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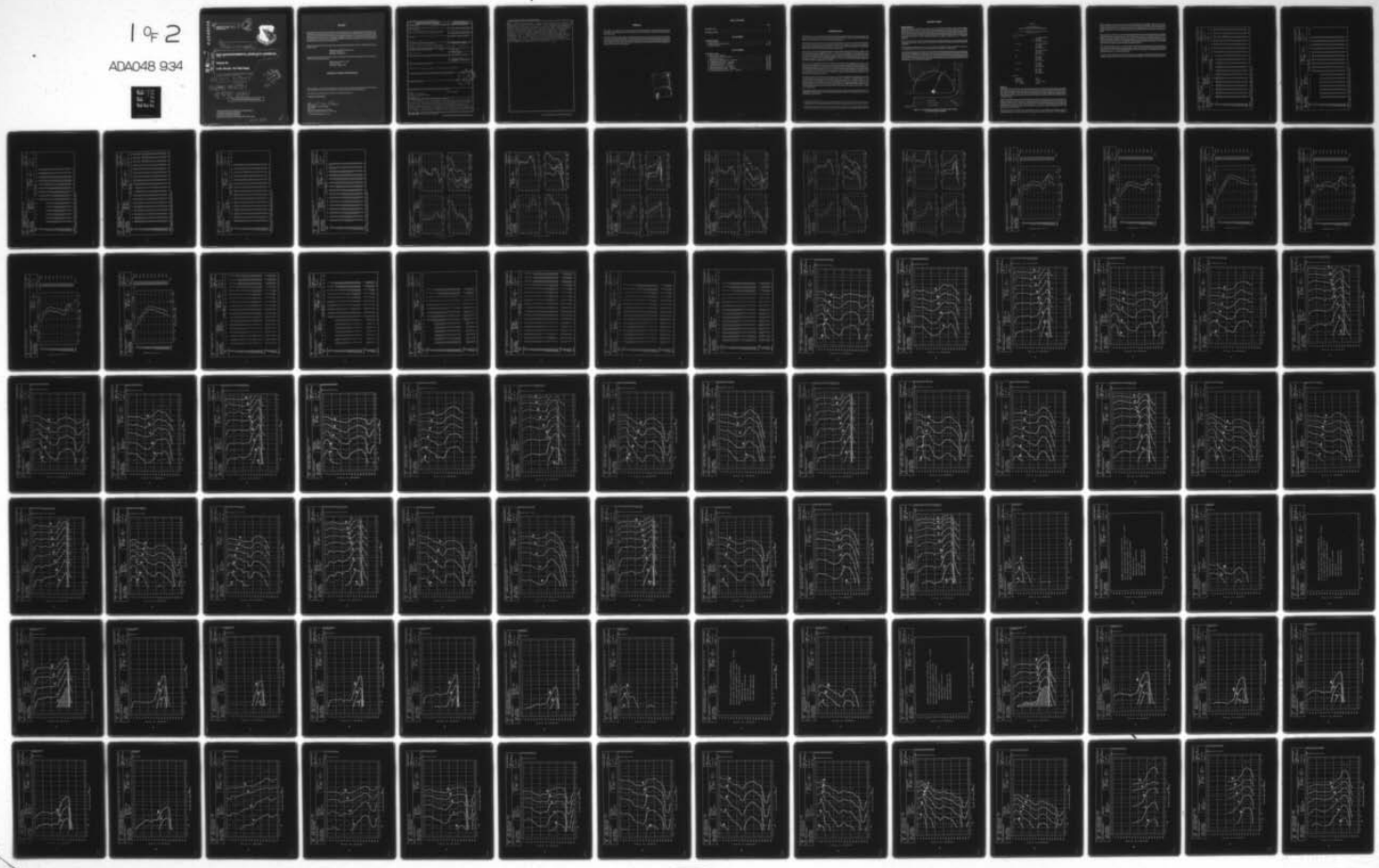

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Robert G. / Powell

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FOR THE COMMANDER

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

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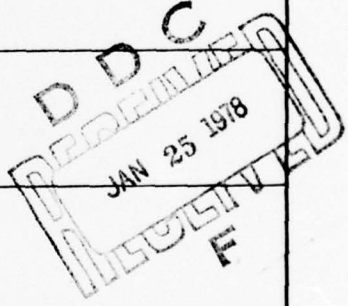

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The USN A-6A is a carrier based attack bomber aircraft powered by two J52-P-8A turbojet engines. This report provides far-field measured and extrapolated data defining both physical and psychoacoustic measures of the bioacoustic environments produced by this aircraft operating on a ground runup pad for six engine/power conditions. Far-field data measured at 19 locations are normalized to standard meteorological conditions and extrapolated from 75-

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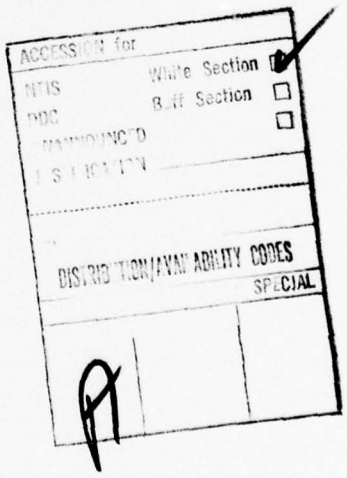
8000 meters to derive sets of equal-value contours as a function of angle and distance from the source. These contours are measures of overall and band sound pressure levels, C-weighted and A-weighted sound levels, preferred speech interference level, perceived noise level, and limiting times for total 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 A-6A is a carrier based attack bomber aircraft powered by two J52-P-8A turbojet engines. The aircraft was manufactured by the Grumman Aerospace Corporation and the engines by the Pratt and Whitney Aircraft Division of the United Aircraft Corporation.

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 A-6A 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 meter 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), AMRL, WPAFB, OH, 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 each semicircle. The center of the 75 meter radius semicircles used in surveying the J52-P-8A engines was on the ground directly below the intersection of the aircraft's centerline and the plane passing through both engines' exhaust-nozzle exit. 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 wavefronts 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.

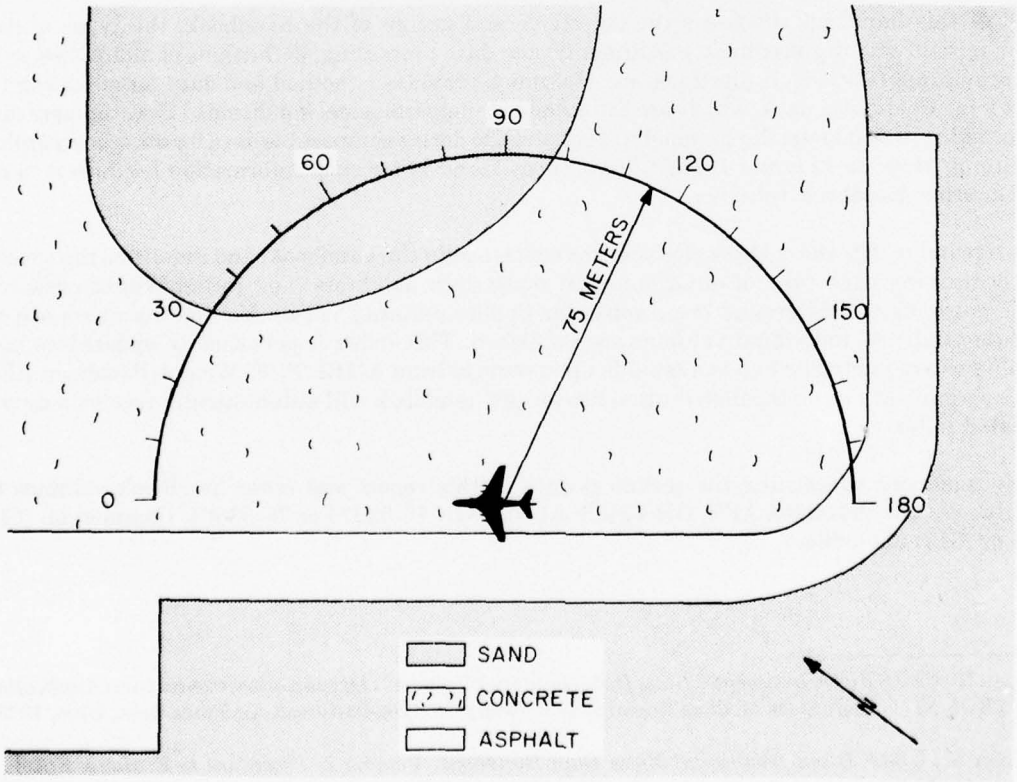


Figure 1. Far-Field Measurement Locations on the Taxiway at ALF, San Clemente Island

TABLE 1

TEST CONDITIONS
FOR FAR-FIELD NOISE MEASUREMENTS

A-6A Aircraft, Ground Runups, ALF, San Clemente Island
Tail#157019, 17 May 1977

Aircraft Engine Operation

Idle	#2 (Starboard) Engine
	60 % RPM
	250 C,Exhaust
	800 LBS/HR, Fuel Flow
75% Runup	#2 (Starboard) Engine
	75 % RPM
	300 C, EGT
	1500 LBS/HR, FF
Military	#2 (Starboard) Engine
	99 % RPM
	650 C, EGT
	8000 LBS/HR, FF
Idle	Both Engines
	60 % RPM
	260 C, EGT
	850 LBS/HR, FF
75% Runup	Both Engines
	75 % RPM
	300 C, EGT
	1500 LBS/HR, FF
Military	Both Engines
	98.5 % RPM
	645 C, EGT
	8000 LBS/HR, FF

Meteorology

Temperature	15.0 C
Bar Pressure	0.764 M Hg
Rel Humidity	78 %
Wind — Speed	3.1 M/Sec (6 KTS)
— Direction	270 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 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 2, which provides a compact summary of the far-field noise characteristics of the A-6A 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 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 the noise levels for intermediate power settings (e.g., 85% RPM) and/or different number of engines operating (e.g., single engine) 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 170/180 degree locations for a single engine operating at 75% RPM, 150 through 180 degree locations for a single engine operating at military power, nor at the 160/170/180 degree locations for both engines operating at 75% and military power settings because of turbulent air flow behind the aircraft. Typically, the A-weighted levels for these angles are 10 to 20 dBA below the level measured at the preceding 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 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 75-002-003
RUN 01
05 MAY 75

NOISE SOURCE/SUBJECT:
A-6A AIRCRAFT
J52-P-8A ENGINE
FAR FIELD NOISE

OPERATION:
IDLE POWER
60% RPM
SINGLE ENGINE
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .764 M HG
REL HUMID = 78 %

FREQ (HZ)	ANGLE (DEGREES) 0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
25						62<							63<	64<	68<	68<	69<	69<	67<
31.5	65<	65<	67<	67<	66<	66<	69	71	70	71	71	75	74	75	78	77	75	77	76
40	66<	66<	67<	66<	67<	68<	69<	68<	70	68<	72	72	73	75	73	74	73	73	75
50	65<	64<	65<	65<	66	63<	65<	65<	64<	66	66	69	71	73	73	72	69	69	73
63	65<	66<	67<	65<	66<	64<	64<	65<	65<	65<	67<	69<	72	74	74	70<	68<	67<	74
80	67	66	68	67	66	64	66	66	65	67	69	71	72	74	75	71	64	63	70
100	74	74	75	74	72<	72<	72<	70<	70<	73<	76	77	78	77	78	72<			69<
125	72	72	73	71	71	70	69	69	69	71	74	75	75	76	76	72	55<	54<	63<
160	75	74	74	74	72	71	70	69	68	71	75	74	75	78	77	71	53<	57<	61
200	72	71	73	73	71	71	69	69	70	71	75	77	81	81	80	73	60<	64	75
250	72	72	73	72	71	70	69	70	70	72	75	76	80	79	79	74	57<	61	73
315	74	74	74	72	69	67	66	67	67	71	77	77	76	78	77	72	54<	55	63
400	74	74	75	72	72	70	69	69	67	71	77	76	76	76	72	72	55	55	61
500	76	75	75	74	75	71	71	71	70	73	78	78	78	77	74	72	58	56	62
630	78	77	77	77	76	71	69	71	70	73	77	76	78	75	74	69	61	55	63
800	81	79	77	76	74	71	70	68	66	70	74	75	76	72	72	66	56	55	62
1000	80	77	78	76	74	72	71	69	65	69	71	74	73	72	70	64	53	54	62
1250	77	74	75	73	70	69	68	66	64	67	68	71	69	69	65	61	51	52	60
1600	80	79	79	76	73	71	70	68	64	67	68	68	67	68	64	61	50	51	58
2000	85	87	87	80	80	74	73	71	67	69	71	68	68	67	64	63	51	51	57
2500	89	90	93	82	82	78	74	72	71	72	73	70	71	66	64	63	53	52	57
3150	96	99	99	89	87	83	76	75	74	76	75	73	71	67	66	66	56	53	61
4000	86	86	85	84	82	81	74	74	69	71	74	73	73	70	65	66	53	53	58
5000	83	85	85	80	78	77	72	70	68	71	74	71	71	69	65	64	51	52	58
6300	85	89	86	82	78	76	72	69	67	70	72	72	70	66	63	63	51	51	56
8000	80	81	81	77	76	74	70	68	64	68	71	70	68	65	61	61	48<	48<	53
10000	75	76	75	72	68	69	65	65	62	67	70	70	68	65	60	58	46<	48<	54
OVERALL	98	100	101	93	91	88	85	84	82	85	88	88	89	89	88	85	79	80	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 75-002-003
RUN 02
05 MAY 75
PAGE 2

NOISE SOURCE/SUBJECT:
A-6A AIRCRAFT
J52-P-8A ENGINE
FAR FIELD NOISE

OPERATION:
75% RPM
SINGLE ENGINE
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .764 M HG
REL HUMID = 78 %

FREQ (HZ)	ANGLE (DEGREES) 0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
25								63<	62<	62<	65<	67<	70<	72<	75	75	72<		
31.5								66<	66<	67<	68<	68<	74	76	79	79	76		
40								71	71	72	72	75	79	81	82	83	77		
50								70	70	71	71	75	78	81	81	82	74		
63								70<	72	73	75	77	81	85	85	85	76		
80								73	73	74	76	79	83	86	87	83	73		
100	71<	73<	75	74	74	75	74	74	76	79	81	83	86	89	89	82	72<		
125	72	73	75	75	75	74	75	76	76	79	81	84	87	90	89	78	68		
160	75	76	78	79	78	77	77	77	77	80	83	86	87	91	88	72	66		
200	74	76	79	80	78	77	77	76	79	81	84	86	87	90	85	69	63		
250	74	75	76	78	77	75	77	77	78	81	84	86	87	88	84	67	60		
315	73	75	75	76	74	74	75	76	79	81	85	87	86	86	80	67	58		
400	73	75	75	75	74	74	75	76	78	80	84	87	85	85	77	65	56		
500	75	77	76	77	77	76	76	77	78	81	84	87	84	83	76	66	56		
630	77	80	80	79	80	78	76	77	79	81	85	87	83	82	75	67	56		
800	79	79	78	79	77	76	76	77	77	81	85	86	82	80	73	66	55		
1000	79	79	78	79	78	77	76	76	77	80	84	84	81	79	72	66	55		
1250	79	79	78	78	77	77	75	75	76	80	83	83	79	77	70	64	53		
1600	81	79	80	81	78	77	75	76	76	79	81	80	79	76	70	63	52		
2000	85	81	83	82	79	78	76	76	75	78	78	78	77	74	68	62	51		
2500	85	84	84	84	82	81	79	77	77	79	79	79	76	73	67	61	52		
3150	94	95	90	90	90	88	85	82	82	80	80	78	78	74	67	63	53		
4000	90	90	91	91	86	85	80	80	79	80	82	80	77	72	66	64	54		
5000	93	93	95	96	89	86	82	83	82	82	82	80	77	72	66	64	55		
6300	88	89	90	91	90	87	84	84	81	81	80	79	77	72	65	61	54		
8000	85	86	87	88	85	86	82	81	79	79	79	78	75	70	63	60	52		
10000	83	82	83	84	81	80	76	79	77	79	78	76	72	69	61	59	51		
OVERALL	99	99	99	100	96	95	92	92	92	93	96	97	97	98	96	91	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 75-002-003
RUN 03
05 MAY 75
PAGE 2

NOISE SOURCE/SUBJECT:
A-6A AIRCRAFT
J52-P-8A ENGINE
FAR FIELD NOISE

OPERATION:
MILITARY POWER
99% RPM
SINGLE ENGINE
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .764 M HG
REL HUMID = 78 %

FREQ (HZ)	ANGLE (DEGREES) 0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
25							81	81	81	82	86	88	91	94	96				
31.5							82	83	84	86	88	92	95	99	99				
40							86	85	87	87	90	95	100	100	101				
50							87	86	86	89	92	96	101	101	100				
63							87	88	87	91	94	101	105	103	101				
80							88	89	89	90	96	104	106	104	99				
100	88	91	93	93	93	91	91	91	93	96	100	109	112	107	100				
125	88	91	92	92	92	92	93	93	94	98	104	112	115	107	97				
160	89	91	93	93	93	94	94	95	97	100	107	115	117	108	96				
200	90	92	93	95	94	94	94	95	97	101	109	117	119	102	92				
250	91	93	94	95	94	97	97	98	100	104	112	117	120	99	91				
315	92	93	95	97	96	97	98	99	102	105	113	118	122	97	95				
400	100	103	101	100	99	99	99	101	101	104	113	117	122	101	96				
500	102	105	101	103	100	102	100	101	101	105	114	117	122	98	94				
630	103	107	108	106	106	106	101	102	102	105	113	116	120	98	94				
800	99	105	106	107	108	107	104	105	103	106	113	116	119	98	94				
1000	98	103	103	105	105	107	106	106	105	107	111	114	117	98	93				
1250	96	101	103	103	103	105	105	105	106	107	110	113	116	97	91				
1600	96	100	102	103	103	105	103	105	105	109	109	112	116	99	90				
2000	94	99	101	101	103	104	104	105	104	108	108	111	115	97	90				
2500	94	97	100	100	102	103	103	104	104	107	107	110	114	96	89				
3150	95	98	98	99	100	101	102	103	103	106	106	109	112	92	87				
4000	92	95	98	98	99	100	102	102	103	105	106	109	113	91	87				
5000	90	92	94	95	96	98	101	101	101	104	106	108	111	89	86				
6300	89	91	93	93	94	96	99	99	98	101	104	106	109	86	83				
8000	88	89	91	91	93	94	98	97	97	101	102	105	109	84	81				
10000	83	84	86	87	89	90	94	94	94	97	99	103	108	82	79				
OVERALL	109	113	114	114	114	115	114	115	115	118	123	127	131	115	110				

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 75-002-003
RUN 04
05 MAY 75
PAGE 2

NOISE SOURCE/SUBJECT:
A-6A AIRCRAFT
J52-P-8A ENGINE
FAR FIELD NOISE

OPERATION:
IDLE POWER
60% RPM
BOTH ENGINES
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .764 M HG
REL HUMID = 78 %

FREQ (HZ)	ANGLE (DEGREES) 0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
25	64<	63<	64<	66<	64<	63<	64<	64<			63<	63<	66<	67<	69<	69<	65<	67<	68<
31.5	65<	67<	70	70	70	72	73	74	70	72	73	73	76	76	76	76	73	73	74
40	67<	69<	71	72	73	73	72	71	67<	70<	71	71	75	76	80	80	74	78	80
50	64<	65<	66	66	66	68	67	67	66	67	69	69	71	73	74	73	67	69	72
63	64<	63<	65<	66<	66<	66<	67<	66<	64<	67<	70<	68<	72	74	74	73	66<	65<	69<
80	65	66	66	68	67	68	68	68	65	67	69	69	70	73	74	71	63	63	65
100	72<	74	74	74	73<	74	74	74	70<	72<	76	75	77	77	77	73<			
125	70	71	71	71	71	71	71	71	69	71	73	74	74	77	76	71	56<	57<	55<
160	72	73	71	74	72	72	70	69	69	71	75	76	74	79	76	70	56<	56<	57<
200	70	71	72	74	72	72	71	71	71	72	76	77	80	80	80	73	60<	59<	65
250	70	71	71	73	72	71	71	71	73	71	75	76	79	80	80	73	60	58<	65
315	70	71	71	71	67	67	67	68	70	72	76	76	76	77	76	71	54<	54<	60
400	70	72	72	71	70	71	67	68	71	71	76	77	76	76	72	71	55	53<	59
500	72	73	73	73	72	72	69	69	71	72	77	78	77	77	73	71	55	53	61
630	75	74	74	74	73	72	69	69	71	73	76	76	77	76	72	70	54	55	62
800	79	77	74	74	72	71	68	69	69	70	74	75	76	73	70	67	53	54	61
1000	78	77	74	74	72	71	70	69	68	69	72	74	73	71	66	64	51	53	62
1250	77	76	71	72	70	69	67	66	66	67	70	71	70	68	62	61	51	52	59
1600	80	80	76	76	73	71	69	68	66	68	68	68	68	67	53	62	51	50	57
2000	85	87	84	81	81	74	75	71	68	69	69	68	69	66	64	63	52	51	57
2500	89	90	91	82	83	80	76	72	71	71	73	71	68	68	64	63	53	51	57
3150	94	98	96	87	88	85	79	77	75	74	76	75	70	70	66	65	55	52	59
4000	83	87	81	82	80	80	75	73	72	71	74	76	72	70	67	65	54	52	56
5000	81	84	81	79	78	76	72	68	69	71	74	75	71	69	66	65	53	51	55
6300	83	87	83	81	79	76	72	69	68	70	73	73	70	68	65	63	53	50	53
8000	77	80	76	76	74	74	71	67	66	68	71	73	69	66	63	60	50	47<	50
10000	72	75	71	69	69	67	64	61	64	67	73	72	68	66	61	58	49	47<	50
OVERALL	96	100	98	92	92	89	86	84	84	85	88	88	88	89	88	85	78	80	82

< 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 75-002-003
RUN 05
05 MAY 75
PAGE 2

NOISE SOURCE/SUBJECT:
A-6A AIRCRAFT
J52-P-8A ENGINE
FAR FIELD NOISE

OPERATION:
75% RPM
BOTH ENGINES
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .764 M HG
REL HUMID = 78 %

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

< 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 75-002-003
RUN 06
05 MAY 75
PAGE 2

NOISE SOURCE/SUBJECT:
A-6A AIRCRAFT
J52-P-8A ENGINE
FAR FIELD NOISE

OPERATION:
MILITARY POWER
99% RPM
BOTH ENGINES
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .764 M HG
REL HUMID = 78 %

FREQ (HZ)	ANGLE (DEGREES) 0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
25	81	79	79	81	81	83	83	84	86	87	90	92	96	97	100	100			
31.5	81	81	82	83	85	84	86	87	88	89	90	96	98	100	103	101			
40	83	85	84	84	87	87	89	89	89	92	94	98	102	102	103	102			
50	83	84	85	85	87	87	87	90	89	92	95	99	103	104	102	98			
63	85	87	86	88	87	89	89	91	91	93	98	104	108	107	103	98			
80	86	87	88	89	89	90	91	91	92	96	101	107	110	108	101	96			
100	90	91	92	92	92	92	95	95	95	100	104	112	114	109	99	94			
125	90	91	92	93	94	94	95	95	96	103	106	116	117	111	96	91			
160	92	93	94	96	97	97	97	97	99	103	108	116	117	111	93	89			
200	93	94	95	96	96	99	98	98	99	105	112	119	119	107	91	90			
250	95	95	98	98	98	98	98	101	102	107	115	121	121	106	94	91			
315	97	96	99	101	100	99	100	101	104	110	116	121	122	104	97	94			
400	105	105	105	105	101	101	100	102	104	111	116	120	123	105	100	94			
500	107	108	107	108	104	105	102	102	104	110	116	119	122	103	97	95			
630	108	109	111	110	108	108	106	105	104	111	117	120	122	103	97	94			
800	106	108	109	110	110	109	109	109	106	112	116	118	120	103	96	91			
1000	103	105	107	108	109	108	107	110	108	112	115	117	118	103	95	90			
1250	101	104	105	106	108	108	107	108	108	111	114	116	116	101	92	89			
1600	100	103	104	105	108	108	106	107	108	112	115	116	116	100	91	88			
2000	98	101	102	104	107	107	106	107	108	111	115	115	115	98	92	89			
2500	97	100	101	103	106	107	105	107	107	110	113	115	114	97	90	87			
3150	95	97	100	101	104	105	104	105	106	109	113	114	114	96	89	86			
4000	95	98	100	101	103	105	104	105	107	109	112	113	113	94	88	86			
5000	94	96	98	98	102	104	102	104	105	106	109	110	111	92	85	83			
6300	92	94	96	96	99	101	100	102	103	104	108	109	109	90	84	81			
8000	90	92	93	94	97	99	98	101	101	104	108	109	109	89	82	81			
10000	86	89	90	91	95	97	96	98	99	100	103	105	106	85	78	76			
OVERALL	114	116	117	117	118	118	117	118	118	122	127	130	131	119	112	109			

LEVEL CORRECTED TO REMOVE BACKGROUND/ELECTRONIC NOISE.

FIGURE: NORMALIZED FARFIELD NOISE LEVELS

2 DISTANCE = 100 METERS

NOISE SOURCE/SUBJECT:

A-6A AIRCRAFT
J52-P-8A ENGINE
FAR FIELD NOISE

OPERATION:
IDLE POWER
60% RPM
SINGLE ENGINE
FREE FLOW

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

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-003
RUN 01

05 MAY 75

PAGE 6

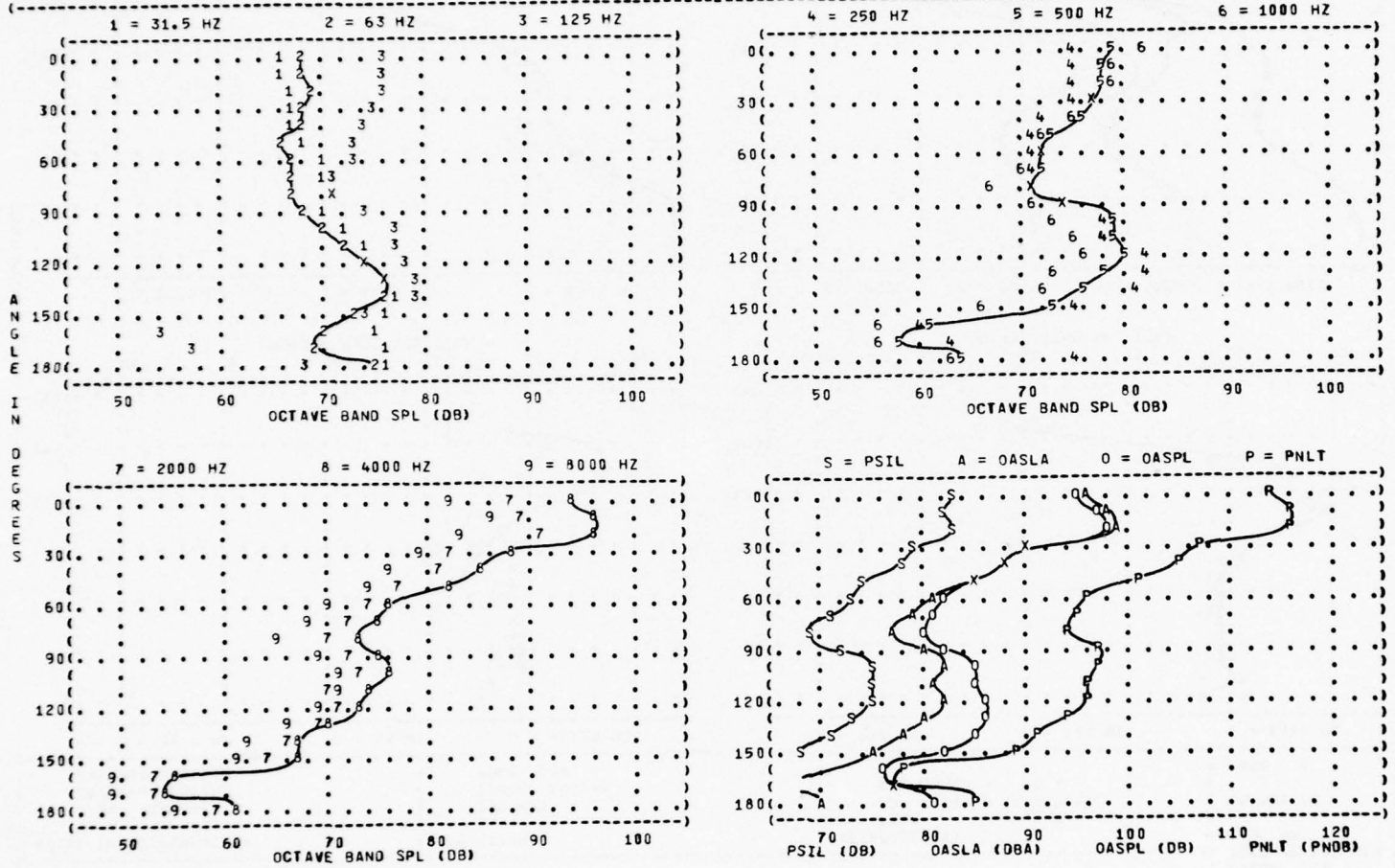


FIGURE: 2 NORMALIZED FARFIELD NOISE LEVELS

DISTANCE = 100 METERS

NOISE SOURCE/SUBJECT:
A-6A AIRCRAFT
J52-P-8A ENGINE
FAR FIELD NOISE

OPERATION:
75% RPM
SINGLE ENGINE
FREE FLOW

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

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-003
RUN 02
05 MAY 75
PAGE 6

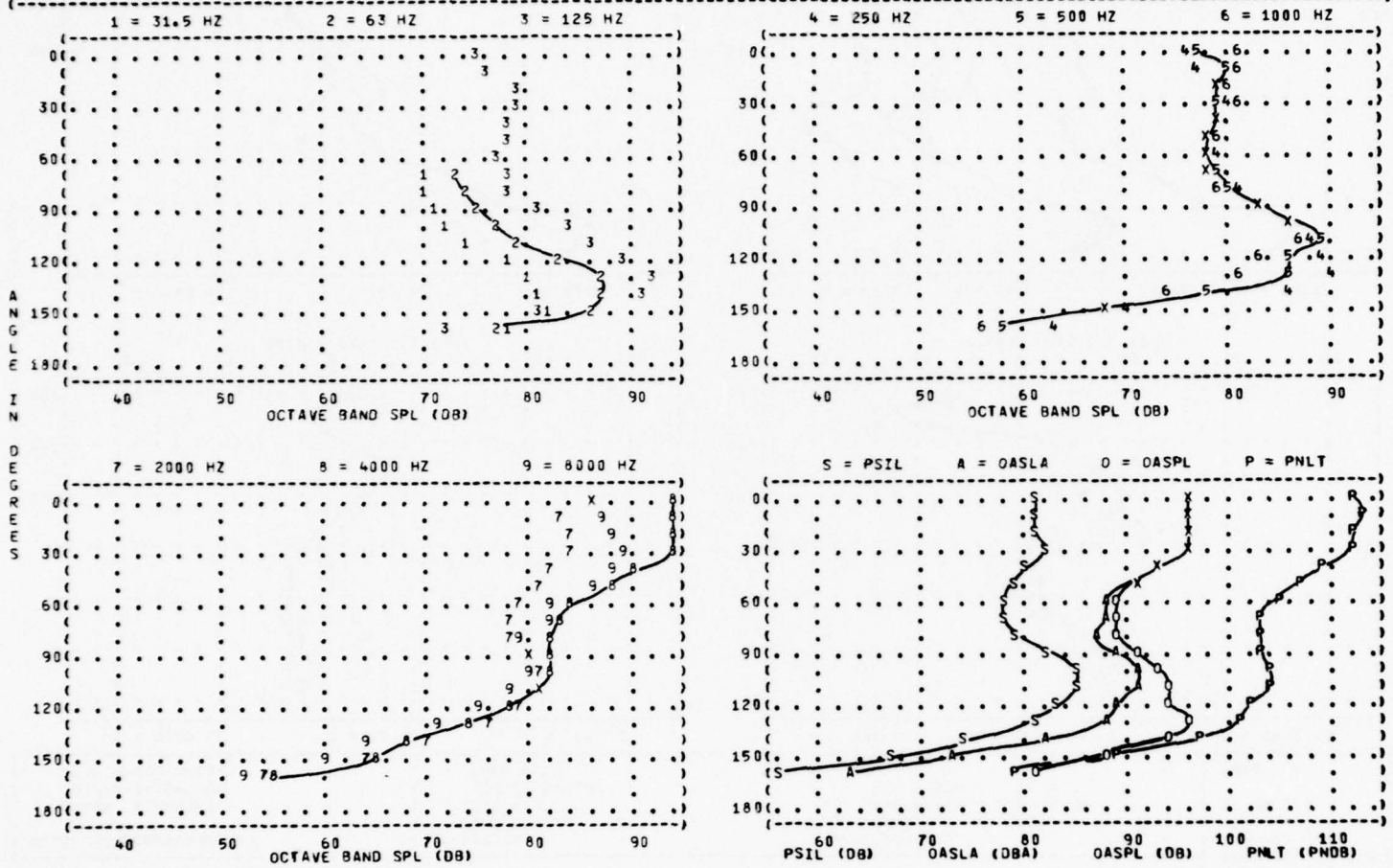


FIGURE: NORMALIZED FARFIELD NOISE LEVELS

2

DISTANCE = 100 METERS

NOISE SOURCE/SUBJECT:
A-6A AIRCRAFT
J52-P-8A ENGINE
FAR FIELD NOISE

OPERATION:
MILITARY POWER
99% RPM
SINGLE ENGINE
FREE FLOW

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

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-003
RUN 03
05 MAY 75
PAGE 6

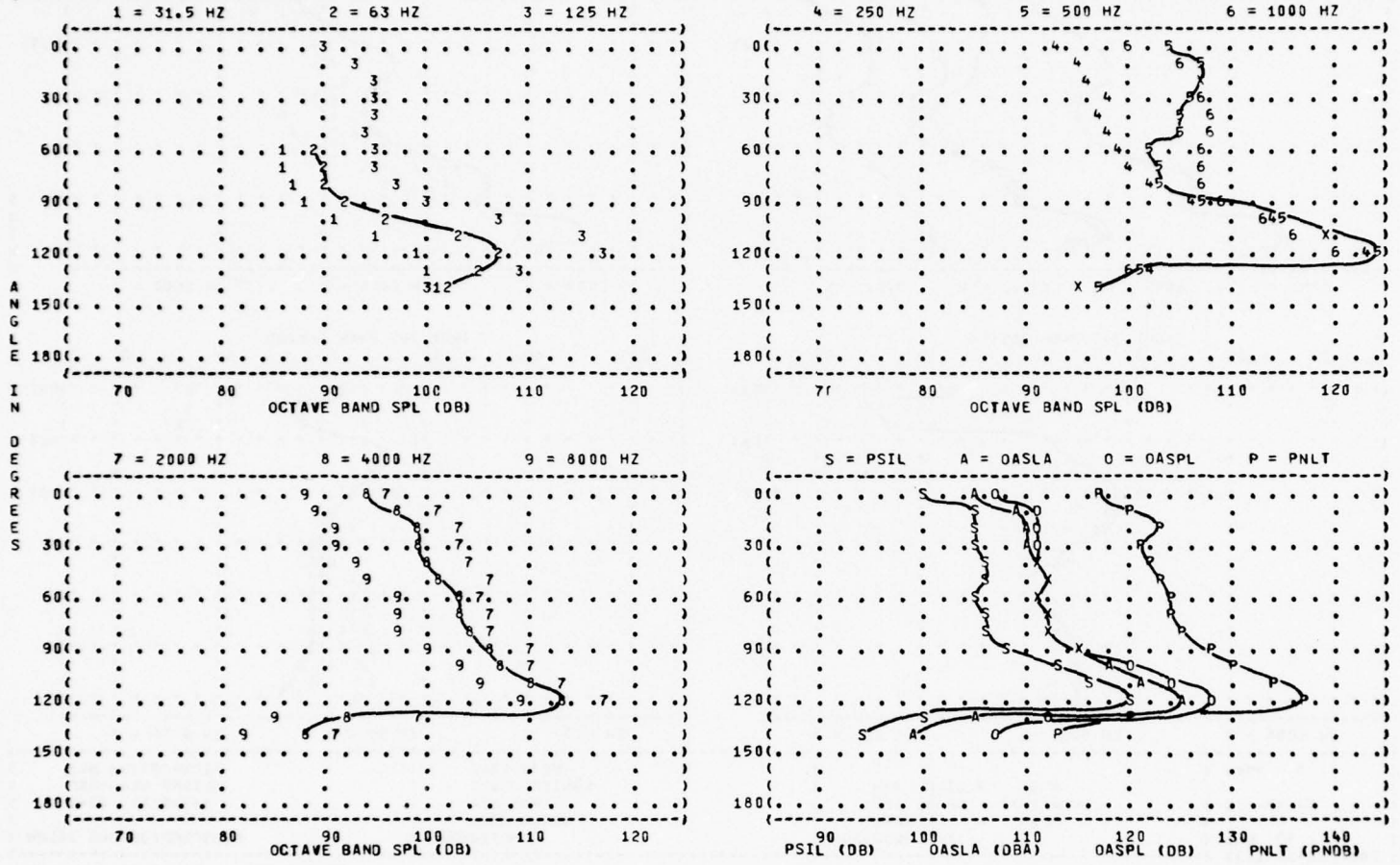


FIGURE: NORMALIZED FARFIELD NOISE LEVELS

2 DISTANCE = 100 METERS

NOISE SOURCE/SUBJECT:
A-6A AIRCRAFT
J52-P-8A ENGINE
FAR FIELD NOISE

OPERATION:
IDLE POWER
60% RPM
BOTH ENGINES
FREE FLOW

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

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-003
RUN 04
05 MAY 75
PAGE 6

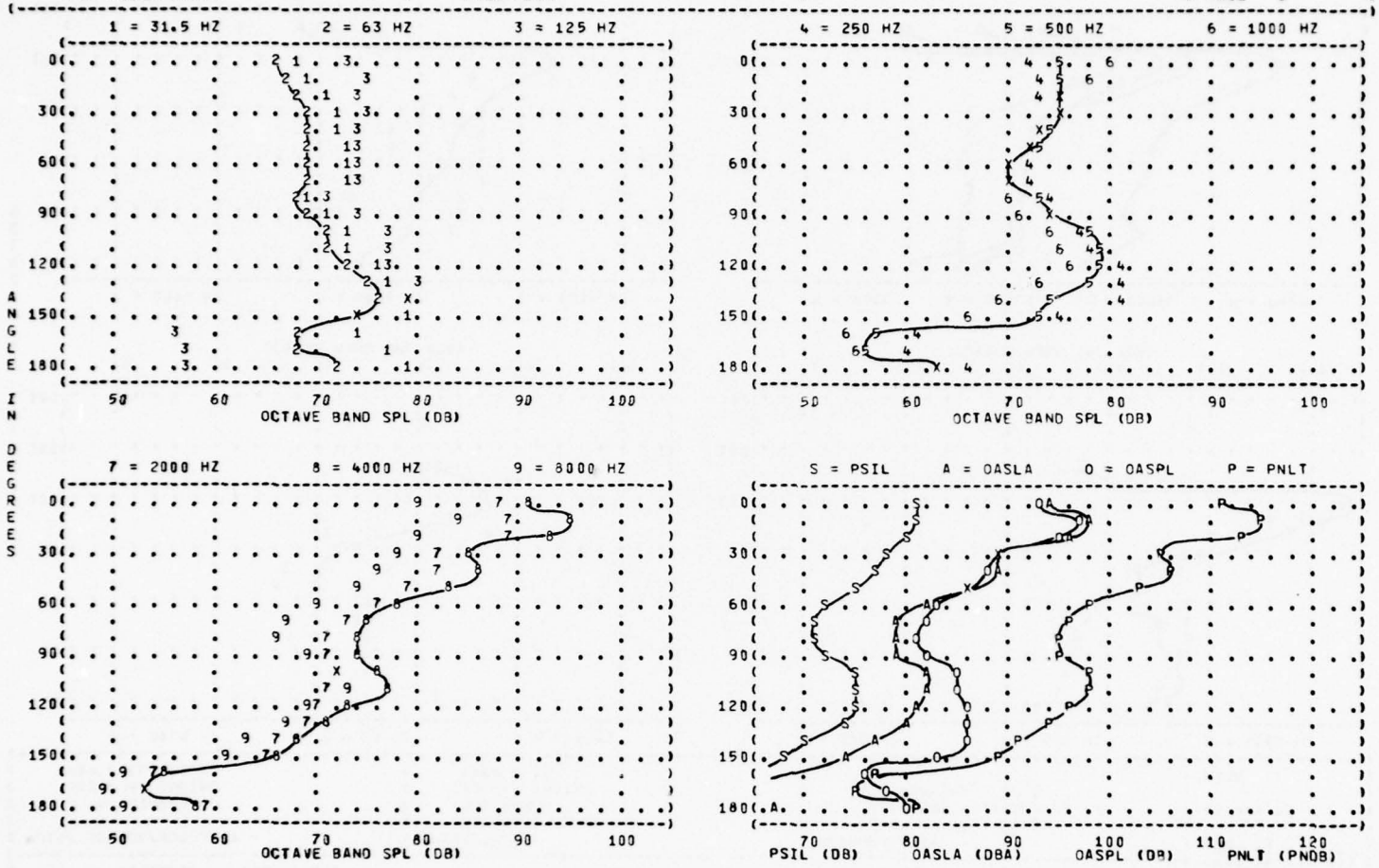


FIGURE: NORMALIZED FARFIELD NOISE LEVELS

2 DISTANCE = 100 METERS

NOISE SOURCE/SUBJECT:

A-6A AIRCRAFT
J52-P-8A ENGINE
FAR FIELD NOISE

OPERATION:

75% RPM
BOTH ENGINES
FREE FLOW

METEOROLOGY:

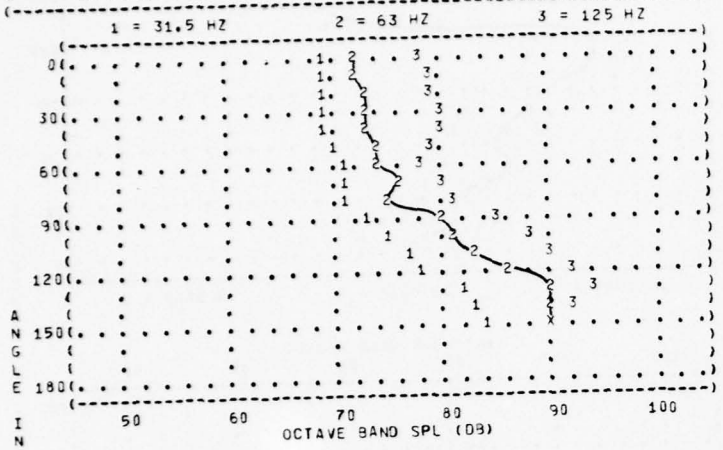
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

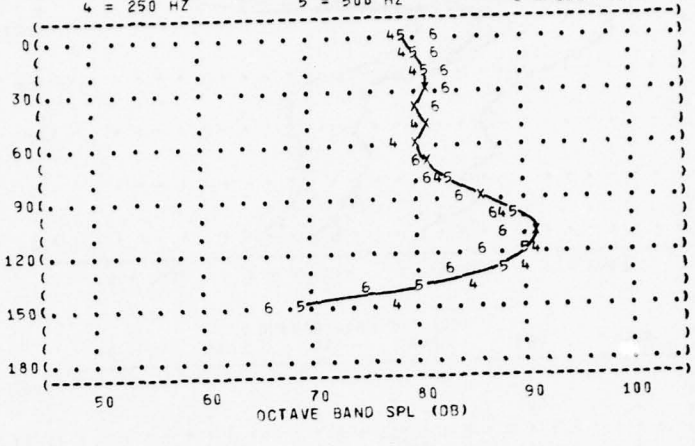
IDENTIFICATION:

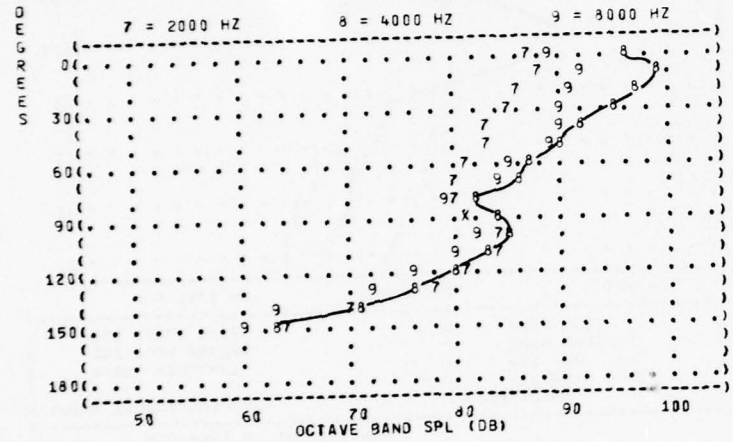
OMEGA 1.4
TEST 75-002-003
RUN 05

05 MAY 75

PAGE 6







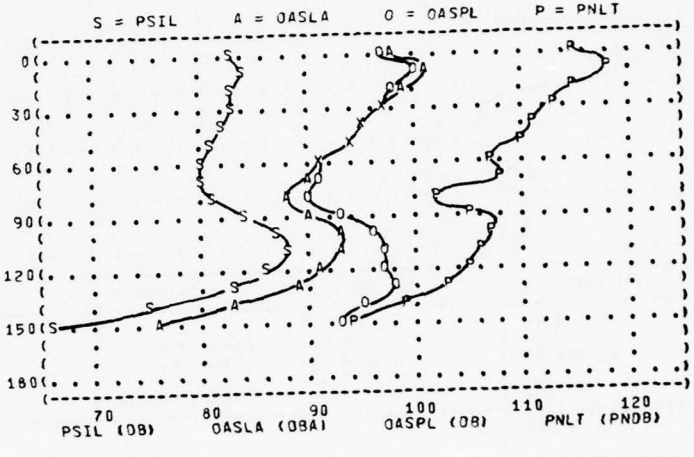


FIGURE: NORMALIZED FARFIELD NOISE LEVELS

2 DISTANCE = 100 METERS

NOISE SOURCE/SUBJECT:

A-6A AIRCRAFT
J52-P-8A ENGINE
FAR FIELD NOISE

OPERATION:

MILITARY POWER
99% RPM
BOTH ENGINES
FREE FLOW

METEOROLOGY:

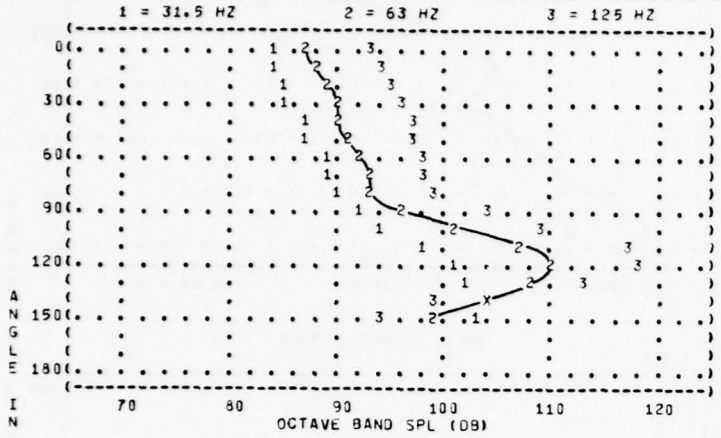
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

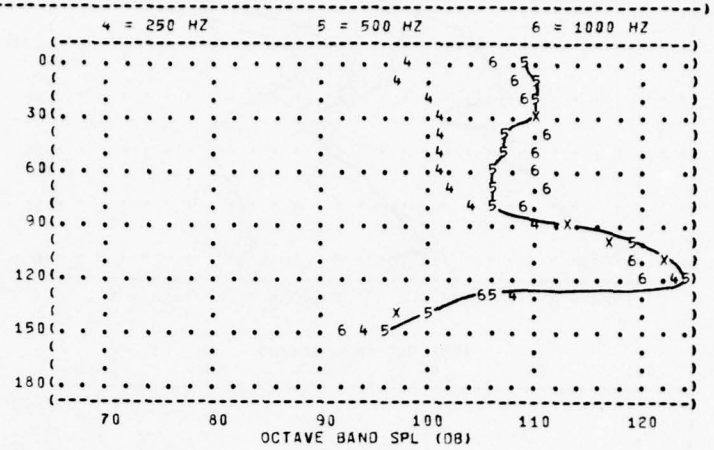
IDENTIFICATION:

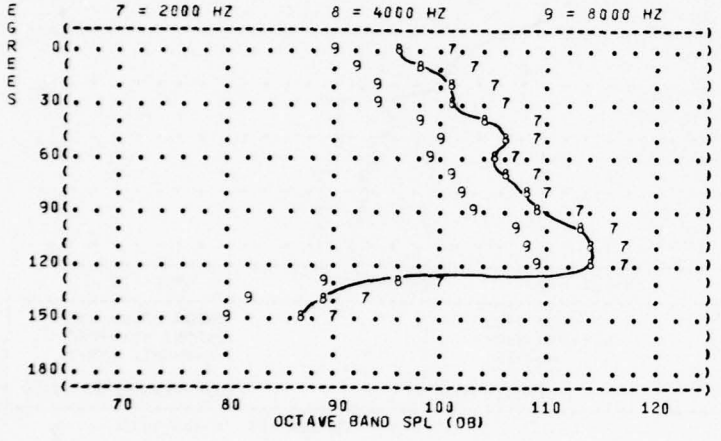
OMEGA 1.4
TEST 75-002-003
RUN 06

05 MAY 75

PAGE 6







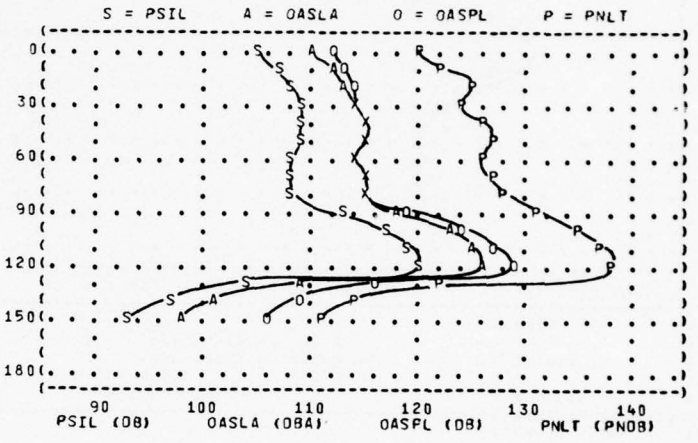


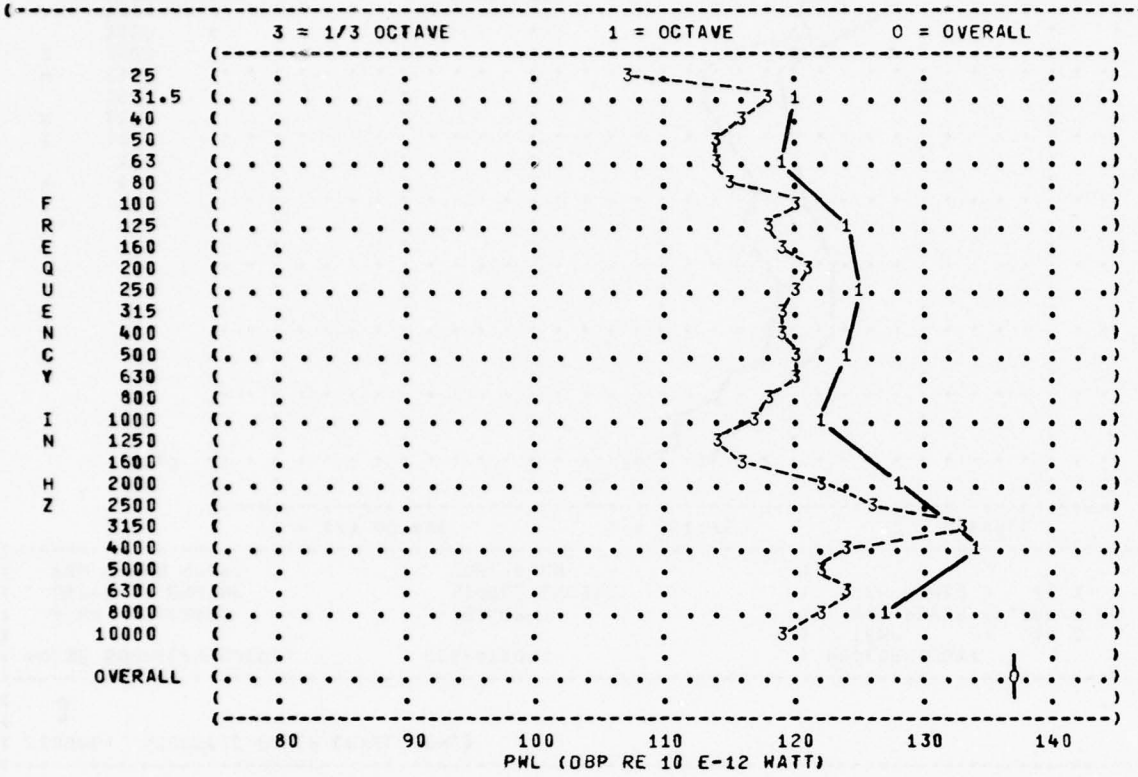
FIGURE: 3 ACOUSTIC POWER LEVEL (PWL)

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-003
RUN 01
05 MAY 75
PAGE 3

NOISE SOURCE/SUBJECT:
A-6A AIRCRAFT
J52-P-8A ENGINE
FAR FIELD NOISE

OPERATION:
IDLE POWER
60% RPM
SINGLE ENGINE
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .764 M HG
REL HUMID = 78 %



	PWL 1/3 OCTAVE	PWL OCTAVE
25	106.9	
31.5	118.1	120.5
40	116.2	
50	113.8	
63	114.2	119.0
80	114.6	
100	119.7	
125	117.8	123.5
160	118.6	
200	121.0	
250	120.2	124.9
315	119.0	
400	118.6	
500	120.1	124.3
630	119.8	
800	118.3	
1000	117.4	121.8
1250	114.4	
1600	116.3	
2000	122.1	127.8
2500	126.1	
3150	133.0	
4000	124.4	133.9
5000	122.4	
6300	124.5	
8000	121.6	127.1
10000	119.2	
OVERALL		136.7

FREQUENCY IN HZ

FIGURE: ACOUSTIC POWER LEVEL (PWL)

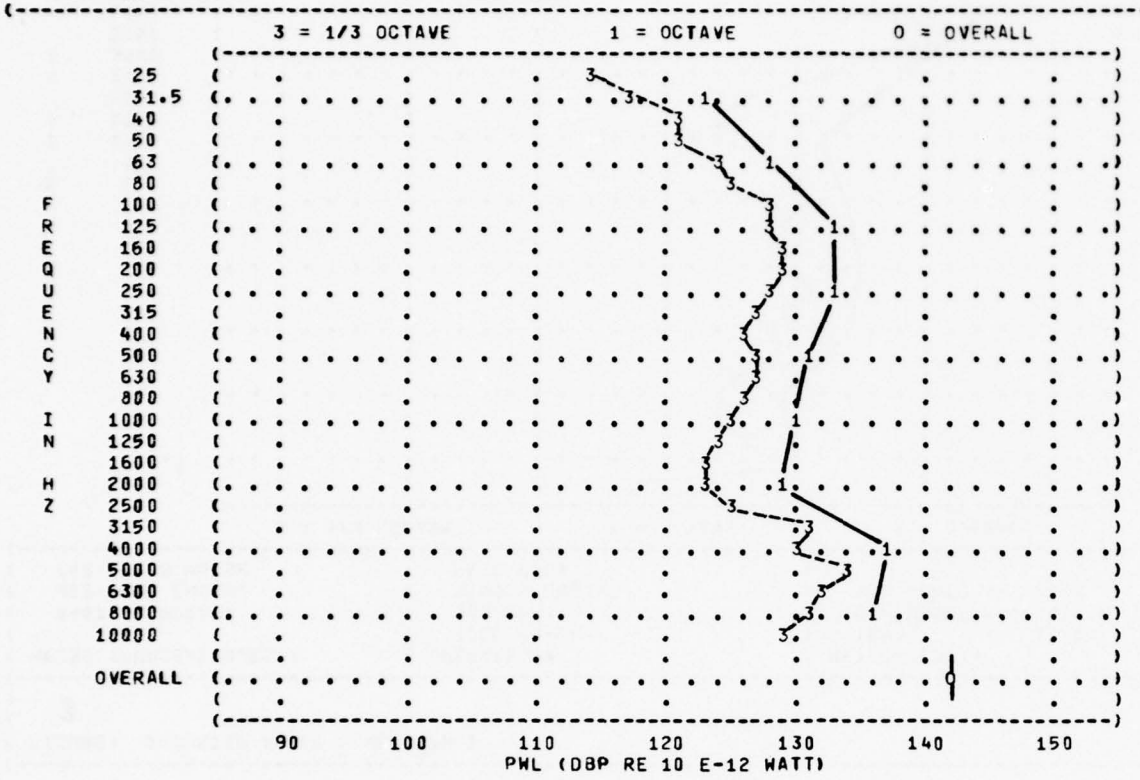
3

NOISE SOURCE/SUBJECT:
A-6A AIRCRAFT
J52-P-8A ENGINE
FAR FIELD NOISE

OPERATION:
75% RPM
SINGLE ENGINE
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .764 M HG
REL HUMID = 78 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-003
RUN 02
05 MAY 75
PAGE 3



	PWL 1/3 OCTAVE	PWL OCTAVE
25	113.5	
31.5	117.0	123.0
40	121.1	
50	120.6	
63	123.8	128.2
80	124.9	
100	127.9	
125	128.4	133.3
160	129.2	
200	128.5	
250	127.5	132.6
315	127.3	
400	126.4	
500	126.5	131.3
630	126.6	
800	126.2	
1000	125.3	130.0
1250	124.0	
1600	123.4	
2000	123.3	128.8
2500	125.1	
3150	131.1	
4000	129.9	136.6
5000	133.7	
6300	132.2	
8000	130.7	135.6
10000	129.2	
OVERALL		142.1

FREQUENCY, HZ

FIGURE: ACOUSTIC POWER LEVEL (PWL)

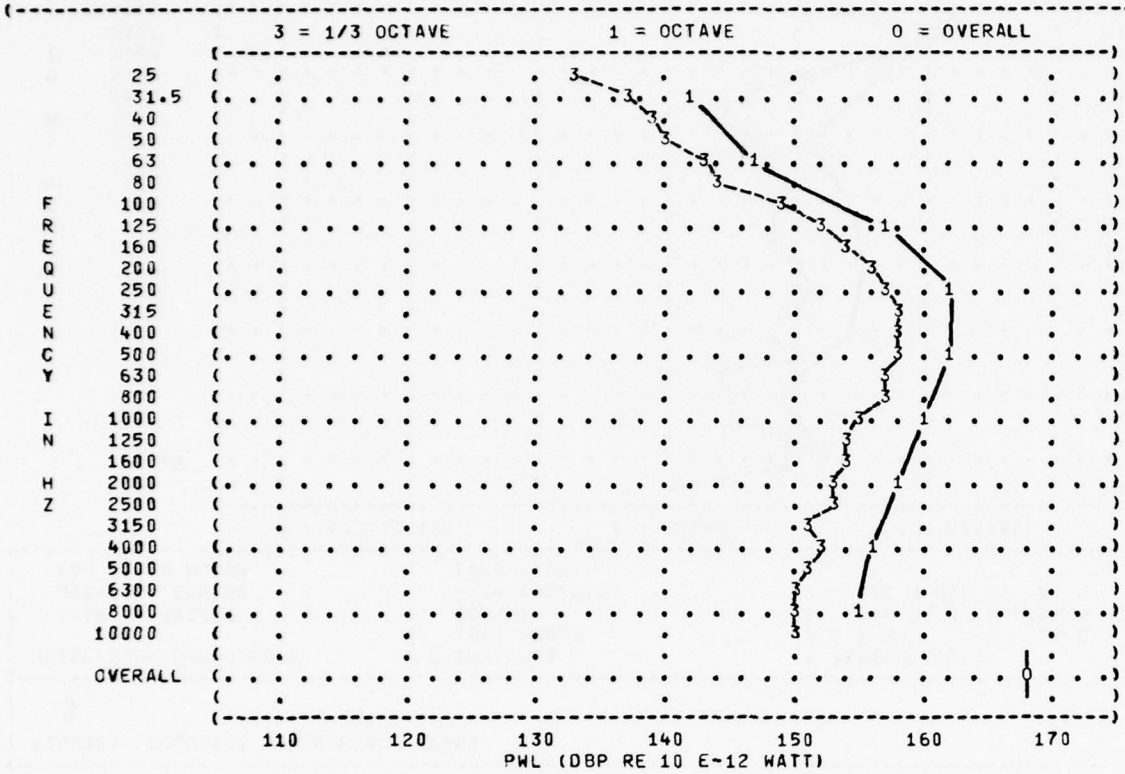
3

NOISE SOURCE/SUBJECT:
A-6A AIRCRAFT
J52-P-8A ENGINE
FAR FIELD NOISE

OPERATION:
MILITARY POWER
99% RPM
SINGLE ENGINE
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .764 M HG
REL HUMID = 78 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-003
RUN 03
05 MAY 75
PAGE 3



	PWL 1/3 OCTAVE	PWL OCTAVE
25	133.1	
31.5	136.6	141.7
40	139.2	
50	139.9	
63	142.9	147.4
80	144.1	
100	148.7	
125	151.5	156.7
160	153.9	
200	155.9	
250	156.5	161.7
315	158.2	
400	158.0	
500	157.9	162.4
630	156.9	
800	156.6	
1000	155.2	160.2
1250	154.4	
1600	153.9	
2000	153.4	158.1
2500	152.6	
3150	151.5	
4000	152.0	156.2
5000	150.9	
6300	149.9	
8000	150.1	154.8
10000	150.1	
OVERALL		167.9

FIGURE: ACOUSTIC POWER LEVEL (PWL)

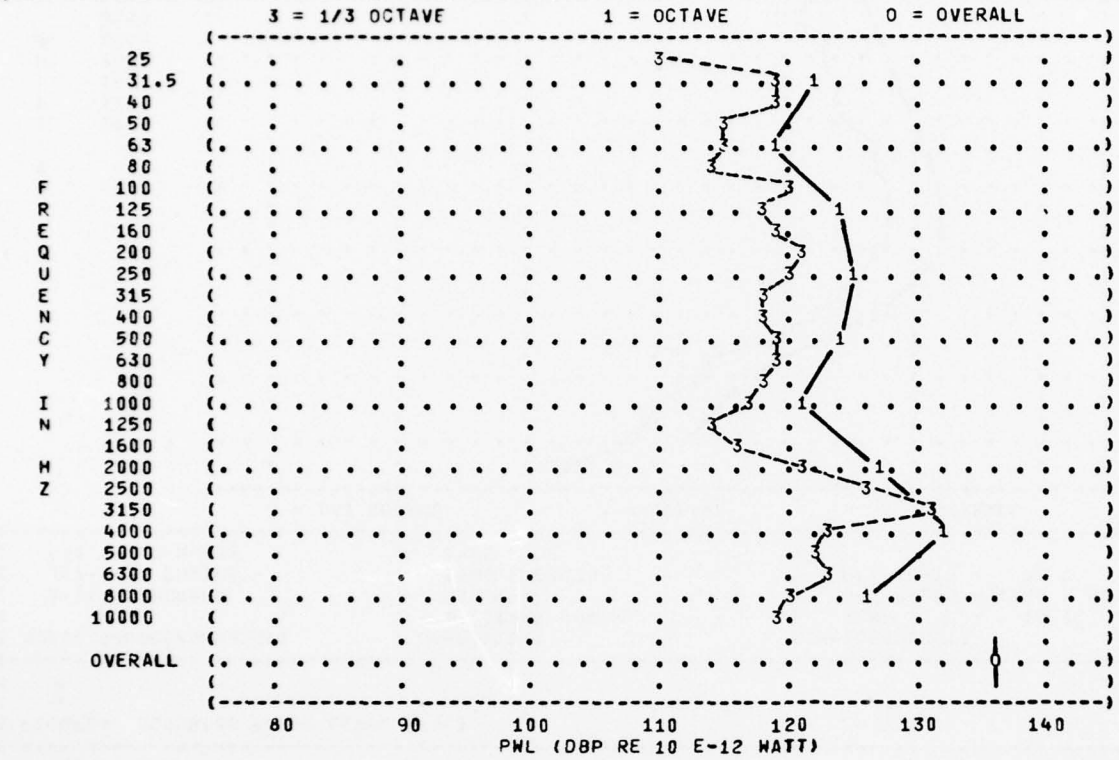
3

NOISE SOURCE/SUBJECT:
A-6A AIRCRAFT
J52-P-8A ENGINE
FAR FIELD NOISE

OPERATION:
IDLE POWER
60% RPM
BOTH ENGINES
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .764 M HG
REL HUMID = 78 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-003
RUN 04
05 MAY 75
PAGE 3



FREQUENCY	PWL 1/3 OCTAVE	PWL OCTAVE
25	109.8	
31.5	118.6	122.2
40	119.3	
50	114.5	
63	114.5	119.3
80	114.5	
100	119.7	
125	117.8	123.6
160	118.6	
200	120.7	
250	120.4	124.7
315	118.3	
400	118.3	
500	119.5	123.7
630	119.0	
800	117.5	
1000	116.7	121.1
1250	114.3	
1600	115.9	
2000	121.4	127.4
2500	125.7	
3150	131.4	
4000	123.4	132.4
5000	121.6	
6300	123.4	
8000	120.5	126.2
10000	119.4	
OVERALL		135.9

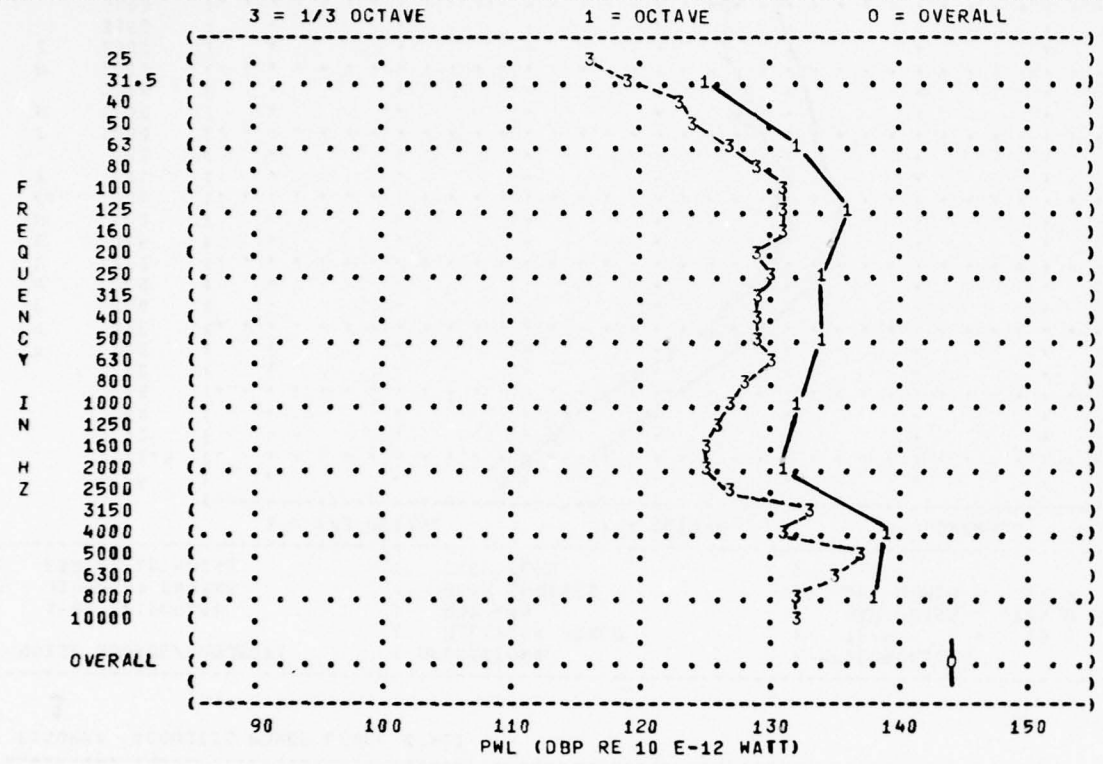
FIGURE: 3 ACOUSTIC POWER LEVEL (PWL)

NOISE SOURCE/SUBJECT:
A-6A AIRCRAFT
J52-P-8A ENGINE
FAR FIELD NOISE

OPERATION:
75% RPM
BOTH ENGINES
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .764 M HG
REL HUMID = 78 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-003
RUN 05
05 MAY 75
PAGE 3



	PWL 1/3 OCTAVE	PWL OCTAVE
25	116.0	
31.5	119.1	124.9
40	122.8	
50	123.8	
63	126.6	131.6
80	128.8	
100	131.1	
125	131.3	135.8
160	130.8	
200	129.2	
250	129.7	134.1
315	129.2	
400	129.1	
500	129.0	134.0
630	129.5	
800	128.0	
1000	127.3	131.8
1250	125.6	
1600	125.4	
2000	125.2	130.7
2500	127.0	
3150	132.6	
4000	131.1	139.0
5000	136.8	
6300	134.9	
8000	132.3	138.0
10000	131.9	
OVERALL		144.4

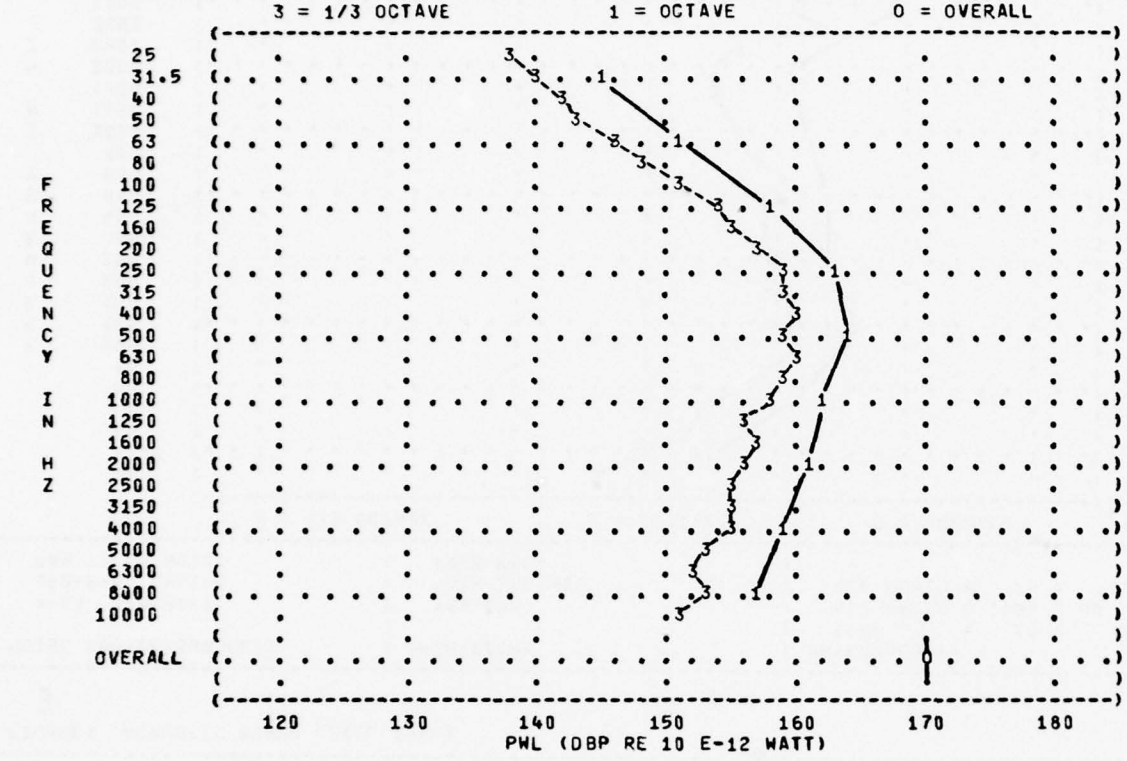
FIGURE: 3 ACOUSTIC POWER LEVEL (PWL)

NOISE SOURCE/SUBJECT:
A-6A AIRCRAFT
J52-P-8A ENGINE
FAR FIELD NOISE

OPERATION:
MILITARY POWER
99% RPM
BOTH ENGINES
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .764 M HG
REL HUMID = 78 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-003
RUN 06
05 MAY 75
PAGE 3



FREQUENCY	PWL 1/3 OCTAVE	PWL OCTAVE
25	138.2	
31.5	140.3	145.3
40	142.2	
50	142.7	
63	146.0	150.8
80	148.0	
100	151.2	
125	154.4	158.5
160	154.7	
200	157.0	
250	158.8	163.3
315	159.4	
400	159.9	
500	159.2	164.3
630	159.6	
800	158.6	
1000	157.8	162.4
1250	156.2	
1600	156.6	
2000	156.2	160.9
2500	155.5	
3150	155.1	
4000	155.0	159.2
5000	152.9	
6300	152.2	
8000	152.9	156.9
10000	151.1	
OVERALL		170.0

TABLE: DIRECTIVITY INDEX (DB)

3

NOISE SOURCE/SUBJECT:
A-6A AIRCRAFT
J52-P-8A ENGINE
FAR FIELD NOISE

OPERATION:
IDLE POWER
60% RPM
SINGLE ENGINE
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .764 M HG
REL HUMID = 78 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-003
RUN 01
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						1							2	3	6	7	7	7	6
31.5	-8	-8	-6	-6	-6	-7	-4	-2	-3	-2	-2	2	1	2	5	4	2	4	3
40	-5	-5	-4	-5	-4	-3	-2	-3	-1	-3	1	1	2	4	2	3	2	2	4
50	-3	-4	-4	-4	-3	-6	-4	-3	-4	-3	-2	0	2	5	4	4	0	0	4
63	-4	-3	-2	-4	-3	-5	-5	-4	-4	-4	-2	0	3	5	5	1	-1	-1	5
80	-3	-3	-1	-2	-4	-6	-3	-4	-4	-3	-1	1	2	4	5	1	-6	-6	1
100	-1	-0	1	-1	-2	-3	-2	-4	-4	-1	2	2	3	3	3	-2			-6
125	-1	-0	0	-1	-1	-3	-3	-4	-4	-2	2	2	3	3	3	-1	-18	-18	-10
160	1	0	0	0	-1	-3	-4	-5	-5	-2	1	1	1	5	4	-2	-20	-16	-12
200	-4	-4	-3	-3	-5	-5	-6	-6	-6	-4	-1	1	5	6	4	-2	-16	-12	-1
250	-3	-3	-2	-3	-4	-5	-6	-5	-5	-3	0	1	5	4	4	-1	-18	-14	-2
315	-0	-0	-0	-2	-5	-7	-8	-6	-7	-2	4	3	2	4	3	-1	-19	-18	-11
400	1	1	1	-1	-2	-3	-4	-5	-6	-2	4	3	3	2	-1	-1	-18	-18	-12
500	1	0	1	-1	-0	-4	-4	-4	-5	-2	3	4	4	2	-0	-3	-16	-19	-13
630	4	2	2	3	1	-4	-5	-4	-4	-2	2	2	3	1	-0	-5	-14	-19	-12
800	8	6	4	3	1	-2	-3	-5	-7	-3	1	2	3	-1	-1	-7	-17	-18	-11
1000	8	5	6	4	2	-0	-1	-3	-7	-3	-1	2	1	-0	-2	-8	-19	-16	-10
1250	8	5	6	4	1	-0	-1	-3	-5	-2	-1	2	-0	0	-4	-6	-18	-17	-9
1600	9	9	9	5	2	1	-1	-2	-6	-3	-3	-3	-4	-3	-7	-9	-21	-19	-12
2000	9	10	11	4	4	-2	-3	-5	-9	-8	-6	-8	-8	-9	-12	-13	-26	-25	-19
2500	9	10	13	2	2	-2	-6	-8	-9	-8	-7	-10	-9	-14	-16	-17	-27	-28	-23
3150	10	12	13	3	0	-4	-10	-11	-12	-10	-12	-14	-15	-19	-21	-21	-31	-34	-25
4000	8	8	7	7	4	4	-3	-4	-8	-7	-4	-4	-5	-8	-12	-11	-24	-25	-19
5000	7	9	9	5	2	2	-3	-5	-8	-4	-1	-4	-4	-6	-11	-11	-24	-23	-18
6300	8	13	9	5	2	-0	-4	-7	-10	-6	-4	-5	-7	-10	-13	-14	-26	-26	-20
8000	8	9	9	5	3	2	-2	-4	-8	-4	-2	-3	-4	-8	-12	-12	-24	-24	-19
10000	7	8	7	4	0	1	-3	-3	-6	-1	2	2	0	-3	-8	-10	-22	-20	-14
OCTAVE																			
31.5	-6	-7	-5	-6	-5	-4	-3	-3	-2	-2	-1	1	2	3	4	4	2	3	4
63	-3	-3	-2	-3	-3	-6	-4	-4	-4	-3	-2	1	2	5	5	2	-2	-2	4
125	0	-0	0	-1	-2	-3	-3	-4	-4	-2	2	2	3	4	3	-2	-21	-19	-8
250	-2	-2	-2	-2	-5	-6	-6	-6	-6	-3	1	1	5	5	4	-2	-17	-14	-2
500	2	1	1	1	0	-4	-4	-4	-5	-2	3	3	3	2	-1	-3	-16	-19	-12
1000	8	6	6	4	1	-1	-2	-4	-6	-3	-0	2	2	-0	-2	-7	-18	-18	-10
2000	9	10	12	3	3	-2	-4	-6	-9	-7	-6	-9	-8	-10	-13	-14	-26	-26	-19
4000	10	12	12	3	1	-2	-8	-9	-11	-9	-8	-10	-11	-14	-17	-17	-29	-30	-23
8000	8	12	9	5	2	0	-3	-6	-9	-5	-3	-3	-5	-8	-12	-13	-25	-24	-19
OVERALL	8	10	10	3	1	-2	-6	-7	-8	-5	-3	-2	-1	-2	-2	-6	-11	-10	-7

TABLE: DIRECTIVITY INDEX (DB)

3

IDENTIFICATION:

OMEGA 1.4
TEST 75-002-003
RUN 02
05 MAY 75
PAGE 4

NOISE SOURCE/SUBJECT:
A-6A AIRCRAFT
J52-P-8A ENGINE
FAR FIELD NOISE

OPERATION:
75% RPM
SINGLE ENGINE
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .764 M HG
REL HUMID = 78 %

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								-6	-6	-6	-3	-1	2	3	7	7	4		
31.5								-6	-6	-5	-4	-3	2	4	7	7	4		
40								-5	-5	-4	-4	-1	3	5	6	7	1		
50								-5	-5	-4	-5	-0	3	6	6	6	-1		
63								-8	-6	-6	-3	-1	3	7	6	6	-3		
80								-7	-7	-5	-3	-1	3	7	7	4	-7		
100	-12	-10	-8	-8	-8	-8	-8	-8	-7	-4	-2	0	4	6	6	-1	-11		
125	-11	-10	-8	-8	-9	-9	-9	-8	-7	-4	-2	0	4	7	6	-5	-15		
160	-9	-8	-6	-5	-6	-7	-7	-7	-7	-4	-1	2	3	7	4	-12	-18		
200	-9	-7	-4	-3	-5	-6	-6	-7	-4	-2	0	3	4	6	2	-14	-21		
250	-8	-7	-6	-5	-5	-8	-5	-6	-4	-1	1	3	4	5	1	-15	-22		
315	-9	-7	-7	-6	-8	-8	-7	-6	-3	-1	3	5	4	4	-2	-15	-24		
400	-8	-6	-6	-6	-7	-8	-6	-5	-3	-1	3	5	3	4	-4	-16	-25		
500	-6	-5	-5	-5	-5	-6	-5	-4	-3	-1	3	6	3	2	-5	-15	-25		
630	-5	-2	-1	-2	-2	-3	-5	-4	-3	-0	3	5	2	1	-7	-15	-25		
800	-2	-2	-3	-1	-3	-4	-5	-4	-4	1	5	5	1	-1	-8	-15	-25		
1000	-1	-1	-2	-0	-2	-2	-4	-4	-3	1	4	5	2	-0	-8	-13	-25		
1250	1	0	-1	-0	-2	-2	-4	-4	-3	1	4	4	1	-2	-8	-14	-26		
1600	4	2	2	3	-0	-0	-3	-2	-2	1	3	2	1	-2	-8	-14	-26		
2000	7	3	6	5	1	1	-1	-1	-2	0	1	1	-1	-3	-10	-16	-26		
2500	6	5	5	5	3	2	0	-2	-2	-0	0	-0	-3	-6	-12	-18	-27		
3150	9	10	6	5	5	3	-0	-3	-3	-5	-5	-6	-7	-11	-17	-21	-32		
4000	7	7	8	8	3	2	-3	-3	-4	-3	-1	-3	-6	-11	-17	-19	-29		
5000	7	7	9	9	3	-0	-4	-3	-5	-4	-5	-6	-10	-15	-20	-23	-32		
6300	4	4	5	7	6	3	-1	-1	-4	-3	-4	-5	-8	-13	-19	-23	-31		
8000	3	4	5	6	4	4	0	-1	-3	-2	-2	-4	-6	-11	-18	-21	-30		
10000	5	4	5	6	3	2	-2	1	-1	1	0	-2	-6	-9	-17	-19	-27		
OCTAVE																			
31.5								-5	-5	-4	-4	-2	3	5	6	7	2		
63								-7	-6	-5	-4	-1	3	6	6	5	-4		
125	-10	-9	-7	-7	-7	-8	-8	-7	-7	-4	-1	1	4	7	5	-4	-14		
250	-9	-7	-5	-4	-6	-7	-6	-6	-4	-1	1	4	4	5	1	-15	-22		
500	-6	-4	-4	-4	-4	-5	-5	-4	-3	-0	3	6	3	2	-5	-15	-25		
1000	-1	-1	-2	-1	-2	-3	-4	-4	-3	1	4	5	1	-1	-8	-14	-25		
2000	6	4	4	4	2	1	-1	-2	-2	0	1	1	-1	-4	-10	-16	-26		
4000	8	8	8	8	4	1	-2	-3	-4	-4	-4	-5	-8	-12	-18	-21	-31		
8000	4	4	5	6	5	3	-0	-0	-3	-2	-3	-4	-7	-12	-19	-22	-30		
OVERALL	3	3	3	4	1	-1	-4	-4	-4	-2	0	2	1	3	1	-5	-12		

TABLE: DIRECTIVITY INDEX (DB)

3

IDENTIFICATION:

OMEGA 1.4
TEST 75-002-003
RUN 03
05 MAY 75
PAGE 4

NOISE SOURCE/SUBJECT:
A-6A AIRCRAFT
J52-P-8A ENGINE
FAR FIELD NOISE

OPERATION:
MILITARY POWER
99% RPM
SINGLE ENGINE
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .764 M HG
REL HUMID = 78 %

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

TABLE: DIRECTIVITY INDEX (DB)

3

IDENTIFICATION:

OMEGA 1.4
TEST 75-002-003
RUN 04

05 MAY 75

PAGE 4

NOISE SOURCE/SUBJECT:
A-6A AIRCRAFT
J52-P-8A ENGINE
FAR FIELD NOISE

OPERATION:
IDLE POWER
60% RPM
BOTH ENGINES
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .764 M HG
REL HUMID = 78 %

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	-1	-1	-0	2	-1	-2	-1	-0			-1	-1	1	2	4	4	0	3	4
31.5	-8	-6	-4	-4	-3	-1	-1	0	-3	-1	-0	-0	2	3	3	3	-0	-0	1
40	-7	-5	-3	-2	-2	-1	-3	-3	-7	-4	-3	-3	1	2	6	5	-0	4	6
50	-5	-5	-4	-3	-3	-2	-3	-2	-3	-2	-1	-0	2	3	5	4	-2	-0	3
63	-6	-6	-5	-4	-3	-3	-2	-3	-5	-3	0	-1	2	5	5	3	-4	-5	0
80	-4	-3	-3	-1	-2	-2	-1	-1	-4	-2	-0	-0	1	4	5	2	-6	-7	-4
100	-3	-1	-1	-1	-1	-1	-0	-1	-4	-2	2	1	2	3	3	-2			
125	-3	-2	-1	-1	-1	-1	-1	-1	-4	-2	1	2	2	4	3	-2	-16	-15	-17
160	-1	-0	-2	0	-2	-2	-3	-5	-5	-2	1	2	0	5	3	-3	-18	-17	-16
200	-5	-5	-4	-2	-4	-4	-4	-4	-5	-3	0	1	4	4	5	-2	-15	-16	-11
250	-5	-4	-4	-2	-4	-4	-5	-4	-3	-4	-0	0	4	5	5	-2	-15	-17	-11
315	-3	-2	-2	-2	-6	-6	-6	-5	-3	-1	3	3	3	4	3	-2	-19	-19	-13
400	-3	-1	-1	-2	-3	-2	-6	-5	-2	-2	3	4	3	3	-1	-2	-18	-20	-14
500	-2	-1	-1	-1	-2	-2	-5	-5	-3	-2	3	4	3	3	-1	-3	-19	-21	-13
630	1	1	1	1	-1	-2	-5	-5	-3	-1	3	3	3	3	-2	-4	-19	-19	-12
800	7	5	2	2	-0	-1	-4	-3	-3	-2	2	3	4	1	-2	-5	-19	-18	-11
1000	7	5	3	3	1	0	-2	-3	-3	-2	1	2	2	-0	-5	-7	-20	-18	-10
1250	8	7	2	3	1	0	-2	-3	-3	-1	1	2	2	-1	-6	-8	-18	-17	-10
1600	10	9	6	6	3	0	-1	-3	-5	-3	-2	-2	-2	-3	-7	-8	-20	-20	-13
2000	9	11	8	5	6	-2	-1	-4	-7	-7	-6	-8	-6	-9	-11	-12	-23	-25	-19
2500	9	10	12	2	3	1	-4	-8	-9	-9	-7	-9	-11	-12	-16	-17	-27	-29	-23
3150	9	13	11	2	3	-0	-6	-8	-10	-11	-9	-10	-15	-15	-19	-20	-30	-33	-26
4000	7	10	5	5	4	4	-2	-4	-4	-5	-3	-0	-4	-6	-10	-11	-23	-24	-20
5000	6	10	6	5	4	1	-3	-6	-6	-3	-0	0	-3	-5	-9	-10	-21	-23	-20
6300	7	12	7	6	4	0	-3	-7	-8	-5	-3	-2	-5	-8	-11	-12	-22	-25	-23
8000	6	9	5	4	3	2	-1	-5	-5	-4	0	1	-3	-5	-9	-11	-21	-24	-21
10000	4	7	3	1	1	-2	-5	-7	-4	-1	5	4	-0	-2	-7	-10	-20	-21	-18
OCTAVE																			
31.5	-7	-5	-3	-2	-2	-1	-1	-1	-5	-3	-2	-1	1	2	5	4	-0	2	4
63	-5	-5	-4	-3	-3	-2	-2	-2	-4	-2	-0	-1	2	4	5	3	-4	-3	0
125	-2	-1	-1	-0	-1	-1	-1	-2	-4	-2	1	1	2	4	3	-2	-19	-19	-19
250	-4	-4	-3	-2	-4	-4	-5	-4	-3	-3	1	1	4	4	4	-2	-16	-17	-11
500	-1	-1	-0	-1	-2	-2	-5	-5	-3	-1	3	4	3	3	-1	-3	-19	-20	-13
1000	7	6	2	2	0	-0	-3	-3	-3	-2	1	2	3	0	-4	-6	-19	-18	-10
2000	9	11	11	4	4	0	-3	-6	-8	-7	-6	-7	-8	-9	-13	-14	-24	-26	-20
4000	9	12	11	3	3	1	-5	-7	-8	-9	-6	-6	-10	-11	-15	-16	-27	-29	-24
8000	7	11	7	5	3	1	-3	-6	-6	-4	-0	-0	-3	-6	-10	-12	-22	-24	-21
OVERALL	7	10	8	2	2	-0	-4	-5	-6	-5	-2	-1	-1	-1	-1	-4	-11	-9	-7

TABLE: DIRECTIVITY INDEX (DB)

3

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-003
RUN 05
05 MAY 75
PAGE 4

NOISE SOURCE/SUBJECT:
A-6A AIRCRAFT
J52-P-8A ENGINE
FAR FIELD NOISE

OPERATION:
75% RPM
BOTH ENGINES
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .764 M HG
REL HUMID = 78 %

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

TABLE: DIRECTIVITY INDEX (DB)

3

NOISE SOURCE/SUBJECT:
A-6A AIRCRAFT
J52-P-8A ENGINE
FAR FIELD NOISE

OPERATION:
MILITARY POWER
99% RPM
BOTH ENGINES
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .764 M HG
REL HUMID = 78 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-003
RUN 06
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	-12	-14	-14	-12	-12	-10	-10	-9	-7	-6	-3	-1	3	4	7	7			
31.5	-15	-14	-13	-12	-11	-12	-9	-9	-7	-6	-5	0	3	4	8	5			
40	-14	-12	-13	-13	-10	-10	-8	-8	-8	-5	-3	1	5	5	6	5			
50	-14	-13	-13	-12	-10	-10	-10	-8	-8	-6	-2	2	5	6	5	1			
63	-16	-14	-14	-13	-13	-12	-12	-10	-10	-8	-3	4	7	6	2	-3			
80	-17	-16	-15	-14	-14	-13	-11	-12	-11	-7	-2	5	8	5	-2	-7			
100	-16	-15	-14	-14	-14	-14	-11	-11	-11	-6	-2	6	8	3	-7	-12			
125	-19	-18	-17	-16	-16	-15	-14	-14	-13	-6	-3	6	8	2	-13	-18			
160	-18	-16	-15	-14	-13	-13	-12	-12	-10	-7	-1	7	8	1	-16	-20			
200	-19	-18	-17	-16	-15	-13	-14	-14	-13	-7	0	7	8	-4	-21	-22			
250	-18	-19	-16	-15	-15	-16	-15	-13	-12	-6	1	7	7	-7	-19	-23			
315	-17	-18	-15	-13	-14	-15	-14	-13	-10	-4	2	7	8	-10	-17	-20			
400	-10	-10	-10	-10	-14	-14	-15	-13	-10	-4	2	6	8	-10	-15	-20			
500	-7	-6	-7	-6	-10	-9	-12	-12	-10	-4	2	5	8	-11	-17	-19			
630	-6	-5	-3	-5	-6	-6	-8	-9	-10	-3	3	5	7	-11	-17	-21			
800	-8	-5	-4	-3	-3	-4	-5	-5	-7	-2	3	5	6	-10	-17	-22			
1000	-10	-8	-6	-5	-4	-4	-5	-3	-5	-0	3	5	6	-9	-18	-22			
1250	-9	-7	-6	-5	-3	-3	-4	-3	-3	-0	3	5	5	-10	-19	-22			
1600	-11	-8	-7	-6	-3	-3	-5	-4	-3	1	4	5	5	-11	-20	-23			
2000	-12	-9	-8	-7	-4	-3	-4	-3	-3	0	4	5	5	-12	-19	-22			
2500	-12	-9	-8	-7	-4	-3	-5	-3	-2	0	4	5	5	-13	-19	-22			
3150	-14	-11	-9	-8	-5	-4	-5	-3	-3	0	4	5	5	-13	-20	-23			
4000	-13	-11	-8	-8	-5	-3	-5	-3	-1	0	4	5	5	-14	-20	-22			
5000	-12	-10	-8	-8	-4	-2	-4	-2	-0	-0	3	5	5	-14	-21	-23			
6300	-13	-10	-9	-8	-5	-3	-4	-2	-1	-0	4	5	5	-14	-21	-23			
8000	-14	-12	-10	-10	-7	-5	-6	-3	-2	0	4	5	6	-15	-21	-23			
10000	-14	-11	-10	-9	-5	-3	-4	-2	-1	-0	3	5	6	-15	-22	-24			
OCTAVE																			
31.5	-14	-13	-13	-13	-10	-10	-9	-8	-7	-5	-3	1	4	4	7	5			
63	-16	-15	-14	-13	-13	-12	-11	-10	-10	-7	-2	4	7	5	1	-4			
125	-18	-17	-16	-15	-14	-14	-13	-13	-11	-7	-2	6	8	2	-12	-17			
250	-18	-18	-16	-15	-15	-15	-14	-13	-11	-6	1	7	7	-7	-19	-22			
500	-7	-7	-6	-6	-9	-9	-11	-11	-10	-4	2	6	8	-10	-16	-20			
1000	-9	-6	-5	-4	-3	-4	-5	-3	-5	-1	3	5	6	-9	-18	-22			
2000	-12	-9	-8	-6	-4	-3	-5	-3	-3	1	4	5	5	-12	-19	-22			
4000	-13	-11	-8	-8	-5	-3	-5	-3	-2	0	4	5	5	-13	-20	-23			
8000	-13	-11	-9	-9	-5	-3	-5	-2	-2	0	4	5	5	-15	-21	-23			
OVERALL	-10	-9	-8	-7	-7	-6	-8	-6	-6	-2	2	6	7	-6	-12	-16			

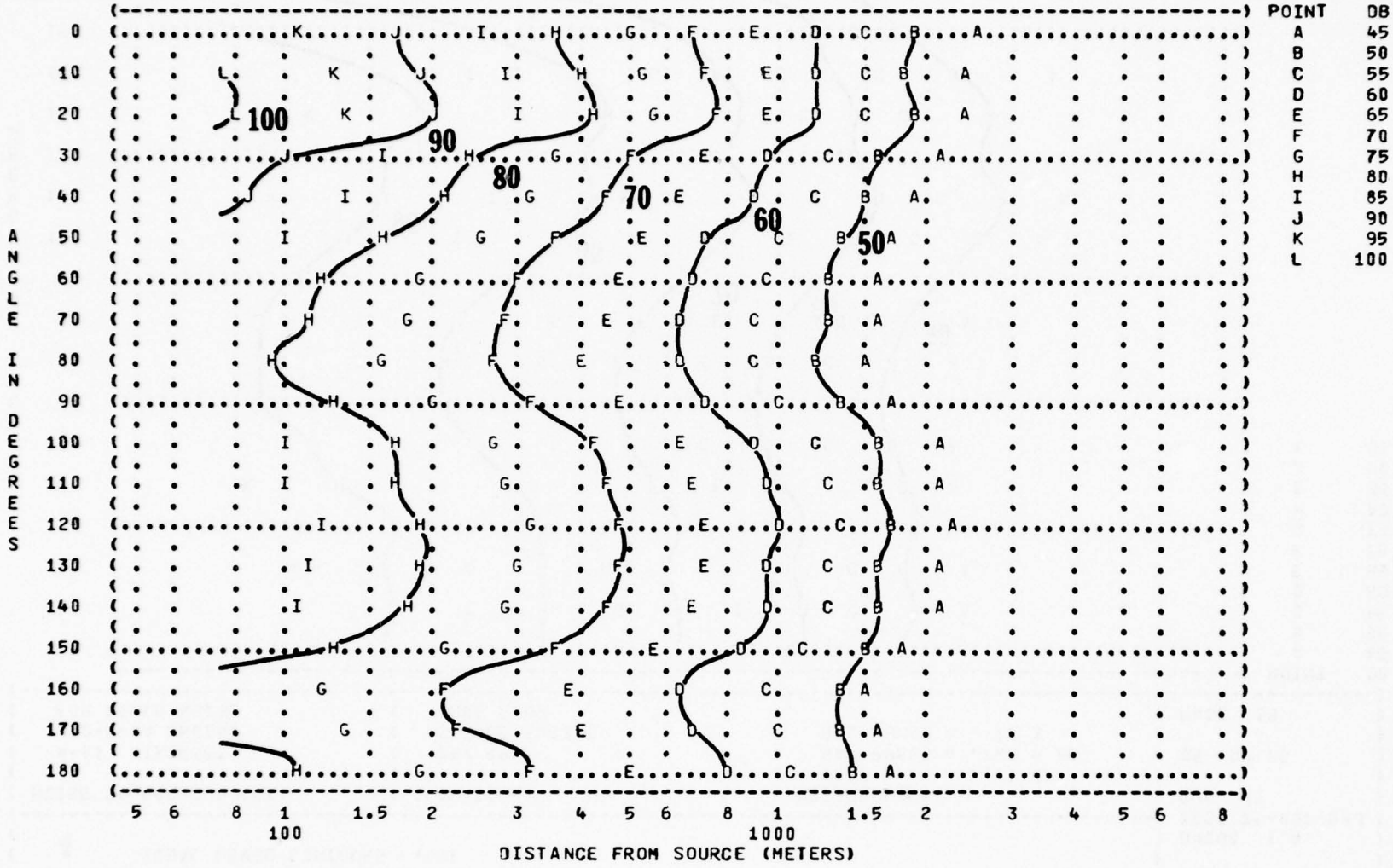
FIGURE 4 OVERALL SOUND PRESSURE LEVEL (OASPL) EQUAL LEVEL CONTOURS (DB)

IDENTIFICATION: OMEGA 1.4 TEST 75-002-003 RUN 01 05 MAY 75 PAGE 13

NOISE SOURCE/SUBJECT:
A-6A AIRCRAFT
J52-P-8A ENGINE
FAR FIELD NOISE

OPERATION:
IDLE POWER
60% 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

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

NOISE SOURCE/SUBJECT:
A-6A AIRCRAFT
J52-P-8A ENGINE
FAR FIELD NOISE

OPERATION:
75% RPM
SINGLE ENGINE
FREE FLOW

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

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-003
RUN 02
05 MAY 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

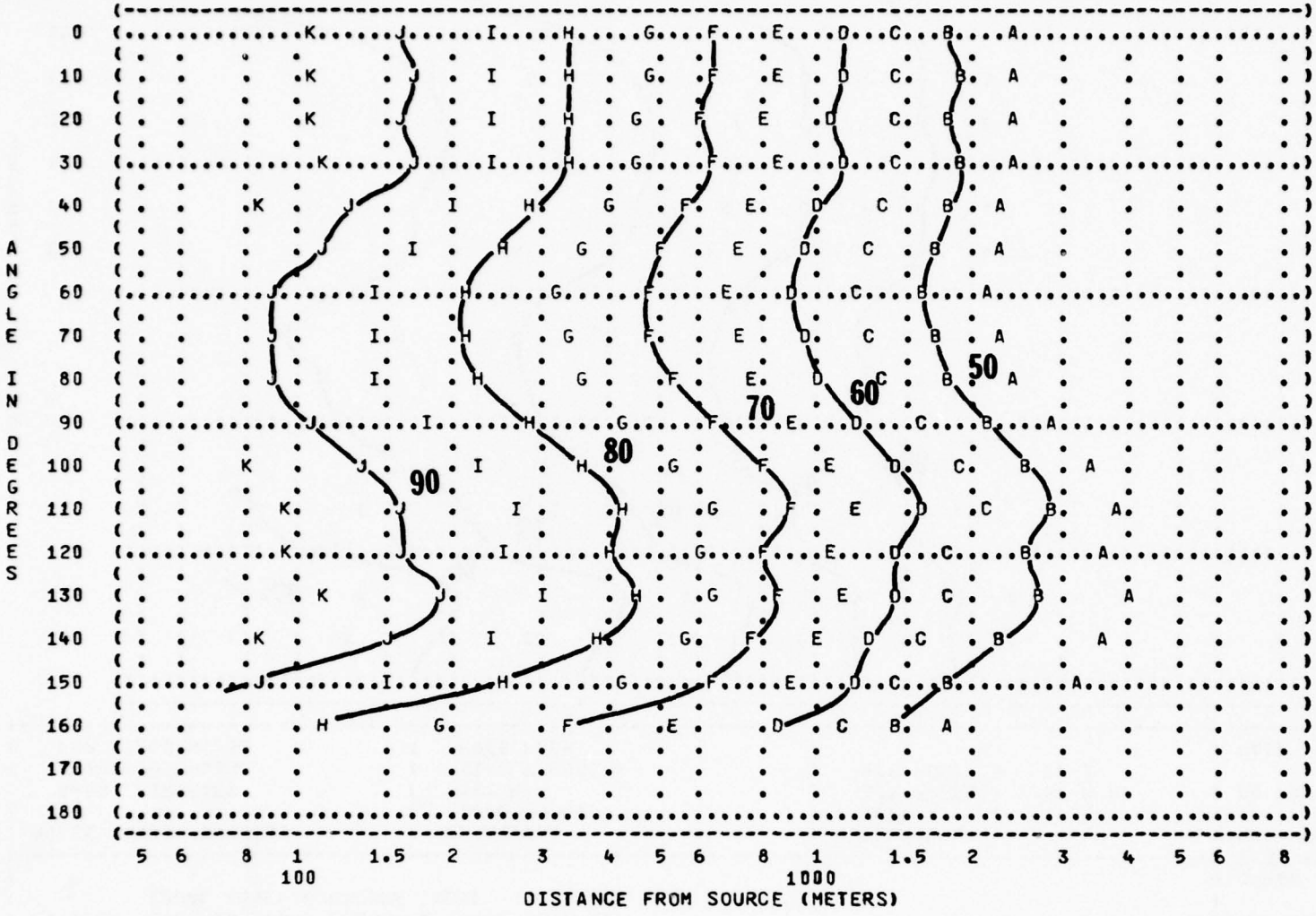


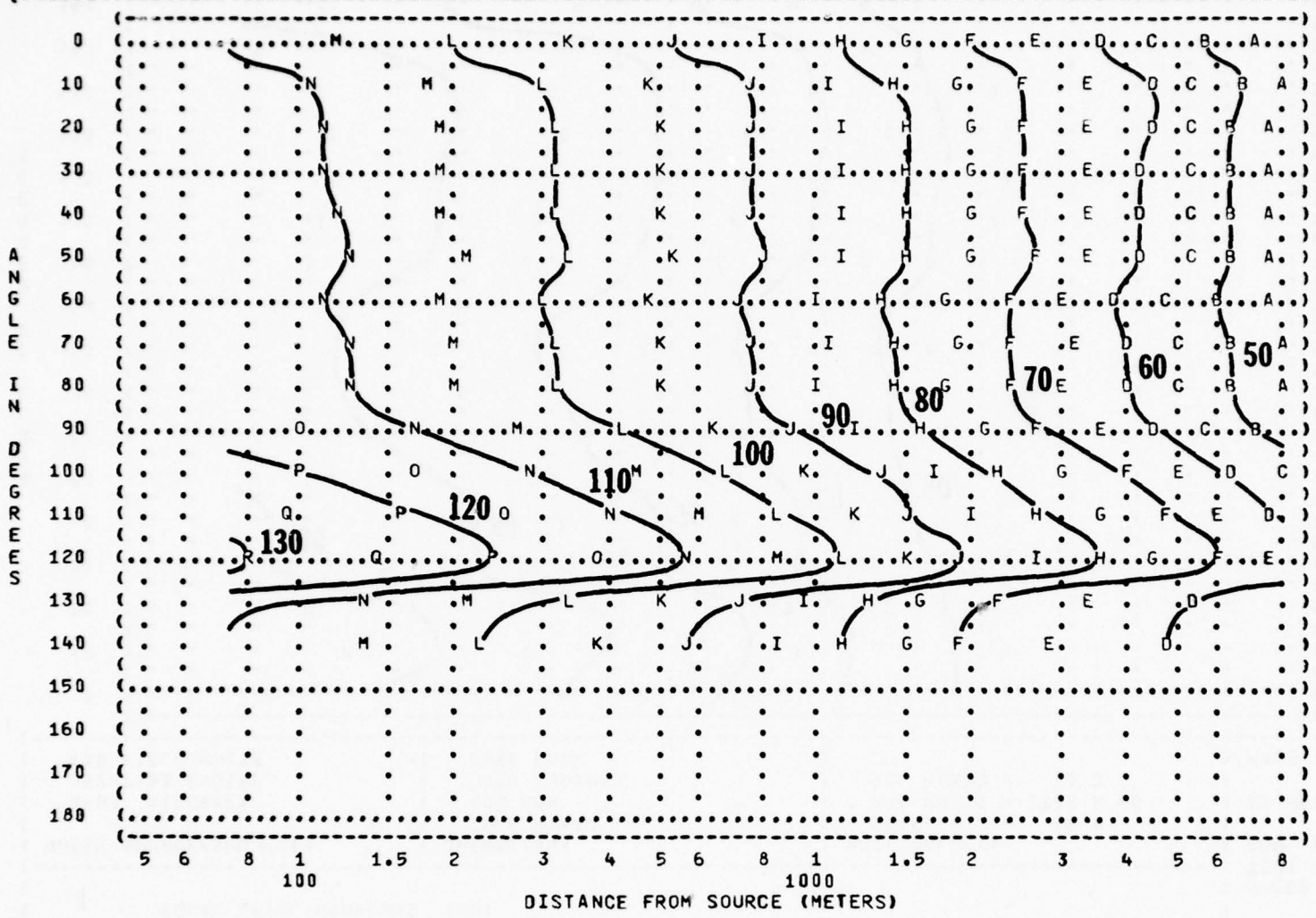
FIGURE: 4 OVERALL SOUND PRESSURE LEVEL (OASPL) EQUAL LEVEL CONTOURS (DB)

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-003
RUN 03
05 MAY 75
PAGE 13

NOISE SOURCE/SUBJECT:
A-6A AIRCRAFT
J52-P-8A ENGINE
FAR FIELD NOISE

OPERATION:
MILITARY POWER
99% 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
Q	125
R	130

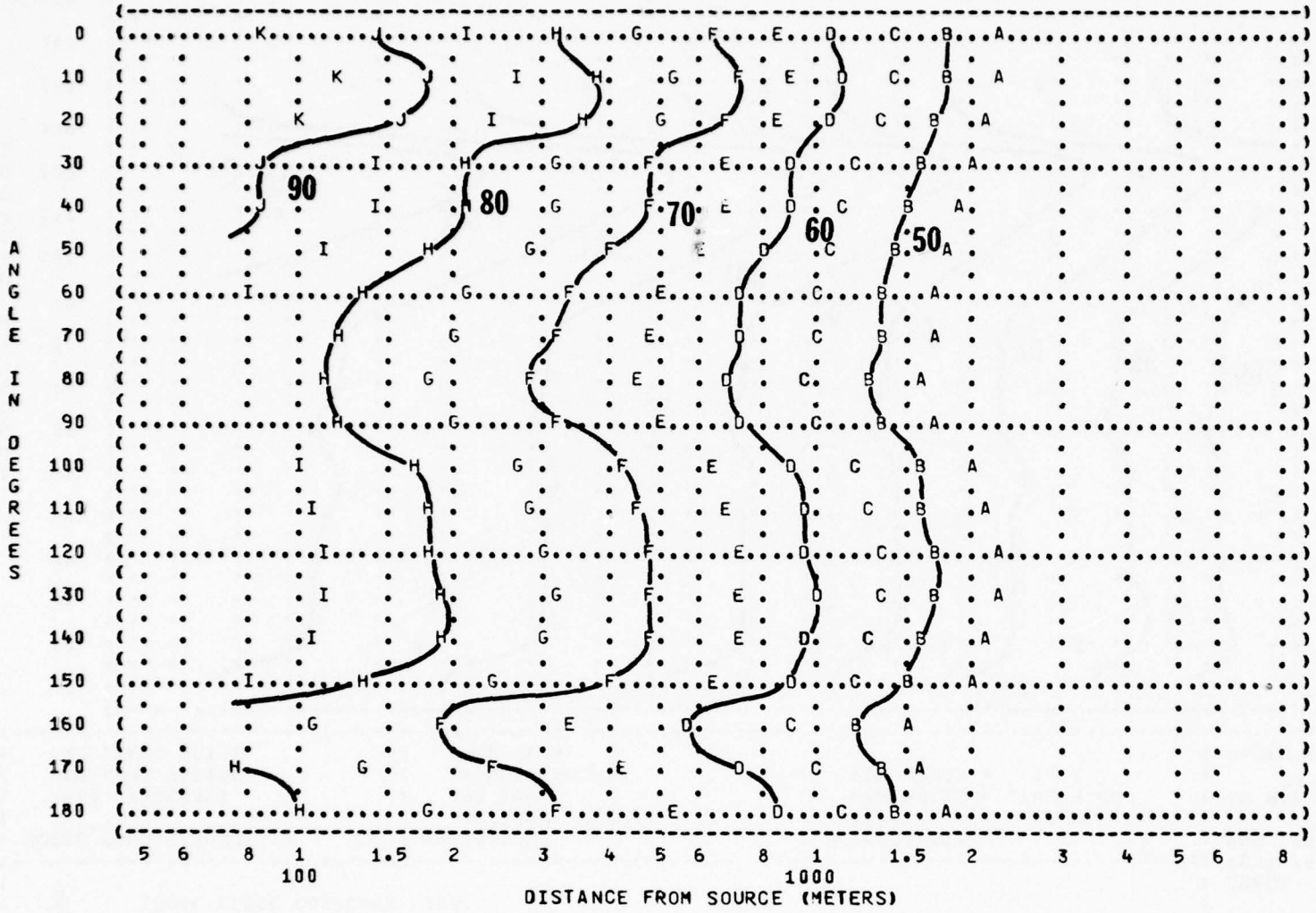
FIGURE 4: OVERALL SOUND PRESSURE LEVEL (OASPL) EQUAL LEVEL CONTOURS (DB)

NOISE SOURCE/SUBJECT:
A-6A AIRCRAFT
J52-P-8A ENGINE
FAR FIELD NOISE

OPERATION:
IDLE POWER
60% RPM
BOTH ENGINES
FREE FLOW

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

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-003
RUN 04
05 MAY 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

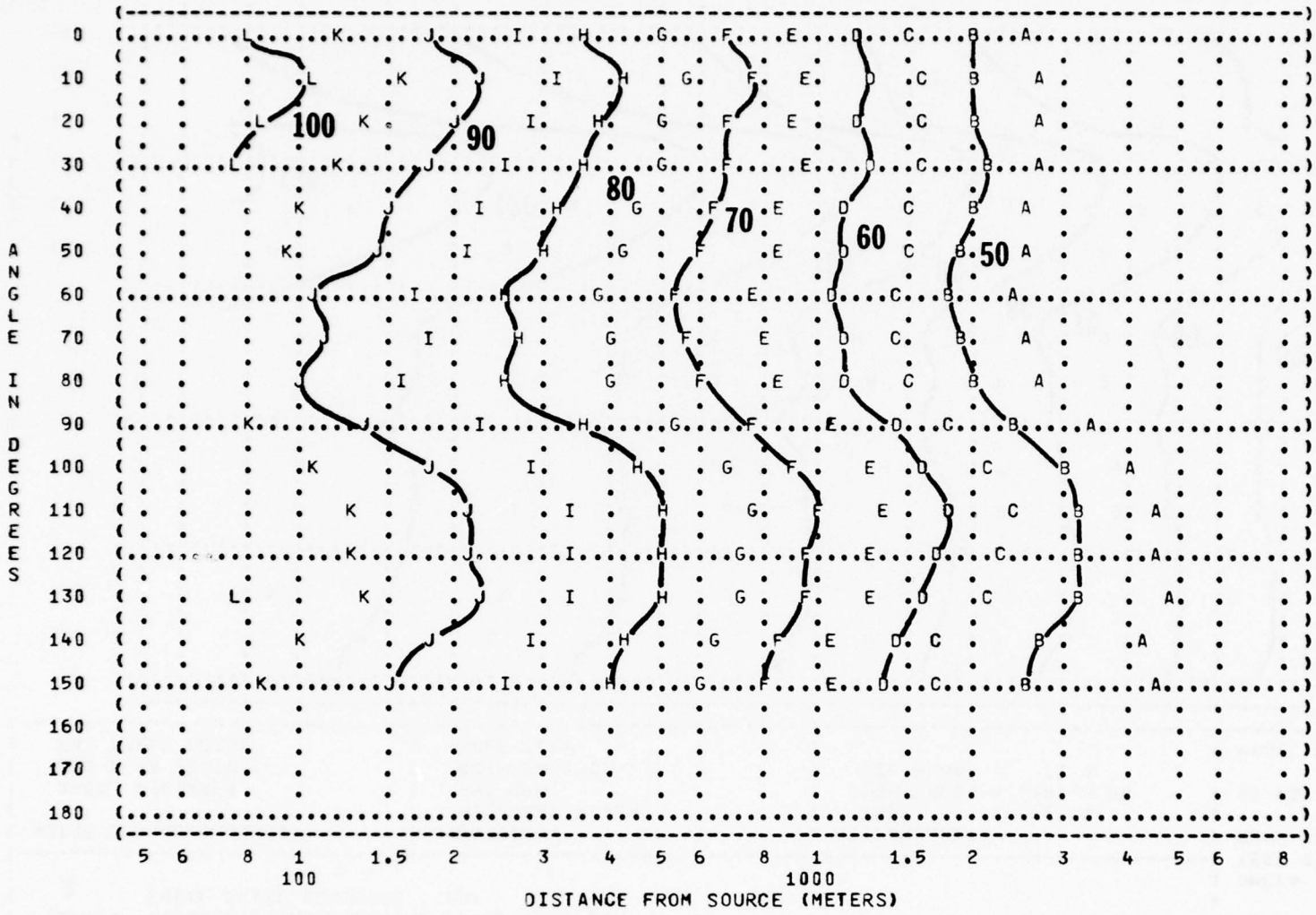
FIGURE: 4 OVERALL SOUND PRESSURE LEVEL (OASPL) EQUAL LEVEL CONTOURS (DB)

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-003
RUN 05
05 MAY 75
PAGE 13

NOISE SOURCE/SUBJECT:
A-6A AIRCRAFT
J52-P-8A 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	45
B	50
C	55
D	60
E	65
F	70
G	75
H	80
I	85
J	90
K	95
L	100

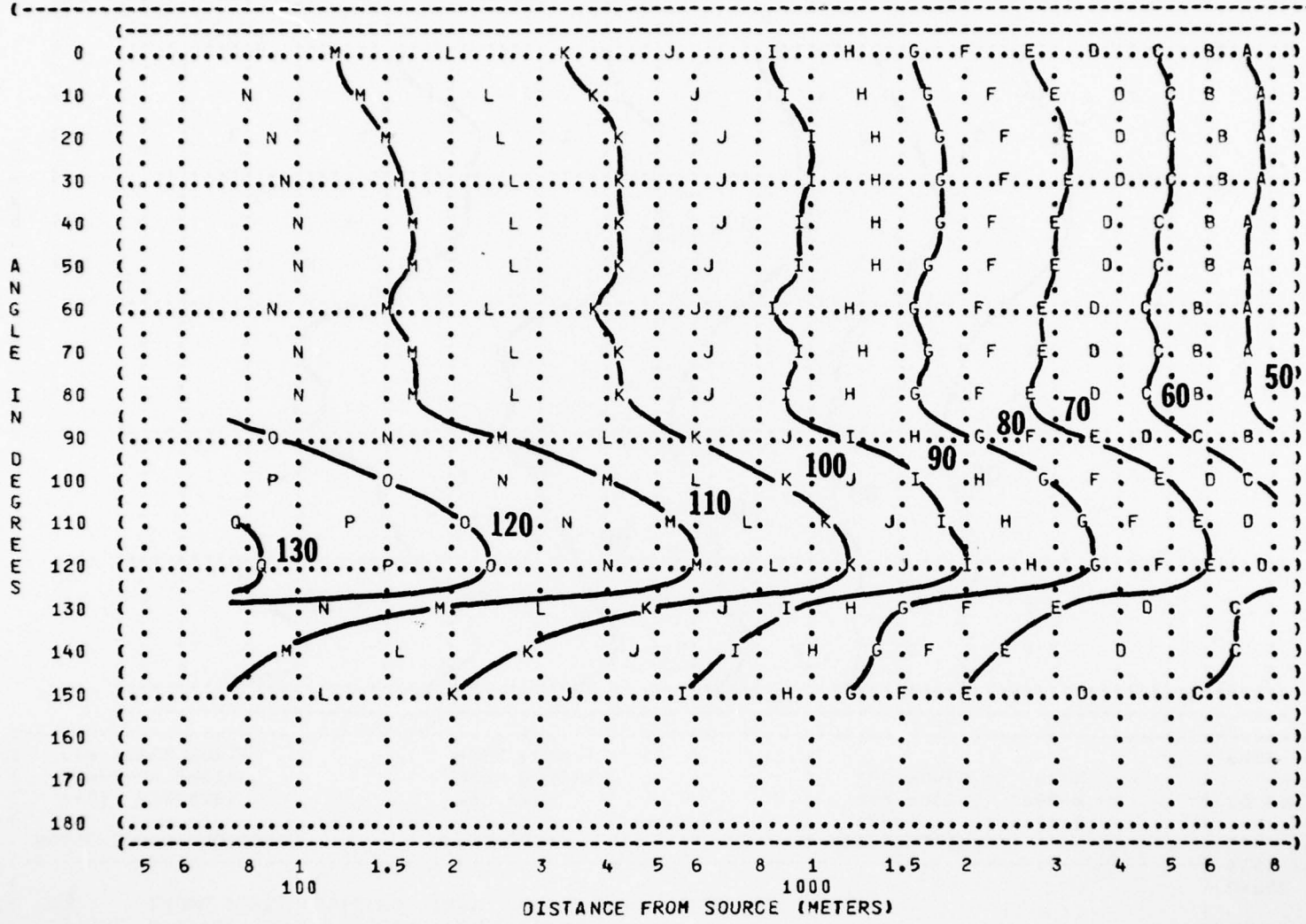
FIGURE: 4 OVERALL SOUND PRESSURE LEVEL (OASPL) EQUAL LEVEL CONTOURS (DB)

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-003
RUN 06
05 MAY 75
PAGE 13

NOISE SOURCE/SUBJECT:
A-6A AIRCRAFT
J52-P-8A ENGINE
FAR FIELD NOISE

OPERATION:
MILITARY POWER
99% RPM
BOTH ENGINES
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
Q	130

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

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-003
RUN 01
05 MAY 75
PAGE 14

NOISE SOURCE/SUBJECT:
A-6A AIRCRAFT
J52-P-8A ENGINE
FAR FIELD NOISE

OPERATION:
IDLE POWER
60% 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

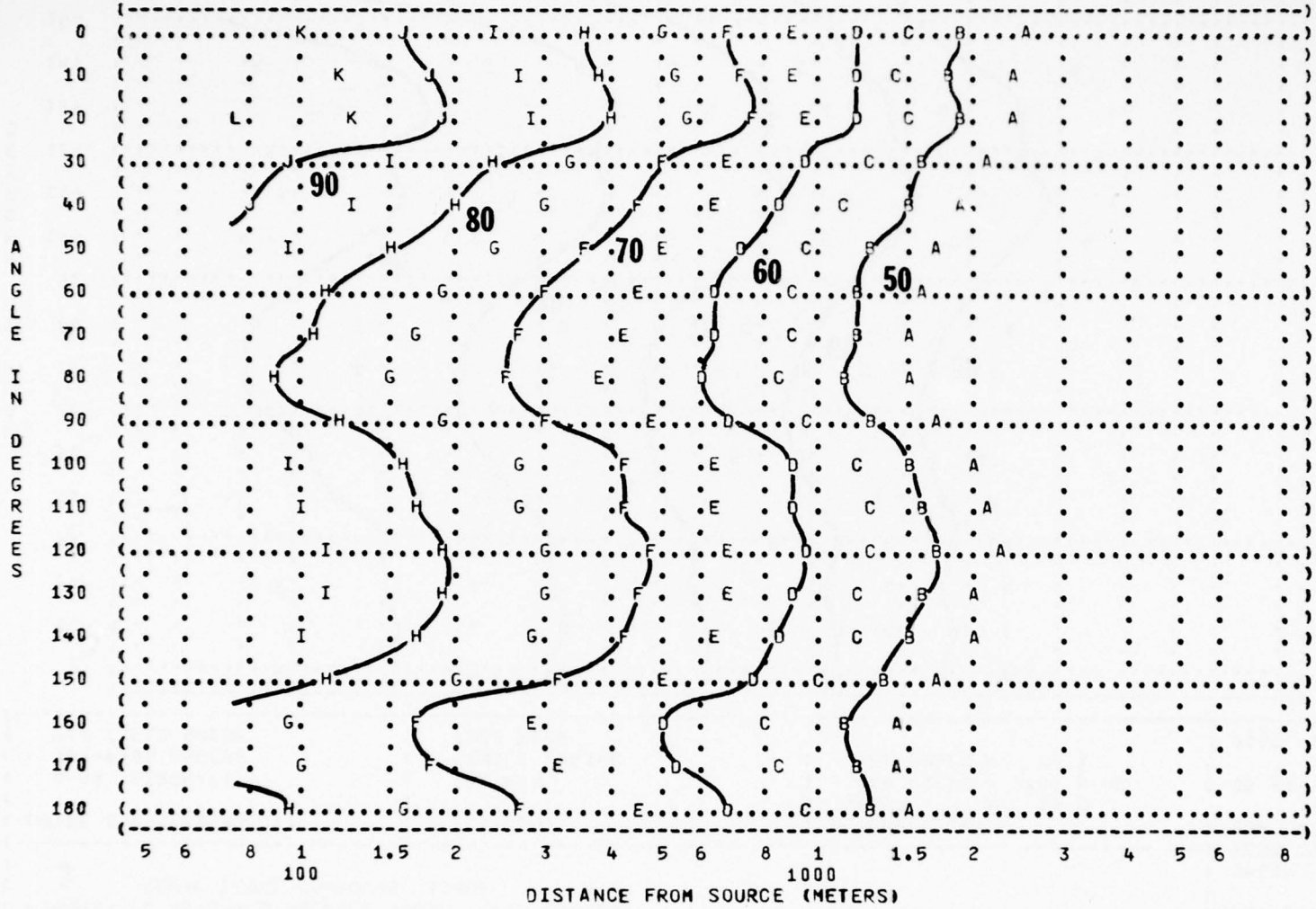


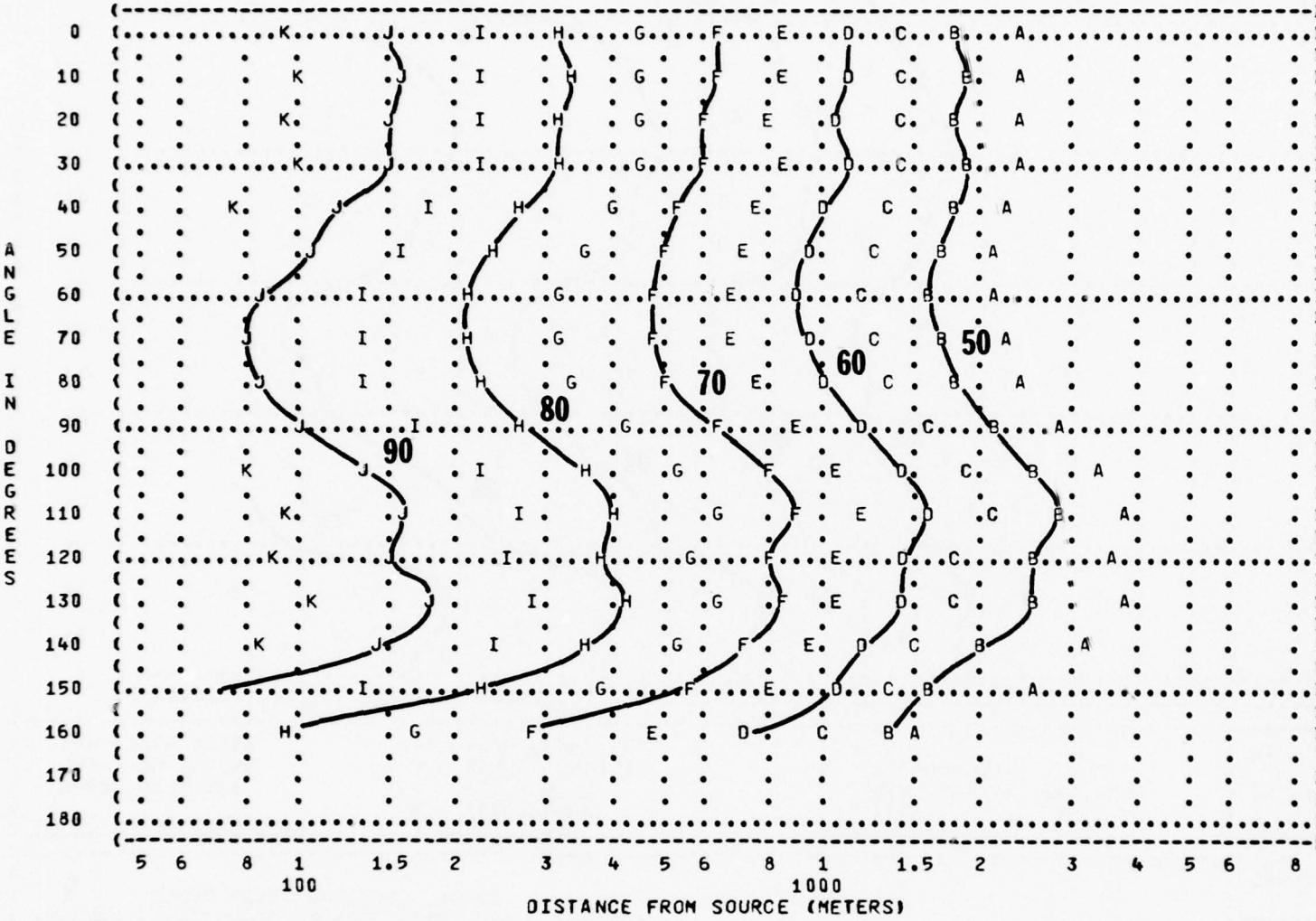
FIGURE 5: C-WEIGHTED OVERALL SOUND LEVEL (OASLC) EQUAL LEVEL CONTOURS (DBC)

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-003
RUN 02
05 MAY 75
PAGE 14

NOISE SOURCE/SUBJECT:
A-6A AIRCRAFT
J52-P-8A ENGINE
FAR FIELD NOISE

OPERATION:
75% 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

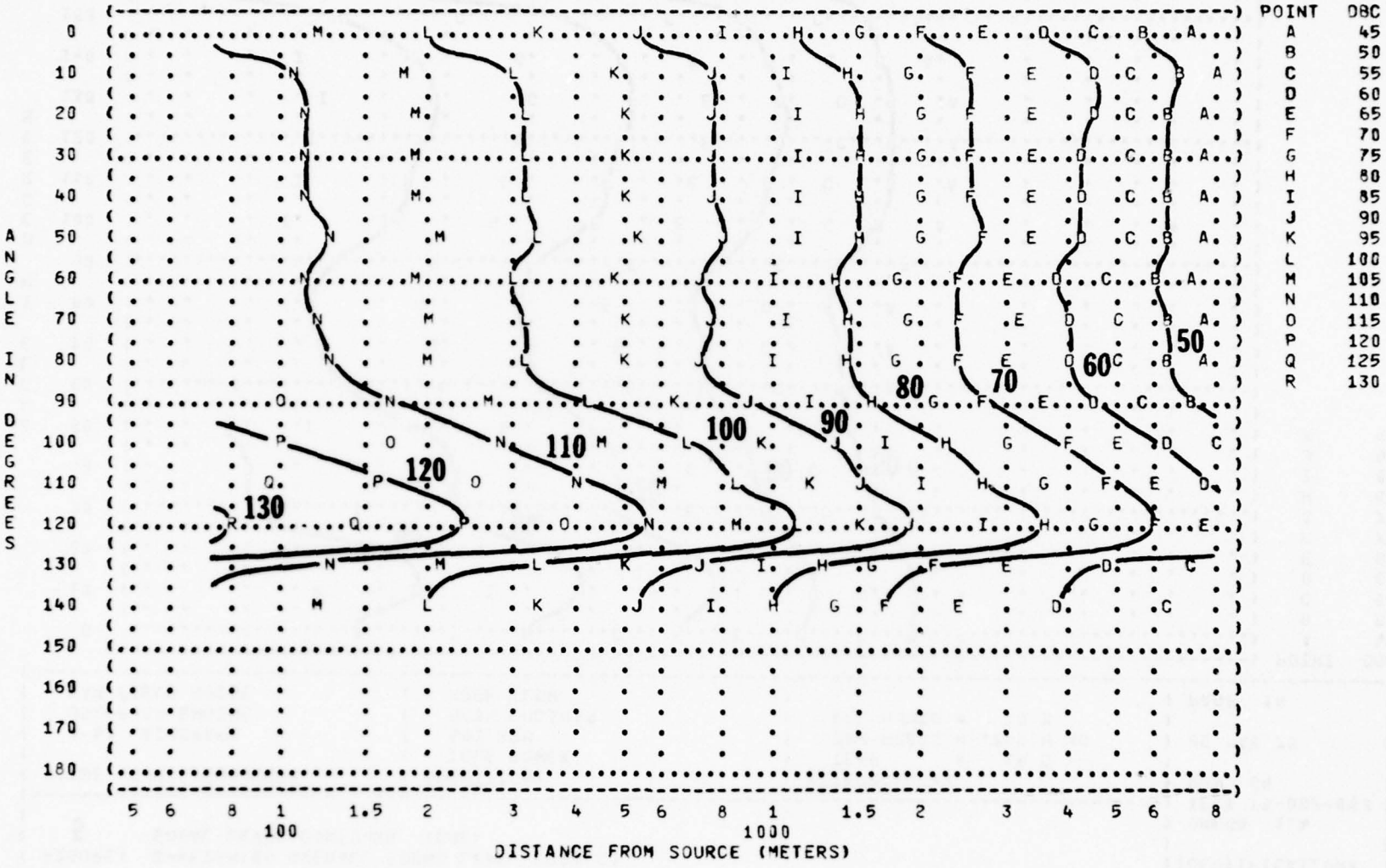
FIGURE: C-WEIGHTED OVERALL SOUND LEVEL (OASLC)
5 EQUAL LEVEL CONTOURS (DBC)

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-003
RUN 03
05 MAY 75
PAGE 14

NOISE SOURCE/SUBJECT:
A-6A AIRCRAFT
J52-P-8A ENGINE
FAR FIELD NOISE

OPERATION:
MILITARY POWER
99% 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
R	130

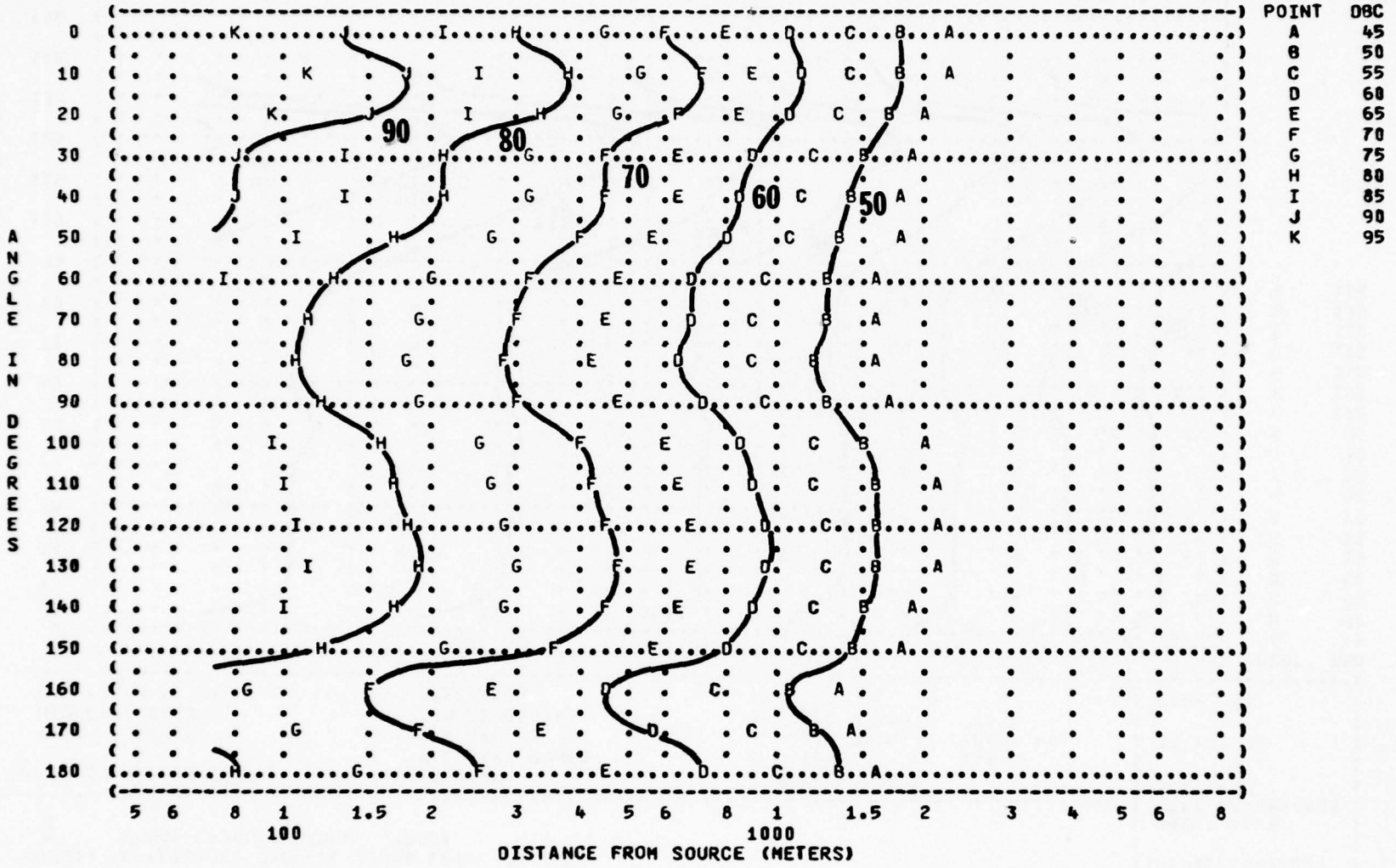
FIGURE 5 C-WEIGHTED OVERALL SOUND LEVEL (OASLC) EQUAL LEVEL CONTOURS (OBC)

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-003
RUN 04
05 MAY 75
PAGE 14

NOISE SOURCE/SUBJECT:
A-6A AIRCRAFT
J52-P-8A ENGINE
FAR FIELD NOISE

OPERATION:
IDLE POWER
60% RPM
BOTH ENGINES
FREE FLOW

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



POINT	OBC
A	45
B	50
C	55
D	60
E	65
F	70
G	75
H	80
I	85
J	90
K	95

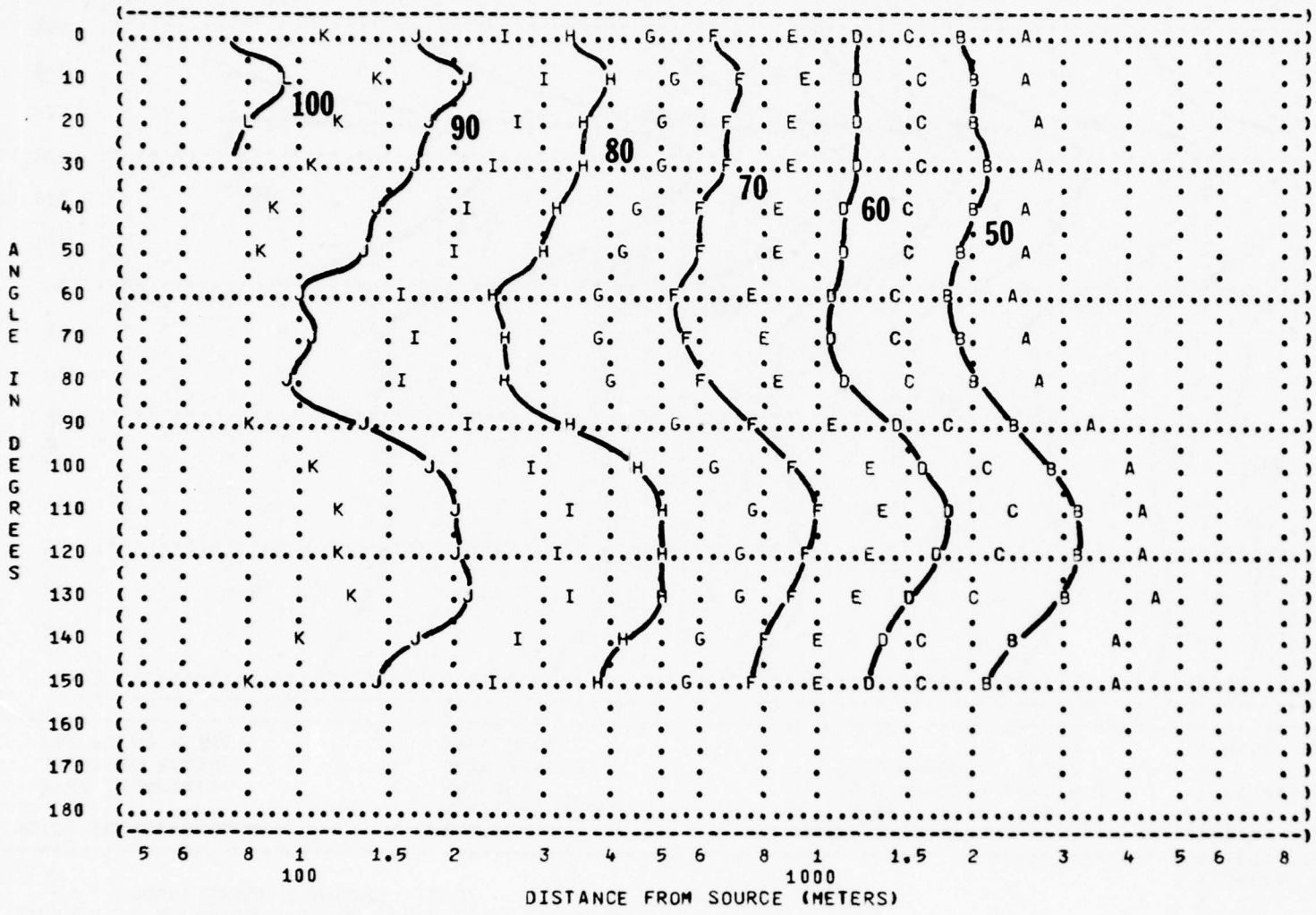
FIGURE: 5 C-WEIGHTED OVERALL SOUND LEVEL (OASLC) EQUAL LEVEL CONTOURS (DBC)

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-003
RUN 05
05 MAY 75
PAGE 14

NOISE SOURCE/SUBJECT:
A-6A AIRCRAFT
J52-P-8A 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
K	95
L	100

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

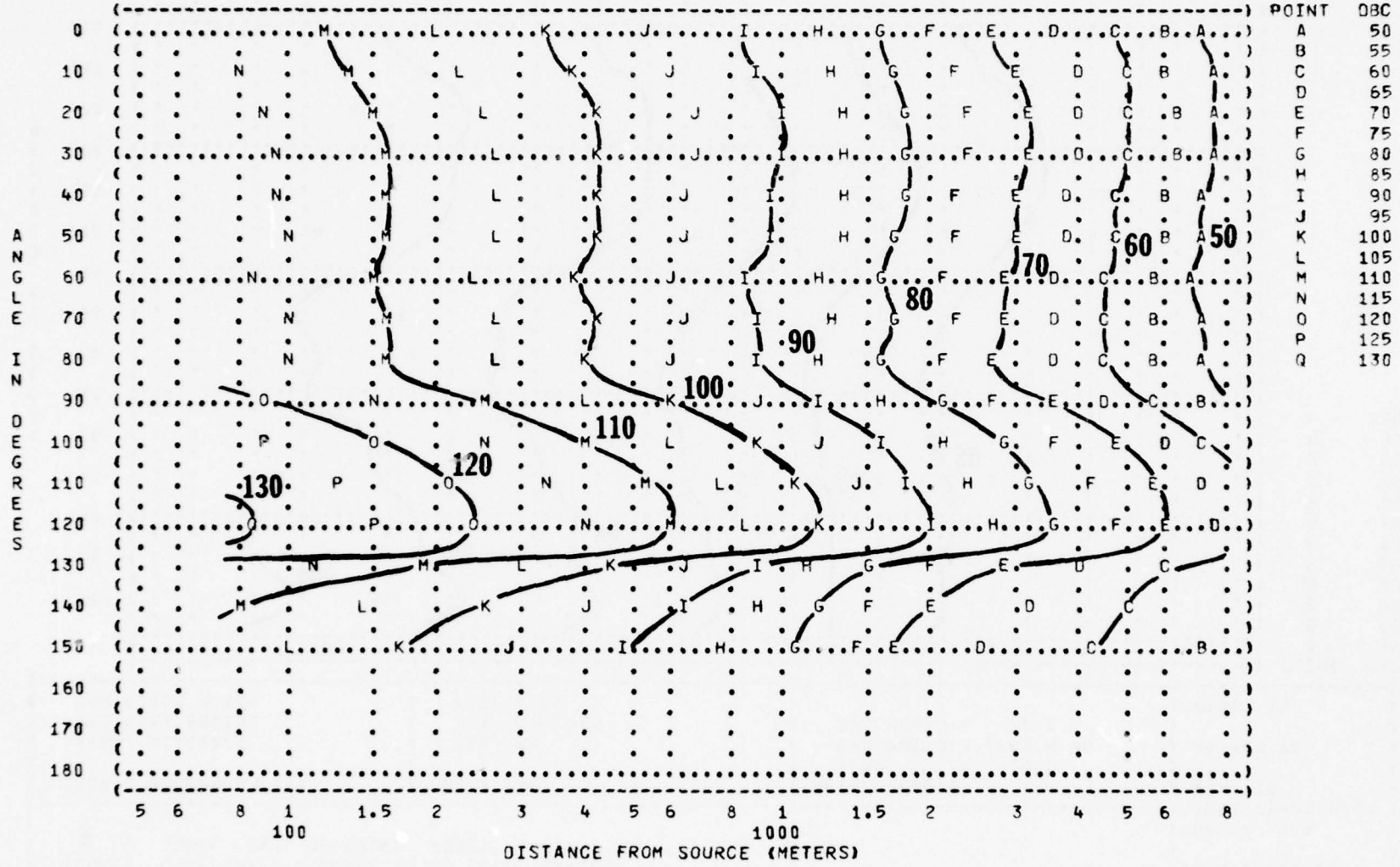
5

NOISE SOURCE/SUBJECT:
A-6A AIRCRAFT
J52-P-8A ENGINE
FAR FIELD NOISE

OPERATION:
MILITARY POWER
99% RPM
BOTH ENGINES
FREE FLOW

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

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-003
RUN 06
05 MAY 75
PAGE 14



POINT	DBC
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
Q	130

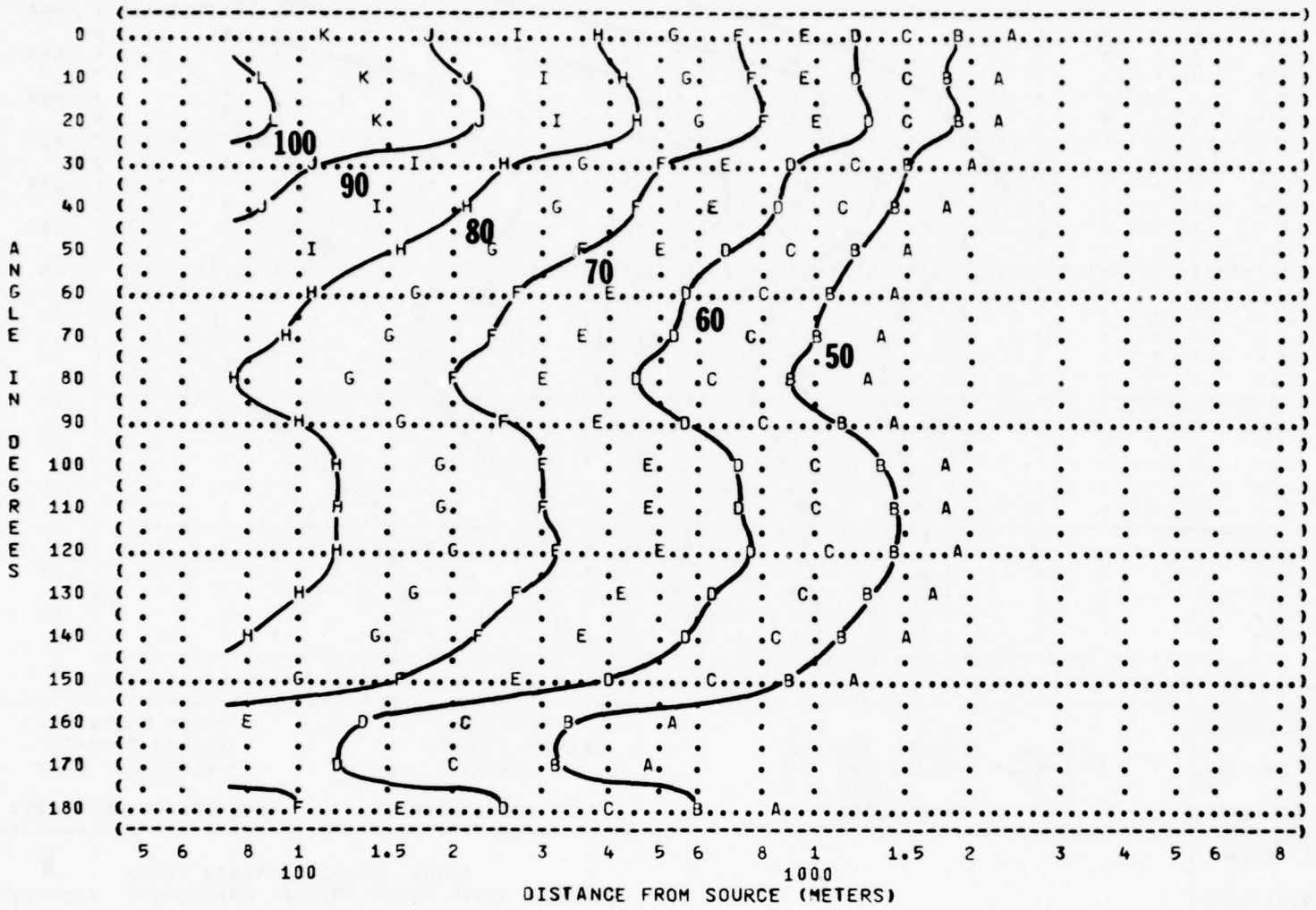
FIGURE: 6 A-WEIGHTED OVERALL SOUND LEVEL (OASLA) EQUAL LEVEL CONTOURS (DBA)

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-003
RUN 01
05 MAY 75
PAGE 15

NOISE SOURCE/SUBJECT:
A-6A AIRCRAFT
J52-P-8A ENGINE
FAR FIELD NOISE

OPERATION:
IDLE POWER
60% 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 75-002-003
RUN 02
05 MAY 75
PAGE 15

NOISE SOURCE/SUBJECT:
A-6A AIRCRAFT
J52-P-8A ENGINE
FAR FIELD NOISE

OPERATION:
75% 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

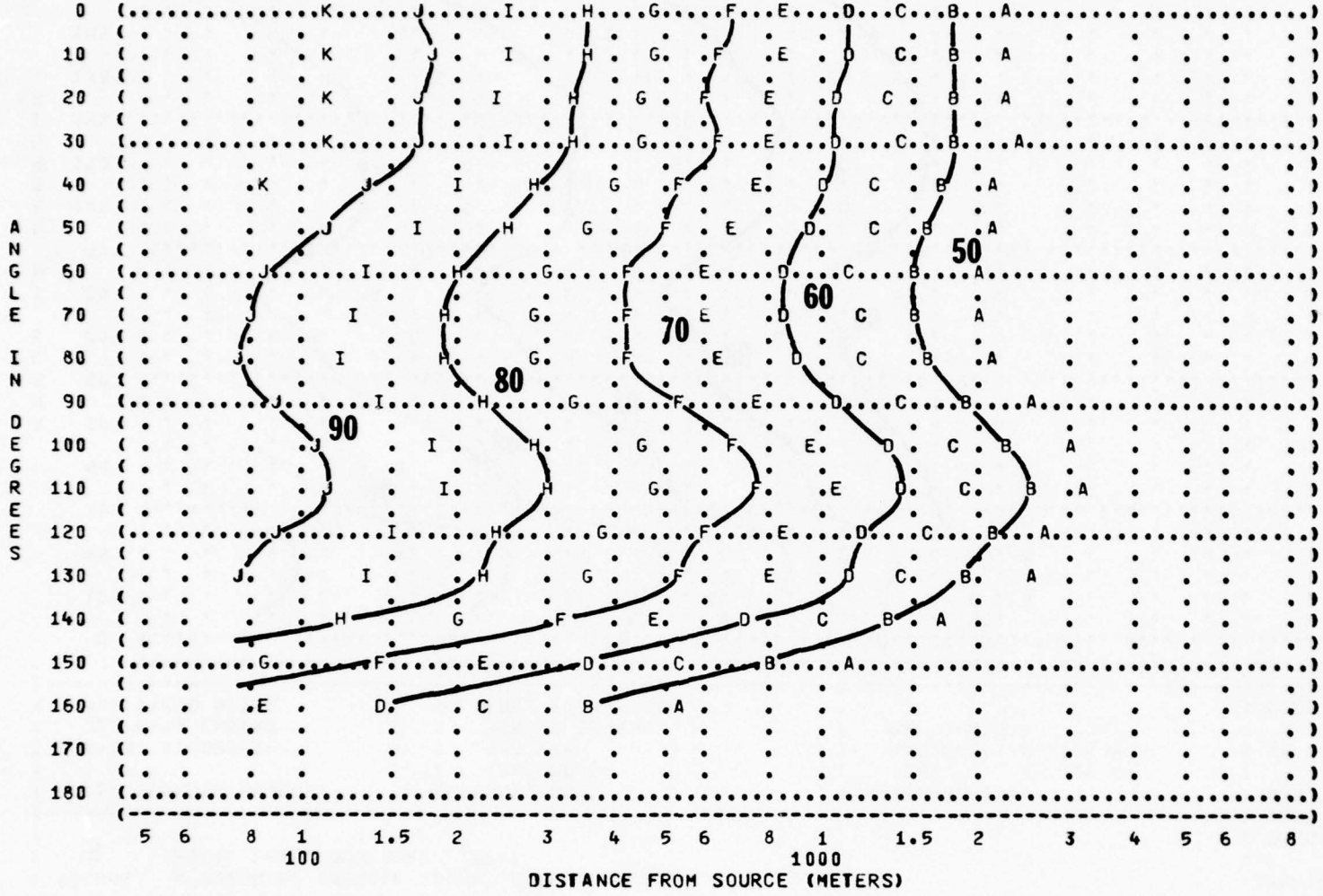


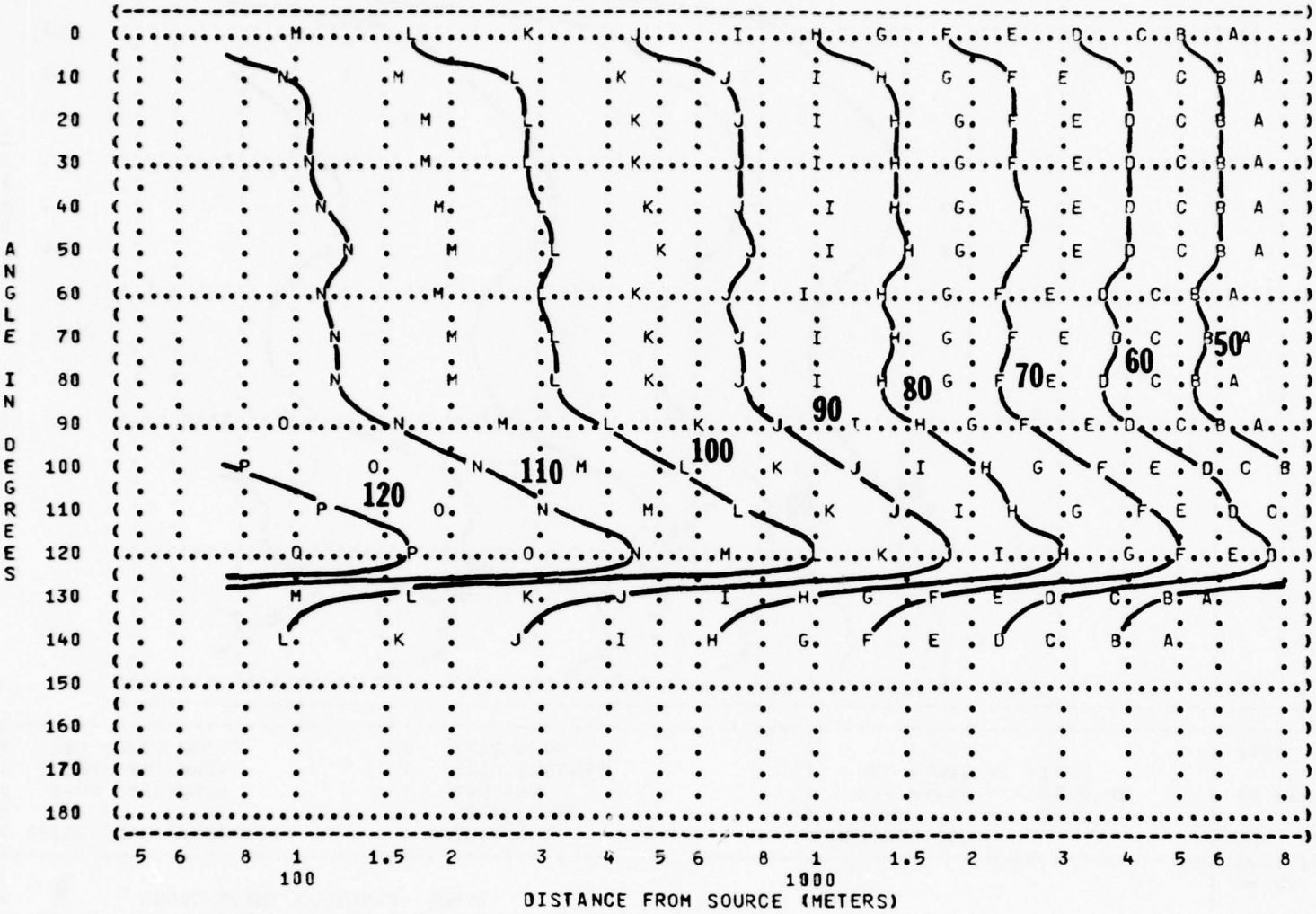
FIGURE 6: A-WEIGHTED OVERALL SOUND LEVEL (OASLA) EQUAL LEVEL CONTOURS (DBA)

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-003
RUN 03
05 MAY 75
PAGE 15

NOISE SOURCE/SUBJECT:
A-6A AIRCRAFT
J52-P-8A ENGINE
FAR FIELD NOISE

OPERATION:
MILITARY POWER
99% 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

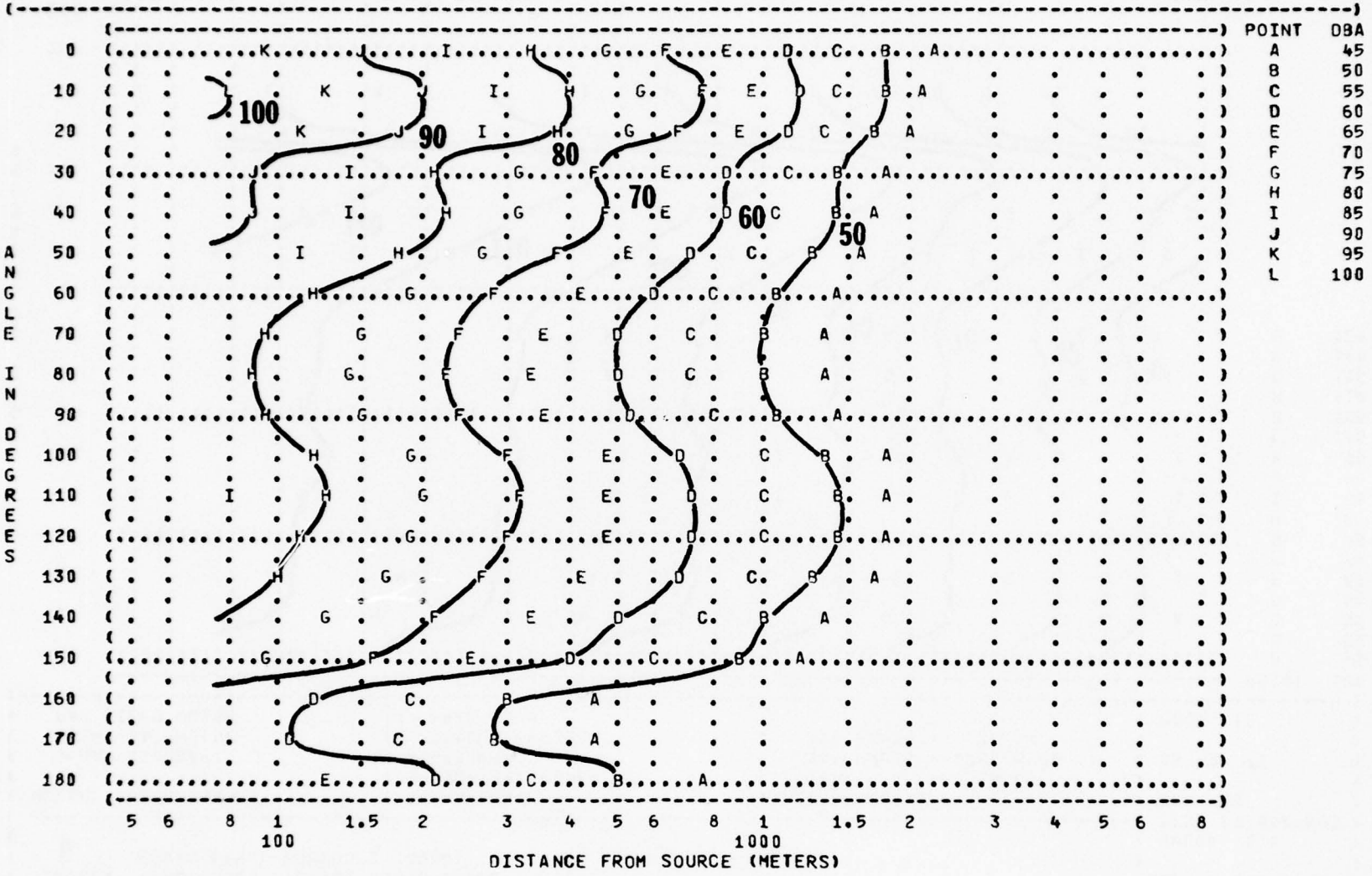
FIGURE 6: A-WEIGHTED OVERALL SOUND LEVEL (OASLA) EQUAL LEVEL CONTOURS (DBA)

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-003
RUN 04
05 MAY 75
PAGE 15

NOISE SOURCE/SUBJECT:
A-6A AIRCRAFT
J52-P-8A ENGINE
FAR FIELD NOISE

OPERATION:
IDLE POWER
60% 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

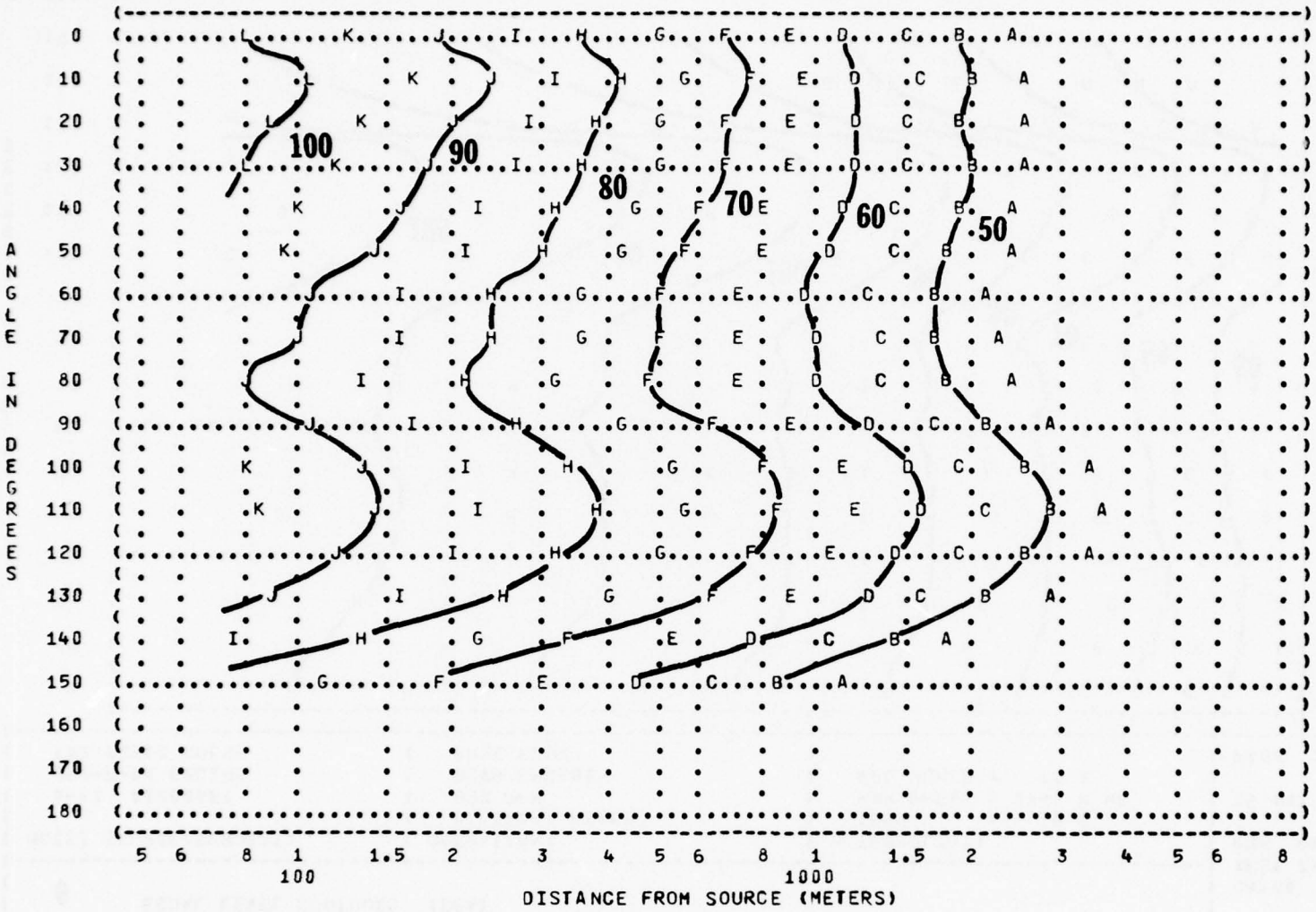
FIGURE 6 A-WEIGHTED OVERALL SOUND LEVEL (OASLA) EQUAL LEVEL CONTOURS (OBA)

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-003
RUN 05
05 MAY 75
PAGE 15

NOISE SOURCE/SUBJECT:
A-6A AIRCRAFT
J52-P-8A 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
J	90
K	95
L	100

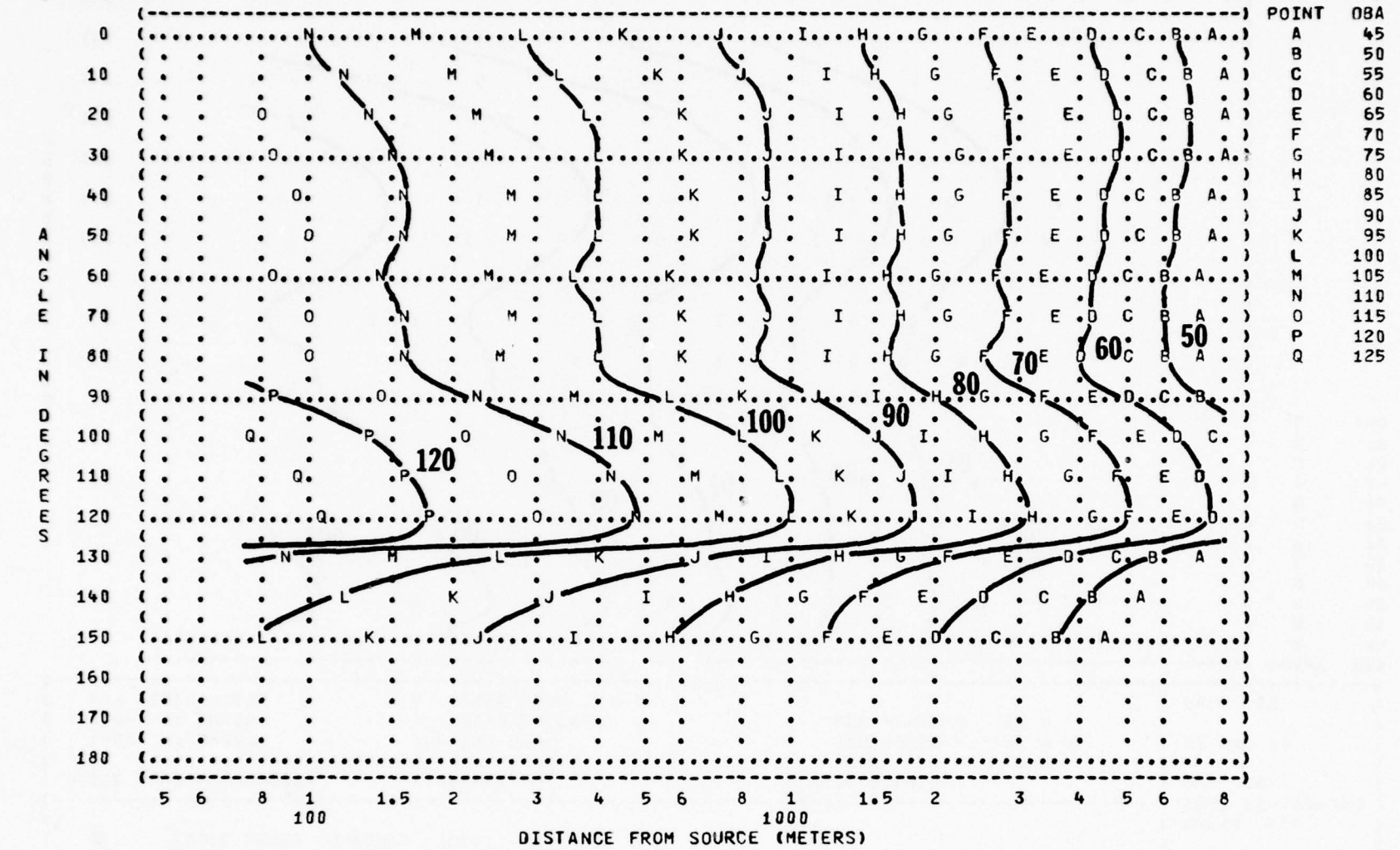
FIGURE 6: A-WEIGHTED OVERALL SOUND LEVEL (OASLA) EQUAL LEVEL CONTOURS (DBA)

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-003
RUN 06
05 MAY 75
PAGE 15

NOISE SOURCE/SUBJECT:
A-6A AIRCRAFT
J52-P-8A ENGINE
FAR FIELD NOISE

OPERATION:
MILITARY POWER
99% RPM
BOTH ENGINES
FREE FLOW

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



POINT	OBA
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

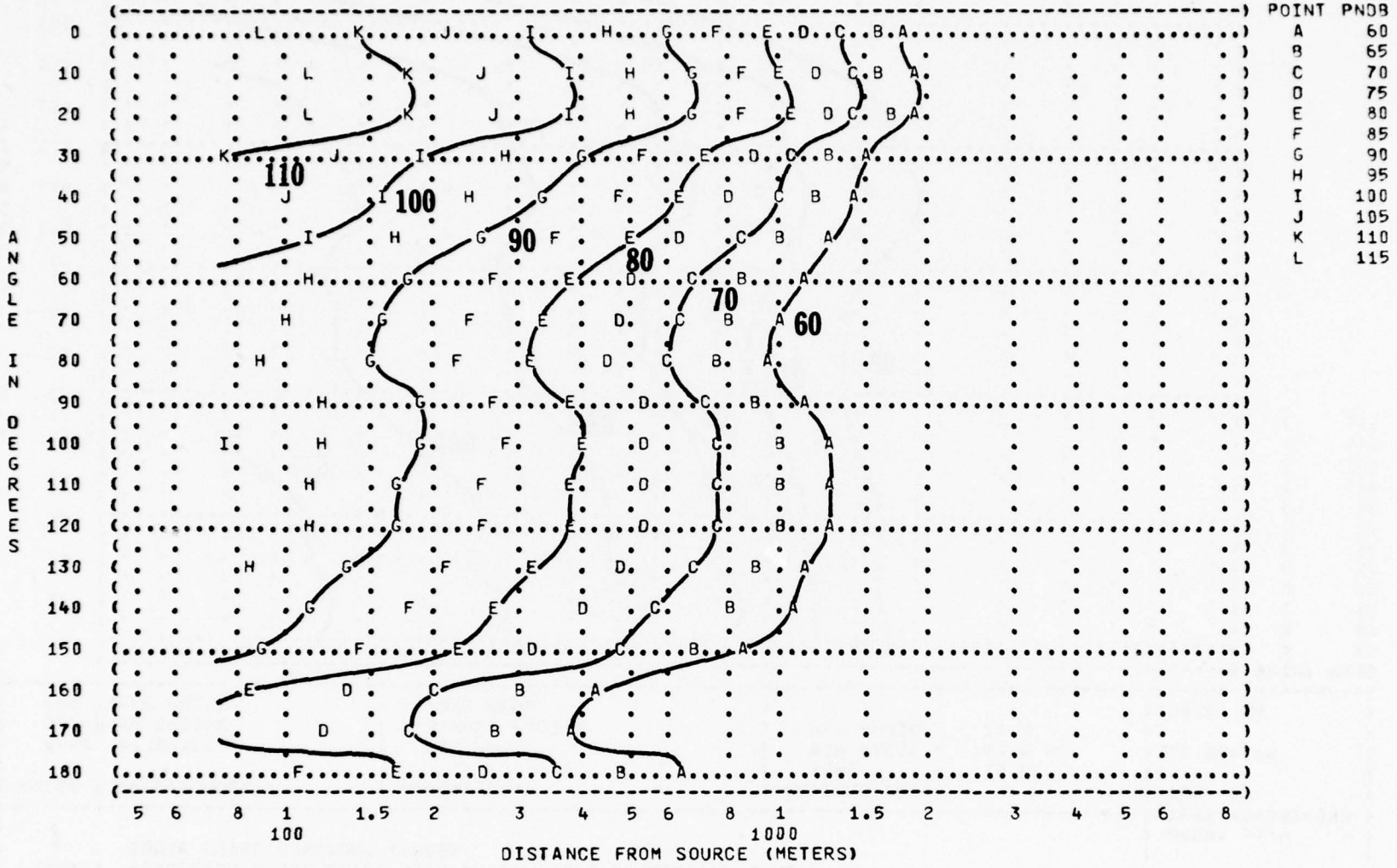
FIGURE 7 PERCEIVED NOISE LEVEL WITH SMOOTH TONE CORRECTION (PNLT) EQUAL LEVEL CONTOURS (PNDB)

NOISE SOURCE/SUBJECT:
A-6A AIRCRAFT
J52-P-8A ENGINE
FAR FIELD NOISE

OPERATION:
IDLE POWER
60% RPM
SINGLE ENGINE
FREE FLOW

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

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-003
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
L	115

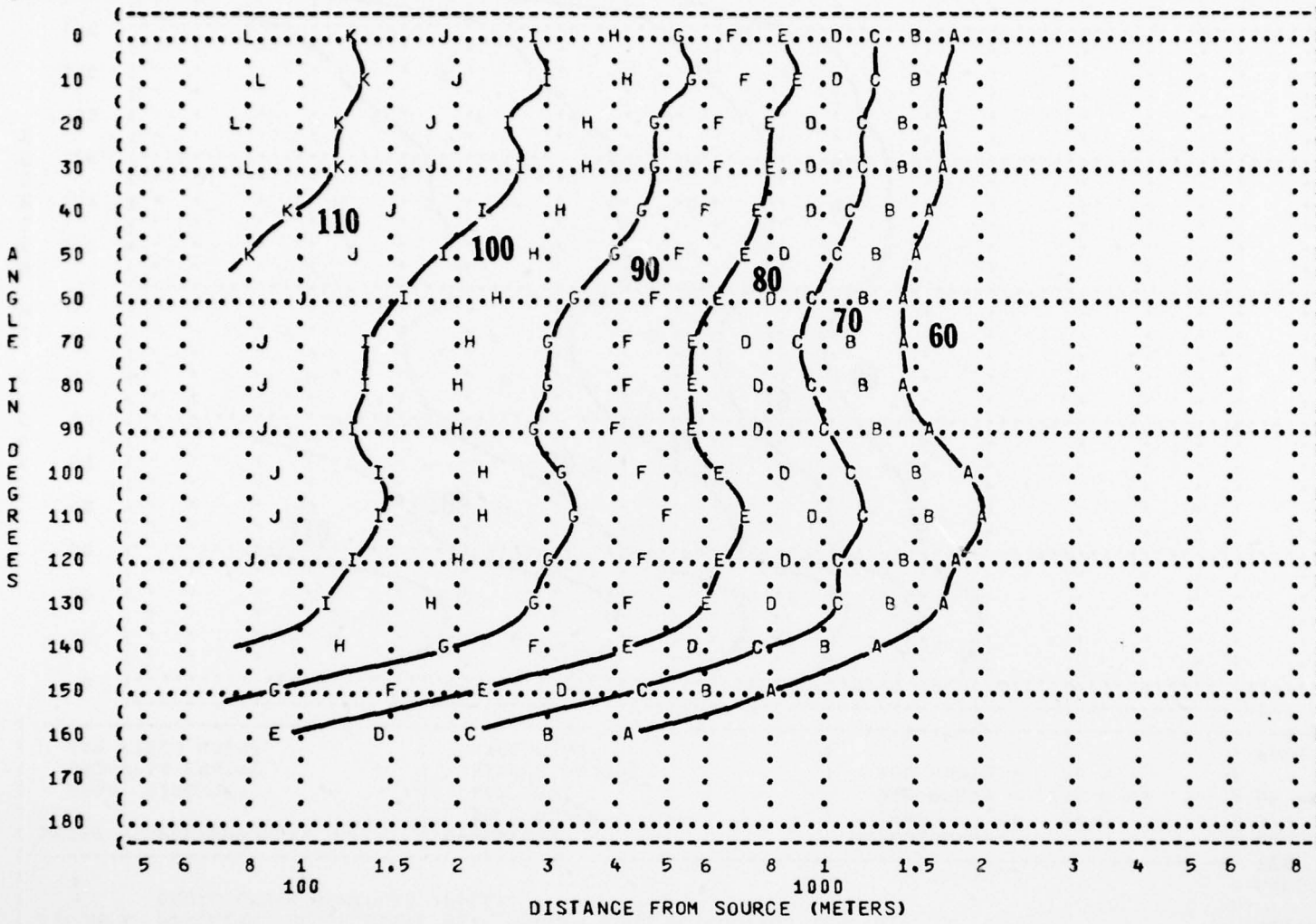
FIGURE 7 PERCEIVED NOISE LEVEL WITH SMOOTH TONE CORRECTION (PNLT) EQUAL LEVEL CONTOURS (PNDB)

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-003
RUN 02
05 MAY 75
PAGE 16

NOISE SOURCE/SUBJECT:
A-6A AIRCRAFT
J52-P-8A ENGINE
FAR FIELD NOISE

OPERATION:
75% 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

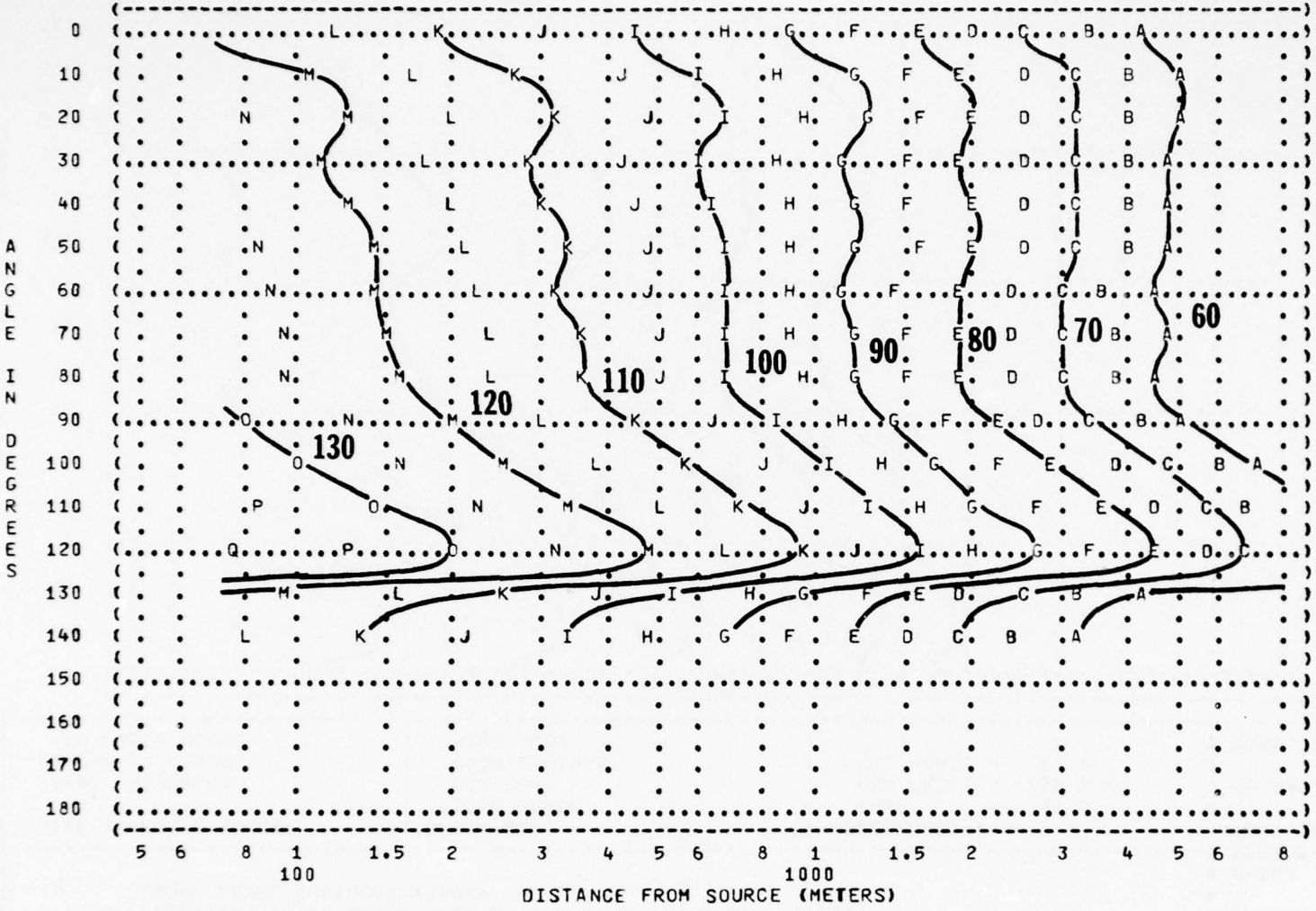
FIGURE: 7 PERCEIVED NOISE LEVEL WITH SMOOTH TONE CORRECTION (PNLT) EQUAL LEVEL CONTOURS (PNDB)

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-003
RUN 03
05 MAY 75
PAGE 16

NOISE SOURCE/SUBJECT:
A-6A AIRCRAFT
J52-P-8A ENGINE
FAR FIELD NOISE

OPERATION:
MILITARY POWER
99% 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
Q	140

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

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-003
RUN 04
05 MAY 75
PAGE 16

NOISE SOURCE/SUBJECT:
A-6A AIRCRAFT
J52-P-8A ENGINE
FAR FIELD NOISE

OPERATION:
IDLE POWER
60% 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

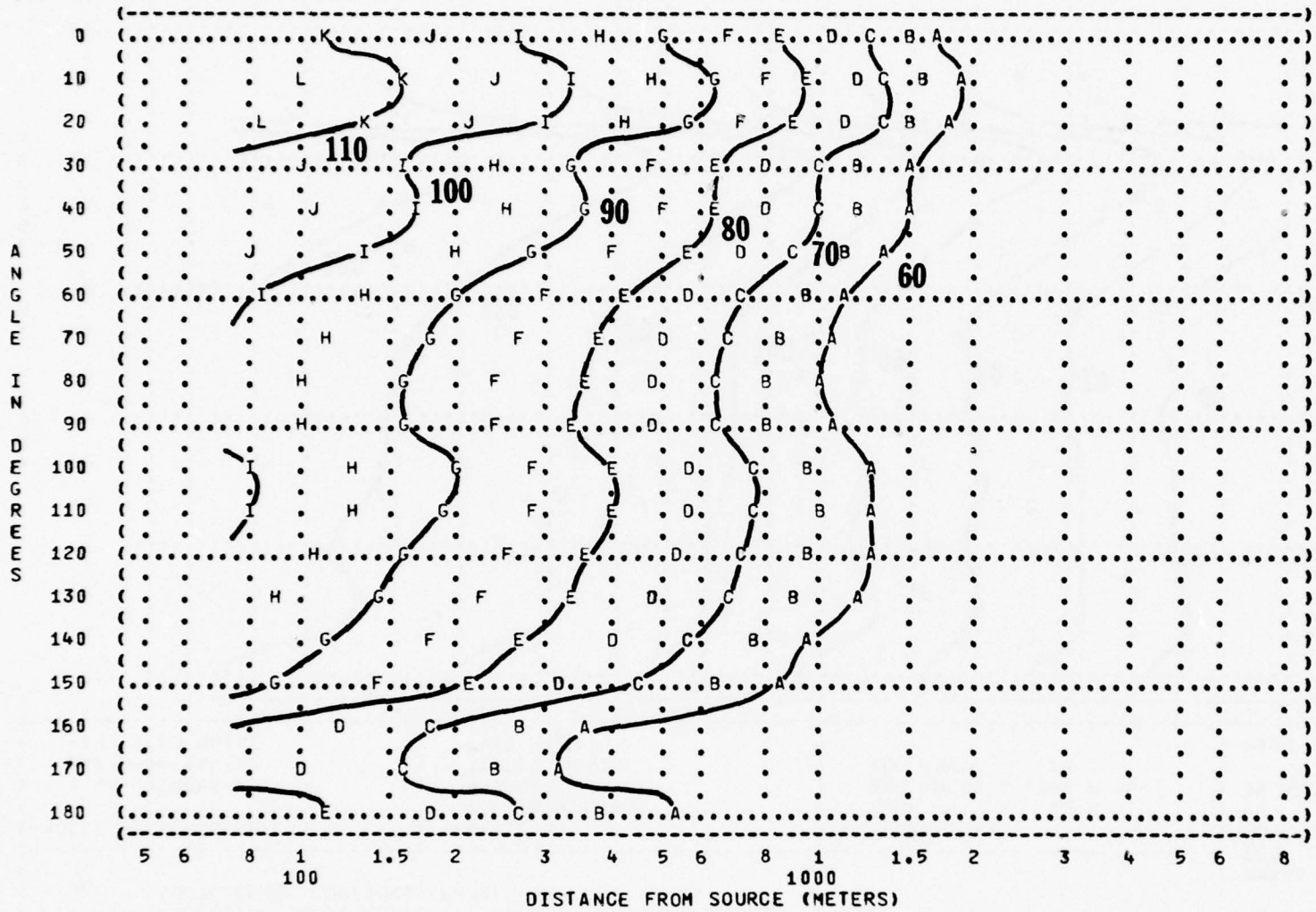


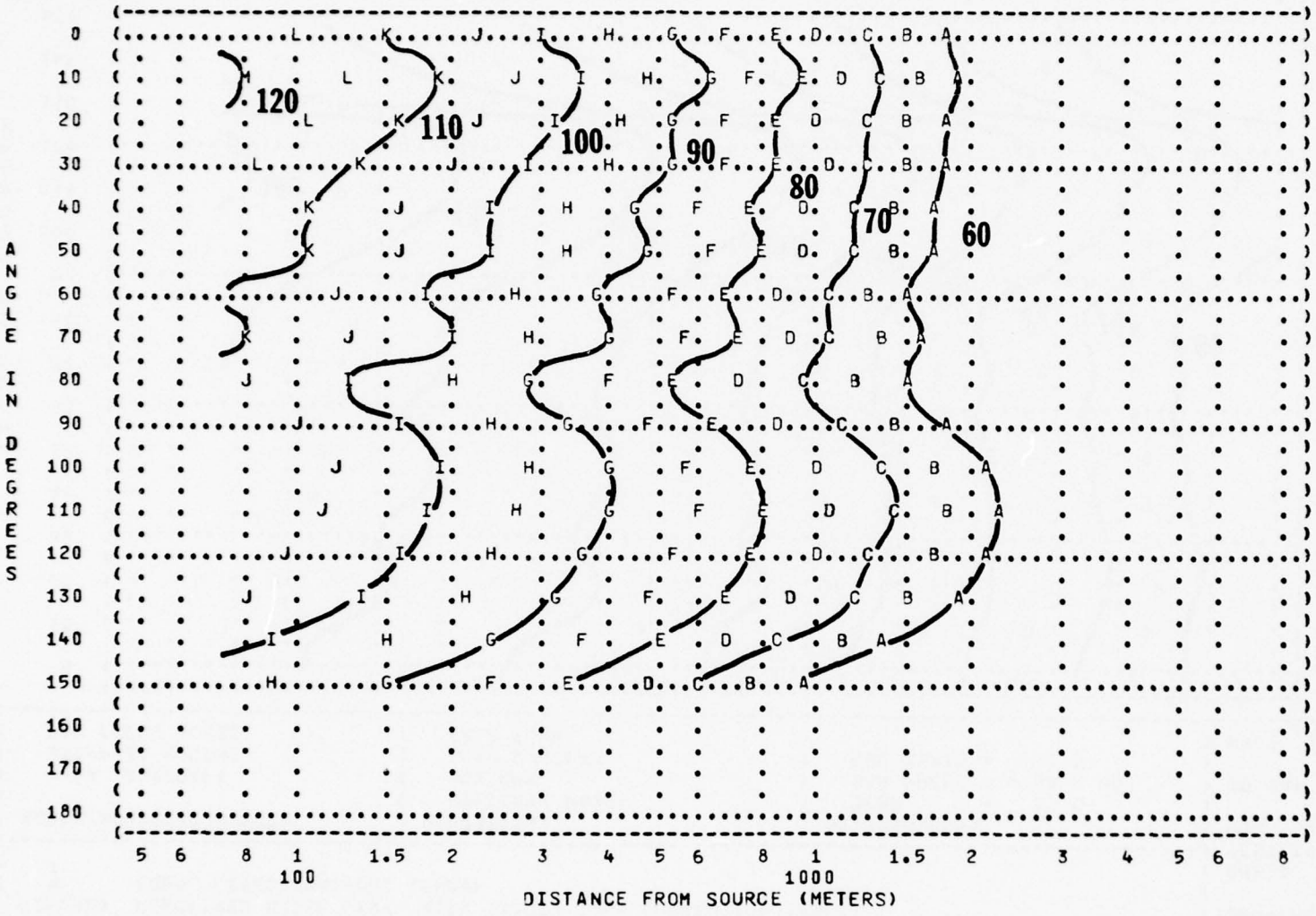
FIGURE 7: PERCEIVED NOISE LEVEL WITH SMOOTH TONE CORRECTION (PNLT) EQUAL LEVEL CONTOURS (PNDB)

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-003
RUN 05
05 MAY 75
PAGE 16

NOISE SOURCE/SUBJECT:
A-6A AIRCRAFT
J52-P-8A 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
J	105
K	110
L	115
M	120

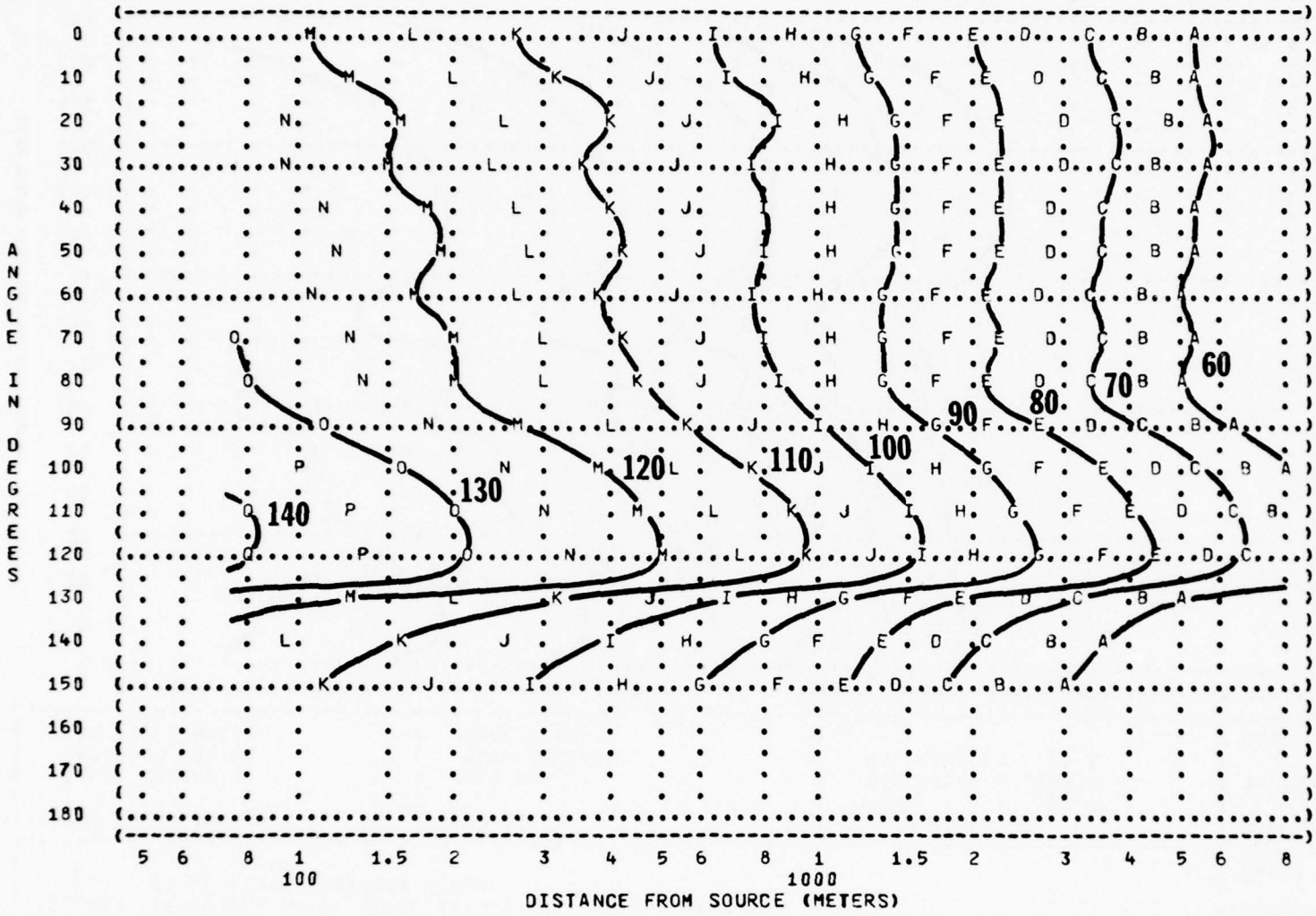
FIGURE 7: PERCEIVED NOISE LEVEL WITH SMOOTH TONE CORRECTION (PNLT) EQUAL LEVEL CONTOURS (PNDB)

NOISE SOURCE/SUBJECT:
A-6A AIRCRAFT
J52-P-8A ENGINE
FAR FIELD NOISE

OPERATION:
MILITARY POWER
99% RPM
BOTH ENGINES
FREE FLOW

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

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-003
RUN 06
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
M	120
N	125
O	130
P	135
Q	140

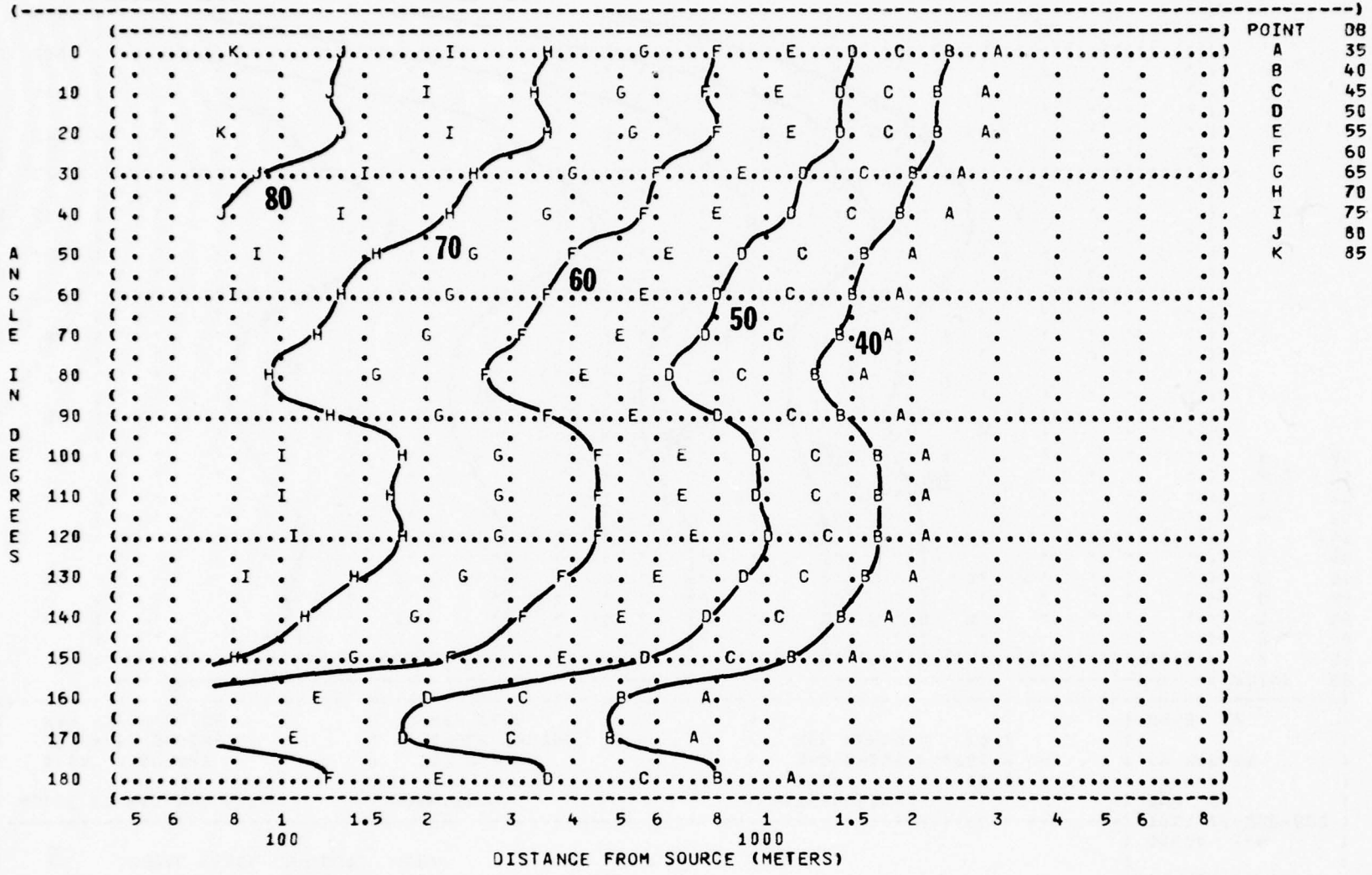
FIGURE 8 PREFERRED SPEECH INTERFERENCE LEVEL (PSIL) EQUAL LEVEL CONTOURS (DB)

NOISE SOURCE/SUBJECT:
A-6A AIRCRAFT
J52-P-8A ENGINE
FAR FIELD NOISE

OPERATION:
IDLE POWER
60% RPM
SINGLE ENGINE
FREE FLOW

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

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-003
RUN 01
05 MAY 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

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

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-003
RUN 02
05 MAY 75
PAGE 17

NOISE SOURCE/SUBJECT:
A-6A AIRCRAFT
J52-P-8A ENGINE
FAR FIELD NOISE

OPERATION:
75% 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

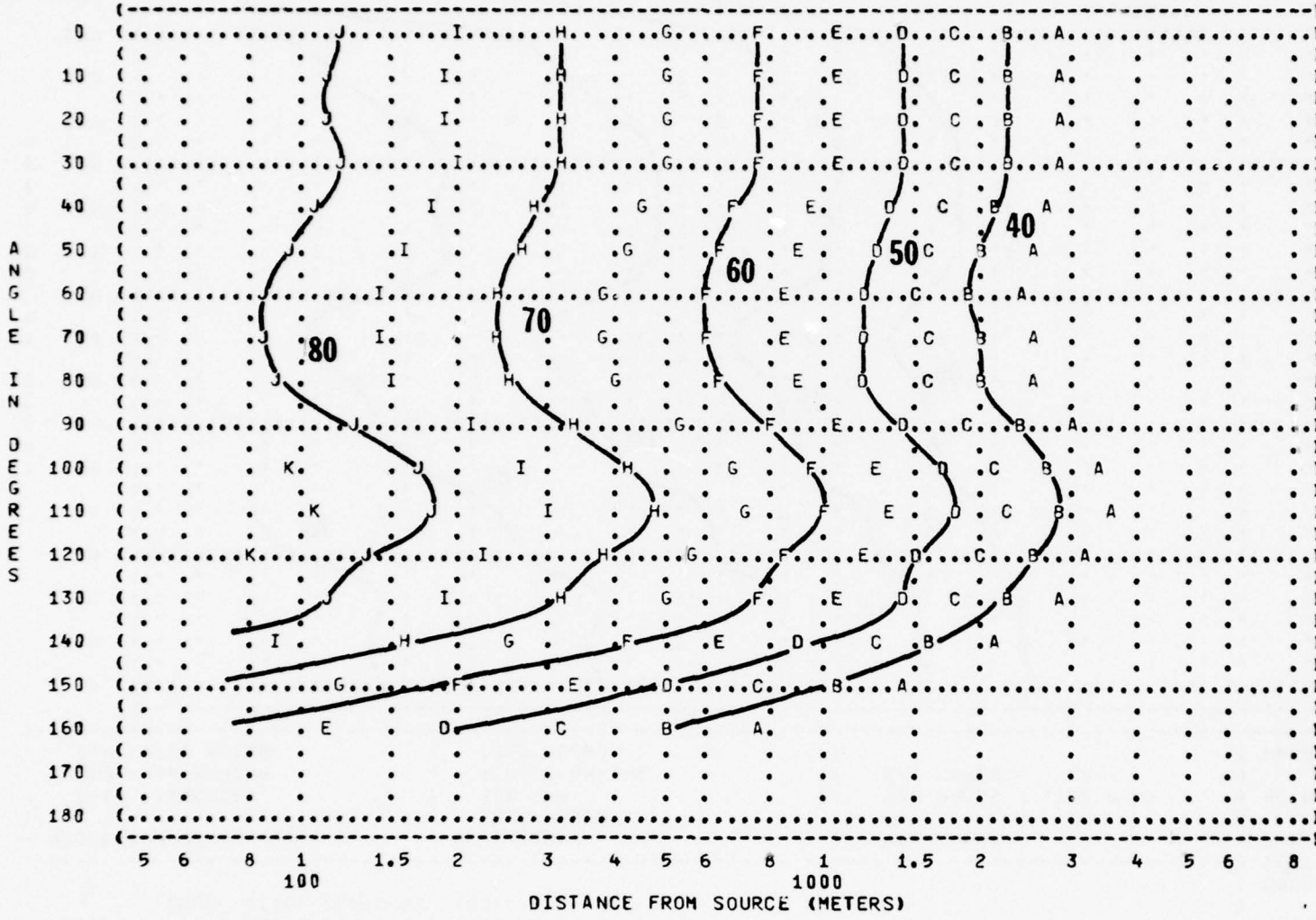


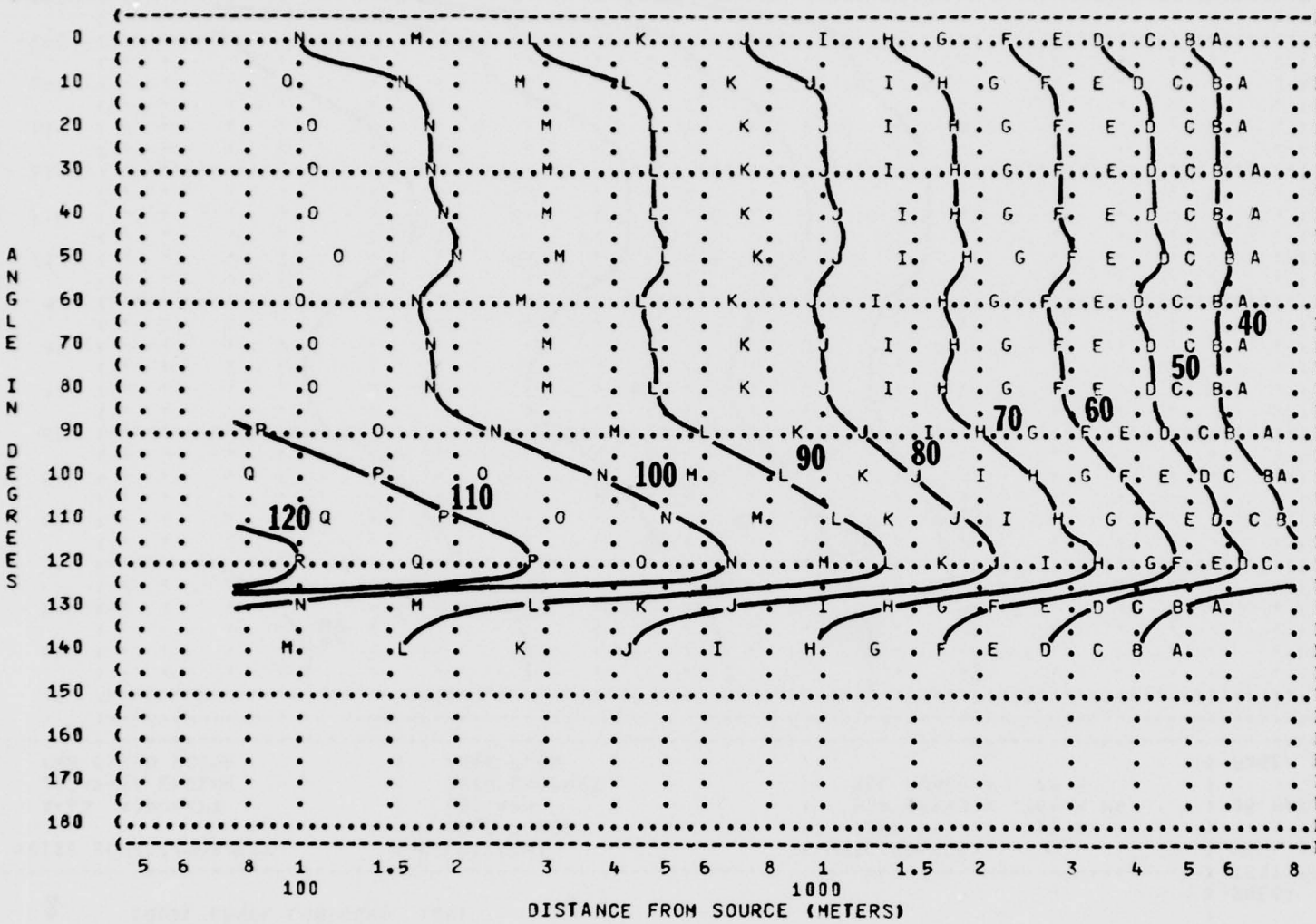
FIGURE: 8 PREFERRED SPEECH INTERFERENCE LEVEL (PSIL) EQUAL LEVEL CONTOURS (DB)

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-003
RUN 03
05 MAY 75
PAGE 17

NOISE SOURCE/SUBJECT:
A-6A AIRCRAFT
J52-P-8A ENGINE
FAR FIELD NOISE

OPERATION:
MILITARY POWER
99% 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 8 PREFERRED SPEECH INTERFERENCE LEVEL (PSIL) EQUAL LEVEL CONTOURS (DB)

NOISE SOURCE/SUBJECT:
A-6A AIRCRAFT
J52-P-8A ENGINE
FAR FIELD NOISE

OPERATION:
IDLE POWER
60% RPM
BOTH ENGINES
FREE FLOW

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

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-003
RUN 04
05 MAY 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

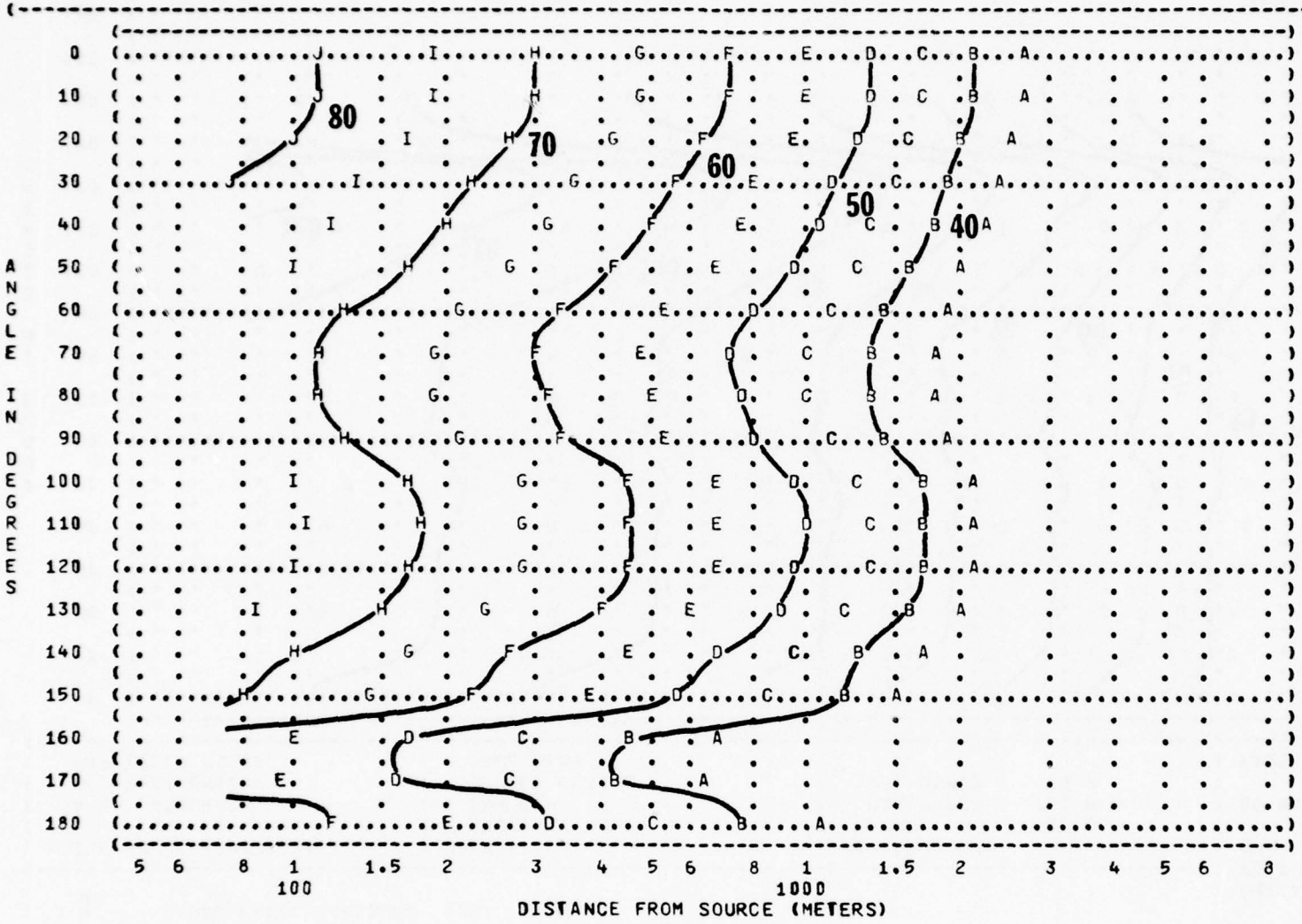


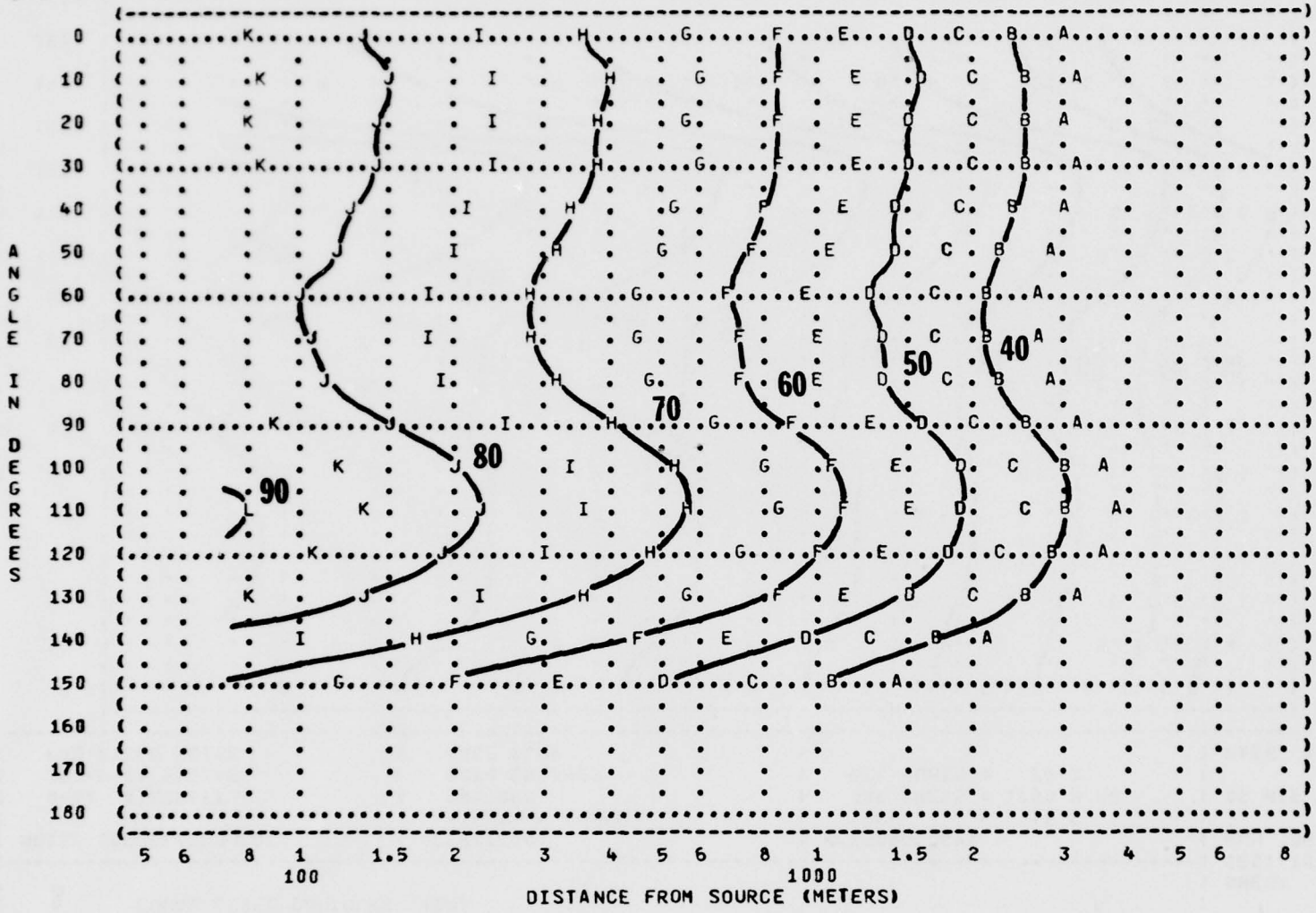
FIGURE 8: PREFERRED SPEECH INTERFERENCE LEVEL (PSIL) EQUAL LEVEL CONTOURS (DB)

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-003
RUN 05
05 MAY 75
PAGE 17

NOISE SOURCE/SUBJECT:
A-6A AIRCRAFT
J52-P-8A 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
J	80
K	85
L	90

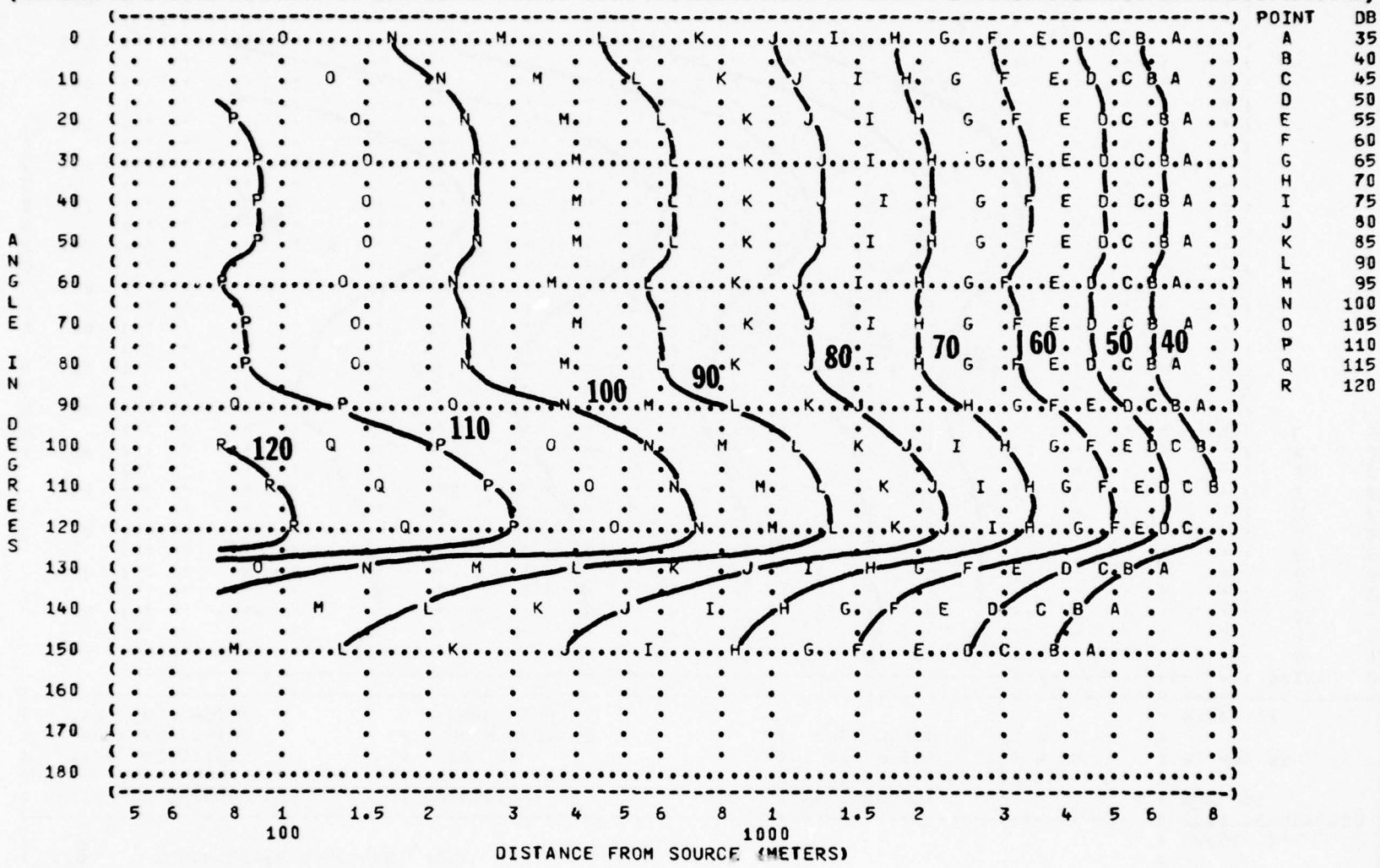
FIGURE: 8 PREFERRED SPEECH INTERFERENCE LEVEL (PSIL) EQUAL LEVEL CONTOURS (DB)

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-003
RUN 06
05 MAY 75
PAGE 17

NOISE SOURCE/SUBJECT:
A-6A AIRCRAFT
J52-P-8A ENGINE
FAR FIELD NOISE

OPERATION:
MILITARY POWER
99% 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
Q	115
R	120

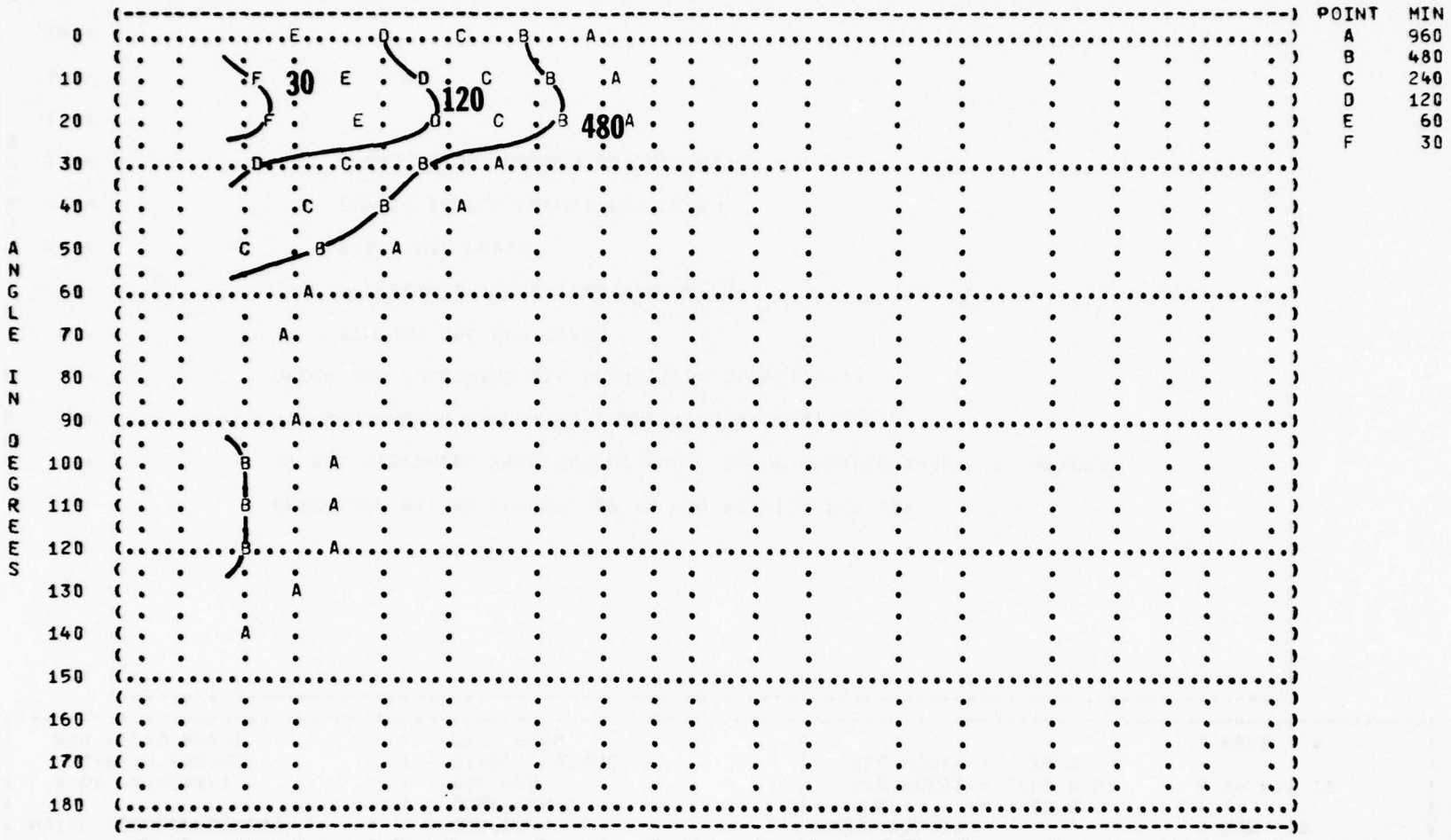
FIGURE 9: MAXIMUM PERMISSIBLE TIME (T) FOR ONE EXPOSURE PER DAY (AFR 161-35, JULY 73)
EQUAL TIME CONTOURS (MINUTES)
NO PROTECTION

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-003
RUN 01
05 MAY 75
PAGE 7

NOISE SOURCE/SUBJECT:
A-6A AIRCRAFT
J52-P-8A ENGINE
FAR FIELD NOISE

OPERATION:
IDLE POWER
60% 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)

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-003
RUN 01
05 MAY 75
PAGE 8

NOISE SOURCE/SUBJECT:
A-6A AIRCRAFT
J52-P-8A ENGINE
FAR FIELD NOISE

OPERATION:
IDLE POWER
60% RPM
SINGLE ENGINE
FREE FLOW

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

PERSONNEL MAY BE EXPOSED UP TO 960 MINUTES PER DAY

AT ALL DISTANCES FROM SOURCE EQUAL TO OR GREATER THAN 75 METERS

FOR ALL ANGLES EVALUATED (INDICATED BY < AT LEFT)

UNDER THE FOLLOWING EAR PROTECTION CONDITIONS:

MINIMUM QPL EAR MUFFS

AMERICAN OPTICAL 1700 EAR MUFFS

V-51R EAR PLUGS

COMFIT TRIPLE FLANGE EAR PLUGS

H-133 GROUND COMMUNICATION UNIT

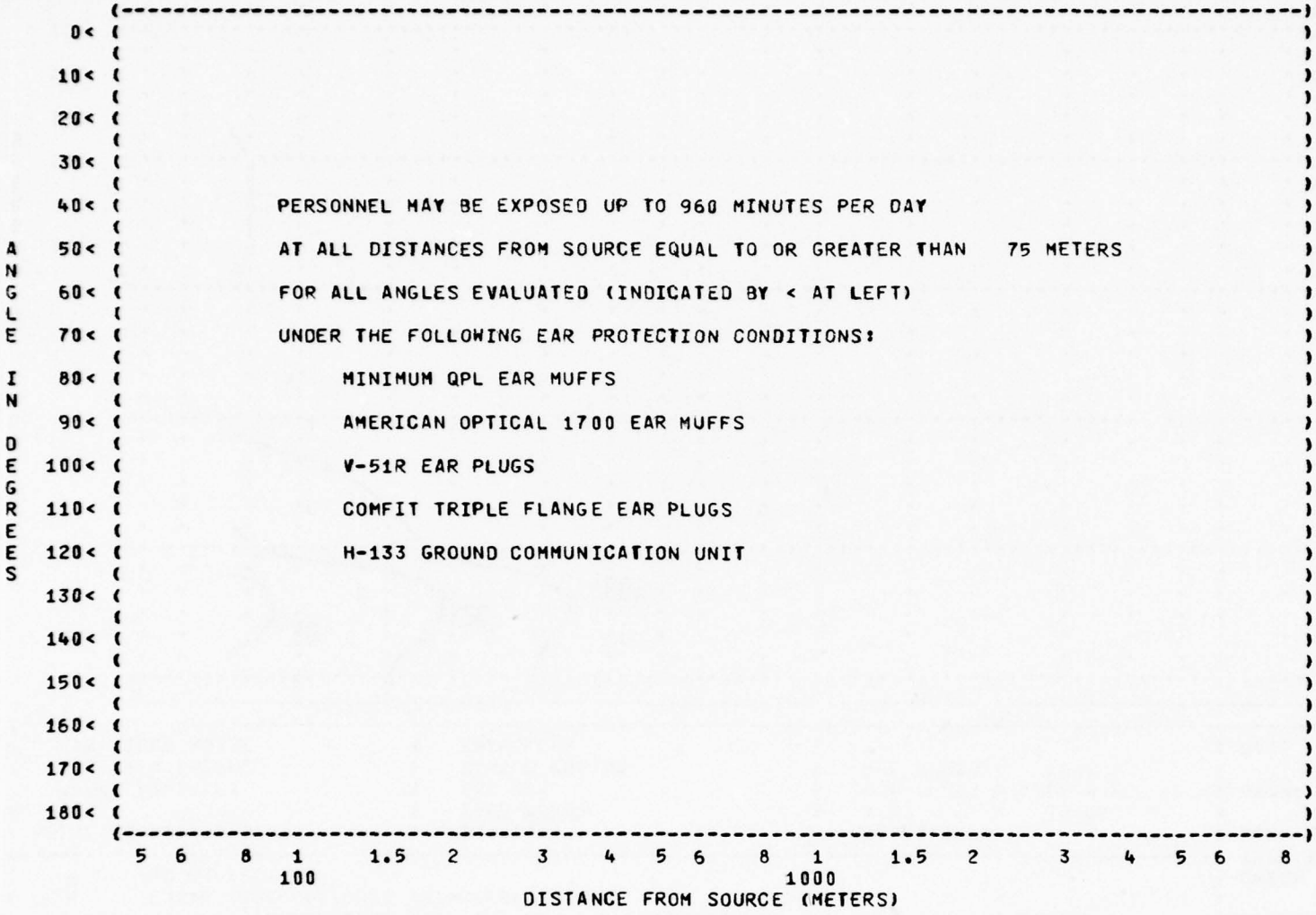


FIGURE 9: MAXIMUM PERMISSIBLE TIME (T) FOR ONE EXPOSURE PER DAY (AFR 161-35, JULY 73)
EQUAL TIME CONTOURS (MINUTES)
NO PROTECTION

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-003
RUN 02
05 MAY 75
PAGE 7

NOISE SOURCE/SUBJECT:
A-6A AIRCRAFT
J52-P-8A ENGINE
FAR FIELD NOISE

OPERATION:
75% 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

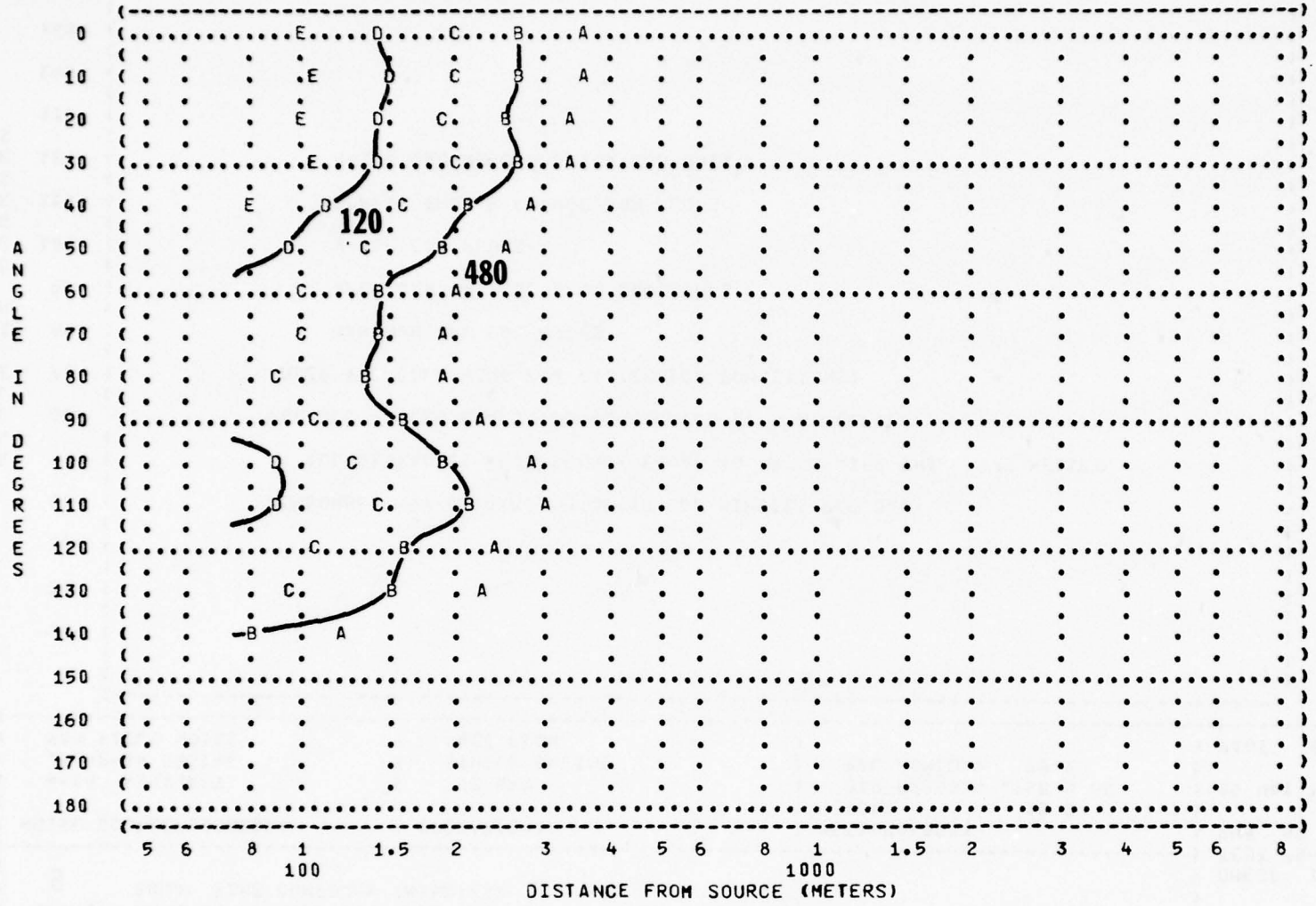


FIGURE 9: MAXIMUM PERMISSIBLE TIME (T) FOR ONE EXPOSURE PER DAY (AFR 161-35, JULY 73)
EQUAL TIME CONTOURS (MINUTES)

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-003
RUN 02
05 MAY 75
PAGE 8

NOISE SOURCE/SUBJECT:
A-6A AIRCRAFT
J52-P-8A ENGINE
FAR FIELD NOISE

OPERATION:
75% RPM
SINGLE ENGINE
FREE FLOW

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

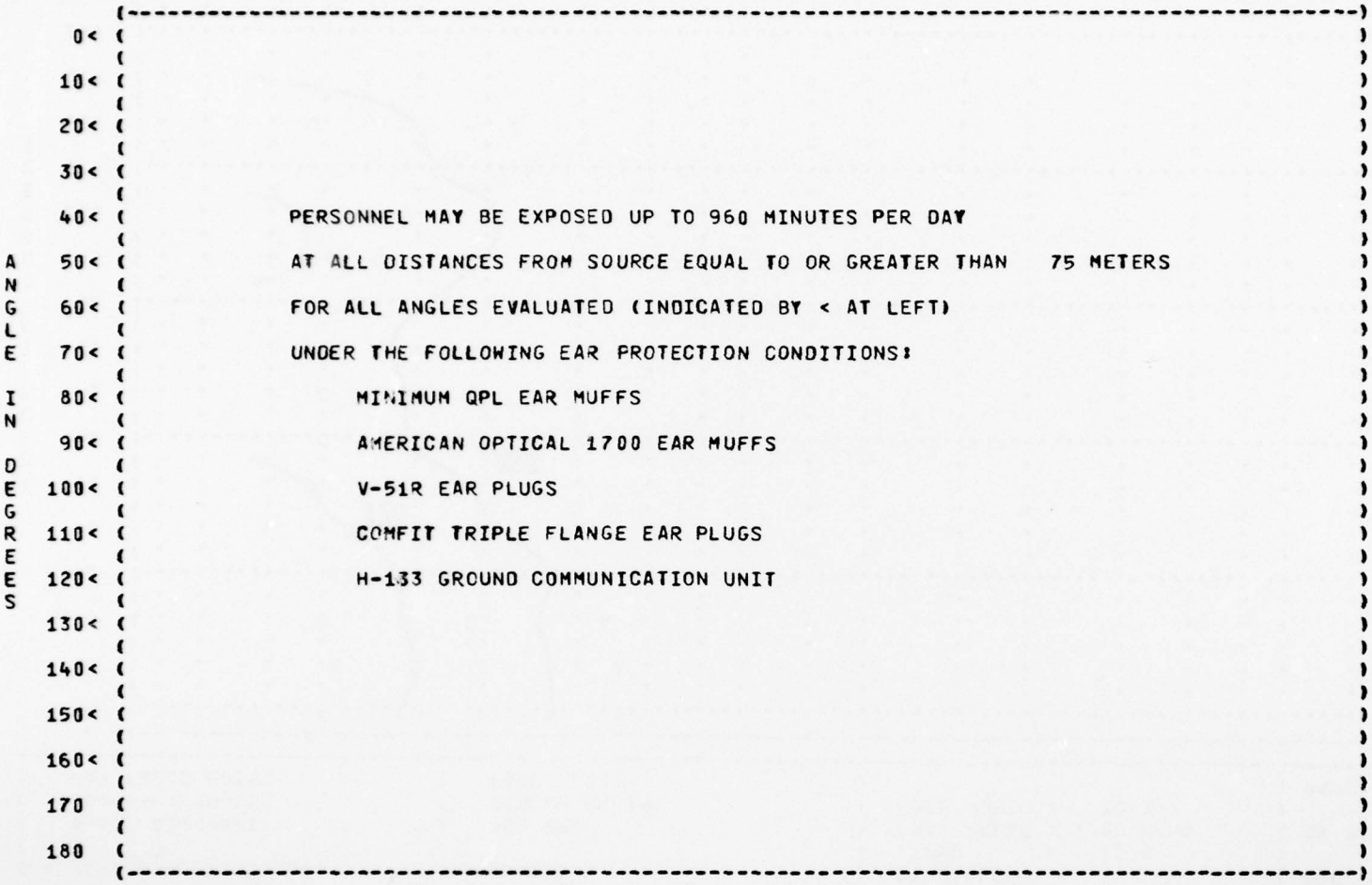


FIGURE 9: MAXIMUM PERMISSIBLE TIME (T) FOR ONE EXPOSURE PER DAY (AFR 161-35, JULY 73)
EQUAL TIME CONTOURS (MINUTES)
NO PROTECTION

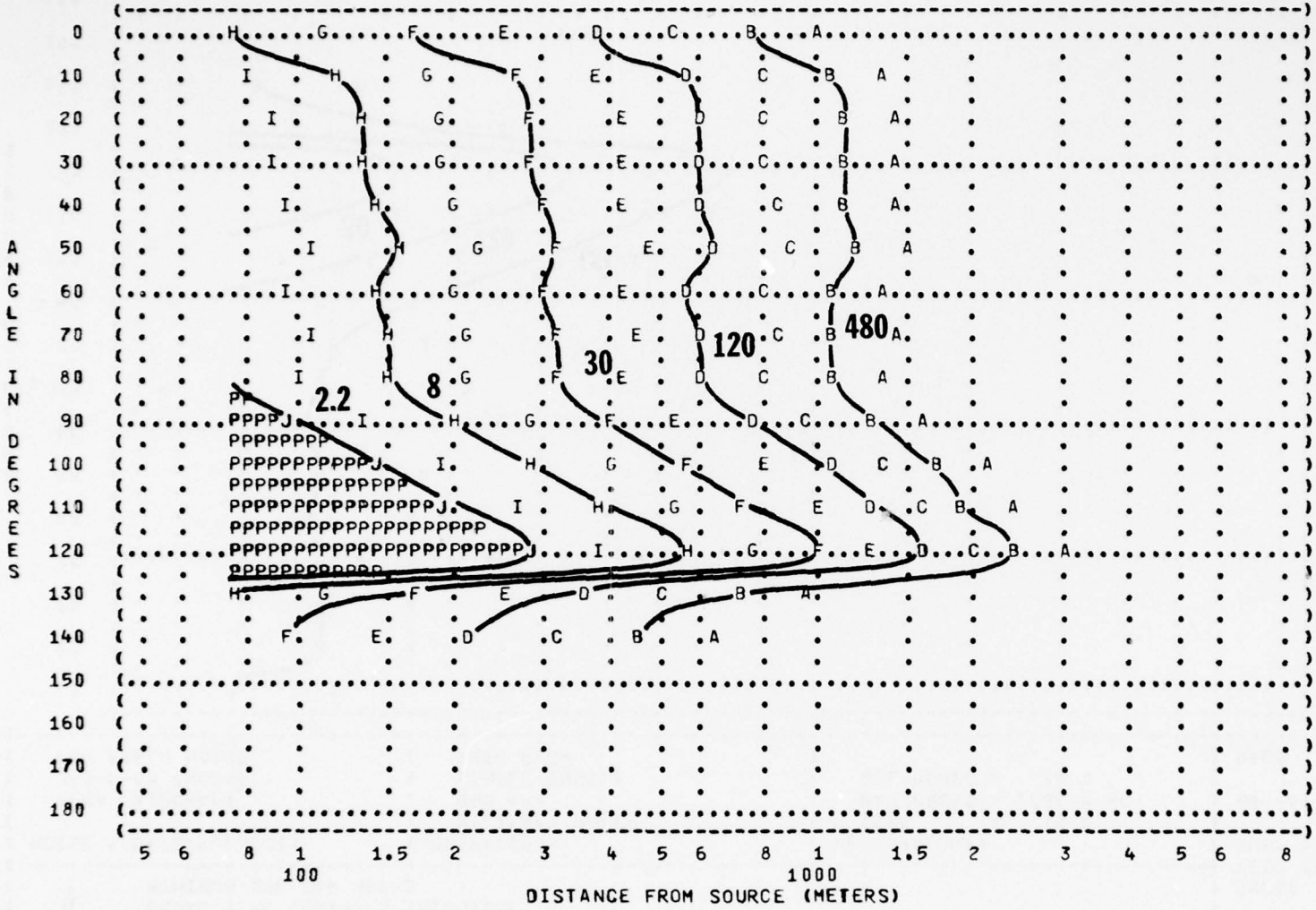
IDENTIFICATION:
OMEGA 1.4
TEST 75-002-003
RUN 03
05 MAY 75
PAGE 7

NOISE SOURCE/SUBJECT:
A-6A AIRCRAFT
J52-P-8A ENGINE
FAR FIELD NOISE

OPERATION:
MILITARY POWER
99% 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
J	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:
A-6A AIRCRAFT
J52-P-8A ENGINE
FAR FIELD NOISE

OPERATION:
MILITARY POWER
99% RPM
SINGLE ENGINE
FREE FLOW

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

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-003
RUN 03
05 MAY 75
PAGE 8

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

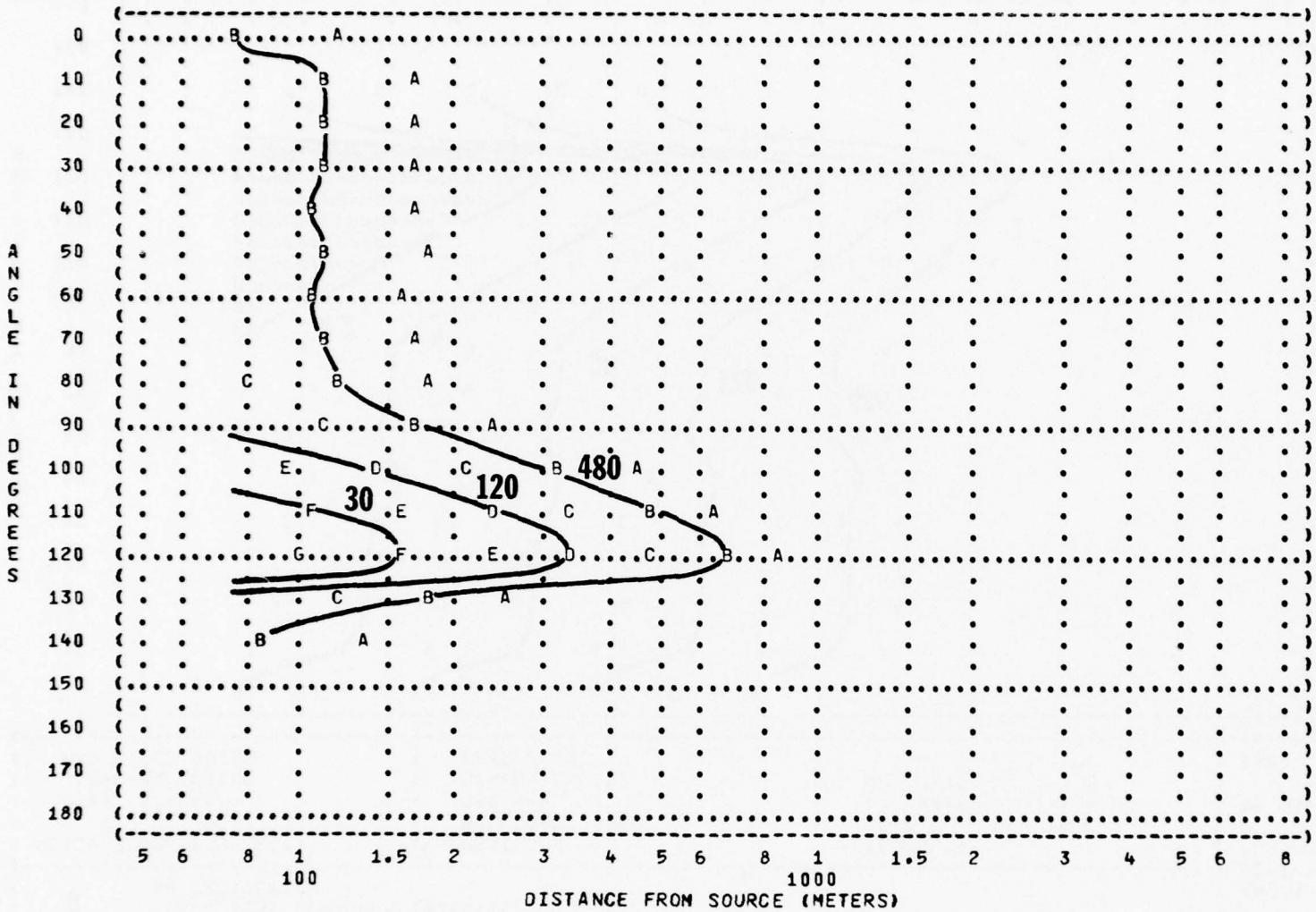


FIGURE 9: MAXIMUM PERMISSIBLE TIME (T) FOR ONE EXPOSURE PER DAY (AFR 161-35, JULY 73)
EQUAL TIME CONTOURS (MINUTES)
AMERICAN OPTICAL 1700 EAR MUFFS

NOISE SOURCE/SUBJECT:
A-6A AIRCRAFT
J52-P-8A ENGINE
FAR FIELD NOISE

OPERATION:
MILITARY POWER
99% RPM
SINGLE ENGINE
FREE FLOW

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

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-003
RUN 03
05 MAY 75
PAGE 9

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

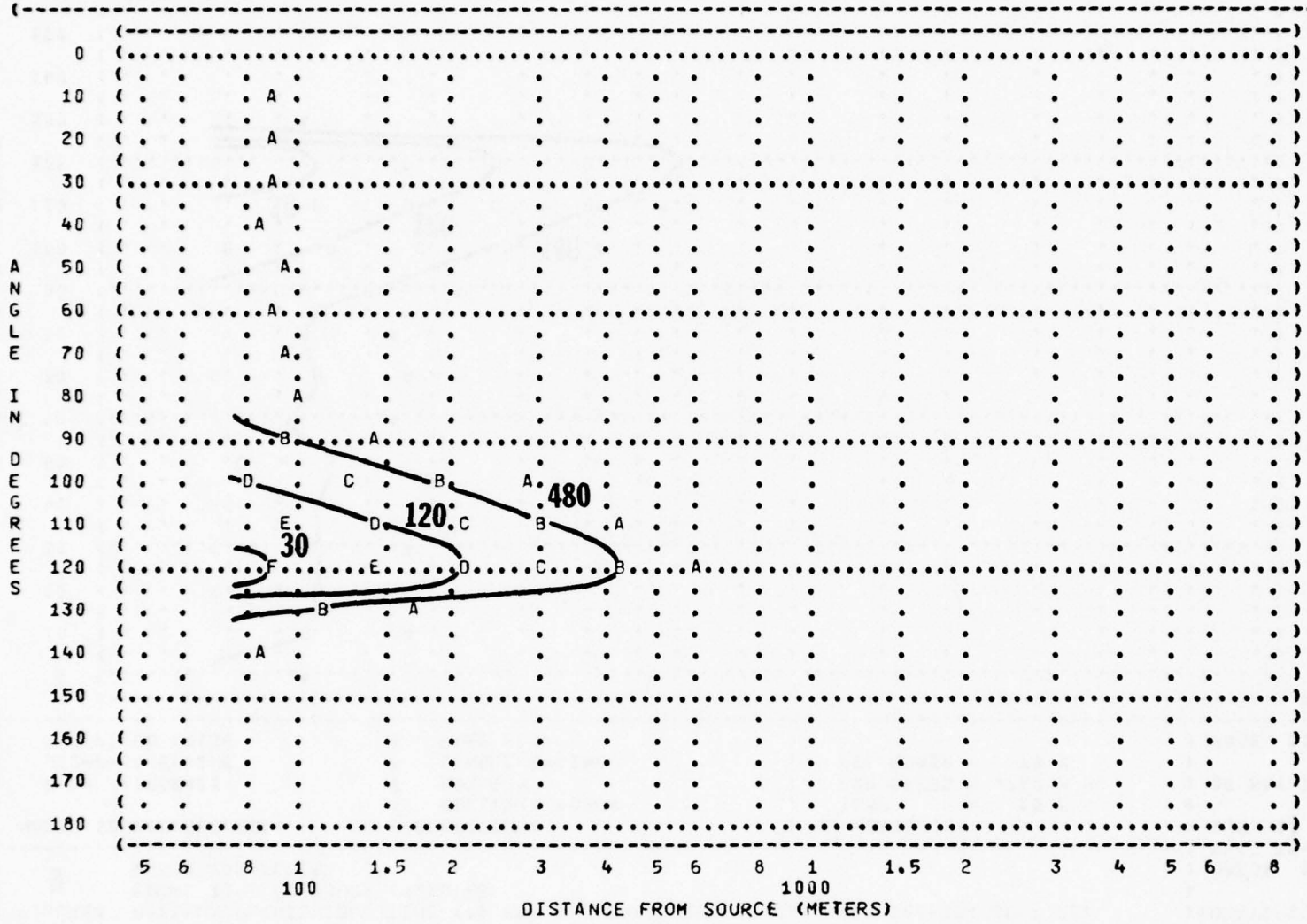


FIGURE 9: MAXIMUM PERMISSIBLE TIME (T) FOR ONE EXPOSURE PER DAY (AFR 161-35, JULY 73)
EQUAL TIME CONTOURS (MINUTES)
V-51R EAR PLUGS

NOISE SOURCE/SUBJECT:
A-6A AIRCRAFT
J52-P-8A ENGINE
FAR FIELD NOISE

OPERATION:
MILITARY POWER
99% RPM
SINGLE ENGINE
FREE FLOW

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

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-003
RUN 03
05 MAY 75
PAGE 10

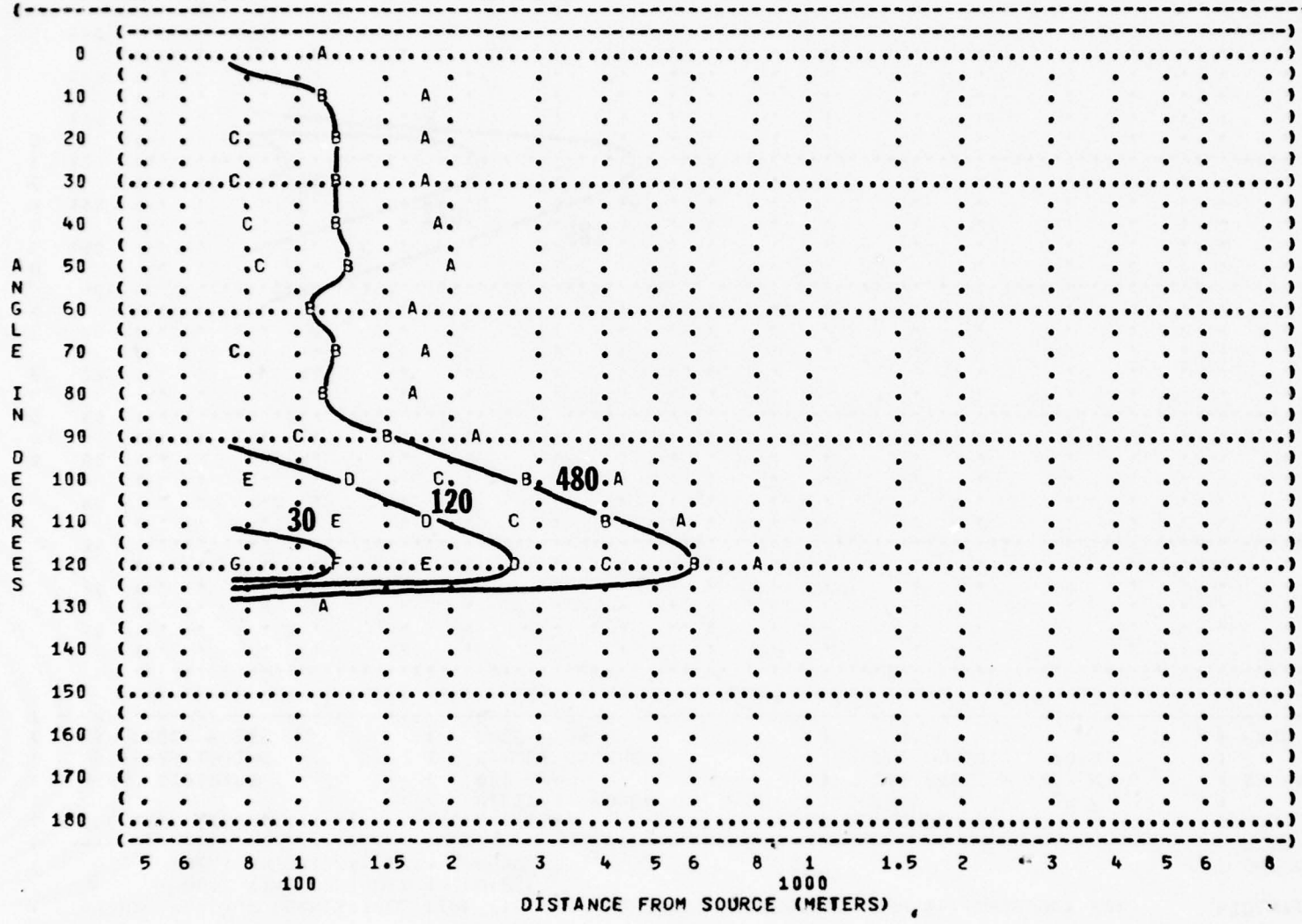


FIGURE: 9

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 75-002-003
RUN 03
05 MAY 75
PAGE 11

NOISE SOURCE/SUBJECT:
A-6A AIRCRAFT
J52-P-8A ENGINE
FAR FIELD NOISE

OPERATION:
MILITARY POWER
99% 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

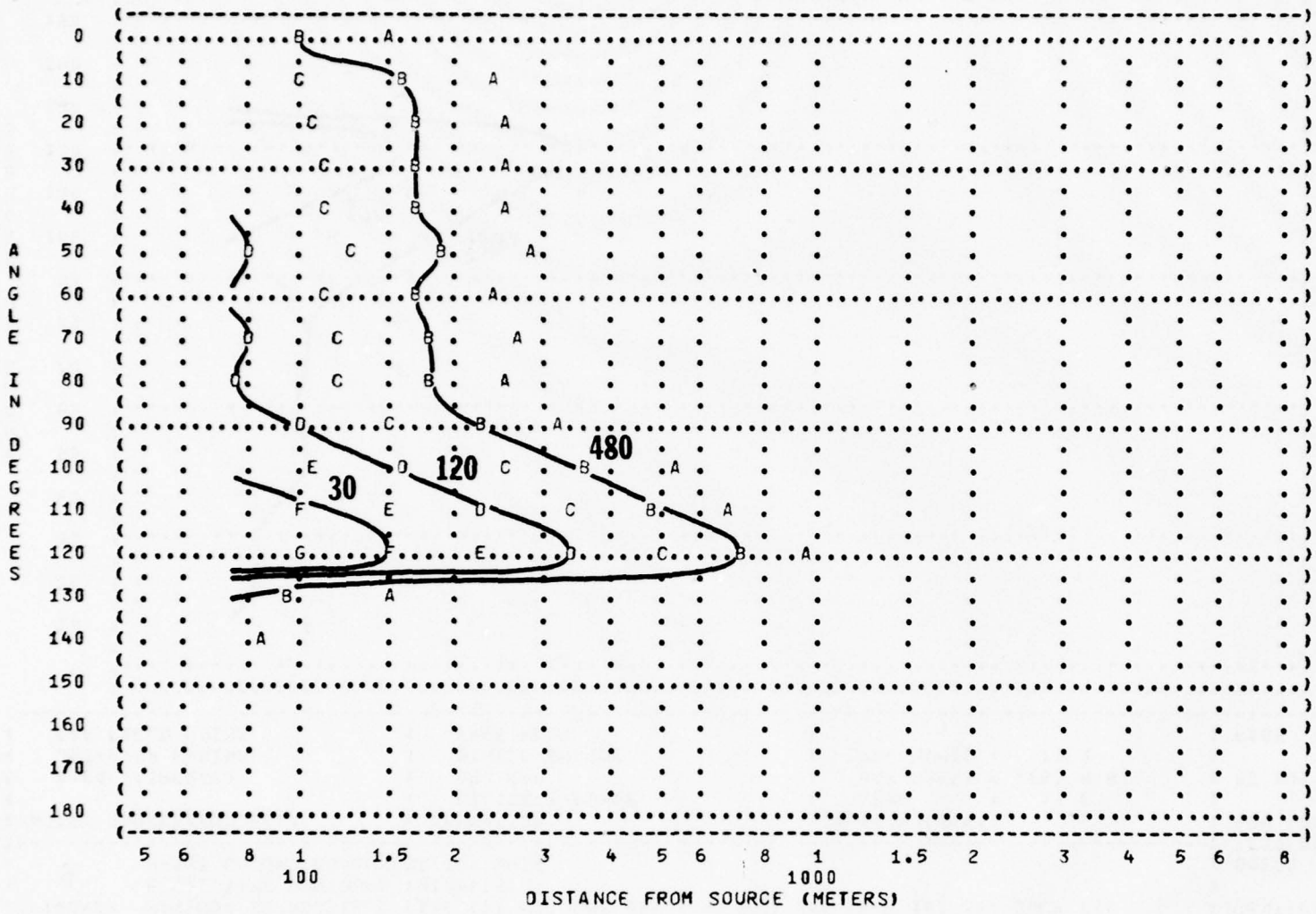


FIGURE: 9

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

NOISE SOURCE/SUBJECT:
A-6A AIRCRAFT
J52-P-8A ENGINE
FAR FIELD NOISE

OPERATION:
MILITARY POWER
99% RPM
SINGLE ENGINE
FREE FLOW

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

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-003
RUN 03
05 MAY 75
PAGE 12

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

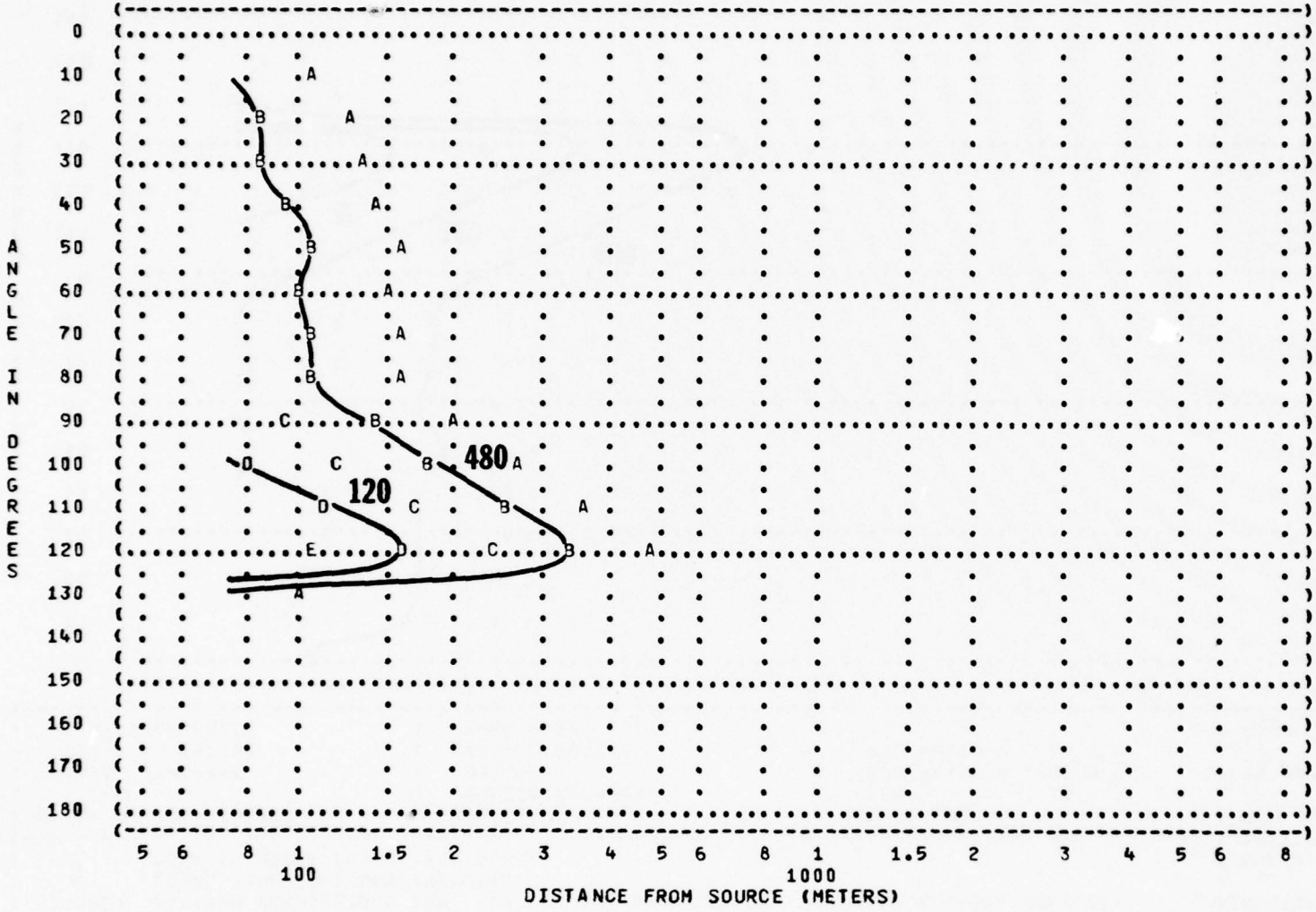


FIGURE 9: MAXIMUM PERMISSIBLE TIME (T) FOR ONE EXPOSURE PER DAY (AFR 161-35, JULY 73)
EQUAL TIME CONTOURS (MINUTES)
NO PROTECTION

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-003
RUN 04
05 MAY 75
PAGE 7

NOISE SOURCE/SUBJECT:
A-6A AIRCRAFT
J52-P-8A ENGINE
FAR FIELD NOISE

OPERATION:
IDLE POWER
60% 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

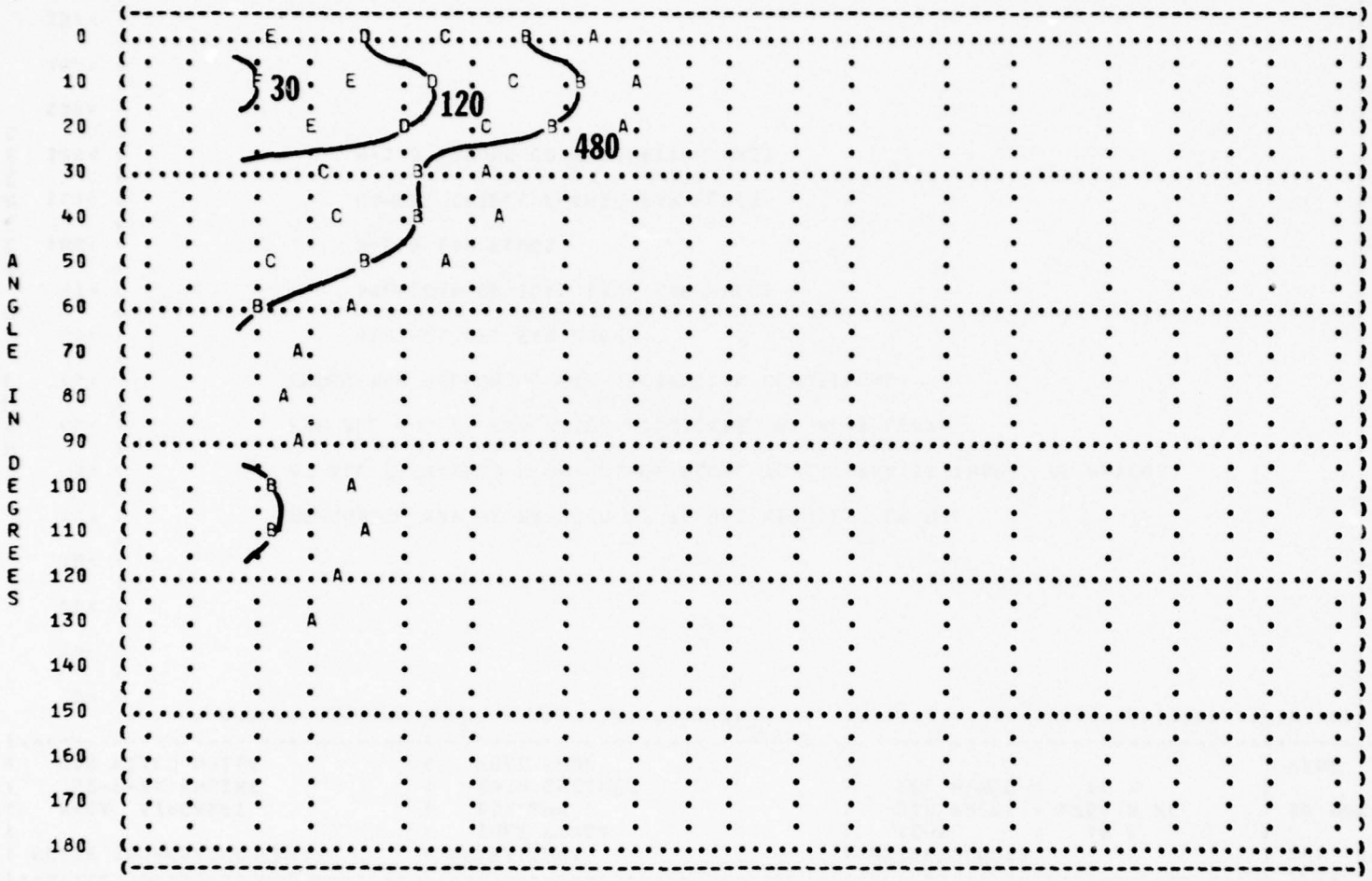


FIGURE 9: MAXIMUM PERMISSIBLE TIME (T) FOR ONE EXPOSURE PER DAY (AFR 161-35, JULY 73)
EQUAL TIME CONTOURS (MINUTES)

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-003
RUN 04
05 MAY 75
PAGE 8

NOISE SOURCE/SUBJECT:
A-6A AIRCRAFT
J52-P-8A ENGINE
FAR FIELD NOISE

OPERATION:
IDLE POWER
60% RPM
BOTH ENGINES
FREE FLOW

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

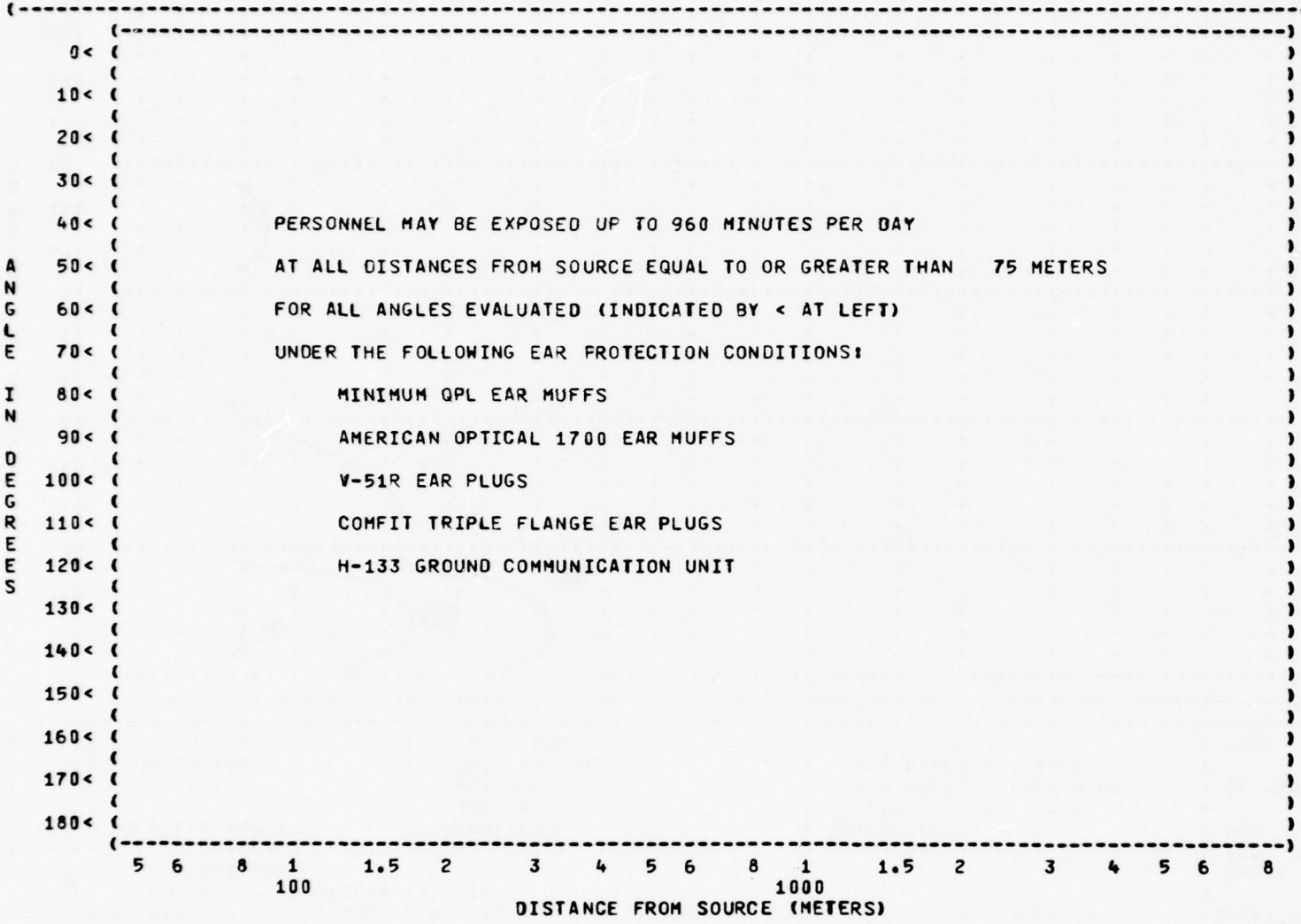


FIGURE 9: MAXIMUM PERMISSIBLE TIME (T) FOR ONE EXPOSURE PER DAY (AFR 161-35, JULY 73)
EQUAL TIME CONTOURS (MINUTES)
NO PROTECTION

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-003
RUN 05
05 MAY 75
PAGE 7

NOISE SOURCE/SUBJECT:
A-6A AIRCRAFT
J52-P-8A 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
C	240
D	120
E	60
F	30
G	15

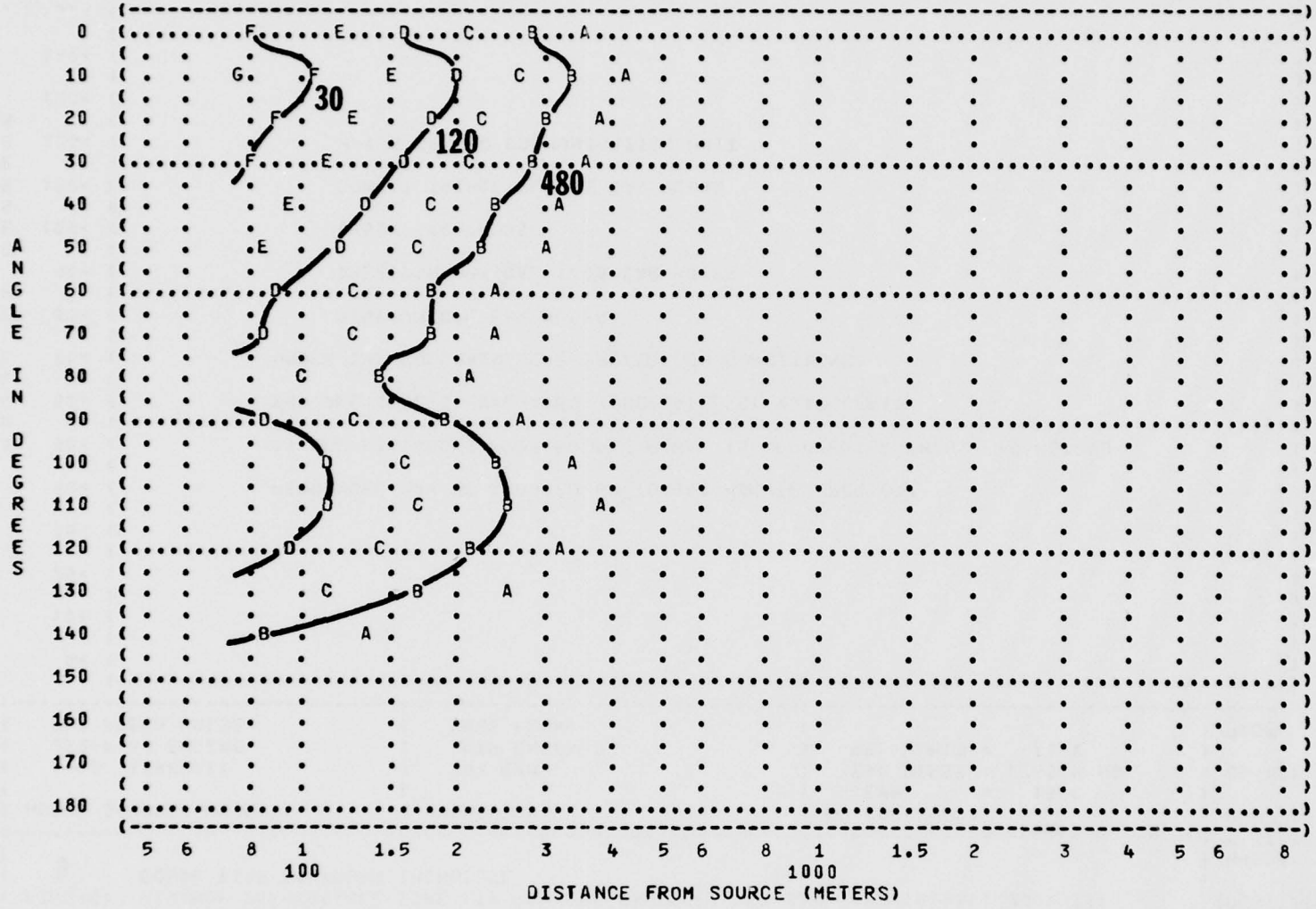


FIGURE: 9	MAXIMUM PERMISSIBLE TIME (T) FOR ONE EXPOSURE PER DAY (AFR 161-35, JULY 73) EQUAL TIME CONTOURS (MINUTES)	IDENTIFICATION:
NOISE SOURCE/SUBJECT: A-6A AIRCRAFT J52-P-8A ENGINE FAR FIELD NOISE	OPERATION: 75% RPM BOTH ENGINES FREE FLOW	METEOROLOGY: TEMP = 15 C BAR PRESS = .760 M HG REL HUMID = 70 %	OMEGA 1.4 TEST 75-002-003 RUN 05 05 MAY 75 PAGE 8

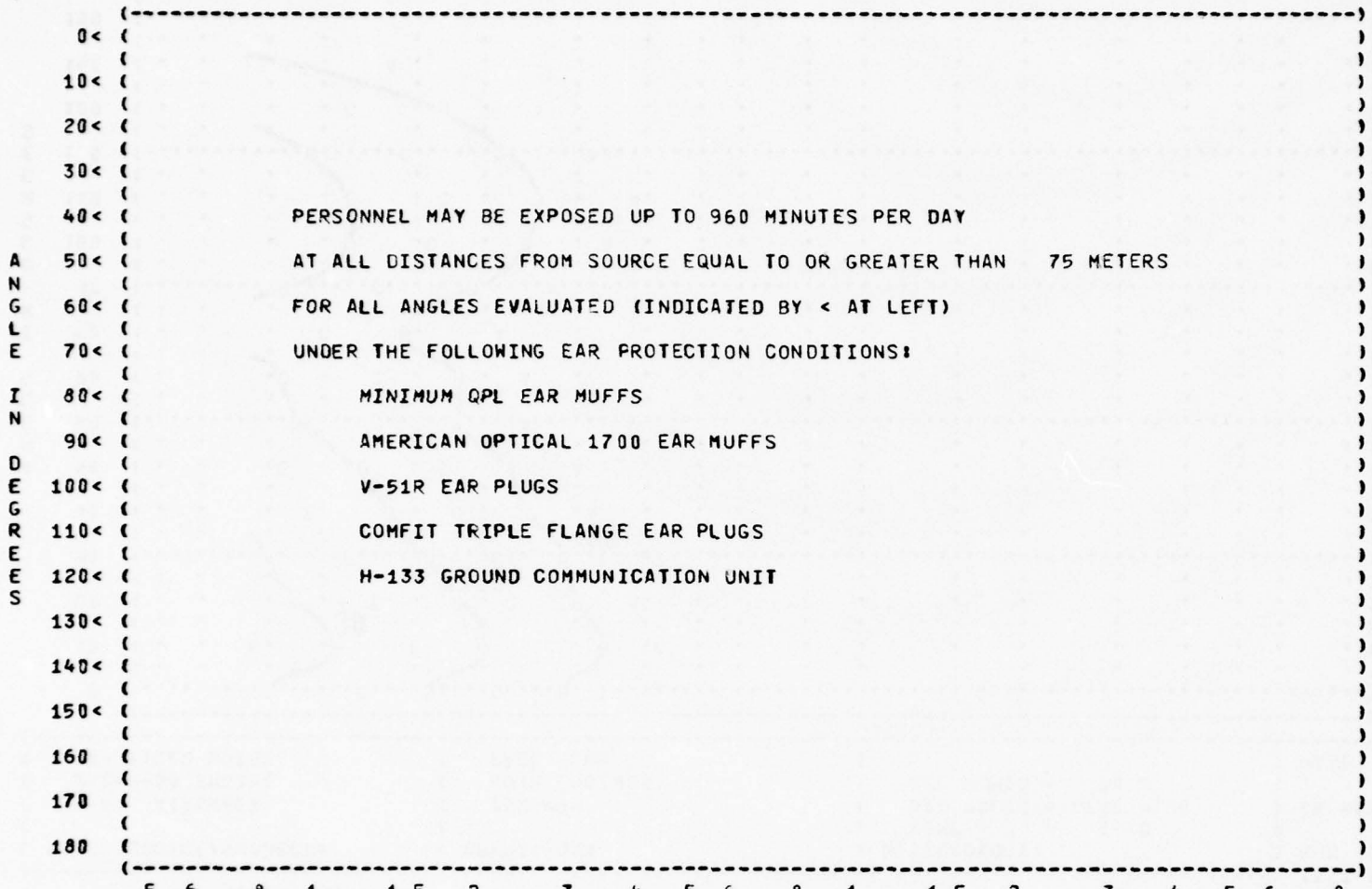


FIGURE 9: MAXIMUM PERMISSIBLE TIME (T) FOR ONE EXPOSURE PER DAY (AFR 161-35, JULY 73)
EQUAL TIME CONTOURS (MINUTES)
NO PROTECTION

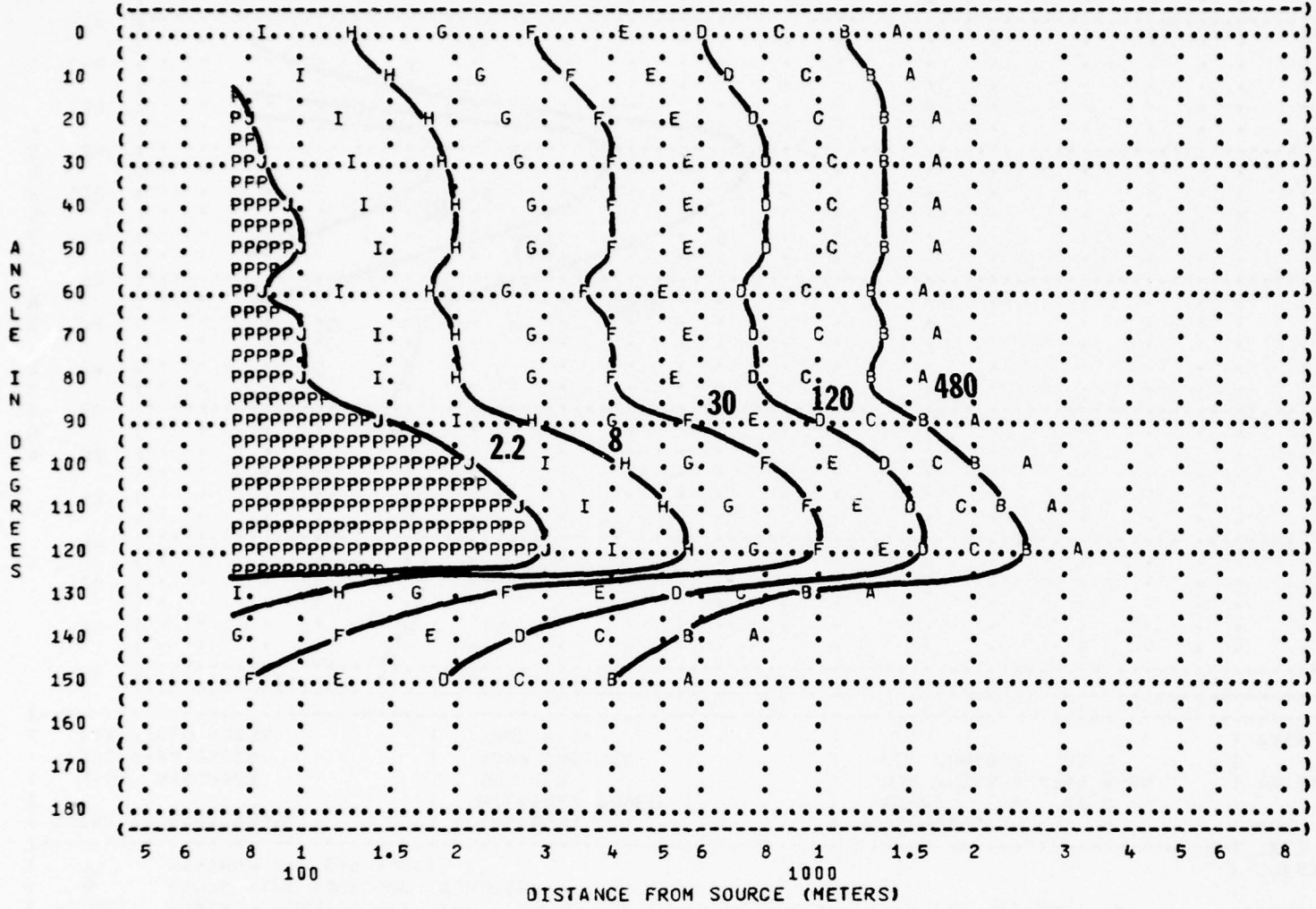
IDENTIFICATION:
OMEGA 1.4
TEST 75-002-003
RUN 06
05 MAY 75
PAGE 7

NOISE SOURCE/SUBJECT:
A-6A AIRCRAFT
J52-P-8A ENGINE
FAR FIELD NOISE

OPERATION:
MILITARY POWER
99% 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
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:
A-6A AIRCRAFT
J52-P-8A ENGINE
FAR FIELD NOISE

OPERATION:
MILITARY POWER
99% RPM
BOTH ENGINES
FREE FLOW

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

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-003
RUN 06
05 MAY 75
PAGE 8

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

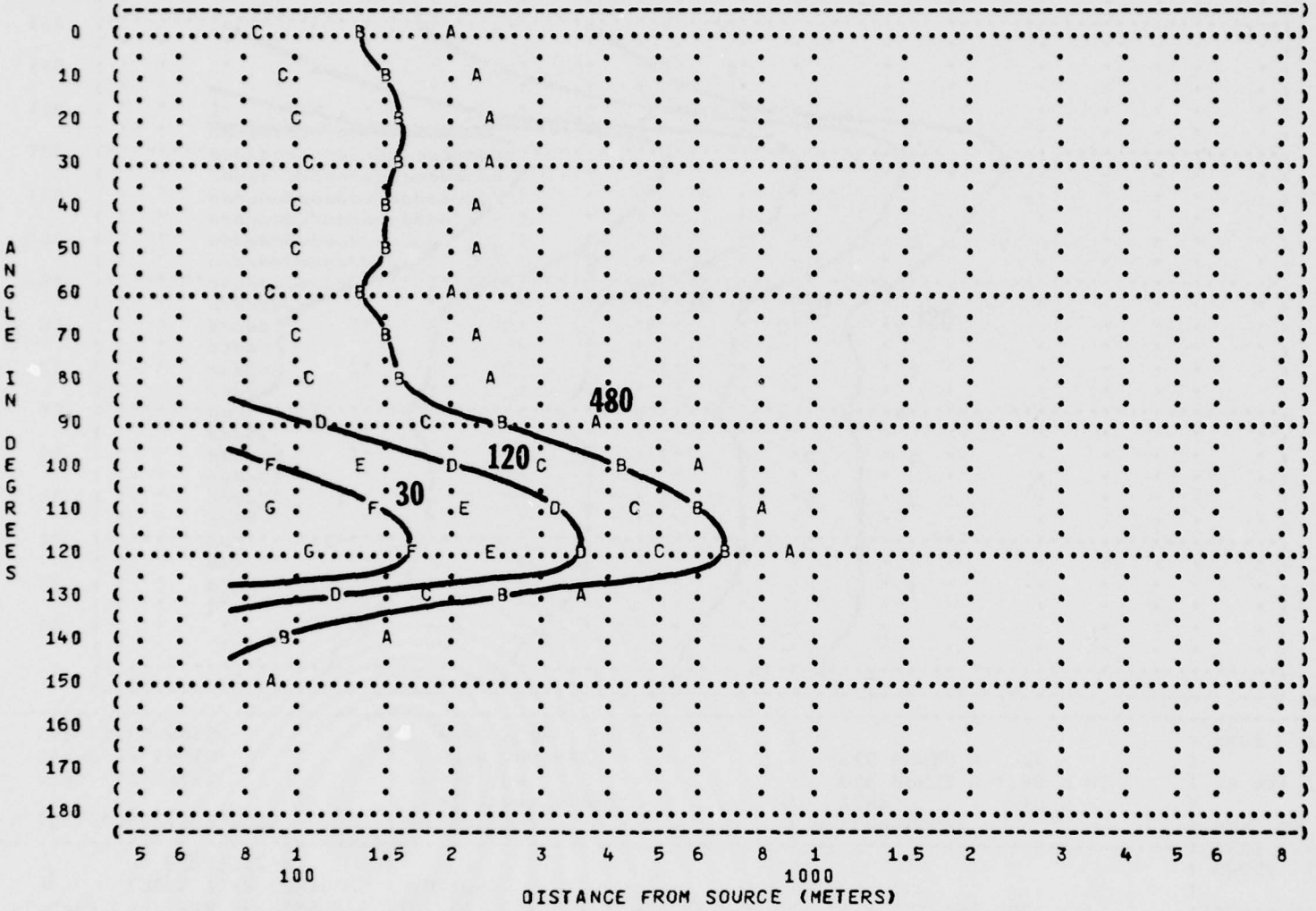


FIGURE 9: MAXIMUM PERMISSIBLE TIME (T) FOR ONE EXPOSURE PER DAY (AFR 161-35, JULY 73)
EQUAL TIME CONTOURS (MINUTES)
AMERICAN OPTICAL 1700 EAR MUFFS

NOISE SOURCE/SUBJECT:
A-6A AIRCRAFT
J52-P-8A ENGINE
FAR FIELD NOISE

OPERATION:
MILITARY POWER
99% RPM
BOTH ENGINES
FREE FLOW

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

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-003
RUN 06
05 MAY 75
PAGE 9

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

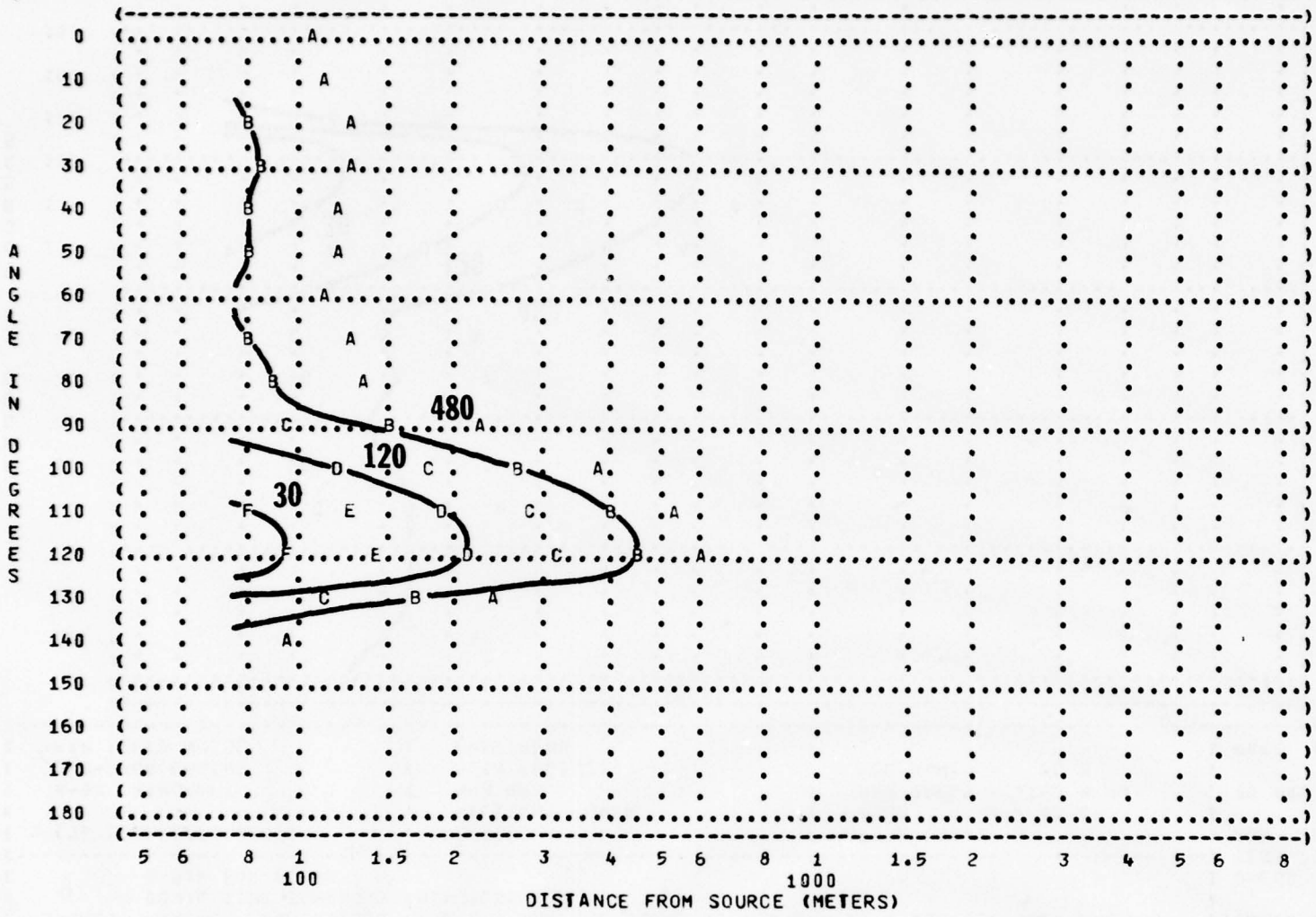


FIGURE 9: MAXIMUM PERMISSIBLE TIME (T) FOR ONE EXPOSURE PER DAY (AFR 161-35, JULY 73)
EQUAL TIME CONTOURS (MINUTES)
V-51R EAR PLUGS

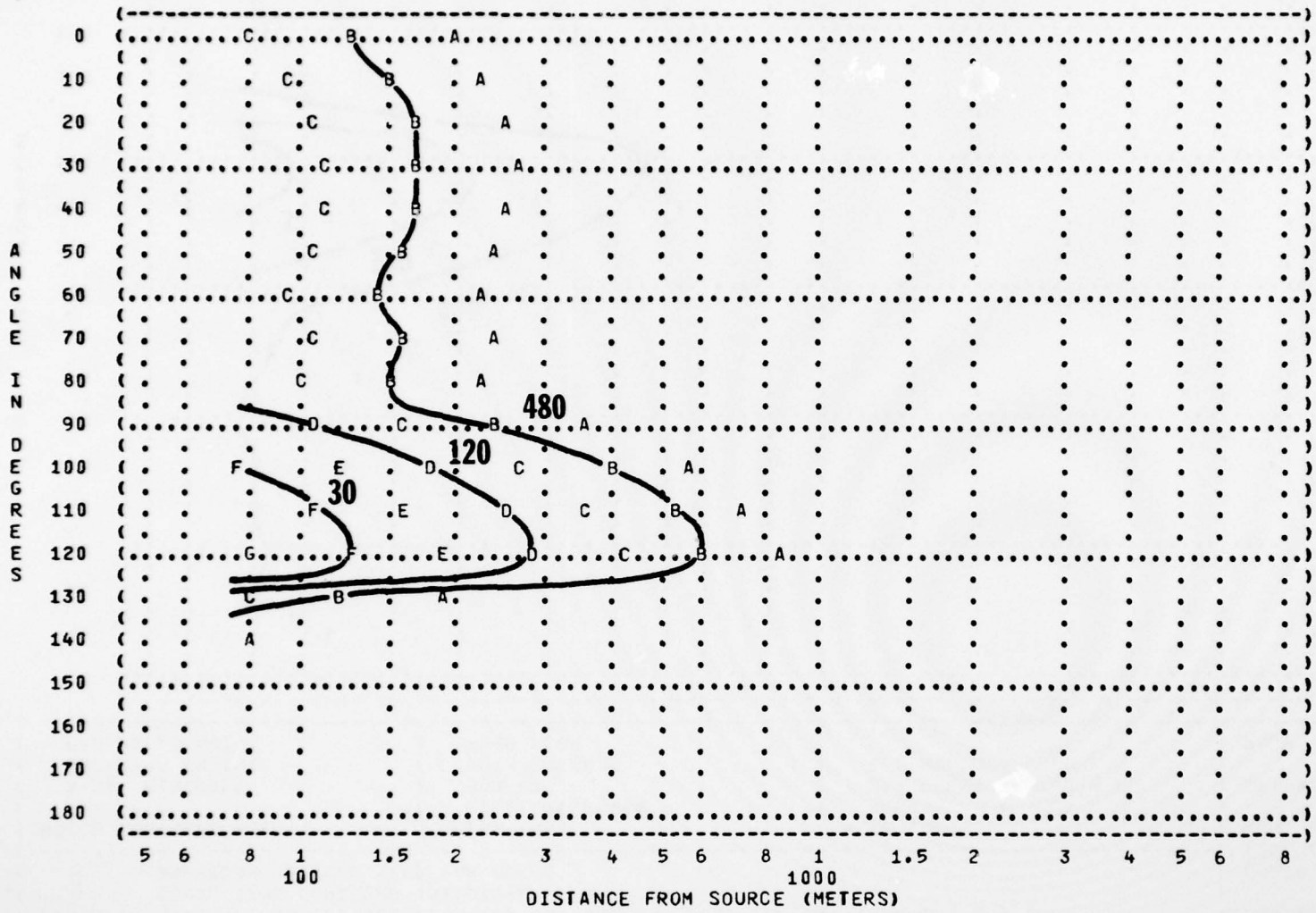
IDENTIFICATION:
OMEGA 1.4
TEST 75-002-003
RUN 06
05 MAY 75
PAGE 10

NOISE SOURCE/SUBJECT:
A-6A AIRCRAFT
J52-P-8A ENGINE
FAR FIELD NOISE

OPERATION:
MILITARY POWER
99% 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



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 75-002-003
RUN 06
05 MAY 75
PAGE 11

NOISE SOURCE/SUBJECT:
A-6A AIRCRAFT
J52-P-8A ENGINE
FAR FIELD NOISE

OPERATION:
MILITARY POWER
99% 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

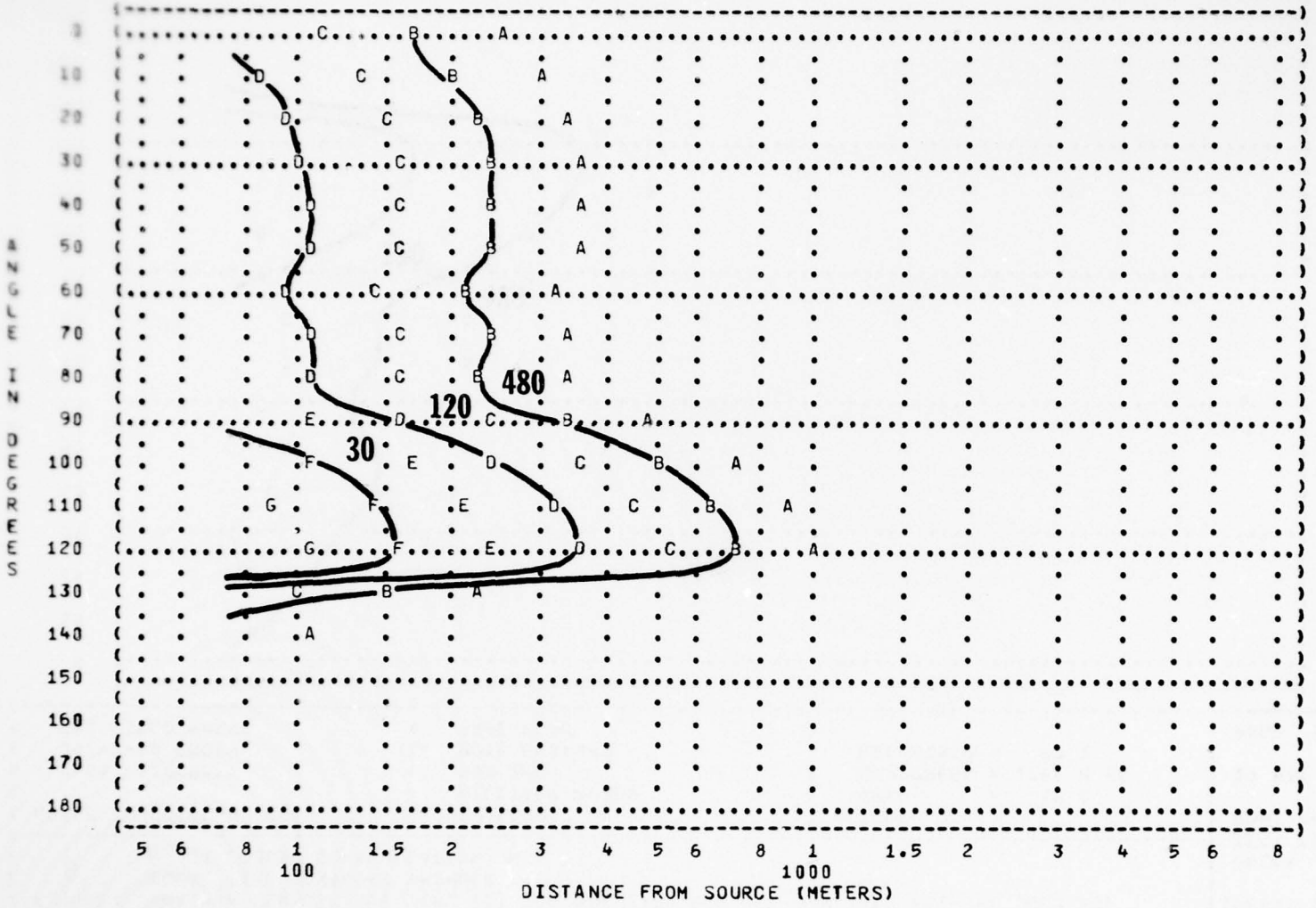


FIGURE: 9

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

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-003
RUN 06
05 MAY 75
PAGE 12

NOISE SOURCE/SUBJECT:
A-6A AIRCRAFT
J52-P-8A ENGINE
FAR FIELD NOISE

OPERATION:
MILITARY POWER
99% RPM
BOTH ENGINES
FREE FLOW

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

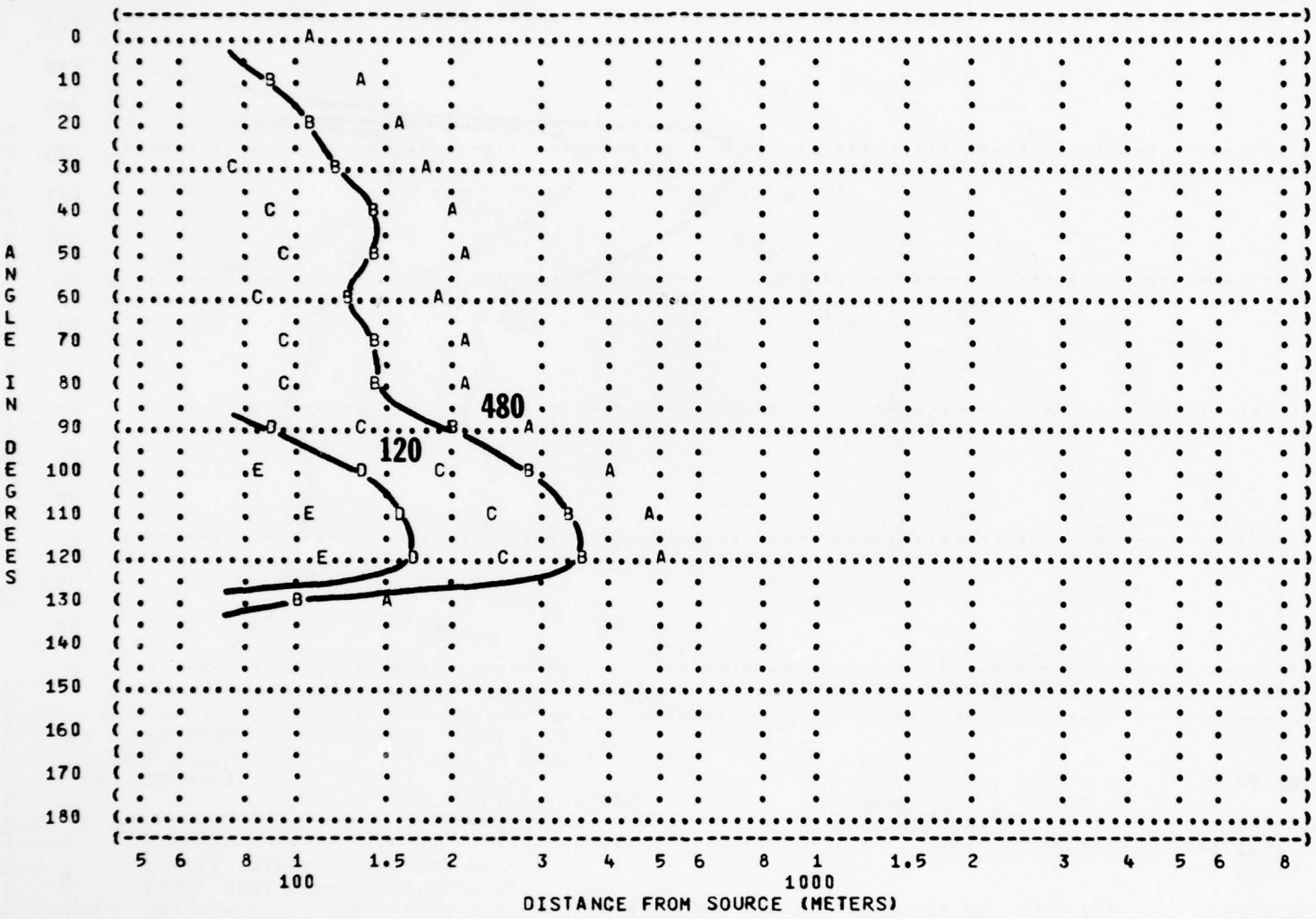


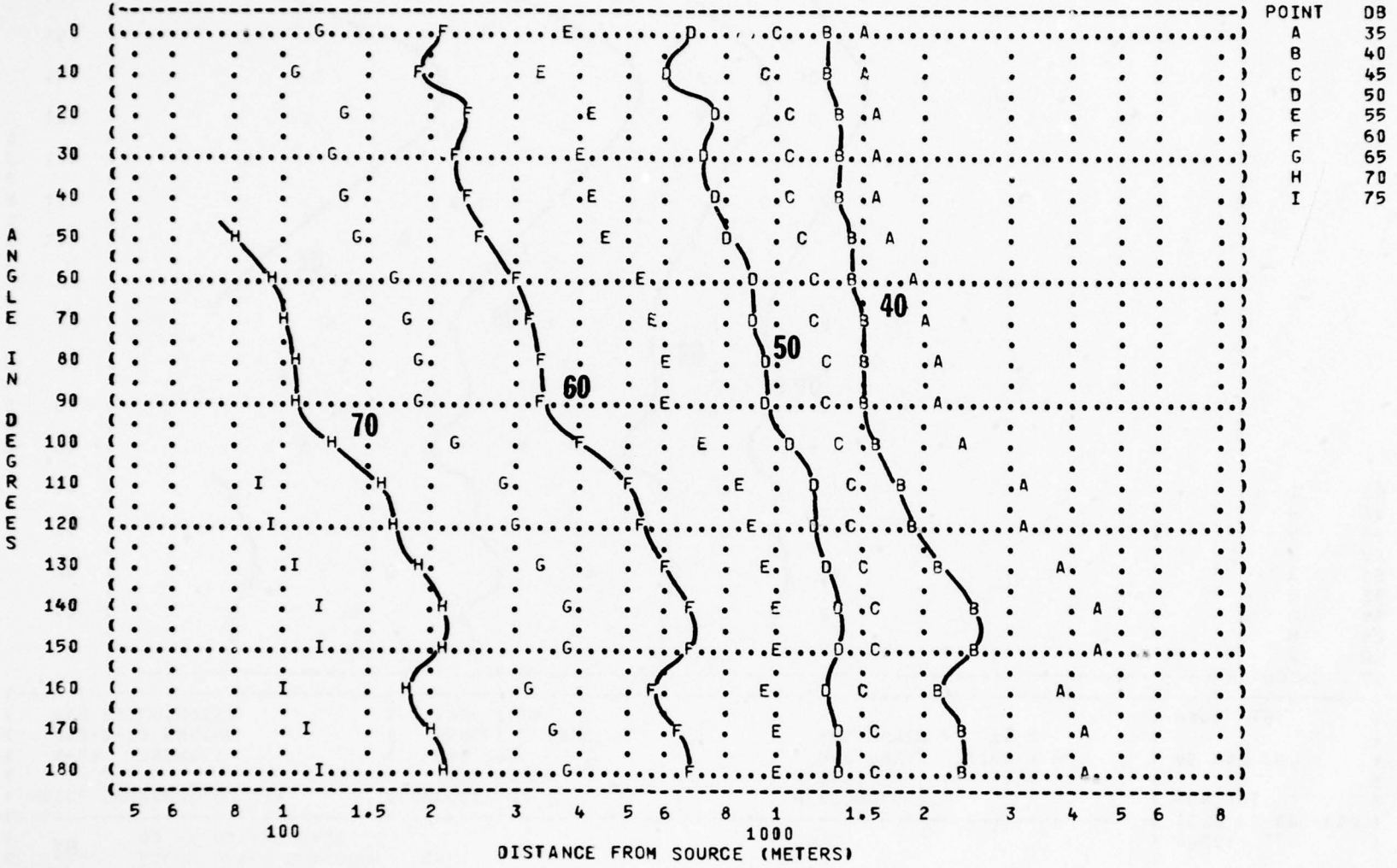
FIGURE 10 SOUND PRESSURE LEVEL (SPL) EQUAL LEVEL CONTOURS (DB) 31.5 HZ OCTAVE BAND

NOISE SOURCE/SUBJECT:
A-6A AIRCRAFT
J52-P-8A ENGINE
FAR FIELD NOISE

OPERATION:
IDLE POWER
60% RPM
SINGLE ENGINE
FREE FLOW

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

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-003
RUN 01
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

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

NOISE SOURCE/SUBJECT:
A-6A AIRCRAFT
J52-P-8A ENGINE
FAR FIELD NOISE

OPERATION:
IDLE POWER
60% RPM
SINGLE ENGINE
FREE FLOW

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

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-003
RUN 01
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

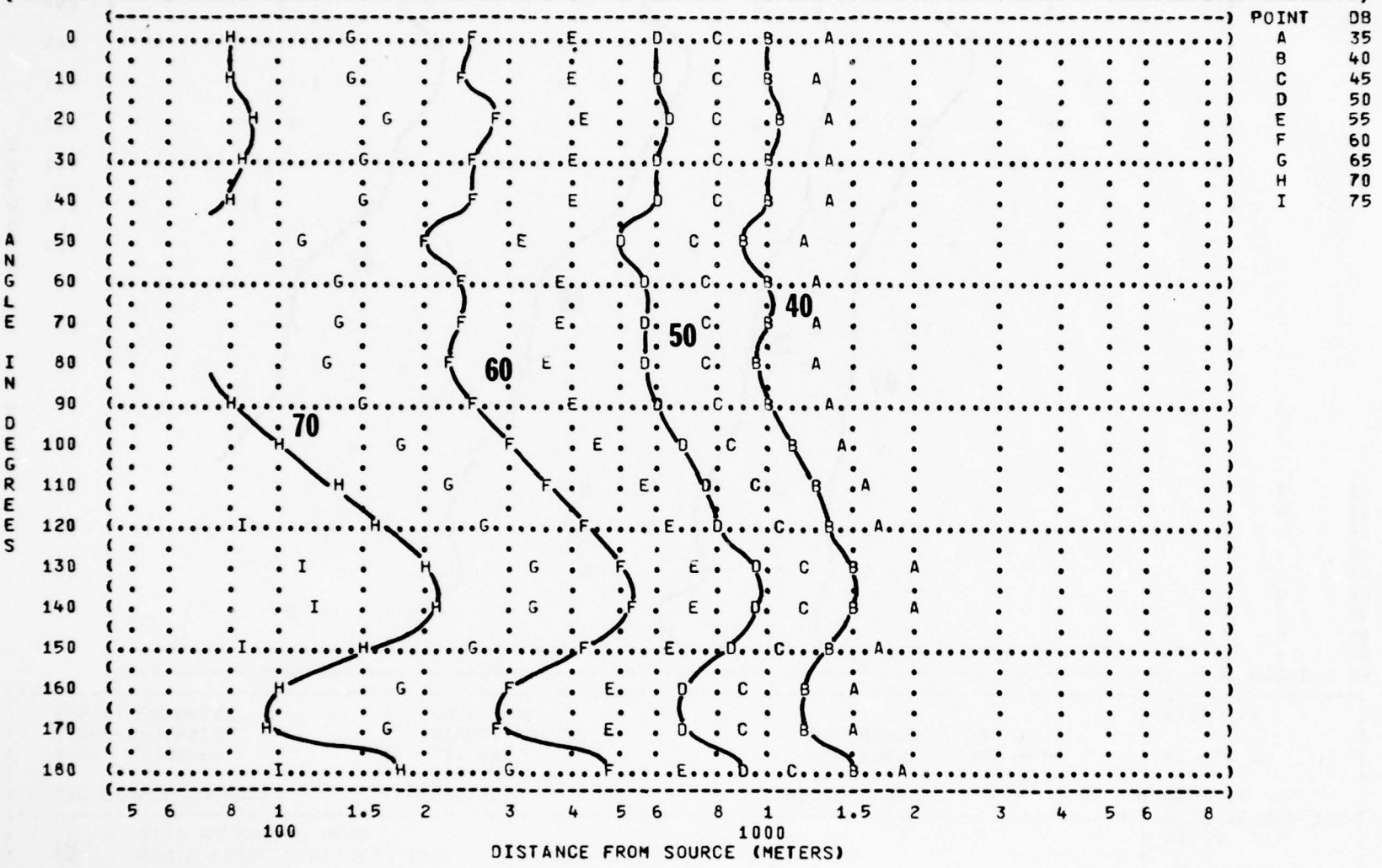


FIGURE: 10

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

NOISE SOURCE/SUBJECT:
A-6A AIRCRAFT
J52-P-8A ENGINE
FAR FIELD NOISE

OPERATION:
IDLE POWER
60% RPM
SINGLE ENGINE
FREE FLOW

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

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-003
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

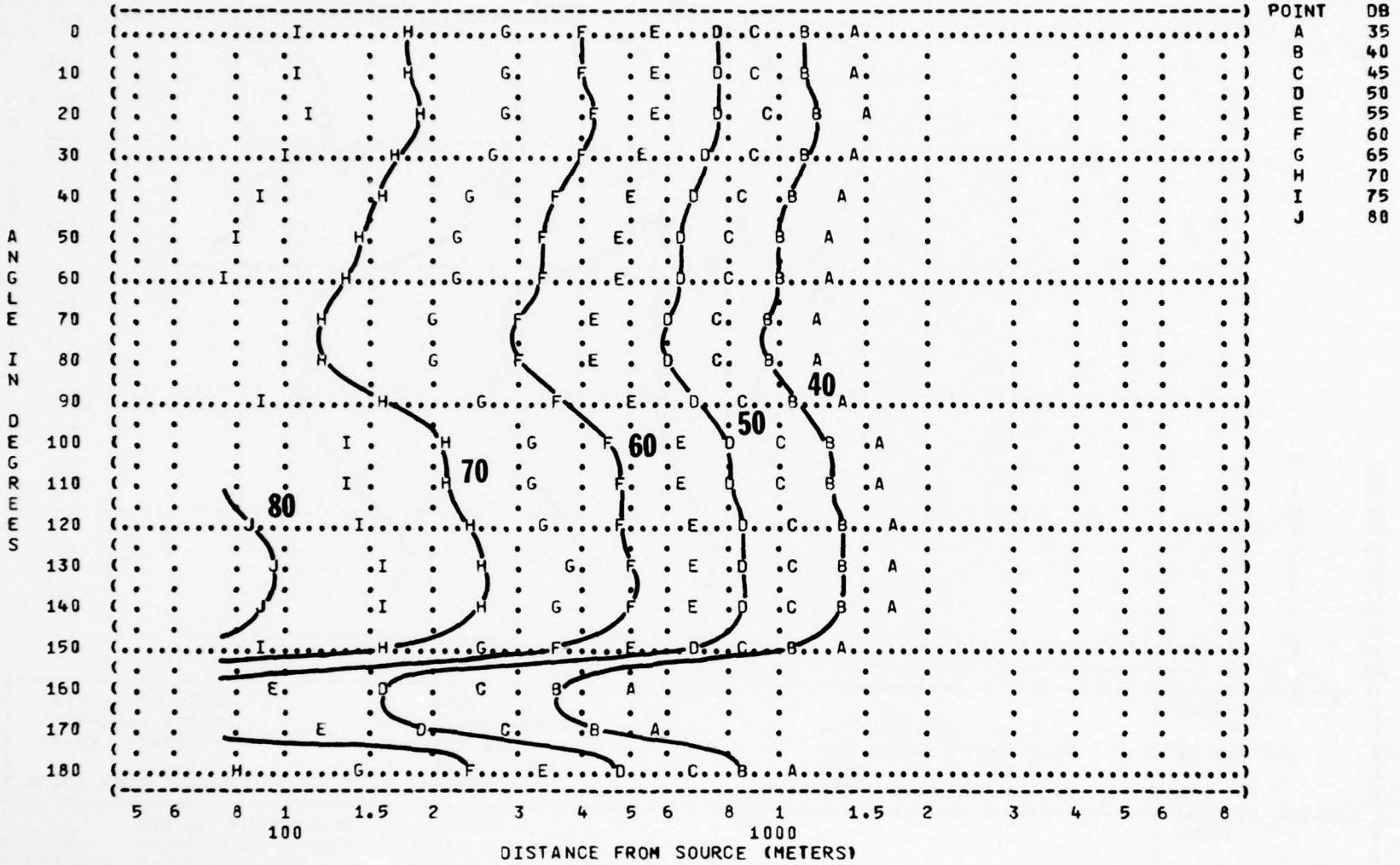


FIGURE: 10 SOUND PRESSURE LEVEL (SPL) EQUAL LEVEL CONTOURS (DB) 250 HZ OCTAVE BAND

NOISE SOURCE/SUBJECT:
A-6A AIRCRAFT
J52-P-8A ENGINE
FAR FIELD NOISE

OPERATION:
IDLE POWER
60% RPM
SINGLE ENGINE
FREE FLOW

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

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-003
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

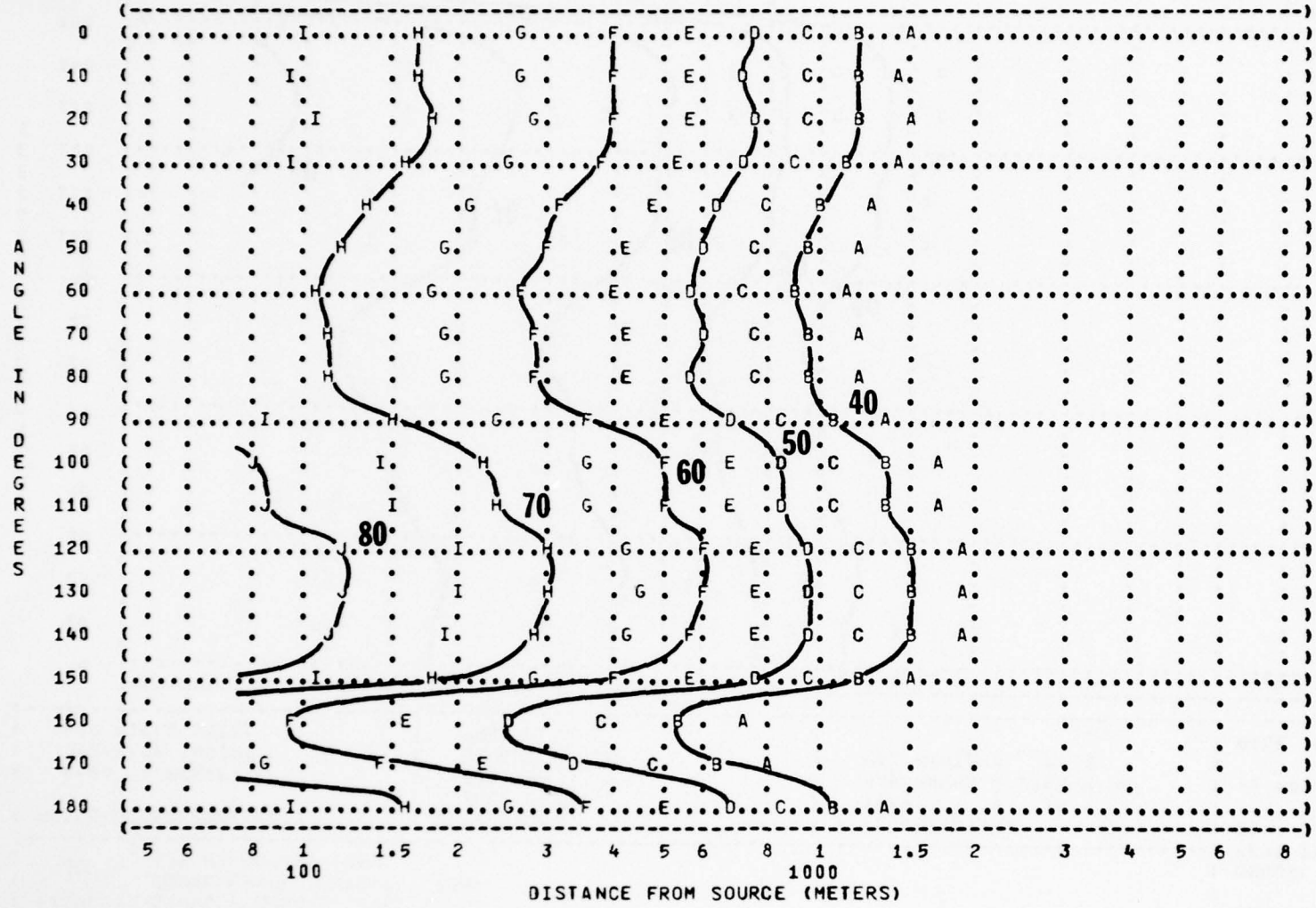


FIGURE 10: SOUND PRESSURE LEVEL (SPL) EQUAL LEVEL CONTOURS (DB) 500 HZ OCTAVE BAND

NOISE SOURCE/SUBJECT:
A-6A AIRCRAFT
J52-P-8A ENGINE
FAR FIELD NOISE

OPERATION:
IDLE POWER
60% RPM
SINGLE ENGINE
FREE FLOW

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

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-003
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

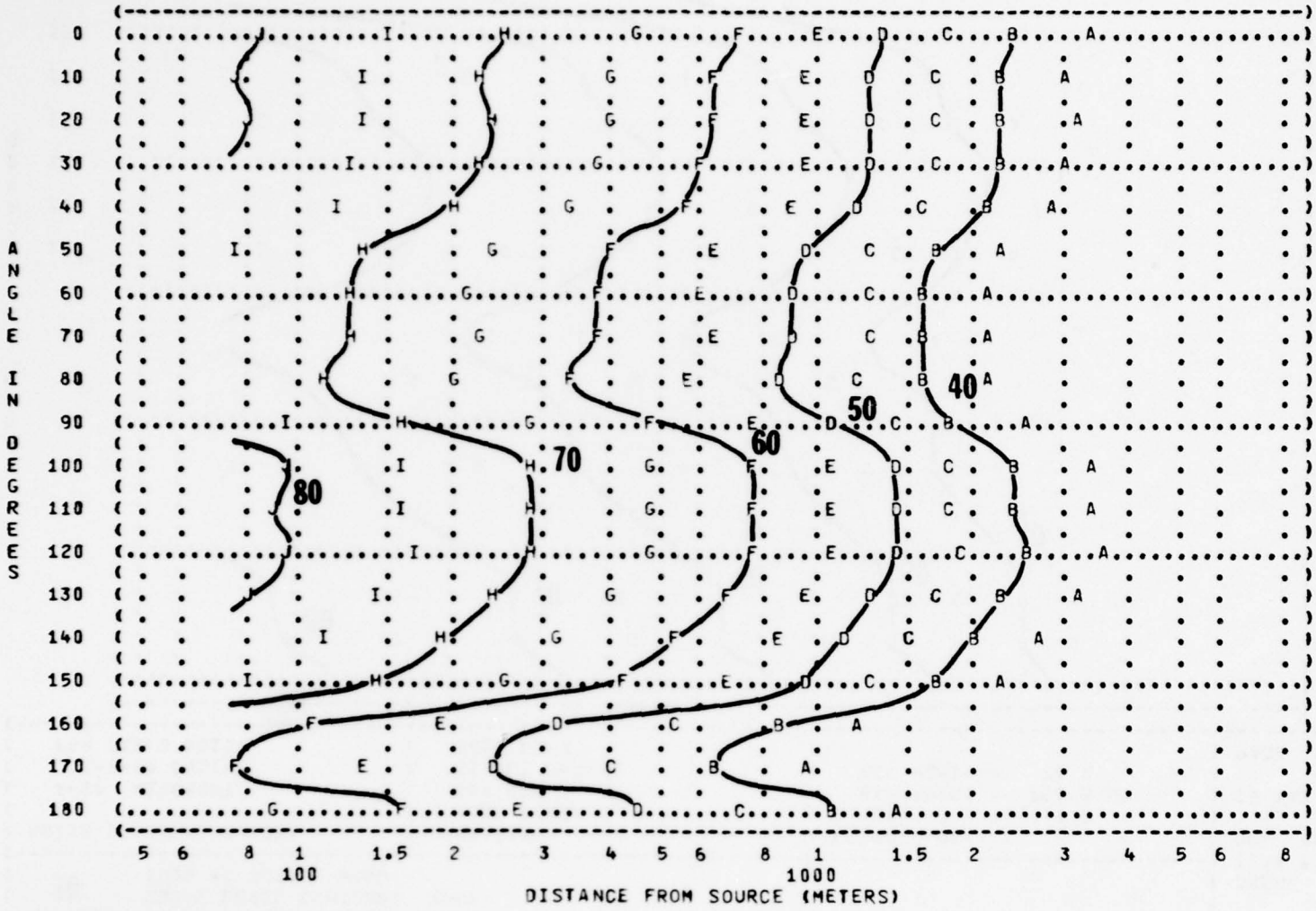


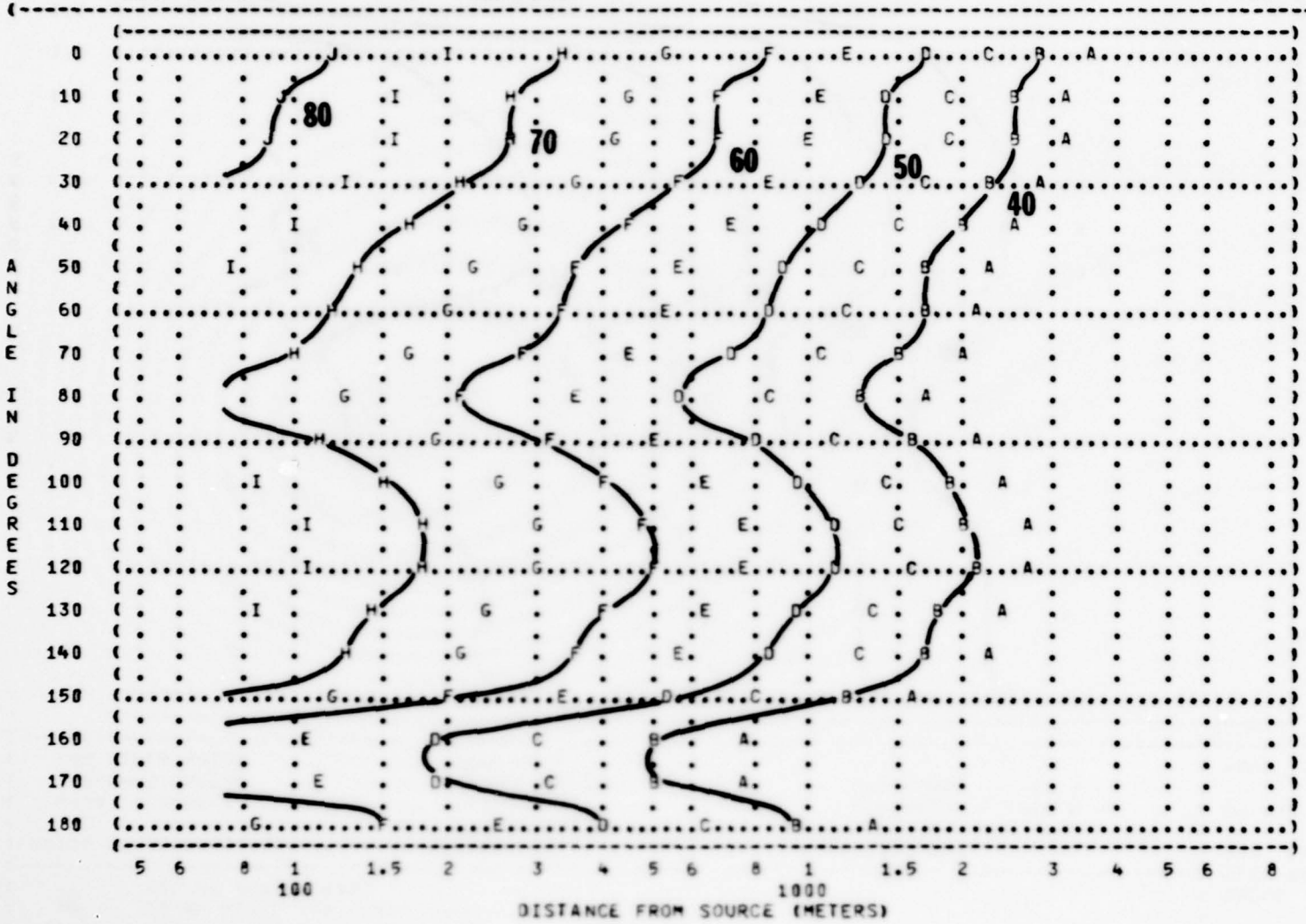
FIGURE 10: SOUND PRESSURE LEVEL (SPL) EQUAL LEVEL CONTOURS (DB) 1000 HZ OCTAVE BAND

NOISE SOURCE/SUBJECT:
A-6A AIRCRAFT
J52-P-8A ENGINE
FAR FIELD NOISE

OPERATION:
IDLE POWER
60% RPM
SINGLE ENGINE
FREE FLOW

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

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-003
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

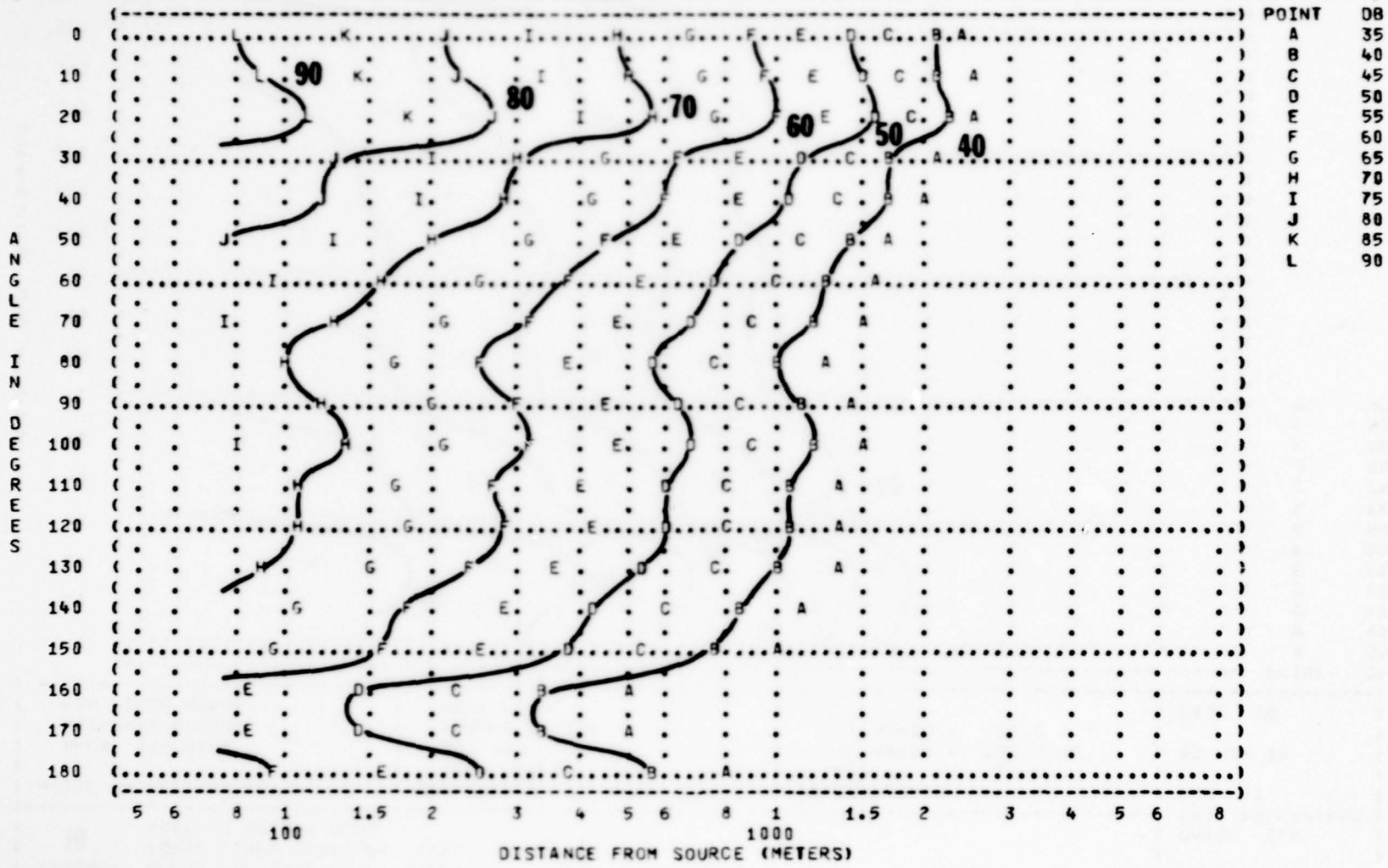
SOUND PRESSURE LEVEL (SPL)
EQUAL LEVEL CONTOURS (DB)
2000 HZ OCTAVE BAND

NOISE SOURCE/SUBJECT:
A-6A AIRCRAFT
J52-P-8A ENGINE
FAR FIELD NOISE

OPERATION:
IDLE POWER
60% RPM
SINGLE ENGINE
FREE FLOW

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

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-003
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

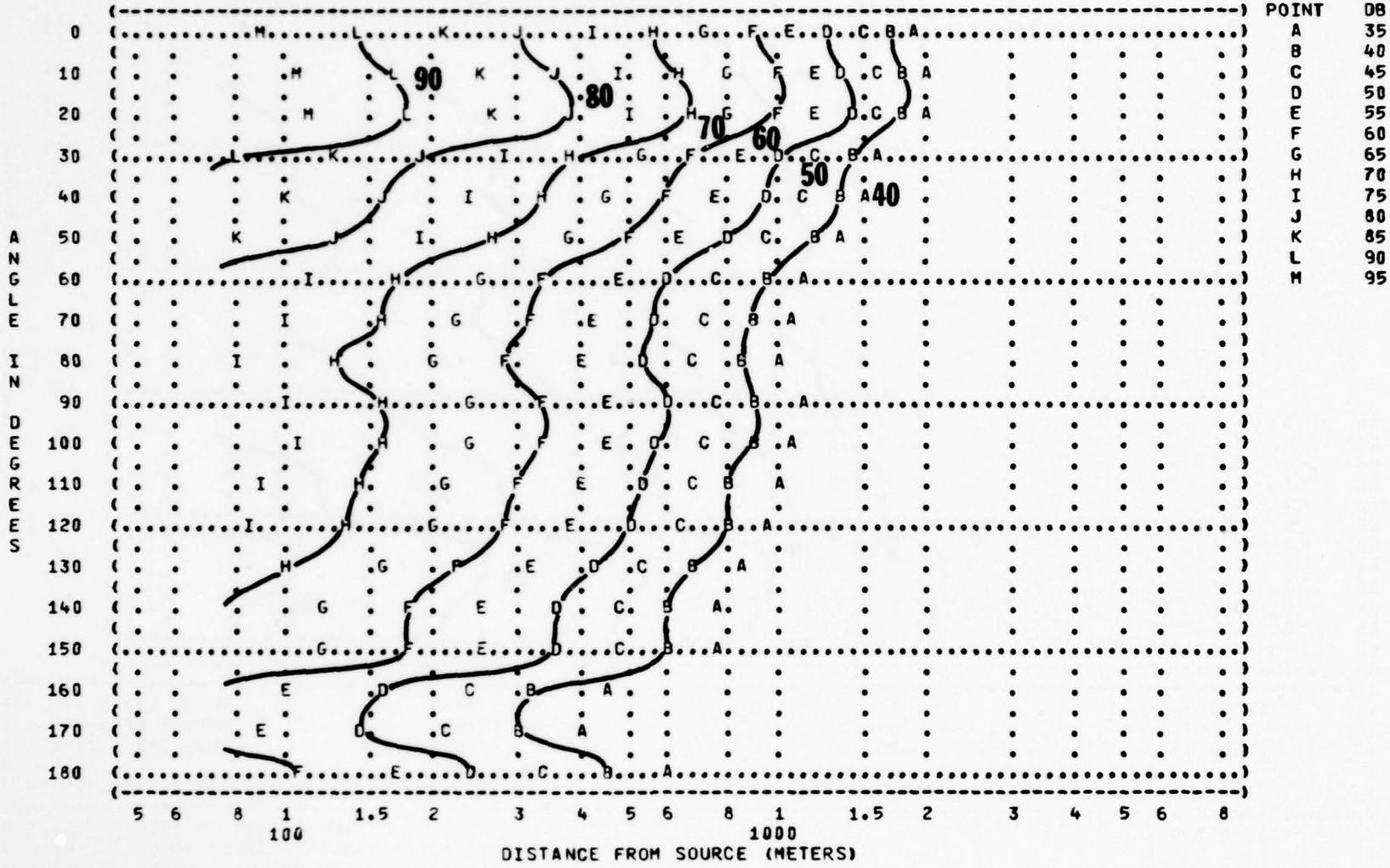
SOUND PRESSURE LEVEL (SPL)
EQUAL LEVEL CONTOURS (DB)
4000 HZ OCTAVE BAND

NOISE SOURCE/SUBJECT:
A-6A AIRCRAFT
J52-P-8A ENGINE
FAR FIELD NOISE

OPERATION:
IDLE POWER
60% RPM
SINGLE ENGINE
FREE FLOW

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

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-003
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
K	85
L	90
M	95

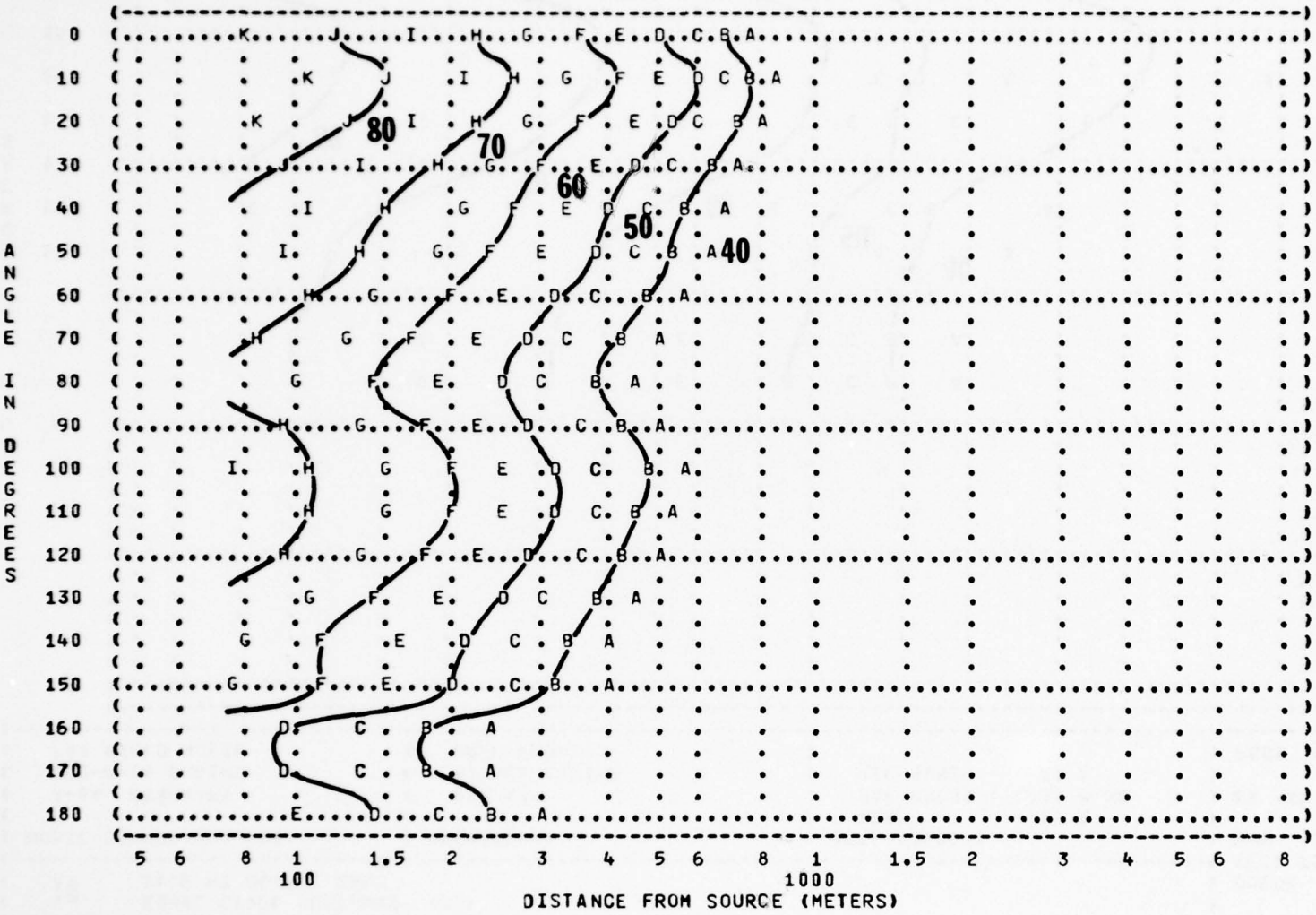
FIGURE 10: SOUND PRESSURE LEVEL (SPL) EQUAL LEVEL CONTOURS (DB) 8000 HZ OCTAVE BAND

IDENTIFICATION: OMEGA 1.4 TEST 75-002-003 RUN 01 05 MAY 75 PAGE 26

NOISE SOURCE/SUBJECT:
A-6A AIRCRAFT
J52-P-8A ENGINE
FAR FIELD NOISE

OPERATION:
IDLE POWER
60% 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

FIGURE: 10

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

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-003
RUN 02
05 MAY 75
PAGE 18

NOISE SOURCE/SUBJECT:
A-6A AIRCRAFT
J52-P-8A ENGINE
FAR FIELD NOISE

OPERATION:
75% 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

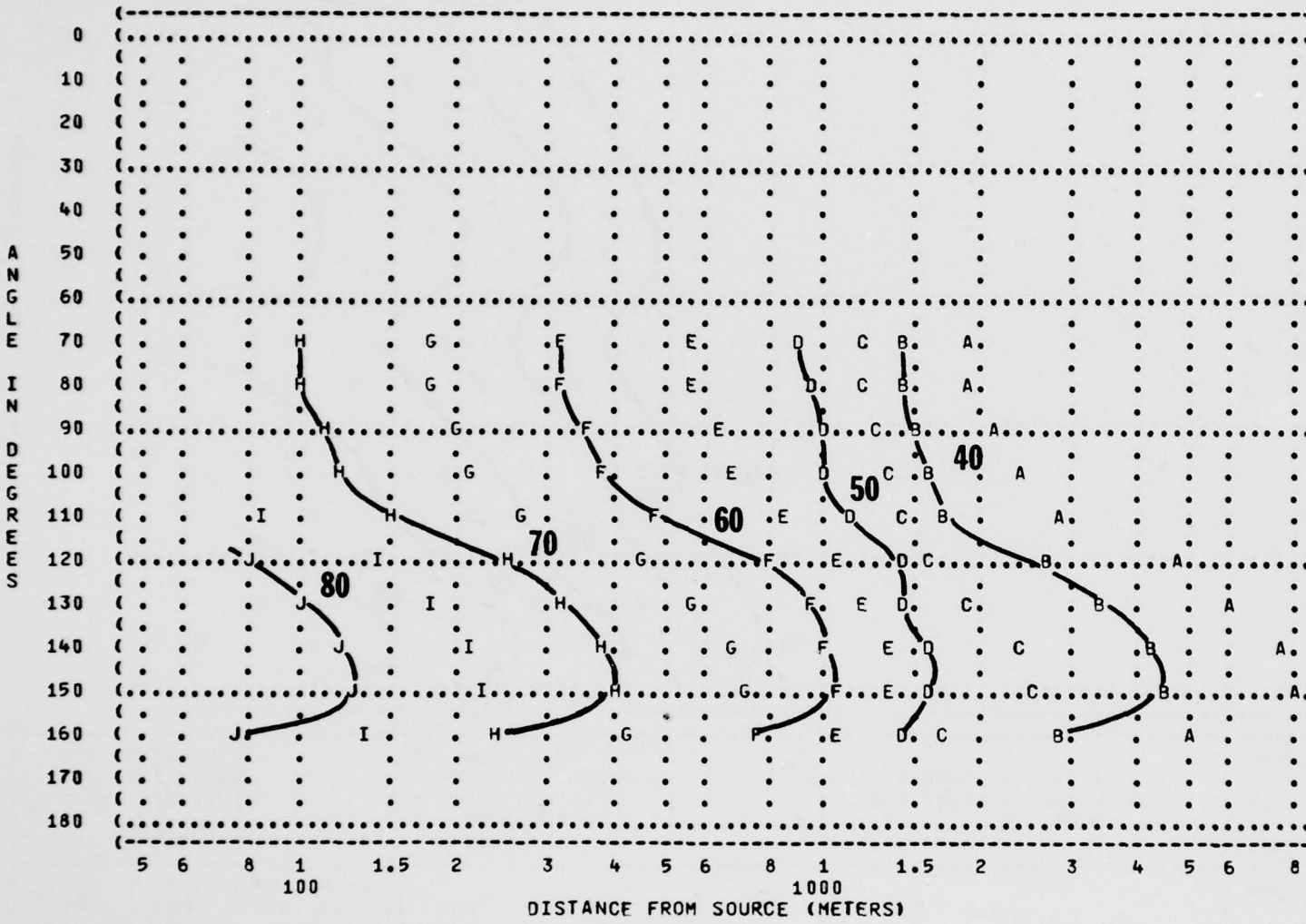


FIGURE: 10

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

NOISE SOURCE/SUBJECT:
A-6A AIRCRAFT
J52-P-8A ENGINE
FAR FIELD NOISE

OPERATION:
75% RPM
SINGLE ENGINE
FREE FLOW

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

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-003
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

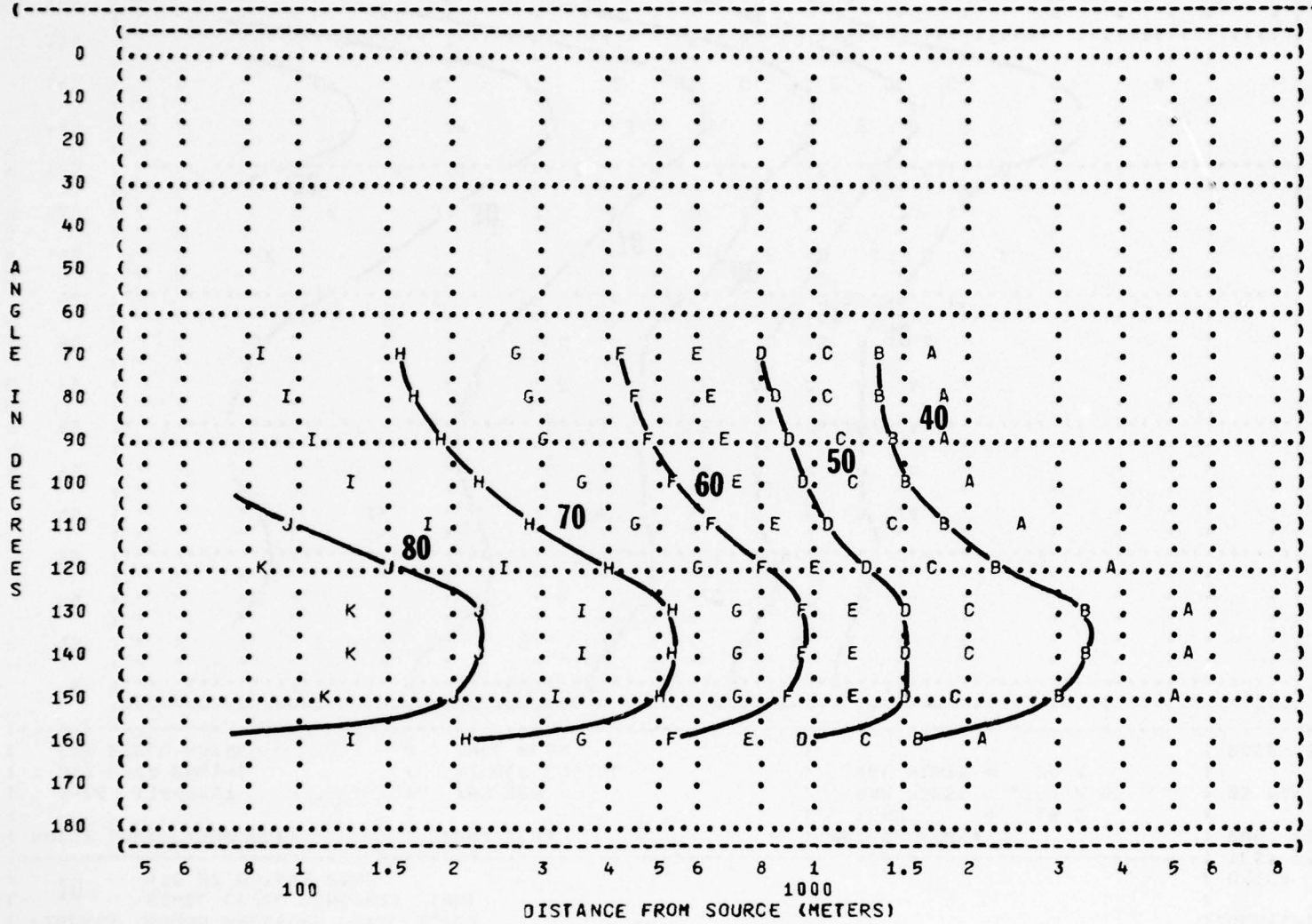


FIGURE: 10

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

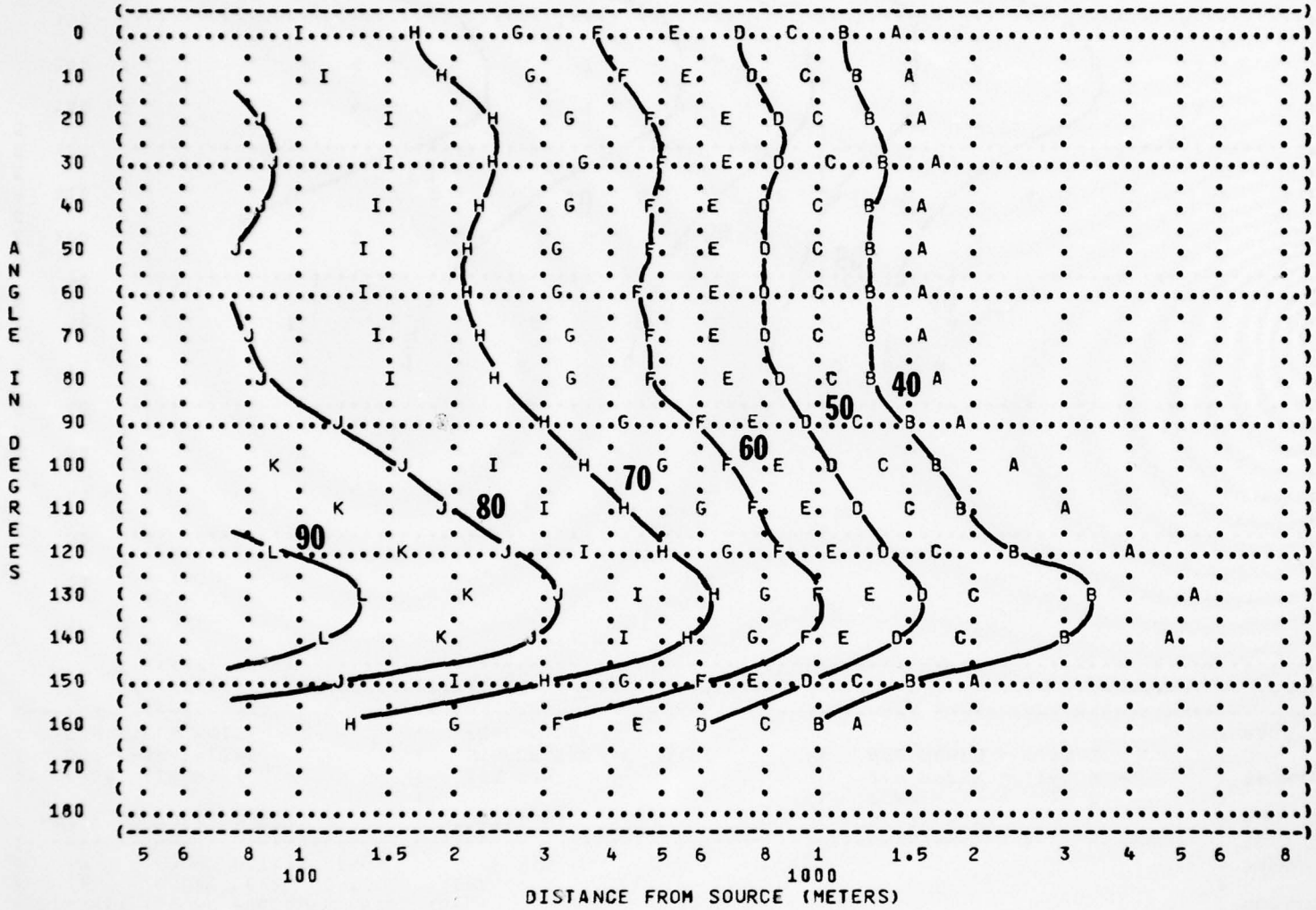
NOISE SOURCE/SUBJECT:
A-6A AIRCRAFT
J52-P-8A ENGINE
FAR FIELD NOISE

OPERATION:
75% RPM
SINGLE ENGINE
FREE FLOW

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

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-003
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



AD-A048 934 AEROSPACE MEDICAL RESEARCH LAB WRIGHT-PATTERSON AFB OHIO F/G 20/1
USAF BIOENVIRONMENTAL NOISE DATA HANDBOOK. VOLUME 94. A-6A AIRC--ETC(U)
JUN 77 R G POWELL

UNCLASSIFIED AMRL-TR-75-50-VOL-94 NL

2 OF 2
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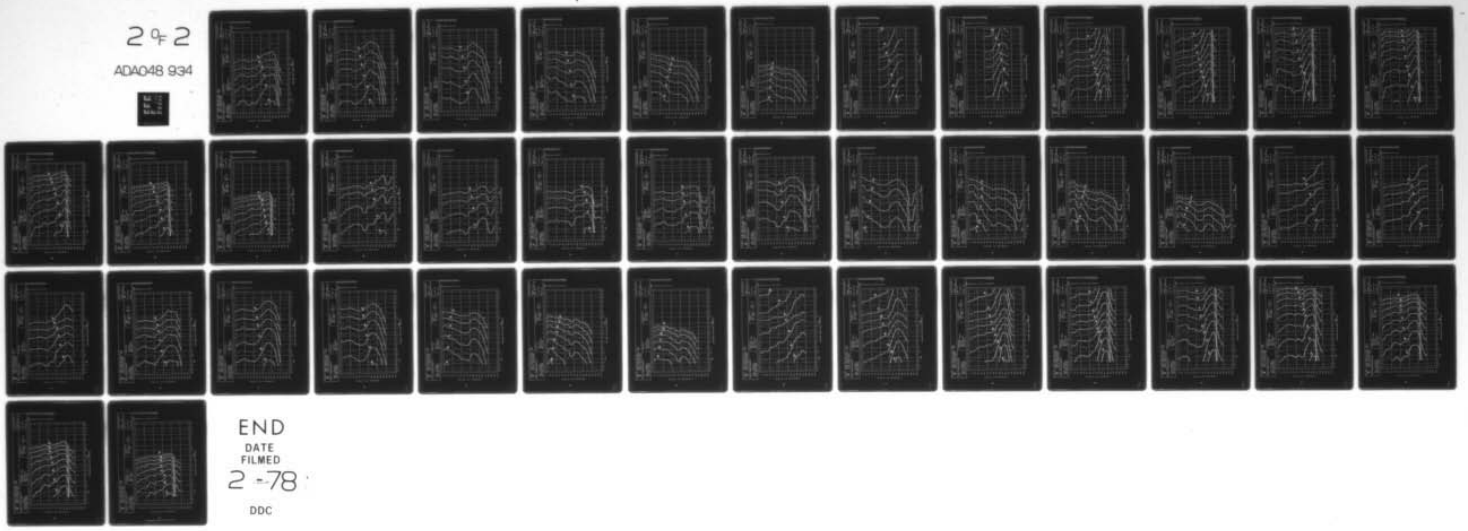

END
DATE FILMED
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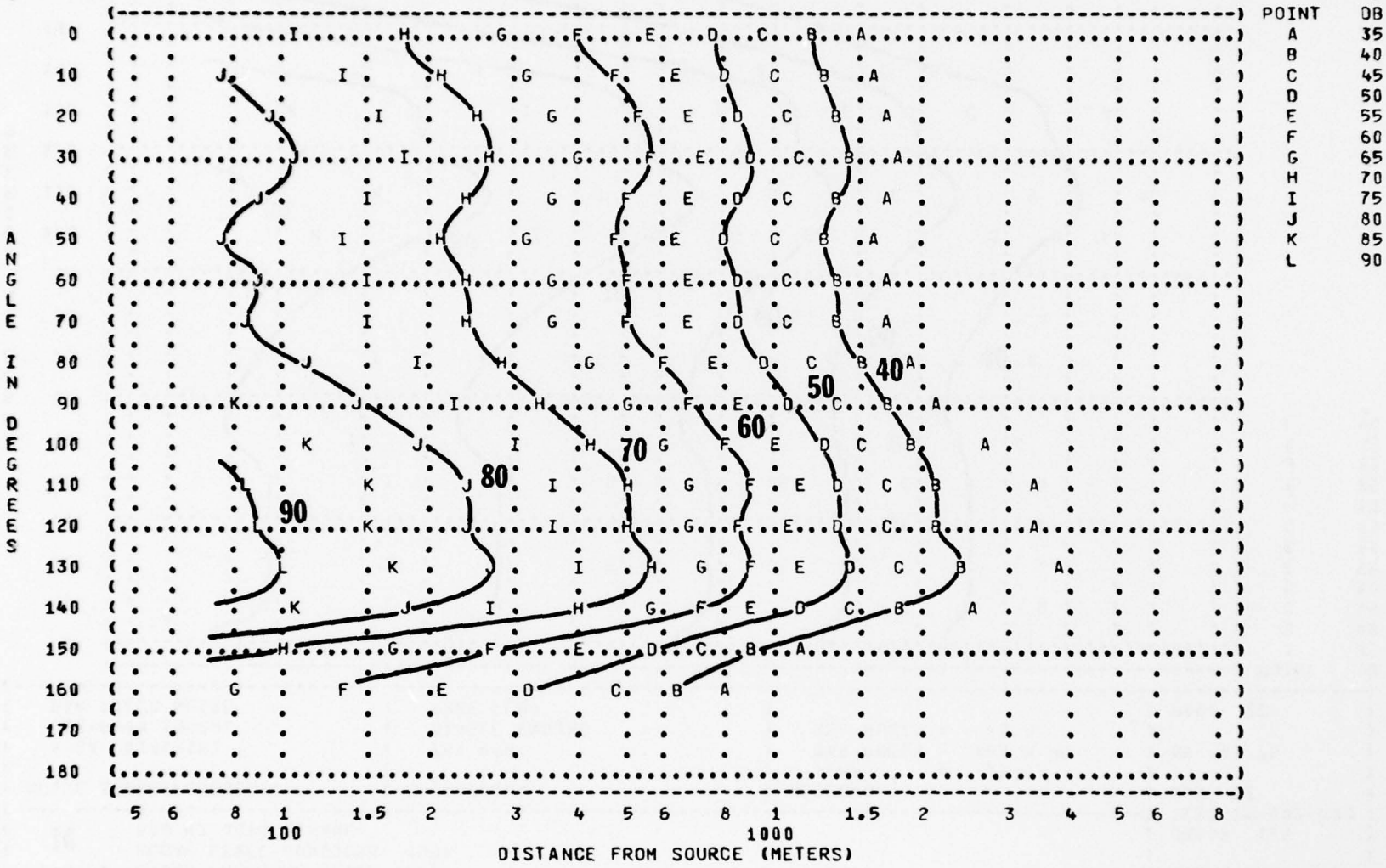
FIGURE 10: SOUND PRESSURE LEVEL (SPL) EQUAL LEVEL CONTOURS (DB) 250 HZ OCTAVE BAND

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-003
RUN 02
05 MAY 75
PAGE 21

NOISE SOURCE/SUBJECT:
A-6A AIRCRAFT
J52-P-8A ENGINE
FAR FIELD NOISE

OPERATION:
75% 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

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

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-003
RUN 02
05 MAY 75
PAGE 22

NOISE SOURCE/SUBJECT:
A-6A AIRCRAFT
J52-P-8A ENGINE
FAR FIELD NOISE

OPERATION:
75% RPM
SINGLE ENGINE
FREE FLOW

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

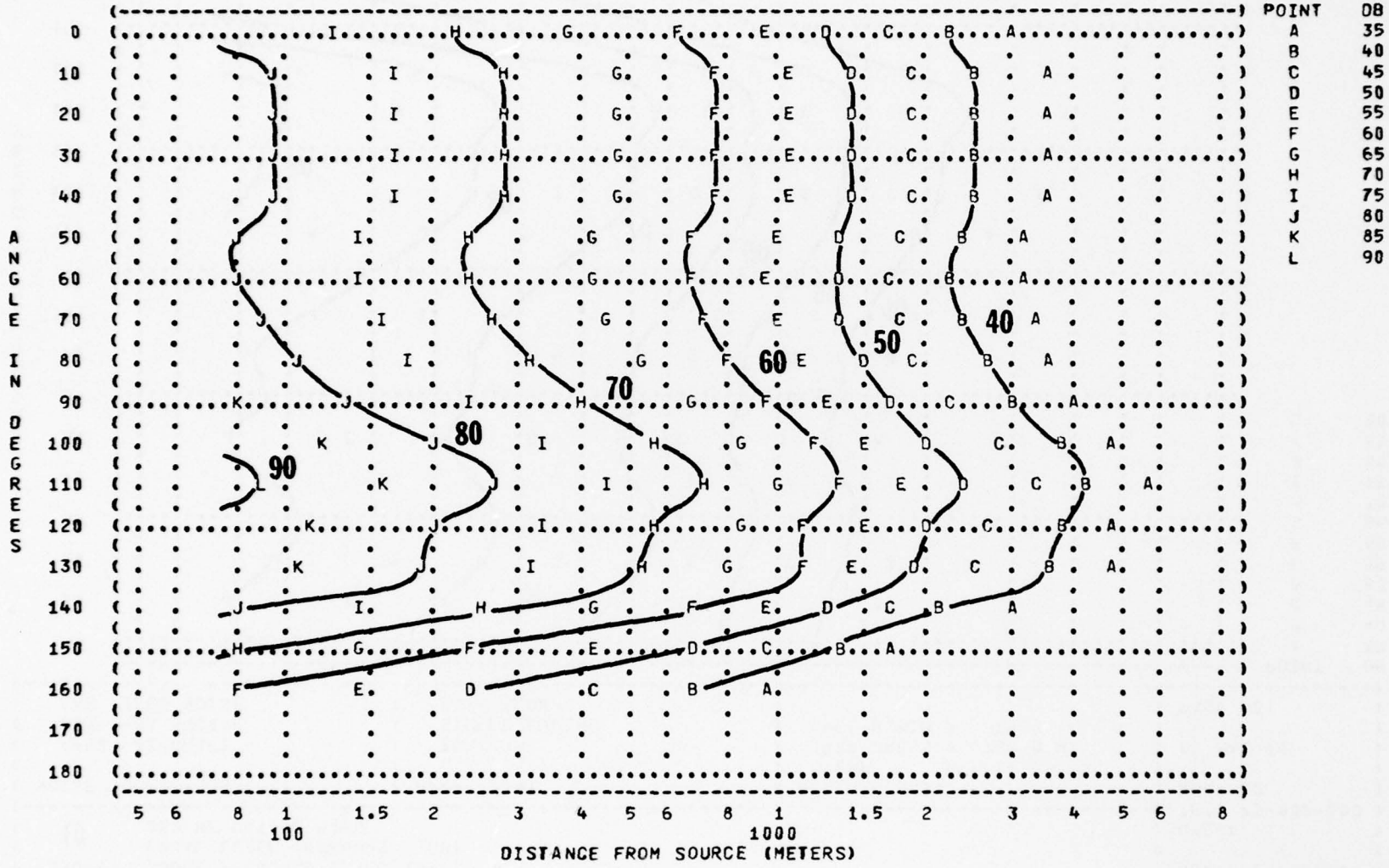


FIGURE: 10

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

NOISE SOURCE/SUBJECT:
A-6A AIRCRAFT
J52-P-8A ENGINE
FAR FIELD NOISE

OPERATION:
75% RPM
SINGLE ENGINE
FREE FLOW

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

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-003
RUN 02
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

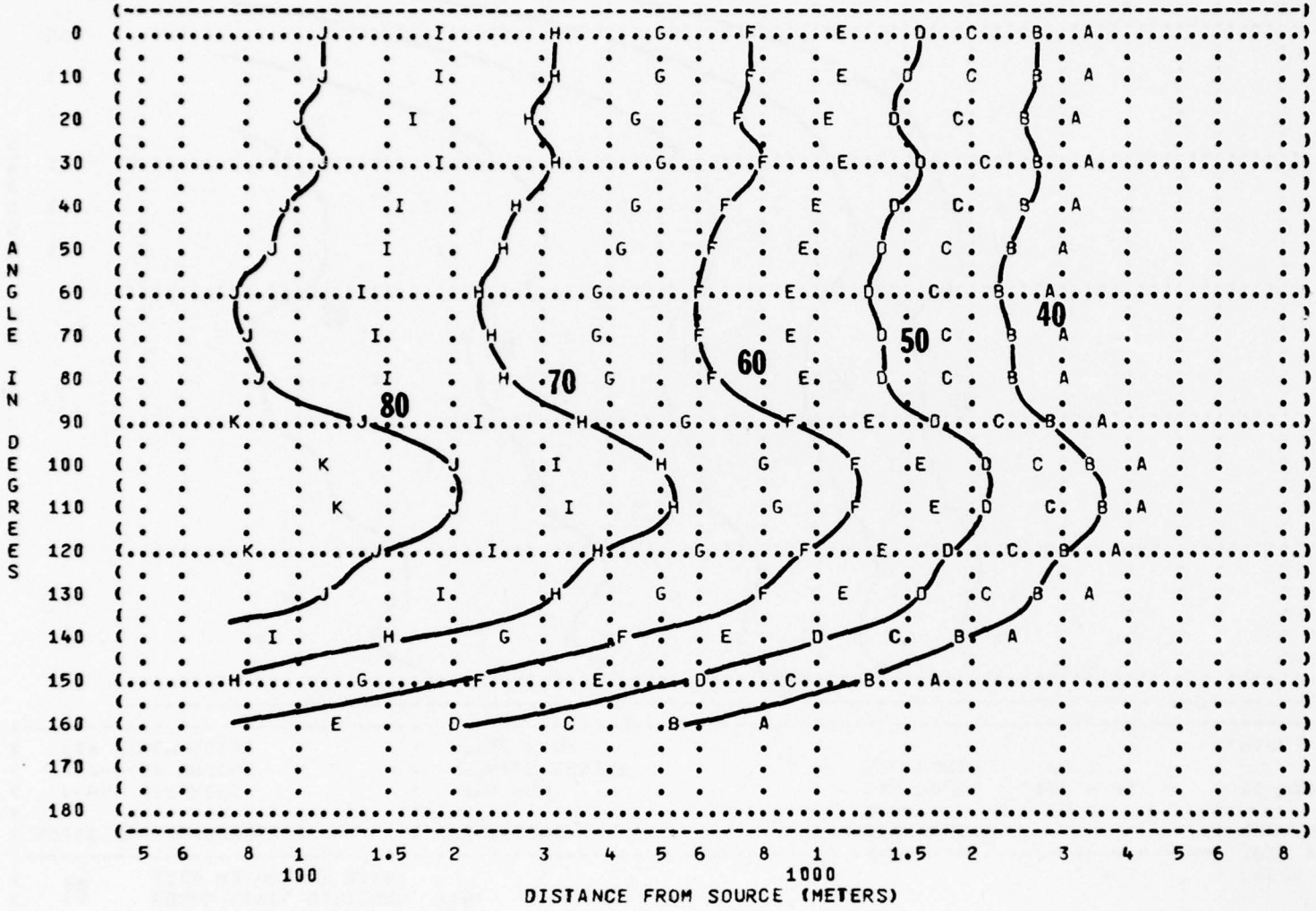


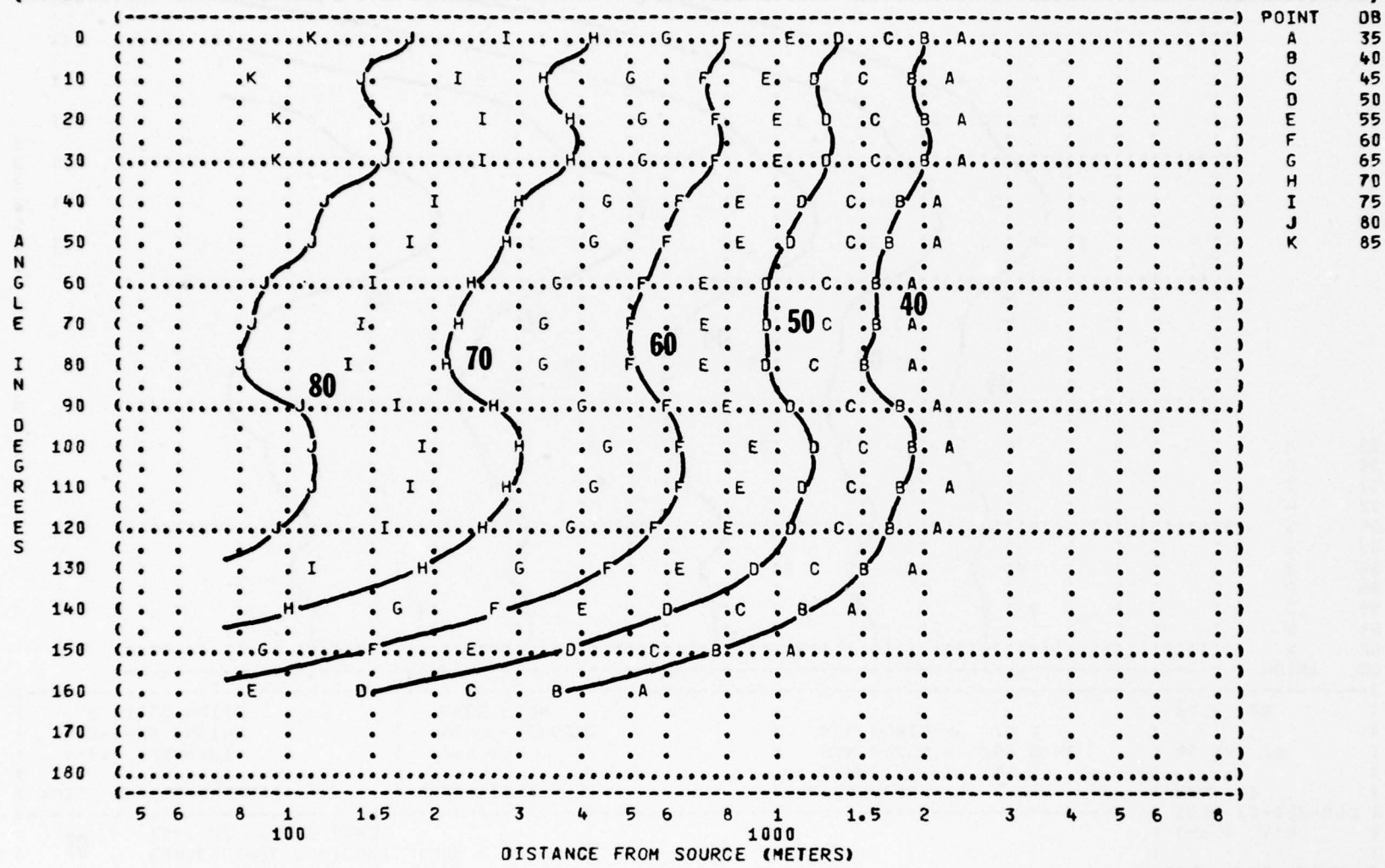
FIGURE: 10 SOUND PRESSURE LEVEL (SPL) EQUAL LEVEL CONTOURS (DB) 2000 HZ OCTAVE BAND

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-003
RUN 02
05 MAY 75
PAGE 24

NOISE SOURCE/SUBJECT:
A-6A AIRCRAFT
J52-P-8A ENGINE
FAR FIELD NOISE

OPERATION:
75% 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

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

NOISE SOURCE/SUBJECT:
A-6A AIRCRAFT
J52-P-8A ENGINE
FAR FIELD NOISE

OPERATION:
75% RPM
SINGLE ENGINE
FREE FLOW

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

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-003
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
M	95

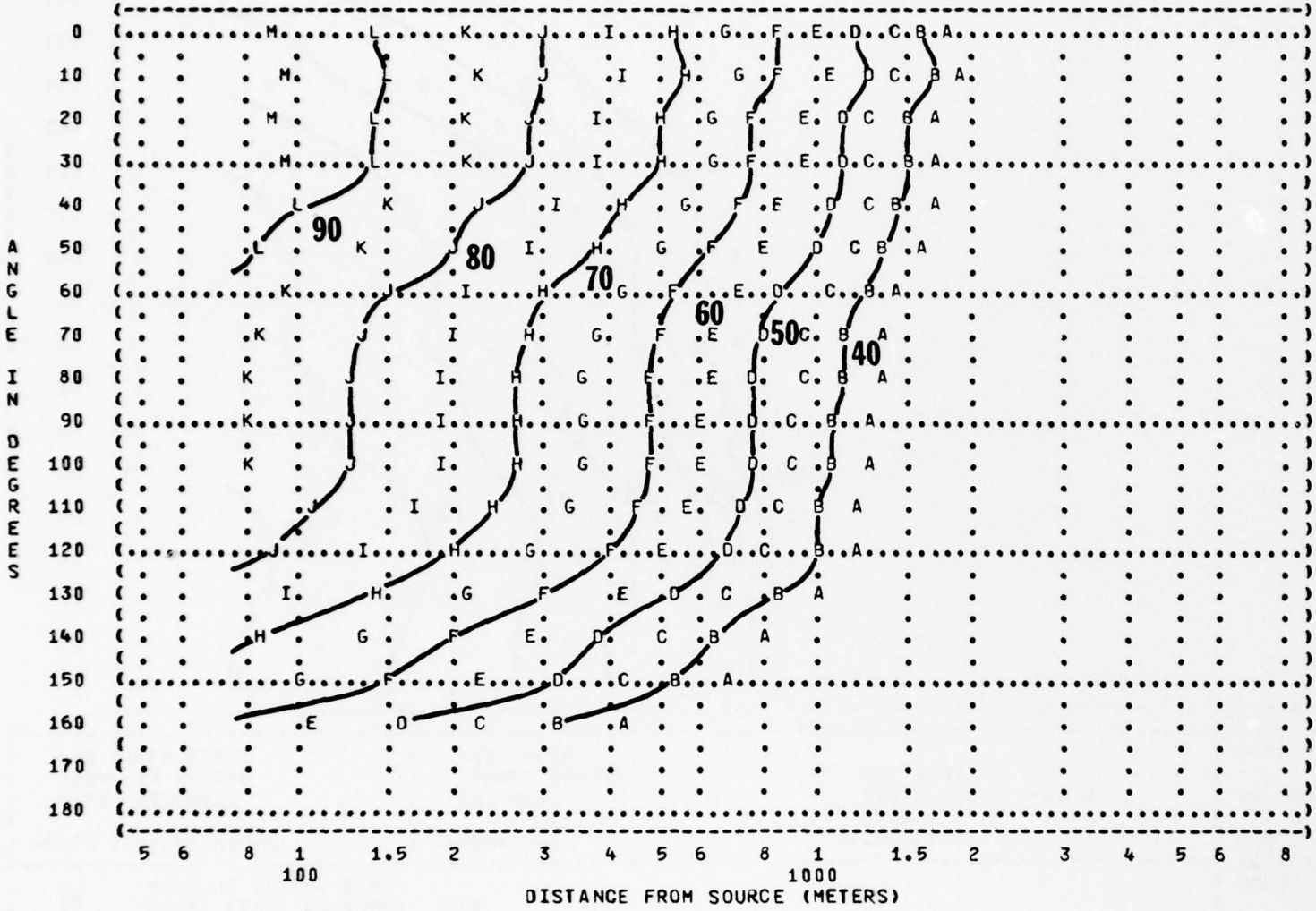


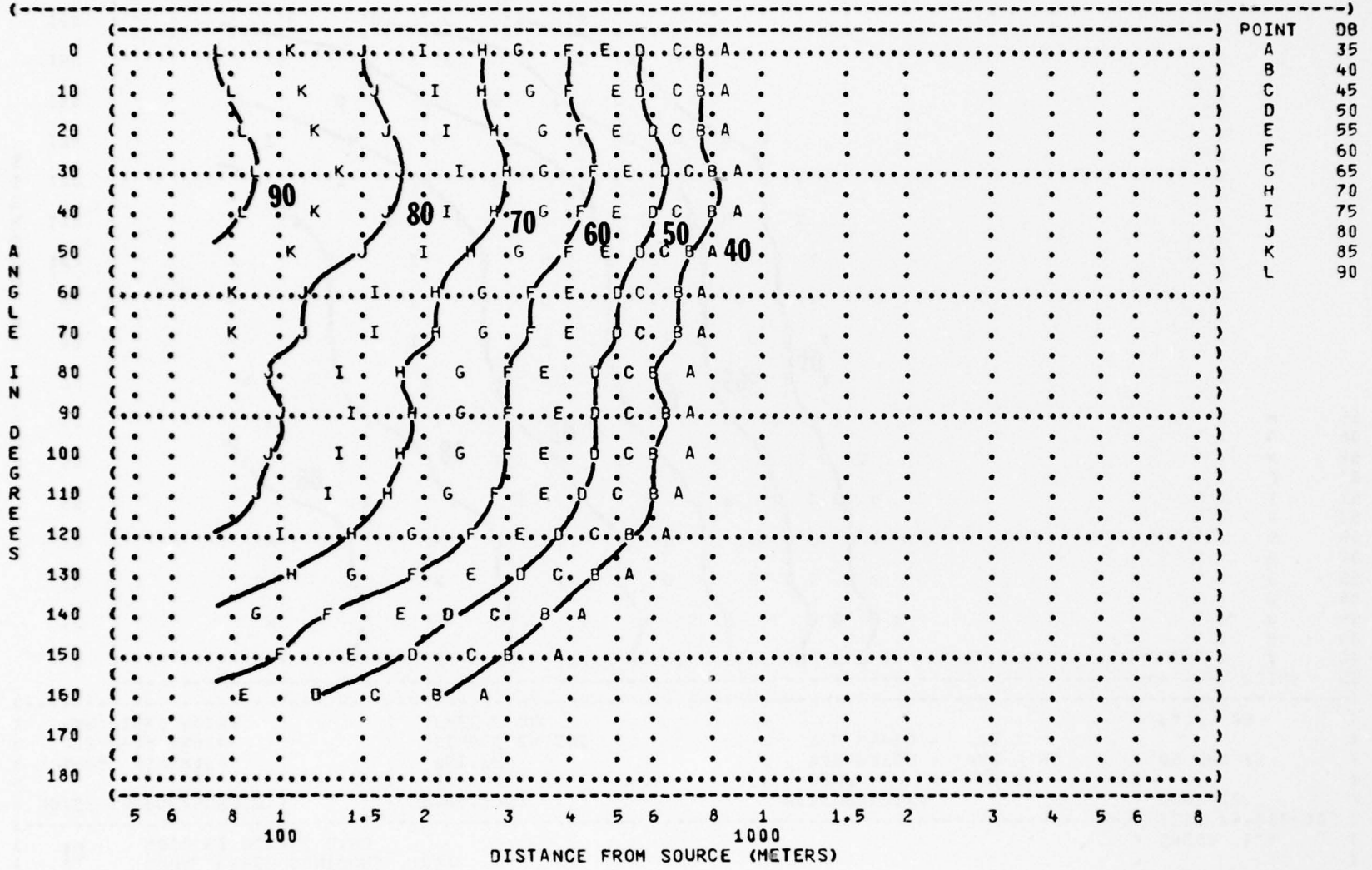
FIGURE 10: SOUND PRESSURE LEVEL (SPL) EQUAL LEVEL CONTOURS (DB) 8000 HZ OCTAVE BAND

IDENTIFICATION: OMEGA 1.4 TEST 75-002-003 RUN 02 05 MAY 75 PAGE 26

NOISE SOURCE/SUBJECT: A-6A AIRCRAFT; J52-P-8A ENGINE; FAR FIELD NOISE

OPERATION: 75% 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

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

NOISE SOURCE/SUBJECT:
A-6A AIRCRAFT
J52-P-8A ENGINE
FAR FIELD NOISE

OPERATION:
MILITARY POWER
99% RPM
SINGLE ENGINE
FREE FLOW

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

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-003
RUN 03
05 MAY 75
PAGE 18

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

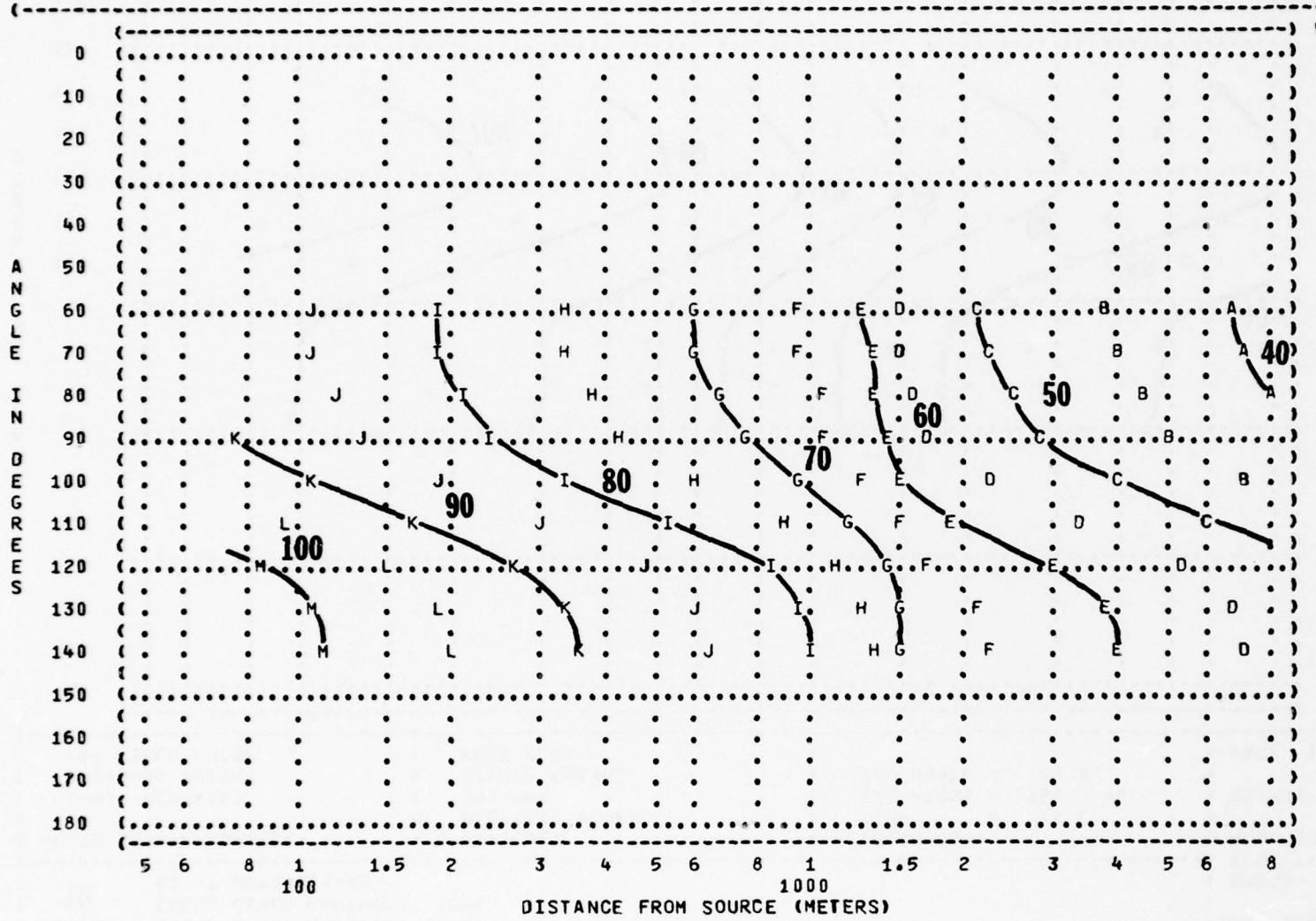


FIGURE: 10

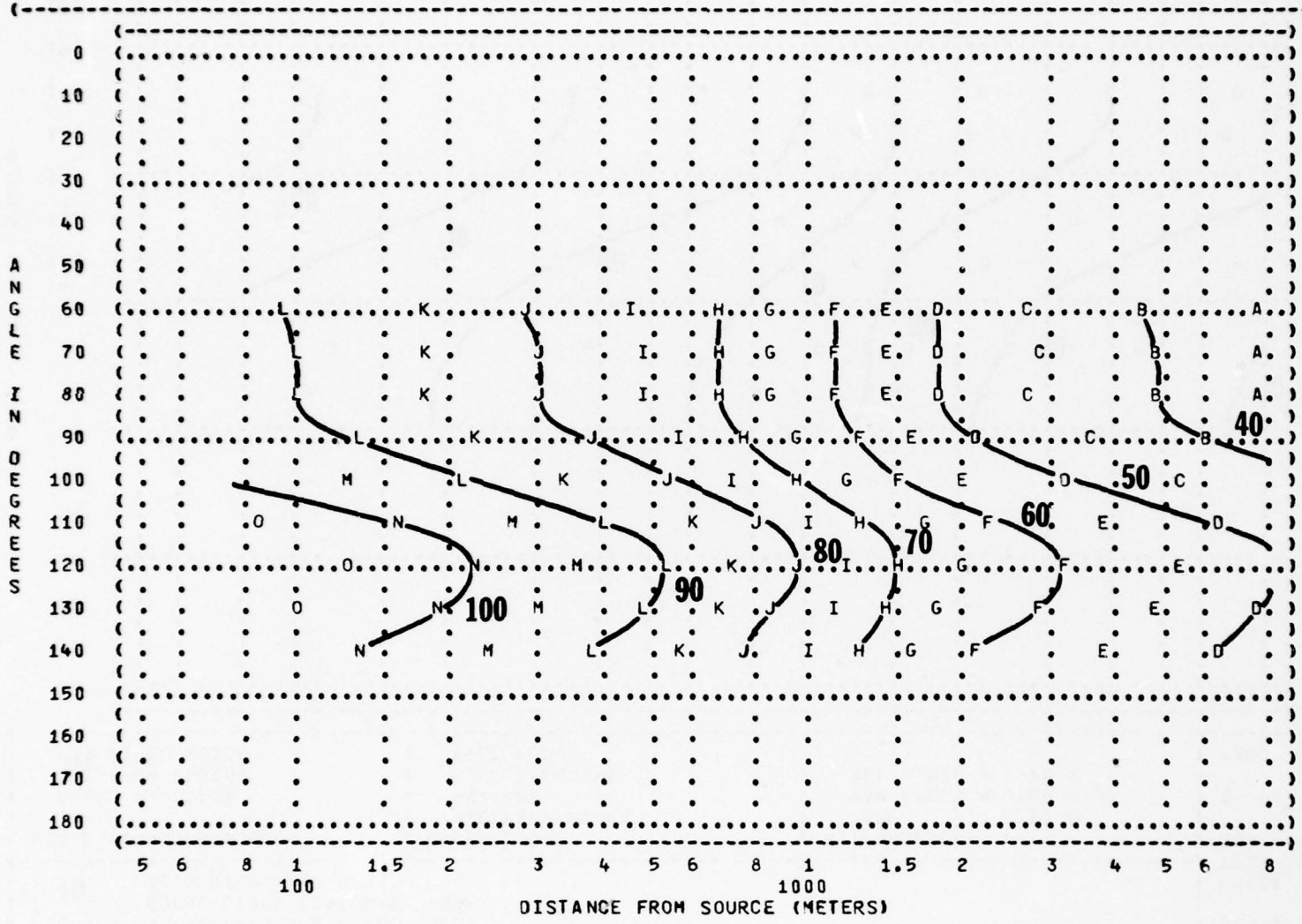
SOUND PRESSURE LEVEL (SPL)
EQUAL LEVEL CONTOURS (DB)
63 HZ OCTAVE BAND

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-003
RUN 03
05 MAY 75
PAGE 19

NOISE SOURCE/SUBJECT:
A-6A AIRCRAFT
J52-P-8A ENGINE
FAR FIELD NOISE

OPERATION:
MILITARY POWER
99% 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

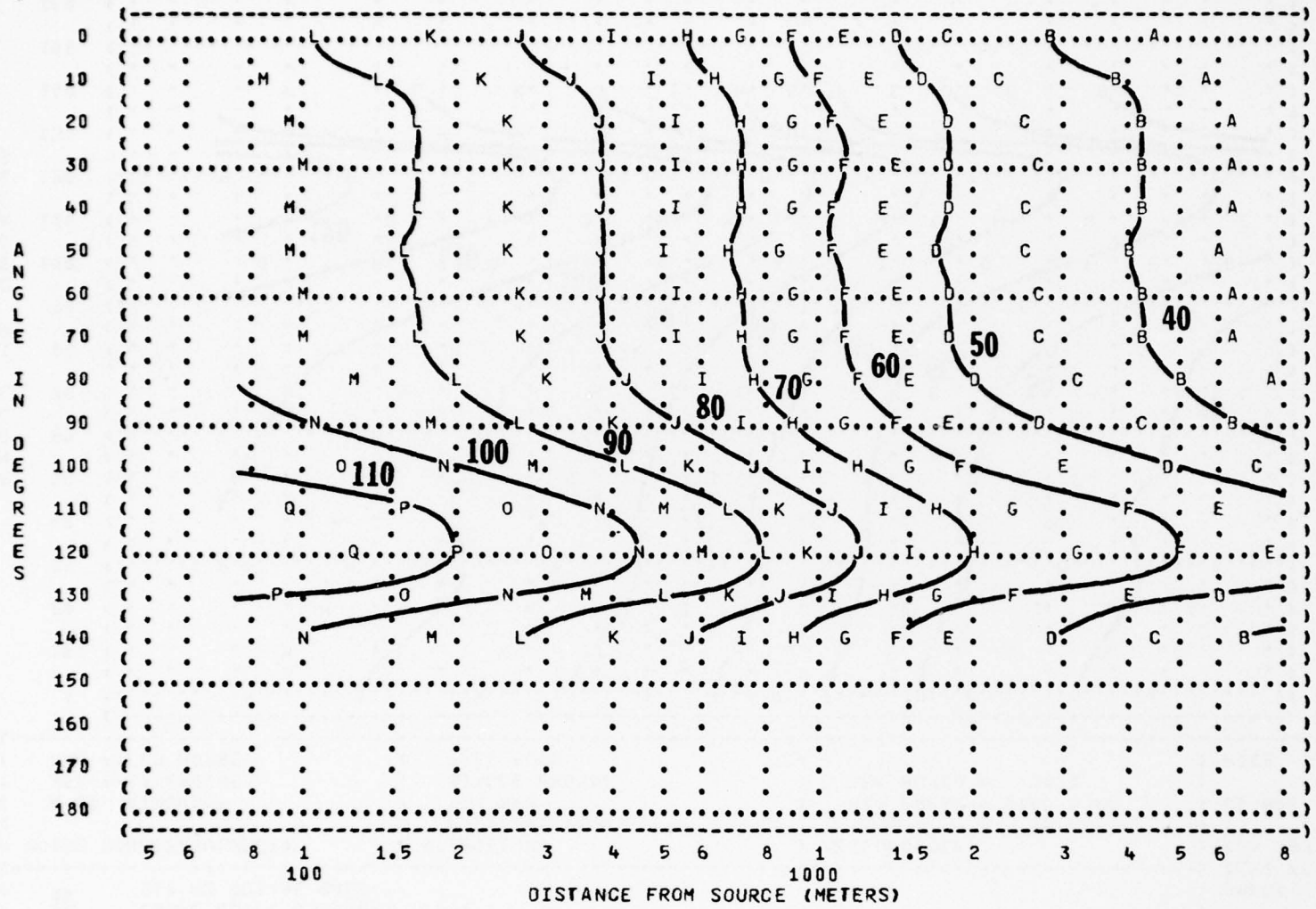
SOUND PRESSURE LEVEL (SPL)
EQUAL LEVEL CONTOURS (DB)
125 HZ OCTAVE BAND

NOISE SOURCE/SUBJECT:
A-6A AIRCRAFT
J52-P-8A ENGINE
FAR FIELD NOISE

OPERATION:
MILITARY POWER
99% RPM
SINGLE ENGINE
FREE FLOW

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

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-003
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

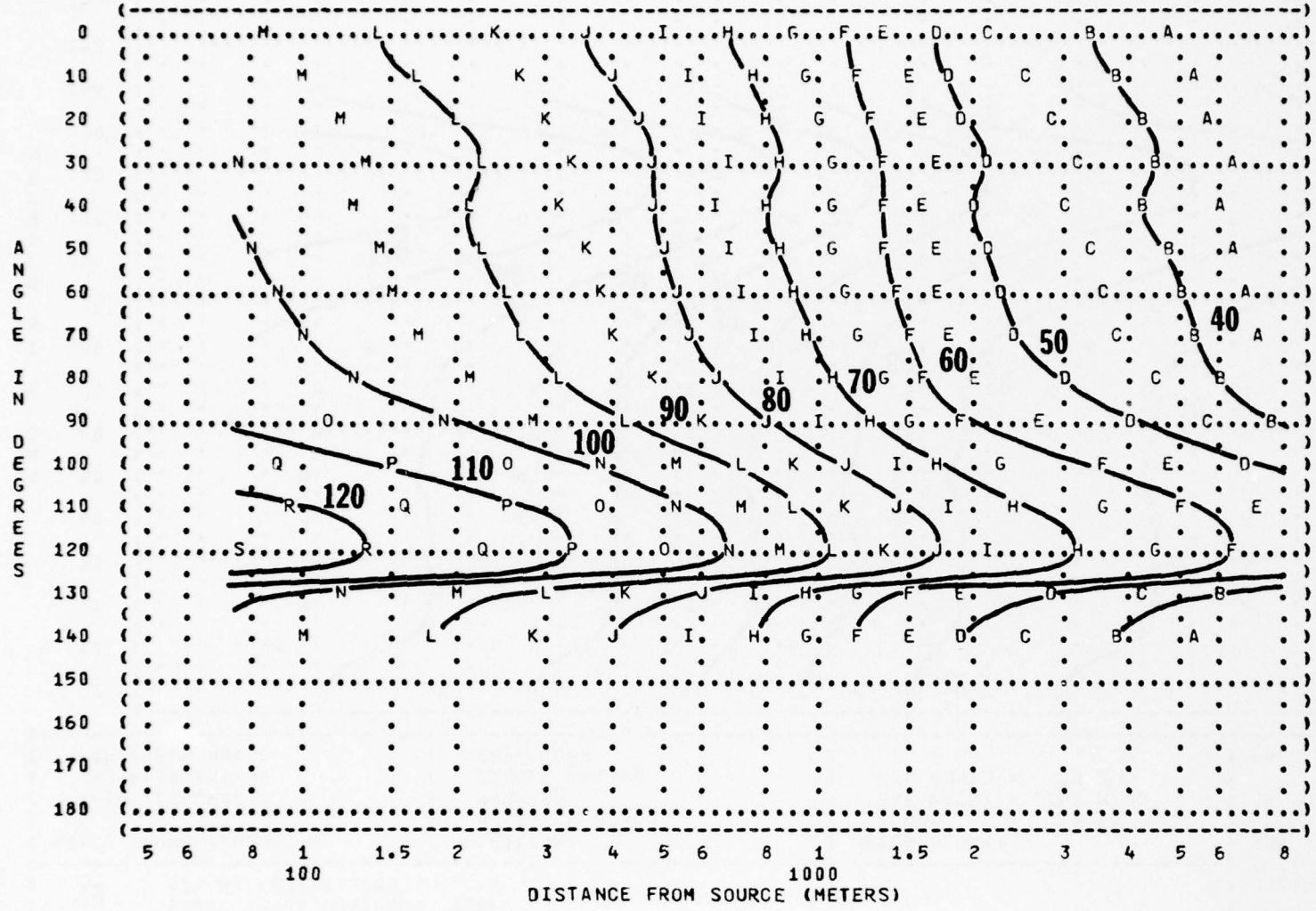
SOUND PRESSURE LEVEL (SPL)
EQUAL LEVEL CONTOURS (DB)
250 HZ OCTAVE BAND

NOISE SOURCE/SUBJECT:
A-6A AIRCRAFT
J52-P-8A ENGINE
FAR FIELD NOISE

OPERATION:
MILITARY POWER
99% RPM
SINGLE ENGINE
FREE FLOW

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

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-003
RUN 03
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

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

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-003
RUN 03
05 MAY 75
PAGE 22

NOISE SOURCE/SUBJECT:
A-6A AIRCRAFT
J52-P-8A ENGINE
FAR FIELD NOISE

OPERATION:
MILITARY POWER
99% RPM
SINGLE ENGINE
FREE FLOW

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

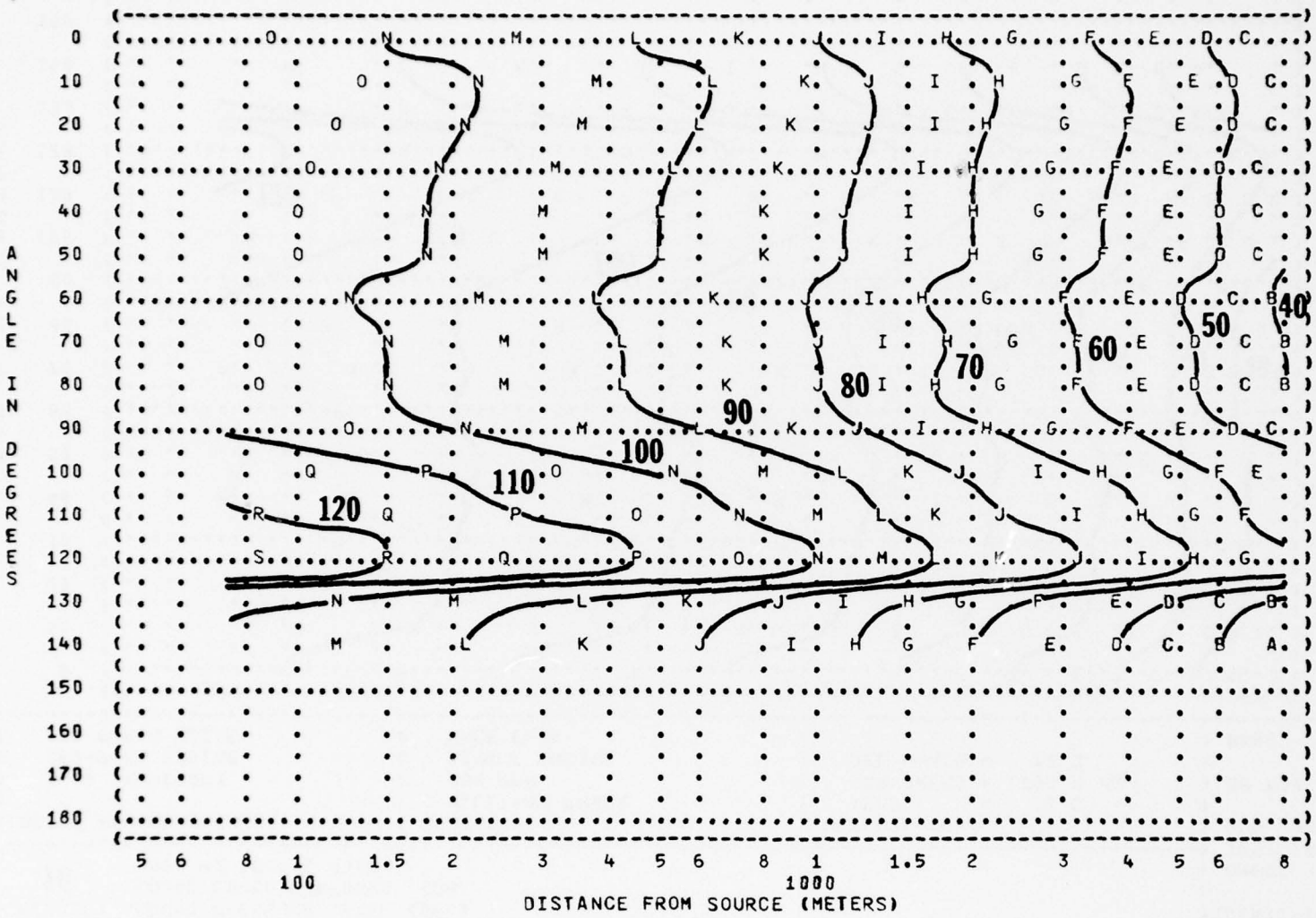


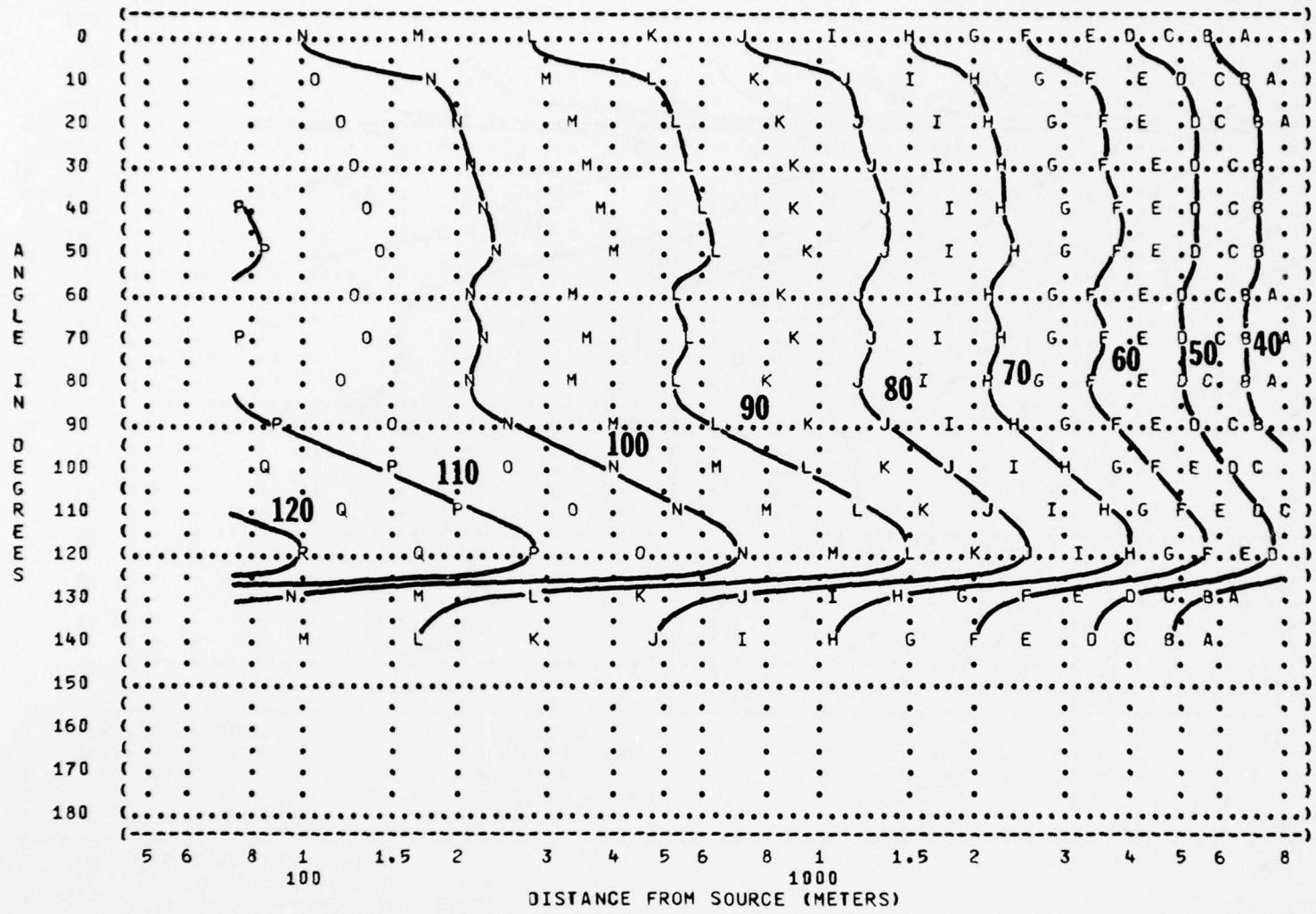
FIGURE 10: SOUND PRESSURE LEVEL (SPL) EQUAL LEVEL CONTOURS (DB) 1000 HZ OCTAVE BAND

NOISE SOURCE/SUBJECT:
A-6A AIRCRAFT
J52-P-8A ENGINE
FAR FIELD NOISE

OPERATION:
MILITARY POWER
99% RPM
SINGLE ENGINE
FREE FLOW

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

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-003
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
Q	115
R	120

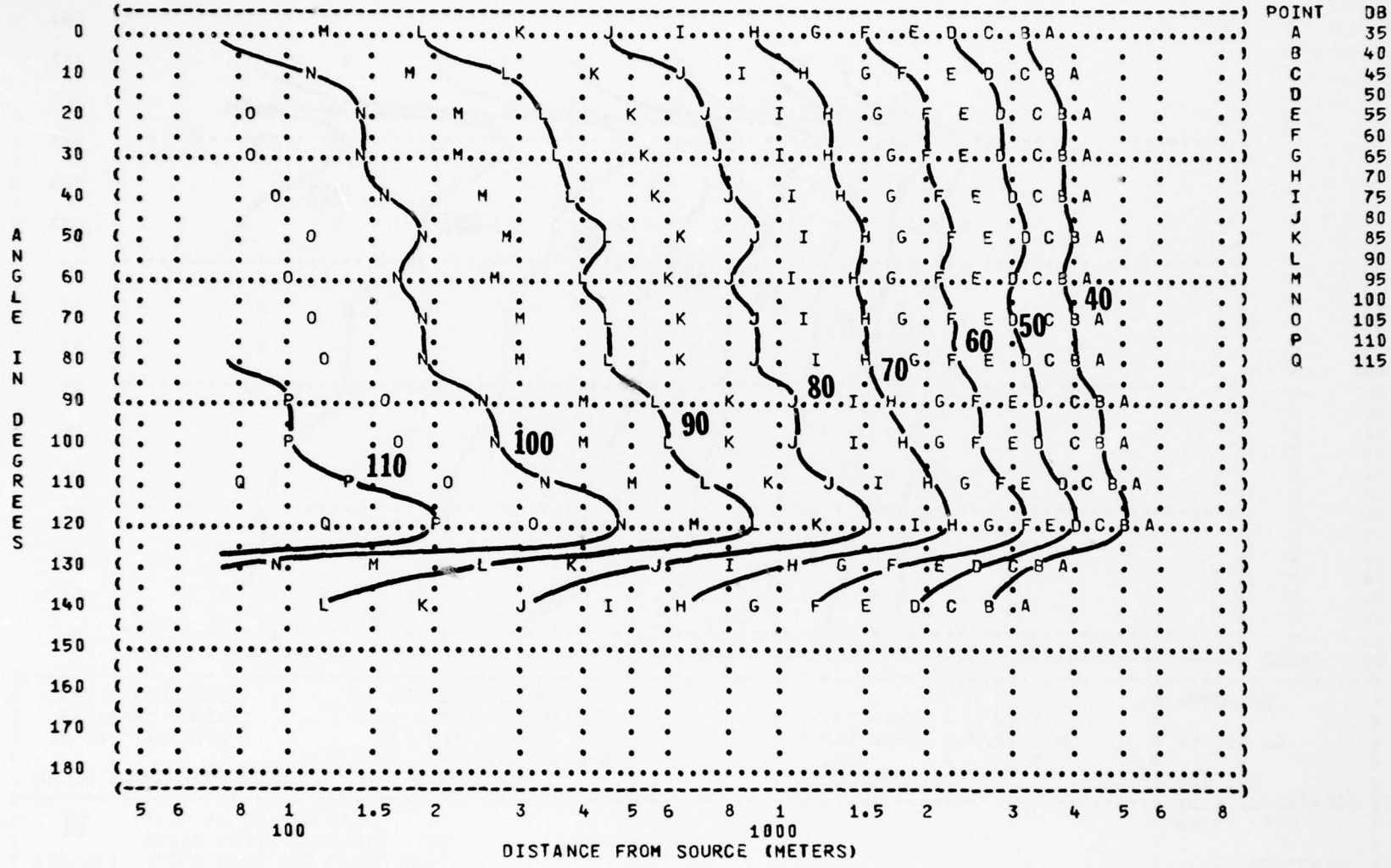
FIGURE 10: SOUND PRESSURE LEVEL (SPL) EQUAL LEVEL CONTOURS (DB) 2000 HZ OCTAVE BAND

IDENTIFICATION: OMEGA 1.4 / TEST 75-002-003 / RUN 03 / 05 MAY 75 / PAGE 24

NOISE SOURCE/SUBJECT:
A-6A AIRCRAFT
J52-P-8A ENGINE
FAR FIELD NOISE

OPERATION:
MILITARY POWER
99% 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:
A-6A AIRCRAFT
J52-P-8A ENGINE
FAR FIELD NOISE

OPERATION:
MILITARY POWER
99% RPM
SINGLE ENGINE
FREE FLOW

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

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-003
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
O	105
P	110
Q	115

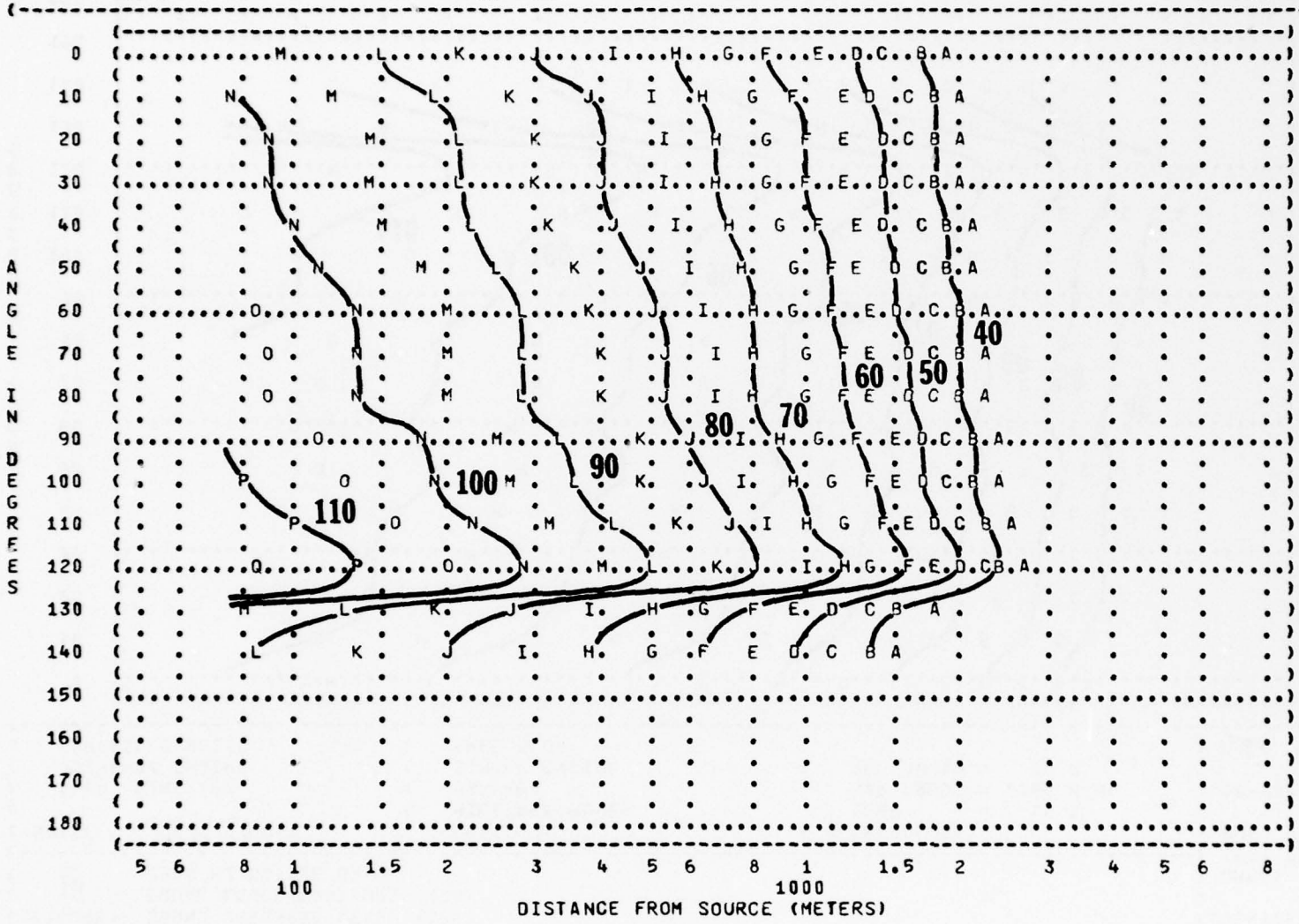


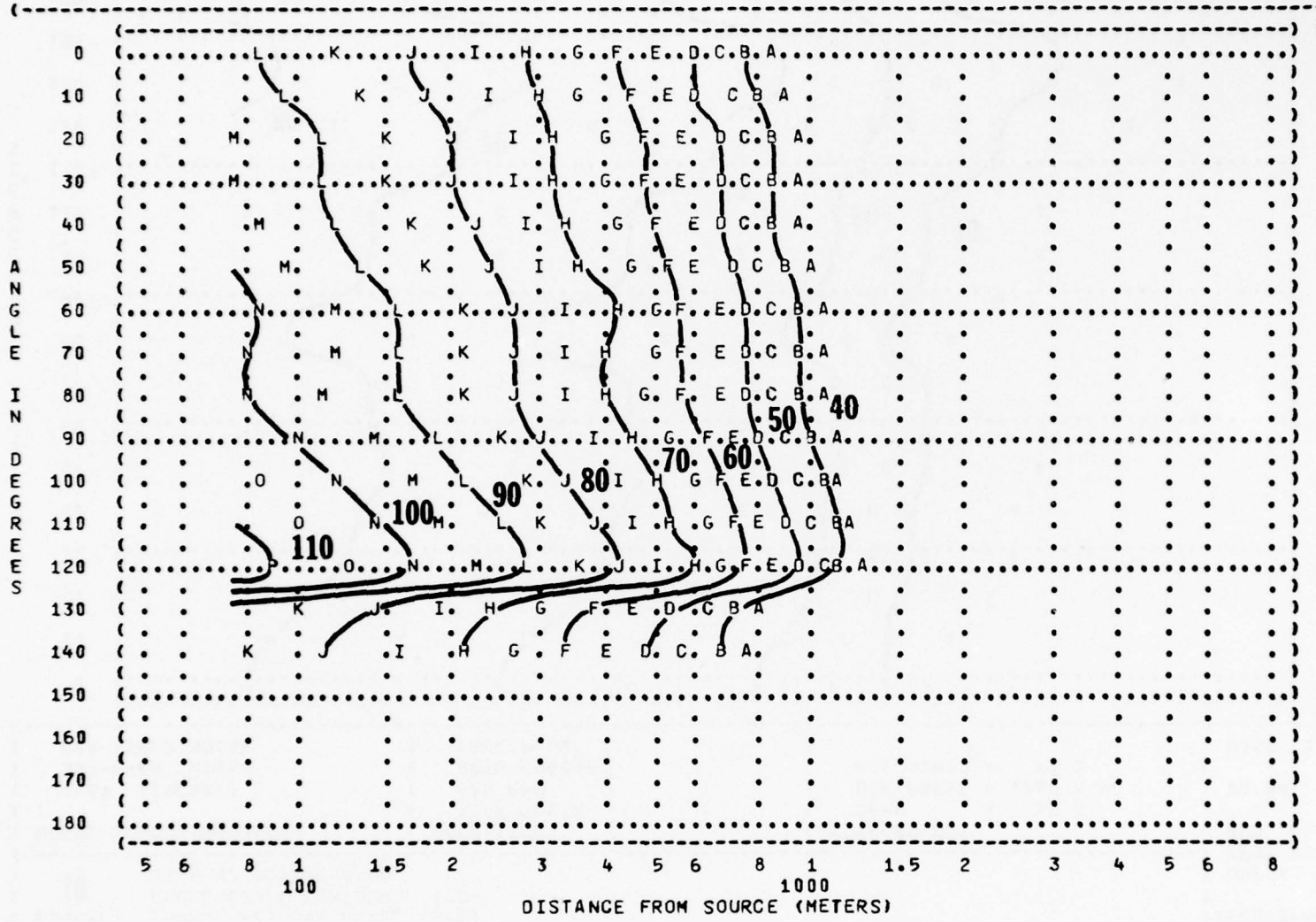
FIGURE 10: SOUND PRESSURE LEVEL (SPL) EQUAL LEVEL CONTOURS (DB) 8000 HZ OCTAVE BAND

NOISE SOURCE/SUBJECT:
A-6A AIRCRAFT
J52-P-8A ENGINE
FAR FIELD NOISE

OPERATION:
MILITARY POWER
99% RPM
SINGLE ENGINE
FREE FLOW

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

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-003
RUN 03
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
K	85
L	90
M	95
N	100
O	105
P	110

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

NOISE SOURCE/SUBJECT:
A-6A AIRCRAFT
J52-P-8A ENGINE
FAR FIELD NOISE

OPERATION:
IDLE POWER
60% RPM
BOTH ENGINES
FREE FLOW

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

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-003
RUN 04
05 MAY 75
PAGE 18

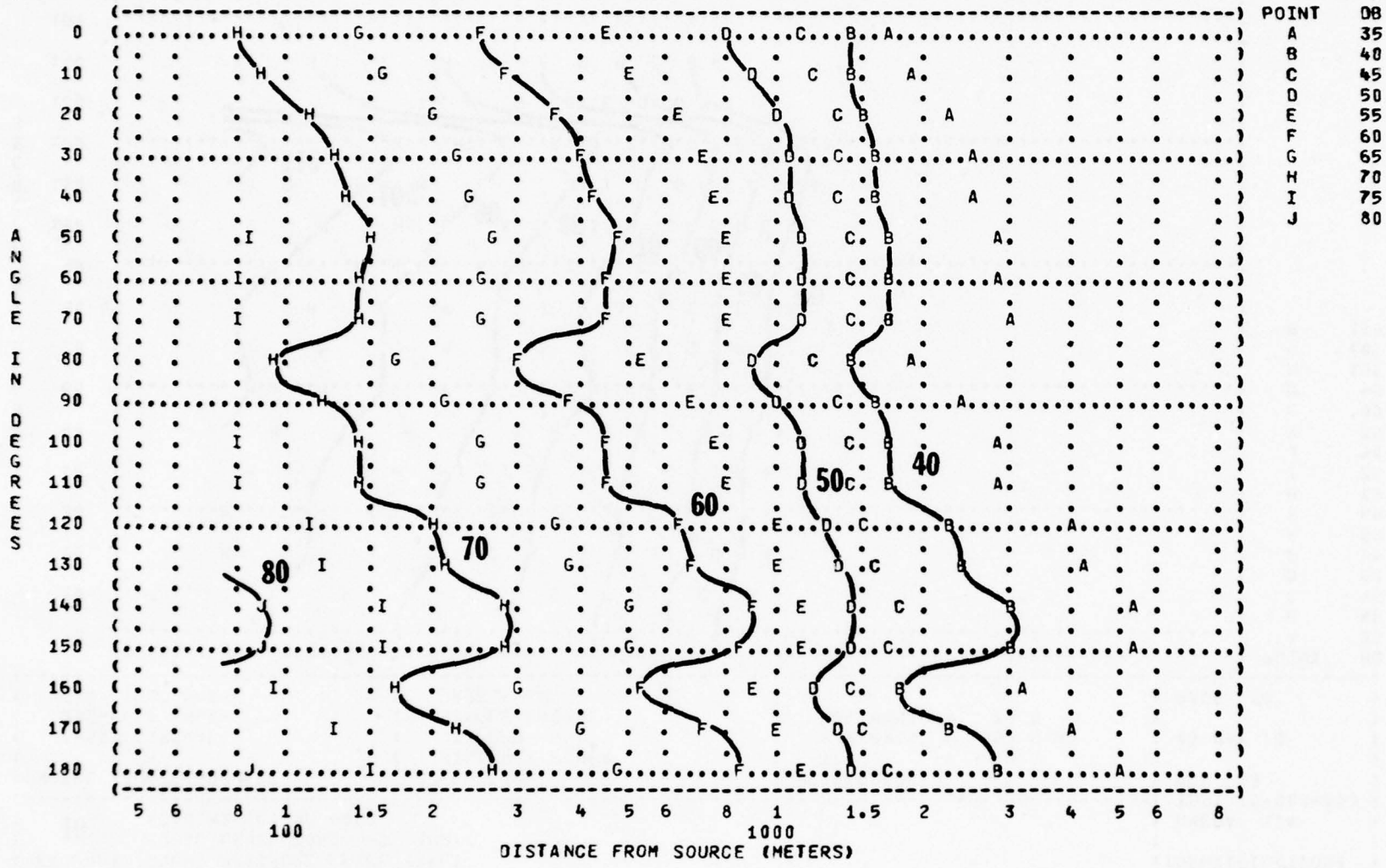


FIGURE: 10

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

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-003
RUN 04
05 MAY 75
PAGE 19

NOISE SOURCE/SUBJECT:
A-6A AIRCRAFT
J52-P-8A ENGINE
FAR FIELD NOISE

OPERATION:
IDLE POWER
60% RPM
BOTH ENGINES
FREE FLOW

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

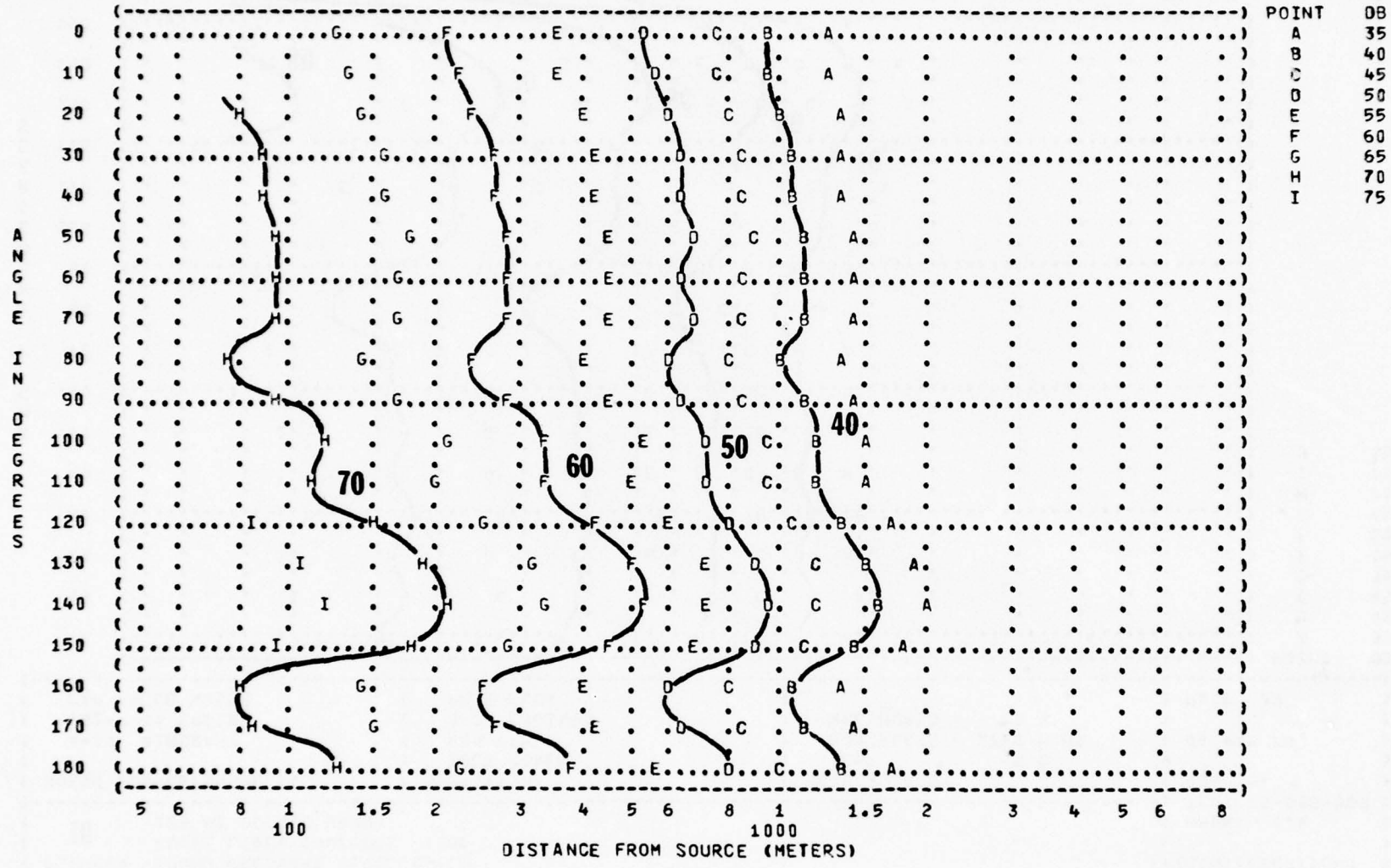


FIGURE: 10

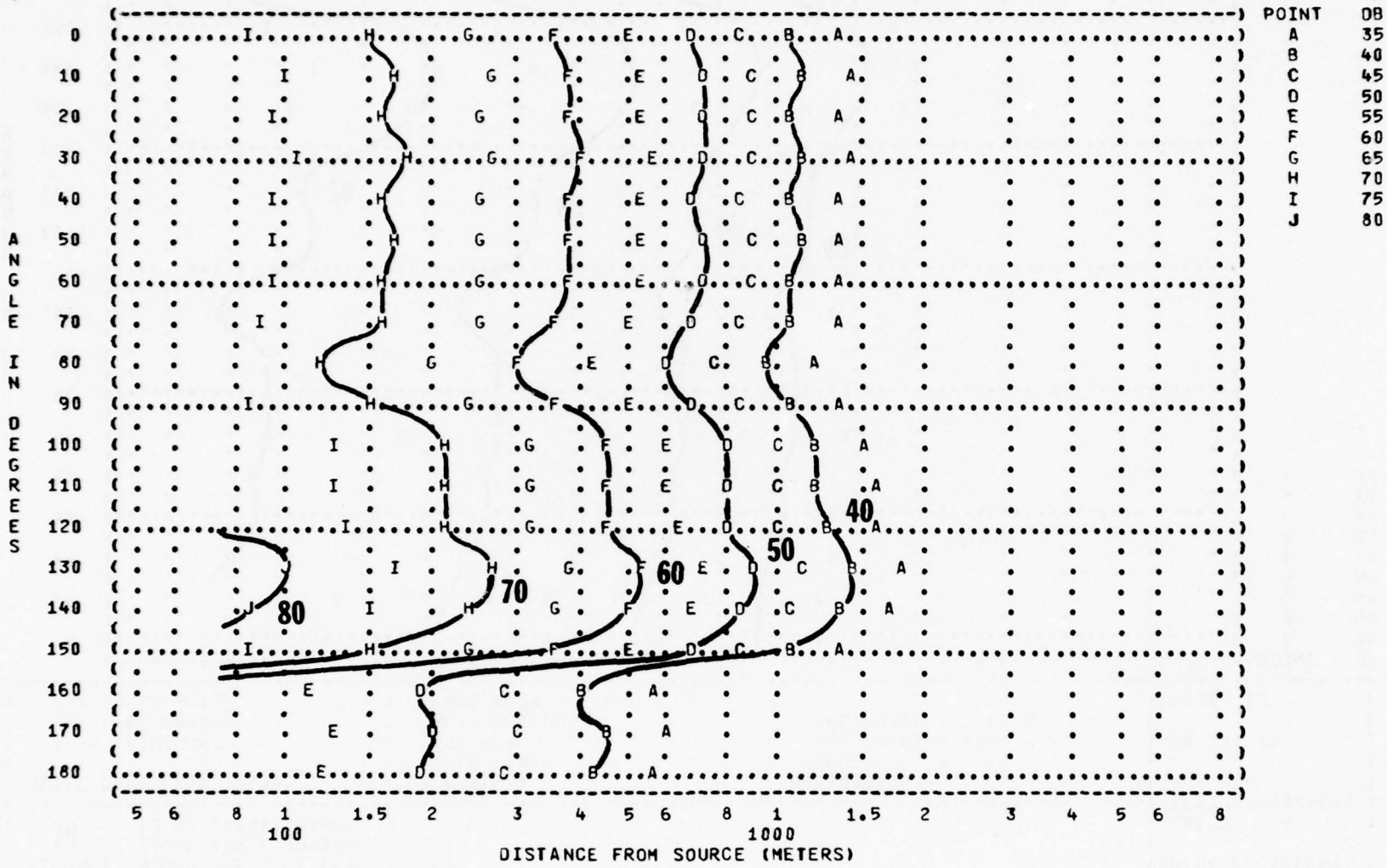
SOUND PRESSURE LEVEL (SPL)
EQUAL LEVEL CONTOURS (DB)
125 HZ OCTAVE BAND

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-003
RUN 04
05 MAY 75
PAGE 20

NOISE SOURCE/SUBJECT:
A-6A AIRCRAFT
J52-P-8A ENGINE
FAR FIELD NOISE

OPERATION:
IDLE POWER
60% 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: 10

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

NOISE SOURCE/SUBJECT:
A-6A AIRCRAFT
J52-P-8A ENGINE
FAR FIELD NOISE

OPERATION:
IDLE POWER
60% RPM
BOTH ENGINES
FREE FLOW

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

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-003
RUN 04
05 MAY 75
PAGE 21

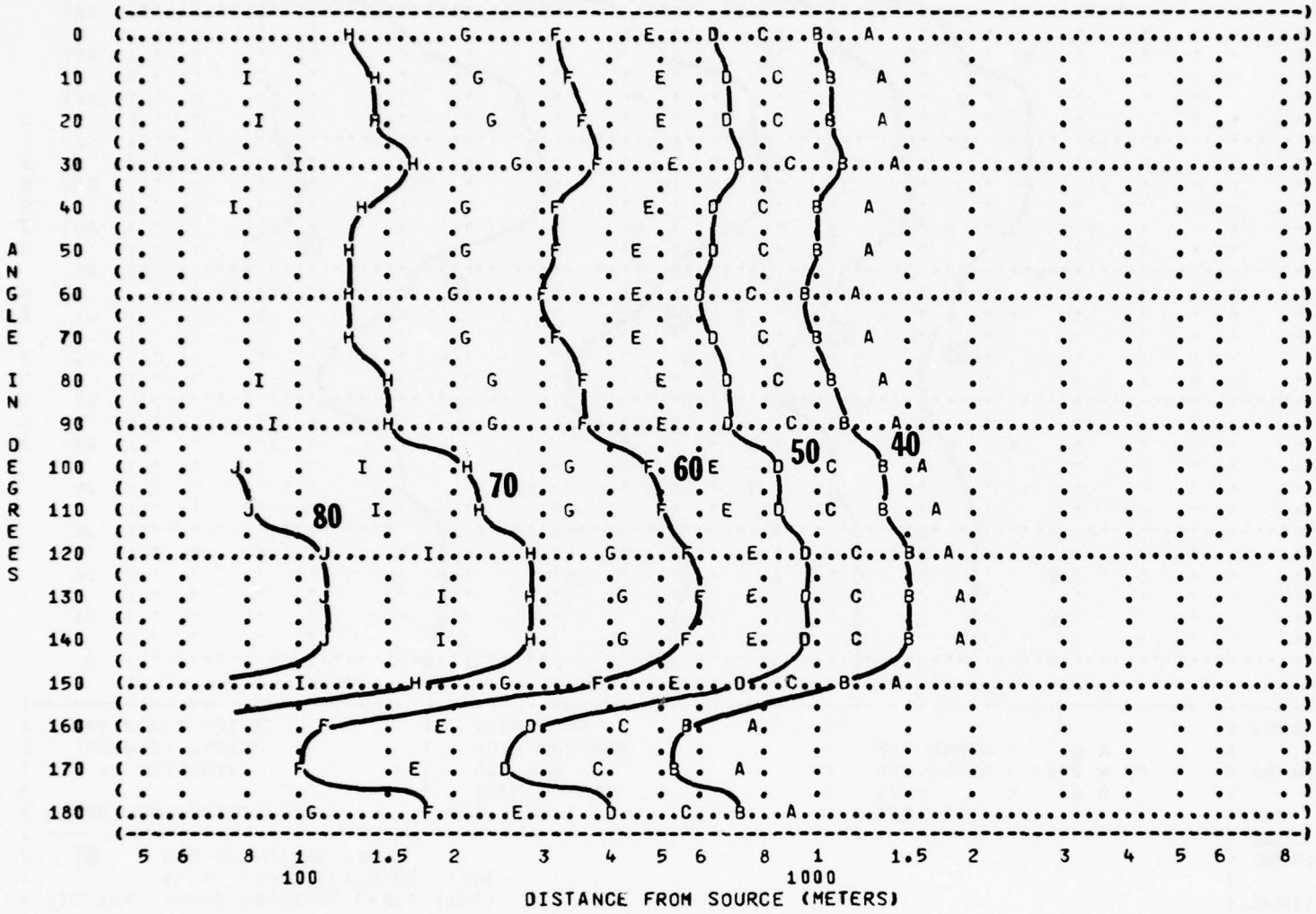


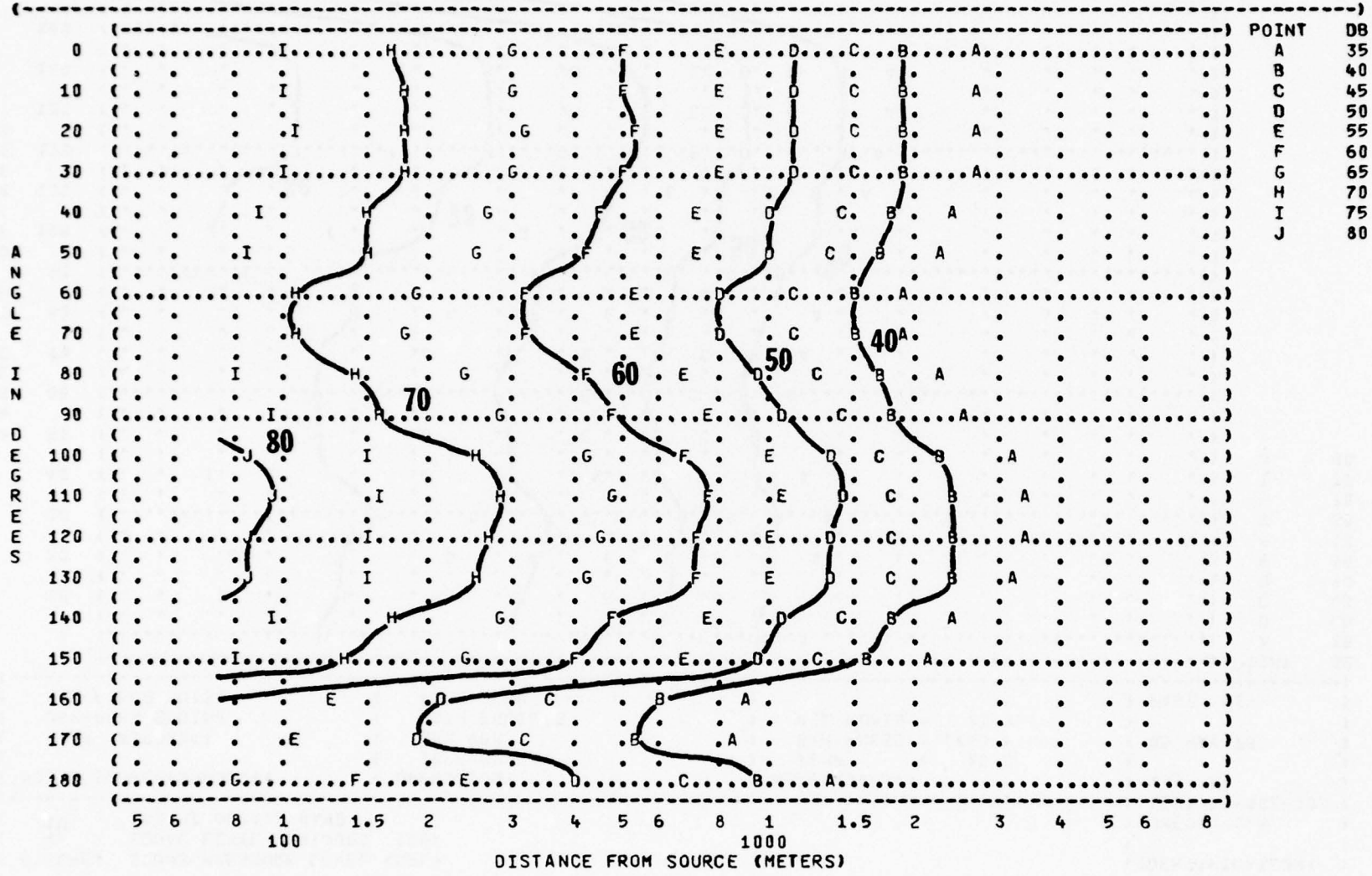
FIGURE 10: SOUND PRESSURE LEVEL (SPL) EQUAL LEVEL CONTOURS (DB) 500 HZ OCTAVE BAND

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-003
RUN 04
05 MAY 75
PAGE 22

NOISE SOURCE/SUBJECT:
A-6A AIRCRAFT
J52-P-8A ENGINE
FAR FIELD NOISE

OPERATION:
IDLE POWER
60% 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: 10

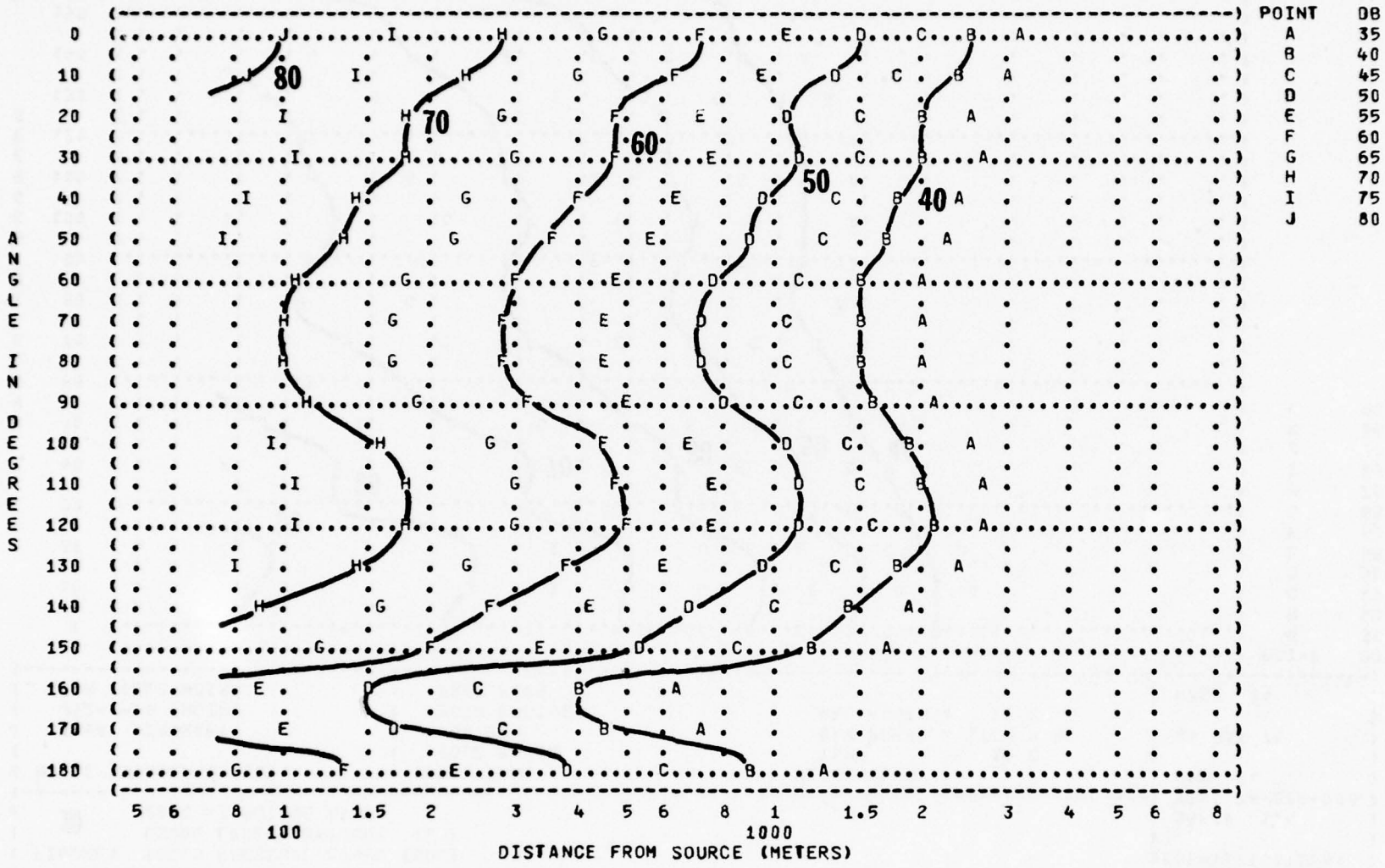
SOUND PRESSURE LEVEL (SPL)
EQUAL LEVEL CONTOURS (DB)
1000 HZ OCTAVE BAND

NOISE SOURCE/SUBJECT:
A-6A AIRCRAFT
J52-P-8A ENGINE
FAR FIELD NOISE

OPERATION:
IDLE POWER
60% RPM
BOTH ENGINES
FREE FLOW

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

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-003
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

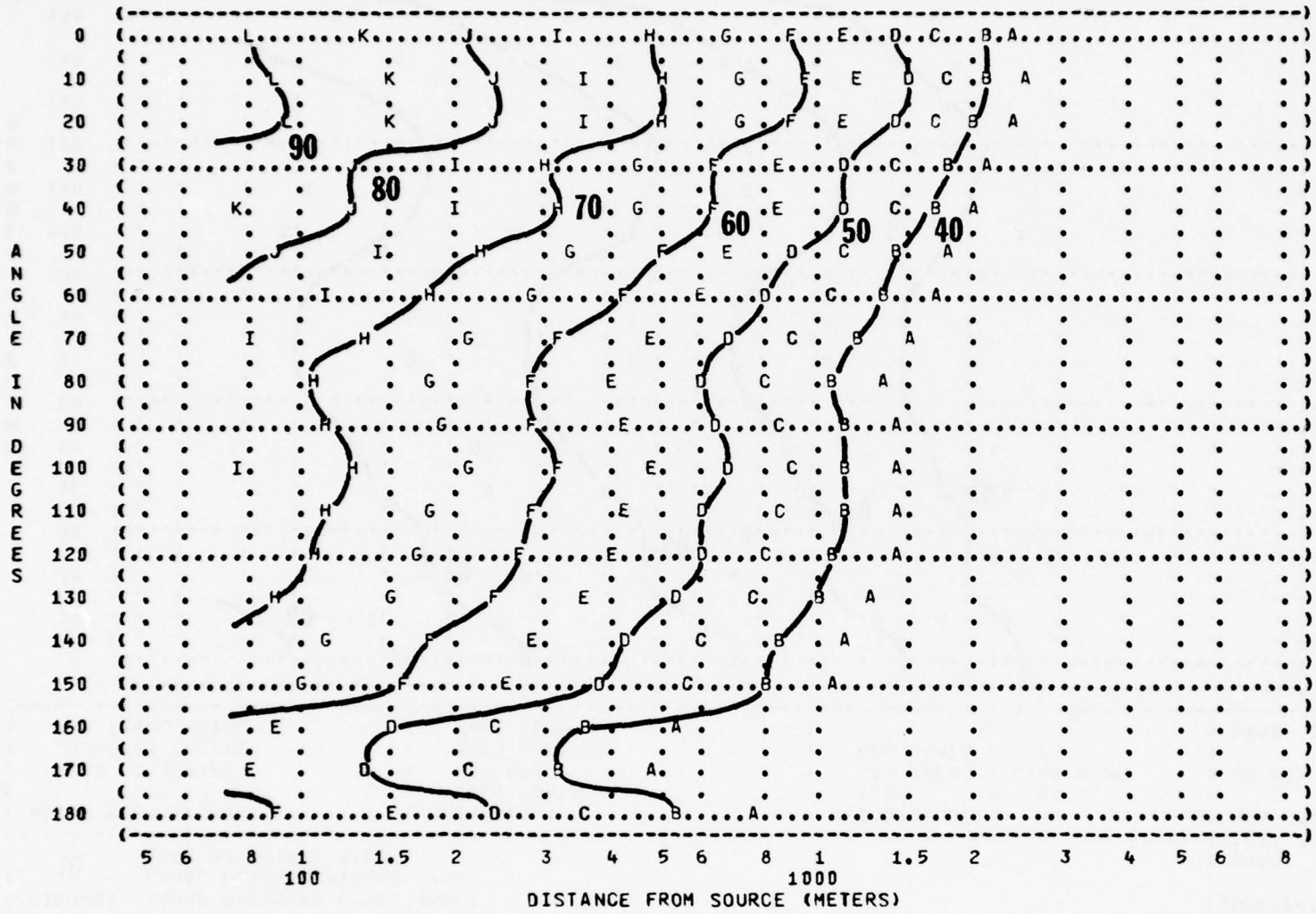
FIGURE 10: SOUND PRESSURE LEVEL (SPL) EQUAL LEVEL CONTOURS (DB) 2000 HZ OCTAVE BAND

NOISE SOURCE/SUBJECT:
A-6A AIRCRAFT
J52-P-8A ENGINE
FAR FIELD NOISE

OPERATION:
IDLE POWER
60% RPM
BOTH ENGINES
FREE FLOW

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

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-003
RUN 04
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

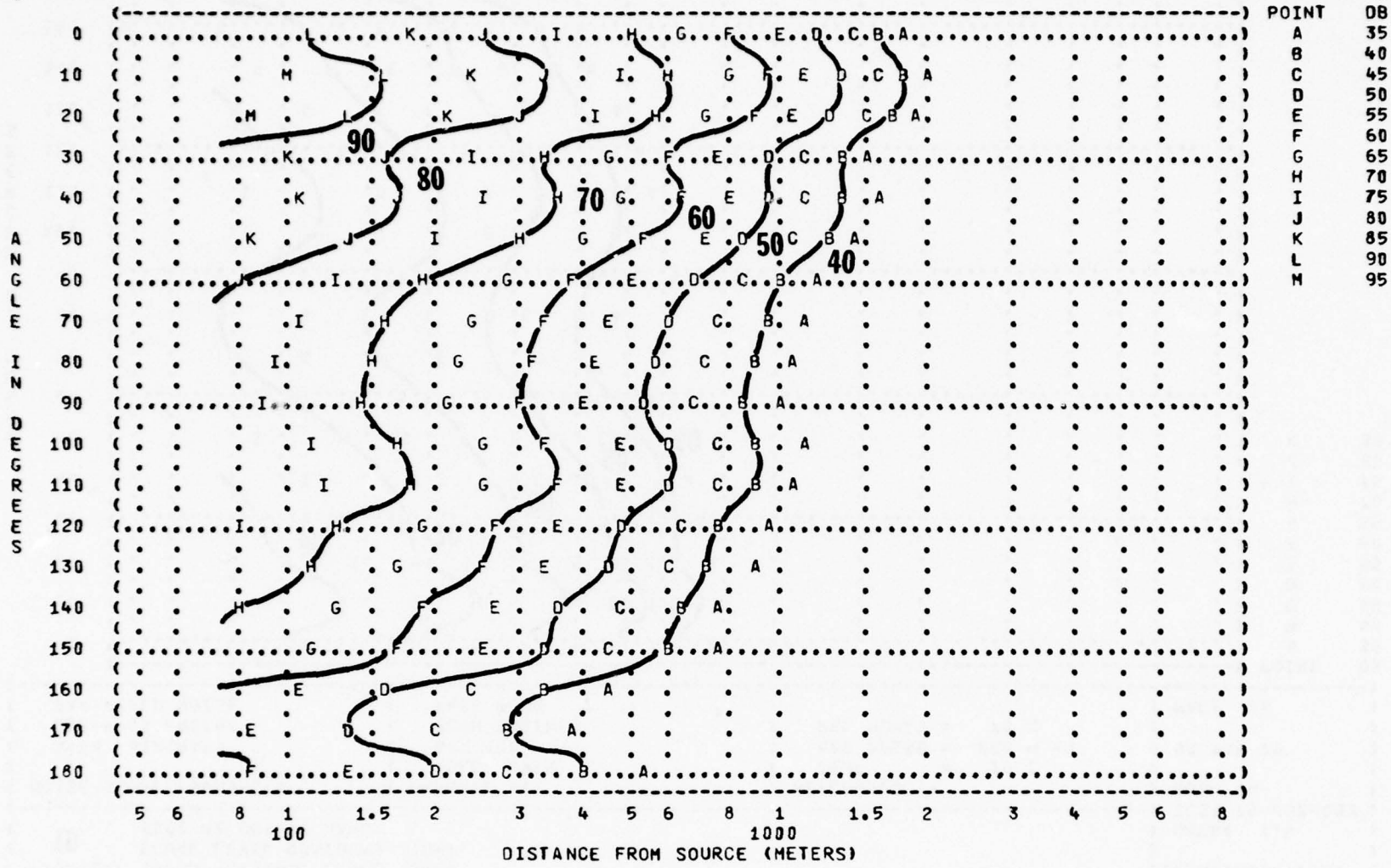
FIGURE 10: SOUND PRESSURE LEVEL (SPL) EQUAL LEVEL CONTOURS (DB) 4000 HZ OCTAVE BAND

NOISE SOURCE/SUBJECT:
A-6A AIRCRAFT
J52-P-8A ENGINE
FAR FIELD NOISE

OPERATION:
IDLE POWER
60% RPM
BOTH ENGINES
FREE FLOW

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

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-003
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

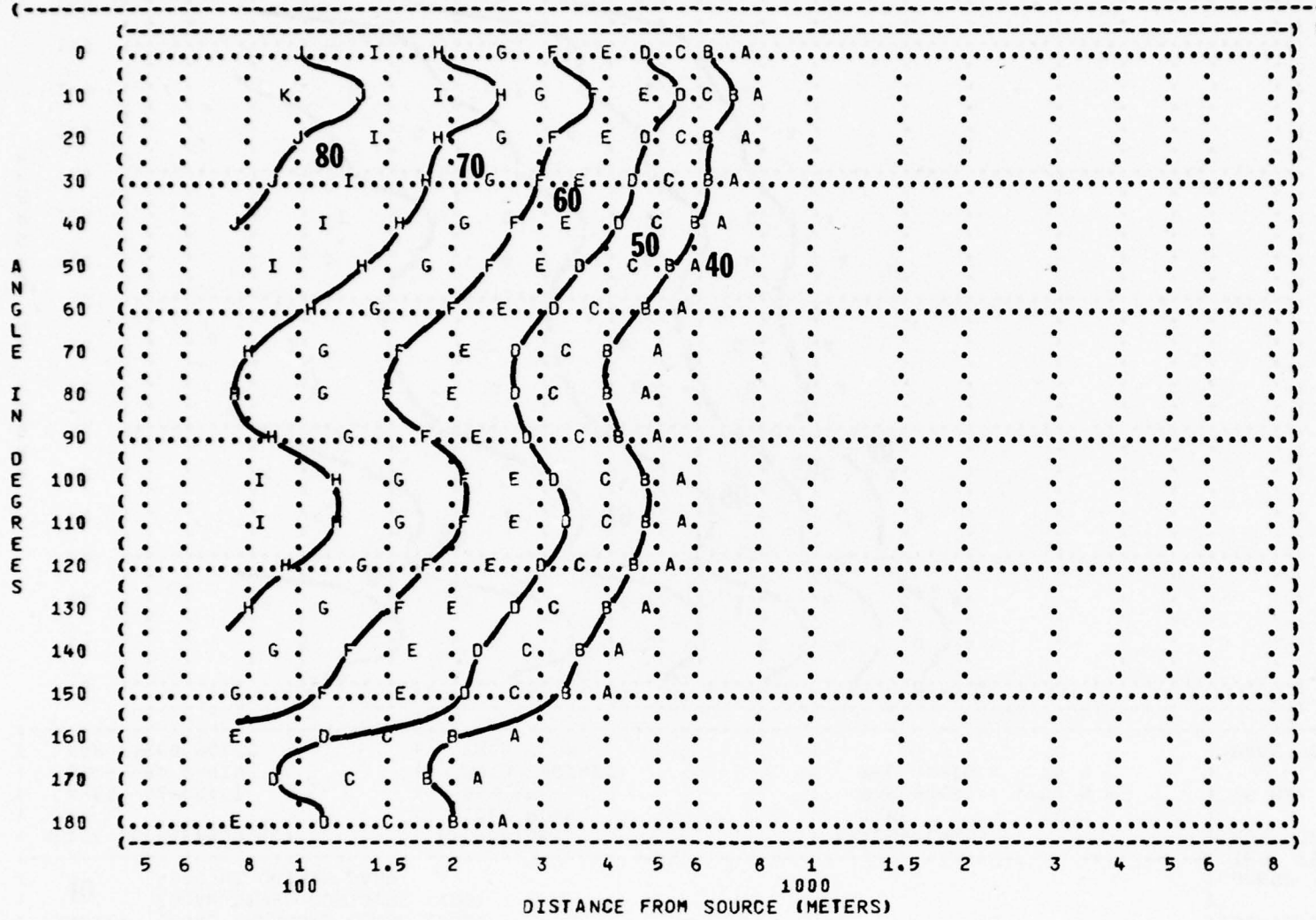
FIGURE 10: SOUND PRESSURE LEVEL (SPL) EQUAL LEVEL CONTOURS (DB) 8000 HZ OCTAVE BAND

NOISE SOURCE/SUBJECT:
A-6A AIRCRAFT
J52-P-8A ENGINE
FAR FIELD NOISE

OPERATION:
IDLE POWER
60% RPM
BOTH ENGINES
FREE FLOW

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

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-003
RUN 04
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
K	85

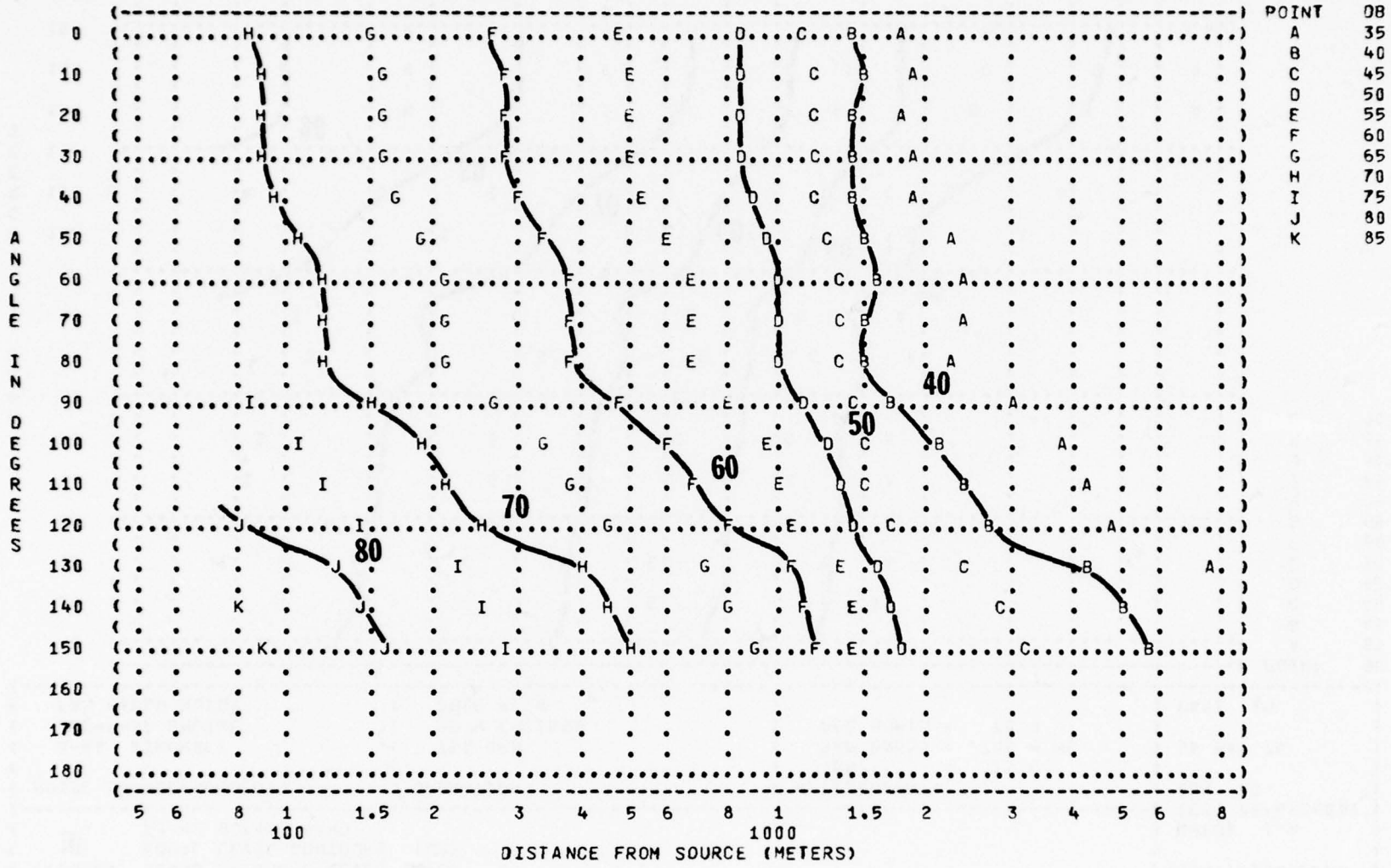
FIGURE 10 SOUND PRESSURE LEVEL (SPL)
EQUAL LEVEL CONTOURS (DB)
31.5 HZ OCTAVE BAND

NOISE SOURCE/SUBJECT:
A-6A AIRCRAFT
J52-P-8A 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 75-002-003
RUN 05
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

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

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-003
RUN 05
05 MAY 75
PAGE 19

NOISE SOURCE/SUBJECT:
A-6A AIRCRAFT
J52-P-8A 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
J	80
K	85
L	90

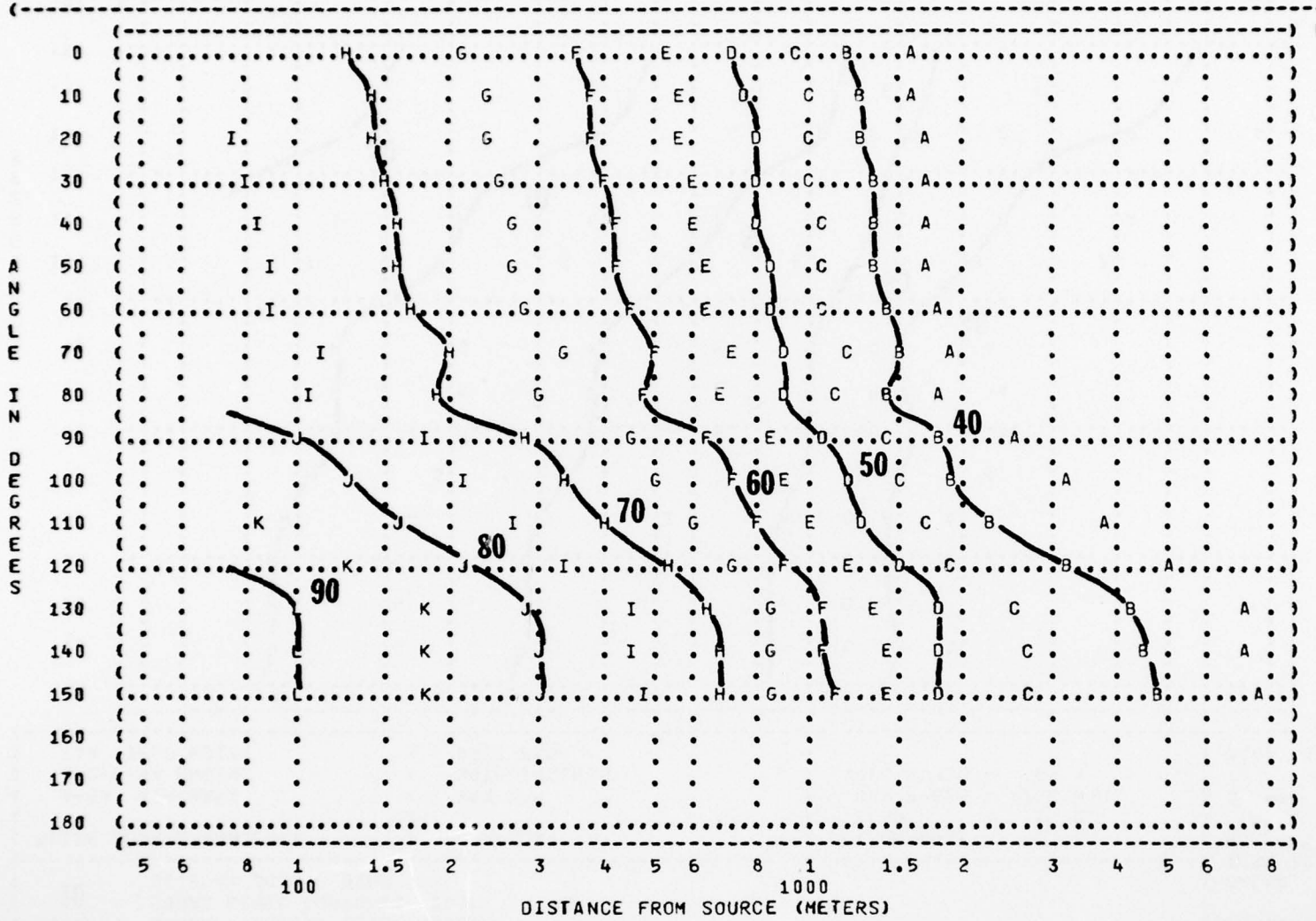


FIGURE 10: SOUND PRESSURE LEVEL (SPL) EQUAL LEVEL CONTOURS (DB) 125 HZ OCTAVE BAND

NOISE SOURCE/SUBJECT:
A-6A AIRCRAFT
J52-P-8A 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 75-002-003
RUN 05
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

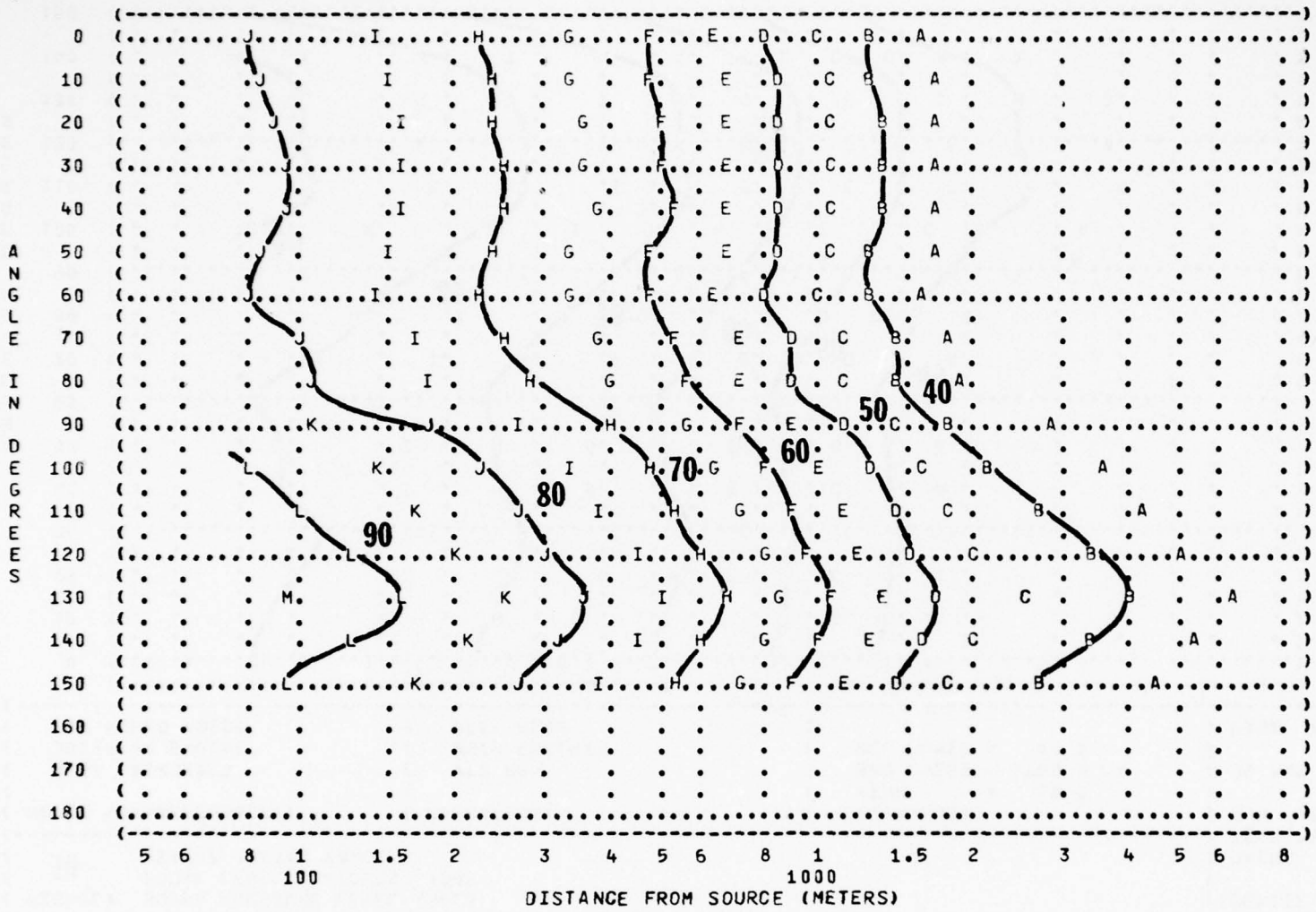


FIGURE 10: SOUND PRESSURE LEVEL (SPL) EQUAL LEVEL CONTOURS (DB) 250 HZ OCTAVE BAND

NOISE SOURCE/SUBJECT:
A-6A AIRCRAFT
J52-P-8A 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 75-002-003
RUN 05
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

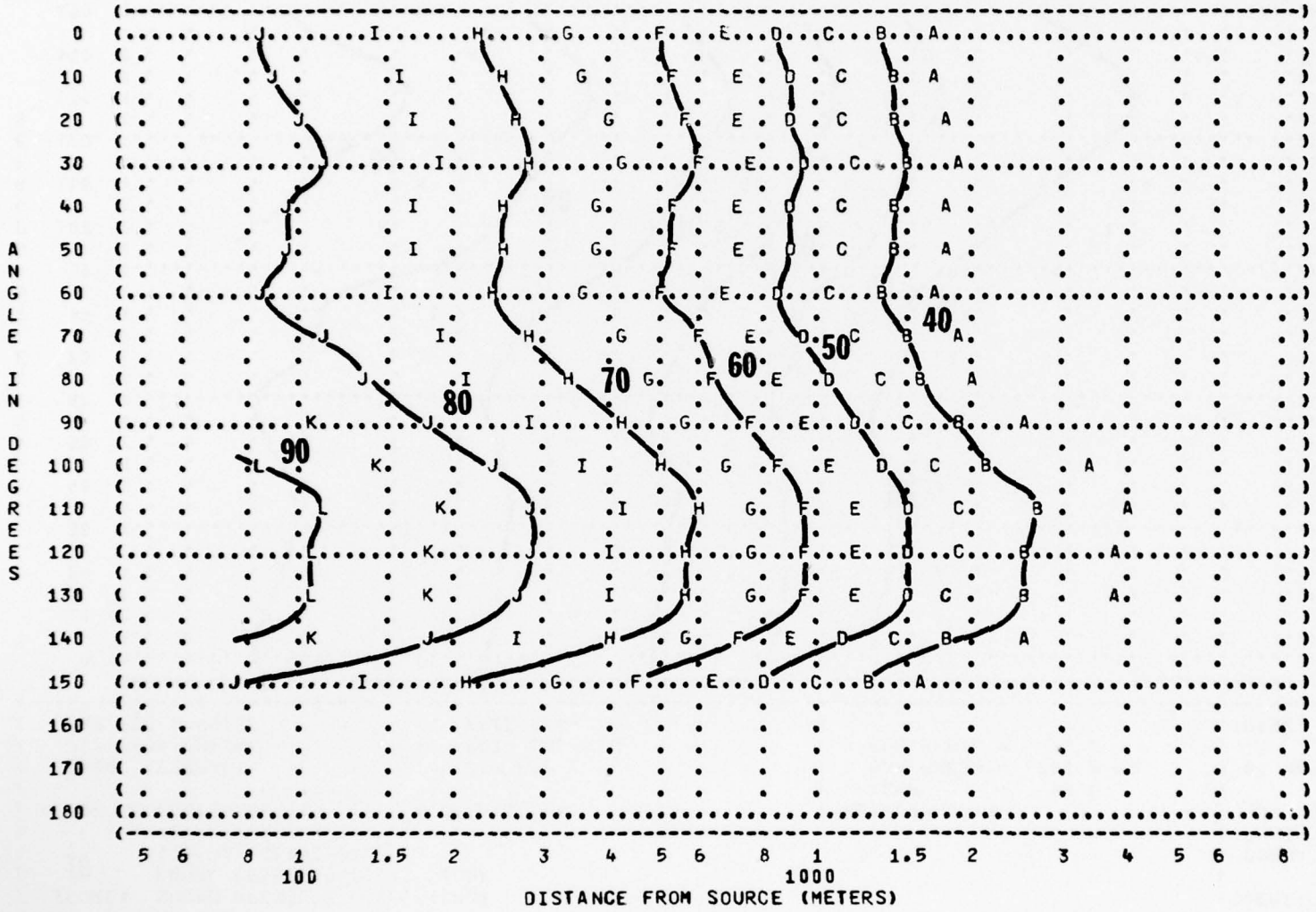


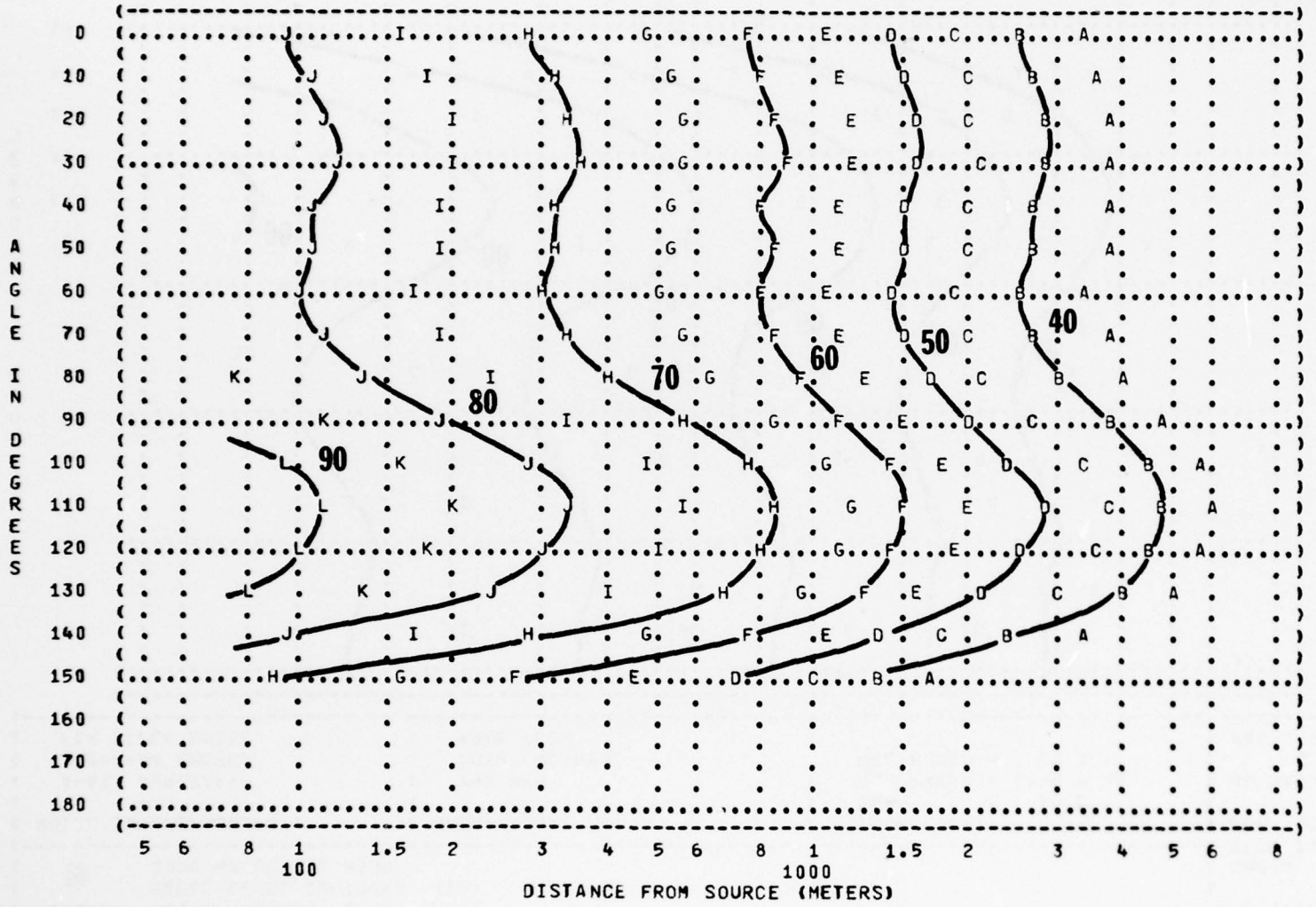
FIGURE 10 SOUND PRESSURE LEVEL (SPL) EQUAL LEVEL CONTOURS (DB) 500 HZ OCTAVE BAND

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-003
RUN 05
05 MAY 75
PAGE 22

NOISE SOURCE/SUBJECT:
A-6A AIRCRAFT
J52-P-8A 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
J	80
K	85
L	90

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

NOISE SOURCE/SUBJECT:
A-6A AIRCRAFT
J52-P-8A 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 75-002-003
RUN 05
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

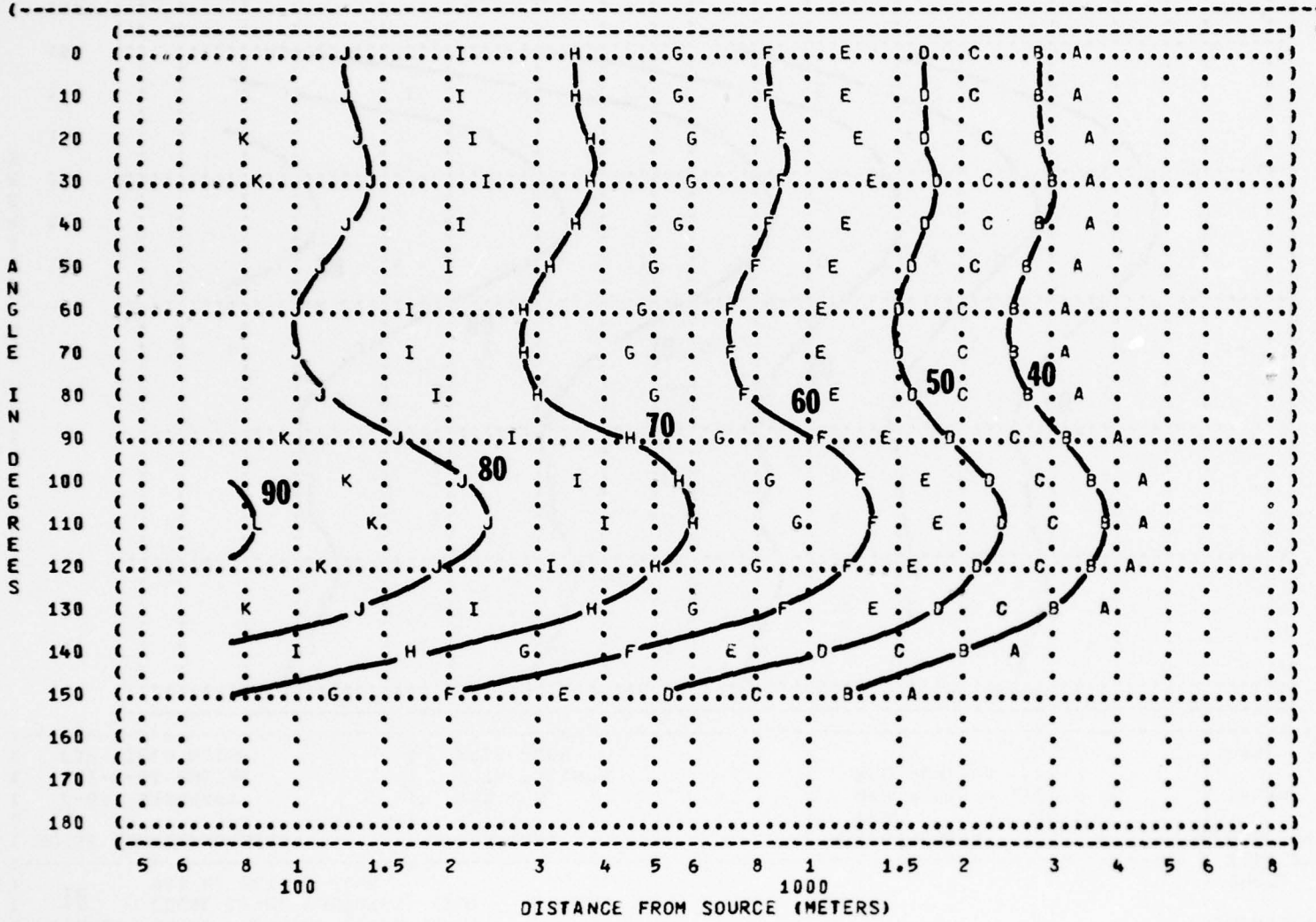


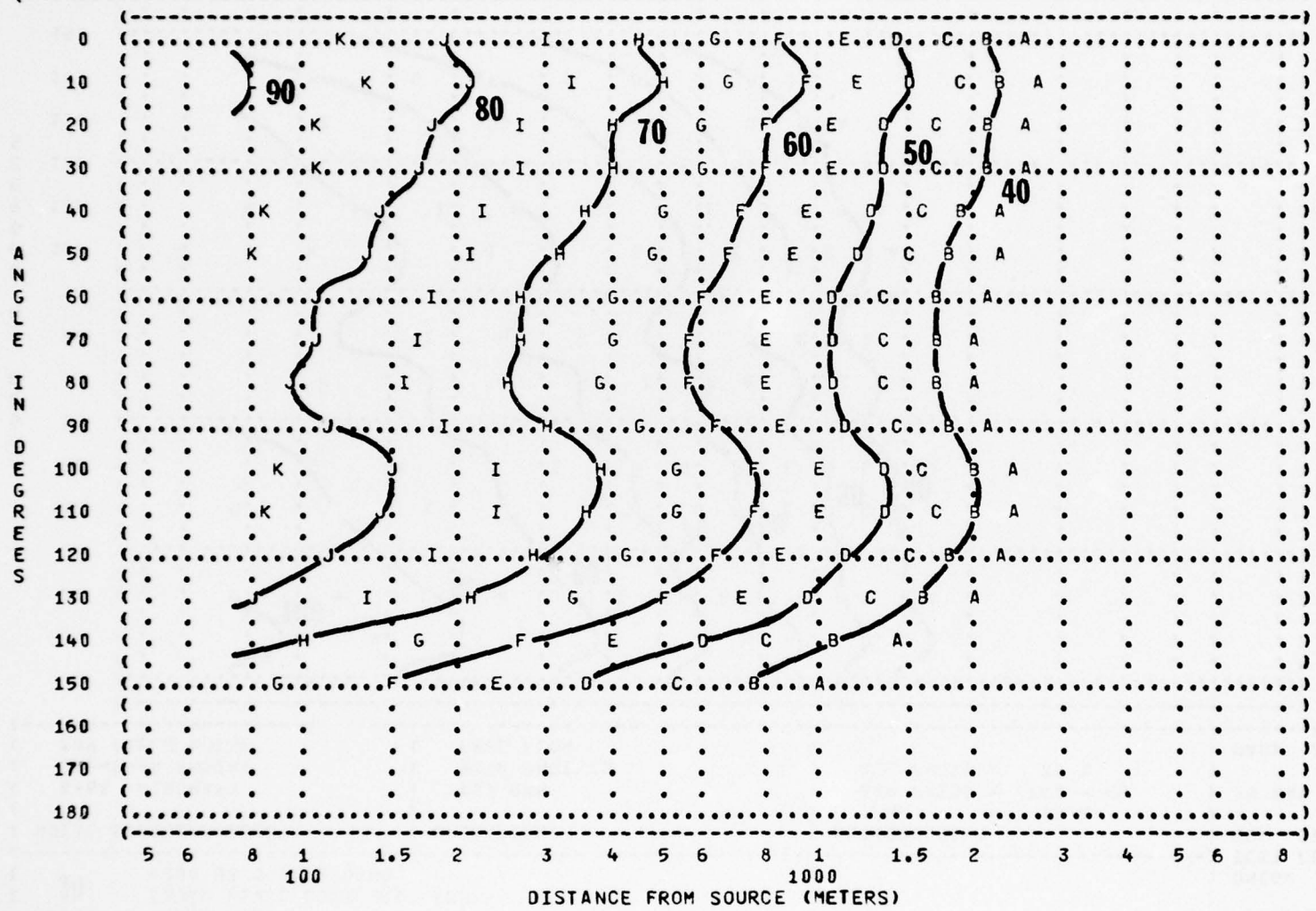
FIGURE 10: SOUND PRESSURE LEVEL (SPL) EQUAL LEVEL CONTOURS (DB) 2000 HZ OCTAVE BAND

NOISE SOURCE/SUBJECT:
A-6A AIRCRAFT
J52-P-8A 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 75-002-003
RUN 05
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

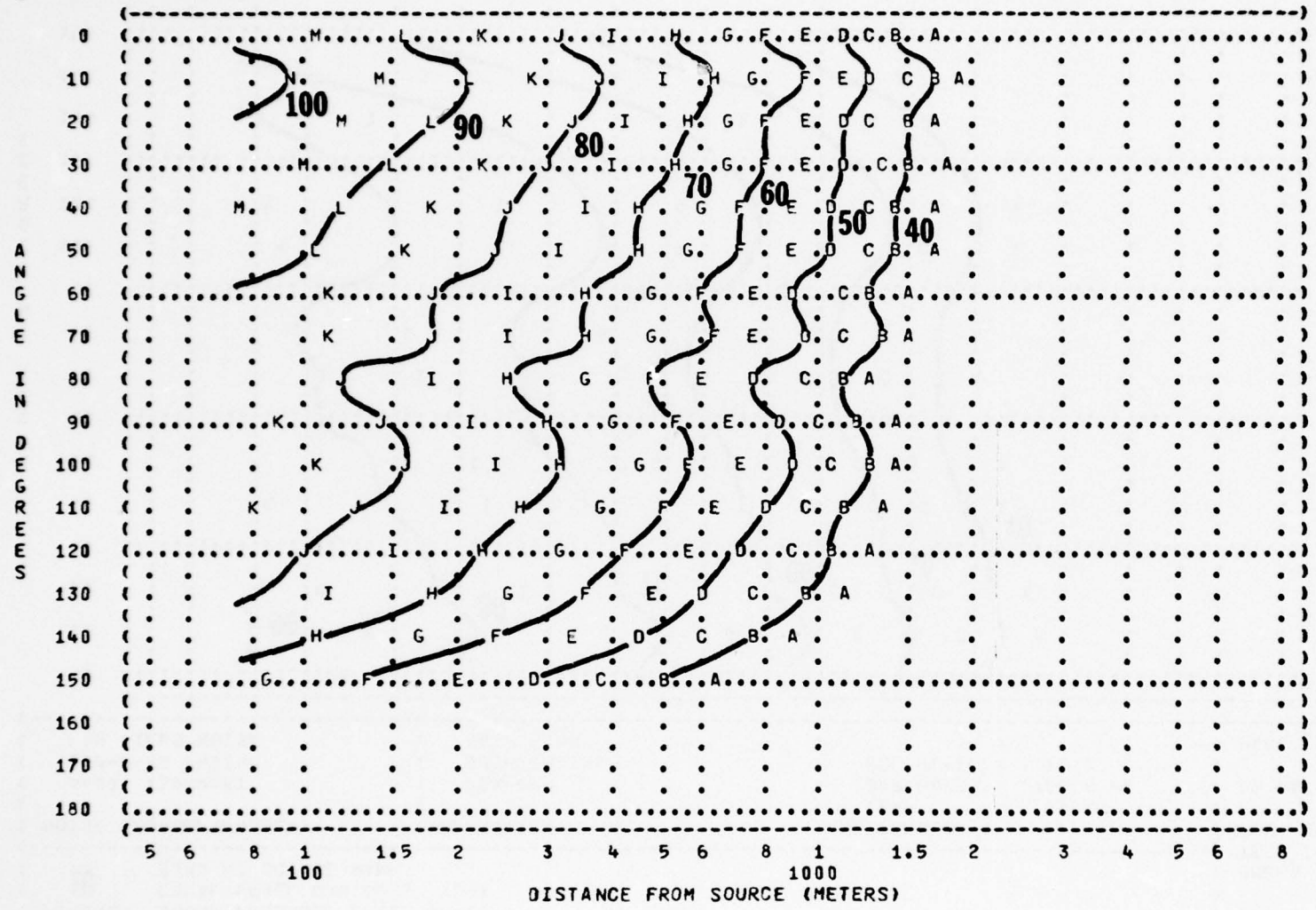
FIGURE 10 SOUND PRESSURE LEVEL (SPL)
EQUAL LEVEL CONTOURS (DB)
4000 HZ OCTAVE BAND

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-003
RUN 05
05 MAY 75
PAGE 25

NOISE SOURCE/SUBJECT:
A-6A AIRCRAFT
J52-P-8A 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
J	80
K	85
L	90
M	95
N	100

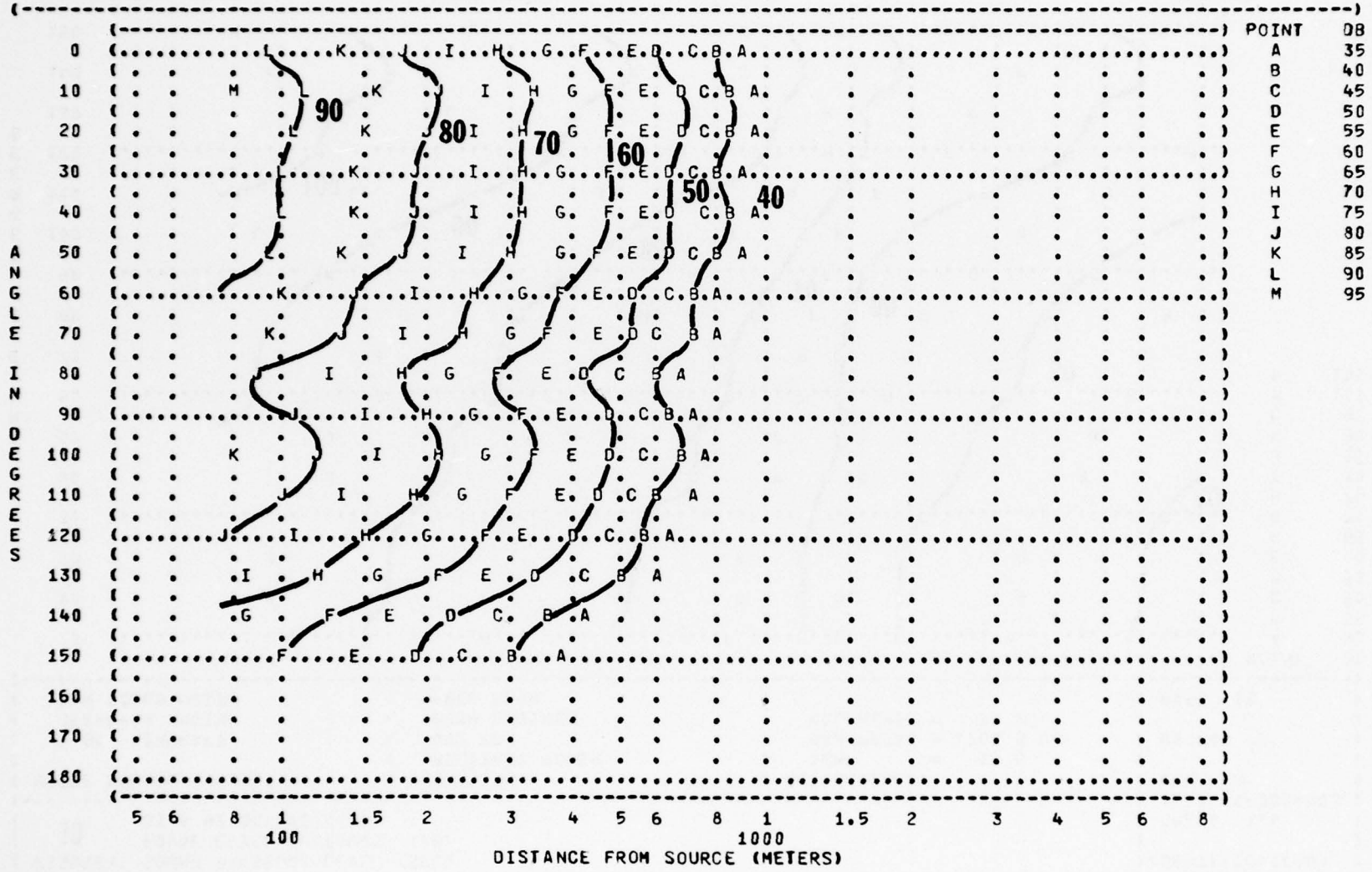
FIGURE 10: SOUND PRESSURE LEVEL (SPL) EQUAL LEVEL CONTOURS (DB) 8000 HZ OCTAVE BAND

NOISE SOURCE/SUBJECT:
A-6A AIRCRAFT
J52-P-8A 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 75-002-003
RUN 05
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
K	85
L	90
M	95

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

NOISE SOURCE/SUBJECT:
A-6A AIRCRAFT
J52-P-8A ENGINE
FAR FIELD NOISE

OPERATION:
MILITARY POWER
99% RPM
BOTH ENGINES
FREE FLOW

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

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-003
RUN 06
05 MAY 75
PAGE 18

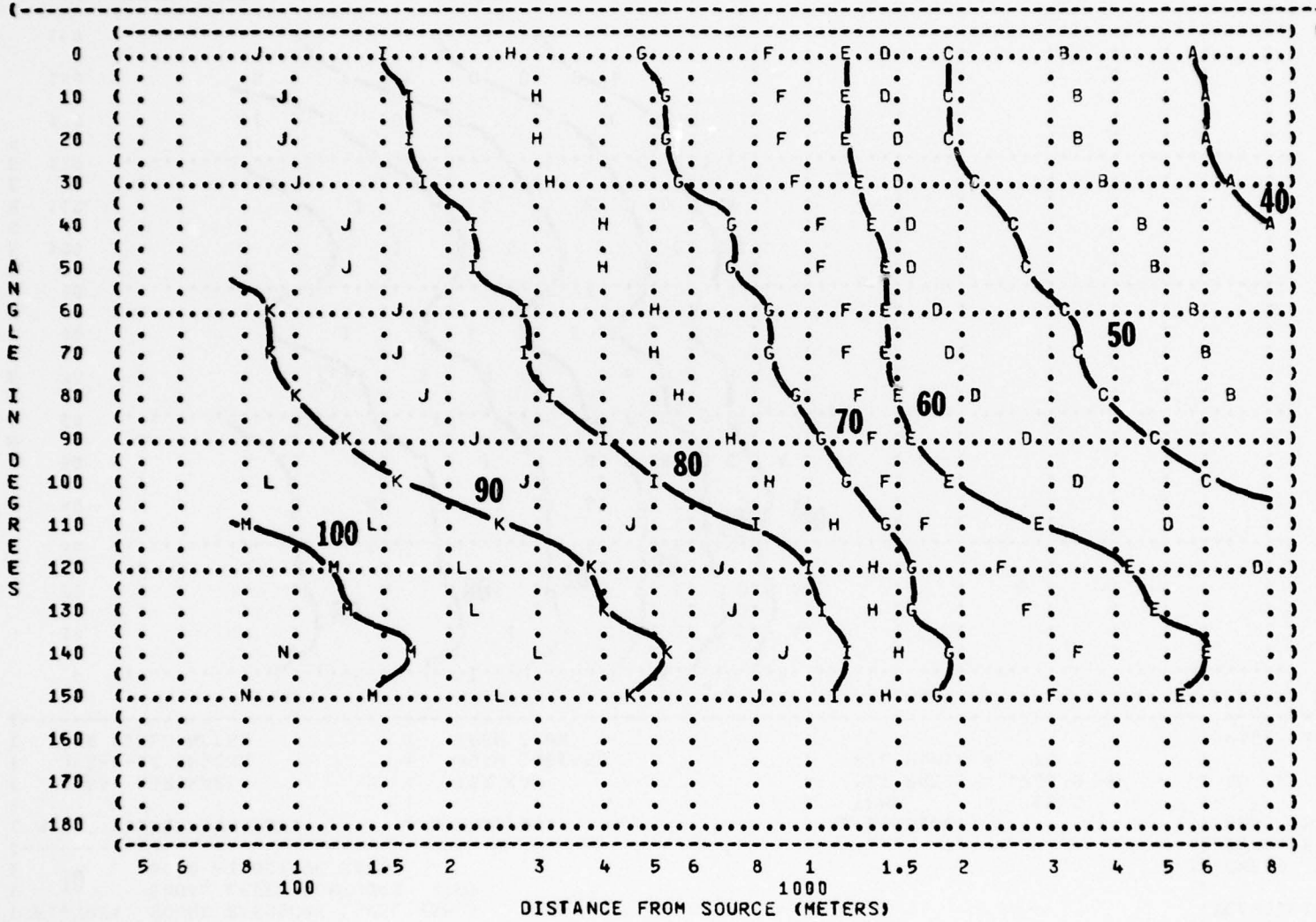


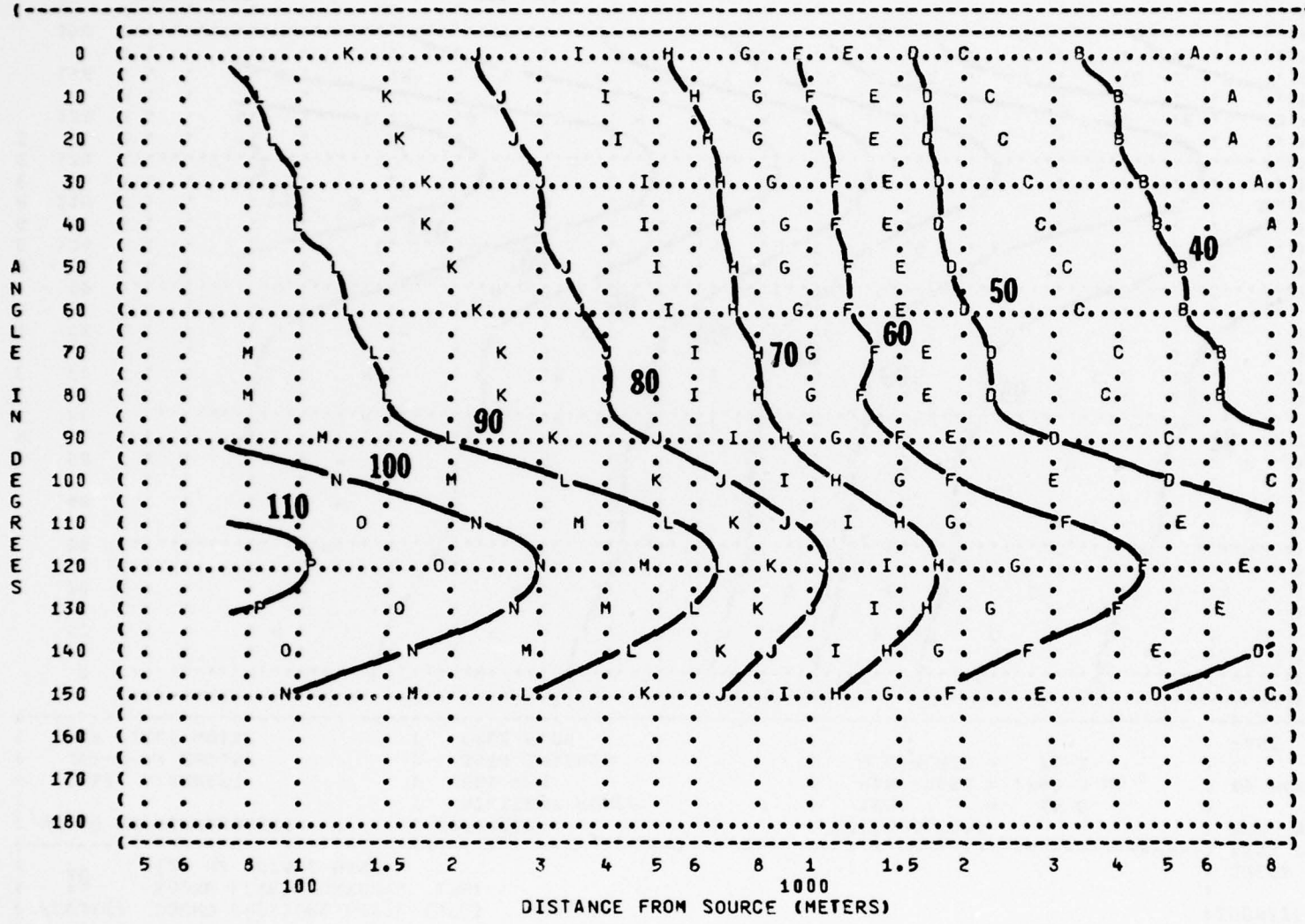
FIGURE 10: SOUND PRESSURE LEVEL (SPL) EQUAL LEVEL CONTOURS (DB) 63 HZ OCTAVE BAND

NOISE SOURCE/SUBJECT:
A-6A AIRCRAFT
J52-P-8A ENGINE
FAR FIELD NOISE

OPERATION:
MILITARY POWER
99% RPM
BOTH ENGINES
FREE FLOW

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

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-003
RUN 06
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
P	110

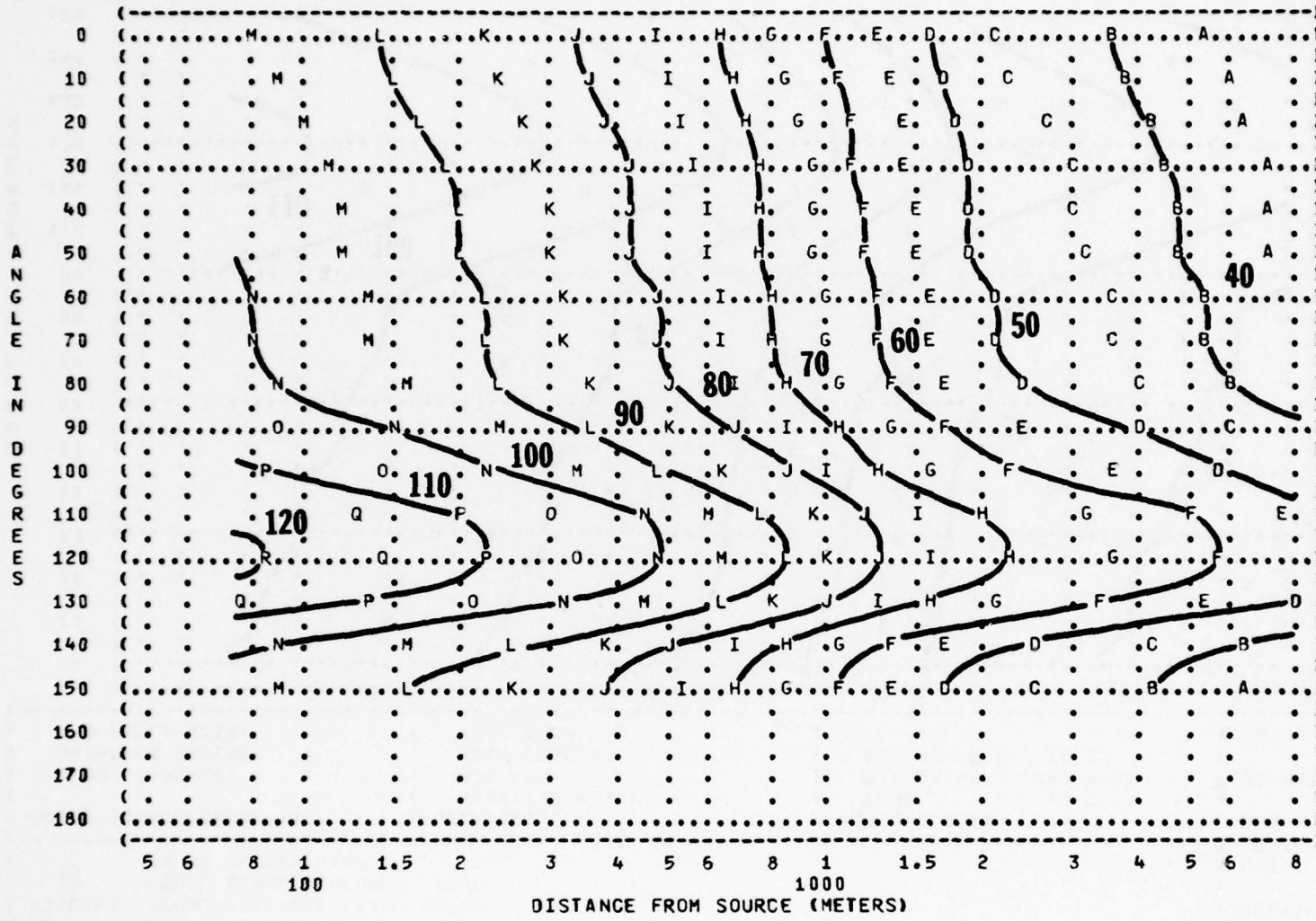
FIGURE 10: SOUND PRESSURE LEVEL (SPL) EQUAL LEVEL CONTOURS (DB) 125 HZ OCTAVE BAND

IDENTIFICATION: OMEGA 1.4 TEST 75-002-003 RUN 06 05 MAY 75 PAGE 20

NOISE SOURCE/SUBJECT:
A-6A AIRCRAFT
J52-P-8A ENGINE
FAR FIELD NOISE

OPERATION:
MILITARY POWER
99% 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
Q	115
R	120

FIGURE: 10

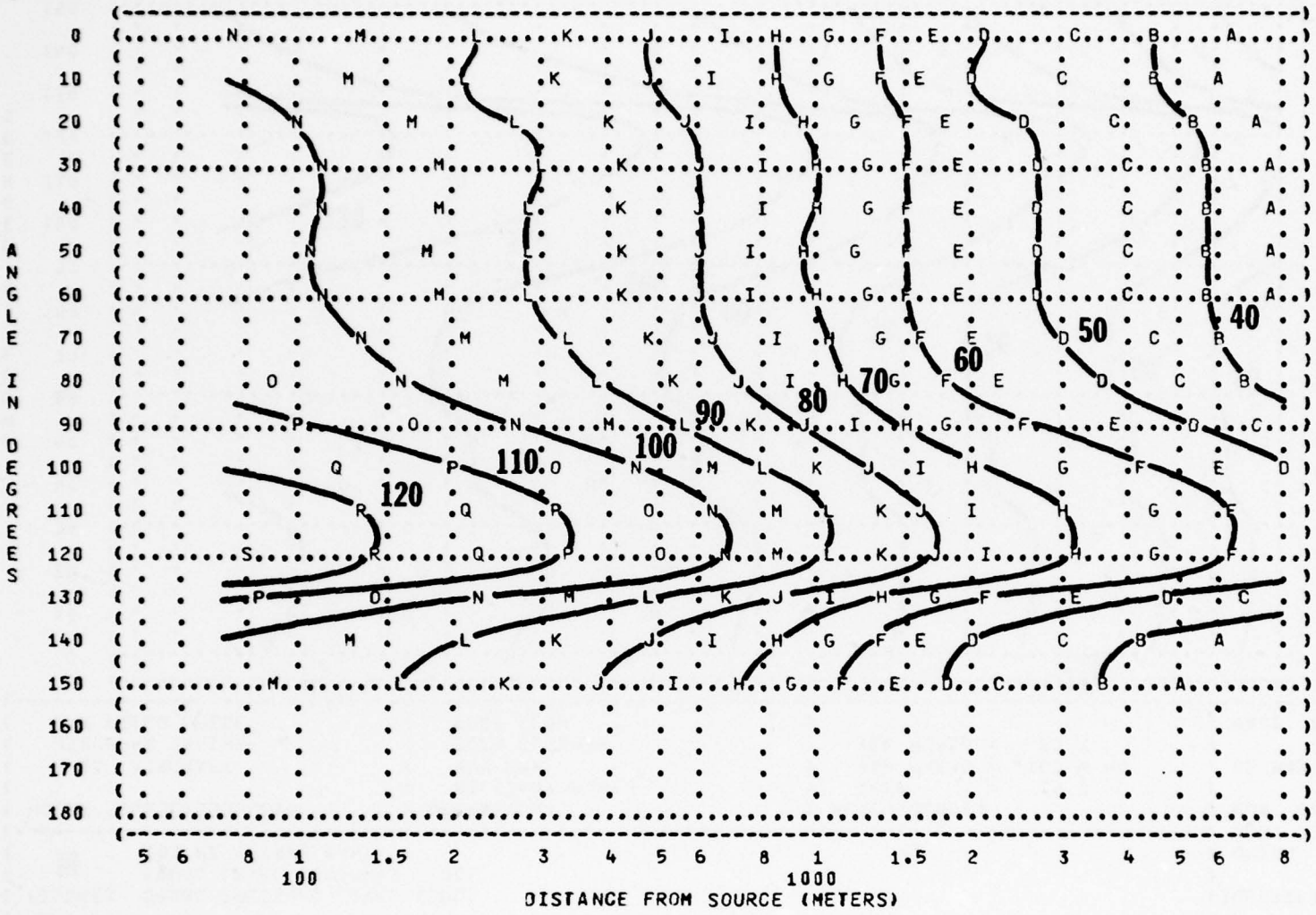
SOUND PRESSURE LEVEL (SPL)
EQUAL LEVEL CONTOURS (DB)
250 HZ OCTAVE BAND

NOISE SOURCE/SUBJECT:
A-6A AIRCRAFT
J52-P-8A ENGINE
FAR FIELD NOISE

OPERATION:
MILITARY POWER
99% RPM
BOTH ENGINES
FREE FLOW

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

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-003
RUN 06
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

FIGURE: 10

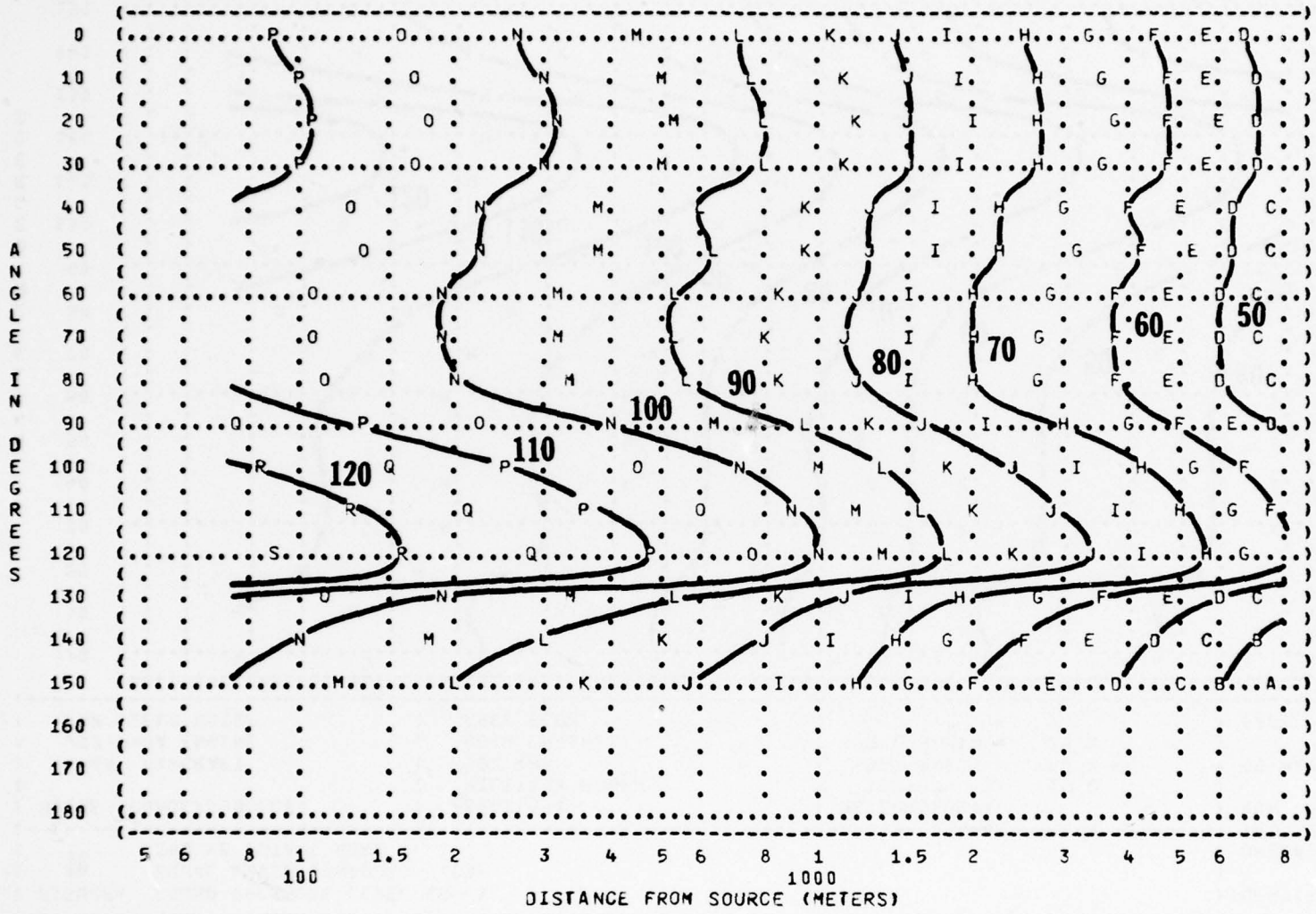
SOUND PRESSURE LEVEL (SPL)
EQUAL LEVEL CONTOURS (DB)
500 HZ OCTAVE BAND

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-003
RUN 06
05 MAY 75
PAGE 22

NOISE SOURCE/SUBJECT:
A-6A AIRCRAFT
J52-P-8A ENGINE
FAR FIELD NOISE

OPERATION:
MILITARY POWER
99% 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
Q	115
R	120
S	125

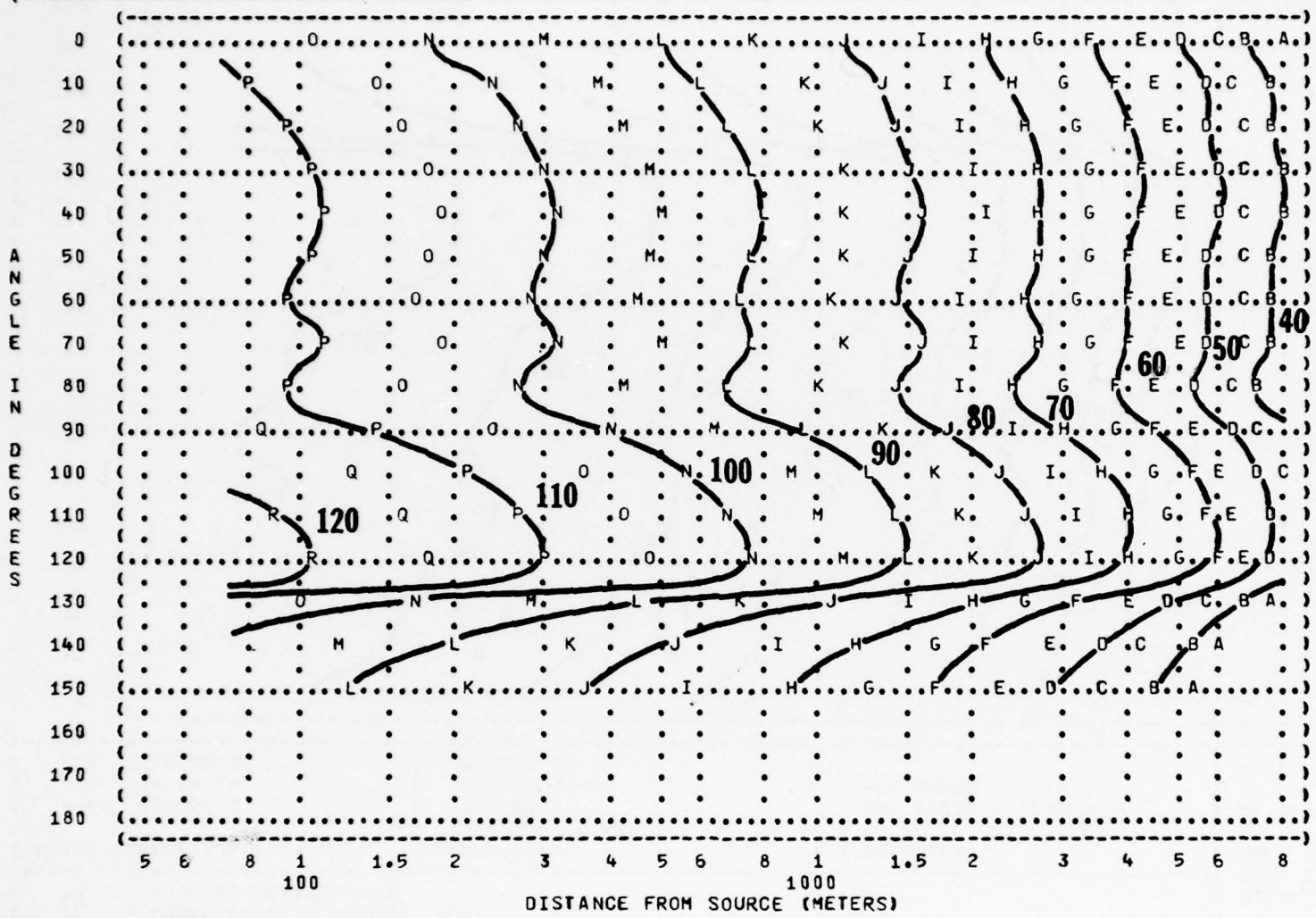
FIGURE 10: SOUND PRESSURE LEVEL (SPL) EQUAL LEVEL CONTOURS (DB) 1000 HZ OCTAVE BAND

NOISE SOURCE/SUBJECT:
A-6A AIRCRAFT
J52-P-8A ENGINE
FAR FIELD NOISE

OPERATION:
MILITARY POWER
99% RPM
BOTH ENGINES
FREE FLOW

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

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-003
RUN 06
05 MAY 75
PAGE 23



POINT	DB
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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

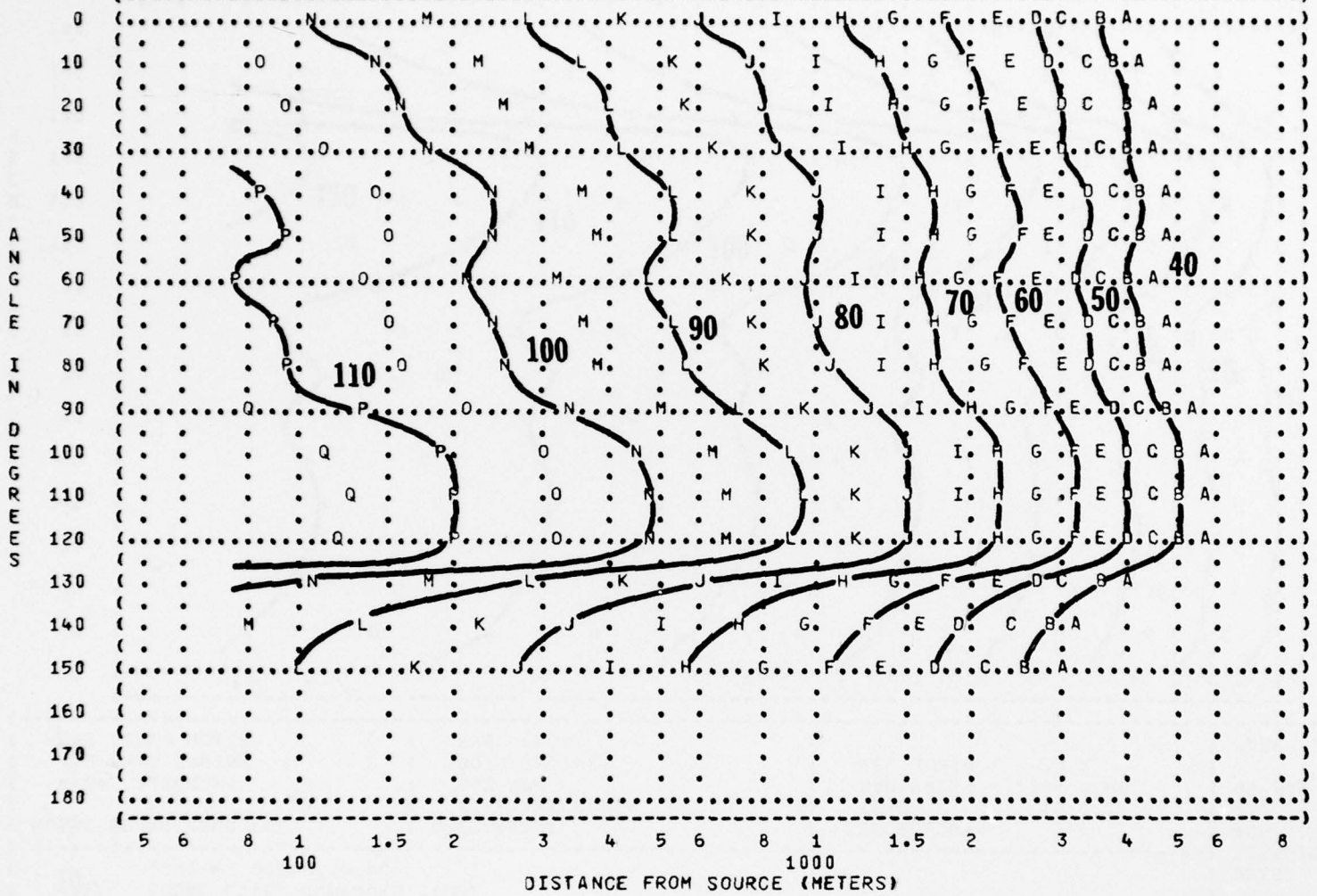
FIGURE 10: SOUND PRESSURE LEVEL (SPL) EQUAL LEVEL CONTOURS (DB) 2000 HZ OCTAVE BAND

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-003
RUN 06
05 MAY 75
PAGE 24

NOISE SOURCE/SUBJECT:
A-6A AIRCRAFT
J52-P-8A ENGINE
FAR FIELD NOISE

OPERATION:
MILITARY POWER
99% 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
Q	115

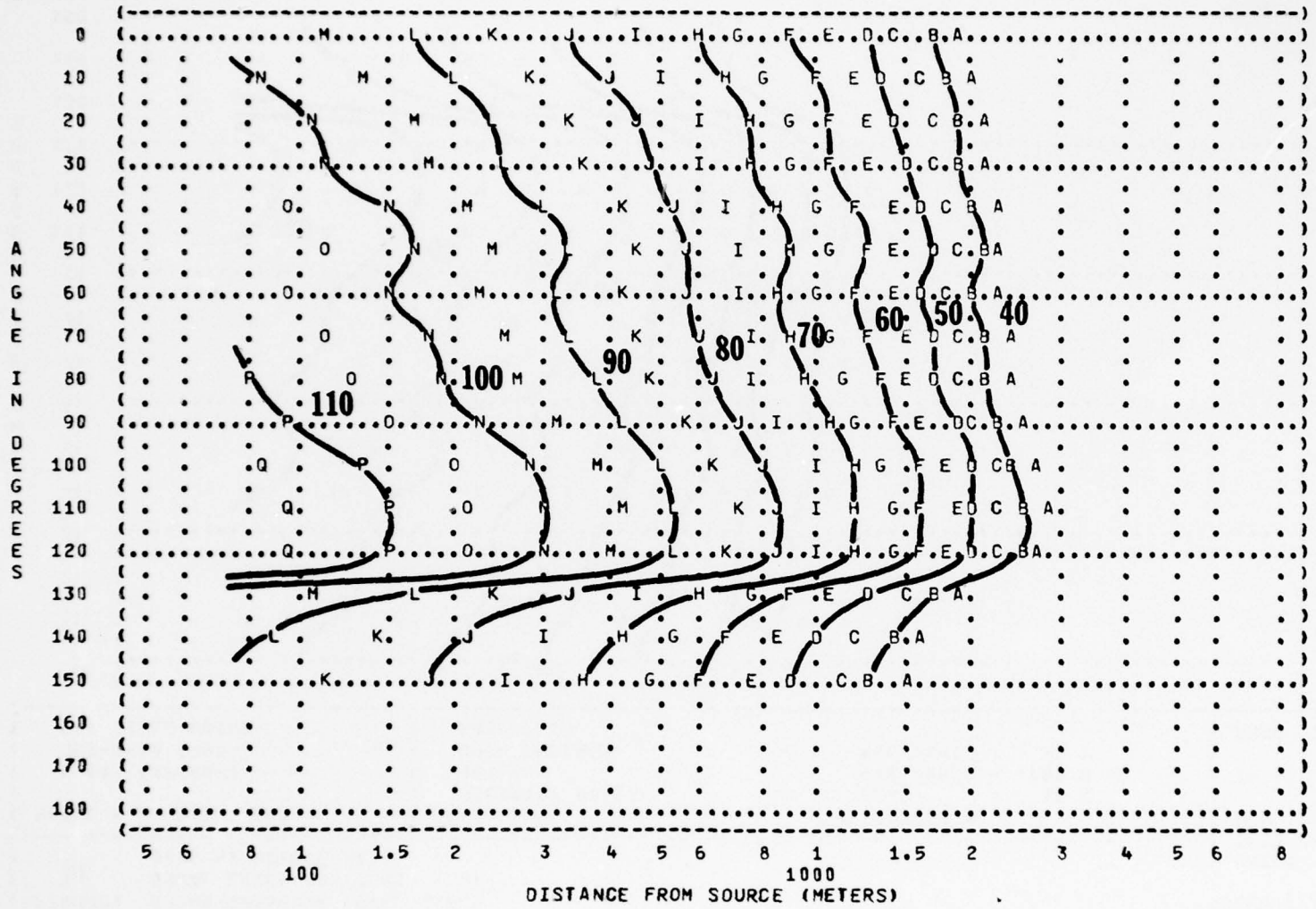
FIGURE 10: SOUND PRESSURE LEVEL (SPL) EQUAL LEVEL CONTOURS (DB) 4000 HZ OCTAVE BAND

NOISE SOURCE/SUBJECT:
A-6A AIRCRAFT
J52-P-8A ENGINE
FAR FIELD NOISE

OPERATION:
MILITARY POWER
99% RPM
BOTH ENGINES
FREE FLOW

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

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-003
RUN 06
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
Q	115

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

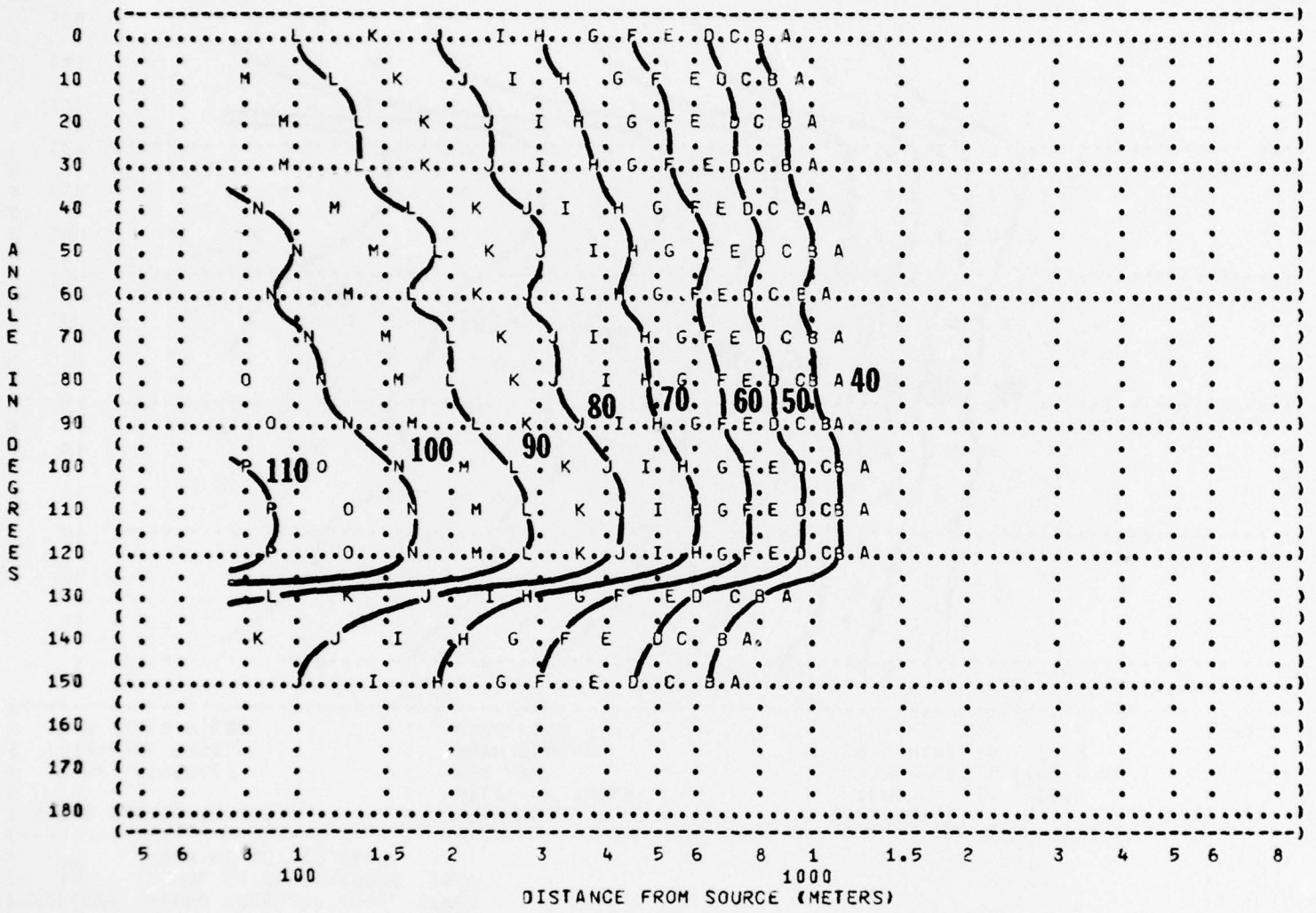
NOISE SOURCE/SUBJECT:
A-6A AIRCRAFT
J52-P-8A ENGINE
FAR FIELD NOISE

OPERATION:
MILITARY POWER
99% RPM
BOTH ENGINES
FREE FLOW

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

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-003
RUN 06
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
K	85
L	90
M	95
N	100
O	105
P	110



*U.S.Government Printing Office: 1977 — 757-080/231