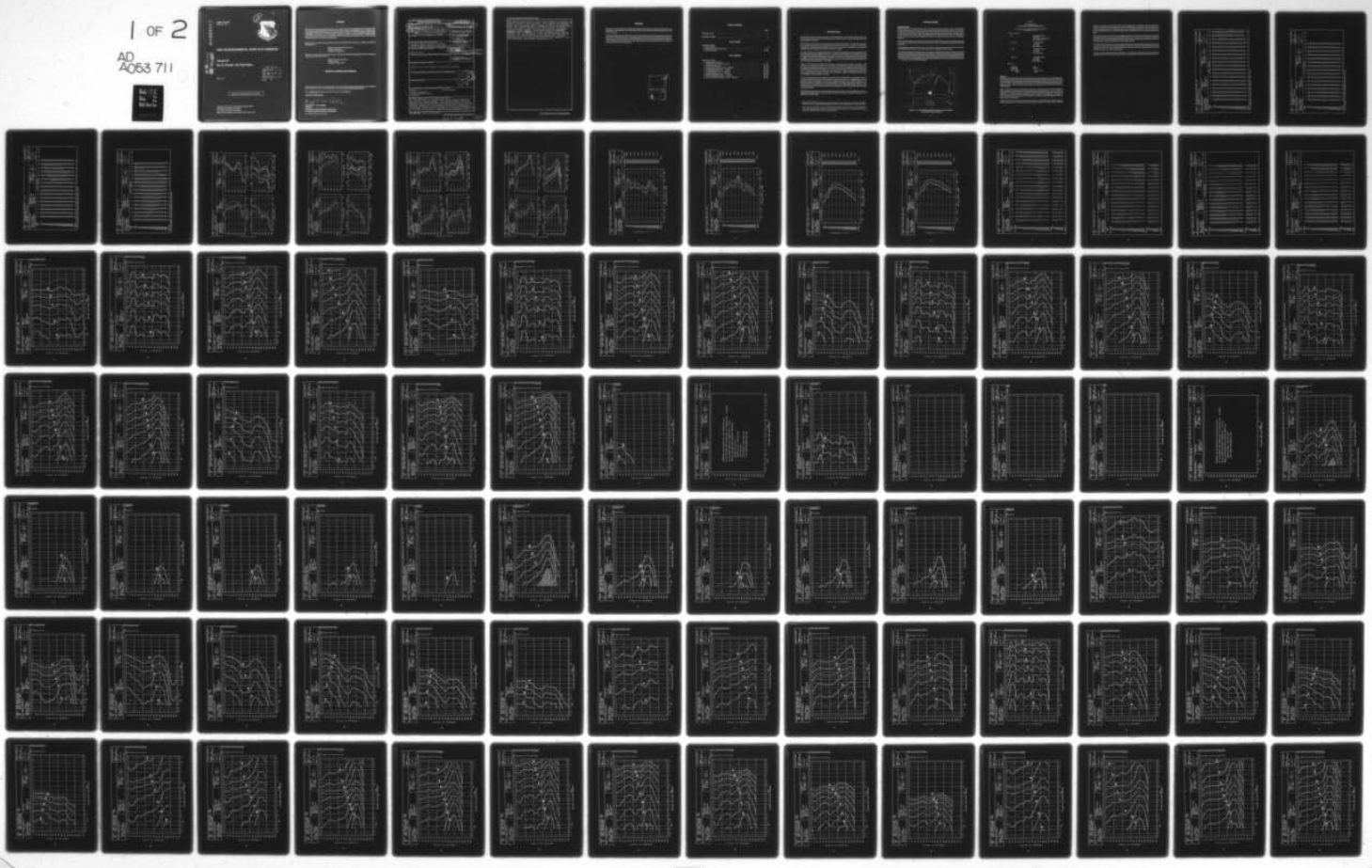
AD-A053 711 AEROSPACE MEDICAL RESEARCH LAB WRIGHT-PATTERSON AFB OHIO F/G 1/2
USAF BIOENVIRONMENTAL NOISE DATA HANDBOOK. VOLUME 93. RA-5C AIR--ETC(U)
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Volume 93

USAF BIOENVIRONMENTAL NOISE DATA HANDBOOK

Volume 93

RA-5C Aircraft, Far-Field Noise

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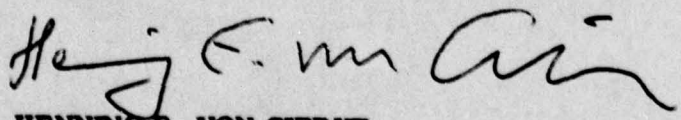
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FOR THE COMMANDER



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

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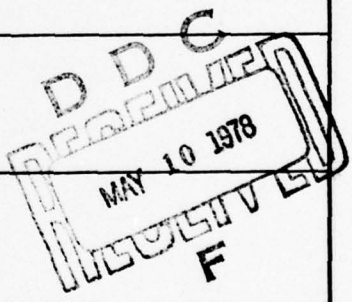
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1. REPORT NUMBER: AMRL-TR-75-50-VOL-93	2. GOVT ACCESSION NO.
3. RECIPIENT'S CATALOG NUMBER: Technical rept.	
4. TITLE (and Subtitle): USAF BIOENVIRONMENTAL NOISE DATA HANDBOOK. RA-5C Aircraft, Far-Field Noise. Volume 93.	5. TYPE OF REPORT & PERIOD COVERED: Volume 93 of a series
	6. PERFORMING ORG. REPORT NUMBER
7. AUTHOR(s)	8. CONTRACT OR GRANT NUMBER(s): 17 04
9. PERFORMING ORGANIZATION NAME AND ADDRESS: Aerospace Medical Research Laboratory, Aerospace Medical Division, Air Force Systems Command, Wright-Patterson AFB OH 45433	10. PROGRAM ELEMENT, PROJECT, TASK AREA & WORK UNIT NUMBERS: 62202F 16 7231-04-33
11. CONTROLLING OFFICE NAME AND ADDRESS: Same as above	12. REPORT DATE: Jun 77 (11)
	13. NUMBER OF PAGES: 101 (12) 101p
14. MONITORING AGENCY NAME & ADDRESS *(if different from Controlling Office)*	15. SECURITY CLASS. *(of this report)*: Unclassified
	15a. DECLASSIFICATION/DOWNGRADING SCHEDULE

16. DISTRIBUTION STATEMENT *(of this Report)*

Approved for public release; distribution unlimited.

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
RA-5C Aircraft

20. ABSTRACT *(Continue on reverse side if necessary and identify by block number)*

The USN RA-5C is a reconnaissance/attack aircraft powered by two J79-GE-8 turbojet engines. This report provides far-field measured and extrapolated data defining both physical and psychoacoustic measures of the bioacoustic environments produced by this aircraft operating on a ground runup pad for four engine/power conditions. Far-field data measured at 19 locations are normalized to standard meteorological conditions and extrapolated from 75-

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8000 meters to derive sets of equal-value contours as a function of angle and distance from the source. These contours are measures of: overall and band sound pressure levels, C-weighted and A-weighted sound levels, preferred speech interference level, perceived noise level, and limiting times for total daily exposure of personnel with and without standard Air Force ear protectors. 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, Capt Nick Farinacci, Mr. Harald Hille, and Mr. Jerry Speakman for their 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 mechanics of data processing, and Mrs. Peggy Massie and Mr. Mike Patterson for assistance in typing and preparation of the graphics.

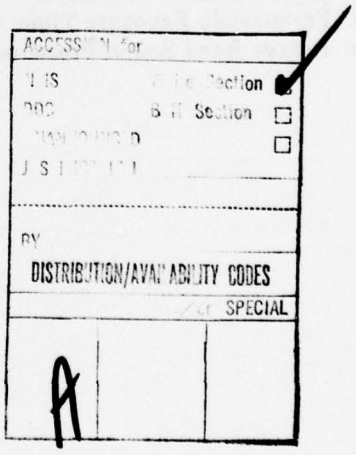


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INTRODUCTION

The USN RA-5C is a reconnaissance/attack aircraft powered by two J79-GE-4 turbojet engines. The aircraft was manufactured by the Columbus Division of Rockwell International 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 RA-5C 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 military 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, the 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 individual volumes are published and is available upon request from AMRL/BBE, Wright-Patterson 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), Aerospace Medical Research Laboratory, Wright-Patterson Air Force Base, Ohio, 1975.

FAR-FIELD NOISE

MEASUREMENTS

AMRL acquired the far-field data during a 1-hour test period thus keeping similar meteorological conditions throughout the test. Figure 1 shows the ground runup area (taxiway), ground cover, aircraft orientation and microphone measurement sites on the semicircle. The center of the 75 meter radius semicircle used in surveying the J79-GE-4 engines was 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 area did not have a blast deflector; therefore, the engines' exhausts were in a "free-flow" condition.

Table 1 provides cockpit readouts of 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 wave-fronts spherically diverge and the noise source may be regarded as a point source.

A portable microphone/tape-recorder sytem was used to sequentially record the noise at each far-field location. 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. These 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.

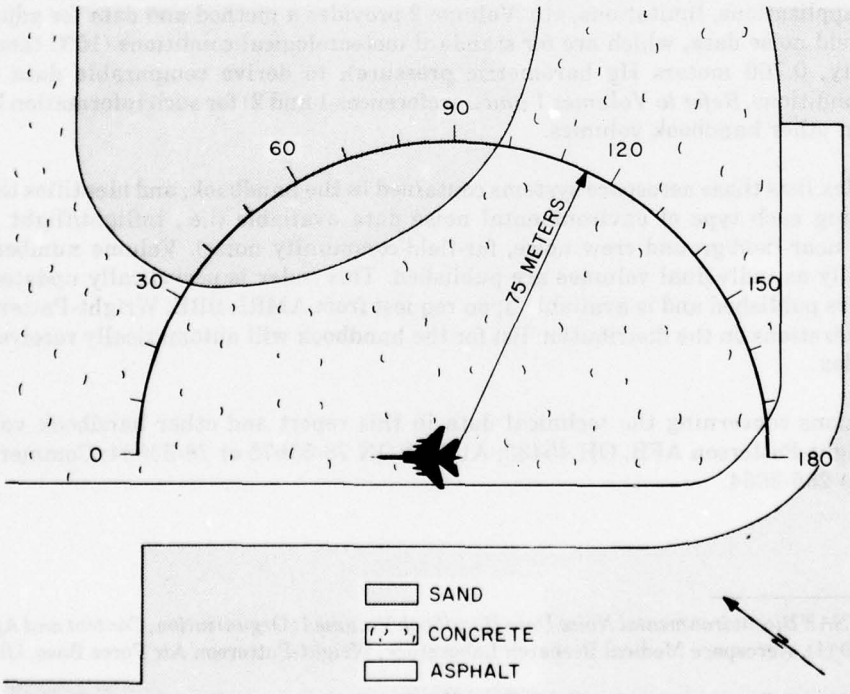


Figure 1. Far-Field Measurement Locations on the Taxiway at ALF, San Clemente Island

TABLE 1

TEST CONDITIONS
FOR FAR-FIELD NOISE MEASUREMENTS

RA-5C Aircraft, Ground Runups, ALF, San Clemente Island
Tail #149304, 19 May 1973

Aircraft Engine Operation	
Idle	#2 (Starboard) Engine 65 % RPM 400 C, Exhaust Gas Temperature 1000 LBS/HR, Fuel Flow
80% Runup	#2 (Starbord) Engine 80 % RPM 375 C, EGT 2000 LBS/HR, FF
Military	#2 (Starboard) Engine 100 % RPM 630 C, EGT 7800 LBS/HR, FF
Afterburner	#2 (Starboard) Engine 100 % RPM 630 C, EGT 44,500 LBS/HR, FF
Meteorology	
Temperature	15.6 C
Bar Pressure	0.761 M Hg
Rel Humidity	84 %
Wind — Speed	2.1 M/Sec (4 KTS)
— Direction	240 Deg

RESULTS

Table 2 lists the overall and 1/3 octave band SPL measured at the far-field locations under meteorological conditions at the time of 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 2 which provides a compact summary of the far-field noise characteristics of the RA-5C aircraft in a standard format.

Figure 3 and Table 3 present two basic acoustic measures, the acoustic power level and the directivity index, respectively. The acoustic power level describes the power radiated by the souce 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 the noise levels for intermediate power settings (e.g., 85% RPM) and/or different number of engines operating (e.g., two engines) can be determined as explained in Volume 1 of this handbook.

Figures 4 through 10 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 160/170/180 locations for all power settings above idle power because of turbulent air flow behind the aircraft. Typically, the A-weighted levels for these angles are 5 to 20 dBA below the level measured at the 150 degree 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 2, 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.

TABLE: 2

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

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-002
RUN 01
05 MAY 75
PAGE 2

NOISE SOURCE/SUBJECT:
RA-5C AIRCRAFT
J79-GE-8C ENGINE
FAR FIELD NOISE

OPERATION:
IDLE
65% RPM
SINGLE ENGINE
FREE FLOW

METEOROLOGY:
TEMP = 16 C
BAR PRESS = .761 M HG
REL HUMID = 84 %

FREQ (HZ)	ANGLE (DEGREES) 0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
25	69<	69<	69<	71<	69<	71<	71<	72<	72<	71<	73<	73<	75<	74<	71<	70<	70<	69<	72<
31.5	77	78	80	81	83	82	83	82	84	83	85	83	84	82	79	78	77	77	77
40	81	82	83	84	86	85	85	86	87	88	88	86	87	86	81	79	77	80	81
50	72	72	73	77	77	77	78	80	78	77	77	77	77	77	74	70	66<	70	73
63	67<	69<	71	73	73	73	73	72	72	72	75	75	75	78	74	67<		63<	68<
80	70	72	74	74	71	73	73	70	73	76	77	79	79	78	73	68	55<	58<	63<
100	70	71	73	73	73	72	71	69	72	73	76	78	77	78	75	68	55<	57<	61<
125	71	72	73	74	75	72	72	71	74	78	79	81	81	83	78	69	60<	59<	64
160	69	72	73	74	71	70	70	72	76	78	81	82	81	83	77	67	59<	56<	62
200	69	70	71	69	68	65	64	65	69	71	76	78	77	81	74	65	54<	54<	57<
250	72	72	73	71	68	67	68	69	70	72	76	78	77	79	73	66	53<	52<	59
315	74	75	73	69	67	67	67	67	69	71	77	79	80	80	73	64	53<	51<	55
400	75	76	74	71	70	69	68	69	70	70	76	78	79	79	73	64	52	49<	53
500	77	76	72	72	70	68	65	65	66	67	71	74	76	75	67	60	50	47<	49
630	76	75	73	72	69	68	64	64	63	63	68	73	74	70	62	58	48<	47<	46<
800	77	75	74	71	71	69	64	63	65	65	70	72	72	70	63	59	50	47<	46<
1000	77	74	74	72	70	69	64	63	64	64	68	69	67	64	60	57	48	46<	45<
1250	77	75	76	75	74	70	65	63	63	63	68	70	66	63	60	58	48	47	45<
1600	91	92	92	87	84	83	74	70	67	66	67	70	69	68	67	66	58	55	53
2000	85	86	86	83	81	79	73	69	66	63	65	68	67	66	64	63	55	51	48
2500	83	83	84	82	82	80	74	70	66	62	64	66	64	65	63	60	53	49	47
3150	78	77	78	76	75	74	68	66	62	58	60	62	61	63	59	56	48	45	42<
4000	79	78	79	77	76	75	70	66	63	59	62	63	62	64	60	57	49	45<	42<
5000	76	75	76	75	73	73	67	65	61	60	64	64	64	64	59	56	48	45<	41<
6300	73	72	72	71	69	69	64	62	60	60	64	64	63	63	58	54	47	44<	41<
8000	71	69	70	69	67	66	62	59	58	57	61	61	60	61	56	52	44<	41<	37<
10000	66	65	65	65	62	62	58	56	54	54	57	58	57	57	52	48<	41<		
OVERALL	94	94	95	92	92	90	89	89	90	90	92	92	92	92	87	83	81	82	83

< LEVEL CORRECTED TO REMOVE BACKGROUND/ELECTRONIC NOISE.

TABLE: 2

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

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-002
RUN 02
05 MAY 75
PAGE 2

NOISE SOURCE/SUBJECT:
RA-5C AIRCRAFT
J79-GE-8C ENGINE
FAR FIELD NOISE

OPERATION:
80% RPM
SINGLE ENGINE
FREE FLOW

METEOROLOGY:
TEMP = 16 C
BAR PRESS = .761 M HG
REL HUMID = 84 %

FREQ (HZ)	ANGLE (DEGREES) 0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
25	69<	68<	67<	70<	70<	70<	69<	69<	71<	71<	72<	72<	74<	77<	77<	78			
31.5	75<	75<	77	77	77	76	74<	78	78	79	78	78	80	80	80	79			
40	75	77	77	80	77	77	78	80	83	83	81	82	85	85	83	84			
50	71	72	75	76	77	76	78	78	79	80	83	84	84	85	87	85			
63	72	75	77	78	77	77	80	80	79	82	84	84	87	89	90	85			
80	73	75	78	78	78	78	79	80	81	83	83	85	88	91	92	84			
100	76	79	82	81	82	82	82	82	83	85	85	88	90	93	95	84			
125	76	79	83	84	82	81	82	82	85	87	89	91	93	95	94	82			
160	76	81	82	84	82	81	82	83	84	86	88	89	91	92	92	77			
200	75	79	80	81	81	80	81	83	84	84	88	89	90	90	89	75			
250	77	79	81	83	82	83	83	85	85	87	89	90	90	88	87	73			
315	81	82	85	88	85	88	87	89	90	88	93	92	91	88	87	73			
400	91	92	100	95	90	92	89	88	88	87	95	94	90	92	91	80			
500	88	95	105	102	96	99	98	96	98	96	101	100	97	99	97	84			
630	80	82	85	87	88	87	88	90	91	89	93	92	88	84	80	69			
800	79	80	82	83	84	84	82	84	86	84	89	88	85	77	74	64			
1000	79	77	82	81	83	82	81	85	85	83	87	85	82	77	72	62			
1250	81	79	81	80	80	80	78	82	82	81	84	83	80	70	68	60			
1600	90	85	84	83	82	81	79	80	80	79	81	81	77	69	66	59			
2000	97	96	94	94	92	88	84	81	80	78	80	80	77	71	68	62			
2500	89	90	89	91	89	88	83	81	78	76	77	78	74	69	65	59			
3150	85	84	85	83	83	81	77	77	77	74	74	75	73	66	63	56			
4000	87	88	89	88	86	84	80	80	78	75	75	75	73	66	64	58			
5000	84	84	85	85	84	83	79	78	76	74	74	74	70	65	62	57			
6300	81	82	82	82	80	79	74	74	72	71	71	73	68	63	61	57			
8000	78	79	79	78	76	76	72	71	70	68	70	70	67	62	60	55			
10000	74	74	75	75	73	73	68	68	67	64	66	66	64	58	57	52			
OVERALL	100	101	107	104	100	102	100	99	101	100	104	104	102	103	103	93			

< LEVEL CORRECTED TO REMOVE BACKGROUND/ELECTRONIC NOISE.

TABLE: 2

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

NOISE SOURCE/SUBJECT:
RA-5C AIRCRAFT
J79-GE-8C ENGINE
FAR FIELD NOISE

OPERATION:
MILITARY POWER
100% RPM
SINGLE ENGINE
FREE FLOW

METEOROLOGY:
TEMP = 16 C
BAR PRESS = .761 M HG
REL HUMID = 84 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-002
RUN 03
05 MAY 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	76<	74<	74<	75<	77<	78	76<	80	77<	81	82	85	91	93	94	95			
31.5	79	77	78	80	81	81	81	82	82	84	84	88	92	95	96	96			
40	80	79	80	84	83	83	86	86	86	87	88	90	94	99	100	100			
50	80	78	79	81	82	83	83	86	86	87	89	91	96	100	101	98			
63	81	81	82	85	84	85	86	88	86	89	92	95	99	103	103	99			
80	81	80	84	86	85	86	86	88	89	92	95	99	105	107	105	100			
100	85	84	88	89	88	88	90	90	90	93	98	104	110	111	107	99			
125	85	86	88	90	90	90	90	90	93	96	99	107	114	113	108	95			
160	87	90	91	92	91	91	92	93	92	97	101	107	114	114	107	92			
200	88	91	91	92	92	91	92	92	94	95	102	109	115	114	107	95			
250	90	92	91	93	93	92	92	94	94	98	104	110	115	114	107	96			
315	91	91	91	94	93	93	94	94	97	98	105	111	115	111	104	93			
400	94	91	94	95	95	95	95	96	98	98	105	110	115	108	102	93			
500	93	91	96	98	96	97	96	95	98	98	106	110	113	107	101	93			
630	92	93	95	97	98	99	97	96	99	98	106	110	112	105	100	93			
800	93	93	95	98	100	101	98	97	100	100	107	109	110	104	100	95			
1000	91	91	94	97	98	99	96	94	97	97	104	107	109	103	98	92			
1250	91	90	93	97	98	99	95	95	98	97	103	106	108	101	96	89			
1600	92	90	92	96	96	97	95	95	98	97	104	105	106	98	95	87			
2000	90	88	90	94	95	96	93	94	97	97	103	104	106	98	93	86			
2500	89	87	89	93	93	96	93	92	95	96	101	102	103	95	92	84			
3150	86	84	86	90	91	93	90	90	94	95	99	99	101	93	91	81			
4000	87	84	86	89	91	93	90	90	93	94	100	99	101	93	90	81			
5000	86	84	85	88	89	91	89	88	91	92	97	97	99	91	88	79			
6300	83	81	82	85	86	88	85	85	88	89	94	94	96	89	85	76			
8000	83	82	81	83	85	86	83	82	85	86	91	92	94	86	83	74			
10000	80	79	79	80	81	82	80	78	81	82	88	88	90	83	79	71			
OVERALL	103	102	105	107	107	108	107	106	109	110	116	120	124	122	116	109			

< LEVEL CORRECTED TO REMOVE BACKGROUND/ELECTRONIC NOISE.

TABLE: 2

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

NOISE SOURCE/SUBJECT:
RA-5C AIRCRAFT
J79-GE-8C ENGINE
FAR FIELD NOISE

OPERATION:
AFTERBURNER POWER
100% RPM
SINGLE ENGINE
FREE FLOW

METEOROLOGY:
TEMP = 16 C
BAR PRESS = .761 M HG
REL HUMID = 84 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-002
RUN 04
05 MAY 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	87	89	87	88	88	90	90	90	91	91	94	97	99	102	103	102			
31.5	90	90	87	89	89	91	90	93	92	93	96	100	104	104	103	101			
40	91	90	89	90	93	92	93	95	95	97	100	104	107	109	106	102			
50	89	88	91	91	92	94	94	94	95	97	99	105	107	108	106	98			
63	90	91	92	95	94	95	96	95	96	97	101	108	111	110	105	96			
80	90	92	94	95	95	95	95	95	97	100	103	110	114	112	105	95			
100	92	94	97	97	96	98	98	99	99	102	107	115	117	114	104	93			
125	93	96	98	98	98	99	99	99	100	103	110	118	118	114	102	91			
160	93	99	99	100	100	100	100	101	103	106	111	119	119	114	99	90			
200	92	99	99	99	99	100	100	101	103	106	113	120	120	113	99	91			
250	95	100	100	100	100	101	102	102	105	107	115	121	119	112	99	90			
315	95	98	98	101	100	101	103	103	106	108	117	120	118	109	97	90			
400	96	97	100	101	100	102	103	103	105	108	116	119	117	106	95	91			
500	96	96	100	101	100	102	103	103	105	109	116	119	116	107	95	90			
630	95	96	98	101	100	103	104	103	106	110	115	118	114	108	93	89			
800	93	96	98	101	101	102	103	104	106	110	115	117	114	107	92	88			
1000	93	94	97	101	100	102	103	104	106	109	114	116	112	106	91	87			
1250	94	95	97	100	100	101	103	104	106	109	113	115	112	104	91	86			
1600	94	94	97	99	100	101	102	105	107	108	111	114	110	102	88	84			
2000	92	92	96	98	98	100	101	103	106	107	110	113	110	101	87	84			
2500	93	93	96	98	97	100	101	103	105	105	108	111	108	99	86	83			
3150	89	89	92	95	95	97	98	100	102	104	107	109	106	97	84	81			
4000	89	89	91	94	94	96	98	99	102	104	107	110	106	97	85	80			
5000	87	87	90	92	92	94	95	97	101	102	105	109	104	95	83	79			
6300	84	85	87	89	89	91	93	95	98	99	103	107	102	93	80	76			
8000	83	84	85	87	86	89	90	92	96	97	102	105	100	90	78	73			
10000	80	81	82	84	83	85	86	89	93	93	99	103	97	88	74	69			
OVERALL	106	109	110	112	112	113	114	115	117	120	126	130	128	123	114	108			

LEVEL CORRECTED TO REMOVE BACKGROUND/ELECTRONIC NOISE.

FIGURE: NORMALIZED FARFIELD NOISE LEVELS

2 DISTANCE = 100 METERS

NOISE SOURCE/SUBJECT:
RA-5C AIRCRAFT
J79-GE-8C ENGINE
FAR FIELD NOISE

OPERATION:
IDLE
65% RPM
SINGLE ENGINE
FREE FLOW

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

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-082
RUN 01
05 MAY 75
PAGE 6

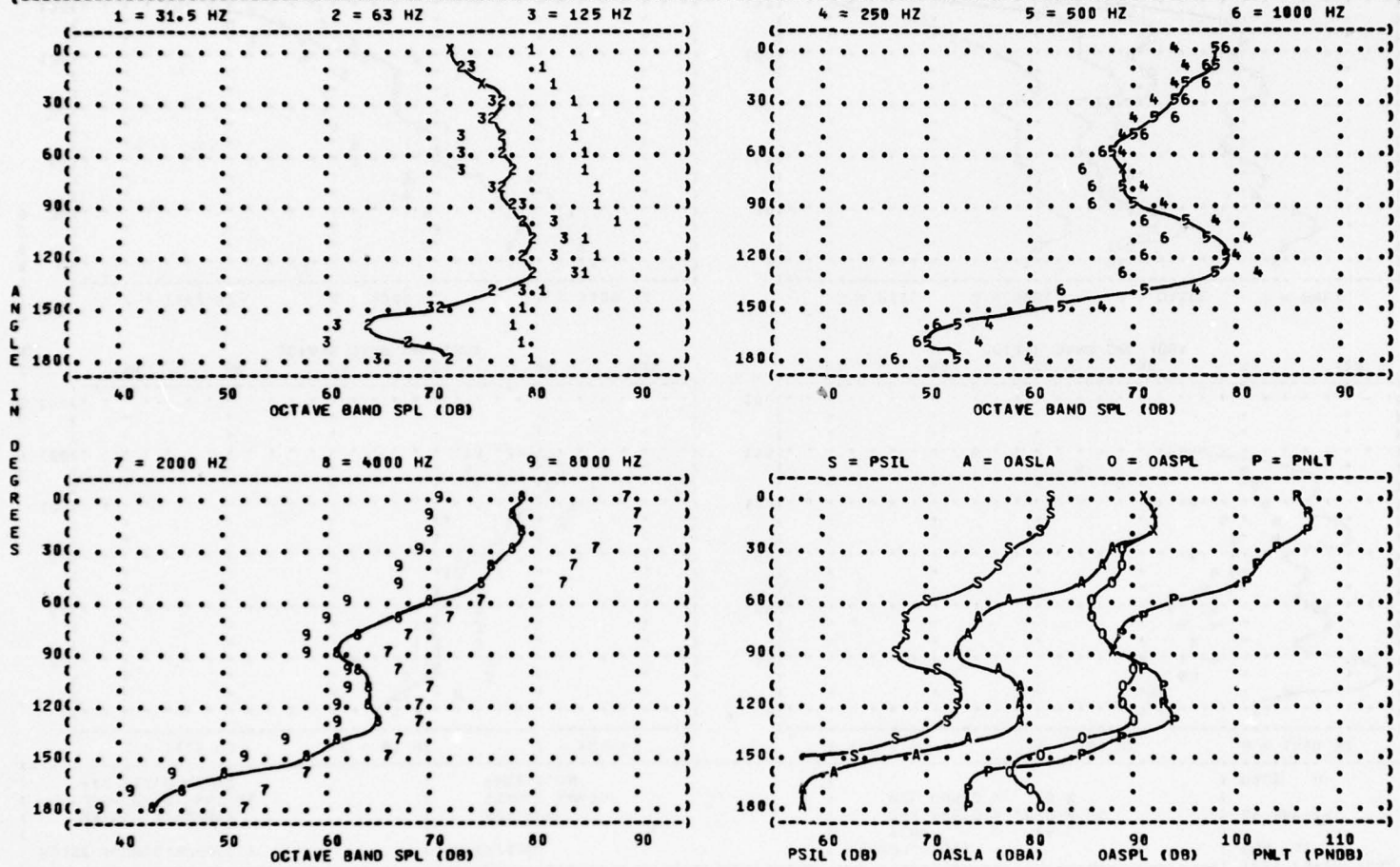


FIGURE: NORMALIZED FARFIELD NOISE LEVELS

2 DISTANCE = 100 METERS

NOISE SOURCE/SUBJECT:
RA-5C AIRCRAFT
J79-GE-8C ENGINE
FAR FIELD NOISE

OPERATION:
80% RPM
SINGLE ENGINE
FREE FLOW

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

IDENTIFICATION:
OMEGA 1.4
TEST 75-802-002
RUN 02
05 MAY 75
PAGE 6

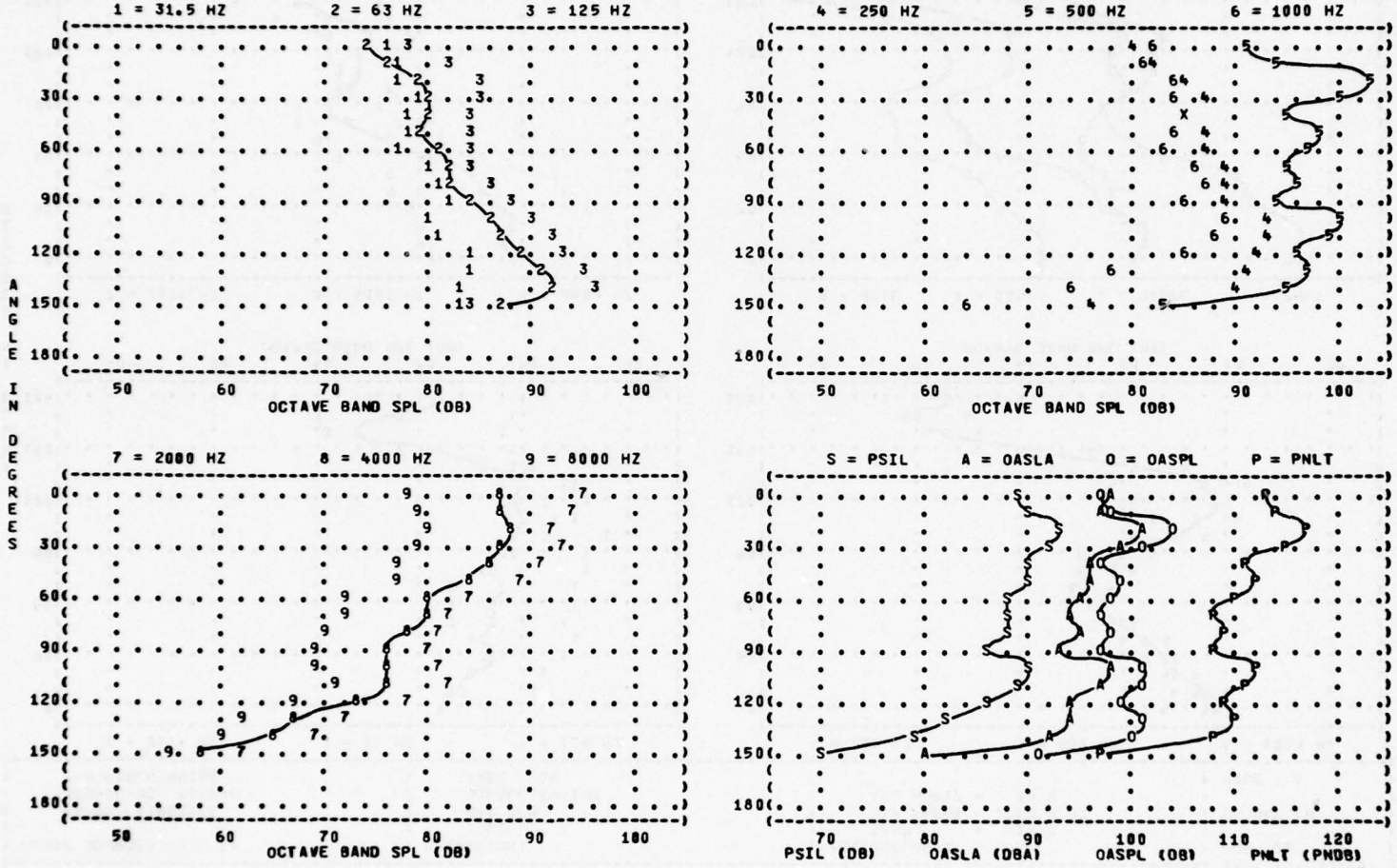


FIGURE: NORMALIZED FARFIELD NOISE LEVELS

2 DISTANCE = 100 METERS

NOISE SOURCE/SUBJECT:
RA-5C AIRCRAFT
J79-GE-8C 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 75-002-002
RUN 03
05 MAY 75
PAGE 6

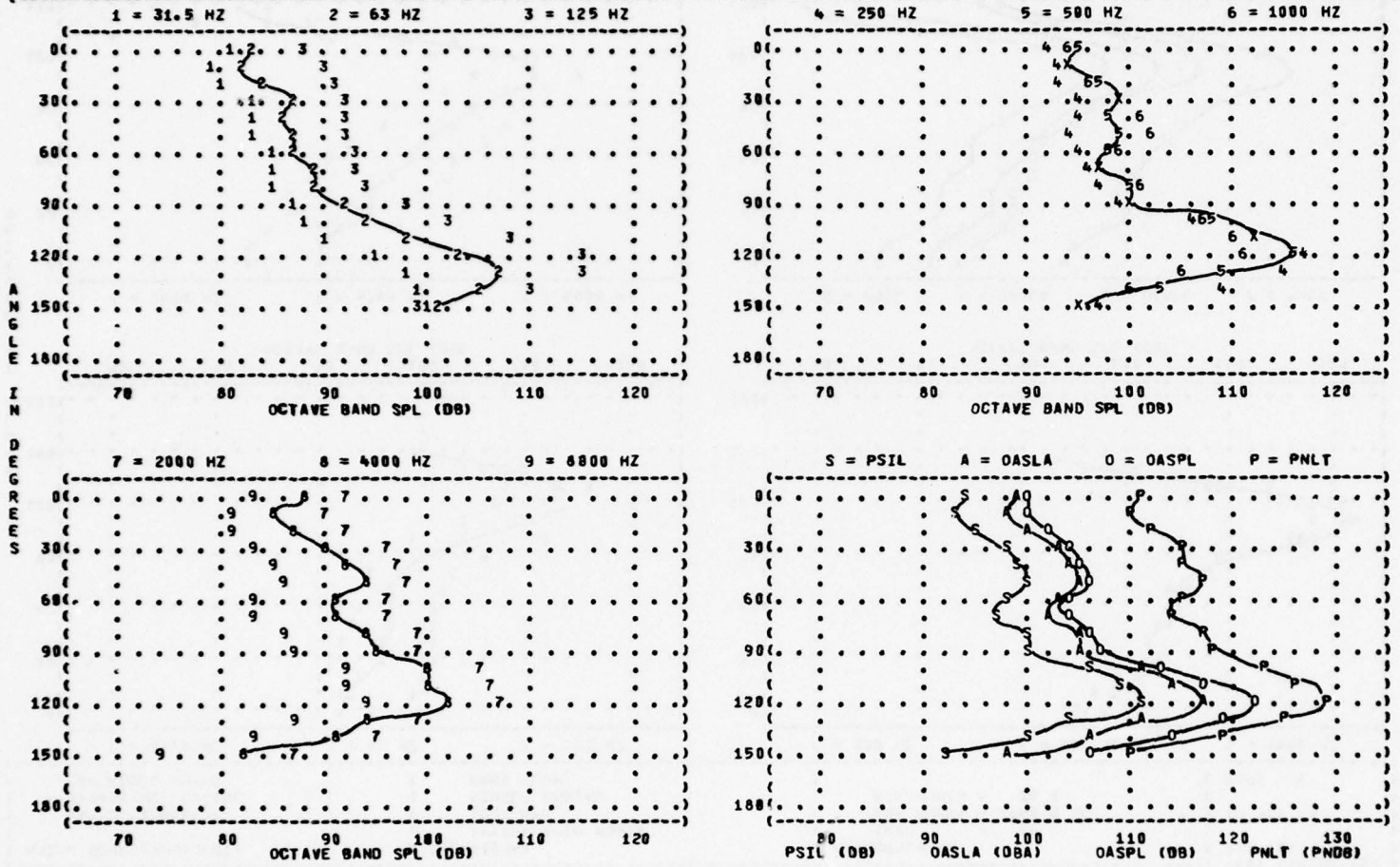


FIGURE: NORMALIZED FARFIELD NOISE LEVELS

2 DISTANCE = 100 METERS

NOISE SOURCE/SUBJECT:
RA-5C AIRCRAFT
J79-GE-8C ENGINE
FAR FIELD NOISE

OPERATION:
AFTERBURNER POWER
100% RPM
SINGLE ENGINE
FREE FLOW

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

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-002
RUN 04
05 MAY 75
PAGE 6

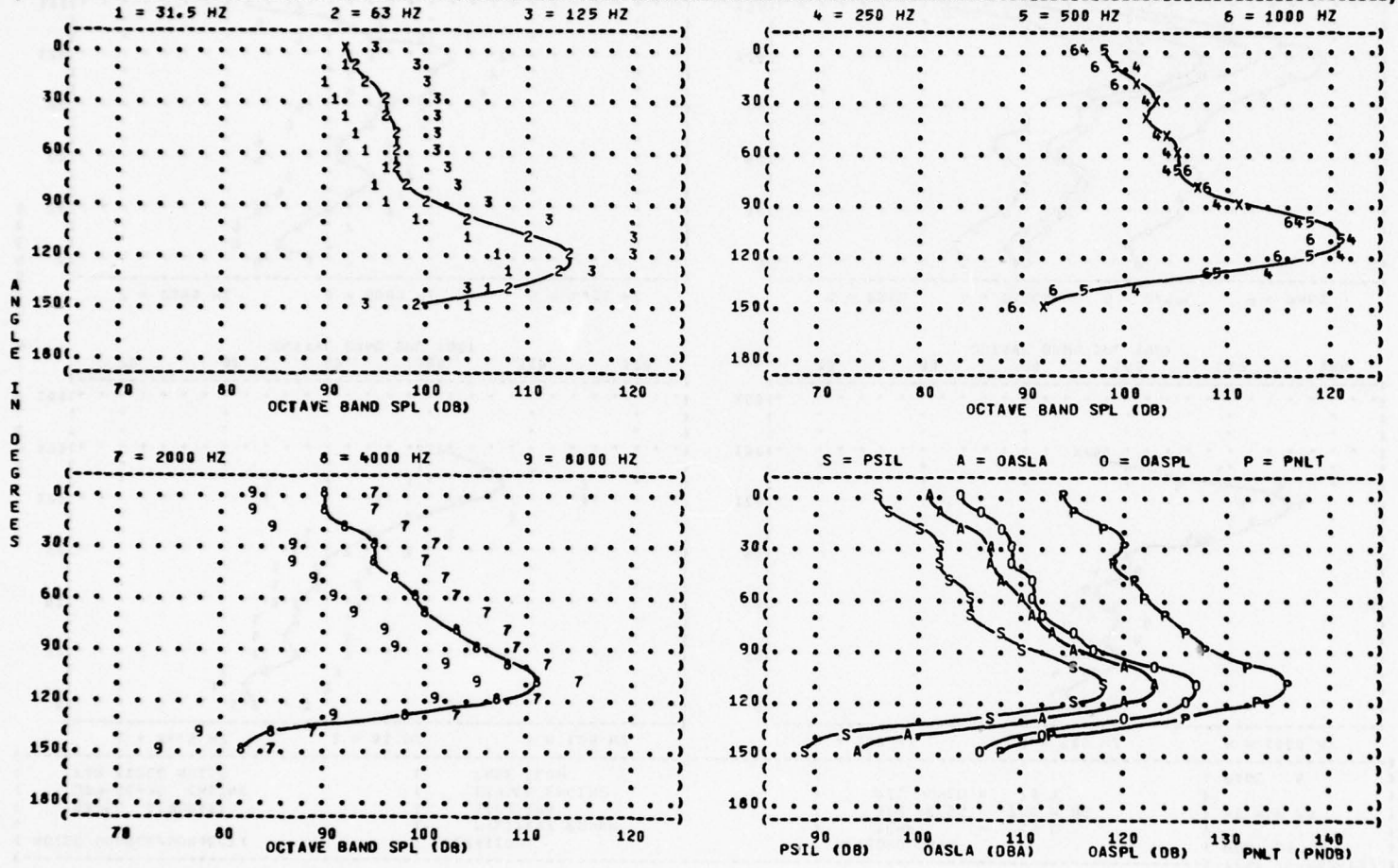


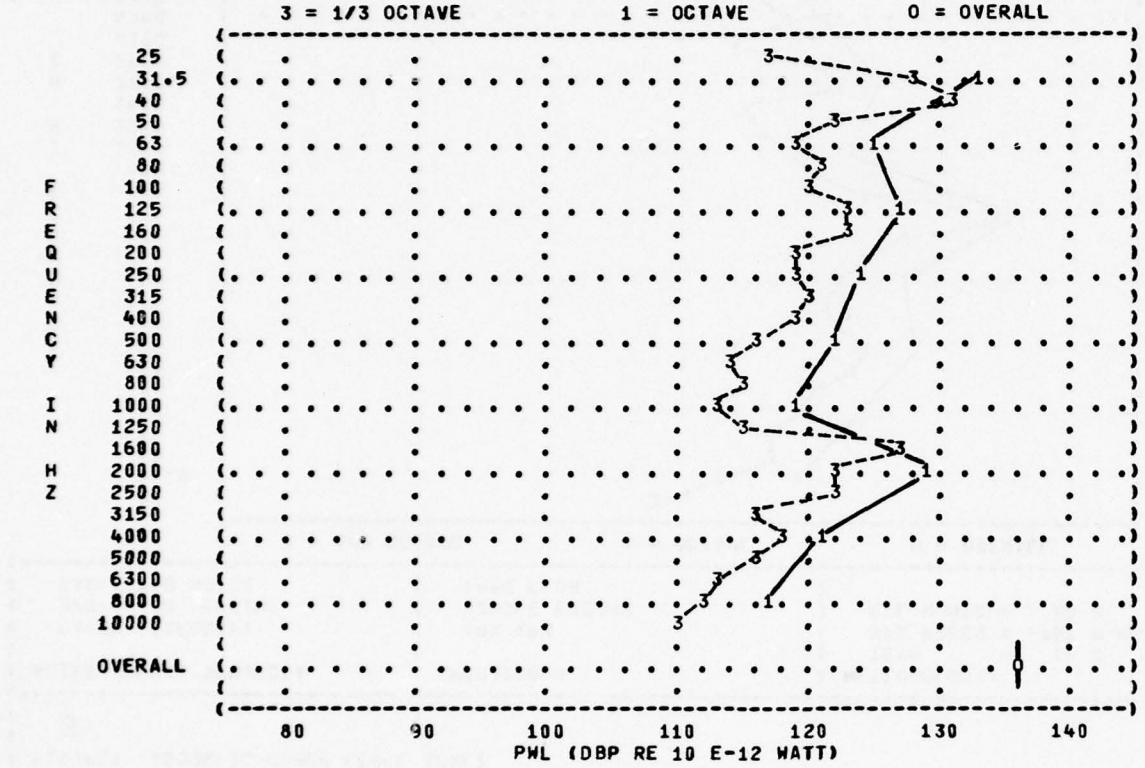
FIGURE: 3 ACOUSTIC POWER LEVEL (PWL)

NOISE SOURCE/SUBJECT:
RA-5C AIRCRAFT
J79-GE-8C ENGINE
FAR FIELD NOISE

OPERATION:
IDLE
65% RPM
SINGLE ENGINE
FREE FLOW

METEOROLOGY:
TEMP = 16 C
BAR PRESS = .761 M HG
REL HUMID = 84 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-002
RUN 01
05 MAY 75
PAGE 3

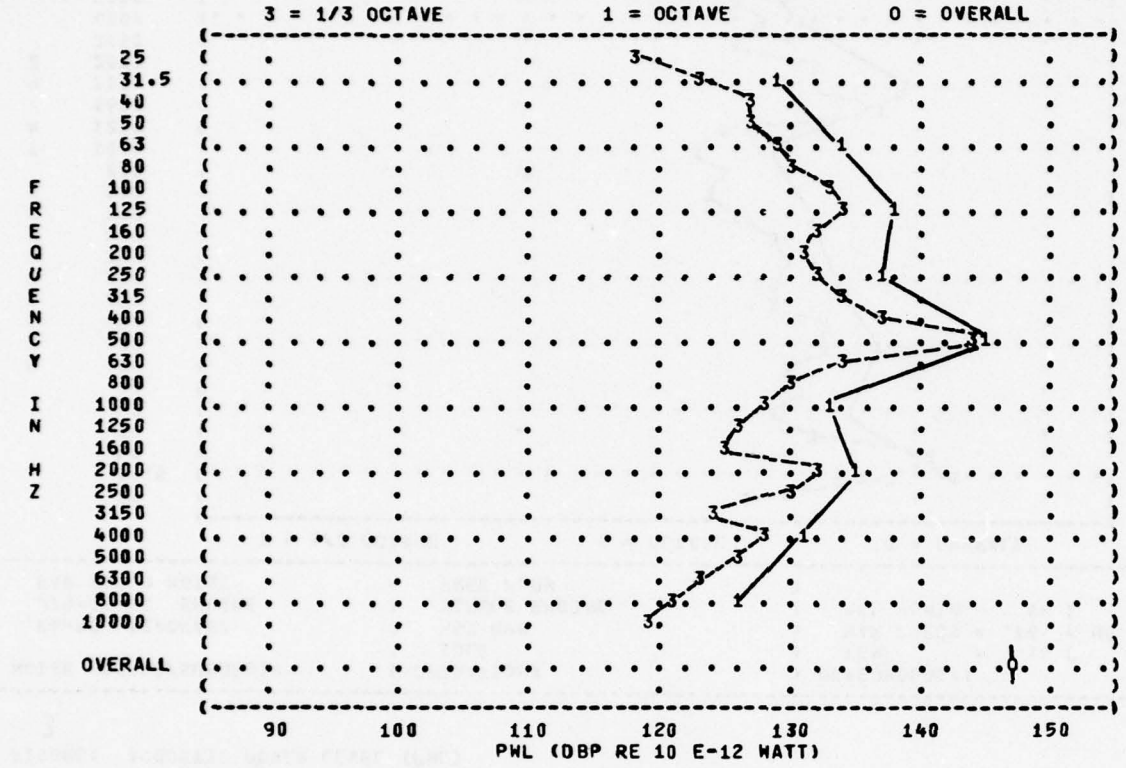


	PWL 1/3 OCTAVE	PWL OCTAVE
25	117.2	
31.5	127.8	132.8
40	131.0	
50	122.0	
63	118.7	125.4
80	120.6	
100	119.5	
125	123.0	127.0
160	123.4	
200	119.4	
250	119.0	124.3
315	120.0	
400	119.4	
500	116.3	122.0
630	114.4	
800	114.5	
1000	113.1	118.9
1250	114.6	
1600	126.7	
2000	122.4	129.0
2500	121.9	
3150	116.2	
4000	117.6	121.4
5000	115.8	
6300	113.3	
8000	112.0	116.7
10000	109.6	
OVERALL	136.3	

FIGURE: ACOUSTIC POWER LEVEL (PWL)

3

NOISE SOURCE/SUBJECT:	OPERATION:	METEOROLOGY:	IDENTIFICATION:
RA-5C AIRCRAFT	80% RPM	TEMP = 16 C	OMEGA 1.4
J79-GE-8C ENGINE	SINGLE ENGINE	BAR PRESS = .761 M HG	TEST 75-002-002
FAR FIELD NOISE	FREE FLOW	REL HUMID = 84 %	RUN 02
			05 MAY 75
			PAGE 3



FREQUENCY	PWL 1/3 OCTAVE	PWL OCTAVE
25	118.0	
31.5	123.2	128.8
40	126.9	
50	127.1	
63	129.2	133.8
80	130.3	
100	132.8	
125	134.1	137.9
160	132.3	
200	131.2	
250	131.8	137.5
315	134.4	
400	137.2	
500	143.9	145.1
630	134.3	
800	129.9	
1000	128.4	133.2
1250	126.1	
1600	125.4	
2000	132.3	134.8
2500	129.9	
3150	124.3	
4000	127.9	131.1
5000	126.0	
6300	123.1	
8000	121.2	126.3
10000	119.3	
OVERALL	147.3	

FIGURE: ACOUSTIC POWER LEVEL (PWL)

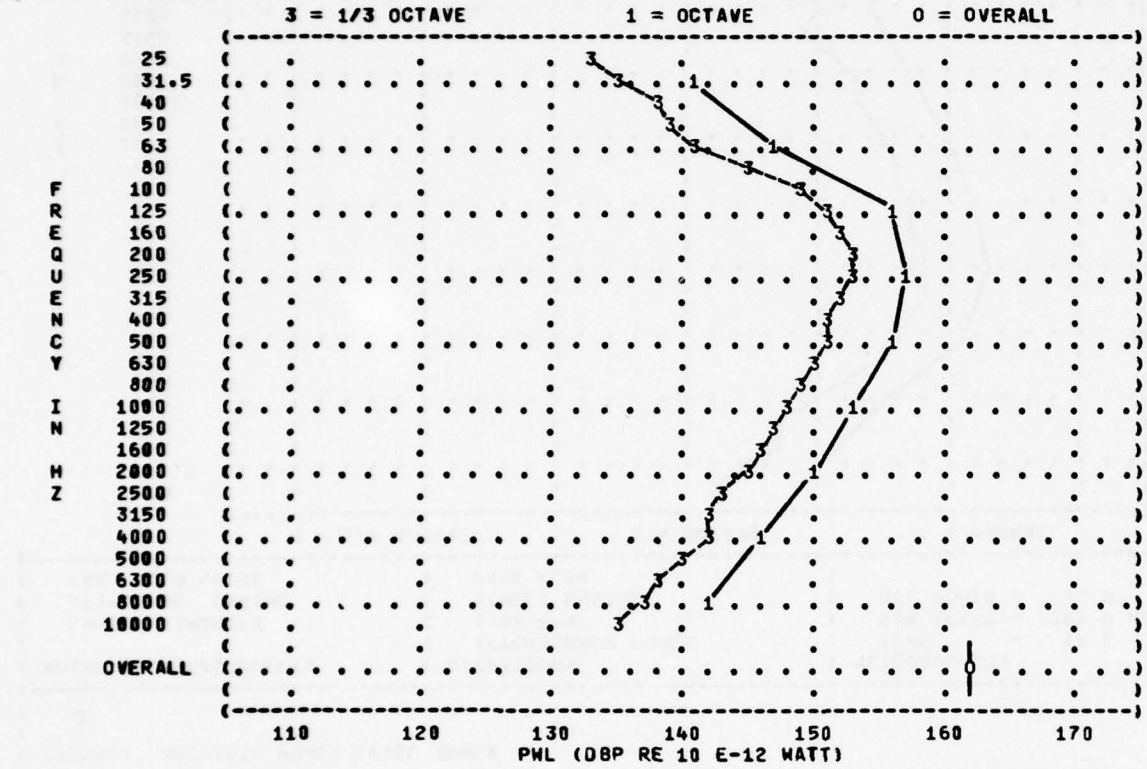
3

NOISE SOURCE/SUBJECT:
RA-5C AIRCRAFT
J79-GE-8C ENGINE
FAR FIELD NOISE

OPERATION:
MILITARY POWER
100% RPM
SINGLE ENGINE
FREE FLOW

METEOROLOGY:
TEMP = 16 C
BAR PRESS = .761 M HG
REL HUMID = 84 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-002
RUN 03
05 MAY 75
PAGE 3



1/3 OCTAVE	PWL OCTAVE
132.8	
134.7	140.5
136.1	
136.6	
141.1	147.1
144.9	
148.8	
151.2	155.6
151.9	
152.5	
152.9	157.3
152.1	
151.5	
150.7	155.6
150.1	
149.4	
147.7	152.9
146.9	
145.9	
145.4	149.8
143.4	
141.6	
142.1	146.2
140.2	
138.0	
136.9	141.5
134.7	
	162.2

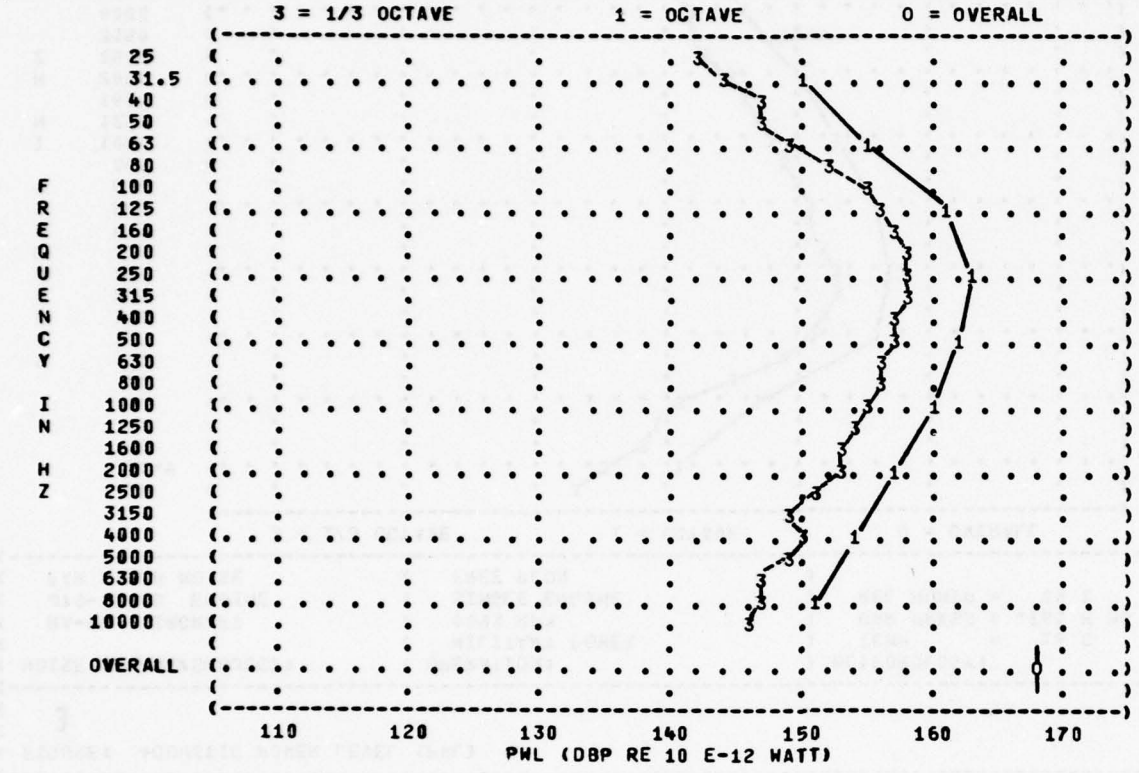
FIGURE: 3 ACOUSTIC POWER LEVEL (PWL)

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-002
RUN 04
05 MAY 75
PAGE 3

NOISE SOURCE/SUBJECT:
RA-5C AIRCRAFT
J79-GE-8C ENGINE
FAR FIELD NOISE

OPERATION:
AFTERBURNER POWER
100% RPM
SINGLE ENGINE
FREE FLOW

METEOROLOGY:
TEMP = 16 C
BAR PRESS = .761 M HG
REL HUMID = 84 %



1/3 OCTAVE	PWL OCTAVE
141.8	
143.6	149.6
147.2	
147.2	
149.5	154.6
151.8	
154.8	
156.4	161.1
157.4	
158.2	
158.4	163.0
158.1	
157.0	
157.0	161.6
156.4	
155.7	
154.8	159.7
154.2	
153.0	
152.6	157.0
150.9	
149.4	
149.9	154.2
148.8	
147.3	
146.7	151.4
145.7	
	168.4

TABLE: 3 DIRECTIVITY INDEX (DB)

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-002
RUN 01
05 MAY 75
PAGE 4

NOISE SOURCE/SUBJECT:
RA-5C AIRCRAFT
J79-GE-8C ENGINE
FAR FIELD NOISE

OPERATION:
IDLE
65% RPM
SINGLE ENGINE
FREE FLOW

METEOROLOGY:
TEMP = 16 C
BAR PRESS = .761 M HG
REL HUMID = 84 %

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	-3	-3	-1	-3	-1	-1	0	-0	-1	1	1	3	2	-1	-2	-2	-3	-0
31.5	-5	-4	-3	-1	0	-0	1	-1	2	0	3	1	1	-0	-4	-5	-6	-5	-6
40	-5	-4	-2	-1	1	-1	-1	0	1	2	3	0	1	0	-5	-7	-9	-6	-5
50	-5	-5	-3	-0	0	0	1	3	1	0	1	0	-0	-0	-3	-7	-11	-7	-4
63	-6	-4	-3	-1	-1	-1	-0	-1	-2	-1	2	2	2	4	0	-7		-10	-5
80	-5	-3	-1	-1	-4	-2	-2	-5	-3	1	2	4	3	3	-3	-7	-21	-18	-12
100	-4	-4	-2	-2	-2	-3	-3	-5	-3	-1	2	4	2	4	1	-7	-19	-17	-13
125	-7	-6	-4	-4	-3	-6	-6	-7	-4	-0	2	4	4	5	1	-9	-18	-19	-14
160	-9	-6	-6	-5	-7	-8	-8	-6	-2	0	3	4	3	5	-2	-12	-19	-22	-16
200	-5	-4	-3	-5	-7	-9	-10	-9	-6	-3	2	4	3	6	0	-9	-20	-20	-17
250	-2	-2	-1	-2	-6	-7	-6	-5	-4	-2	2	4	3	5	-1	-8	-20	-22	-15
315	-1	0	-2	-5	-8	-8	-8	-8	-6	-4	2	4	5	5	-2	-11	-22	-23	-20
400	1	2	-0	-3	-4	-5	-6	-5	-4	-4	2	4	5	5	-1	-10	-22	-25	-21
500	6	5	1	1	-1	-3	-6	-6	-5	-4	0	3	5	4	-4	-11	-21	-23	-22
630	7	6	4	3	-0	-1	-5	-5	-6	-6	-1	4	5	1	-7	-11	-21	-22	-23
800	8	6	5	2	2	-0	-5	-6	-4	-4	1	3	3	1	-6	-10	-19	-22	-23
1000	10	6	7	5	3	2	-3	-5	-4	-3	1	1	-1	-3	-7	-10	-20	-22	-23
1250	8	6	7	6	5	1	-4	-6	-6	-6	-1	1	-3	-6	-9	-11	-21	-22	-24
1600	10	11	11	6	3	2	-7	-11	-14	-15	-14	-11	-12	-13	-14	-15	-23	-26	-28
2000	9	10	10	6	4	3	-4	-7	-11	-14	-11	-8	-9	-11	-12	-14	-22	-26	-28
2500	8	7	8	6	7	5	-2	-6	-10	-14	-12	-10	-11	-11	-13	-16	-23	-27	-29
3150	8	7	8	6	5	4	-2	-4	-8	-12	-10	-8	-9	-7	-11	-14	-22	-25	-28
4000	8	7	8	6	5	4	-1	-5	-8	-12	-9	-8	-8	-7	-11	-14	-21	-25	-28
5000	7	7	8	6	5	4	-2	-4	-7	-9	-5	-4	-5	-5	-9	-13	-20	-24	-27
6300	8	6	7	6	4	4	-2	-4	-6	-5	-2	-2	-2	-3	-8	-11	-19	-22	-25
8000	8	6	7	6	4	3	-1	-4	-5	-6	-2	-2	-3	-2	-7	-11	-19	-22	-26
10000	7	6	6	6	3	3	-1	-3	-5	-5	-2	-1	-2	-2	-7	-11	-18		
OCTAVE																			
31.5	-5	-4	-3	-1	0	-1	-0	-0	1	2	3	0	1	0	-4	-6	-7	-5	-5
63	-5	-4	-2	-1	-1	-1	-0	1	-0	0	1	2	2	2	-2	-7	-14	-9	-6
125	-7	-5	-4	-4	-4	-6	-6	-6	-3	-0	2	4	3	5	-0	-9	-18	-19	-14
250	-2	-1	-2	-4	-7	-8	-8	-7	-5	-3	2	4	4	6	-1	-9	-21	-21	-17
500	4	4	1	-0	-2	-4	-6	-5	-5	-4	1	3	5	4	-3	-10	-21	-24	-21
1000	9	6	6	4	3	1	-4	-5	-5	-4	0	2	1	-2	-7	-10	-20	-22	-23
2000	9	10	10	6	4	3	-5	-9	-12	-15	-13	-10	-11	-12	-13	-15	-23	-26	-28
4000	8	7	8	6	5	4	-1	-4	-8	-11	-8	-7	-7	-6	-10	-13	-21	-25	-28
8000	8	6	7	6	4	3	-1	-4	-5	-6	-2	-2	-2	-3	-8	-11	-19	-23	-25
OVERALL	3	4	4	1	1	-0	-2	-2	-1	-0	1	1	1	1	-4	-8	-10	-8	-7

TABLE: DIRECTIVITY INDEX (DB)

3

NOISE SOURCE/SUBJECT:
RA-5C AIRCRAFT
J79-GE-8C ENGINE
FAR FIELD NOISE

OPERATION:
80% RPM
SINGLE ENGINE
FREE FLOW

METEOROLOGY:
TEMP = 16 C
BAR PRESS = .761 M HG
REL HUMID = 84 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-002
RUN 02
05 MAY 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	-4	-5	-5	-3	-3	-2	-3	-4	-2	-2	-1	-1	1	5	4	5			
31.5	-2	-3	-1	-1	-1	-2	-4	-0	-0	1	0	-0	2	2	2	1			
40	-6	-5	-5	-2	-5	-4	-4	-1	1	1	-1	0	3	3	1	2			
50	-11	-10	-7	-6	-5	-6	-4	-4	-3	-2	1	2	2	3	5	3			
63	-12	-9	-7	-6	-7	-7	-4	-4	-5	-2	0	0	3	5	6	1			
80	-12	-10	-7	-7	-7	-7	-6	-5	-4	-2	-2	0	3	6	7	-1			
100	-12	-9	-6	-7	-6	-6	-6	-6	-4	-2	-3	0	2	6	7	-4			
125	-13	-10	-6	-5	-7	-8	-7	-7	-4	-2	0	2	4	6	5	-7			
160	-11	-6	-5	-3	-5	-6	-5	-4	-3	-1	1	2	4	5	5	-10			
200	-11	-7	-6	-5	-5	-6	-5	-3	-2	-2	2	3	4	4	3	-11			
250	-9	-7	-5	-3	-5	-4	-3	-2	-1	0	3	4	3	2	1	-14			
315	-8	-7	-4	-1	-4	-1	-2	0	1	-1	4	3	2	-1	-2	-16			
400	-1	0	8	3	-2	-0	-3	-4	-4	-5	3	2	-2	0	-1	-12			
500	-10	-3	6	3	-3	1	-0	-3	-1	-3	3	2	-2	0	-2	-14			
630	-9	-7	-4	-2	-1	-2	-1	1	2	0	4	3	-1	-5	-9	-20			
800	-5	-4	-2	-1	-0	-1	-2	-0	2	-0	5	3	0	-7	-10	-20			
1000	-4	-6	-1	-2	-0	-1	-2	2	2	0	4	2	-1	-6	-11	-21			
1250	1	-2	1	-1	-0	-0	-2	1	2	1	4	2	-1	-10	-13	-21			
1600	10	6	4	3	2	1	-1	0	-0	-1	1	1	-2	-11	-14	-21			
2000	10	9	7	8	5	2	-3	-6	-7	-8	-6	-6	-10	-15	-18	-24			
2500	5	6	6	8	5	5	-1	-3	-6	-7	-7	-6	-10	-14	-18	-25			
3150	7	6	7	5	5	3	-1	-1	-1	-4	-4	-3	-5	-12	-15	-22			
4000	6	7	8	7	5	3	-1	-1	-3	-6	-6	-6	-8	-15	-17	-23			
5000	5	5	6	6	5	4	0	-1	-3	-5	-5	-5	-9	-14	-17	-22			
6300	5	7	7	7	4	3	-1	-2	-3	-5	-4	-3	-7	-12	-14	-19			
8000	5	6	6	5	4	4	0	-1	-2	-4	-3	-2	-5	-11	-12	-18			
10000	5	5	6	6	4	4	-0	-1	-2	-4	-3	-2	-5	-10	-12	-17			
OCTAVE																			
31.5	-5	-4	-4	-2	-3	-3	-4	-1	0	1	-1	0	3	3	2	2			
63	-12	-10	-7	-6	-6	-7	-5	-4	-4	-2	-0	1	3	5	6	1			
125	-12	-8	-5	-5	-6	-6	-6	-6	-4	-2	-0	2	3	5	6	-6			
250	-9	-7	-5	-2	-4	-3	-3	-1	-0	-1	3	3	3	2	0	-14			
500	-6	-3	6	3	-2	0	-1	-2	-1	-3	3	2	-2	0	-2	-14			
1000	-3	-4	-1	-1	-0	-1	-2	1	2	-0	4	3	-0	-7	-11	-20			
2000	9	8	7	7	5	3	-2	-3	-5	-6	-5	-4	-8	-14	-17	-24			
4000	6	6	7	6	5	3	-1	-1	-3	-5	-5	-5	-8	-14	-16	-23			
8000	5	6	7	6	4	3	-1	-1	-3	-4	-3	-2	-6	-11	-13	-18			
OVERALL	-2	-1	5	2	-2	-0	-1	-2	-1	-2	2	2	0	1	1	-9			

TABLE: 3 DIRECTIVITY INDEX (DB)

NOISE SOURCE/SUBJECT:
RA-5C AIRCRAFT
J79-GE-8C ENGINE
FAR FIELD NOISE

OPERATION:
MILITARY POWER
100% RPM
SINGLE ENGINE
FREE FLOW

METEOROLOGY:
TEMP = 16 C
BAR PRESS = .761 M HG
REL HUMID = 84 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-002
RUN 03
05 MAY 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	-11	-13	-13	-13	-11	-9	-11	-8	-10	-7	-5	-2	3	5	6	8			
31.5	-11	-13	-12	-9	-9	-8	-8	-7	-8	-6	-6	-1	2	6	7	7			
40	-13	-14	-13	-9	-10	-10	-7	-7	-7	-6	-5	-3	1	6	7	7			
50	-14	-15	-14	-12	-11	-10	-10	-7	-8	-7	-5	-2	2	6	8	5			
63	-15	-15	-14	-11	-12	-11	-10	-8	-10	-7	-4	-1	3	7	7	3			
80	-18	-20	-16	-14	-14	-14	-13	-12	-11	-8	-5	-1	5	8	6	1			
100	-19	-19	-16	-15	-16	-15	-14	-13	-13	-10	-5	1	7	8	4	-4			
125	-21	-20	-18	-16	-16	-16	-16	-16	-13	-10	-7	1	8	7	2	-11			
160	-19	-17	-16	-15	-16	-16	-14	-14	-15	-10	-6	1	7	7	1	-14			
200	-19	-16	-16	-15	-16	-17	-15	-15	-13	-12	-5	2	8	6	0	-13			
250	-17	-16	-16	-14	-15	-15	-15	-14	-13	-9	-4	3	8	7	-0	-12			
315	-16	-16	-16	-13	-14	-14	-13	-13	-10	-9	-2	4	8	4	-3	-14			
400	-12	-15	-12	-11	-11	-11	-11	-11	-9	-8	-1	3	9	2	-4	-13			
500	-12	-14	-9	-8	-10	-8	-9	-11	-7	-7	0	5	8	1	-5	-12			
630	-13	-12	-9	-8	-7	-6	-8	-9	-6	-6	1	5	7	1	-6	-12			
800	-11	-11	-9	-6	-4	-3	-6	-7	-4	-4	3	5	6	0	-4	-9			
1000	-11	-11	-8	-5	-5	-4	-6	-8	-5	-5	2	5	6	1	-4	-10			
1250	-10	-11	-9	-5	-3	-3	-6	-7	-3	-4	2	5	6	0	-6	-12			
1600	-9	-10	-9	-5	-4	-3	-5	-5	-2	-3	3	4	6	-2	-6	-13			
2000	-10	-12	-10	-5	-5	-3	-6	-6	-2	-2	3	4	6	-2	-6	-14			
2500	-8	-11	-8	-5	-4	-2	-5	-5	-3	-1	4	5	5	-2	-5	-14			
3150	-9	-12	-9	-6	-4	-2	-5	-5	-1	-1	4	4	5	-2	-5	-14			
4000	-8	-11	-9	-6	-4	-2	-5	-6	-2	-1	4	4	6	-2	-6	-14			
5000	-7	-9	-8	-5	-4	-2	-4	-5	-2	-1	4	4	6	-2	-5	-14			
6300	-7	-9	-8	-5	-4	-2	-5	-6	-3	-2	4	4	6	-1	-5	-14			
8000	-5	-6	-7	-5	-3	-2	-5	-6	-3	-2	3	4	6	-2	-5	-14			
10000	-4	-5	-5	-4	-3	-2	-4	-6	-3	-2	4	4	6	-1	-5	-13			
OCTAVE																			
31.5	-12	-13	-13	-10	-10	-9	-8	-7	-7	-6	-5	-2	2	6	7	7			
63	-17	-17	-15	-13	-13	-12	-12	-10	-10	-7	-5	-1	4	7	6	2			
125	-20	-18	-16	-15	-16	-16	-15	-14	-14	-10	-6	1	7	7	2	-9			
250	-17	-16	-16	-14	-15	-15	-14	-14	-12	-10	-4	3	8	6	-1	-13			
500	-12	-14	-10	-9	-9	-8	-9	-10	-7	-7	0	4	8	1	-4	-12			
1000	-11	-11	-8	-5	-4	-3	-6	-7	-4	-4	2	5	6	0	-5	-10			
2000	-9	-11	-9	-5	-4	-3	-5	-5	-2	-2	4	5	6	-2	-6	-14			
4000	-8	-11	-9	-6	-4	-2	-5	-5	-2	-1	4	4	6	-2	-5	-14			
8000	-6	-7	-7	-5	-4	-2	-5	-6	-3	-2	4	4	6	-1	-5	-14			
OVERALL	-14	-14	-12	-10	-9	-8	-10	-10	-8	-7	-1	3	7	5	-0	-8			

TABLE: DIRECTIVITY INDEX (DB)

3

IDENTIFICATION:

OMEGA 1.4
TEST 75-002-002
RUN 04
05 MAY 75
PAGE 4

NOISE SOURCE/SUBJECT:
RA-5C AIRCRAFT
J79-GE-8C ENGINE
FAR FIELD NOISE

OPERATION:
AFTERBURNER POWER
100% RPM
SINGLE ENGINE
FREE FLOW

METEOROLOGY:
TEMP = 16 C
BAR PRESS = .761 M HG
REL HUMID = 84 %

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	-10	-8	-9	-8	-9	-7	-7	-6	-5	-6	-3	1	3	5	6	5			
31.5	-8	-8	-11	-9	-10	-7	-8	-5	-7	-6	-3	1	5	6	4	2			
40	-11	-12	-13	-12	-9	-10	-9	-7	-7	-5	-2	2	5	7	4	-0			
50	-13	-14	-11	-11	-10	-8	-8	-8	-7	-5	-3	3	5	6	4	-4			
63	-15	-13	-12	-9	-10	-10	-8	-9	-8	-7	-3	3	7	6	1	-8			
80	-17	-15	-13	-12	-12	-12	-11	-11	-9	-7	-3	3	8	6	-1	-11			
100	-17	-15	-12	-12	-13	-12	-11	-11	-10	-8	-2	5	8	4	-5	-17			
125	-18	-15	-14	-13	-13	-13	-13	-12	-11	-9	-1	7	7	3	-10	-21			
160	-19	-14	-13	-12	-12	-12	-12	-11	-10	-6	-1	7	7	1	-13	-22			
200	-21	-14	-14	-14	-14	-13	-13	-12	-10	-7	0	7	7	0	-14	-22			
250	-19	-13	-14	-13	-14	-12	-12	-11	-9	-6	2	7	6	-2	-14	-23			
315	-18	-15	-15	-12	-12	-11	-10	-10	-7	-4	4	7	5	-4	-16	-23			
400	-16	-14	-12	-11	-11	-10	-9	-9	-7	-4	4	7	5	-6	-17	-20			
500	-16	-15	-12	-11	-12	-10	-9	-9	-6	-3	4	7	4	-5	-17	-21			
630	-16	-15	-13	-10	-11	-8	-7	-8	-5	-1	4	7	3	-3	-18	-22			
800	-17	-14	-12	-10	-9	-8	-7	-6	-4	-1	4	7	3	-3	-19	-22			
1000	-16	-15	-13	-9	-9	-8	-6	-6	-3	-0	4	7	3	-3	-18	-22			
1250	-15	-14	-12	-8	-8	-7	-6	-5	-2	1	4	7	3	-4	-18	-23			
1600	-13	-13	-10	-8	-8	-6	-5	-3	-1	0	4	6	3	-5	-19	-23			
2000	-14	-14	-11	-8	-8	-6	-6	-3	-1	0	4	7	3	-5	-19	-23			
2500	-12	-12	-9	-7	-7	-5	-4	-2	0	0	4	6	3	-6	-19	-22			
3150	-14	-14	-11	-8	-8	-6	-5	-3	-1	1	4	6	3	-6	-19	-22			
4000	-14	-14	-12	-9	-9	-7	-5	-4	-1	1	4	7	3	-6	-18	-23			
5000	-15	-14	-12	-10	-9	-7	-6	-4	-1	0	4	7	2	-7	-19	-23			
6300	-15	-15	-13	-10	-10	-8	-7	-5	-1	-0	4	7	3	-7	-19	-24			
8000	-14	-14	-13	-11	-11	-9	-8	-6	-2	-0	4	7	3	-7	-20	-25			
10000	-15	-14	-13	-11	-12	-10	-9	-6	-2	-2	4	8	2	-7	-21	-26			
OCTAVE																			
31.5	-10	-10	-12	-11	-9	-8	-8	-6	-7	-5	-2	2	5	6	5	2			
63	-15	-14	-12	-11	-11	-10	-9	-10	-8	-6	-3	3	7	6	1	-8			
125	-18	-15	-13	-12	-13	-12	-12	-11	-10	-7	-1	7	7	3	-9	-20			
250	-19	-14	-14	-13	-13	-12	-11	-11	-8	-6	2	7	6	-2	-15	-23			
500	-16	-15	-12	-11	-11	-9	-8	-9	-6	-2	4	7	4	-4	-17	-21			
1000	-16	-14	-12	-9	-9	-8	-7	-6	-3	-0	4	7	3	-4	-18	-22			
2000	-13	-13	-10	-8	-8	-6	-5	-3	-0	0	4	6	3	-5	-19	-23			
4000	-14	-14	-12	-9	-9	-7	-5	-4	-1	0	4	7	3	-6	-19	-22			
8000	-15	-14	-13	-11	-11	-9	-7	-5	-2	-1	4	7	3	-7	-20	-24			
OVERALL	-16	-14	-13	-11	-11	-10	-9	-8	-6	-3	3	7	5	-0	-9	-15			

FIGURE: 4 OVERALL SOUND PRESSURE LEVEL (OASPL) EQUAL LEVEL CONTOURS (DB)

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-002
RUN 01
05 MAY 75
PAGE 13

NOISE SOURCE/SUBJECT:
RA-5C AIRCRAFT
J79-GE-8C ENGINE
FAR FIELD NOISE

OPERATION:
IDLE
65% RPM
SINGLE ENGINE
FREE FLOW

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

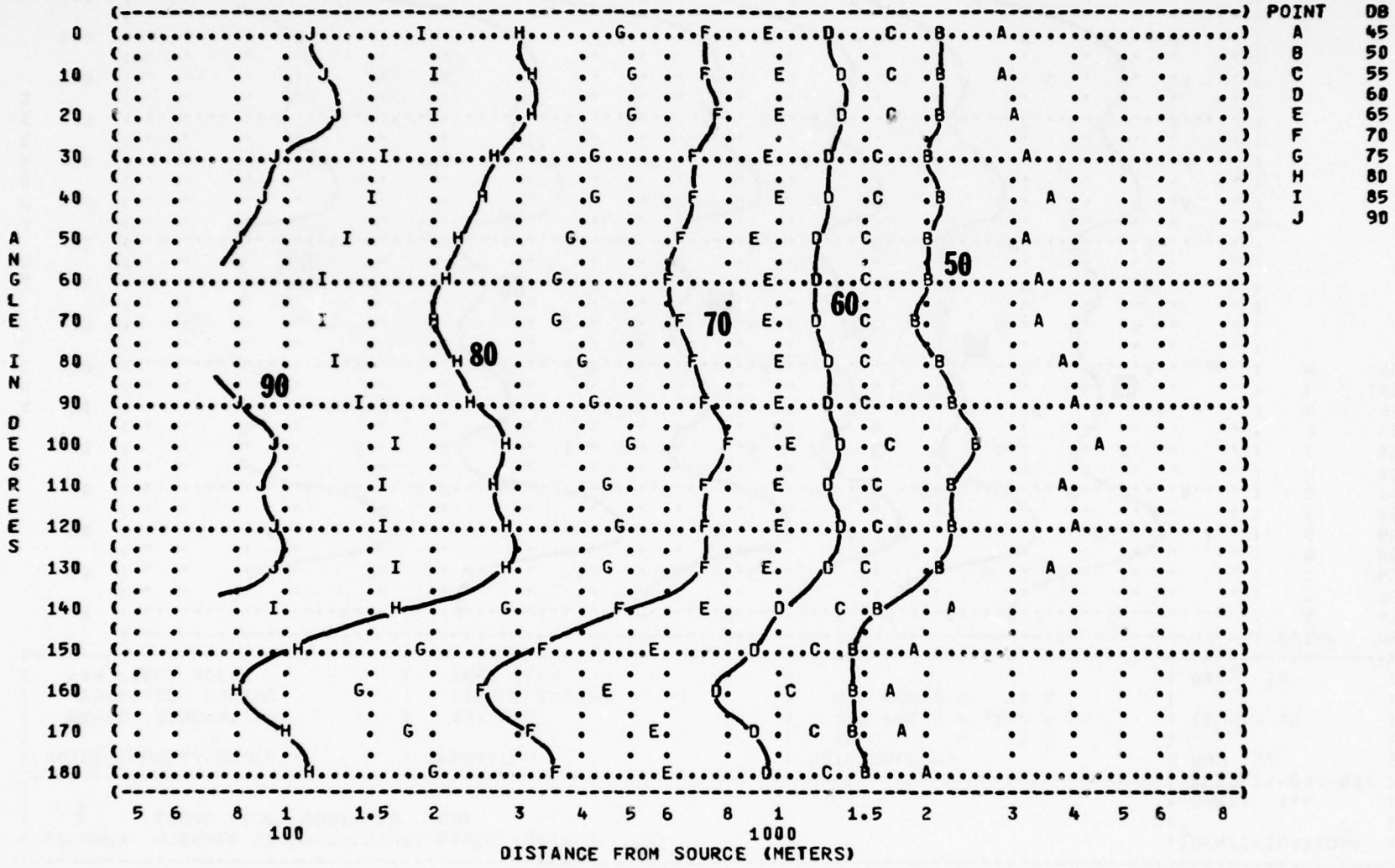


FIGURE 4: OVERALL SOUND PRESSURE LEVEL (OASPL) EQUAL LEVEL CONTOURS (DB)

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-002
RUN 02
05 MAY 75
PAGE 13

NOISE SOURCE/SUBJECT:
RA-5C AIRCRAFT
J79-GE-8C ENGINE
FAR FIELD NOISE

OPERATION:
80% RPM
SINGLE ENGINE
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

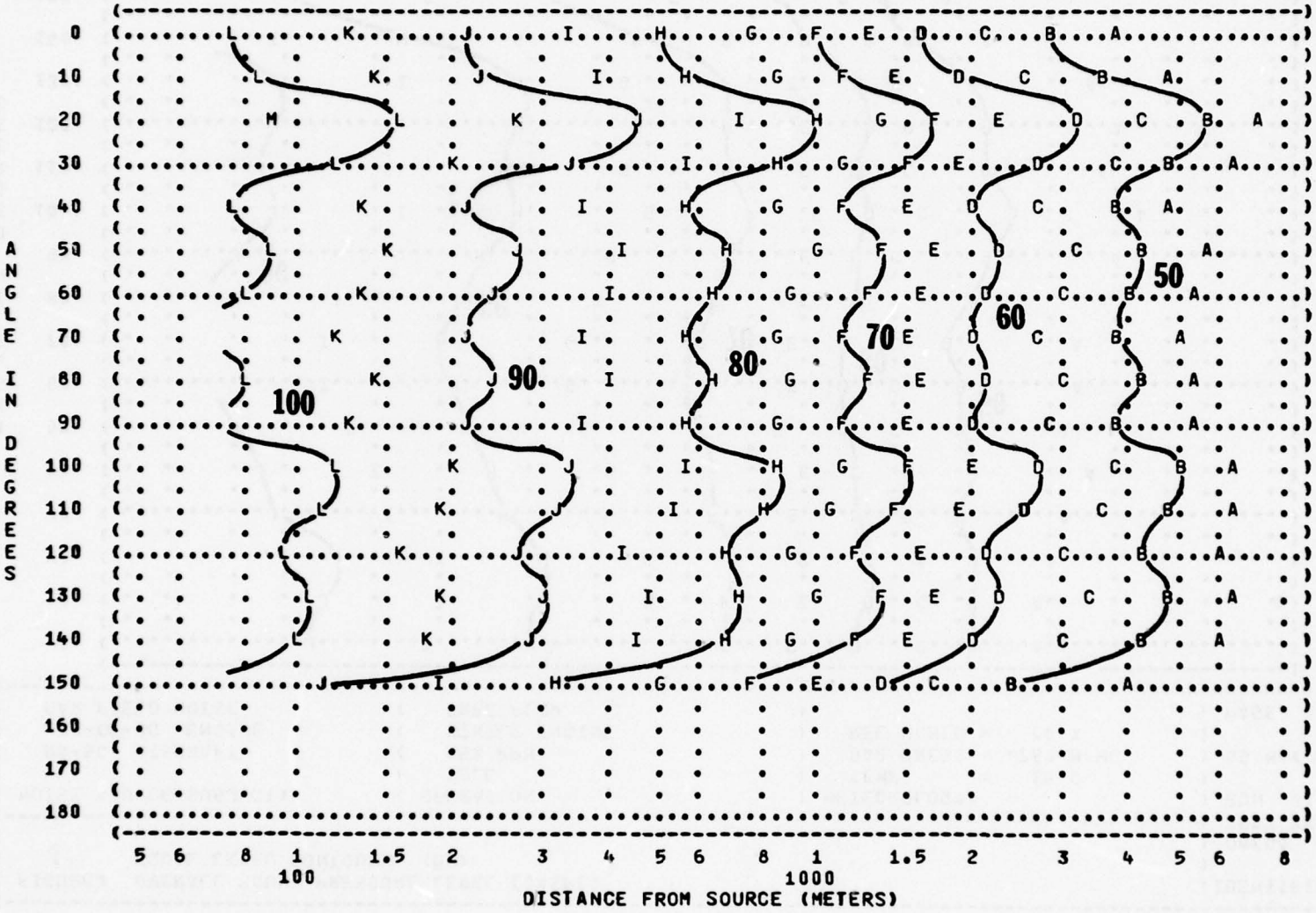


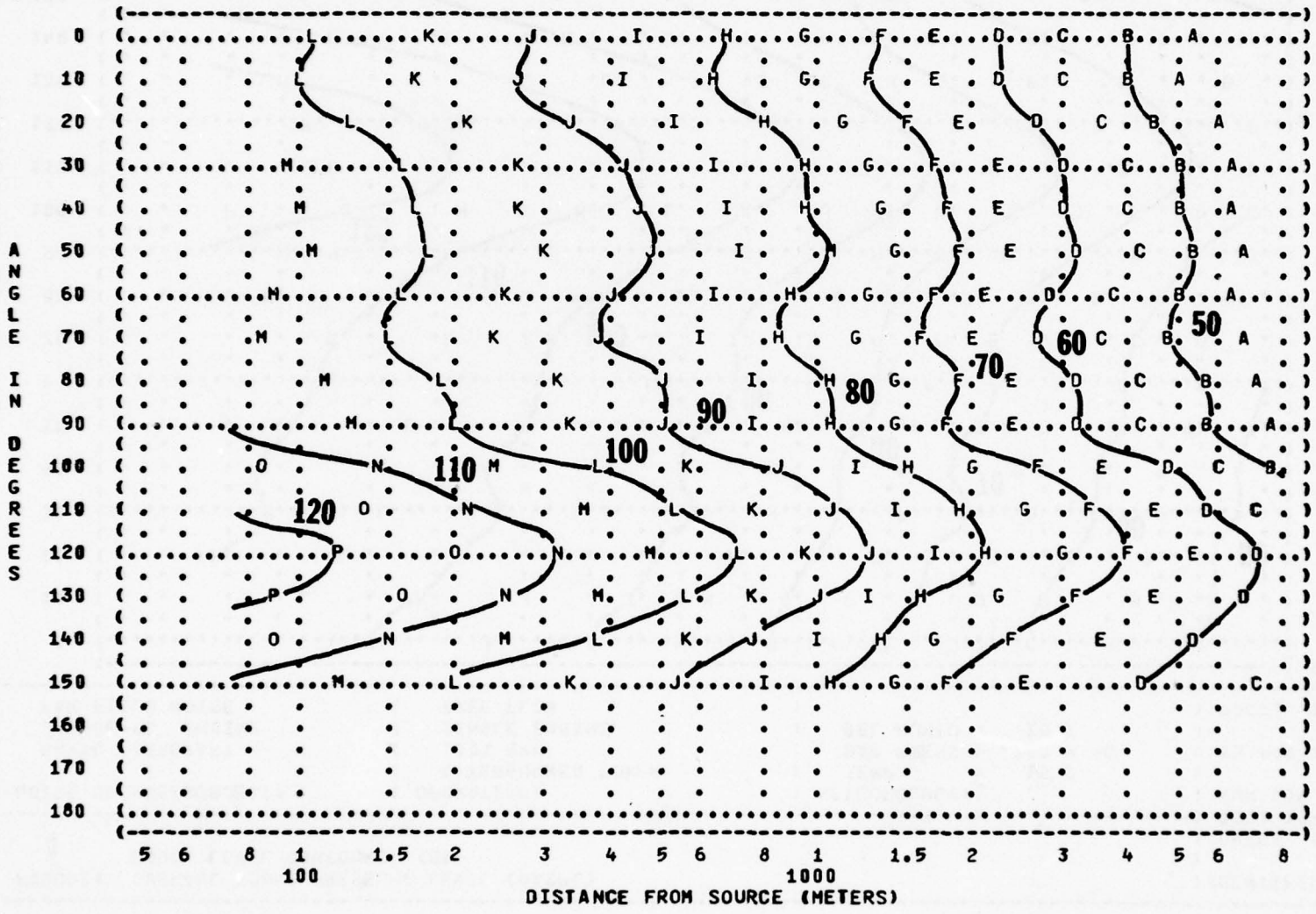
FIGURE: 4 OVERALL SOUND PRESSURE LEVEL (OASPL) EQUAL LEVEL CONTOURS (DB)

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-002
RUN 03
05 MAY 75
PAGE 13

NOISE SOURCE/SUBJECT:
RA-5C AIRCRAFT
J79-GE-8C 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	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

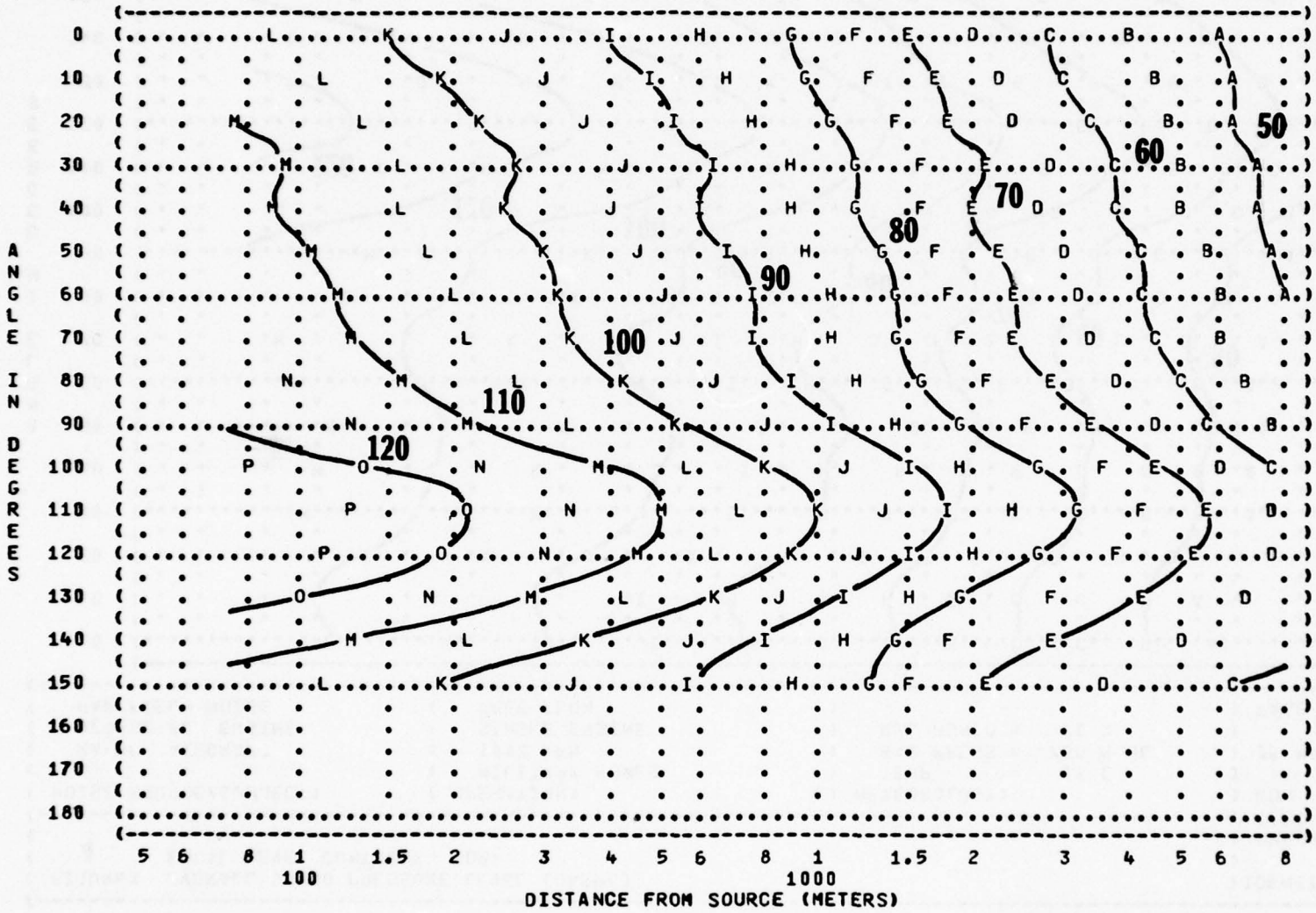
FIGURE: 4 OVERALL SOUND PRESSURE LEVEL (OASPL) EQUAL LEVEL CONTOURS (DB)

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-002
RUN 04
05 MAY 75
PAGE 13

NOISE SOURCE/SUBJECT:
RA-5C AIRCRAFT
J79-GE-8C ENGINE
FAR FIELD NOISE

OPERATION:
AFTERBURNER POWER
100% RPM
SINGLE ENGINE
FREE FLOW

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



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

FIGURE: 5 C-WEIGHTED OVERALL SOUND LEVEL (OASLC) EQUAL LEVEL CONTOURS (DBC)

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-002
RUN 01
05 MAY 75
PAGE 14

NOISE SOURCE/SUBJECT:
RA-5C AIRCRAFT
J79-GE-8C ENGINE
FAR FIELD NOISE

OPERATION:
IDLE
65% RPM
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

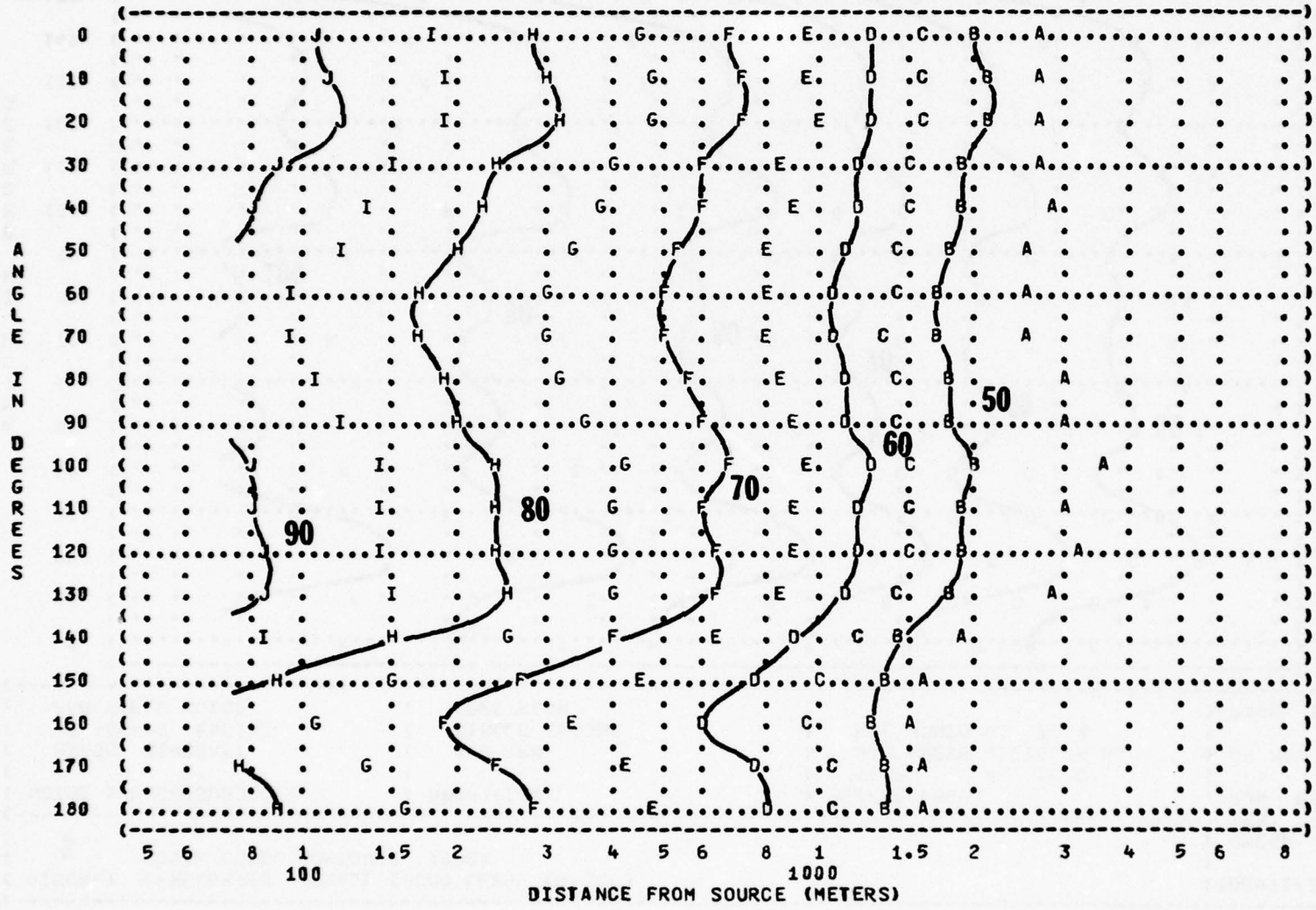


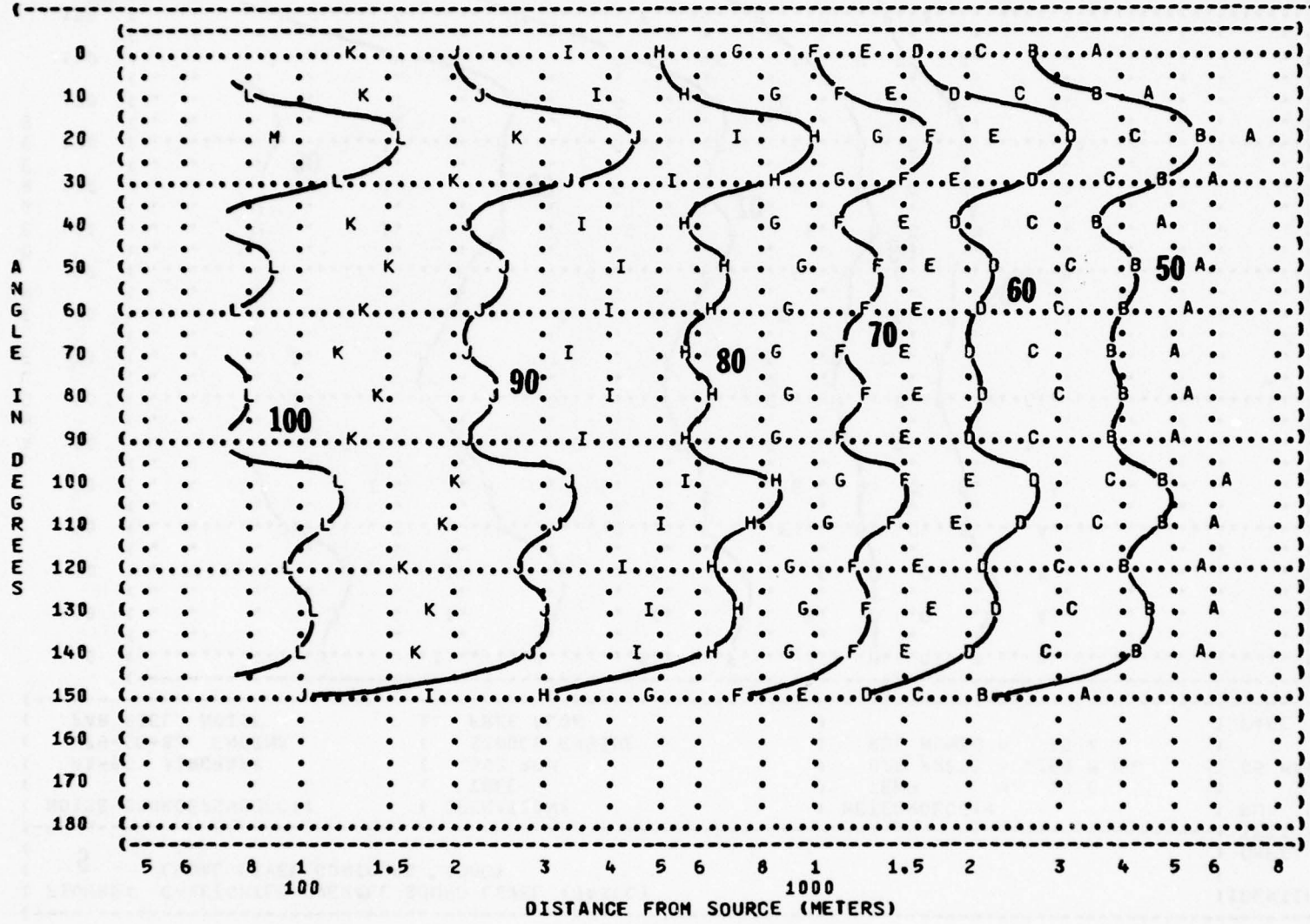
FIGURE: 5 C-WEIGHTED OVERALL SOUND LEVEL (OASLC) EQUAL LEVEL CONTOURS (DBC)

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-002
RUN 02
05 MAY 75
PAGE 14

NOISE SOURCE/SUBJECT:
RA-5C AIRCRAFT
J79-GE-8C ENGINE
FAR FIELD NOISE

OPERATION:
80% RPM
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

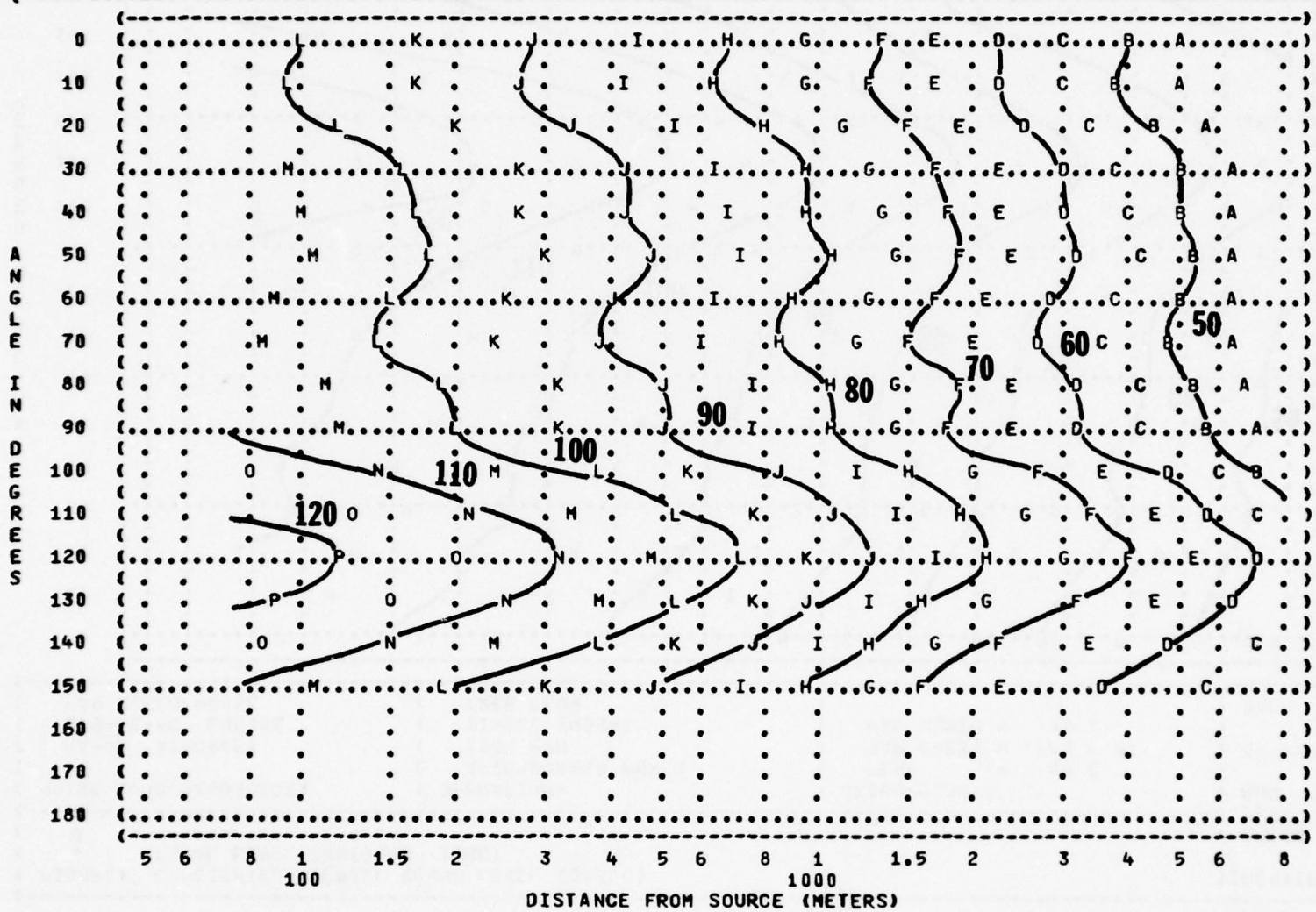
FIGURE 5 C-WEIGHTED OVERALL SOUND LEVEL (OASLC) EQUAL LEVEL CONTOURS (DBC)

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-002
RUN 03
05 MAY 75
PAGE 14

NOISE SOURCE/SUBJECT:
RA-5C AIRCRAFT
J79-GE-8C 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	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

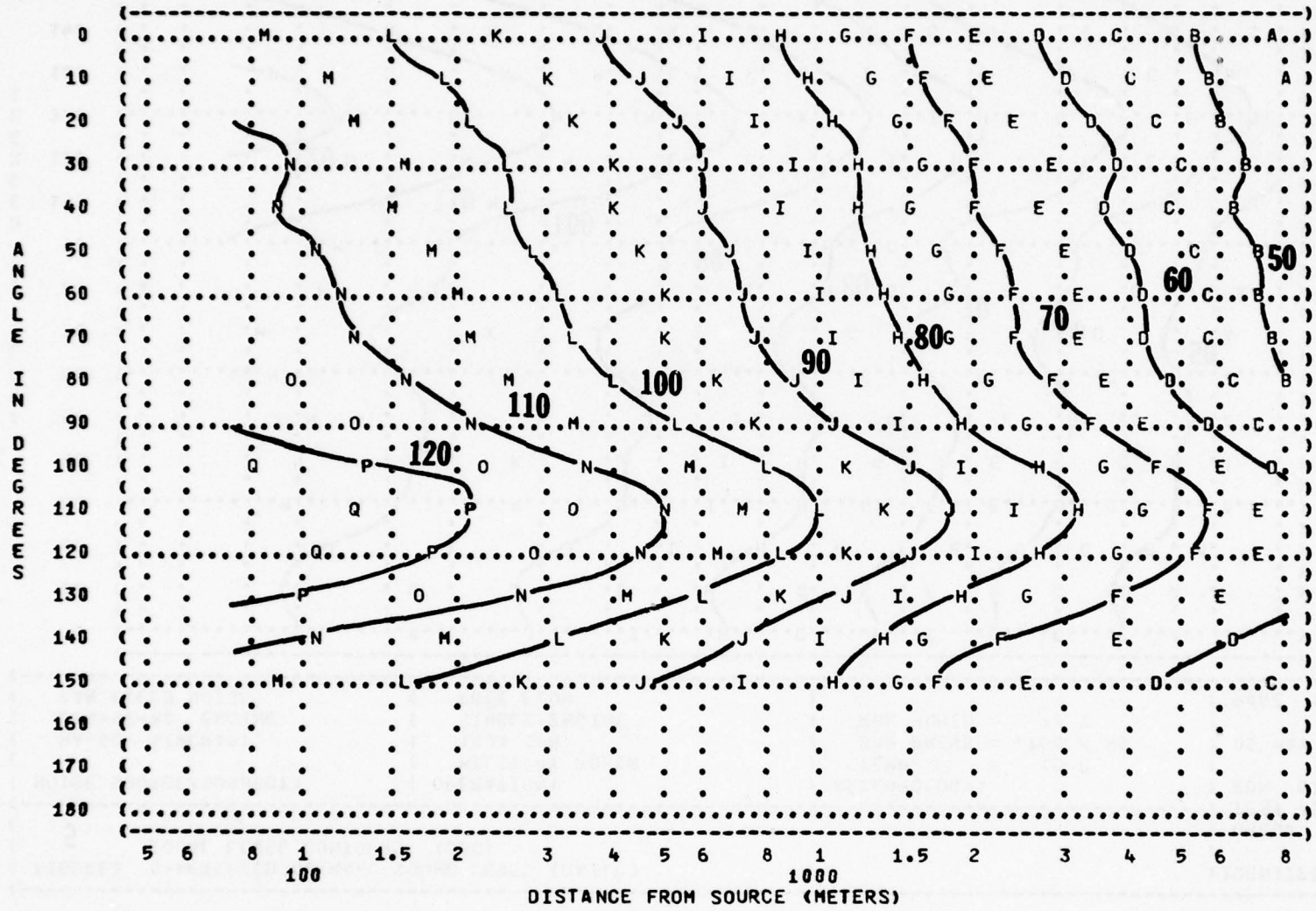
FIGURE: 5 C-WEIGHTED OVERALL SOUND LEVEL (OASLC) EQUAL LEVEL CONTOURS (DBC)

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-002
RUN 04
05 MAY 75
PAGE 14

NOISE SOURCE/SUBJECT:
RA-5C AIRCRAFT
J79-GE-8C ENGINE
FAR FIELD NOISE

OPERATION:
AFTERBURNER POWER
100% RPM
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 A-WEIGHTED OVERALL SOUND LEVEL (OASLA) EQUAL LEVEL CONTOURS (DBA)

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-002
RUN 01
05 MAY 75
PAGE 15

NOISE SOURCE/SUBJECT:
RA-5C AIRCRAFT
J79-GE-8C ENGINE
FAR FIELD NOISE

OPERATION:
IDLE
65% RPM
SINGLE ENGINE
FREE FLOW

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

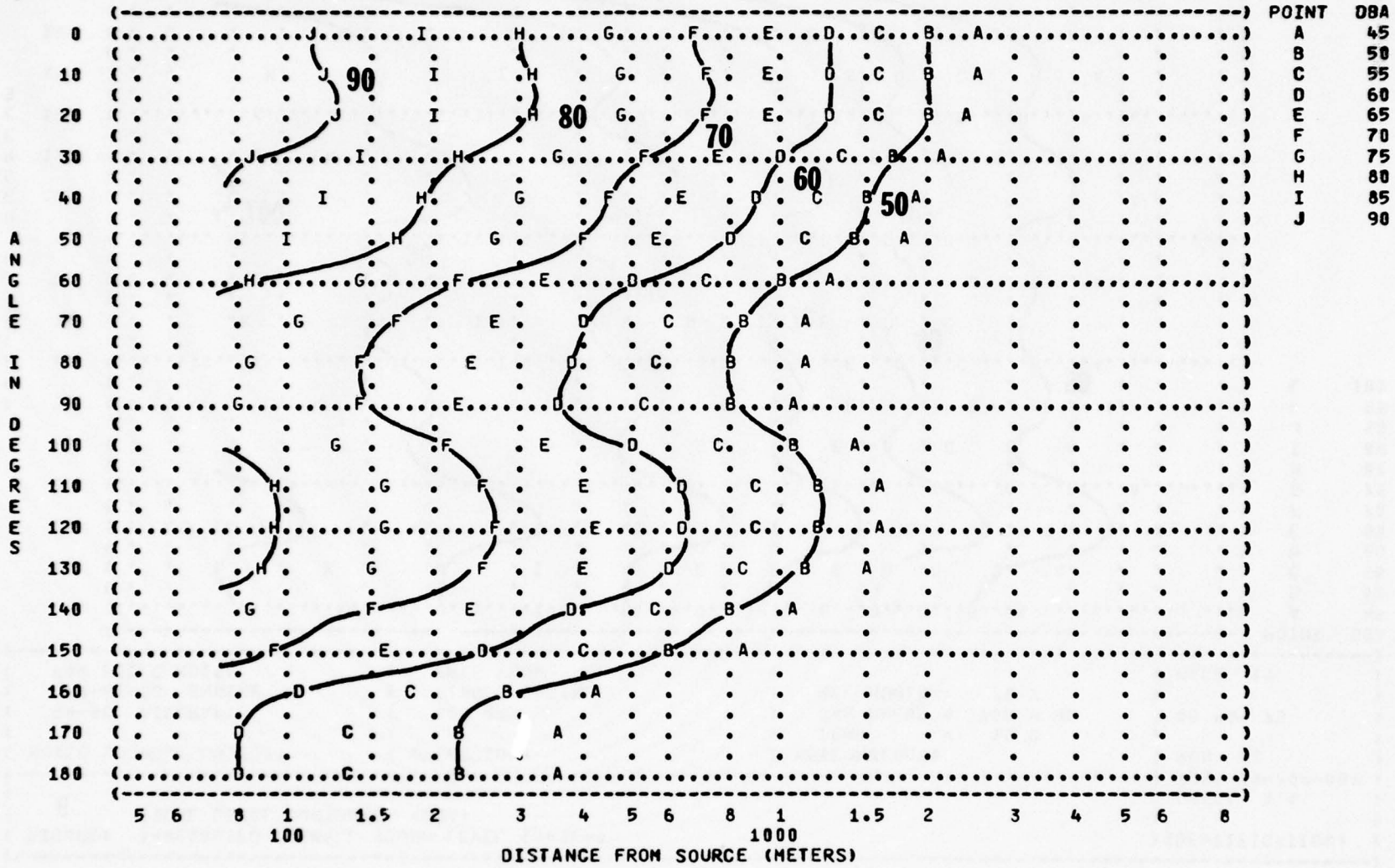


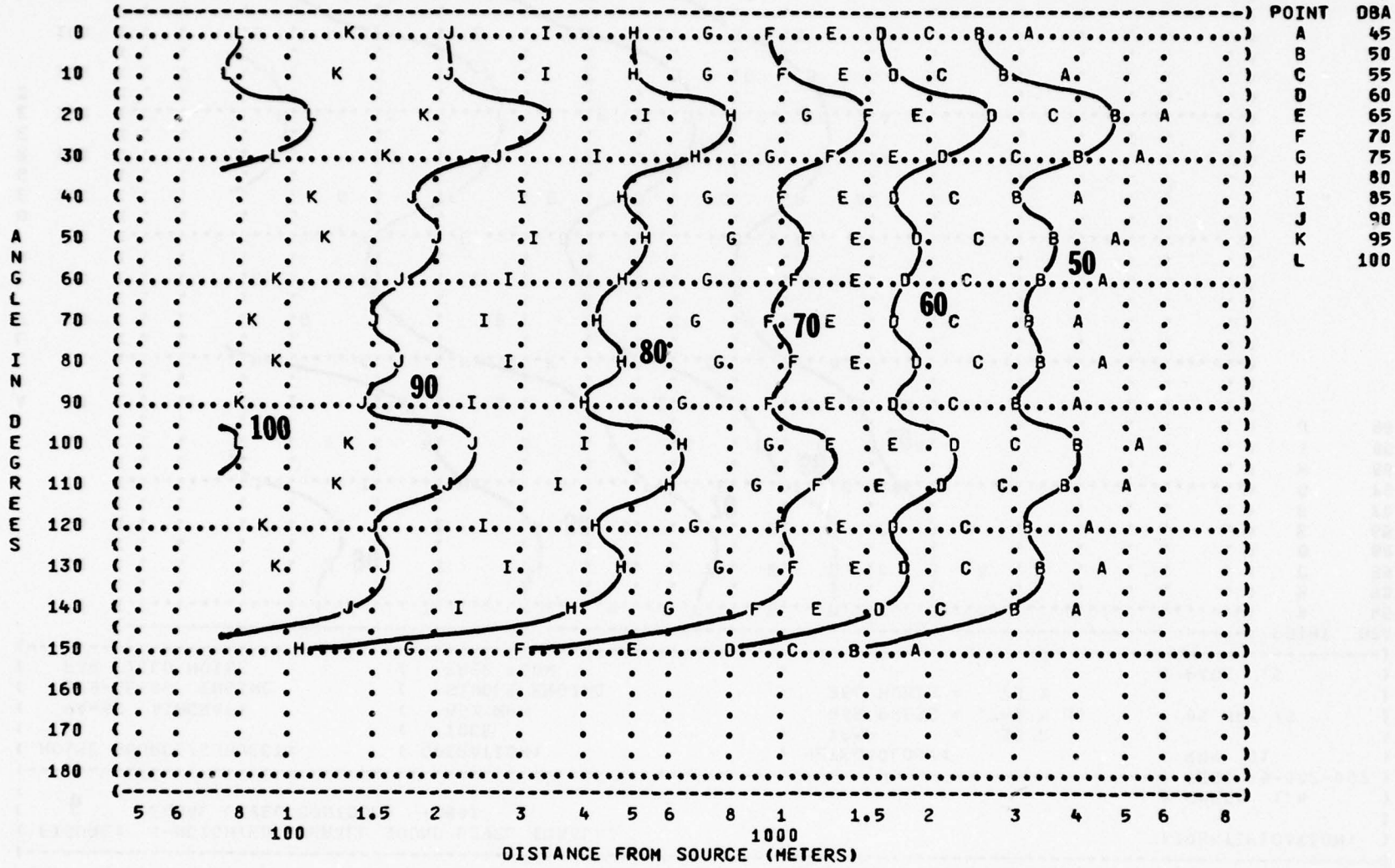
FIGURE 6 A-WEIGHTED OVERALL SOUND LEVEL (OASLA) EQUAL LEVEL CONTOURS (DBA)

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-002
RUN 02
05 MAY 75
PAGE 15

NOISE SOURCE/SUBJECT:
RA-5C AIRCRAFT
J79-GE-8C ENGINE
FAR FIELD NOISE

OPERATION:
80% 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

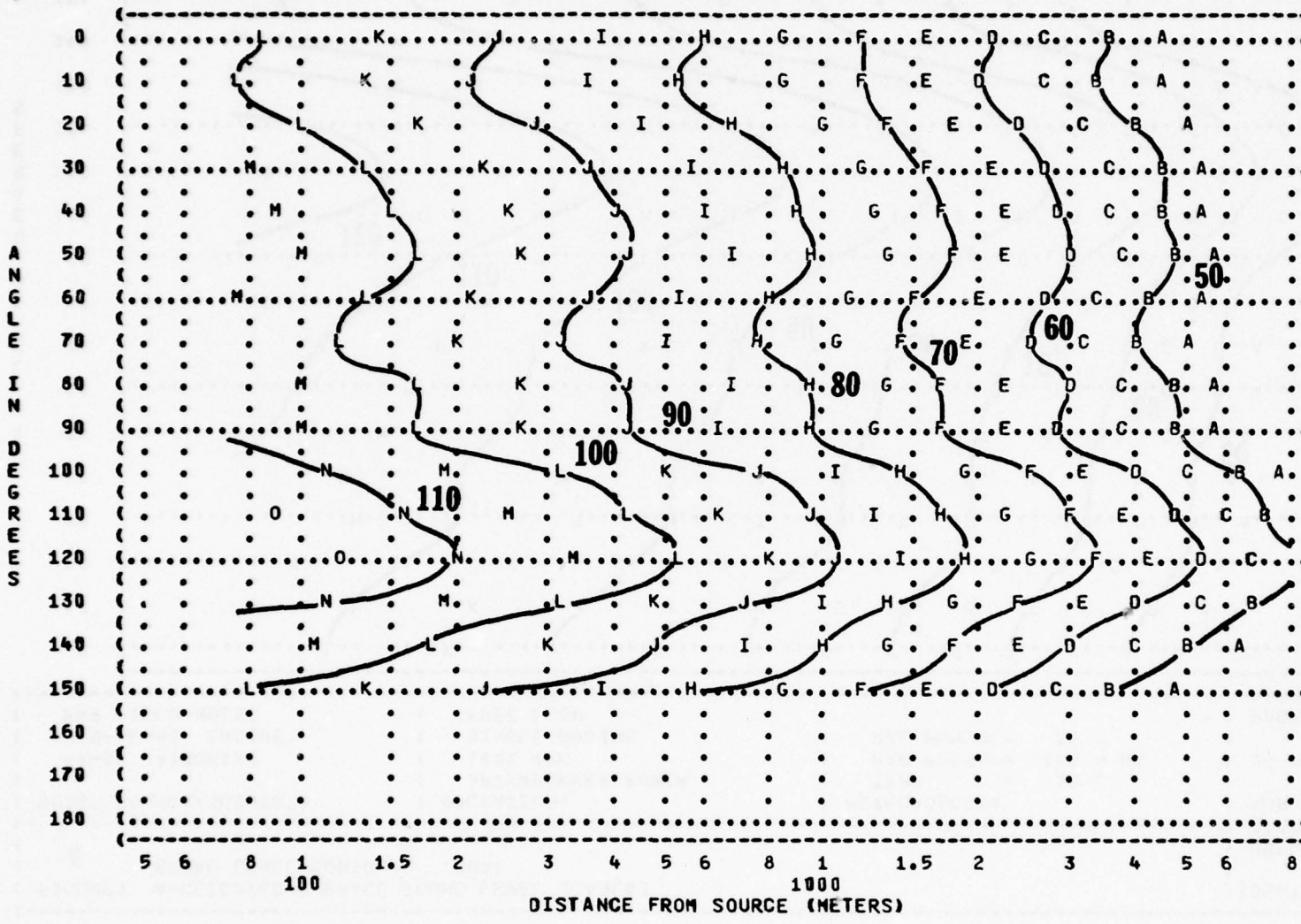
FIGURE 6: A-WEIGHTED OVERALL SOUND LEVEL (OASLA) EQUAL LEVEL CONTOURS (DBA)

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-002
RUN 03
05 MAY 75
PAGE 15

NOISE SOURCE/SUBJECT:
RA-5C AIRCRAFT
J79-GE-8C 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
O	115

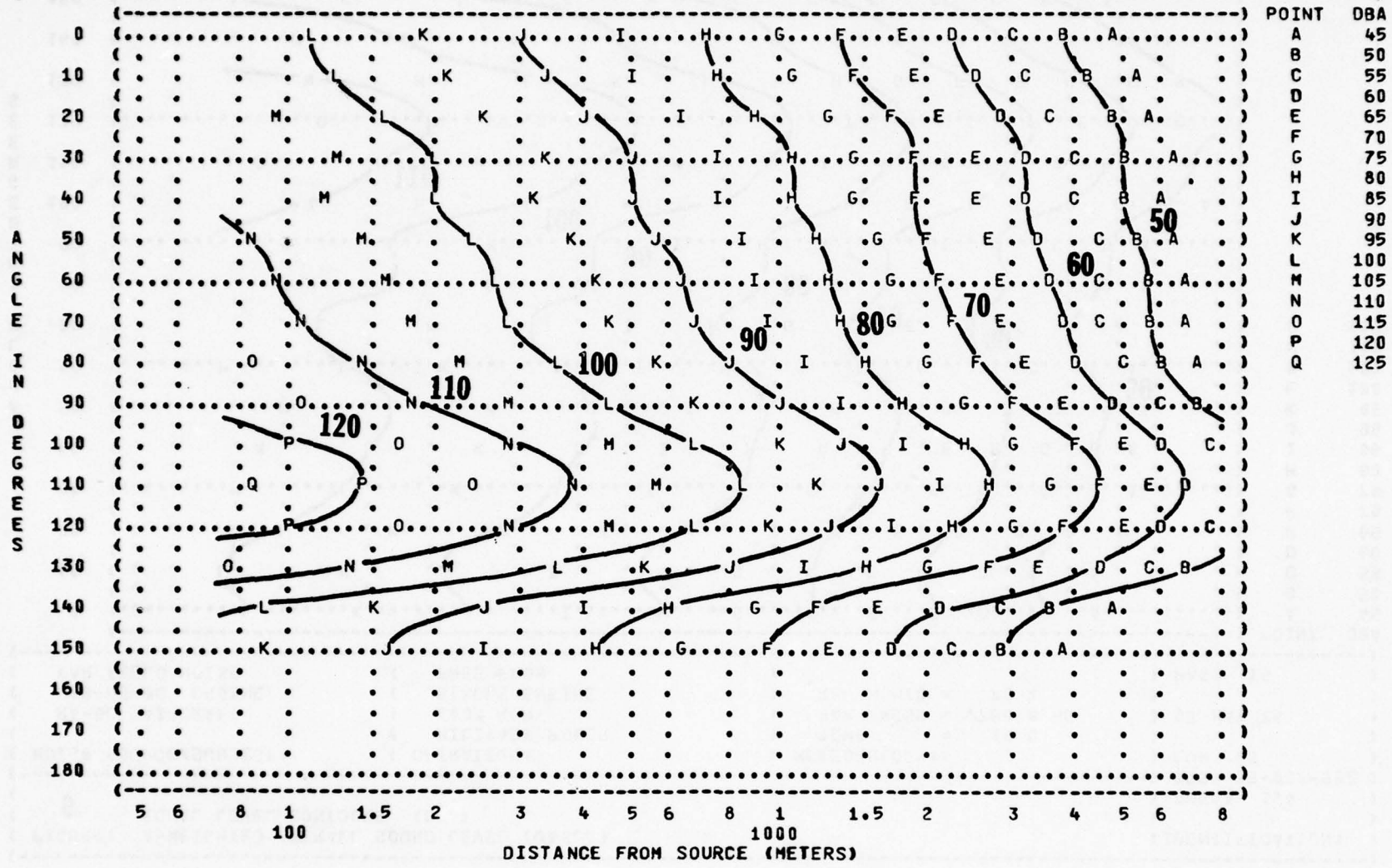
FIGURE: 6 A-WEIGHTED OVERALL SOUND LEVEL (OASLA) EQUAL LEVEL CONTOURS (DBA)

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

NOISE SOURCE/SUBJECT:
RA-5C AIRCRAFT
J79-GE-8C ENGINE
FAR FIELD NOISE

OPERATION:
AFTERBURNER 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
O	115
P	120
Q	125

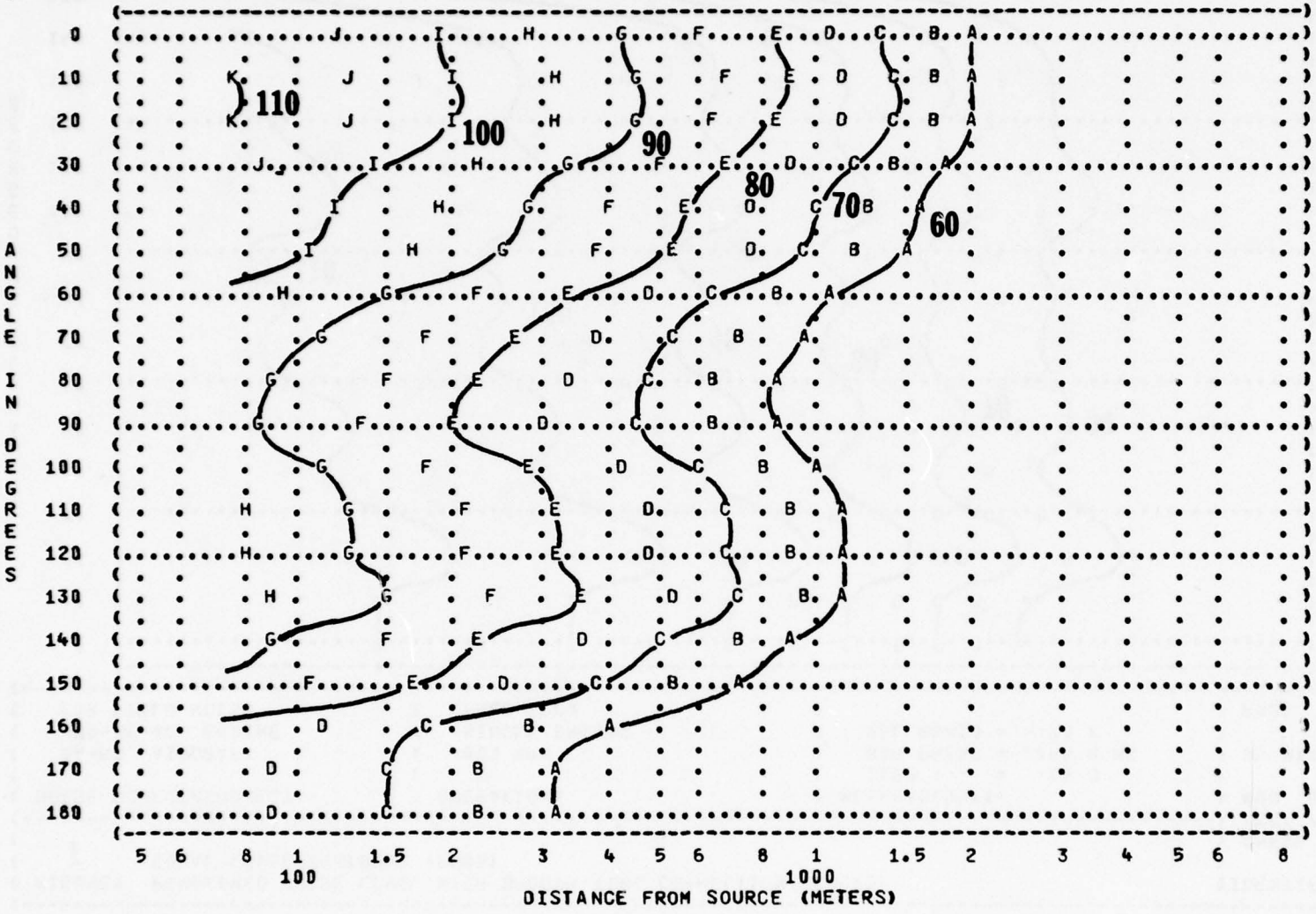
FIGURE 7 PERCEIVED NOISE LEVEL WITH SMOOTH TONE CORRECTION (PNLT)
EQUAL LEVEL CONTOURS (PNDB)

NOISE SOURCE/SUBJECT:
RA-5C AIRCRAFT
J79-GE-8C ENGINE
FAR FIELD NOISE

OPERATION:
IDLE
65% RPM
SINGLE ENGINE
FREE FLOW

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

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-002
RUN 01
05 MAY 75
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

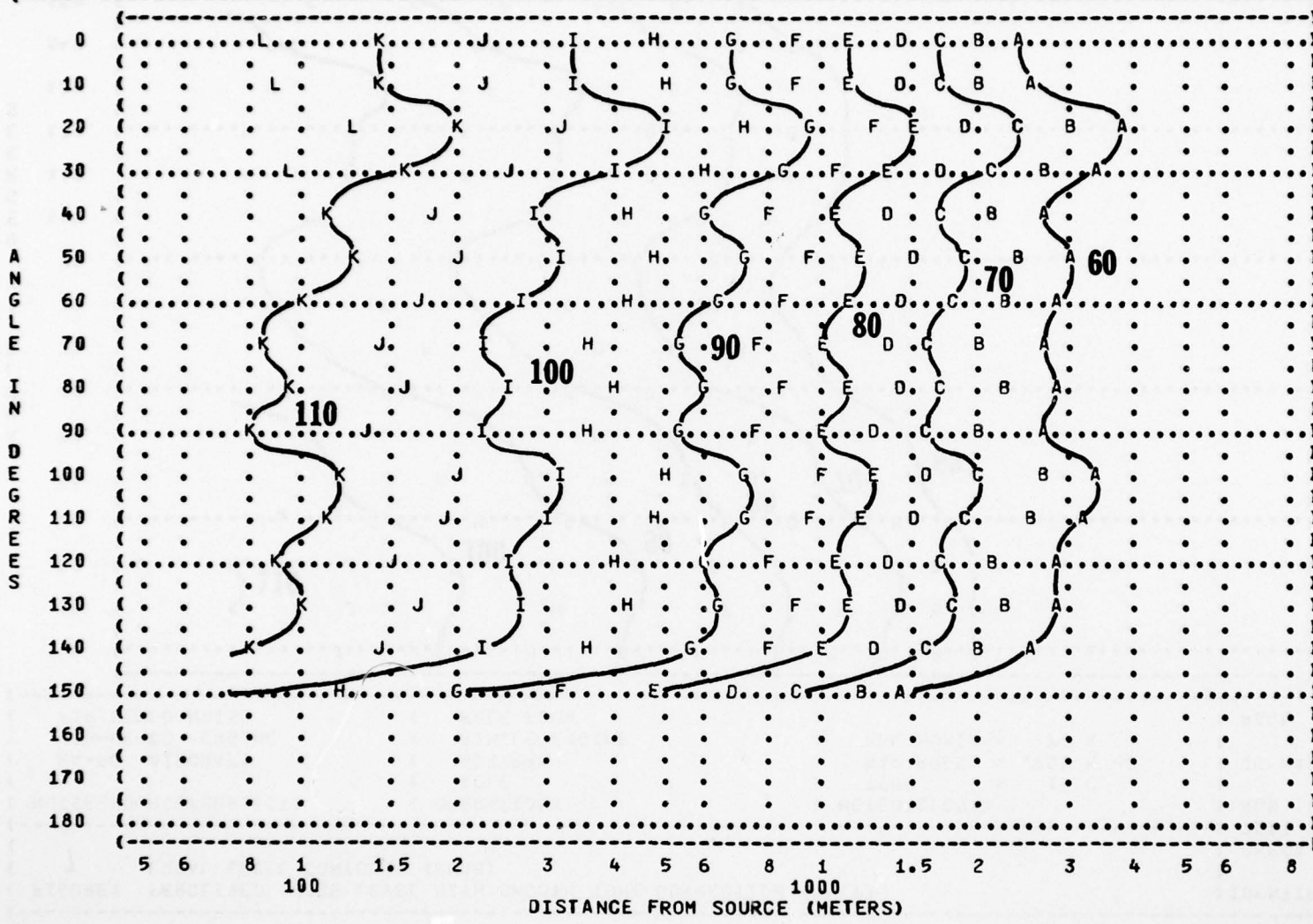
FIGURE 7 PERCEIVED NOISE LEVEL WITH SMOOTH TONE CORRECTION (PNLT) EQUAL LEVEL CONTOURS (PNDB)

NOISE SOURCE/SUBJECT:
RA-5C AIRCRAFT
J79-GE-8C ENGINE
FAR FIELD NOISE

OPERATION:
80% RPM
SINGLE ENGINE
FREE FLOW

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

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-002
RUN 02
05 MAY 75
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

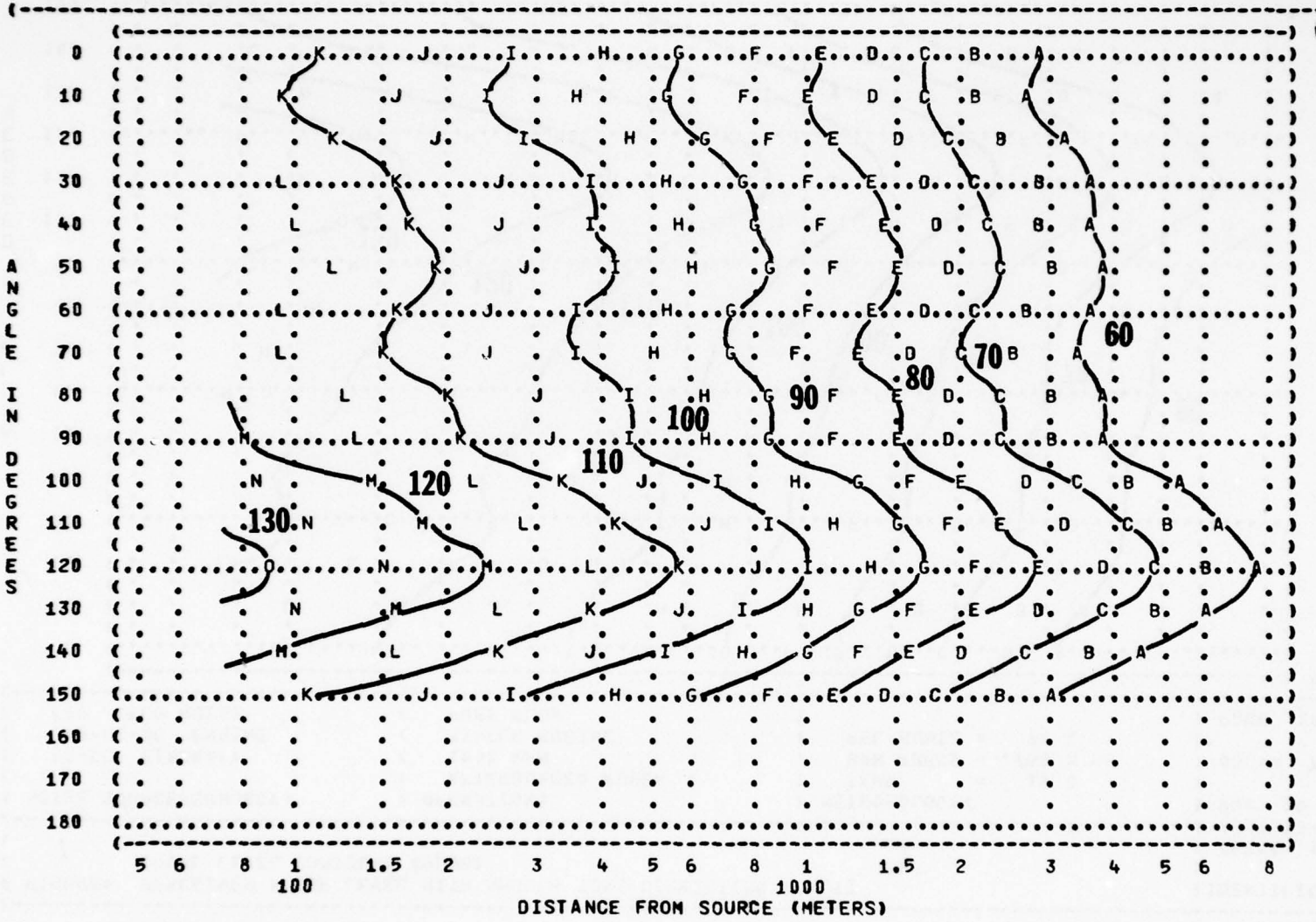
FIGURE 7: PERCEIVED NOISE LEVEL WITH SMOOTH TONE CORRECTION (PNLT) EQUAL LEVEL CONTOURS (PNDB)

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-002
RUN 03
05 MAY 75
PAGE 16

NOISE SOURCE/SUBJECT:
RA-5C AIRCRAFT
J79-GE-8C 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
O	130

FIGURE 7: PERCEIVED NOISE LEVEL WITH SMOOTH TONE CORRECTION (PNLT) EQUAL LEVEL CONTOURS (PNDB)

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-002
RUN 04
05 MAY 75
PAGE 16

NOISE SOURCE/SUBJECT:
RA-5C AIRCRAFT
J79-GE-8C ENGINE
FAR FIELD NOISE

OPERATION:
AFTERBURNER 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
O	130
P	135

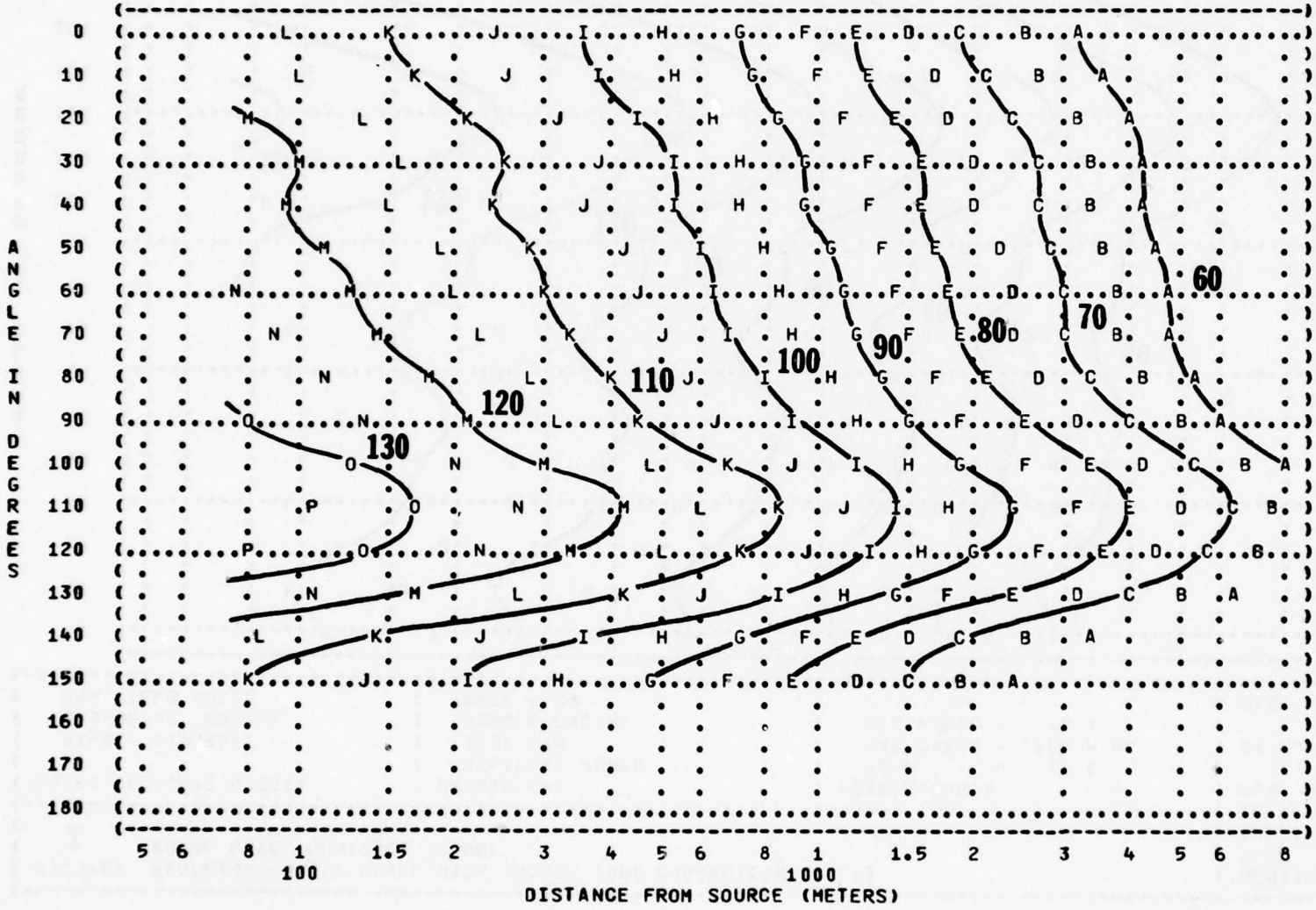


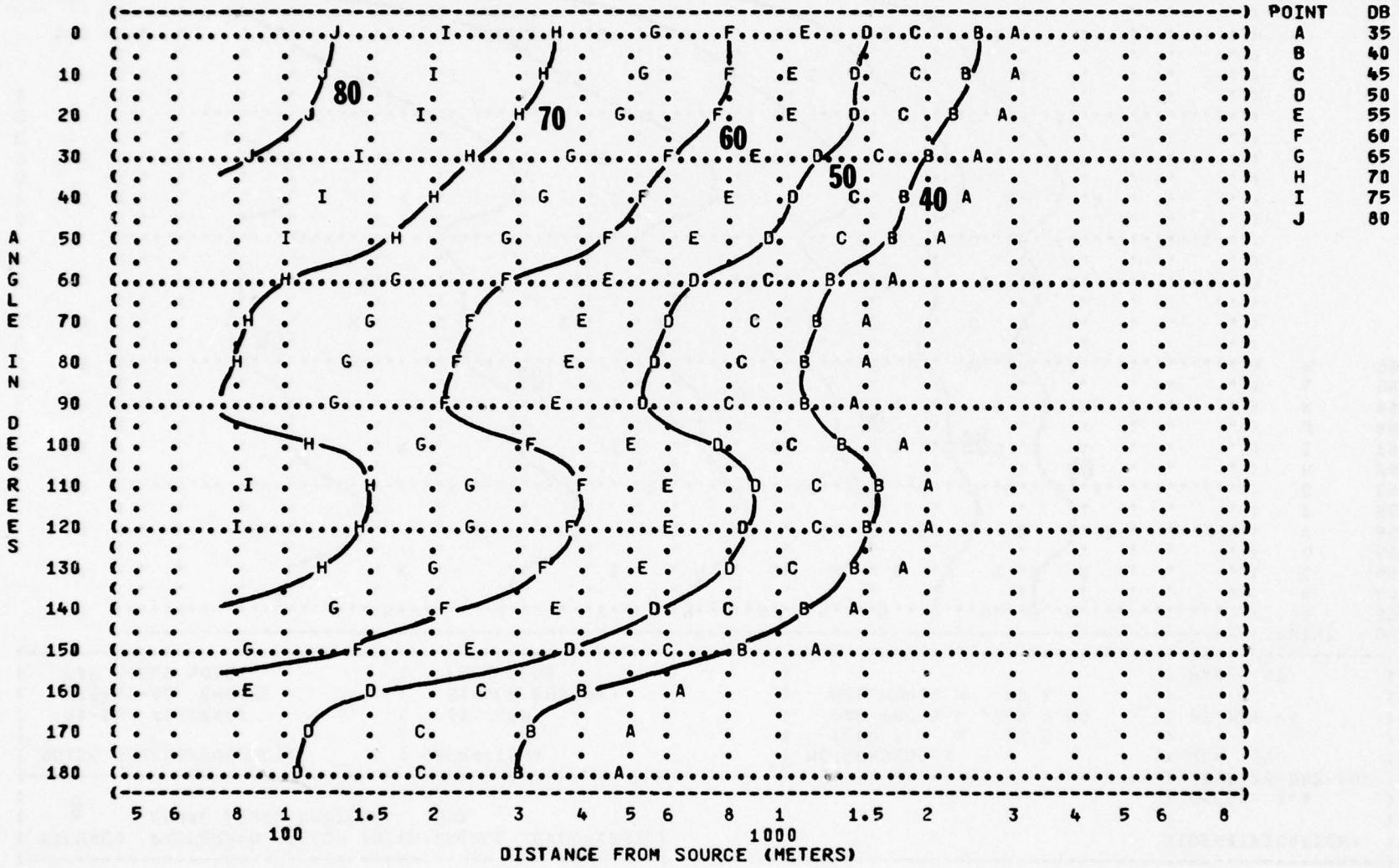
FIGURE 8 PREFERRED SPEECH INTERFERENCE LEVEL (PSIL)
EQUAL LEVEL CONTOURS (DB)

IDENTIFICATION:
ONEGA 1.4
TEST 75-002-002
RUN 01
05 MAY 75
PAGE 17

NOISE SOURCE/SUBJECT:
RA-5C AIRCRAFT
J79-GE-8C ENGINE
FAR FIELD NOISE

OPERATION:
IDLE
65% 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

FIGURE 8 PREFERRED SPEECH INTERFERENCE LEVEL (PSIL) EQUAL LEVEL CONTOURS (DB)

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-002
RUN 02
05 MAY 75
PAGE 17

NOISE SOURCE/SUBJECT:
RA-5C AIRCRAFT
J79-GE-8C ENGINE
FAR FIELD NOISE

OPERATION:
80% 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

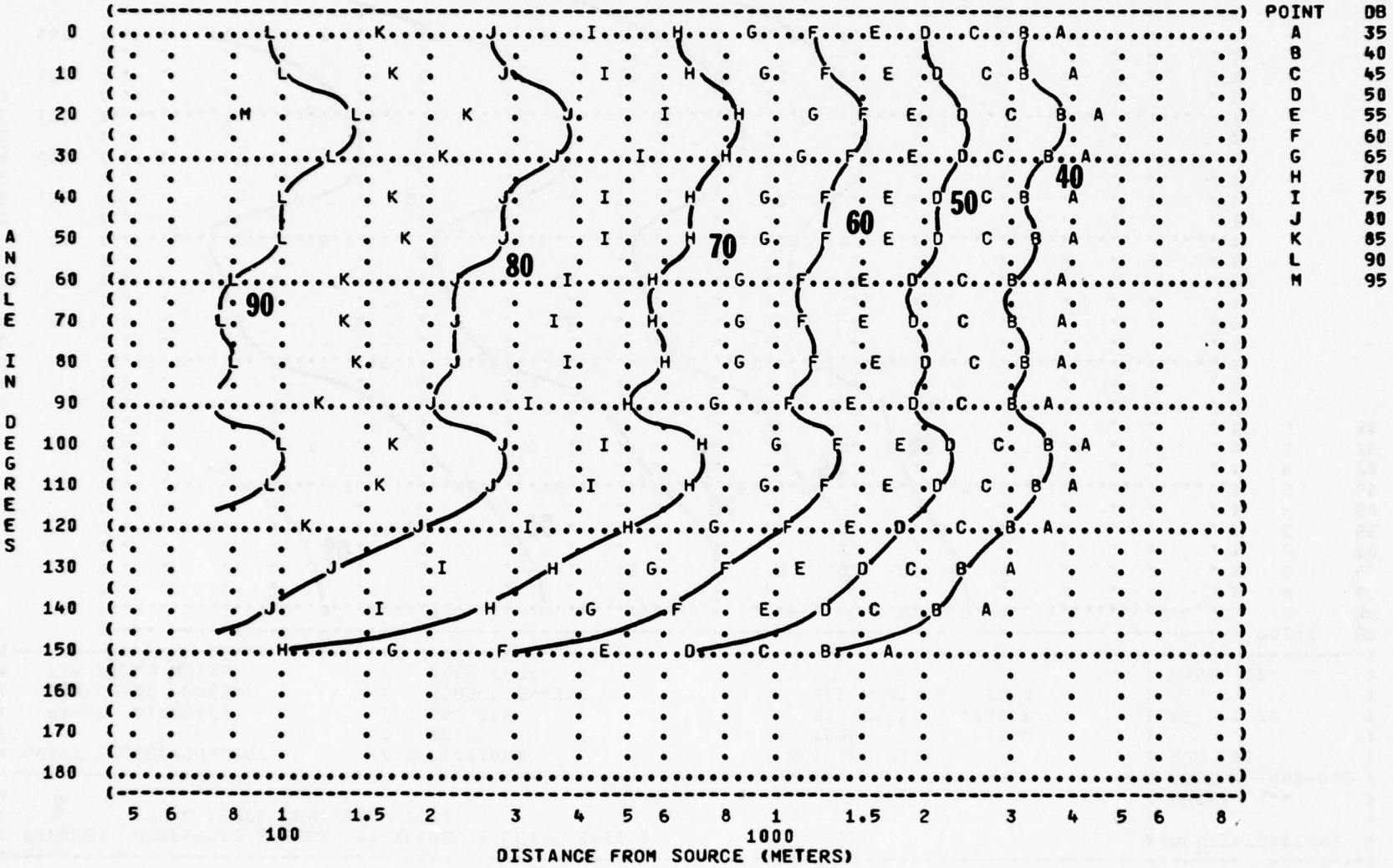


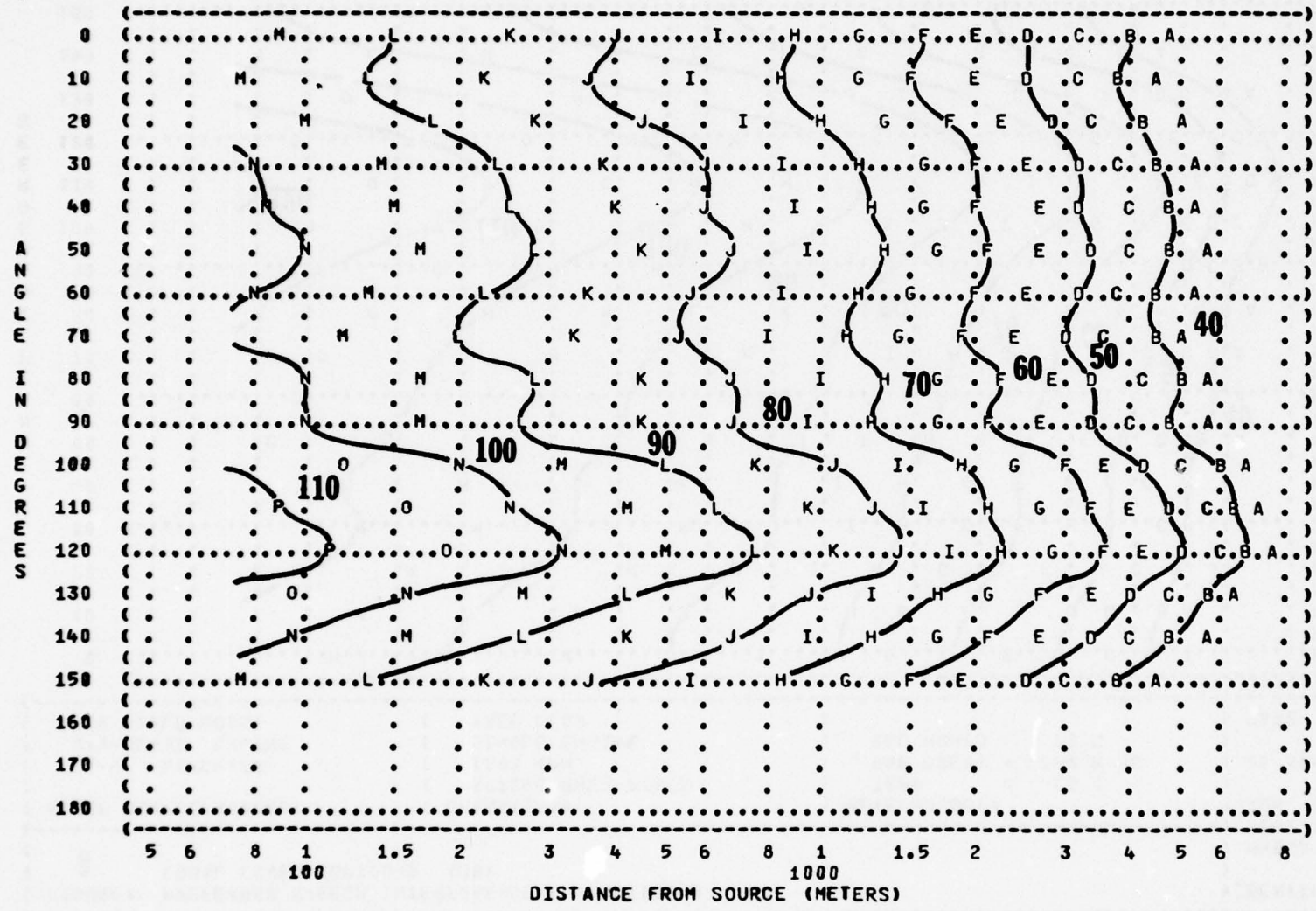
FIGURE 8 PREFERRED SPEECH INTERFERENCE LEVEL (PSIL) EQUAL LEVEL CONTOURS (DB)

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-002
RUN 03
05 MAY 75
PAGE 17

NOISE SOURCE/SUBJECT:
RA-5C AIRCRAFT
J79-GE-8C 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 8 PREFERRED SPEECH INTERFERENCE LEVEL (PSIL)
EQUAL LEVEL CONTOURS (DB)

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-002
RUN 04
05 MAY 75
PAGE 17

NOISE SOURCE/SUBJECT:
RA-5C AIRCRAFT
J79-GE-8C ENGINE
FAR FIELD NOISE

OPERATION:
AFTERBURNER 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
Q	115
R	120

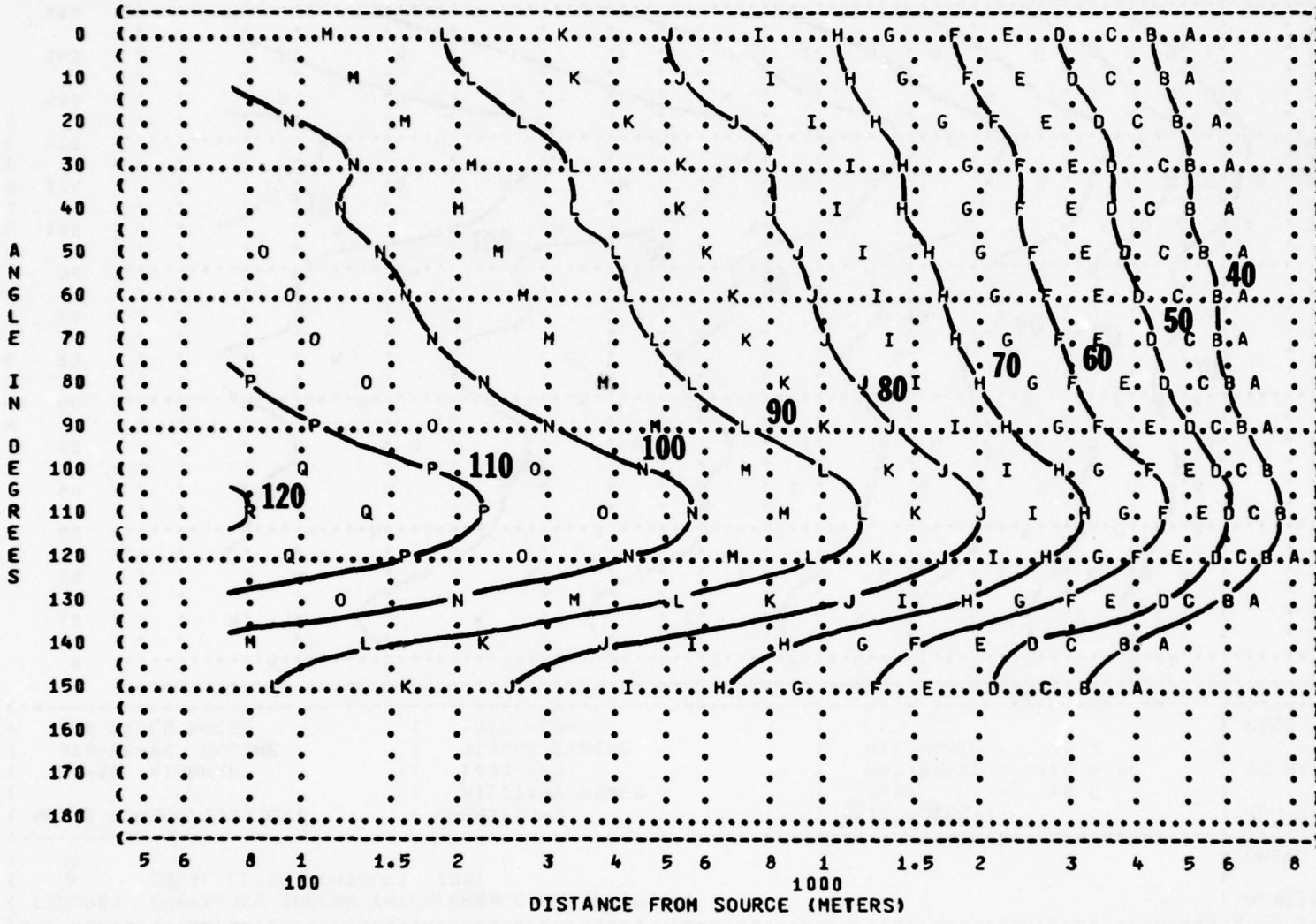


FIGURE 9: MAXIMUM PERMISSIBLE TIME (T) FOR ONE EXPOSURE PER DAY (AFR 161-35, JULY 73)
EQUAL TIME CONTOURS (MINUTES)
NO PROTECTION

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-002
RUN 01
05 MAY 75
PAGE 7

NOISE SOURCE/SUBJECT:
RA-5C AIRCRAFT
J79-GE-8C ENGINE
FAR FIELD NOISE

OPERATION:
IDLE
65% 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

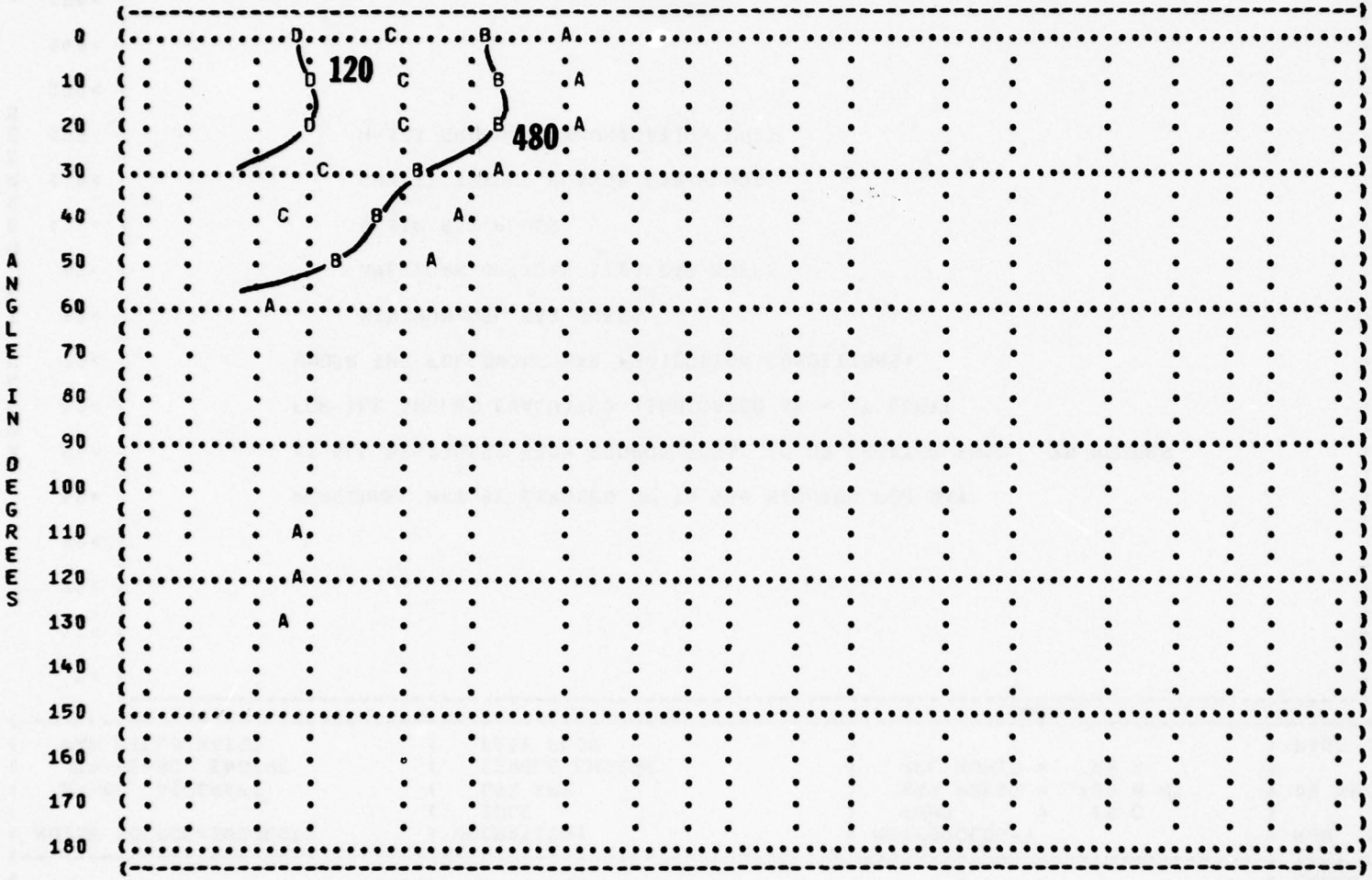


FIGURE: 9 — MAXIMUM PERMISSIBLE TIME (T) FOR ONE EXPOSURE PER DAY (AFR 161-35, JULY 73)
EQUAL TIME CONTOURS (MINUTES)

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-002
RUN 01
05 MAY 75
PAGE 8

NOISE SOURCE/SUBJECT:
RA-5C AIRCRAFT
J79-GE-8C ENGINE
FAR FIELD NOISE

OPERATION:
IDLE
65% RPM
SINGLE ENGINE
FREE FLOW

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

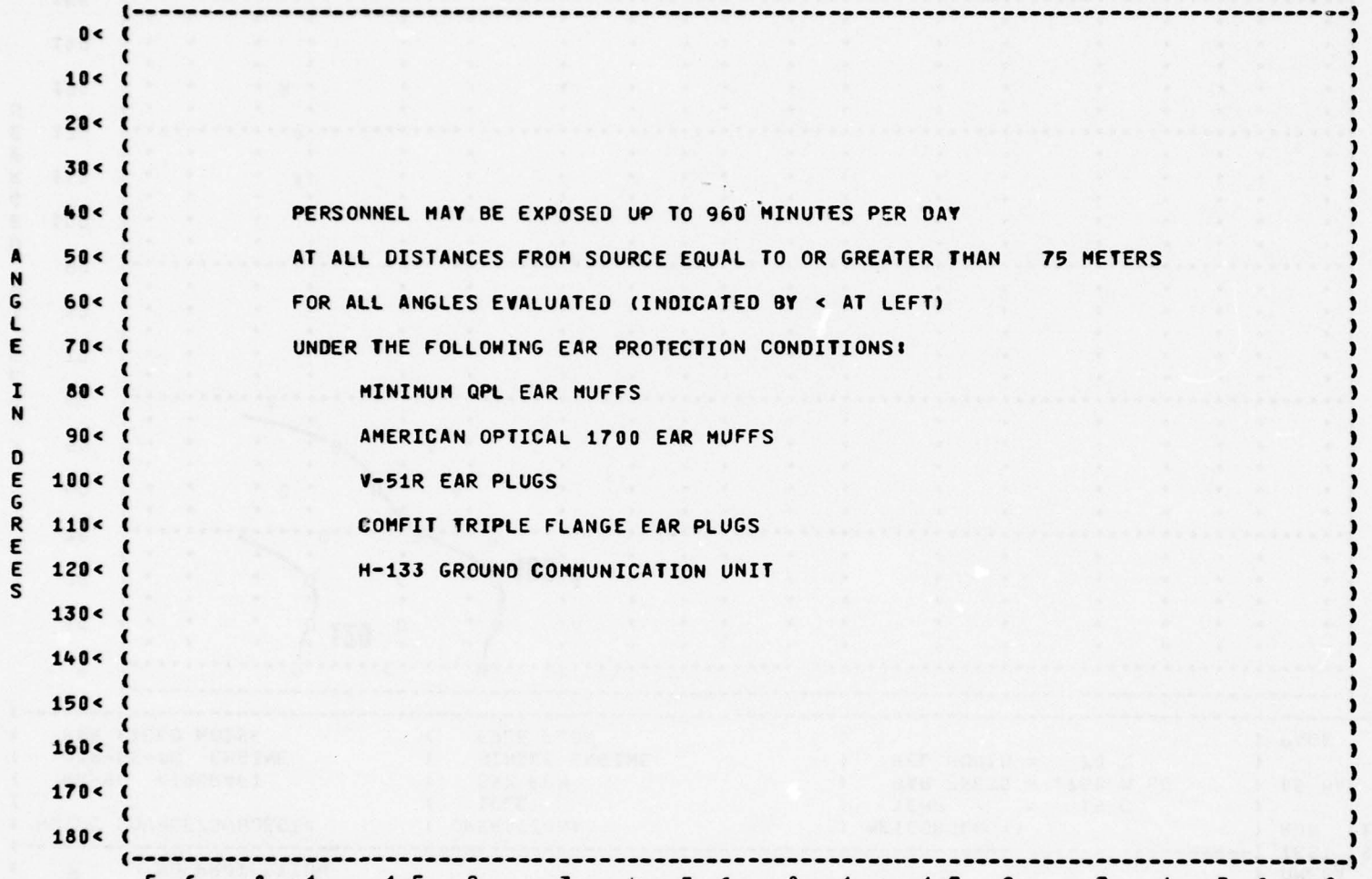


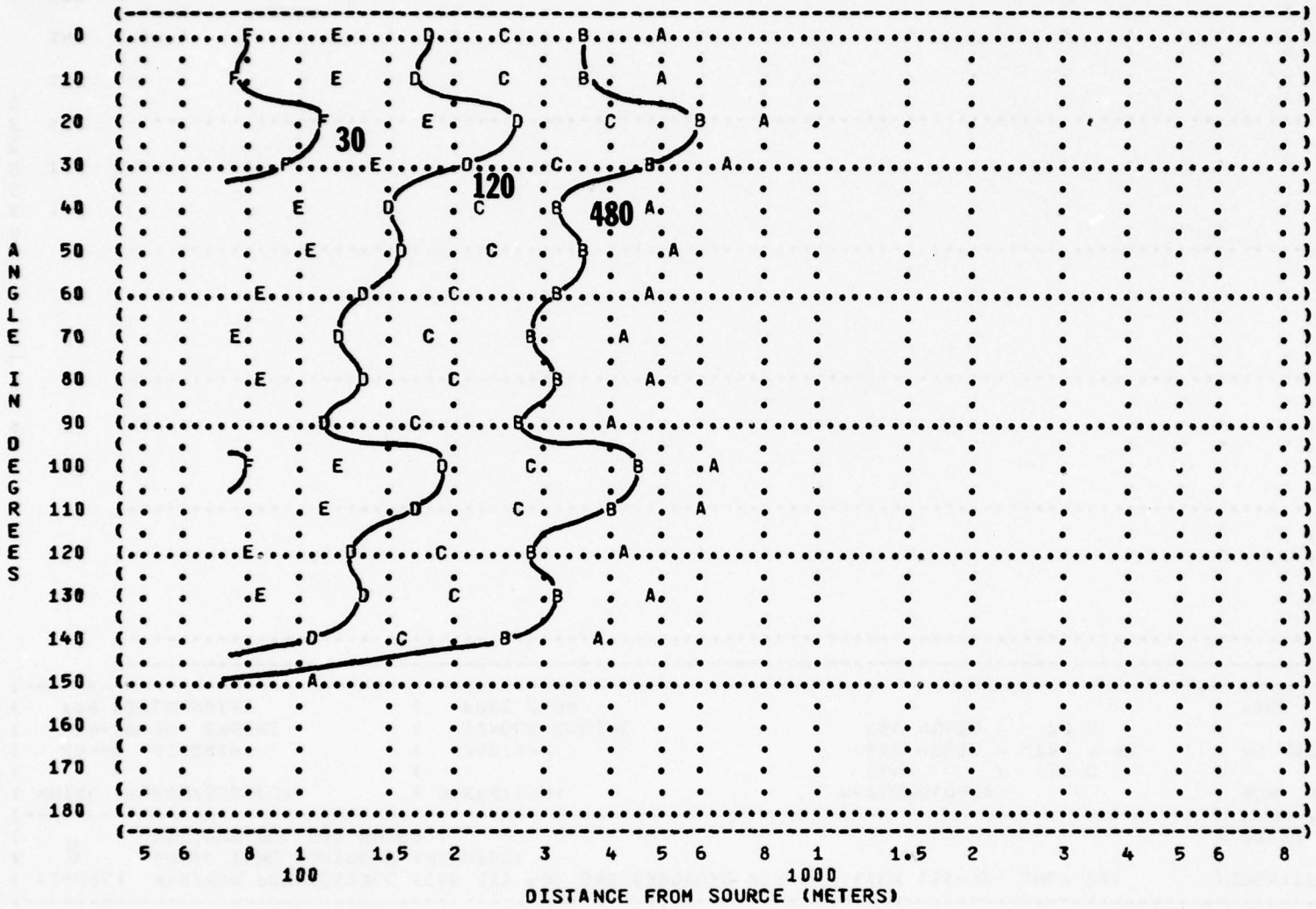
FIGURE 9: MAXIMUM PERMISSIBLE TIME (T) FOR ONE EXPOSURE PER DAY (AFR 161-35, JULY 73)
EQUAL TIME CONTOURS (MINUTES)
NO PROTECTION

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-002
RUN 02
05 MAY 75
PAGE 7

NOISE SOURCE/SUBJECT:
RA-5C AIRCRAFT
J79-GE-8C ENGINE
FAR FIELD NOISE

OPERATION:
80% 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

FIGURE: 9

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:
RA-5C AIRCRAFT
J79-GE-8C ENGINE
FAR FIELD NOISE

OPERATION:
80% RPM
SINGLE ENGINE
FREE FLOW

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

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-002
RUN 02
05 MAY 75
PAGE 8

POINT MIN
A 960

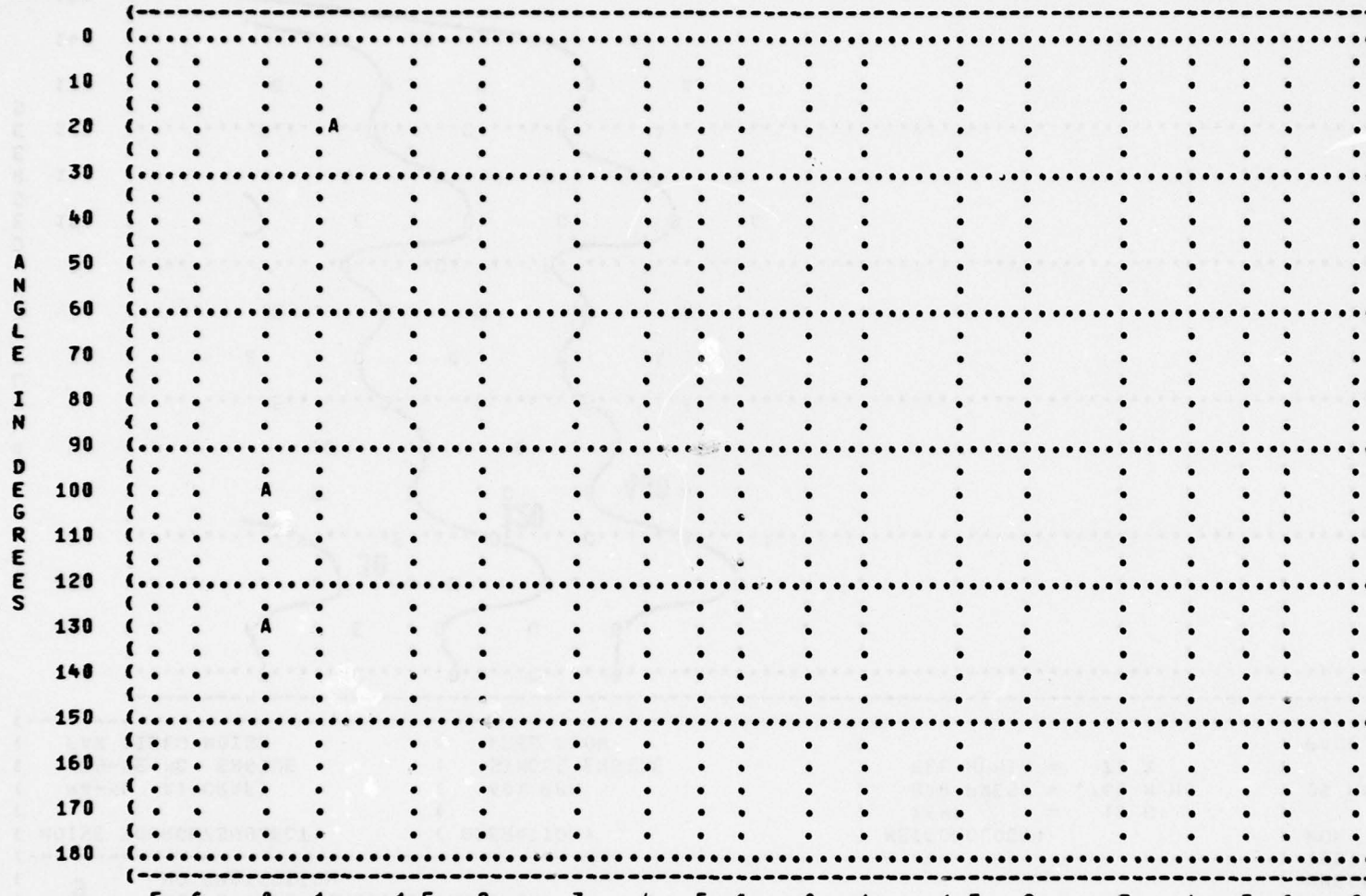


FIGURE 9: MAXIMUM PERMISSIBLE TIME (T) FOR ONE EXPOSURE PER DAY (AFR 161-35, JULY 73)
EQUAL TIME CONTOURS (MINUTES)
V-51R EAR PLUGS

NOISE SOURCE/SUBJECT:
RA-5C AIRCRAFT
J79-GE-8C ENGINE
FAR FIELD NOISE

OPERATION:
80% RPM
SINGLE ENGINE
FREE FLOW

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

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-002
RUN 02
05 MAY 75
PAGE 9

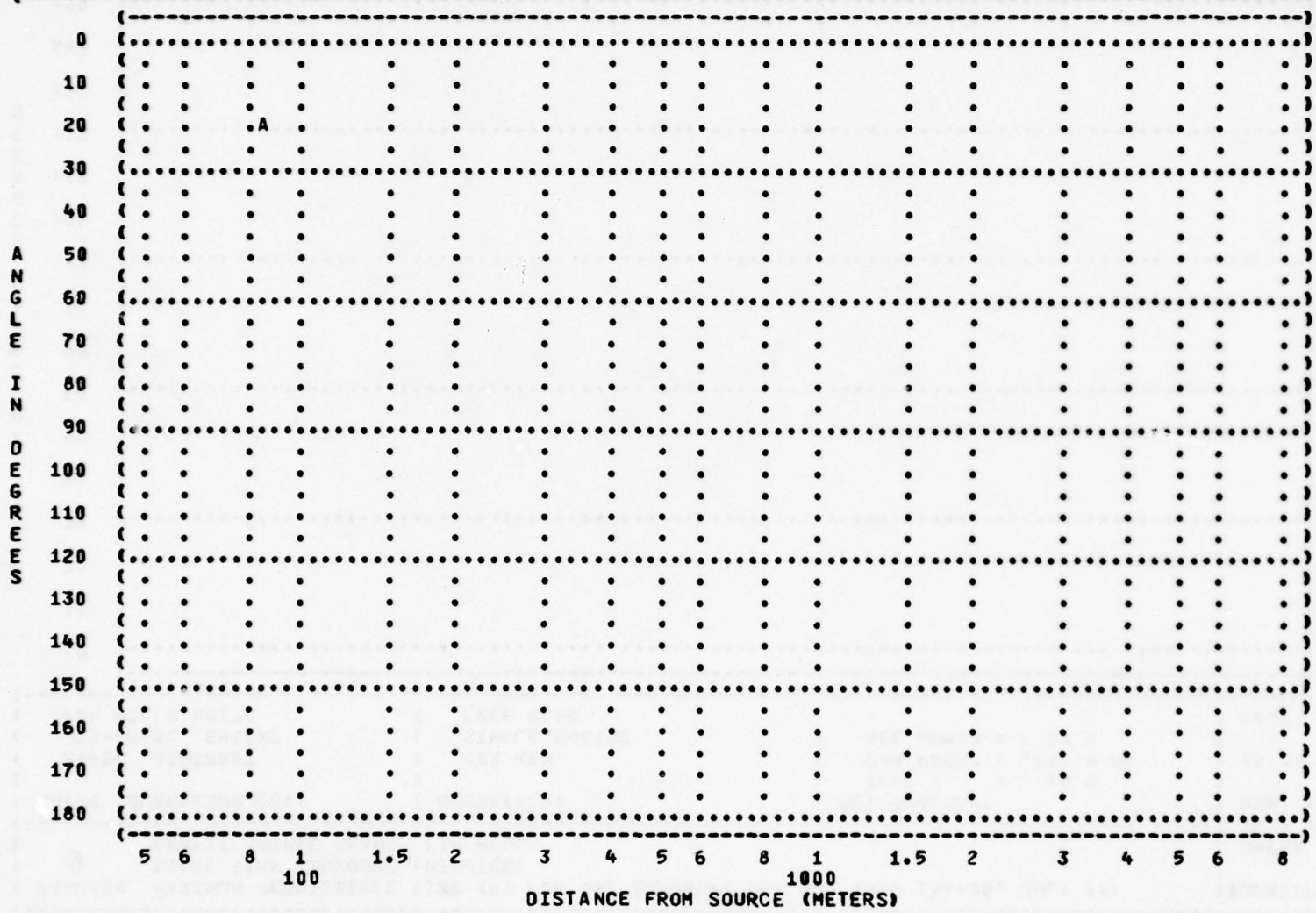


FIGURE 9: MAXIMUM PERMISSIBLE TIME (T) FOR ONE EXPOSURE PER DAY (AFR 161-35, JULY 73)
EQUAL TIME CONTOURS (MINUTES)
COMFIT TRIPLE FLANGE EAR PLUGS

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-002
RUN 02
05 MAY 75
PAGE 10

NOISE SOURCE/SUBJECT:
RA-5C AIRCRAFT
J79-GE-8C ENGINE
FAR FIELD NOISE

OPERATION:
80% RPM
SINGLE ENGINE
FREE FLOW

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

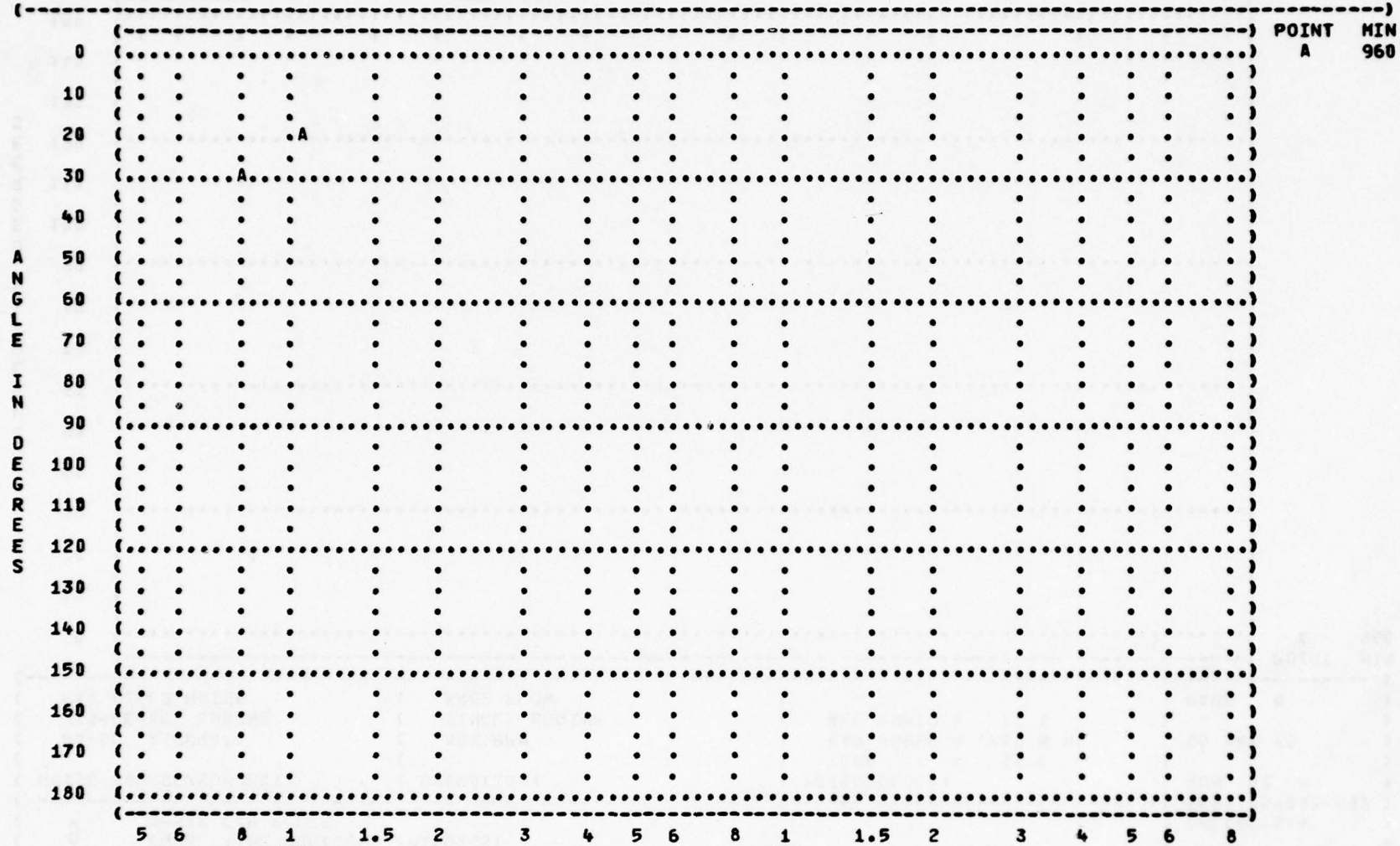


FIGURE 9 MAXIMUM PERMISSIBLE TIME (T) FOR ONE EXPOSURE PER DAY (AFR 161-35, JULY 73)
EQUAL TIME CONTOURS (MINUTES)

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-002
RUN 02
05 MAY 75
PAGE 11

NOISE SOURCE/SUBJECT:
RA-5C AIRCRAFT
J79-GE-8C ENGINE
FAR FIELD NOISE

OPERATION:
80% RPM
SINGLE ENGINE
FREE FLOW

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

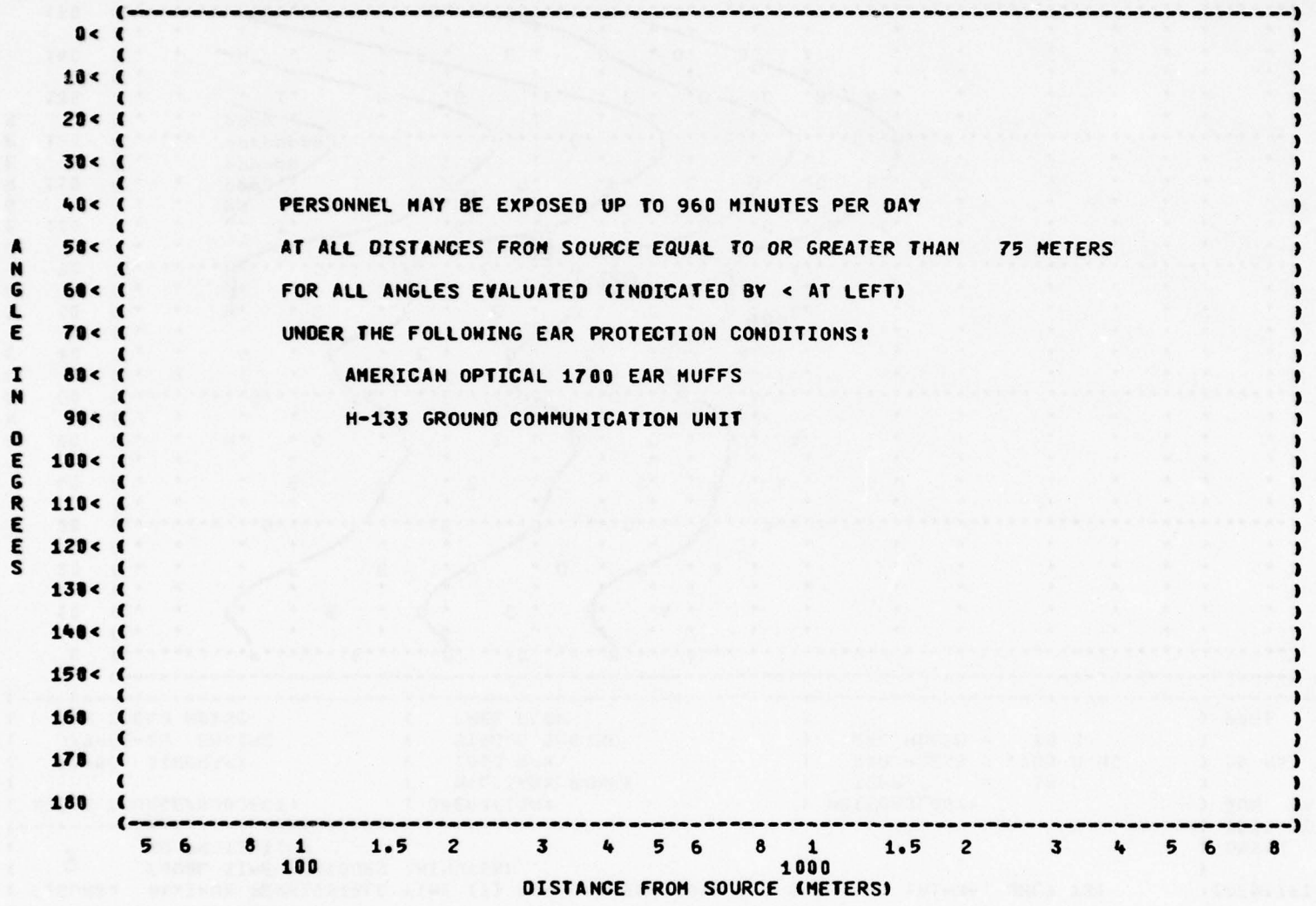


FIGURE: 9

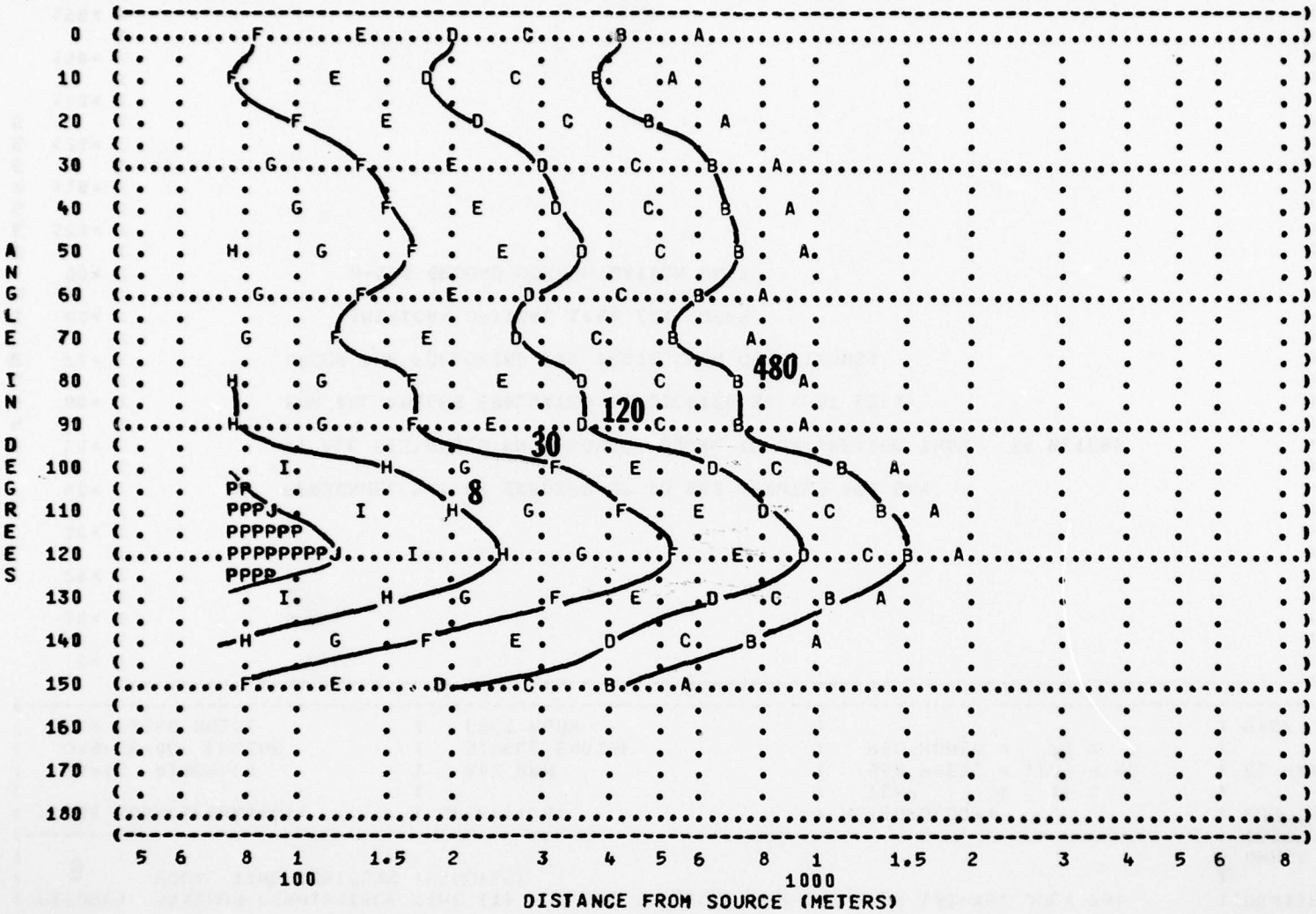
MAXIMUM PERMISSIBLE TIME (T) FOR ONE EXPOSURE PER DAY (AFR 161-35, JULY 73)
EQUAL TIME CONTOURS (MINUTES)
NO PROTECTION

NOISE SOURCE/SUBJECT:
RA-5C AIRCRAFT
J79-GE-8C 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 75-002-002
RUN 03
05 MAY 75
PAGE 7



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 9: 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:
RA-5C AIRCRAFT
J79-GE-8C 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 75-002-002
RUN 03
05 MAY 75
PAGE 8

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

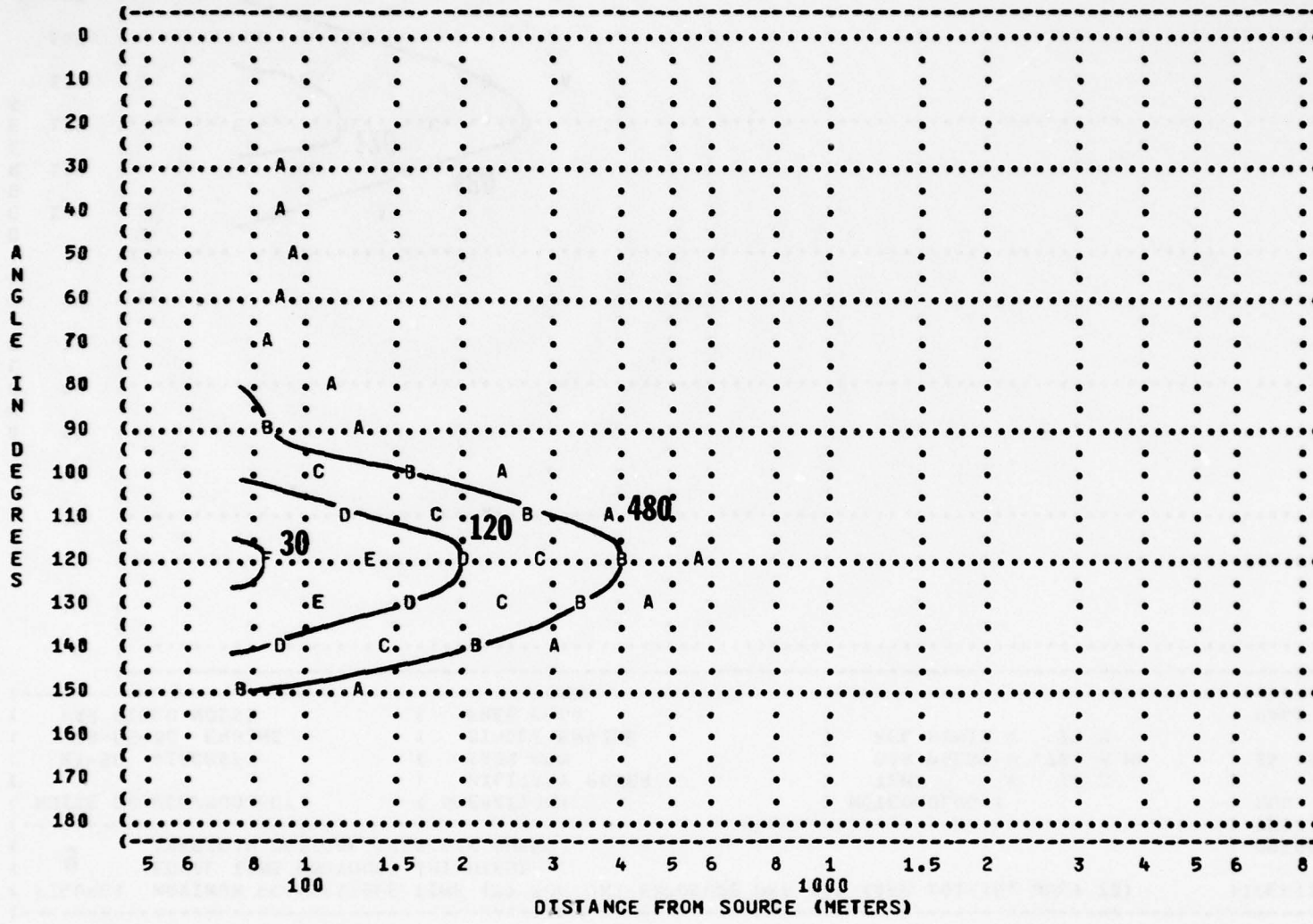


FIGURE 9: MAXIMUM PERMISSIBLE TIME (T) FOR ONE EXPOSURE PER DAY (AFR 161-35, JULY 73)
EQUAL TIME CONTOURS (MINUTES)
AMERICAN OPTICAL 1700 EAR MUFFS

NOISE SOURCE/SUBJECT:
RA-5C AIRCRAFT
J79-GE-8C 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 75-002-002
RUN 03
05 MAY 75
PAGE 9

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

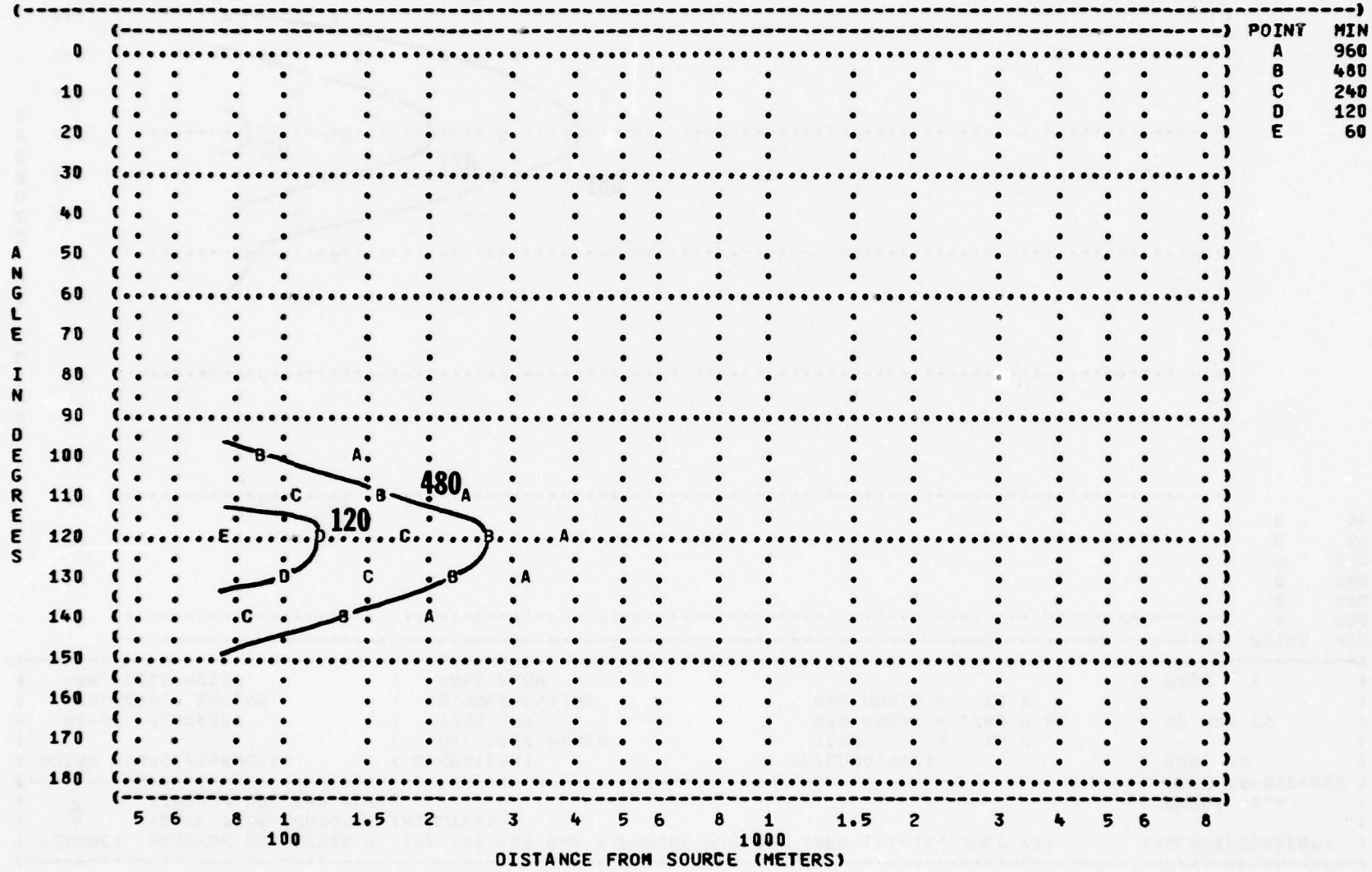


FIGURE 9: MAXIMUM PERMISSIBLE TIME (T) FOR ONE EXPOSURE PER DAY (AFR 161-35, JULY 73)
EQUAL TIME CONTOURS (MINUTES)
V-51R EAR PLUGS

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-002
RUN 03
05 MAY 75
PAGE 10

NOISE SOURCE/SUBJECT:
RA-5C AIRCRAFT
J79-GE-8C 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

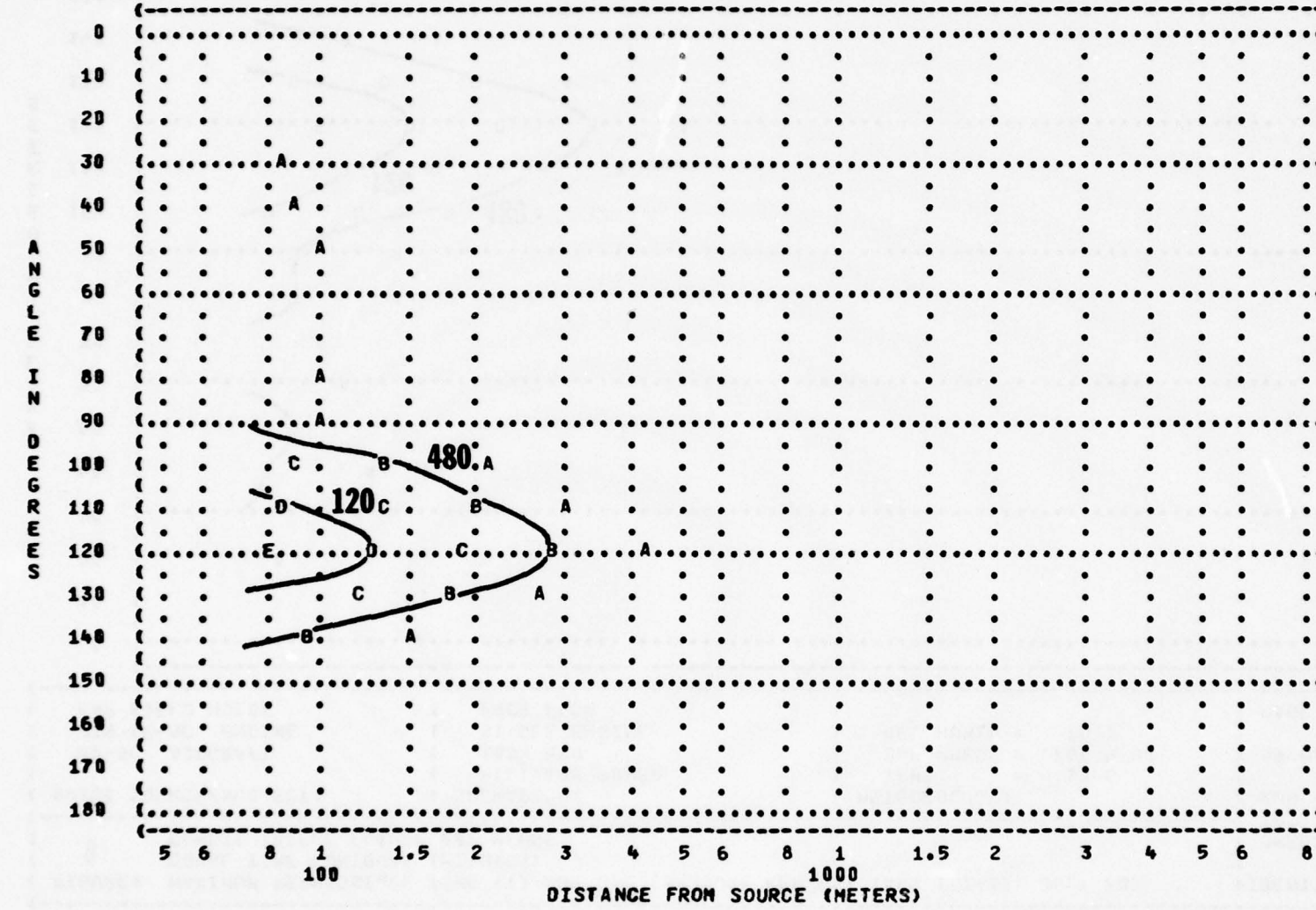


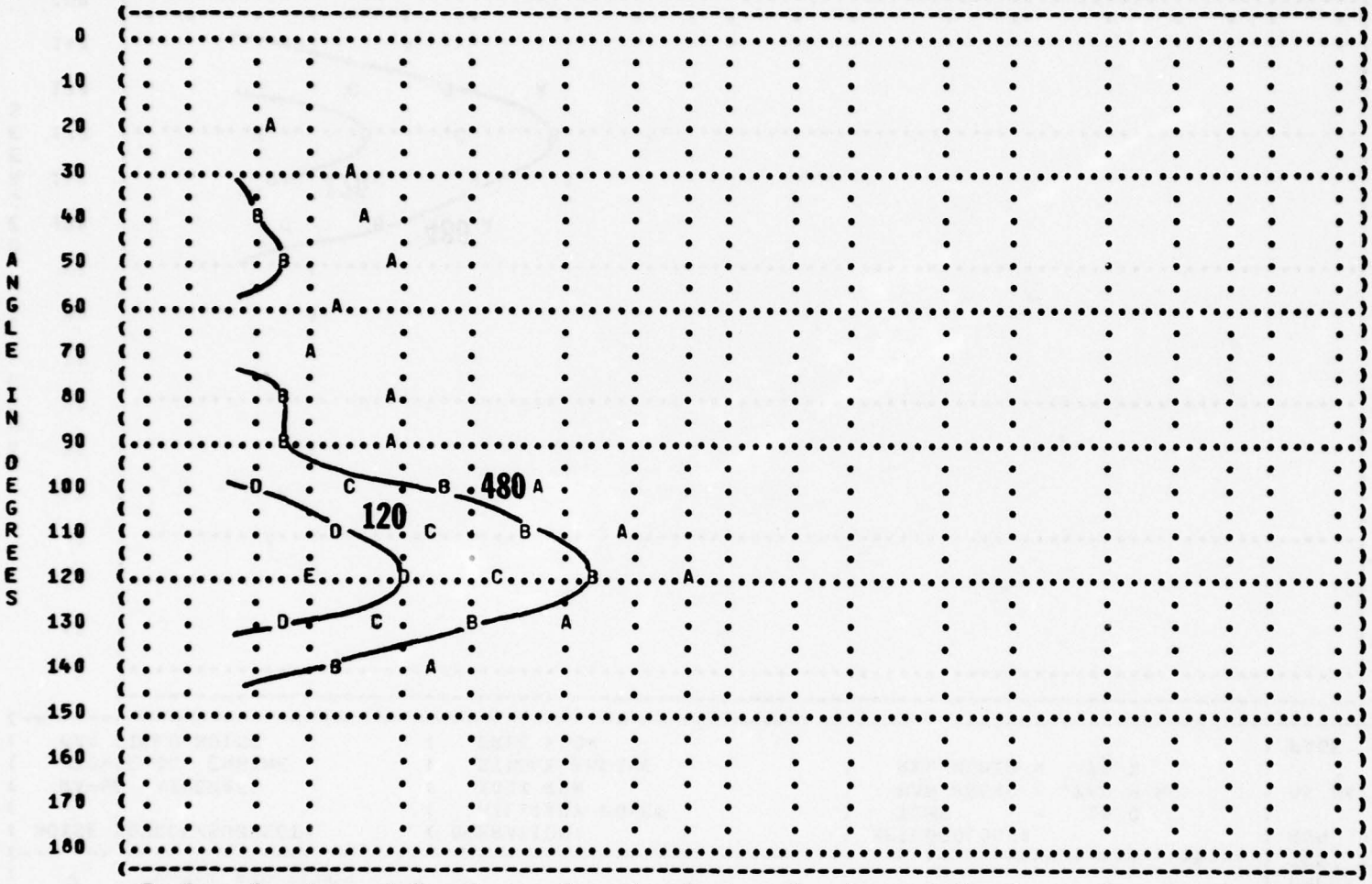
FIGURE 9: MAXIMUM PERMISSIBLE TIME (T) FOR ONE EXPOSURE PER DAY (AFR 161-35, JULY 73)
EQUAL TIME CONTOURS (MINUTES)
COMFIT TRIPLE FLANGE EAR PLUGS

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-002
RUN 03
05 MAY 75
PAGE 11

NOISE SOURCE/SUBJECT:
RA-5C AIRCRAFT
J79-GE-8C 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

FIGURE 9: 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:
RA-5C AIRCRAFT
J79-GE-8C 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 75-002-002
RUN 03
05 MAY 75
PAGE 12

POINT	MIN
A	960
B	480
C	240

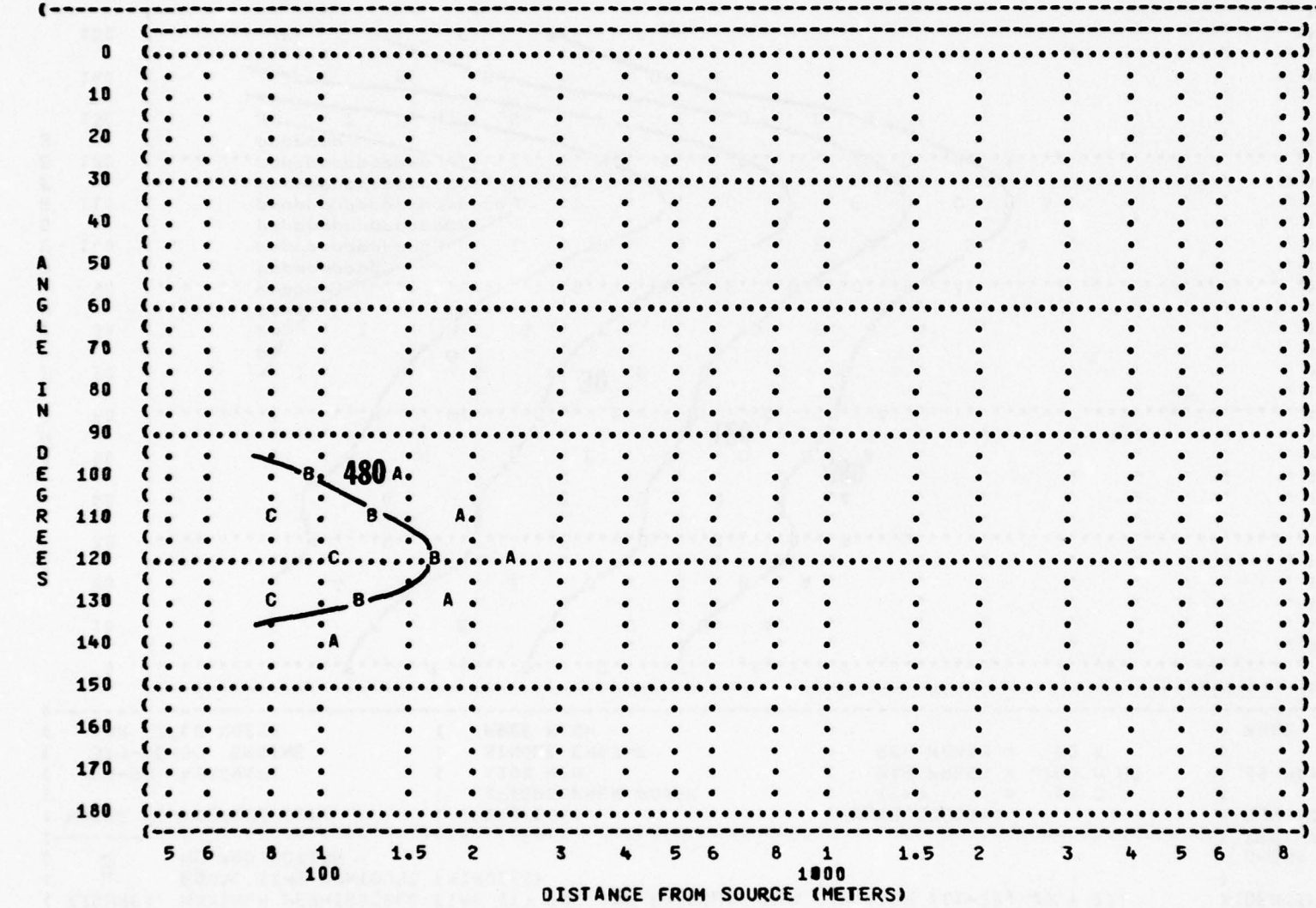


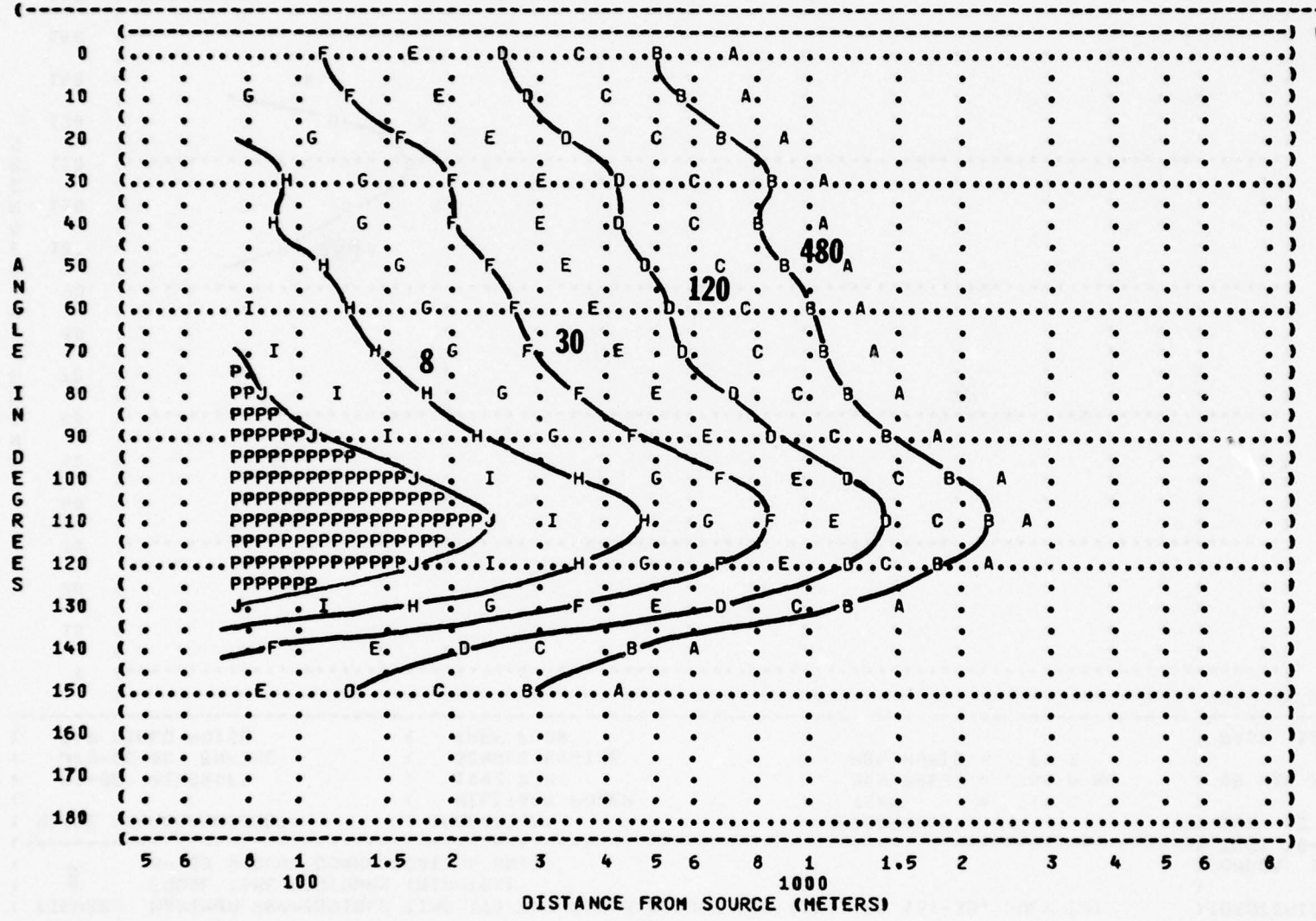
FIGURE 9: MAXIMUM PERMISSIBLE TIME (T) FOR ONE EXPOSURE PER DAY (AFR 161-35, JULY 73)
EQUAL TIME CONTOURS (MINUTES)
NO PROTECTION

NOISE SOURCE/SUBJECT:
RA-5C AIRCRAFT
J79-GE-8C ENGINE
FAR FIELD NOISE

OPERATION:
AFTERBURNER POWER
100% RPM
SINGLE ENGINE
FREE FLOW

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

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-002
RUN 04
05 MAY 75
PAGE 7



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 9: 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 75-002-002
RUN 04
05 MAY 75
PAGE 8

NOISE SOURCE/SUBJECT:
RA-5C AIRCRAFT
J79-GE-8C ENGINE
FAR FIELD NOISE

OPERATION:
AFTERBURNER 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

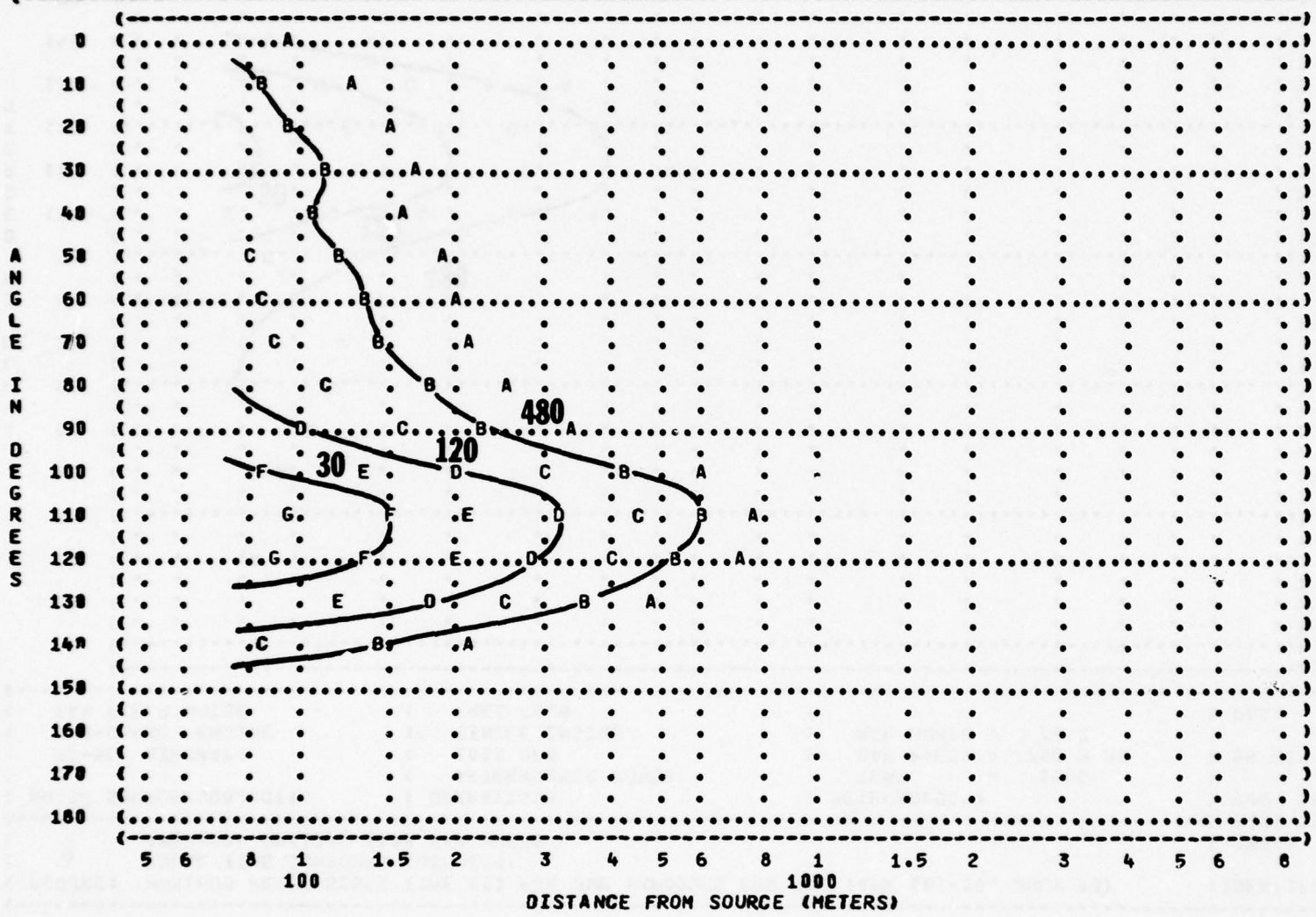


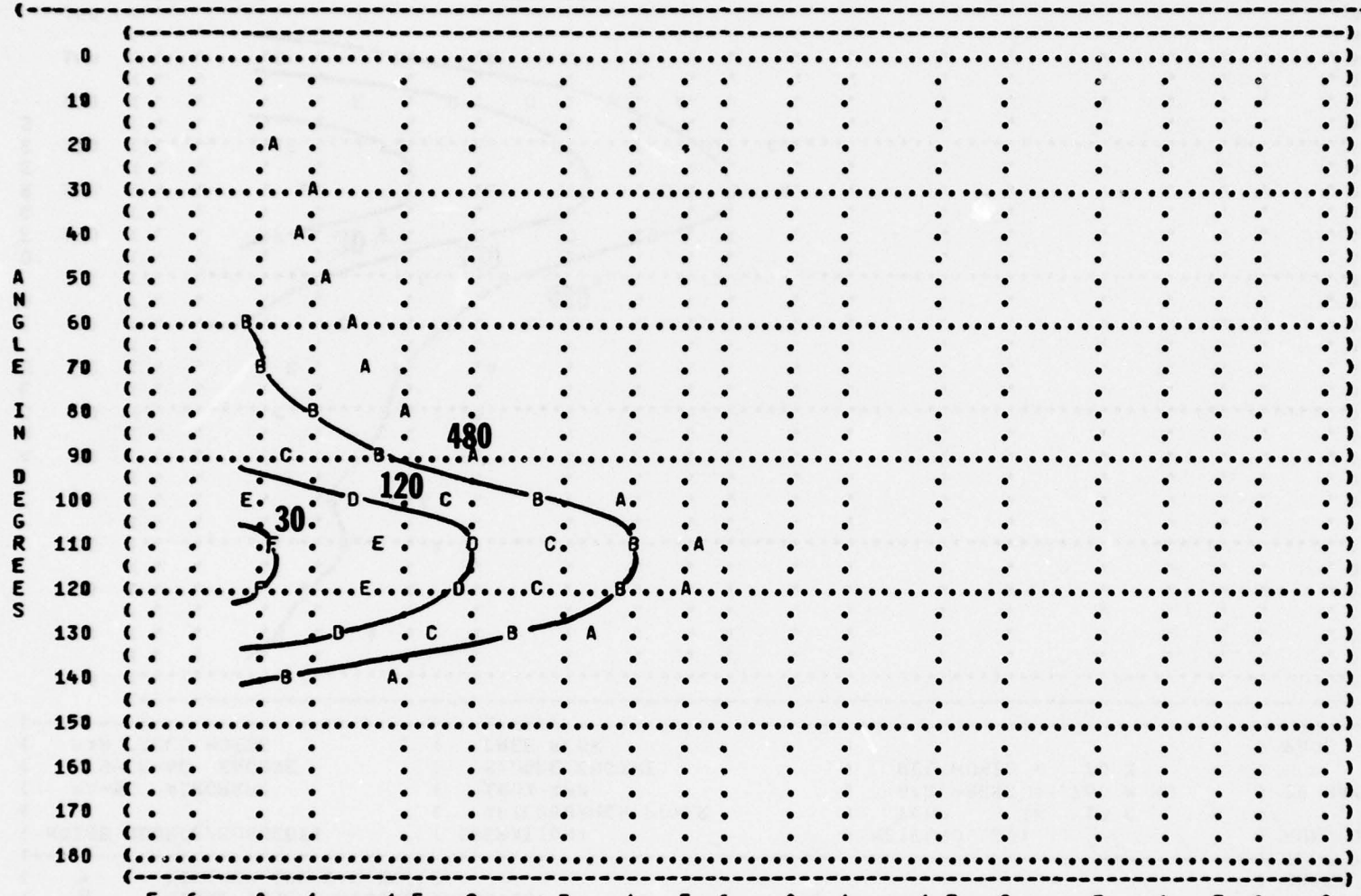
FIGURE 9: MAXIMUM PERMISSIBLE TIME (T) FOR ONE EXPOSURE PER DAY (AFR 161-35, JULY 73)
EQUAL TIME CONTOURS (MINUTES)
AMERICAN OPTICAL 1700 EAR MUFFS

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-002
RUN 04
05 MAY 75
PAGE 9

NOISE SOURCE/SUBJECT:
RA-5C AIRCRAFT
J79-GE-8C ENGINE
FAR FIELD NOISE

OPERATION:
AFTERBURNER 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

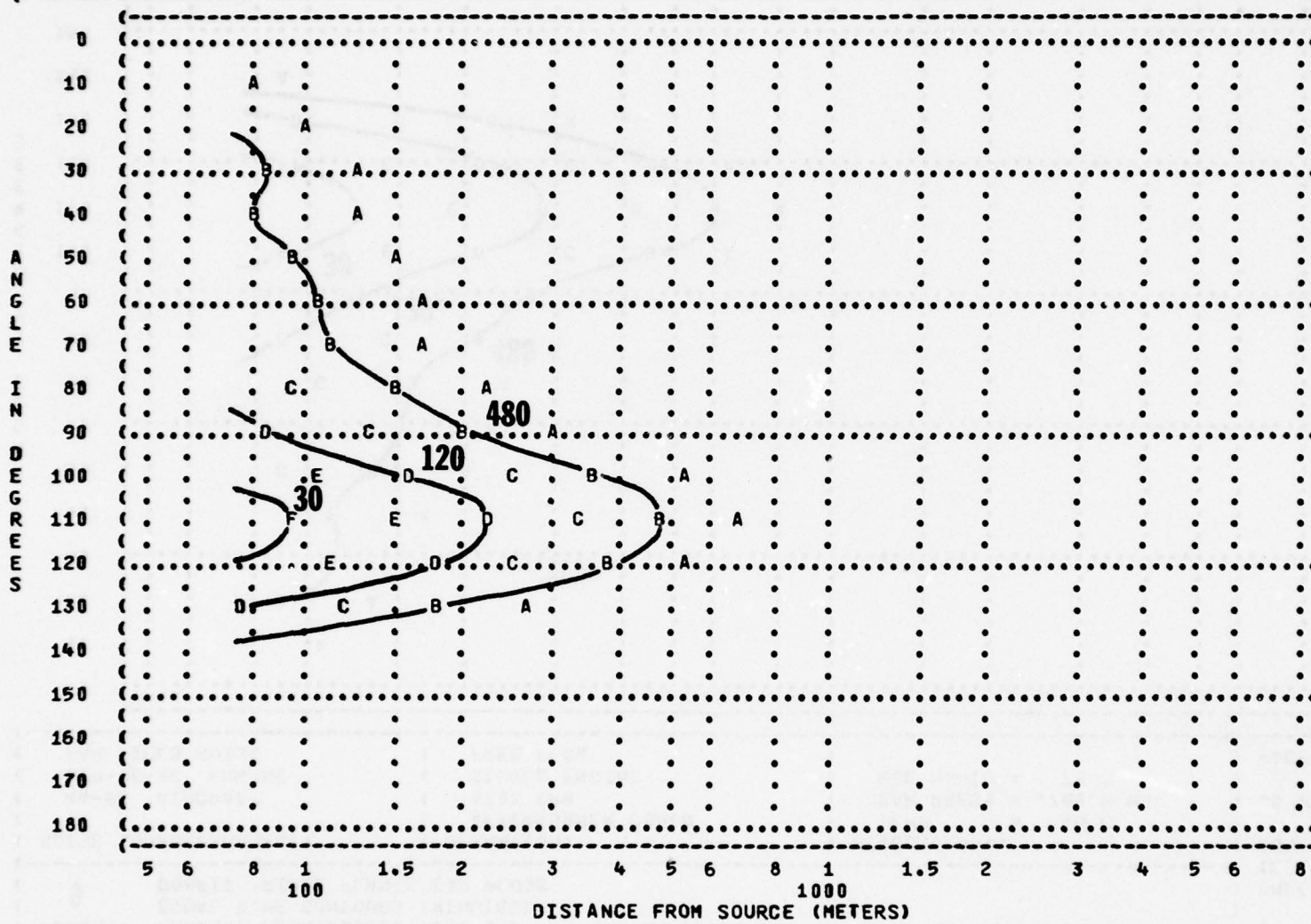
FIGURE 9: MAXIMUM PERMISSIBLE TIME (T) FOR ONE EXPOSURE PER DAY (AFR 161-35, JULY 73)
EQUAL TIME CONTOURS (MINUTES)
V-51R EAR PLUGS

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-002
RUN 04
05 MAY 75
PAGE 10

NOISE SOURCE/SUBJECT:
RA-5C AIRCRAFT
J79-GE-8C ENGINE
FAR FIELD NOISE

OPERATION:
AFTERBURNER 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

FIGURE 9: 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:
RA-5C AIRCRAFT
J79-GE-8C ENGINE
FAR FIELD NOISE

OPERATION:
AFTERBURNER POWER
100% RPM
SINGLE ENGINE
FREE FLOW

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

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-002
RUN 04
05 MAY 75
PAGE 11

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

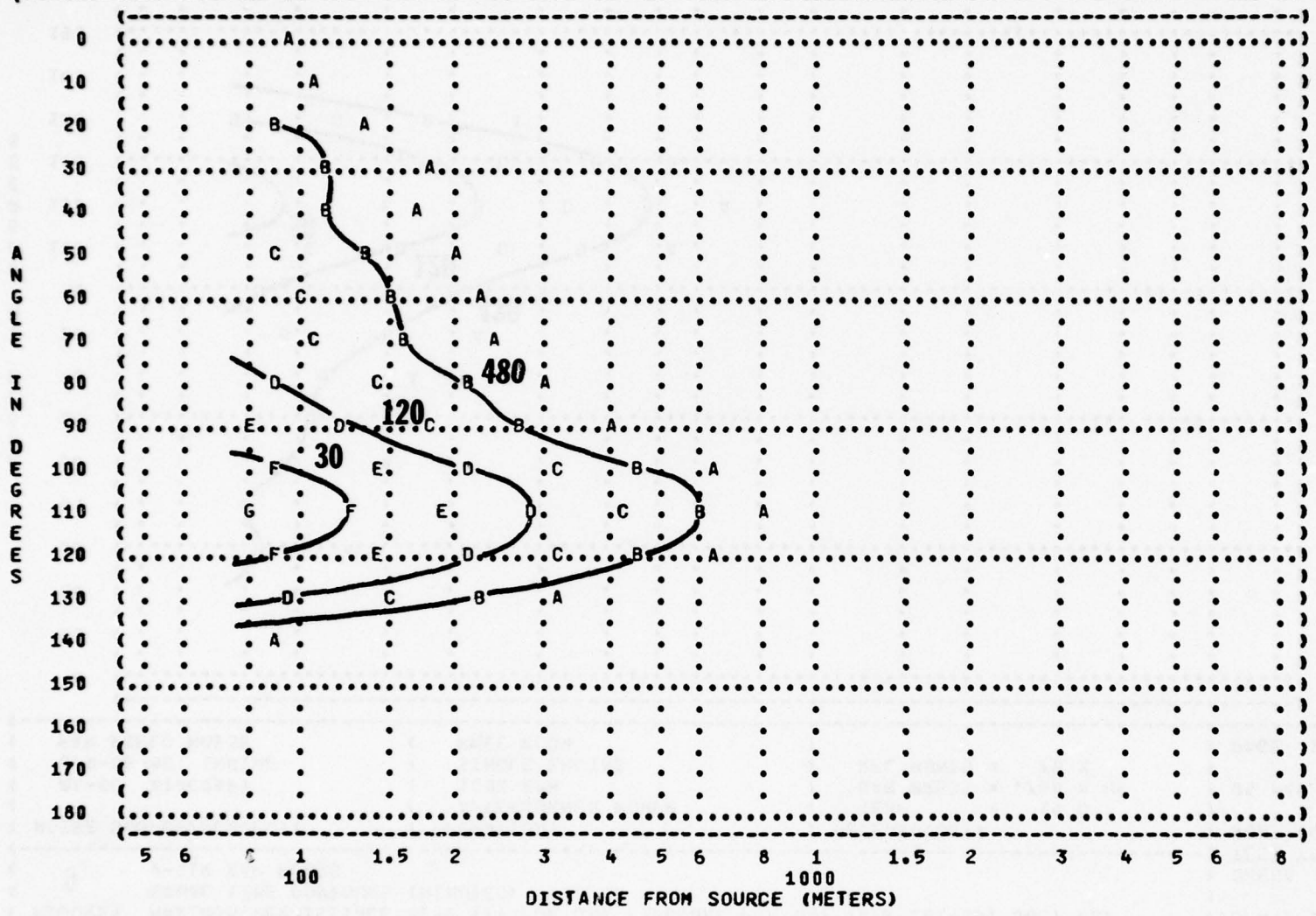


FIGURE 9: MAXIMUM PERMISSIBLE TIME (T) FOR ONE EXPOSURE PER DAY (AFR 161-35, JULY 73)
EQUAL TIME CONTOURS (MINUTES)
H-133 GROUND COMMUNICATION UNIT

NOISE SOURCE/SUBJECT:
RA-5C AIRCRAFT
J79-GE-8C ENGINE
FAR FIELD NOISE

OPERATION:
AFTERBURNER POWER
100% RPM
SINGLE ENGINE
FREE FLOW

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

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-002
RUN 04
05 MAY 75
PAGE 12

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

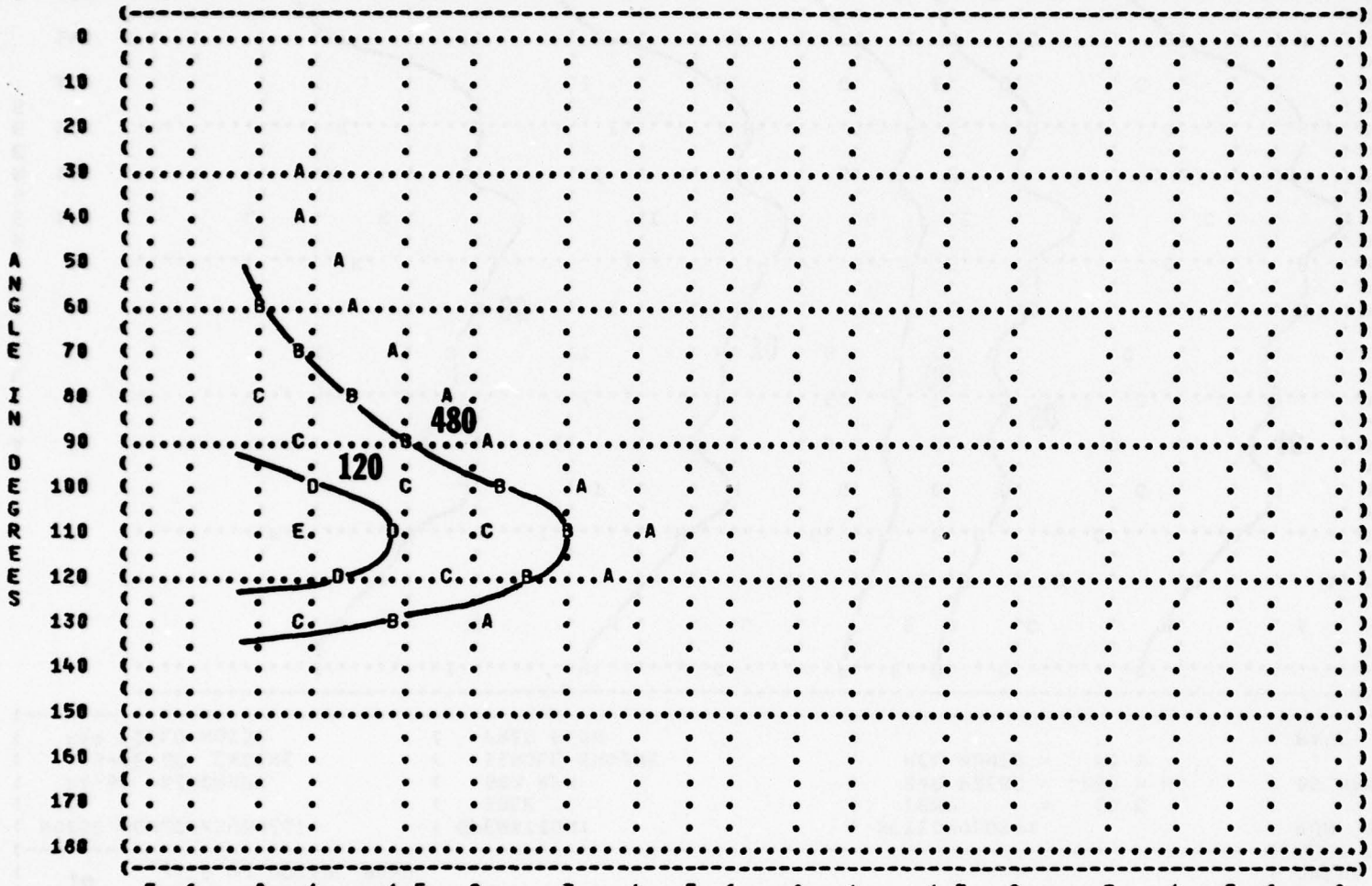


FIGURE 10: SOUND PRESSURE LEVEL (SPL) EQUAL LEVEL CONTOURS (DB) 31.5 HZ OCTAVE BAND

NOISE SOURCE/SUBJECT:
RA-5C AIRCRAFT
J79-GE-8C ENGINE
FAR FIELD NOISE

OPERATION:
IDLE
65% RPM
SINGLE ENGINE
FREE FLOW

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

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-002
RUN 01
05 MAY 75
PAGE 18

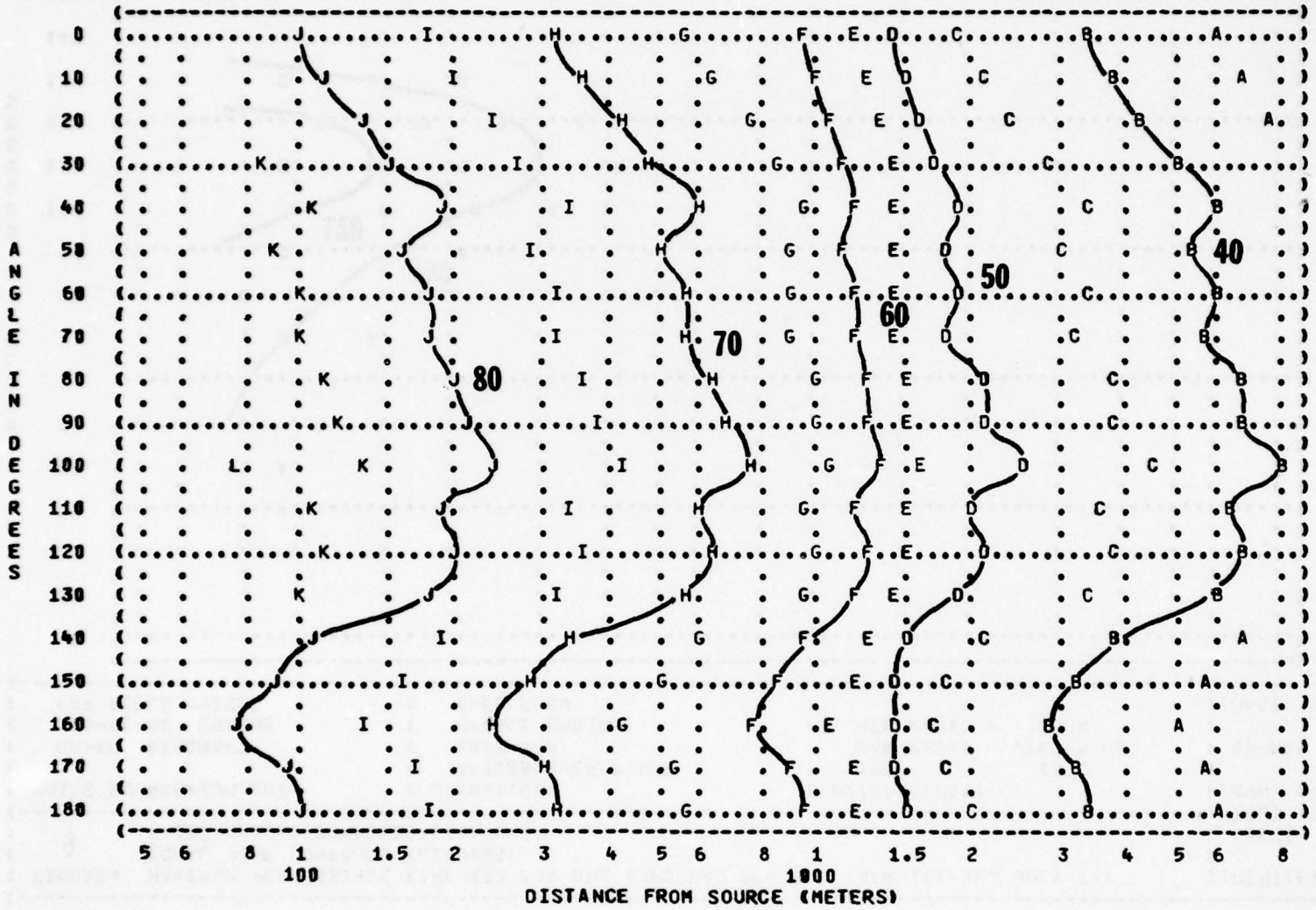


FIGURE: 10 SOUND PRESSURE LEVEL (SPL) EQUAL LEVEL CONTOURS (DB) 63 HZ OCTAVE BAND

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-002
RUN 01
05 MAY 75
PAGE 19

NOISE SOURCE/SUBJECT:
RA-5C AIRCRAFT
J79-GE-8C ENGINE
FAR FIELD NOISE

OPERATION:
IDLE
65% 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

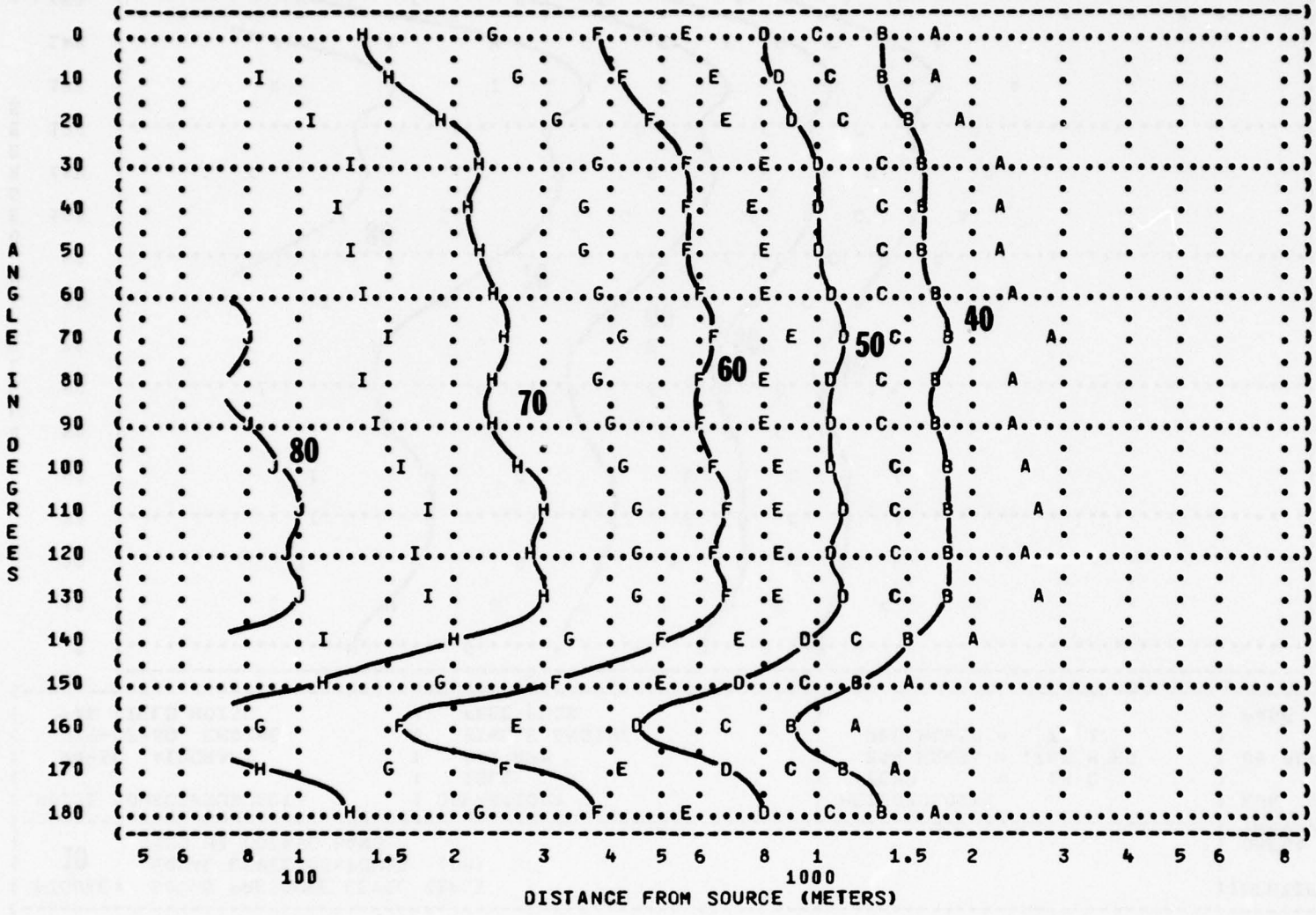


FIGURE: 10

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

NOISE SOURCE/SUBJECT:
RA-5C AIRCRAFT
J79-GE-8C ENGINE
FAR FIELD NOISE

OPERATION:
IDLE
65% RPM
SINGLE ENGINE
FREE FLOW

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

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-002
RUN 01
05 MAY 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

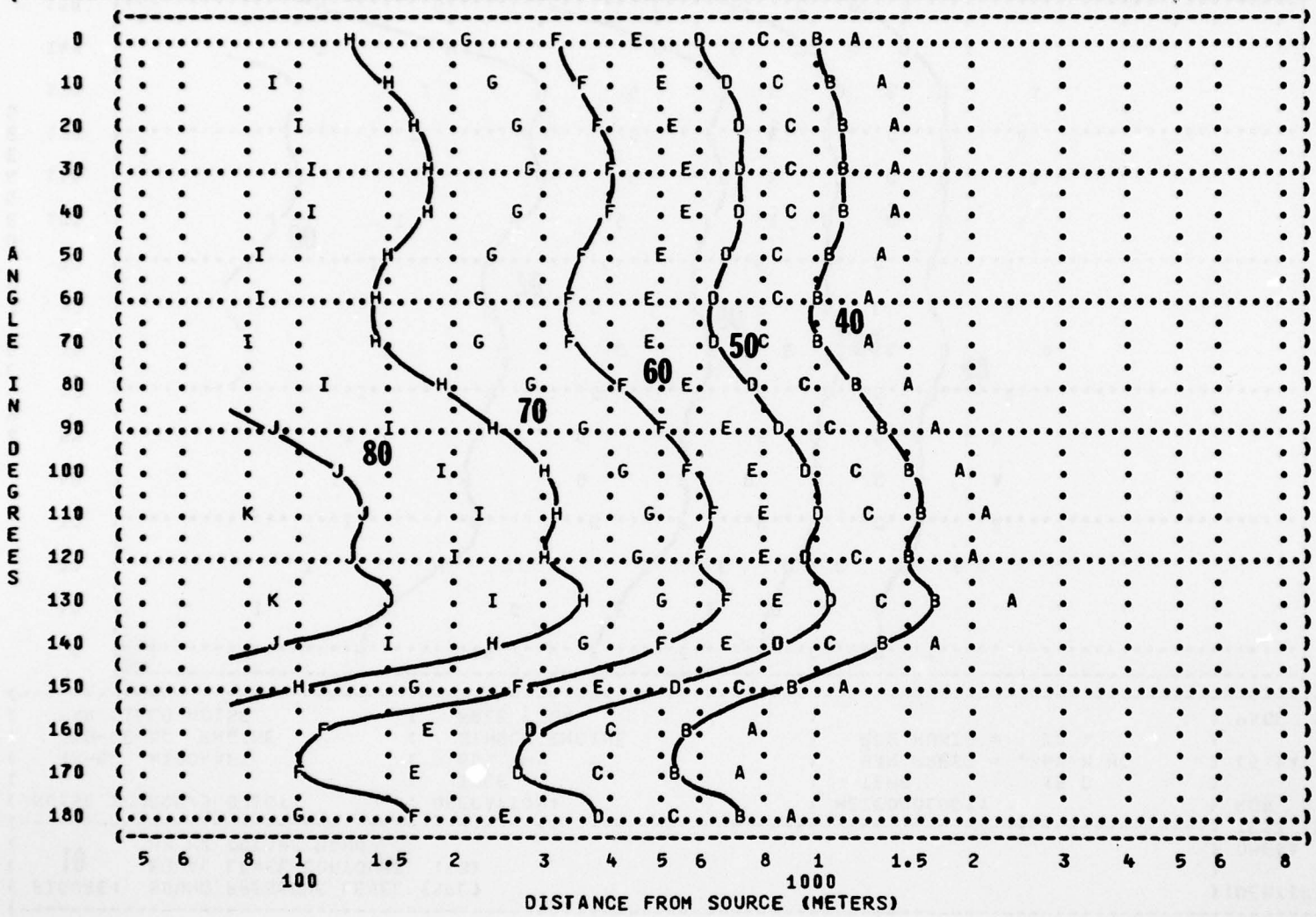


FIGURE: 10 SOUND PRESSURE LEVEL (SPL) EQUAL LEVEL CONTOURS (DB) 250 HZ OCTAVE BAND

NOISE SOURCE/SUBJECT:
RA-5C AIRCRAFT
J79-GE-8C ENGINE
FAR FIELD NOISE

OPERATION:
IDLE
65% RPM
SINGLE ENGINE
FREE FLOW

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

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-002
RUN 01
05 MAY 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

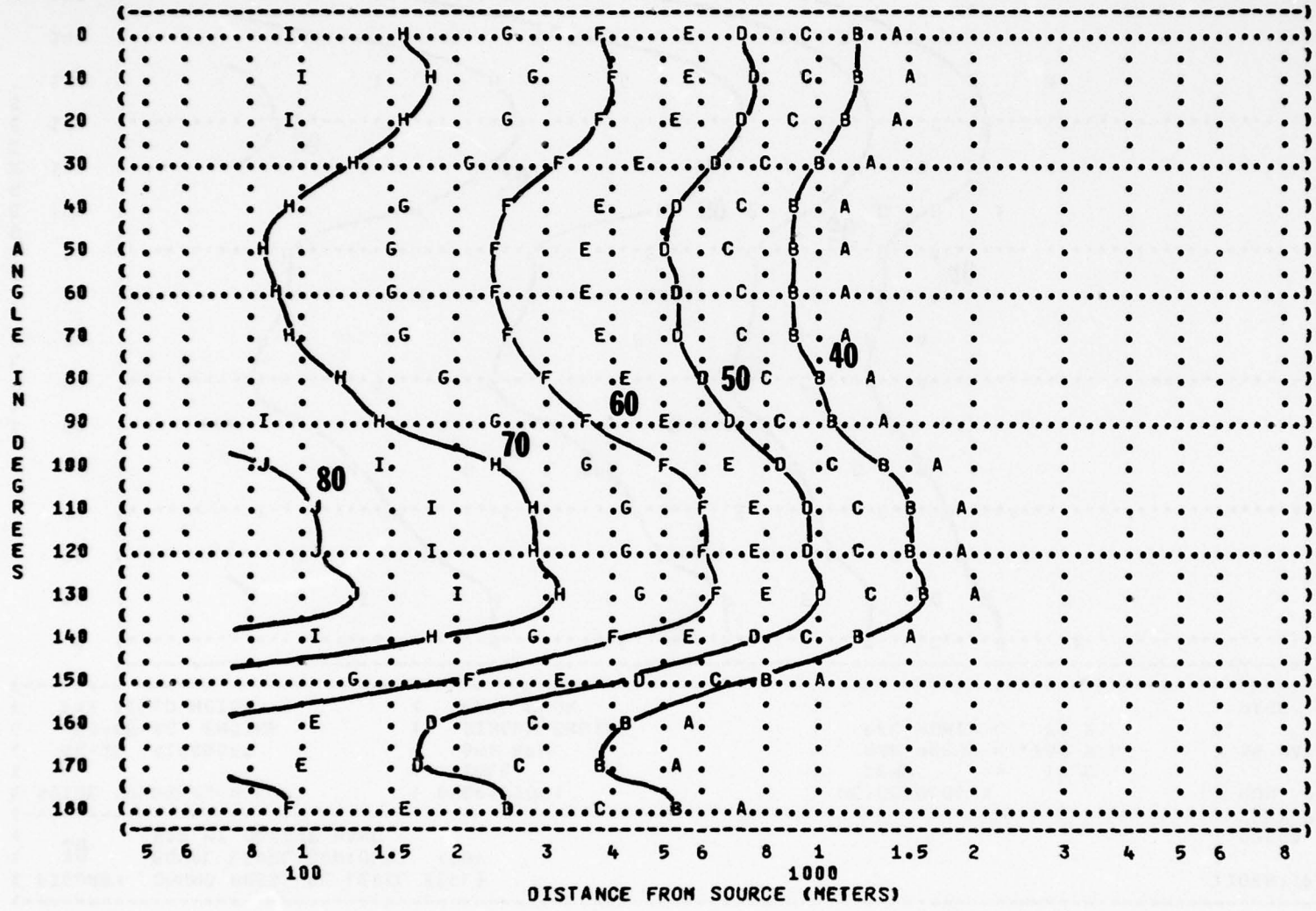


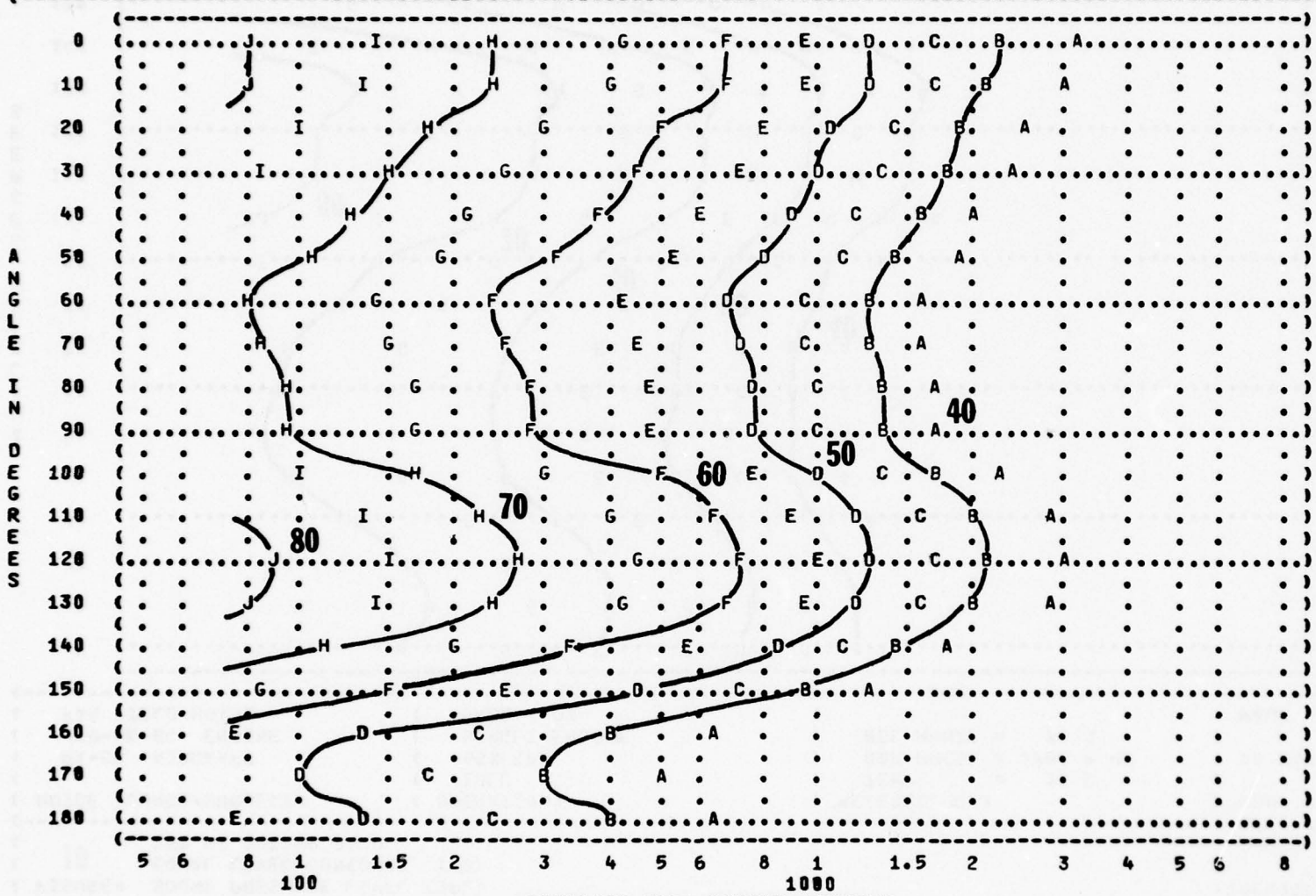
FIGURE: 10 SOUND PRESSURE LEVEL (SPL) EQUAL LEVEL CONTOURS (DB) 500 HZ OCTAVE BAND

NOISE SOURCE/SUBJECT:
RA-5C AIRCRAFT
J79-GE-8C ENGINE
FAR FIELD NOISE

OPERATION:
IDLE
65% RPM
SINGLE ENGINE
FREE FLOW

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

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-002
RUN 01
05 MAY 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: 10

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

NOISE SOURCE/SUBJECT:
RA-5C AIRCRAFT
J79-GE-8C ENGINE
FAR FIELD NOISE

OPERATION:
IDLE
65% RPM
SINGLE ENGINE
FREE FLOW

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

IDENTIFICATION:
ONEGA 1.4
TEST 75-002-002
RUN 01
05 MAY 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

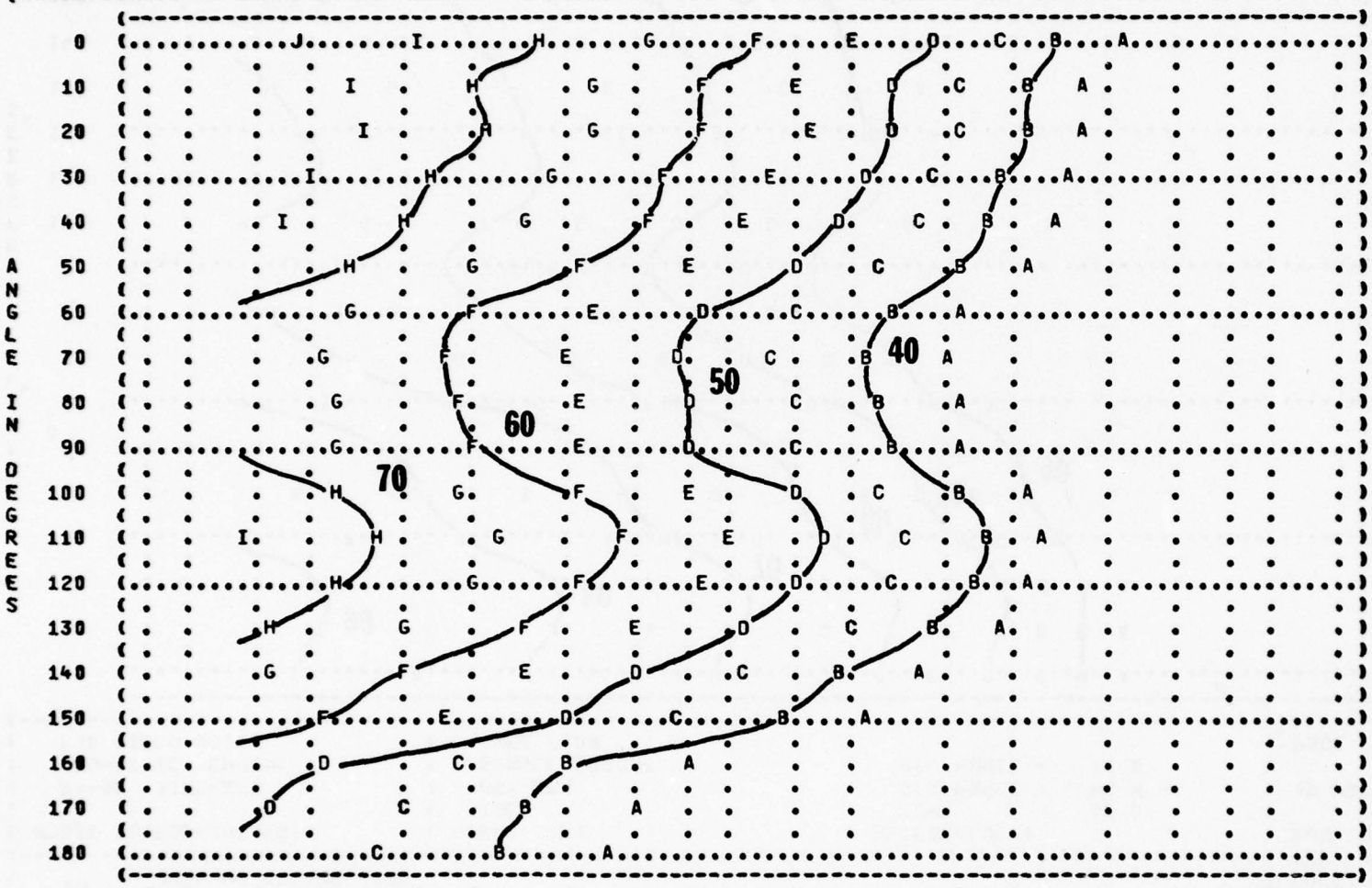


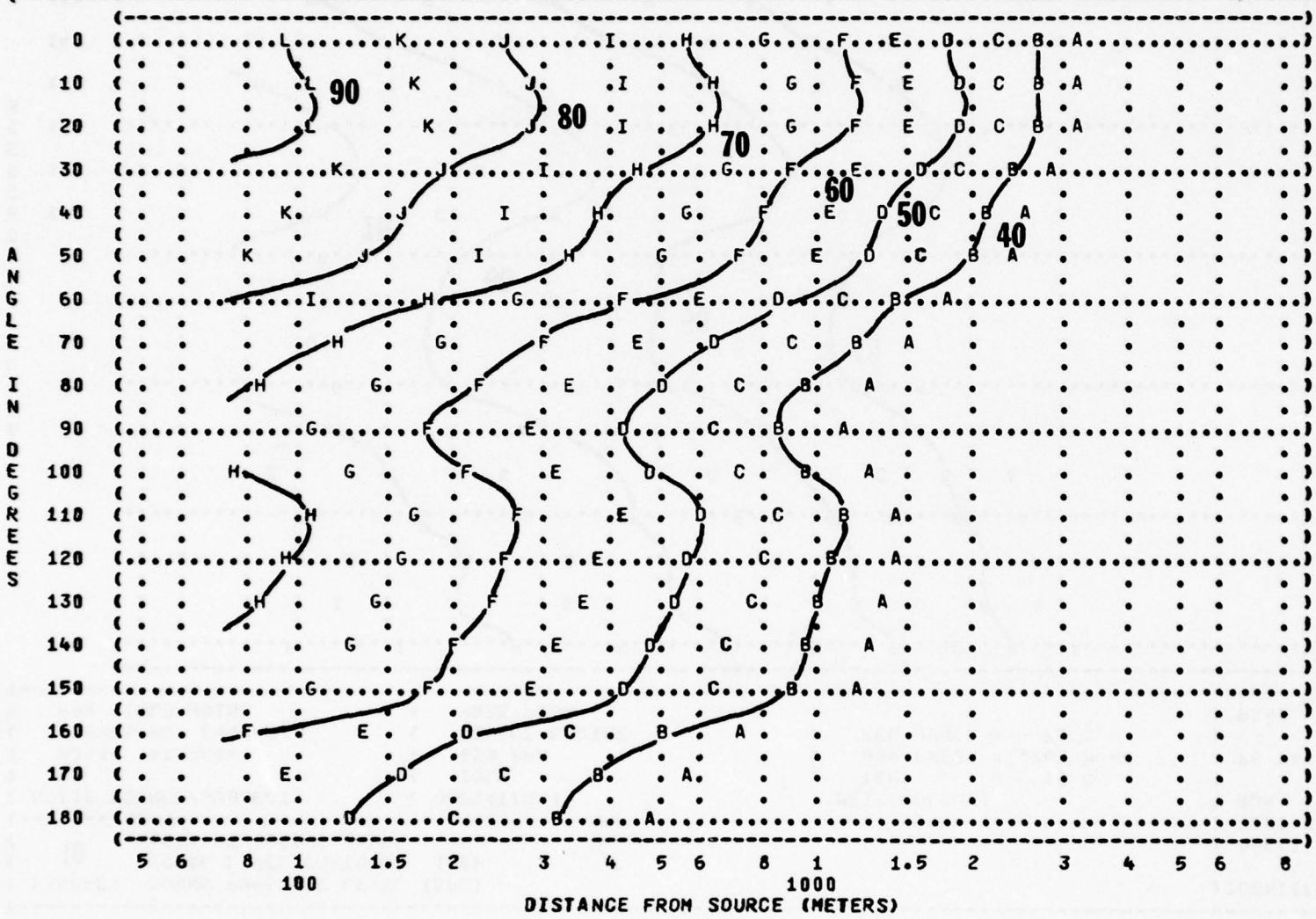
FIGURE 10: SOUND PRESSURE LEVEL (SPL) EQUAL LEVEL CONTOURS (DB) 2000 HZ OCTAVE BAND

NOISE SOURCE/SUBJECT:
RA-5C AIRCRAFT
J79-GE-8C ENGINE
FAR FIELD NOISE

OPERATION:
IDLE
65% RPM
SINGLE ENGINE
FREE FLOW

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

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-002
RUN 01
05 MAY 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

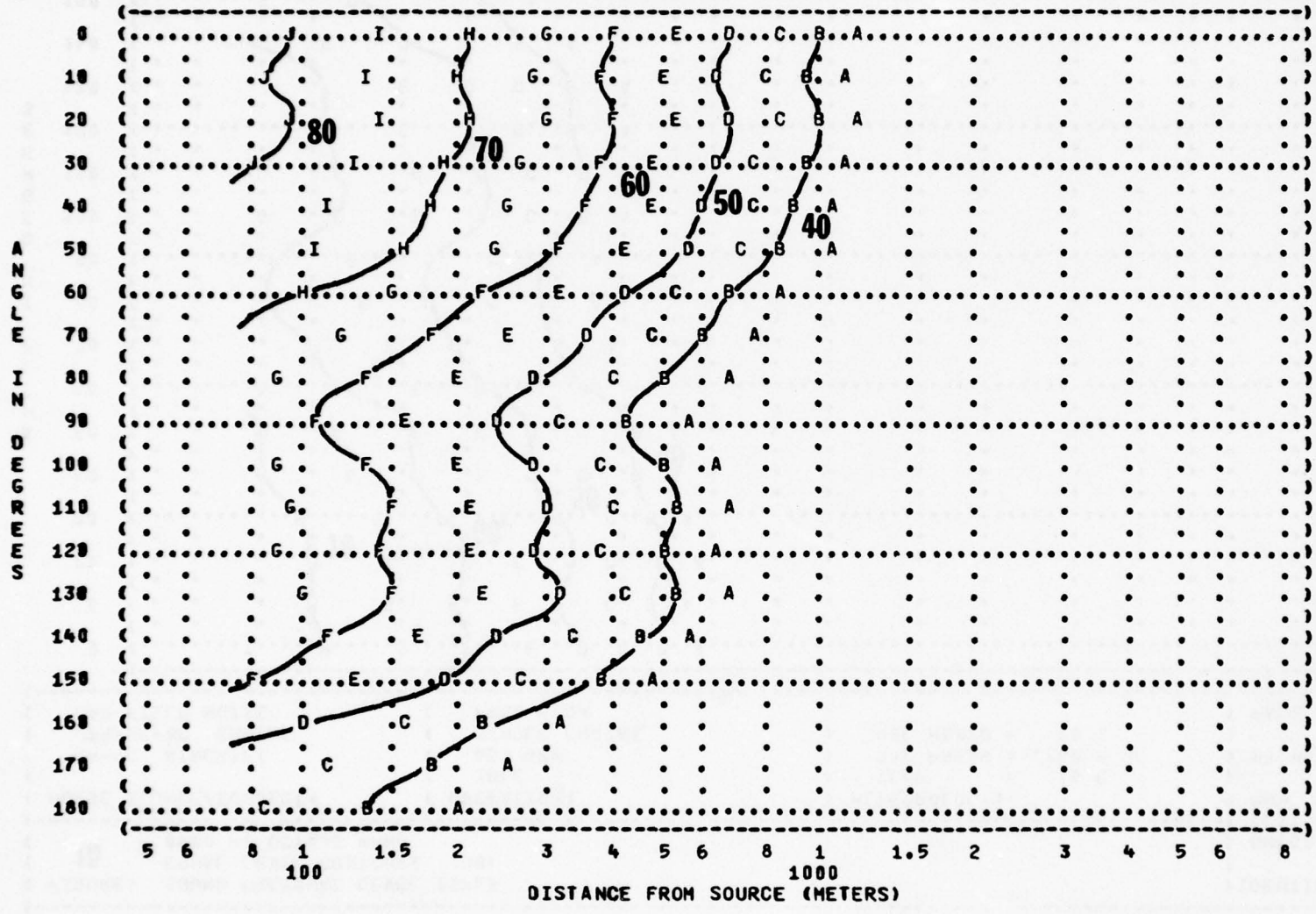
FIGURE 10: SOUND PRESSURE LEVEL (SPL) EQUAL LEVEL CONTOURS (DB) 4000 HZ OCTAVE BAND

NOISE SOURCE/SUBJECT:
RA-5C AIRCRAFT
J79-GE-8C ENGINE
FAR FIELD NOISE

OPERATION:
IDLE
65% RPM
SINGLE ENGINE
FREE FLOW

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

IDENTIFICATION:
OMEGA 1.4
TEST 75-802-002
RUN 01
05 MAY 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

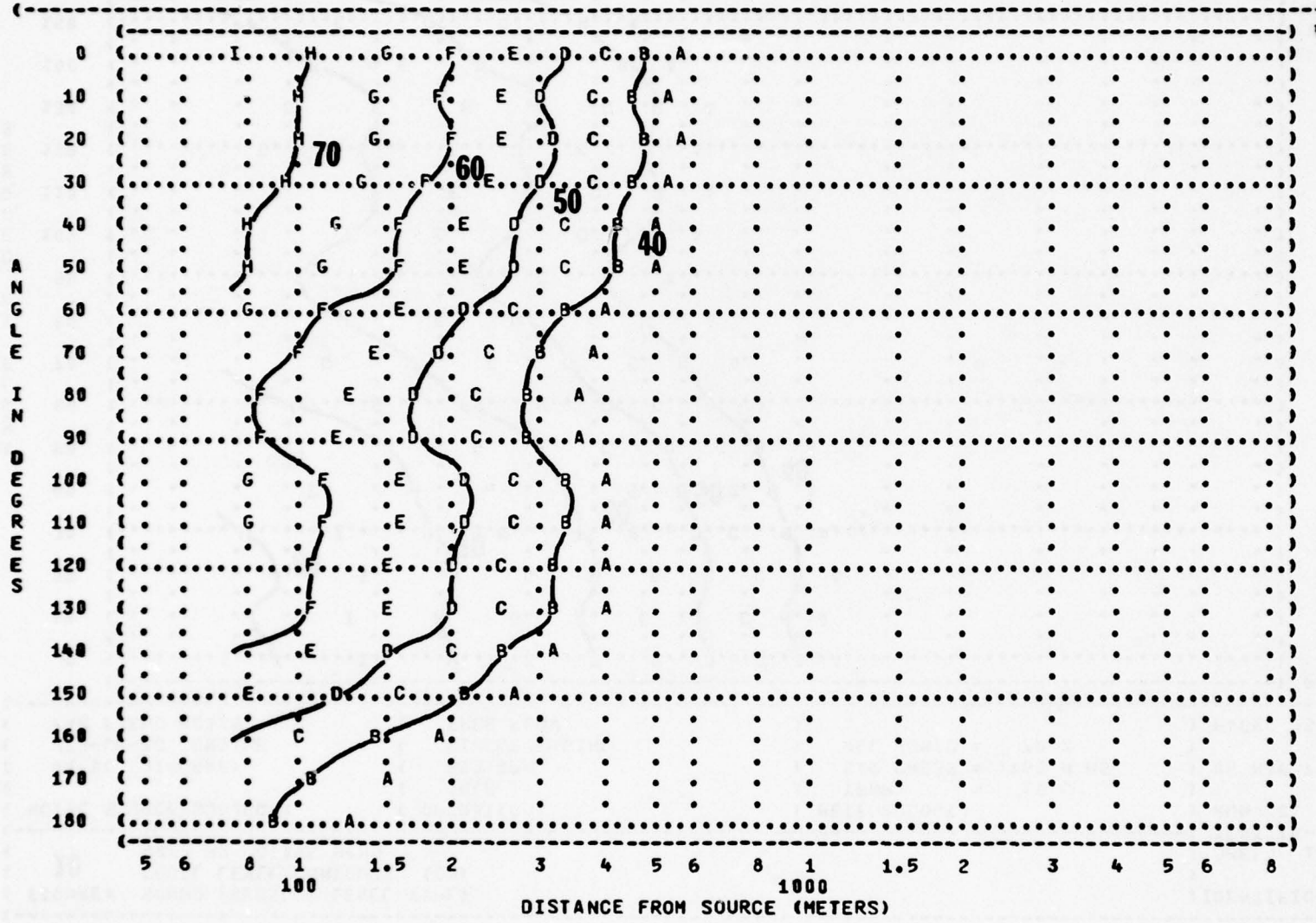
FIGURE: 10 SOUND PRESSURE LEVEL (SPL) EQUAL LEVEL CONTOURS (DB) 8000 HZ OCTAVE BAND

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-002
RUN 01
05 MAY 75
PAGE 26

NOISE SOURCE/SUBJECT:
RA-5C AIRCRAFT
J79-GE-8C ENGINE
FAR FIELD NOISE

OPERATION:
IDLE
65% 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

FIGURE 10: SOUND PRESSURE LEVEL (SPL) EQUAL LEVEL CONTOURS (DB) 31.5 HZ OCTAVE BAND

NOISE SOURCE/SUBJECT:
RA-5C AIRCRAFT
J79-GE-8C ENGINE
FAR FIELD NOISE

OPERATION:
80% RPM
SINGLE ENGINE
FREE FLOW

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

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-002
RUN 02
05 MAY 75
PAGE 18

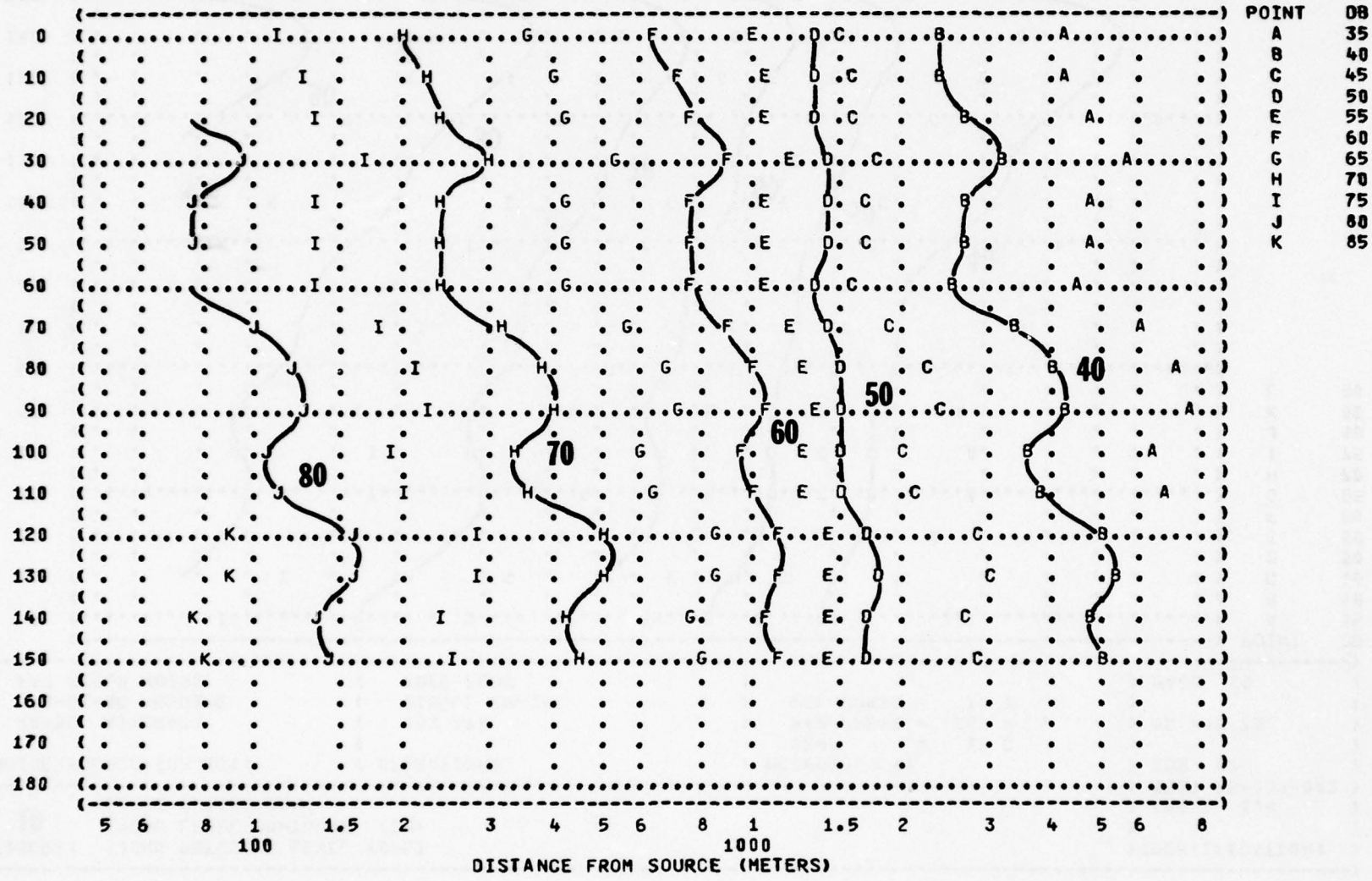


FIGURE 10: SOUND PRESSURE LEVEL (SPL) EQUAL LEVEL CONTOURS (DB) 63 HZ OCTAVE BAND

NOISE SOURCE/SUBJECT:
RA-5C AIRCRAFT
J79-GE-8C ENGINE
FAR FIELD NOISE

OPERATION:
80% RPM
SINGLE ENGINE
FREE FLOW

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

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-002
RUN 02
05 MAY 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

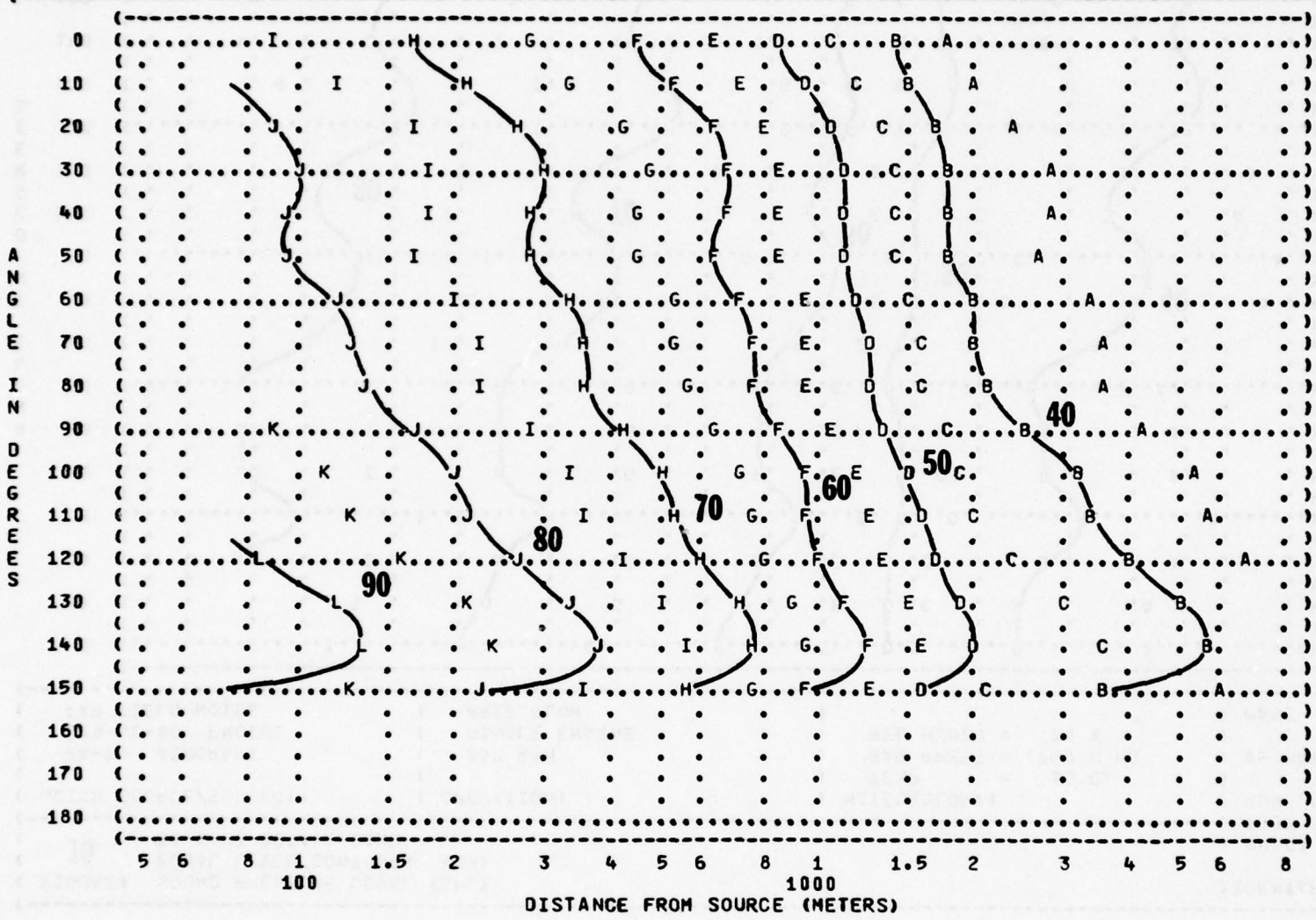


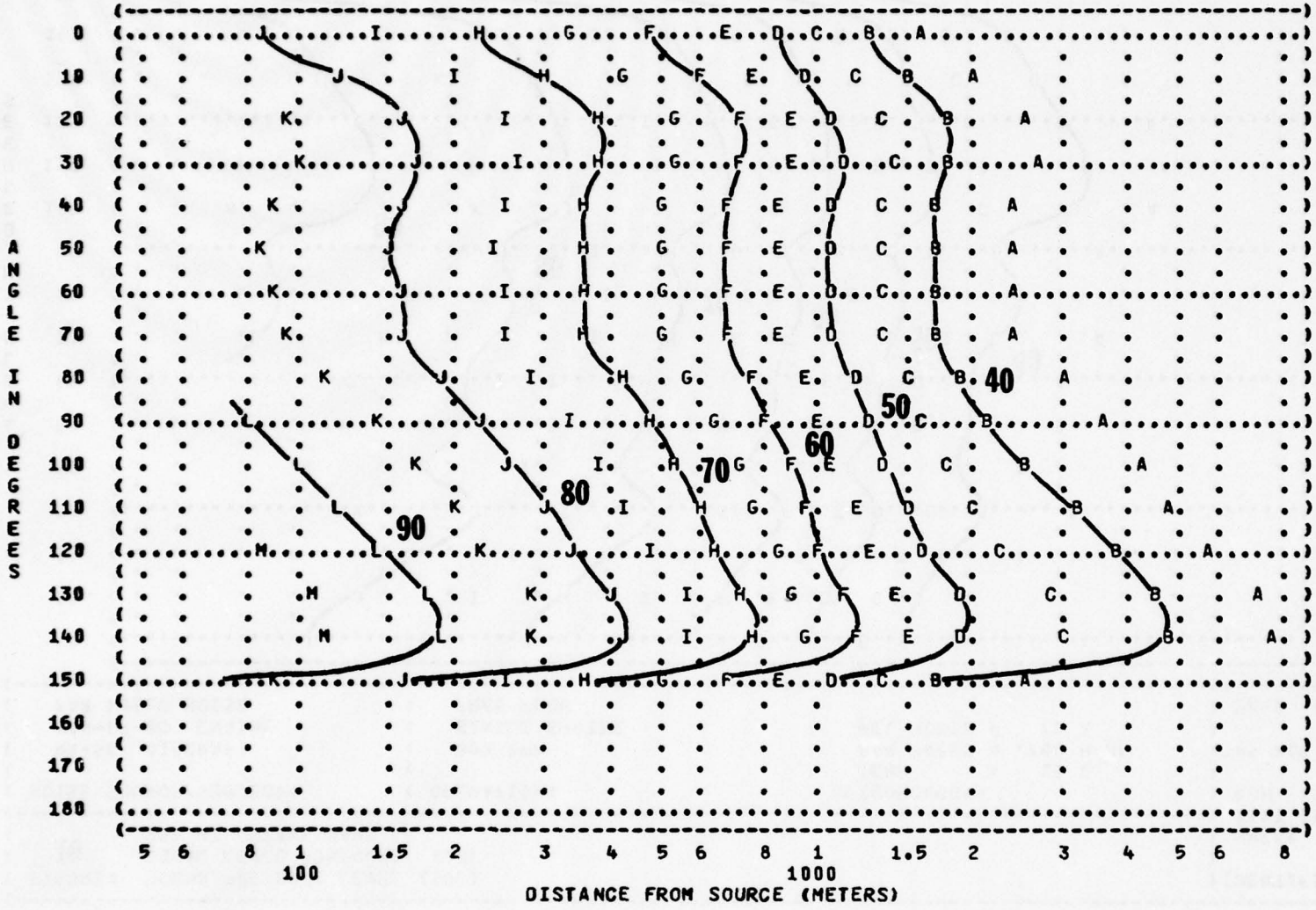
FIGURE: 10 SOUND PRESSURE LEVEL (SPL) EQUAL LEVEL CONTOURS (DB) 125 HZ OCTAVE BAND

NOISE SOURCE/SUBJECT:
RA-5C AIRCRAFT
J79-GE-8C ENGINE
FAR FIELD NOISE

OPERATION:
80% RPM
SINGLE ENGINE
FREE FLOW

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

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-002
RUN 02
05 MAY 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

FIGURE: 10

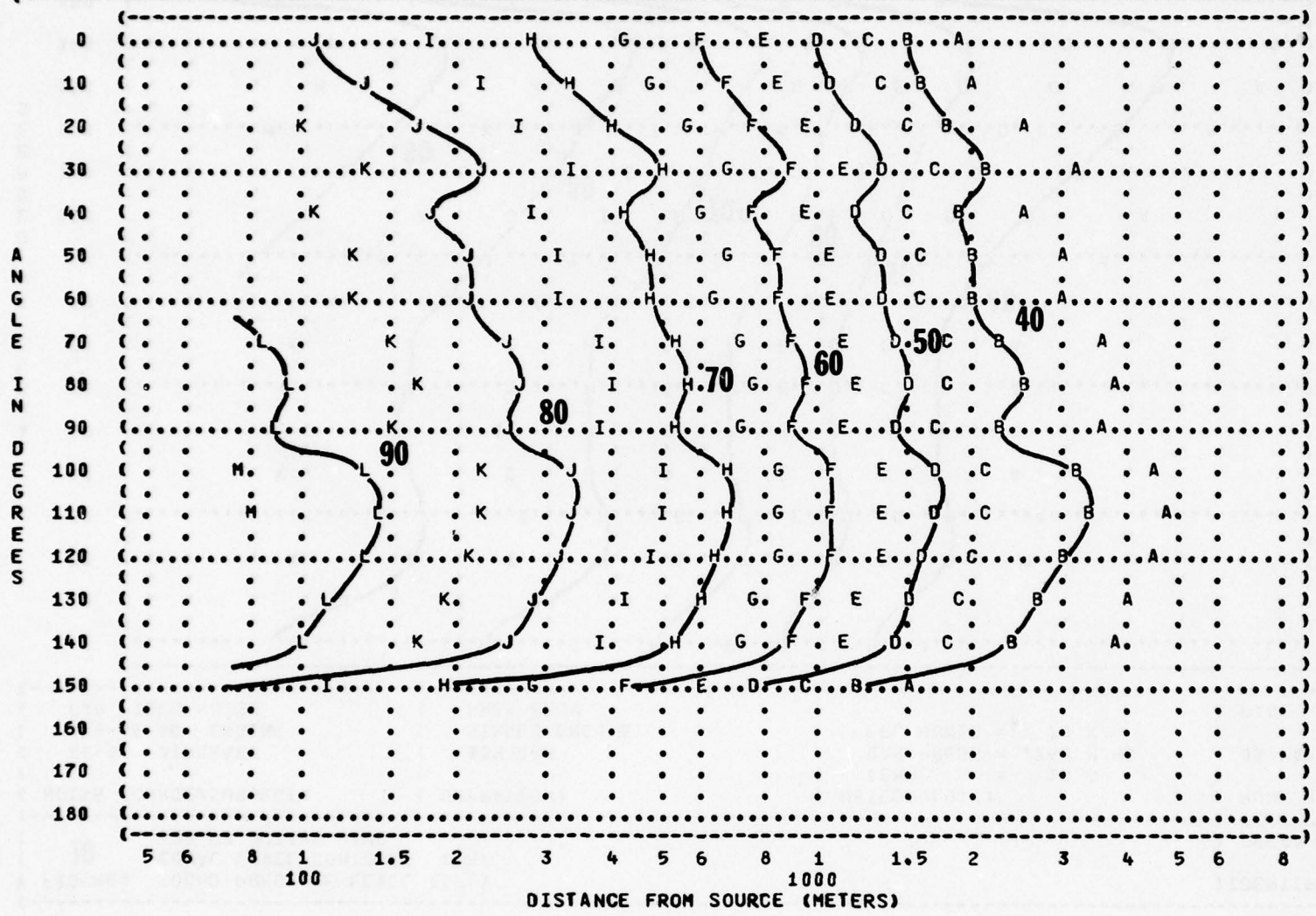
SOUND PRESSURE LEVEL (SPL)
EQUAL LEVEL CONTOURS (DB)
250 HZ OCTAVE BAND

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-002
RUN 02
05 MAY 75
PAGE 21

NOISE SOURCE/SUBJECT:
RA-5C AIRCRAFT
J79-GE-8C ENGINE
FAR FIELD NOISE

OPERATION:
80% 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

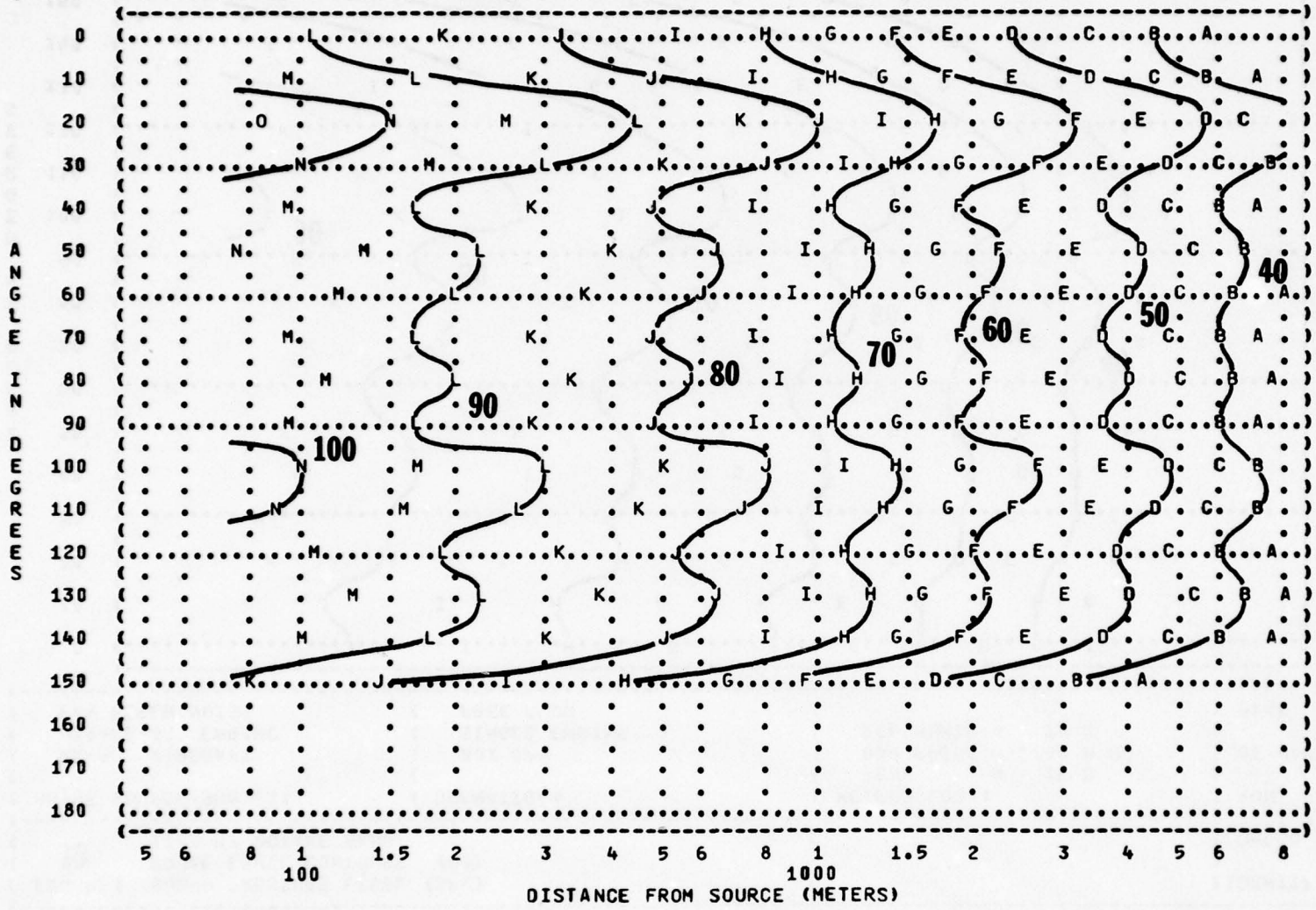
FIGURE: 10 SOUND PRESSURE LEVEL (SPL) EQUAL LEVEL CONTOURS (DB) 500 HZ OCTAVE BAND

NOISE SOURCE/SUBJECT:
RA-5C AIRCRAFT
J79-GE-8C ENGINE
FAR FIELD NOISE

OPERATION:
80% RPM
SINGLE ENGINE
FREE FLOW

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

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-002
RUN 02
05 MAY 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 10: SOUND PRESSURE LEVEL (SPL)
EQUAL LEVEL CONTOURS (DB)
1000 HZ OCTAVE BAND

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-002
RUN 02
05 MAY 75
PAGE 23

NOISE SOURCE/SUBJECT:
RA-5C AIRCRAFT
J79-GE-8C ENGINE
FAR FIELD NOISE

OPERATION:
80% RPM
SINGLE ENGINE
FREE FLOW

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

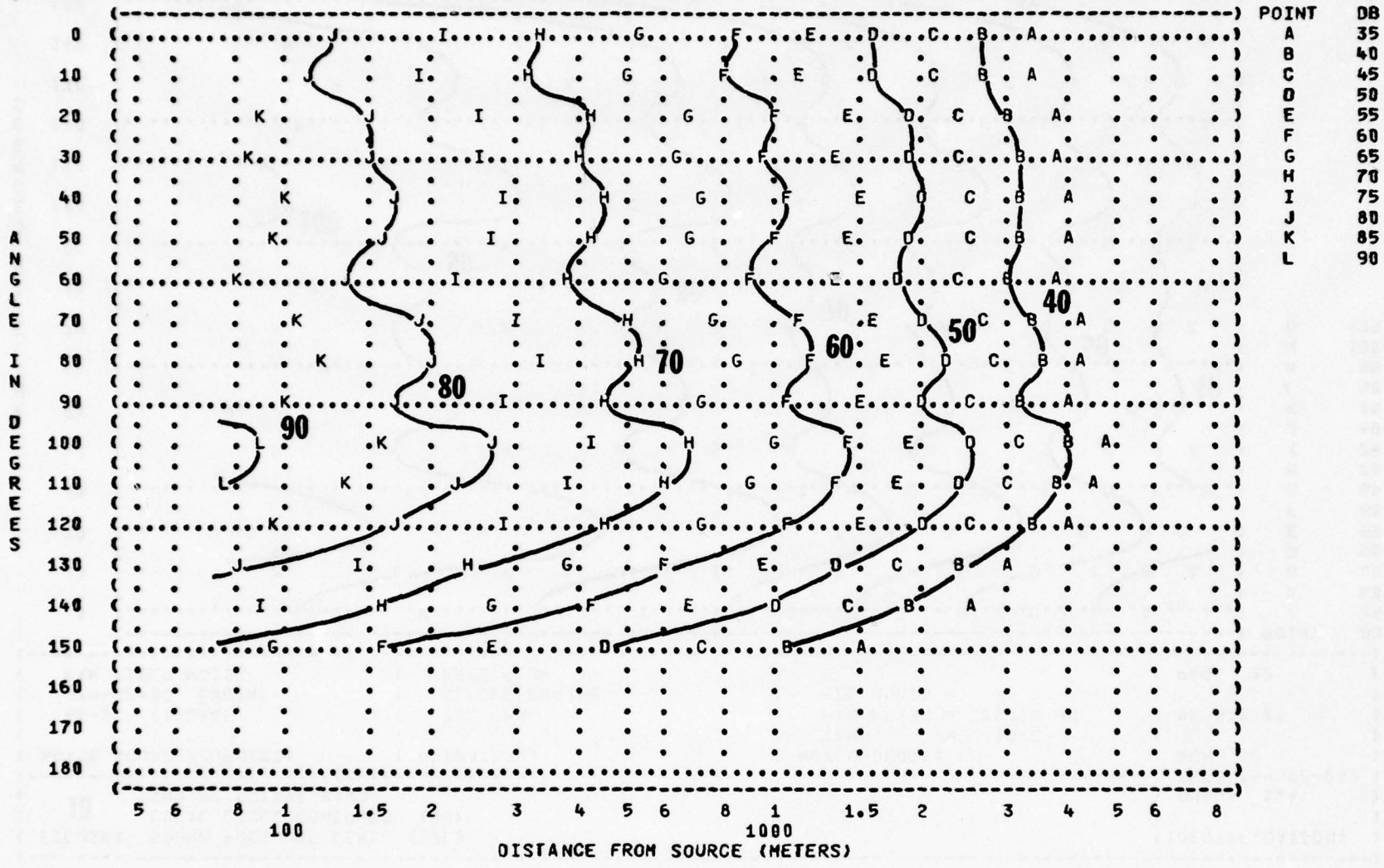


FIGURE 10: SOUND PRESSURE LEVEL (SPL) EQUAL LEVEL CONTOURS (DB) 2000 HZ OCTAVE BAND

NOISE SOURCE/SUBJECT:
RA-5C AIRCRAFT
J79-GE-8C ENGINE
FAR FIELD NOISE

OPERATION:
80% RPM
SINGLE ENGINE
FREE FLOW

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

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-002
RUN 02
05 MAY 75
PAGE 24

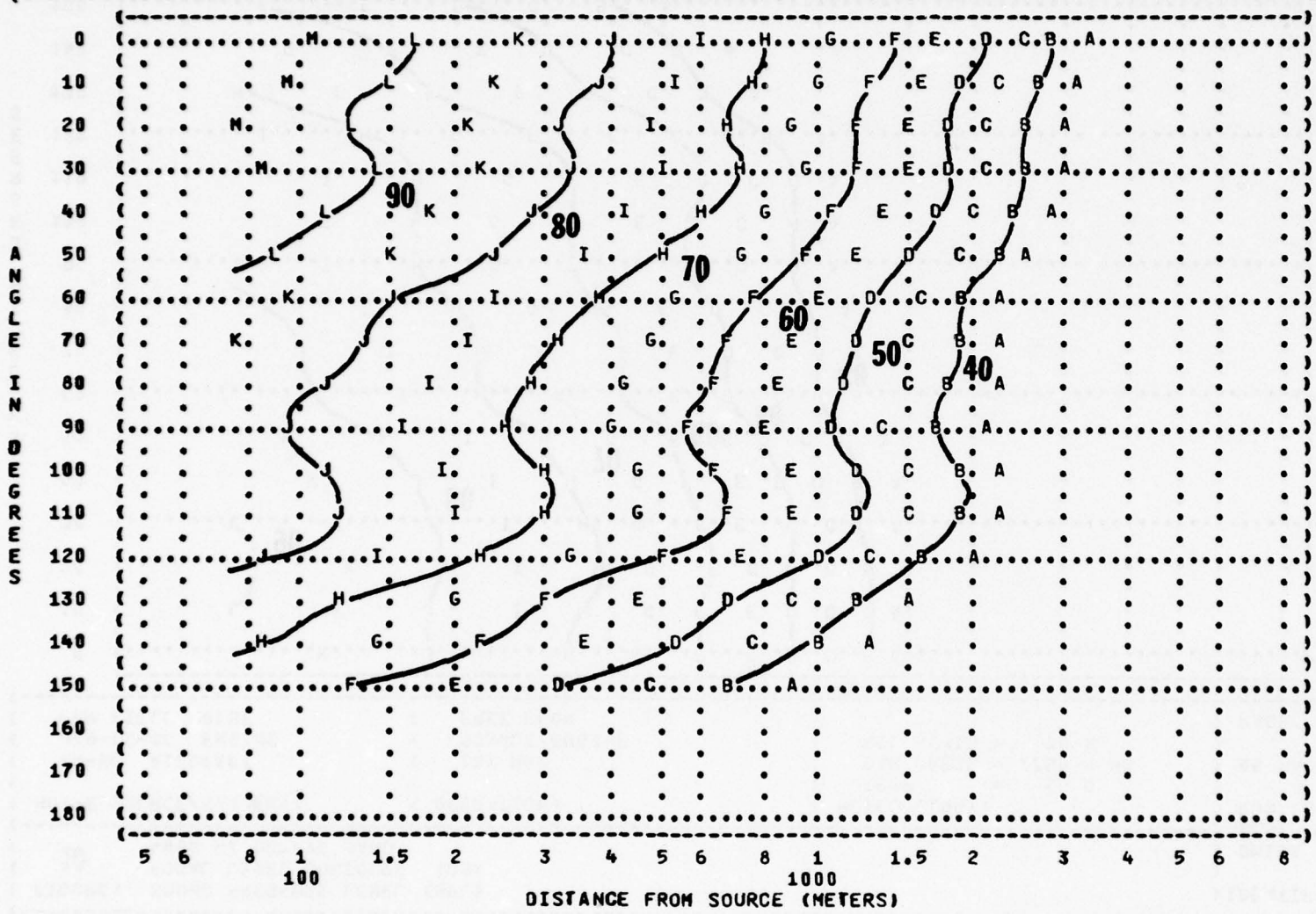


FIGURE: 10 SOUND PRESSURE LEVEL (SPL) EQUAL LEVEL CONTOURS (DB) 4000 HZ OCTAVE BAND

NOISE SOURCE/SUBJECT:
RA-5C AIRCRAFT
J79-GE-8C ENGINE
FAR FIELD NOISE

OPERATION:
80% RPM
SINGLE ENGINE
FREE FLOW

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

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-002
RUN 02
05 MAY 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

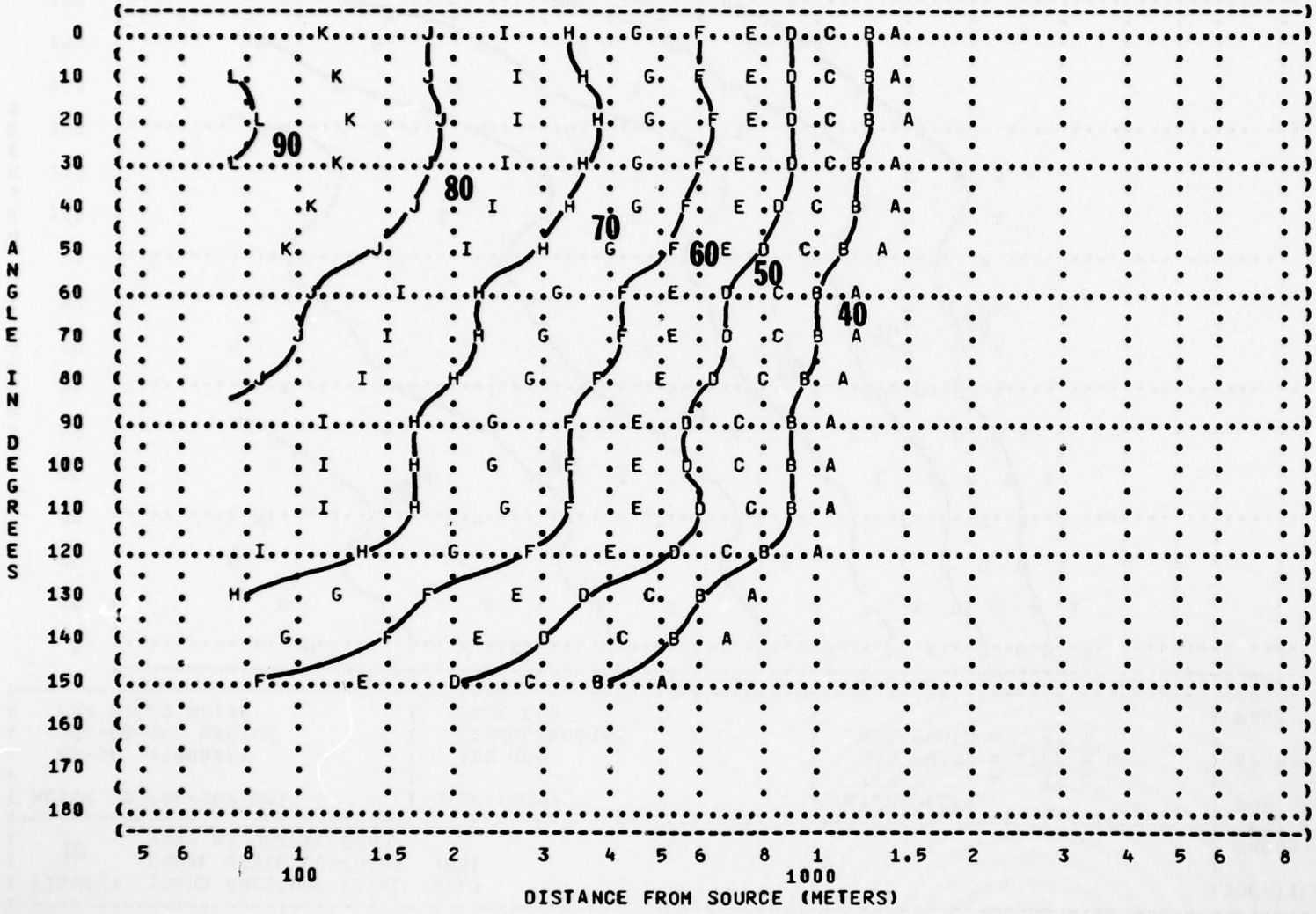


FIGURE 10: SOUND PRESSURE LEVEL (SPL) EQUAL LEVEL CONTOURS (DB) 8000 HZ OCTAVE BAND

NOISE SOURCE/SUBJECT:
RA-5C AIRCRAFT
J79-GE-8C ENGINE
FAR FIELD NOISE

OPERATION:
80% RPM
SINGLE ENGINE
FREE FLOW

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

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-082
RUN 02
05 MAY 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

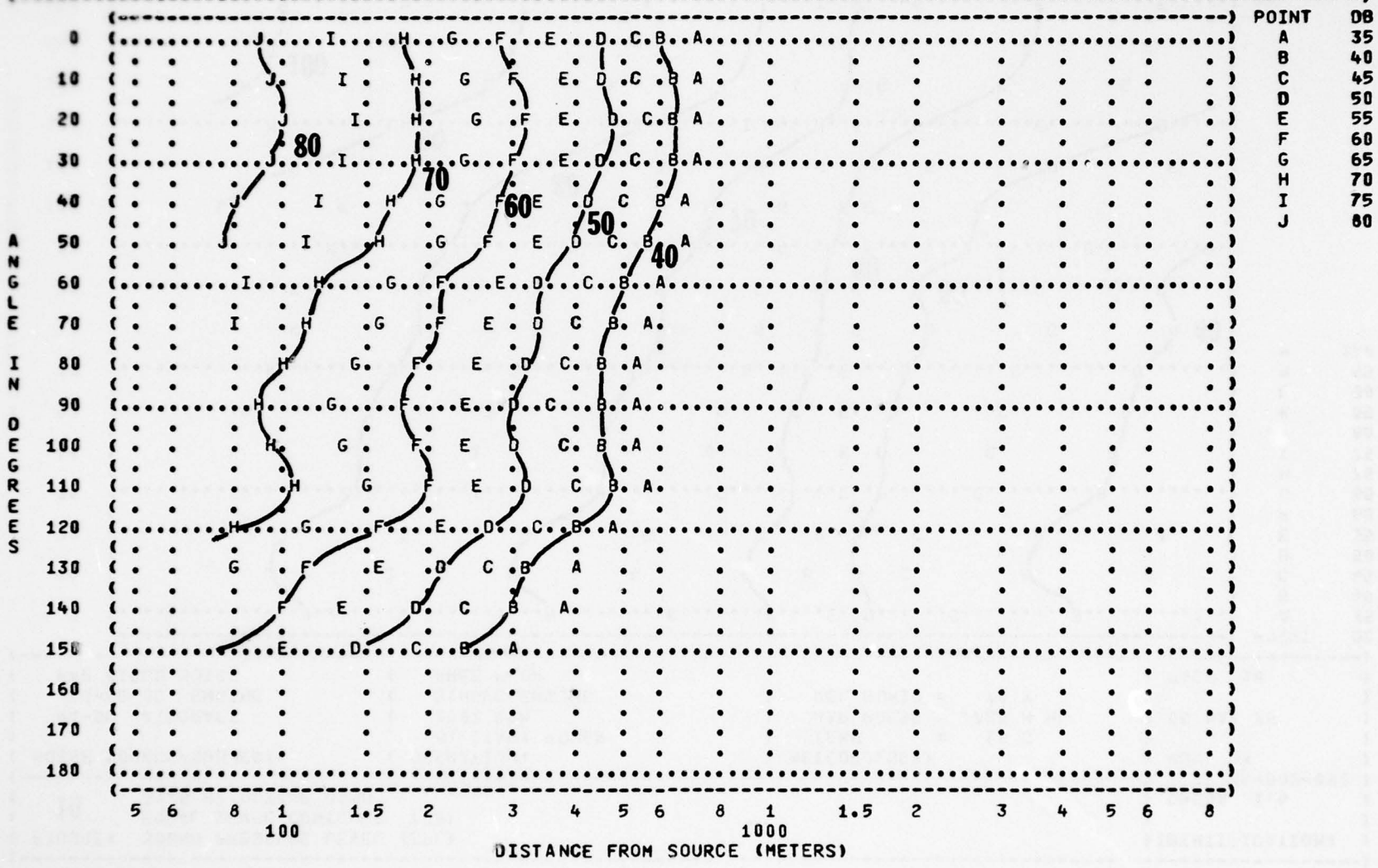


FIGURE: 10

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

NOISE SOURCE/SUBJECT:
RA-5C AIRCRAFT
J79-GE-8C 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 75-002-002
RUN 03
05 MAY 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

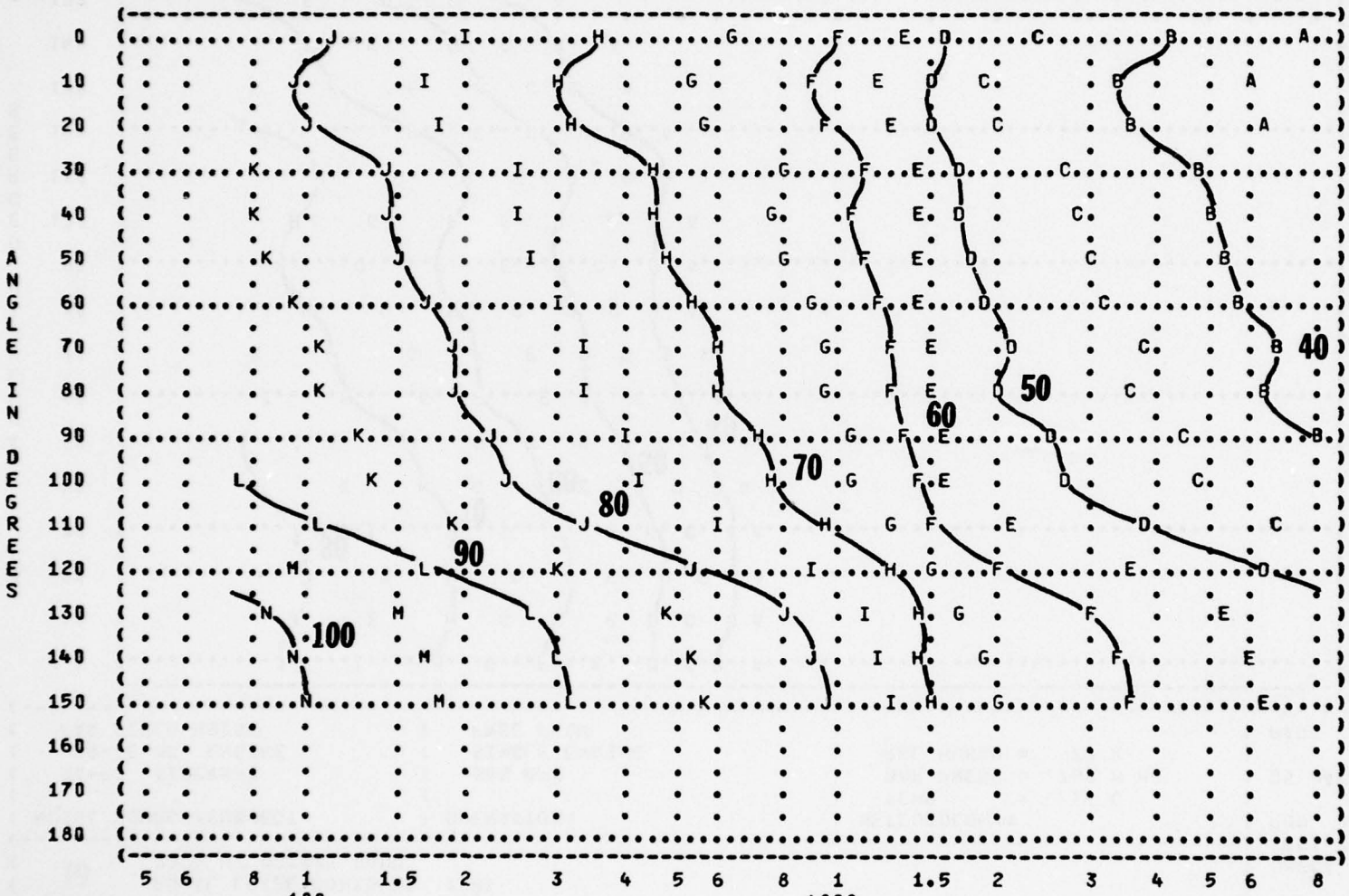


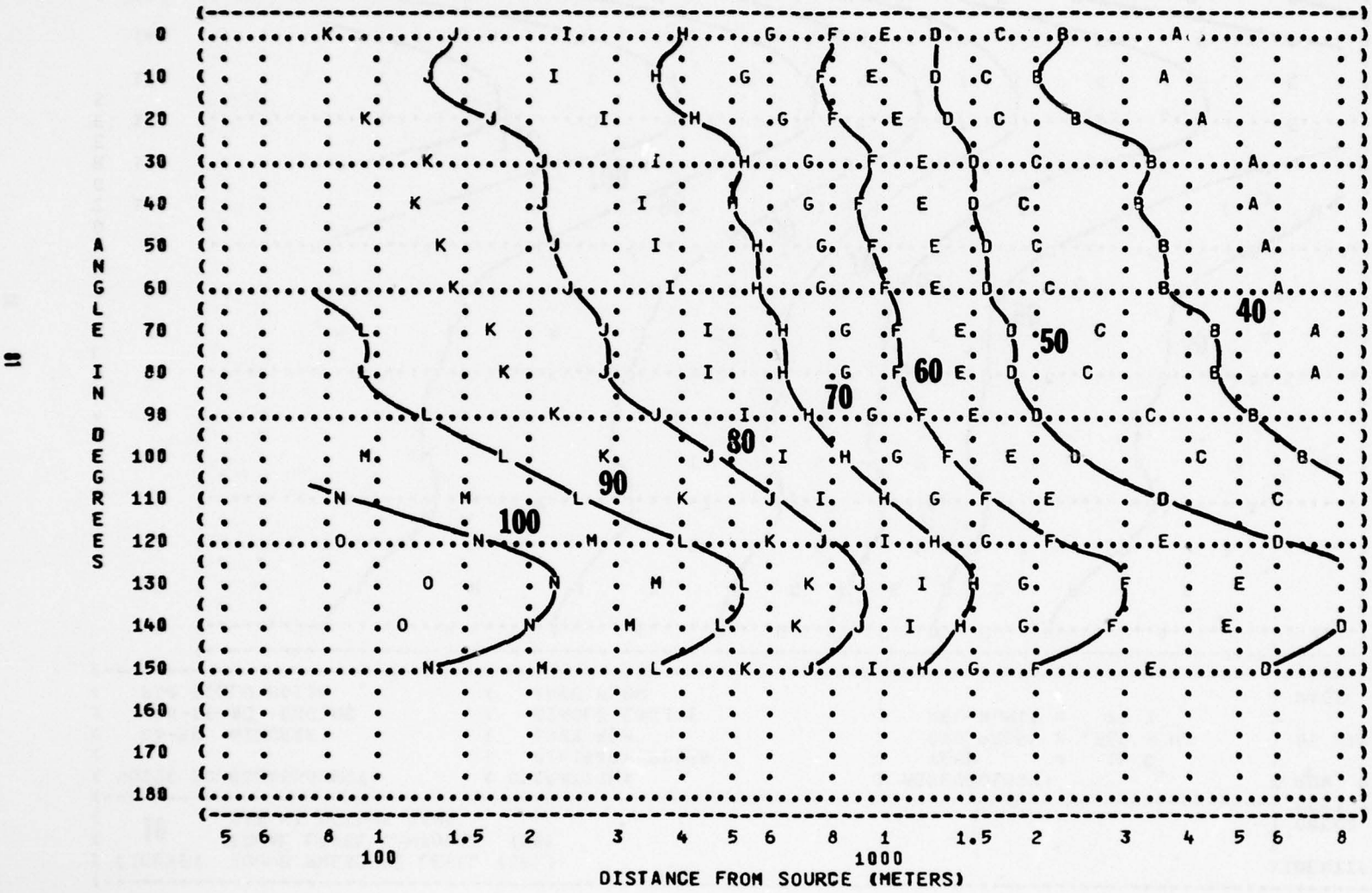
FIGURE: 10 SOUND PRESSURE LEVEL (SPL) EQUAL LEVEL CONTOURS (DB) 63 HZ OCTAVE BAND

NOISE SOURCE/SUBJECT:
RA-5C AIRCRAFT
J79-GE-8C 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 75-002-002
RUN 03
05 MAY 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

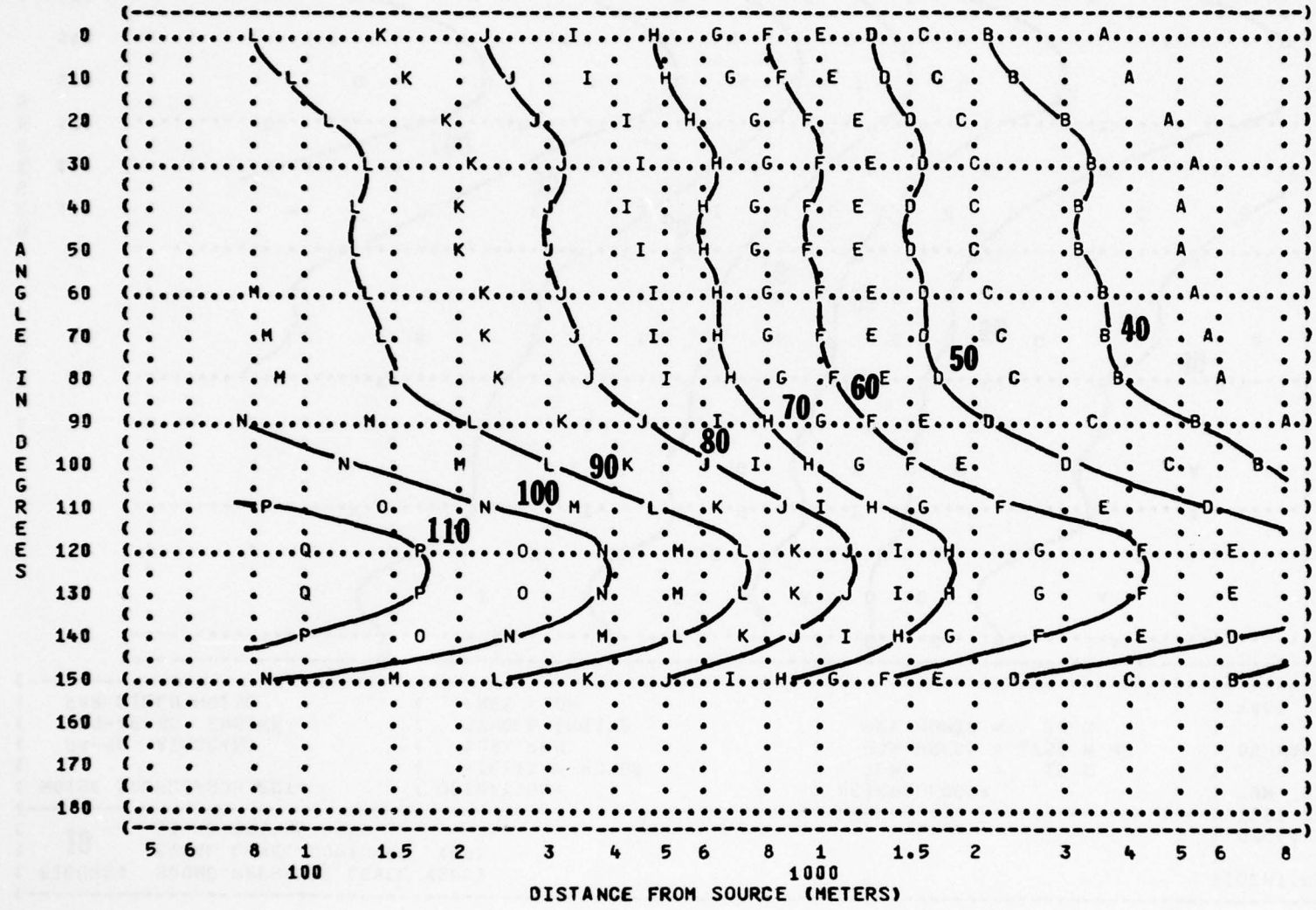
FIGURE: 10 SOUND PRESSURE LEVEL (SPL) EQUAL LEVEL CONTOURS (DB) 125 HZ OCTAVE BAND

NOISE SOURCE/SUBJECT:
RA-5C AIRCRAFT
J79-GE-8C 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 75-002-002
RUN 03
05 MAY 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

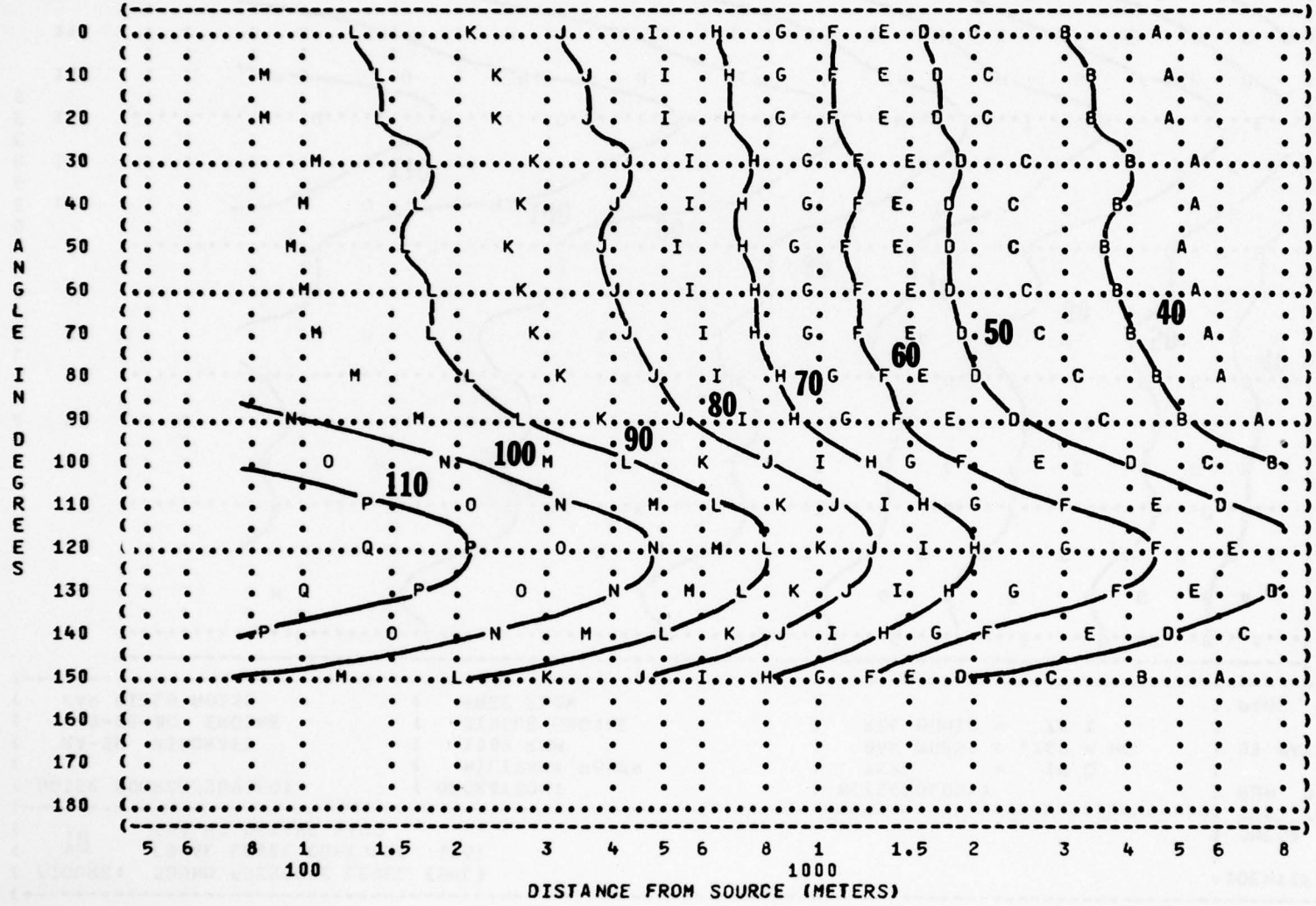
FIGURE 10: SOUND PRESSURE LEVEL (SPL) EQUAL LEVEL CONTOURS (DB) 250 HZ OCTAVE BAND

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-002
RUN 03
05 MAY 75
PAGE 21

NOISE SOURCE/SUBJECT:
RA-5C AIRCRAFT
J79-GE-8C 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
Q	115

FIGURE: 10 SOUND PRESSURE LEVEL (SPL) EQUAL LEVEL CONTOURS (DB) 500 HZ OCTAVE BAND

NOISE SOURCE/SUBJECT:
RA-5C AIRCRAFT
J79-GE-8C 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 75-002-002
RUN 03
05 MAY 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

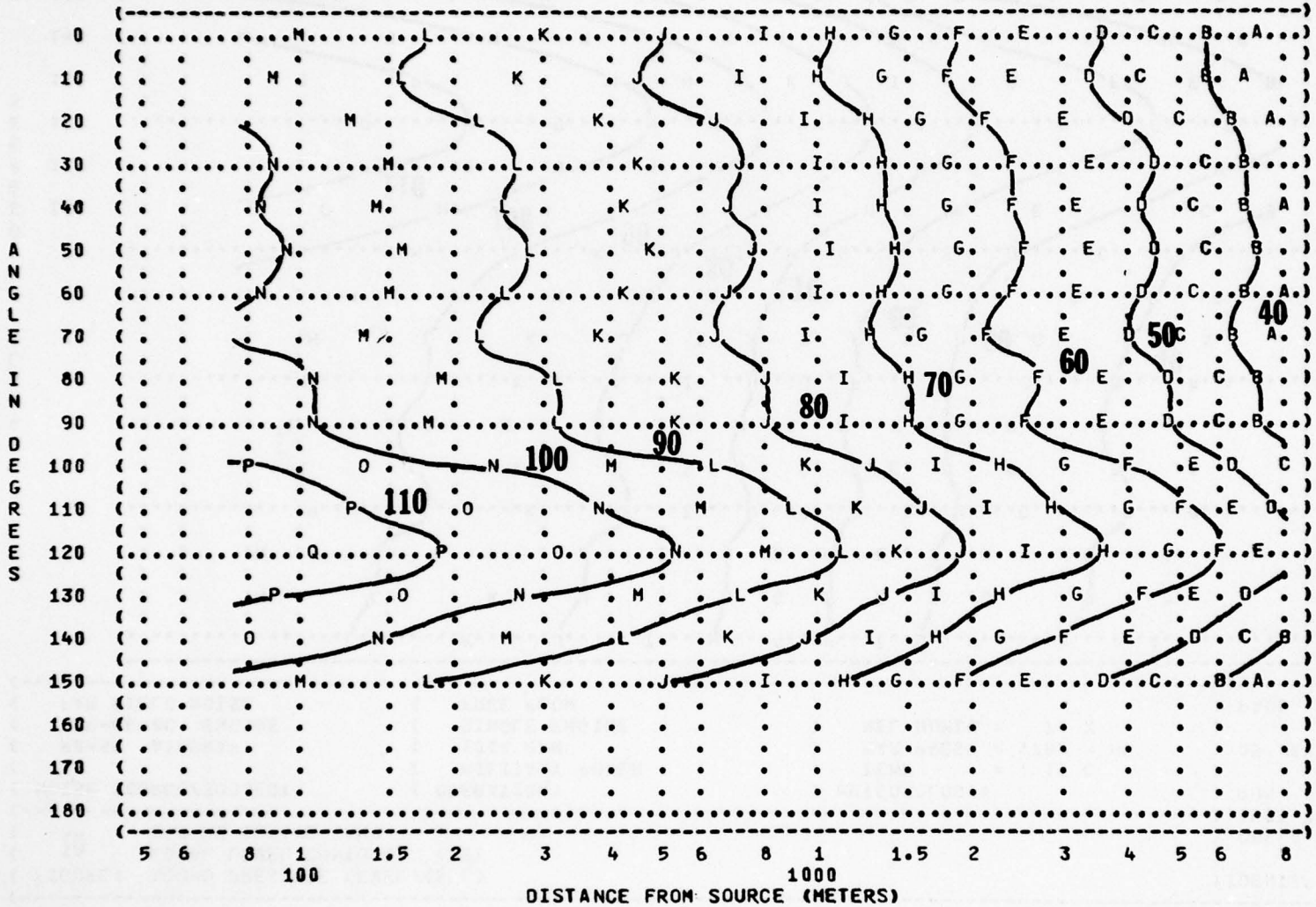


FIGURE: 10

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

NOISE SOURCE/SUBJECT:
RA-5C AIRCRAFT
J79-GE-8C 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 75-002-002
RUN 03
05 MAY 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

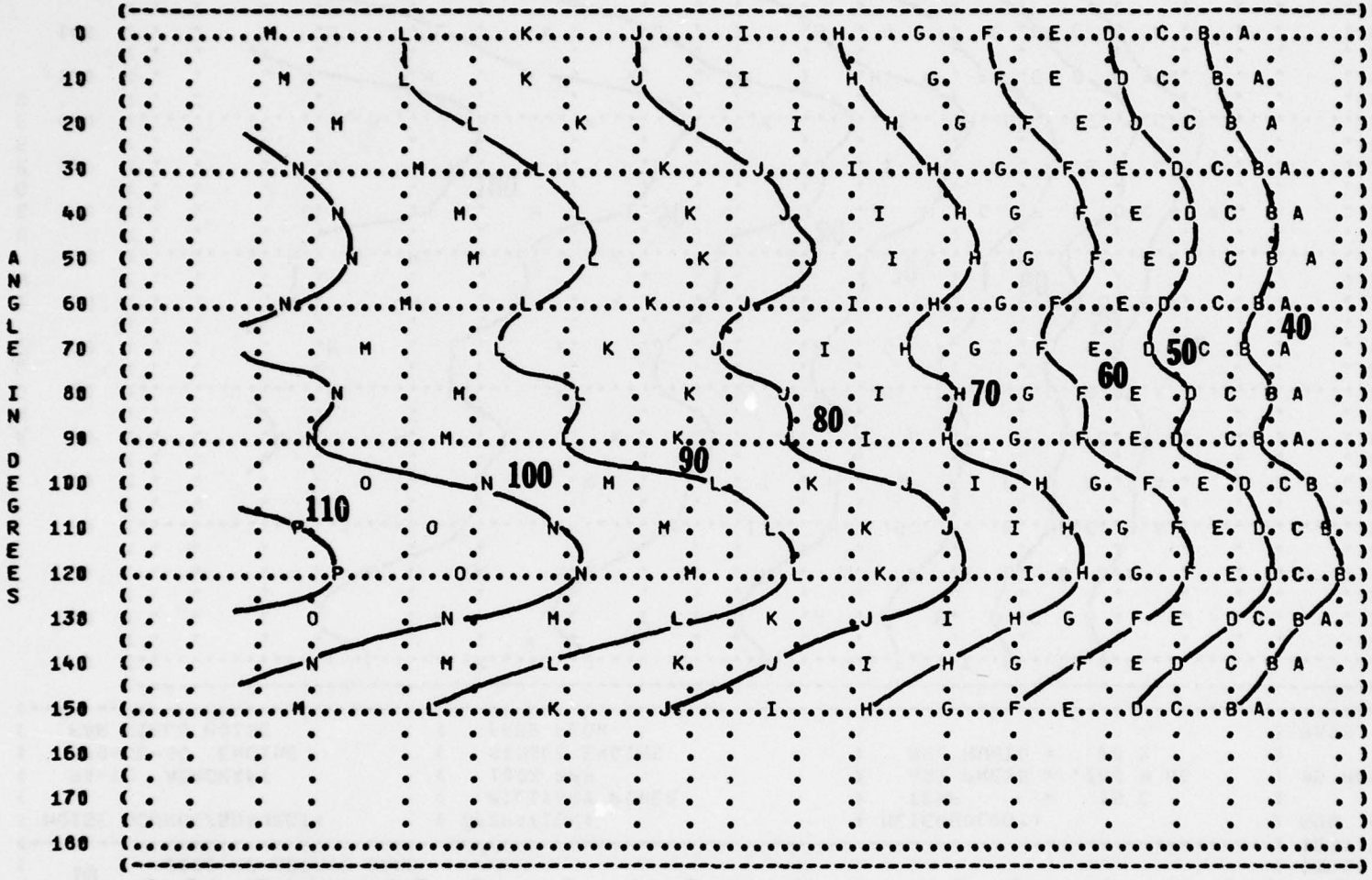


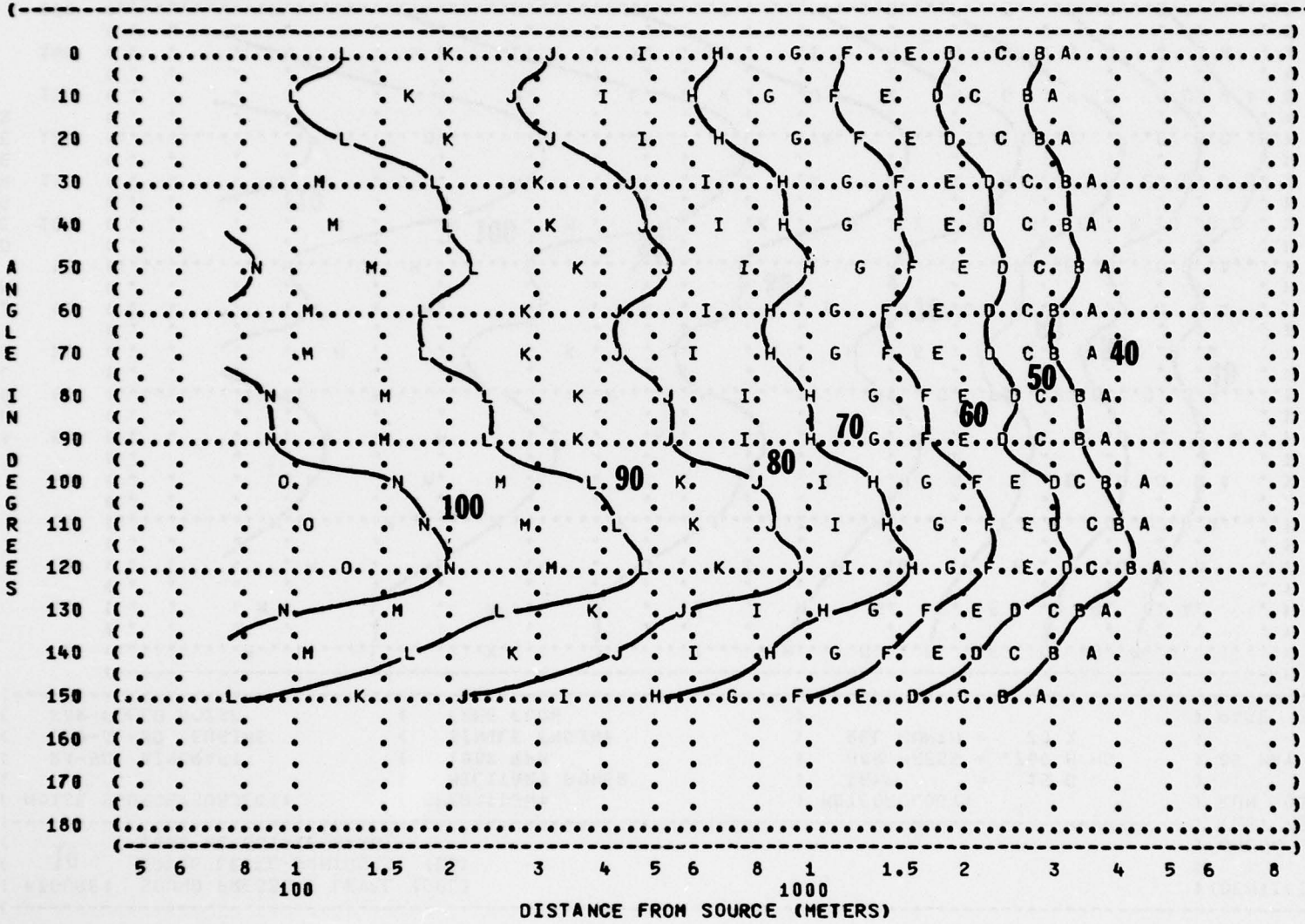
FIGURE: 10 SOUND PRESSURE LEVEL (SPL) EQUAL LEVEL CONTOURS (DB) 2000 HZ OCTAVE BAND

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-002
RUN 03
05 MAY 75
PAGE 24

NOISE SOURCE/SUBJECT:
RA-5C AIRCRAFT
J79-GE-8C 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

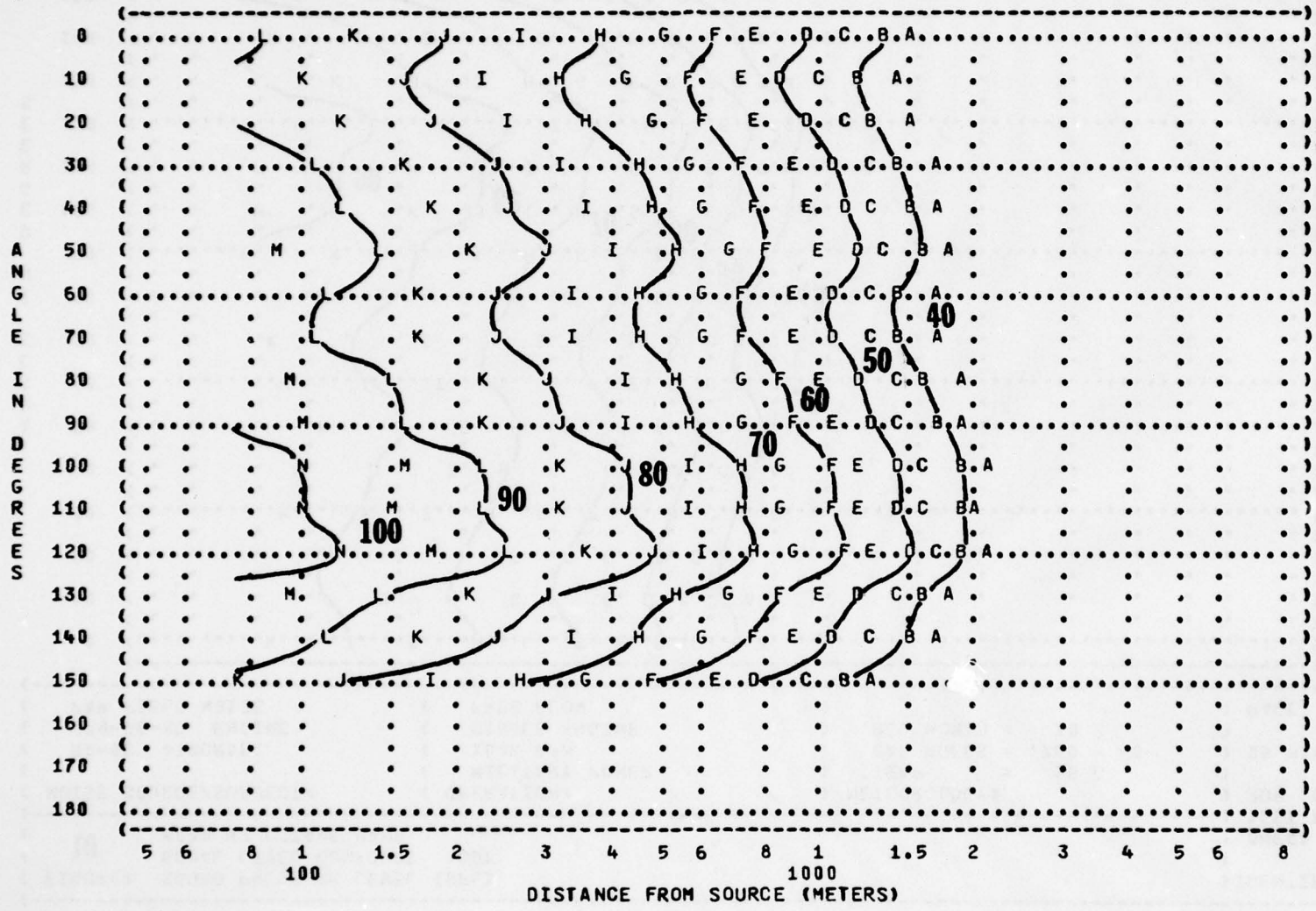
FIGURE: 10 SOUND PRESSURE LEVEL (SPL) EQUAL LEVEL CONTOURS (DB) 4000 HZ OCTAVE BAND

NOISE SOURCE/SUBJECT:
RA-5C AIRCRAFT
J79-GE-8C 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 75-002-002
RUN 03
05 MAY 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: 10

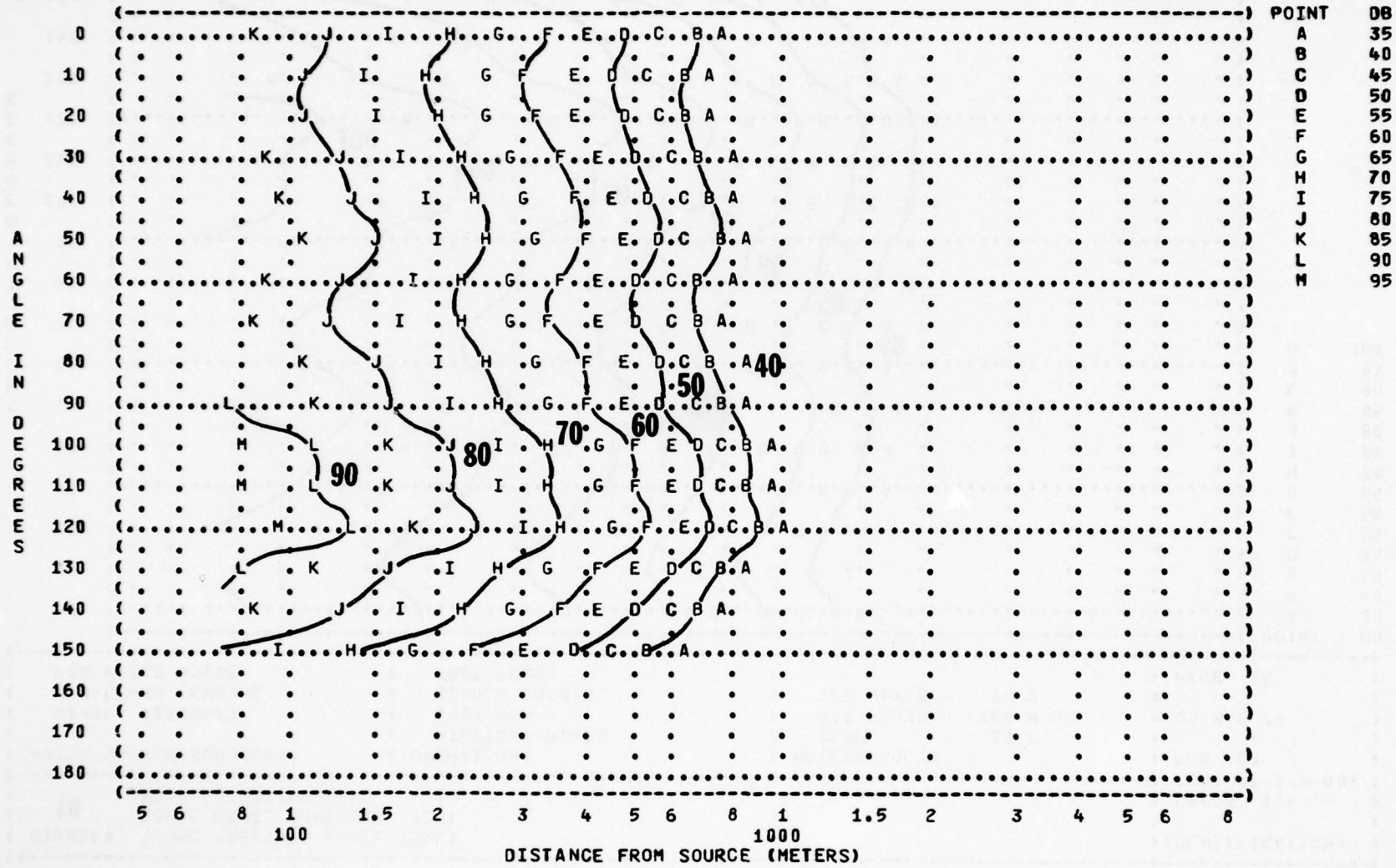
SOUND PRESSURE LEVEL (SPL)
EQUAL LEVEL CONTOURS (DB)
8000 HZ OCTAVE BAND

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-002
RUN 03
05 MAY 75
PAGE 26

NOISE SOURCE/SUBJECT:
RA-5C AIRCRAFT
J79-GE-8C 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

FIGURE: 10

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

NOISE SOURCE/SUBJECT:
RA-5C AIRCRAFT
J79-GE-8C ENGINE
FAR FIELD NOISE

OPERATION:
AFTERBURNER POWER
100% RPM
SINGLE ENGINE
FREE FLOW

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

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-002
RUN 04
05 MAY 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
N	110

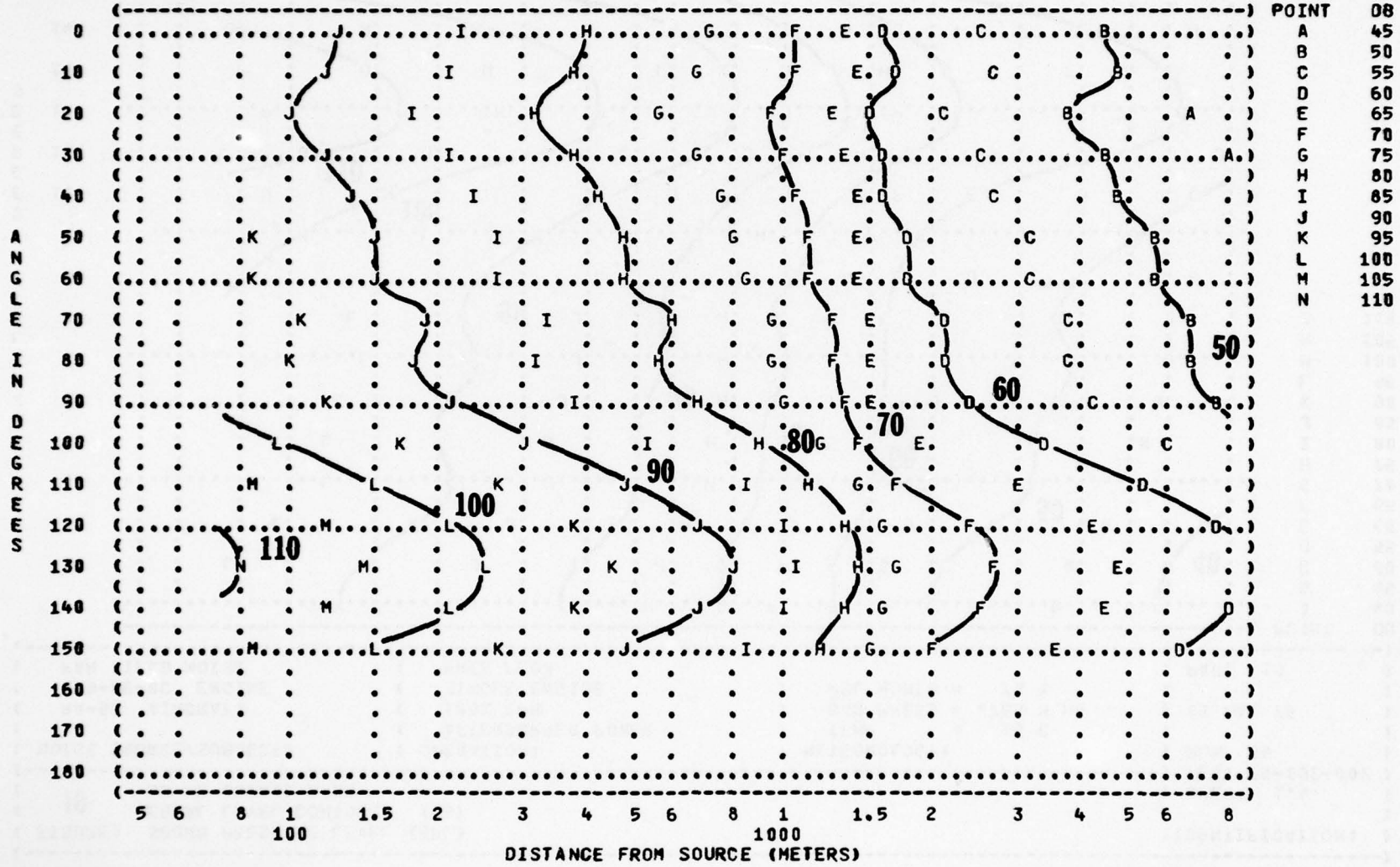


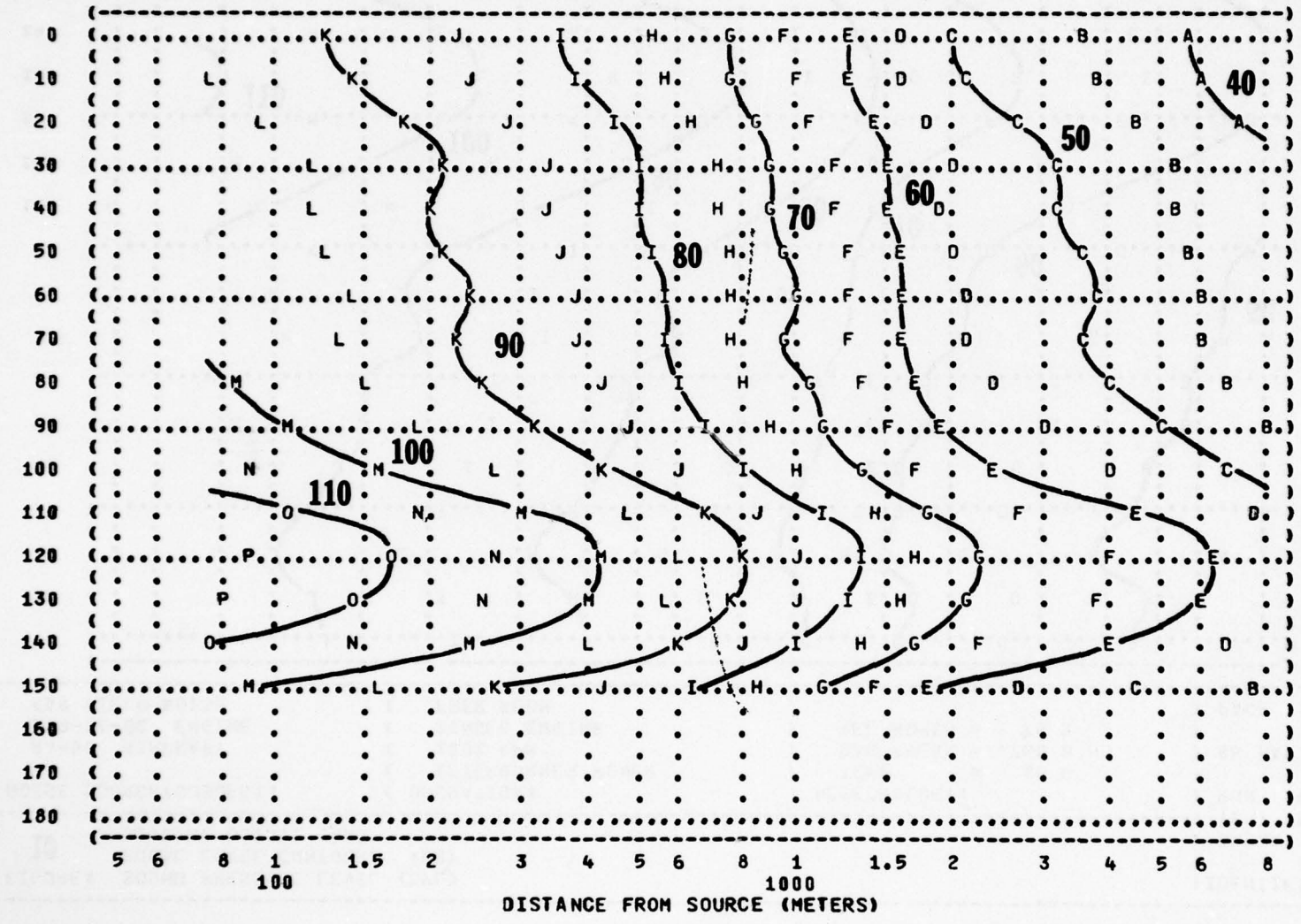
FIGURE: 10 SOUND PRESSURE LEVEL (SPL) EQUAL LEVEL CONTOURS (DB) 63 HZ OCTAVE BAND

NOISE SOURCE/SUBJECT:
RA-5C AIRCRAFT
J79-GE-8C ENGINE
FAR FIELD NOISE

OPERATION:
AFTERBURNER POWER
100% RPM
SINGLE ENGINE
FREE FLOW

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

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-002
RUN 04
05 MAY 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: 10

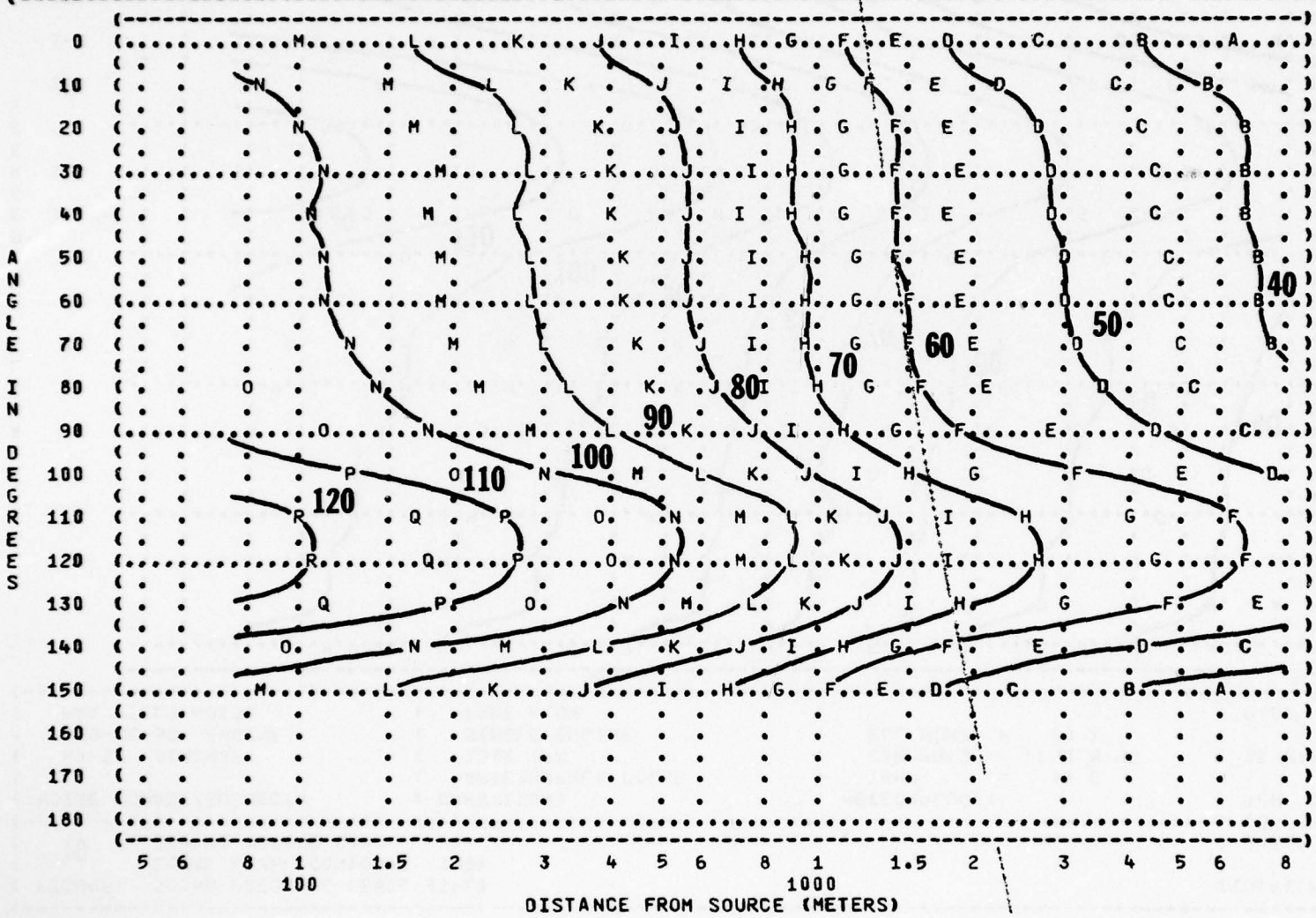
SOUND PRESSURE LEVEL (SPL)
EQUAL LEVEL CONTOURS (DB)
125 HZ OCTAVE BAND

NOISE SOURCE/SUBJECT:
RA-5C AIRCRAFT
J79-GE-8C ENGINE
FAR FIELD NOISE

OPERATION:
AFTERBURNER POWER
100% RPM
SINGLE ENGINE
FREE FLOW

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

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-002
RUN 04
05 MAY 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: 10

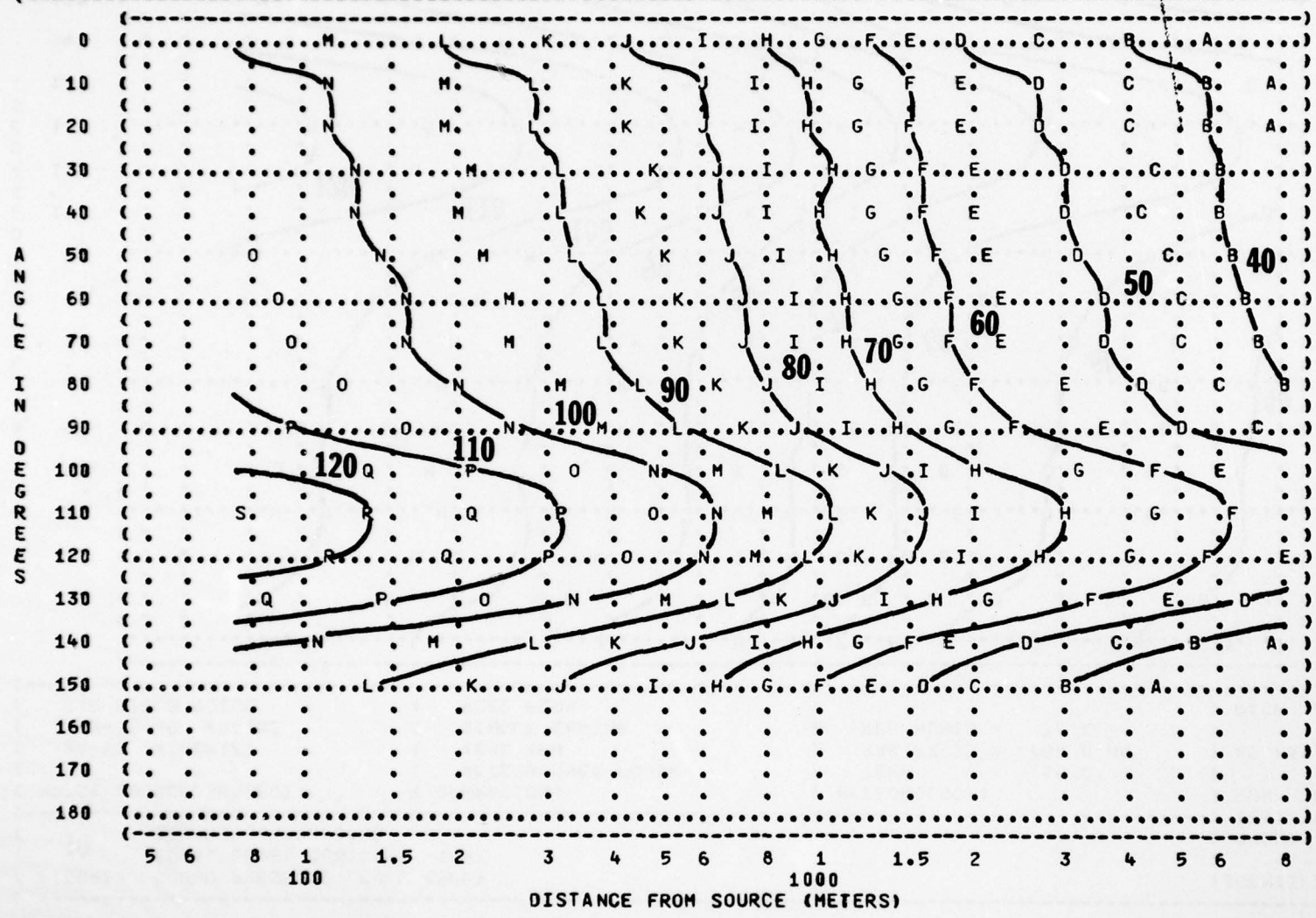
SOUND PRESSURE LEVEL (SPL)
EQUAL LEVEL CONTOURS (DB)
250 HZ OCTAVE BAND

NOISE SOURCE/SUBJECT:
RA-5C AIRCRAFT
J79-GE-8C ENGINE
FAR FIELD NOISE

OPERATION:
AFTERBURNER POWER
100% RPM
SINGLE ENGINE
FREE FLOW

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

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-002
RUN 04
05 MAY 75
PAGE 21

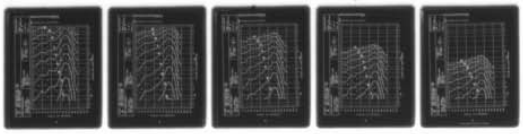


POINT	DB
A	35
B	40
C	45
D	50
E	55
F	60
G	65
H	70
I	75
J	80
K	85
L	90
M	95
N	100
O	105
P	110
Q	115
R	120
S	125

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USAF BIOENVIRONMENTAL NOISE DATA HANDBOOK. VOLUME 93. RA-5C AIR--ETC(U)
JUN 77

UNCLASSIFIED . AMRL-TR-75-50-VOL-93 NL

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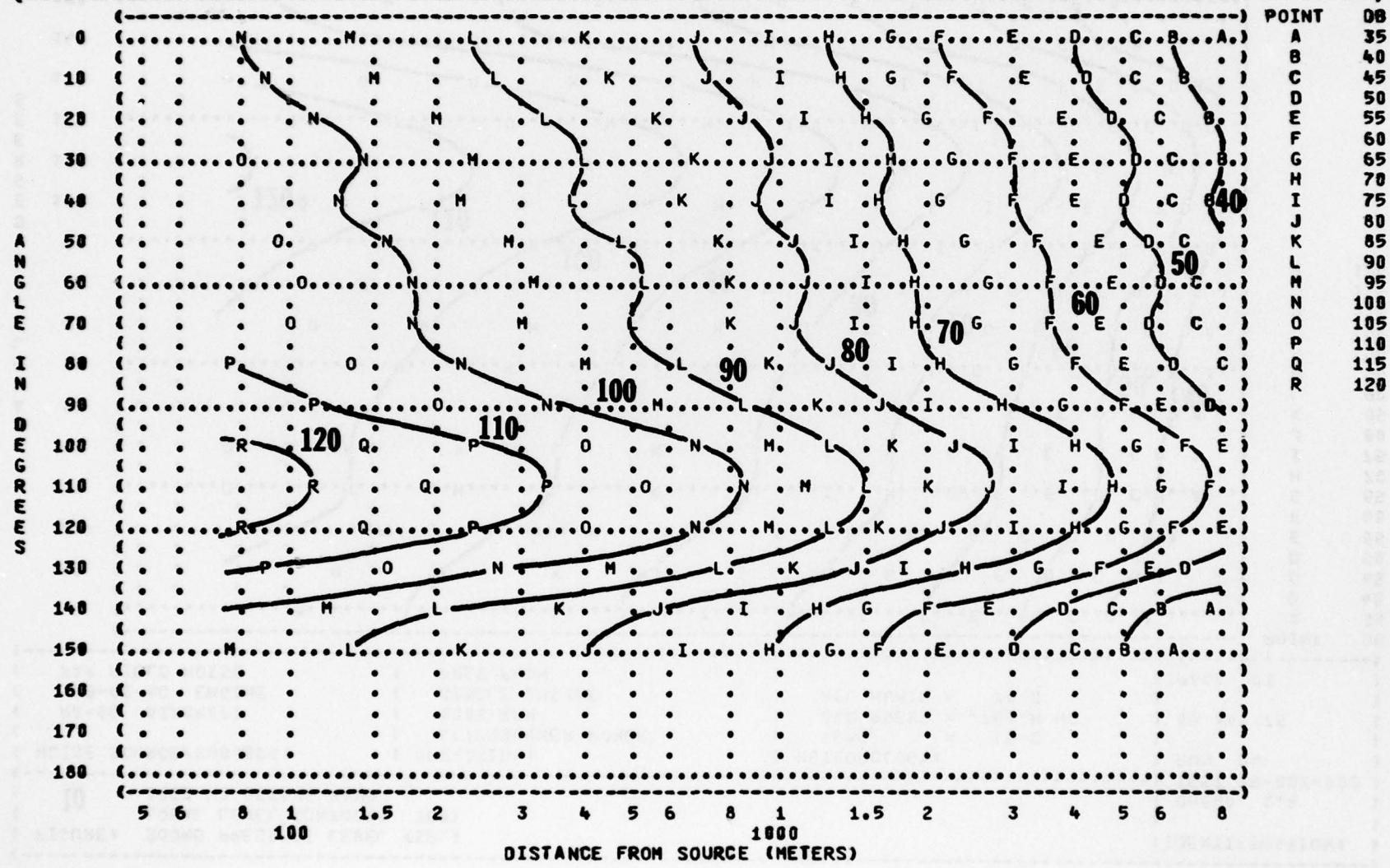
FIGURE 10: SOUND PRESSURE LEVEL (SPL) EQUAL LEVEL CONTOURS (DB) 500 HZ OCTAVE BAND

NOISE SOURCE/SUBJECT:
RA-5C AIRCRAFT
J79-GE-8C ENGINE
FAR FIELD NOISE

OPERATION:
AFTERBURNER POWER
100% RPM
SINGLE ENGINE
FREE FLOW

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

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-002
RUN 04
05 MAY 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
R	120

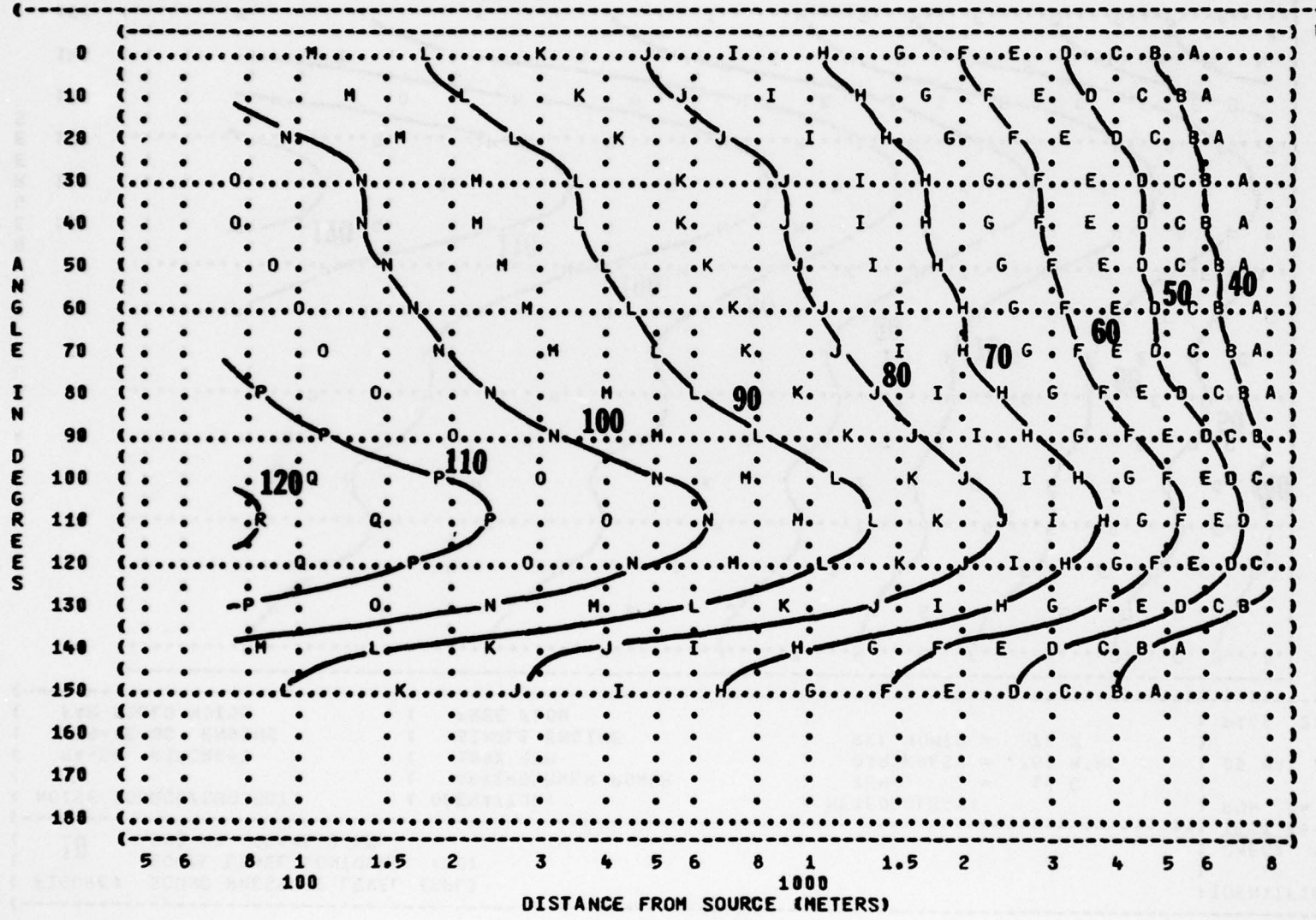
FIGURE 10: SOUND PRESSURE LEVEL (SPL) EQUAL LEVEL CONTOURS (DB) 1000 HZ OCTAVE BAND

NOISE SOURCE/SUBJECT:
RA-5C AIRCRAFT
J79-GE-8C ENGINE
FAR FIELD NOISE

OPERATION:
AFTERBURNER POWER
100% RPM
SINGLE ENGINE
FREE FLOW

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

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-002
RUN 04
05 MAY 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
R	120

FIGURE: 10

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

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-002
RUN 04
05 MAY 75
PAGE 24

NOISE SOURCE/SUBJECT:
RA-5C AIRCRAFT
J79-GE-8C ENGINE
FAR FIELD NOISE

OPERATION:
AFTERBURNER 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
Q	115

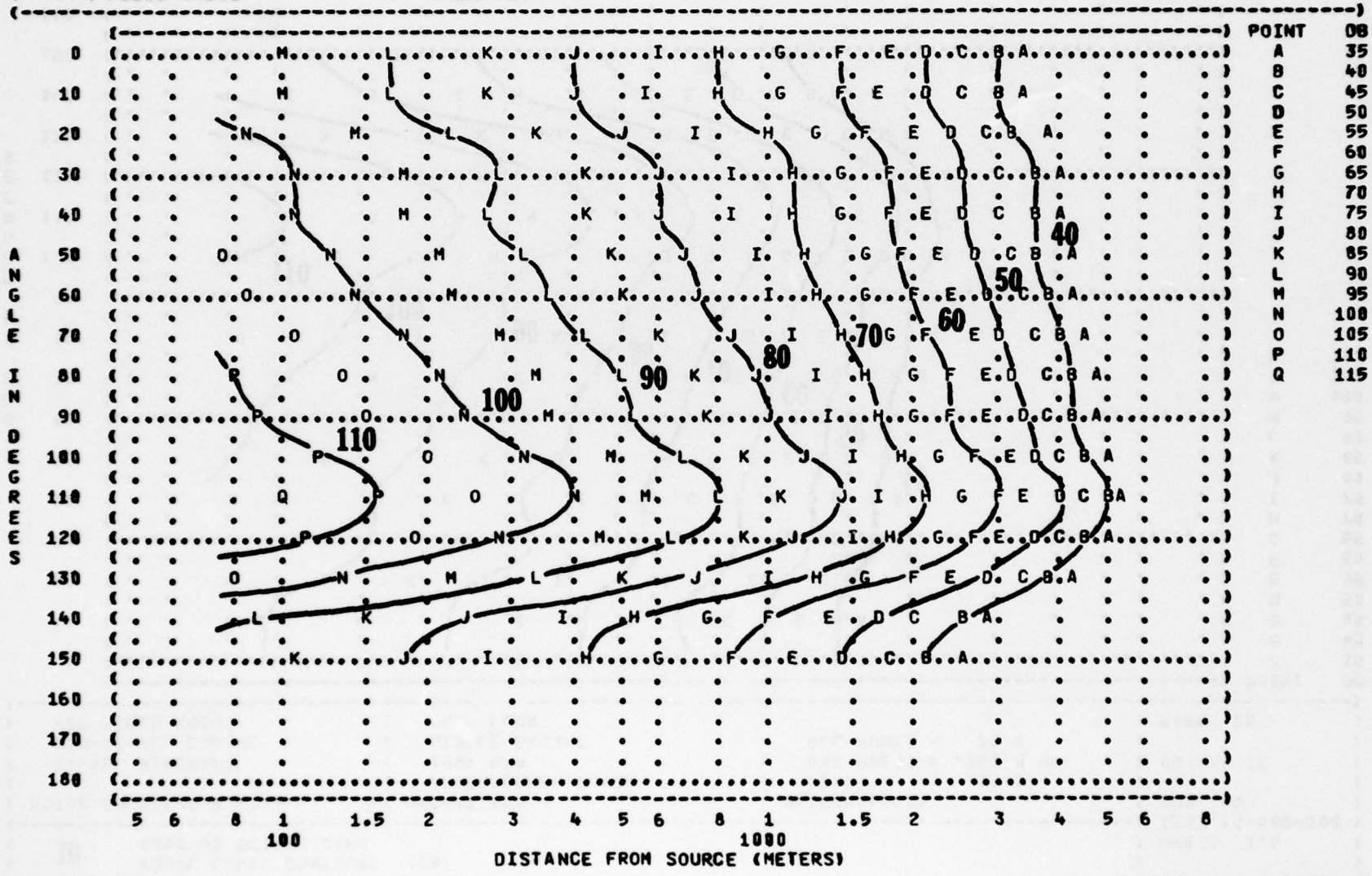


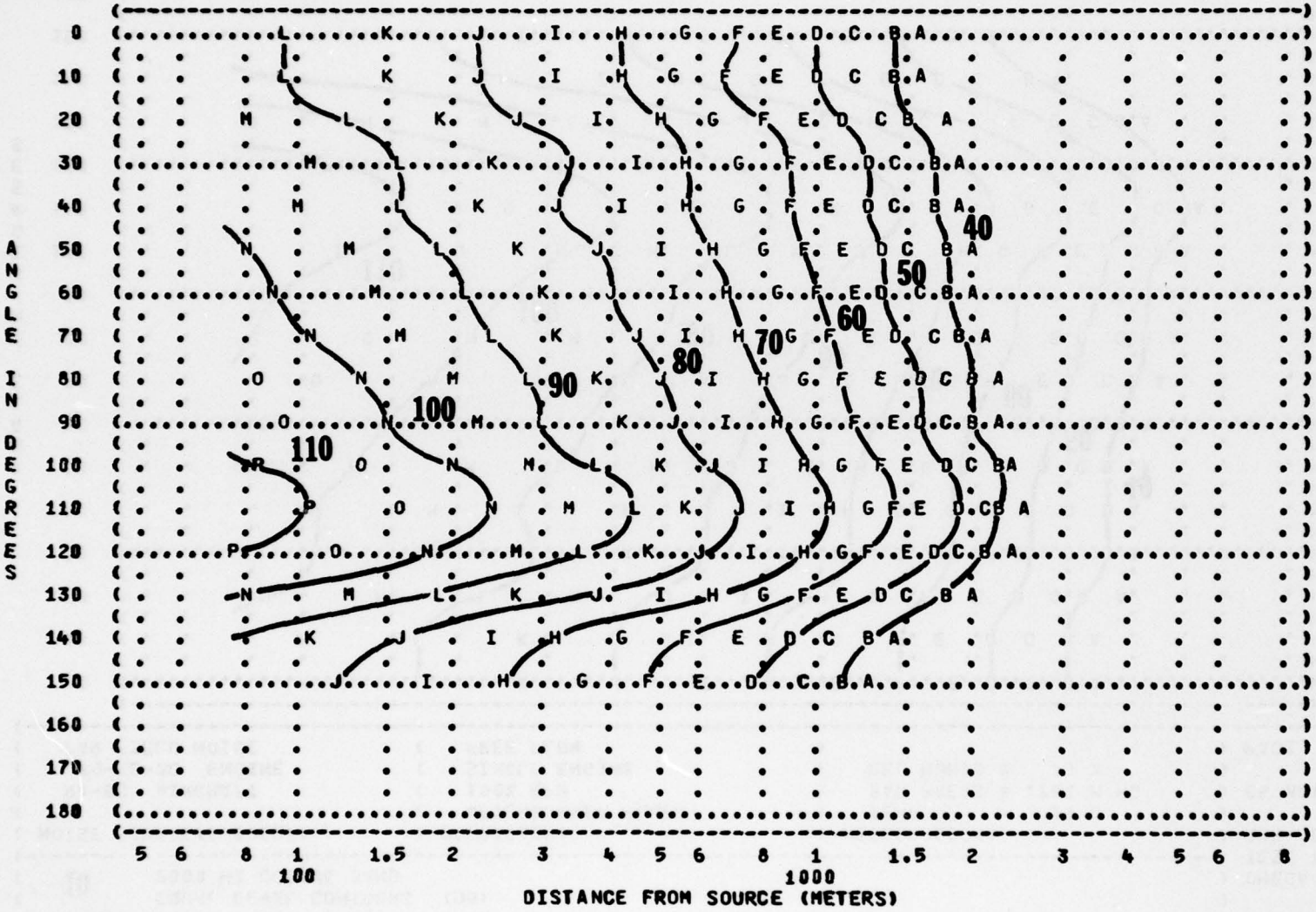
FIGURE 10: SOUND PRESSURE LEVEL (SPL) EQUAL LEVEL CONTOURS (DB) 4000 HZ OCTAVE BAND

NOISE SOURCE/SUBJECT:
RA-5C AIRCRAFT
J79-GE-8C ENGINE
FAR FIELD NOISE

OPERATION:
AFTERBURNER POWER
100% RPM
SINGLE ENGINE
FREE FLOW

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

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-002
RUN 04
05 MAY 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
P	110

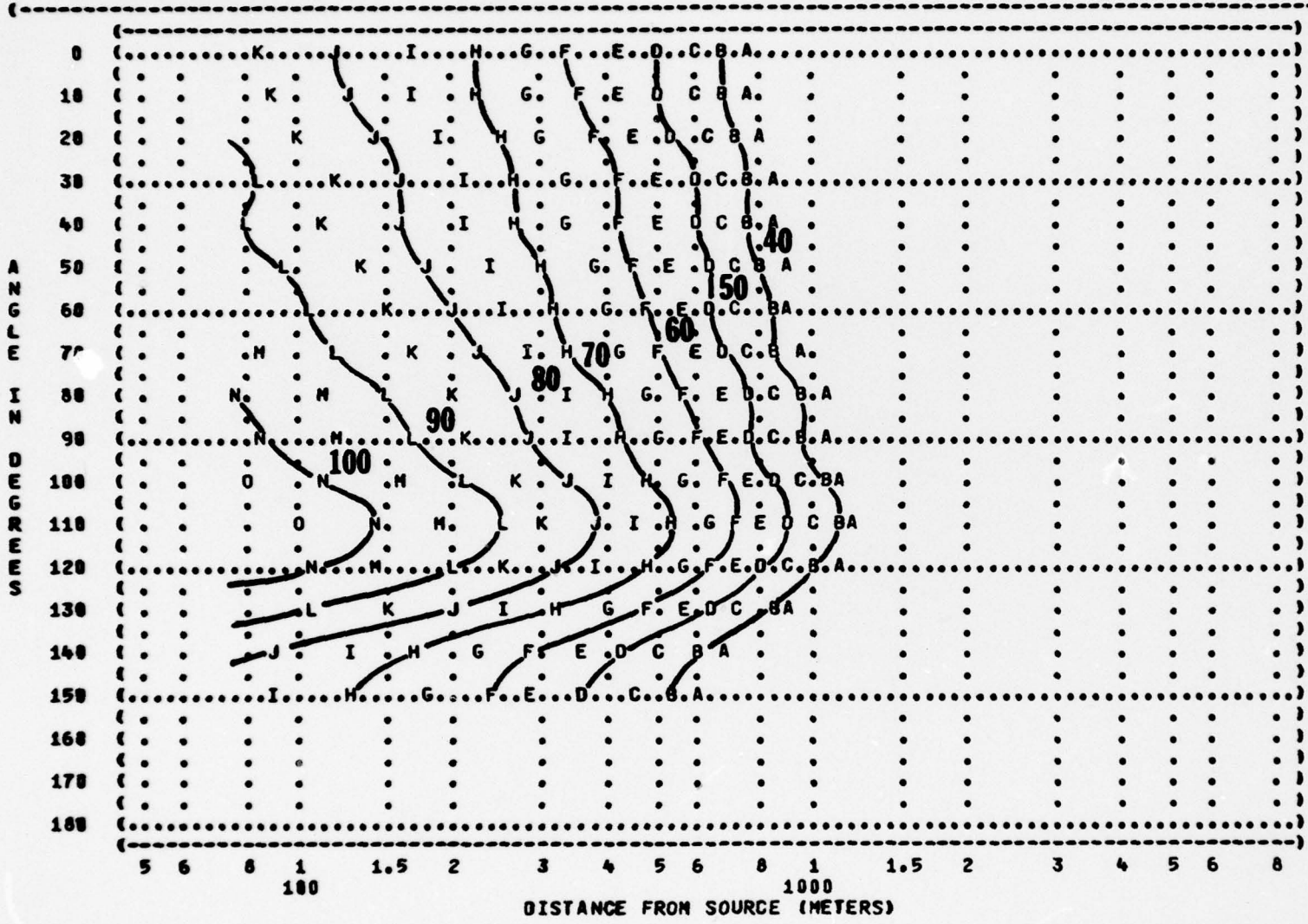
FIGURE 10 SOUND PRESSURE LEVEL (SPL) EQUAL LEVEL CONTOURS (DB) 8000 HZ OCTAVE BAND

NOISE SOURCE/SUBJECT:
RA-5C AIRCRAFT
J79-GE-8C ENGINE
FAR FIELD NOISE

OPERATION:
AFTERBURNER POWER
100% RPM
SINGLE ENGINE
FREE FLOW

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

IDENTIFICATION:
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