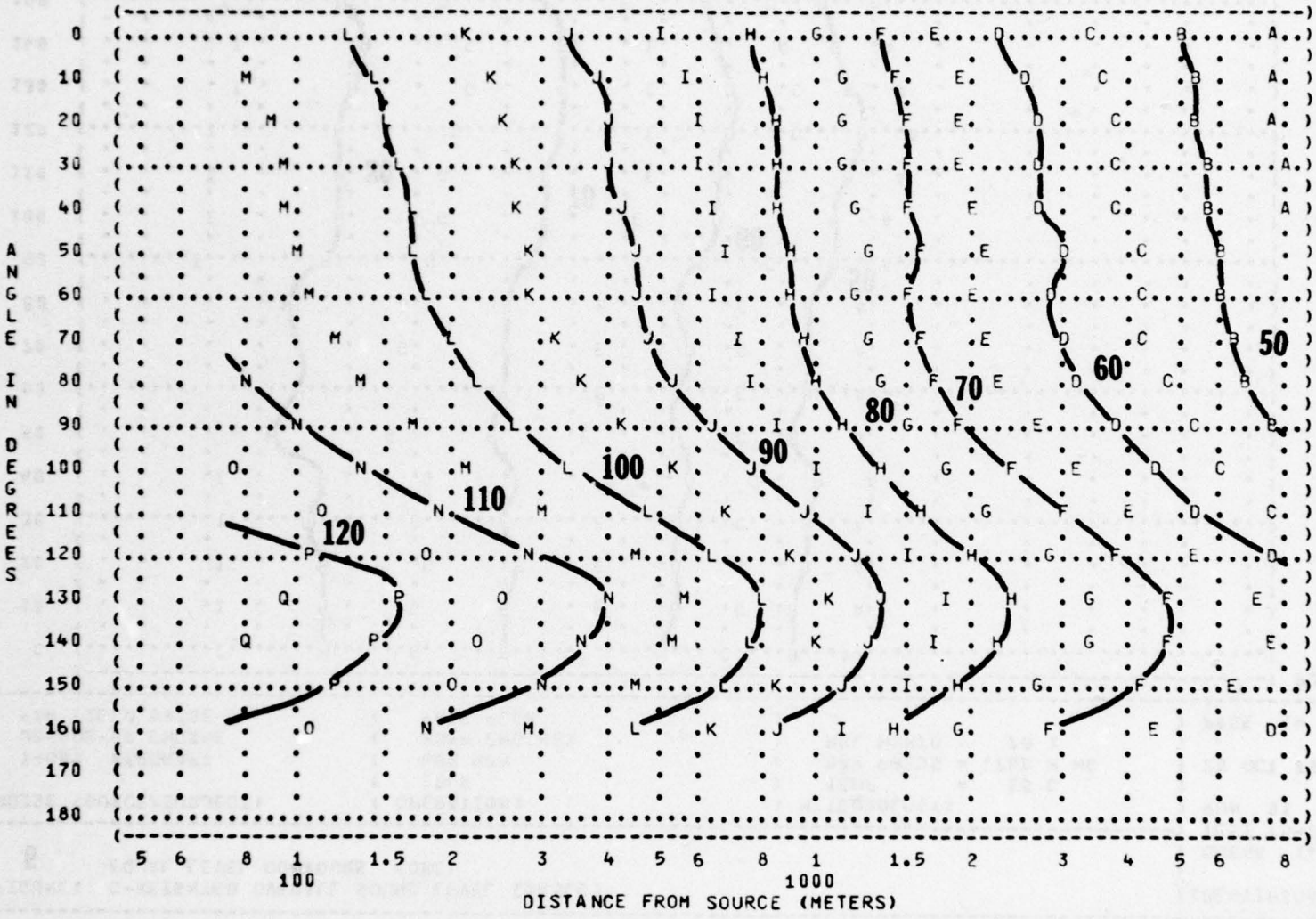
FIGURE 5 OVERALL SOUND PRESSURE LEVEL (OASPL) EQUAL LEVEL CONTOURS (DB)

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-056
RUN 04
20 OCT 75
PAGE 13

NOISE SOURCE/SUBJECT:
T-38A AIRCRAFT
J85-GE-5A ENGINE
FAR FIELD NOISE

OPERATION:
MAXIMUM POWER
100% RPM AND AFTERBURNER
BOTH ENGINES
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %



POINT	DB
A	45
B	50
C	55
D	60
E	65
F	70
G	75
H	80
I	85
J	90
K	95
L	100
M	105
N	110
O	115
P	120
Q	125

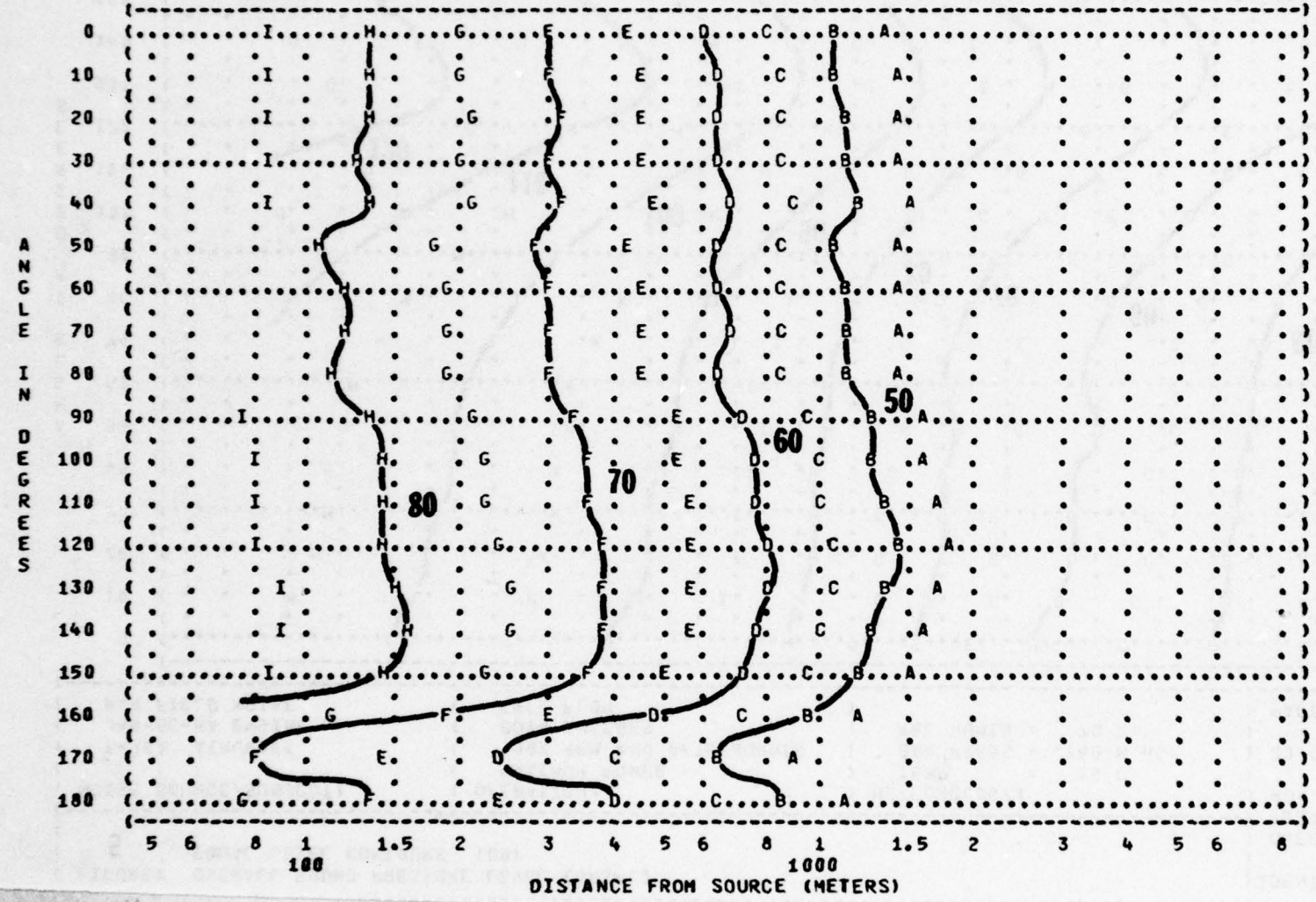
FIGURE: 6 C-WEIGHTED OVERALL SOUND LEVEL (OASLC) EQUAL LEVEL CONTOURS (DBC)

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-047
RUN 01
20 OCT 75
PAGE 14

NOISE SOURCE/SUBJECT:
T-38A AIRCRAFT
J85-GE-5A ENGINE
FAR FIELD NOISE

OPERATION:
IDLE
48% RPM
BOTH ENGINES
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %



POINT	DBC
A	45
B	50
C	55
D	60
E	65
F	70
G	75
H	80
I	85

FIGURE 6: C-WEIGHTED OVERALL SOUND LEVEL (OASLC) EQUAL LEVEL CONTOURS (DBC)

NOISE SOURCE/SUBJECT:
T-38A AIRCRAFT
J85-GE-5A ENGINE
FAR FIELD NOISE

OPERATION:
70% RPM
BOTH ENGINES
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-047
RUN 02
20 OCT 75
PAGE 14

POINT	DBC
A	45
B	50
C	55
D	60
E	65
F	70
G	75
H	80
I	85
J	90

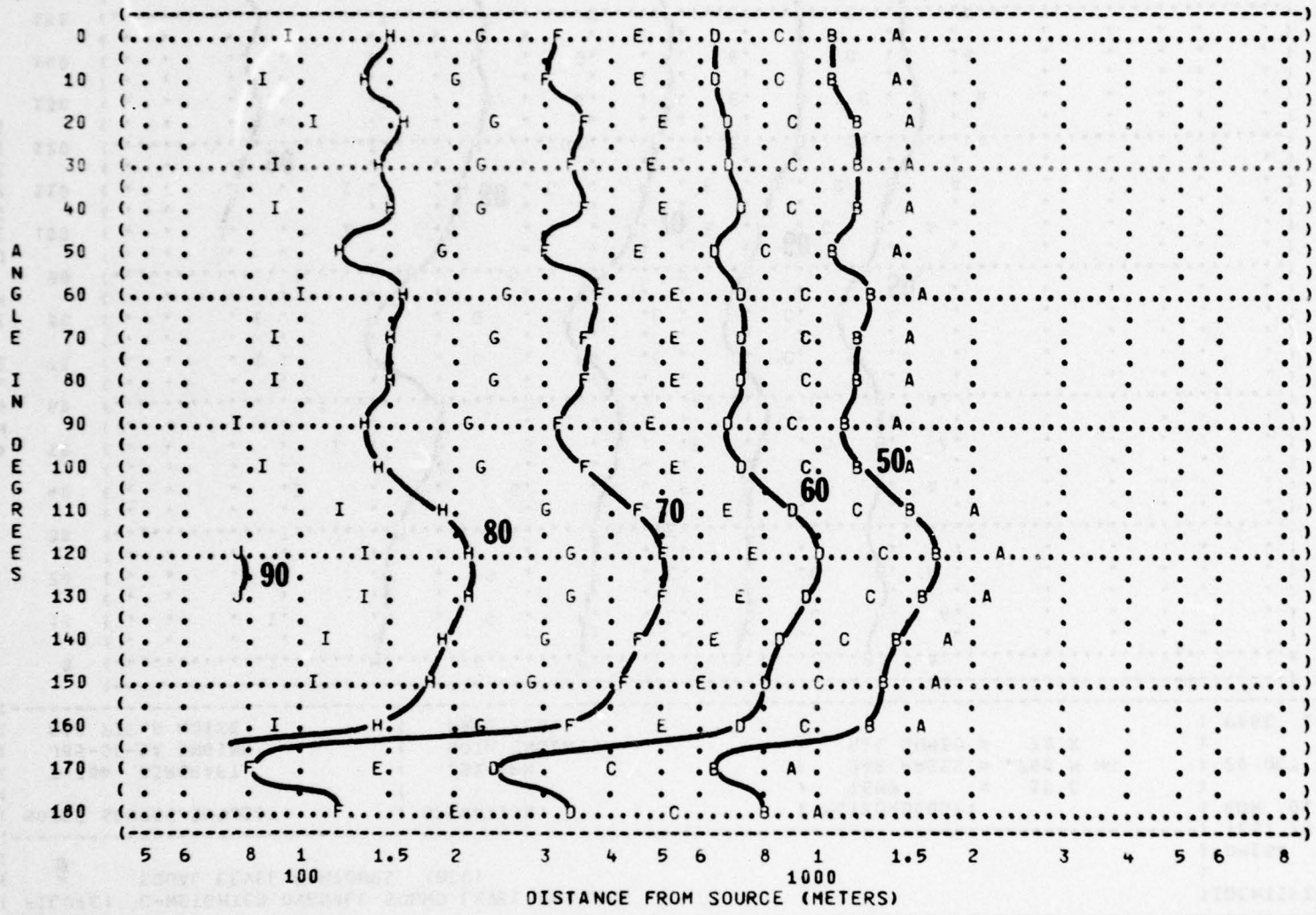


FIGURE 6 C-WEIGHTED OVERALL SOUND LEVEL (OASLC) EQUAL LEVEL CONTOURS (DBC)

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-056
RUN 01
20 OCT 75
PAGE 14

NOISE SOURCE/SUBJECT:
T-38A AIRCRAFT
J85-GE-5A ENGINE
FAR FIELD NOISE

OPERATION:
75% RPM
BOTH ENGINES
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

POINT	DBC
A	45
B	50
C	55
D	60
E	65
F	70
G	75
H	80
I	85
J	90

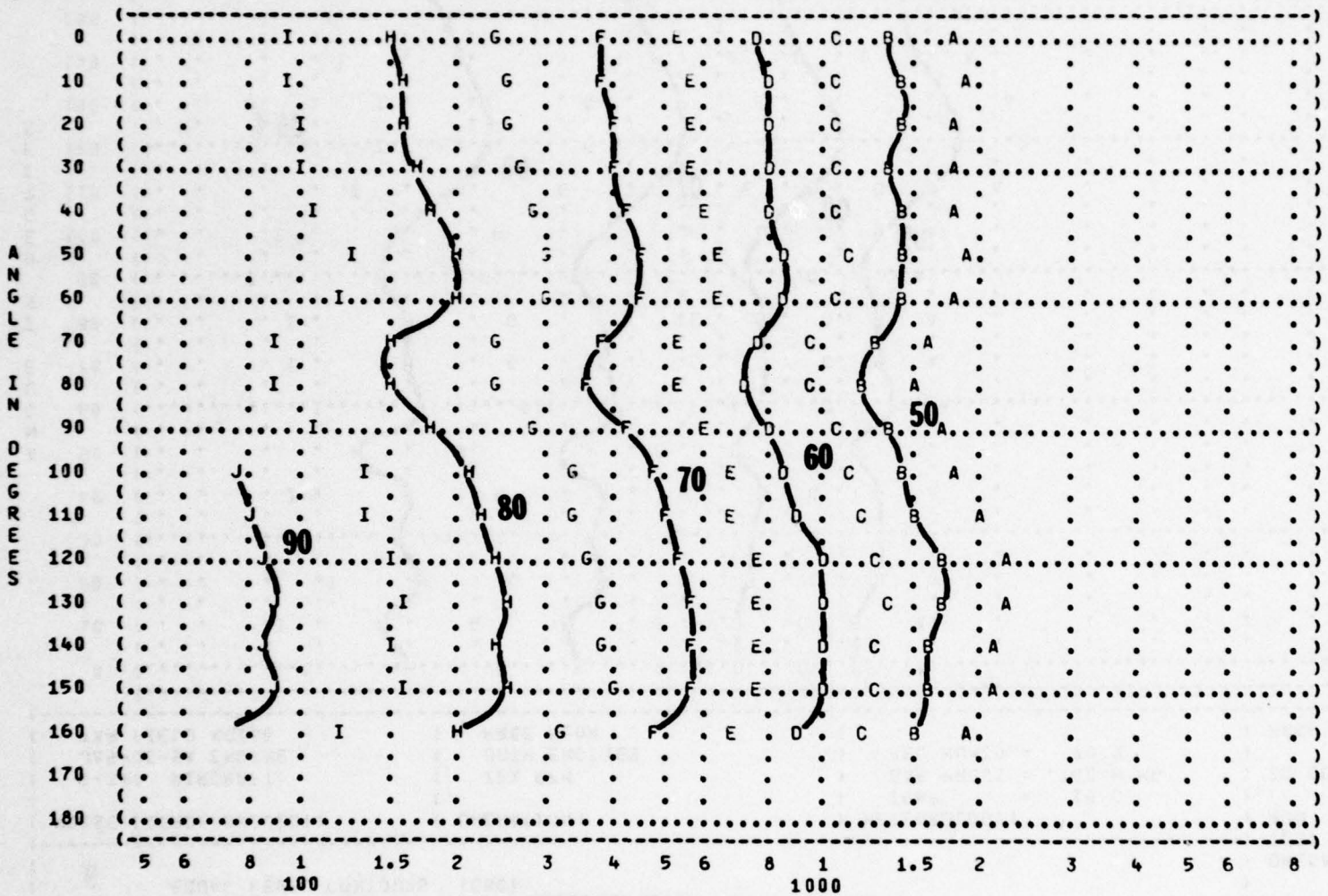


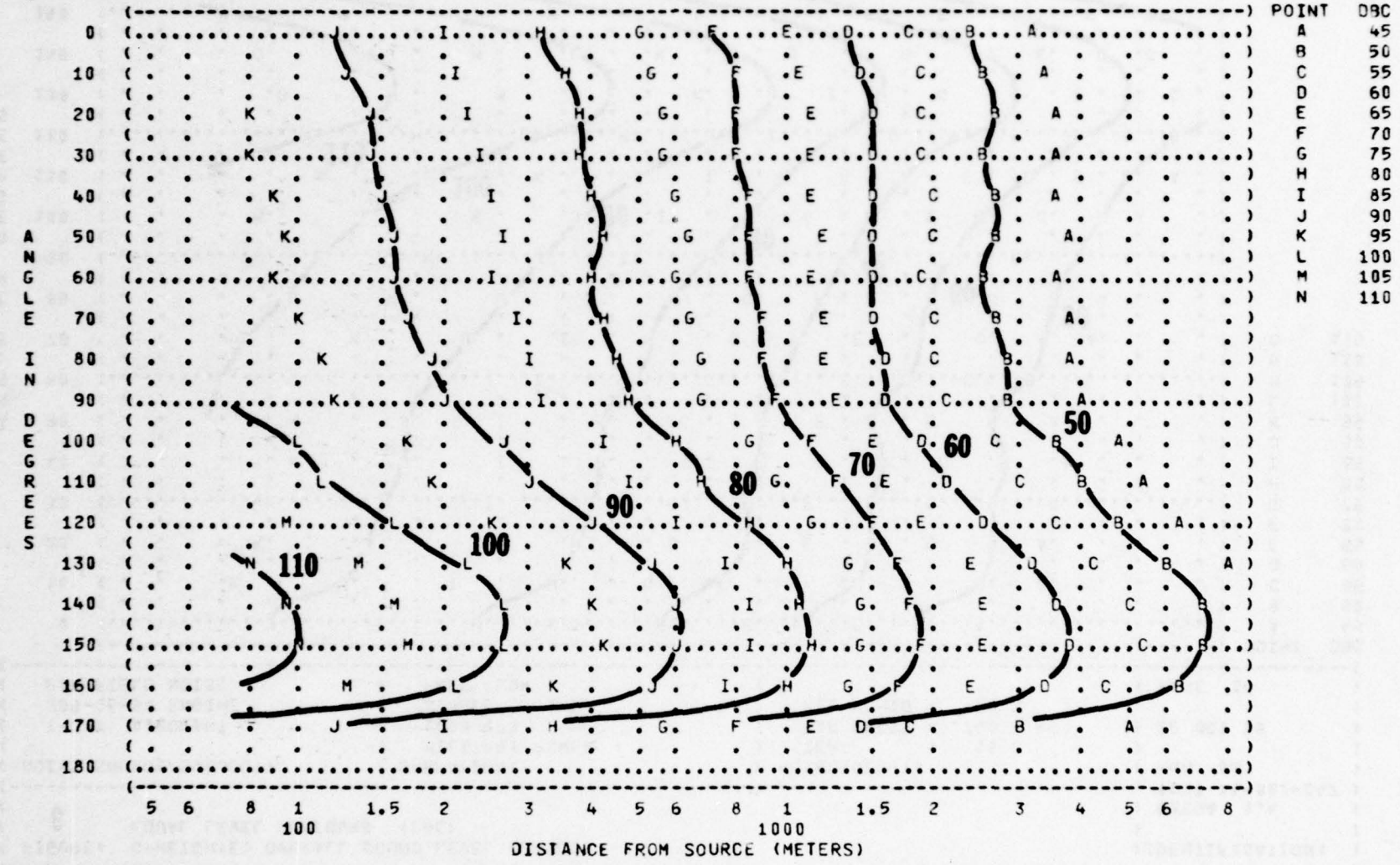
FIGURE 6 C-WEIGHTED OVERALL SOUND LEVEL (OASLC) EQUAL LEVEL CONTOURS (DBC)

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-056
RUN 02
20 OCT 75
PAGE 14

NOISE SOURCE/SUBJECT:
T-38A AIRCRAFT
J85-GE-5A ENGINE
FAR FIELD NOISE

OPERATION:
TRIM CHECK
94% RPM
BOTH ENGINES
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %



POINT	DBC
A	45
B	50
C	55
D	60
E	65
F	70
G	75
H	80
I	85
J	90
K	95
L	100
M	105
N	110

FIGURE 6: C-WEIGHTED OVERALL SOUND LEVEL (OASLC) EQUAL LEVEL CONTOURS (DBC)

NOISE SOURCE/SUBJECT:
T-38A AIRCRAFT
J85-GE-5A ENGINE
FAR FIELD NOISE

OPERATION:
MILITARY POWER
100% RPM
SINGLE ENGINE
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-047
RUN 03
20 OCT 75
PAGE 14

POINT	DBC
A	45
B	50
C	55
D	60
E	65
F	70
G	75
H	80
I	85
J	90
K	95
L	100
M	105
N	110
O	115

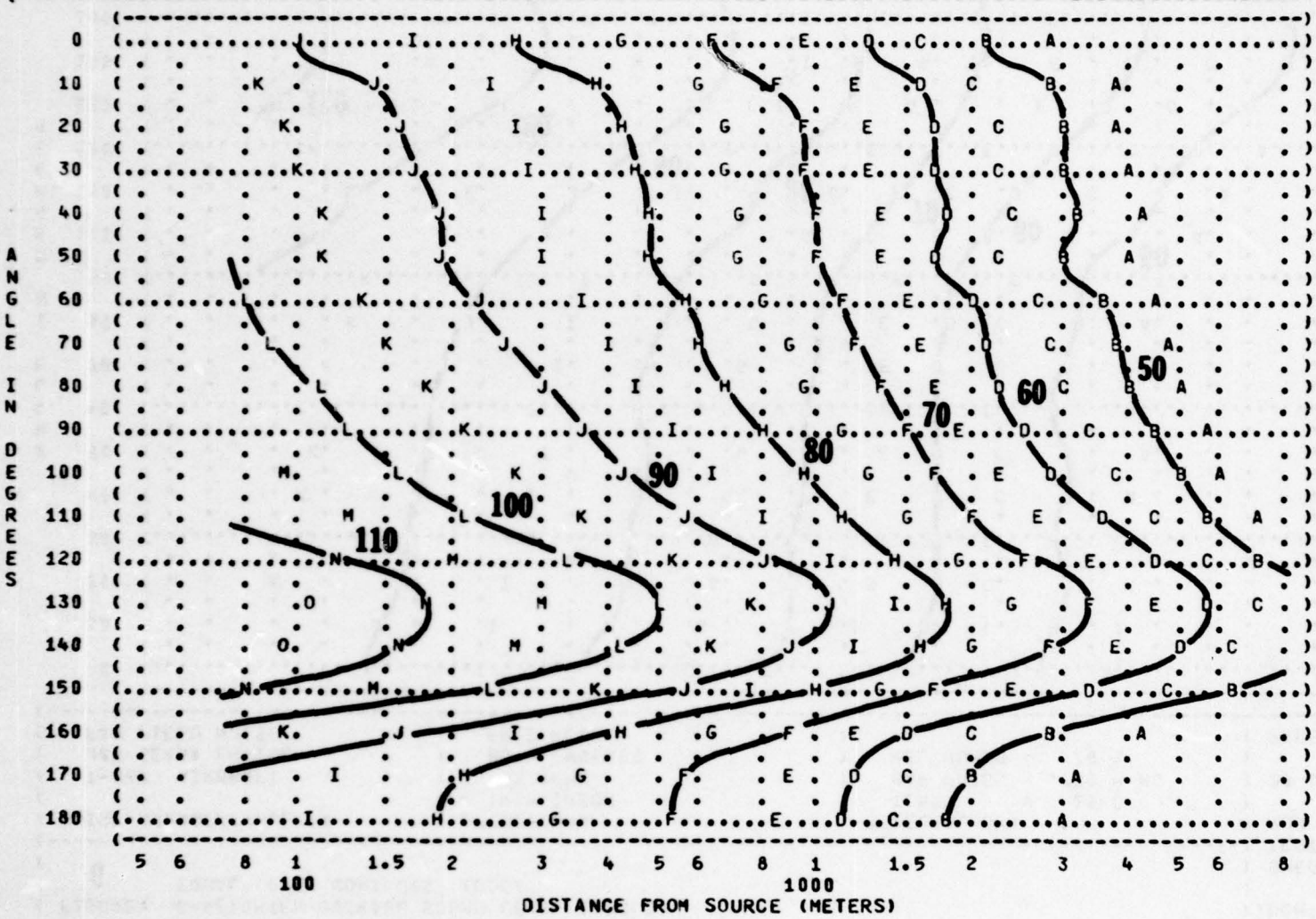


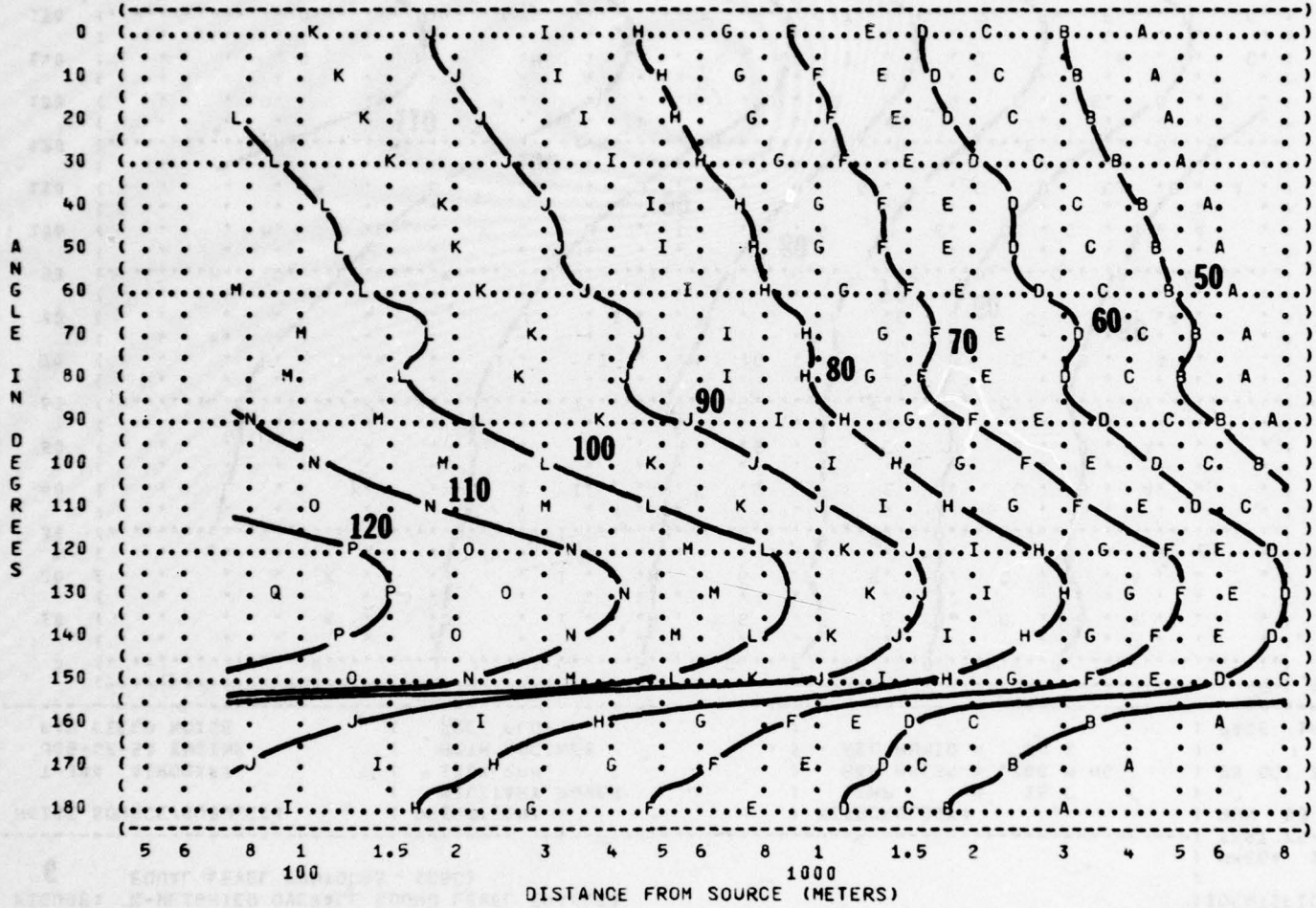
FIGURE 6: C-WEIGHTED OVERALL SOUND LEVEL (OASLC) EQUAL LEVEL CONTOURS (DBC)

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-047
RUN 04
20 OCT 75
PAGE 14

NOISE SOURCE/SUBJECT:
T-38A AIRCRAFT
J85-GE-5A ENGINE
FAR FIELD NOISE

OPERATION:
MAXIMUM POWER
100% RPM AND AFTERBURNER
SINGLE ENGINE
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %



POINT	DBC
A	45
B	50
C	55
D	60
E	65
F	70
G	75
H	80
I	85
J	90
K	95
L	100
M	105
N	110
O	115
P	120
Q	125

FIGURE 6 C-WEIGHTED OVERALL SOUND LEVEL (OASLC)
EQUAL LEVEL CONTOURS (DBC)

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-056
RUN 03
20 OCT 75
PAGE 14

NOISE SOURCE/SUBJECT:
T-38A AIRCRAFT
J85-GE-5A ENGINE
FAR FIELD NOISE

OPERATION:
MILITARY POWER
100% RPM
BOTH ENGINES
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

POINT	DBC
A	45
B	50
C	55
D	60
E	65
F	70
G	75
H	80
I	85
J	90
K	95
L	100
M	105
N	110
O	115

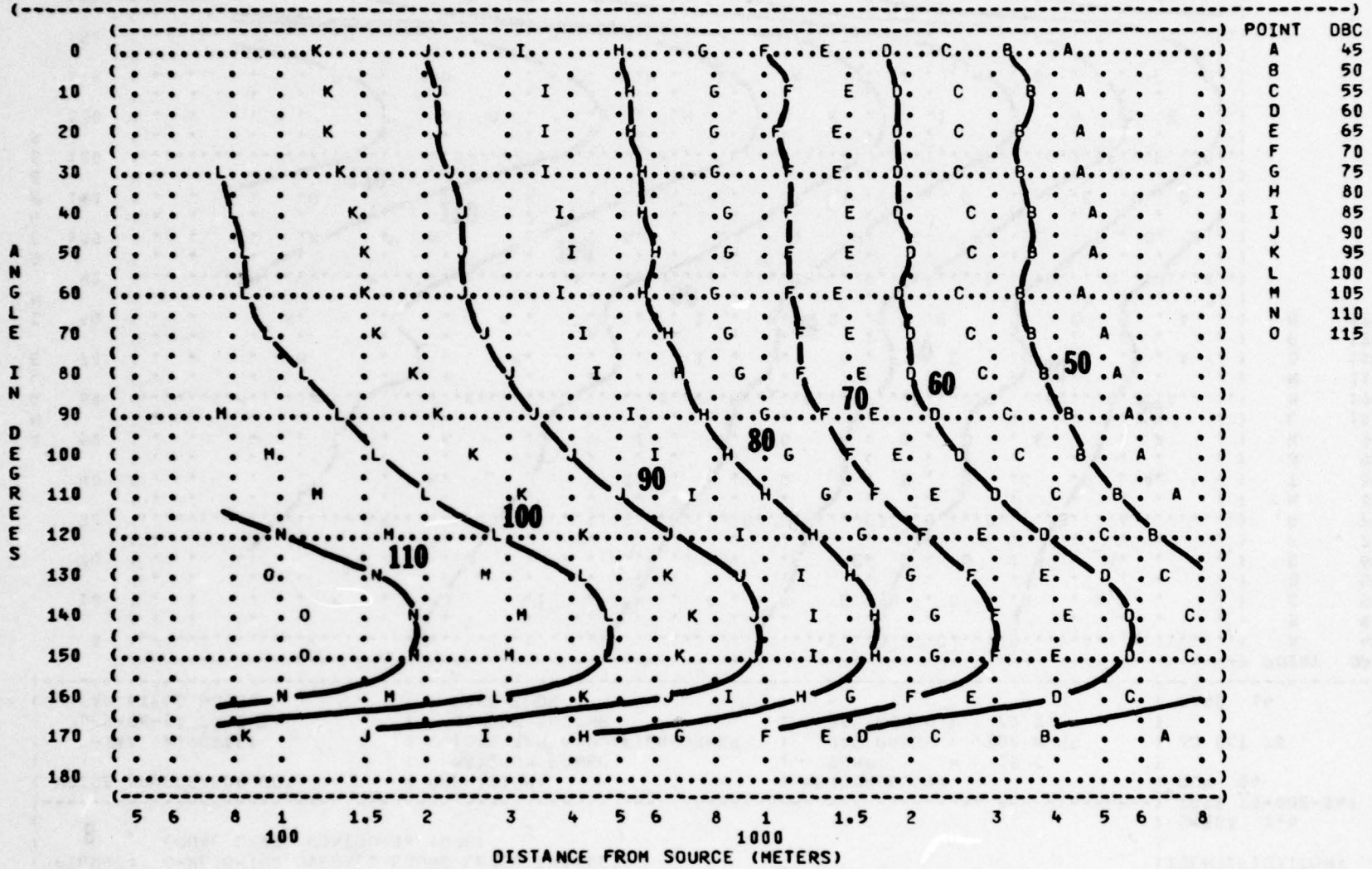


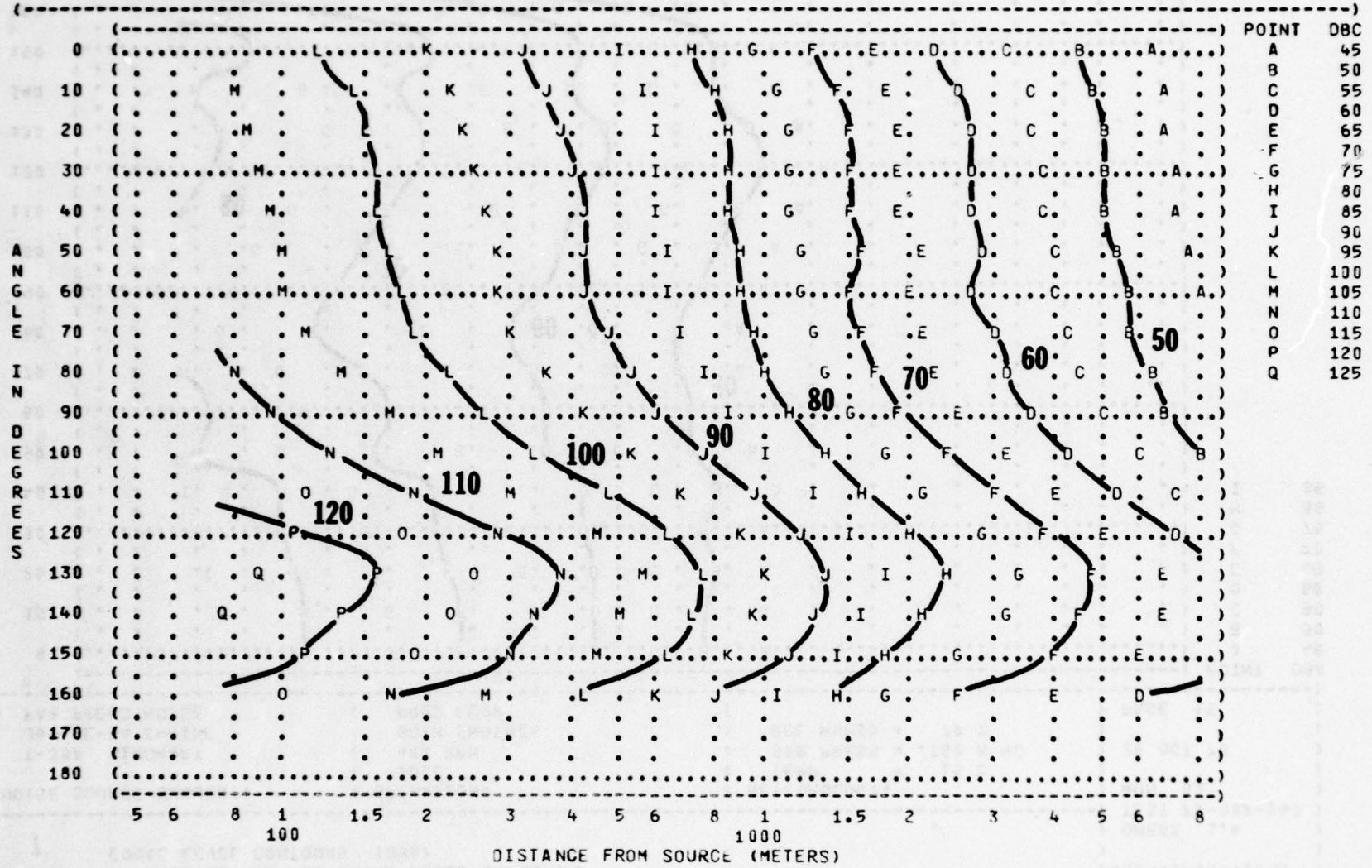
FIGURE 6 C-WEIGHTED OVERALL SOUND LEVEL (OASLC) EQUAL LEVEL CONTOURS (DBC)

IDENTIFICATION: OMEGA 1.4 TEST 75-002-056 RUN 04 20 OCT 75 PAGE 14

NOISE SOURCE/SUBJECT: T-38A AIRCRAFT J85-GE-5A ENGINE FAR FIELD NOISE

OPERATION: MAXIMUM POWER 100% RPM AND AFTERBURNER BOTH ENGINES FREE FLOW

METEOROLOGY: TEMP = 15 C BAR PRESS = .760 M HG REL HUMID = 70 %



POINT	DBC
A	45
B	50
C	55
D	60
E	65
F	70
G	75
H	80
I	85
J	90
K	95
L	100
M	105
N	110
O	115
P	120
Q	125

FIGURE 7 A-WEIGHTED OVERALL SOUND LEVEL (OASLA) EQUAL LEVEL CONTOURS (DBA)

NOISE SOURCE/SUBJECT:
T-38A AIRCRAFT
J85-GE-5A ENGINE
FAR FIELD NOISE

OPERATION:
IDLE
48% RPM
BOTH ENGINES
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-047
RUN 01
20 OCT 75
PAGE 15

POINT	DBA
A	45
B	50
C	55
D	60
E	65
F	70
G	75
H	80
I	85

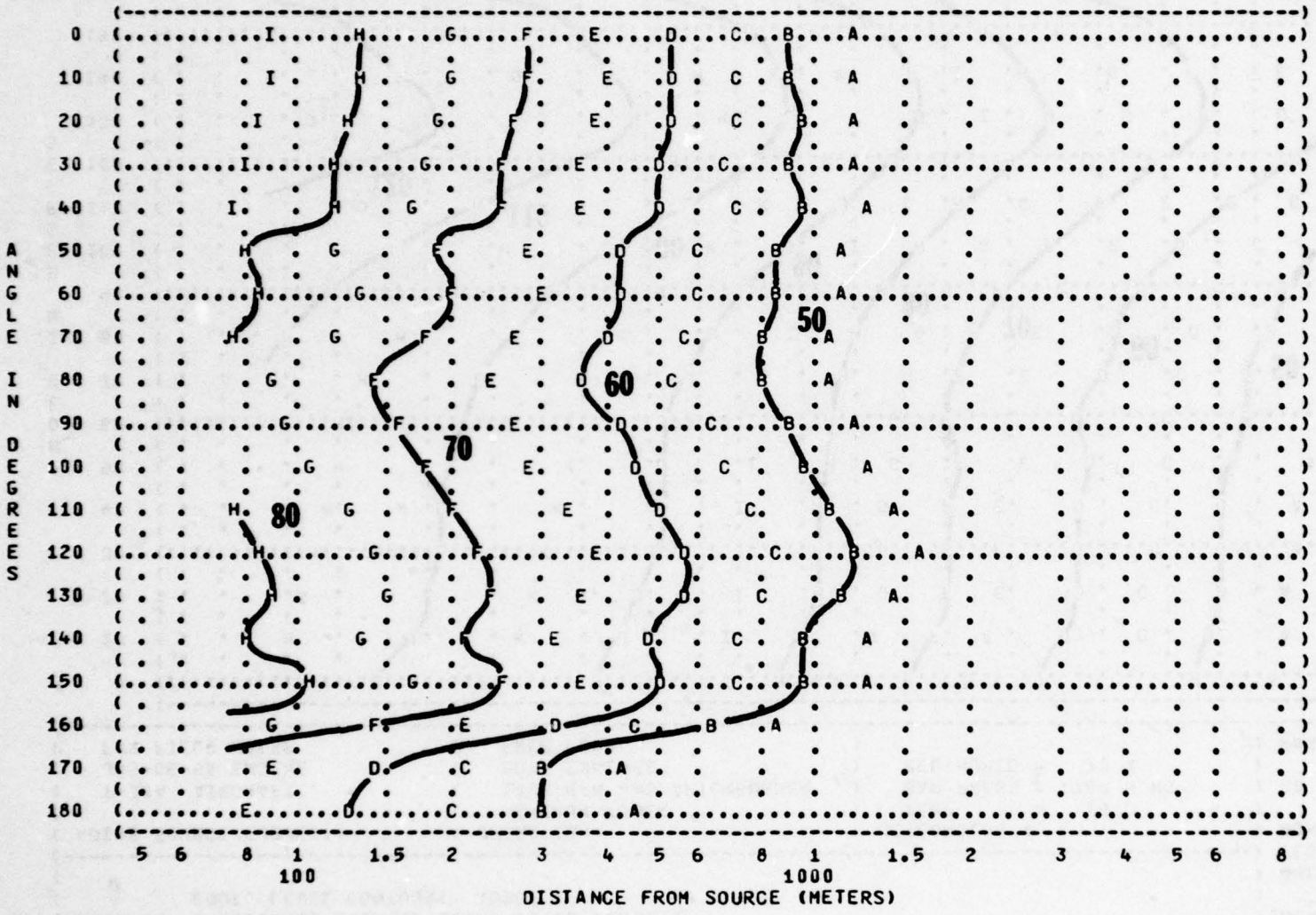


FIGURE 7: A-WEIGHTED OVERALL SOUND LEVEL (OASLA) EQUAL LEVEL CONTOURS (DBA)

NOISE SOURCE/SUBJECT:
T-38A AIRCRAFT
J85-GE-5A ENGINE
FAR FIELD NOISE

OPERATION:
70% RPM
BOTH ENGINES
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-047
RUN 02
20 OCT 75
PAGE 15

POINT	DBA
A	45
B	50
C	55
D	60
E	65
F	70
G	75
H	80
I	85

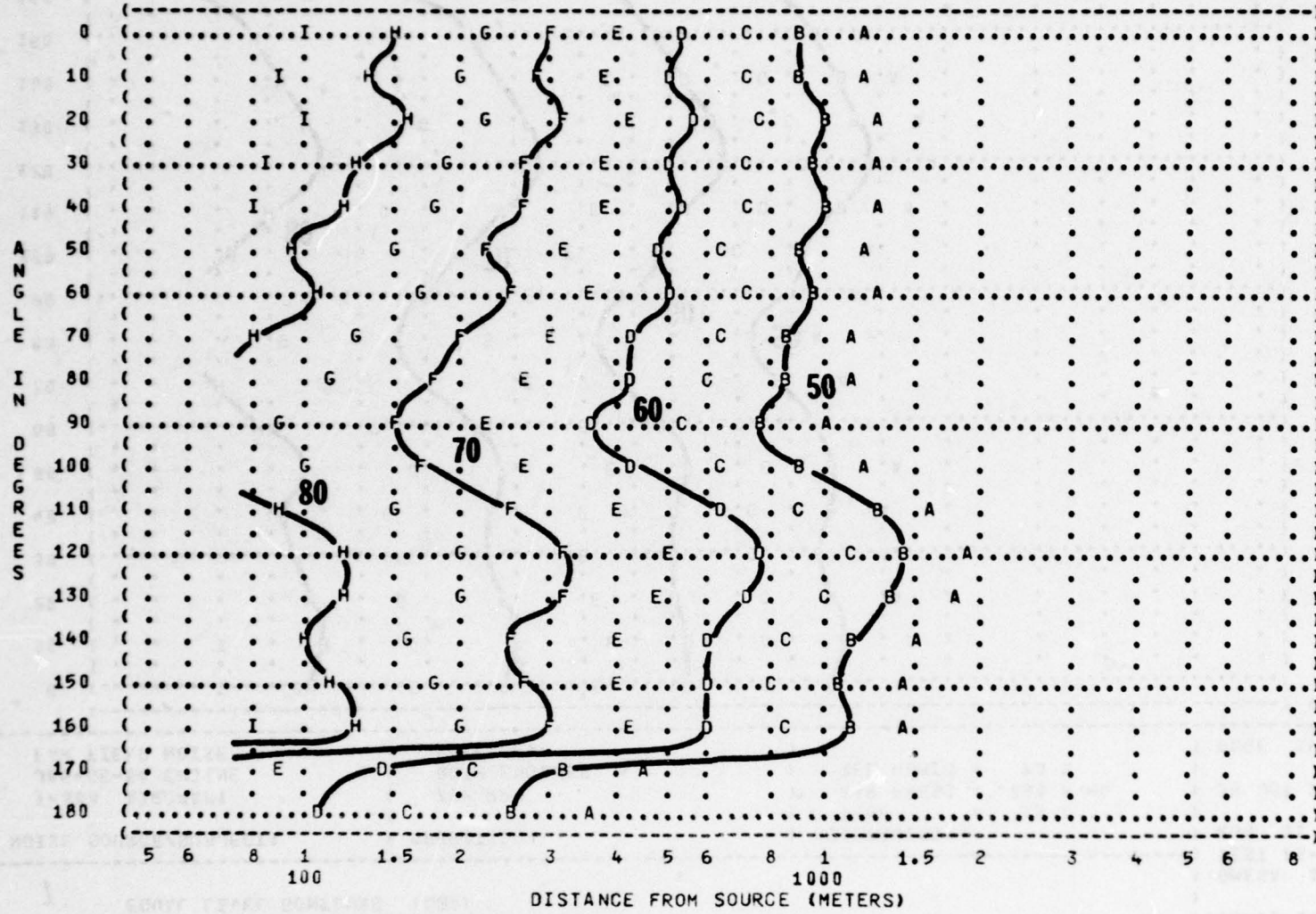


FIGURE 7: A-WEIGHTED OVERALL SOUND LEVEL (OASLA) EQUAL LEVEL CONTOURS (DBA)

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-056
RUN 01
20 OCT 75
PAGE 15

NOISE SOURCE/SUBJECT:
T-38A AIRCRAFT
J85-GE-5A ENGINE
FAR FIELD NOISE

OPERATION:
75% RPM
BOTH ENGINES
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

POINT	DBA
A	45
B	50
C	55
D	60
E	65
F	70
G	75
H	80
I	85

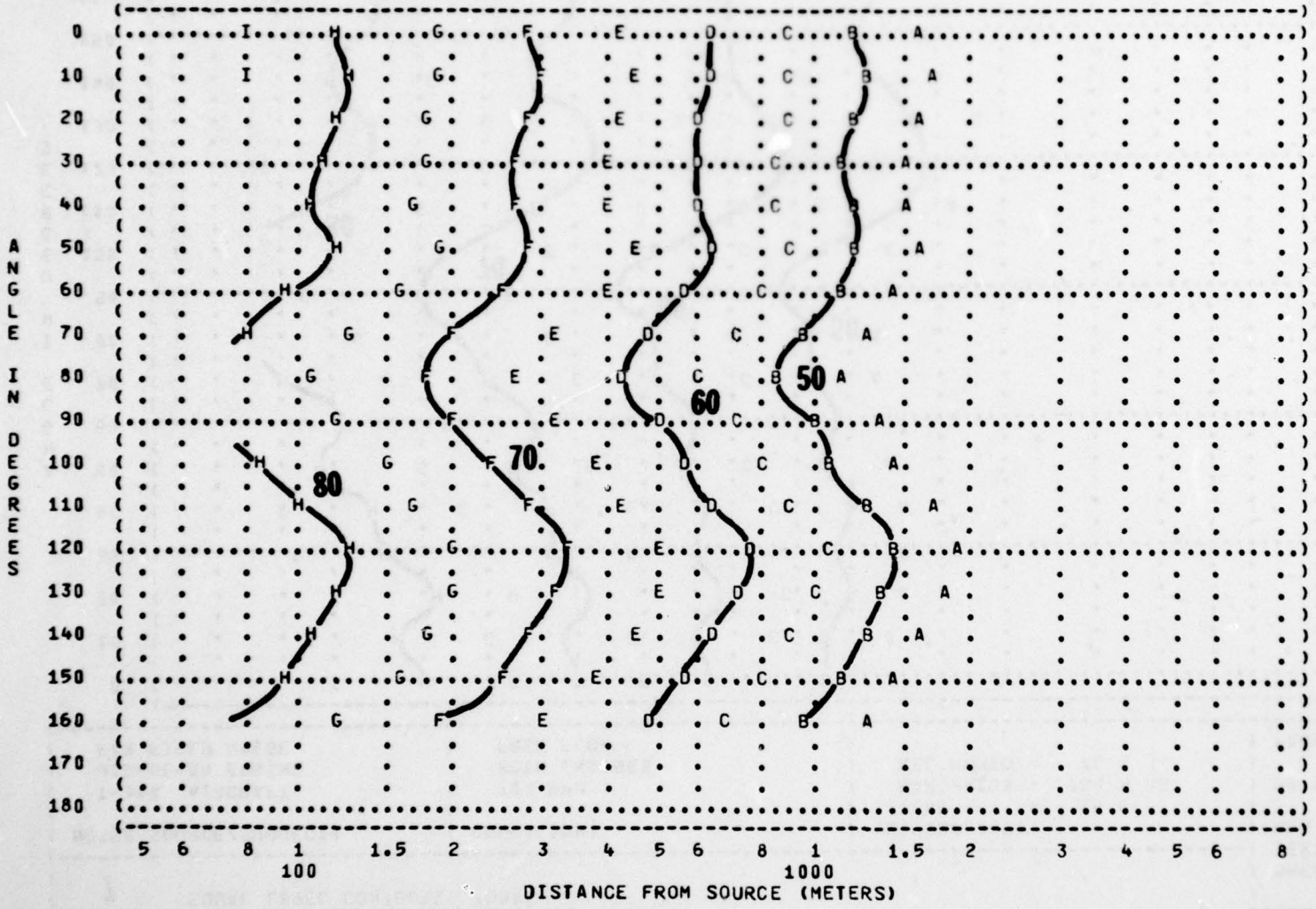


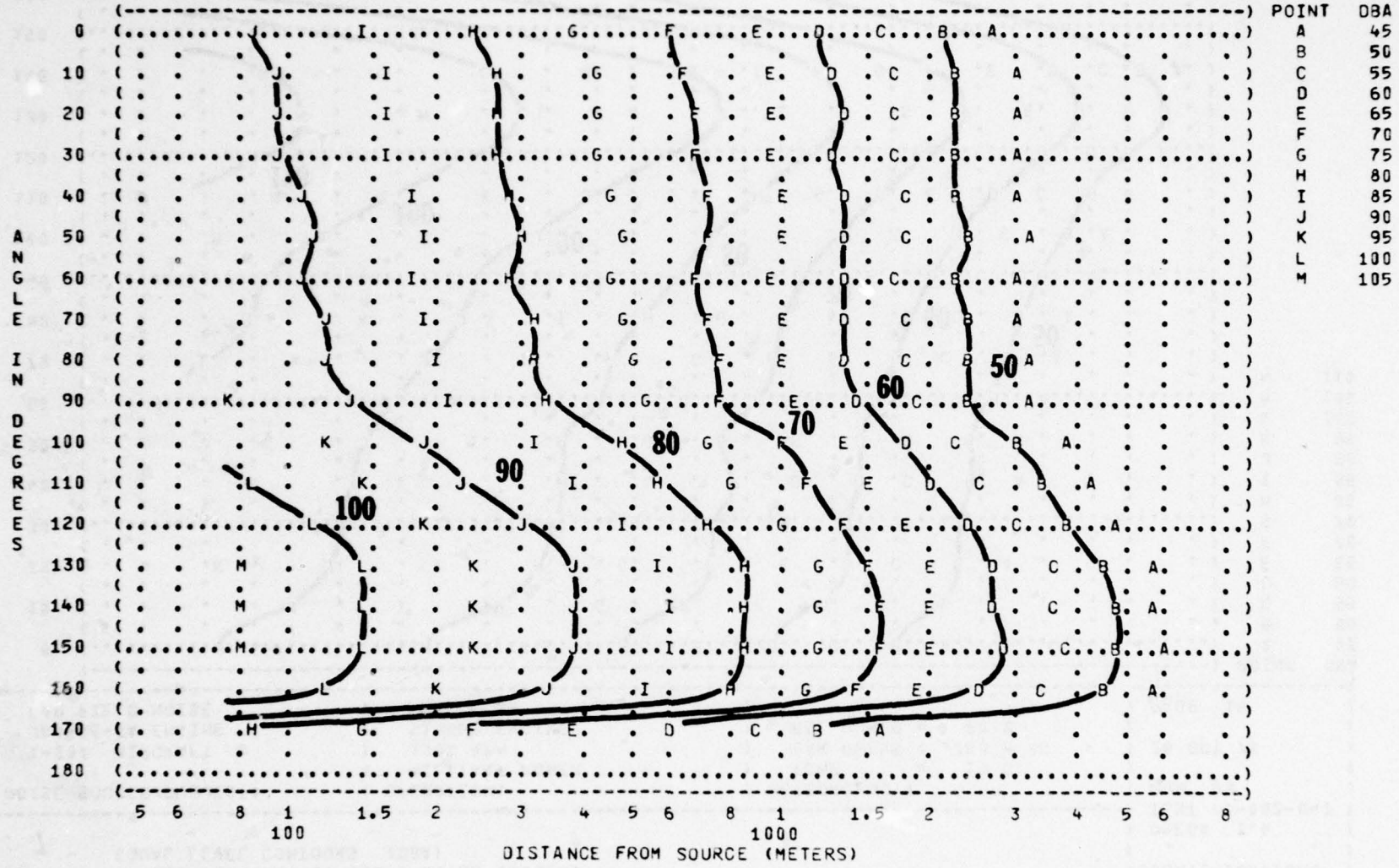
FIGURE 7 A-WEIGHTED OVERALL SOUND LEVEL (OASLA) EQUAL LEVEL CONTOURS (DBA)

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-056
RUN 02
20 OCT 75
PAGE 15

NOISE SOURCE/SUBJECT:
T-38A AIRCRAFT
J85-GE-5A ENGINE
FAR FIELD NOISE

OPERATION:
TRIM CHECK
94% RPM
BOTH ENGINES
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %



POINT	DBA
A	45
B	50
C	55
D	60
E	65
F	70
G	75
H	80
I	85
J	90
K	95
L	100
M	105

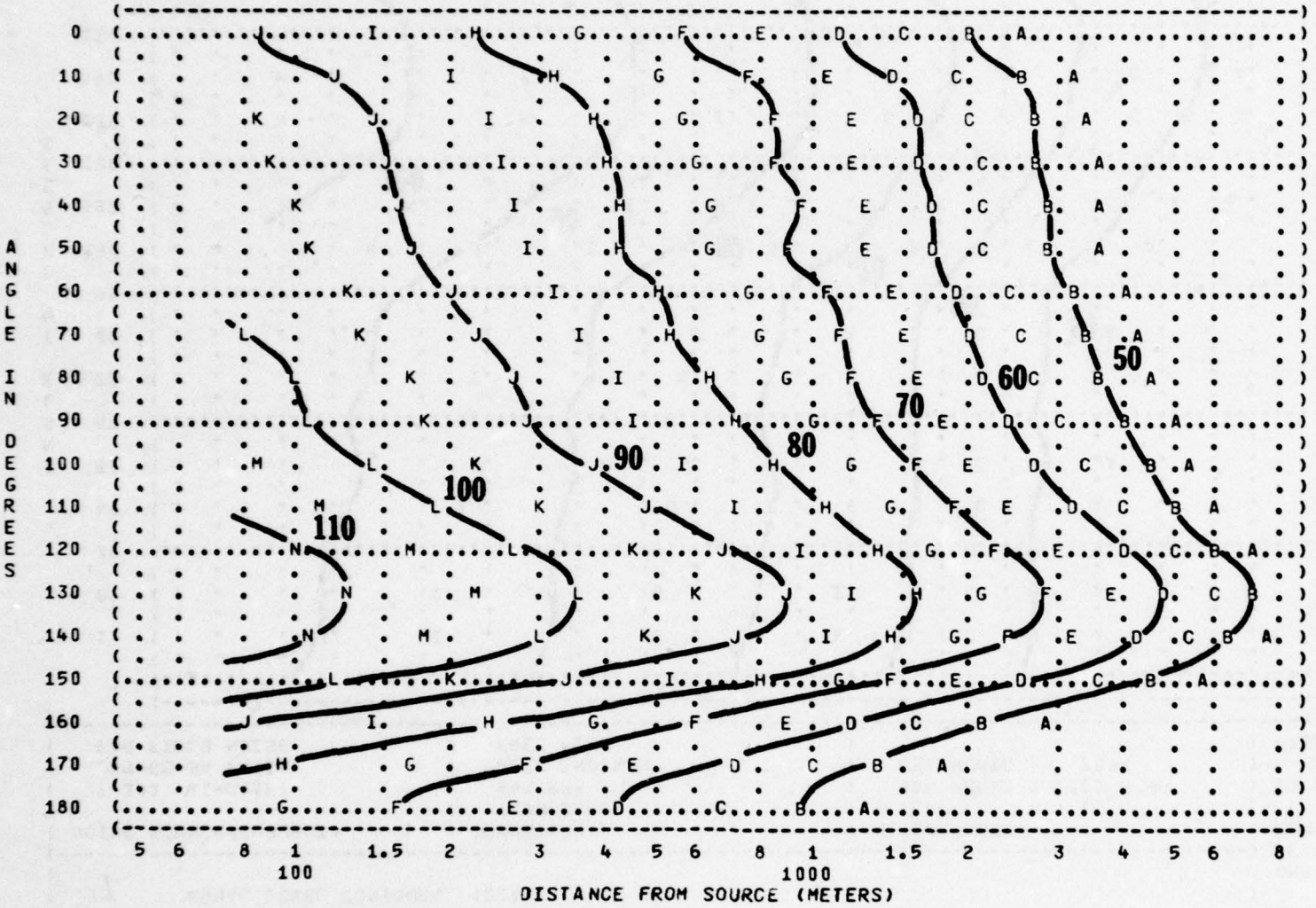
FIGURE: 7 A-WEIGHTED OVERALL SOUND LEVEL (OASLA) EQUAL LEVEL CONTOURS (DBA)

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-047
RUN 03
20 OCT 75
PAGE 15

NOISE SOURCE/SUBJECT:
T-38A AIRCRAFT
J85-GE-5A ENGINE
FAR FIELD NOISE

OPERATION:
MILITARY POWER
100% RPM
SINGLE ENGINE
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %



POINT	DBA
A	45
B	50
C	55
D	60
E	65
F	70
G	75
H	80
I	85
J	90
K	95
L	100
M	105
N	110

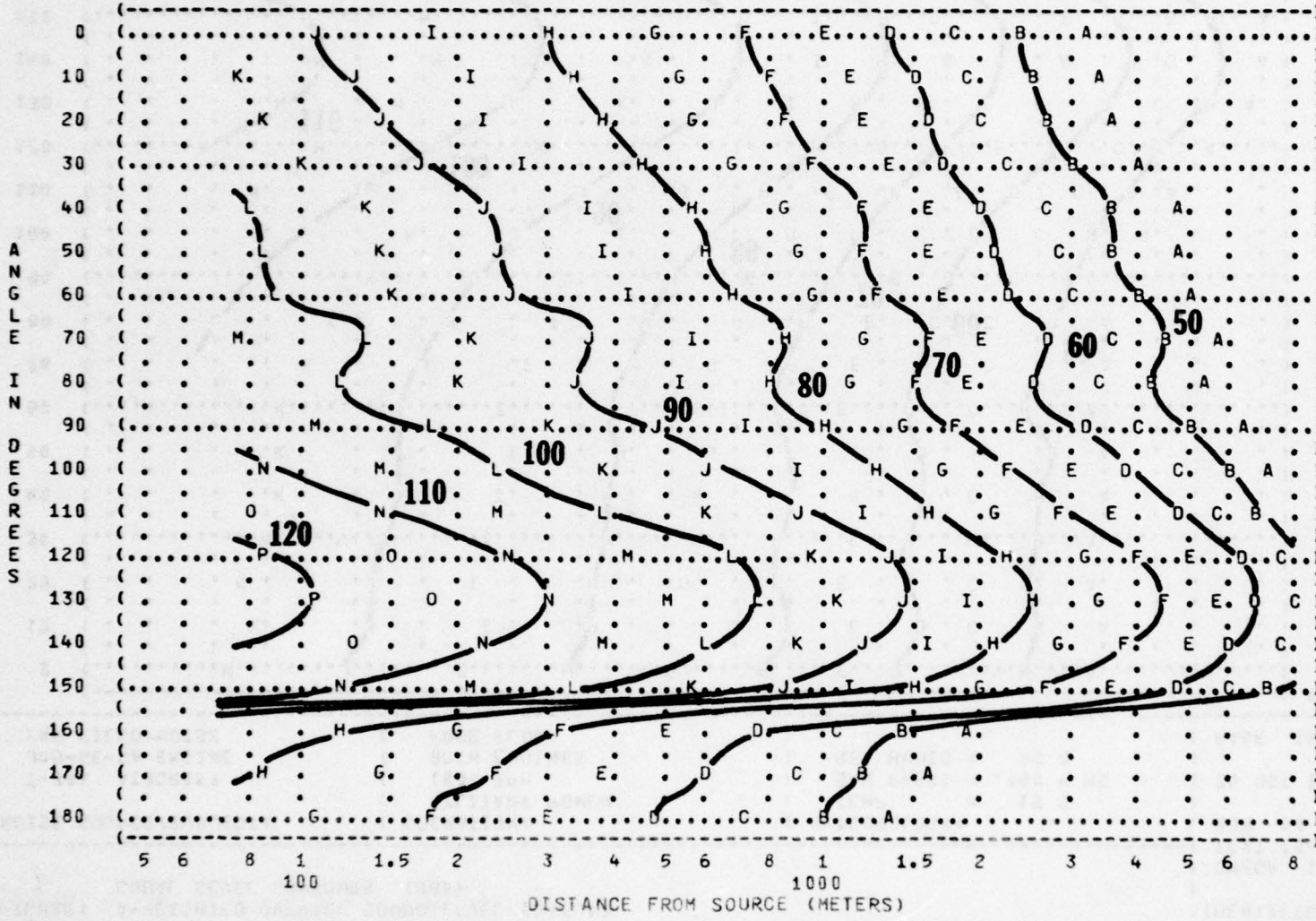
FIGURE 7: A-WEIGHTED OVERALL SOUND LEVEL (OASLA) EQUAL LEVEL CONTOURS (DBA)

NOISE SOURCE/SUBJECT:
T-38A AIRCRAFT
J85-GE-5A ENGINE
FAR FIELD NOISE

OPERATION:
MAXIMUM POWER
100% RPM AND AFTERBURNER
SINGLE ENGINE
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-047
RUN 04
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PAGE 15



POINT	DBA
A	45
B	50
C	55
D	60
E	65
F	70
G	75
H	80
I	85
J	90
K	95
L	100
M	105
N	110
O	115
P	120

FIGURE 7: A-WEIGHTED OVERALL SOUND LEVEL (OASLA) EQUAL LEVEL CONTOURS (DBA)

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-056
RUN 03
20 OCT 75
PAGE 15

NOISE SOURCE/SUBJECT:
T-38A AIRCRAFT
J85-GE-5A ENGINE
FAR FIELD NOISE

OPERATION:
MILITARY POWER
100% RPM
BOTH ENGINES
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

POINT	DBA
A	45
B	50
C	55
D	60
E	65
F	70
G	75
H	80
I	85
J	90
K	95
L	100
M	105
N	110

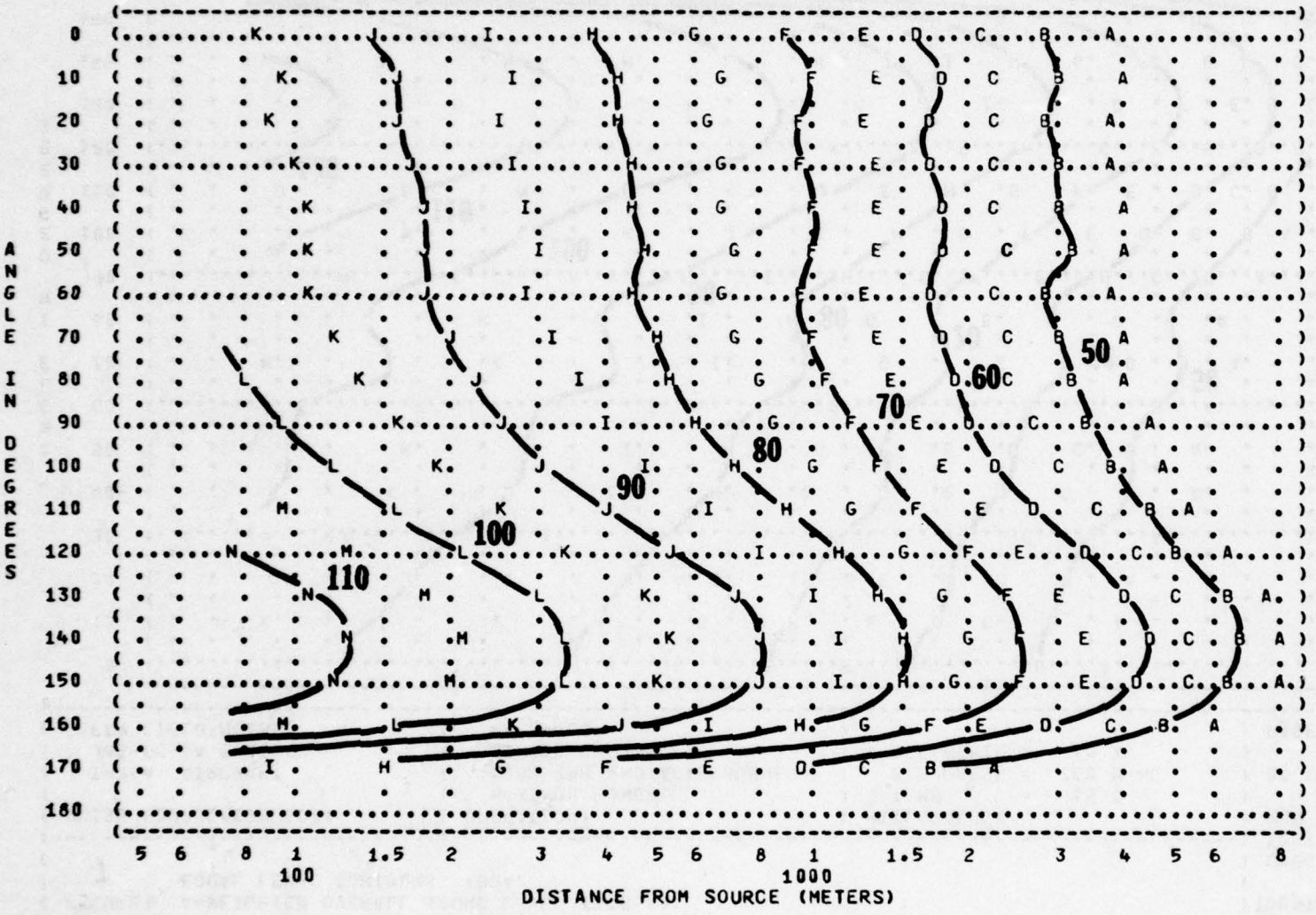


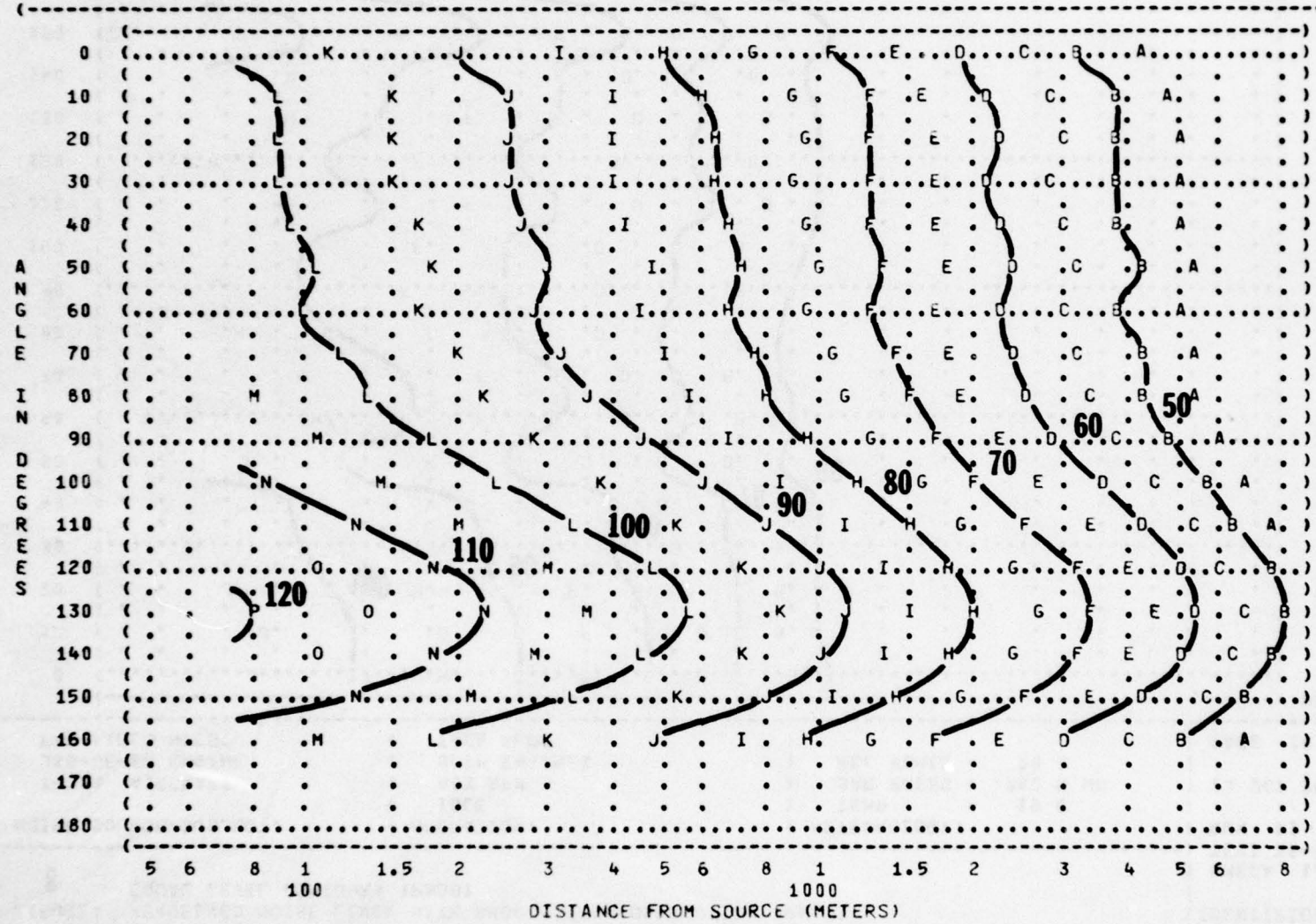
FIGURE 7 A-WEIGHTED OVERALL SOUND LEVEL (OASLA) EQUAL LEVEL CONTOURS (DBA)

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-056
RUN 04
20 OCT 75
PAGE 15

NOISE SOURCE/SUBJECT:
T-38A AIRCRAFT
J85-GE-5A ENGINE
FAR FIELD NOISE

OPERATION:
MAXIMUM POWER
100% RPM AND AFTERBURNER
BOTH ENGINES
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %



POINT	DBA
A	45
B	50
C	55
D	60
E	65
F	70
G	75
H	80
I	85
J	90
K	95
L	100
M	105
N	110
O	115
P	120

FIGURE 8 PERCEIVED NOISE LEVEL WITH SMOOTH TONE CORRECTION (PNLT)
EQUAL LEVEL CONTOURS (PNDB)

NOISE SOURCE/SUBJECT:
T-38A AIRCRAFT
J85-GE-5A ENGINE
FAR FIELD NOISE

OPERATION:
IDLE
48% RPM
BOTH ENGINES
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-047
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PAGE 16

POINT	PNDB
A	60
B	65
C	70
D	75
E	80
F	85
G	90
H	95
I	100
J	105

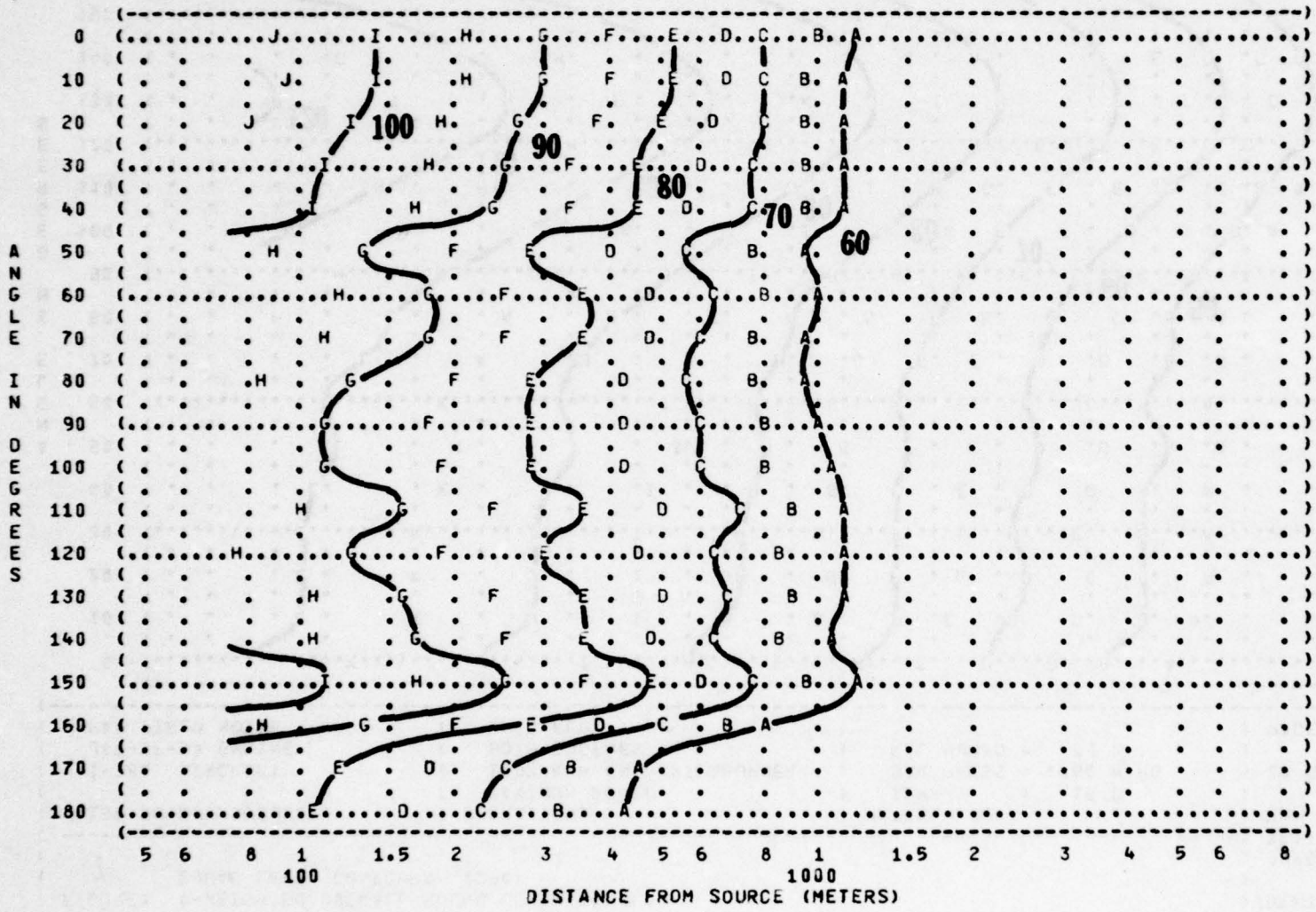


FIGURE 8: PERCEIVED NOISE LEVEL WITH SMOOTH TONE CORRECTION (PNLT) EQUAL LEVEL CONTOURS (PNDB)

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-047
RUN 02
20 OCT 75
PAGE 16

NOISE SOURCE/SUBJECT:
T-38A AIRCRAFT
J85-GE-5A ENGINE
FAR FIELD NOISE

OPERATION:
70% RPM
BOTH ENGINES
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

POINT	PNDB
A	60
B	65
C	70
D	75
E	80
F	85
G	90
H	95
I	100
J	105

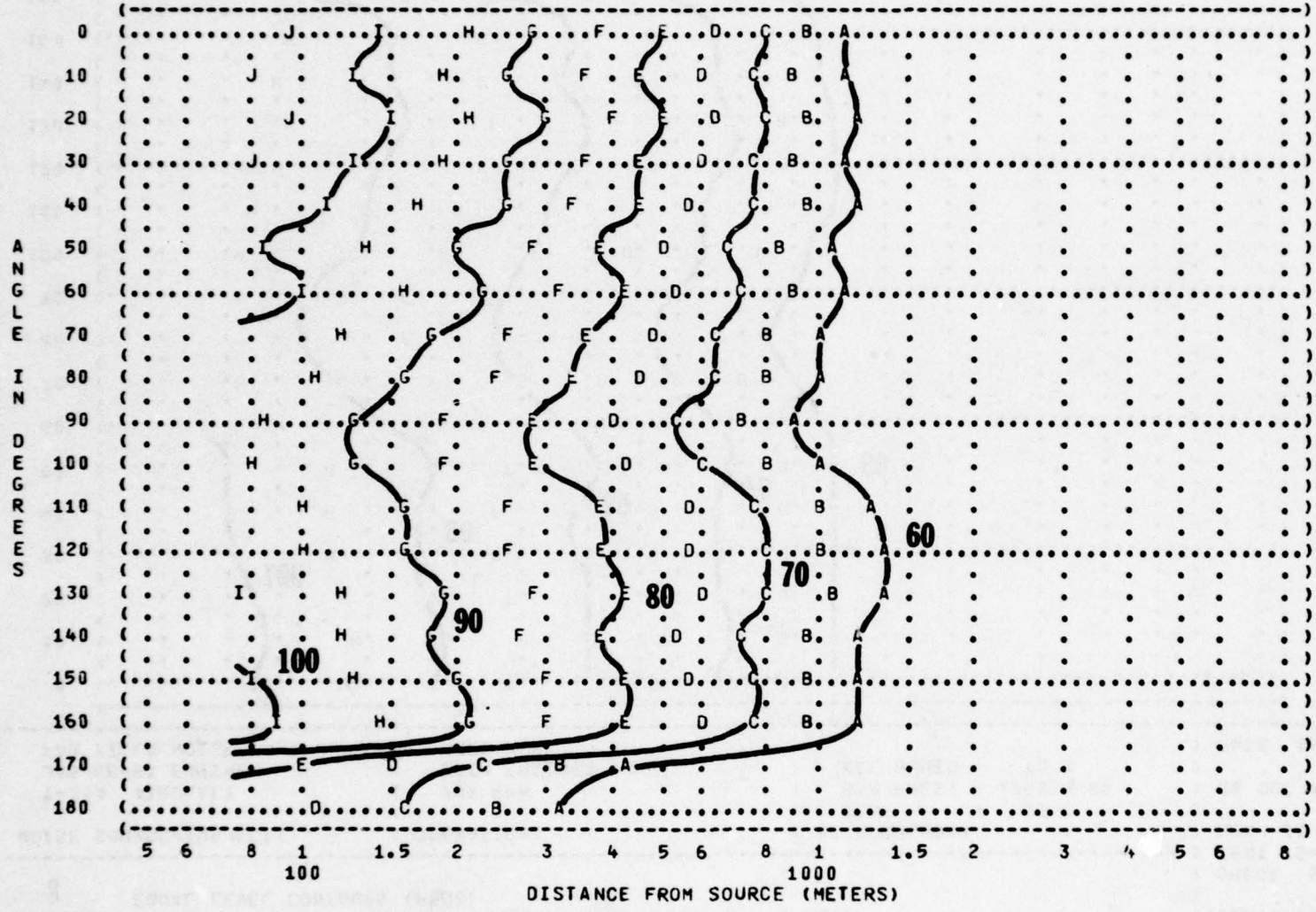


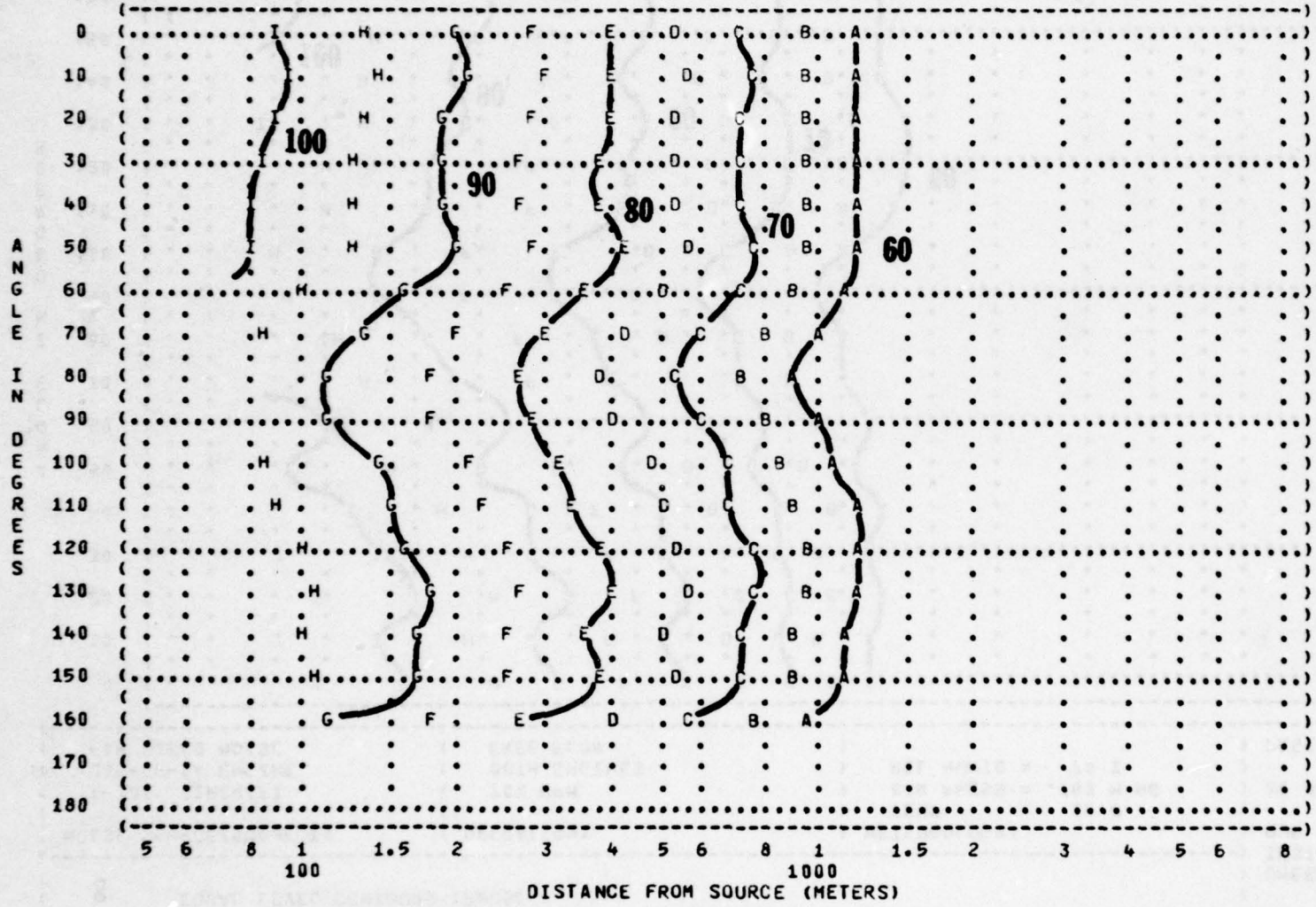
FIGURE 8 PERCEIVED NOISE LEVEL WITH SMOOTH TONE CORRECTION (PNLT) EQUAL LEVEL CONTOURS (PNDB)

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-056
RUN 01
20 OCT 75
PAGE 16

NOISE SOURCE/SUBJECT:
T-38A AIRCRAFT
J85-GE-5A ENGINE
FAR FIELD NOISE

OPERATION:
75% RPM
BOTH ENGINES
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %



POINT	PNDB
A	60
B	65
C	70
D	75
E	80
F	85
G	90
H	95
I	100

FIGURE 8 PERCEIVED NOISE LEVEL WITH SMOOTH TONE CORRECTION (PNLT)
EQUAL LEVEL CONTOURS (PNDB)

NOISE SOURCE/SUBJECT:
T-38A AIRCRAFT
J85-GE-5A ENGINE
FAR FIELD NOISE

OPERATION:
TRIM CHECK
94% RPM
BOTH ENGINES
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-056
RUN 02
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PAGE 16

POINT	PNDB
A	60
B	65
C	70
D	75
E	80
F	85
G	90
H	95
I	100
J	105
K	110
L	115

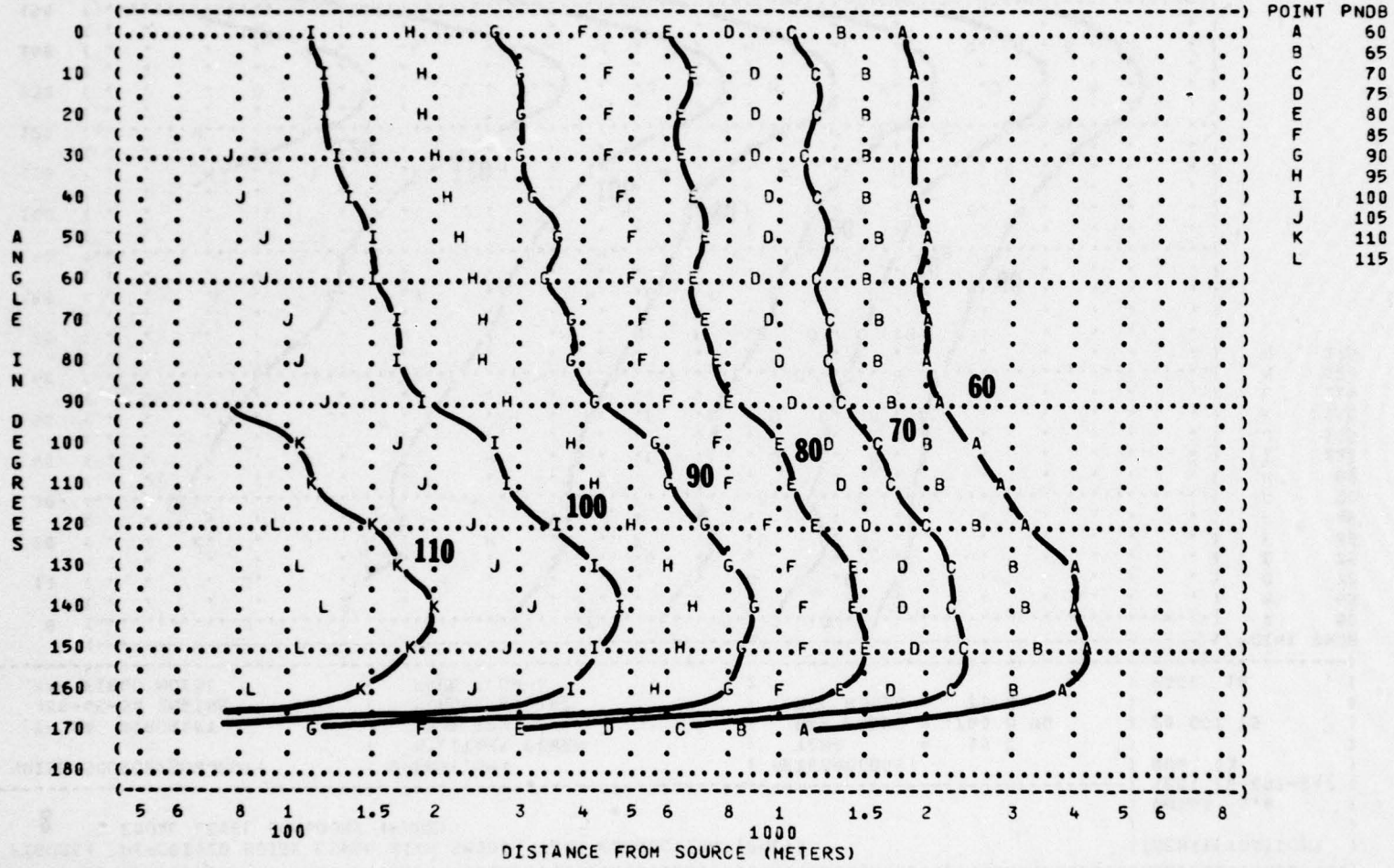


FIGURE 8 PERCEIVED NOISE LEVEL WITH SMOOTH TONE CORRECTION (PNLT)
EQUAL LEVEL CONTOURS (PNDB)

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-047
RUN 03
20 OCT 75
PAGE 16

NOISE SOURCE/SUBJECT:
T-38A AIRCRAFT
J85-GE-5A ENGINE
FAR FIELD NOISE

OPERATION:
MILITARY POWER
100% RPM
SINGLE ENGINE
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

POINT	PNDB
A	60
B	65
C	70
D	75
E	80
F	85
G	90
H	95
I	100
J	105
K	110
L	115
M	120
N	125

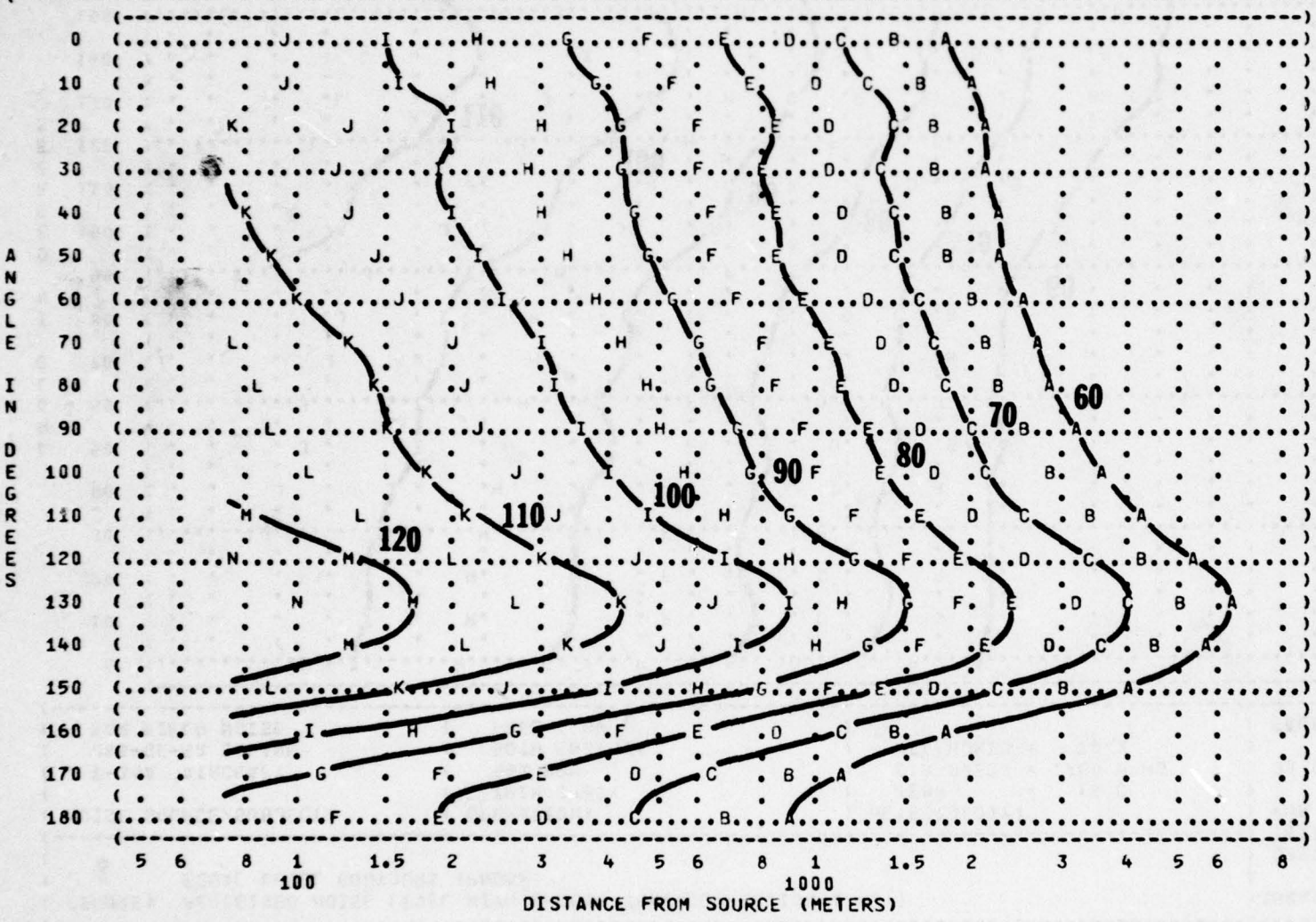


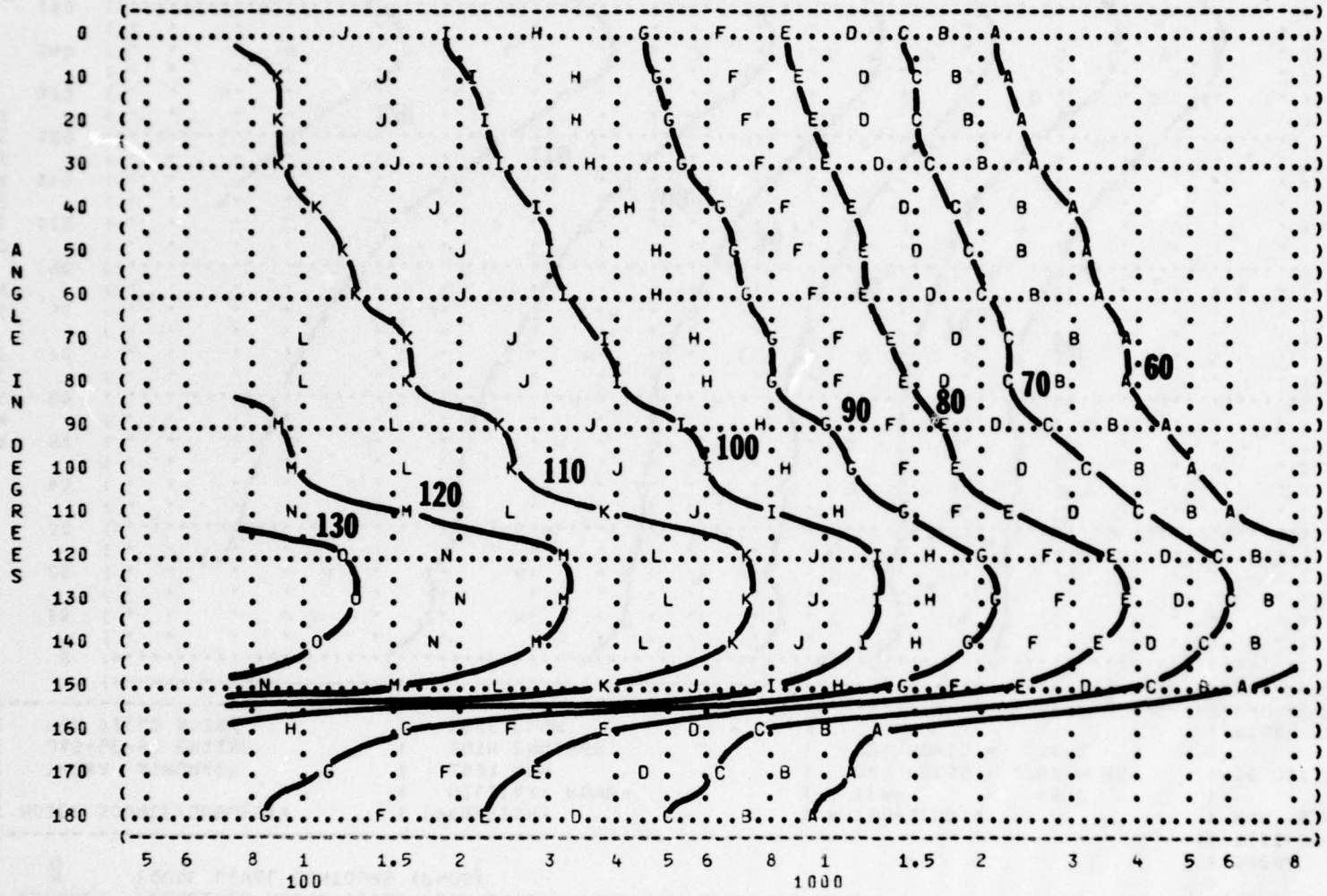
FIGURE 8 PERCEIVED NOISE LEVEL WITH SMOOTH TONE CORRECTION (PNLT) EQUAL LEVEL CONTOURS (PNDB)

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-047
RUN 04
20 OCT 75
PAGE 16

NOISE SOURCE/SUBJECT:
T-38A AIRCRAFT
J85-GE-5A ENGINE
FAR FIELD NOISE

OPERATION:
MAXIMUM POWER
100% RPM AND AFTERBURNER
SINGLE ENGINE
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %



POINT	PNDB
A	60
B	65
C	70
D	75
E	80
F	85
G	90
H	95
I	100
J	105
K	110
L	115
M	120
N	125
O	130

FIGURE 8 PERCEIVED NOISE LEVEL WITH SMOOTH TONE CORRECTION (PNLT)
EQUAL LEVEL CONTOURS (PNDB)

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-056
RUN 03
20 OCT 75
PAGE 16

NOISE SOURCE/SUBJECT:
T-38A AIRCRAFT
J85-GE-5A ENGINE
FAR FIELD NOISE

OPERATION:
MILITARY POWER
100% RPM
BOTH ENGINES
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

POINT	PNDB
A	60
B	65
C	70
D	75
E	80
F	85
G	90
H	95
I	100
J	105
K	110
L	115
M	120
N	125

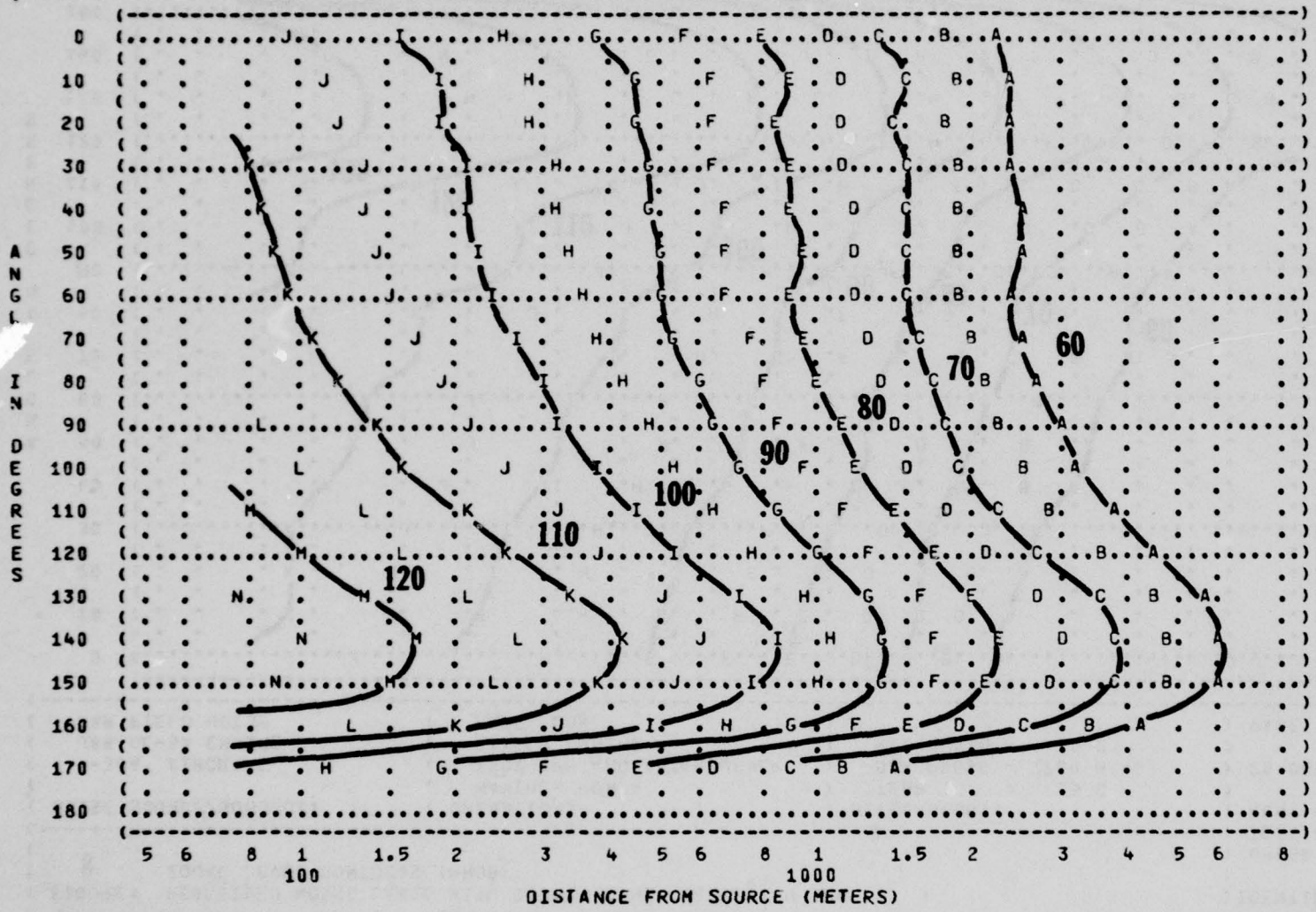


FIGURE: 8 PERCEIVED NOISE LEVEL WITH SMOOTH TONE CORRECTION (PNLT)
EQUAL LEVEL CONTOURS (PNDB)

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-056
RUN 04
20 OCT 75
PAGE 16

NOISE SOURCE/SUBJECT:
T-38A AIRCRAFT
J85-GE-5A ENGINE
FAR FIELD NOISE

OPERATION:
MAXIMUM POWER
100% RPM AND AFTERBURNER
BOTH ENGINES
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

POINT	PNDB
A	60
B	65
C	70
D	75
E	80
F	85
G	90
H	95
I	100
J	105
K	110
L	115
M	120
N	125
O	130

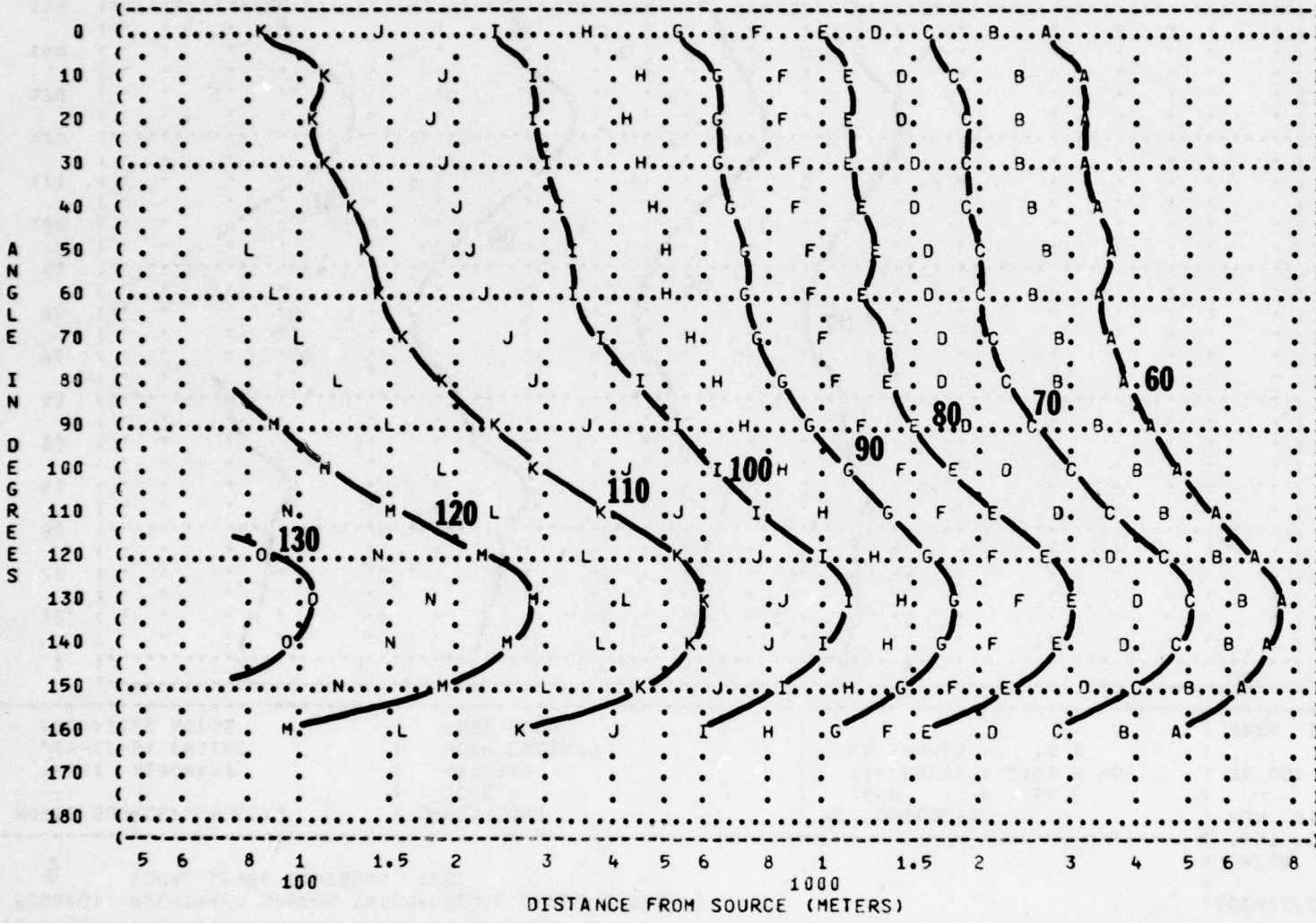


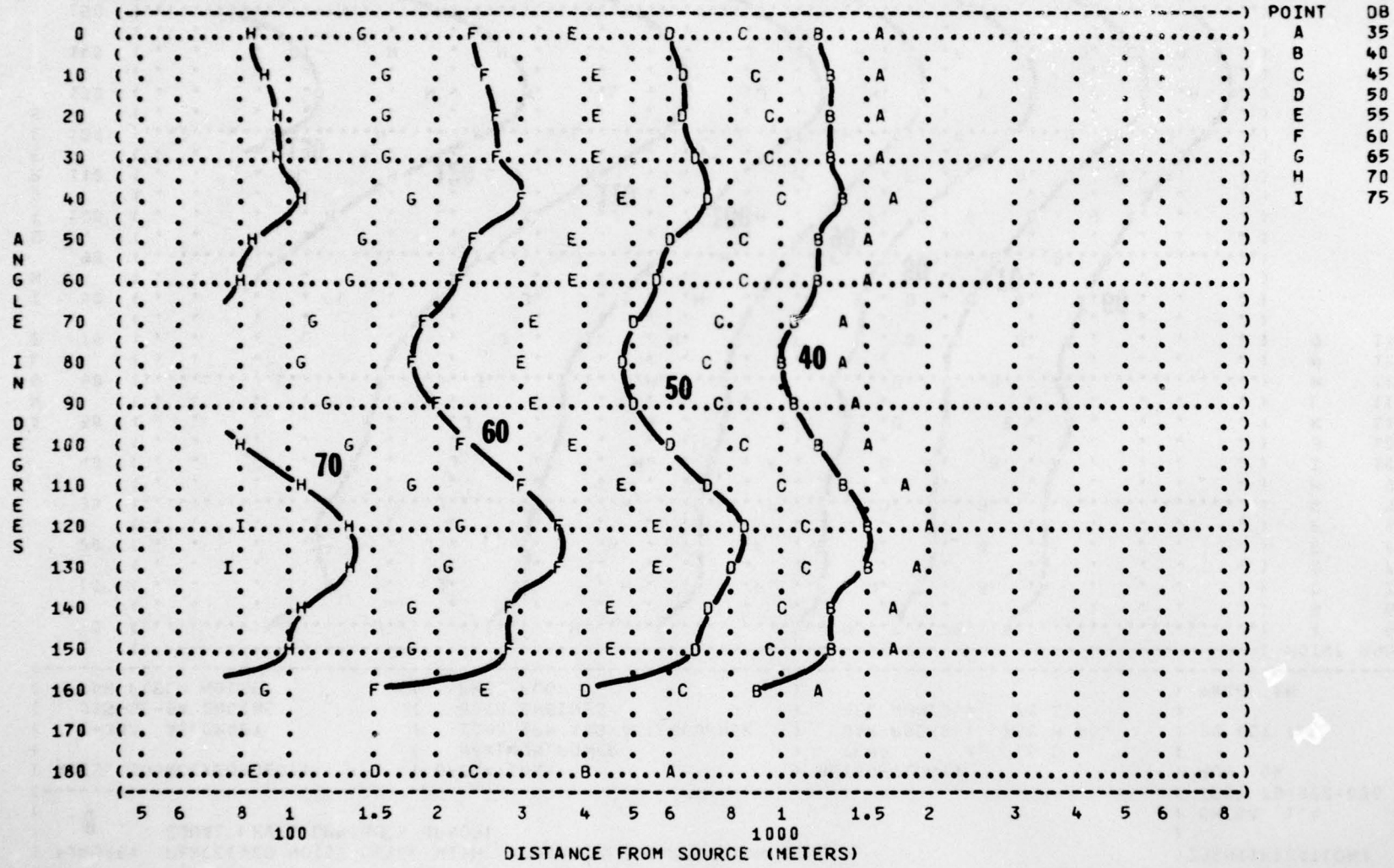
FIGURE: 9 PREFERRED SPEECH INTERFERENCE LEVEL (PSIL) EQUAL LEVEL CONTOURS (DB)

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-047
RUN 01
20 OCT 75
PAGE 17

NOISE SOURCE/SUBJECT:
T-38A AIRCRAFT
J85-GE-5A ENGINE
FAR FIELD NOISE

OPERATION:
IDLE
48% RPM
BOTH ENGINES
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %



POINT	DB
A	35
B	40
C	45
D	50
E	55
F	60
G	65
H	70
I	75

FIGURE 9 PREFERRED SPEECH INTERFERENCE LEVEL (PSIL) EQUAL LEVEL CONTOURS (DB)

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-047
RUN 02
20 OCT 75
PAGE 17

NOISE SOURCE/SUBJECT:
T-38A AIRCRAFT
J85-GE-5A ENGINE
FAR FIELD NOISE

OPERATION:
70% RPM
BOTH ENGINES
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

POINT	DB
A	35
B	40
C	45
D	50
E	55
F	60
G	65
H	70
I	75

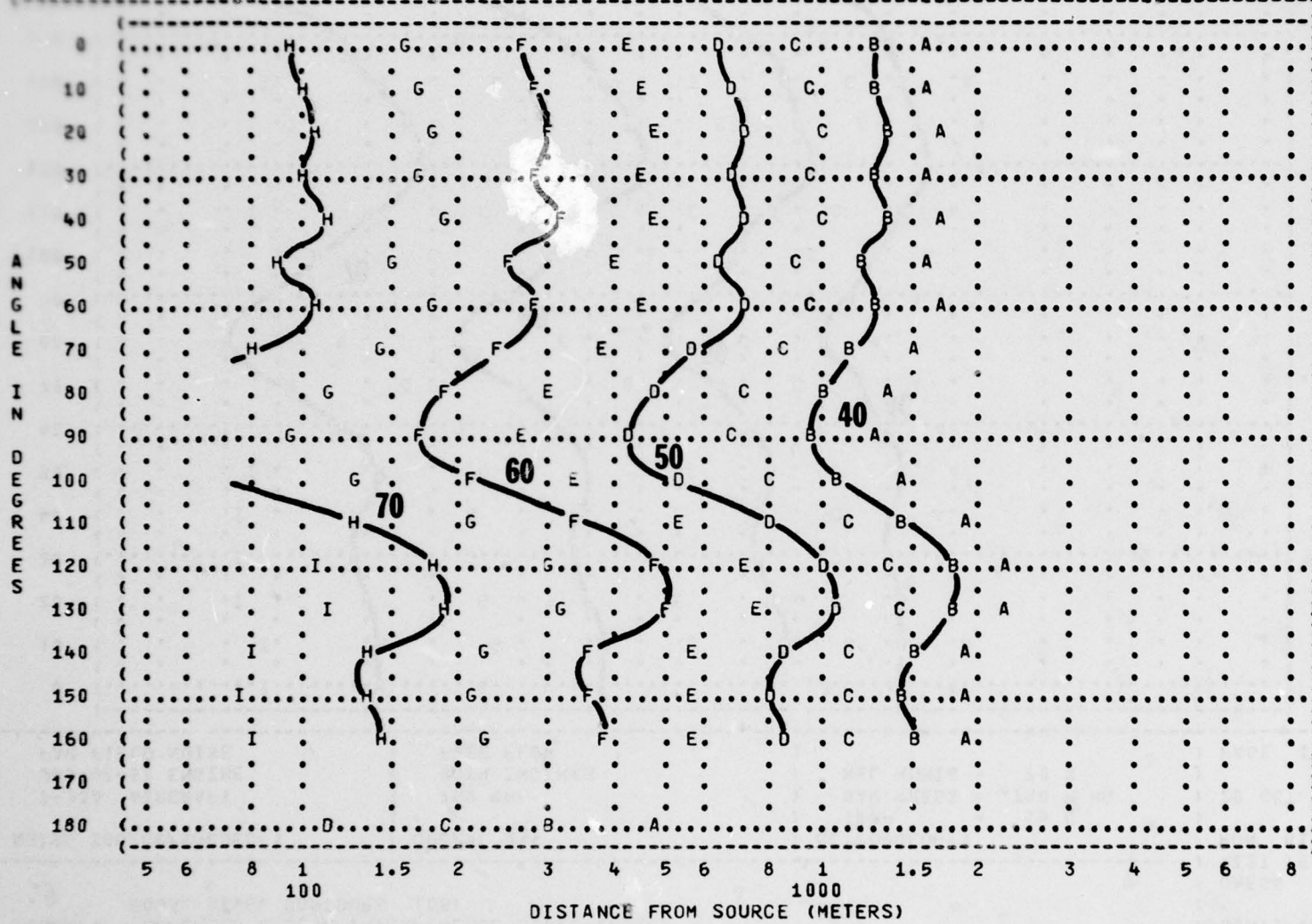


FIGURE: 9 PREFERRED SPEECH INTERFERENCE LEVEL (PSIL) EQUAL LEVEL CONTOURS (DB)

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-056
RUN 01
20 OCT 75
PAGE 17

NOISE SOURCE/SUBJECT:
T-38A AIRCRAFT
J85-GE-5A ENGINE
FAR FIELD NOISE

OPERATION:
75% RPM
BOTH ENGINES
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

POINT	DB
A	35
B	40
C	45
D	50
E	55
F	60
G	65
H	70
I	75

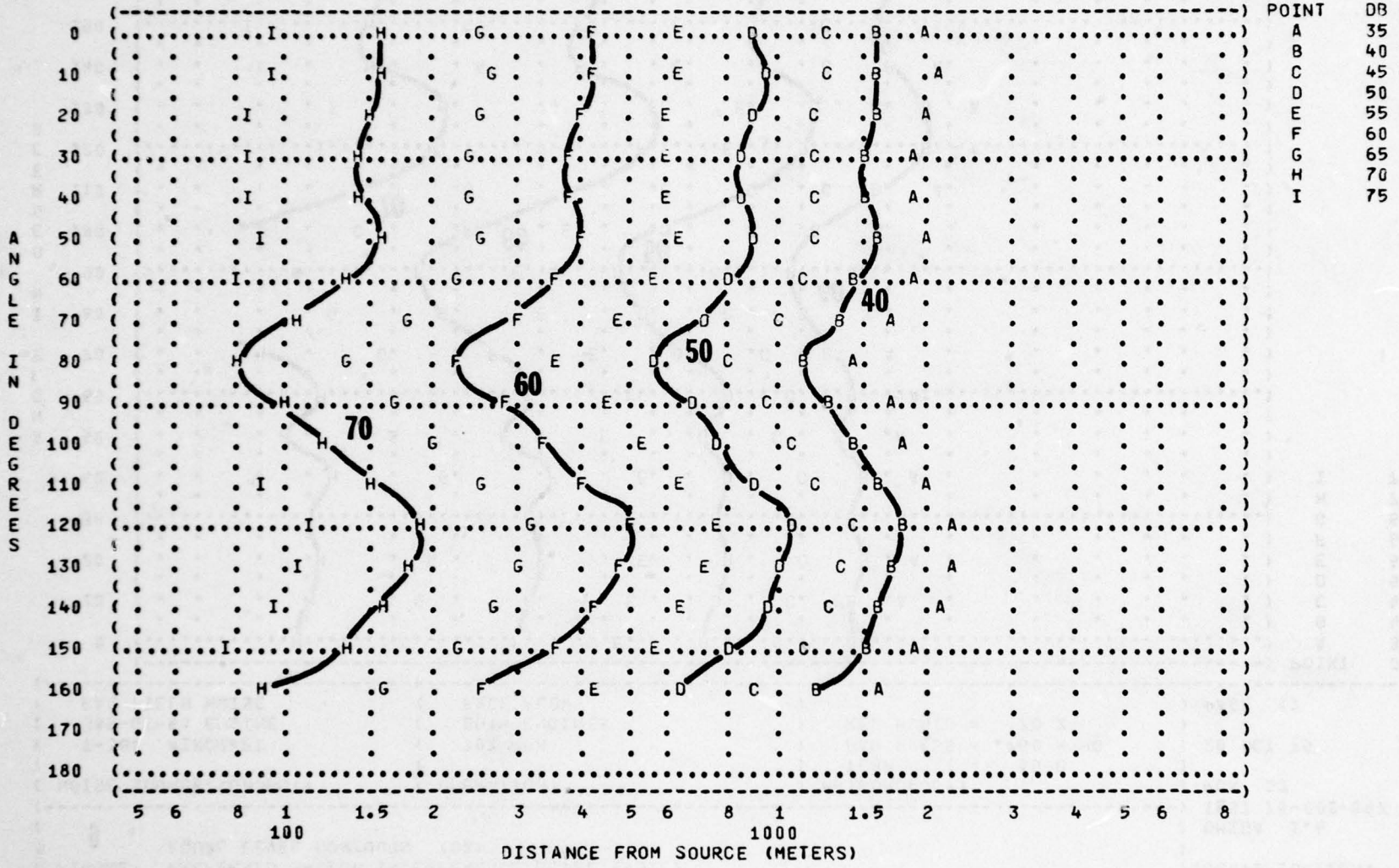


FIGURE 9 PREFERRED SPEECH INTERFERENCE LEVEL (PSIL) EQUAL LEVEL CONTOURS (DB)

NOISE SOURCE/SUBJECT:
T-38A AIRCRAFT
J85-GE-5A ENGINE
FAR FIELD NOISE

OPERATION:
TRIM CHECK
94% RPM
BOTH ENGINES
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-056
RUN 02
20 OCT 75
PAGE 17

POINT	DB
A	35
B	40
C	45
D	50
E	55
F	60
G	65
H	70
I	75
J	80
K	85
L	90
M	95
N	100

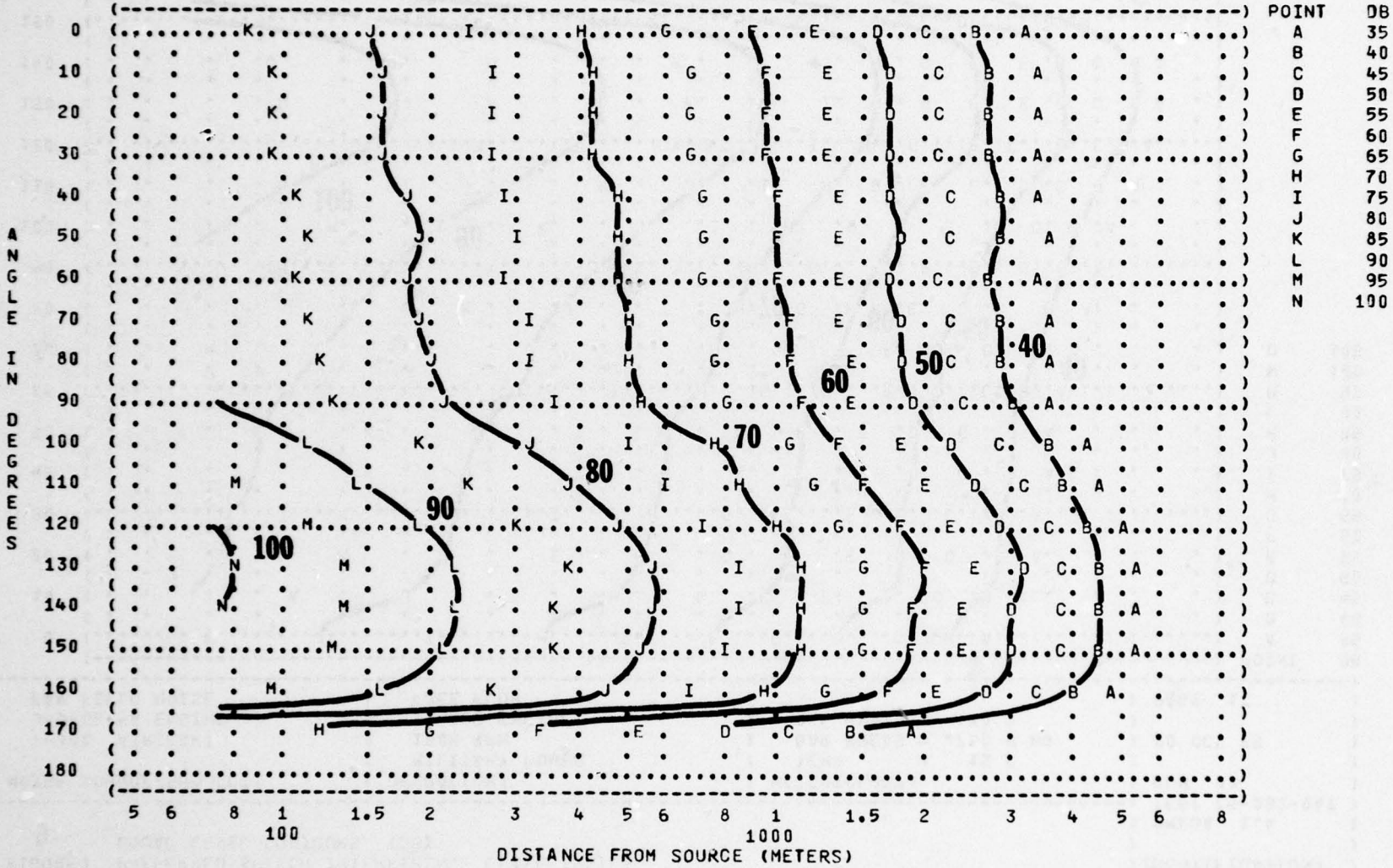


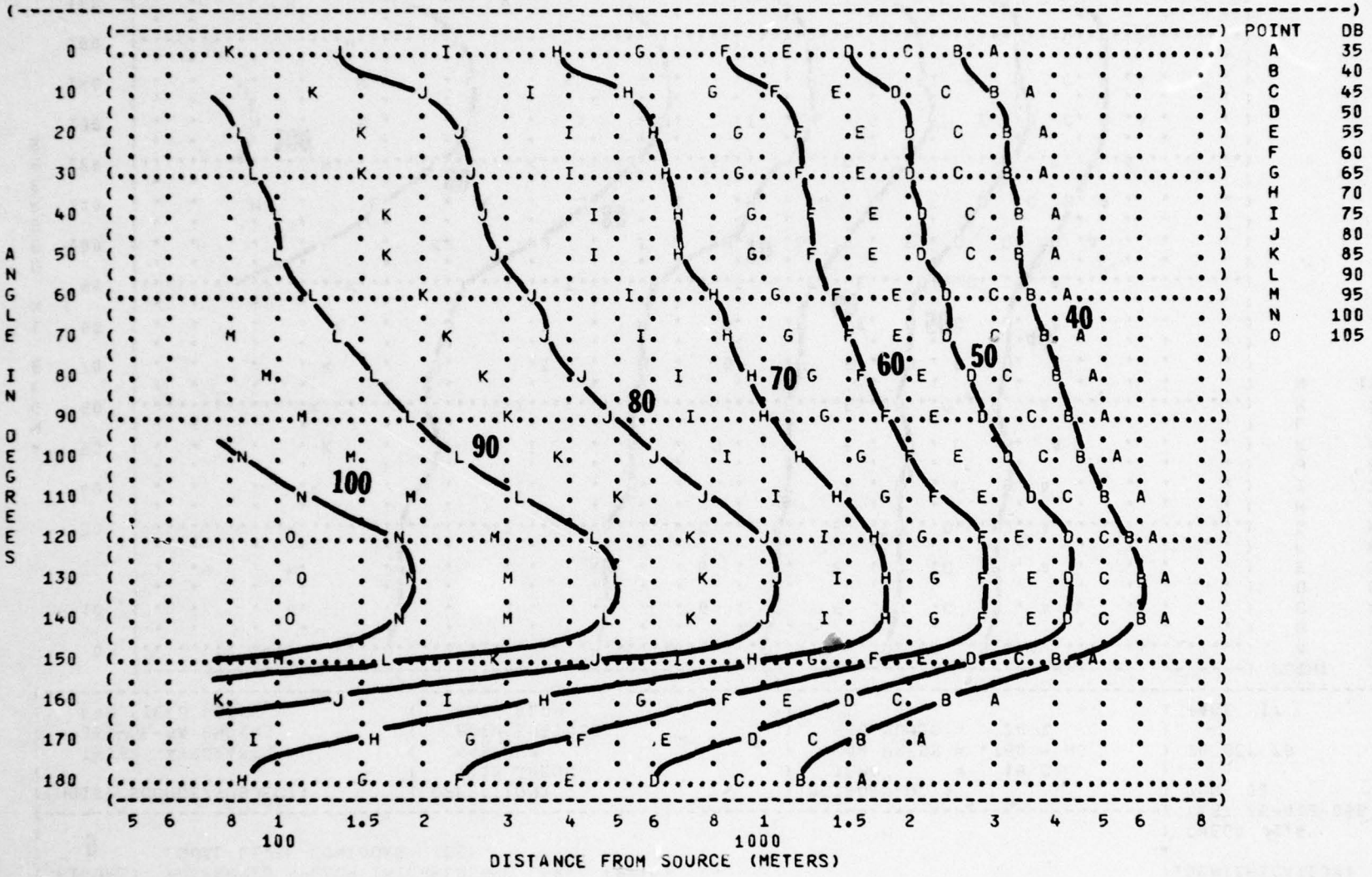
FIGURE: 9 PREFERRED SPEECH INTERFERENCE LEVEL (PSIL) EQUAL LEVEL CONTOURS (DB)

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-047
RUN 03
20 OCT 75
PAGE 17

NOISE SOURCE/SUBJECT:
T-38A AIRCRAFT
J85-GE-5A ENGINE
FAR FIELD NOISE

OPERATION:
MILITARY POWER
100% RPM
SINGLE ENGINE
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %



POINT	DB
A	35
B	40
C	45
D	50
E	55
F	60
G	65
H	70
I	75
J	80
K	85
L	90
M	95
N	100
O	105

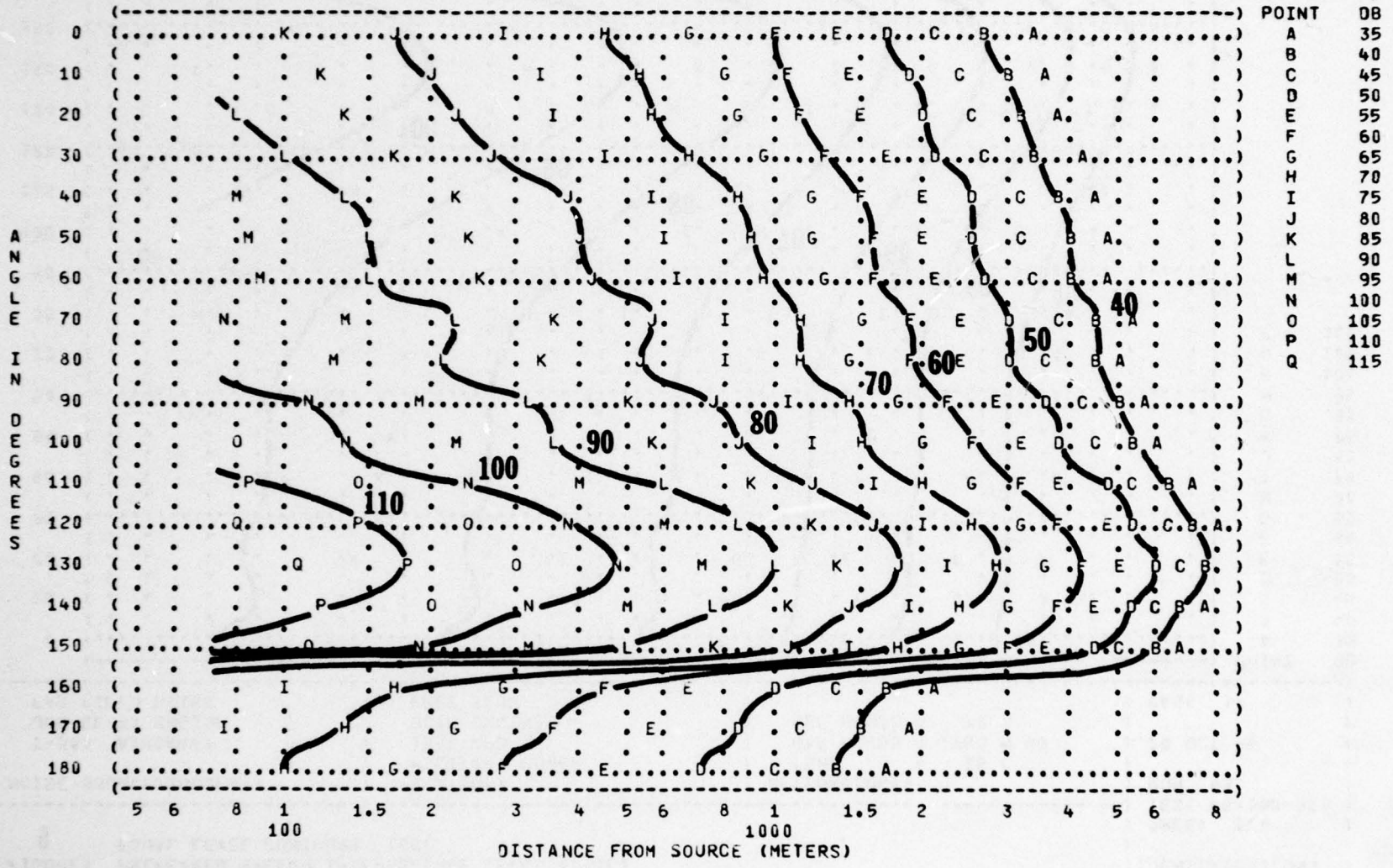
FIGURE 9: PREFERRED SPEECH INTERFERENCE LEVEL (PSIL) EQUAL LEVEL CONTOURS (DB)

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-047
RUN 04
20 OCT 75
PAGE 17

NOISE SOURCE/SUBJECT:
T-38A AIRCRAFT
J85-GE-5A ENGINE
FAR FIELD NOISE

OPERATION:
MAXIMUM POWER
100% RPM AND AFTERBURNER
SINGLE ENGINE
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %



POINT	DB
A	35
B	40
C	45
D	50
E	55
F	60
G	65
H	70
I	75
J	80
K	85
L	90
M	95
N	100
O	105
P	110
Q	115

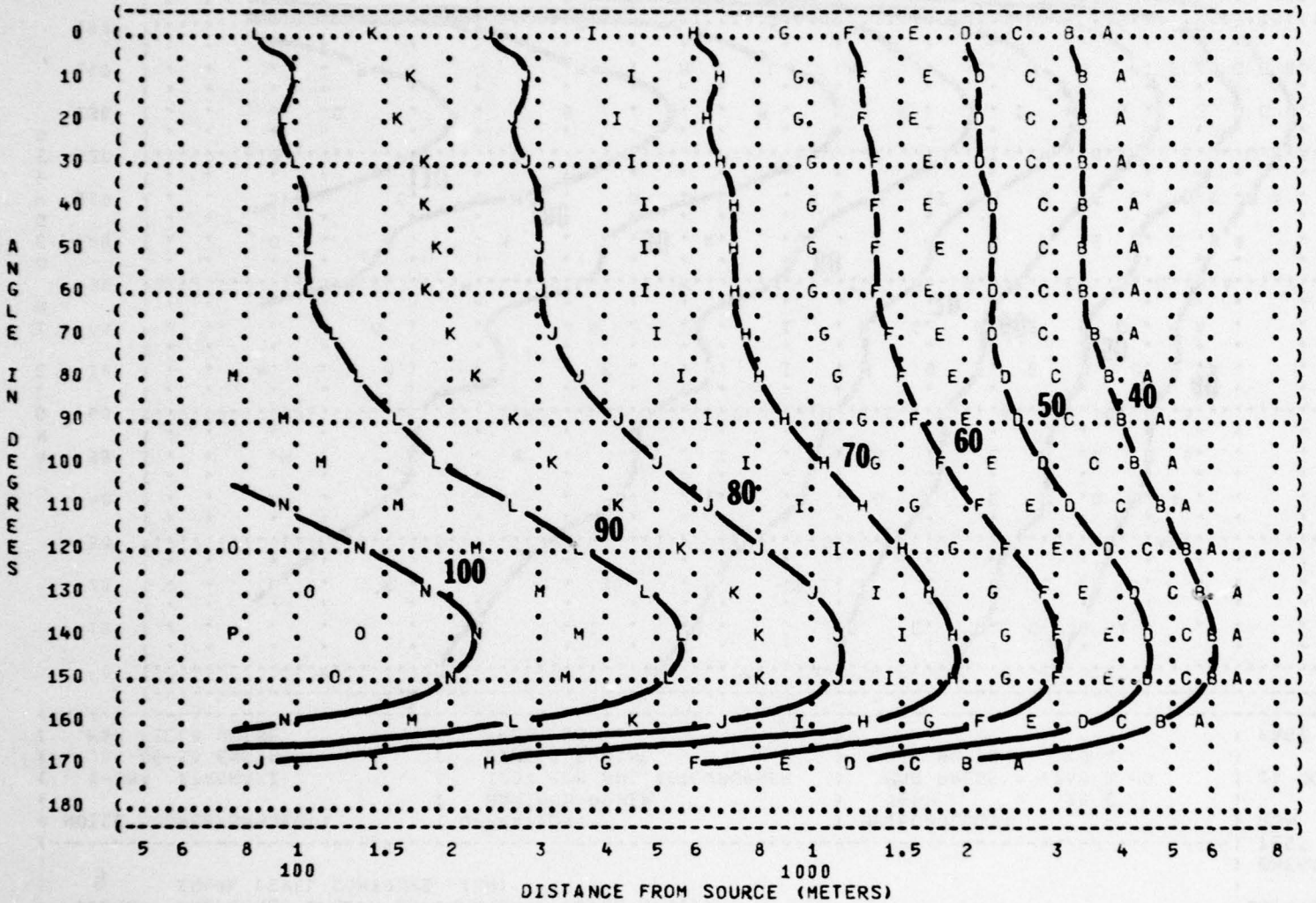
FIGURE 9 PREFERRED SPEECH INTERFERENCE LEVEL (PSIL) EQUAL LEVEL CONTOURS (DB)

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-056
RUN 03
20 OCT 75
PAGE 17

NOISE SOURCE/SUBJECT:
T-38A AIRCRAFT
J85-GE-5A ENGINE
FAR FIELD NOISE

OPERATION:
MILITARY POWER
100% RPM
BOTH ENGINES
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %



POINT	DB
A	35
B	40
C	45
D	50
E	55
F	60
G	65
H	70
I	75
J	80
K	85
L	90
M	95
N	100
O	105
P	110

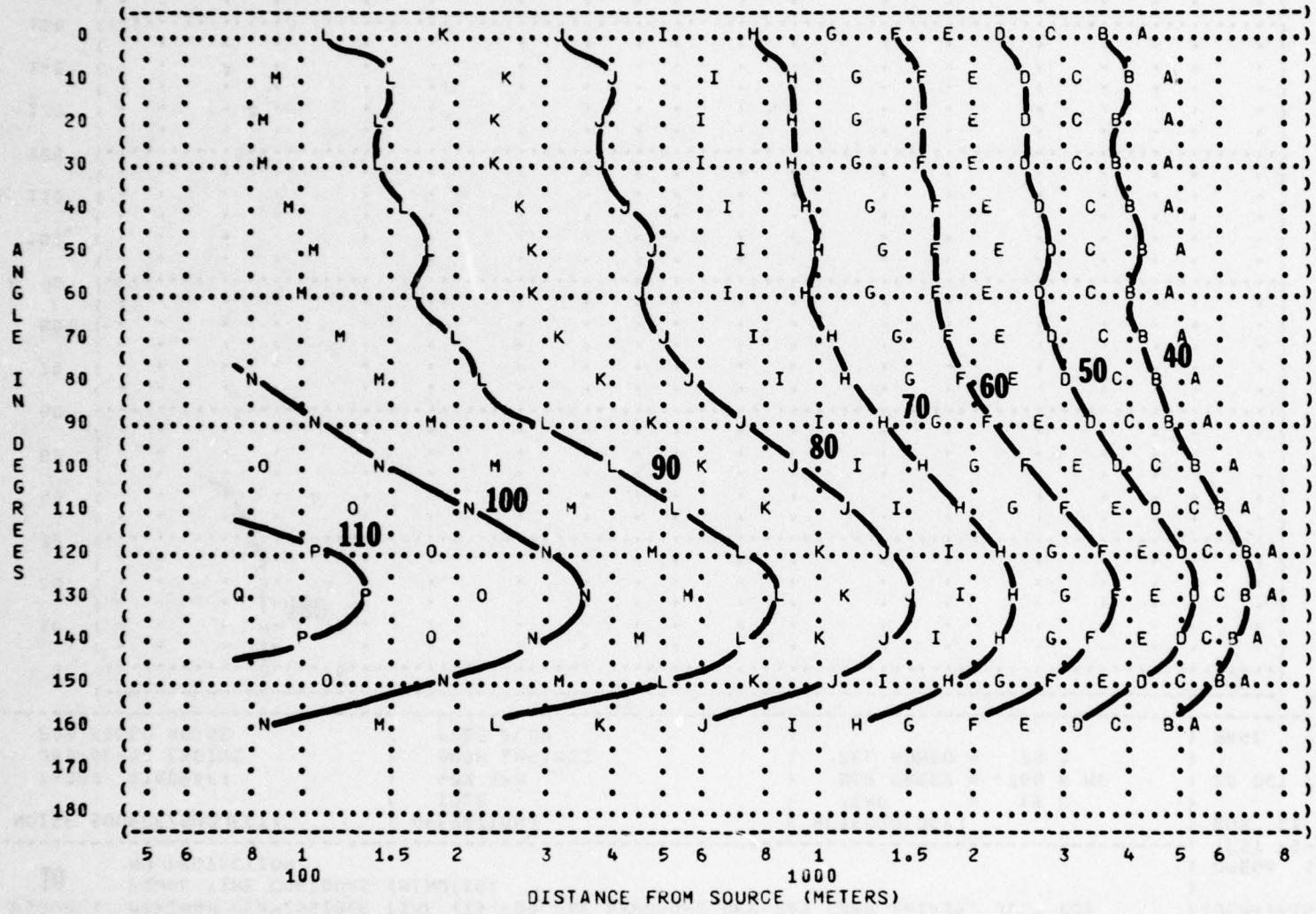
FIGURE 9 PREFERRED SPEECH INTERFERENCE LEVEL (PSIL) EQUAL LEVEL CONTOURS (DB)

NOISE SOURCE/SUBJECT:
T-38A AIRCRAFT
J85-GE-5A ENGINE
FAR FIELD NOISE

OPERATION:
MAXIMUM POWER
100% RPM AND AFTERBURNER
BOTH ENGINES
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-056
RUN 04
20 OCT 75
PAGE 17



POINT	DB
A	35
B	40
C	45
D	50
E	55
F	60
G	65
H	70
I	75
J	80
K	85
L	90
M	95
N	100
O	105
P	110
Q	115

FIGURE: 10

MAXIMUM PERMISSIBLE TIME (T) FOR ONE EXPOSURE PER DAY (AFR 161-35, JULY 73)
EQUAL TIME CONTOURS (MINUTES)
NO PROTECTION

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-047
RUN 01
20 OCT 75
PAGE 7

NOISE SOURCE/SUBJECT:
T-38A AIRCRAFT
J85-GE-5A ENGINE
FAR FIELD NOISE

OPERATION:
IDLE
48% RPM
BOTH ENGINES
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

POINT	MIN
A	960
B	480

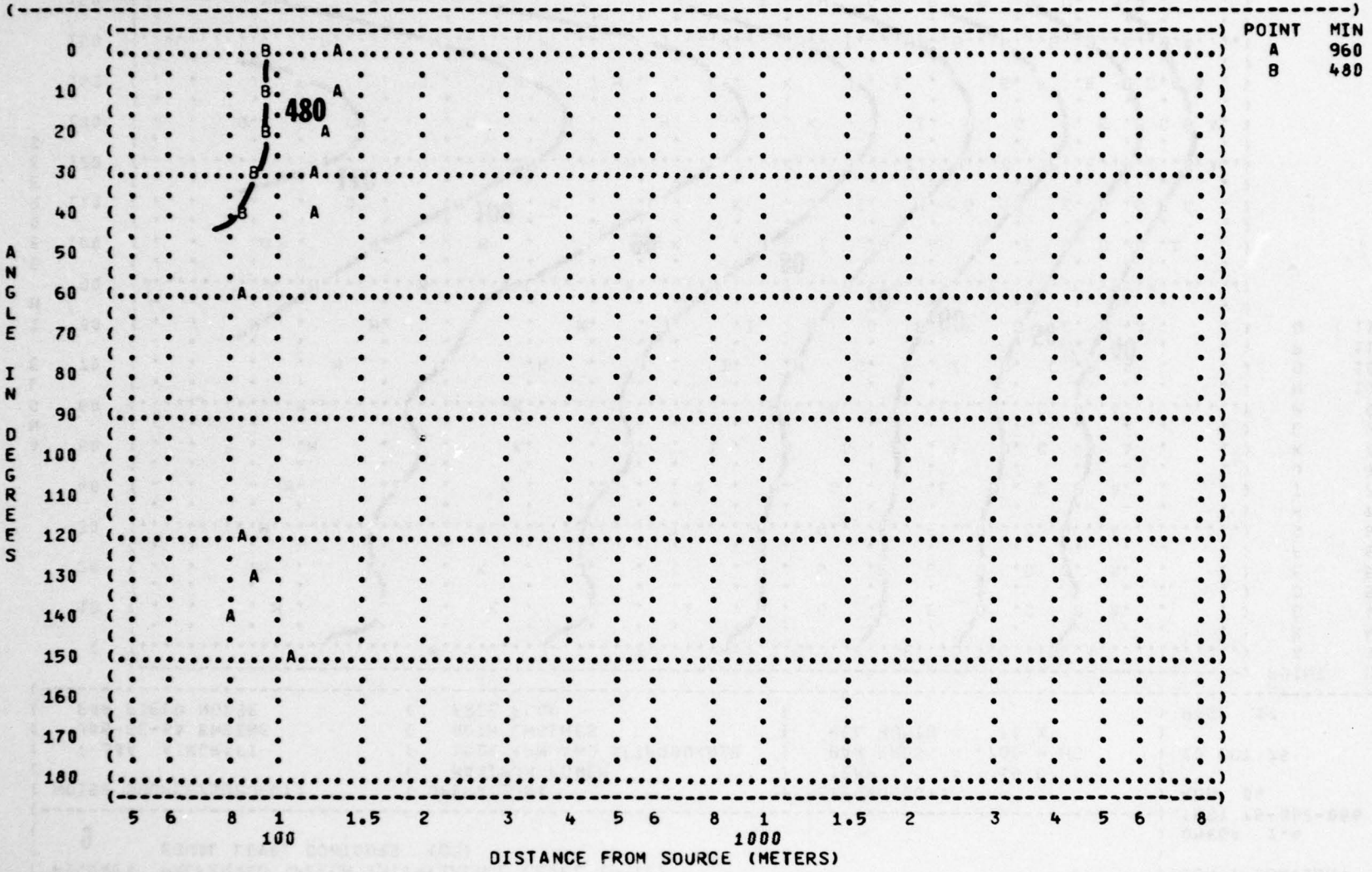


FIGURE 10: MAXIMUM PERMISSIBLE TIME (T) FOR ONE EXPOSURE PER DAY (AFR 161-35, JULY 73)
EQUAL TIME CONTOURS (MINUTES)

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-047
RUN 01
20 OCT 75
PAGE 8

NOISE SOURCE/SUBJECT:
T-38A AIRCRAFT
J85-GE-5A ENGINE
FAR FIELD NOISE

OPERATION:
IDLE
48% RPM
BOTH ENGINES
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

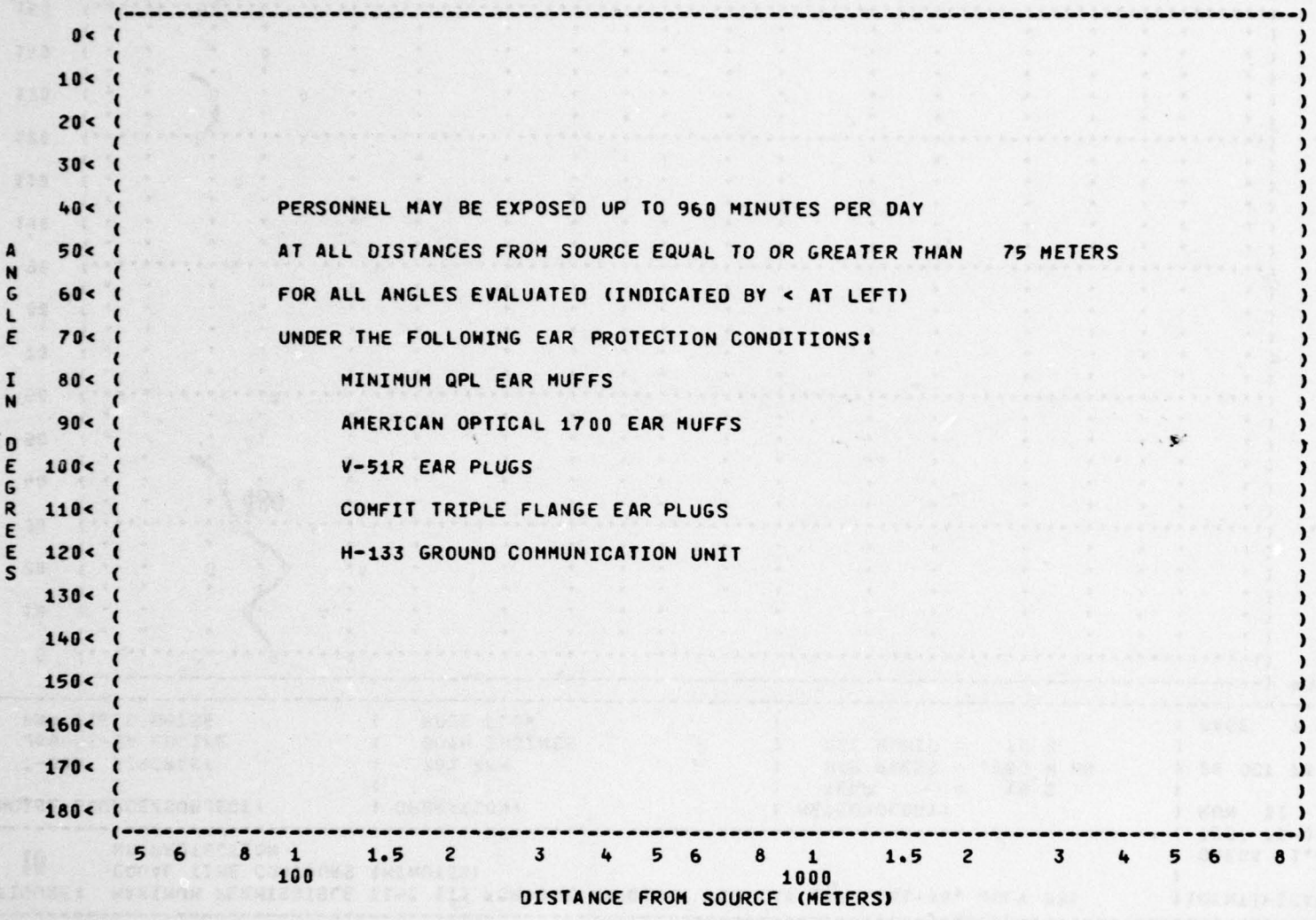


FIGURE 10: MAXIMUM PERMISSIBLE TIME (T) FOR ONE EXPOSURE PER DAY (AFR 161-35, JULY 73)
EQUAL TIME CONTOURS (MINUTES)
NO PROTECTION

NOISE SOURCE/SUBJECT:
T-38A AIRCRAFT
J85-GE-5A ENGINE
FAR FIELD NOISE

OPERATION:
70% RPM
BOTH ENGINES
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-047
RUN 02
20 OCT 75
PAGE 7

POINT	MIN
A	960
B	480
C	240

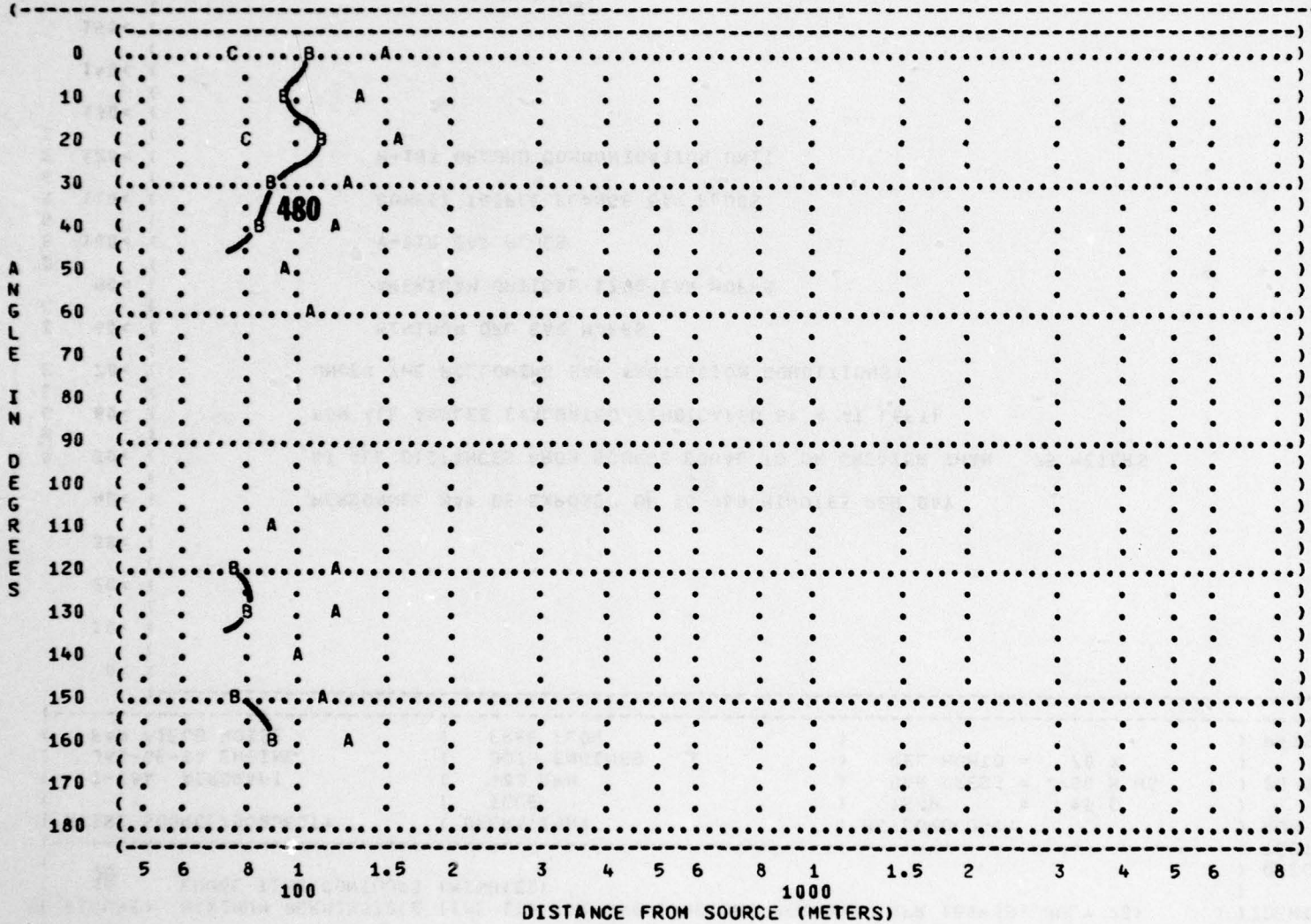


FIGURE 10: MAXIMUM PERMISSIBLE TIME (T) FOR ONE EXPOSURE PER DAY (AFR 161-35, JULY 73)
EQUAL TIME CONTOURS (MINUTES)

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-047
RUN 02
20 OCT 75
PAGE 8

NOISE SOURCE/SUBJECT:
T-38A AIRCRAFT
J85-GE-5A ENGINE
FAR FIELD NOISE

OPERATION:
70% RPM
BOTH ENGINES
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

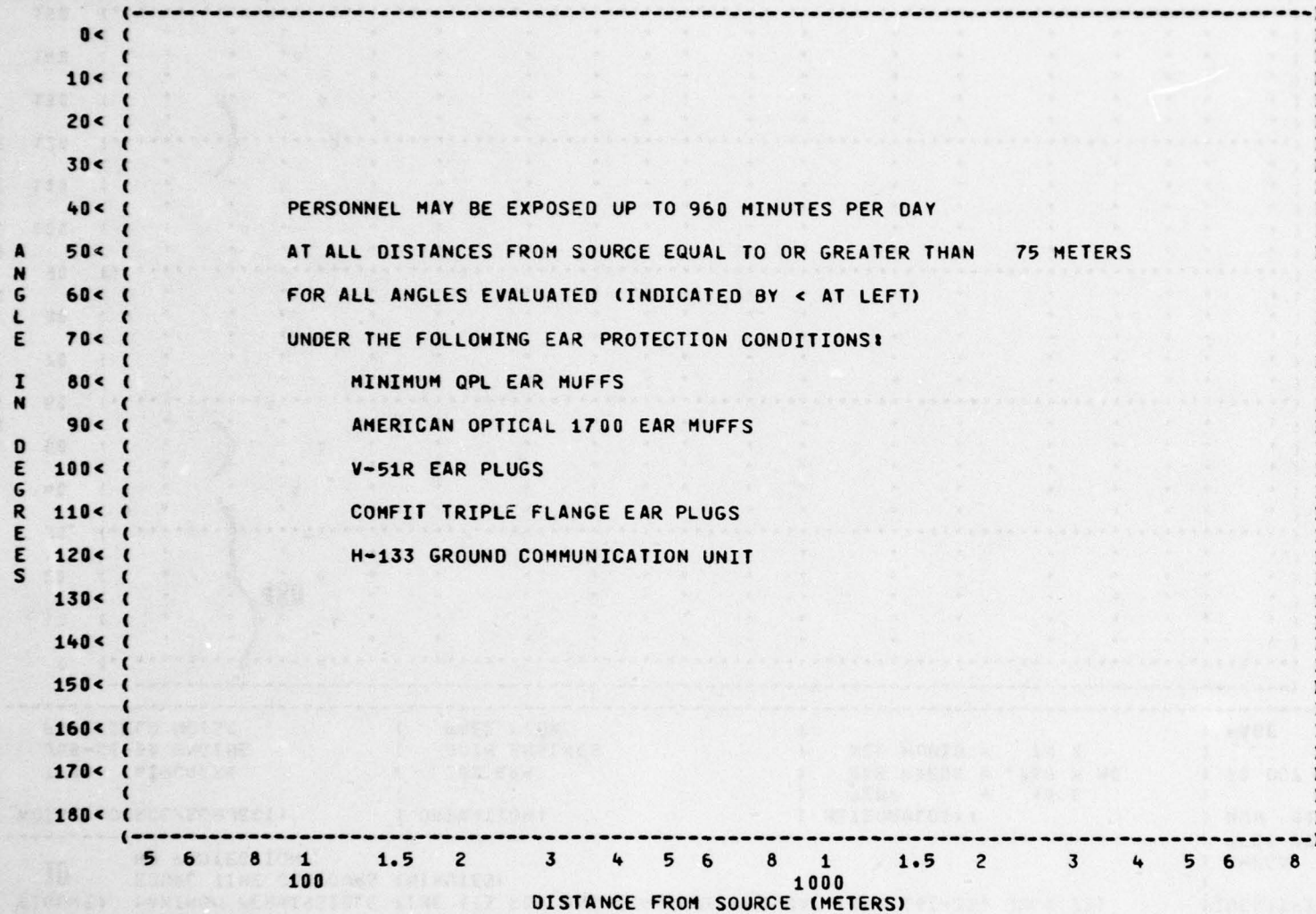


FIGURE: 10

MAXIMUM PERMISSIBLE TIME (T) FOR ONE EXPOSURE PER DAY (AFR 161-35, JULY 73)
EQUAL TIME CONTOURS (MINUTES)
NO PROTECTION

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-056
RUN 01
20 OCT 75
PAGE 7

NOISE SOURCE/SUBJECT:
T-38A AIRCRAFT
J85-GE-5A ENGINE
FAR FIELD NOISE

OPERATION:
75% RPM
BOTH ENGINES
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

POINT	MIN
A	960
B	480

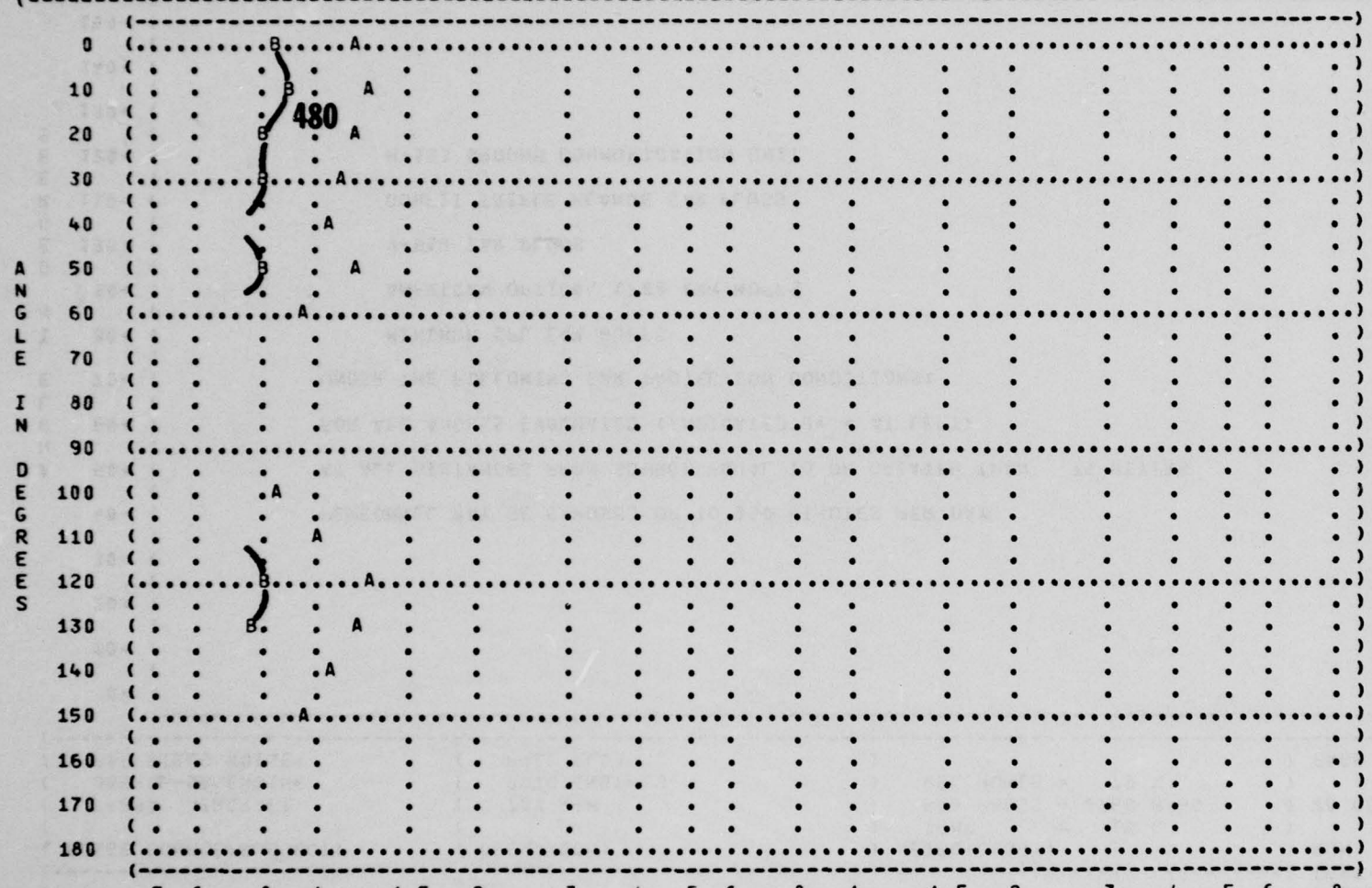


FIGURE 10: MAXIMUM PERMISSIBLE TIME (T) FOR ONE EXPOSURE PER DAY (AFR 161-35, JULY 73)
EQUAL TIME CONTOURS (MINUTES)

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-056
RUN 01
20 OCT 75
PAGE 8

NOISE SOURCE/SUBJECT:
T-38A AIRCRAFT
J85-GE-5A ENGINE
FAR FIELD NOISE

OPERATION:
75% RPM
BOTH ENGINES
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

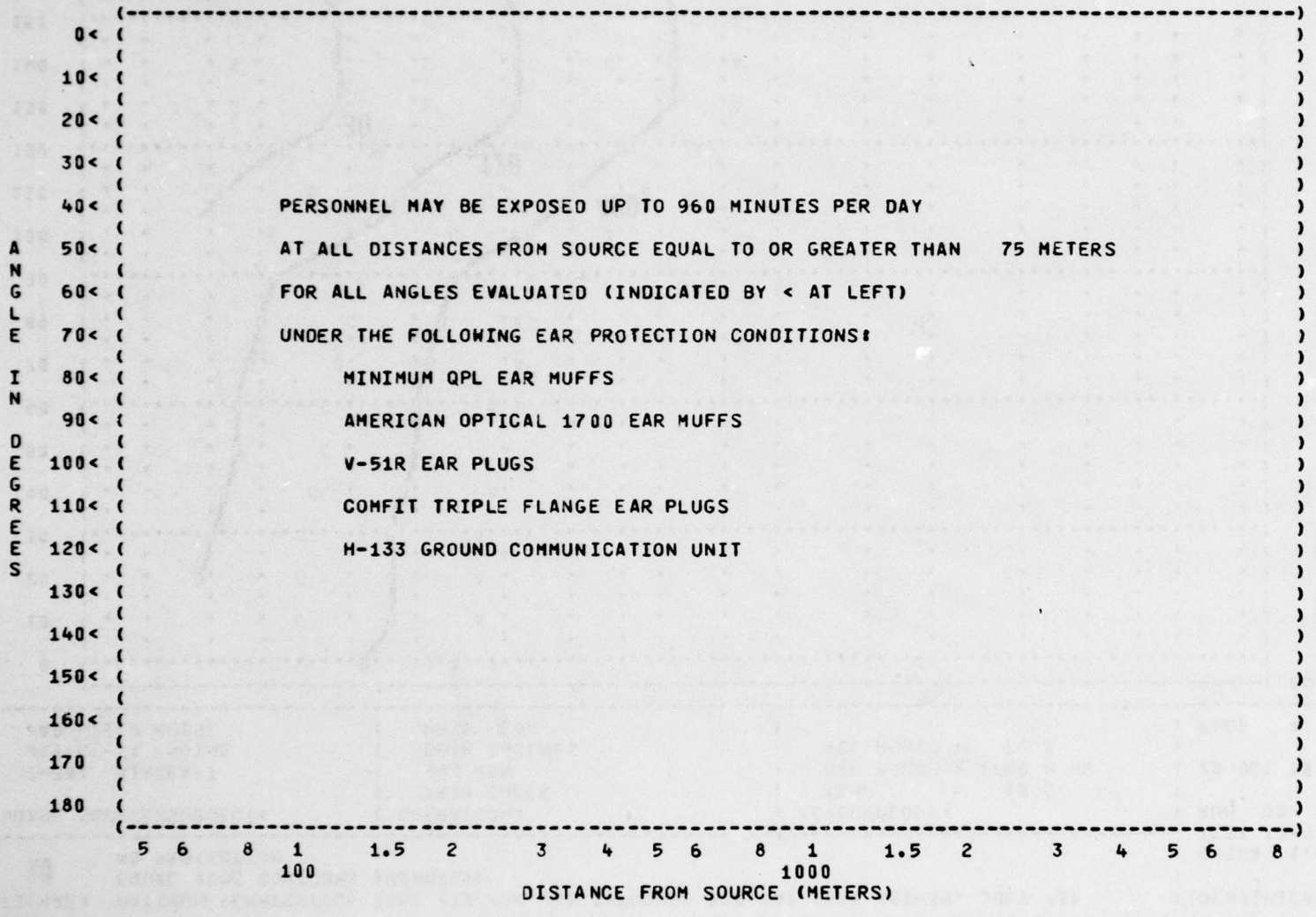


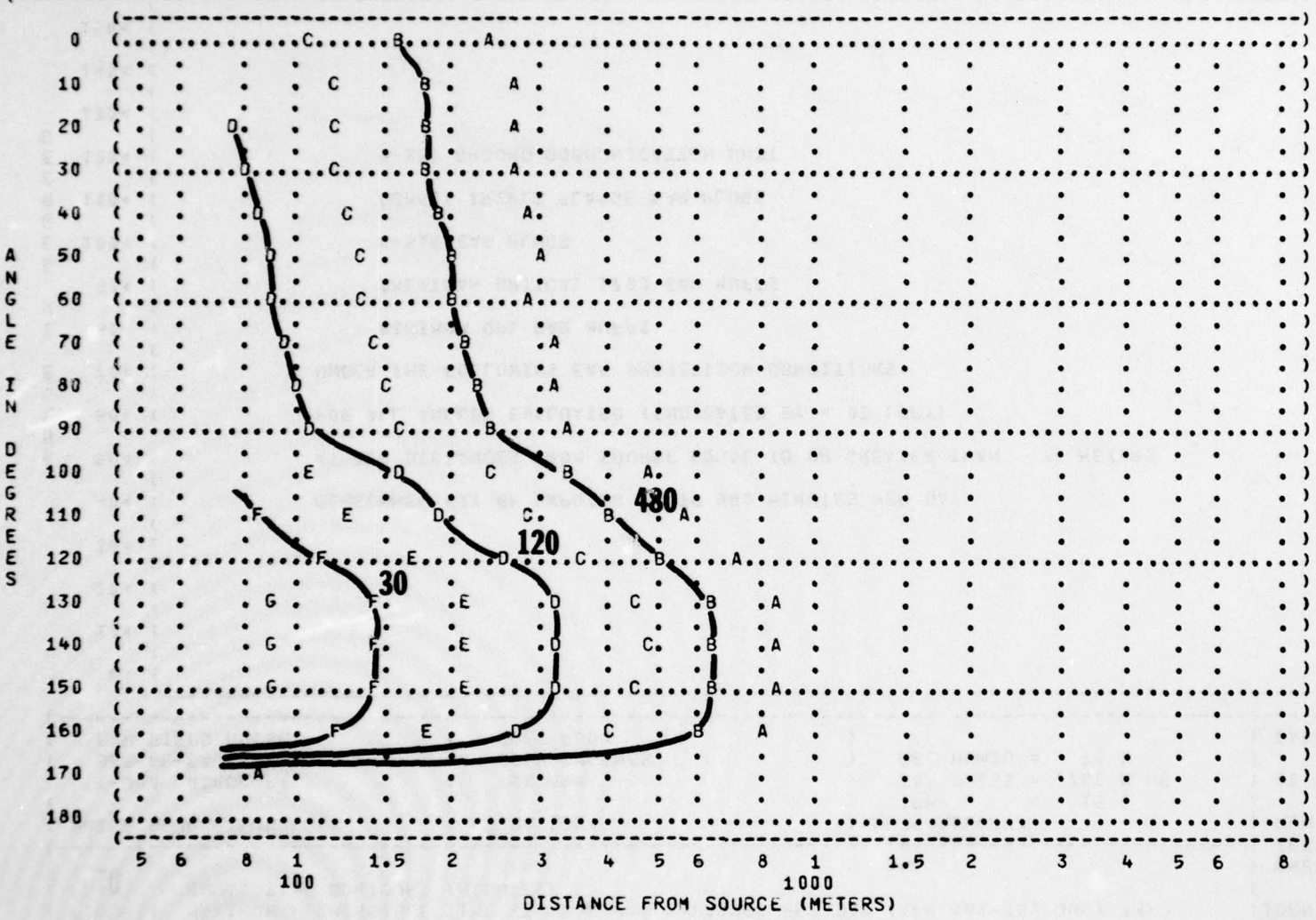
FIGURE 10: MAXIMUM PERMISSIBLE TIME (T) FOR ONE EXPOSURE PER DAY (AFR 161-35, JULY 73)
EQUAL TIME CONTOURS (MINUTES)
NO PROTECTION

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-056
RUN 02
20 OCT 75
PAGE 7

NOISE SOURCE/SUBJECT:
T-38A AIRCRAFT
J85-GE-5A ENGINE
FAR FIELD NOISE

OPERATION:
TRIM CHECK
94% RPM
BOTH ENGINES
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %



POINT	MIN
A	960
B	480
C	240
D	120
E	60
F	30
G	15

AD-A048 834 AEROSPACE MEDICAL RESEARCH LAB WRIGHT-PATTERSON AFB OHIO F/G 20/1
USAF BIOENVIRONMENTAL NOISE DATA HANDBOOK: VOLUME 74. T-38A AIR--ETC(U)
FEB 77 R G POWELL

UNCLASSIFIED AMRL-TR-75-50-VOL-74 NL

2 OF 3
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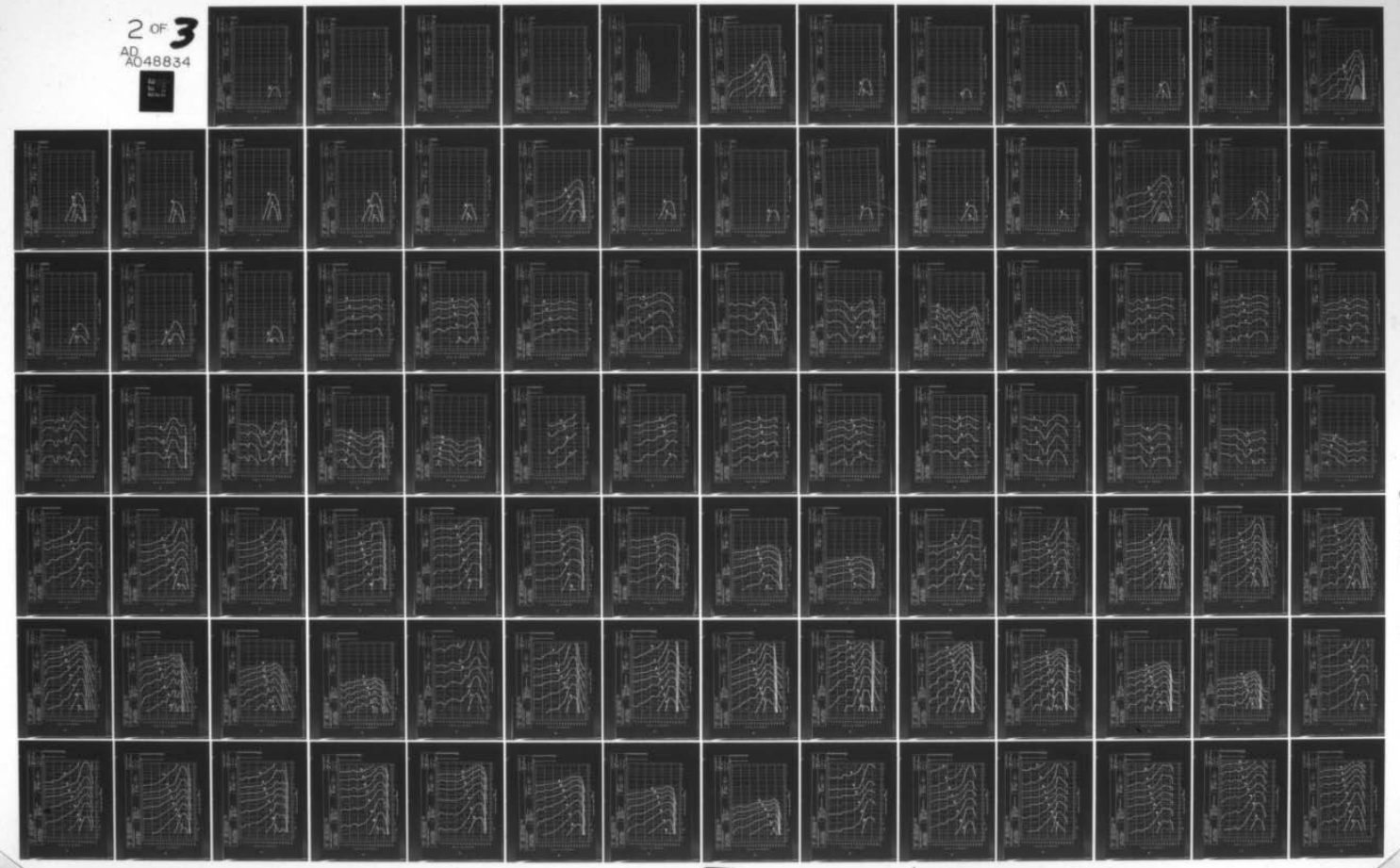


FIGURE: 10

MAXIMUM PERMISSIBLE TIME (T) FOR ONE EXPOSURE PER DAY (AFR 161-35, JULY 73)
EQUAL TIME CONTOURS (MINUTES)
MINIMUM QPL EAR MUFFS

NOISE SOURCE/SUBJECT:
T-38A AIRCRAFT
J85-GE-5A ENGINE
FAR FIELD NOISE

OPERATION:
TRIM CHECK
94% RPM
BOTH ENGINES
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-056
RUN 02
20 OCT 75
PAGE 8

POINT	MIN
A	960
B	480
C	240

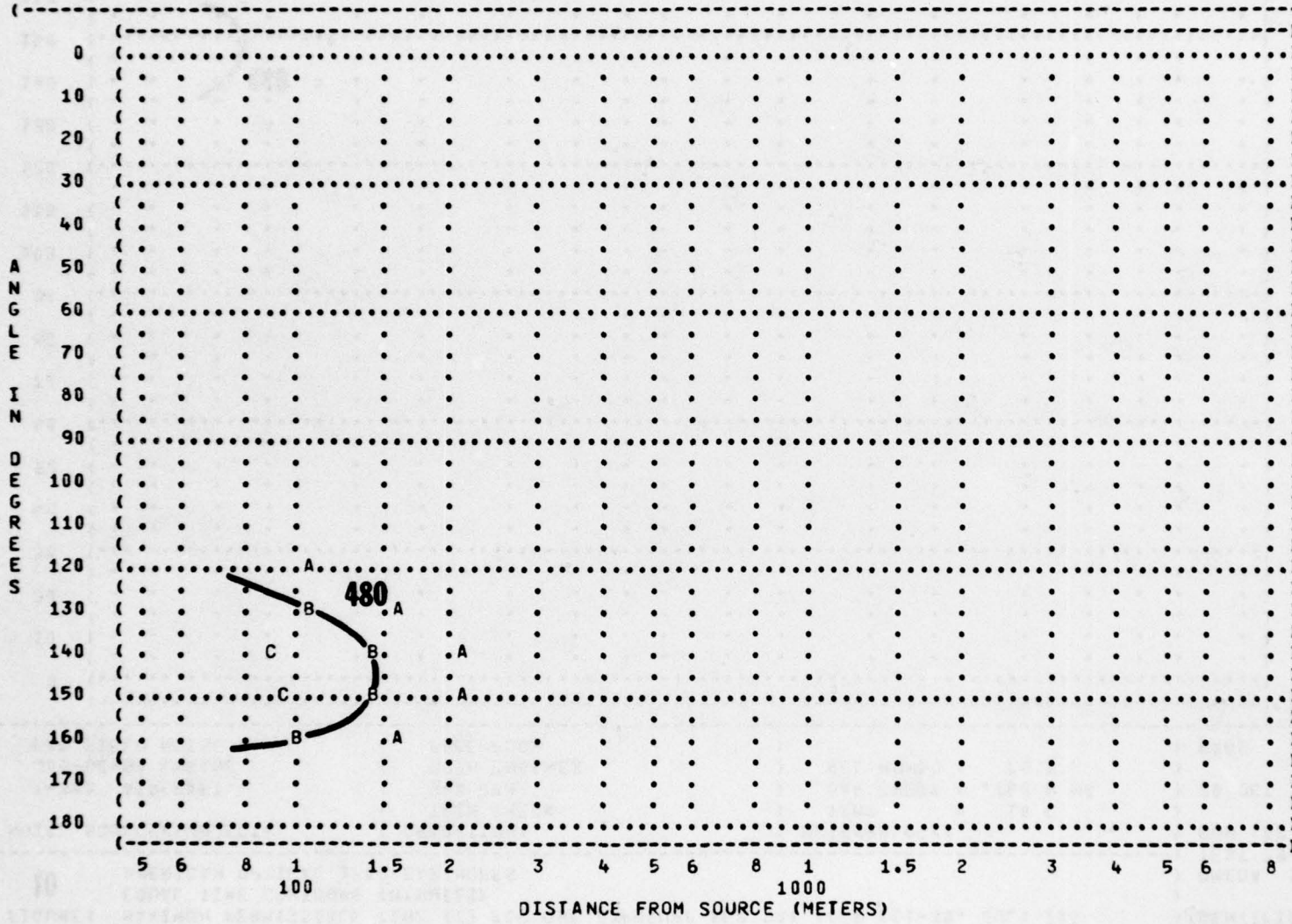


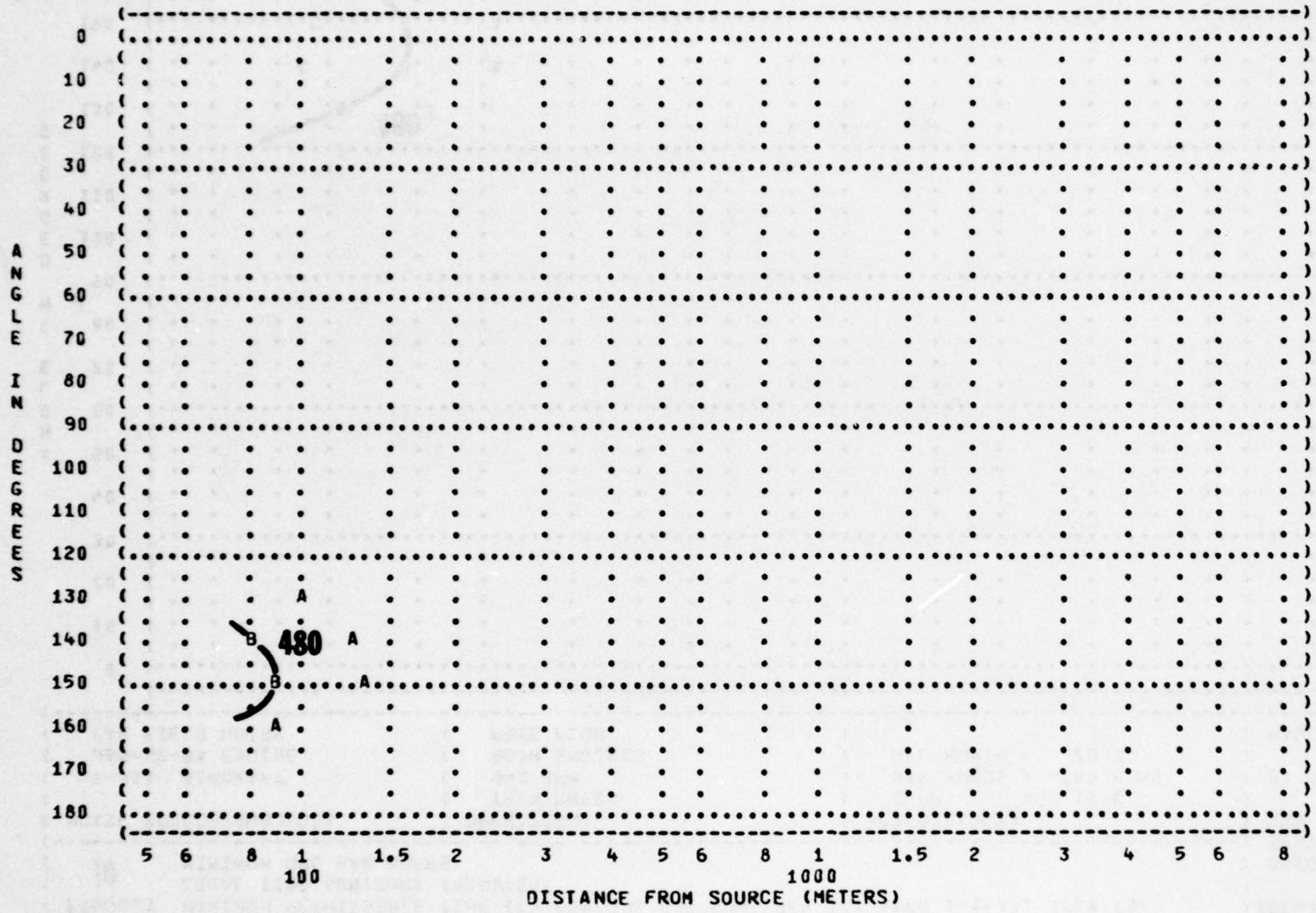
FIGURE 10: MAXIMUM PERMISSIBLE TIME (T) FOR ONE EXPOSURE PER DAY (AFR 161-35, JULY 73)
EQUAL TIME CONTOURS (MINUTES)
AMERICAN OPTICAL 1700 EAR MUFFS

NOISE SOURCE/SUBJECT:
T-38A AIRCRAFT
J85-GE-5A ENGINE
FAR FIELD NOISE

OPERATION:
TRIM CHECK
94% RPM
BOTH ENGINES
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-056
RUN 02
20 OCT 75
PAGE 9



POINT	MIN
A	960
B	480

FIGURE: 10

MAXIMUM PERMISSIBLE TIME (T) FOR ONE EXPOSURE PER DAY (AFR 161-35, JULY 73)
EQUAL TIME CONTOURS (MINUTES)
V-51R EAR PLUGS

NOISE SOURCE/SUBJECT:
T-38A AIRCRAFT
J85-GE-5A ENGINE
FAR FIELD NOISE

OPERATION:
TRIM CHECK
94% RPM
BOTH ENGINES
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-056
RUN 02
20 OCT 75
PAGE 10

POINT MIN
A 960

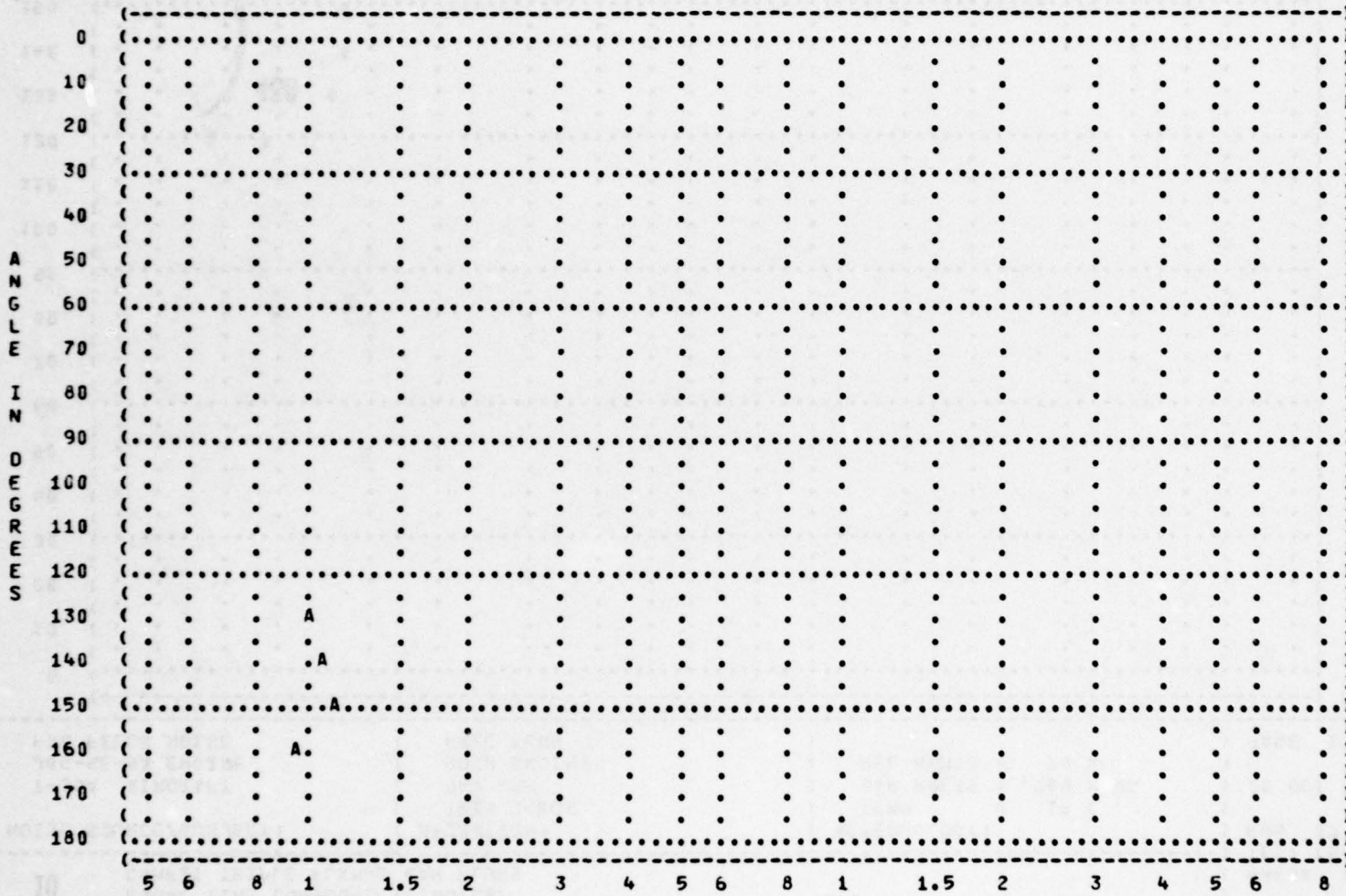


FIGURE 10: MAXIMUM PERMISSIBLE TIME (T) FOR ONE EXPOSURE PER DAY (AFR 161-35, JULY 73)
EQUAL TIME CONTOURS (MINUTES)
COMFIT TRIPLE FLANGE EAR PLUGS

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-056
RUN 02
20 OCT 75
PAGE 11

NOISE SOURCE/SUBJECT:
T-38A AIRCRAFT
J85-GE-5A ENGINE
FAR FIELD NOISE

OPERATION:
TRIM CHECK
94% RPM
BOTH ENGINES
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

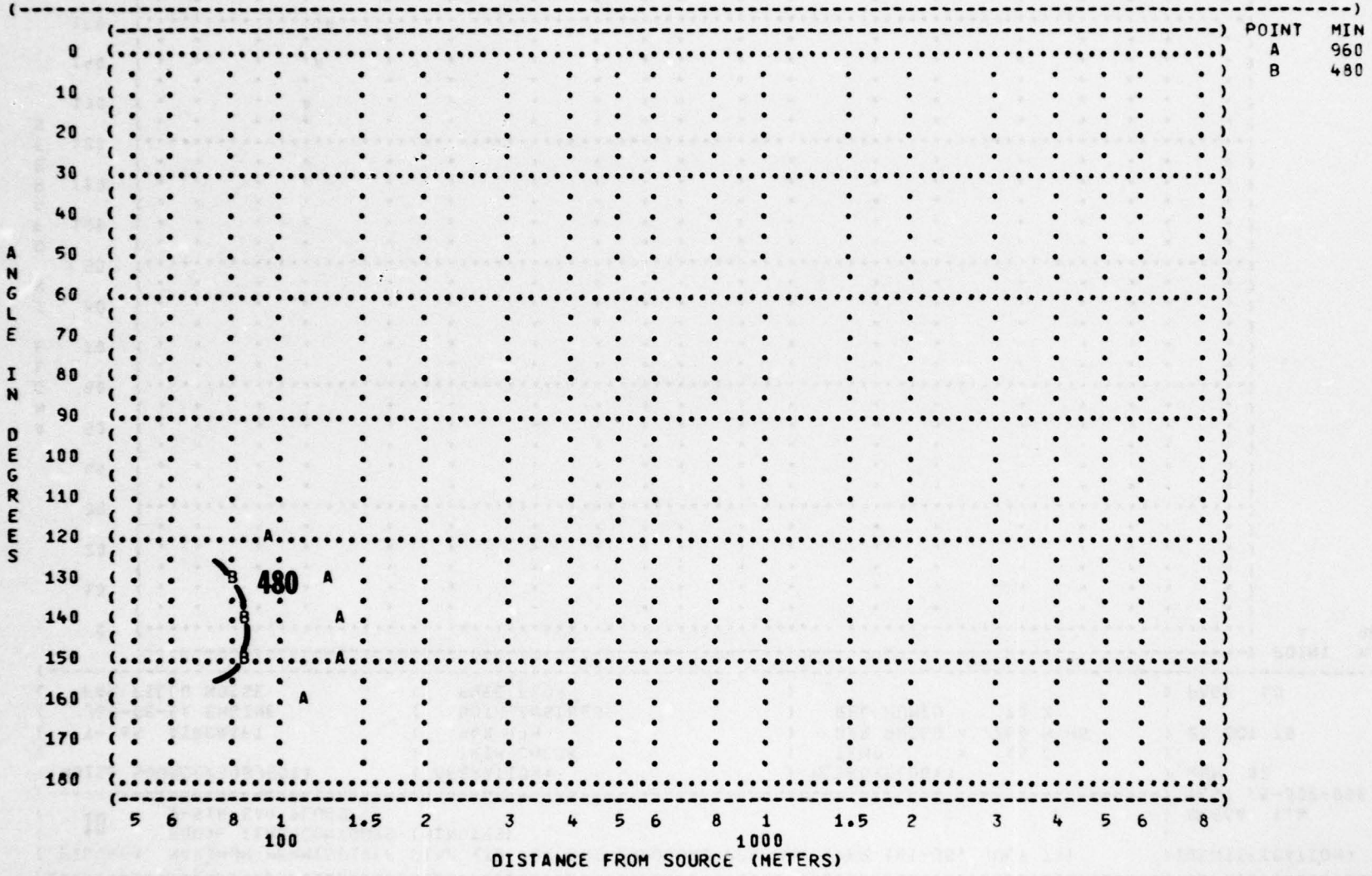


FIGURE 10: MAXIMUM PERMISSIBLE TIME (T) FOR ONE EXPOSURE PER DAY (AFR 161-35, JULY 73)
EQUAL TIME CONTOURS (MINUTES)

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-056
RUN 02
20 OCT 75
PAGE 12

NOISE SOURCE/SUBJECT:
T-38A AIRCRAFT
J85-GE-5A ENGINE
FAR FIELD NOISE

OPERATION:
TRIM CHECK
94% RPM
BOTH ENGINES
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

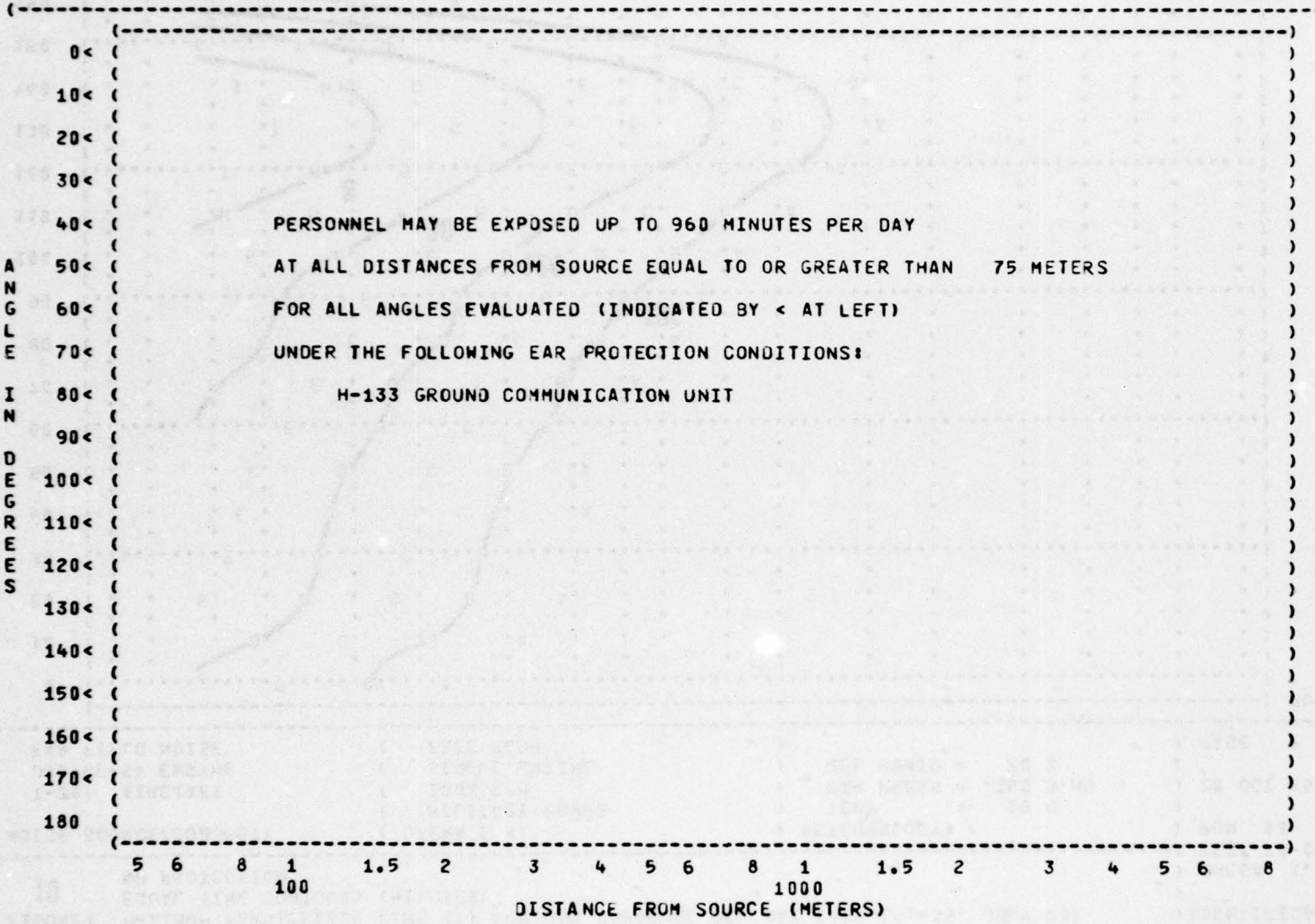


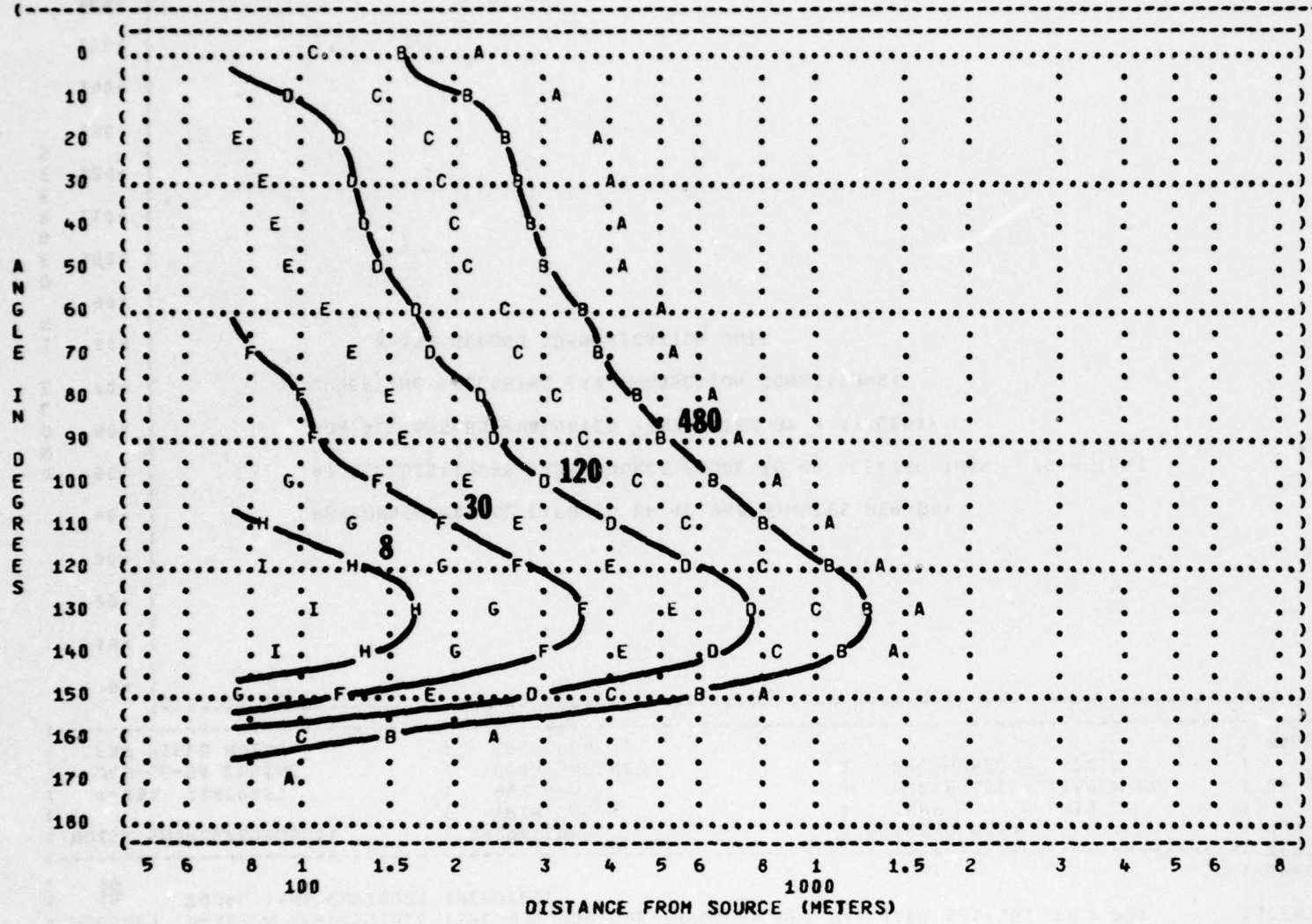
FIGURE 10: MAXIMUM PERMISSIBLE TIME (T) FOR ONE EXPOSURE PER DAY (AFR 161-35, JULY 73)
EQUAL TIME CONTOURS (MINUTES)
NO PROTECTION

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-047
RUN 03
20 OCT 75
PAGE 7

NOISE SOURCE/SUBJECT:
T-38A AIRCRAFT
J85-GE-5A ENGINE
FAR FIELD NOISE

OPERATION:
MILITARY POWER
100% RPM
SINGLE ENGINE
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %



POINT	MIN
A	960
B	480
C	240
D	120
E	60
F	30
G	15
H	8
I	4

FIGURE: 10

MAXIMUM PERMISSIBLE TIME (T) FOR ONE EXPOSURE PER DAY (AFR 161-35, JULY 73)
EQUAL TIME CONTOURS (MINUTES)
MINIMUM QPL EAR MUFFS

NOISE SOURCE/SUBJECT:
T-38A AIRCRAFT
J85-GE-5A ENGINE
FAR FIELD NOISE

OPERATION:
MILITARY POWER
100% RPM
SINGLE ENGINE
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-047
RUN 03
20 OCT 75
PAGE 8

POINT	MIN
A	960
B	480
C	240
D	120

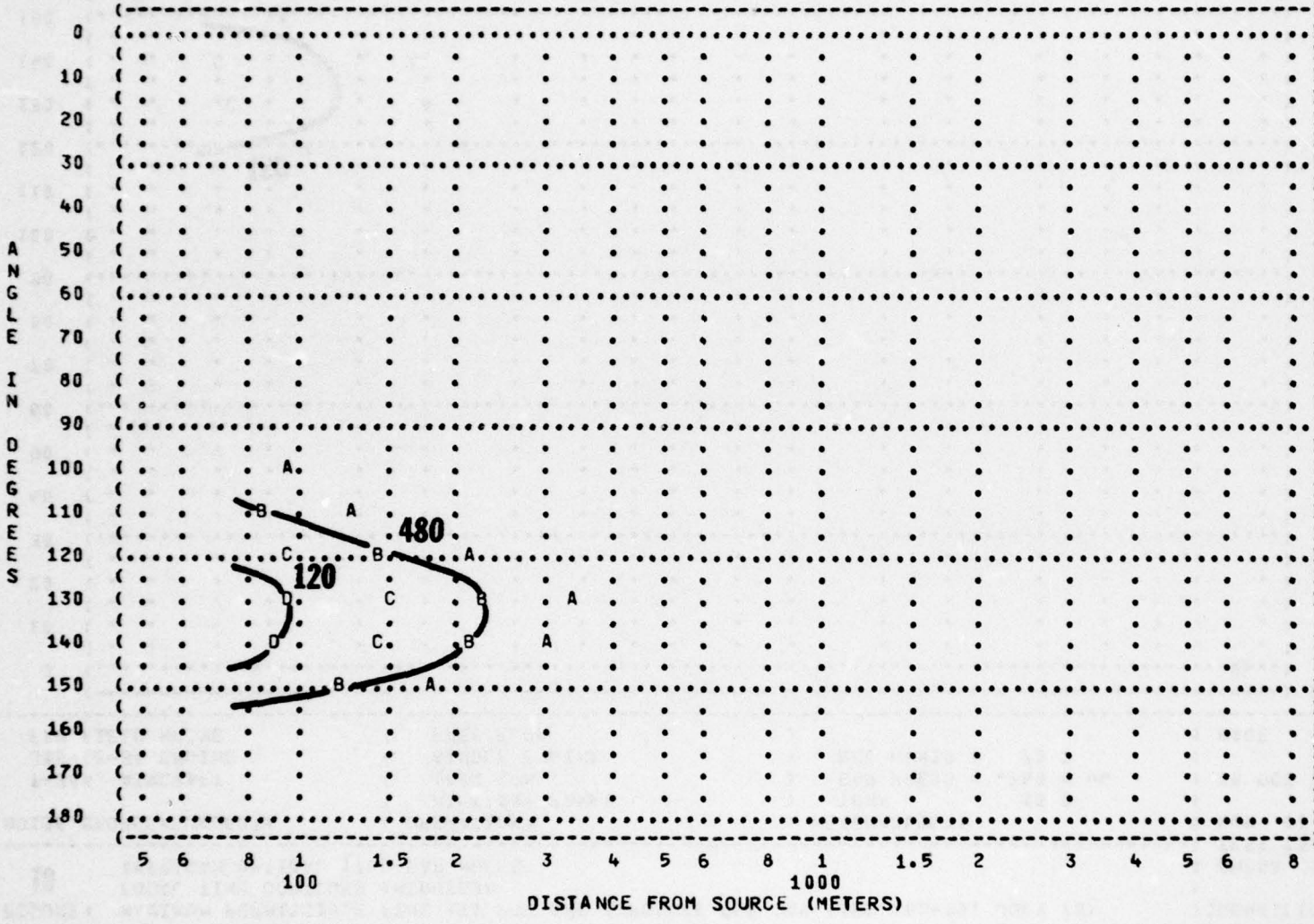


FIGURE: 10

MAXIMUM PERMISSIBLE TIME (T) FOR ONE EXPOSURE PER DAY (AFR 161-35, JULY 73)
EQUAL TIME CONTOURS (MINUTES)
AMERICAN OPTICAL 1700 EAR MUFFS

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-047
RUN 03
20 OCT 75
PAGE 9

NOISE SOURCE/SUBJECT:
T-38A AIRCRAFT
J85-GE-5A ENGINE
FAR FIELD NOISE

OPERATION:
MILITARY POWER
100% RPM
SINGLE ENGINE
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

POINT	MIN
A	960
B	480
C	240

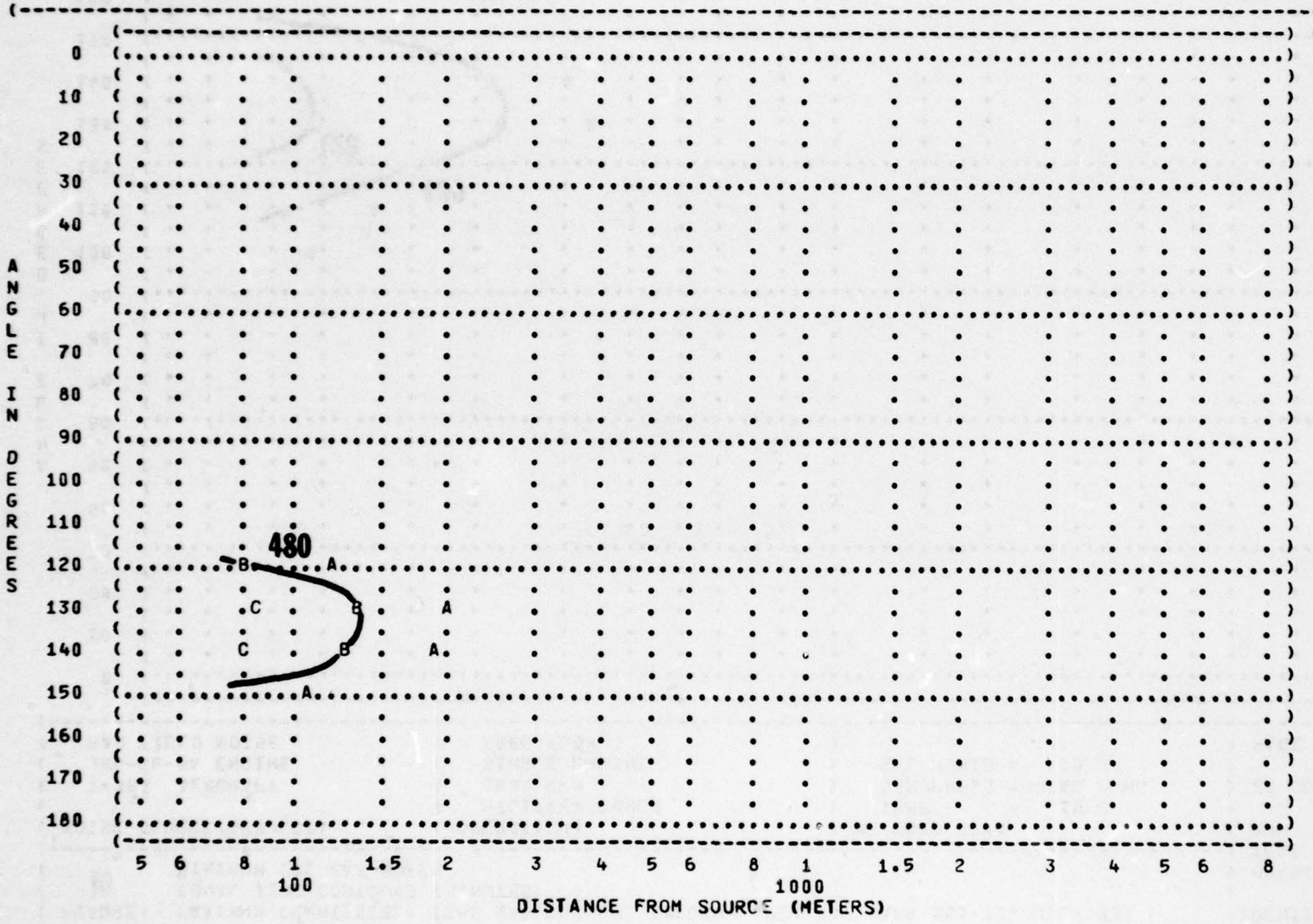


FIGURE: 10 MAXIMUM PERMISSIBLE TIME (T) FOR ONE EXPOSURE PER DAY (AFR 161-35, JULY 73)
EQUAL TIME CONTOURS (MINUTES)
V-51R EAR PLUGS

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-047
RUN 03
20 OCT 75
PAGE 10

NOISE SOURCE/SUBJECT:
T-38A AIRCRAFT
J85-GE-5A ENGINE
FAR FIELD NOISE

OPERATION:
MILITARY POWER
100% RPM
SINGLE ENGINE
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

POINT	MIN
A	960
B	480
C	240
D	120

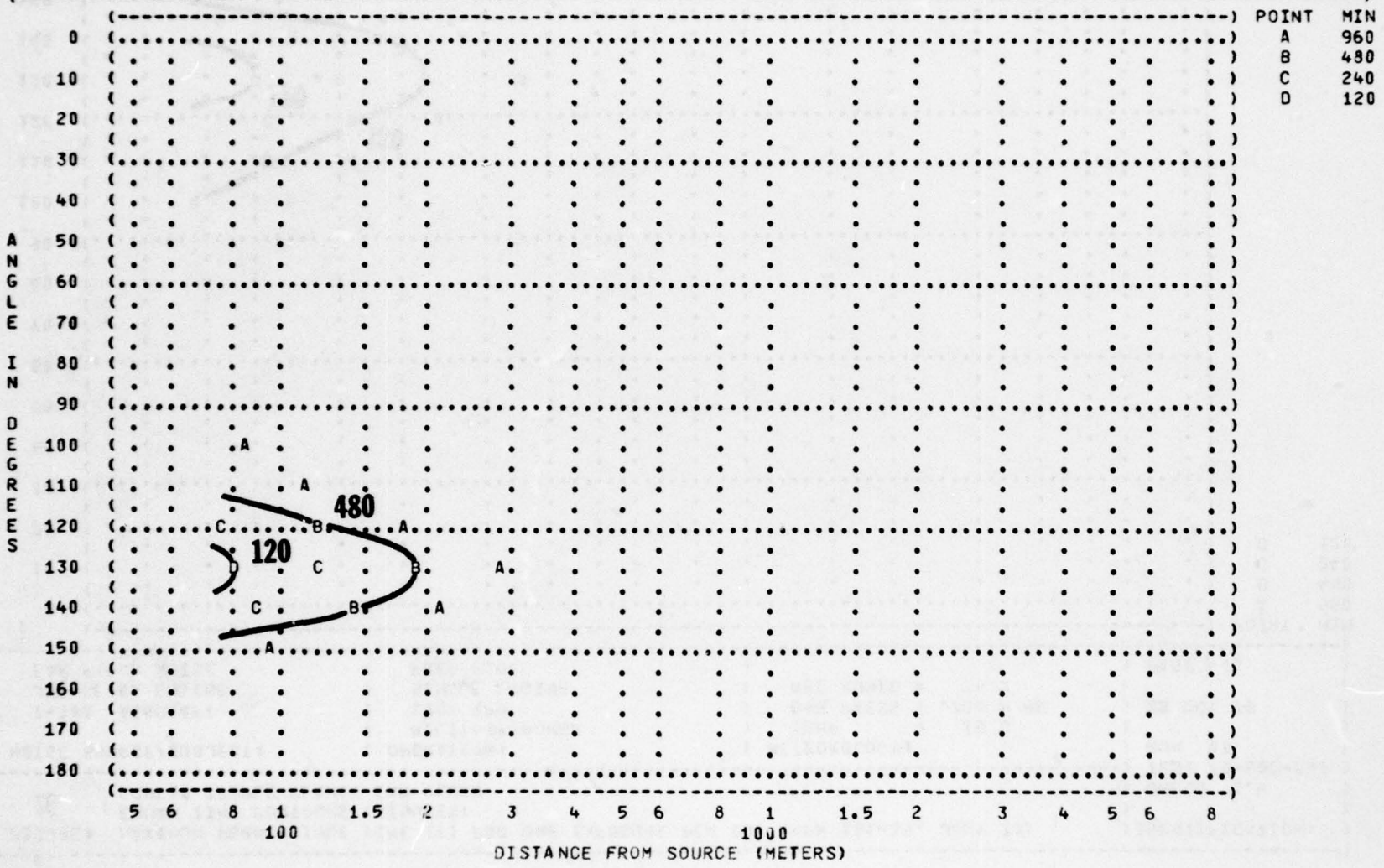


FIGURE 10: MAXIMUM PERMISSIBLE TIME (T) FOR ONE EXPOSURE PER DAY (AFR 161-35, JULY 73)
EQUAL TIME CONTOURS (MINUTES)
COMFIT TRIPLE FLANGE EAR PLUGS

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-047
RUN 03
20 OCT 75
PAGE 11

NOISE SOURCE/SUBJECT:
T-38A AIRCRAFT
J85-GE-5A ENGINE
FAR FIELD NOISE

OPERATION:
MILITARY POWER
100% RPM
SINGLE ENGINE
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

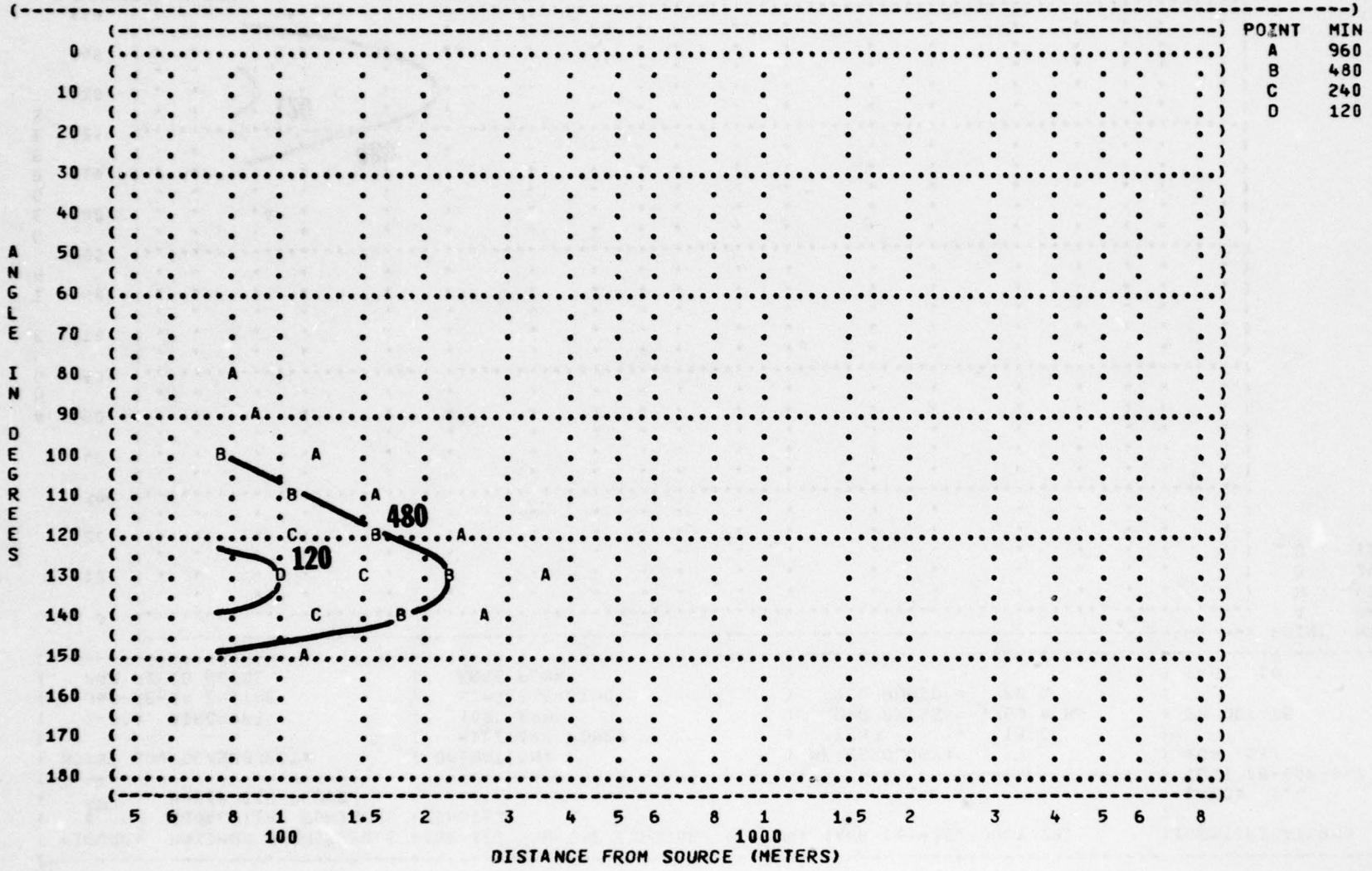


FIGURE 10: MAXIMUM PERMISSIBLE TIME (T) FOR ONE EXPOSURE PER DAY (AFR 161-35, JULY 73)
EQUAL TIME CONTOURS (MINUTES)
H-133 GROUND COMMUNICATION UNIT

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-047
RUN 03
20 OCT 75
PAGE 12

NOISE SOURCE/SUBJECT:
T-38A AIRCRAFT
J85-GE-5A ENGINE
FAR FIELD NOISE

OPERATION:
MILITARY POWER
100% RPM
SINGLE ENGINE
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

POINT	MIN
A	960
B	480

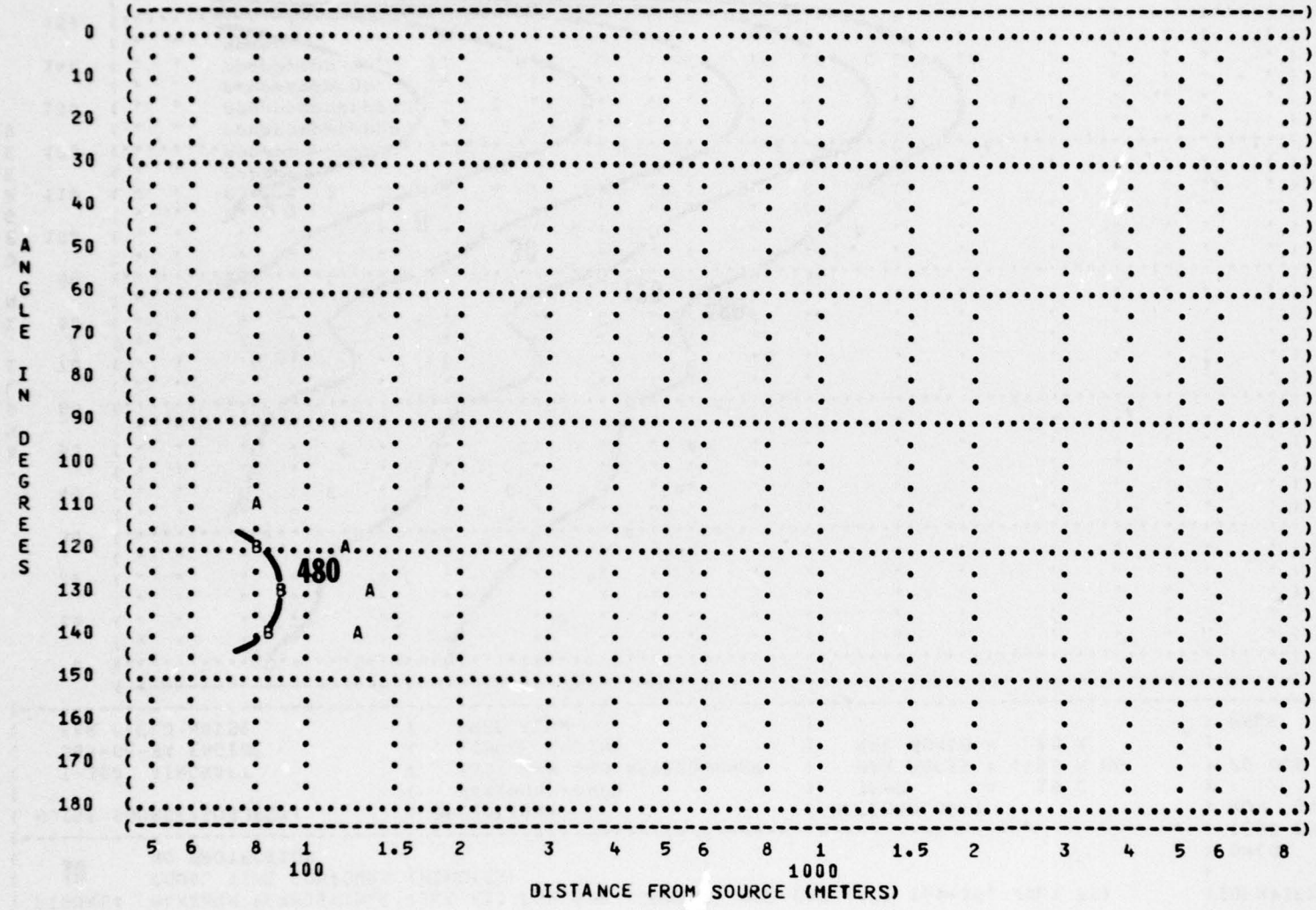


FIGURE: 10 MAXIMUM PERMISSIBLE TIME (T) FOR ONE EXPOSURE PER DAY (AFR 161-35, JULY 73)
EQUAL TIME CONTOURS (MINUTES)
NO PROTECTION

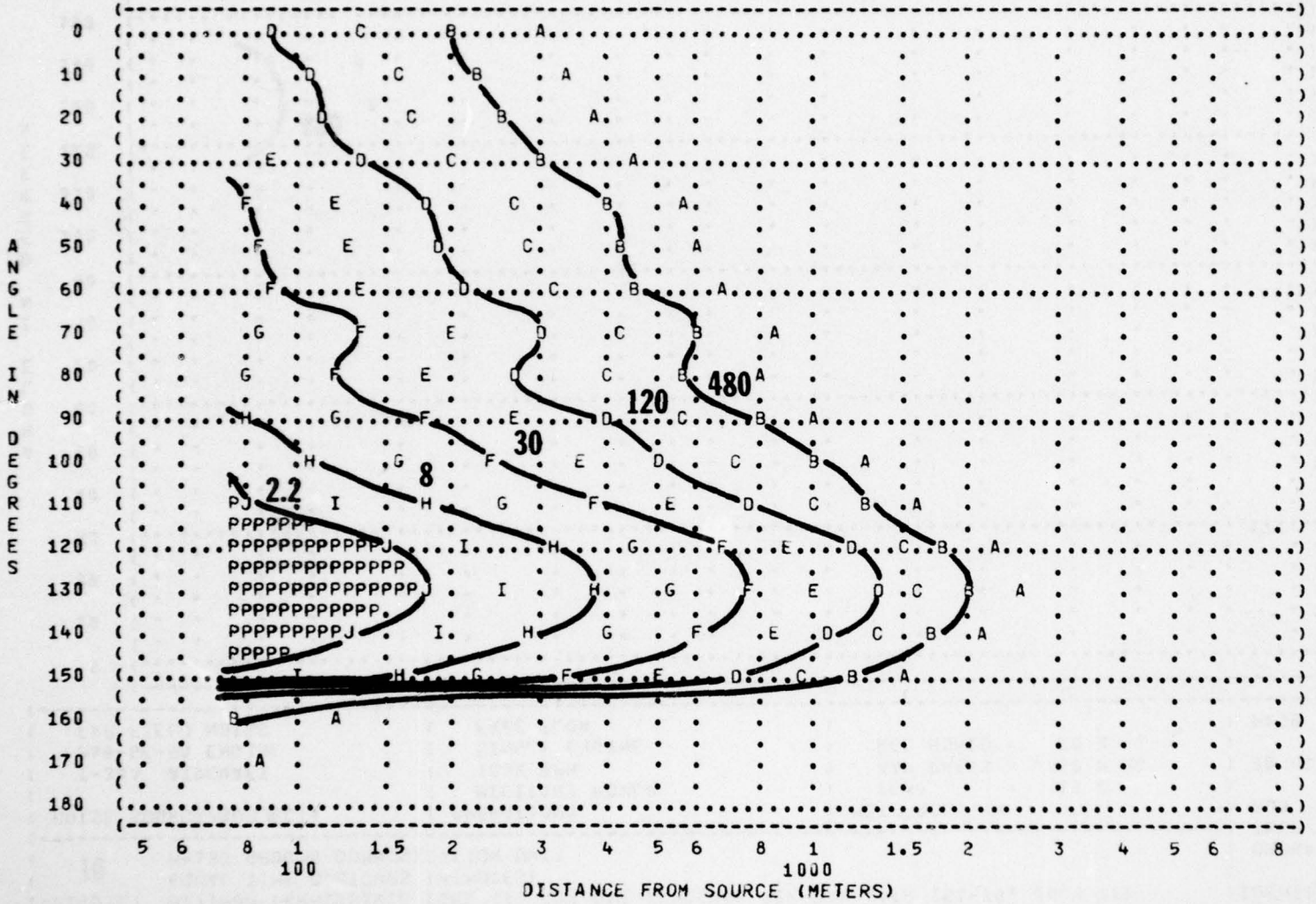
IDENTIFICATION:
OMEGA 1.4
TEST 75-002-047
RUN 04
20 OCT 75
PAGE 7

NOISE SOURCE/SUBJECT:
T-38A AIRCRAFT
J85-GE-5A ENGINE
FAR FIELD NOISE

OPERATION:
MAXIMUM POWER
100% RPM AND AFTERBURNER
SINGLE ENGINE
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

POINT	MIN
A	960
B	480
C	240
D	120
E	60
F	30
G	15
H	8
I	4
J	2.2



P ADDITIONAL EAR PROTECTION REQUIRED.

FIGURE: 10

MAXIMUM PERMISSIBLE TIME (T) FOR ONE EXPOSURE PER DAY (AFR 161-35, JULY 73)
EQUAL TIME CONTOURS (MINUTES)
MINIMUM QPL EAR MUFFS

NOISE SOURCE/SUBJECT:
T-38A AIRCRAFT
J85-GE-5A ENGINE
FAR FIELD NOISE

OPERATION:
MAXIMUM POWER
100% RPM AND AFTERBURNER
SINGLE ENGINE
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-047
RUN 04
20 OCT 75
PAGE 8

POINT	MIN
A	960
B	480
C	240
D	120
E	60
F	30

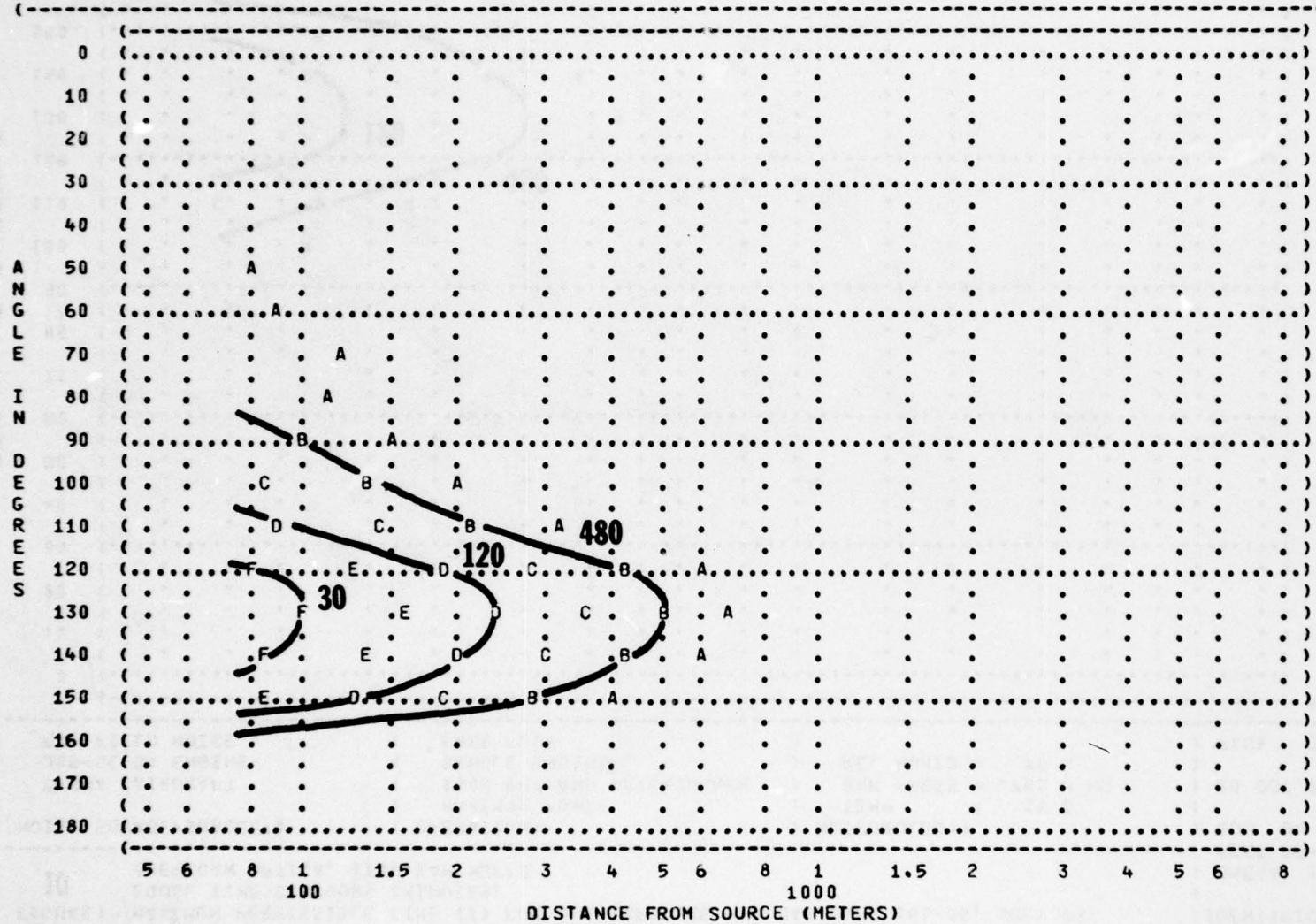


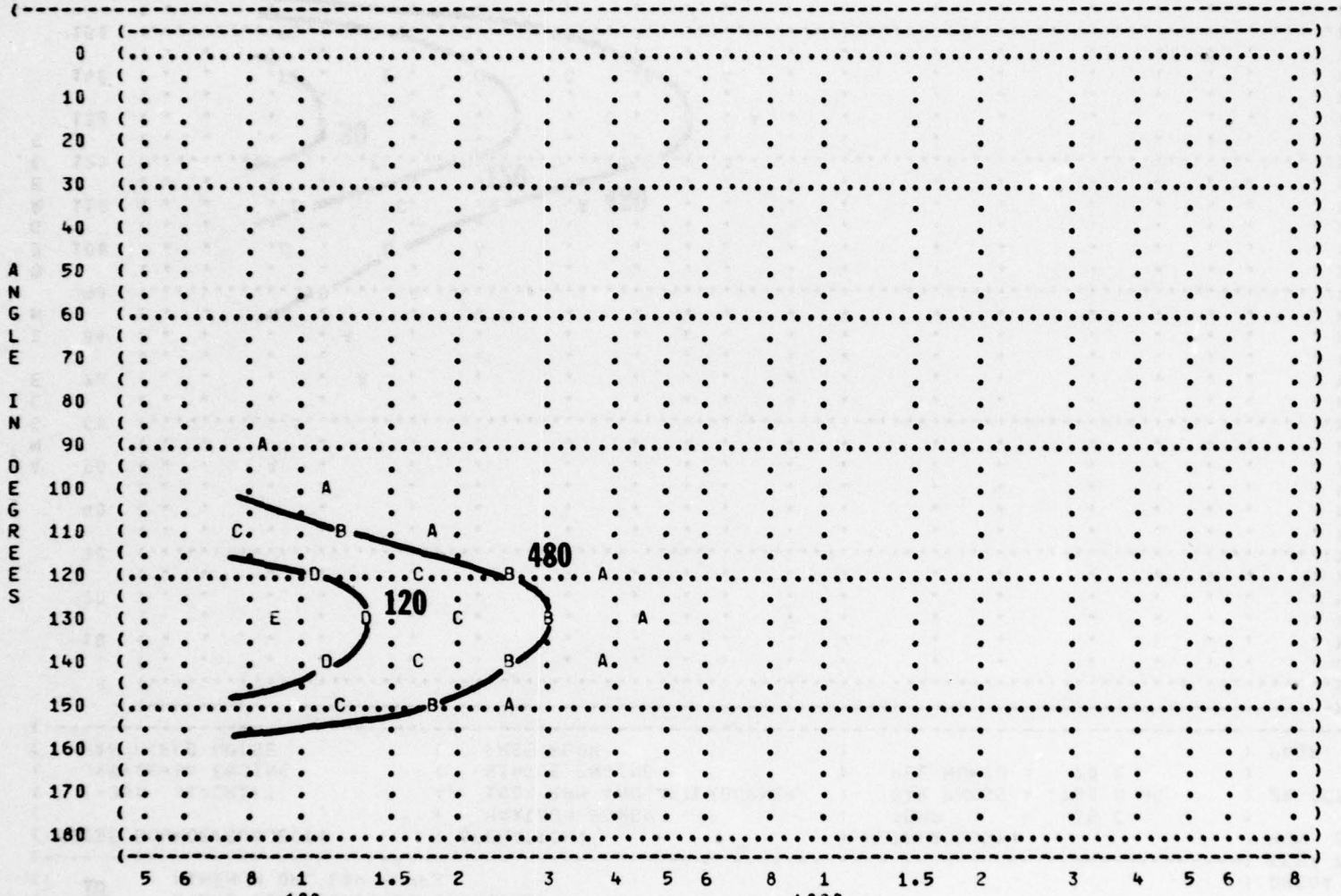
FIGURE 10: MAXIMUM PERMISSIBLE TIME (T) FOR ONE EXPOSURE PER DAY (AFR 161-35, JULY 73)
EQUAL TIME CONTOURS (MINUTES)
AMERICAN OPTICAL 1700 EAR MUFFS

NOISE SOURCE/SUBJECT:
T-38A AIRCRAFT
J85-GE-5A ENGINE
FAR FIELD NOISE

OPERATION:
MAXIMUM POWER
100% RPM AND AFTERBURNER
SINGLE ENGINE
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-047
RUN 04
20 OCT 75
PAGE 9



POINT	MIN
A	960
B	480
C	240
D	120
E	60

FIGURE: 10

MAXIMUM PERMISSIBLE TIME (T) FOR ONE EXPOSURE PER DAY (AFR 161-35, JULY 73)
EQUAL TIME CONTOURS (MINUTES)
V-51R EAR PLUGS

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-047
RUN 04
20 OCT 75
PAGE 10

NOISE SOURCE/SUBJECT:
T-38A AIRCRAFT
J85-GE-5A ENGINE
FAR FIELD NOISE

OPERATION:
MAXIMUM POWER
100% RPM AND AFTERBURNER
SINGLE ENGINE
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

POINT	MIN
A	960
B	480
C	240
D	120
E	60
F	30

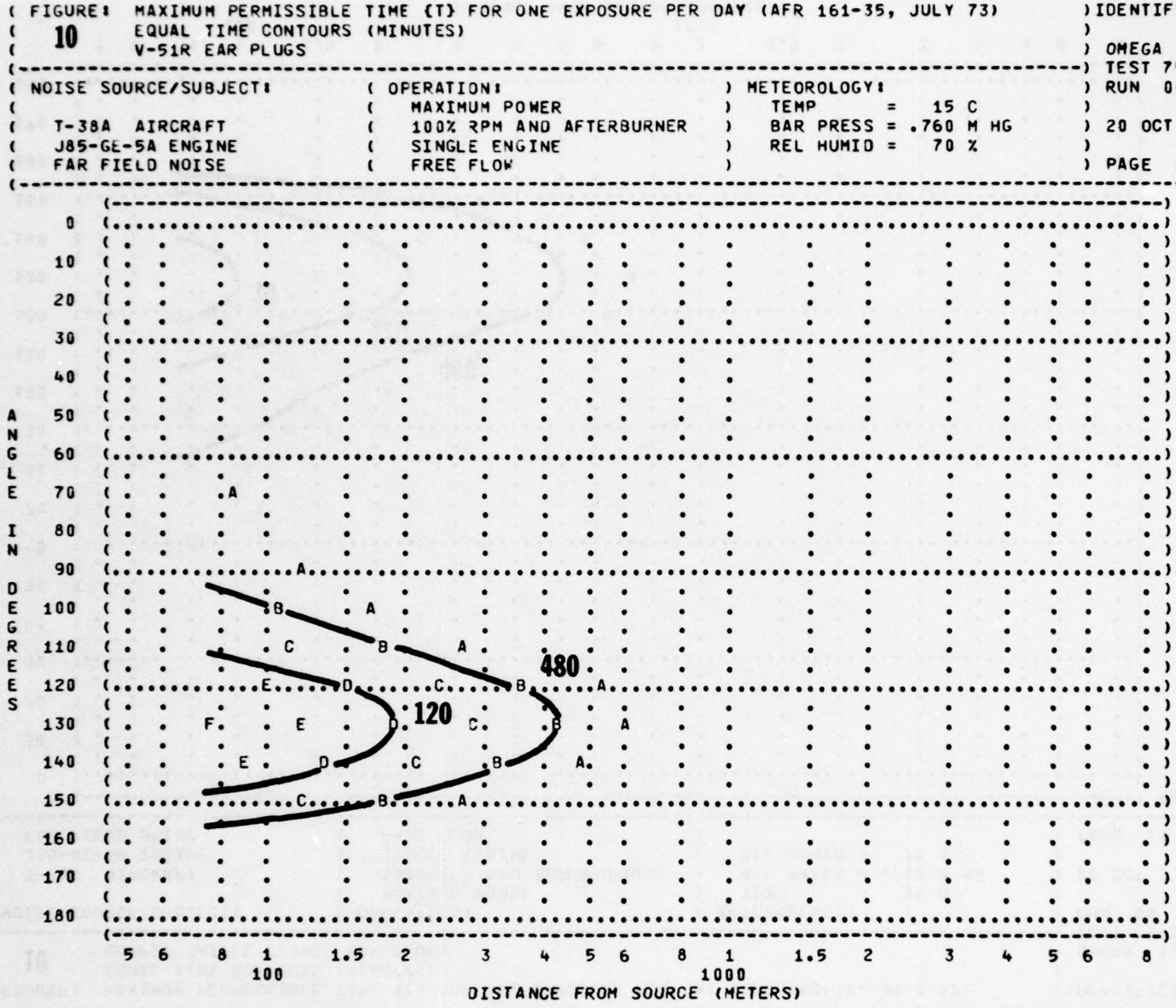


FIGURE 10: MAXIMUM PERMISSIBLE TIME (T) FOR ONE EXPOSURE PER DAY (AFR 161-35, JULY 73)
EQUAL TIME CONTOURS (MINUTES)
COMFIT TRIPLE FLANGE EAR PLUGS

NOISE SOURCE/SUBJECT:
T-38A AIRCRAFT
J85-GE-5A ENGINE
FAR FIELD NOISE

OPERATION:
MAXIMUM POWER
100% RPM AND AFTERBURNER
SINGLE ENGINE
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-047
RUN 04
20 OCT 75
PAGE 11

POINT	MIN
A	960
B	480
C	240
D	120
E	60
F	30

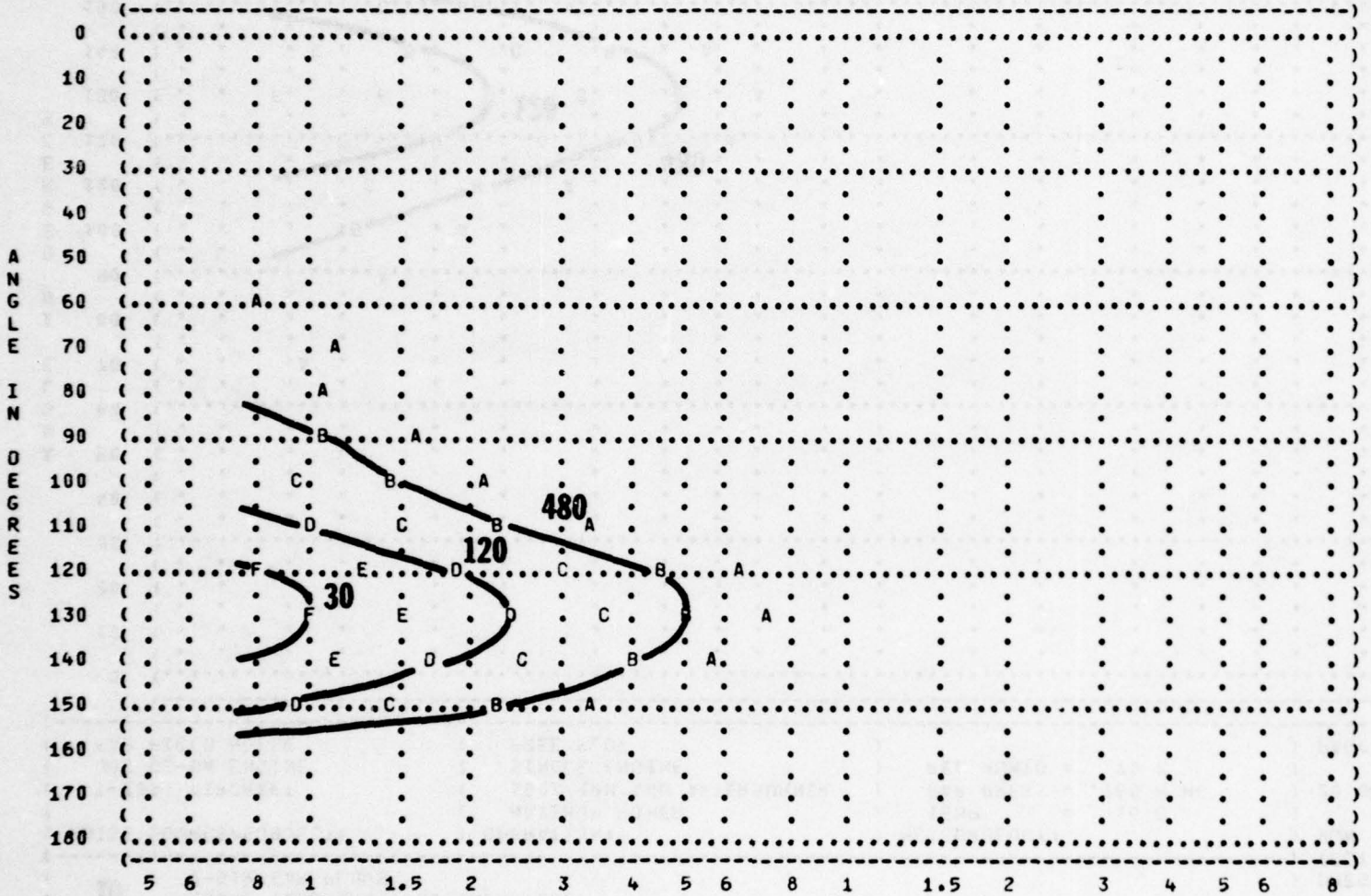


FIGURE: 10

MAXIMUM PERMISSIBLE TIME (T) FOR ONE EXPOSURE PER DAY (AFR 161-35, JULY 73)
EQUAL TIME CONTOURS (MINUTES)
H-133 GROUND COMMUNICATION UNIT

NOISE SOURCE/SUBJECT:
T-38A AIRCRAFT
J85-GE-5A ENGINE
FAR FIELD NOISE

OPERATION:
MAXIMUM POWER
100% RPM AND AFTERBURNER
SINGLE ENGINE
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-047
RUN 04
20 OCT 75
PAGE 12

POINT	MIN
A	960
B	480
C	240
D	120

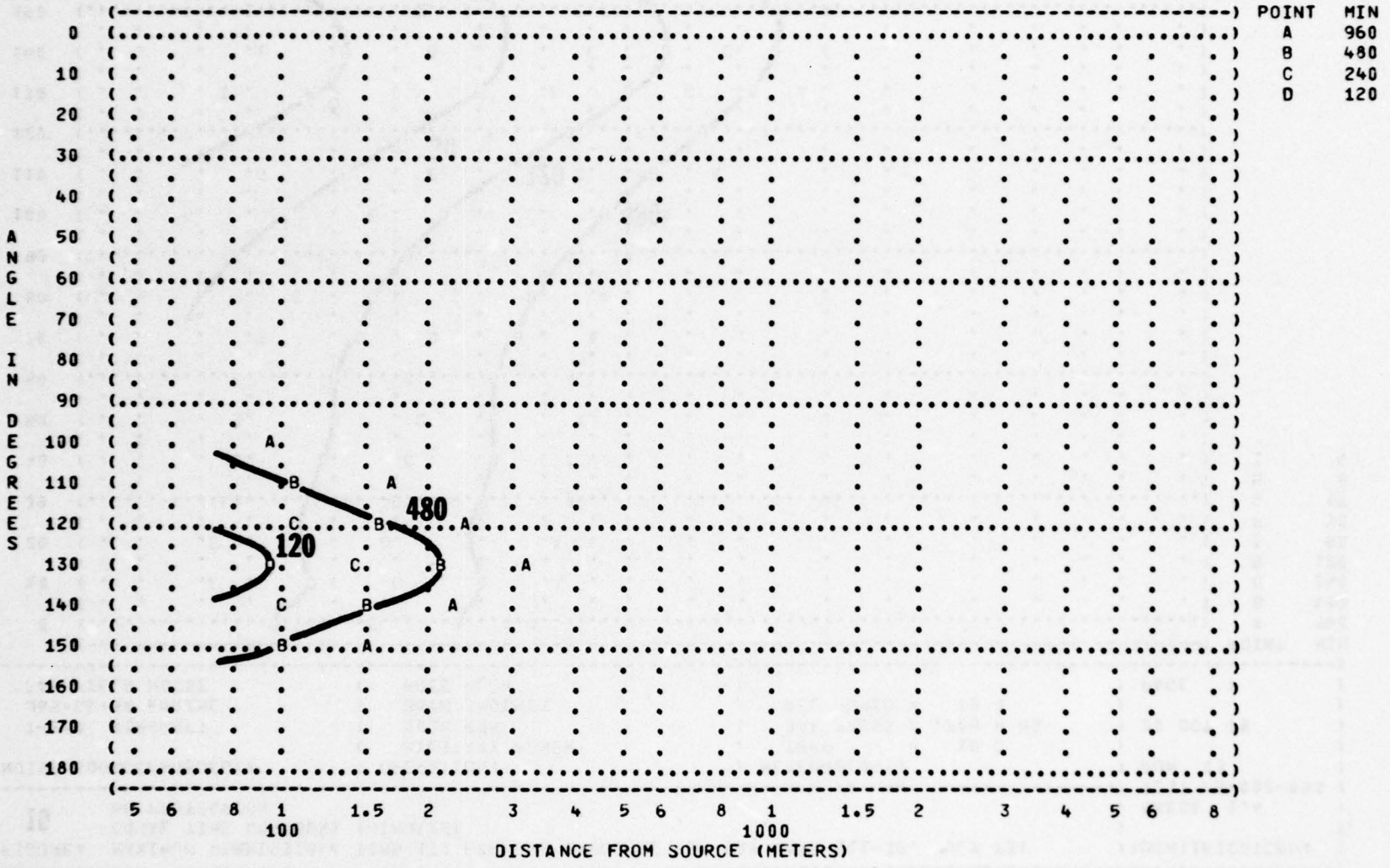


FIGURE 10: MAXIMUM PERMISSIBLE TIME (T) FOR ONE EXPOSURE PER DAY (AFR 161-35, JULY 73)
EQUAL TIME CONTOURS (MINUTES)
NO PROTECTION

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-056
RUN 03
20 OCT 75
PAGE 7

NOISE SOURCE/SUBJECT:
T-38A AIRCRAFT
J85-GE-5A ENGINE
FAR FIELD NOISE

OPERATION:
MILITARY POWER
100% RPM
BOTH ENGINES
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

POINT	MIN
A	960
B	480
C	240
D	120
E	60
F	30
G	15
H	8
I	4

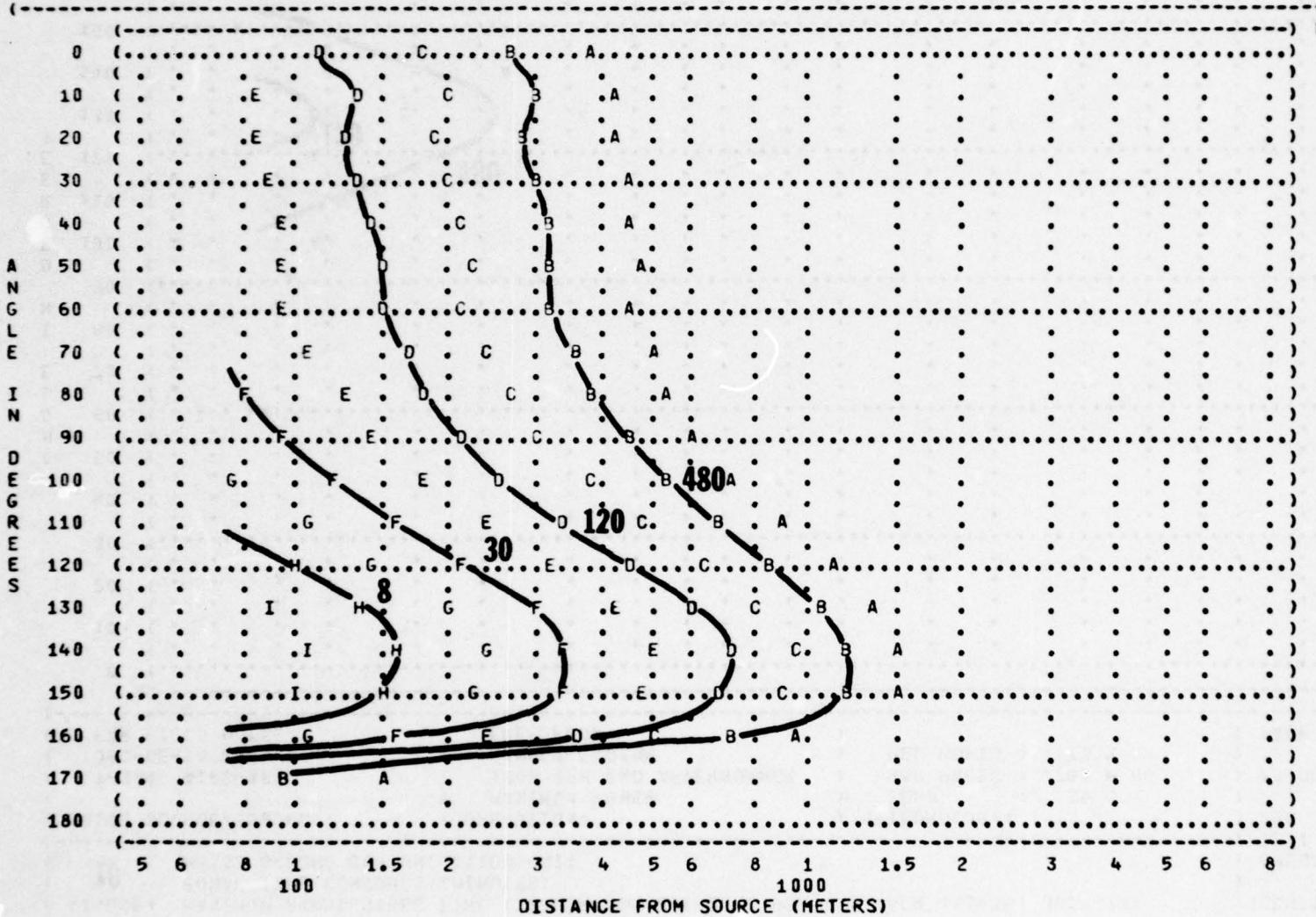


FIGURE: 10 MAXIMUM PERMISSIBLE TIME (T) FOR ONE EXPOSURE PER DAY (AFR 161-35, JULY 73)
EQUAL TIME CONTOURS (MINUTES)
MINIMUM QPL EAR MUFFS

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-056
RUN 03
20 OCT 75
PAGE 8

NOISE SOURCE/SUBJECT:
T-38A AIRCRAFT
J85-GE-5A ENGINE
FAR FIELD NOISE

OPERATION:
MILITARY POWER
100% RPM
BOTH ENGINES
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

POINT	MIN
A	960
B	480
C	240
D	120

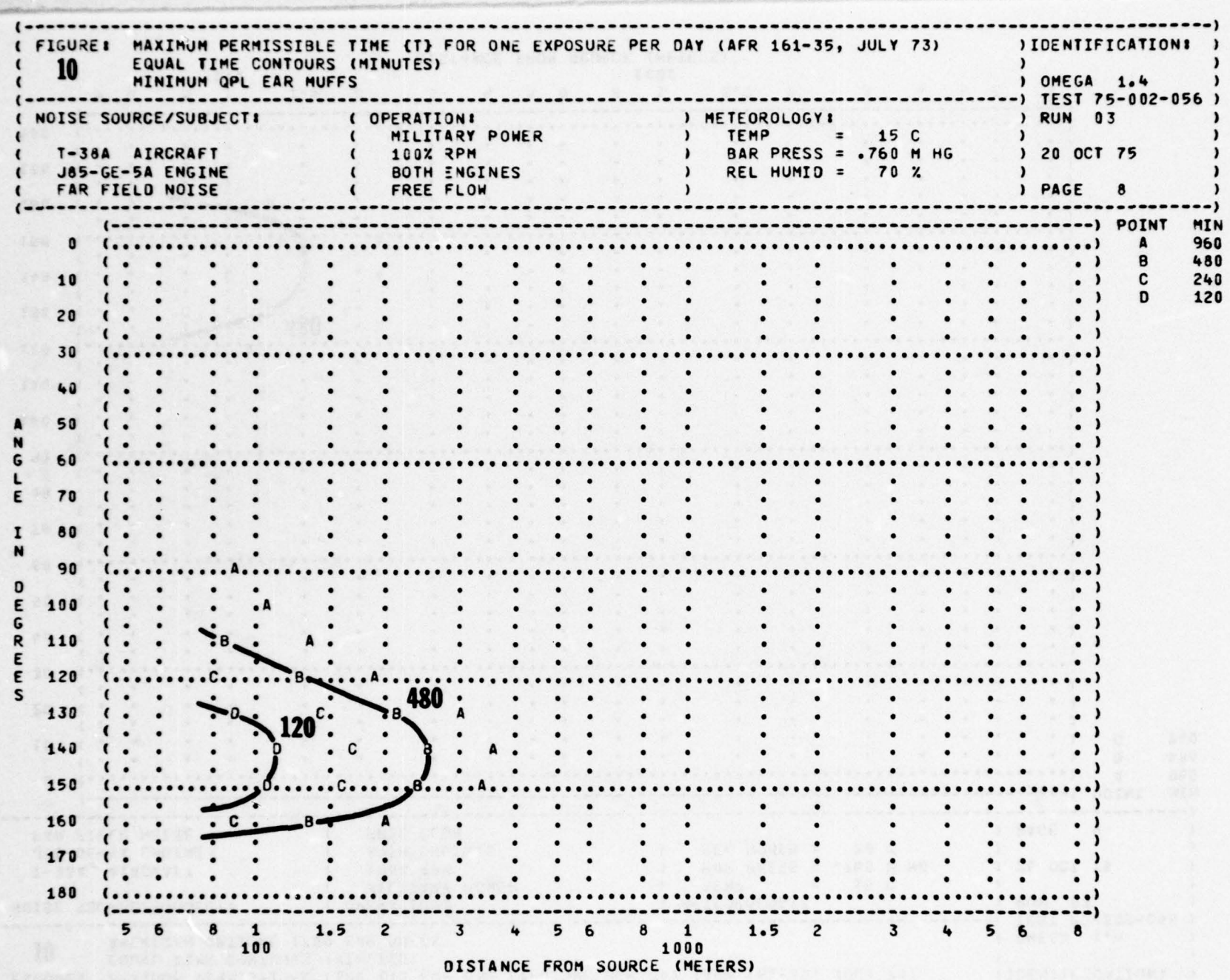


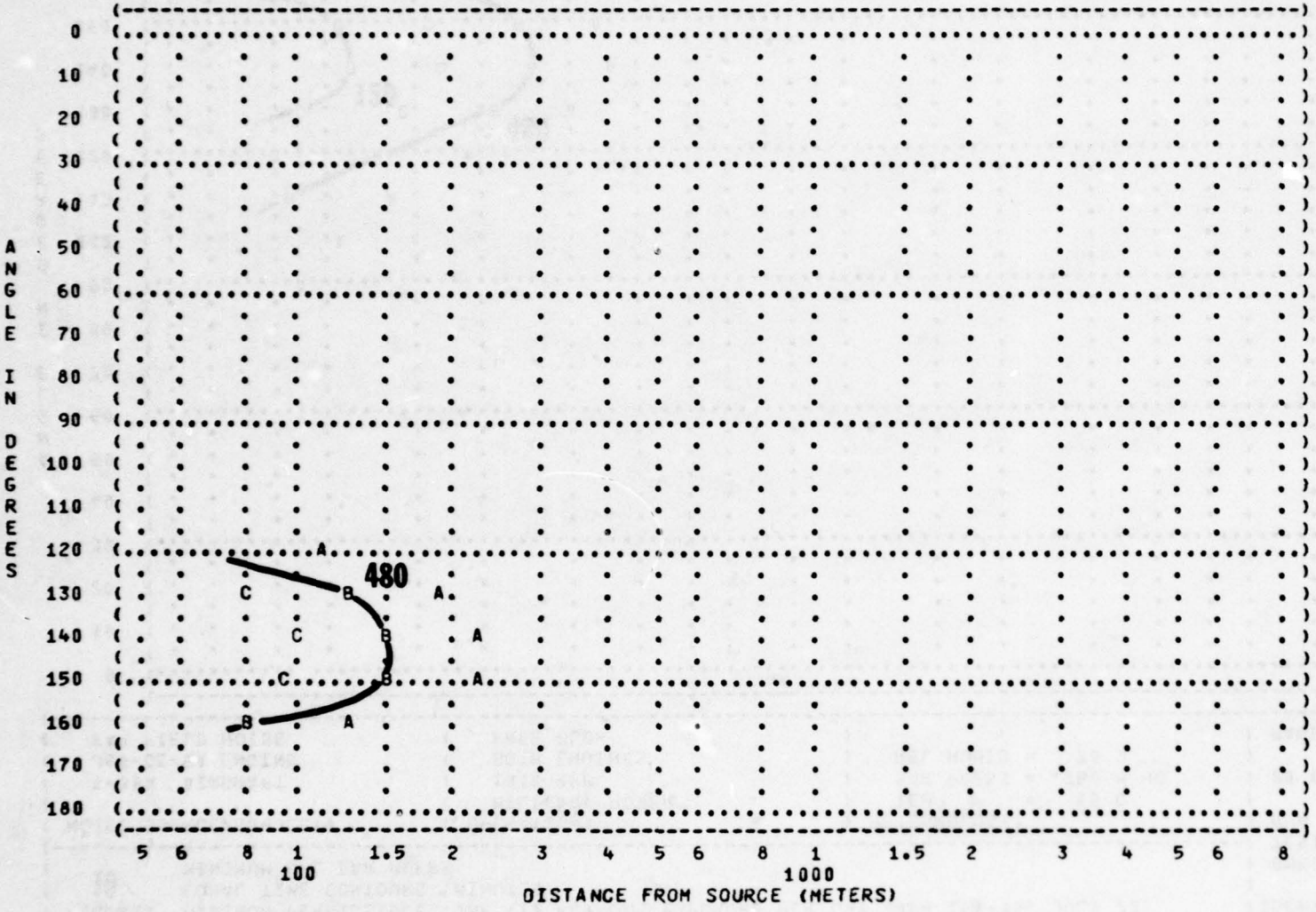
FIGURE 10: MAXIMUM PERMISSIBLE TIME (T) FOR ONE EXPOSURE PER DAY (AFR 161-35, JULY 73)
EQUAL TIME CONTOURS (MINUTES)
AMERICAN OPTICAL 1700 EAR MUFFS

NOISE SOURCE/SUBJECT:
T-38A AIRCRAFT
J85-GE-5A ENGINE
FAR FIELD NOISE

OPERATION:
MILITARY POWER
100% RPM
BOTH ENGINES
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-056
RUN 03
20 OCT 75
PAGE 9



POINT	MIN
A	960
B	480
C	240

FIGURE 10: MAXIMUM PERMISSIBLE TIME (T) FOR ONE EXPOSURE PER DAY (AFR 161-35, JULY 73)
EQUAL TIME CONTOURS (MINUTES)
V-51R EAR PLUGS

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-056
RUN 03
20 OCT 75
PAGE 10

NOISE SOURCE/SUBJECT:
T-38A AIRCRAFT
J85-GE-5A ENGINE
FAR FIELD NOISE

OPERATION:
MILITARY POWER
100% RPM
BOTH ENGINES
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

POINT	MIN
A	960
B	480
C	240

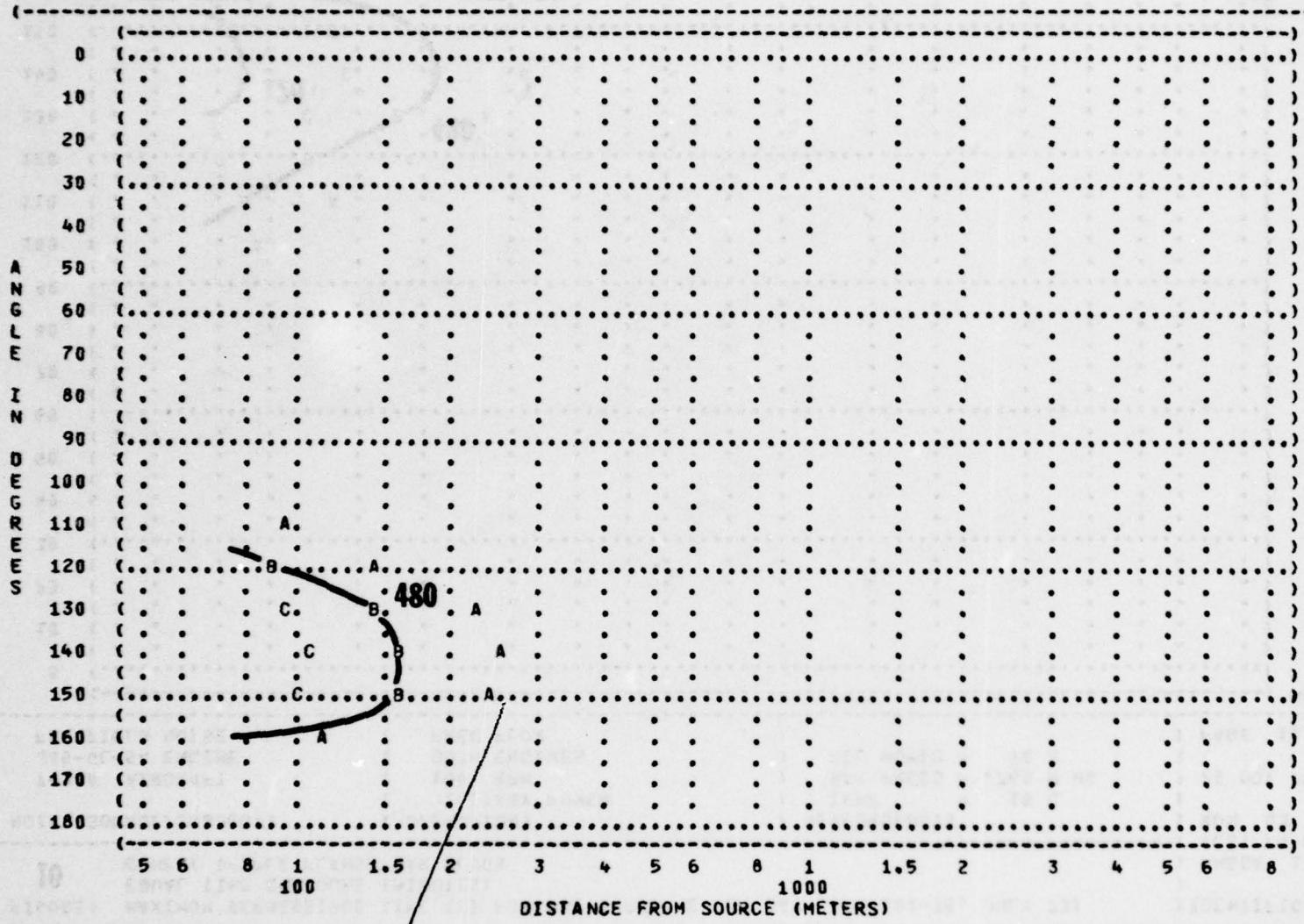


FIGURE 10 MAXIMUM PERMISSIBLE TIME (T) FOR ONE EXPOSURE PER DAY (AFR 161-35, JULY 73)
EQUAL TIME CONTOURS (MINUTES)
COMFIT TRIPLE FLANGE EAR PLUGS

NOISE SOURCE/SUBJECT:
T-38A AIRCRAFT
J85-GE-5A ENGINE
FAR FIELD NOISE

OPERATION:
MILITARY POWER
100% RPM
BOTH ENGINES
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-056
RUN 03
20 OCT 75
PAGE 11

POINT	MIN
A	960
B	480
C	240
D	120

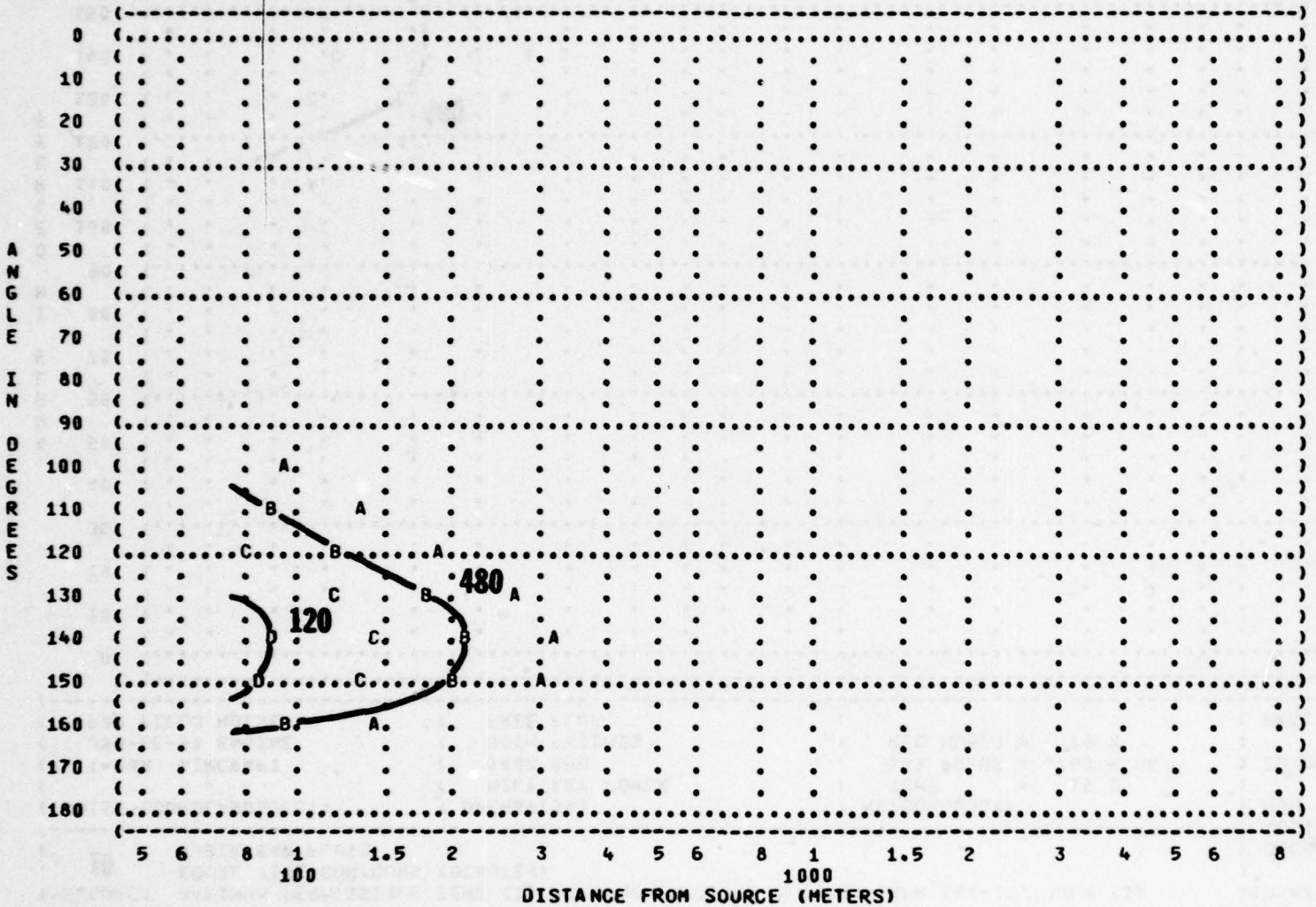


FIGURE 10: MAXIMUM PERMISSIBLE TIME (T) FOR ONE EXPOSURE PER DAY (AFR 161-35, JULY 73)
EQUAL TIME CONTOURS (MINUTES)
H-133 GROUND COMMUNICATION UNIT

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-056
RUN 03
20 OCT 75
PAGE 12

NOISE SOURCE/SUBJECT:
T-38A AIRCRAFT
J85-GE-5A ENGINE
FAR FIELD NOISE

OPERATION:
MILITARY POWER
100% RPM
BOTH ENGINES
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

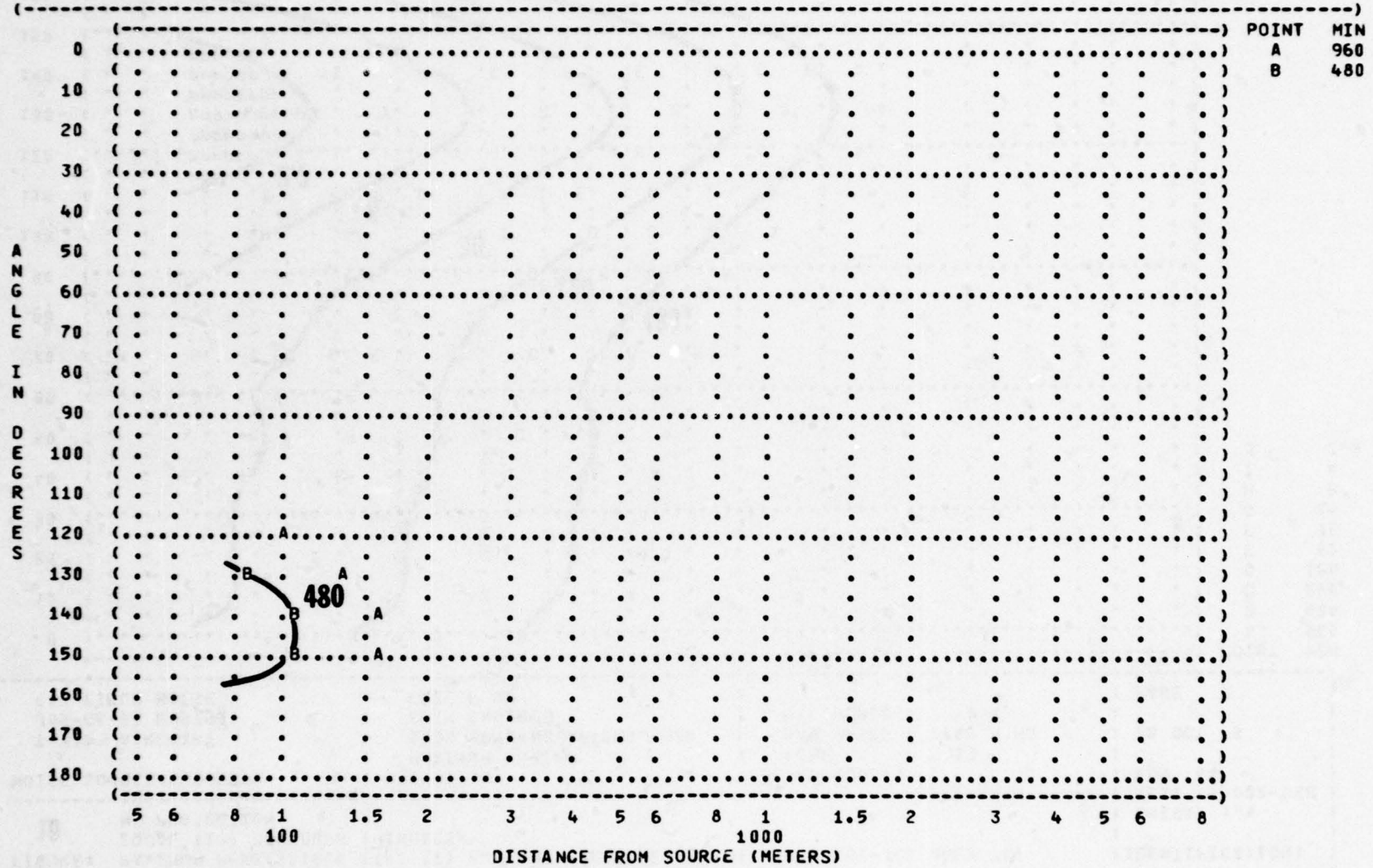


FIGURE 10: MAXIMUM PERMISSIBLE TIME (T) FOR ONE EXPOSURE PER DAY (AFR 161-35, JULY 73)
EQUAL TIME CONTOURS (MINUTES)
NO PROTECTION

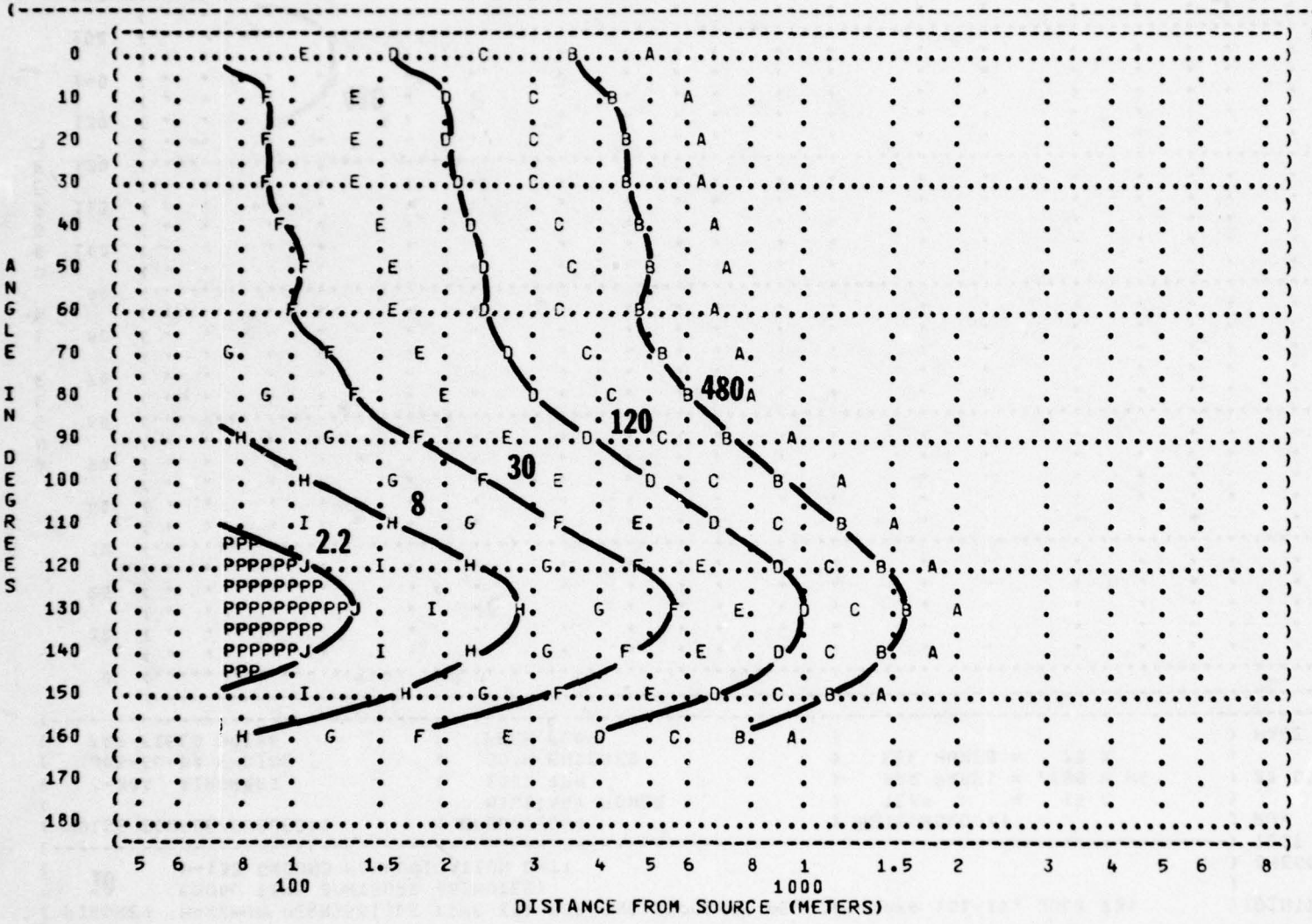
IDENTIFICATION:
OMEGA 1.4
TEST 75-002-056
RUN 04
20 OCT 75
PAGE 7

NOISE SOURCE/SUBJECT:
T-38A AIRCRAFT
J85-GE-5A ENGINE
FAR FIELD NOISE

OPERATION:
MAXIMUM POWER
100% RPM AND AFTERBURNER
BOTH ENGINES
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

POINT	MIN
A	960
B	480
C	240
D	120
E	60
F	30
G	15
H	8
I	4
J	2.2



P ADDITIONAL EAR PROTECTION REQUIRED.

FIGURE: 10

MAXIMUM PERMISSIBLE TIME (T) FOR ONE EXPOSURE PER DAY (AFR 161-35, JULY 73)
EQUAL TIME CONTOURS (MINUTES)
MINIMUM QPL EAR MUFFS

NOISE SOURCE/SUBJECT:
T-38A AIRCRAFT
J85-GE-5A ENGINE
FAR FIELD NOISE

OPERATION:
MAXIMUM POWER
100% RPM AND AFTERBURNER
BOTH ENGINES
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-056
RUN 04
20 OCT 75
PAGE 8

POINT	MIN
A	960
B	480
C	240
D	120
E	60
F	30
G	15

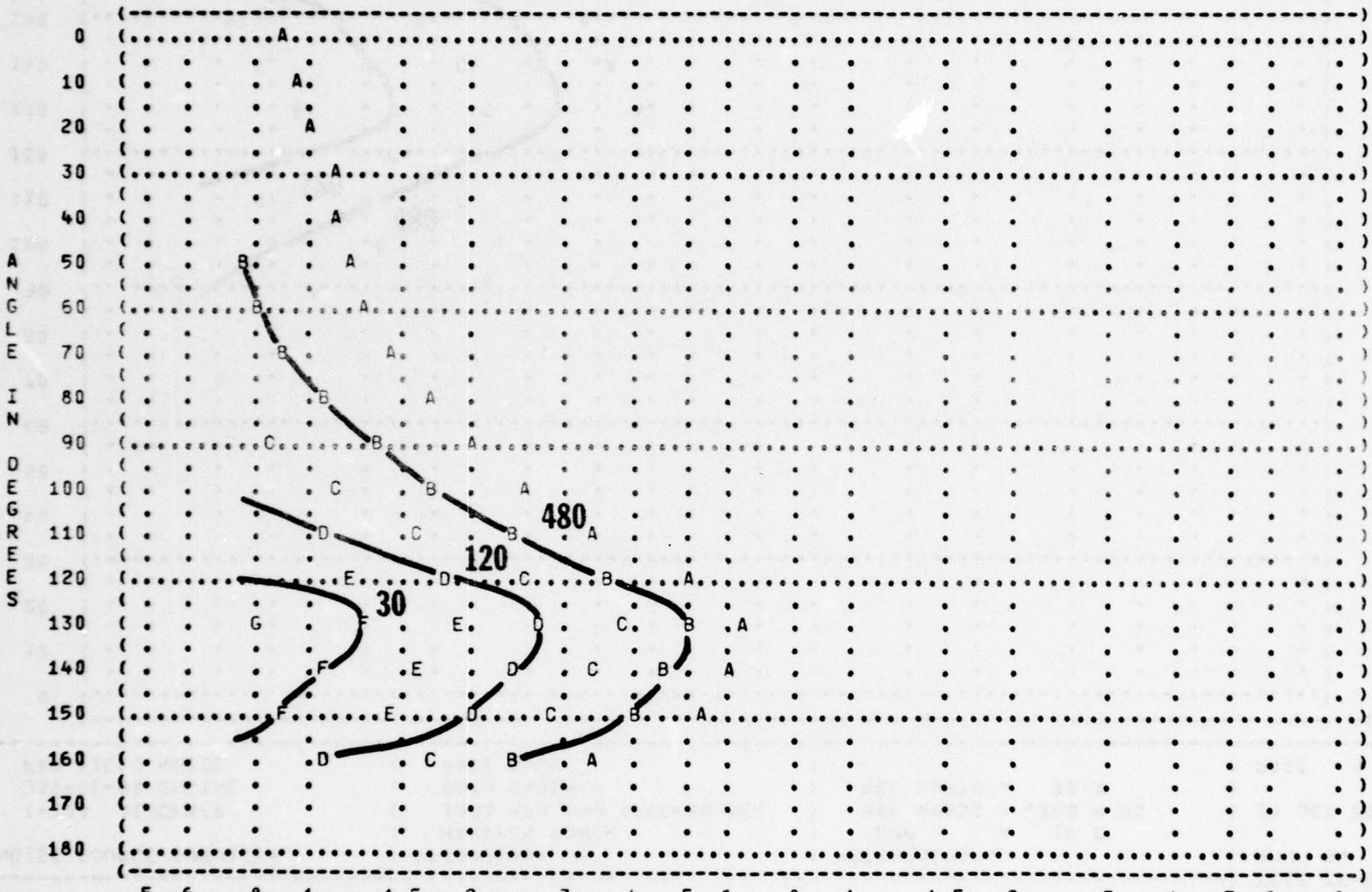


FIGURE: 10

MAXIMUM PERMISSIBLE TIME (T) FOR ONE EXPOSURE PER DAY (AFR 161-35, JULY 73)
EQUAL TIME CONTOURS (MINUTES)
AMERICAN OPTICAL 1700 EAR MUFFS

NOISE SOURCE/SUBJECT:
T-38A AIRCRAFT
J85-GE-5A ENGINE
FAR FIELD NOISE

OPERATION:
MAXIMUM POWER
100% RPM AND AFTERBURNER
BOTH ENGINES
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-056
RUN 04

20 OCT 75

PAGE 9

POINT	MIN
A	960
B	480
C	240
D	120
E	60

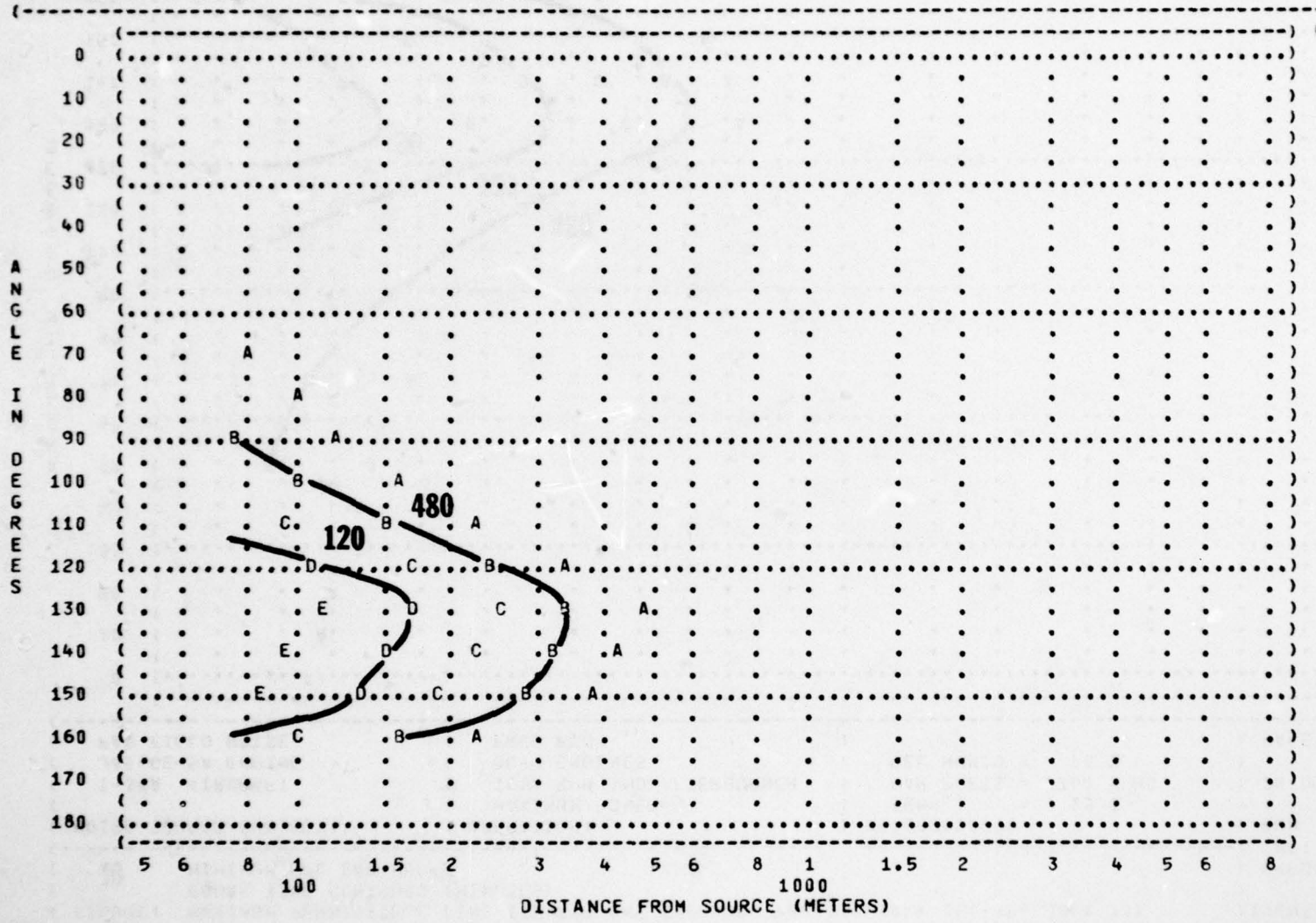


FIGURE 10: MAXIMUM PERMISSIBLE TIME (T) FOR ONE EXPOSURE PER DAY (AFR 161-35, JULY 73)
EQUAL TIME CONTOURS (MINUTES)
V-51R EAR PLUGS

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-056
RUN 04
20 OCT 75
PAGE 10

NOISE SOURCE/SUBJECT:
T-38A AIRCRAFT
J85-GE-5A ENGINE
FAR FIELD NOISE

OPERATION:
MAXIMUM POWER
100% RPM AND AFTERBURNER
BOTH ENGINES
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

POINT	MIN
A	960
B	480
C	240
D	120
E	60

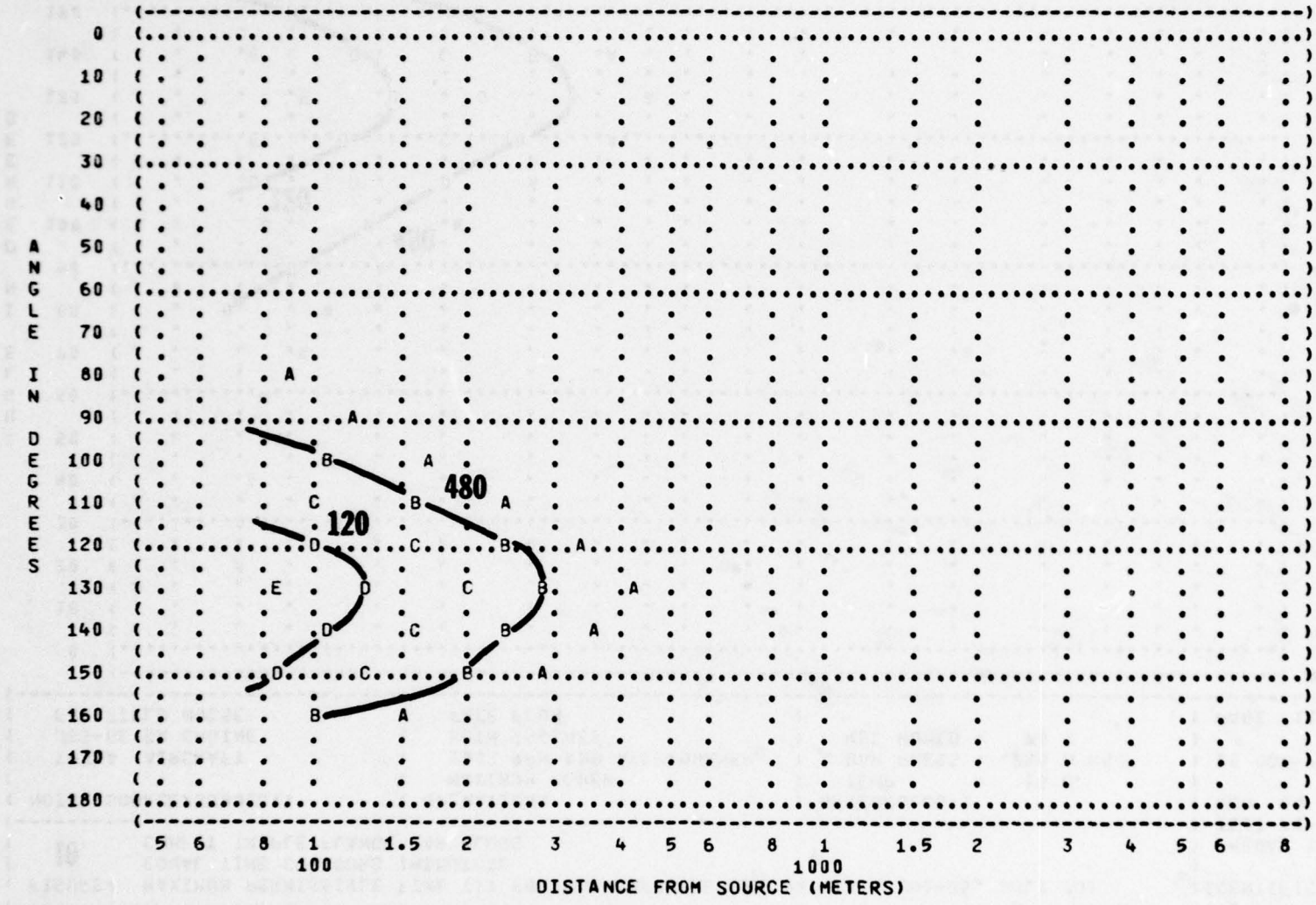


FIGURE 10: MAXIMUM PERMISSIBLE TIME (T) FOR ONE EXPOSURE PER DAY (AFR 161-35, JULY 73)
EQUAL TIME CONTOURS (MINUTES)
COMFIT TRIPLE FLANGE EAR PLUGS

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-056
RUN 04
20 OCT 75
PAGE 11

NOISE SOURCE/SUBJECT:
T-38A AIRCRAFT
J85-GE-5A ENGINE
FAR FIELD NOISE

OPERATION:
MAXIMUM POWER
100% RPM AND AFTERBURNER
BOTH ENGINES
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

POINT	MIN
A	960
B	480
C	240
D	120
E	60

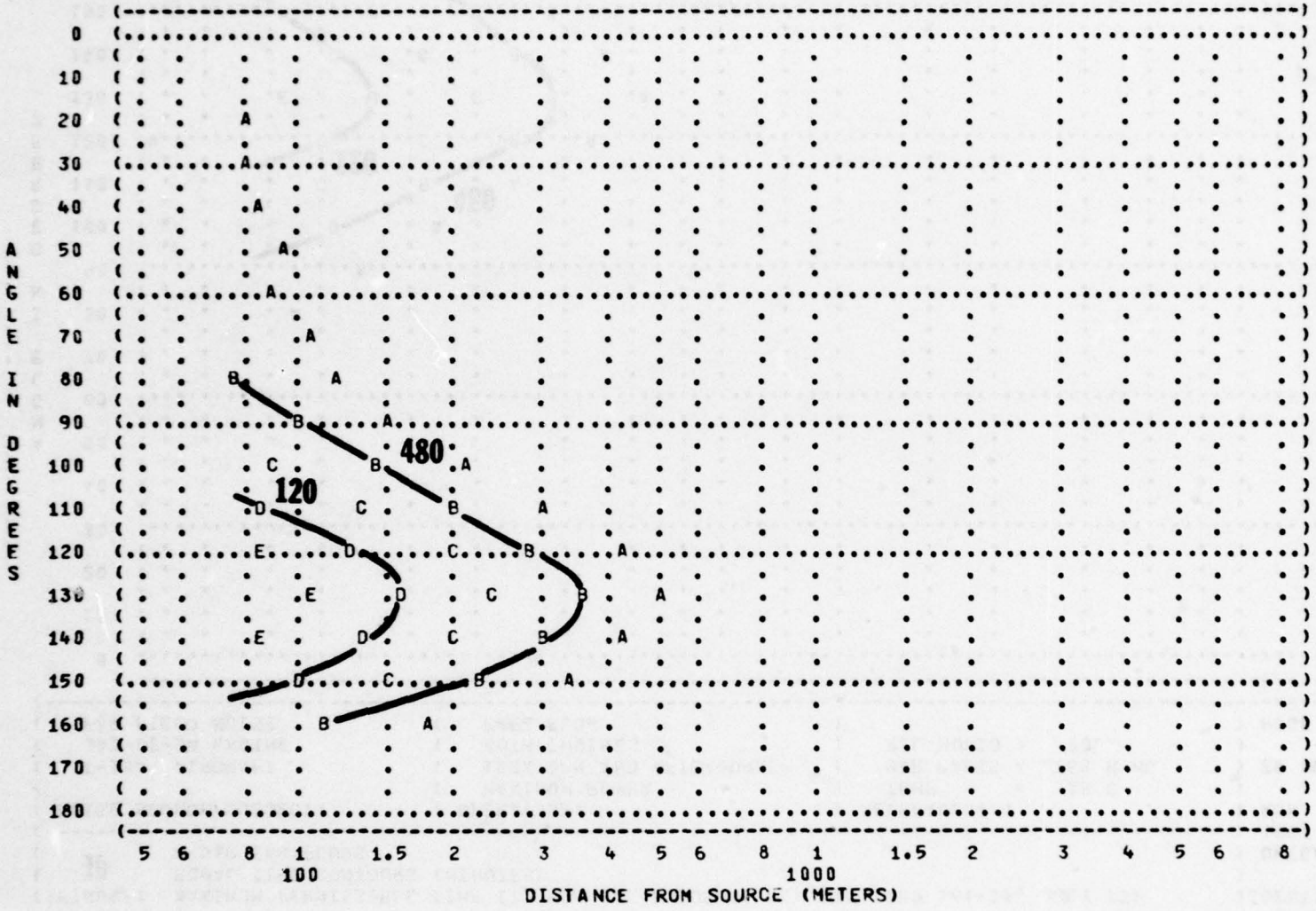


FIGURE: 10

MAXIMUM PERMISSIBLE TIME (T) FOR ONE EXPOSURE PER DAY (AFR 161-35, JULY 73)
EQUAL TIME CONTOURS (MINUTES)
H-133 GROUND COMMUNICATION UNIT

NOISE SOURCE/SUBJECT:
T-38A AIRCRAFT
J85-GE-5A ENGINE
FAR FIELD NOISE

OPERATION:
MAXIMUM POWER
100% RPM AND AFTERBURNER
BOTH ENGINES
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-056
RUN 04
20 OCT 75
PAGE 12

POINT	MIN
A	960
B	480
C	240
D	120

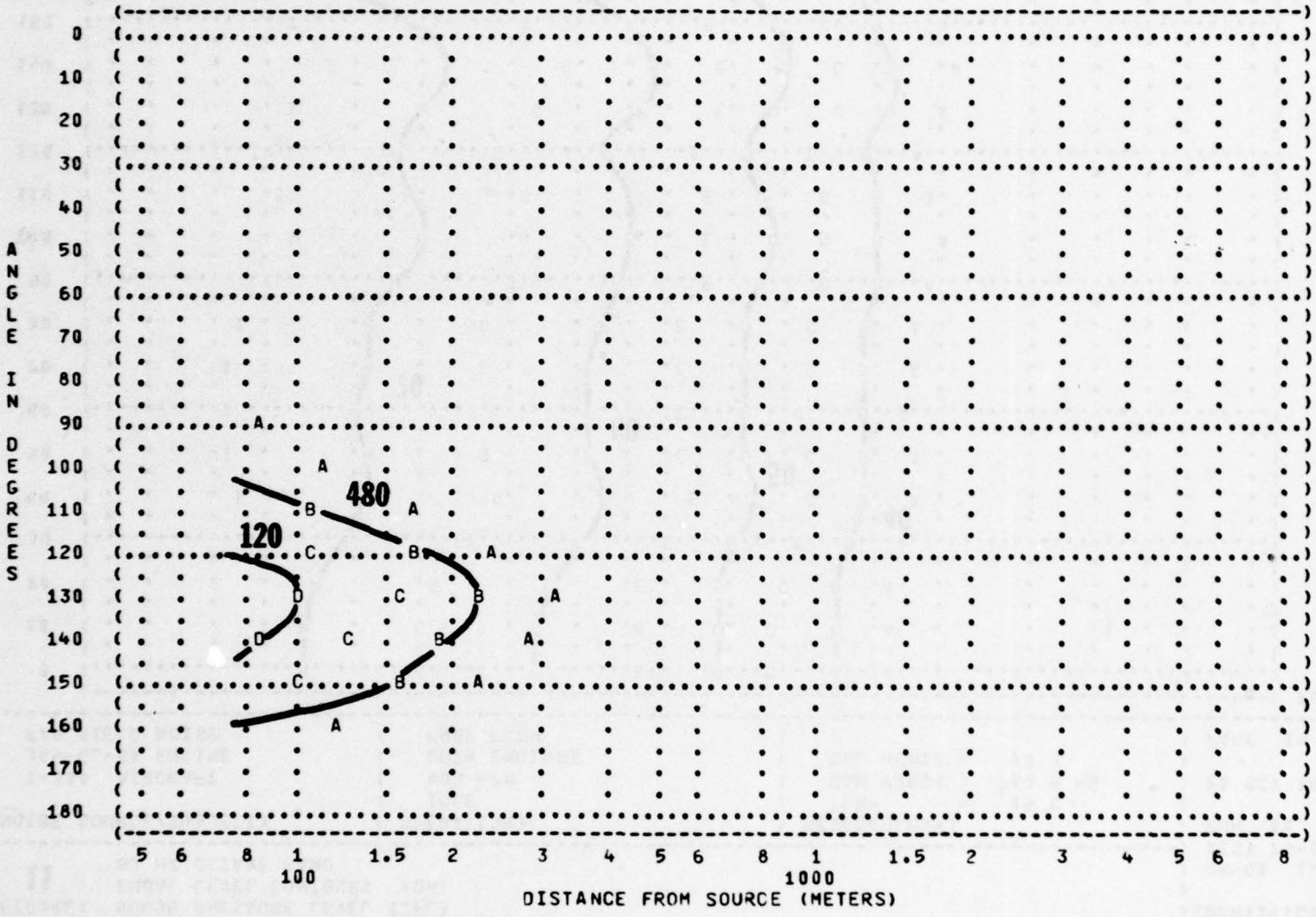


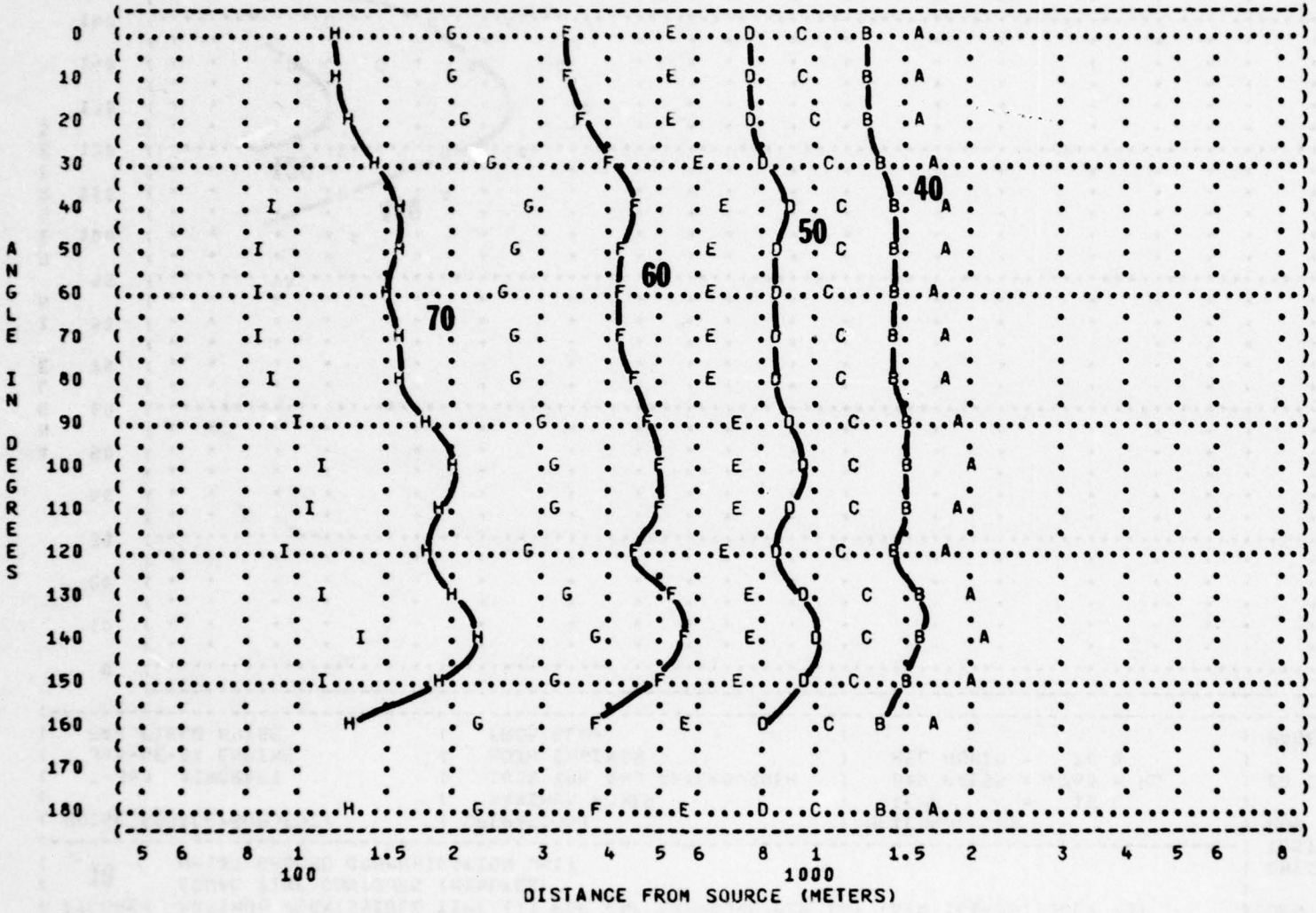
FIGURE 11: SOUND PRESSURE LEVEL (SPL) EQUAL LEVEL CONTOURS (DB) 63 HZ OCTAVE BAND

NOISE SOURCE/SUBJECT:
T-38A AIRCRAFT
J85-GE-5A ENGINE
FAR FIELD NOISE

OPERATION:
IDLE
48% RPM
BOTH ENGINES
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-047
RUN 01
20 OCT 75
PAGE 19



POINT	DB
A	35
B	40
C	45
D	50
E	55
F	60
G	65
H	70
I	75

FIGURE 11 SOUND PRESSURE LEVEL (SPL) EQUAL LEVEL CONTOURS (DB) 125 HZ OCTAVE BAND

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-047
RUN 01
20 OCT 75
PAGE 20

NOISE SOURCE/SUBJECT:
T-38A AIRCRAFT
J85-GE-5A ENGINE
FAR FIELD NOISE

OPERATION:
IDLE
48% RPM
BOTH ENGINES
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

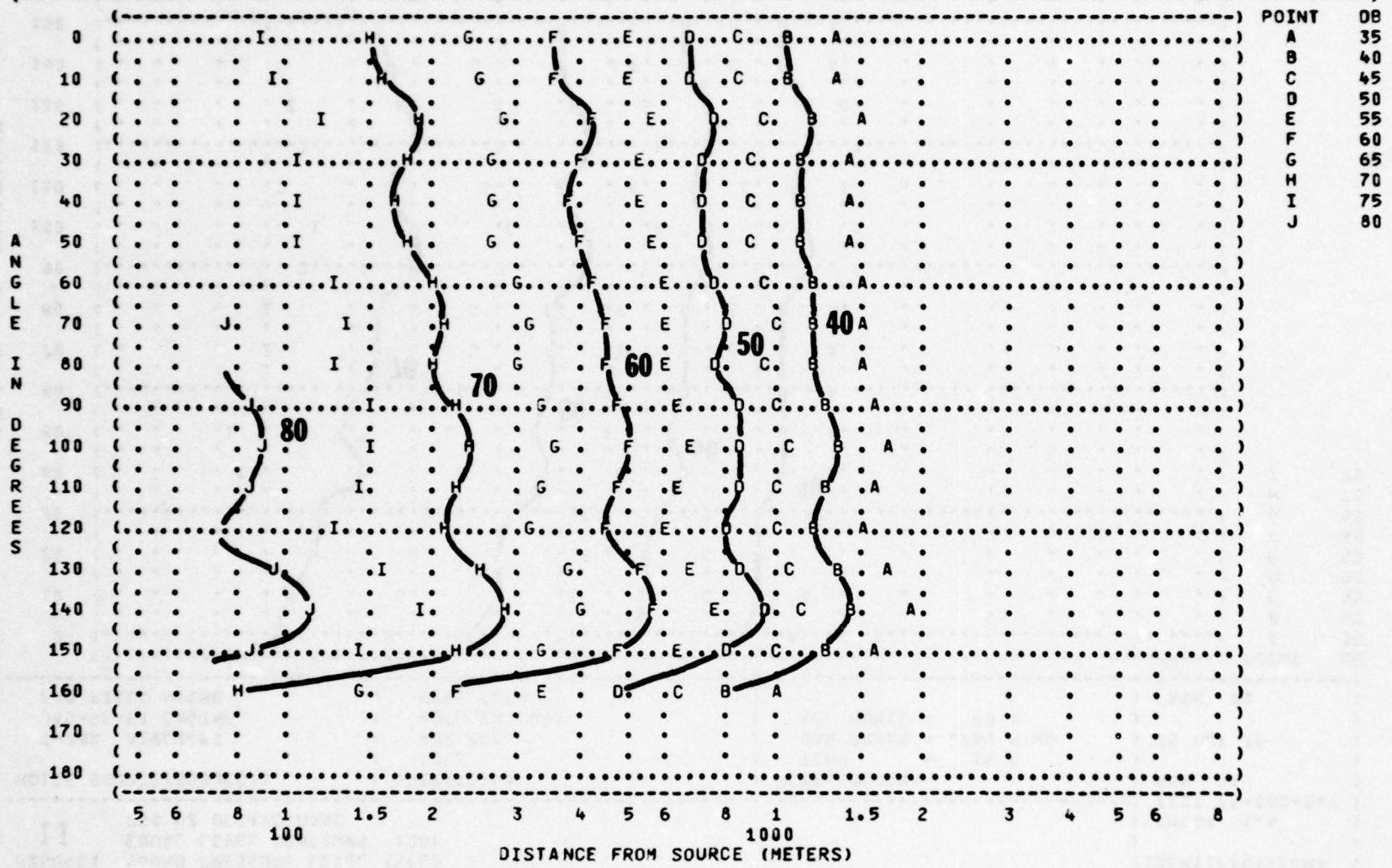


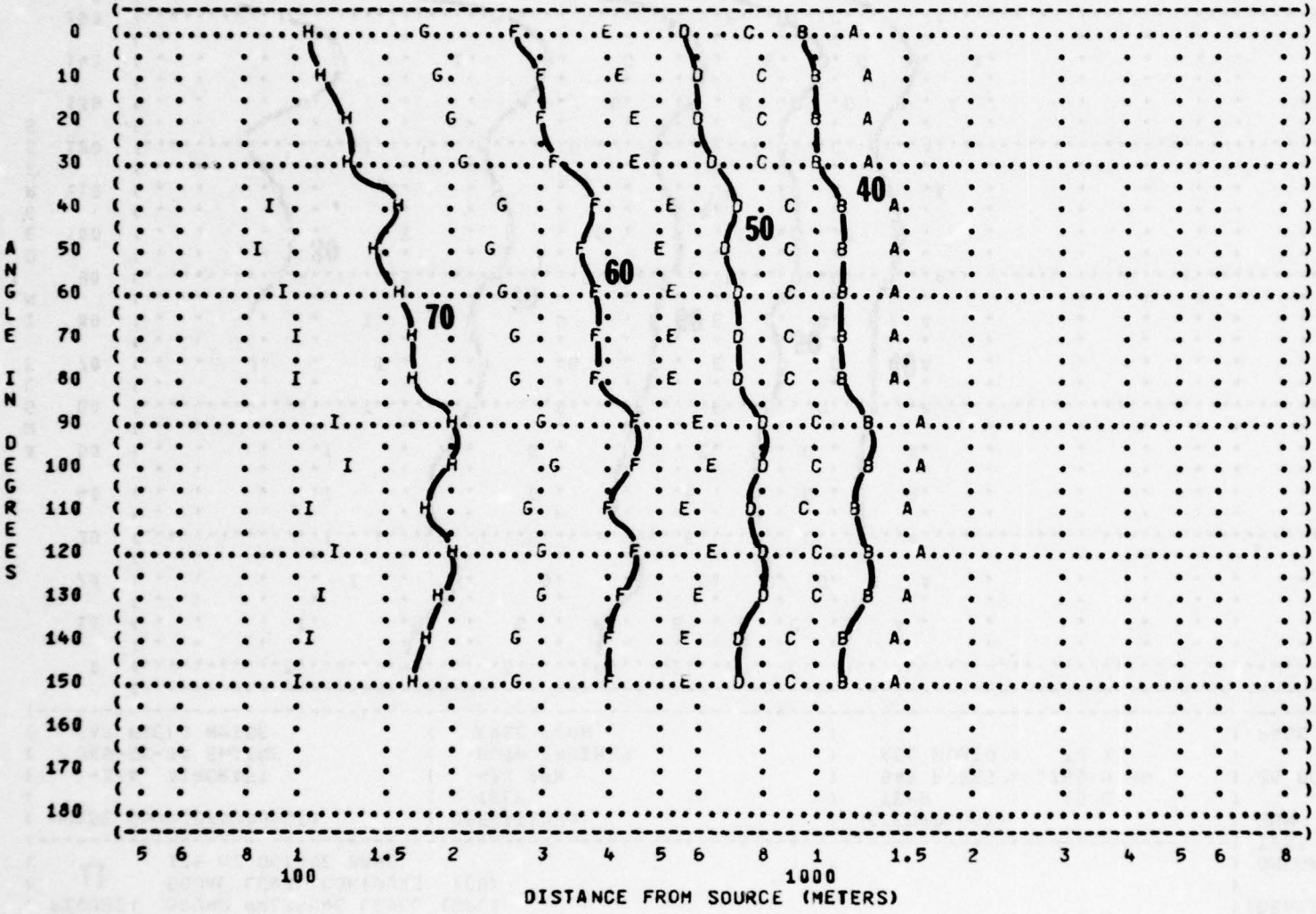
FIGURE 11: SOUND PRESSURE LEVEL (SPL) EQUAL LEVEL CONTOURS (DB) 250 HZ OCTAVE BAND

NOISE SOURCE/SUBJECT:
T-38A AIRCRAFT
J85-GE-5A ENGINE
FAR FIELD NOISE

OPERATION:
IDLE
48% RPM
BOTH ENGINES
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-047
RUN 01
20 OCT 75
PAGE 21



POINT	DB
A	35
B	40
C	45
D	50
E	55
F	60
G	65
H	70
I	75

FIGURE 11: SOUND PRESSURE LEVEL (SPL) EQUAL LEVEL CONTOURS (DB) 500 HZ OCTAVE BAND

NOISE SOURCE/SUBJECT:
T-38A AIRCRAFT
J85-GE-5A ENGINE
FAR FIELD NOISE

OPERATION:
IDLE
48% RPM
BOTH ENGINES
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-047
RUN 01
20 OCT 75
PAGE 22

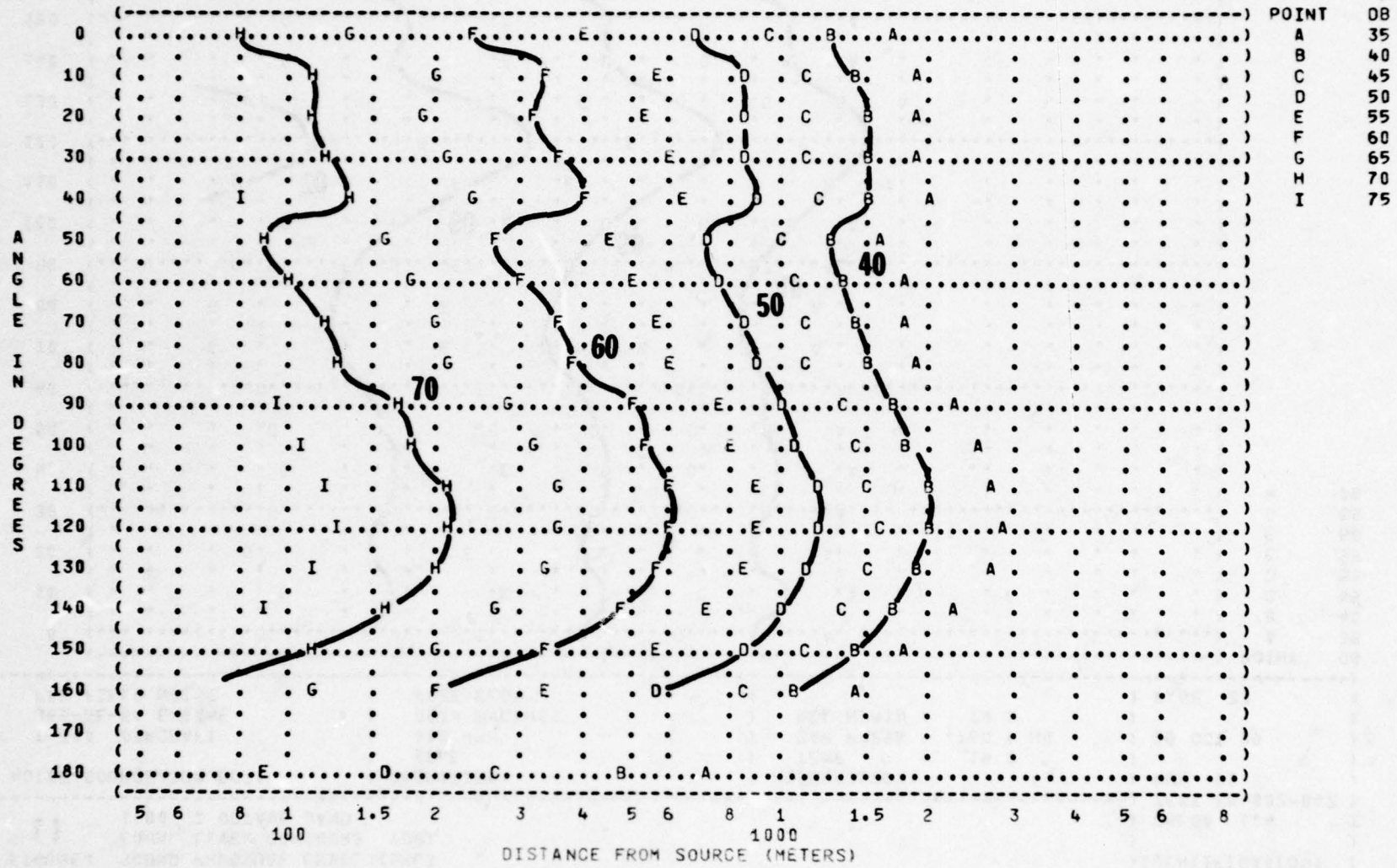


FIGURE 11: SOUND PRESSURE LEVEL (SPL) EQUAL LEVEL CONTOURS (DB) 1000 HZ OCTAVE BAND

NOISE SOURCE/SUBJECT:
T-38A AIRCRAFT
J85-GE-5A ENGINE
FAR FIELD NOISE

OPERATION:
IDLE
48% RPM
BOTH ENGINES
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-047
RUN 01
20 OCT 75
PAGE 23

POINT	DB
A	35
B	40
C	45
D	50
E	55
F	60
G	65
H	70

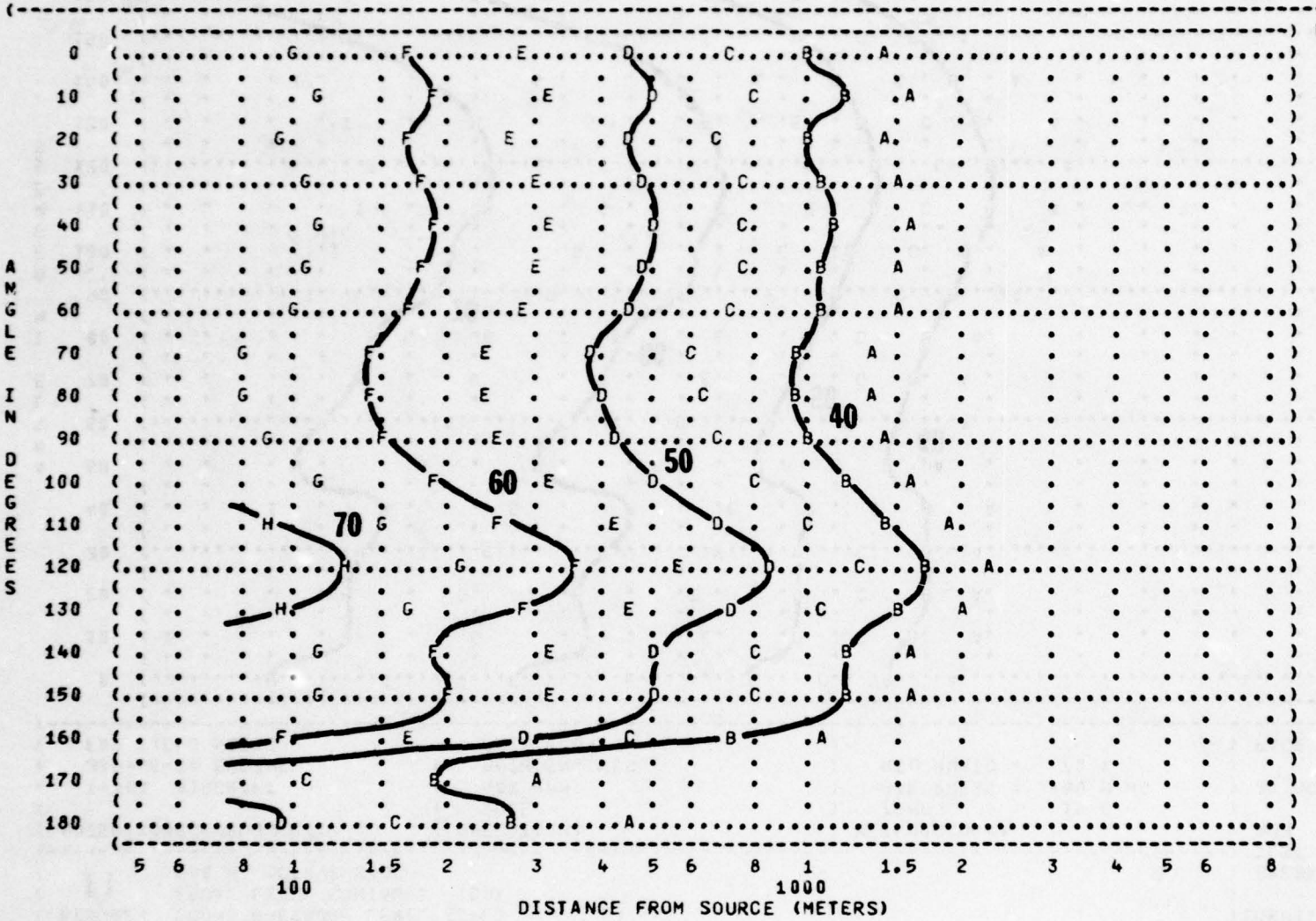


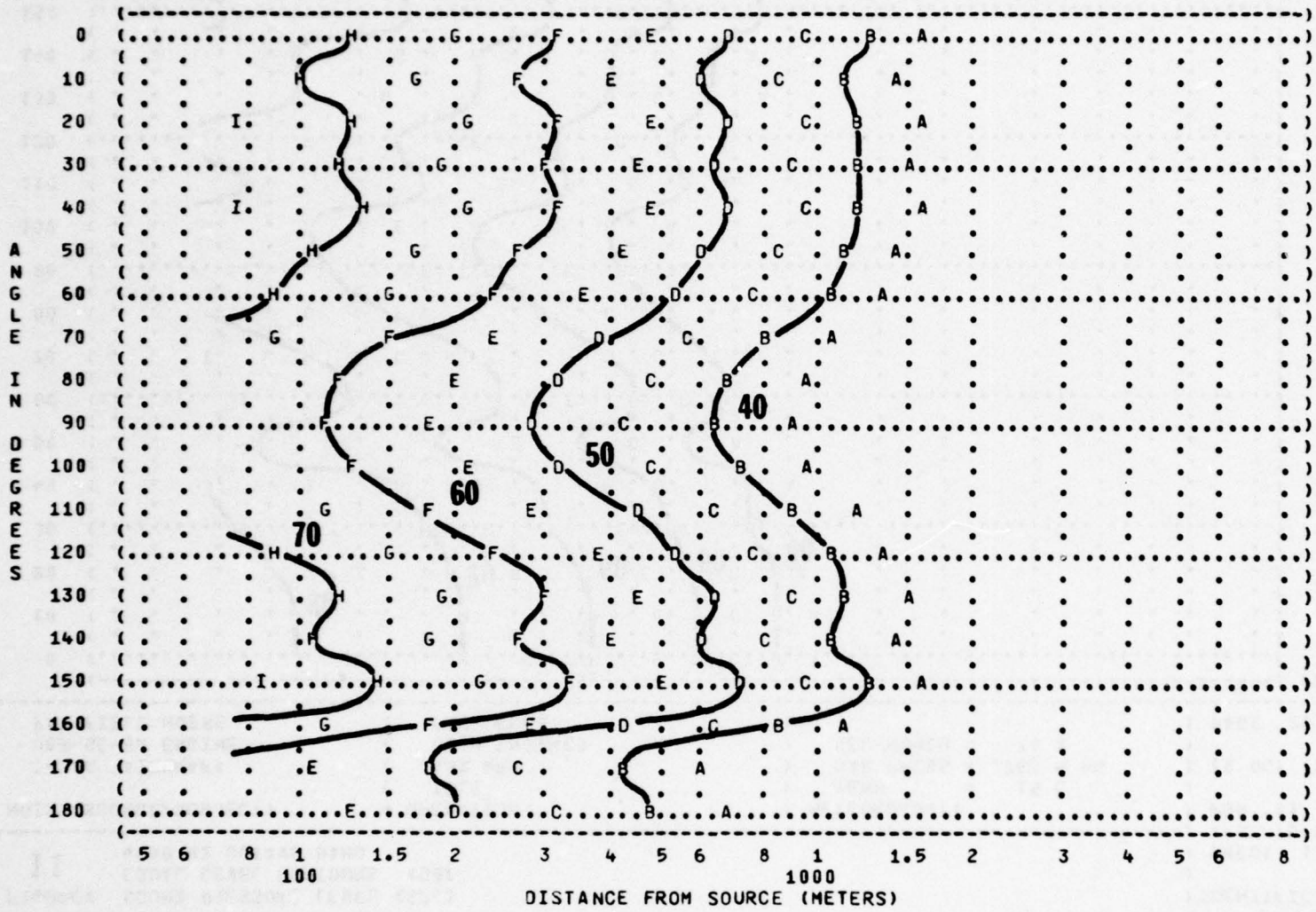
FIGURE: 11 SOUND PRESSURE LEVEL (SPL) EQUAL LEVEL CONTOURS (DB) 2000 HZ OCTAVE BAND

NOISE SOURCE/SUBJECT:
T-38A AIRCRAFT
J85-GE-5A ENGINE
FAR FIELD NOISE

OPERATION:
IDLE
48% RPM
BOTH ENGINES
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-047
RUN 01
20 OCT 75
PAGE 24



POINT	DB
A	35
B	40
C	45
D	50
E	55
F	60
G	65
H	70
I	75

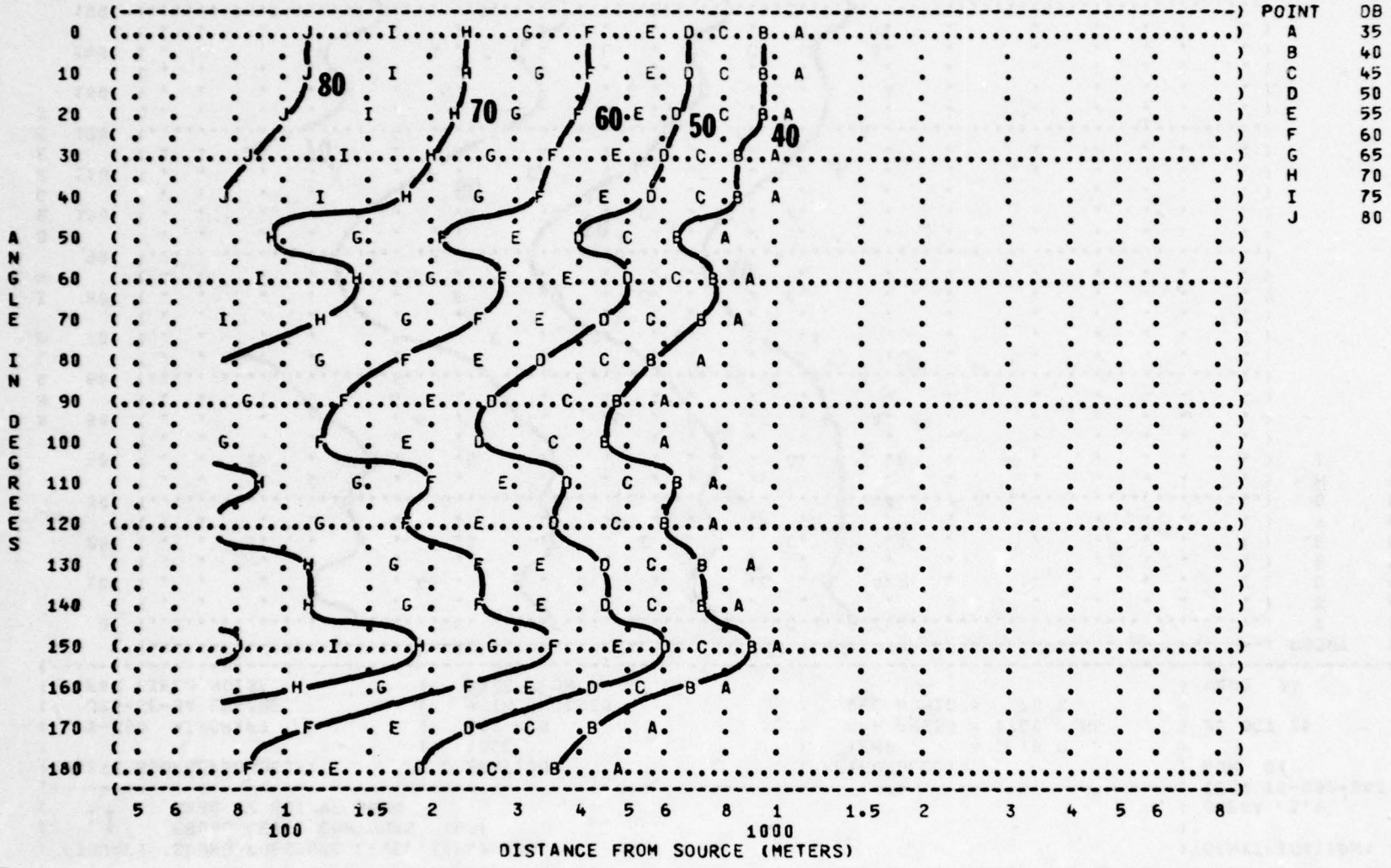
FIGURE 11 SOUND PRESSURE LEVEL (SPL) EQUAL LEVEL CONTOURS (DB) 4000 HZ OCTAVE BAND

NOISE SOURCE/SUBJECT:
T-38A AIRCRAFT
J85-GE-5A ENGINE
FAR FIELD NOISE

OPERATION:
IDLE
48% RPM
BOTH ENGINES
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-047
RUN 01
20 OCT 75
PAGE 25



POINT	DB
A	35
B	40
C	45
D	50
E	55
F	60
G	65
H	70
I	75
J	80

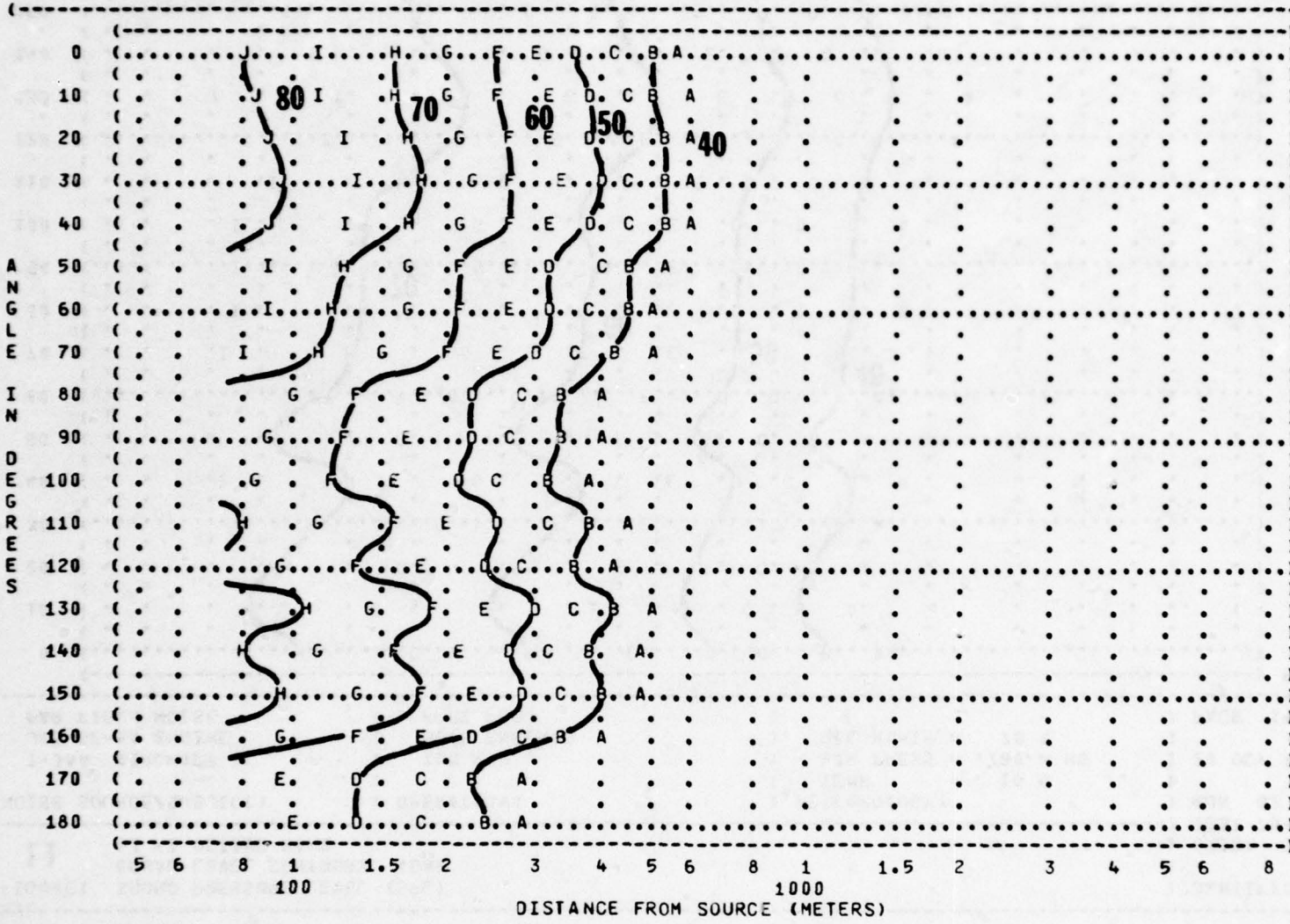
FIGURE 11: SOUND PRESSURE LEVEL (SPL) EQUAL LEVEL CONTOURS (DB) 8000 HZ OCTAVE BAND

NOISE SOURCE/SUBJECT:
T-38A AIRCRAFT
J85-GE-5A ENGINE
FAR FIELD NOISE

OPERATION:
IDLE
48% RPM
BOTH ENGINES
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-047
RUN 01
20 OCT 75
PAGE 26



POINT	DB
A	35
B	40
C	45
D	50
E	55
F	60
G	65
H	70
I	75
J	80

FIGURE 11: SOUND PRESSURE LEVEL (SPL) EQUAL LEVEL CONTOURS (DB) 63 HZ OCTAVE BAND

NOISE SOURCE/SUBJECT:
T-38A AIRCRAFT
J85-GE-5A ENGINE
FAR FIELD NOISE

OPERATION:
70% RPM
BOTH ENGINES
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-047
RUN 02
20 OCT 75
PAGE 19

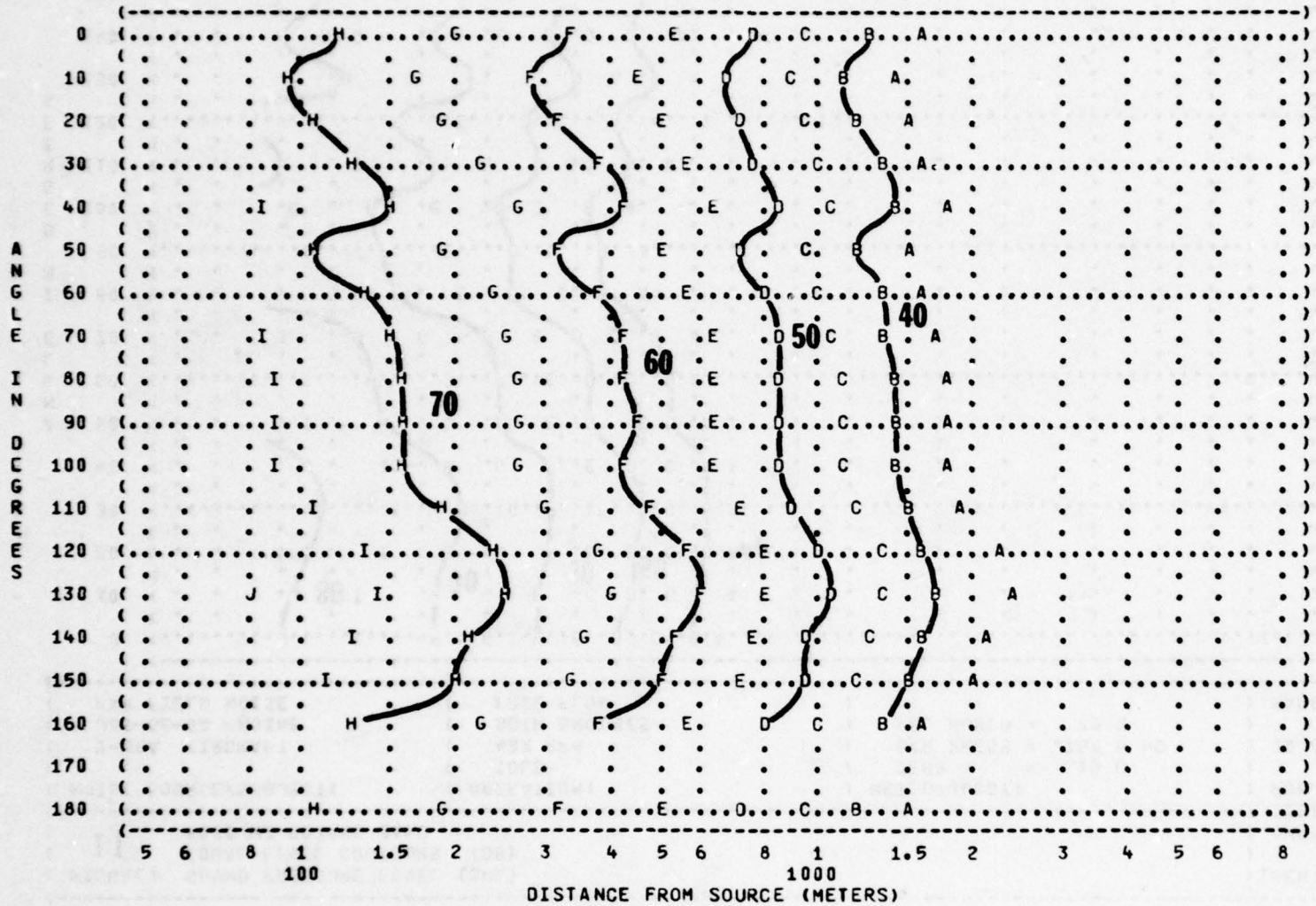


FIGURE 11: SOUND PRESSURE LEVEL (SPL) EQUAL LEVEL CONTOURS (DB) 125 HZ OCTAVE BAND

NOISE SOURCE/SUBJECT:
T-38A AIRCRAFT
J85-GE-5A ENGINE
FAR FIELD NOISE

OPERATION:
70% RPM
BOTH ENGINES
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-047
RUN 02
20 OCT 75
PAGE 20

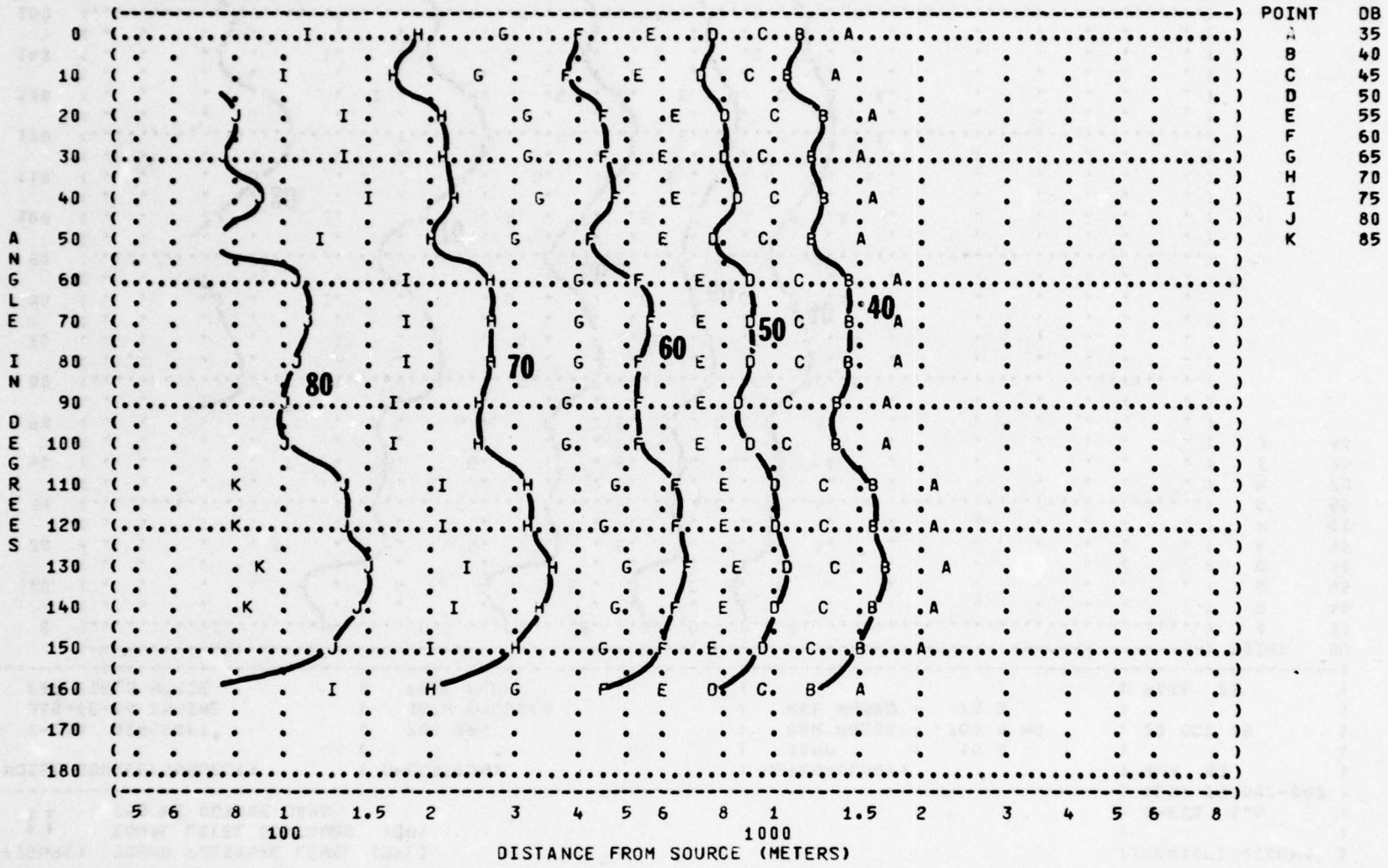


FIGURE 11: SOUND PRESSURE LEVEL (SPL) EQUAL LEVEL CONTOURS (DB) 250 HZ OCTAVE BAND

IDENTIFICATION: OMEGA 1.4 TEST 75-002-047 RUN 02 20 OCT 75 PAGE 21

NOISE SOURCE/SUBJECT: T-38A AIRCRAFT; J85-GE-5A ENGINE; FAR FIELD NOISE

OPERATION: 70% RPM; BOTH ENGINES; FREE FLOW

METEOROLOGY: TEMP = 15 C; BAR PRESS = .760 M HG; REL HUMID = 70 %

POINT	DB
A	35
B	40
C	45
D	50
E	55
F	60
G	65
H	70
I	75
J	80

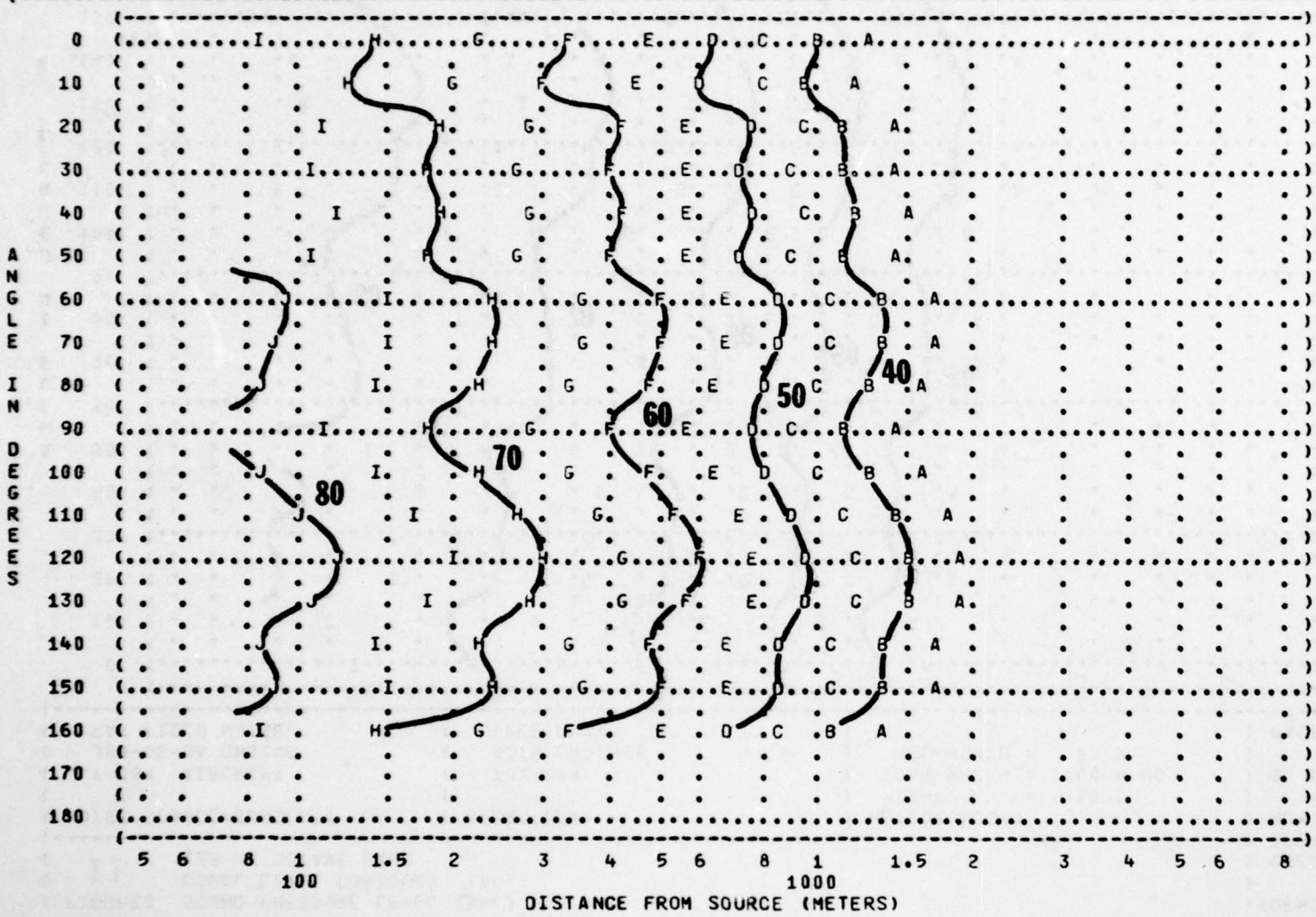


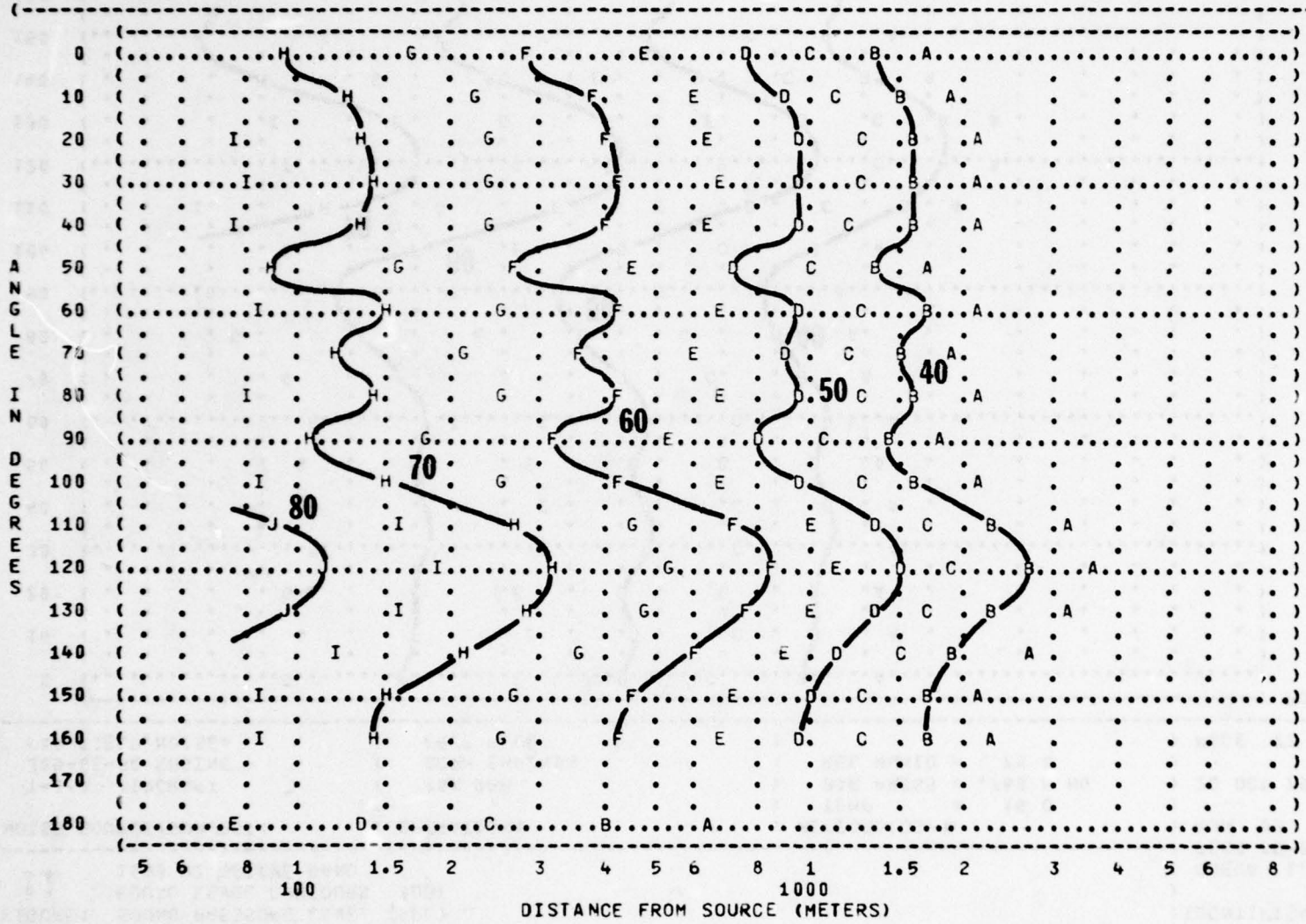
FIGURE 11: SOUND PRESSURE LEVEL (SPL) EQUAL LEVEL CONTOURS (DB) 500 HZ OCTAVE BAND

NOISE SOURCE/SUBJECT:
T-38A AIRCRAFT
J85-GE-5A ENGINE
FAR FIELD NOISE

OPERATION:
70% RPM
BOTH ENGINES
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-047
RUN 02
20 OCT 75
PAGE 22



POINT	DB
A	35
B	40
C	45
D	50
E	55
F	60
G	65
H	70
I	75
J	80

FIGURE 11: SOUND PRESSURE LEVEL (SPL) EQUAL LEVEL CONTOURS (DB) 1000 HZ OCTAVE BAND

NOISE SOURCE/SUBJECT:
T-38A AIRCRAFT
J85-GE-5A ENGINE
FAR FIELD NOISE

OPERATION:
70% RPM
BOTH ENGINES
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-047
RUN 02
20 OCT 75
PAGE 23

POINT	DB
A	35
B	40
C	45
D	50
E	55
F	60
G	65
H	70
I	75

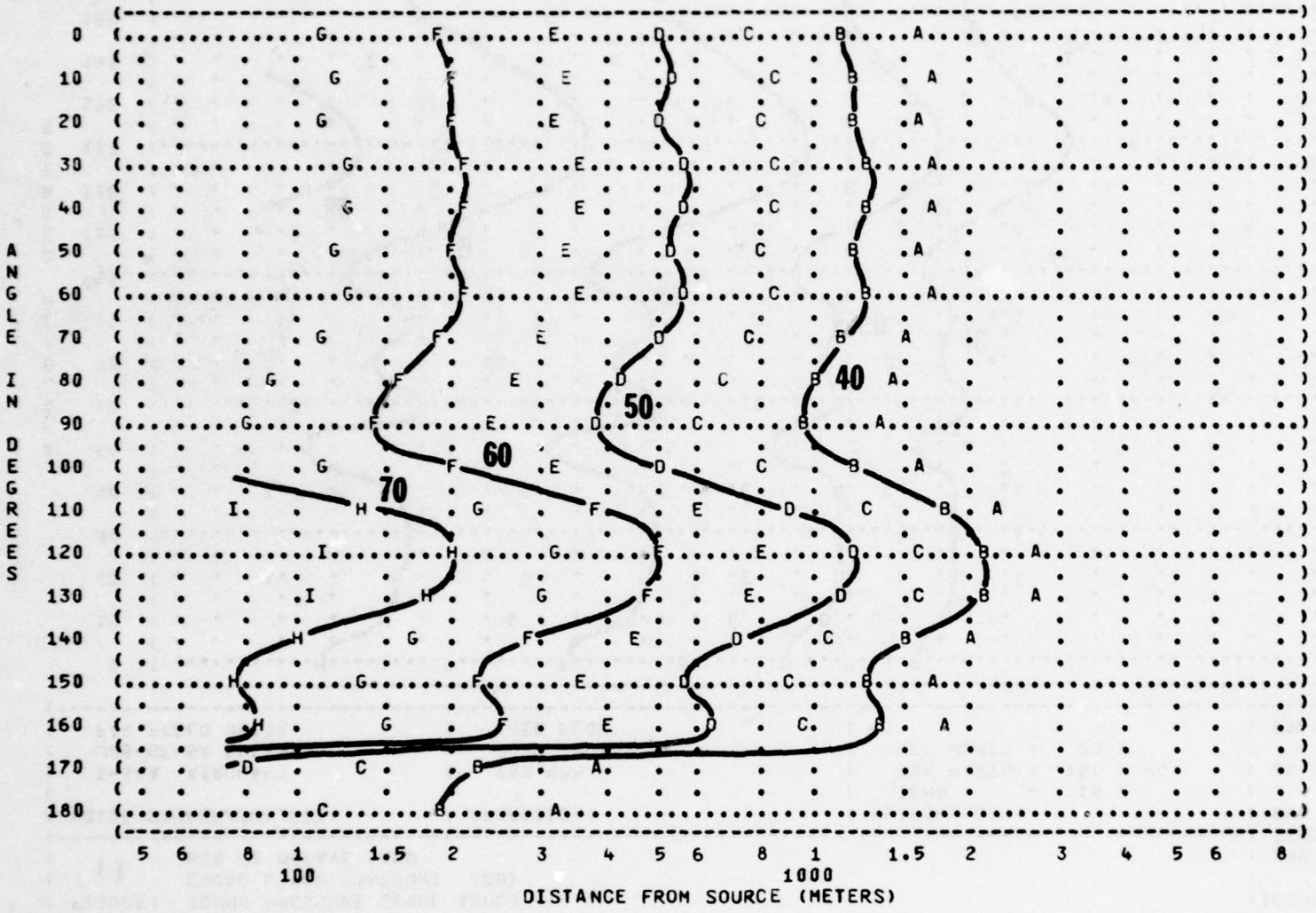


FIGURE 11: SOUND PRESSURE LEVEL (SPL) EQUAL LEVEL CONTOURS (DB) 2000 HZ OCTAVE BAND

NOISE SOURCE/SUBJECT:
T-38A AIRCRAFT
J85-GE-5A ENGINE
FAR FIELD NOISE

OPERATION:
70% RPM
BOTH ENGINES
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-047
RUN 02
20 OCT 75
PAGE 24

POINT	DB
A	35
B	40
C	45
D	50
E	55
F	60
G	65
H	70
I	75

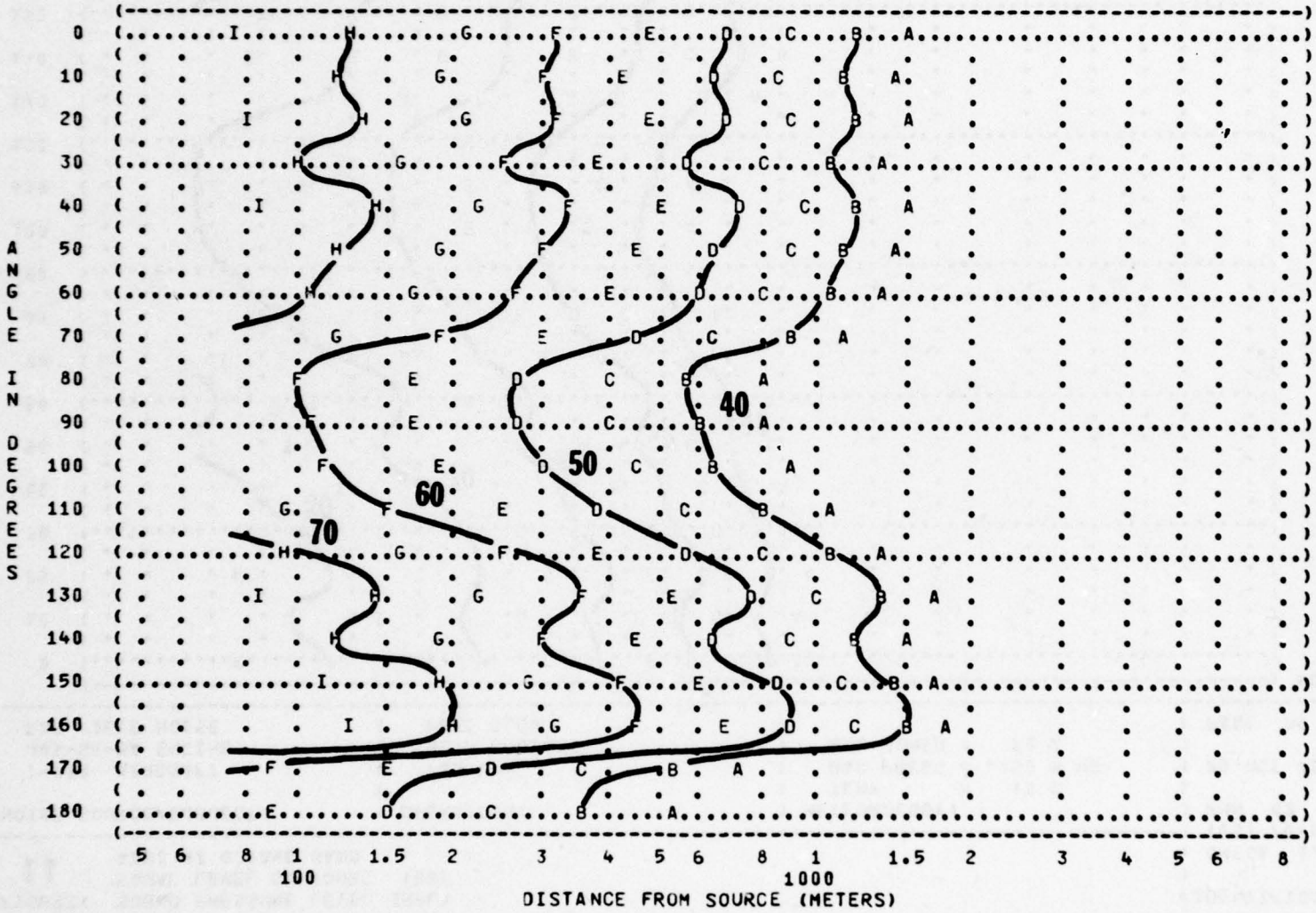


FIGURE 11: SOUND PRESSURE LEVEL (SPL) EQUAL LEVEL CONTOURS (DB) 4000 HZ OCTAVE BAND

NOISE SOURCE/SUBJECT:
T-38A AIRCRAFT
J85-GE-5A ENGINE
FAR FIELD NOISE

OPERATION:
70% RPM
BOTH ENGINES
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-047
RUN 02
20 OCT 75
PAGE 25

POINT	DB
A	35
B	40
C	45
D	50
E	55
F	60
G	65
H	70
I	75
J	80
K	85

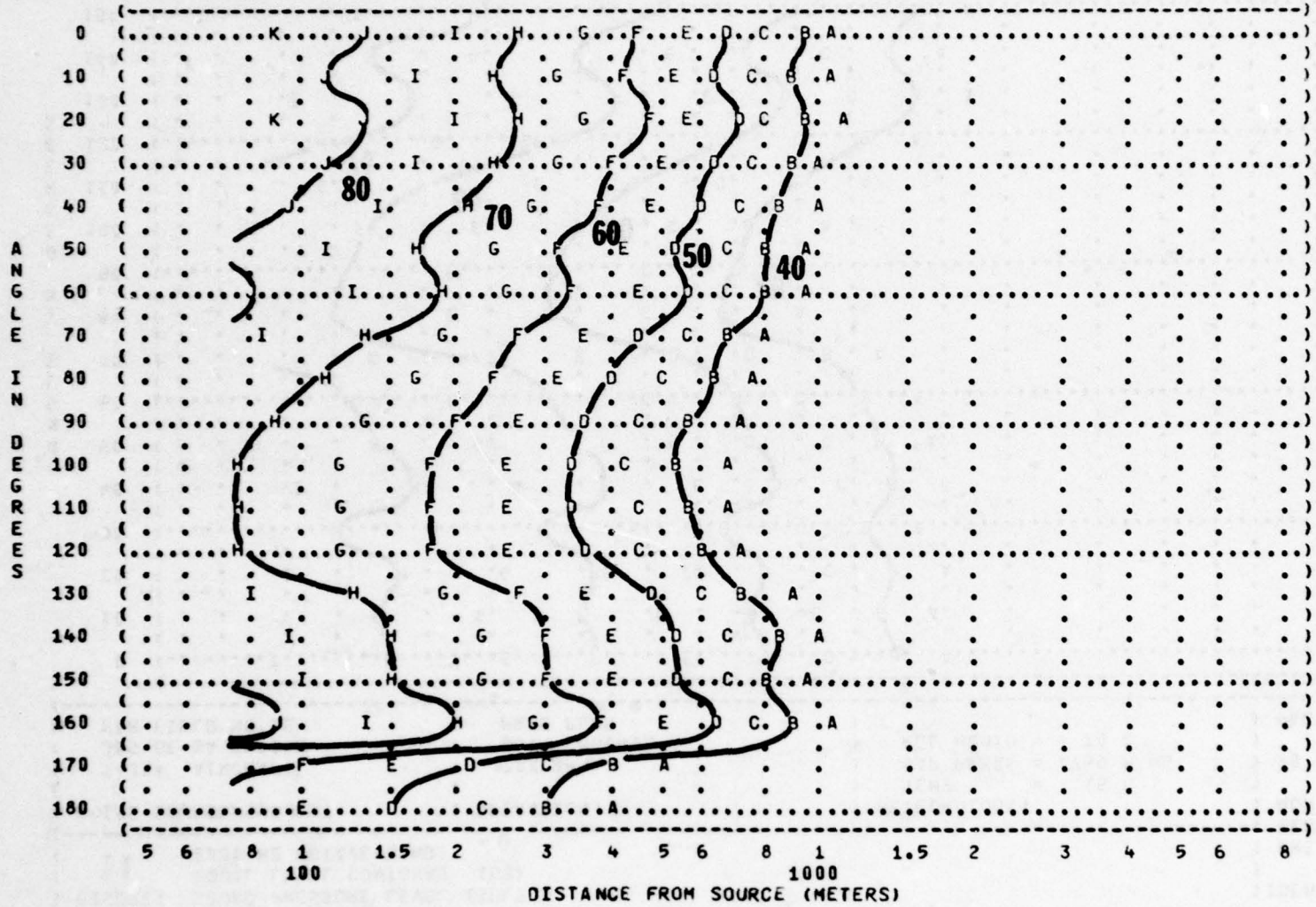


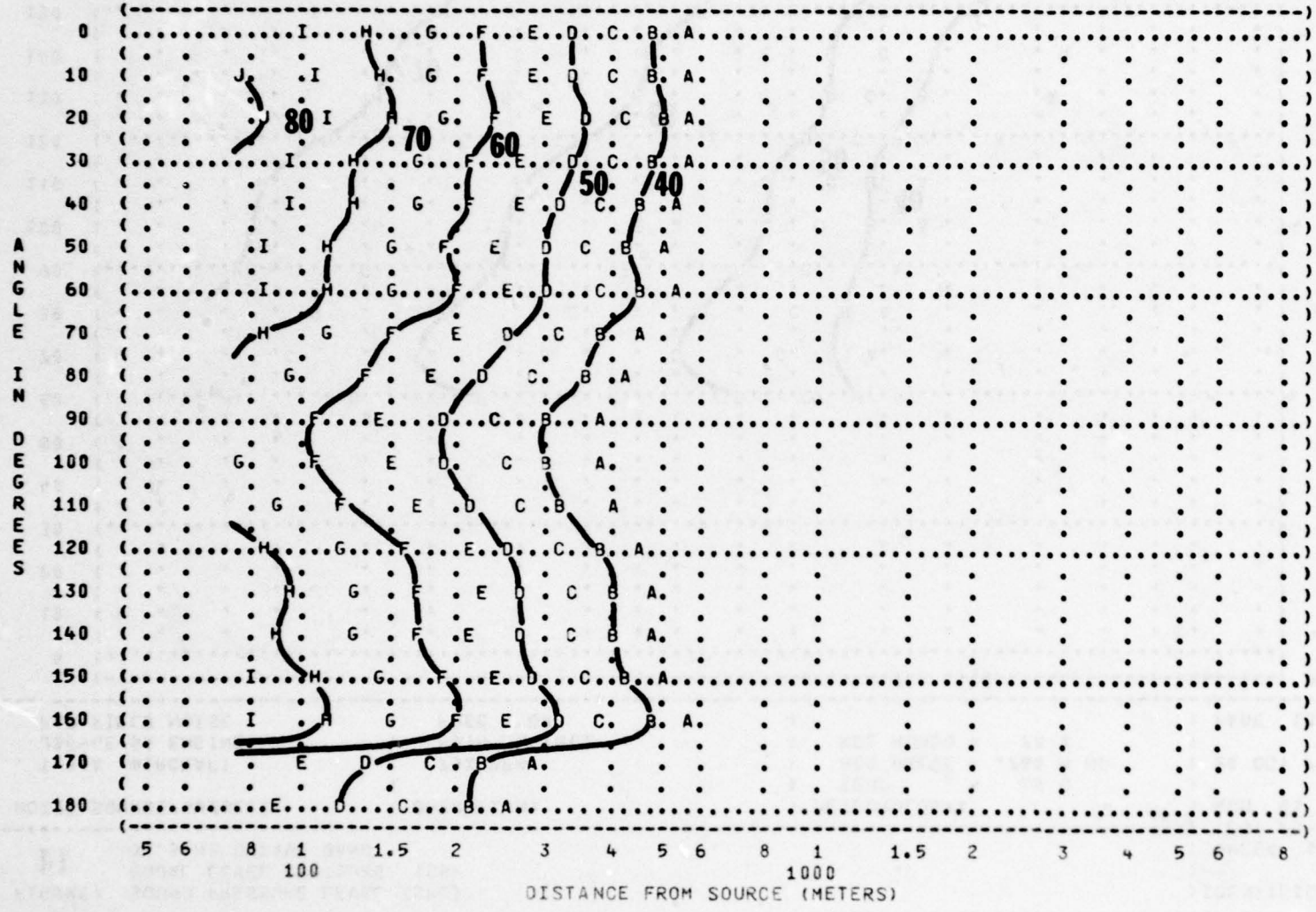
FIGURE 11 SOUND PRESSURE LEVEL (SPL) EQUAL LEVEL CONTOURS (DB) 8000 HZ OCTAVE BAND

NOISE SOURCE/SUBJECT:
T-38A AIRCRAFT
J85-GE-5A ENGINE
FAR FIELD NOISE

OPERATION:
70% RPM
BOTH ENGINES
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-047
RUN 02
20 OCT 75
PAGE 26



POINT	DB
A	35
B	40
C	45
D	50
E	55
F	60
G	65
H	70
I	75
J	80

FIGURE 11: SOUND PRESSURE LEVEL (SPL) EQUAL LEVEL CONTOURS (DB) 31.5 HZ OCTAVE BAND

NOISE SOURCE/SUBJECT:
T-38A AIRCRAFT
J85-GE-5A ENGINE
FAR FIELD NOISE

OPERATION:
75% RPM
BOTH ENGINES
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-056
RUN 01
20 OCT 75
PAGE 18

POINT	DB
A	35
B	40
C	45
D	50
E	55
F	60
G	65
H	70
I	75

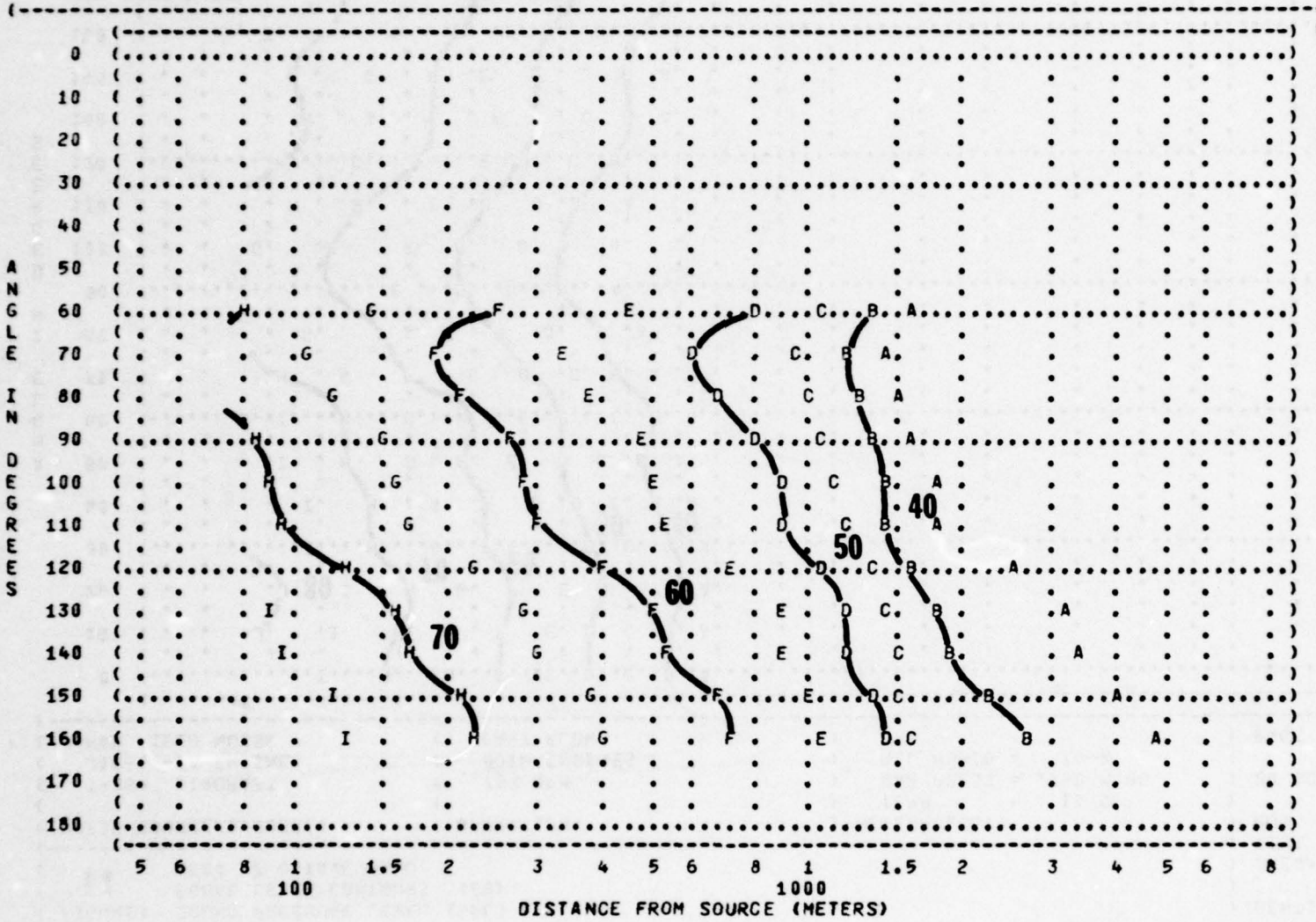


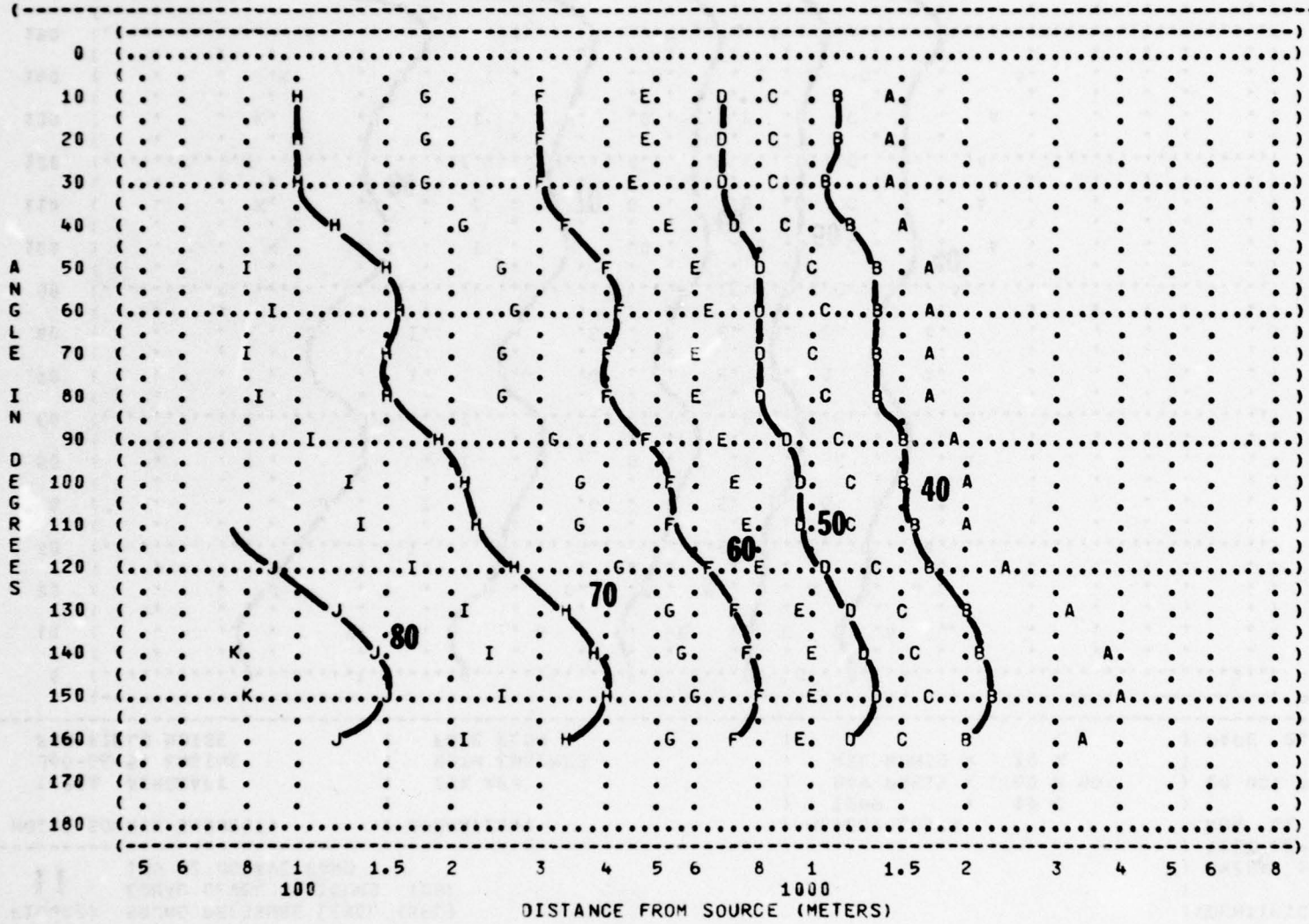
FIGURE 11: SOUND PRESSURE LEVEL (SPL) EQUAL LEVEL CONTOURS (DB) 63 HZ OCTAVE BAND

NOISE SOURCE/SUBJECT:
T-38A AIRCRAFT
J85-GE-5A ENGINE
FAR FIELD NOISE

OPERATION:
75% RPM
BOTH ENGINES
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-056
RUN 01
20 OCT 75
PAGE 19



POINT	DB
A	35
B	40
C	45
D	50
E	55
F	60
G	65
H	70
I	75
J	80
K	85

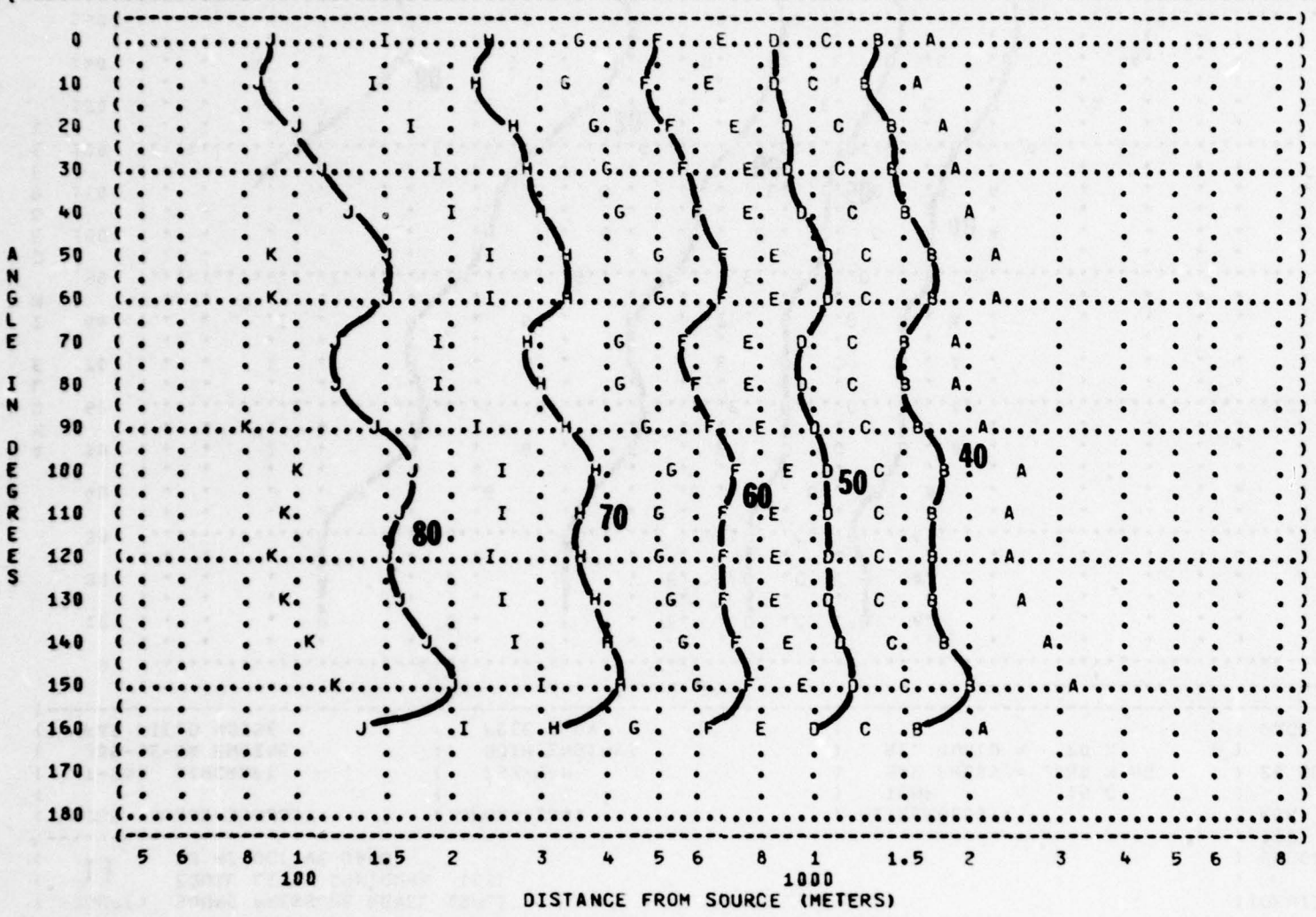
FIGURE 11: SOUND PRESSURE LEVEL (SPL) EQUAL LEVEL CONTOURS (DB) 125 HZ OCTAVE BAND

NOISE SOURCE/SUBJECT:
T-38A AIRCRAFT
J85-GE-5A ENGINE
FAR FIELD NOISE

OPERATION:
75% RPM
BOTH ENGINES
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-056
RUN 01
20 OCT 75
PAGE 20



POINT	DB
A	35
B	40
C	45
D	50
E	55
F	60
G	65
H	70
I	75
J	80
K	85

FIGURE 11 SOUND PRESSURE LEVEL (SPL) EQUAL LEVEL CONTOURS (DB) 250 HZ OCTAVE BAND

NOISE SOURCE/SUBJECT:
T-38A AIRCRAFT
J85-GE-5A ENGINE
FAR FIELD NOISE

OPERATION:
75% RPM
BOTH ENGINES
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-056
RUN 01
20 OCT 75
PAGE 21

POINT	DB
A	35
B	40
C	45
D	50
E	55
F	60
G	65
H	70
I	75
J	80
K	85

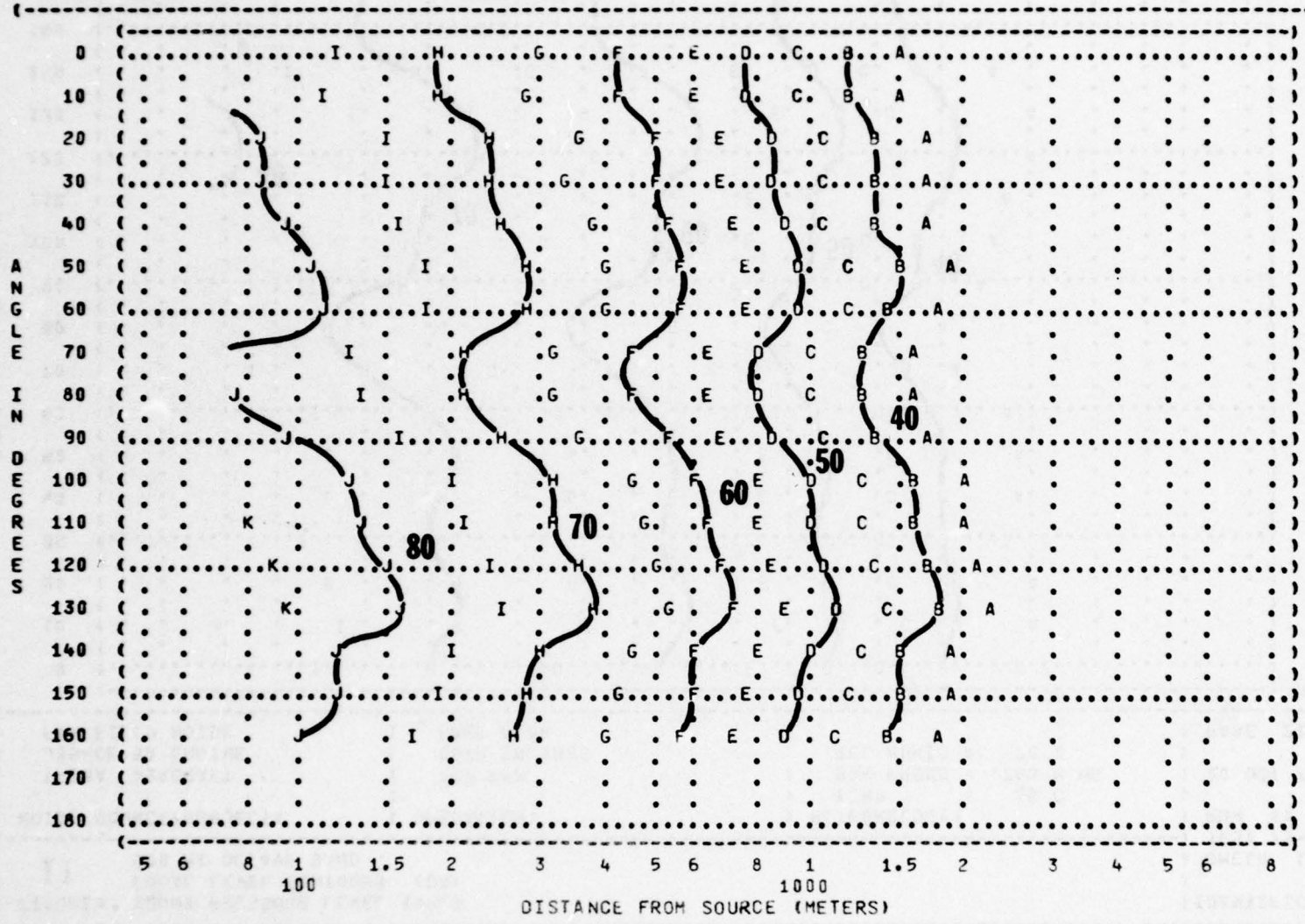


FIGURE 11: SOUND PRESSURE LEVEL (SPL) EQUAL LEVEL CONTOURS (DB) 500 HZ OCTAVE BAND

IDENTIFICATION: OMEGA 1.4 TEST 75-002-056 RUN 01 20 OCT 75 PAGE 22

NOISE SOURCE/SUBJECT: T-38A AIRCRAFT; J85-GE-5A ENGINE; FAR FIELD NOISE

OPERATION: 75% RPM; BOTH ENGINES; FREE FLOW

METEOROLOGY: TEMP = 15 C; BAR PRESS = .760 M HG; REL HUMID = 70 %

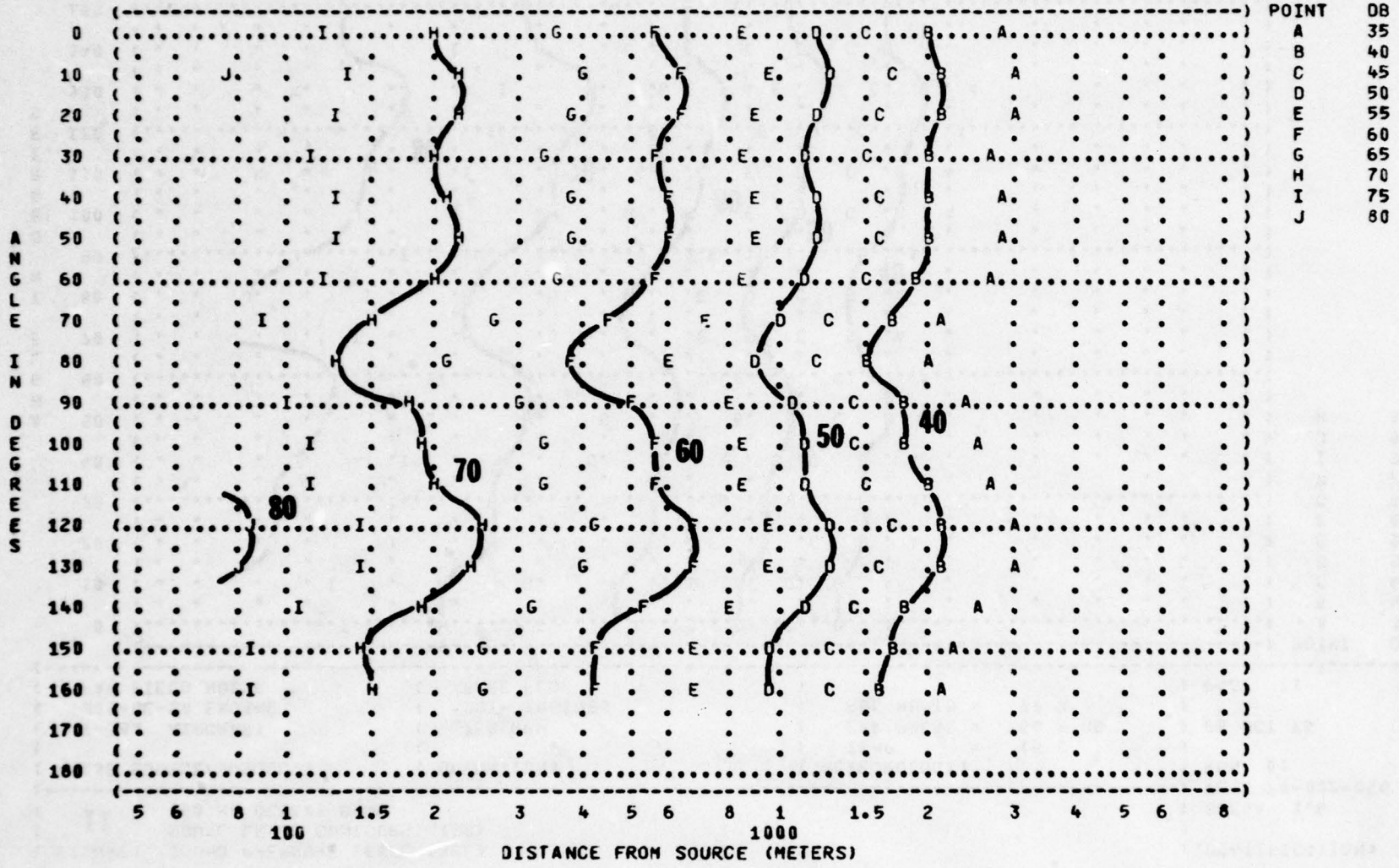


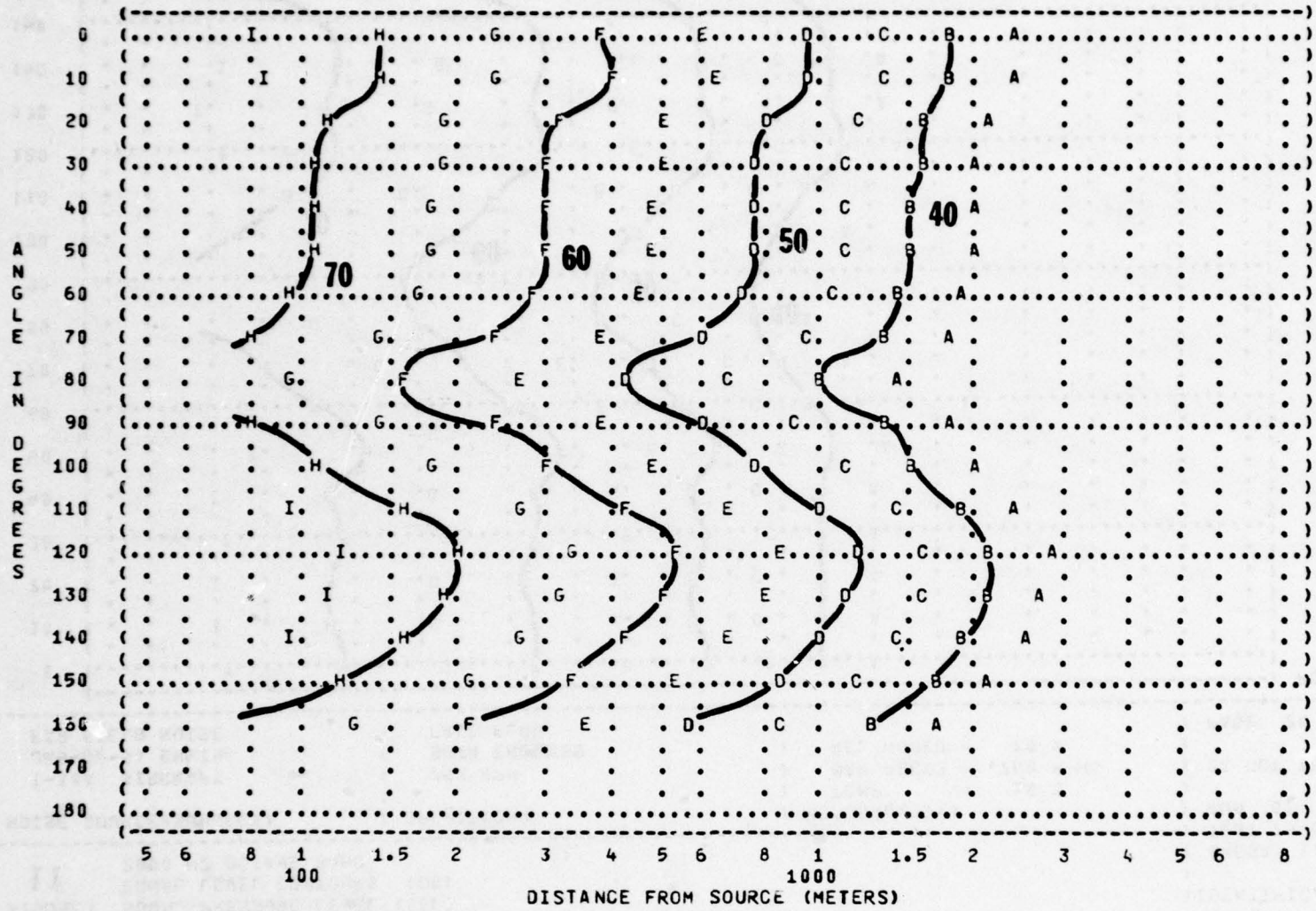
FIGURE 11 SOUND PRESSURE LEVEL (SPL) EQUAL LEVEL CONTOURS (DB) 1000 HZ OCTAVE BAND

NOISE SOURCE/SUBJECT:
T-38A AIRCRAFT
J85-GE-5A ENGINE
FAR FIELD NOISE

OPERATION:
75% RPM
BOTH ENGINES
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-056
RUN 01
20 OCT 75
PAGE 23



POINT	DB
A	35
B	40
C	45
D	50
E	55
F	60
G	65
H	70
I	75

FIGURE 11: SOUND PRESSURE LEVEL (SPL) EQUAL LEVEL CONTOURS (DB) 2000 HZ OCTAVE BAND

NOISE SOURCE/SUBJECT:
T-38A AIRCRAFT
J85-GE-5A ENGINE
FAR FIELD NOISE

OPERATION:
75% RPM
BOTH ENGINES
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-056
RUN 01
20 OCT 75
PAGE 24

POINT	DB
A	35
B	40
C	45
D	50
E	55
F	60
G	65
H	70
I	75

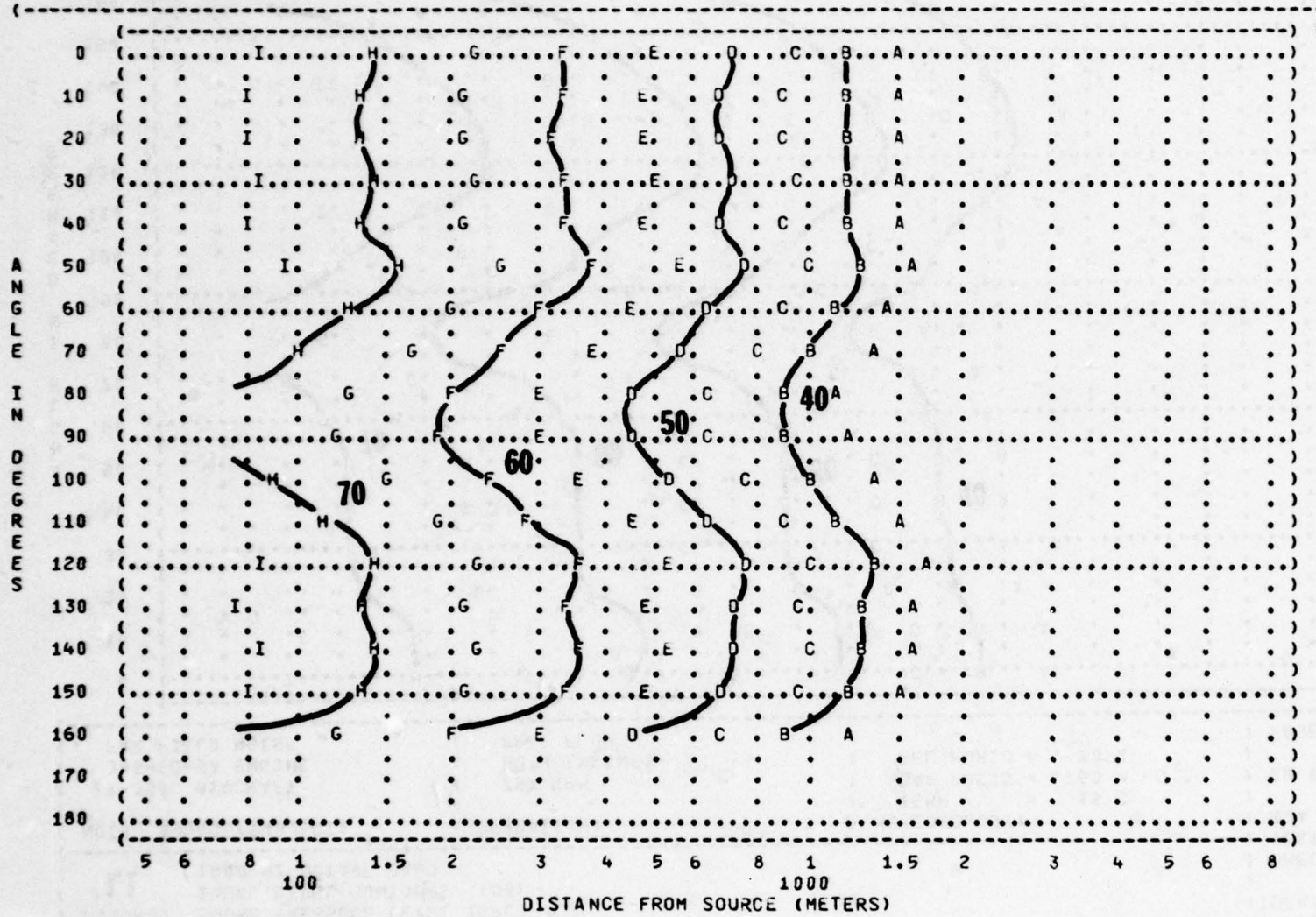


FIGURE: 11 SOUND PRESSURE LEVEL (SPL) EQUAL LEVEL CONTOURS (DB) 4000 HZ OCTAVE BAND

NOISE SOURCE/SUBJECT:
T-38A AIRCRAFT
J85-GE-5A ENGINE
FAR FIELD NOISE

OPERATION:
75% RPM
BOTH ENGINES
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-056
RUN 01
20 OCT 75
PAGE 25

POINT	DB
A	35
B	40
C	45
D	50
E	55
F	60
G	65
H	70
I	75

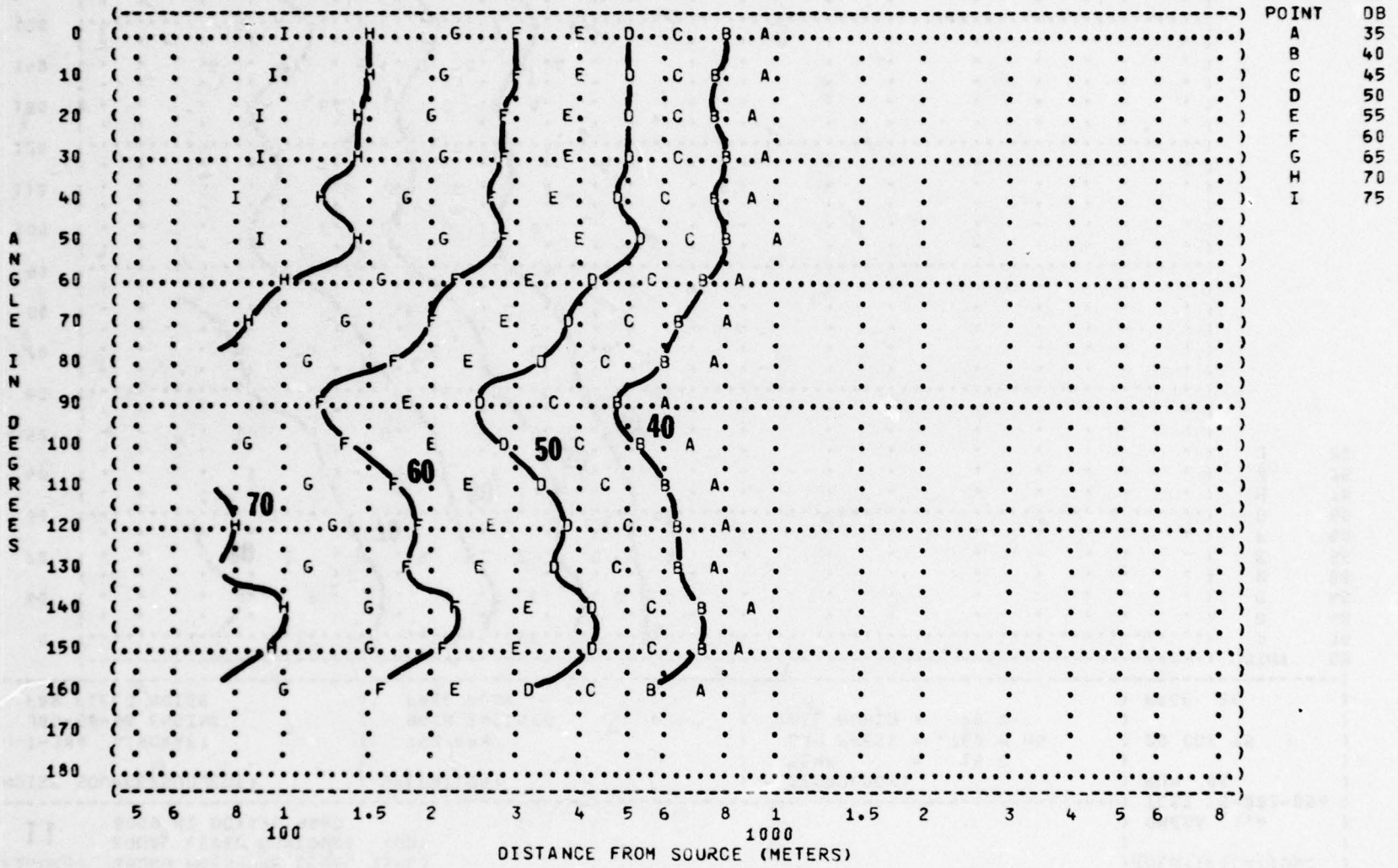


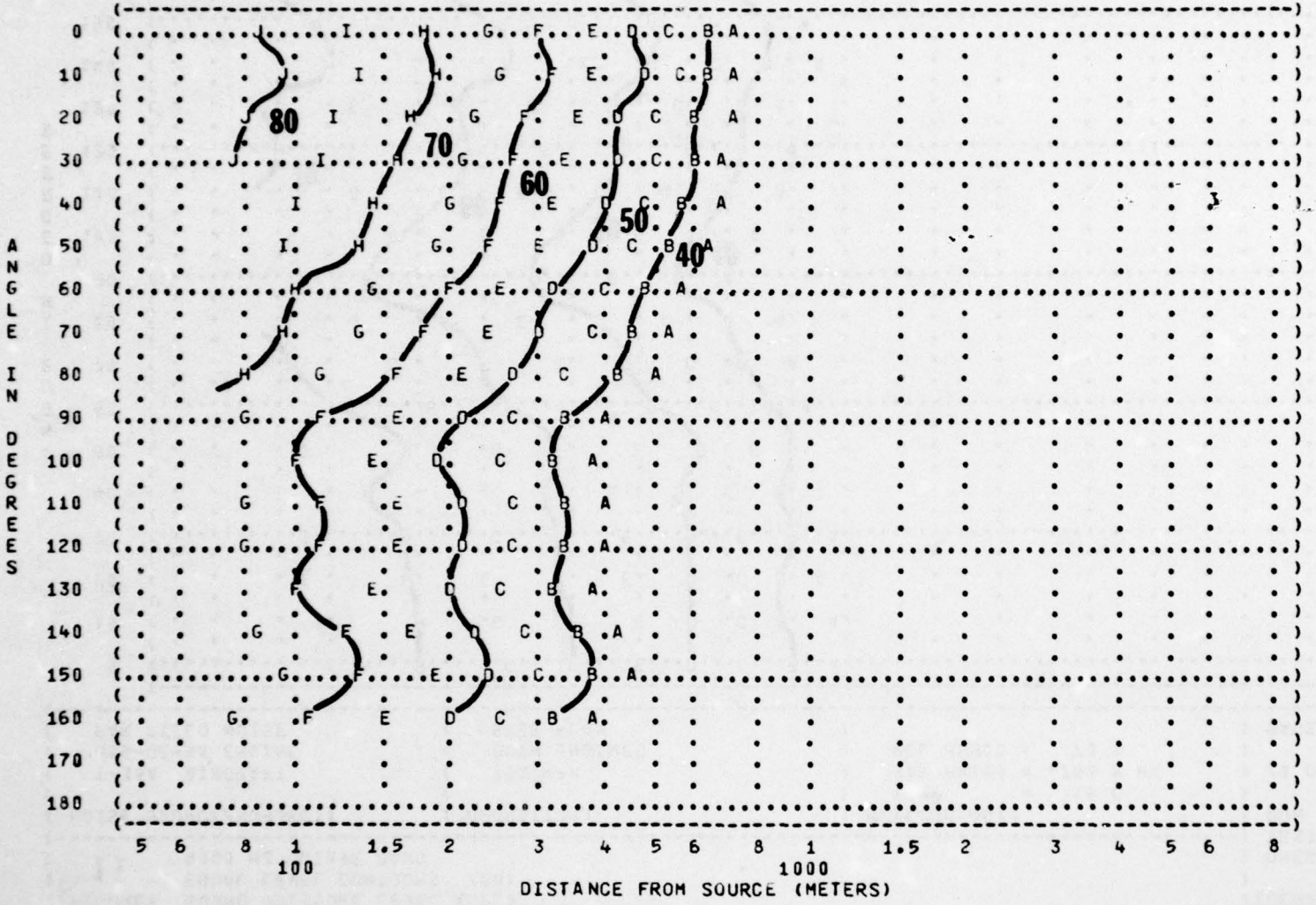
FIGURE 11: SOUND PRESSURE LEVEL (SPL) EQUAL LEVEL CONTOURS (DB) 8000 HZ OCTAVE BAND

NOISE SOURCE/SUBJECT:
T-38A AIRCRAFT
J85-GE-5A ENGINE
FAR FIELD NOISE

OPERATION:
75% RPM
BOTH ENGINES
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-056
RUN 01
20 OCT 75
PAGE 26



POINT	DB
A	35
B	40
C	45
D	50
E	55
F	60
G	65
H	70
I	75
J	80

FIGURE 11: SOUND PRESSURE LEVEL (SPL) EQUAL LEVEL CONTOURS (DB) 31.5 HZ OCTAVE BAND

NOISE SOURCE/SUBJECT:
T-38A AIRCRAFT
J85-GE-5A ENGINE
FAR FIELD NOISE

OPERATION:
TRIM CHECK
94% RPM
BOTH ENGINES
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-056
RUN 02
20 OCT 75
PAGE 18

POINT	DB
A	35
B	40
C	45
D	50
E	55
F	60
G	65
H	70
I	75
J	80
K	85
L	90

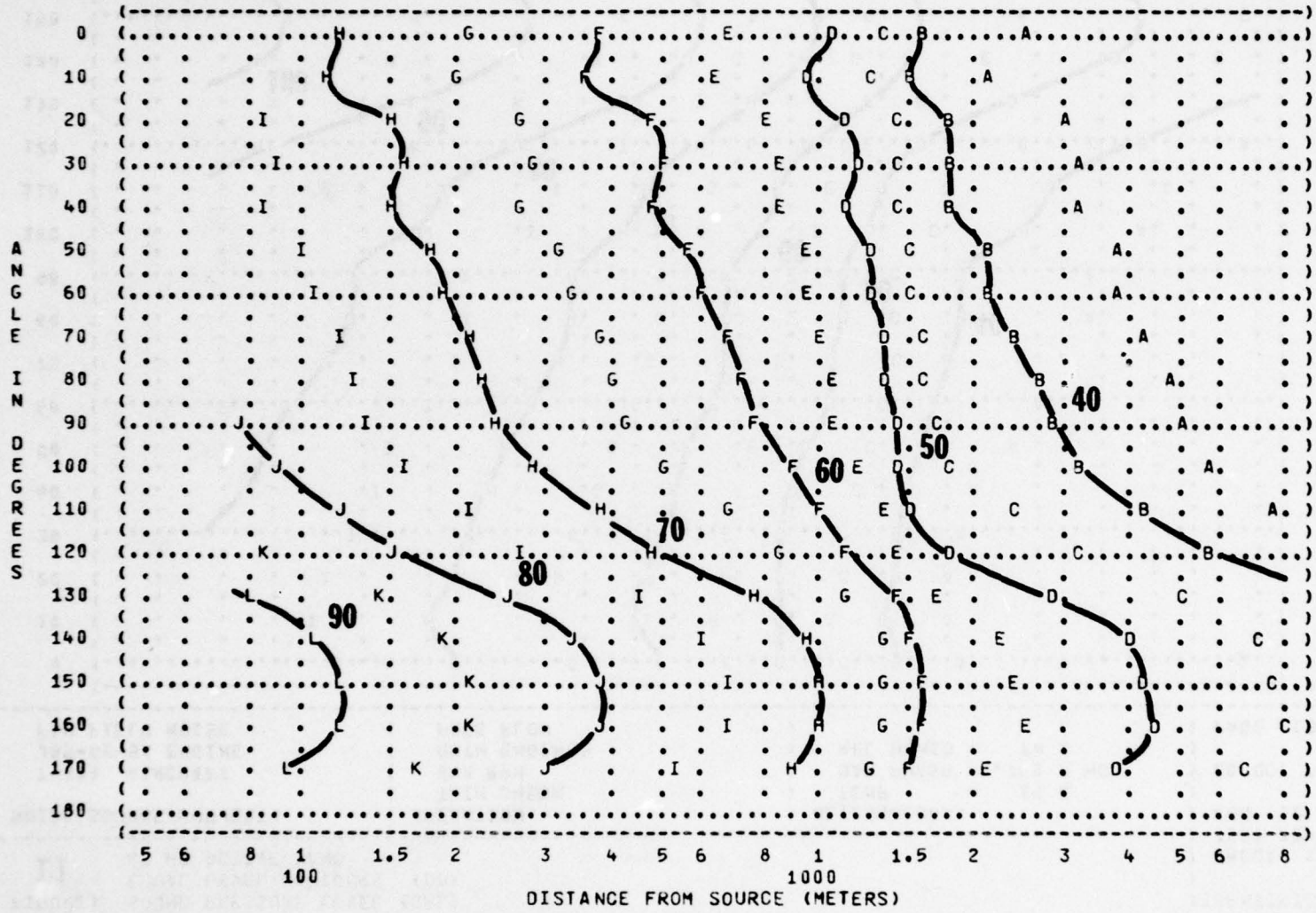


FIGURE 11: SOUND PRESSURE LEVEL (SPL) EQUAL LEVEL CONTOURS (DB) 63 HZ OCTAVE BAND

NOISE SOURCE/SUBJECT:
T-38A AIRCRAFT
J85-GE-5A ENGINE
FAR FIELD NOISE

OPERATION:
TRIM CHECK
94% RPM
BOTH ENGINES
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-056
RUN 02
20 OCT 75
PAGE 19

POINT	DB
A	35
B	40
C	45
D	50
E	55
F	60
G	65
H	70
I	75
J	80
K	85
L	90
M	95
N	100

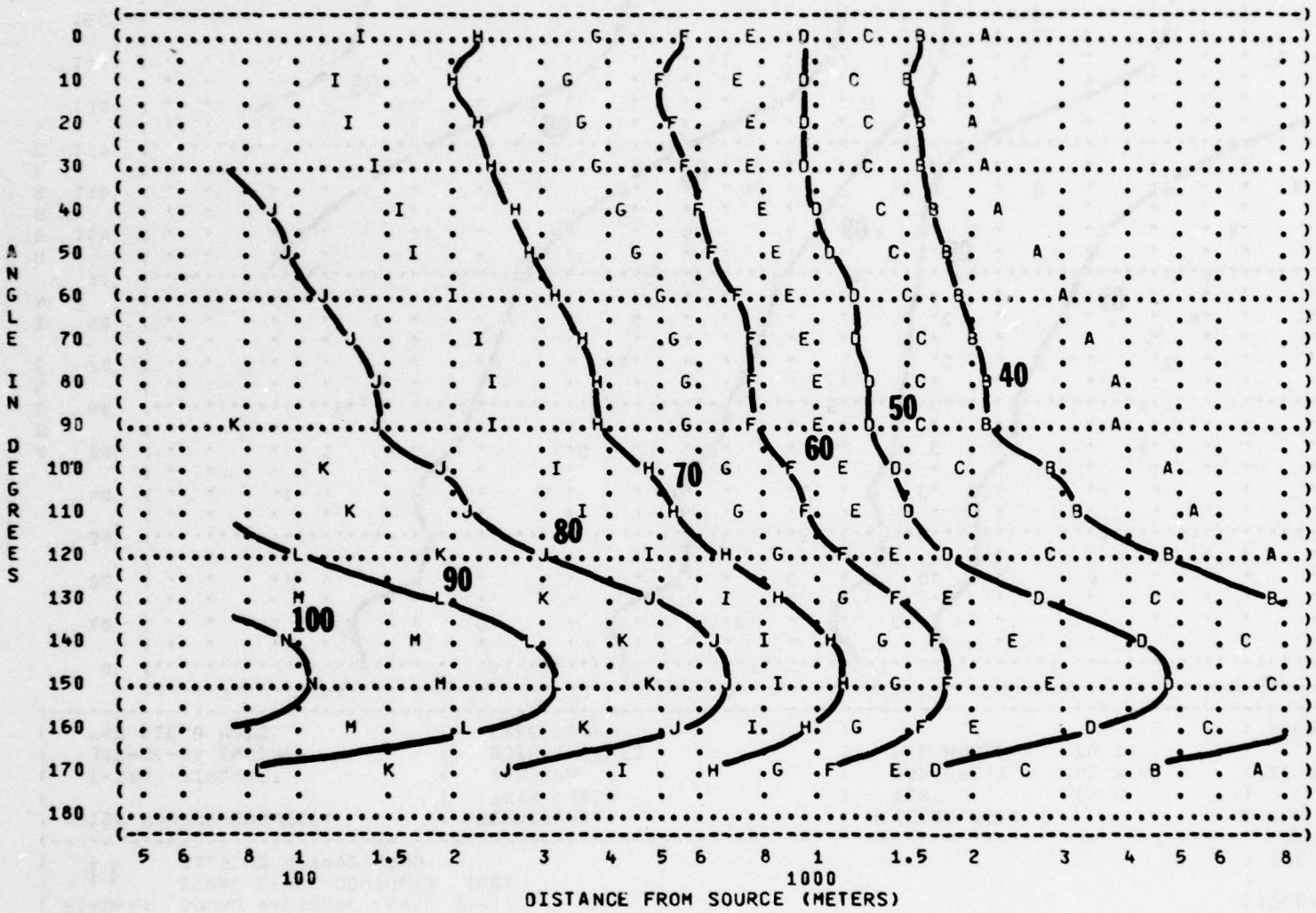


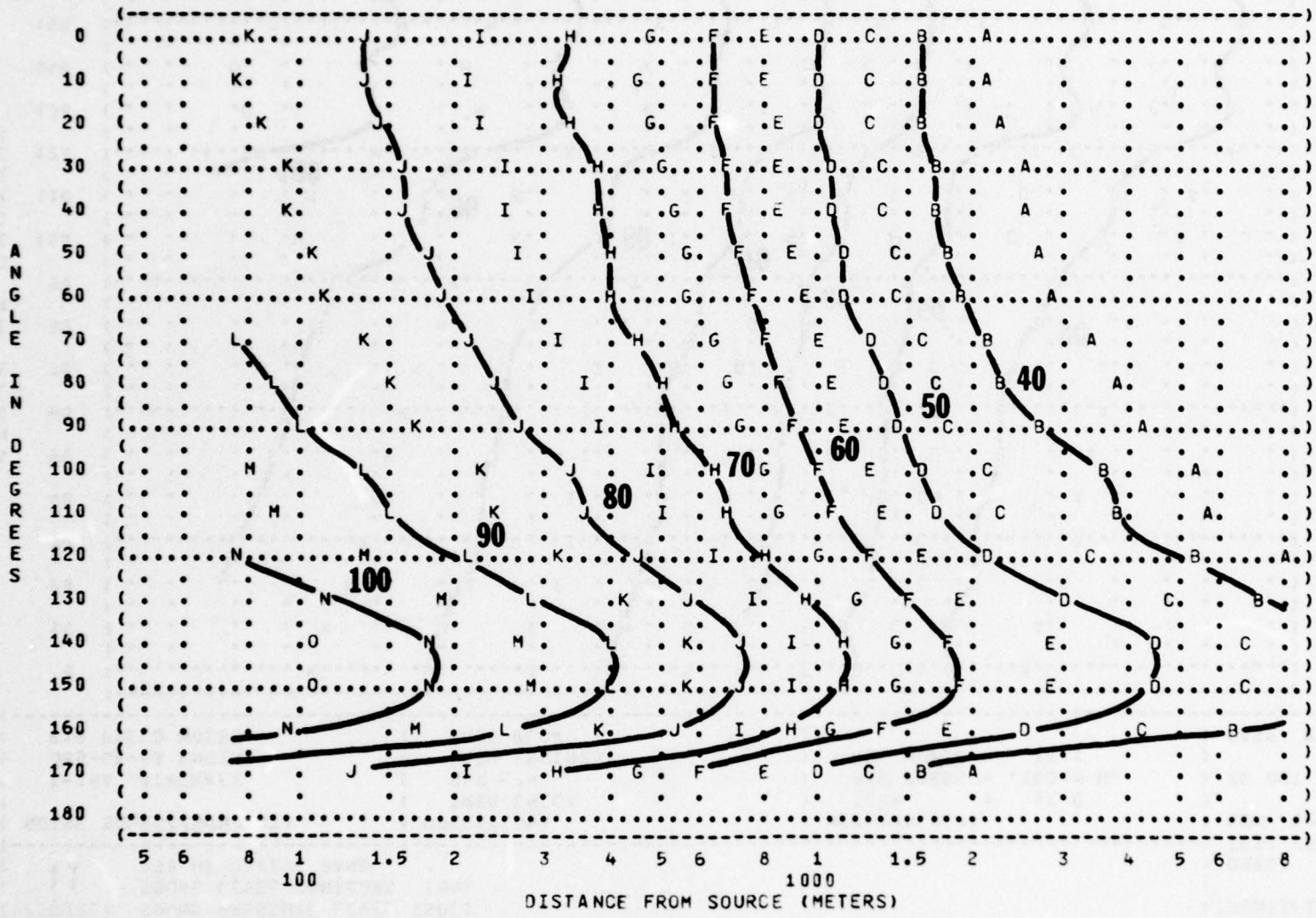
FIGURE 11: SOUND PRESSURE LEVEL (SPL) EQUAL LEVEL CONTOURS (DB) 125 HZ OCTAVE BAND

NOISE SOURCE/SUBJECT:
T-38A AIRCRAFT
J85-GE-5A ENGINE
FAR FIELD NOISE

OPERATION:
TRIM CHECK
94% RPM
BOTH ENGINES
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-056
RUN 02
20 OCT 75
PAGE 20



POINT	DB
A	35
B	40
C	45
D	50
E	55
F	60
G	65
H	70
I	75
J	80
K	85
L	90
M	95
N	100
O	105

FIGURE 11: SOUND PRESSURE LEVEL (SPL) EQUAL LEVEL CONTOURS (DB) 250 HZ OCTAVE BAND

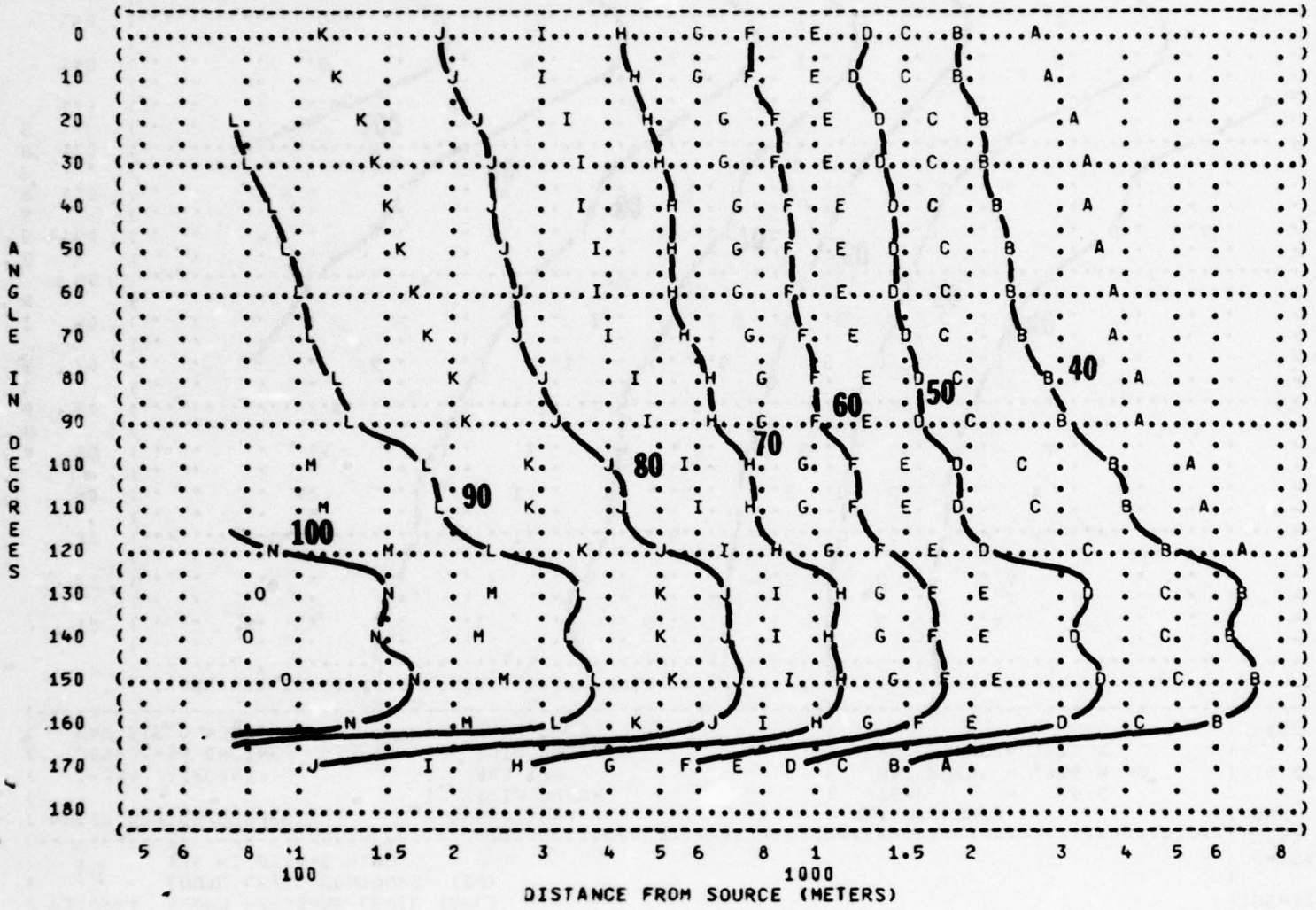
NOISE SOURCE/SUBJECT:
T-38A AIRCRAFT
J85-GE-5A ENGINE
FAR FIELD NOISE

OPERATION:
TRIM CHECK
94% RPM
BOTH ENGINES
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-056
RUN 02
20 OCT 75
PAGE 21

POINT	DB
A	35
B	40
C	45
D	50
E	55
F	60
G	65
H	70
I	75
J	80
K	85
L	90
M	95
N	100
O	105



150

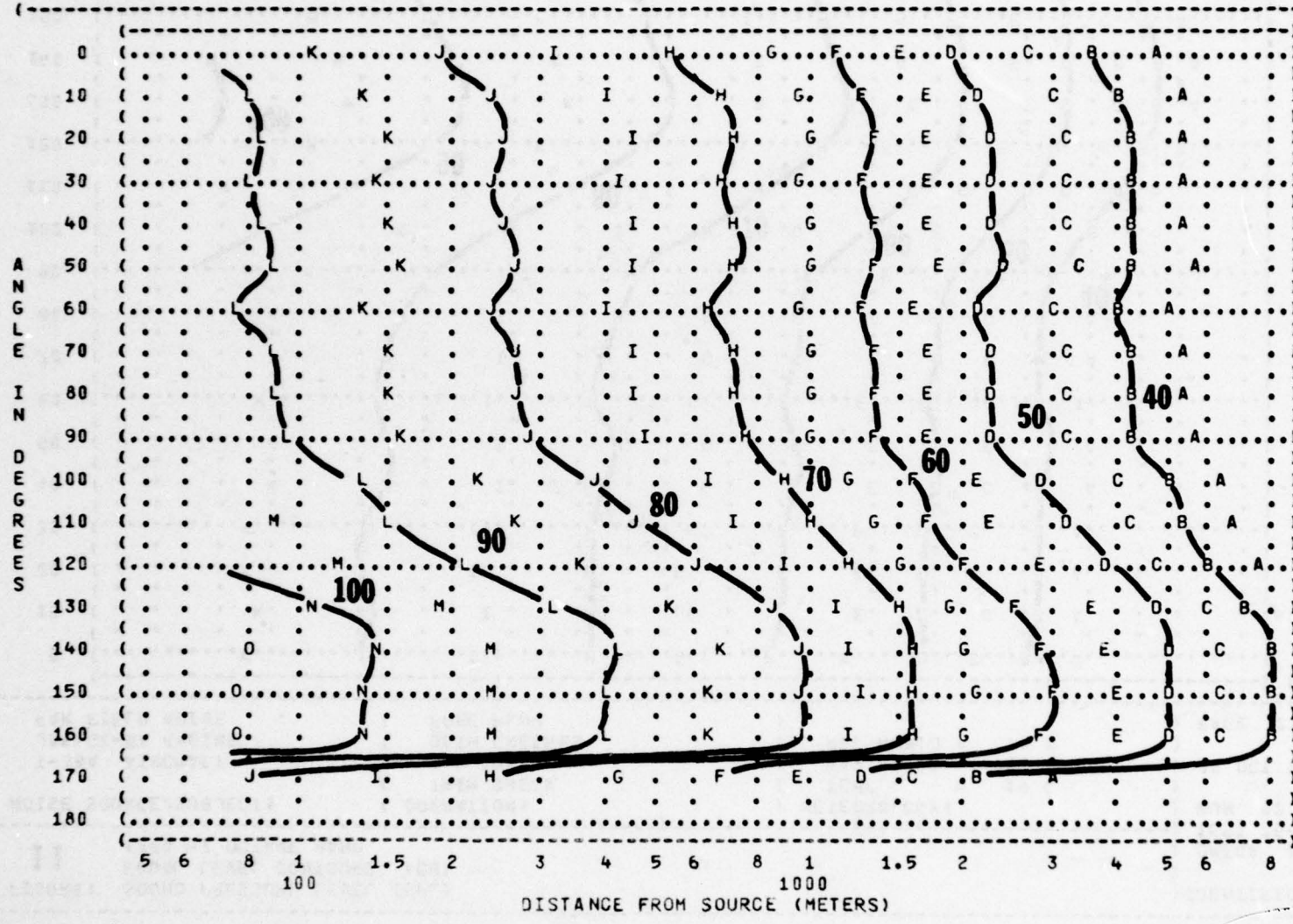
FIGURE 11: SOUND PRESSURE LEVEL (SPL) EQUAL LEVEL CONTOURS (DB) 500 HZ OCTAVE BAND

NOISE SOURCE/SUBJECT:
T-38A AIRCRAFT
J85-GE-5A ENGINE
FAR FIELD NOISE

OPERATION:
TRIM CHECK
94% RPM
BOTH ENGINES
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-056
RUN 02
20 OCT 75
PAGE 22



POINT	DB
A	35
B	40
C	45
D	50
E	55
F	60
G	65
H	70
I	75
J	80
K	85
L	90
M	95
N	100
O	105

FIGURE 11 SOUND PRESSURE LEVEL (SPL) EQUAL LEVEL CONTOURS (DB) 1000 HZ OCTAVE BAND

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-056
RUN 02
20 OCT 75
PAGE 23

NOISE SOURCE/SUBJECT:
T-38A AIRCRAFT
J85-GE-5A ENGINE
FAR FIELD NOISE

OPERATION:
TRIM CHECK
94% RPM
BOTH ENGINES
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

POINT	DB
A	35
B	40
C	45
D	50
E	55
F	60
G	65
H	70
I	75
J	80
K	85
L	90
M	95
N	100

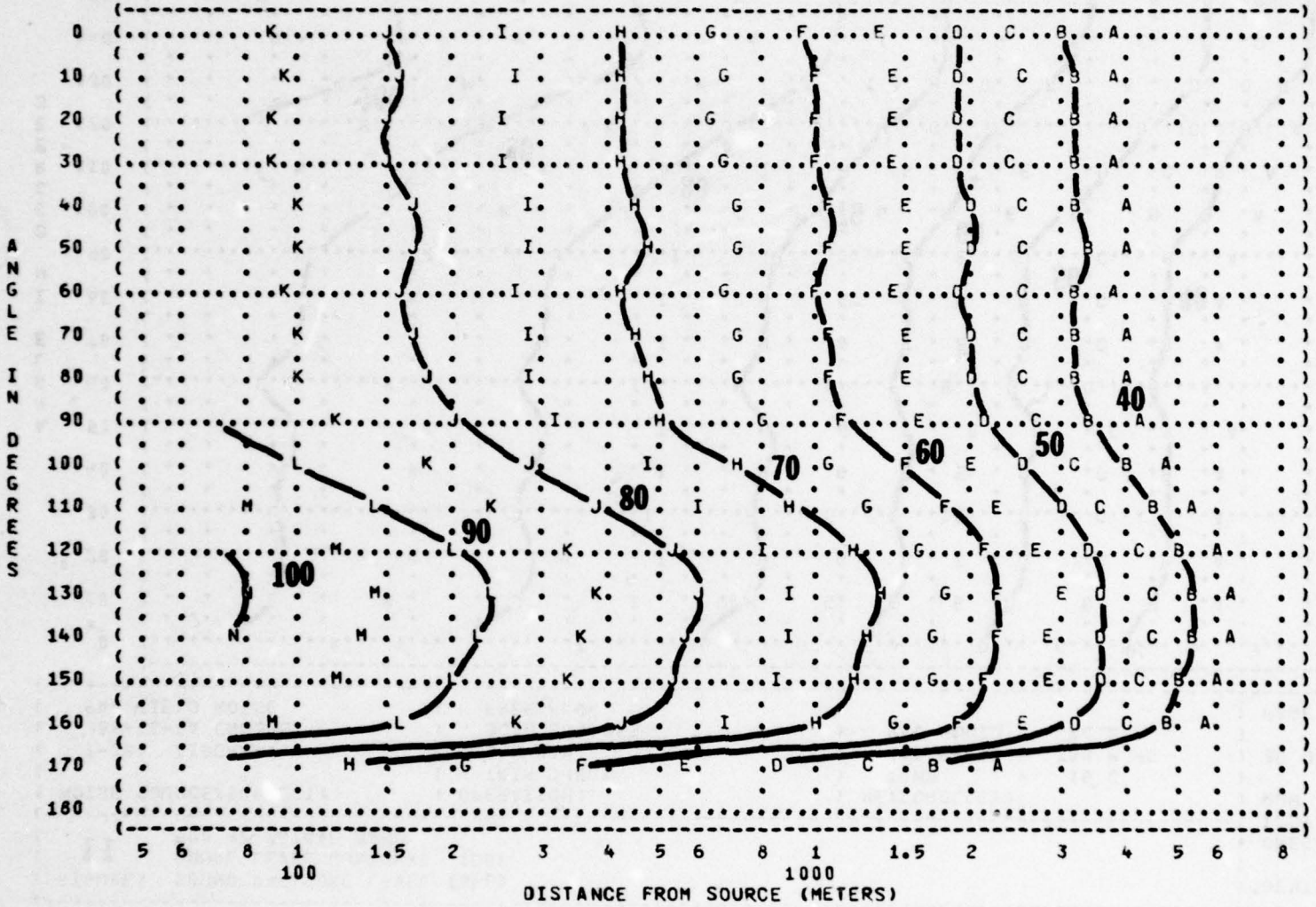


FIGURE 11: SOUND PRESSURE LEVEL (SPL) EQUAL LEVEL CONTOURS (DB) 2000 HZ OCTAVE BAND

NOISE SOURCE/SUBJECT:
T-38A AIRCRAFT
J85-GE-5A ENGINE
FAR FIELD NOISE

OPERATION:
TRIM CHECK
94% RPM
BOTH ENGINES
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-056
RUN 02
20 OCT 75
PAGE 24

POINT	DB
A	35
B	40
C	45
D	50
E	55
F	60
G	65
H	70
I	75
J	80
K	85
L	90
M	95

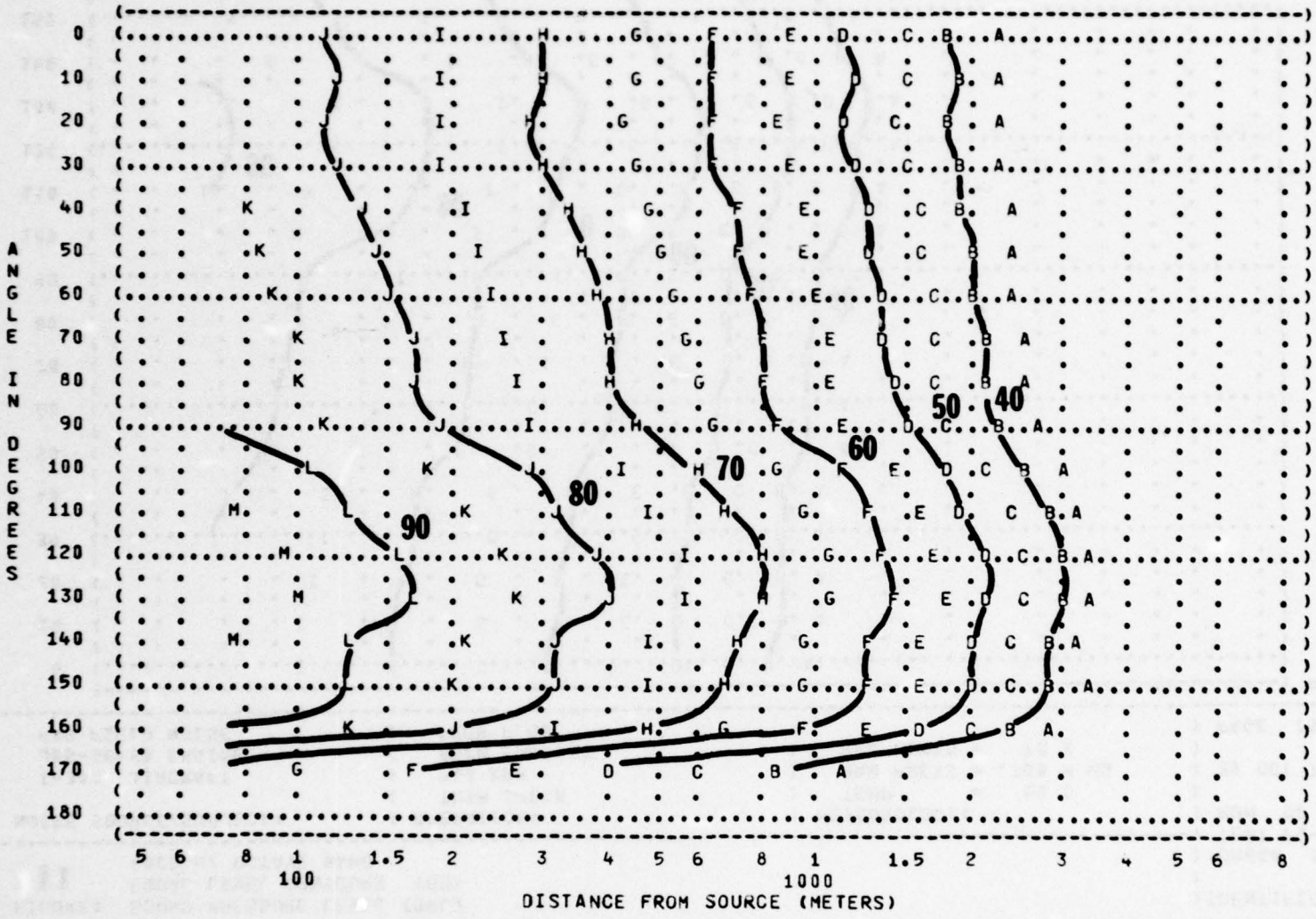


FIGURE: 11 SOUND PRESSURE LEVEL (SPL) EQUAL LEVEL CONTOURS (DB) 4000 HZ OCTAVE BAND

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-056
RUN 02
20 OCT 75
PAGE 25

NOISE SOURCE/SUBJECT:
T-38A AIRCRAFT
J85-GE-5A ENGINE
FAR FIELD NOISE

OPERATION:
TRIM CHECK
94% RPM
BOTH ENGINES
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

POINT	DB
A	35
B	40
C	45
D	50
E	55
F	60
G	65
H	70
I	75
J	80
K	85
L	90

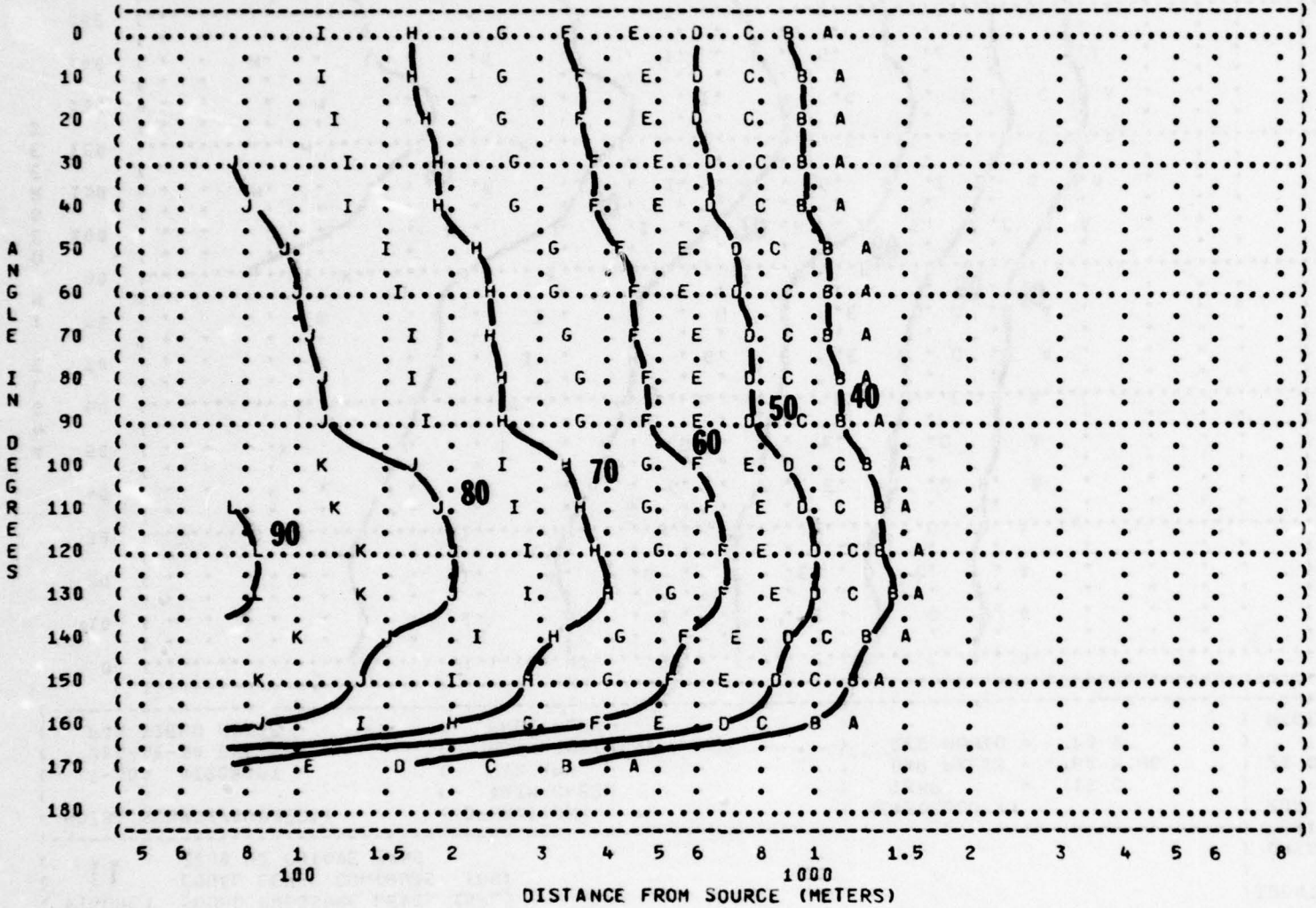


FIGURE 11 SOUND PRESSURE LEVEL (SPL) EQUAL LEVEL CONTOURS (DB) 8000 HZ OCTAVE BAND

NOISE SOURCE/SUBJECT:
T-38A AIRCRAFT
J85-GE-5A ENGINE
FAR FIELD NOISE

OPERATION:
TRIM CHECK
94% RPM
BOTH ENGINES
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-056
RUN 02
20 OCT 75
PAGE 26

POINT	DB
A	35
B	40
C	45
D	50
E	55
F	60
G	65
H	70
I	75
J	80

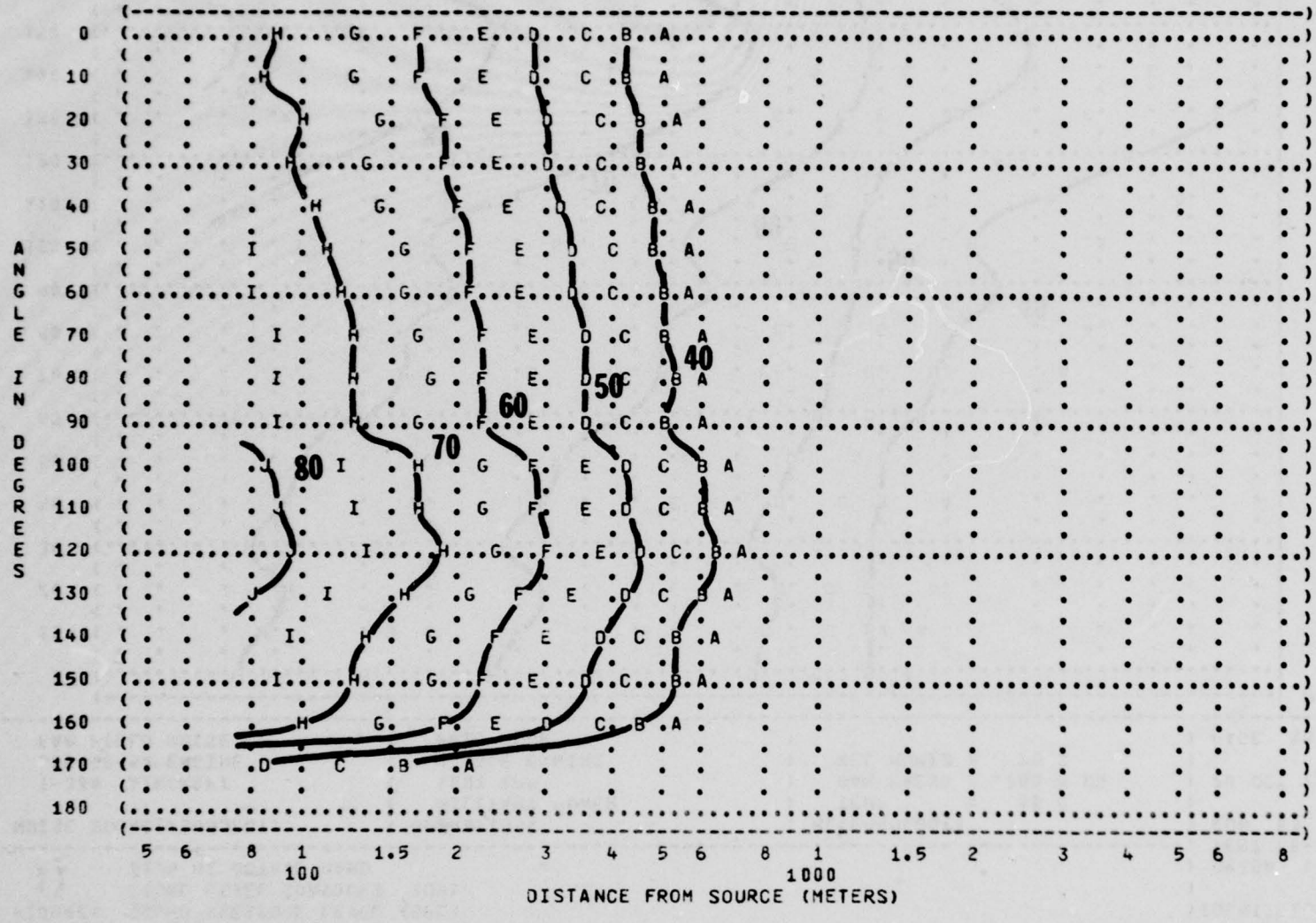


FIGURE 11: SOUND PRESSURE LEVEL (SPL) EQUAL LEVEL CONTOURS (DB) 31.5 HZ OCTAVE BAND

NOISE SOURCE/SUBJECT:
T-38A AIRCRAFT
J85-GE-5A ENGINE
FAR FIELD NOISE

OPERATION:
MILITARY POWER
100% RPM
SINGLE ENGINE
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-047
RUN 03
20 OCT 75
PAGE 18

POINT	DB
A	35
B	40
C	45
D	50
E	55
F	60
G	65
H	70
I	75
J	80
K	85
L	90

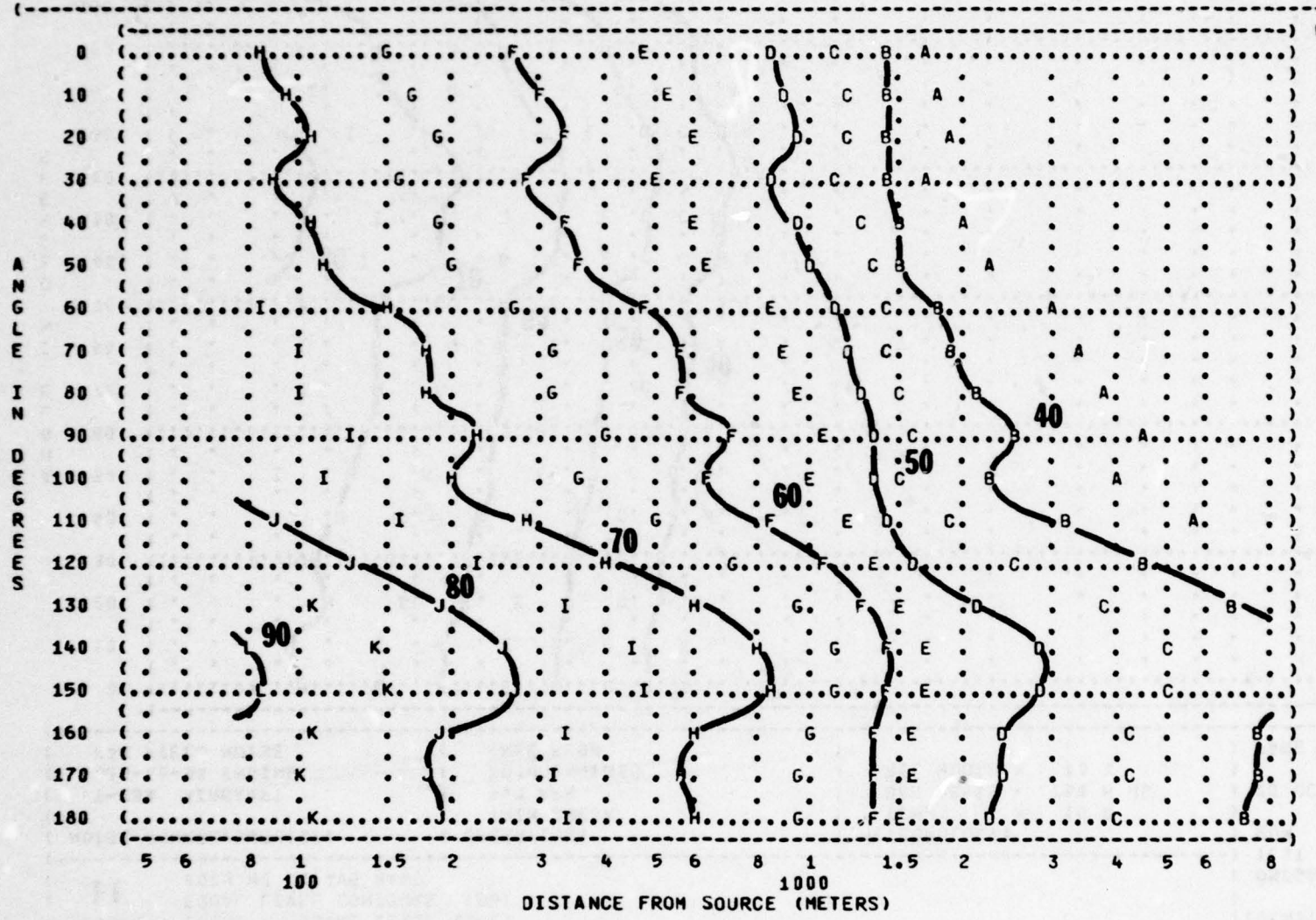


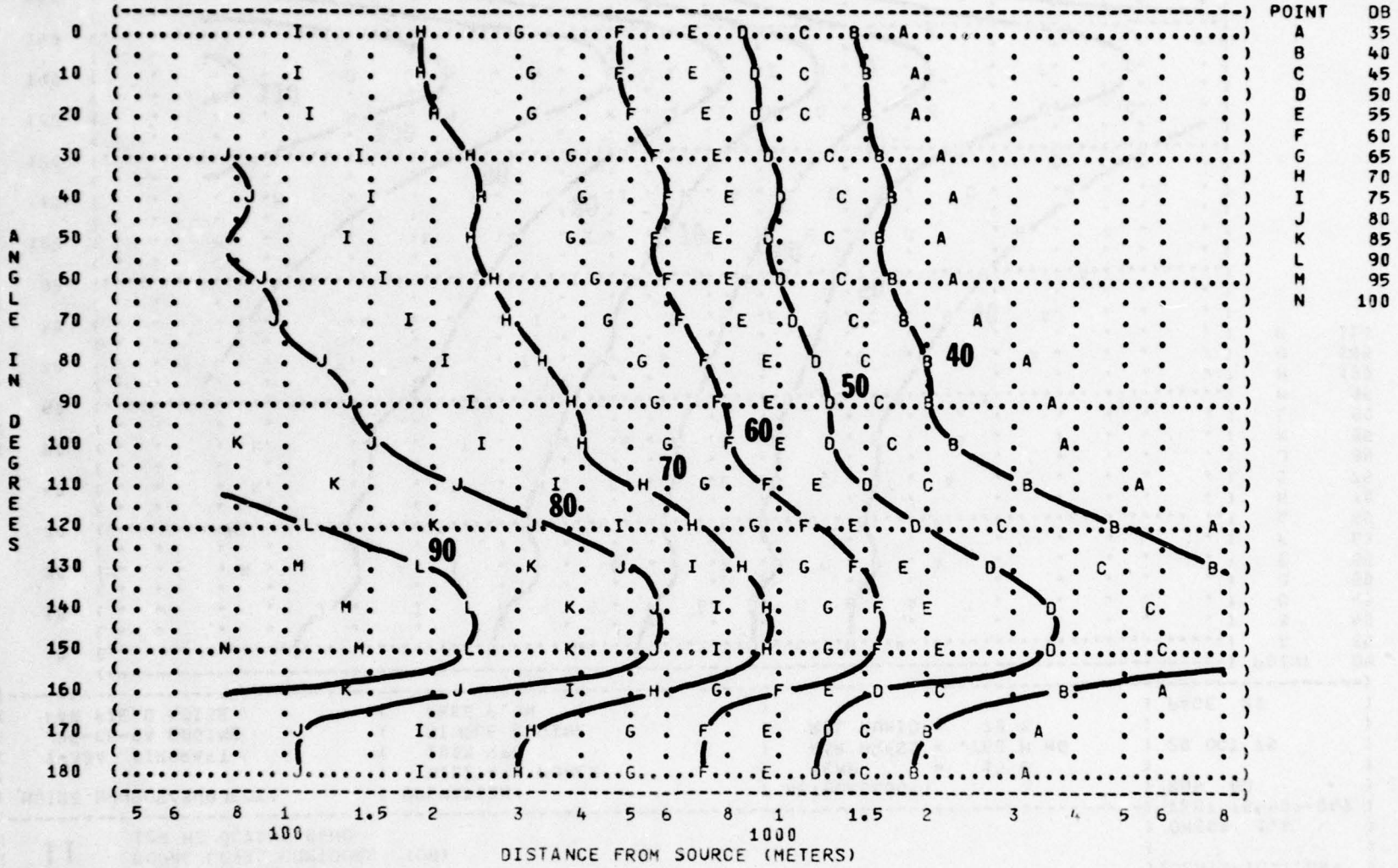
FIGURE 11 SOUND PRESSURE LEVEL (SPL) EQUAL LEVEL CONTOURS (DB) 63 HZ OCTAVE BAND

NOISE SOURCE/SUBJECT:
T-38A AIRCRAFT
J85-GE-5A ENGINE
FAR FIELD NOISE

OPERATION:
MILITARY POWER
100% RPM
SINGLE ENGINE
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-047
RUN 03
20 OCT 75
PAGE 19



POINT	DB
A	35
B	40
C	45
D	50
E	55
F	60
G	65
H	70
I	75
J	80
K	85
L	90
M	95
N	100

FIGURE 11 SOUND PRESSURE LEVEL (SPL) EQUAL LEVEL CONTOURS (DB) 125 HZ OCTAVE BAND

NOISE SOURCE/SUBJECT:
T-38A AIRCRAFT
J85-GE-5A ENGINE
FAR FIELD NOISE

OPERATION:
MILITARY POWER
100% RPM
SINGLE ENGINE
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-047
RUN 03
20 OCT 75
PAGE 20

POINT	DB
A	35
B	40
C	45
D	50
E	55
F	60
G	65
H	70
I	75
J	80
K	85
L	90
M	95
N	100
O	105
P	110

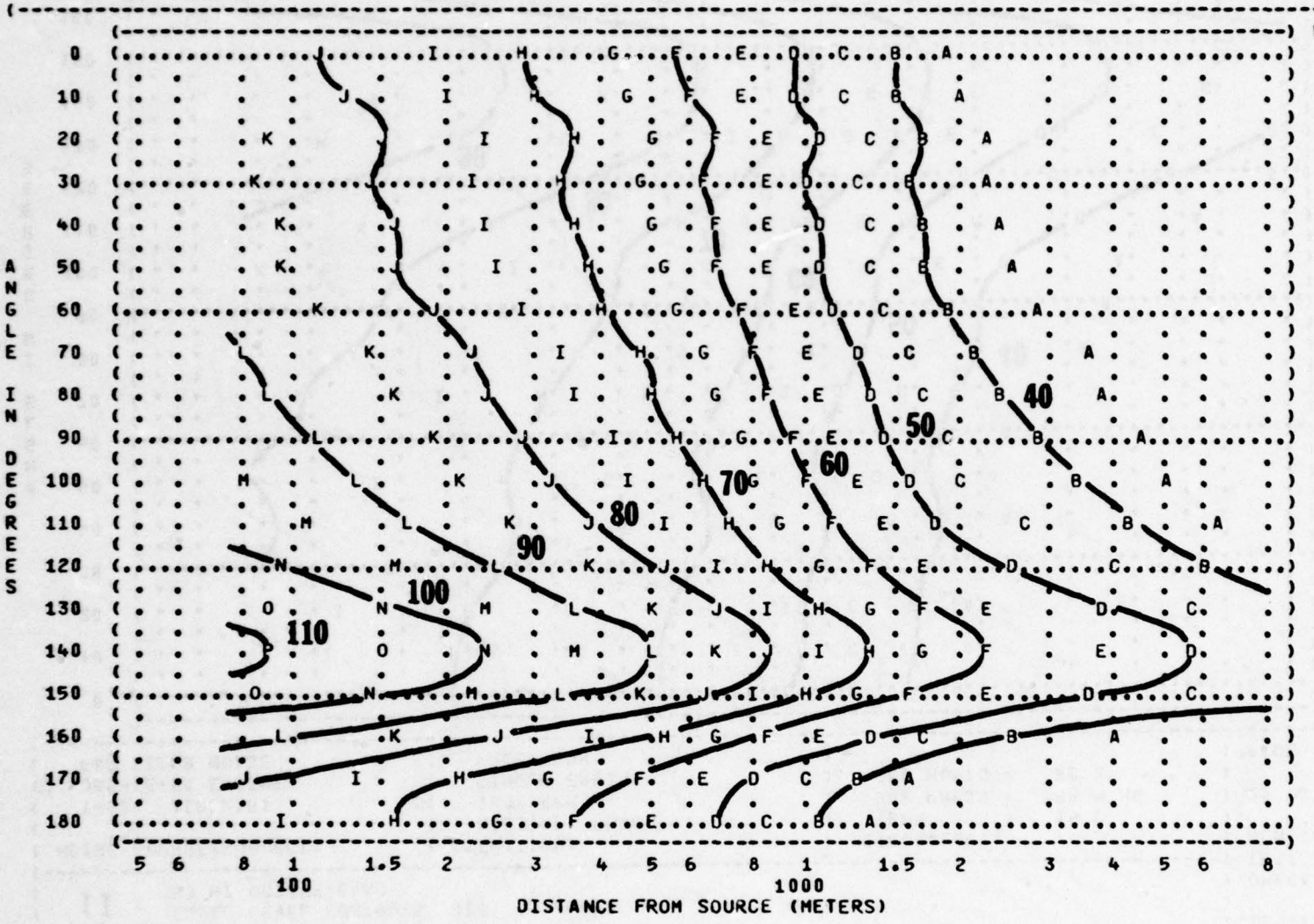


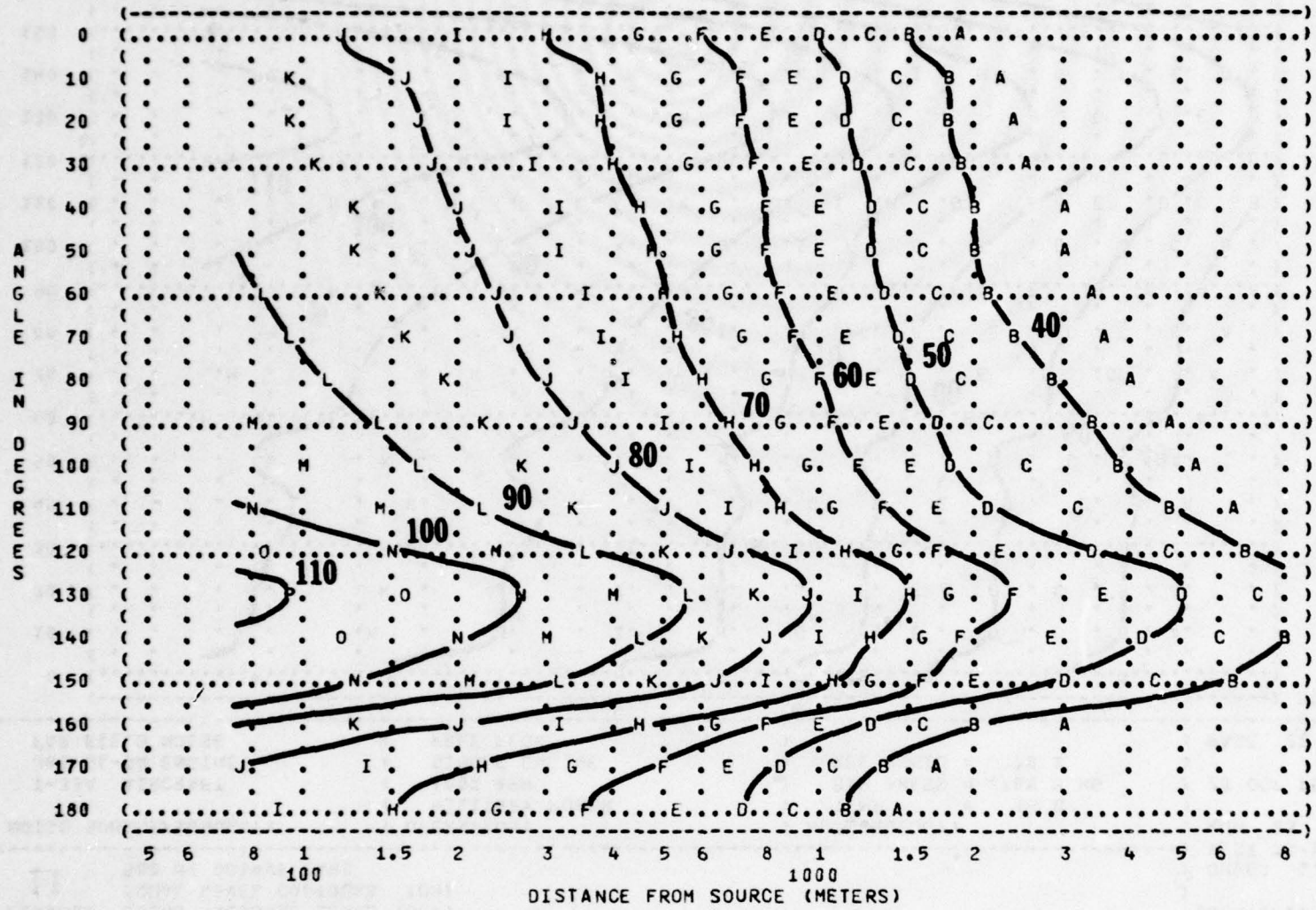
FIGURE 11: SOUND PRESSURE LEVEL (SPL) EQUAL LEVEL CONTOURS (DB) 250 HZ OCTAVE BAND

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-047
RUN 03
20 OCT 75
PAGE 21

NOISE SOURCE/SUBJECT:
T-38A AIRCRAFT
J85-GE-5A ENGINE
FAR FIELD NOISE

OPERATION:
MILITARY POWER
100% RPM
SINGLE ENGINE
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %



POINT	DB
A	35
B	40
C	45
D	50
E	55
F	60
G	65
H	70
I	75
J	80
K	85
L	90
M	95
N	100
O	105
P	110

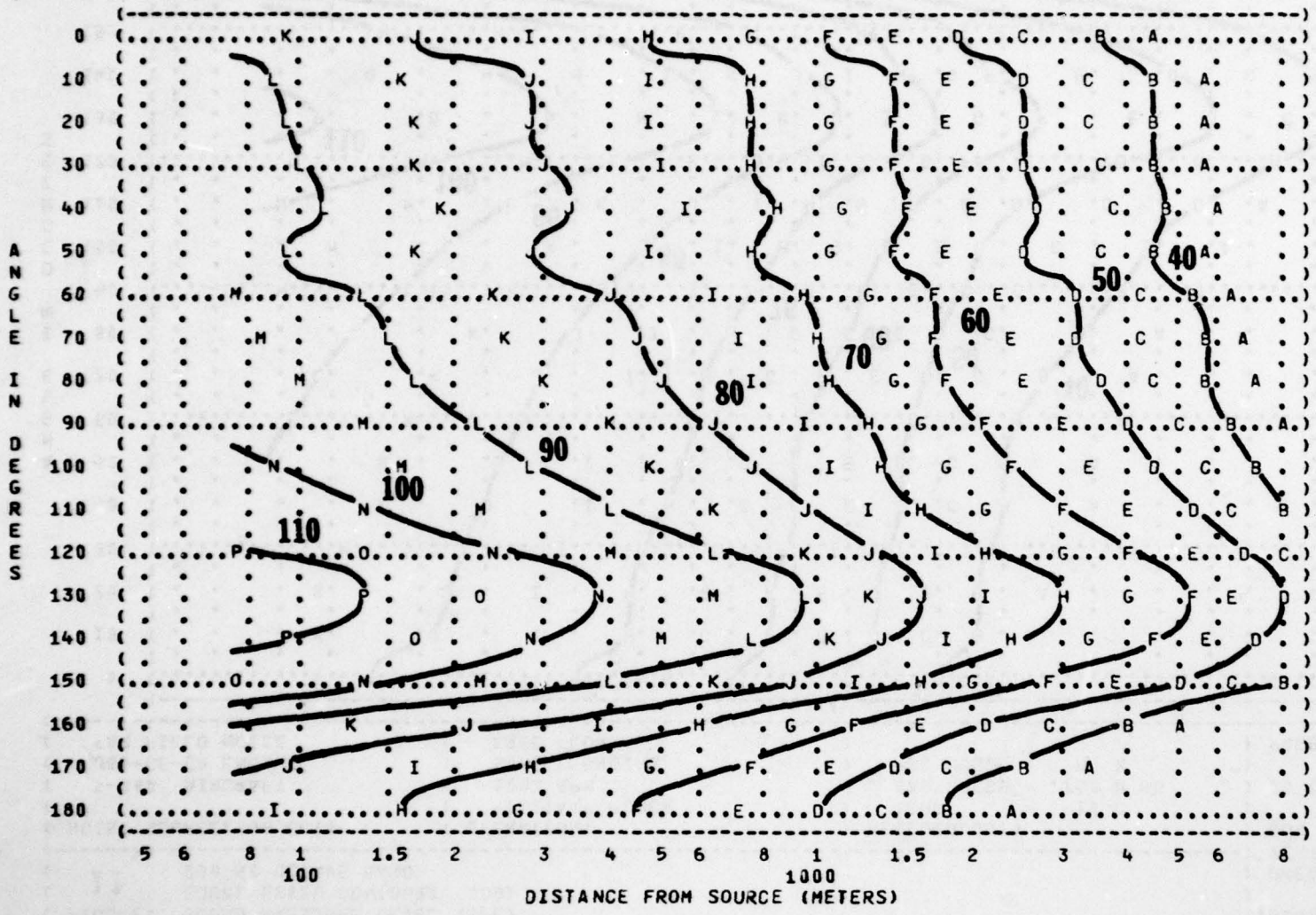
FIGURE 11 SOUND PRESSURE LEVEL (SPL) EQUAL LEVEL CONTOURS (DB) 500 HZ OCTAVE BAND

NOISE SOURCE/SUBJECT:
T-38A AIRCRAFT
J85-GE-5A ENGINE
FAR FIELD NOISE

OPERATION:
MILITARY POWER
100% RPM
SINGLE ENGINE
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-047
RUN 03
20 OCT 75
PAGE 22



POINT	DB
A	35
B	40
C	45
D	50
E	55
F	60
G	65
H	70
I	75
J	80
K	85
L	90
M	95
N	100
O	105
P	110

FIGURE 11 SOUND PRESSURE LEVEL (SPL) EQUAL LEVEL CONTOURS (DB) 1000 HZ OCTAVE BAND

NOISE SOURCE/SUBJECT:
T-38A AIRCRAFT
J85-GE-5A ENGINE
FAR FIELD NOISE

OPERATION:
MILITARY POWER
100% RPM
SINGLE ENGINE
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-047
RUN 03
20 OCT 75
PAGE 23

POINT	DB
A	35
B	40
C	45
D	50
E	55
F	60
G	65
H	70
I	75
J	80
K	85
L	90
M	95
N	100
O	105
P	110

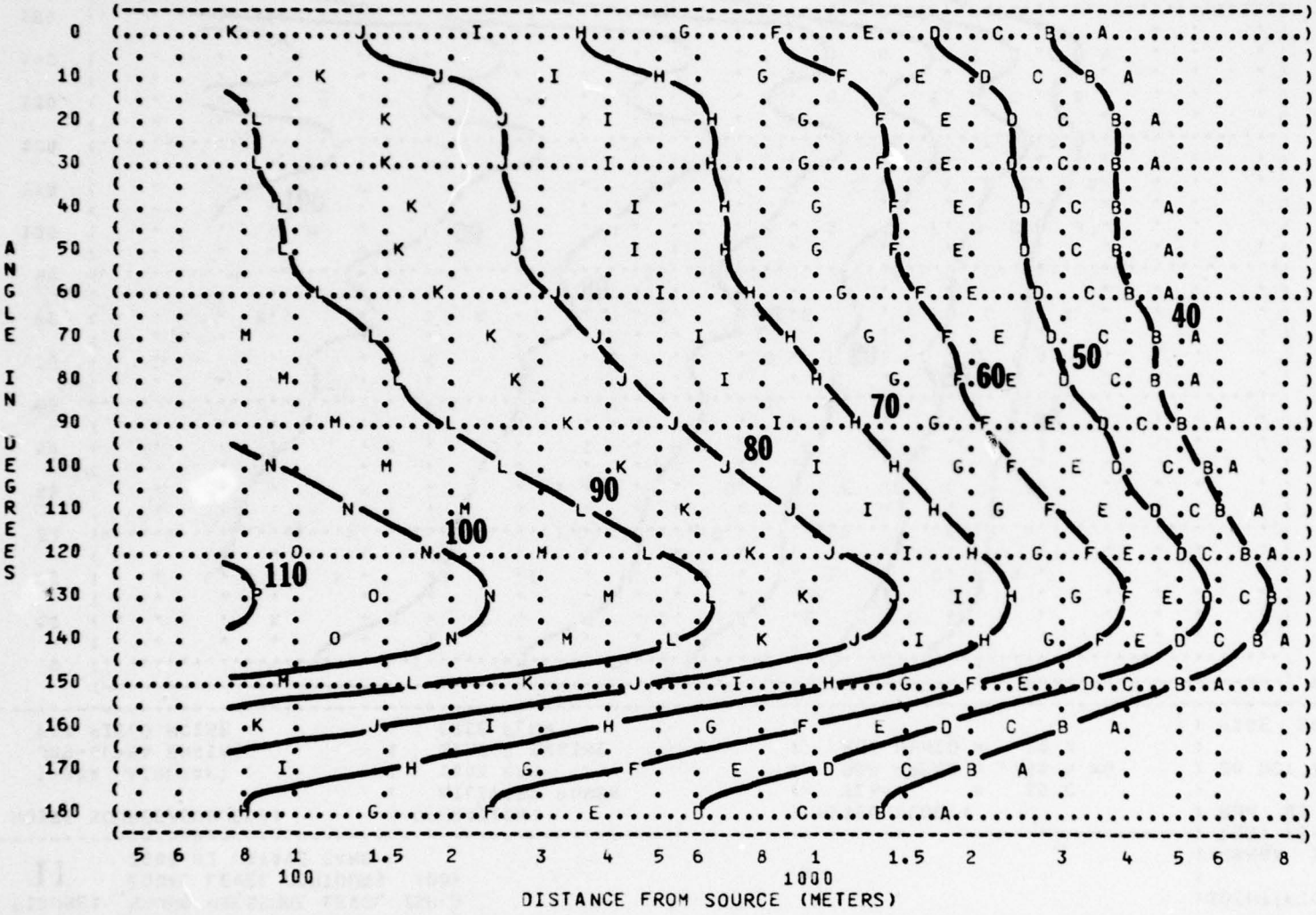


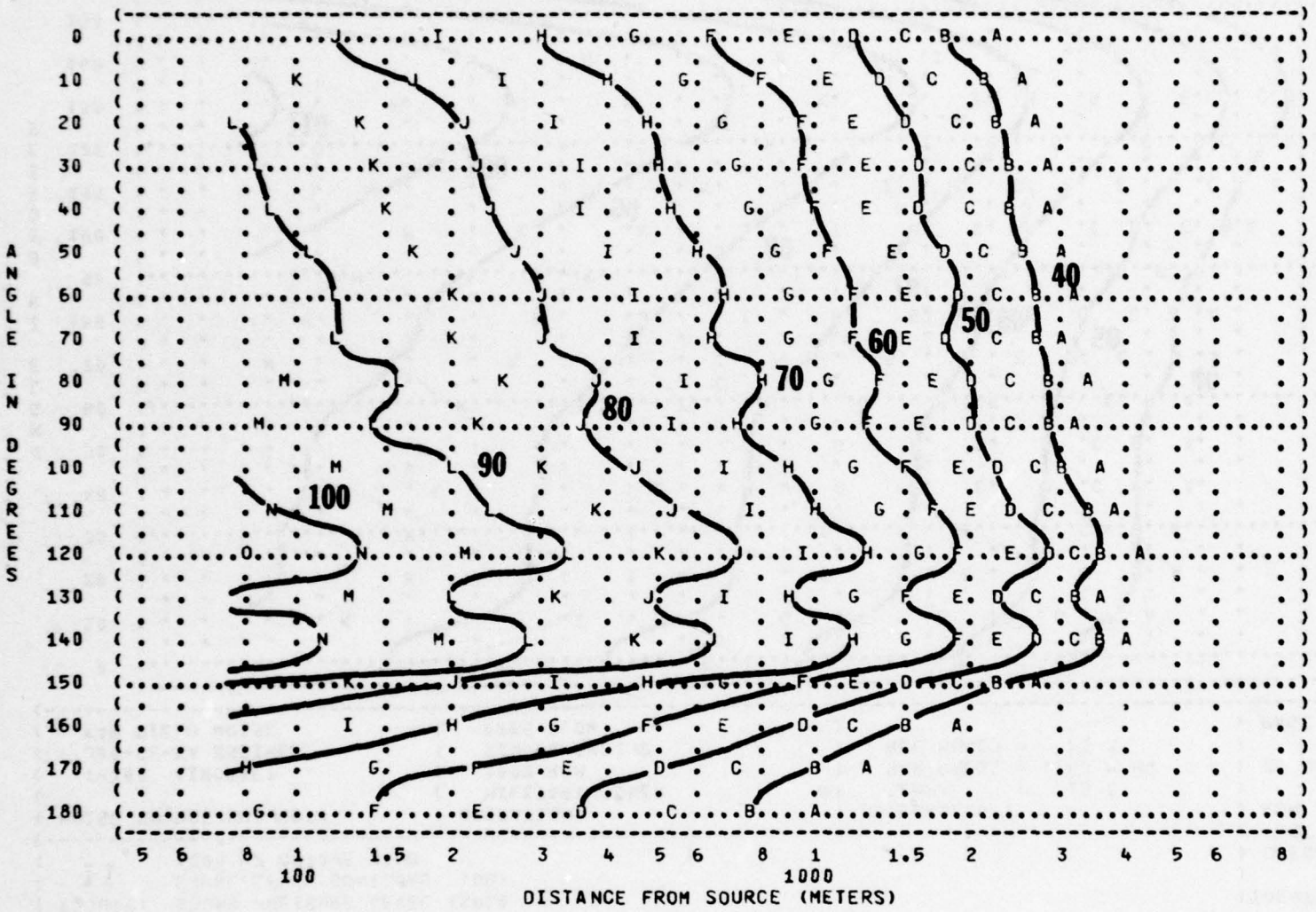
FIGURE: 11 SOUND PRESSURE LEVEL (SPL) EQUAL LEVEL CONTOURS (DB) 2000 HZ OCTAVE BAND

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-047
RUN 03
20 OCT 75
PAGE 24

NOISE SOURCE/SUBJECT:
T-38A AIRCRAFT
J85-GE-5A ENGINE
FAR FIELD NOISE

OPERATION:
MILITARY POWER
100% RPM
SINGLE ENGINE
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %



POINT	DB
A	35
B	40
C	45
D	50
E	55
F	60
G	65
H	70
I	75
J	80
K	85
L	90
M	95
N	100
O	105

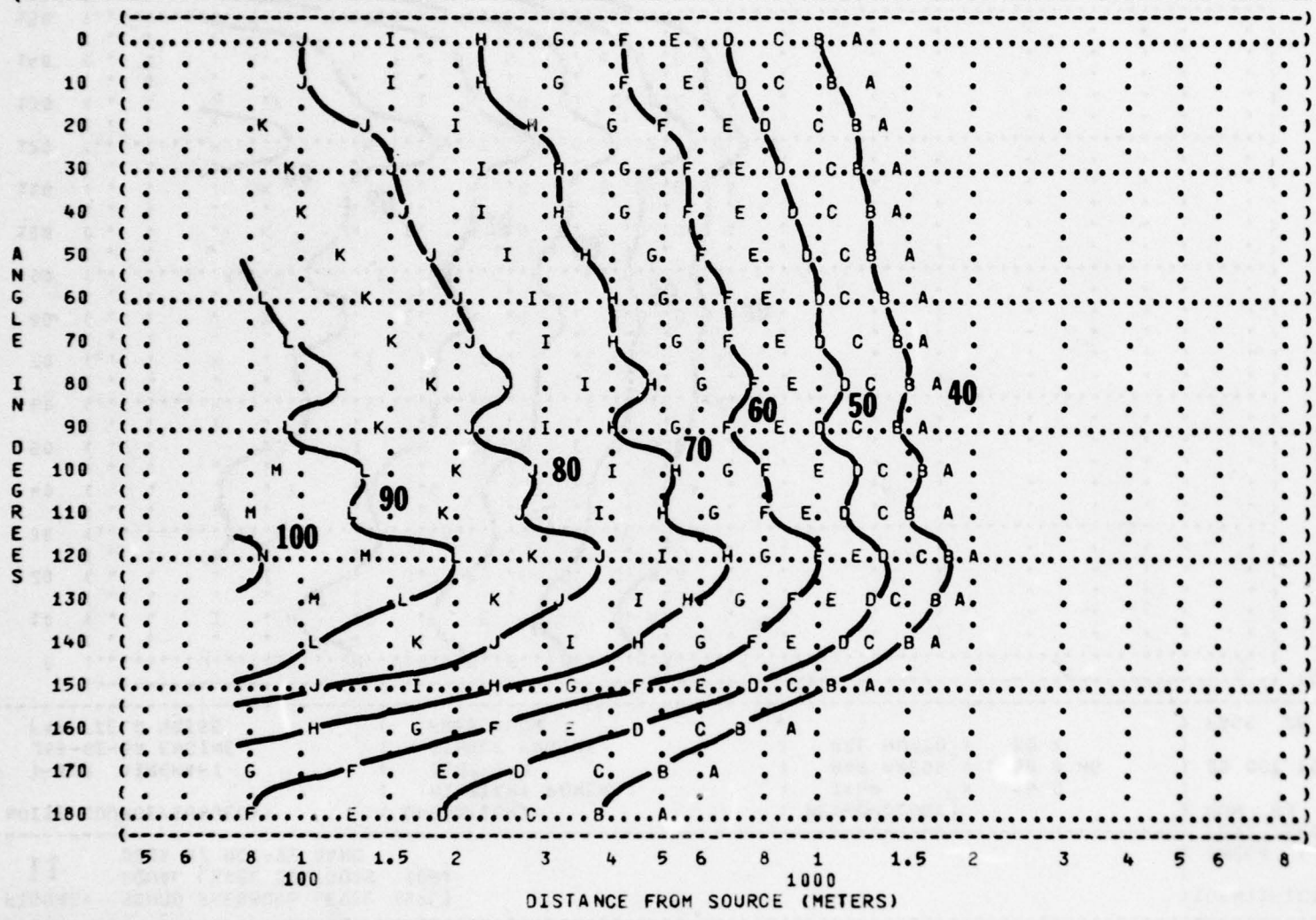
FIGURE 11 SOUND PRESSURE LEVEL (SPL) EQUAL LEVEL CONTOURS (DB) 4000 HZ OCTAVE BAND

NOISE SOURCE/SUBJECT:
T-38A AIRCRAFT
J85-GE-5A ENGINE
FAR FIELD NOISE

OPERATION:
MILITARY POWER
100% RPM
SINGLE ENGINE
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-302-047
RUN 03
20 OCT 75
PAGE 25



POINT	DB
A	35
B	40
C	45
D	50
E	55
F	60
G	65
H	70
I	75
J	80
K	85
L	90
M	95
N	100

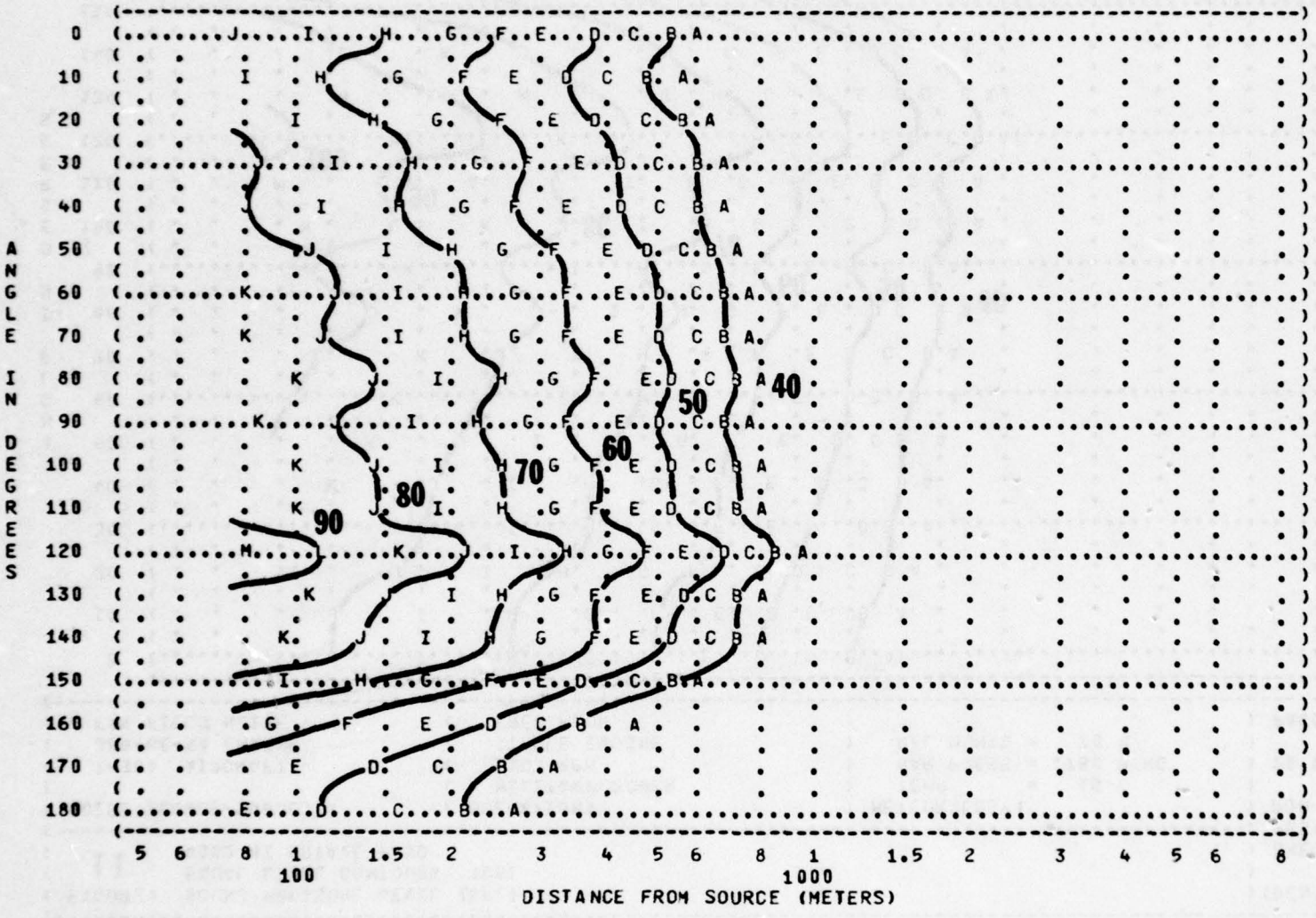
FIGURE 11: SOUND PRESSURE LEVEL (SPL) EQUAL LEVEL CONTOURS (DB) 8000 HZ OCTAVE BAND

NOISE SOURCE/SUBJECT:
T-38A AIRCRAFT
J85-GE-5A ENGINE
FAR FIELD NOISE

OPERATION:
MILITARY POWER
100% RPM
SINGLE ENGINE
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-047
RUN 03
20 OCT 75
PAGE 26



POINT	DB
A	35
B	40
C	45
D	50
E	55
F	60
G	65
H	70
I	75
J	80
K	85
L	90
M	95

FIGURE 11: SOUND PRESSURE LEVEL (SPL) EQUAL LEVEL CONTOURS (DB) 31.5 HZ OCTAVE BAND

NOISE SOURCE/SUBJECT:
T-38A AIRCRAFT
J85-GE-5A ENGINE
FAR FIELD NOISE

OPERATION:
MAXIMUM POWER
100% RPM AND AFTERBURNER
SINGLE ENGINE
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-047
RUN 04
20 OCT 75
PAGE 18

POINT	DB
A	35
B	40
C	45
D	50
E	55
F	60
G	65
H	70
I	75
J	80
K	85
L	90
M	95

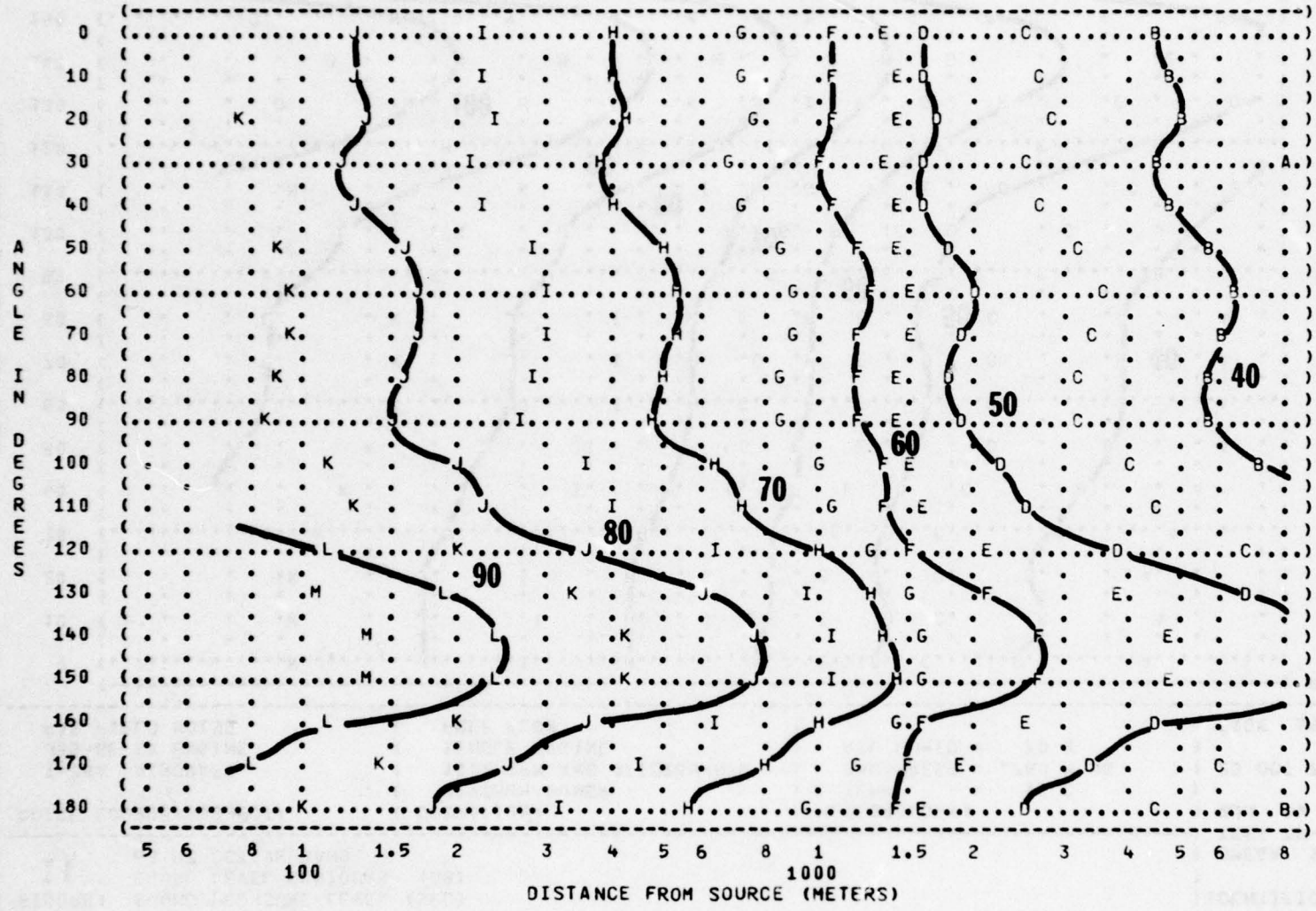


FIGURE 11 SOUND PRESSURE LEVEL (SPL) EQUAL LEVEL CONTOURS (DB) 63 HZ OCTAVE BAND

IDENTIFICATION: OMEGA 1.4 TEST 75-002-047 RUN 04 20 OCT 75 PAGE 19

NOISE SOURCE/SUBJECT: T-38A AIRCRAFT; J85-GE-5A ENGINE; FAR FIELD NOISE

OPERATION: MAXIMUM POWER; 100% RPM AND AFTERBURNER; SINGLE ENGINE; FREE FLOW

METEOROLOGY: TEMP = 15 C; BAR PRESS = .760 M HG; REL HUMID = 70 %

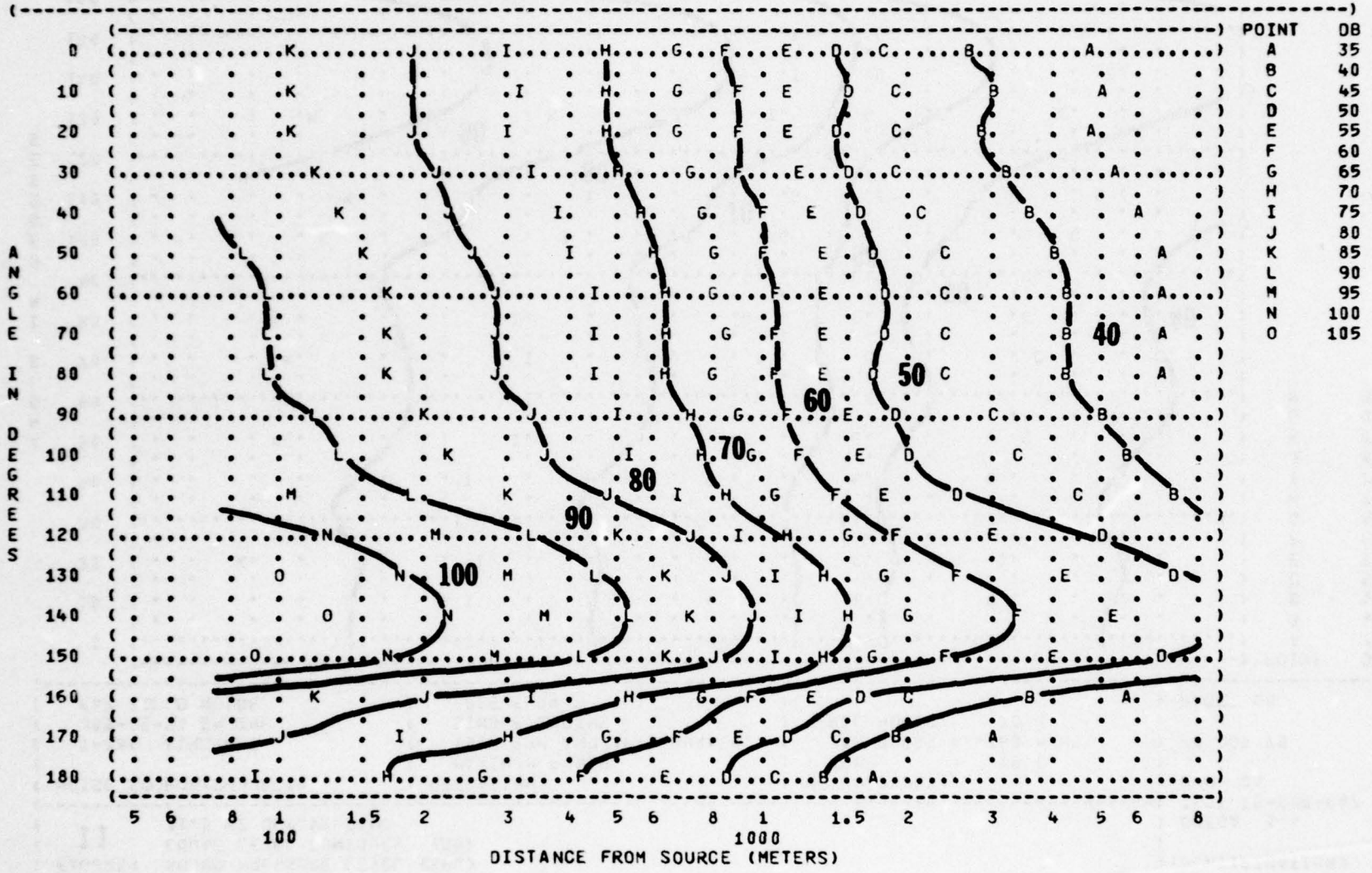


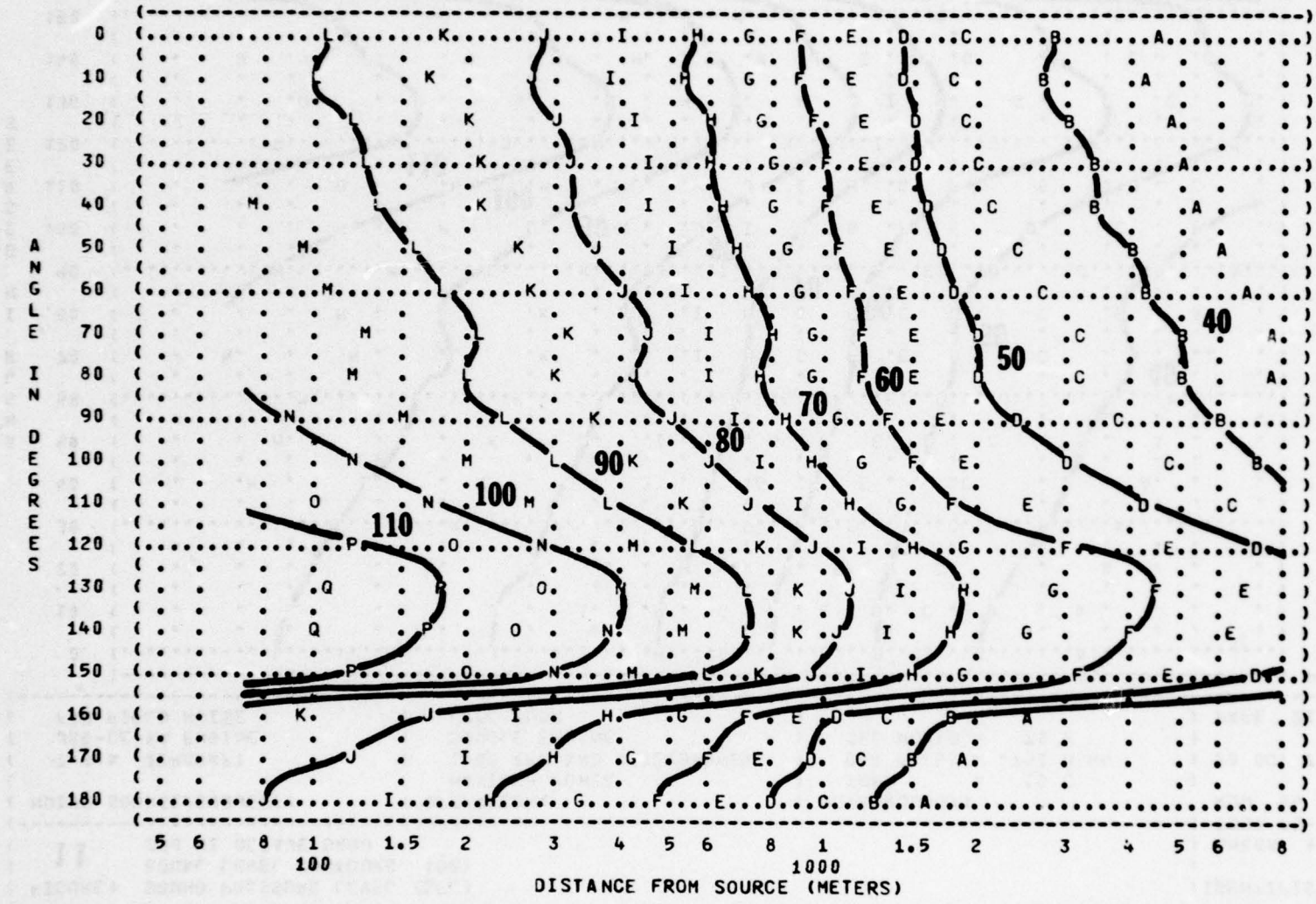
FIGURE 11: SOUND PRESSURE LEVEL (SPL) EQUAL LEVEL CONTOURS (DB) 125 HZ OCTAVE BAND

NOISE SOURCE/SUBJECT:
T-38A AIRCRAFT
J85-GE-5A ENGINE
FAR FIELD NOISE

OPERATION:
MAXIMUM POWER
100% RPM AND AFTERBURNER
SINGLE ENGINE
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-047
RUN 04
20 OCT 75
PAGE 20



POINT	DB
A	35
B	40
C	45
D	50
E	55
F	60
G	65
H	70
I	75
J	80
K	85
L	90
M	95
N	100
O	105
P	110
Q	115

FIGURE 11: SOUND PRESSURE LEVEL (SPL) EQUAL LEVEL CONTOURS (DB) 250 HZ OCTAVE BAND

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-047
RUN 04
20 OCT 75
PAGE 21

NOISE SOURCE/SUBJECT:
T-38A AIRCRAFT
J85-GE-5A ENGINE
FAR FIELD NOISE

OPERATION:
MAXIMUM POWER
100% RPM AND AFTERBURNER
SINGLE ENGINE
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

POINT	DB
A	35
B	40
C	45
D	50
E	55
F	60
G	65
H	70
I	75
J	80
K	85
L	90
M	95
N	100
O	105
P	110
Q	115

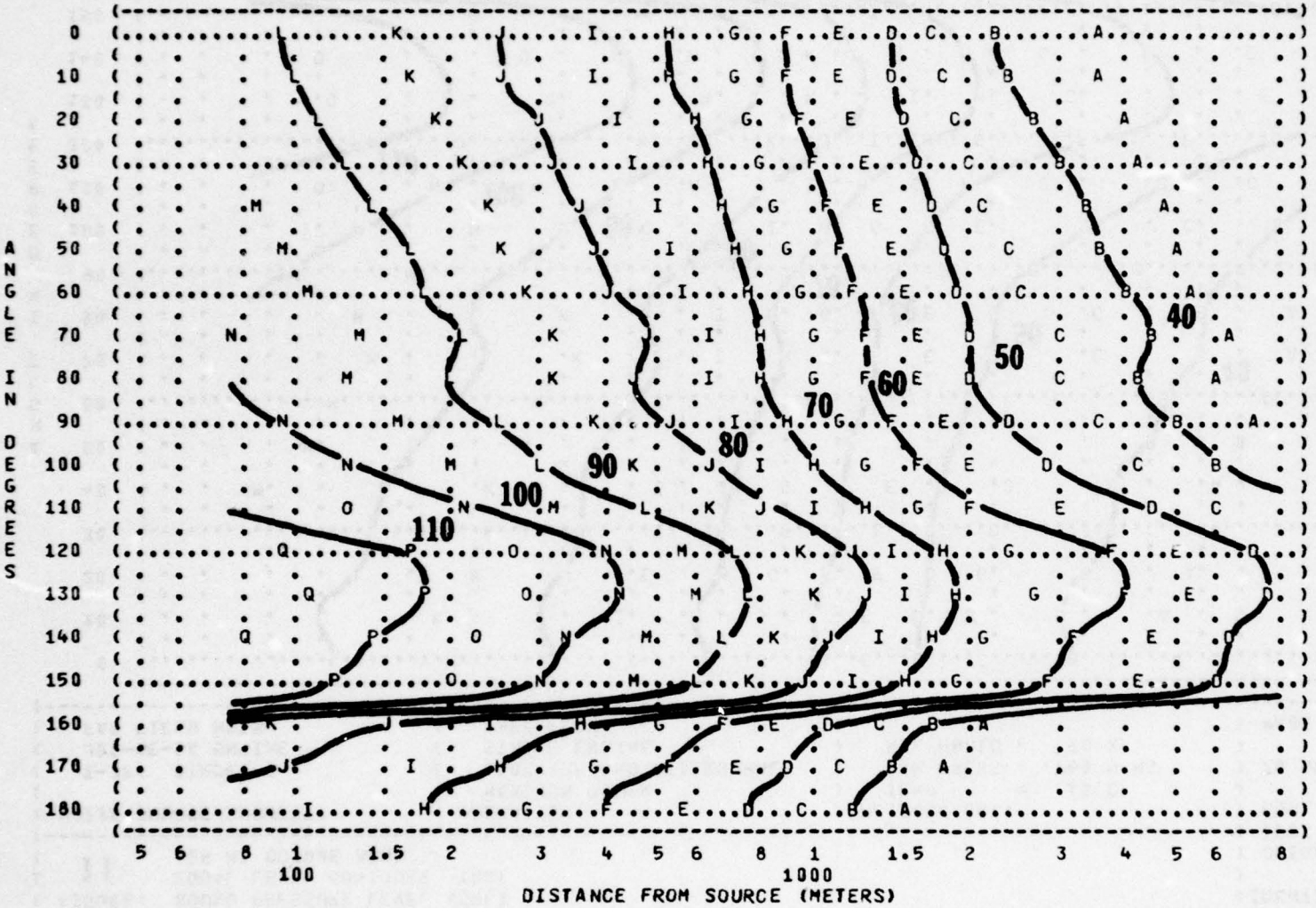


FIGURE 11: SOUND PRESSURE LEVEL (SPL) EQUAL LEVEL CONTOURS (DB) 500 HZ OCTAVE BAND

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-047
RUN 04
20 OCT 75
PAGE 22

NOISE SOURCE/SUBJECT:
T-38A AIRCRAFT
J85-GE-5A ENGINE
FAR FIELD NOISE

OPERATION:
MAXIMUM POWER
100% RPM AND AFTERBURNER
SINGLE ENGINE
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

POINT	DB
A	35
B	40
C	45
D	50
E	55
F	60
G	65
H	70
I	75
J	80
K	85
L	90
M	95
N	100
O	105
P	110
Q	115
R	120

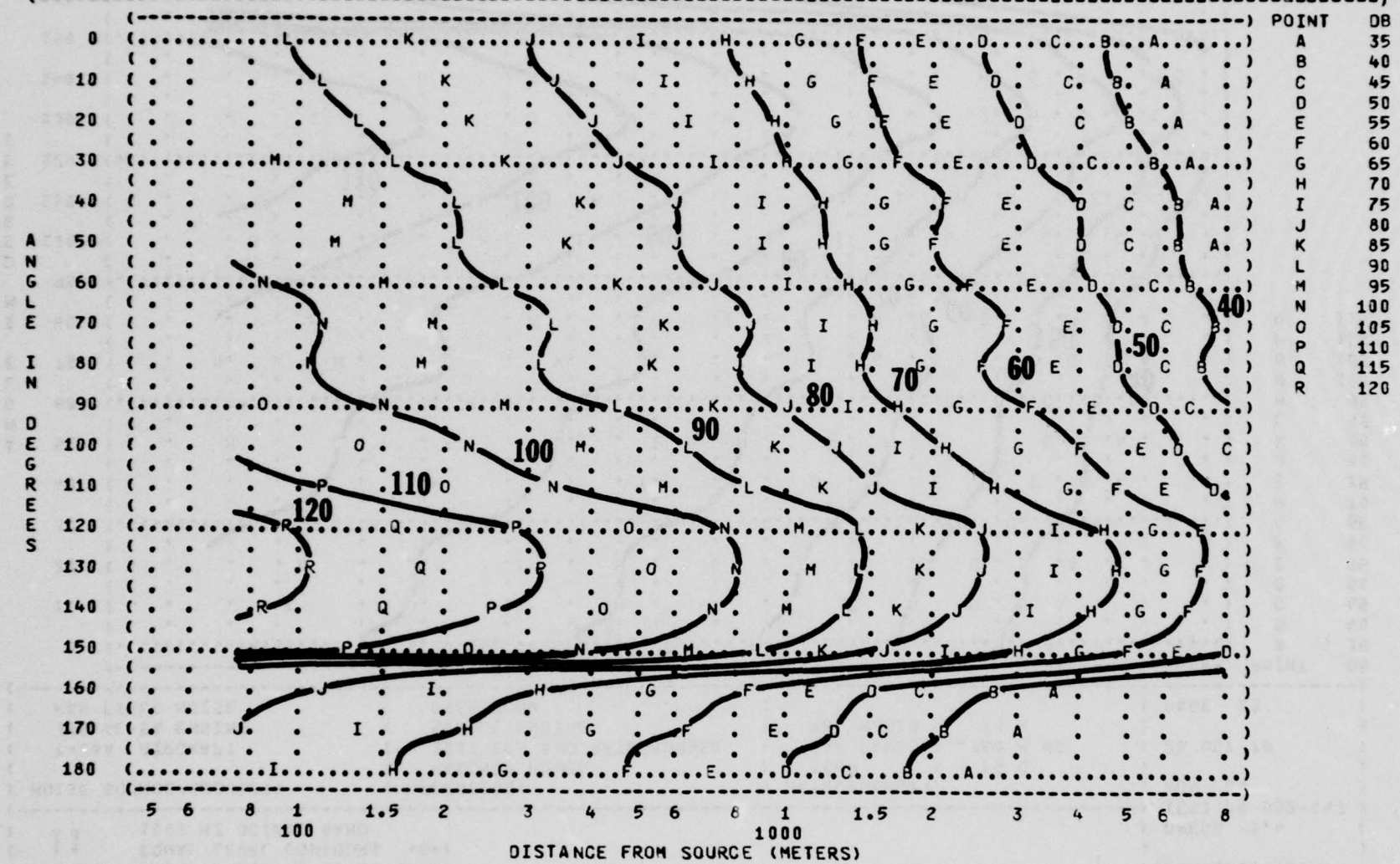


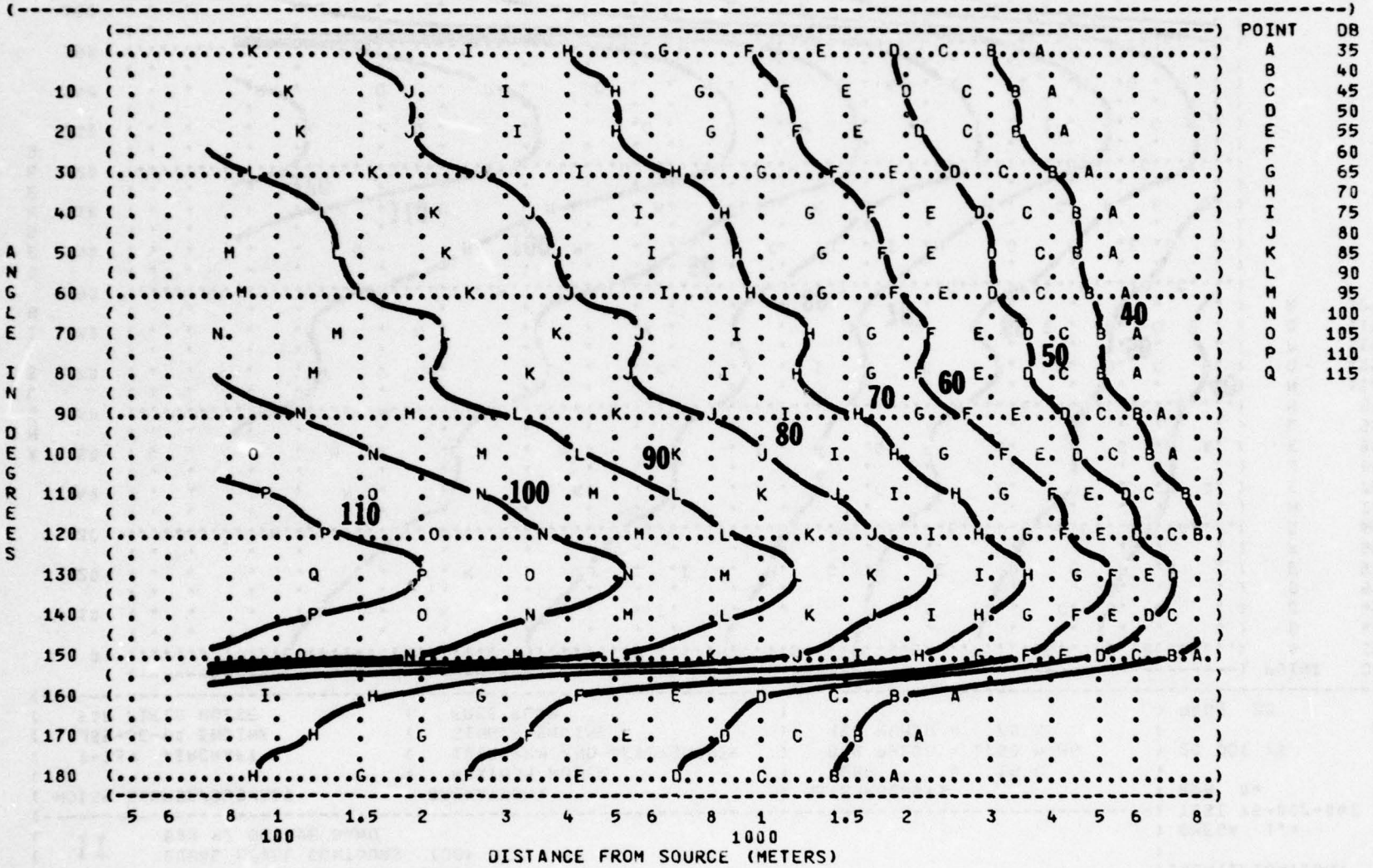
FIGURE 11: SOUND PRESSURE LEVEL (SPL) EQUAL LEVEL CONTOURS (DB) 1000 HZ OCTAVE BAND

NOISE SOURCE/SUBJECT:
T-38A AIRCRAFT
J85-GE-5A ENGINE
FAR FIELD NOISE

OPERATION:
MAXIMUM POWER
100% RPM AND AFTERBURNER
SINGLE ENGINE
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-047
RUN 04
20 OCT 75
PAGE 23



POINT	DB
A	35
B	40
C	45
D	50
E	55
F	60
G	65
H	70
I	75
J	80
K	85
L	90
M	95
N	100
O	105
P	110
Q	115

FIGURE: 11

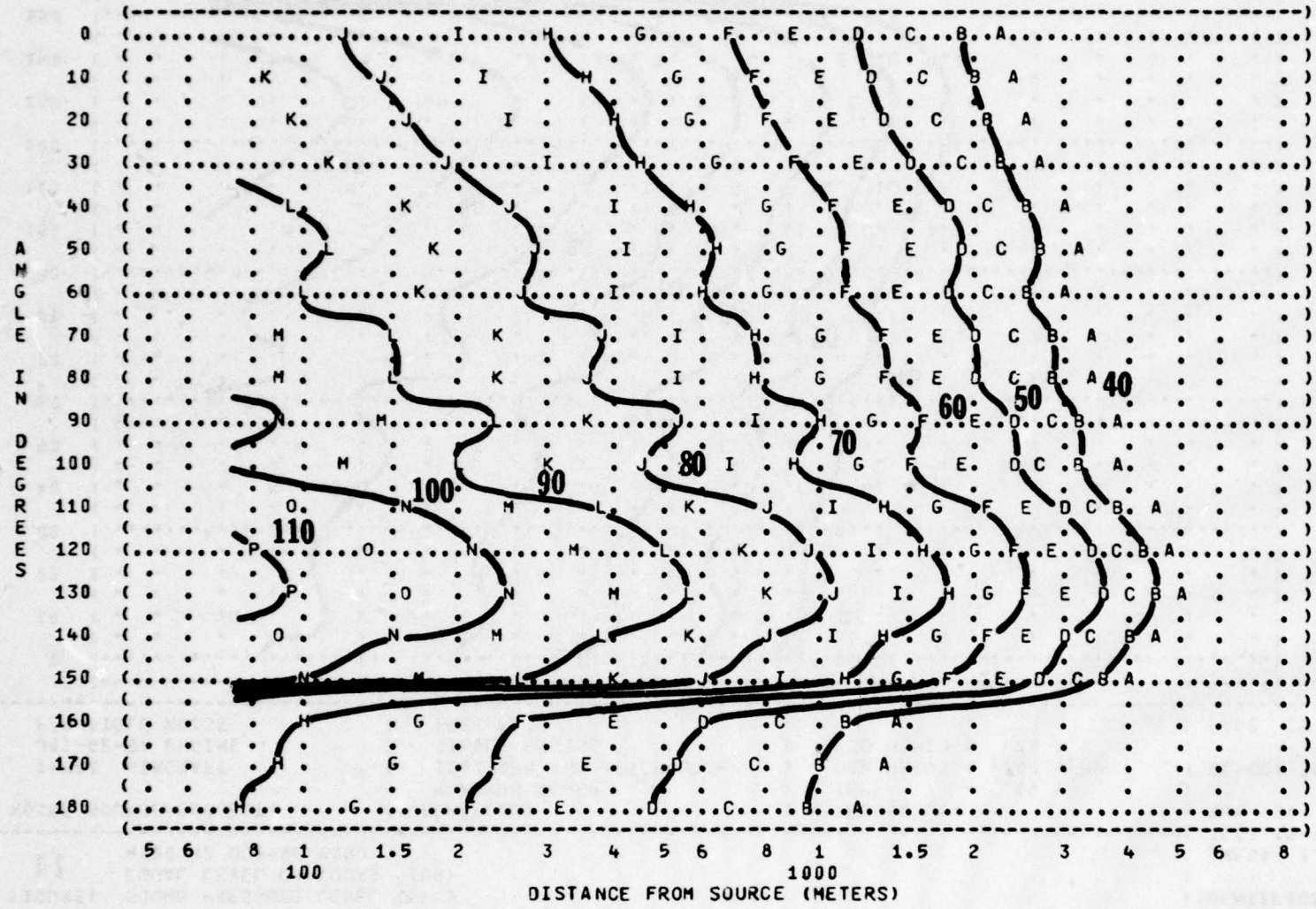
SOUND PRESSURE LEVEL (SPL)
EQUAL LEVEL CONTOURS (DB)
2000 HZ OCTAVE BAND

NOISE SOURCE/SUBJECT:
T-38A AIRCRAFT
J85-GE-5A ENGINE
FAR FIELD NOISE

OPERATION:
MAXIMUM POWER
100% RPM AND AFTERBURNER
SINGLE ENGINE
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-047
RUN 04
20 OCT 75
PAGE 24



POINT	DB
A	35
B	40
C	45
D	50
E	55
F	60
G	65
H	70
I	75
J	80
K	85
L	90
M	95
N	100
O	105
P	110

FIGURE: 11

SOUND PRESSURE LEVEL (SPL)
EQUAL LEVEL CONTOURS (DB)
4000 HZ OCTAVE BAND

NOISE SOURCE/SUBJECT:
T-38A AIRCRAFT
J85-GE-5A ENGINE
FAR FIELD NOISE

OPERATION:
MAXIMUM POWER
100% RPM AND AFTERBURNER
SINGLE ENGINE
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-047
RUN 04
20 OCT 75
PAGE 25

POINT	DB
A	35
B	40
C	45
D	50
E	55
F	60
G	65
H	70
I	75
J	80
K	85
L	90
M	95
N	100
O	105

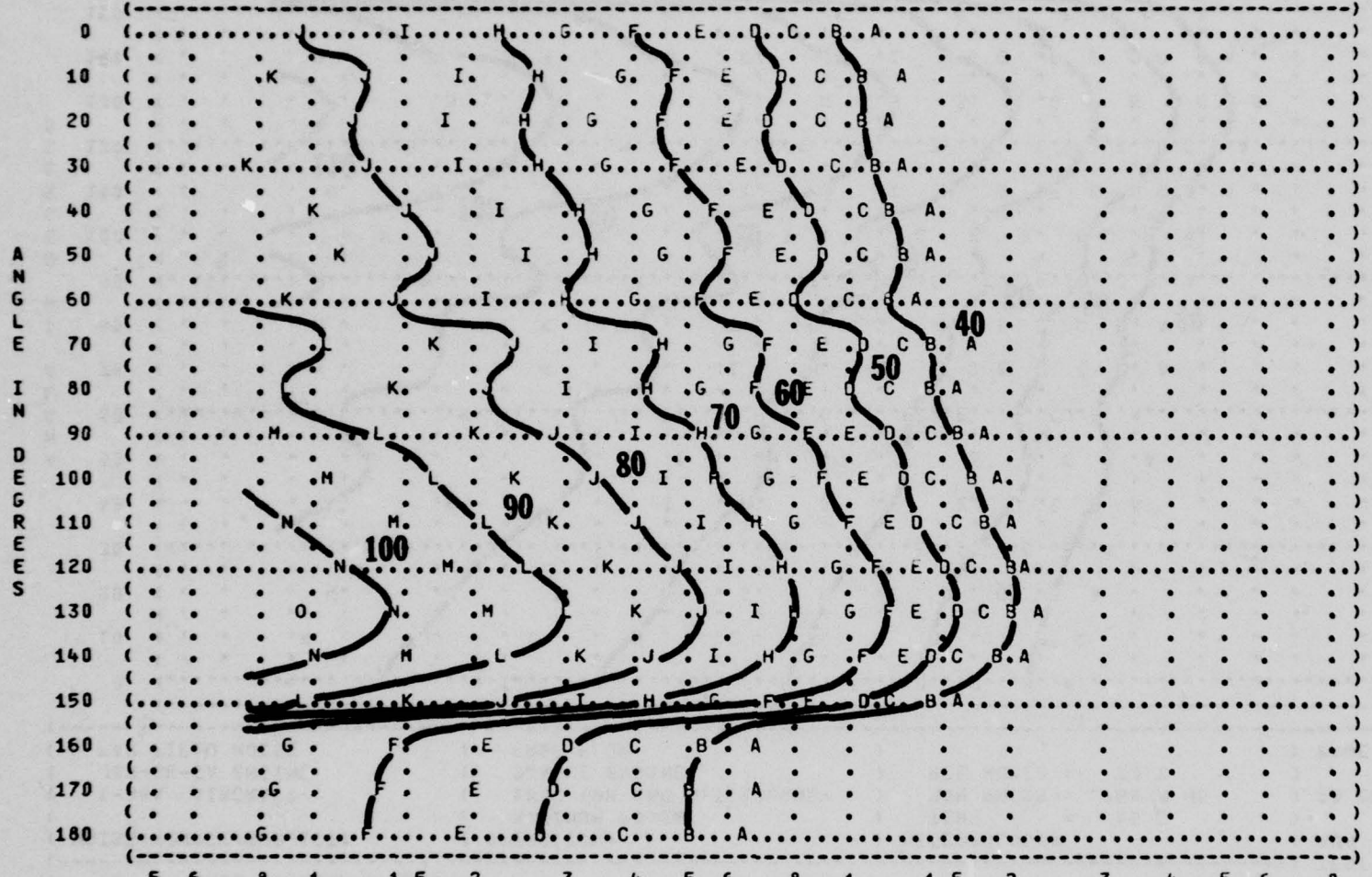


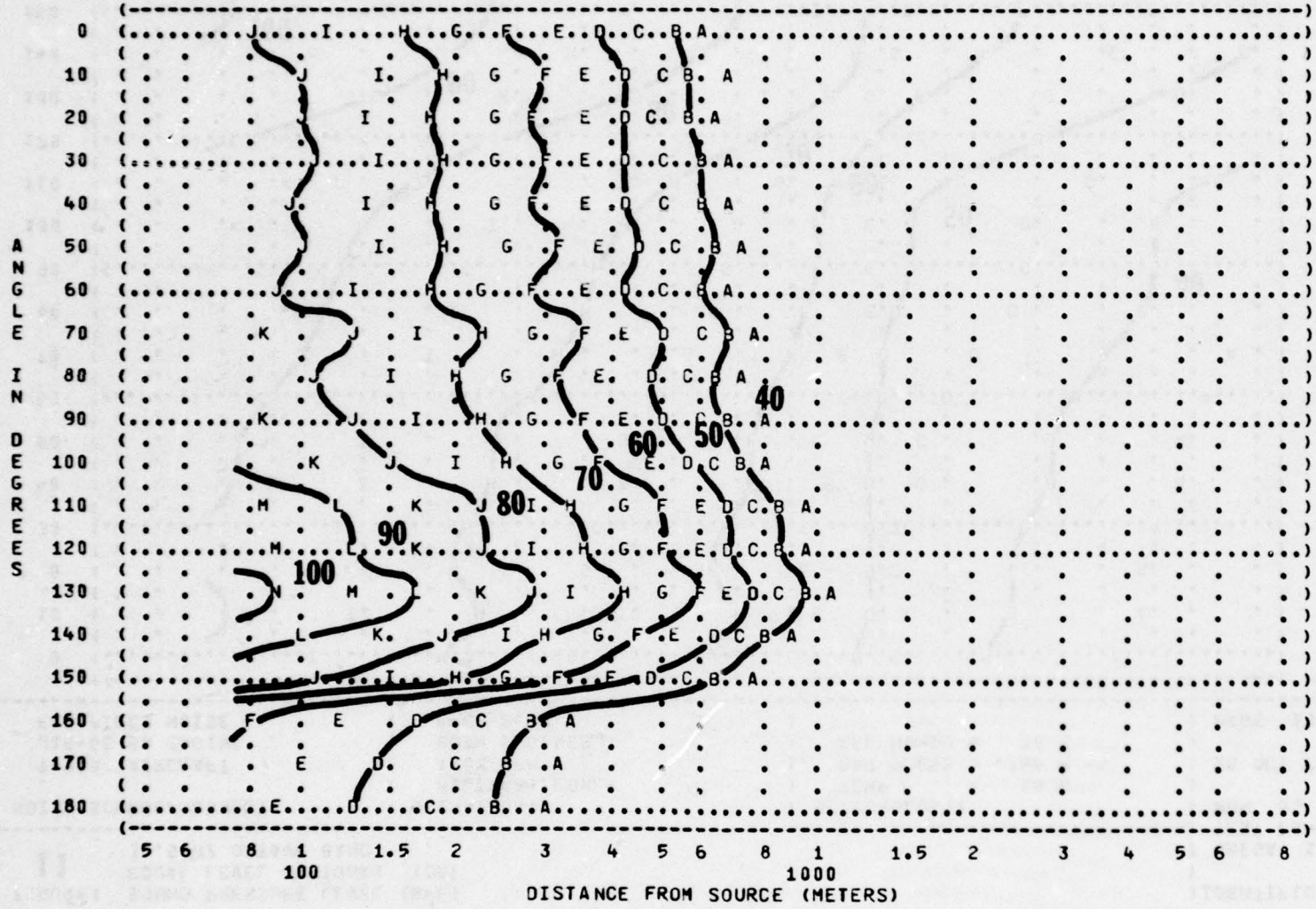
FIGURE 11 SOUND PRESSURE LEVEL (SPL) EQUAL LEVEL CONTOURS (DB) 8000 HZ OCTAVE BAND

NOISE SOURCE/SUBJECT:
T-38A AIRCRAFT
J85-GE-5A ENGINE
FAR FIELD NOISE

OPERATION:
MAXIMUM POWER
100% RPM AND AFTERBURNER
SINGLE ENGINE
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-047
RUN 04
20 OCT 75
PAGE 26



POINT	DB
A	35
B	40
C	45
D	50
E	55
F	60
G	65
H	70
I	75
J	80
K	85
L	90
M	95
N	100

FIGURE 11 SOUND PRESSURE LEVEL (SPL) EQUAL LEVEL CONTOURS (DB) 31.5 HZ OCTAVE BAND

NOISE SOURCE/SUBJECT:
T-38A AIRCRAFT
J85-GE-5A ENGINE
FAR FIELD NOISE

OPERATION:
MILITARY POWER
100% RPM
BOTH ENGINES
FREE FLOW

METEOROLOGY:
TEMP = 25 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-056
RUN 03
20 OCT 75
PAGE 18

POINT	DB
A	35
B	40
C	45
D	50
E	55
F	60
G	65
H	70
I	75
J	80
K	85
L	90
M	95
N	100

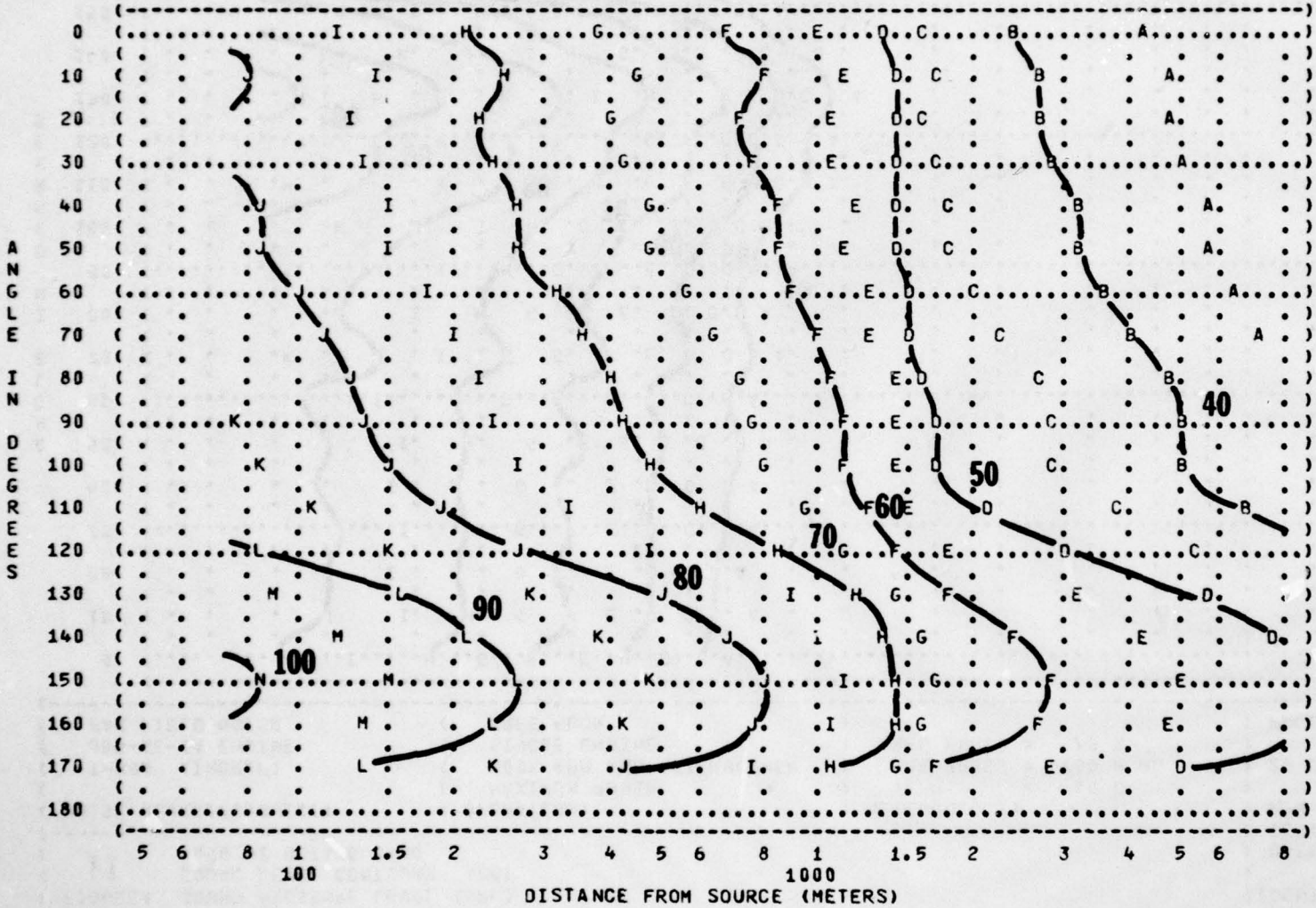


FIGURE 11: SOUND PRESSURE LEVEL (SPL) EQUAL LEVEL CONTOURS (DB) 63 HZ OCTAVE BAND

NOISE SOURCE/SUBJECT:
T-38A AIRCRAFT
J85-GE-5A ENGINE
FAR FIELD NOISE

OPERATION:
MILITARY POWER
100% RPM
BOTH ENGINES
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-056
RUN 03
20 OCT 75
PAGE 19

POINT	DB
A	35
B	40
C	45
D	50
E	55
F	60
G	65
H	70
I	75
J	80
K	85
L	90
M	95
N	100
O	105

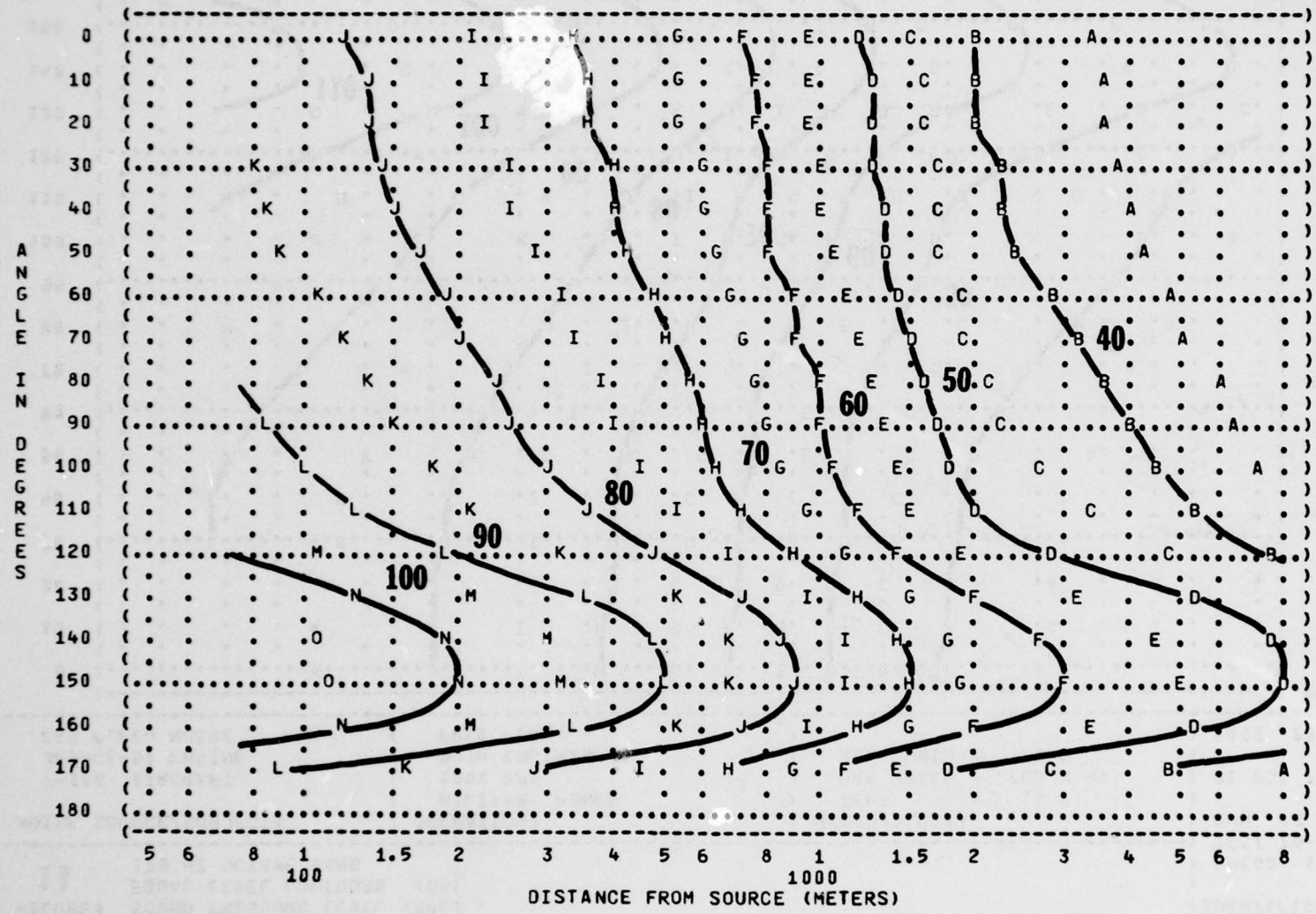


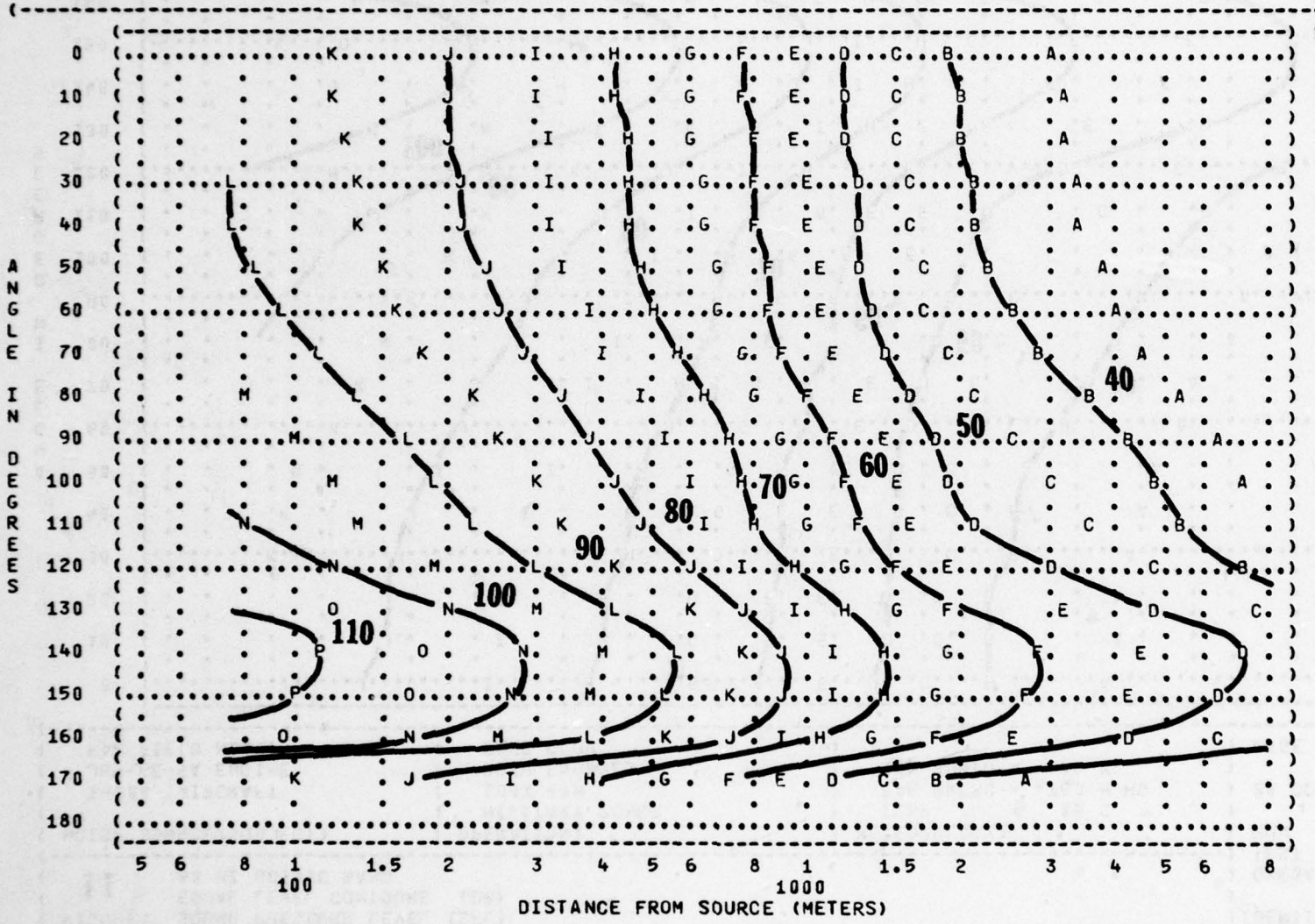
FIGURE 11: SOUND PRESSURE LEVEL (SPL) EQUAL LEVEL CONTOURS (DB) 125 HZ OCTAVE BAND

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-056
RUN 03
20 OCT 75
PAGE 20

NOISE SOURCE/SUBJECT:
T-38A AIRCRAFT
J85-GE-5A ENGINE
FAR FIELD NOISE

OPERATION:
MILITARY POWER
100% RPM
BOTH ENGINES
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %



POINT	DB
A	35
B	40
C	45
D	50
E	55
F	60
G	65
H	70
I	75
J	80
K	85
L	90
M	95
N	100
O	105
P	110

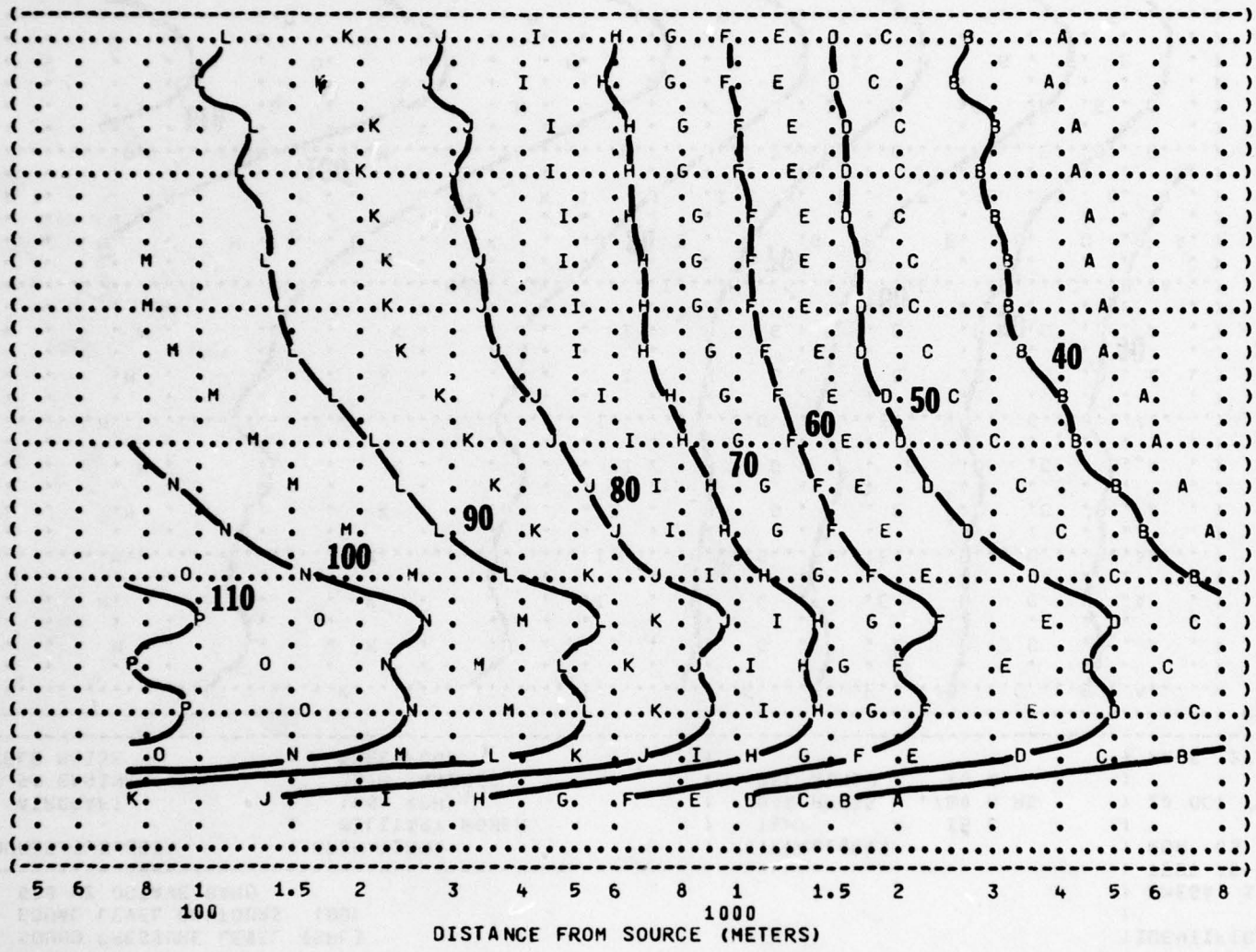
FIGURE: 11 SOUND PRESSURE LEVEL (SPL) EQUAL LEVEL CONTOURS (DB) 250 HZ OCTAVE BAND

NOISE SOURCE/SUBJECT:
T-38A AIRCRAFT
J85-GE-5A ENGINE
FAR FIELD NOISE

OPERATION:
MILITARY POWER
100% RPM
BOTH ENGINES
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-056
RUN 03
20 OCT 75
PAGE 21



POINT	DB
A	35
B	40
C	45
D	50
E	55
F	60
G	65
H	70
I	75
J	80
K	85
L	90
M	95
N	100
O	105
P	110

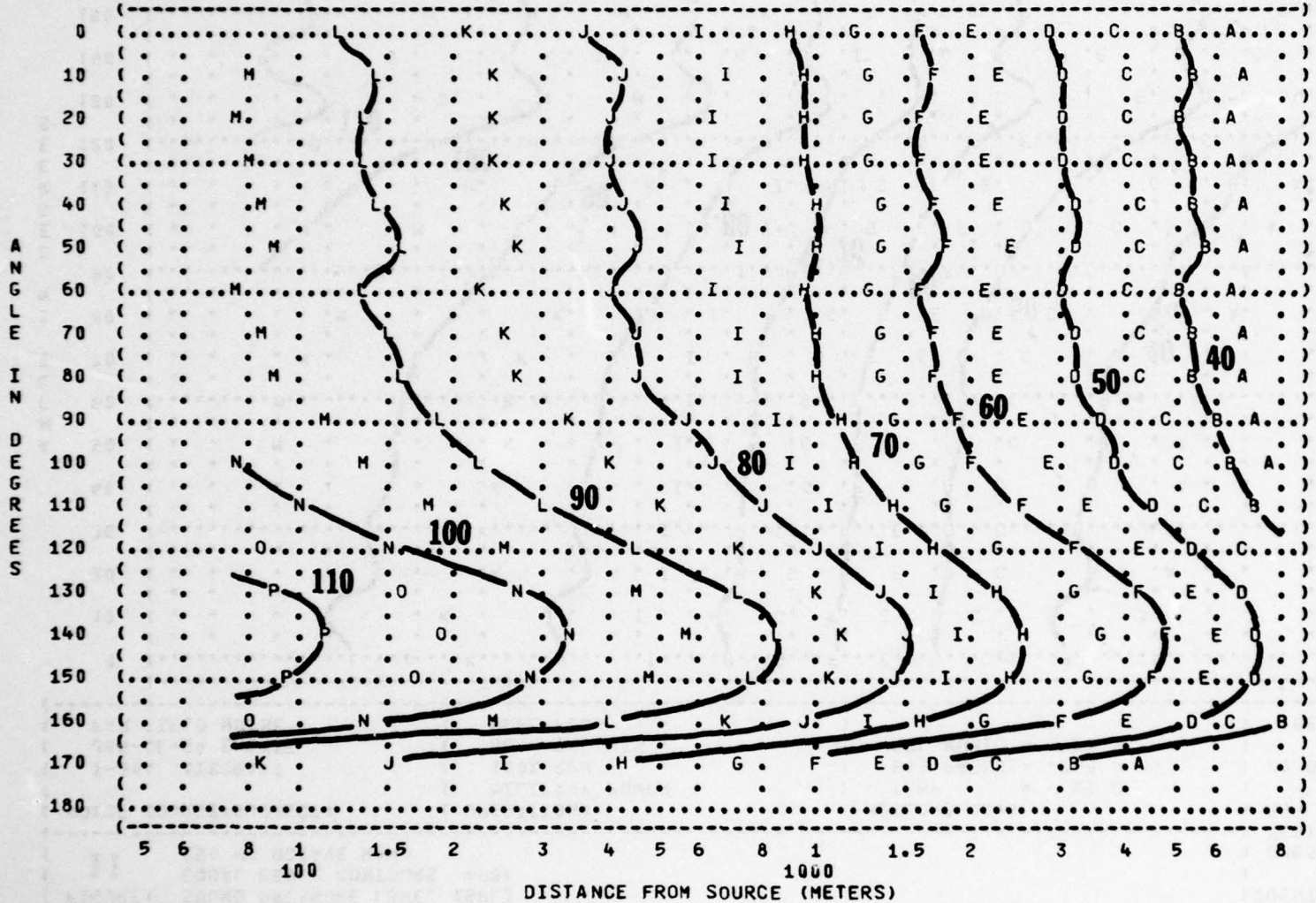
FIGURE 11: SOUND PRESSURE LEVEL (SPL) EQUAL LEVEL CONTOURS (DB) 500 HZ OCTAVE BAND

IDENTIFICATION: OMEGA 1.4 TEST 75-002-056 RUN 03 20 OCT 75 PAGE 22

NOISE SOURCE/SUBJECT: T-38A AIRCRAFT; J85-GE-5A ENGINE; FAR FIELD NOISE

OPERATION: MILITARY POWER; 100% RPM; BOTH ENGINES; FREE FLOW

METEOROLOGY: TEMP = 15 C; BAR PRESS = .760 M HG; REL HUMID = 70 %



POINT	DB
A	35
B	40
C	45
D	50
E	55
F	60
G	65
H	70
I	75
J	80
K	85
L	90
M	95
N	100
O	105
P	110

FIGURE: 11

SOUND PRESSURE LEVEL (SPL)
EQUAL LEVEL CONTOURS (DB)
1000 HZ OCTAVE BAND

NOISE SOURCE/SUBJECT:
T-38A AIRCRAFT
J85-GE-5A ENGINE
FAR FIELD NOISE

OPERATION:
MILITARY POWER
100% RPM
BOTH ENGINES
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-056
RUN 03
20 OCT 75
PAGE 23

POINT	DB
A	35
B	40
C	45
D	50
E	55
F	60
G	65
H	70
I	75
J	80
K	85
L	90
M	95
N	100
O	105

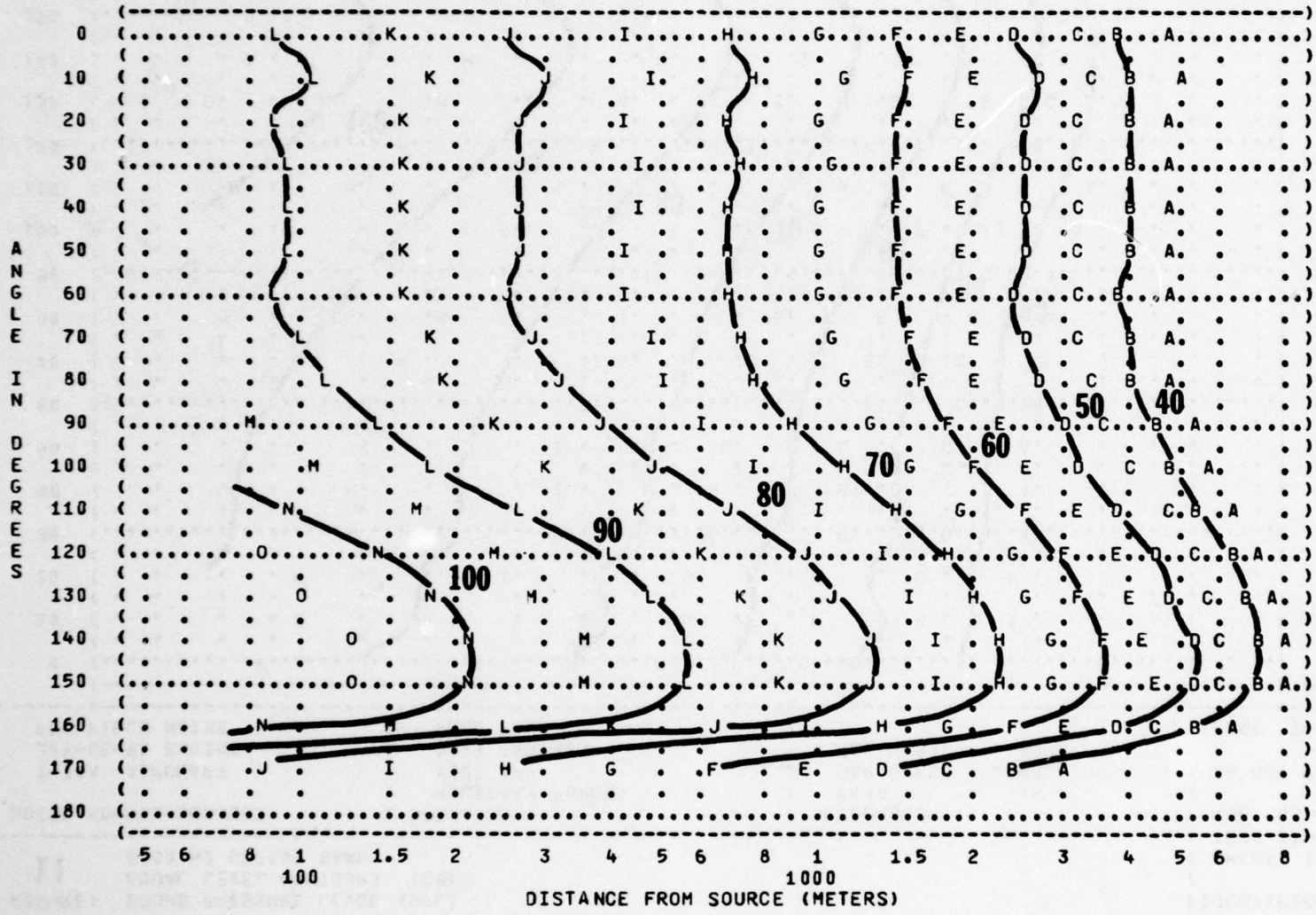


FIGURE 11: SOUND PRESSURE LEVEL (SPL) EQUAL LEVEL CONTOURS (DB) 2000 HZ OCTAVE BAND

NOISE SOURCE/SUBJECT:
T-38A AIRCRAFT
J85-GE-5A ENGINE
FAR FIELD NOISE

OPERATION:
MILITARY POWER
100% RPM
BOTH ENGINES
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-056
RUN 03
20 OCT 75
PAGE 24

POINT	DB
A	35
B	40
C	45
D	50
E	55
F	60
G	65
H	70
I	75
J	80
K	85
L	90
M	95
N	100
O	105

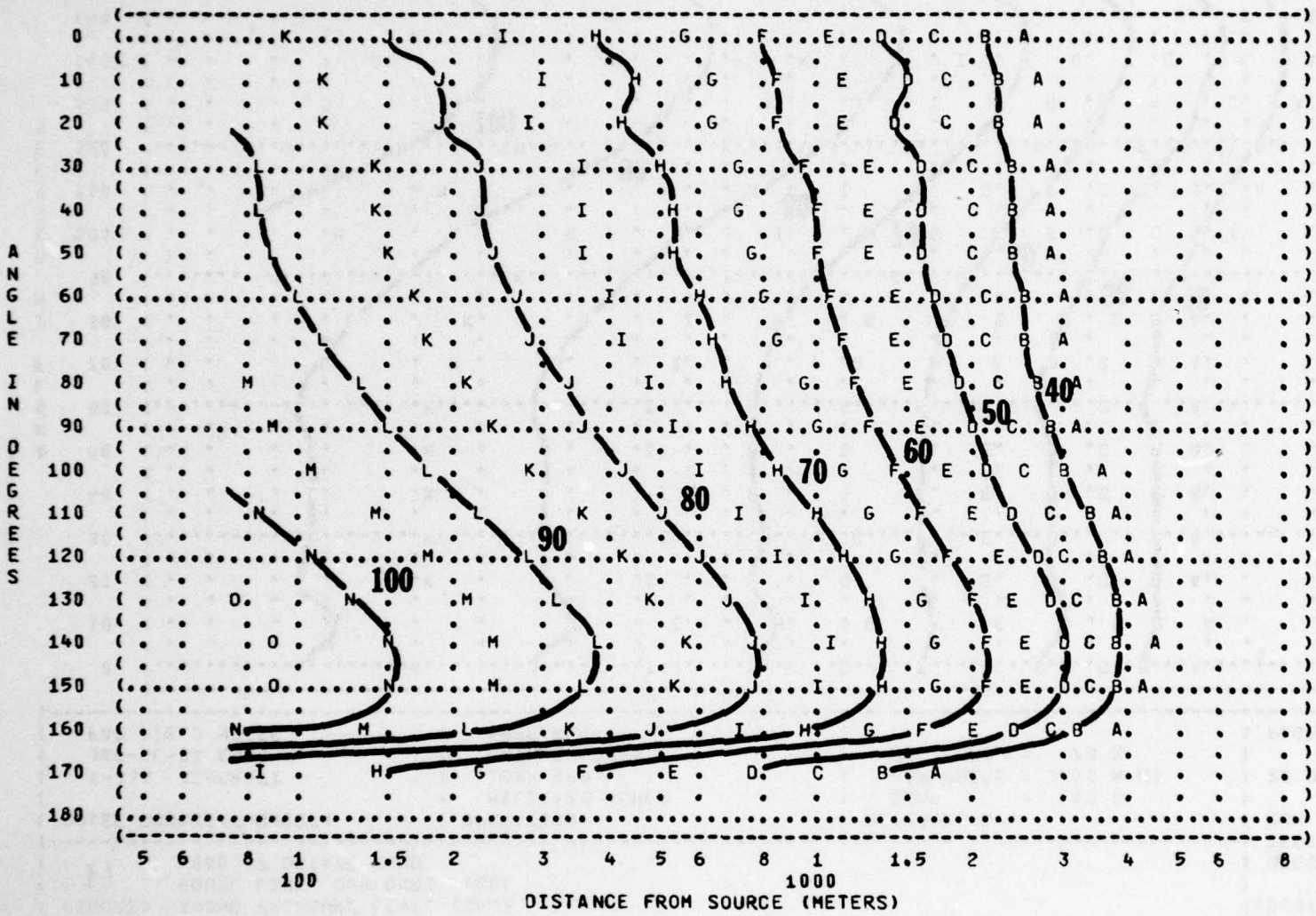


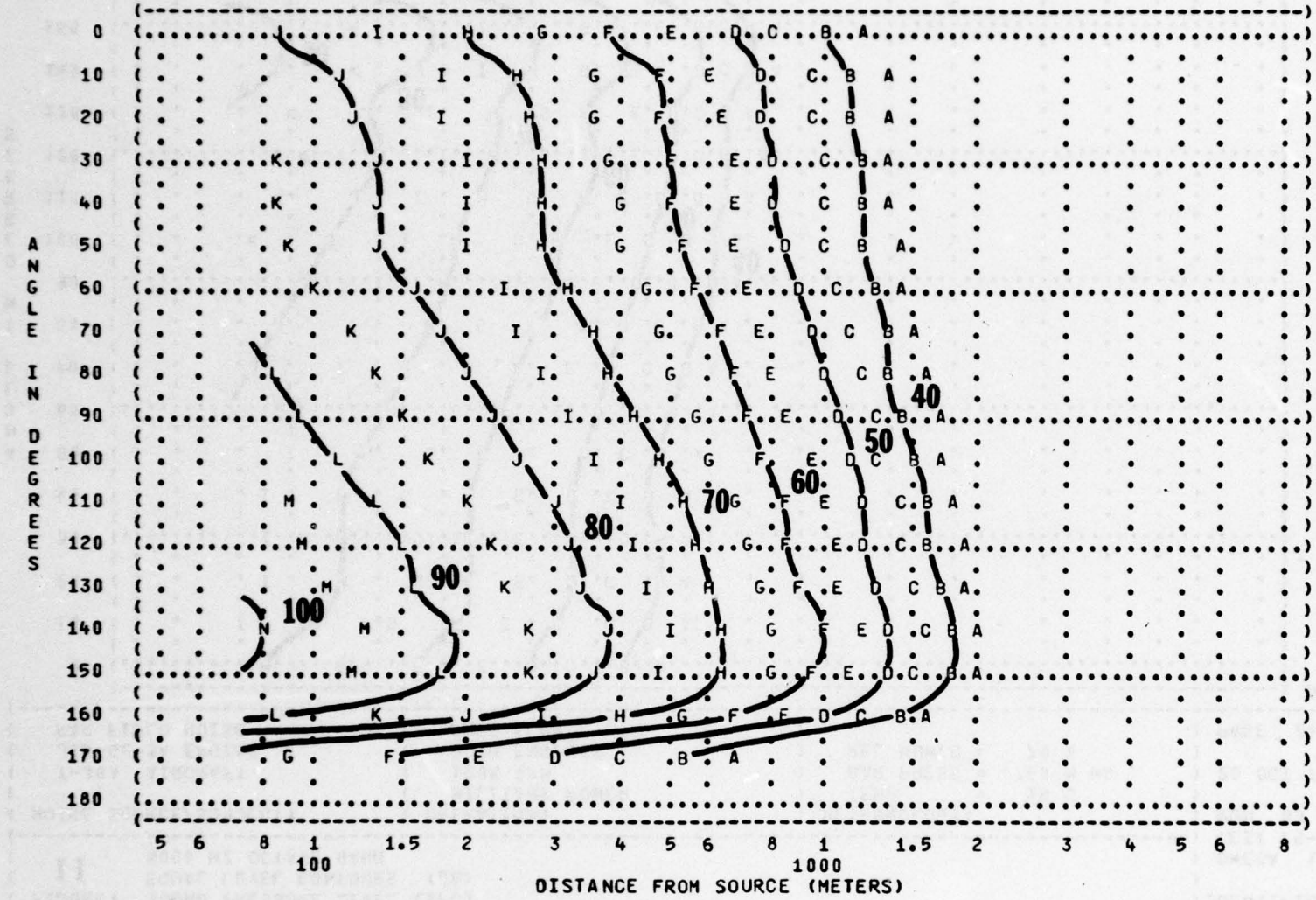
FIGURE 11: SOUND PRESSURE LEVEL (SPL) EQUAL LEVEL CONTOURS (DB) 4000 HZ OCTAVE BAND

NOISE SOURCE/SUBJECT:
T-38A AIRCRAFT
J85-GE-5A ENGINE
FAR FIELD NOISE

OPERATION:
MILITARY POWER
100% RPM
BOTH ENGINES
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-056
RUN 03
20 OCT 75
PAGE 25



POINT	DB
A	35
B	40
C	45
D	50
E	55
F	60
G	65
H	70
I	75
J	80
K	85
L	90
M	95
N	100

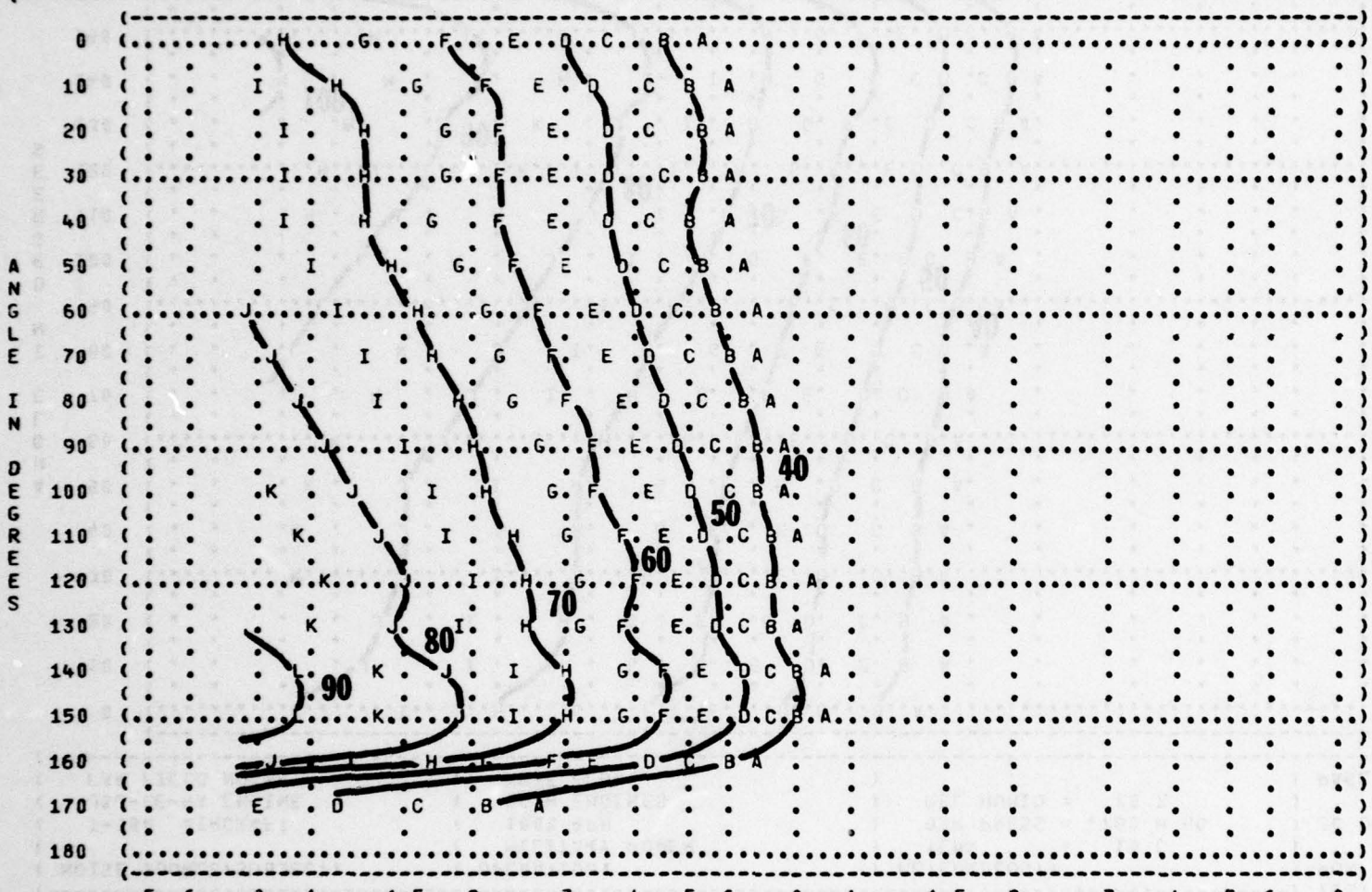
FIGURE 11: SOUND PRESSURE LEVEL (SPL) EQUAL LEVEL CONTOURS (DB) 8000 HZ OCTAVE BAND

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-056
RUN 03
20 OCT 75
PAGE 26

NOISE SOURCE/SUBJECT:
T-38A AIRCRAFT
J85-GE-5A ENGINE
FAR FIELD NOISE

OPERATION:
MILITARY POWER
100% RPM
BOTH ENGINES
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %



POINT	DB
A	35
B	40
C	45
D	50
E	55
F	60
G	65
H	70
I	75
J	80
K	85
L	90

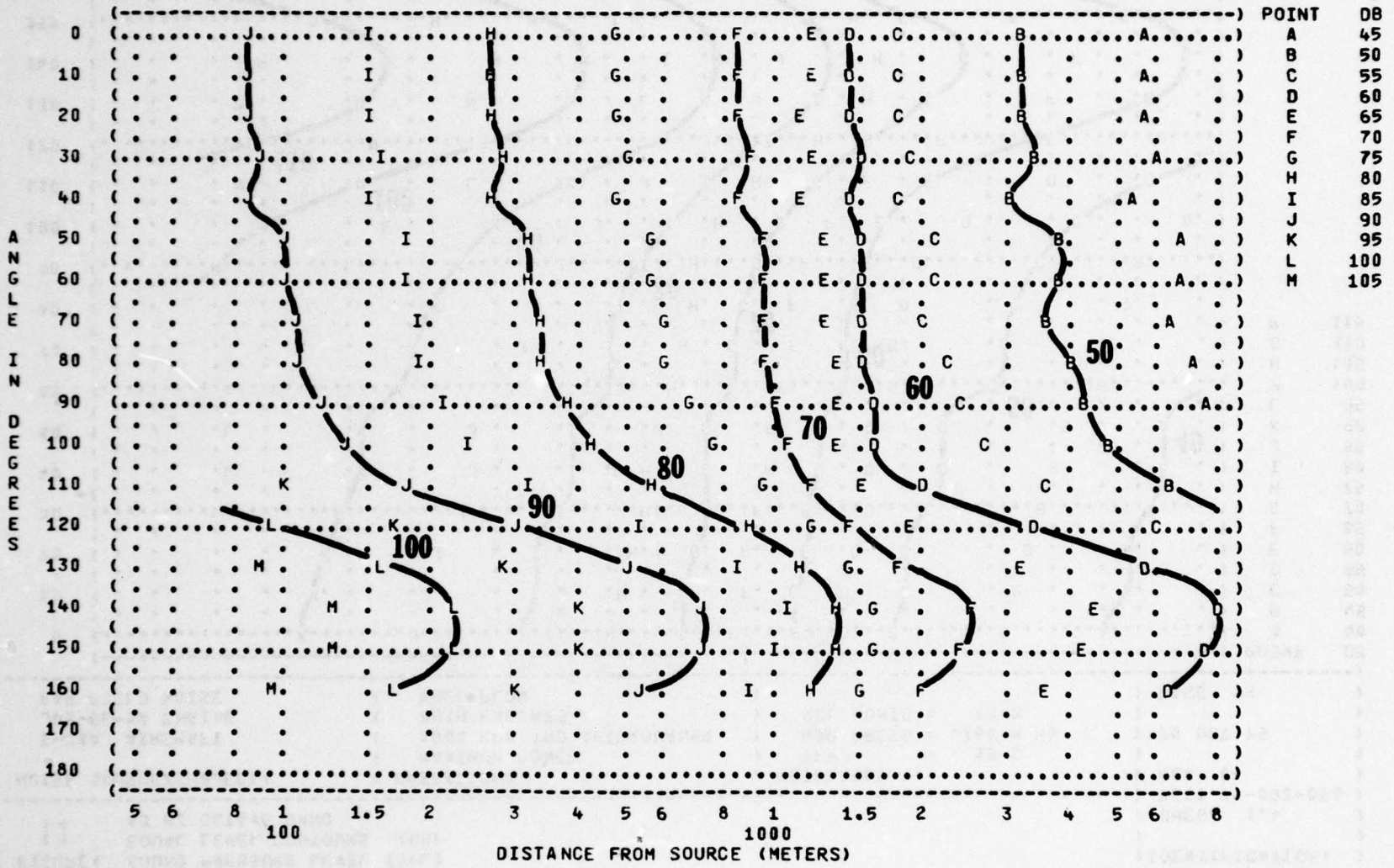
FIGURE 11: SOUND PRESSURE LEVEL (SPL) EQUAL LEVEL CONTOURS (DB) 31.5 HZ OCTAVE BAND

NOISE SOURCE/SUBJECT:
T-38A AIRCRAFT
J85-GE-5A ENGINE
FAR FIELD NOISE

OPERATION:
MAXIMUM POWER
100% RPM AND AFTERBURNER
BOTH ENGINES
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-056
RUN 04
20 OCT 75
PAGE 18



POINT	DB
A	45
B	50
C	55
D	60
E	65
F	70
G	75
H	80
I	85
J	90
K	95
L	100
M	105

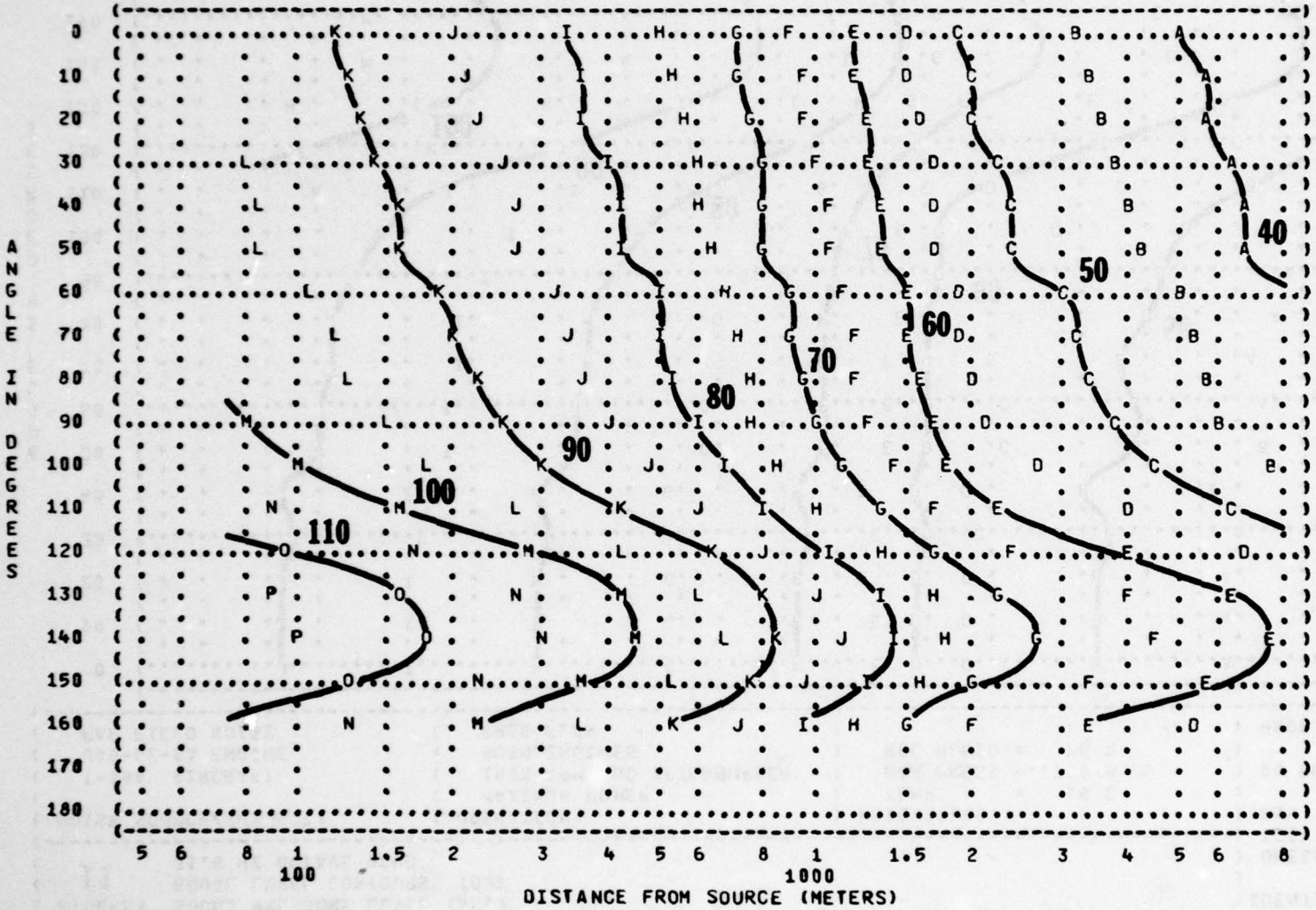
FIGURE 11: SOUND PRESSURE LEVEL (SPL)
EQUAL LEVEL CONTOURS (DB)
63 HZ OCTAVE BAND

NOISE SOURCE/SUBJECT:
T-38A AIRCRAFT
J85-GE-5A ENGINE
FAR FIELD NOISE

OPERATION:
MAXIMUM POWER
100% RPM AND AFTERBURNER
BOTH ENGINES
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-056
RUN 04
20 OCT 75
PAGE 19



POINT	DB
A	40
B	45
C	50
D	55
E	60
F	65
G	70
H	75
I	80
J	85
K	90
L	95
M	100
N	105
O	110
P	115

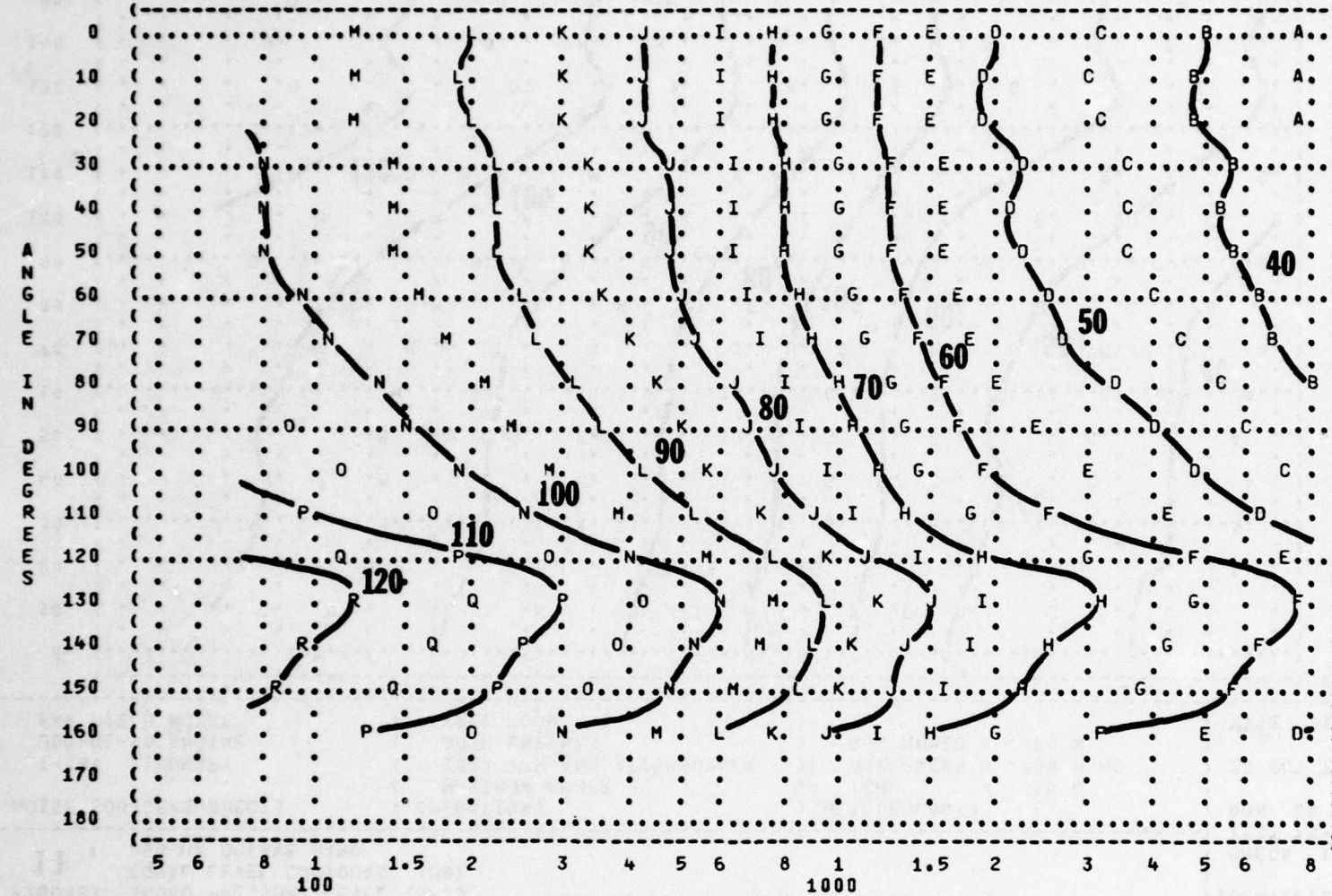
FIGURE: 11 SOUND PRESSURE LEVEL (SPL) EQUAL LEVEL CONTOURS (DB) 125 HZ OCTAVE BAND

NOISE SOURCE/SUBJECT:
T-38A AIRCRAFT
J85-GE-5A ENGINE
FAR FIELD NOISE

OPERATION:
MAXIMUM POWER
100% RPM AND AFTERBURNER
BOTH ENGINES
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-056
RUN 04
20 OCT 75
PAGE 20



POINT	DB
A	35
B	40
C	45
D	50
E	55
F	60
G	65
H	70
I	75
J	80
K	85
L	90
M	95
N	100
O	105
P	110
Q	115
R	120

FIGURE 11: SOUND PRESSURE LEVEL (SPL) EQUAL LEVEL CONTOURS (DB) 250 HZ OCTAVE BAND

NOISE SOURCE/SUBJECT:
T-38A AIRCRAFT
J85-GE-5A ENGINE
FAR FIELD NOISE

OPERATION:
MAXIMUM POWER
100% RPM AND AFTERBURNER
BOTH ENGINES
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-056
RUN 04
20 OCT 75
PAGE 21

POINT	DB
A	35
B	40
C	45
D	50
E	55
F	60
G	65
H	70
I	75
J	80
K	85
L	90
M	95
N	100
O	105
P	110
Q	115

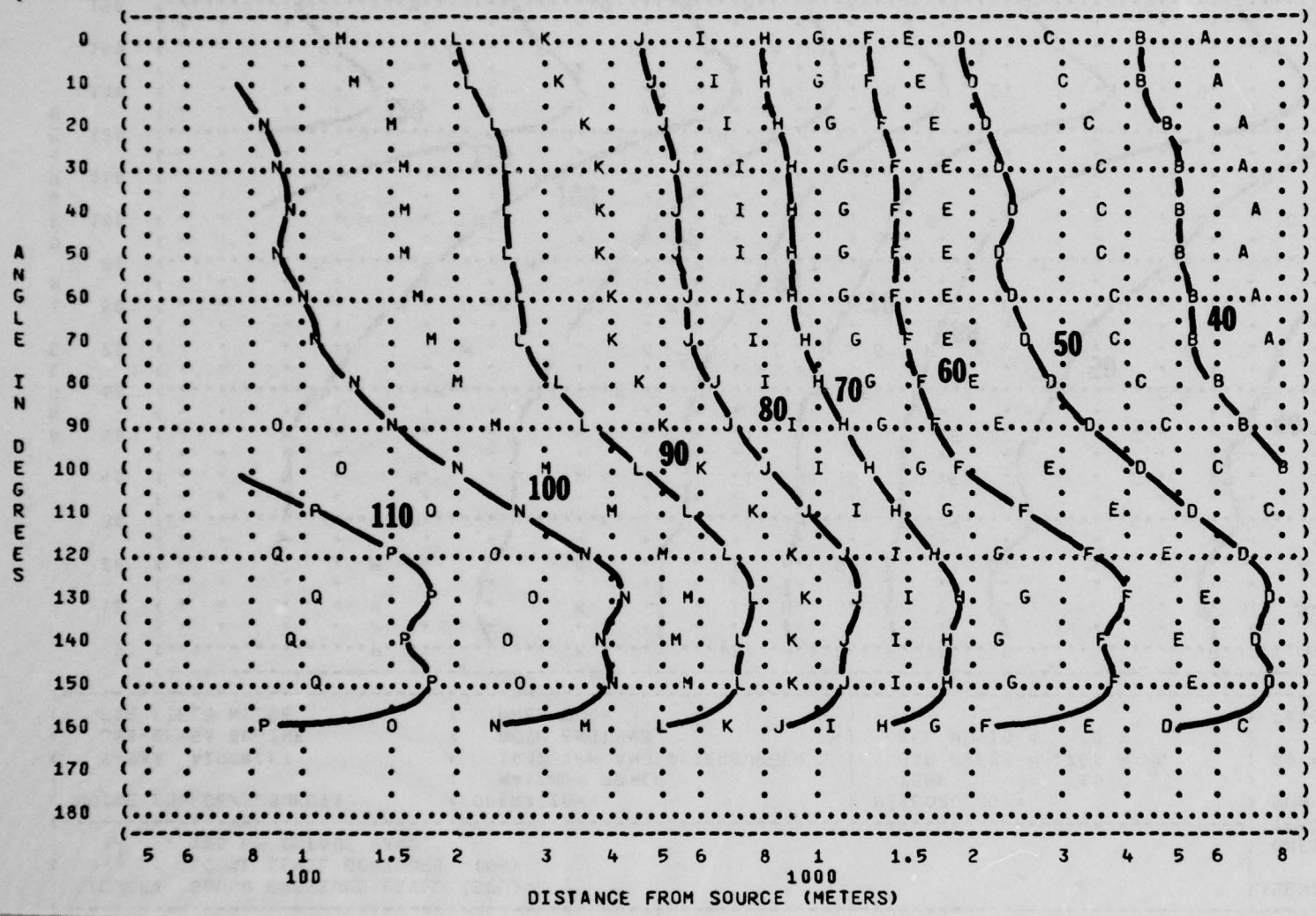


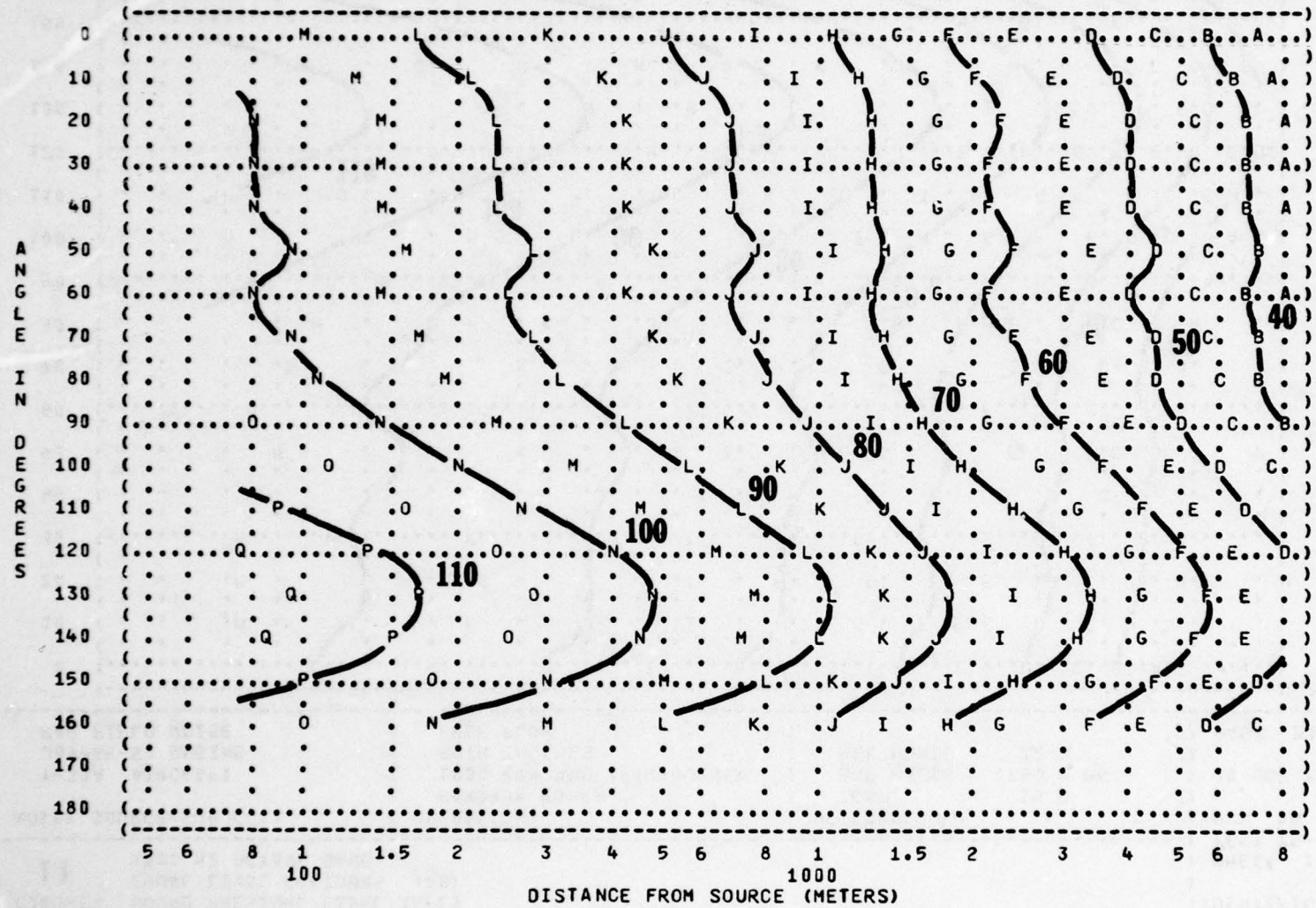
FIGURE 11: SOUND PRESSURE LEVEL (SPL) EQUAL LEVEL CONTOURS (DB) 500 HZ OCTAVE BAND

NOISE SOURCE/SUBJECT:
T-38A AIRCRAFT
J85-GE-5A ENGINE
FAR FIELD NOISE

OPERATION:
MAXIMUM POWER
100% RPM AND AFTERBURNER
BOTH ENGINES
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-056
RUN 04
20 OCT 75
PAGE 22



POINT	DB
A	35
B	40
C	45
D	50
E	55
F	60
G	65
H	70
I	75
J	80
K	85
L	90
M	95
N	100
O	105
P	110
Q	115

FIGURE 11 SOUND PRESSURE LEVEL (SPL) EQUAL LEVEL CONTOURS (DB) 1000 HZ OCTAVE BAND

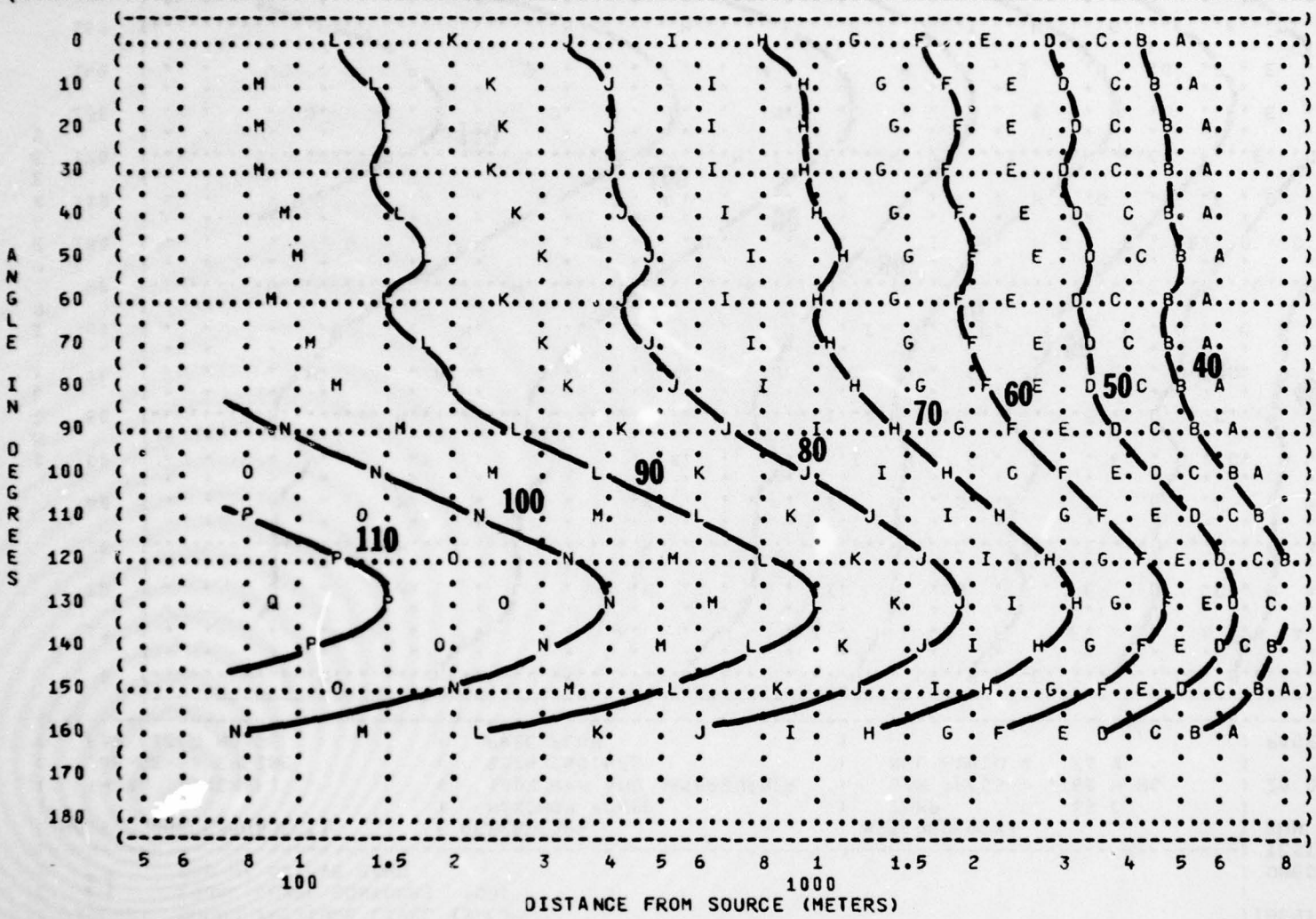
IDENTIFICATION: OMEGA 1.4 TEST 75-002-056 RUN 04 20 OCT 75 PAGE 23

NOISE SOURCE/SUBJECT:
T-38A AIRCRAFT
J85-GE-5A ENGINE
FAR FIELD NOISE

OPERATION:
MAXIMUM POWER
100% RPM AND AFTERBURNER
BOTH ENGINES
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

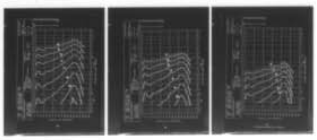
POINT	DB
A	35
B	40
C	45
D	50
E	55
F	60
G	65
H	70
I	75
J	80
K	85
L	90
M	95
N	100
O	105
P	110
Q	115



AD-A048 834 AEROSPACE MEDICAL RESEARCH LAB WRIGHT-PATTERSON AFB OHIO F/G 20/1
USAF BIOENVIRONMENTAL NOISE DATA HANDBOOK: VOLUME 74. T-38A AIR--ETC(U)
FEB 77 R G POWELL

UNCLASSIFIED AMRL-TR-75-50-VOL-74 NL

3 OF 3
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FIGURE: 11

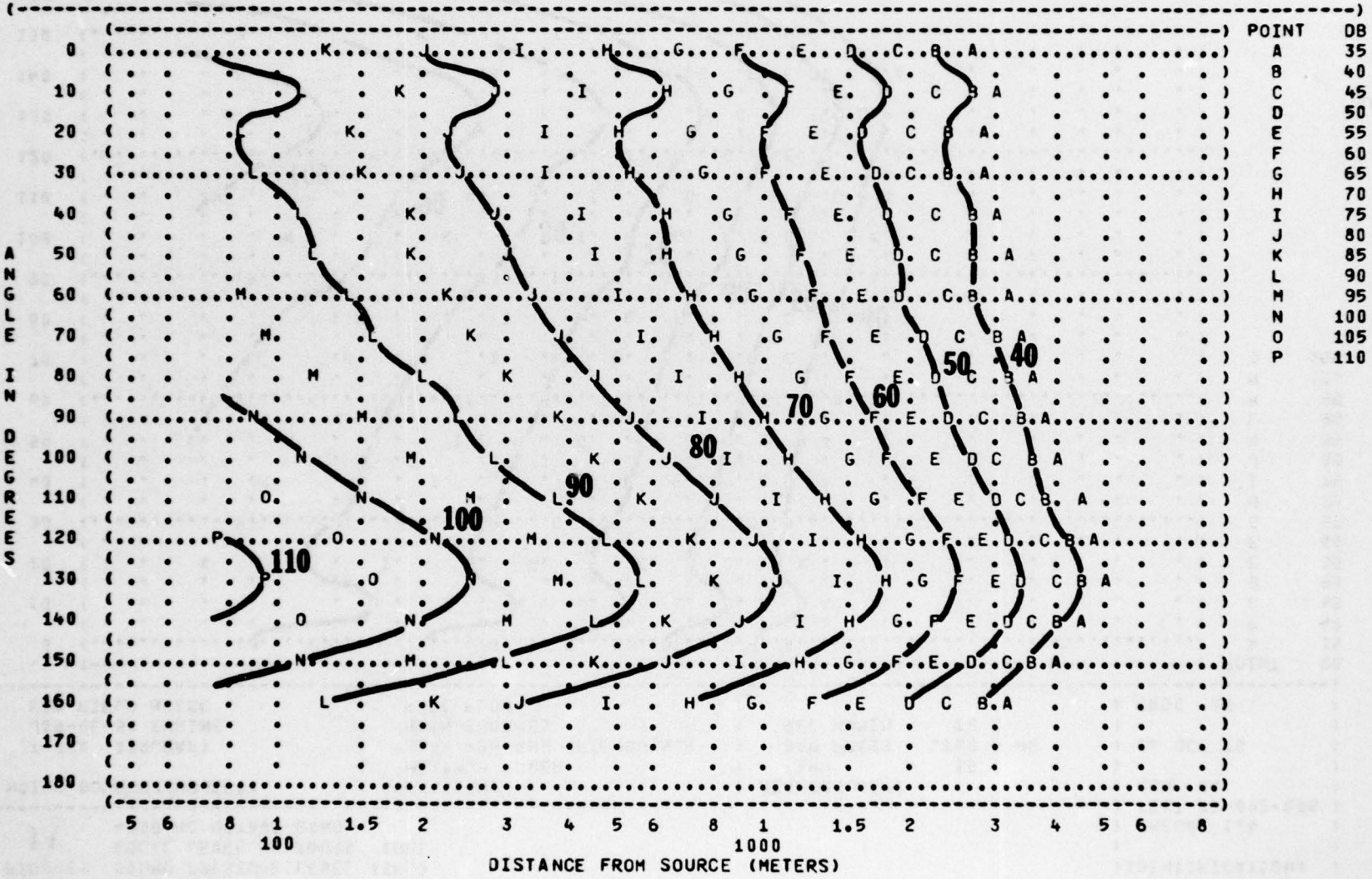
SOUND PRESSURE LEVEL (SPL)
EQUAL LEVEL CONTOURS (DB)
2000 HZ OCTAVE BAND

NOISE SOURCE/SUBJECT:
T-38A AIRCRAFT
J85-GE-5A ENGINE
FAR FIELD NOISE

OPERATION:
MAXIMUM POWER
100% RPM AND AFTERBURNER
BOTH ENGINES
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-056
RUN 04
20 OCT 75
PAGE 24



POINT	DB
A	35
B	40
C	45
D	50
E	55
F	60
G	65
H	70
I	75
J	80
K	85
L	90
M	95
N	100
O	105
P	110

FIGURE 11 SOUND PRESSURE LEVEL (SPL) EQUAL LEVEL CONTOURS (DB) 4000 HZ OCTAVE BAND

NOISE SOURCE/SUBJECT:
T-38A AIRCRAFT
J85-GE-5A ENGINE
FAR FIELD NOISE .

OPERATION:
MAXIMUM POWER
100% RPM AND AFTERBURNER
BOTH ENGINES
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-056
RUN 04
20 OCT 75
PAGE 25

POINT	DB
A	35
B	40
C	45
D	50
E	55
F	60
G	65
H	70
I	75
J	80
K	85
L	90
M	95
N	100
O	105

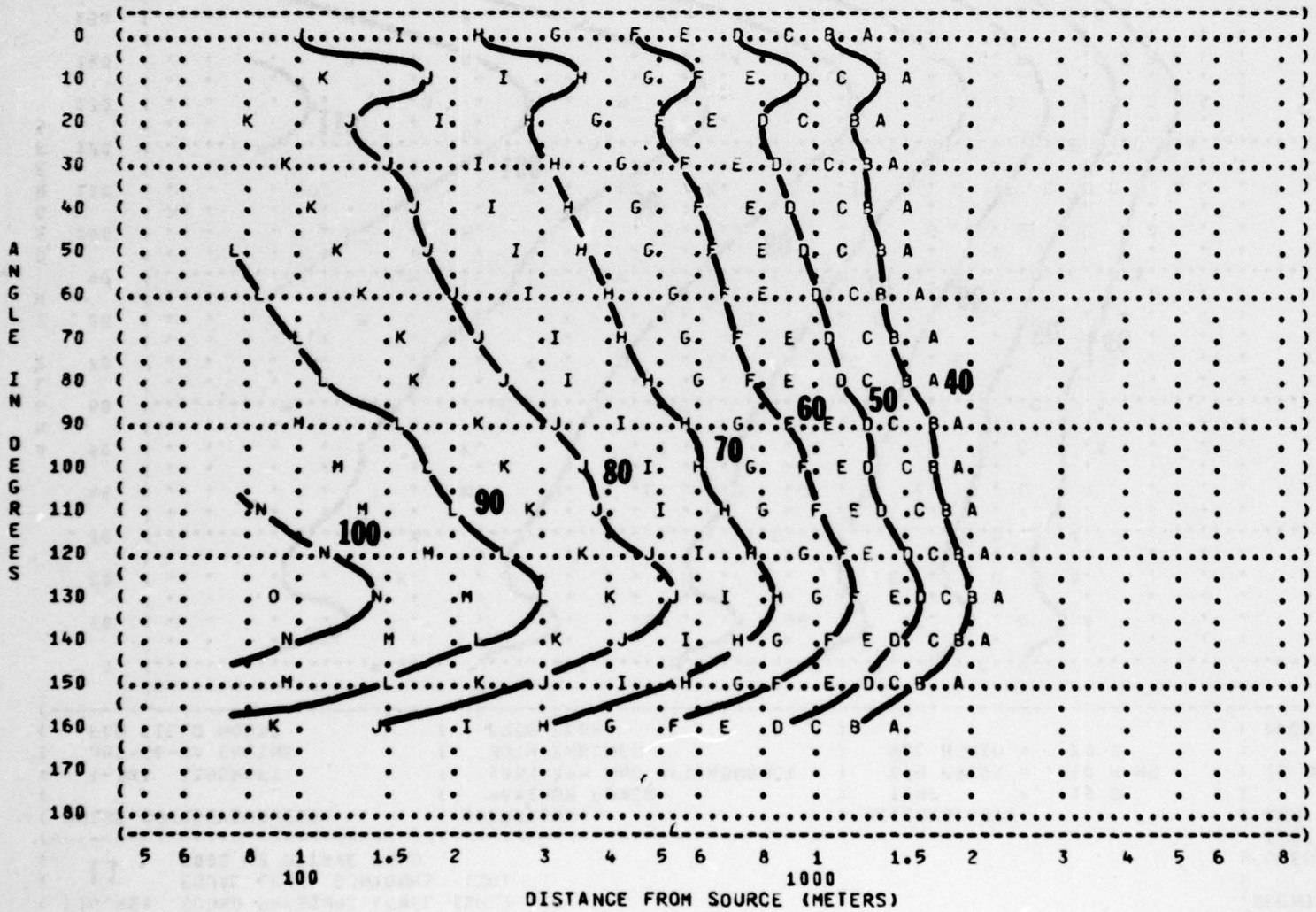


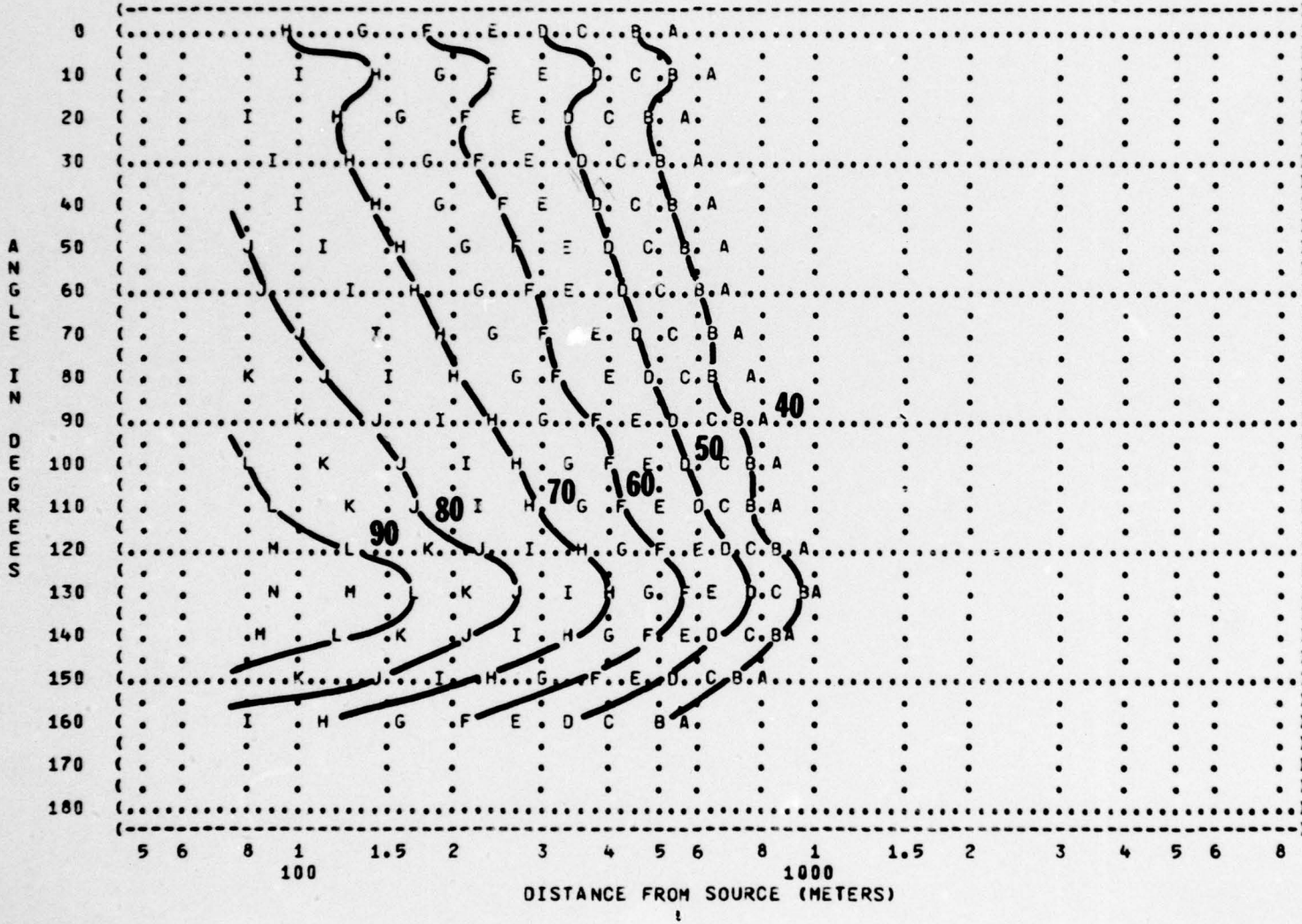
FIGURE 11: SOUND PRESSURE LEVEL (SPL) EQUAL LEVEL CONTOURS (DB) 8000 HZ OCTAVE BAND

NOISE SOURCE/SUBJECT:
T-38A AIRCRAFT
J85-GE-5A ENGINE
FAR FIELD NOISE

OPERATION:
MAXIMUM POWER
100% RPM AND AFTERBURNER
BOTH ENGINES
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-056
RUN 04
20 OCT 75
PAGE 26



POINT	DB
A	35
B	40
C	45
D	50
E	55
F	60
G	65
H	70
I	75
J	80
K	85
L	90
M	95
N	100

*U.S.Government Printing Office: 1977 — 757-080/238