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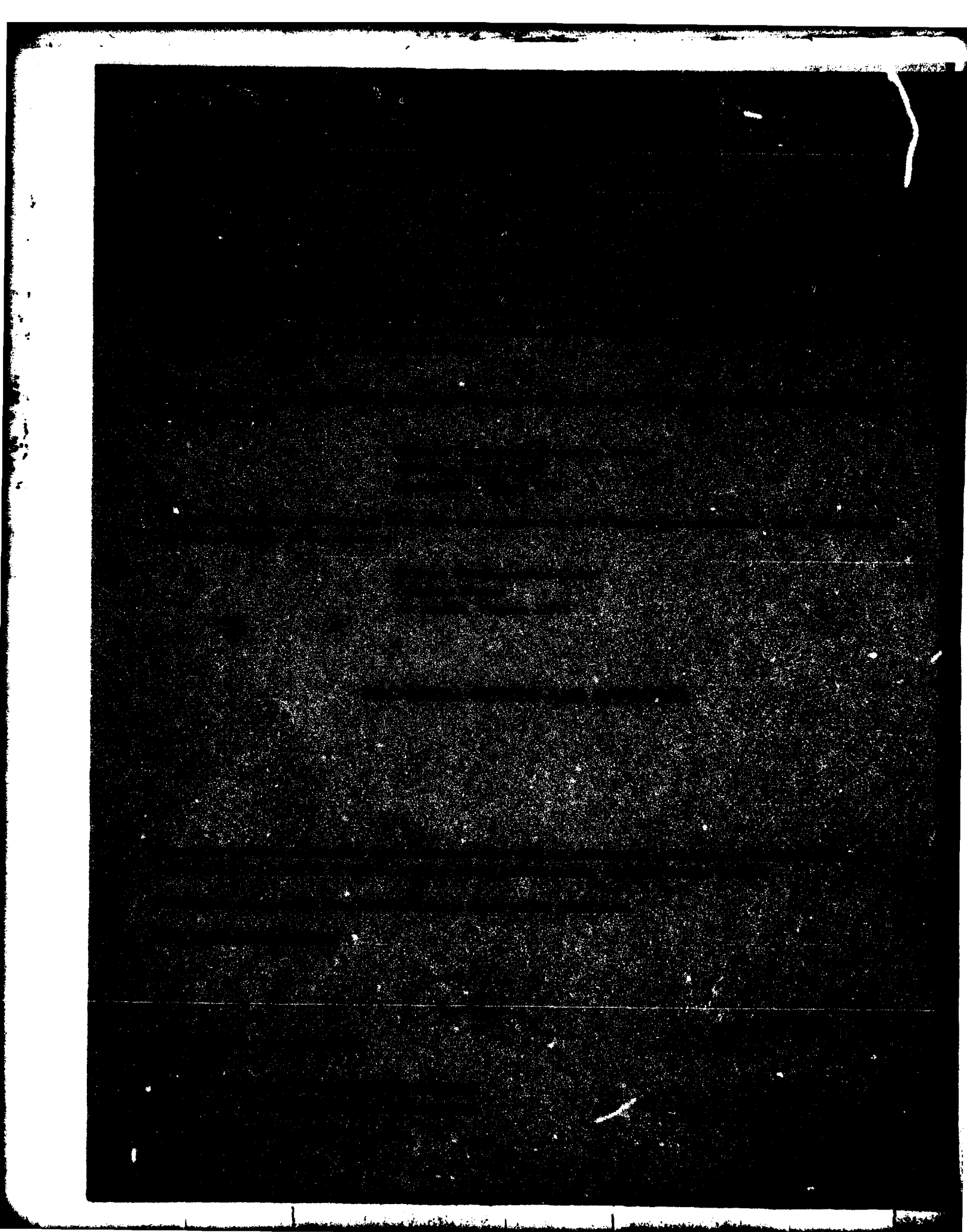
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THE UNIVERSITY OF TEXAS AT AUSTIN
INSTITUTE OF TECHNOLOGY
DEPARTMENT OF MECHANICAL ENGINEERING
AUSTIN, TEXAS 78712

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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. Far-field data measured at 19 locations are normalized to standard meteorological conditions and extrapolated from 75-8000 meters to derive sets of equal-value contours for these same seven acoustic measures as functions of angle and distance from the source. Refer to Volume 1 of this handbook, "USAF Bioenvironmental Noise Data Handbook, Vol 1: Organization, Content and Application", AMRL-TR-75-50(1) 1975, for discussion of the objective and design of the handbook, the types of data presented, measurement procedures, instrumentation, data processing, definitions of quantities, symbols, equations, applications, limitations, etc.

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PREFACE

This report was prepared by the Biodynamic Environment Branch, Aerospace Medical Research Laboratory, under Project/Task 723107, Technology to Define and Assess Environmental Quality of Noise From Air Force Operations.

The author gratefully acknowledges Mr. John Cole and Mr. Robert Powell for their assistance in preparing this report, Mr. Jerry Speakman and Capt. Richard Gorman for their assistance in acquiring the raw data, Mr. Keith Kettler, Mr. Henry Mohlman and Mr. Fred Lampley of the University of Dayton for assistance in the mechanics of data processing, and Mrs. Peggy Massie for assistance in typing this report.

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INTRODUCTION

The F-106B aircraft equipped with one Pratt and Whitney J75-P-17 engine functions as a pilot proficiency training aircraft while maintaining full tactical capabilities for the interception and destruction of hostile aircraft and missiles. This aircraft is manufactured by General Dynamics/Convair and is code named the Delta Dart. The AF32A-17 noise suppressor is made by Jetway Equipment Corporation to provide noise level reduction for all F-106 aircraft during ground runup operations.

This volume provides measured and extrapolated data defining bioacoustic environments produced by this aircraft in this suppressor system 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 group runups of the F-106 aircraft operating in the AF32A-17 noise suppressor.

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

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

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

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

1. Cole, John N., *USAF Bioenvironmental Noise Data Handbook Volume 1: Organization, Content and Application*, AMRL-TR-75-50 (1), Aerospace Medical Research Laboratory, Wright-Patterson Air Force Base, Ohio, 1975.
2. Cole, John N., *USAF Bioenvironmental Noise Data Handbook, Volume 2: Procedure to Evaluate Effects of Non-standard Meteorological Conditions on Far-Field Noise*, AMRL-TR-75-50 (2), AMRL, WPAFB, OH, 1975.

NEAR-FIELD NOISE

MEASUREMENTS

AMRL acquired near-field noise data on the AF32A-17 noise suppressor system during ground runup operations of the F-106 aircraft. For these tests the aircraft was located in the AF32A-17 noise suppressor at Selfridge ANG with no significant reflecting surfaces in the vicinity except the ground plane. Table 1 gives the surface meteorological conditions and the five engine power conditions. The groundcrew chief selected power conditions and near-field locations generally used during routine maintenance or engine runup for preflight checks.

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

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

RESULTS

The measured data presented in Table 2 define the sound pressure levels (SPL) produced by the F-106 aircraft in the AF32A-17 noise suppressor at the two ground crew locations. This table includes the overall, 1/3 octave band, and octave band levels. From these data one can calculate the variety of measures given in Table 3, which are widely used to assess the effects of noise on personnel and their performance.

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

TABLE 1

**MEASUREMENT LOCATIONS AND TEST CONDITIONS
FOR NEAR-FIELD NOISE MEASUREMENTS**

**F-106 Aircraft Suppressor Ground Runup
Test #77-778-001**

<i>Ground Crew Location</i>		
1		Marshal Position
2		Trim Check Adjustment Position
<i>Aircraft Engine Operation</i>		
A		Idle Power (59% RPM)
B		85 %
C		95% RPM
D		Military Power (100% RPM)
E		Afterburner Power
<i>Meteorology</i>		
Temperature		4 C
Bar Pressure		.754 M Hg
Rel Humidity		60 %
Wind — Speed		Calm
— Direction		Calm

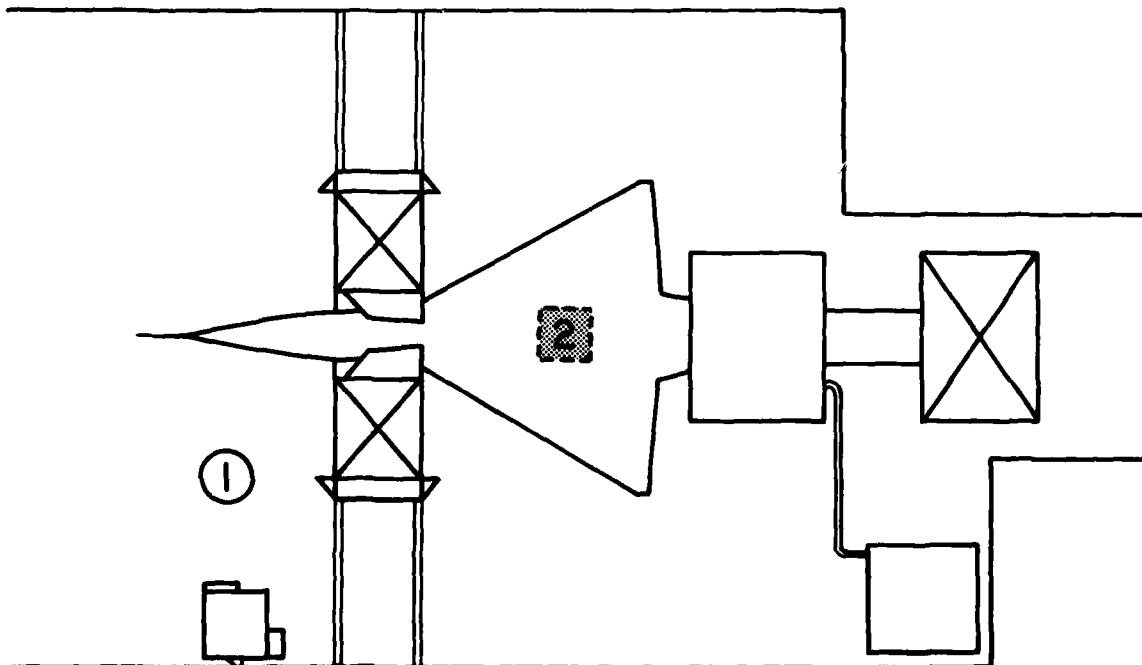


Figure 1. Near-Field Measurement Locations

FAR-FIELD NOISE

MEASUREMENTS

AMRL acquired the near and far-field data during a 1—2-hour test period, thus keeping similar meteorological conditions. Figure 2 shows the aircraft in the suppressor and its orientation relative to 19 microphone measurement sites on a semicircle. The center of the 100 meter radius semicircle used in surveying the AF32A-17 suppressor was on the ground directly below the center of the exhaust stack.

Table 4 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 19 microphone measurement sites are in the acoustic far-field of the source where the sound wave-fronts spherically diverge and the noise source may be regarded as a point source.

A portable microphone/tape-recorder system 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.

RESULTS

Table 5 lists the overall and 1/3 octave band SPL measured at the far-field locations under meteorological conditions at the time of the test. Data in all other figures and tables are based on these levels. These data were normalized to 100 meters distance and standard meteorological conditions (15 C temperature, 70% relative humidity, 0.760 meter Hg barometric pressure) and used to derive the graphic data in Figure 3 which provides a compact summary of the far-field noise characteristics of the F-106 aircraft operating in the AF32A-17 noise suppressor in a standard format.

Estimates of the noise levels for intermediate power settings (e.g., 90% 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.

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.

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

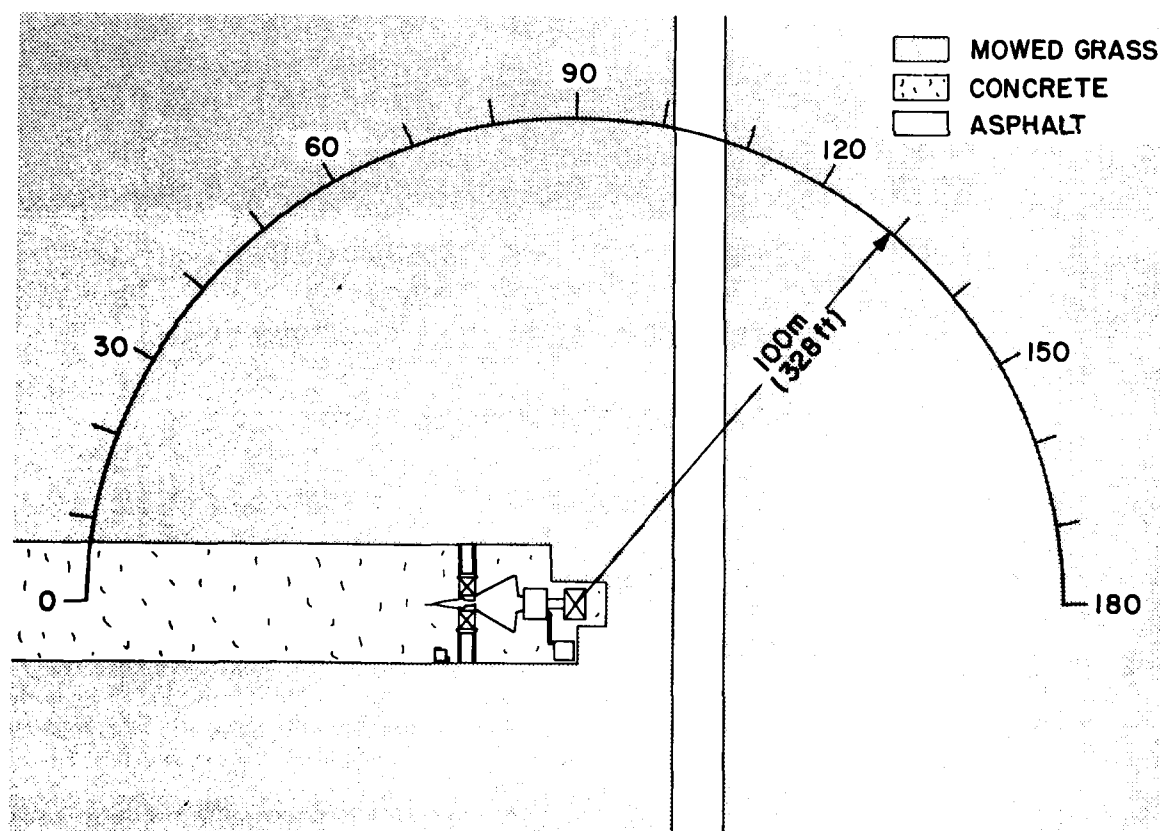


Figure 2. Far-Field Measurement Locations at Selfridge ANG, MI

TABLE: MEASURED SOUND PRESSURE LEVEL (DB)		IDENTIFICATION:									
2											
OCTAVE BAND											
NOISE SOURCE/SUBJECT:		OPERATION:									
F-106 AIRCRAFT IN THE											
AF/324-17 SUPPRESSOR											
GROUND CREW											
NEAR FIELD NOISE LEVELS											
		LOCATION/CONDITION									
		1/A	2/A	1/B	2/B	1/C	2/C	1/D	2/D	1/E	2/E
FREQ											
(Hz)											
31.5		84	93	92	104	99	108	100	109	104	113
63		88	97	94	104	97	109	97	108	99	110
125		86	99	91	105	100	115	99	114	101	116
250		85	98	90	102	98	110	100	112	103	114
500		86	100	96	108	99	114	101	115	102	116
1000		91	106	93	108	99	113	100	115	103	117
2000		89	103	97	111	98	112	98	113	102	116
4000		83	100	93	107	95	111	97	112	99	113
8000		78	98	84	100	87	103	90	103	90	103
OVERALL		96	110	103	116	107	121	108	122	111	124

TABLE: MEASURES OF HUMAN NOISE EXPOSURE										IDENTIFICATION:	
3											
NOISE SOURCE/SUBJECT: (OPERATION:)										OMEGA 3.2	
F-106 AIRCRAFT IN THE ()										TEST 77-778-001	
AF/32H-17 SUPPRESSOR ()										RUN 01	
GROUND CREW ()										14 SEP 78	
NEAR FIELD NOISE LEVELS ()										PAGE H1	

LOCATION/CONDITION											
1/A	2/A	1/B	2/B	1/C	2/C	1/D	2/D	1/E	2/E		
HAZARD/PROTECTION											
C-WEIGHTED OVERALL SOUND LEVEL (OASLC IN DBC) AT EAR											
A-WEIGHTED OVERALL SOUND LEVEL (OASLA IN DBA) AT EAR											
MAXIMUM PERMISSIBLE TIME (T IN MINUTES) FOR ONE EXPOSURE PER DAY (AFR 161-35, JULY 73)											
NO PROTECTION											
OASLC	96	110	102	116	107	121	108	122	111	123	
OASLA	94	110	101	115	104	119	105	120	108	122	
T	85	5	25	2.2	15	P	13	P	8	P	
MINIMUM QPL EAR MUFFS											
OASLA*	70	84	77	90	82	97	83	97	85	99	
T	960	480	960	170	679	50	571	50	404	36	
AMERICAN OPTICAL 1700 EAR MUFFS											
OASLA*	66	79	72	85	78	92	78	92	81	94	
T	960	960	960	404	960	120	960	120	807	85	
V-51R EAR PLUGS											
OASLA*	68	83	74	88	79	93	80	94	83	96	
T	960	571	960	240	960	101	960	85	571	60	
AMERICAN OPTICAL 1700 EAR MUFFS PLUS V-51R EAR PLUGS											
OASLA*	56	70	60	74	65	79	66	80	69	82	
T	960	960	960	960	960	960	960	960	960	679	
H-133 GROUND COMMUNICATION UNIT											
OASLA*	67	82	73	87	77	91	78	92	81	95	
T	960	679	960	285	960	143	960	120	807	71	
COMMUNICATION											
PREFERRED SPEECH INTERFERENCE LEVEL (PSIL IN DB)											
PSIL	89	103	95	109	99	113	100	114	102	116	
ANNOYANCE											
PERCEIVED NOISE LEVEL, TONE CORRECTED (PNLT IN PNDB)											
TONE CORRECTION (C IN DB)											
PNLT	107	123	117	131	118	134	120	135	121	135	
C	1	1	2	2	1	1	1	1	0	1	

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

TABLE 4
TEST CONDITIONS
FOR FAR-FIELD NOISE MEASUREMENTS

F-106 Aircraft In The AF32A-17 Noise Suppressor, Ground Runup
Selfridge ANG, MI, Tail # 58-767

Aircraft Engine Operation

Idle, Power	One Engine 59 % RPM 1.2 EPR 1600 LBS/HR, Fuel Flow
-------------	---

85% RPM	One Engine 85 % RPM 1.85 EPR 2400 LBS/HR, FF
---------	---

Military Power	One Engine 100 % RPM 2.18 EPR 10500 LBS/HR, FF
----------------	---

Afterburner Power	One Engine 100 % RPM 2.18 EPR 24500 LBS/HR, FF
-------------------	---

Meteorology

Temperature	4 C
Bar Pressure	.754 M Hg
Rel Humidity	60 %
Wind — Speed	Calm
— Direction	Calm

TABLE: MEASURED SOUND PRESSURE LEVEL (DB)		IDENTIFICATION:	
1/3 OCTAVE BAND	1/3 OCTAVE BAND		
5	5	OMEGA 1.4	TEST 77-778-001
DISTANCE = 100 METERS	DISTANCE = 100 METERS	RUN 01	PAGE 2
NOISE SOURCE/SUBJECT:	OPERATION:	METEOROLOGY:	
F-106 AIRCRAFT IN THE	IDLE POWER (59% RPM)	TEMP = 4 C	
AF32A-17 SUPPRESSOR	SINGLE ENGINE	BAR PRESS = .754 M HG	
ENGINE J75-P-17	GROUND RUNUP (SUPPRESSED)	REL HUMID = 60 %	
FAR FIELD NOISE			
FREQ (HZ)	ANGLE (DEGREES)		
	70 80 90 100 110 120 130 140 150 160 170 180		
25	62< 63< 64< 67 69 71 70 70 68 67 66 66 63< 67 63< 66 67 68		
31.5	59< 61< 63< 63< 63< 64< 62< 61< 63< 61< 62< 60< 60< 61< 61< 62< 62< 63<		
40	63< 64< 63< 64< 62< 61< 63< 61< 62< 62< 60< 60< 60< 61< 61< 60< 60< 60<		
50	65< 63< 65< 66< 66< 66< 65< 67< 62< 61< 62< 64< 66< 64< 65< 63< 65< 63<		
63	69< 65< 69 73 76 73 71 70 68< 67< 69< 67< 71 70 70 66< 64< 67< 66<		
80	65< 66 68 65< 67 64< 65< 64< 65< 65< 66 66 66 67 66 66 61< 62< 61<		
100	63< 62< 65< 62< 65< 63< 64< 64< 63< 64< 63< 64< 64< 63< 62< 61< 59<		
125	64< 63< 67 68 69 67 68 67 65< 65< 66 65< 66 65< 66 61< 60< 64< 64<		
160	63 59< 63 63 62 62 62 62 61< 61< 62 61< 60< 61< 60< 57< 56< 58< 58<		
200	62 61 62 62 62 62 60 62 60 62 62 62 61 60 59< 58< 56< 55< 59< 61<		
250	61 62 63 65 63 60 59 60 62 65 62 60 60 57< 56< 55< 55< 57< 56<		
315	66 63 66 65 61 62 61 64 68 66 62 62 58 57 56 53< 52< 53< 55< 53<		
400	61 59 62 61 61 59 59 60 63 60 60 60 58 56 53< 50< 47< 49< 53<		
500	61 58 62 62 60 60 60 61 64 61 61 59 57 55 53< 51< 47< 50< 52<		
630	64 58 60 61 64 60 60 62 63 62 61 60 58 56< 55< 56< 50< 55< 58<		
800	62 57 60 61 64 60 60 61 62 62 58 59 57 58 58 57 52< 55< 54<		
1000	66 59 65 66 69 63 60 61 61 62 61 64 61 64 65 73 65 62 60 51<		
1250	65 61 65 65 66 61 59 61 61 62 65 61 64 65 65 73 65 62 60 51<		
1600	61 60 63 62 66 62 63 63 63 64 58 65 65 64 69 68 67 63 61 49<		
2000	60 58 59 58 61 58 64 60 60 63 64 63 66 65 65 65 65 62 59 46<		
2500	57 56 56 54 58 56 58 57 62 53 61 58 58 60 59 57 53 52 42 42<		
3150	60 58 60 54 60 58 59 53 63 53 64 61 59 59 59 58 53 54 44<		
4000	58 57 57 54 60 58 58 63 52 65 61 58 60 58 57 51 52 42 42<		
5000	51 52 51 49 58 55 55 59 48 60 57 52 54 52 51 48 48 37<		
6300	47 47 46 56 54 54 57 46 58 56 52 52 51 47 46 45 39 39		
8000	40 39 39 38 45 47 45 49 39 50 48 44 42 41 38 35 34 33<		
10000	33< 33< 32< 40 41 38 39 43 36 43 42 35 35 35 29< 28< 35 35		
OVERALL	77 75 77 78 80 78 78 78 76 77 76 77 77 78 76 73 74 74		

TABLE: MEASURED SOUND PRESSURE LEVEL (DB)																			IDENTIFICATION:	
1/3 OCTAVE BAND																				
5																			OMEGA 1.4	
DISTANCE = 100 METERS																			TEST 77-778-001	
NOISE SOURCE/SUBJECT:																			METEOROLOGY:	
(F-106 AIRCRAFT IN THE)																			TEMP = 4 C	
(AF32A-17 SUPPRESSOR)																			BAR PRESS = .754 M HG	
(ENGINE J75-P-17)																			REL HUMID = 60 %	
(FAR FIELD NOISE)																			PAGE 2	
FREQ																				
(HZ)																			ANGLE (DEGREES)	
0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180																				
25	78	75	76	79	80	82	82	81	80	77	78	78	77	77	77	78	78	81	81	
31.5	73	72	74	75	77	77	77	76	76	74	74	72	74	73	76	75	77	79	78	
40	77	77	77	75	75	74	73	73	73	71	70	71	72	72	75	74	76	76	77	
50	79	79	79	78	75	70	70	71	71	68	69	68	69	73	76	75	77	77	78	
63	77	77	76	73	77	75	75	76	74	72	72	72	72	77	72	74	73	73	74	
80	73	72	72	70	69	73	73	74	71	71	72	71	70	70	69	69	71	71	73	
100	72	73	71	70	71	71	72	69	72	68	68	69	73	72	70	69	69	72	73	
125	76	75	74	74	76	76	74	73	74	73	73	72	72	73	70	72	70	70	71	
160	72	70	71	75	71	70	69	67	69	69	68	68	67	67	69	69	69	65	67	
200	74	72	73	74	73	70	69	68	68	68	68	69	67	67	66	65	65	64	64	
250	71	72	72	73	71	68	68	69	68	67	67	67	67	65	64	64	62	63	62	
315	72	70	73	74	71	72	71	70	70	70	68	69	69	65	64	62	63	61	60	
400	73	69	73	73	71	70	70	71	72	72	69	70	70	67	65	62	62	61	60	
500	76	70	75	74	73	71	71	71	73	75	71	72	73	69	67	63	62	60	59	
630	71	67	73	73	71	71	71	70	72	73	69	71	75	71	69	64	64	62	59	
800	70	68	73	73	73	73	73	73	74	75	70	71	75	73	70	64	65	65	59	
1000	70	69	71	71	73	71	71	72	73	73	71	71	77	75	72	65	66	67	62	
1250	70	67	70	70	72	70	70	70	70	73	74	71	77	77	73	67	67	67	61	
1600	71	68	71	71	73	72	71	70	73	75	77	75	77	79	74	68	69	67	61	
2000	74	71	74	71	72	73	72	71	75	75	76	77	76	77	75	69	68	70	62	
2500	69	66	70	69	71	72	70	68	74	75	75	75	74	72	70	67	65	65	60	
3150	67	66	68	69	73	74	71	69	77	78	75	75	74	71	69	65	62	63	59	
4000	68	67	70	68	74	75	72	70	79	78	77	75	74	71	70	68	64	63	58	
5000	62	59	63	62	68	67	65	63	72	70	70	68	67	63	63	61	59	57	51	
6300	57	54	57	57	64	64	61	58	67	66	67	64	62	60	58	57	54	51	48	
8000	51	49	51	50	58	59	56	54	63	60	60	59	56	54	50	51	47	44	40	
10000	47	45	46	47	57	58	55	52	60	57	57	54	51	49	46	49	43	40	38	
OVERALL	87	86	87	87	87	88	87	86	88	87	87	86	87	87	85	84	85	86	86	
< LEVEL CORRECTED TO REMOVE BACKGROUND/ELECTRONIC NOISE																				

< LEVEL CORRECTED TO REMOVE BACKGROUND/ELECTRONIC NOISE.

TABLE: MEASURED SOUND PRESSURE LEVEL (DB)		IDENTIFICATION:																	
5		OMEGA 1.4																	
1/3 OCTAVE BAND		TEST 77-778-001																	
DISTANCE = 100 METERS		RUN 03																	
NOISE SOURCE/SUBJECT:		METEOROLOGY:																	
F-106 AIRCRAFT IN THE		TEMP = 4 C																	
AF32A-17 SUPPRESSOR		BAR PRESS = .754 M HG																	
ENGINE J75-P-17		REL HUMID = 60 %																	
FAR FIELD NOISE		PAGE 2																	
FREQ (HZ)	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
25	83	84	82	84	83	83	86	85	82	83	82	82	82	83	84	85	85	87	84
31.5	78	78	78	82	82	82	82	83	81	81	80	80	80	80	82	79	82	83	83
40	84	82	81	81	81	80	80	80	78	78	76	78	79	78	81	81	83	84	85
50	83	83	82	80	78	77	76	76	75	74	76	72	76	80	81	83	84	85	
63	81	81	81	78	76	78	78	77	75	76	75	75	75	75	74	77	78	82	82
80	79	77	76	76	77	75	78	76	79	78	79	74	78	75	73	74	75	78	81
100	77	77	77	79	78	75	79	73	77	80	77	77	75	76	75	74	75	77	80
125	78	77	79	81	80	79	78	76	77	76	76	74	75	74	75	77	72	73	76
160	79	74	77	81	79	79	79	74	74	74	73	73	72	74	73	75	77	72	77
200	81	77	78	79	78	77	78	76	74	75	74	75	74	74	76	78	78	73	78
250	80	77	79	77	77	76	77	75	75	73	72	73	73	71	73	76	75	72	73
315	79	77	79	78	79	78	78	77	77	76	74	73	73	72	72	71	73	70	71
400	78	76	80	81	76	79	80	80	79	77	75	73	72	70	70	69	70	67	69
500	77	76	77	78	76	77	78	77	77	75	73	72	72	70	69	67	67	65	63
630	77	74	75	75	74	75	76	76	75	74	71	71	70	69	69	67	67	65	63
800	75	73	76	77	76	77	78	79	76	74	70	70	70	70	72	71	71	69	65
1000	74	74	74	77	75	77	78	80	75	73	70	70	71	71	73	73	74	71	67
1250	72	70	69	74	70	71	71	71	69	68	69	68	69	69	72	71	71	67	62
1600	74	72	73	76	75	76	75	77	77	75	73	71	71	70	73	74	76	73	67
2000	70	71	72	75	74	77	74	78	78	75	74	72	71	70	71	73	75	73	67
2500	68	69	70	73	72	73	71	71	71	70	73	72	72	70	70	71	71	71	64
3150	67	67	68	72	72	74	71	70	70	67	71	70	69	70	70	68	70	69	62
4000	67	67	69	73	72	74	73	73	68	70	71	72	73	73	73	70	72	70	64
5000	62	61	63	70	67	68	65	66	67	64	66	65	63	64	66	62	65	61	56
6300	57	55	59	64	62	62	59	60	61	58	60	61	62	61	61	58	60	57	50
8000	52	50	54	57	56	57	56	55	54	56	55	55	56	56	57	52	53	50	44
10000	47	45	49	50	51	52	50	49	53	49	48	49	50	48	49	47	47	44	39
OVERALL	92	91	91	92	91	91	92	91	91	90	89	88	89	89	90	90	91	92	92

LEVEL CORRECTED TO REMOVE BACKGROUND/ELECTRONIC NOISE.

TABLE: MEASURED SOUND PRESSURE LEVEL (DB)																	IDENTIFICATION:		
1/3 OCTAVE BAND																			
DISTANCE = 100 METERS																			
NOISE SOURCE/SUBJECT:																			
(F-106 AIRCRAFT IN THE)																			
(AF32A-17 SUPPRESSOR)																			
(ENGINE J75-P-17)																			
(FAR FIELD NOISE)																			
FREQ (HZ)	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
25	85	84	85	84	85	84	84	85	82	84	84	83	82	85	85	86	88	89	85
31.5	79	80	81	81	83	85	84	83	83	82	80	82	81	83	83	82	85	85	86
40	85	82	82	83	82	82	81	80	81	80	80	80	80	81	82	84	85	86	87
50	86	84	83	81	77	78	76	77	76	75	74	75	79	78	82	82	84	87	86
63	84	83	83	81	78	80	78	78	76	78	75	73	77	76	77	78	81	84	84
80	81	79	77	78	74	78	79	77	77	78	76	77	77	75	77	76	77	82	83
100	78	76	76	78	77	79	80	77	75	77	76	77	76	77	77	75	77	80	80
125	79	77	78	79	79	79	78	75	73	73	75	76	76	76	78	79	74	75	76
160	78	75	77	82	81	78	79	78	74	75	76	77	76	77	74	77	77	76	79
200	80	78	78	79	79	76	77	77	76	75	75	77	74	76	75	78	80	76	78
250	80	79	80	78	78	78	79	78	78	75	75	75	73	74	74	77	79	76	76
315	79	79	82	79	81	81	81	80	80	77	76	76	74	74	75	73	76	76	74
400	77	78	81	81	79	82	84	82	82	79	76	74	72	72	73	71	73	72	71
500	76	77	79	79	78	80	81	81	80	77	74	74	73	70	70	68	71	70	70
630	75	77	76	78	78	79	78	78	77	76	71	71	69	70	71	70	73	70	68
800	74	75	78	79	76	79	77	78	74	72	72	71	72	73	74	72	77	75	69
1000	72	75	77	78	77	81	78	78	73	70	73	73	73	74	75	74	80	76	70
1250	69	70	71	75	74	75	74	74	72	68	73	73	72	73	73	72	74	73	66
1600	69	72	74	76	75	79	78	80	79	73	73	73	71	72	73	74	77	77	71
2000	68	72	74	76	77	81	80	84	82	78	76	73	72	73	73	73	77	77	71
2500	65	69	69	74	73	78	75	76	76	74	77	71	71	73	72	70	71	73	69
3150	64	68	70	74	73	77	75	75	74	71	76	70	72	74	72	71	70	71	66
4000	64	68	71	74	74	77	76	77	74	71	74	70	72	76	74	72	73	73	68
5000	58	62	63	69	70	73	70	70	71	67	72	67	65	67	66	64	65	65	61
6300	54	56	60	63	64	67	64	66	65	62	67	63	64	64	62	58	61	61	56
8000	48	51	54	57	59	61	60	63	60	57	62	57	57	58	58	53	55	53	50
10000	44	46	49	50	52	54	53	54	53	50	55	50	51	51	50	46	47	47	43
OVERALL	93	92	93	93	92	94	93	93	92	91	90	90	89	91	91	92	94	95	94

LEVEL CORRECTED TO REMOVE BACKGROUND/ELECTRONIC NOISE.

LEVEL CORRECTED TO REMOVE BACKGROUND/ELECTRONIC NOISE.

TABLE: MEASURED SOUND PRESSURE LEVEL (D3)		IDENTIFICATION:																		
5		OMEGA 1.4																		
DISTANCE = 100 METERS		TEST 77-778-001																		
NOISE SOURCE/SUBJECT:		RUN 05																		
(F-106 AIRCRAFT IN THE		METEOROLOGY:																		
(AF32A-17 SUPPRESSOR		TEMP = 4 C																		
(ENGINE J75-P-17		BAR PRESS = .754 M HG																		
(FAR FIELD NOISE		REL HUMID = 60 %																		
OPERATION:		PAGE 2																		
AFTERBURNER POWER																				
SINGLE ENGINE																				
GROUND RUNUP (SUPPRESSED)																				
FREQ (HZ)		0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
25	92	89	91	92	90	92	90	92	90	88	86	87	85	84	86	87	87	88	90	91
31.5	88	86	88	88	90	89	89	89	87	87	86	85	86	83	85	86	86	87	90	89
40	87	87	87	88	88	88	88	84	85	85	85	83	81	83	84	85	87	88	91	88
50	84	85	85	84	84	83	81	80	81	81	80	77	78	79	81	83	84	85	90	89
63	91	89	87	87	86	83	84	84	79	81	80	79	78	78	80	83	85	88	94	92
80	86	83	82	80	80	80	83	81	78	80	79	77	76	77	77	77	78	79	85	83
100	80	80	80	80	79	83	78	78	78	78	77	76	77	76	77	78	77	76	83	81
125	84	81	81	82	83	85	78	75	77	76	79	79	80	82	84	81	78	85	82	
160	84	80	80	81	84	84	84	81	78	77	78	75	76	79	79	78	78	79	80	78
200	86	82	84	83	83	84	83	81	80	79	77	77	77	78	76	75	76	77	82	79
250	85	82	82	83	82	83	82	82	79	78	77	77	77	76	77	77	77	78	80	77
315	82	82	84	82	83	84	84	82	82	84	82	78	77	78	77	77	77	78	83	81
400	79	80	83	84	81	85	85	87	82	84	82	78	77	78	77	76	77	78	82	80
500	79	79	81	82	83	85	85	85	81	83	80	75	75	77	75	74	75	77	79	76
630	79	78	79	80	81	82	82	82	78	78	72	72	72	74	73	72	74	77	78	74
800	77	77	80	81	79	80	80	80	77	76	74	71	71	71	73	72	72	75	77	72
1000	75	75	77	79	79	79	78	80	75	75	72	71	71	71	72	72	74	77	79	71
1250	74	74	75	78	78	78	78	78	73	73	70	71	71	70	71	72	74	77	77	70
1600	73	74	75	78	78	78	78	78	72	74	73	74	73	71	71	72	74	76	77	70
2000	72	73	75	77	79	79	79	79	72	80	78	77	75	75	72	72	73	74	78	69
2500	70	72	73	77	78	78	78	78	71	78	75	78	75	73	73	73	73	74	77	68
3150	70	72	73	77	78	78	78	75	69	73	71	74	71	72	73	74	74	75	76	69
4000	69	72	73	77	80	78	78	74	70	74	72	71	71	73	74	76	75	75	76	68
5000	62	64	65	71	72	72	68	63	68	67	67	67	67	64	65	67	68	68	68	61
6300	57	58	61	65	67	68	63	59	63	61	63	62	62	62	62	61	62	63	62	56
8000	52	52	55	58	61	61	58	53	57	55	57	55	54	54	54	55	55	54	54	54
10000	47	47	49	52	55	55	52	52	47	51	49	50	48	47	47	47	47	48	48	59
OVERALL	98	96	97	98	97	98	97	97	94	95	94	92	91	92	93	94	94	95	99	98

LEVEL CORRECTED TO REMOVE BACKGROUND/ELECTRONIC NOISE.

LEVEL CORRECTED TO REMOVE BACKGROUND/ELECTRONIC NOISE.

FIGURE 1 NORMALIZED FARFIELD NOISE LEVELS

3 DISTANCE = 100 METERS

NOISE SOURCE/SUBJECT:

F-106 AIRCRAFT IN THE

AF32A-1 SUPPRESSOR

ENGINE J79-P-17

FAR FIELD NOISE

OPERATION:

IDLE POWER (59% RPM)

SINGLE ENGINE

GROUND RUNUP (SUPPRESSED)

METEOROLOGY:

TEMP = 15 C

BAR PRESS = 760 MM HG

REL HUMID = 78 %

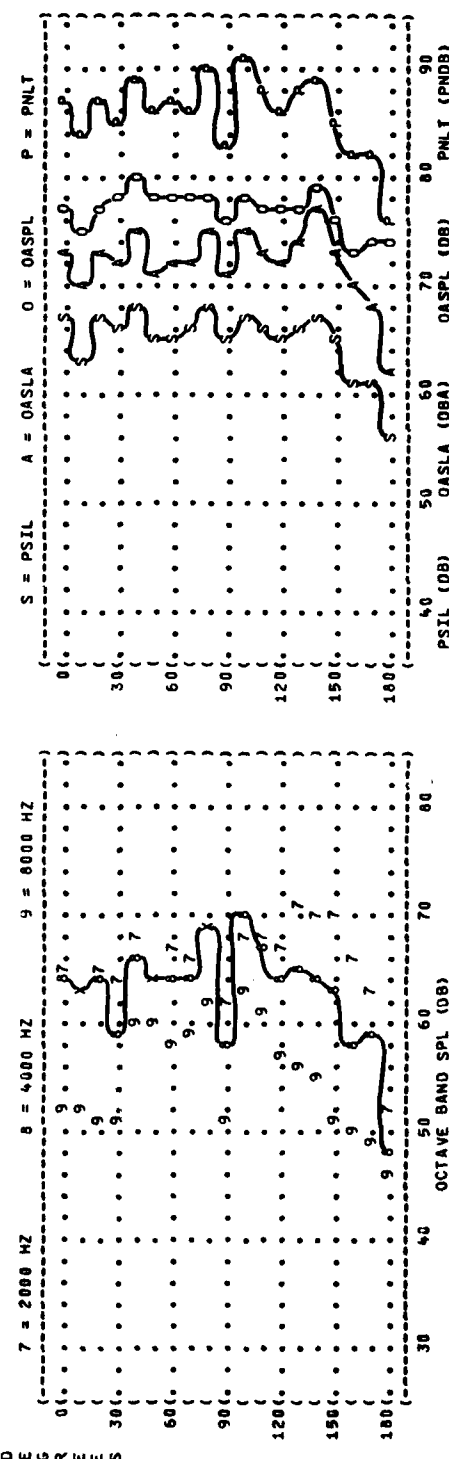
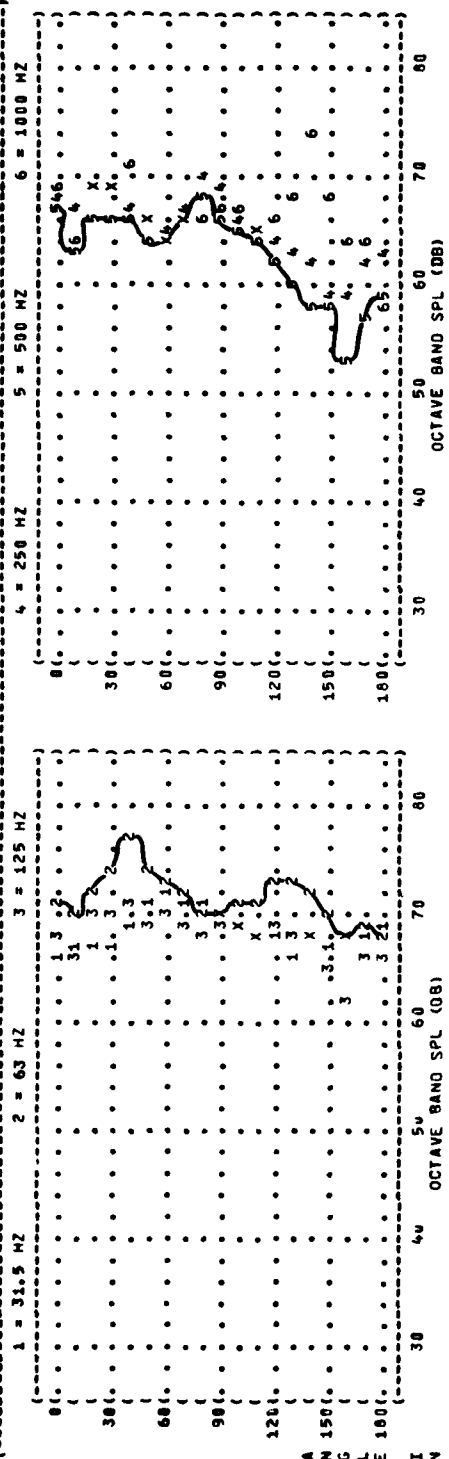
OMEGA 1.4

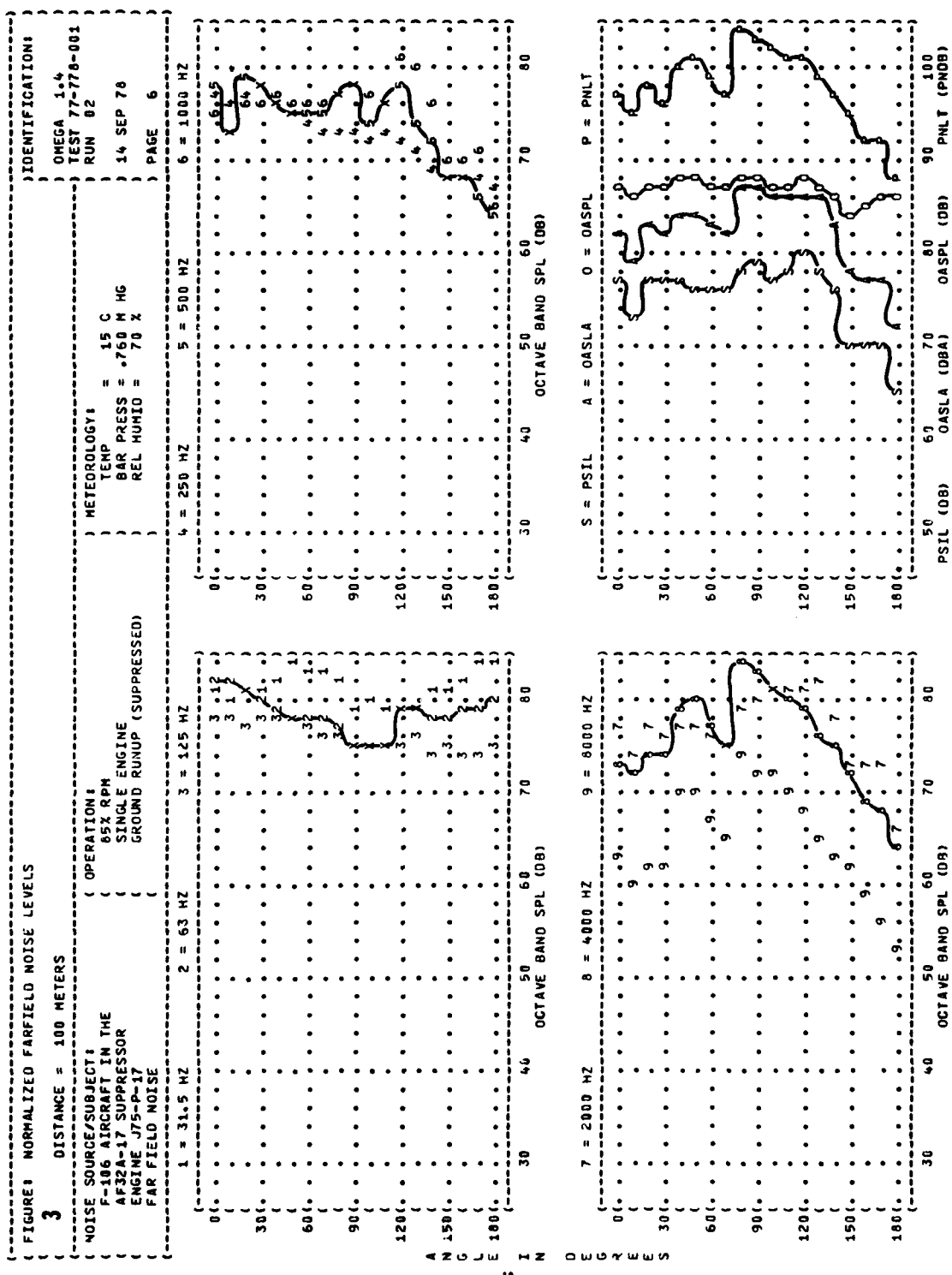
TEST 77-778-001

RUN 81

14 SEP 78

PAGE 6





01500000 DISTANCE = 100 METERS

3

DISTANCE = 100 METERS

NOISE SOURCE/SUBJECT:
F-106 AIRCRAFT IN THE

AF32A-17 SUPPRESSOR

AF32A-1/ SUPPNE-
ENGINE J75-P-17

ENGINE J75-P-17
FAR FIELD NOISE

OPERATION:

95% RPM

33% RPM
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

OROLOGY:

TEMP = 15 C

BAR PRESS = .760 M
REL HUMID = 70 %

RELATIONSHIP

100

OMEGA 1.4

TEST 77-

RUN 03

5

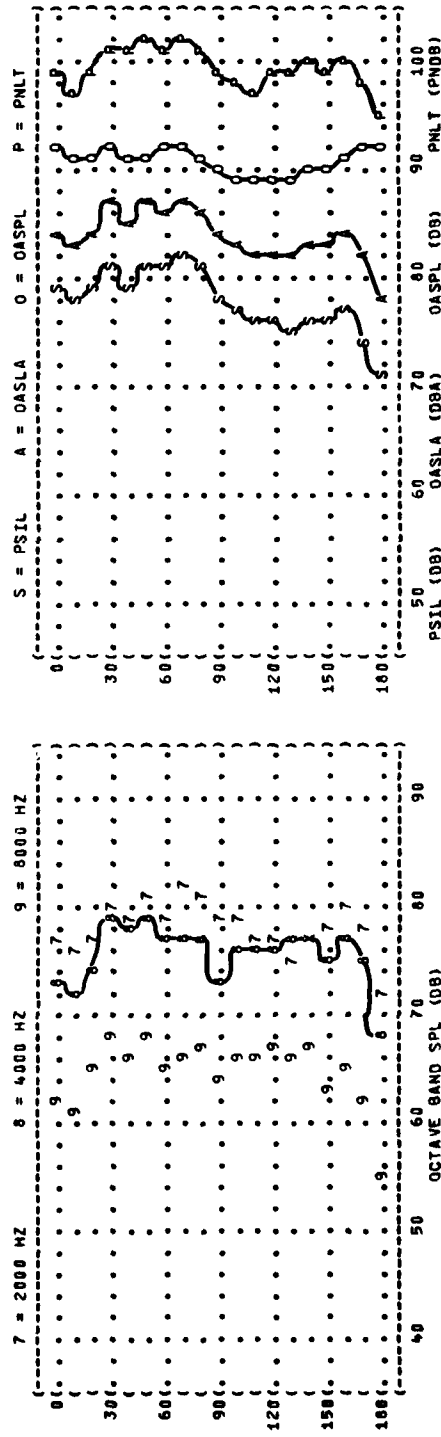
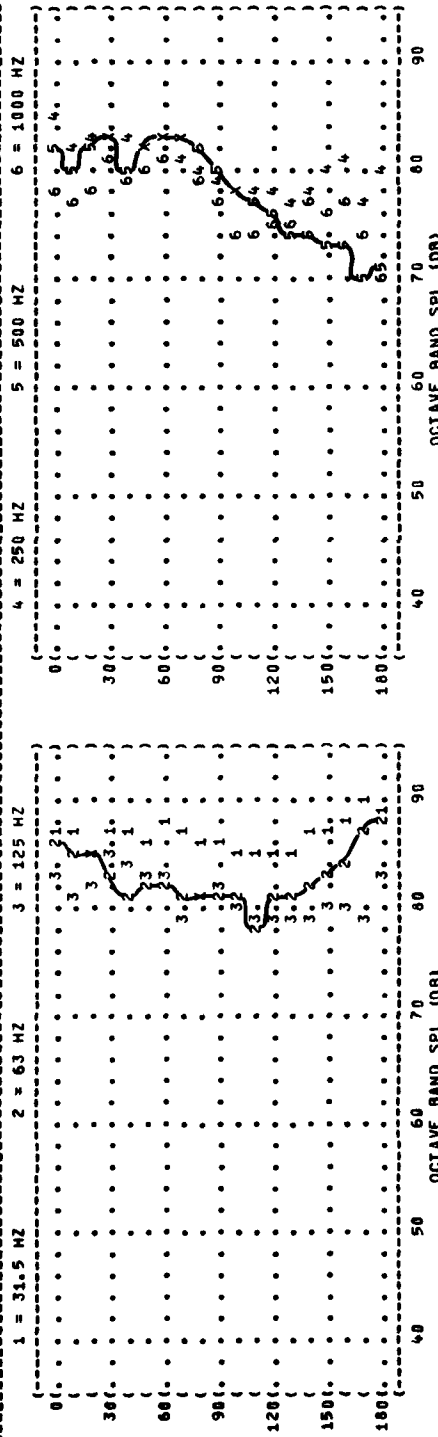


FIGURE 1 NORMALIZED FARFIELD NOISE LEVELS

3 DISTANCE = 100 METERS

NOISE SOURCE/SUBJECT 1

F-106 AIRCRAFT IN THE

AF32A-17 SUPPRESSOR

ENGINE J75-P-17

FAR FIELD NOISE

OPERATION 1

AFTERBURNER POWER

SINGLE ENGINE

GROUND RUNUP (SUPPRESSED)

METEOROLOGY 1

TEMP = 15 C

BAR PRESS = .760 M HG

REL HUMID = 70 %

IDENTIFICATION 1

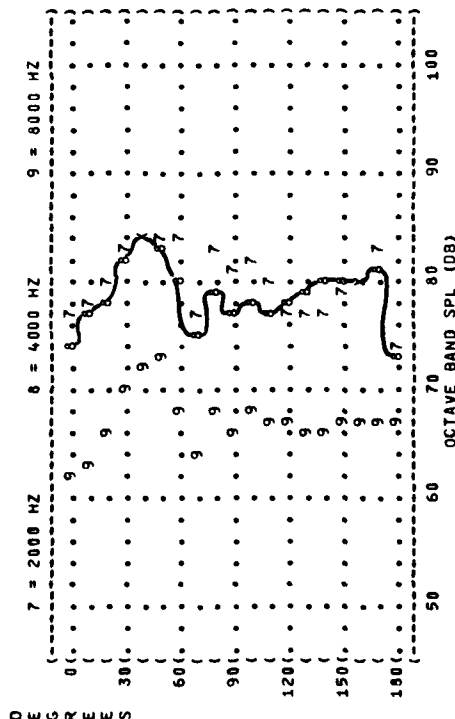
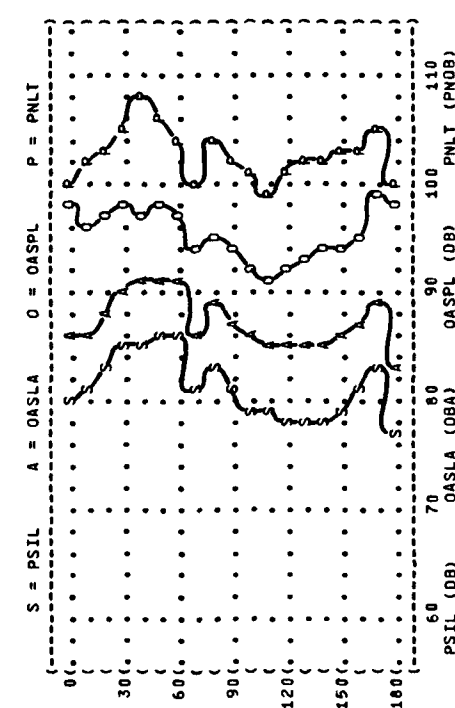
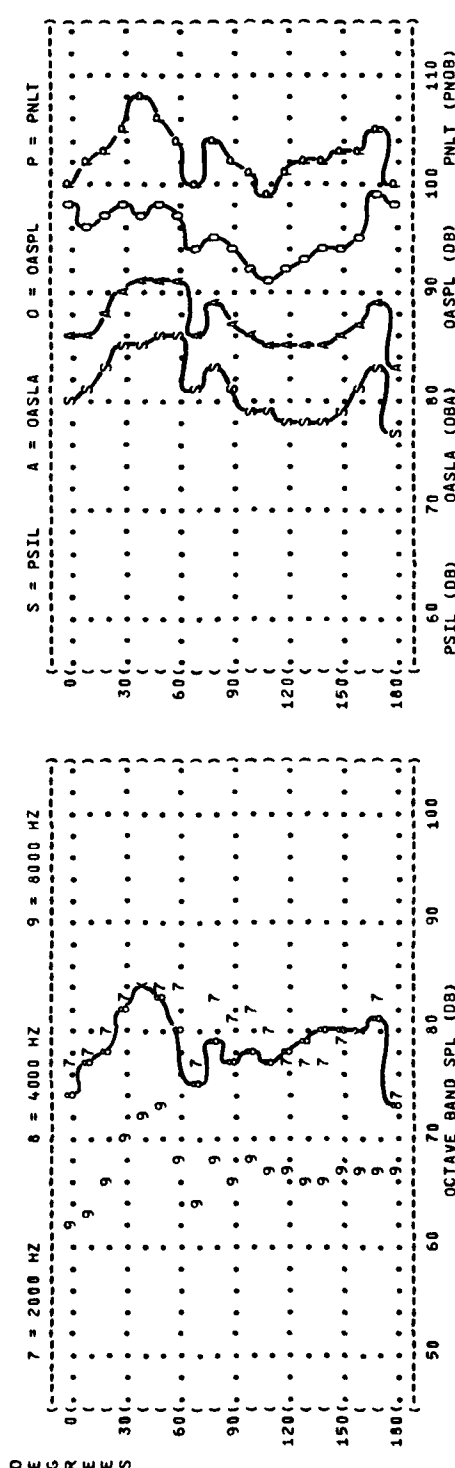
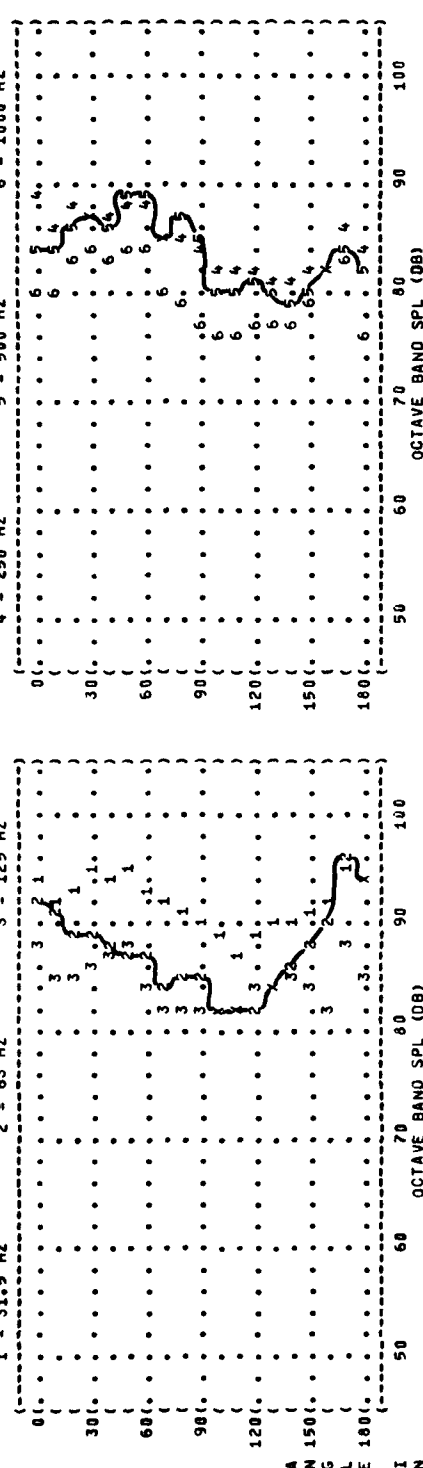
OMEGA 1.4

TEST 77-778-001

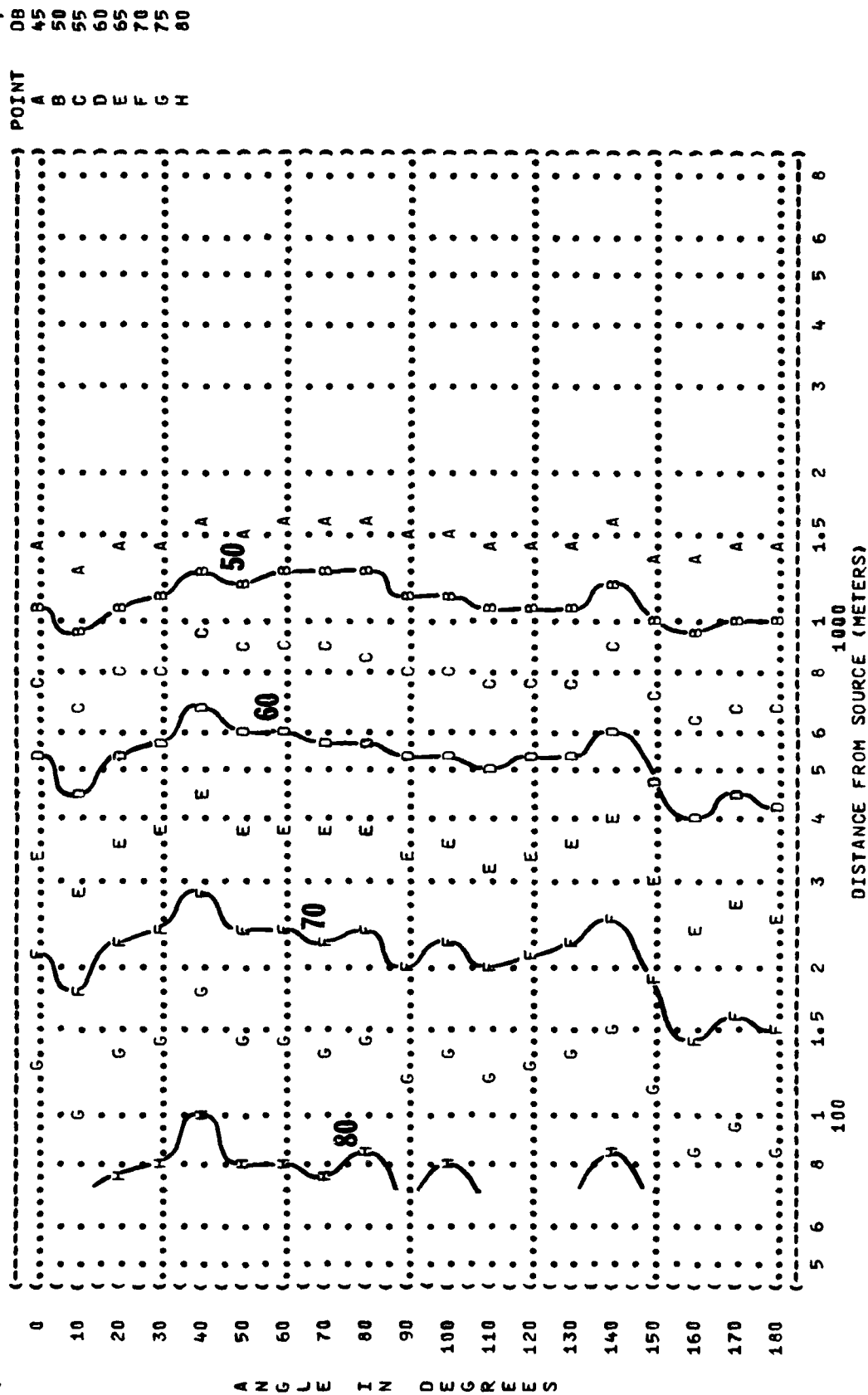
RUN 05

14 SEP 78

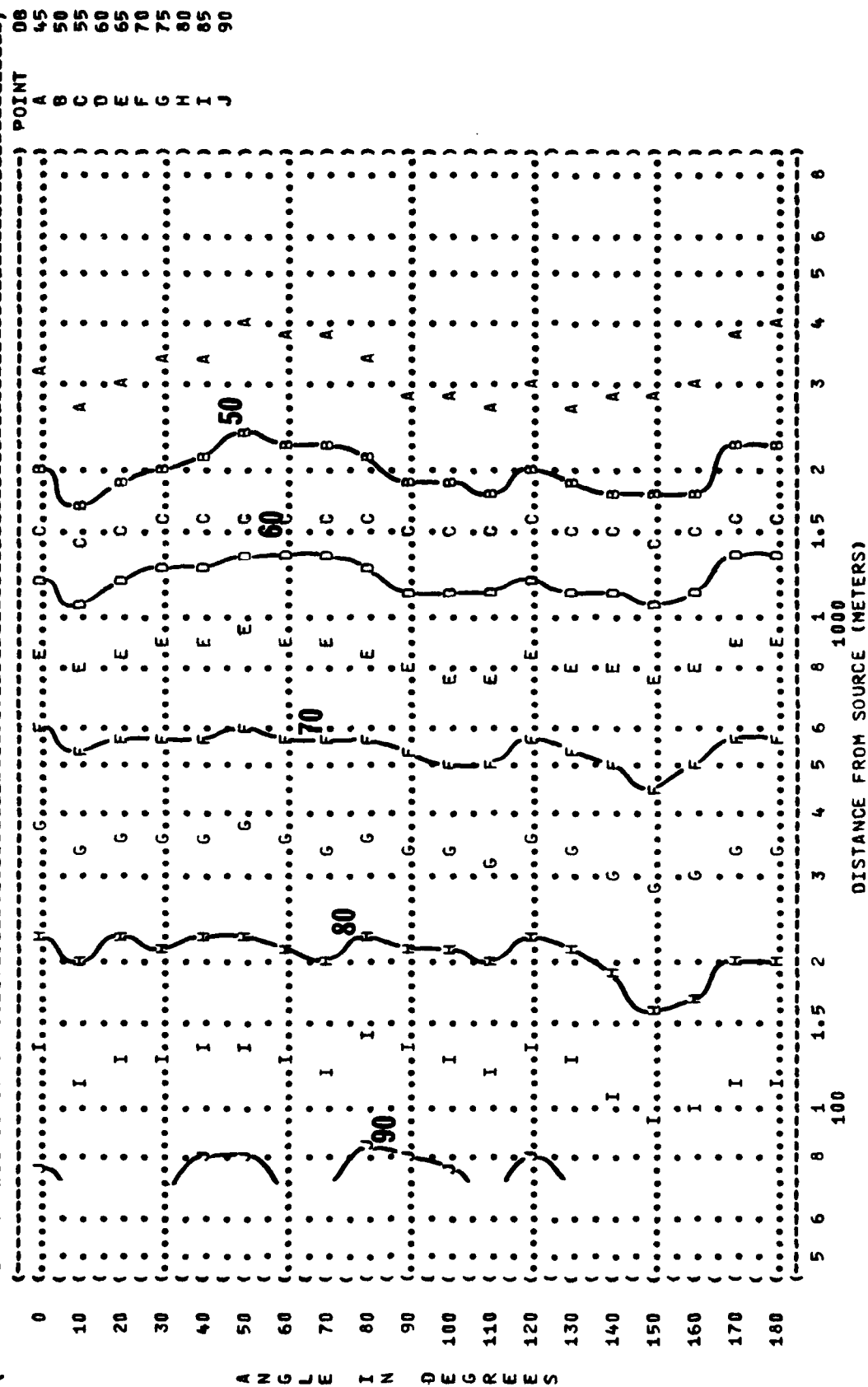
PAGE 6



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(-----)
( ( FIGURE: OVERALL SOUND PRESSURE LEVEL {OASPL} ) IDENTIFICATION: )
( ( EQUAL LEVEL CONTOURS (DB) ) )
( ( 4 ) OMEGA 1.4 )
(-----)
( ( NOISE SOURCE/SUBJECT: ) METEOROLOGY: )
( ( F-106 AIRCRAFT IN THE ) TEMP = 15 C )
( ( AF32A-17 SUPPRESSOR ) BAR PRESS = .760 M HG )
( ( ENGINE J75-P-17 ) REL HUMID = 70 % )
( ( FAR FIELD NOISE ) PAGE 13 )
(-----)
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(-----)
( FIGURE: OVERALL SOUND PRESSURE LEVEL (OASPL) ) IDENTIFICATION: )
(      4 EQUAL LEVEL CONTOURS (DB) ) )
( ) ) OMEGA 1.4 )
( ) ) TEST 77-778-001 )
( ) ) RUN 02 )
( NOISE SOURCE/SUBJECT: ) METEOROLOGY: )
( F-106 AIRCRAFT IN THE ) TEMP = 15 C )
( AF32A-17 SUPPRESSOR ) SINGLE ENGINE BAR PRESS = .760 M HG )
( ENGINE J75-P-17 ) GROUND RUNUP (SUPPRESSED) REL HUMID = 70 % )
( FAR FIELD NOISE ) ) PAGE 13 )
(-----)
```



IDENTIFICATION:

OMEGA 1-4

RUN 03
 14 SEP 78
 PAGE 13

RUN 03

TEMP = 15 C

14 SEP 78

REL HUMID = 70 %

PAGE 13

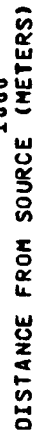
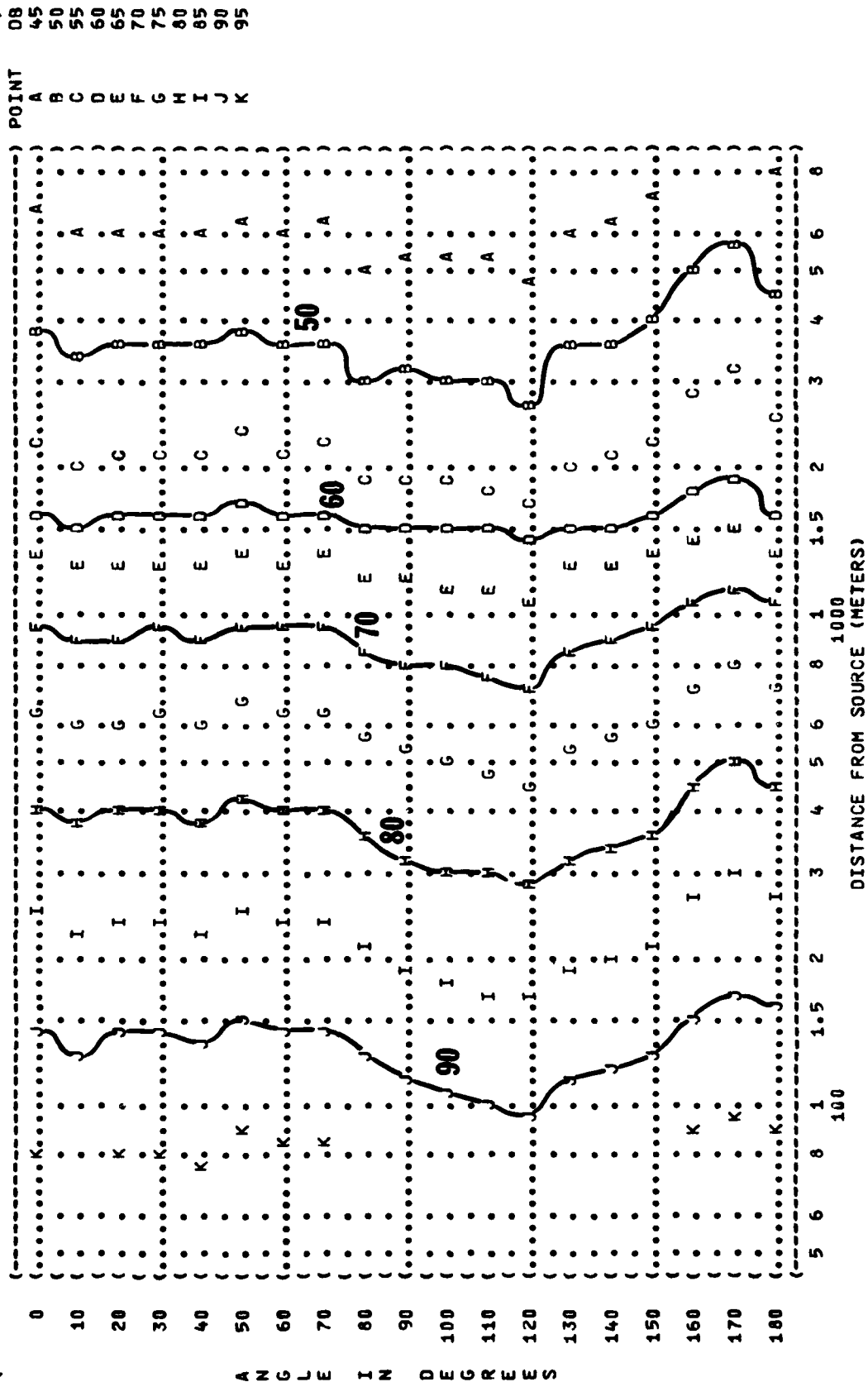
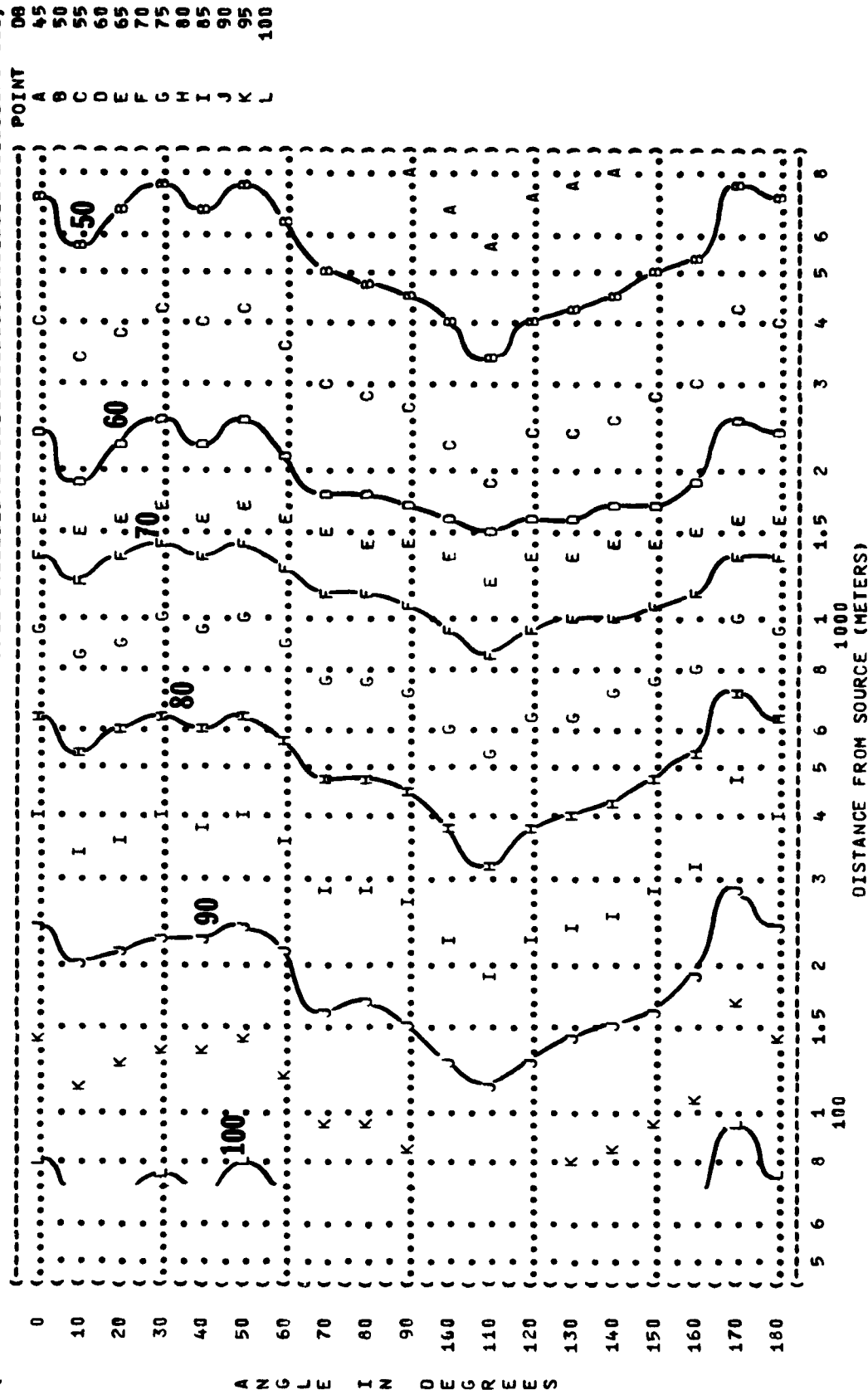


FIGURE: OVERALL SOUND PRESSURE LEVEL (OASPL)
 4
 IDENTIFICATION:
 OMEGA 1.4
 TEST 77-778-001
 RUN 04
 NOISE SOURCE/SUBJECT:
 F-106 AIRCRAFT IN THE
 AF32A-17 SUPPRESSOR
 ENGINE J75-P-17
 FAR FIELD NOISE
 OPERATION:
 MILITARY POWER (100% RPM)
 SINGLE ENGINE
 GROUND RUNUP (SUPPRESSED)
 METEOROLOGY:
 TEMP = 15 C
 BAR PRESS = .760 M HG
 REL HUMID = 70 %
 PAGE 13



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(-----)
( FIGURE: OVERALL SOUND PRESSURE LEVEL (OASPL) ) IDENTIFICATION:
( 4 EQUAL LEVEL CONTOURS (DB) ) )
( ) ) OMEGA 1.4
( ) ) TEST 77-776-001
( ) ) RUN 05
( ) ) METEOROLOGY:
( NOISE SOURCE/SUBJECT: )
( F-106 AIRCRAFT IN THE ) TEMP = 15 C
( AF32A-17 SUPPRESSOR ) BAR PRESS = .760 M HG
( ENGINE J75-P-17 ) REL HUMID = 70 %
( FAR FIELD NOISE ) PAGE 13
(-----)
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FIGURE: C-WEIGHTED OVERALL SOUND LEVEL (OASLC)
EQUAL LEVEL CONTOURS (DBC)

5

NOISE SOURCE/SUBJECT:
F-106 AIRCRAFT IN THE
AF32A-17 SUPPRESSOR
ENGINE J75-P-17
FAR FIELD NOISE

OPERATION:
( IDLE POWER (59% RPM)
( SINGLE ENGINE
( GROUND RUNUP (SUPPRESSED)
(

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

IDENTIFICATION:
OMEGA 1.4
TEST 77-778-001
RUN 01
24 JAN 79
PAGE 14

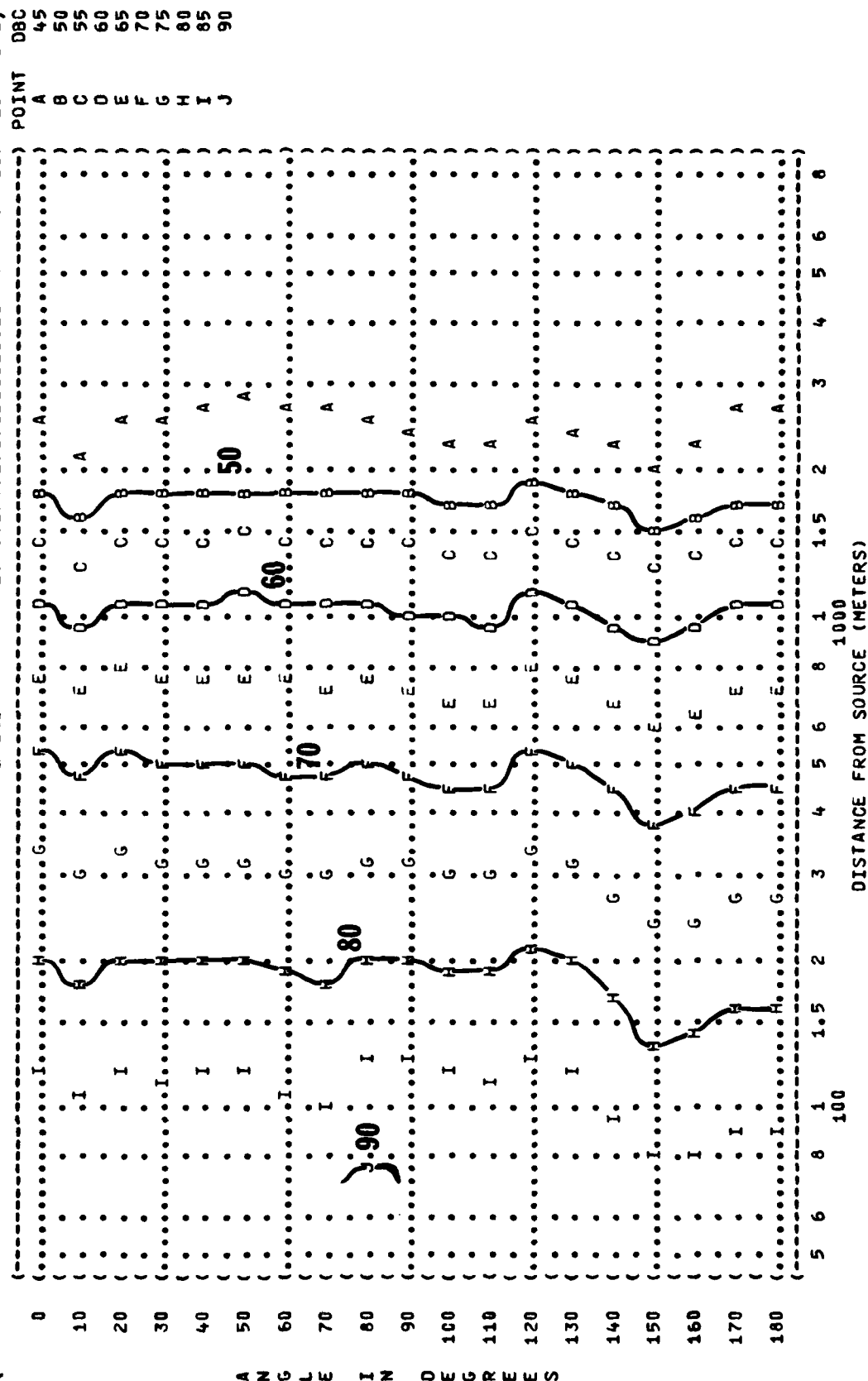
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5

NOISE SOURCE/SUBJECT:
F-106 AIRCRAFT IN IT
AF32A-17 SUPPRESSOR
ENGINE J75-P-17
FAR FIELD NOISE

OPERATION:
85% RPM
SINGLE E
GROUND R

TEOROLOGY:
TEMP
BAR PRESS
REL HUMID



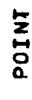
IDENTIFICATION:

EQUAL LEVEL CONTOURS (DBC)

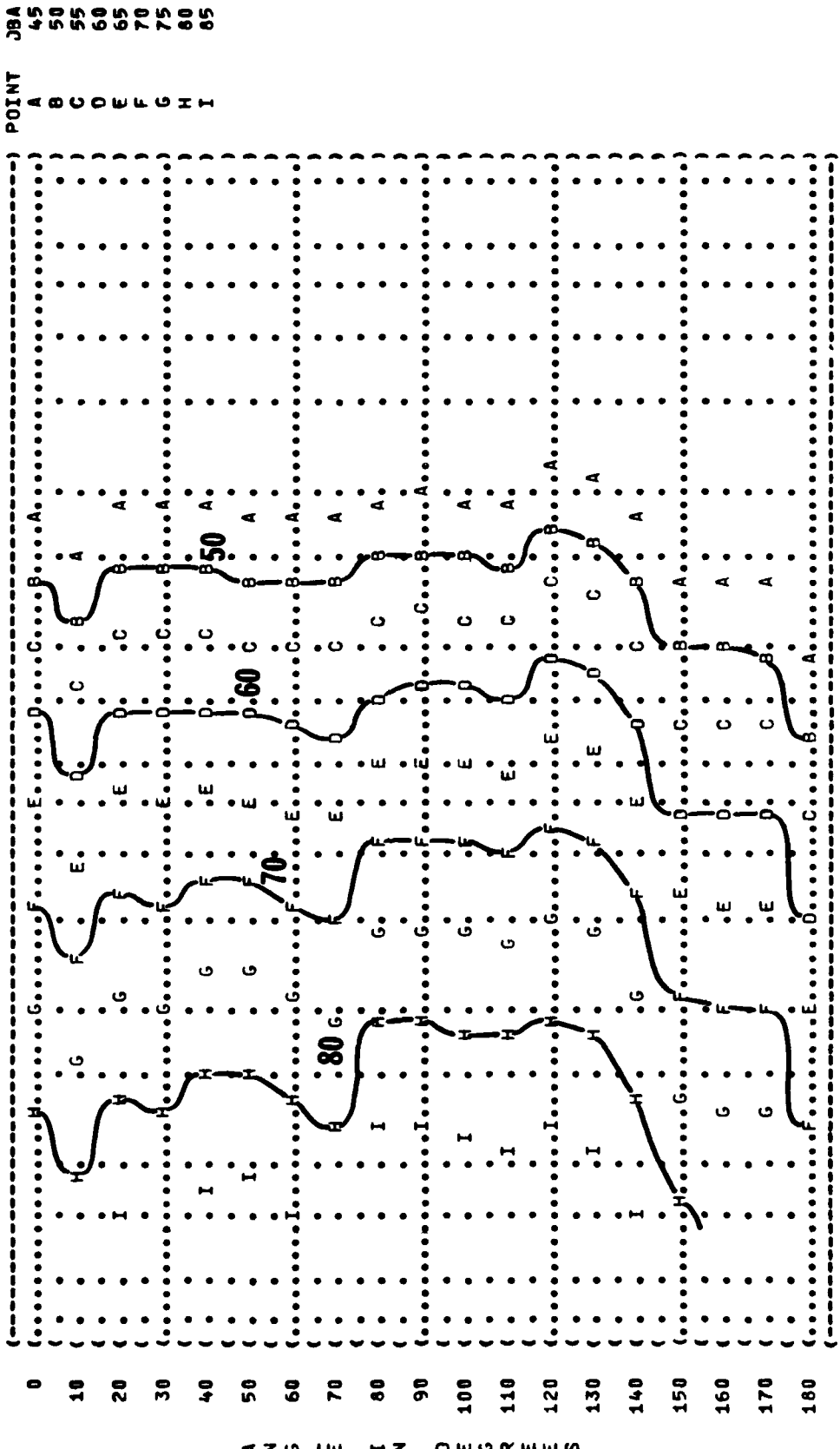
(OPERATION:
(95% RPM
(SINGLE E
(GROUND R
(

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

03 RUN



(FIGURE: A-WEIGHTED OVERALL SOUND LEVEL (OASLA)) IDENTIFICATION:)
 (6) EQUAL LEVEL CONTOURS (DBA))
 () OMEGA 1.4)
 () TEST 77-778-001)
 () RUN 02)
 (NOISE SOURCE/SUBJECT:) METEOROLOGY:)
 (F-106 AIRCRAFT IN THE) TEMP = 15 C)
 (AF32A-17 SUPPRESSOR) SINGLE ENGINE) BAR PRESS = .760 M HG)
 (ENGINE J75-P-17) GROUND RUNUP (SUPPRESSED)) REL HUMID = 70 %)
 (FAR FIELD NOISE))
 () PAGE 15)



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

DISTANCE FROM SOURCE (METERS)

(FIGURE: A-WEIGHTED OVERALL SOUND-LEVEL (OASLA)
 (6
 (EQUAL LEVEL CONTOURS (DBA)
 () IDENTIFICATION:
 ()
 () OMEGA 1.4
 () TEST 77-778-001
 () RUN 04
 ()
 (NOISE SOURCE/SUBJECT:) METEOROLOGY:
 () OPERATION:)
 () F-106 AIRCRAFT IN THE) TEMP = 15 C
 () AF32A-17 SUPPRESSOR) BAR PRESS = .760 M HG
 () ENGINE J75-P-17) REL HUMID = 70 %
 () FAR FIELD NOISE)
 () PAGE 15

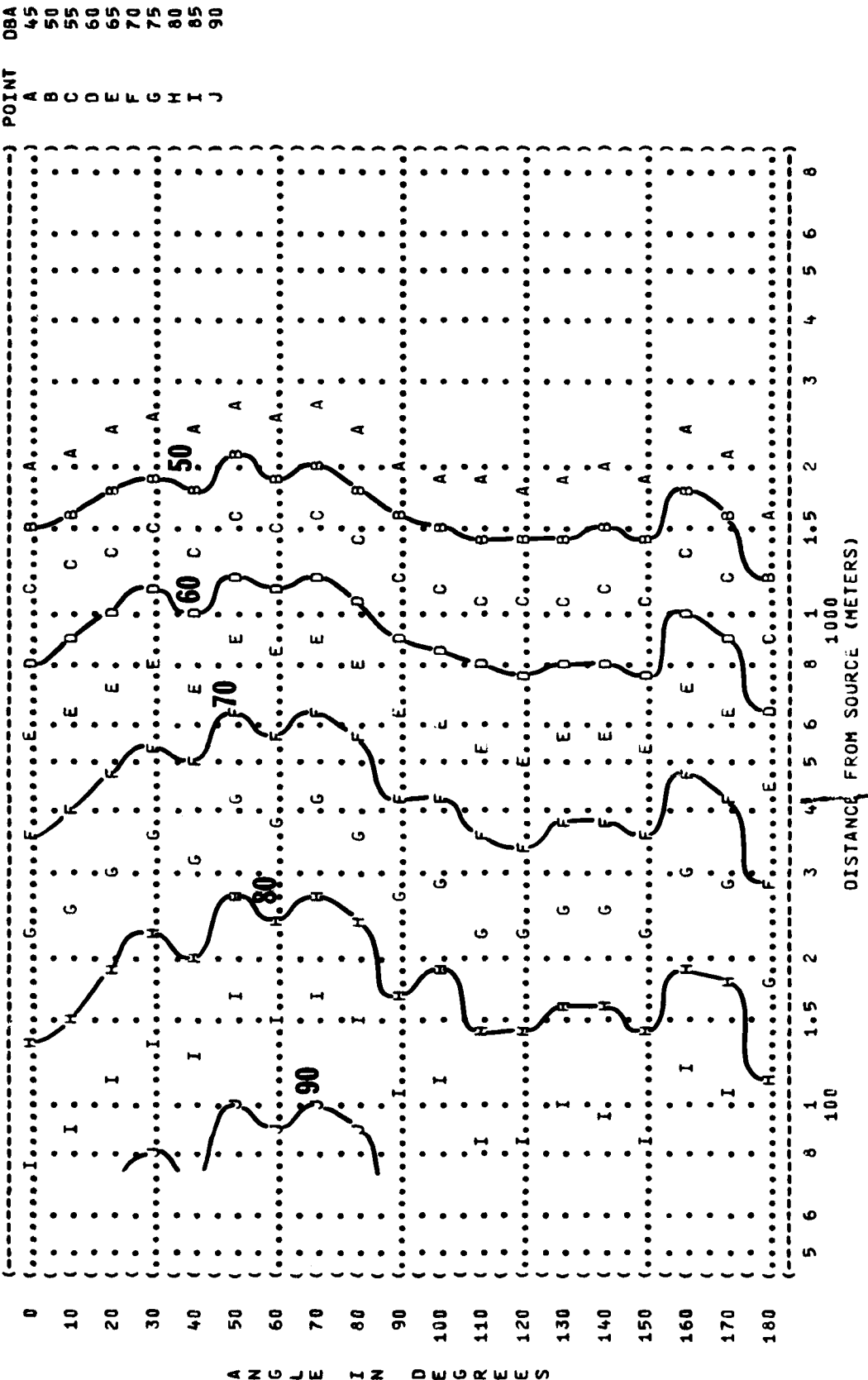
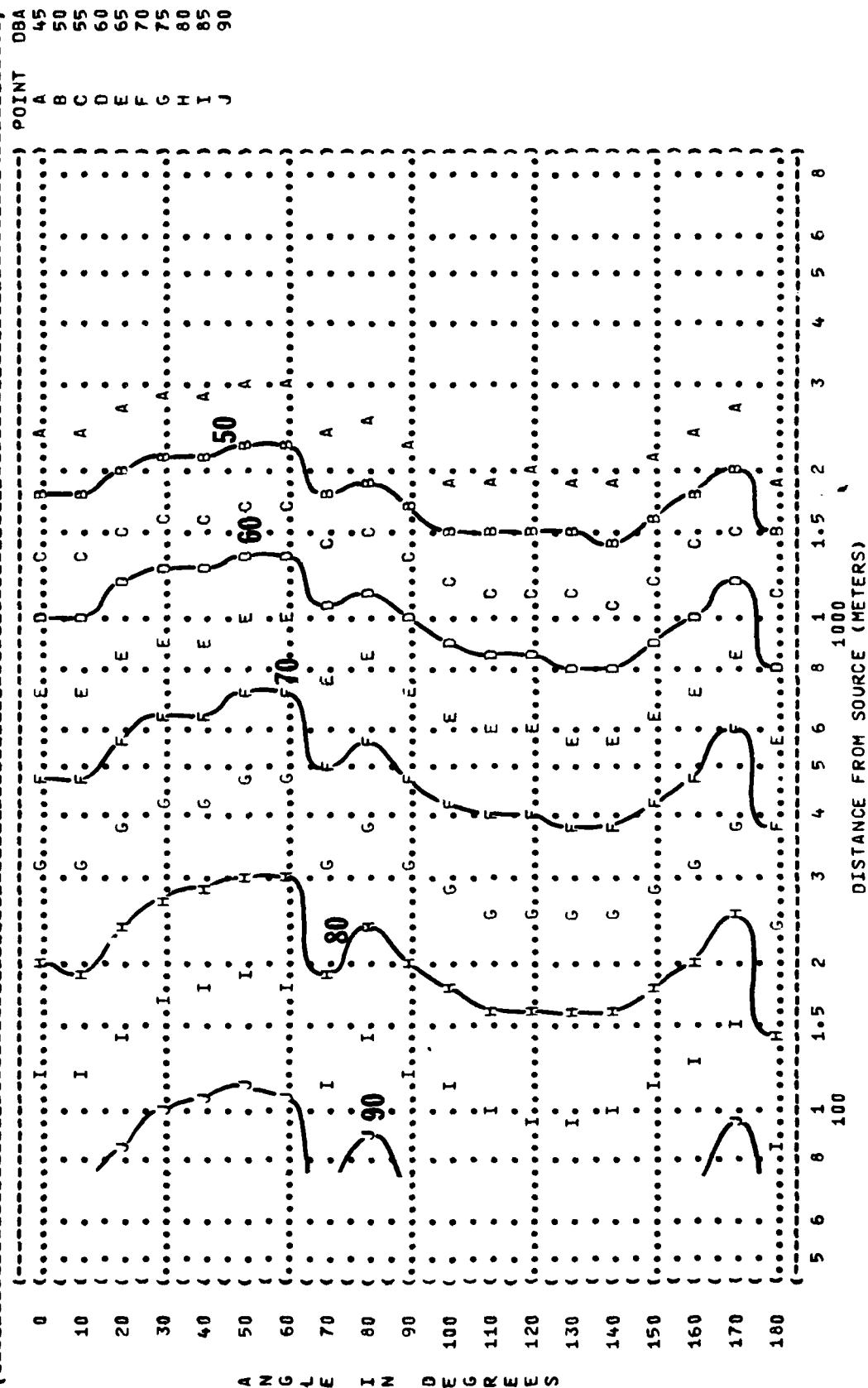


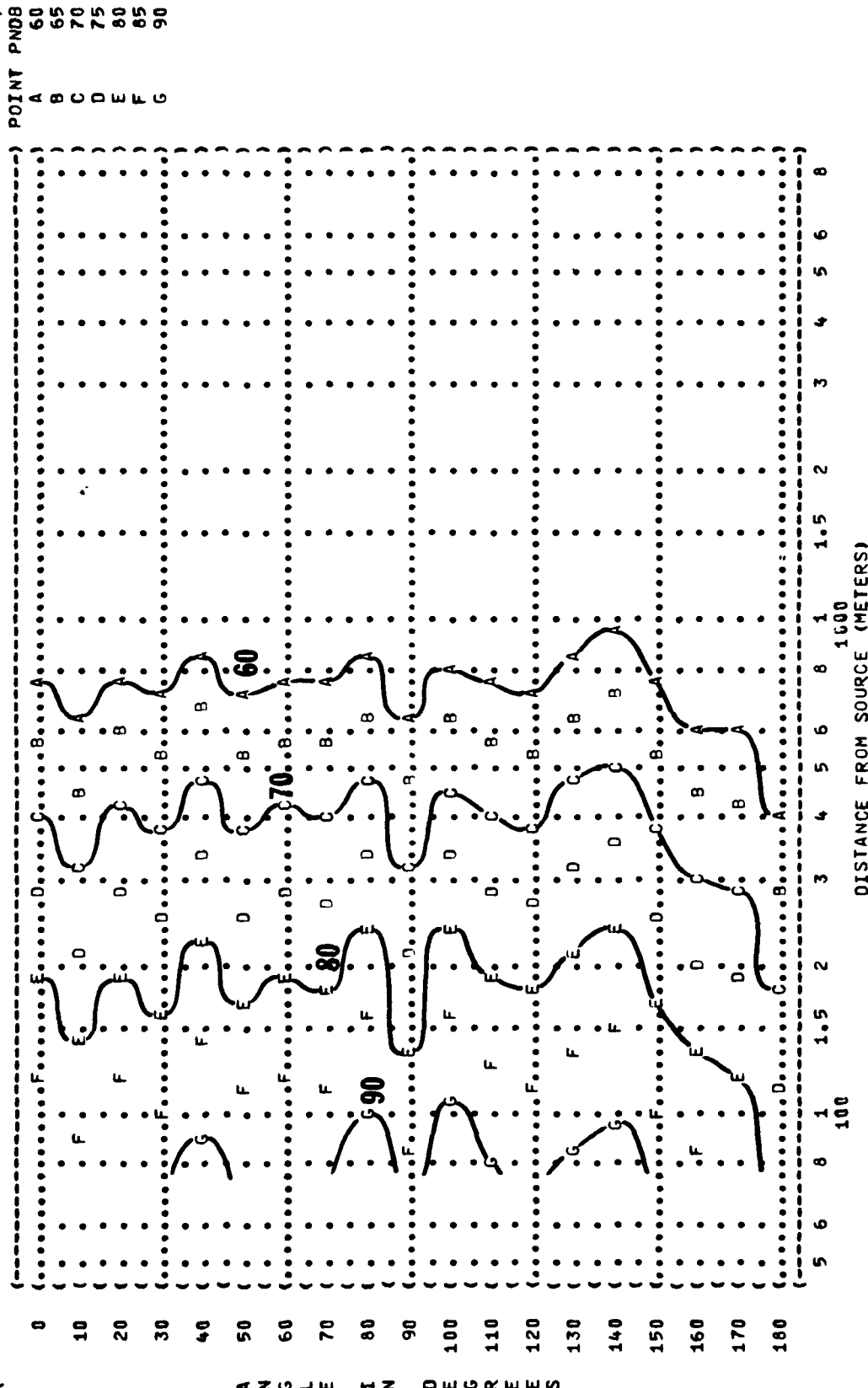
FIGURE 1 A-WEIGHTED OVERALL SOUND LEVEL (OASLA)
 6 EQUAL LEVEL CONTOURS (DBA)

IDENTIFICATION:
 OMEGA 1.4
 TEST 77-778-001
 RUN 05
 24 JAN 79
 PAGE 15

NOISE SOURCE/SUBJECT: (OPERATION:) METEOROLOGY:
 F-106 AIRCRAFT IN THE (AFTERBURNER POWER) TEMP = 15 C
 AF32A-17 SUPPRESSOR (SINGLE ENGINE) BAR PRESS = .760 M HG
 ENGINE J75-P-17 (GROUND RUNUP (SUPPRESSED)) REL HUMID = 70 %
 FAR FIELD NOISE ()



(FIGURE: PERCEIVED NOISE LEVEL, TONE CORRECTED {PNLT}
 (7
 (EQUAL LEVEL CONTOURS (PNDB)
 () IDENTIFICATION:)
 () OMEGA 1.4
 () TEST 77-778-001
 () RUN 01
 () METEOROLOGY:)
 () TEMP = 15 C
 () BAR PRESS = .760 M HG
 () REL HUMID = 70 %
 () 24 JAN 79
 () PAGE 16
 ()



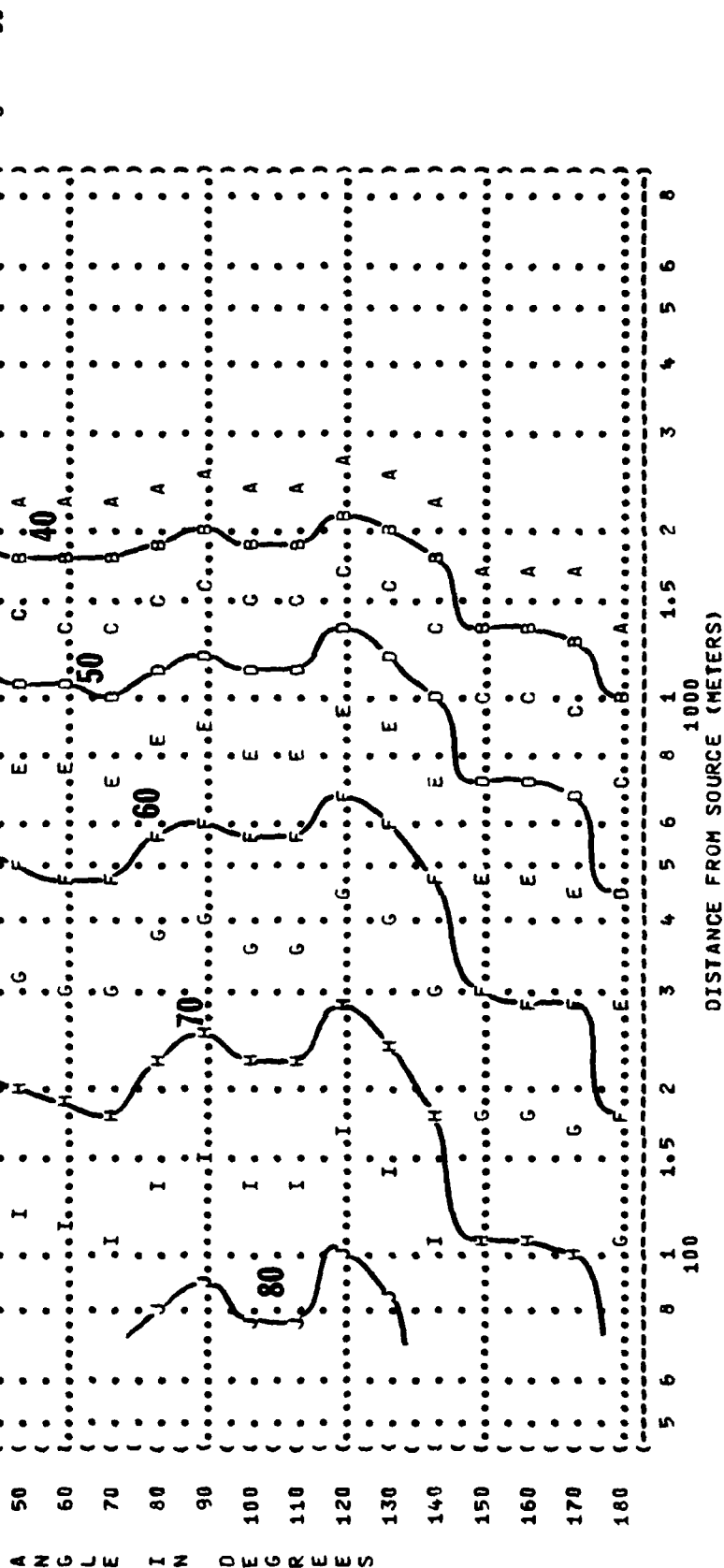
A N G L E I N D E G R E E S

FIGURE: PREFERRED SPEECH INTERFERENCE LEVEL (PSIL)
 7
 IDENTIFICATION:
 OMEGA 1.4
 TEST 77-770-001
 RUN 02
 24 JAN 79
 PAGE 17

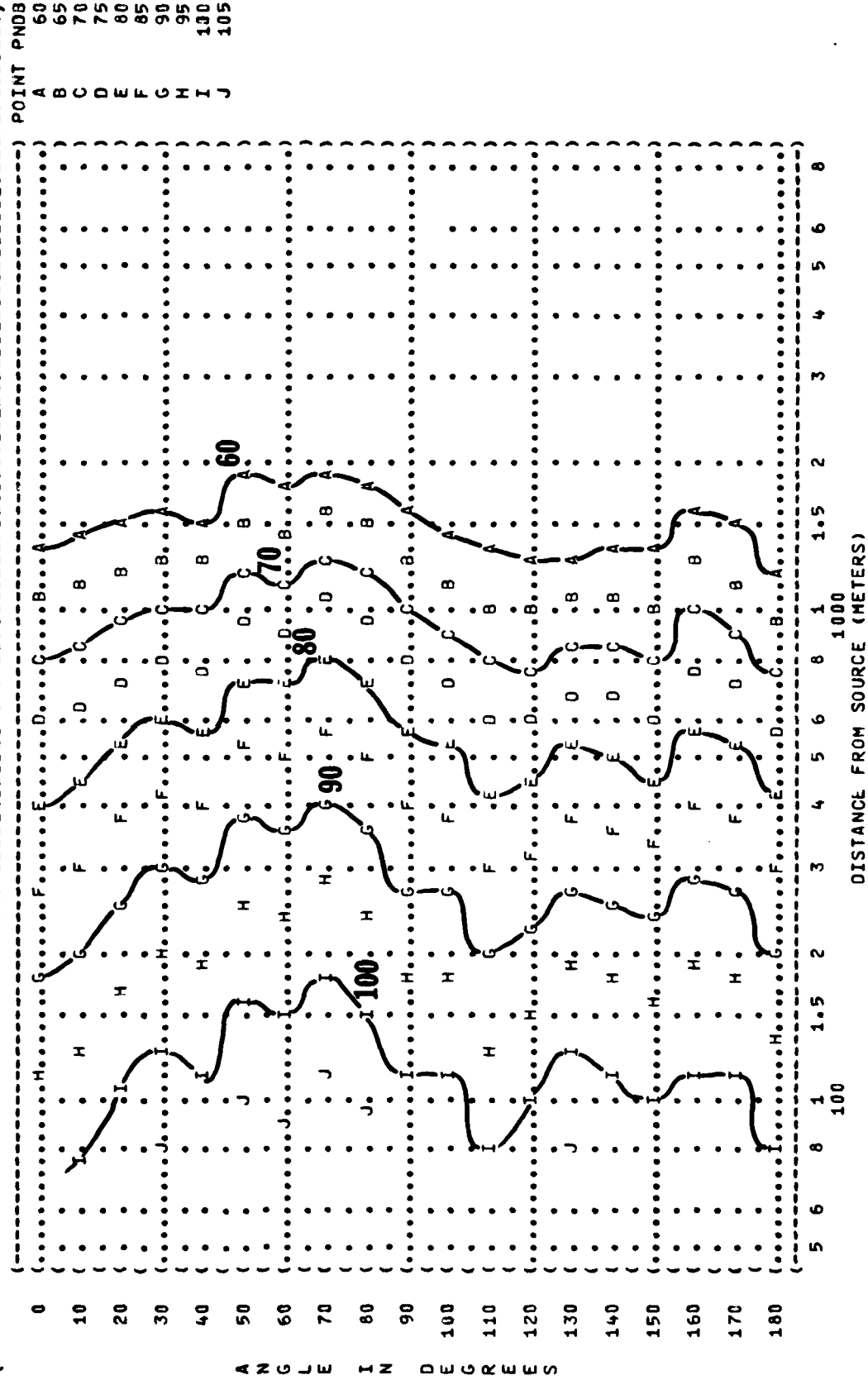
NOISE SOURCE/SUBJECT: OPERATION:
 F-106 AIRCRAFT IN THE 85% RPM
 AF32A-17 SUPPRESSOR SINGLE ENGINE
 ENGINE J75-P-17 GROUND RUNUP (SUPPRESSED)
 FAR FIELD NOISE

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

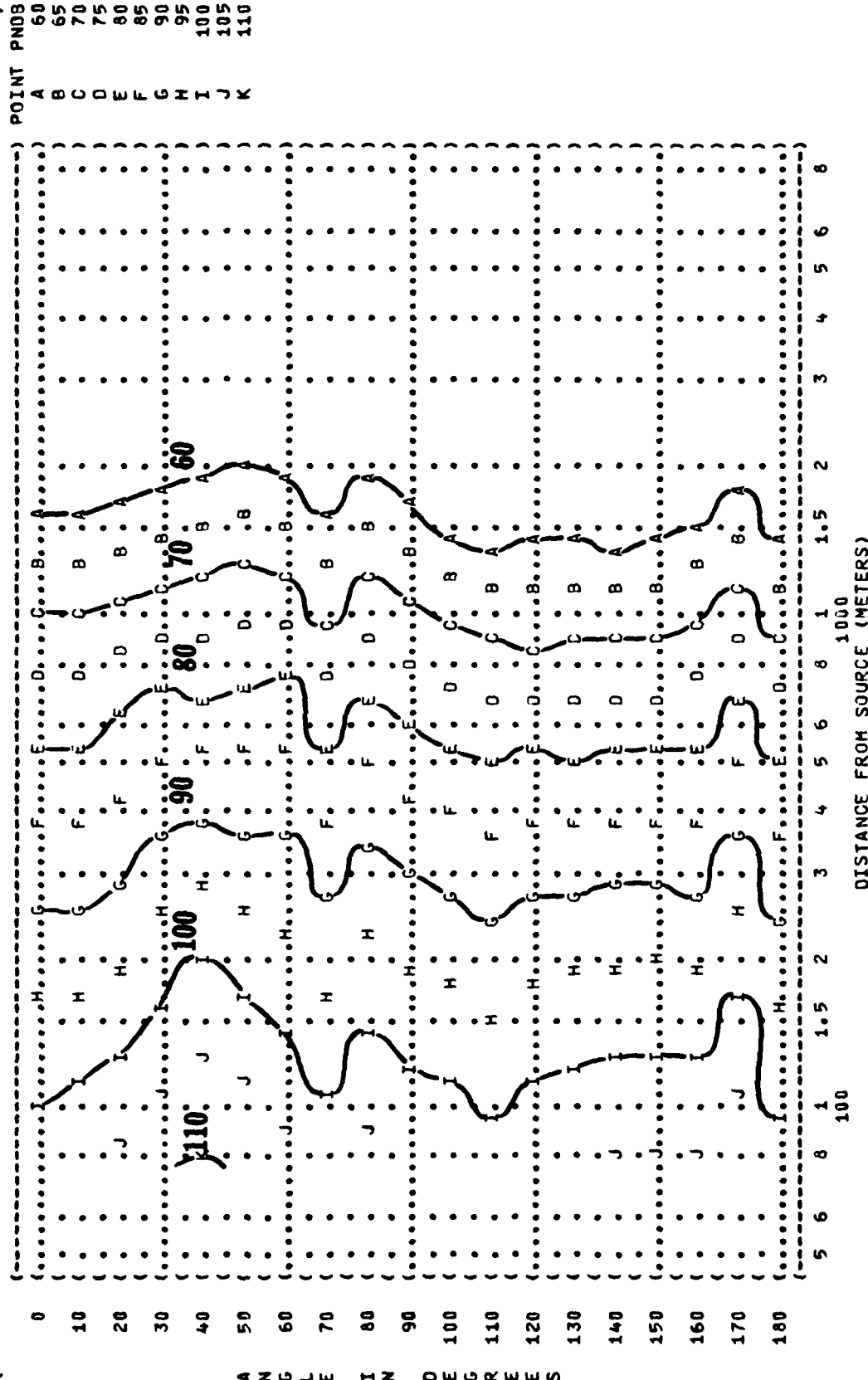
POINT DB
 A 35
 B 40
 C 45
 D 50
 E 55
 F 60
 G 65
 H 70
 I 75
 J 80



(FIGURE: PERCEIVED NOISE LEVEL, TONE CORRECTED (PNLT))
 (7 EQUAL LEVEL CONTOURS (PNDB))
 () IDENTIFICATION:)
 () OMEGA 1.4)
 () TEST 77-778-001)
 () RUN 04)
 () METEOROLOGY:)
 () TEMP = 15 C)
 () BAR PRESS = .760 H HG)
 () 14 SEP 78)
 () REL HUMID = 70 %)
 () PAGE 16)

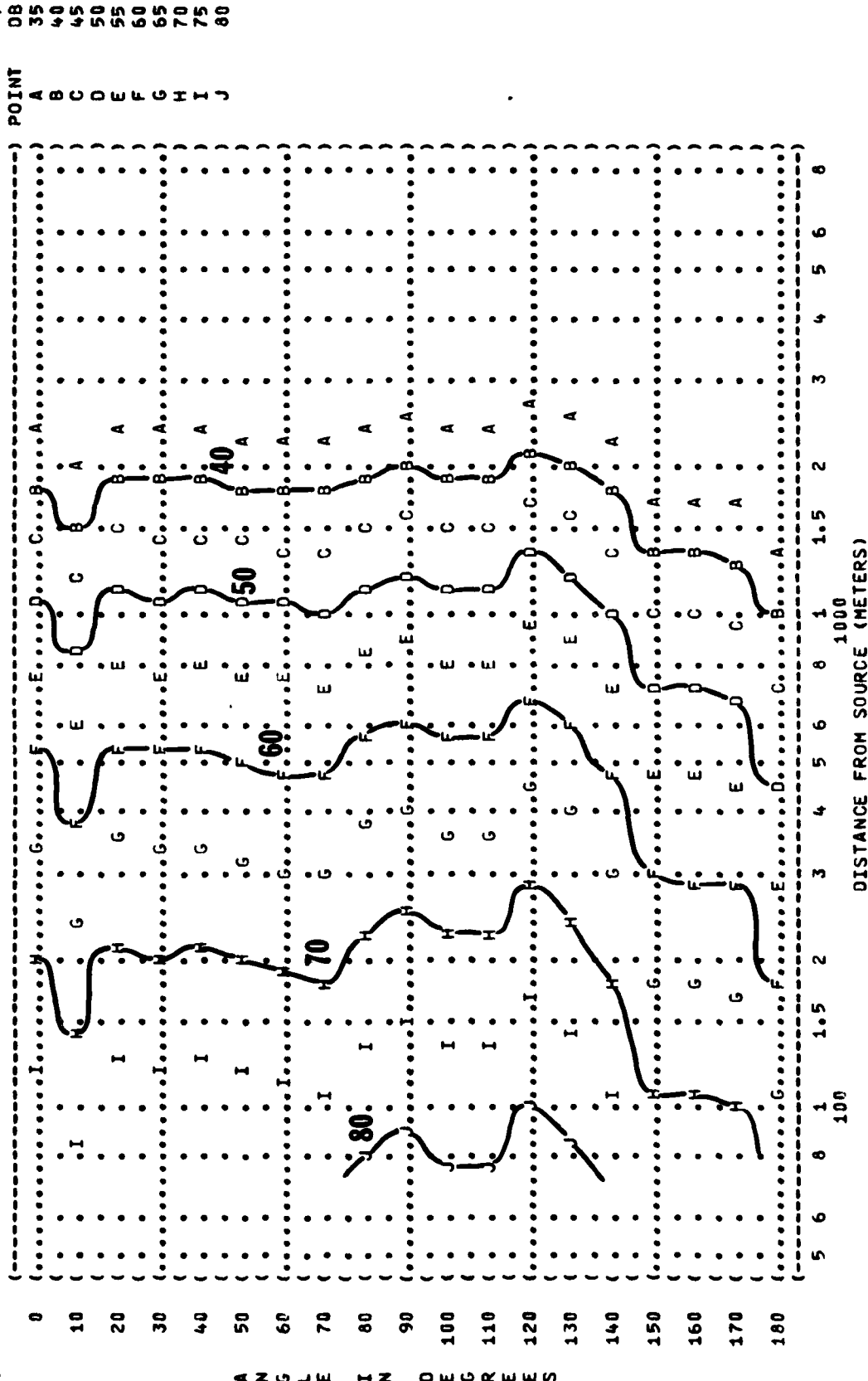


(FIGURE: PERCEIVED NOISE LEVEL, TONE CORRECTED (PNLT))
 (7 EQUAL LEVEL CONTOURS (PNDB))
 () IDENTIFICATION:)
 () OMEGA 1.4)
 () TEST 77-778-001)
 () RUN 05)
 () METEOROLOGY:)
 () TEMP = 15 C)
 () BAR PRESS = .760 M HG)
 () REL HUMID = 70 %)
 () 14 SEP 78)
 () PAGE 16)

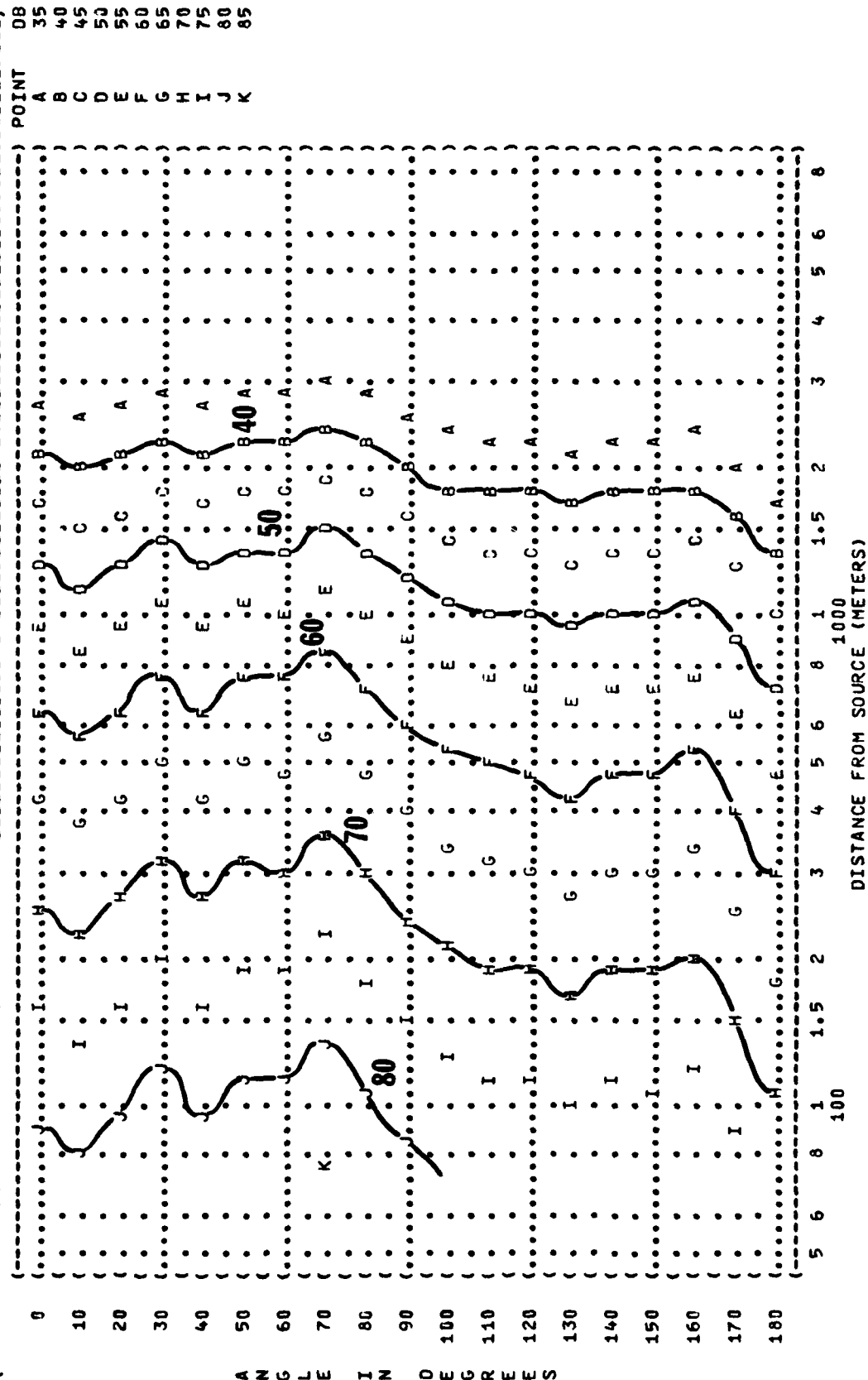


A N G L E I N D E G R E E S

(FIGURE: PREFERRED SPEECH INTERFERENCE LEVEL (PSIL)
 (8
 (EQUAL LEVEL CONTOURS (DB)
 () IDENTIFICATION:
 () OMEGA 1.4
 () TEST 77-778-001
 () RUN 02
 () METEOROLOGY:
 () TEMP = 15 C
 () BAR PRESS = .760 M HG
 () 14 SEP 78
 () REL HUMID = 70 %
 () PAGE 17
 ()



```
(-----)
( ( FIGURE: PREFERRED SPEECH INTERFERENCE LEVEL (PSIL)
( ( 8
( ( EQUAL LEVEL CONTOURS (DB)
( (
( ( NOISE SOURCE/SUBJECT:
( ( F-106 AIRCRAFT IN THE
( ( AF32A-17 SUPPRESSOR
( ( ENGINE J75-P-17
( ( FAR FIELD NOISE
( (
( ( OPERATION:
( ( 95% RPM
( ( SINGLE ENGINE
( ( GROUND RUNUP (SUPPRESSED)
( (
( ( METEOROLOGY:
( ( TEMP = 15 C
( ( BAR PRESS = .760 M HG
( ( REL HUMID = 70 %
( (
( ( OMEGA 1.4
( ( TEST 77-778-001
( ( RUN 03
( (
( ( IDENTIFICATION:
( (
( (
( ( PAGE 17
(-----)
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IDENTIFICATION:

EQUAL LEVEL CONTOURS (DB)

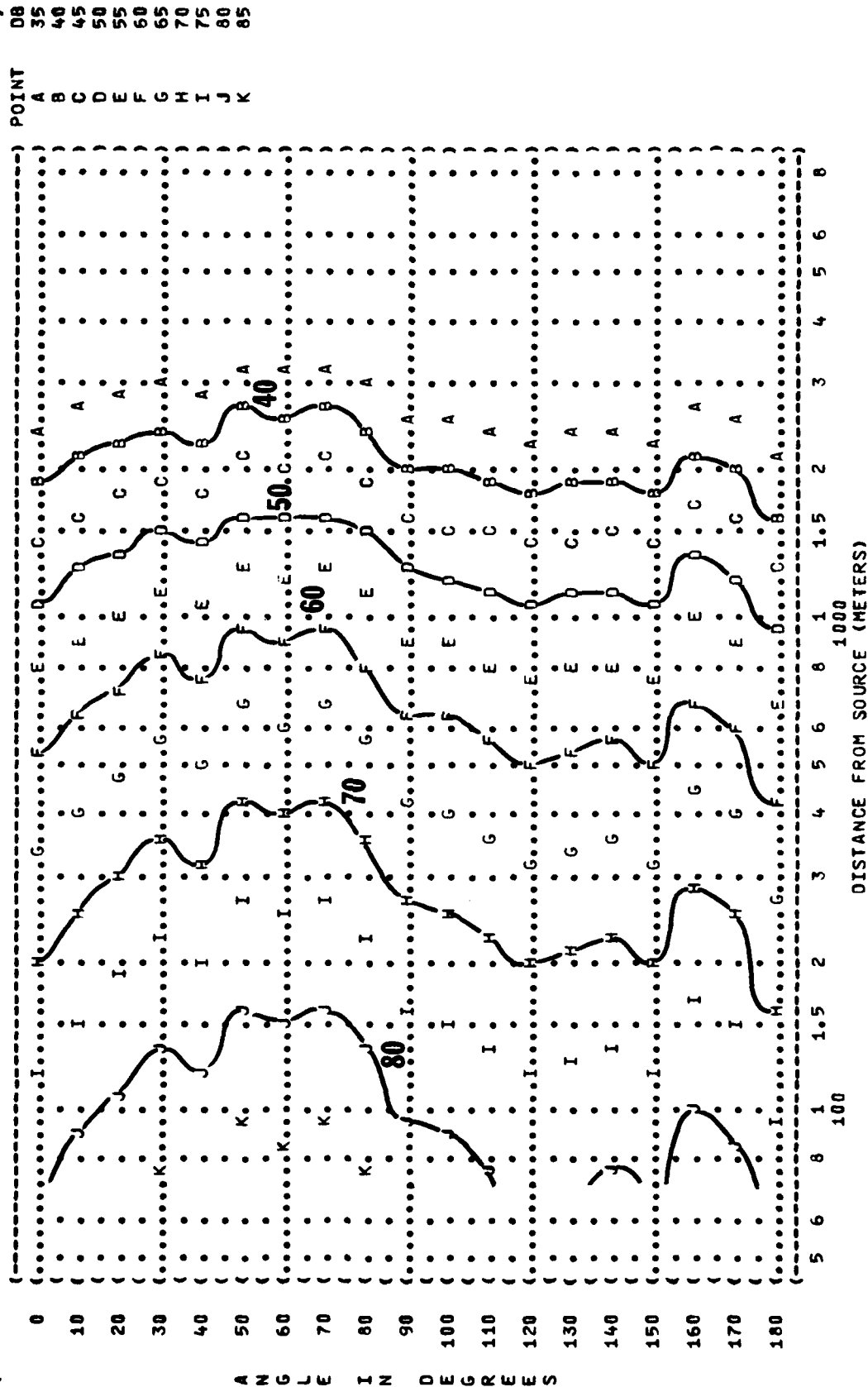
OMEGA 1.4
TEST 77-778-001

RUN 04

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

(OPERATION:
(MILITARY POWER (100% RPM)
(SINGLE ENGINE
(GROUND RUNUP (SUPPRESSED)

NOISE SOURCE/SUBJECT:
F-106 AIRCRAFT IN THE
AF32A-17 SUPPRESSOR
ENGINE J75-P-17
FAR FIELD NOISE



PAGE 7

DISTANCE FROM SOURCE (METERS)

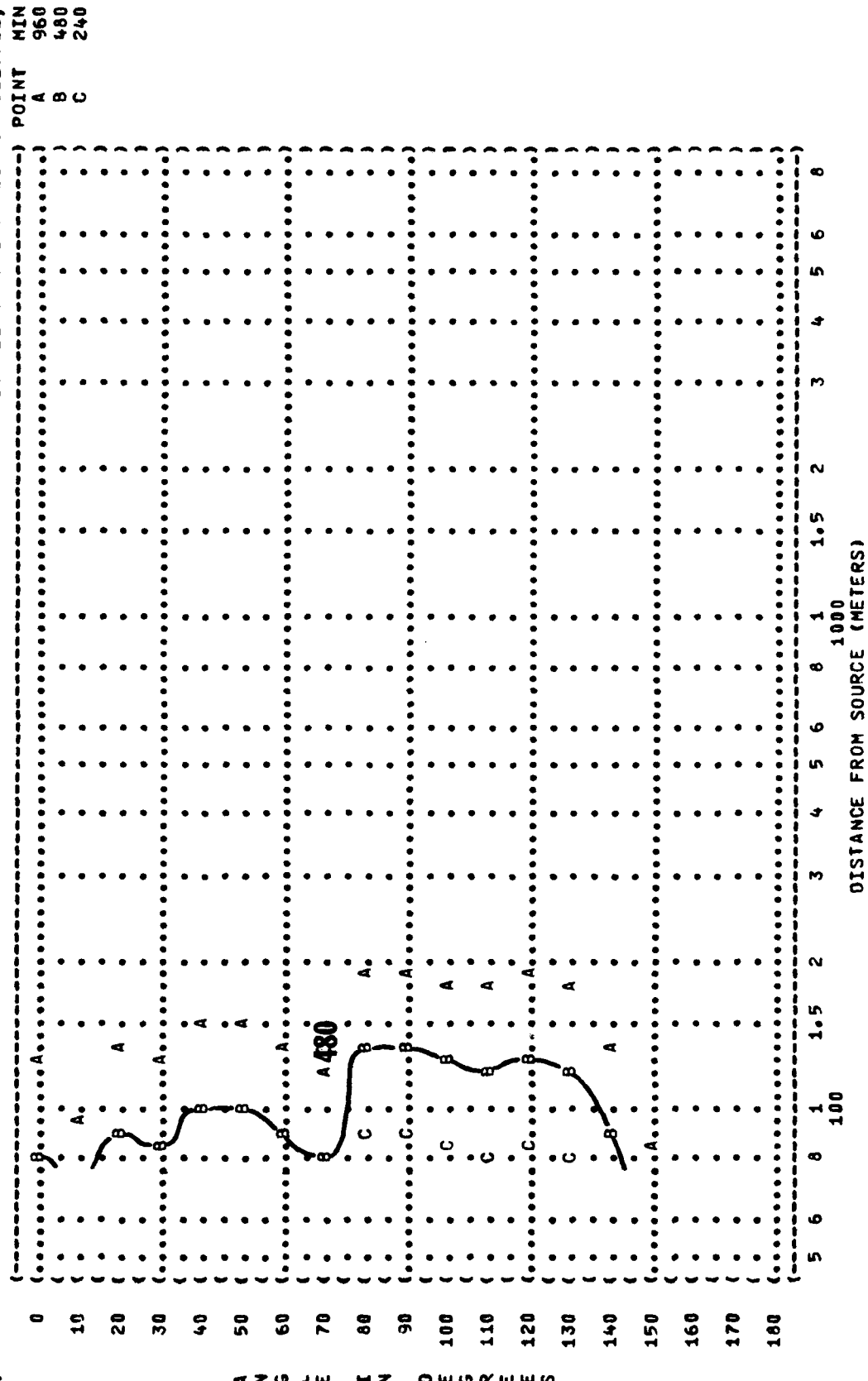
H-133 GROUND COMMUNICATION UNIT

	5	6	8	1	1.5	2	3	4	5	6	8	1	1.5	2	3	4	5	6	8
--	---	---	---	---	-----	---	---	---	---	---	---	---	-----	---	---	---	---	---	---

```

( ( FIGURE: MAXIMUM PERMISSIBLE TIME {T} FOR ONE EXPOSURE PER DAY (AFR 161-35, JULY 73) ) IDENTIFICATION:
( ( 9 EQUAL TIME CONTOURS (MINUTES) ) )
( ( NO PROTECTION ) )
( (-----) )
( ( NOISE SOURCE/SUBJECT: ) OPERATION: ) METEOROLOGY: )
( ( F-106 AIRCRAFT IN THE ) ( 85% RPM ) ) TEMP = 15 C )
( ( AF32A-17 SUPPRESSOR ) ( SINGLE ENGINE ) ) BAR PRESS = .760 M HG )
( ( ENGINE J75-P-17 ) ( GROUND RUNUP (SUPPRESSED) ) ) REL HUMID = 70 % )
( ( FAR FIELD NOISE ) ( ) ) ) PAGE 7 )

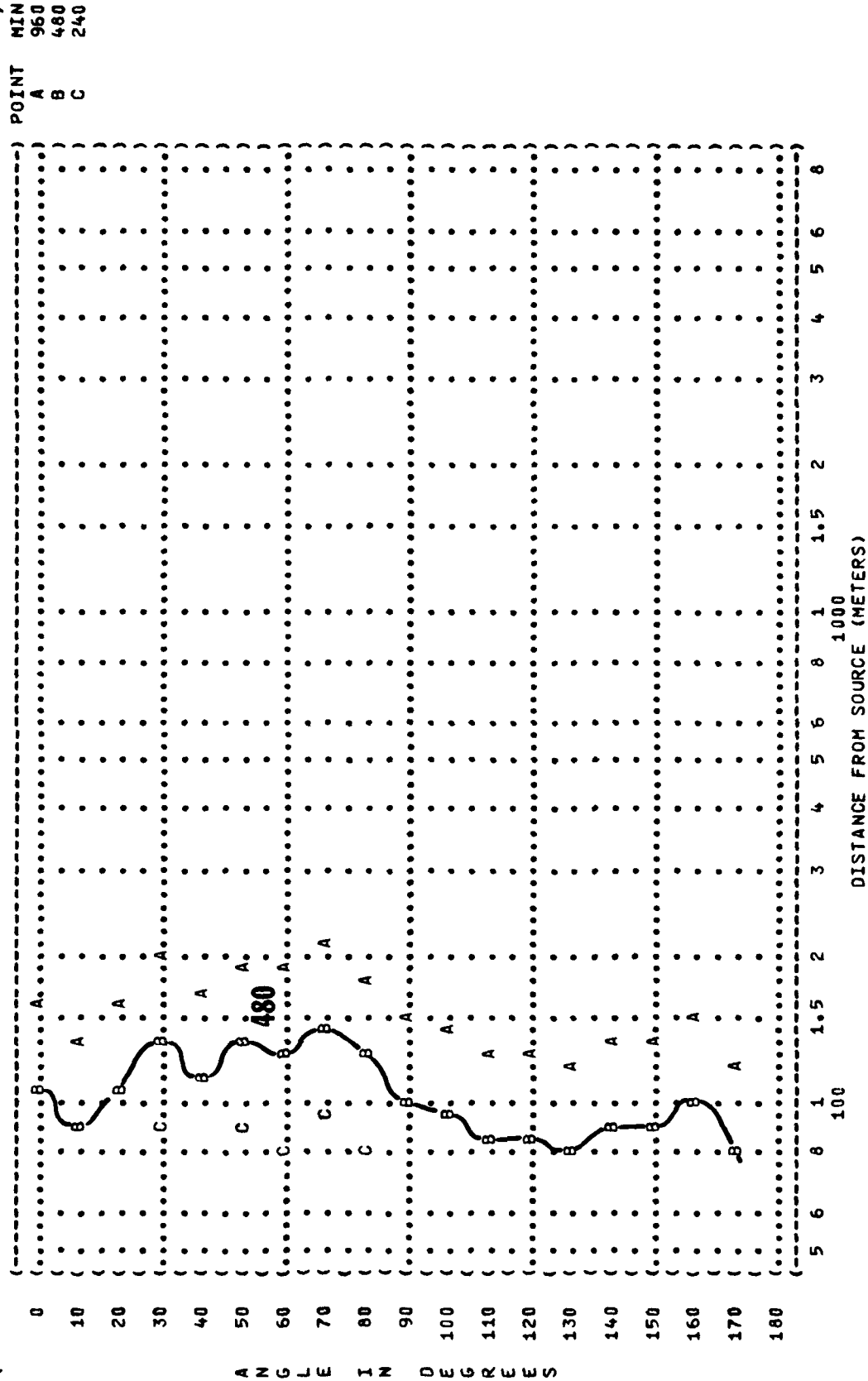
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```
(-----)
( FIGURE: MAXIMUM PERMISSIBLE TIME {T} FOR ONE EXPOSURE PER DAY (AFR 161-35, JULY 73) ) IDENTIFICATION:
(      9 ) )
( ) ) OMEGA 1.4
( ) ) TEST 77-778-001
( ) ) RUN 02
( ) )
( NOISE SOURCE/SUBJECT: ) METEOROLOGY:
( F-106 AIRCRAFT IN THE ) TEMP = 15 C
( AF32A-17 SUPPRESSOR ) BAR PRESS = .760 M HG
( ENGINE J75-P-17 ) GROUND RUNUP (SUPPRESSED) ) REL HUMID = 70 %
( FAR FIELD NOISE ) ) PAGE 8
(-----)
```

[illegible]

(FIGURE: MAXIMUM PERMISSIBLE TIME (T) FOR ONE EXPOSURE PER DAY (AFR 161-35, JULY 73)) IDENTIFICATION:)
 (9) EQUAL TIME CONTOURS (MINUTES))
 (NO PROTECTION) OMEGA 1.4)
 (NOISE SOURCE/SUBJECT:) METEOROLOGY:)
 (F-106 AIRCRAFT IN THE) OPERATION:)
 (AF32A-17 SUPPRESSOR) (95% RPM) TEMP = 15 C)
 (ENGINE J75-P-17) (SINGLE ENGINE) BAR PRESS = .760 M HG)
 (FAR FIELD NOISE) (GROUND RUNUP (SUPPRESSED)) REL HUMID = 70 %)
 () () 14 SEP 78)
 () () PAGE 7)
 () () TEST 77-778-001)
 () () RUN 03)



(FIGURE: MAXIMUM PERMISSIBLE TIME (T) FOR ONE EXPOSURE PER DAY (AFR 161-35, JULY 73)) IDENTIFICATION:)
 (9 EQUAL TIME CONTOURS (MINUTES)))
 () OMEGA 1.4)
 () TEST 77-778-001)
 () RUN 03)
 (NOISE SOURCE/SUBJECT:) METEOROLOGY:)
 (F-106 AIRCRAFT IN THE)) TEMP = 15 C)
 (AF32A-17 SUPPRESSOR) SINGLE ENGINE) BAR PRESS = .760 M HG)
 (ENGINE J75-P-17) GROUND RUNUP (SUPPRESSED)) REL HUMID = 70 %)
 (FAR FIELD NOISE)))
 () PAGE 8)

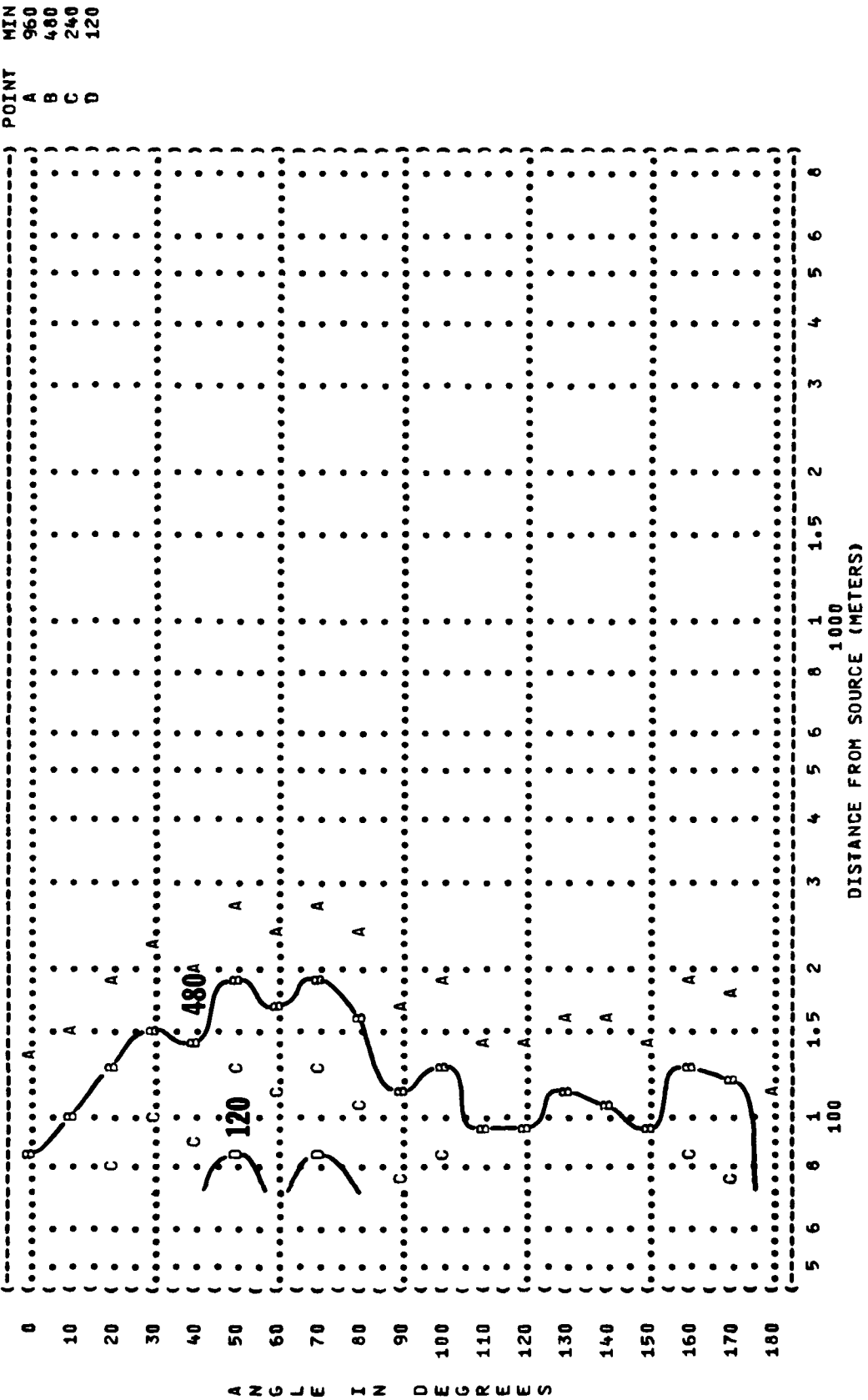
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 80< ()
 90< ()
 100< ()
 110< ()
 120< ()
 130< ()
 140< ()
 150< ()
 160< ()
 170< ()
 180< ()

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

5 6 8 1 1.5 2 3 4 5 6 8 1 1.5 2 3 4 5 6 8
 100 1000
 DISTANCE FROM SOURCE (METERS)

(FIGURE: MAXIMUM PERMISSIBLE TIME (T) FOR ONE EXPOSURE PER DAY (AFR 161-35, JULY 73)) IDENTIFICATION:)
 (9) EQUAL TIME CONTOURS (MINUTES))
 (NO PROTECTION) OMEGA 1.4
 () TEST 77-778-001)
 () RUN 04)
 (NOISE SOURCE/SUBJECT:) METEOROLOGY:)
 (F-106 AIRCRAFT IN THE) MILITARY POWER (100% RPM)) TEMP = 15 C)
 (AF32A-17 SUPPRESSOR) SINGLE ENGINE) BAR PRESS = .760 M HG)
 (ENGINE J75-P-17) GROUND RUNUP (SUPPRESSED)) REL HUMID = 70 %)
 (FAR FIELD NOISE)) PAGE 7)



```
(-----)
( FIGURE: MAXIMUM PERMISSIBLE TIME {T} FOR ONE EXPOSURE PER DAY (AFR 161-35, JULY 73) ) IDENTIFICATION: )
(      9 ) ) )
( ) ) OMEGA 1.4 )
( ) ) TEST 77-778-001 )
( NOISE SOURCE/SUBJECT: ) OPERATION: ) METEOROLOGY: )
( F-106 AIRCRAFT IN THE ) MILITARY POWER (100% RPM) ) TEMP = 15 C )
( AF32A-17 SUPPRESSOR ) SINGLE ENGINE ) BAR PRESS = .760 M HG )
( ENGINE J75-P-17 ) GROUND RUNUP (SUPPRESSED) ) REL HUMID = 70 % )
( FAR FIELD NOISE ) ) PAGE 8 )
(-----)
```

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 $\angle$ 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

5 6 8 1 1.5 2 3 4 5 6 8 1 1.5 2 3 4 5 6 8 100
100
DISTANCE FROM SOURCE (METERS)

FIGURE	MAXIMUM PERMISSIBLE TIME (T) FOR ONE EXPOSURE PER DAY (AFR 161-35, JULY 73)	IDENTIFICATION
9	9	OMEGA 1.4 TEST 77-778-001
NOISE SOURCE/SUBJECT: (OPERATION:) METEOROLOGY:) RUN 05		
(F-106 AIRCRAFT IN THE (AFTERBURNER POWER) TEMP = 15 C)		
(AF32A-17 SUPPRESSOR (SINGLE ENGINE) BAR PRESS = .760 M HG)		
(ENGINE J75-P-17 (GROUND RUNUP (SUPPRESSED)) REL HUMID = 70 %)		
(FAR FIELD NOISE ())		
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		
DISTANCE FROM SOURCE (METERS)		
0<	5	100
10<	6	100
20<	8	100
30<	1	100
40<	1.5	100
50<	2	100
60<	3	100
70<	4	100
80<	5	100
90<	6	100
100<	8	100
110<	1	100
120<	1.5	100
130<	2	100
140<	3	100
150<	4	100
160<	5	100
170<	6	100
180<	8	100

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

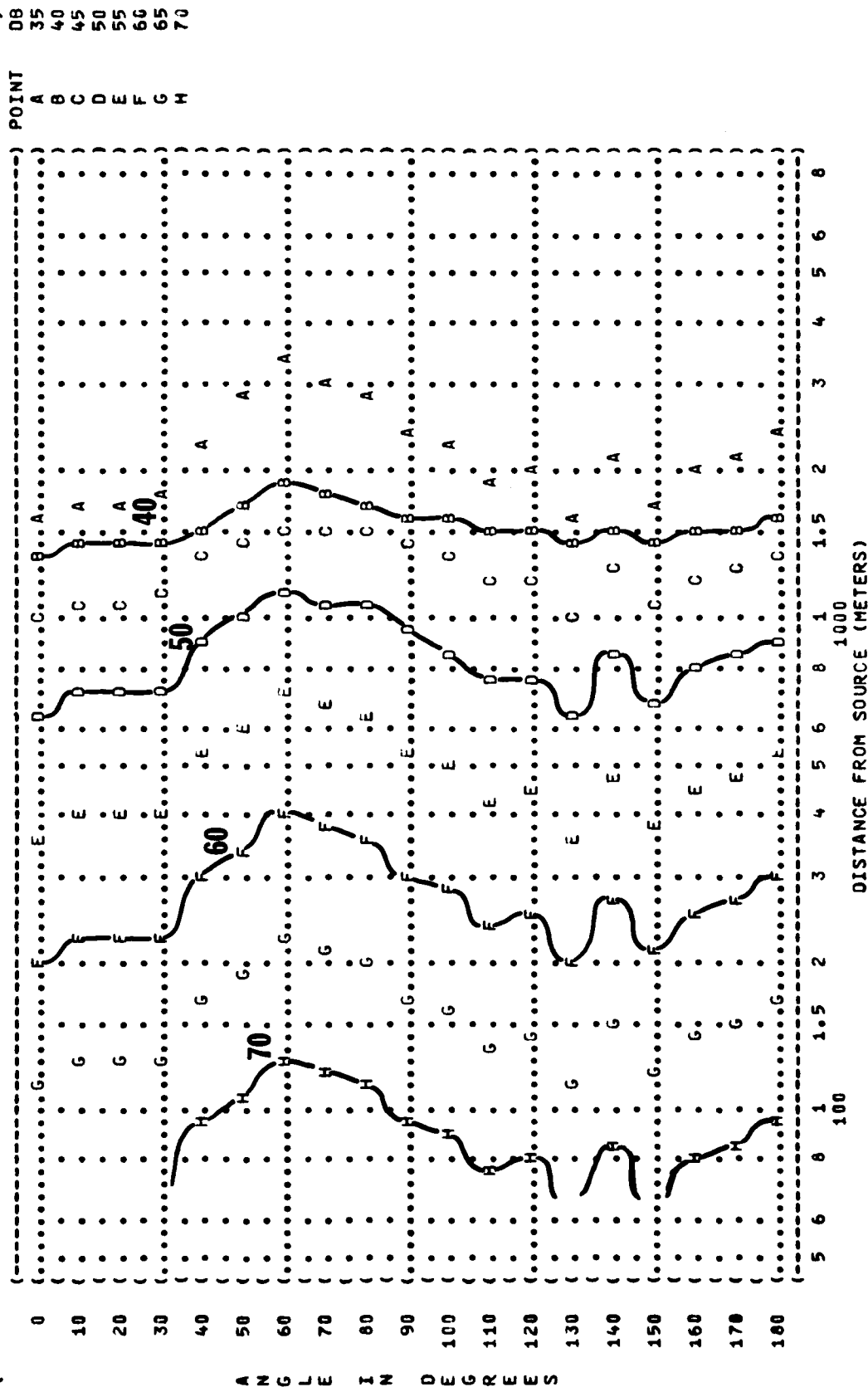
IDENTIFICATION:
 OMEGA 1.4
 TEST 77-778-001
 RUN 01

NOISE SOURCE/SUBJECT:
 F-106 AIRCRAFT IN THE
 AF32A-17 SUPPRESSOR
 ENGINE J75-P-17
 FAR FIELD NOISE

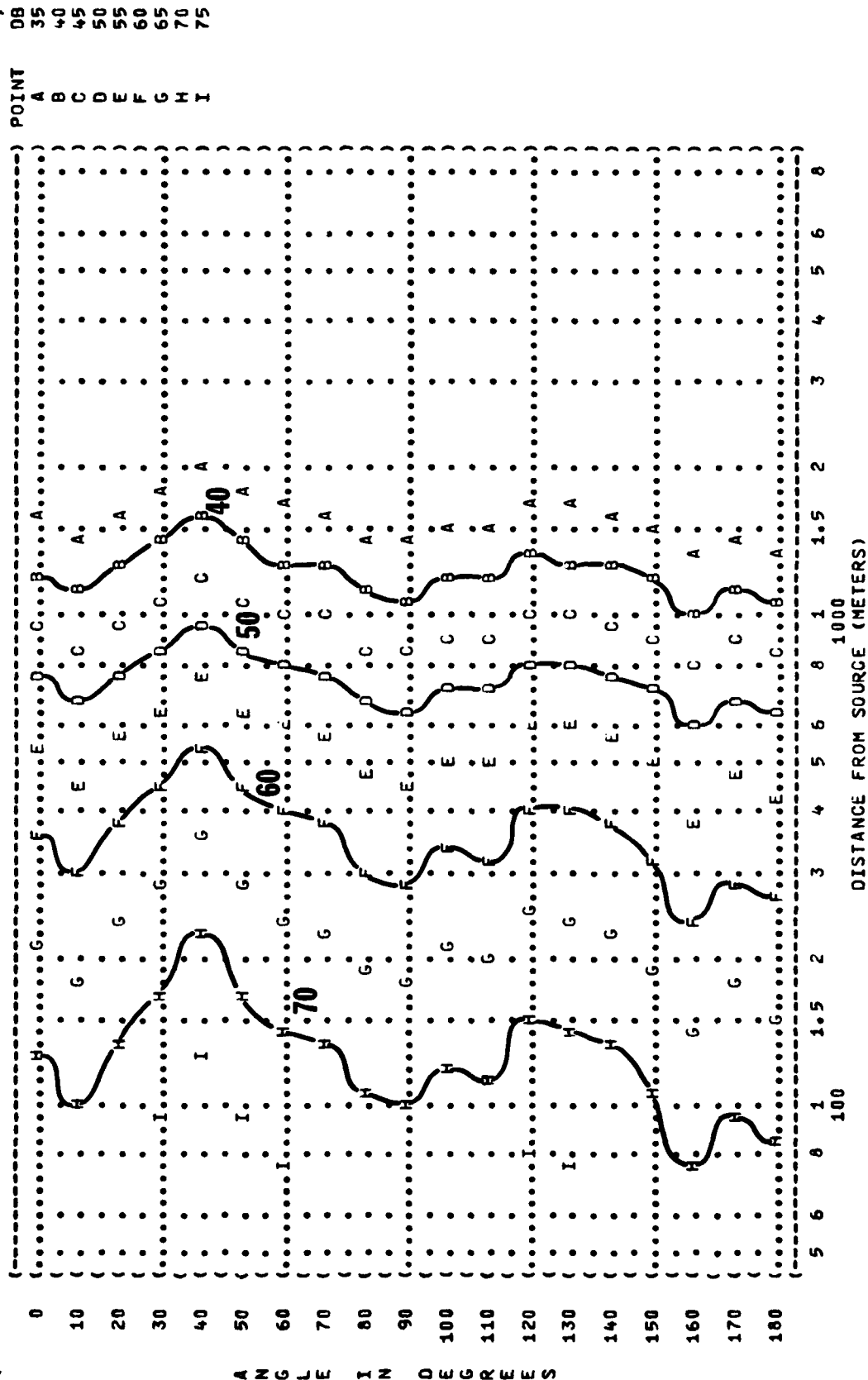
OPERATION:
 IDLE POWER (59% RPM)
 SINGLE ENGINE
 GROUND RUNUP (SUPPRESSED)

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

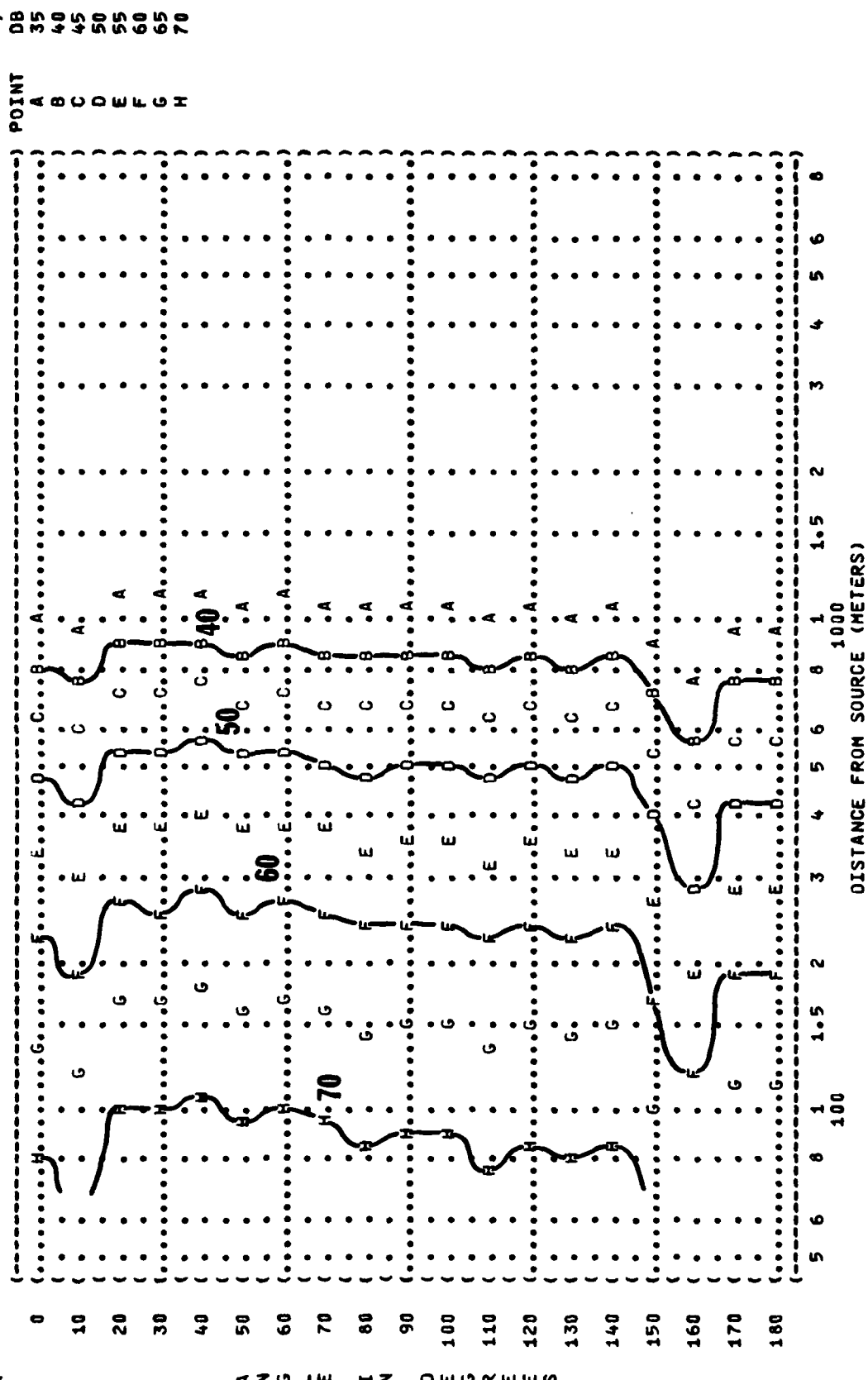
PAGE 18



(FIGURE: SOUND PRESSURE LEVEL (SPL)
 (10 EQUAL LEVEL CONTOURS (DB)
 (63 HZ OCTAVE BAND
 (NOISE SOURCE/SUBJECT:
 (F-106 AIRCRAFT IN THE
 (AF32A-17 SUPPRESSOR
 (ENGINE J75-P-17
 (FAR FIELD NOISE
 (OPERATION:
 (IDLE POWER (59% RPM)
 (SINGLE ENGINE
 (GROUND RUNUP (SUPPRESSED)
 (METEOROLOGY:
 (TEMP = 15 C
 (BAR PRESS = .760 M HG
 (REL HUMID = 70 %
 (IDENTIFICATION:
 (OMEGA 1.4
 (TEST 77-778-001
 (RUN 01
 (14 SEP 78
 (PAGE 19

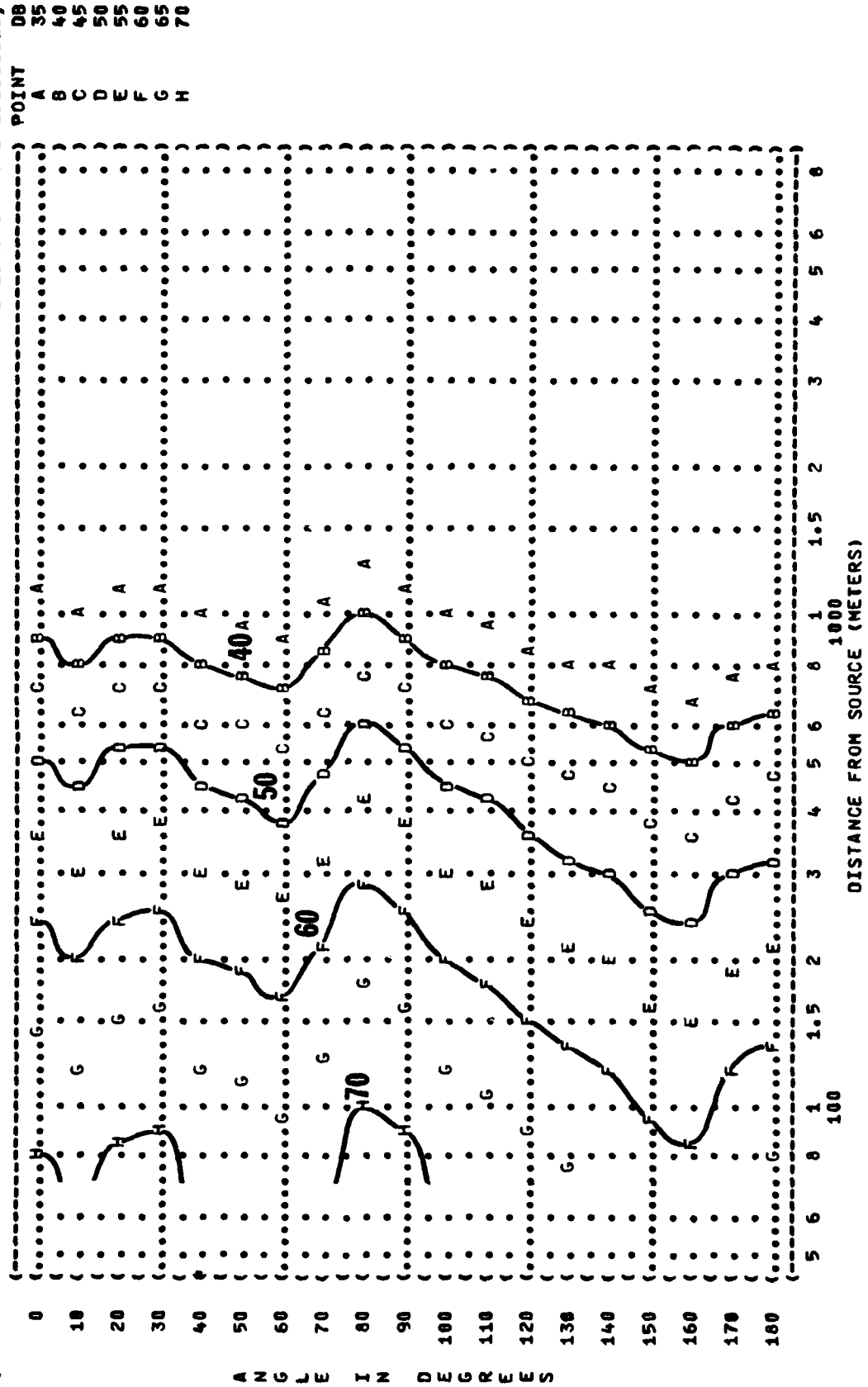


(FIGURE: SOUND PRESSURE LEVEL (SPL))
 (10 EQUAL LEVEL CONTOURS (DB))
 (125 HZ OCTAVE BAND)
 (NOISE SOURCE/SUBJECT:)
 (F-106 AIRCRAFT IN THE)
 (AF32A-17 SUPPRESSOR)
 (ENGINE J75-P-17)
 (FAR FIELD NOISE)
 (OPERATION:)
 (IDLE POWER (59% RPM))
 (SINGLE ENGINE)
 (GROUND RUNUP (SUPPRESSED))
 ()
 (METEOROLOGY:)
 (TEMP = 15 C)
 (BAR PRESS = .760 M HG)
 (REL HUMID = 70 %)
 ()
 (IDENTIFICATION:)
 ()
 (OMEGA 1.4)
 (TEST 77-778-001)
 (RUN 01)
 ()
 (14 SEP 78)
 ()
 (PAGE 20)
 ()



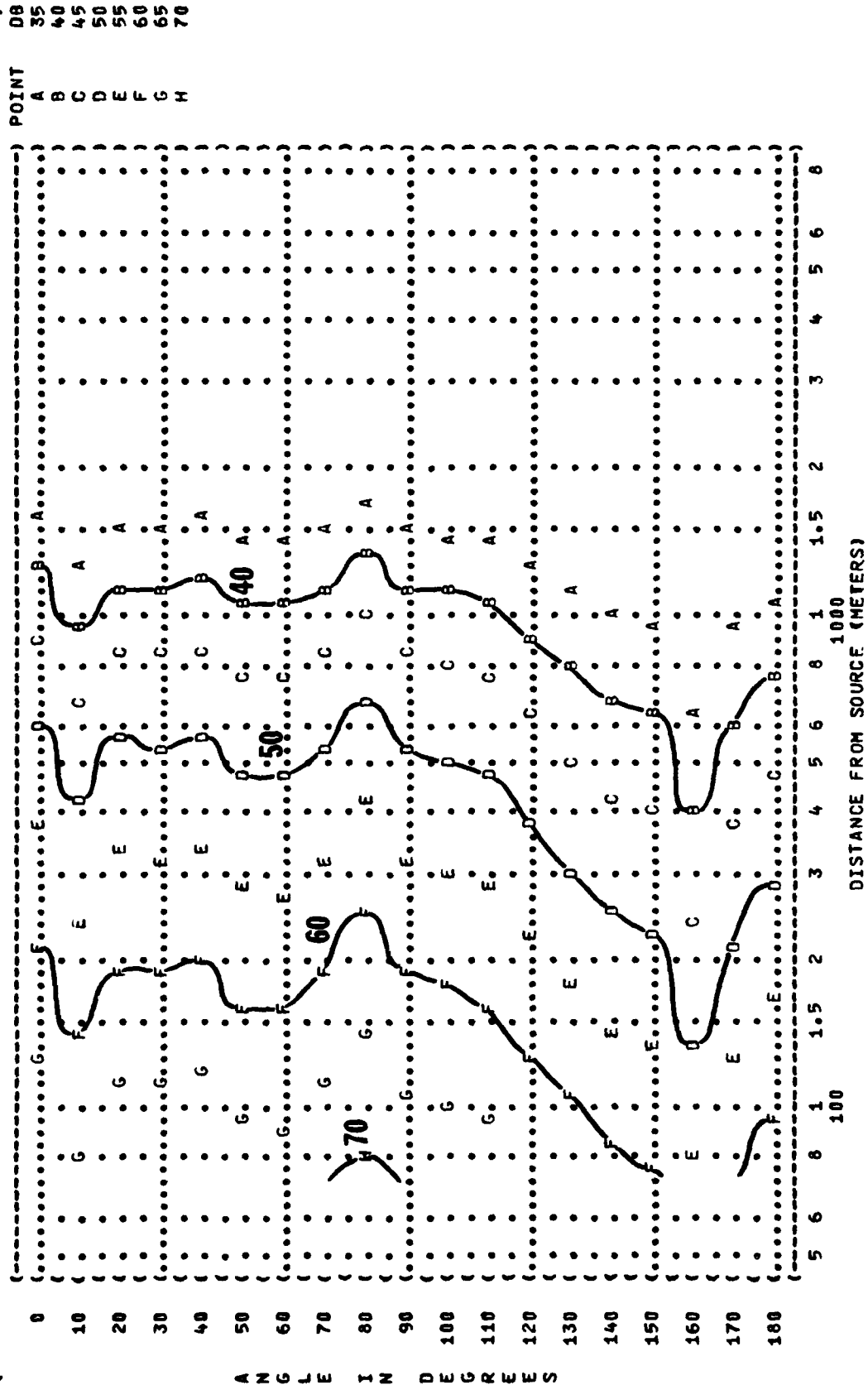
A N
 G L
 E I
 N D
 E G
 R E
 E S

(FIGURE 1 SOUND PRESSURE LEVEL (SPL)
 (10 EQUAL LEVEL CONTOURS (DB)
 (250 HZ OCTAVE BAND
 (NOISE SOURCE/SUBJECT: (OPERATION: (METEOROLOGY: (POINT DB
 (F-106 AIRCRAFT IN THE (IDLE POWER (59% RPM)) TEMP = 15 C) A 35
 (AF32A-17 SUPPRESSOR (SINGLE ENGINE) BAR PRESS = .760 M HG) B 40
 (ENGINE J75-P-17 (GROUND RUNUP (SUPPRESSED)) REL HUMID = 70 %) C 45
 (FAR FIELD NOISE ())) D 50
 ())) E 55
 ())) F 60
 ())) G 65
 ())) H 70

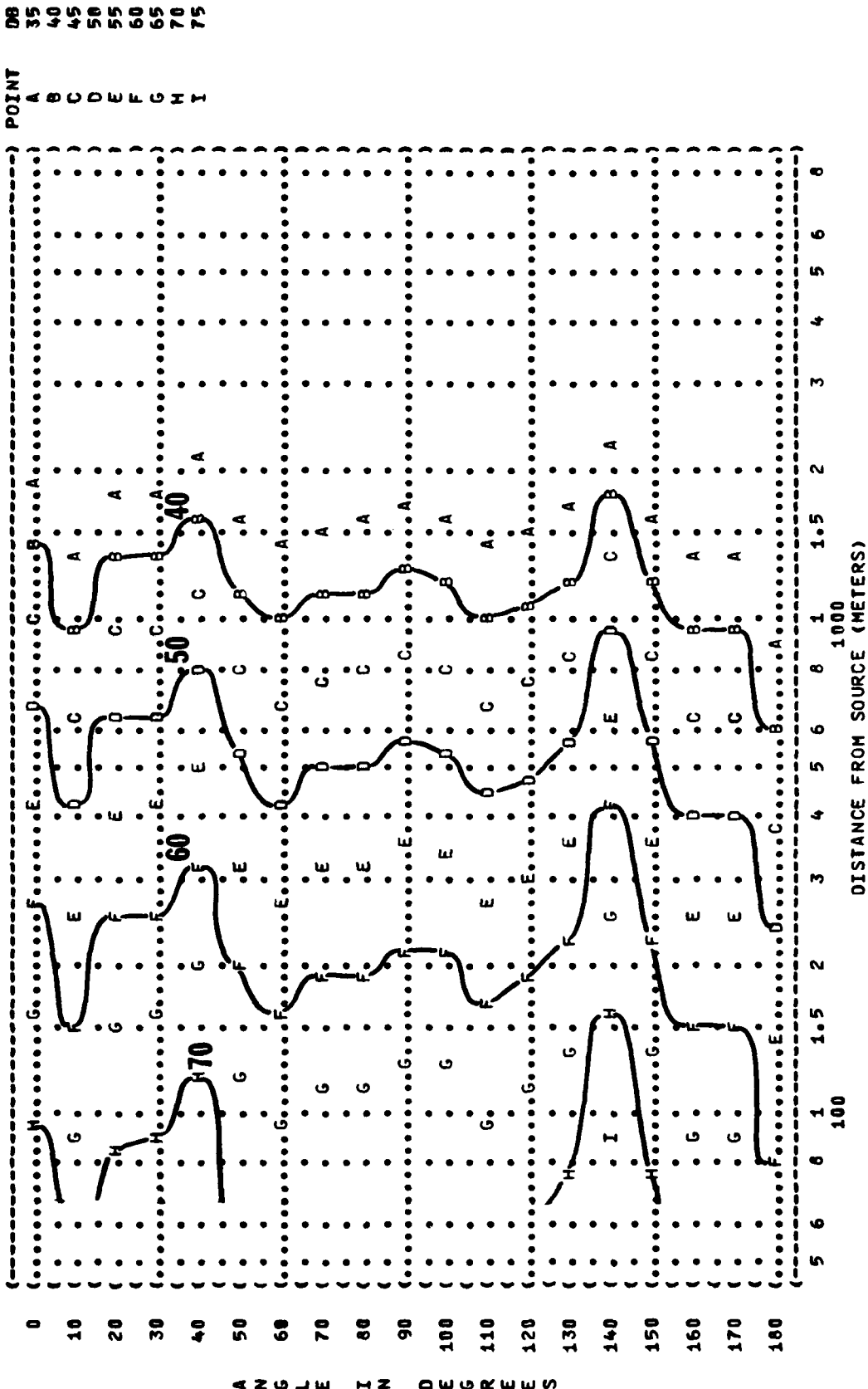


A N G L E I N D E G R E E S

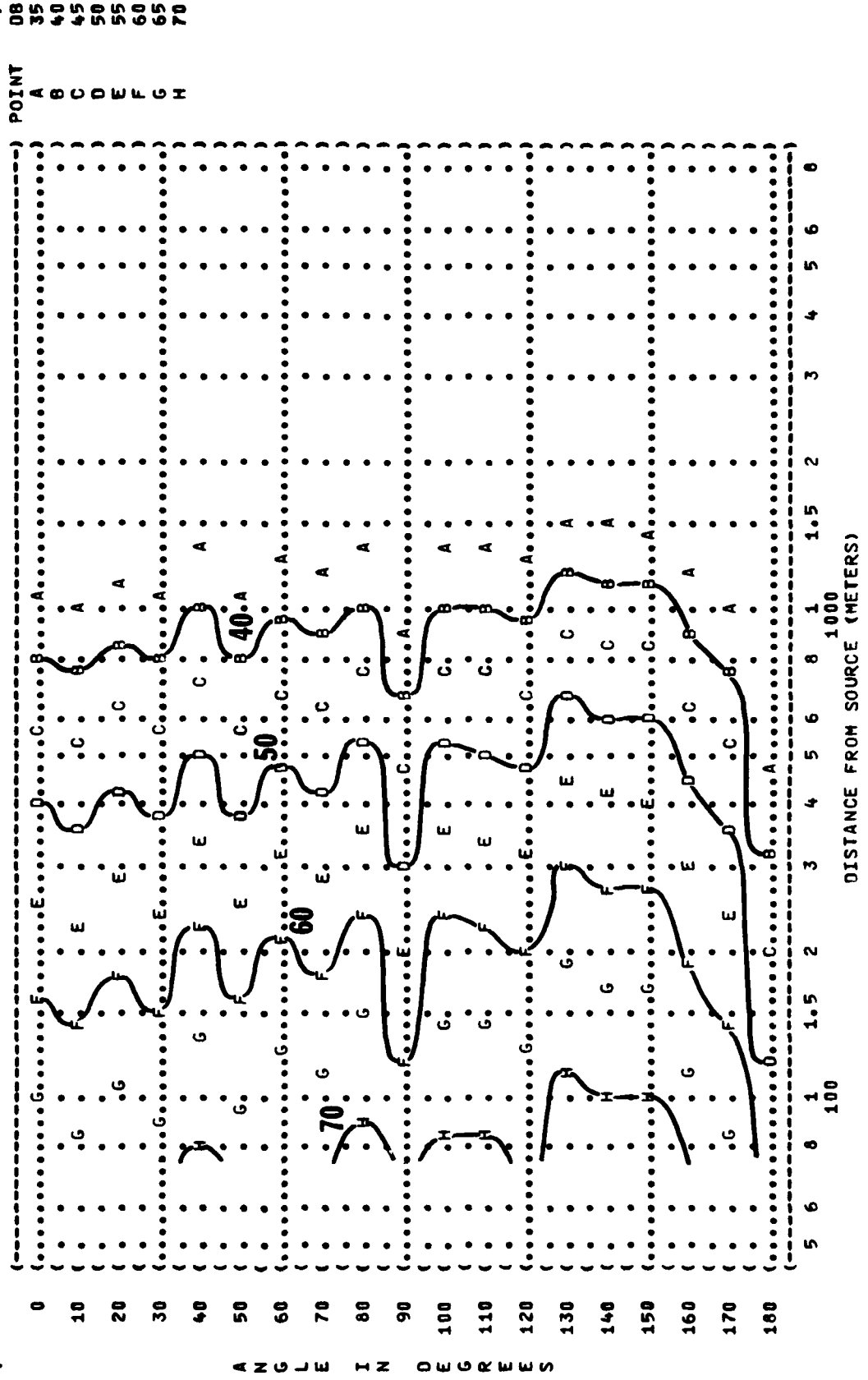
() FIGURE: SOUND PRESSURE LEVEL (SPL)
 () EQUAL LEVEL CONTOURS (DB)
 () 10 500 HZ OCTAVE BAND
 () NOISE SOURCE/SUBJECT:
 () F-106 AIRCRAFT IN THE
 () AF32A-17 SUPPRESSOR
 () ENGINE J75-P-17
 () FAR FIELD NOISE
 () OPERATION:
 () IDLE POWER (59% RPM)
 () SINGLE ENGINE
 () GROUND RUNUP (SUPPRESSED)
 () METEOROLOGY:
 () TEMP = 15 C
 () BAR PRESS = .760 M HG
 () REL HUMID = 70 %
 () IDENTIFICATION:
 () OMEGA 1.4
 () TEST 77-778-001
 () RUN 01
 () 24 JAN 79
 () PAGE 22



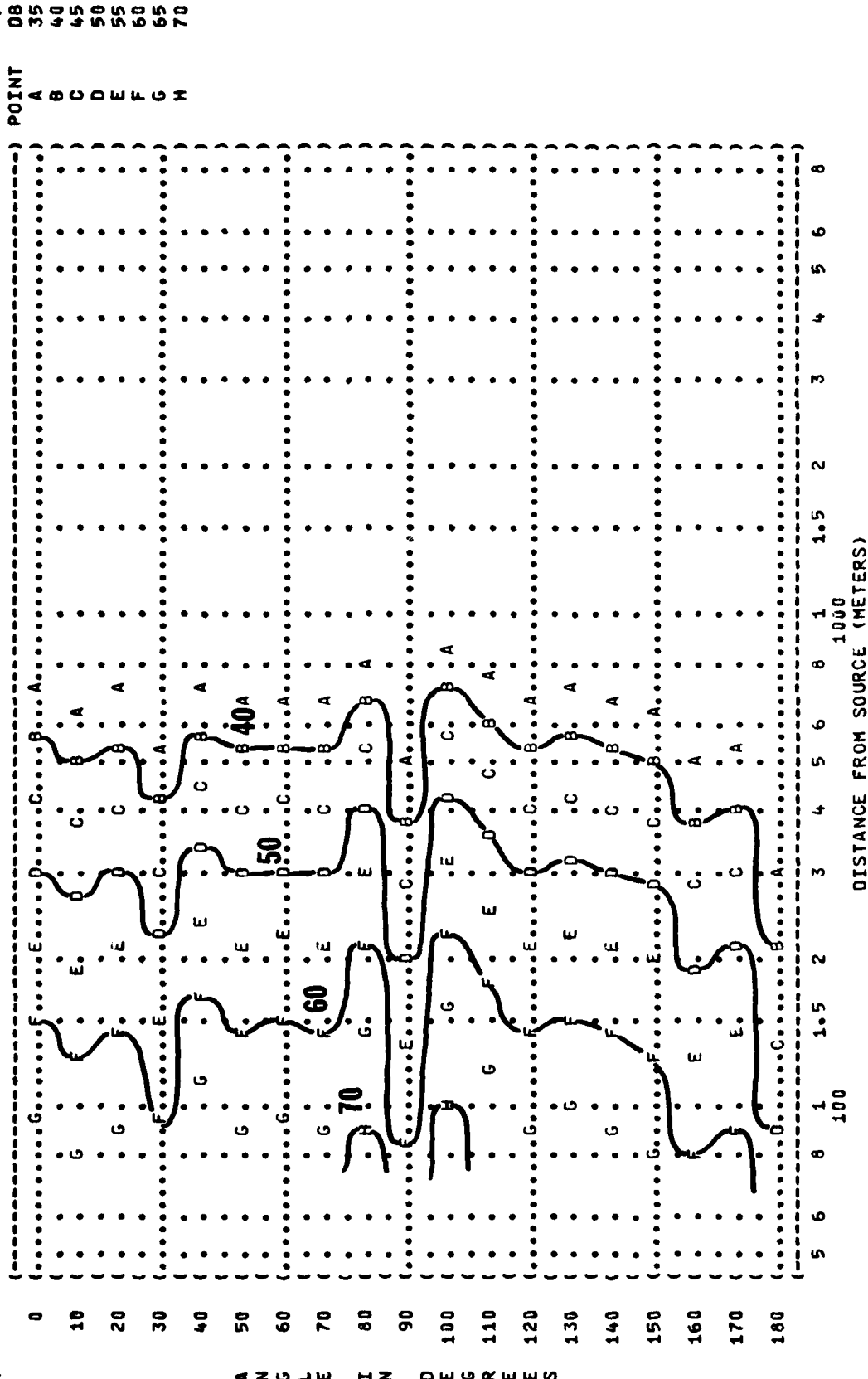
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 (10 EQUAL LEVEL CONTOURS (DB)
 (1000 HZ OCTAVE BAND
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 (F-106 AIRCRAFT IN THE (IDLE POWER (59% RPM)) TEMP = 15 C
 (AF32A-17 SUPPRESSOR (SINGLE ENGINE) BAR PRESS = .760 M HG
 (ENGINE J75-P-17 (GROUND RUNUP (SUPPRESSED)) REL HUMID = 70 %
 (FAR FIELD NOISE ()) PAGE 23



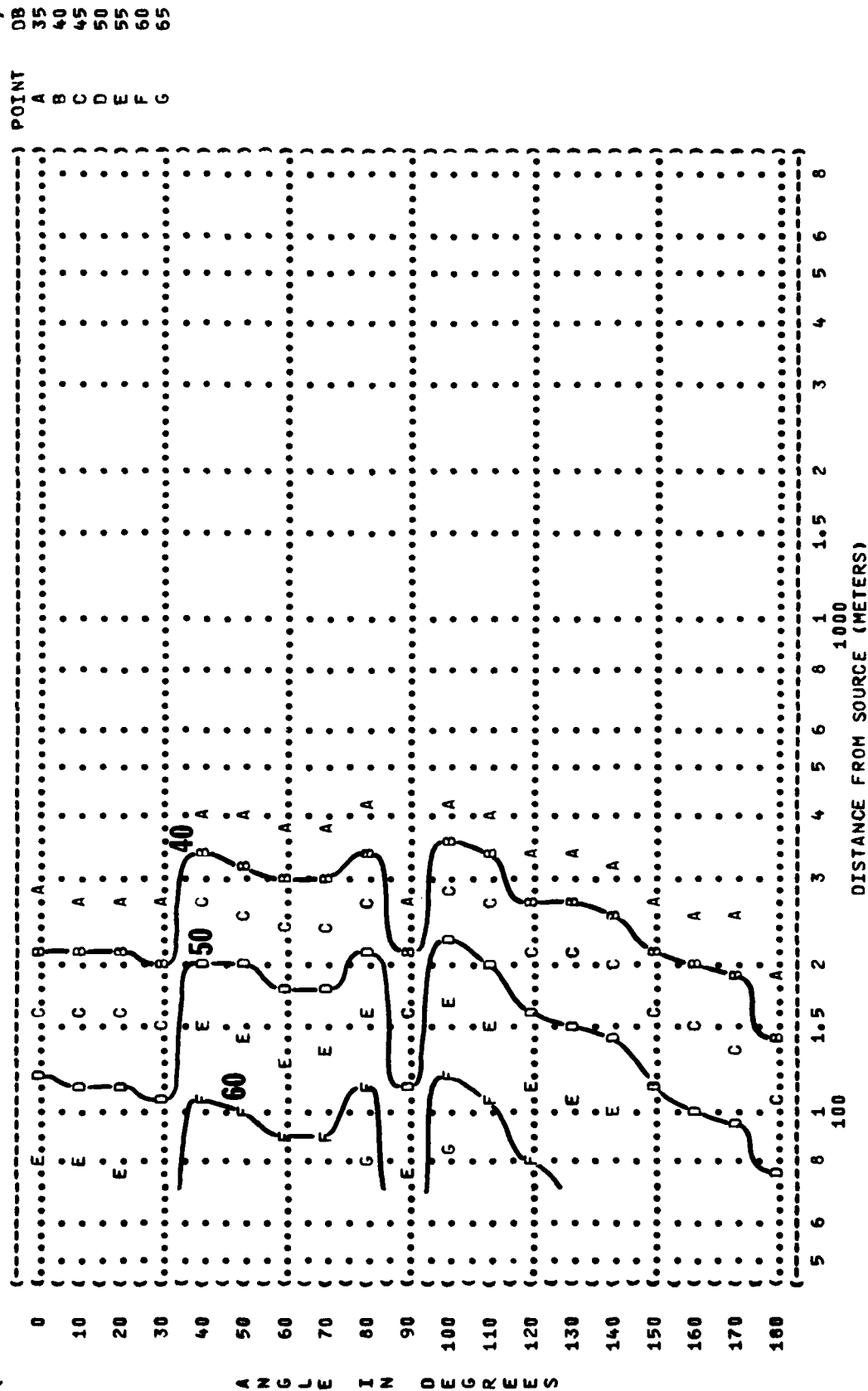
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 (10 EQUAL LEVEL CONTOURS (DB)
 (2000 HZ OCTAVE BAND
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 (AF32A-17 SUPPRESSOR
 (ENGINE J75-P-17
 (FAR FIELD NOISE
 (OPERATION:
 (IDLE POWER (59% RPM)
 (SINGLE ENGINE
 (GROUND RUNUP (SUPPRESSED)
 (METEOROLOGY:
 (TEMP = 15 C
 (BAR PRESS = .760 M HG
 (REL HUMID = 70 %
 (IDENTIFICATION:
 (OMEGA 1.4
 (TEST 77-778-001
 (RUN 01
 (24 JAN 79
 (PAGE 24



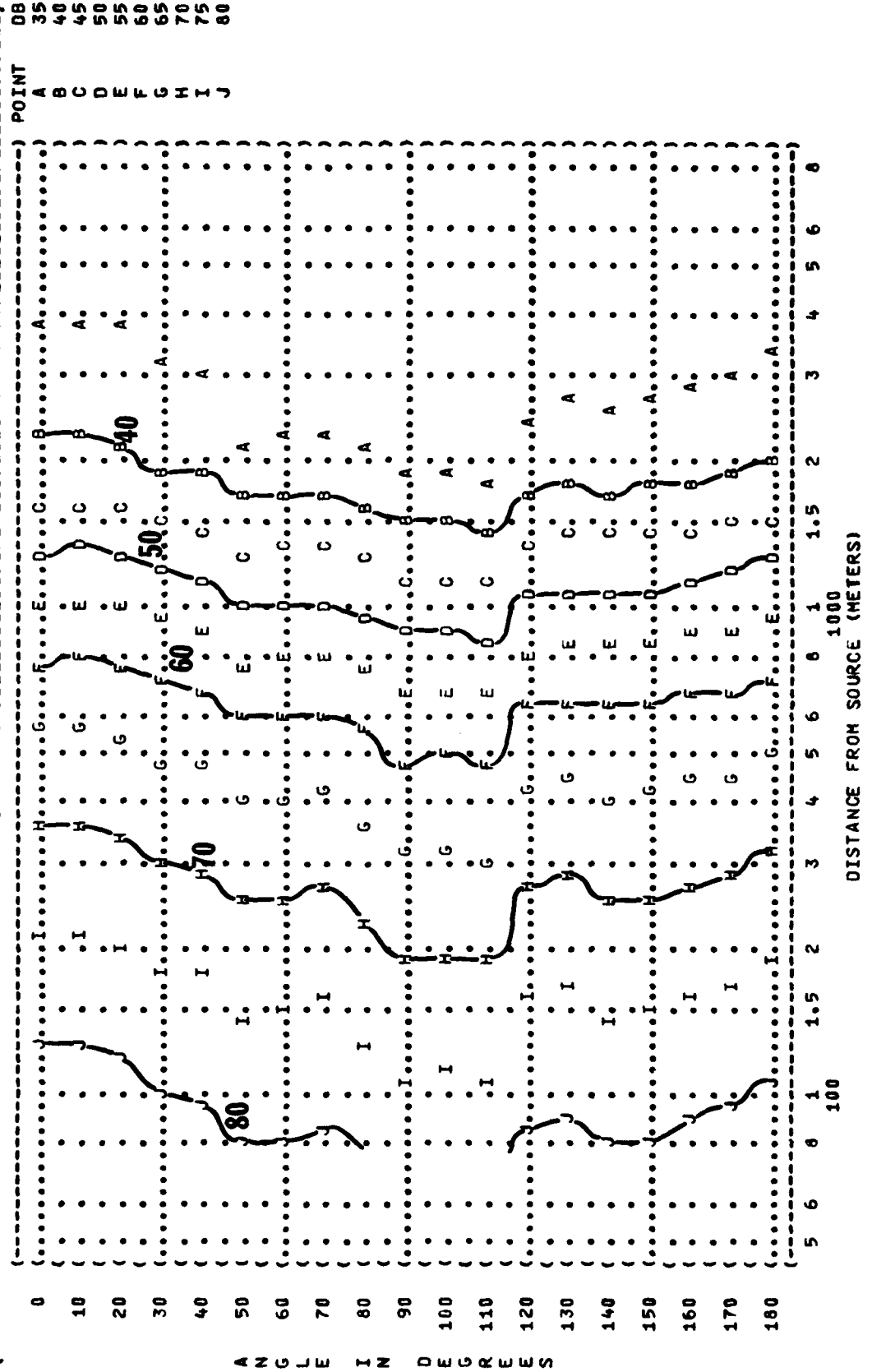
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(-----)
( FIGURE: SOUND PRESSURE LEVEL {SPL} ) IDENTIFICATION: )
( EQUAL LEVEL CONTOURS (DB) ) )
( 10 ) )
( 4000 HZ OCTAVE BAND ) )
(-----)
( NOISE SOURCE/SUBJECT: ) METEOROLOGY: )
( F-106 AIRCRAFT IN THE ) IDLE POWER (59% RPM) ) TEMP = 15 C )
( AF32A-17 SUPPRESSOR ) SINGLE ENGINE ) BAR PRESS = .760 M HG )
( ENGINE J75-P-17 ) GROUND RUNUP (SUPPRESSED) ) REL HUMID = 70 % )
( FAR FIELD NOISE ) ) PAGE 25 )
(-----)
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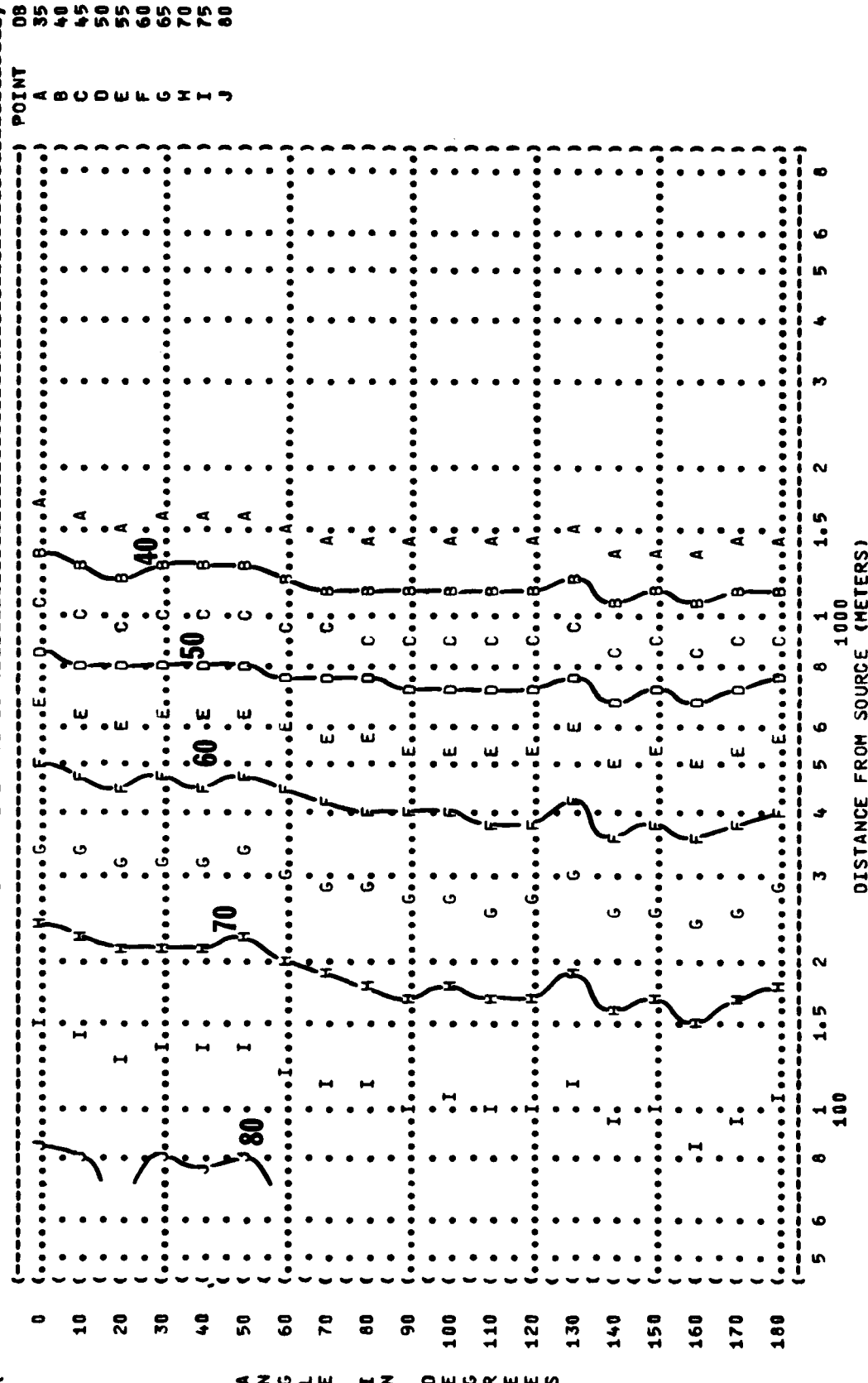
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 (10 EQUAL LEVEL CONTOURS (DB)
 (8000 HZ OCTAVE BAND
 (NOISE SOURCE/SUBJECT: (OPERATION:) METEOROLOGY:
 (F-106 AIRCRAFT IN THE (IDLE POWER (59% RPM)) TEMP = 15 C
 (AF32A-17 SUPPRESSOR (SINGLE ENGINE) BAR PRESS = .760 M HG
 (ENGINE J75-P-17 (GROUND RUNUP (SUPPRESSED)) REL HUMID = 70 %
 (FAR FIELD NOISE () PAGE 26)



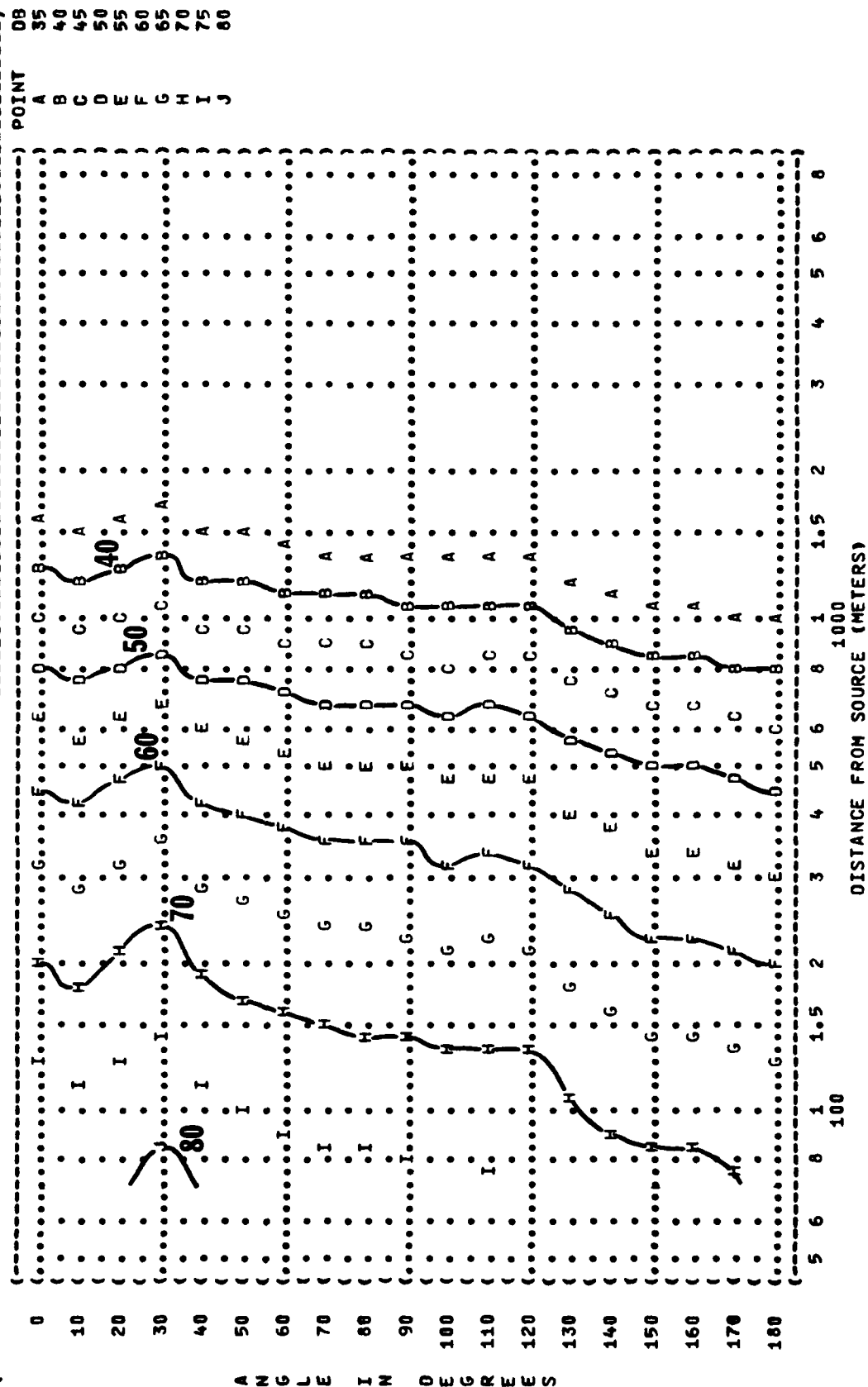

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(-----)
( ( FIGURE: SOUND PRESSURE LEVEL {SPL} ) ) IDENTIFICATION: )
( ( 10 EQUAL LEVEL CONTOURS (DB) ) ) )
( ( 63 HZ OCTAVE BAND ) ) )
(-----)
( ( NOISE SOURCE/SUBJECT: ) ) )
( ( F-106 AIRCRAFT IN THE ) ) )
( ( AF32A-17 SUPPRESSOR ) ) )
( ( ENGINE J75-P-17 ) ) )
( ( FAR FIELD NOISE ) ) )
(-----)
( ( OPERATION: ) ) )
( ( 85% RPM ) ) )
( ( SINGLE ENGINE ) ) )
( ( GROUND RUNUP (SUPPRESSED) ) ) )
(-----)
( ( METEOROLOGY: ) ) )
( ( TEMP = 15 C ) ) )
( ( BAR PRESS = .760 M HG ) ) )
( ( REL HUMID = 70 % ) ) )
(-----)
( ( OMEGA 1.4 ) ) )
( ( TEST 77-778-001 ) ) )
( ( RUN 02 ) ) )
(-----)
( ( PAGE 19 ) ) )
(-----)
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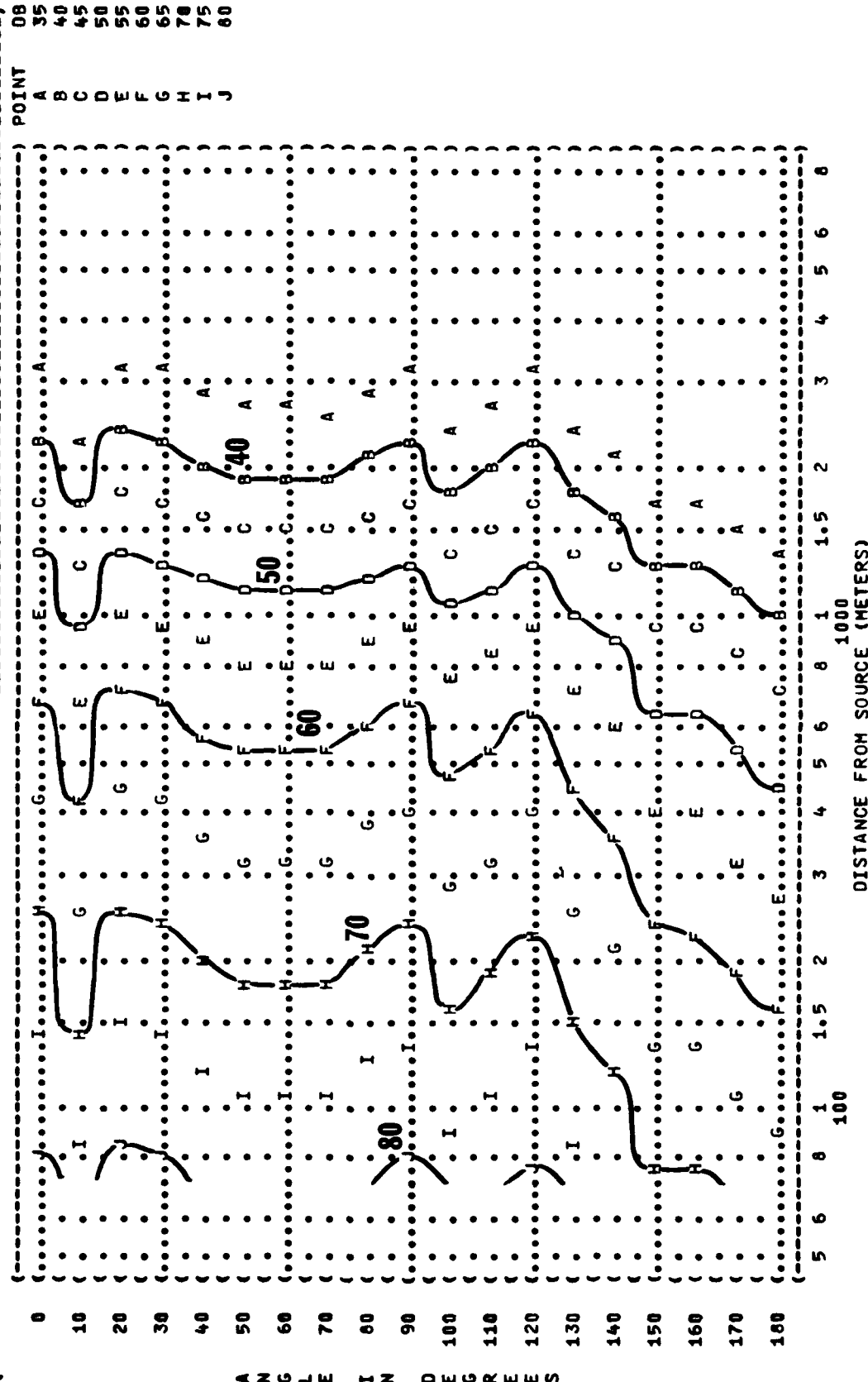
(FIGURE: SOUND PRESSURE LEVEL (SPL)
 (10 EQUAL LEVEL CONTOURS (DB)
 (125 HZ OCTAVE BAND
 (NOISE SOURCE/SUBJECT: (OPERATION:
 (F-106 AIRCRAFT IN THE (85% RPM
 (AF32A-17 SUPPRESSOR (SINGLE ENGINE
 (ENGINE J75-P-17 (GROUND RUNUP (SUPPRESSED)
 (FAR FIELD NOISE ()
 () METEOROLOGY:
 () TEMP = 15 C
 () BAR PRESS = .760 M HG
 () REL HUMID = 70 %
 () PAGE 20
 () IDENTIFICATION:
 () OMEGA 1.4
 () TEST 77-776-001
 () RUN 02
 () 24 JAN 79



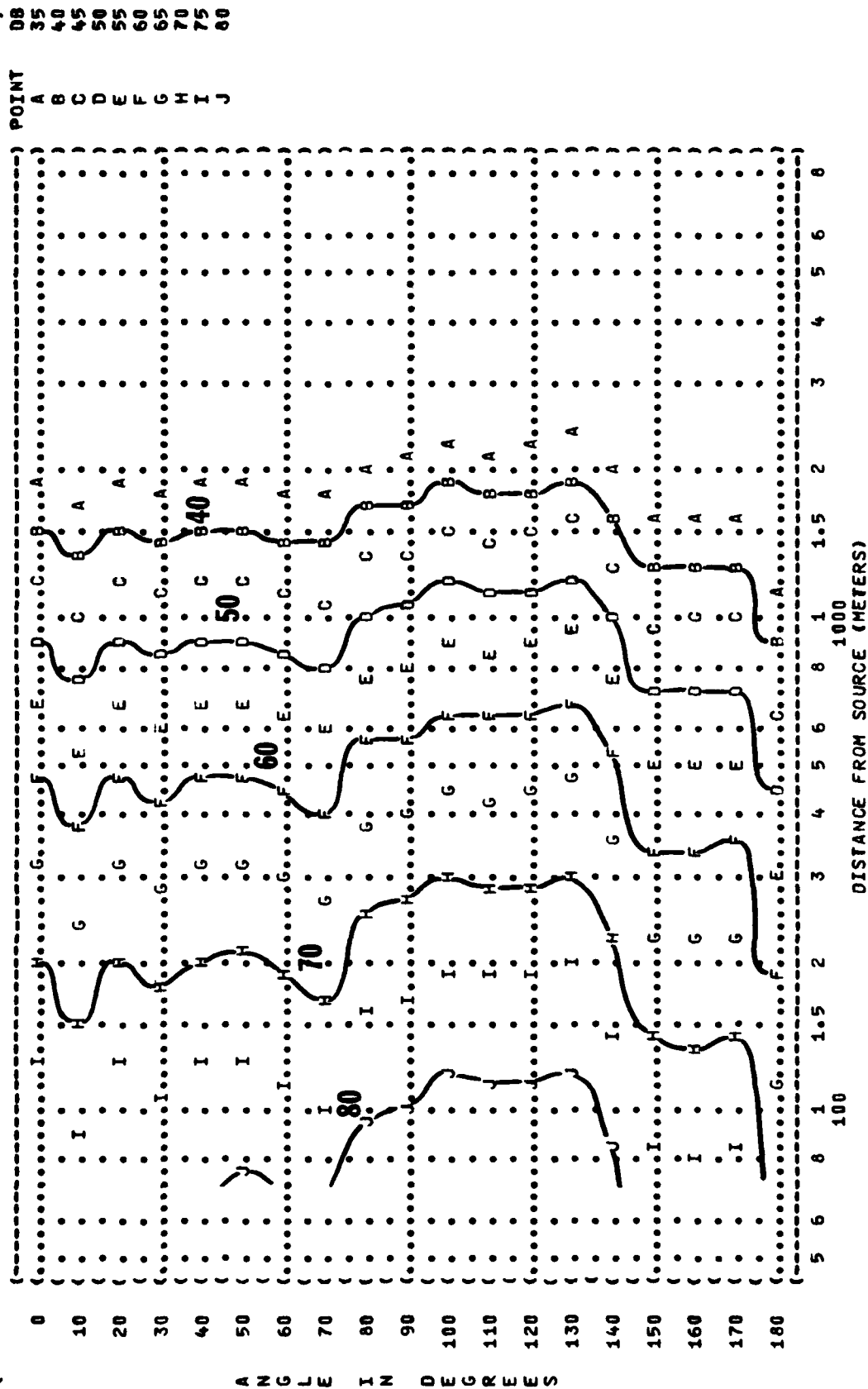
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(-----)
( FIGURE: SOUND PRESSURE LEVEL (SPL) ) IDENTIFICATION: )
( ( EQUAL LEVEL CONTOURS (DB) ) )
( 10 ) OMEGA 1.4 )
( 250 HZ OCTAVE BAND ) TEST 77-778-001 )
( NOISE SOURCE/SUBJECT: ) METEOROLOGY: )
( F-106 AIRCRAFT IN THE ) TEMP = 15 C )
( AF32A-17 SUPPRESSOR ) SINGLE ENGINE ) BAR PRESS = .760 M HG )
( ENGINE J75-P-17 ) GROUND RUNUP (SUPPRESSED) ) REL HUMID = 70 % )
( FAR FIELD NOISE ) ) PAGE 21 )
(-----)
```



(FIGURE: SOUND PRESSURE LEVEL (SPL))
 (10 EQUAL LEVEL CONTOURS (DB))
 (500 HZ OCTAVE BAND)
 (NOISE SOURCE/SUBJECT:)
 (F-106 AIRCRAFT IN THE)
 (AF32A-17 SUPPRESSOR)
 (ENGINE J75-P-17)
 (FAR FIELD NOISE)
 (OPERATION:)
 (85% RPM)
 (SINGLE ENGINE)
 (GROUND RUNUP (SUPPRESSED))
 (METEOROLOGY:)
 (TEMP = 15 C)
 (BAR PRESS = .760 M HG)
 (REL HUMID = 70 %)
 (IDENTIFICATION:)
 (OMEGA 1.4)
 (TEST 77-778-001)
 (RUN 02)
 (24 JAN 79)
 (PAGE 22)



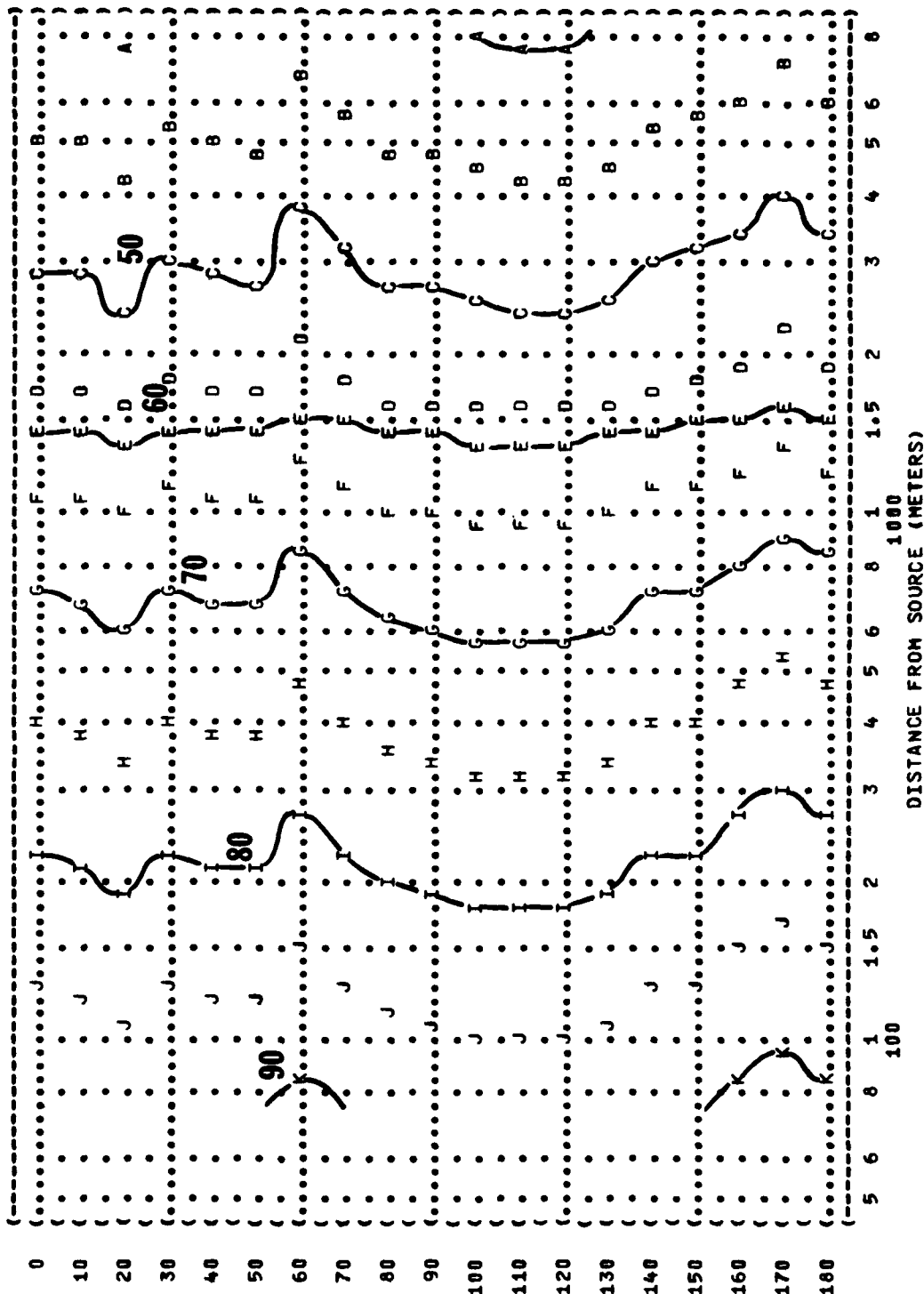
(FIGURE: SOUND PRESSURE LEVEL (SPL)
 (10 EQUAL LEVEL CONTOURS (DB)
 (2000 HZ OCTAVE BAND
 (NOISE SOURCE/SUBJECT: (OPERATION:
 (F-106 AIRCRAFT IN THE (65% RPM
 (AF32A-17 SUPPRESSOR (SINGLE ENGINE
 (ENGINE J75-P-17 (GROUND RUNUP (SUPPRESSED)
 (FAR FIELD NOISE ()
 () IDENTIFICATION:
 () OMEGA 1.4
 (TEST 77-778-001
 (RUN 02
 () 24 JAN 79
 () PAGE 24



(FIGURE: SOUND PRESSURE LEVEL (SPL)
 (10 EQUAL LEVEL CONTOURS (DB)
 (31.5 HZ OCTAVE BAND
 (NOISE SOURCE/SUBJECT: (OPERATION:
 (F-106 AIRCRAFT IN THE (95% RPM
 (AF32A-17 SUPPRESSOR (SINGLE ENGINE
 (ENGINE J75-P-17 (GROUND RUNUP (SUPPRESSED)
 (FAR FIELD NOISE (

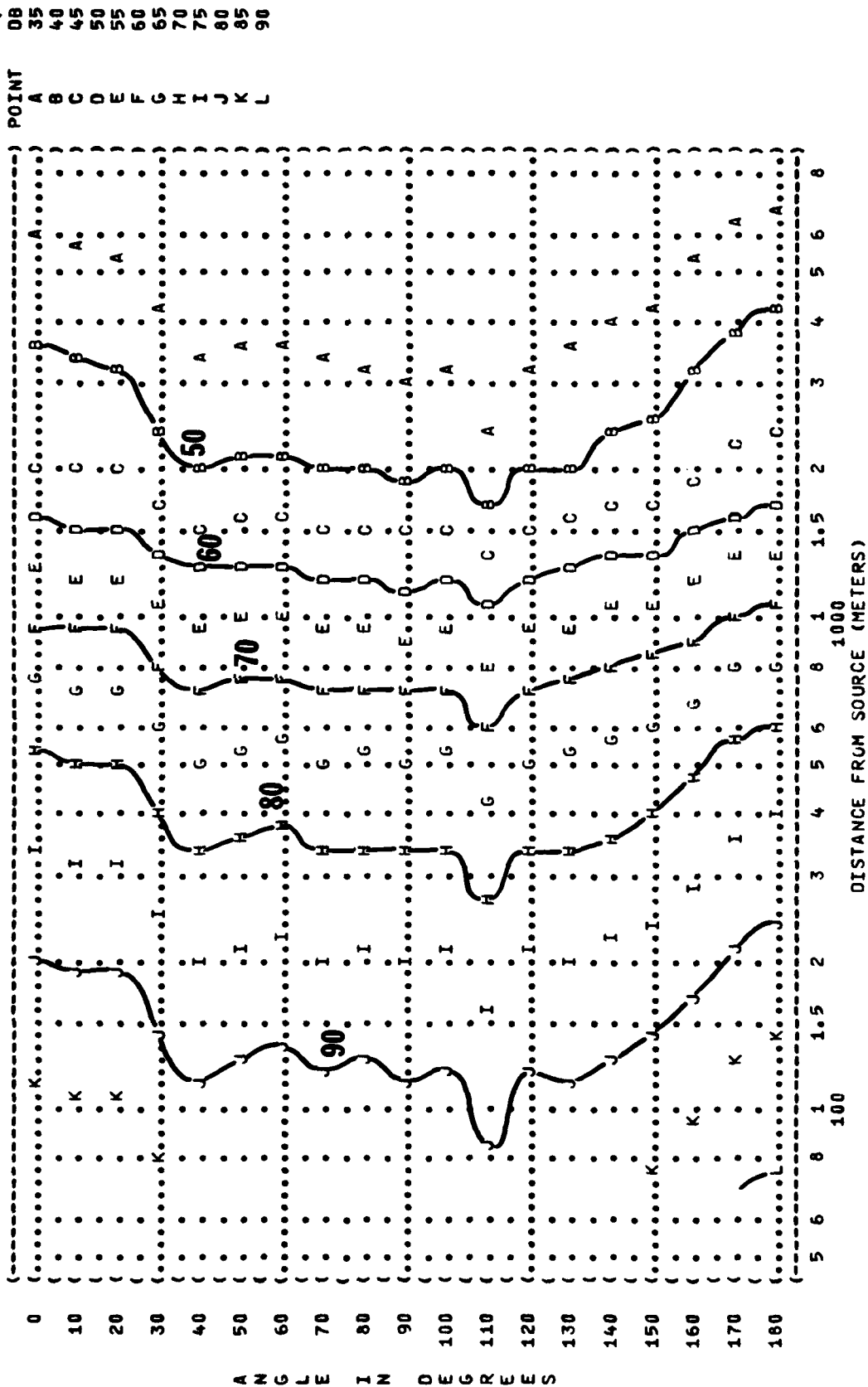
) IDENTIFICATION:
) OMEGA 1.4
) TEST 77-778-001
) RUN 03
) 24 JAN 79
) PAGE 18
) METEOROLOGY:
) TEMP = 15 C
) BAR PRESS = .760 M HG
) REL HUMID = 70 %
) POINT DB
) A 40
) B 45
) C 50
) D 55
) E 60
) F 65
) G 70
) H 75
) I 80
) J 85
) K 90

A N G
 L E
 I N
 D E G
 R E E S

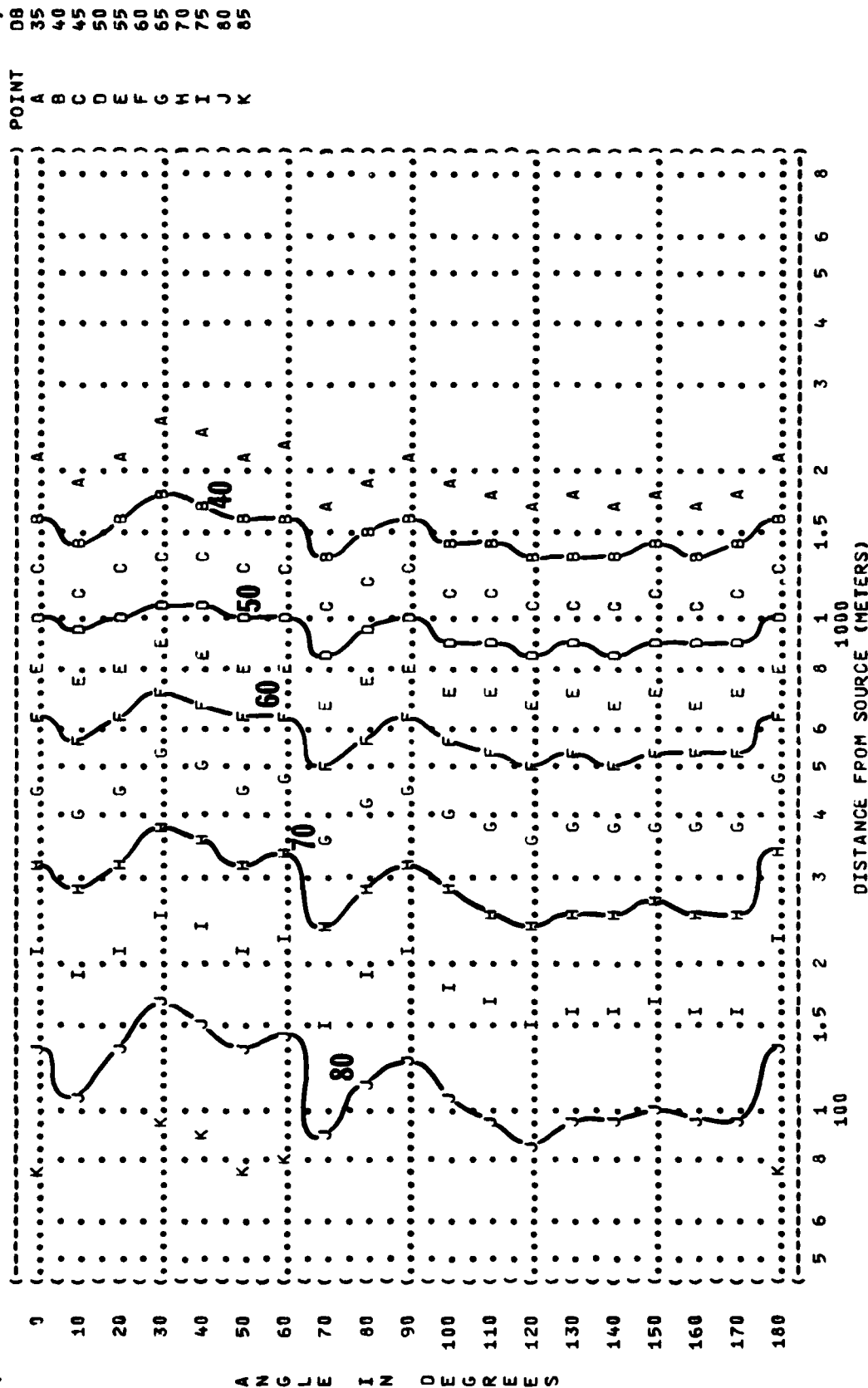


DISTANCE FROM SOURCE (METERS)

(FIGURE: SOUND PRESSURE LEVEL (SPL))
 (10 EQUAL LEVEL CONTOURS (DB))
 (63 HZ OCTAVE BAND)
 (NOISE SOURCE/SUBJECT:)
 (F-106 AIRCRAFT IN THE)
 (AF32A-17 SUPPRESSOR)
 (ENGINE J75-P-17)
 (FAR FIELD NOISE)
 (OPERATION:)
 (95% RPM)
 (SINGLE ENGINE)
 (GROUND RUNUP (SUPPRESSED))
 (METEOROLOGY:)
 (TEMP = 15 C)
 (BAR PRESS = .760 M HG)
 (REL HUMID = 70 %)
 (IDENTIFICATION:)
 (OMEGA 1.4)
 (TEST 77-778-001)
 (RUN 03)
 (14 SEP 78)
 (PAGE 19)



(FIGURE: SOUND PRESSURE LEVEL (SPL)
 (10 EQUAL LEVEL CONTOURS (DB)
 (125 HZ OCTAVE BAND
 (NOISE SOURCE/SUBJECT: (OPERATION:
 (F-106 AIRCRAFT IN THE (95% RPM
 (AF32A-17 SUPPRESSOR (SINGLE ENGINE
 (ENGINE J75-P-17 (GROUND RUNUP (SUPPRESSED)
 (FAR FIELD NOISE ()
 () METEOROLOGY:
 () TEMP = 15 C
 () BAR PRESS = .760 M HG
 () REL HUMID = 70 %
 () IDENTIFICATION:
 () OMEGA 1.4
 () TEST 77-778-001
 () RUN 03
 () 14 SEP 78
 () PAGE 20



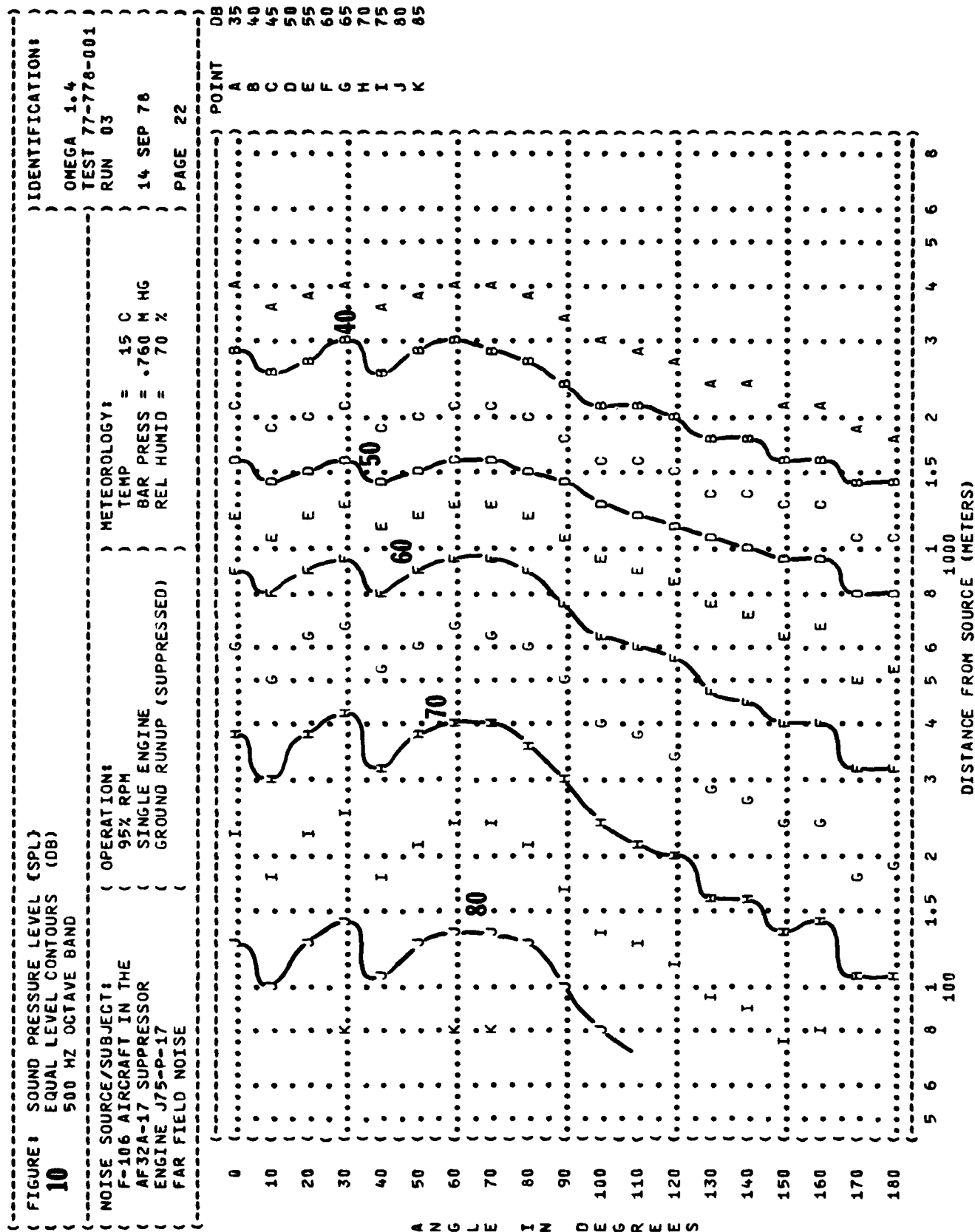
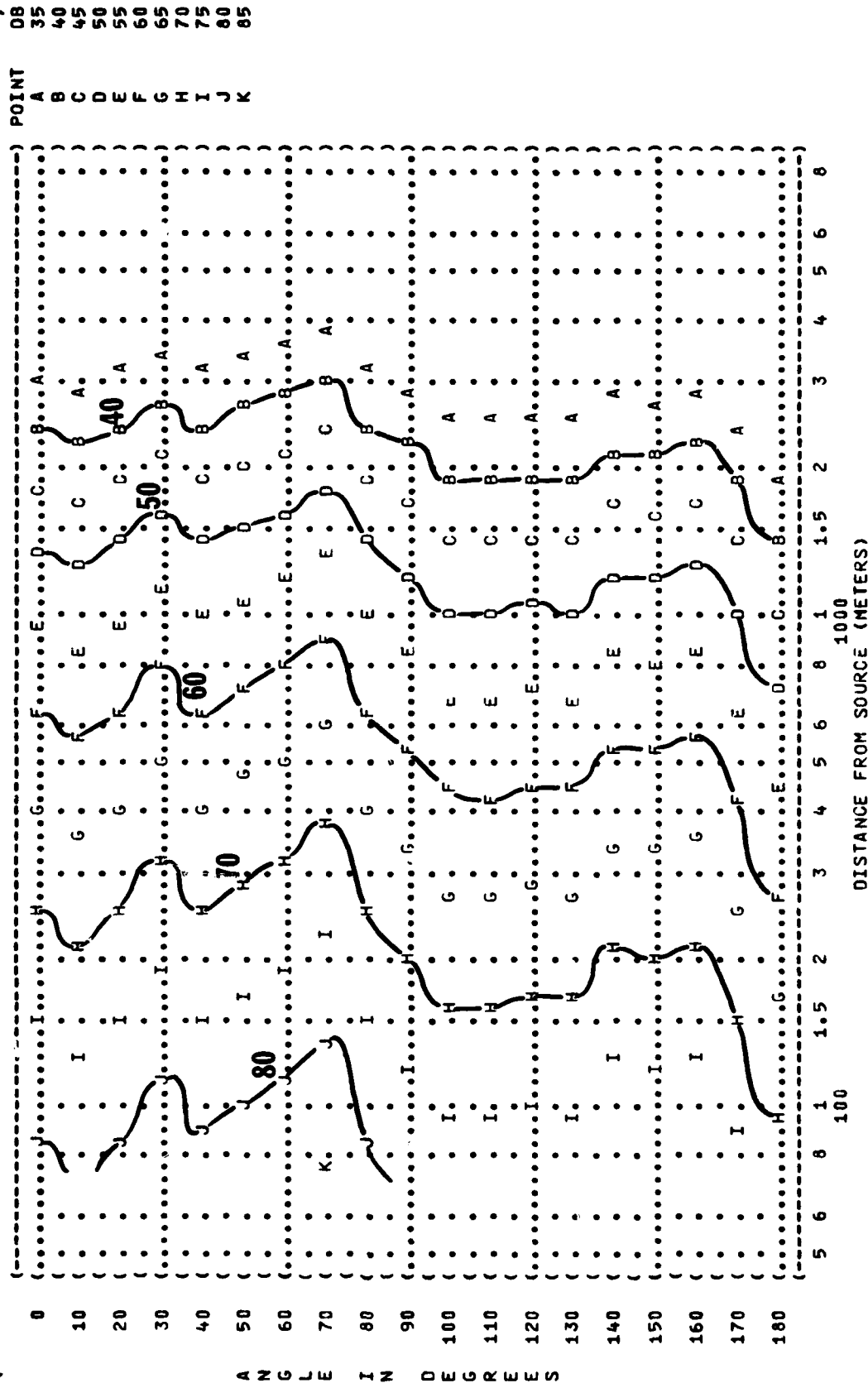
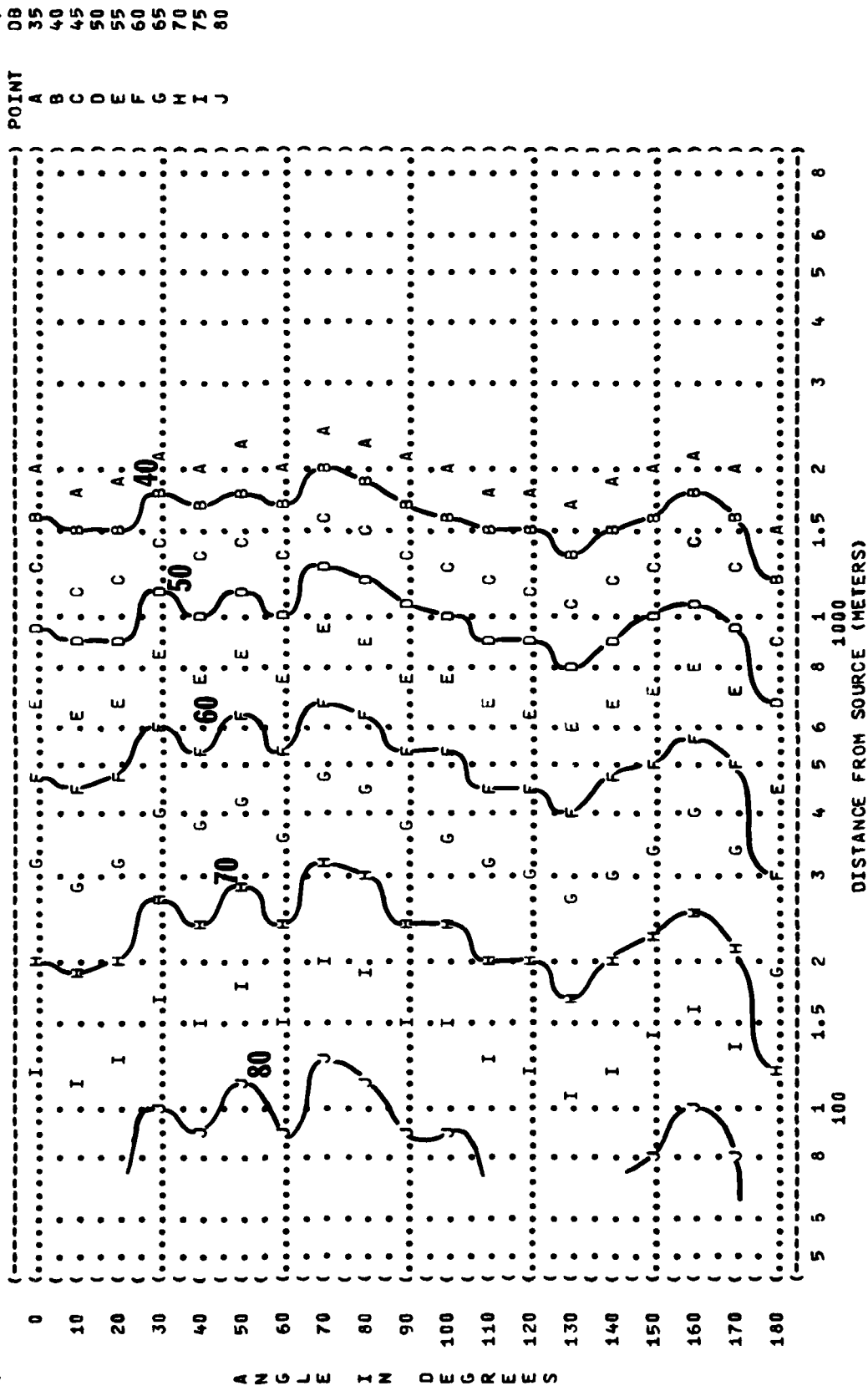


FIGURE 10 SOUND PRESSURE LEVEL (SPL)
EQUAL LEVEL CONTOURS (DB)
1000 HZ OCTAVE BAND

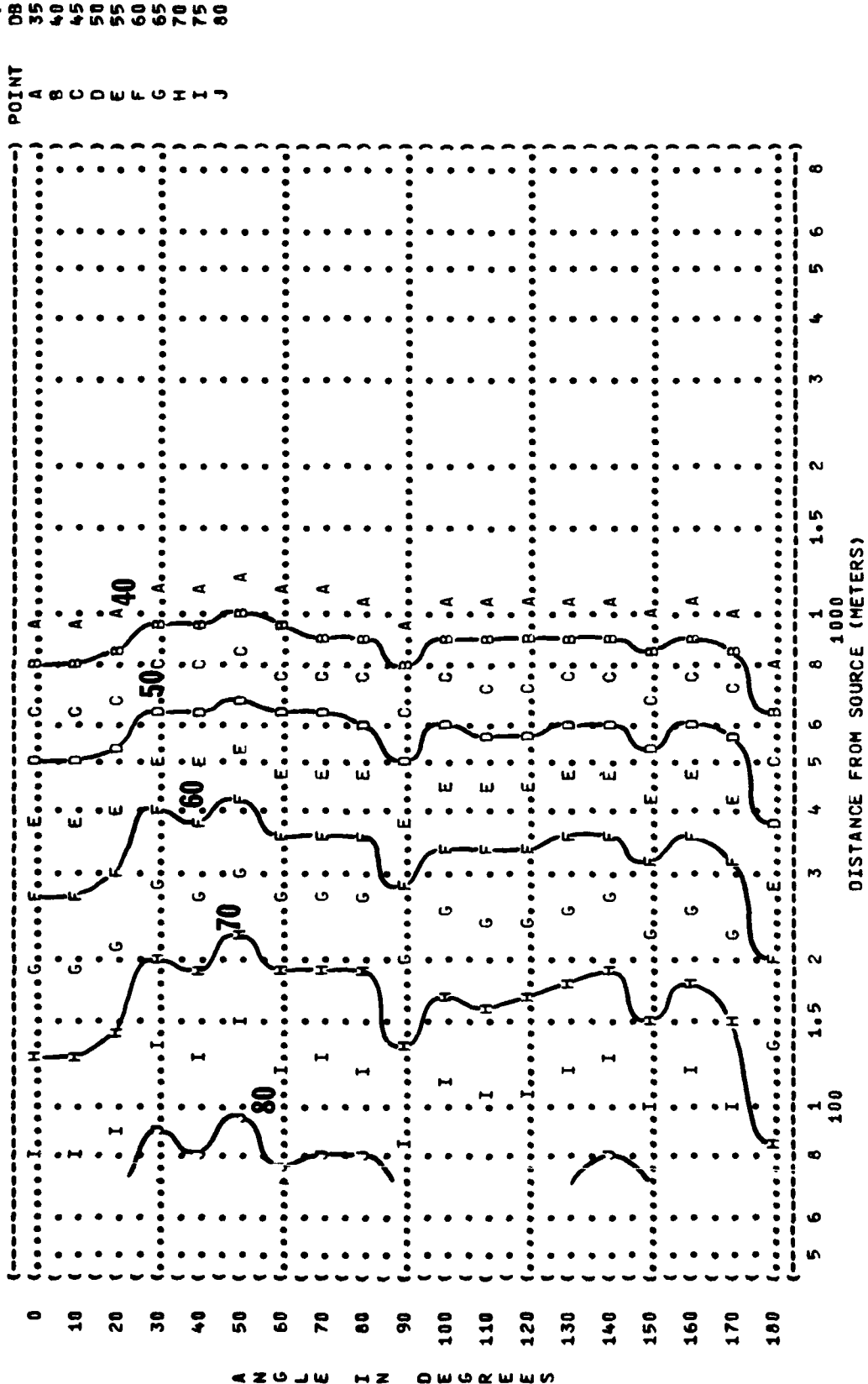
IDENTIFICATION:
OMEGA 1.4
TEST 77-770-001
RUN 03
METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %
OPERATION:
95% RPM
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)
FAR FIELD NOISE



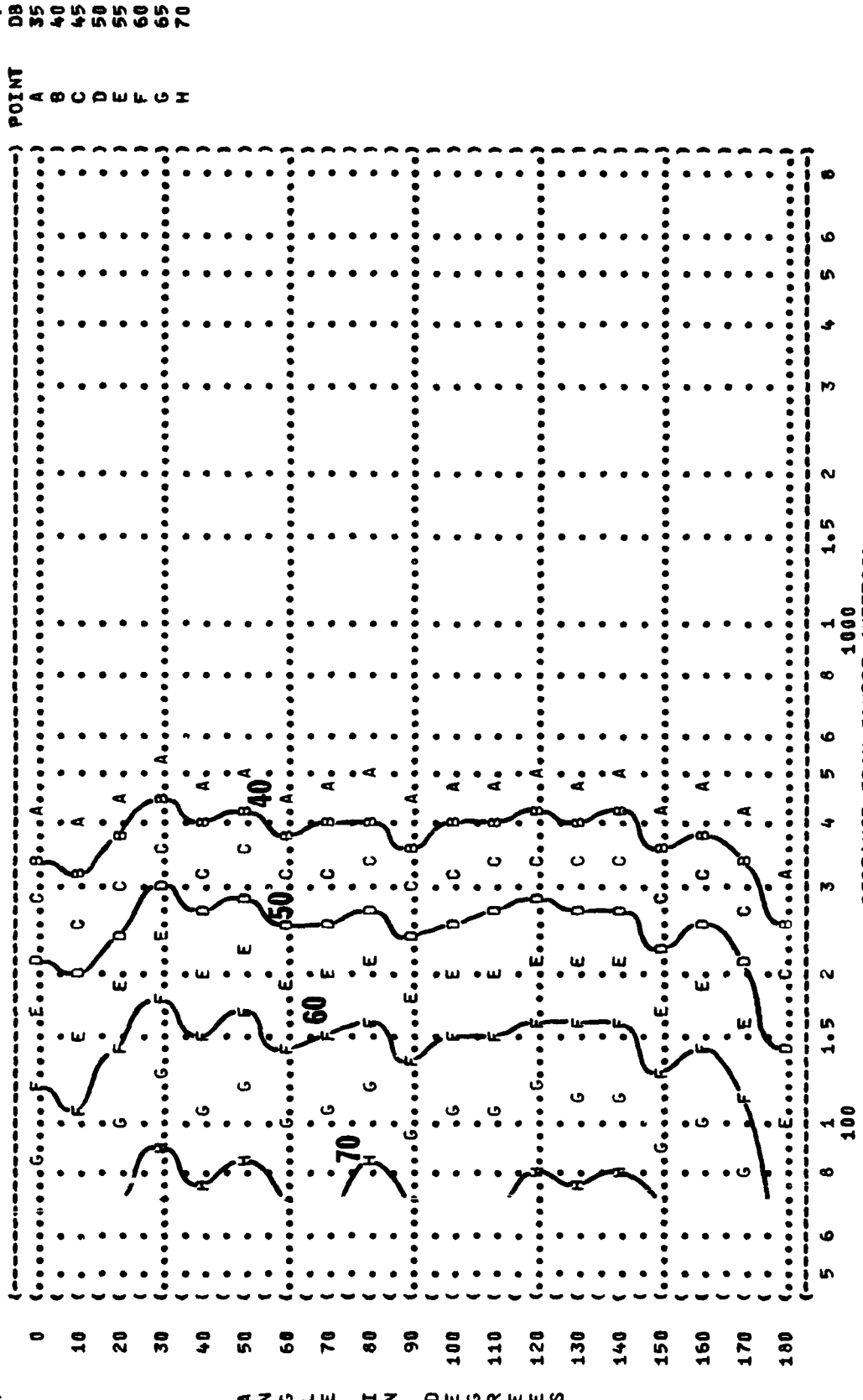
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( FIGURE: SOUND PRESSURE LEVEL {SPL} ) IDENTIFICATION: )
( ( EQUAL LEVEL CONTOURS (DB) ) )
( ( 10 ) )
( ( 2000 HZ OCTAVE BAND ) )
(-----)
( NOISE SOURCE/SUBJECT: ) METEOROLOGY: )
( F-106 AIRCRAFT IN THE ) TEMP = 15 C )
( AF32A-17 SUPPRESSOR ) SINGLE ENGINE ) BAR PRESS = .760 M HG )
( ENGINE J75-P-17 ) GROUND RUNUP (SUPPRESSED) ) REL HUMID = 70 % )
( FAR FIELD NOISE ) ) PAGE 24 )
(-----)
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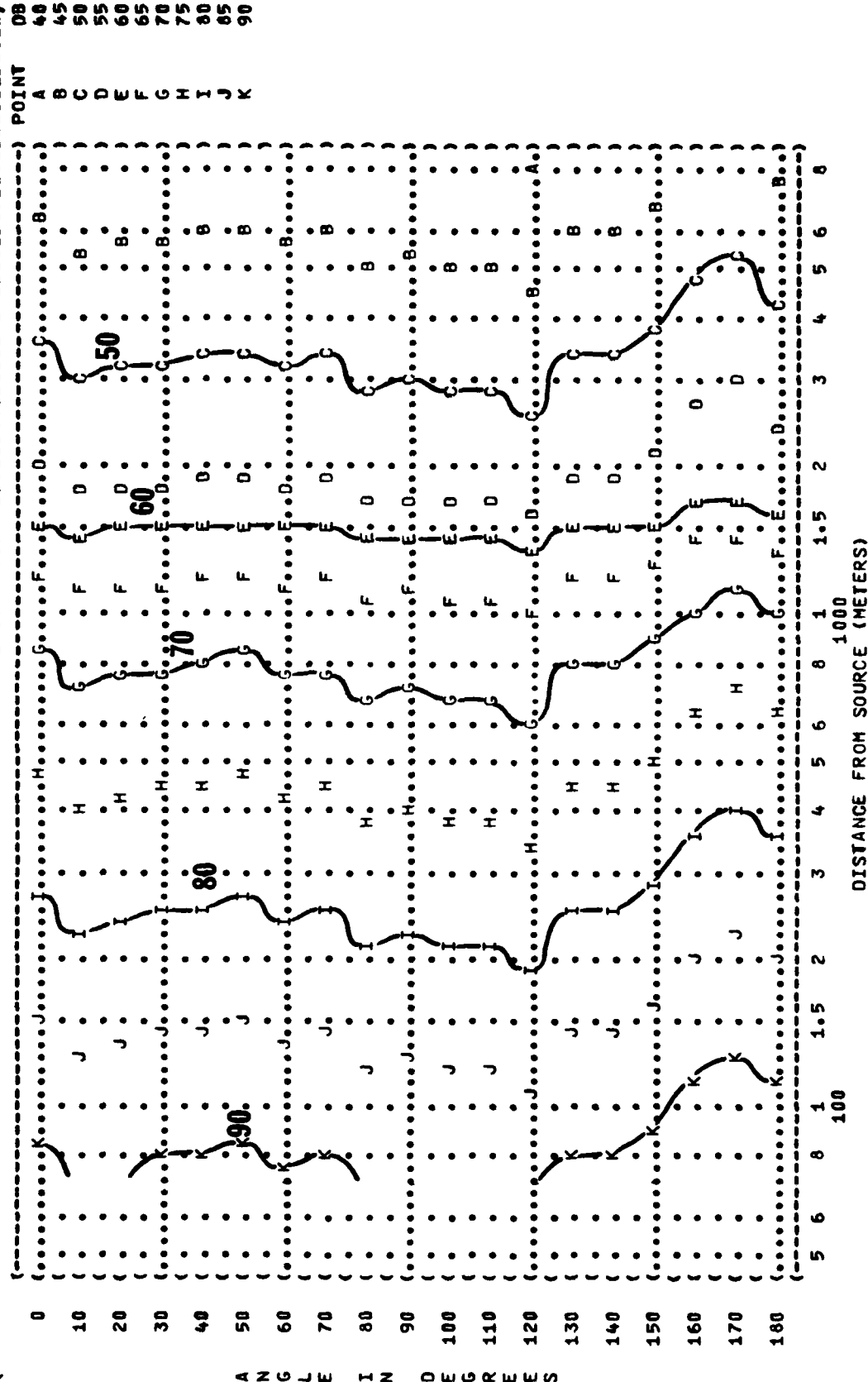
(FIGURE: SOUND PRESSURE LEVEL (SPL)
 (10 EQUAL LEVEL CONTOURS (DB)
 (4000 HZ OCTAVE BAND
 (NOISE SOURCE/SUBJECT: (OPERATION: (METEOROLOGY: (POINT DB
 (F-106 AIRCRAFT IN THE (95% RPM (TEMP = 15 C (A 35
 (AF32A-17 SUPPRESSOR (SINGLE ENGINE (BAR PRESS = .760 M HG (B 40
 (ENGINE J75-P-17 (GROUND RUNUP (SUPPRESSED) (REL HUMID = 70 % (C 45
 (FAR FIELD NOISE (((((D 50
 (((((((((((E 55
 (((((((((((F 60
 (((((((((((G 65
 (((((((((((H 70
 (((((((((((I 75
 (((((((((((J 80



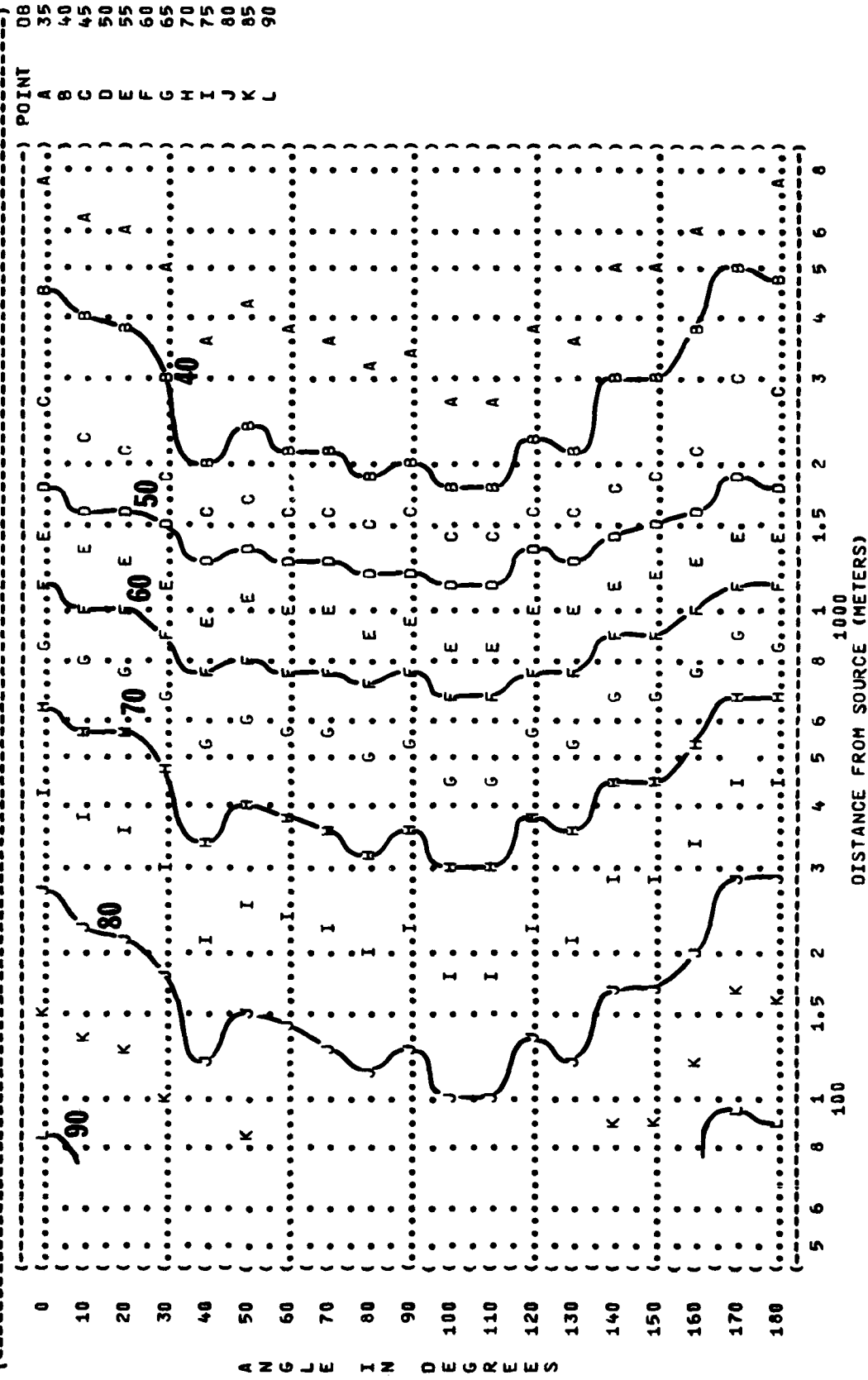
(FIGURE: SOUND PRESSURE LEVEL (SPL)
 (10 EQUAL LEVEL CONTOURS (DB)
 (8000 HZ OCTAVE BAND
 (NOISE SOURCE/SUBJECT: (OPERATION:
 (F-106 AIRCRAFT IN THE (95% RPM
 (AF32A-17 SUPPRESSOR (SINGLE ENGINE
 (ENGINE J75-P-17 (GROUND RUNUP (SUPPRESSED)
 (FAR FIELD NOISE ()
 () IDENTIFICATION:
 () OMEGA 1.4
 () TEST 77-778-001
 () RUN 03
 () TEMP = 15 C
 () BAR PRESS = .760 M HG
 () 24 JAN 79
 () REL HUMID = 70 %
 () PAGE 26



(FIGURE: SOUND PRESSURE LEVEL (SPL)
 (10 EQUAL LEVEL CONTOURS (DB)
 (31.5 HZ OCTAVE BAND
 (NOISE SOURCE/SUBJECT: (OPERATION: (METEOROLOGY: (TEMPERATURE = 15 C
 (F-106 AIRCRAFT IN THE (MILITARY POWER (100% RPM) (BAR PRESS = .760 M HG
 (AF32A-17 SUPPRESSOR (SINGLE ENGINE (REL HUMID = 70 %
 (ENGINE J75-P-17 (GROUND RUNUP (SUPPRESSED) (PAGE 18
 (FAR FIELD NOISE (

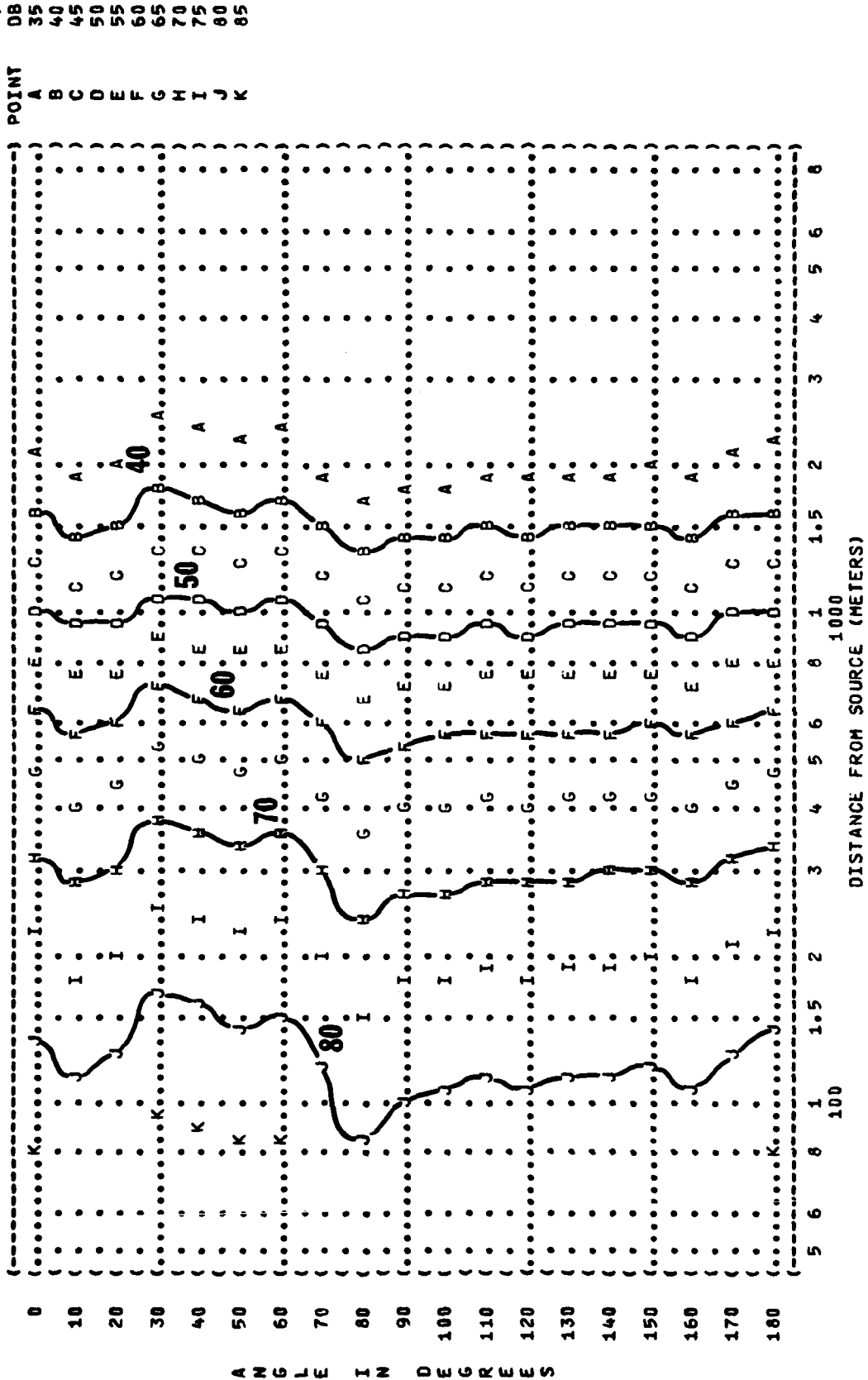


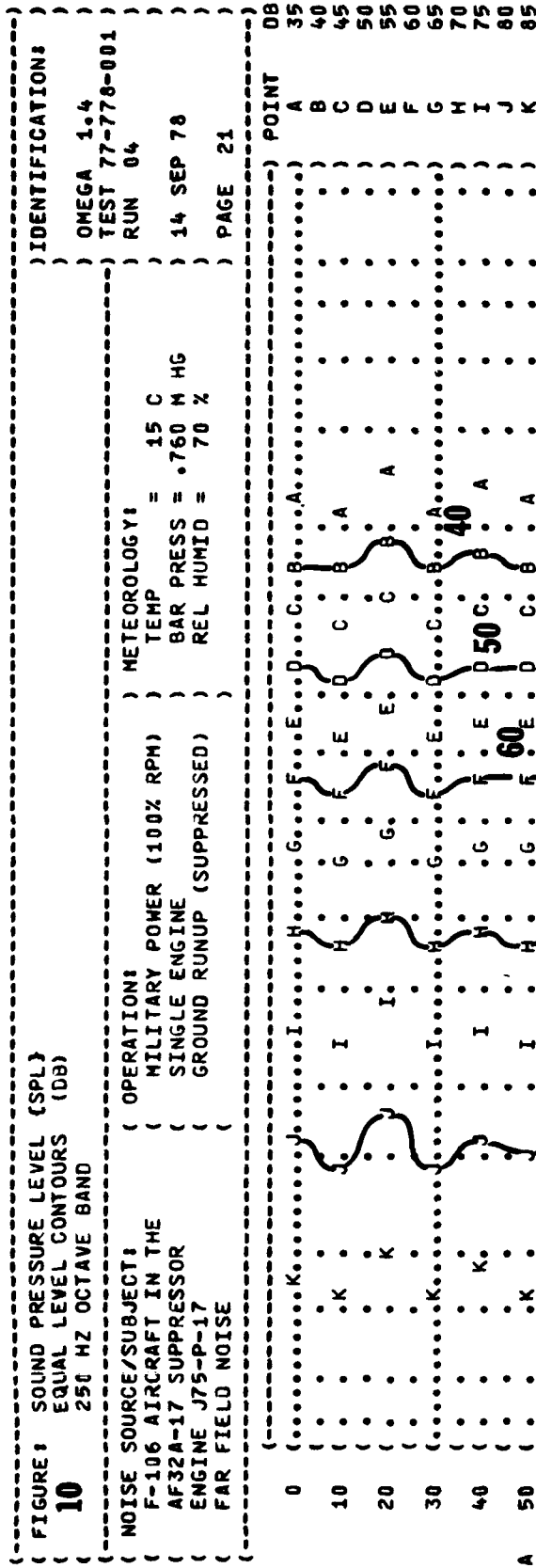
(FIGURE: SOUND PRESSURE LEVEL (SPL))
 (10 EQUAL LEVEL CONTOURS (DB))
 (63 HZ OCTAVE BAND)
 (NOISE SOURCE/SUBJECT:)
 (F-106 AIRCRAFT IN THE)
 (AF32A-17 SUPPRESSOR)
 (ENGINE J75-P-17)
 (FAR FIELD NOISE)
 (OPERATION:)
 (MILITARY POWER (100% RPM))
 (SINGLE ENGINE)
 (GROUND RUNUP (SUPPRESSED))
 ()
 (METEOROLOGY:)
 (TEMP = 15 C)
 (BAR PRESS = .760 M HG)
 (REL HUMID = 70 %)
 ()
 (IDENTIFICATION:)
 ()
 (OMEGA 1.4)
 (TEST 77-778-001)
 (RUN 04)
 (14 SEP 78)
 (PAGE 19)



A N G L E I N D E G R E E S

(FIGURE: SOUND PRESSURE LEVEL (SPL)
 (EQUAL LEVEL CONTOURS (DB)
 (10 125 HZ OCTAVE BAND
 (NOISE SOURCE/SUBJECT: (OPERATION:
 (F-106 AIRCRAFT IN THE (MILITARY POWER (100% RPM)) TEMP = 15 C
 (AF32A-17 SUPPRESSOR (SINGLE ENGINE) BAR PRESS = .760 M HG
 (ENGINE J75-P-17 (GROUND RUNUP (SUPPRESSED)) REL HUMID = 70 %
 (FAR FIELD NOISE ()) PAGE 20
 (IDENTIFICATION:)
 () OMEGA 1.4
 () TEST 77-778-001
 () RUN 04
 () 14 SEP 78

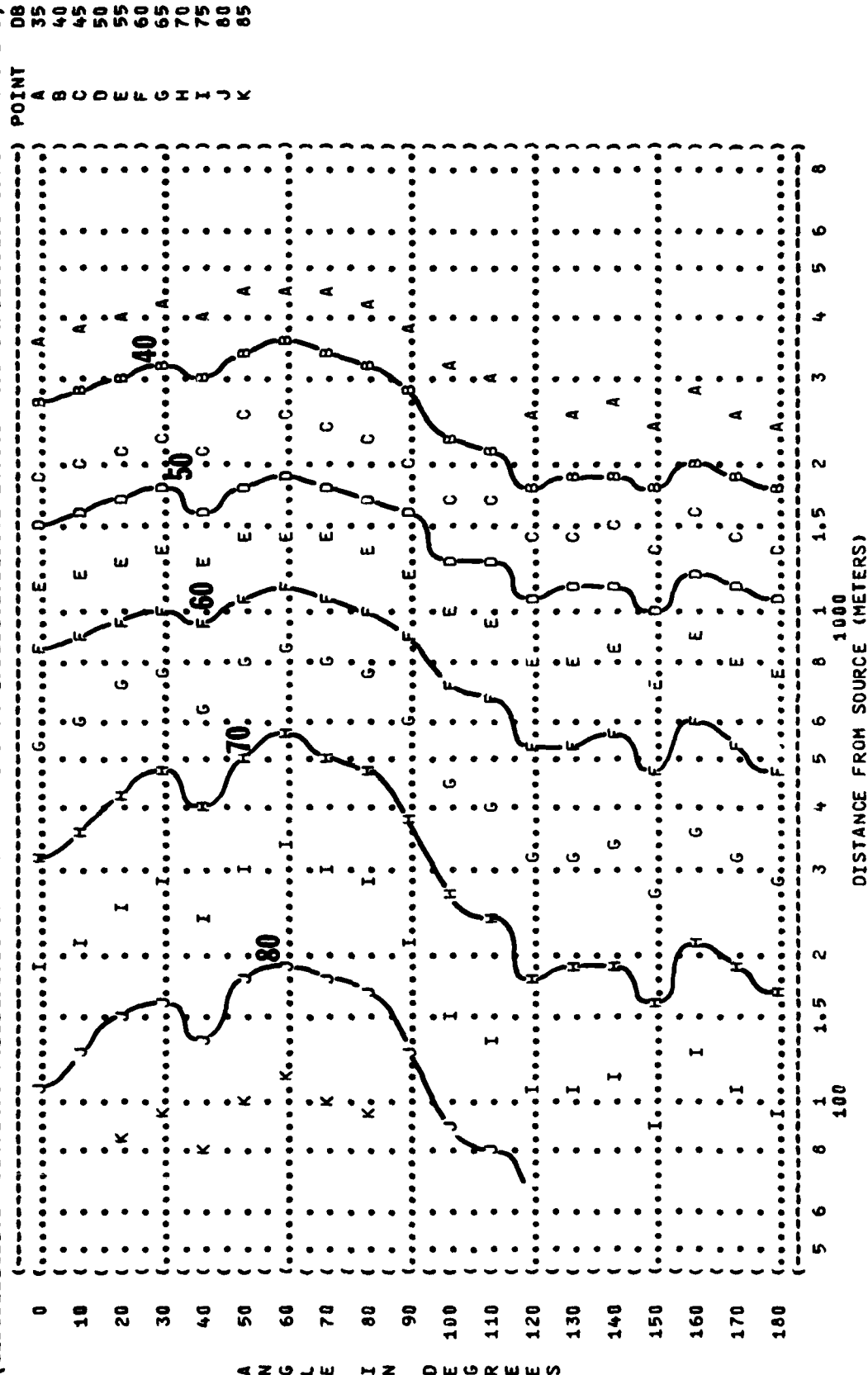




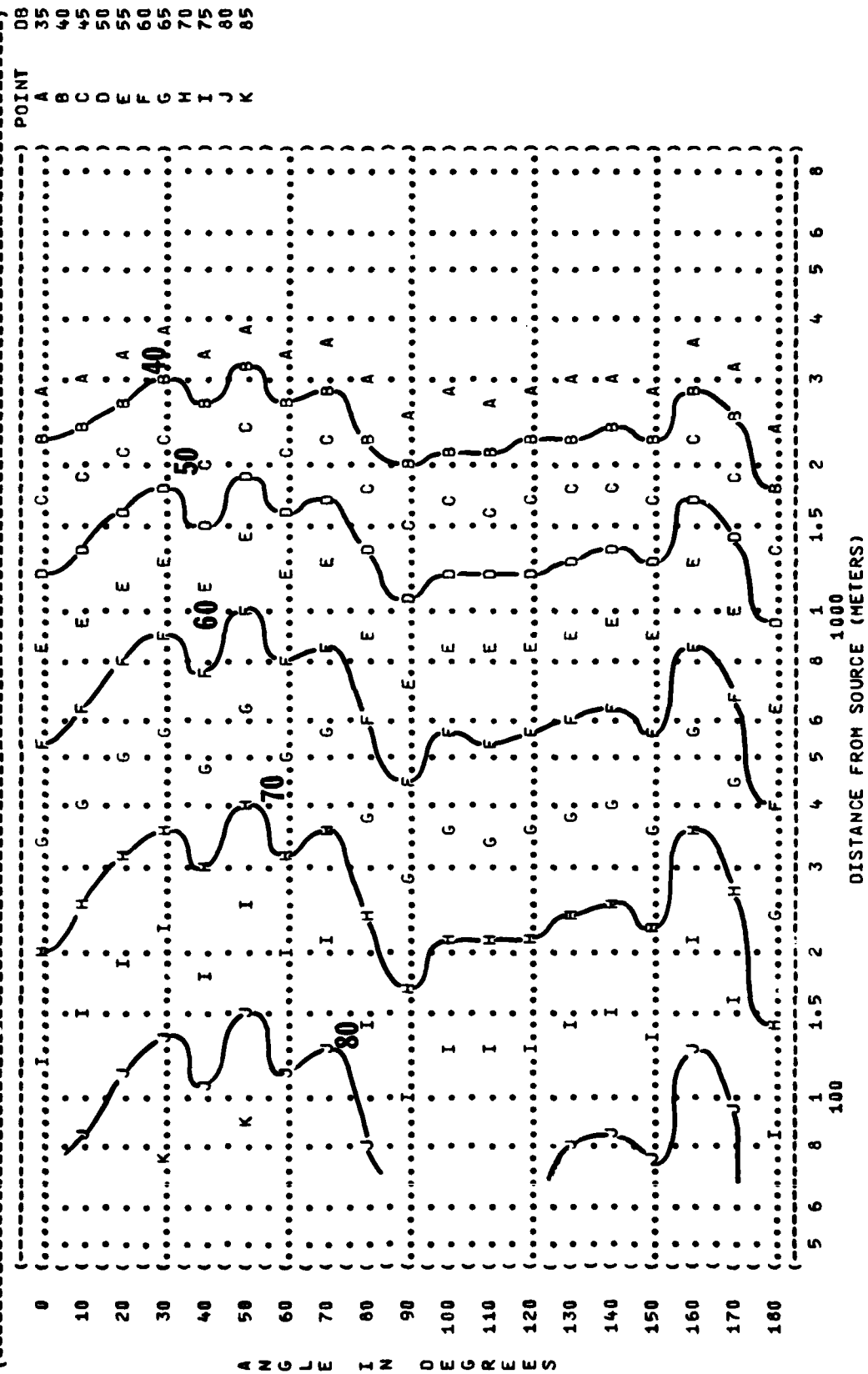
(FIGURE: SOUND PRESSURE LEVEL (SPL)
 (10 EQUAL LEVEL CONTOURS (DB)
 (500 HZ OCTAVE BAND
 (NOISE SOURCE/SUBJECT: (OPERATION:
 (F-106 AIRCRAFT IN THE (MILITARY POWER (100% RPM)
 (AF32A-17 SUPPRESSOR (SINGLE ENGINE
 (ENGINE J75-P-17 (GROUND RUNUP (SUPPRESSED)
 (FAR FIELD NOISE (

) IDENTIFICATION:
)
) OMEGA 1.4
) TEST 77-778-001
) RUN 04
) 14 SEP 78
)
) PAGE 22

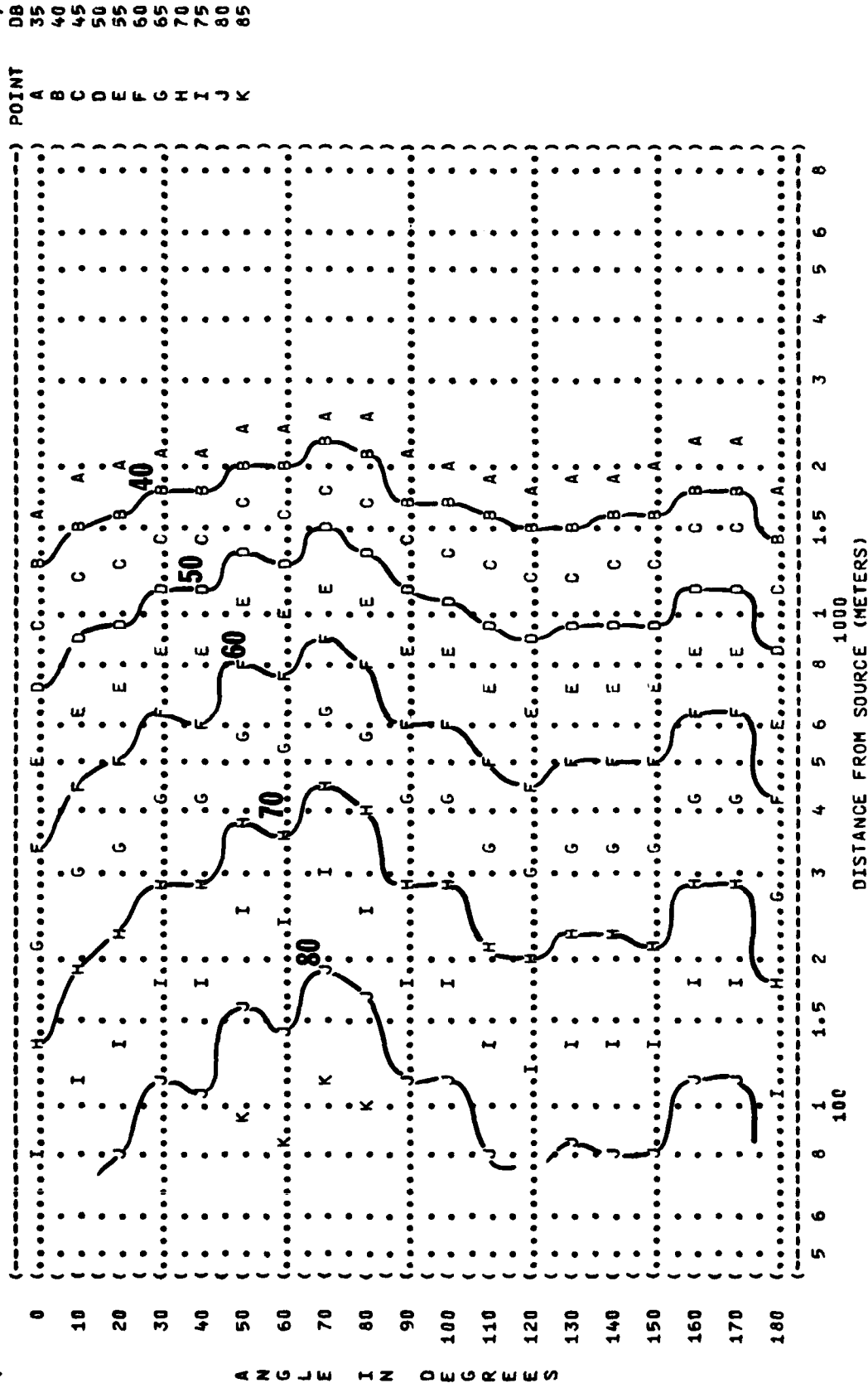
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) TEMP = 15 C
) BAR PRESS = .760 M HG
) REL HUMID = 70 %



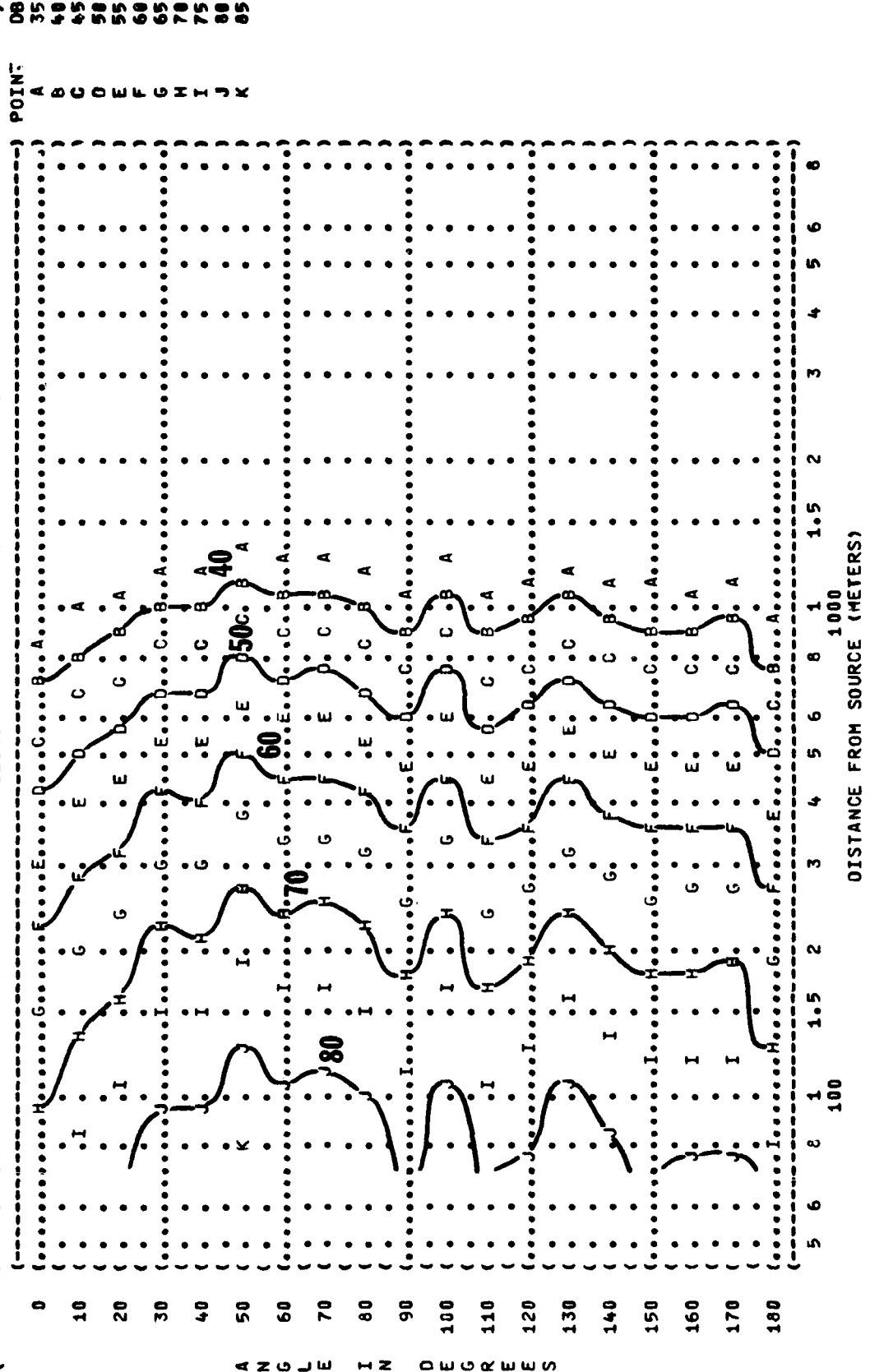
(FIGURE: SOUND PRESSURE LEVEL (SPL))
 (10 EQUAL LEVEL CONTOURS (DB))
 (1000 HZ OCTAVE BAND)
 (NOISE SOURCE/SUBJECT:)
 (F-106 AIRCRAFT IN THE)
 (AF32A-17 SUPPRESSOR)
 (ENGINE J75-P-17)
 (FAR FIELD NOISE)
 (OPERATION:)
 (MILITARY POWER (100% RPM))
 (SINGLE ENGINE)
 (GROUND RUNUP (SUPPRESSED))
 (METEOROLOGY:)
 (TEMP = 15 C)
 (BAR PRESS = .760 M HG)
 (REL HUMID = 70 %)
 (IDENTIFICATION:)
 (OMEGA 1.4)
 (TEST 77-778-001)
 (RUN 04)
 (14 SEP 78)
 (PAGE 23)



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(-----)
( FIGURE: SOUND PRESSURE LEVEL {SPL} ) IDENTIFICATION:
( 10 EQUAL LEVEL CONTOURS (DB) ) )
( 2000 HZ OCTAVE BAND ) OMEGA 1.4
( ) TEST 77-778-001
( ) RUN C4
( NOISE SOURCE/SUBJECT: ) METEOROLOGY:
( F-106 AIRCRAFT IN THE ) OPERATION: ) TEMP = 15 C
( AF32A-17 SUPPRESSOR ) MILITARY POWER (100% RPM) ) BAR PRESS = .760 M HG
( ENGINE J75-P-17 ) SINGLE ENGINE ) REL HUMID = 70 %
( FAR FIELD NOISE ) GROUND RUNUP (SUPPRESSED) ) PAGE 24
(-----)
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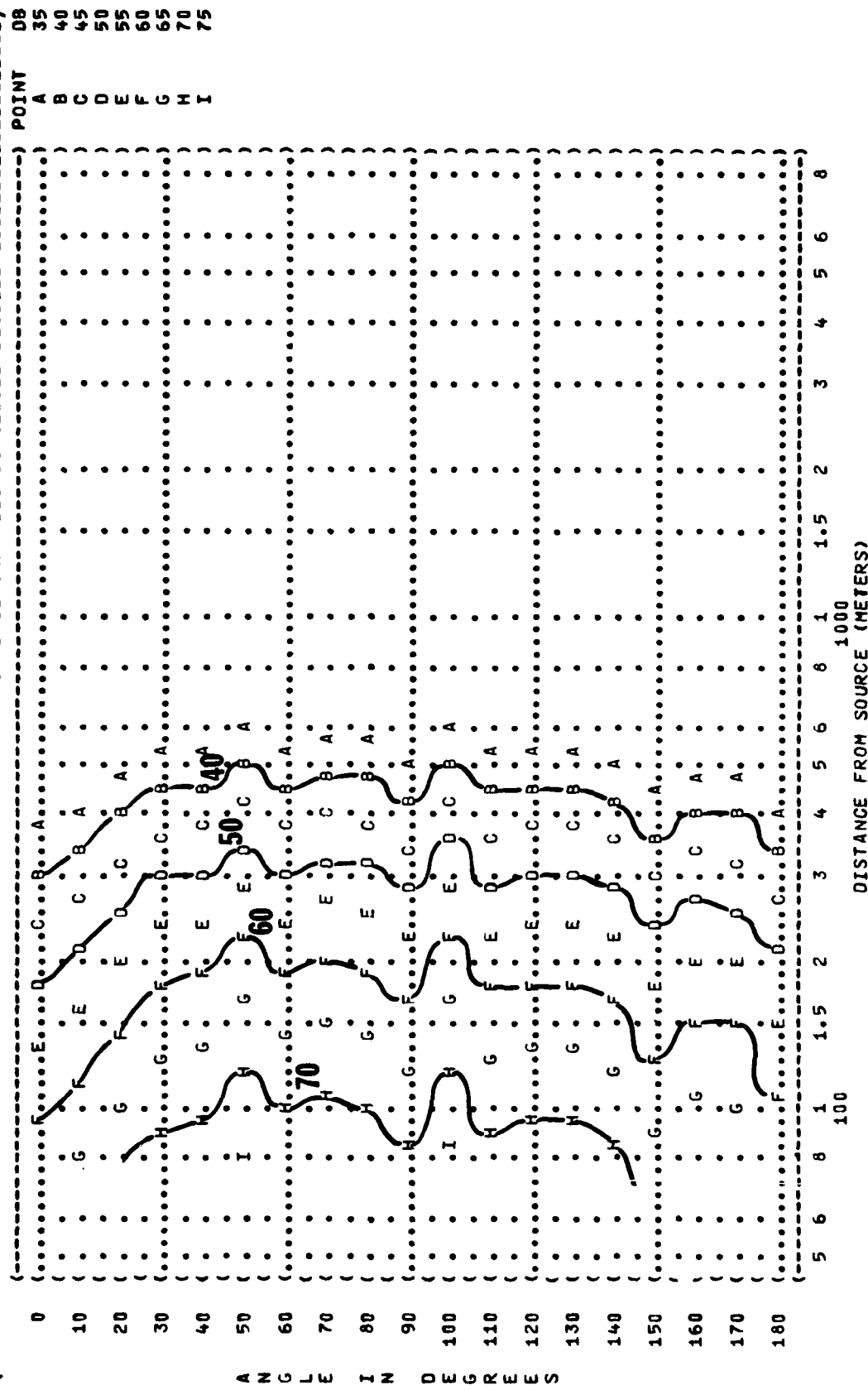


(FIGURE: SOUND PRESSURE LEVEL (SPL)) IDENTIFICATION:)
 (EQUAL LEVEL CONTOURS (DB)))
 (10 4000 HZ OCTAVE BAND))
 () OMEGA 1.4)
 () TEST 77-778-001)
 () RUN 04)
 (NOISE SOURCE/SUBJECT:) METEOROLOGY:)
 () MILITARY POWER (100% RPH)) TEMP = 15 C)
 () SINGLE ENGINE) BAR PRESS = .760 M HG)
 () GROUND RUNUP (SUPPRESSED)) REL HUMID = 70 %)
 () FAR FIELD NOISE))
 () PAGE 25)



A N G L E I N D E G R E E S

(FIGURE: SOUND PRESSURE LEVEL (SPL)
 (EQUAL LEVEL CONTOURS (DB)
 (10 8000 HZ OCTAVE BAND
 (NOISE SOURCE/SUBJECT: (OPERATION:
 (F-106 AIRCRAFT IN THE (MILITARY POWER (100% RPM)
 (AF32A-17 SUPPRESSOR (SINGLE ENGINE
 (ENGINE J75-P-17 (GROUND RUNUP (SUPPRESSED)
 (FAR FIELD NOISE ()
 () METEOROLOGY:
 () TEMP = 15 C
 () BAR PRESS = .760 M HG
 () REL HUMID = 70 %
 () PAGE 26
 () IDENTIFICATION:
 () OMEGA 1.4
 () TEST 77-778-001
 () RUN 04
 () 14 SEP 78
 ()



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USAF BIOENVIRONMENTAL NOISE DATA HANDBOOK. VOLUME 135. F-106 AI--ETC(U)
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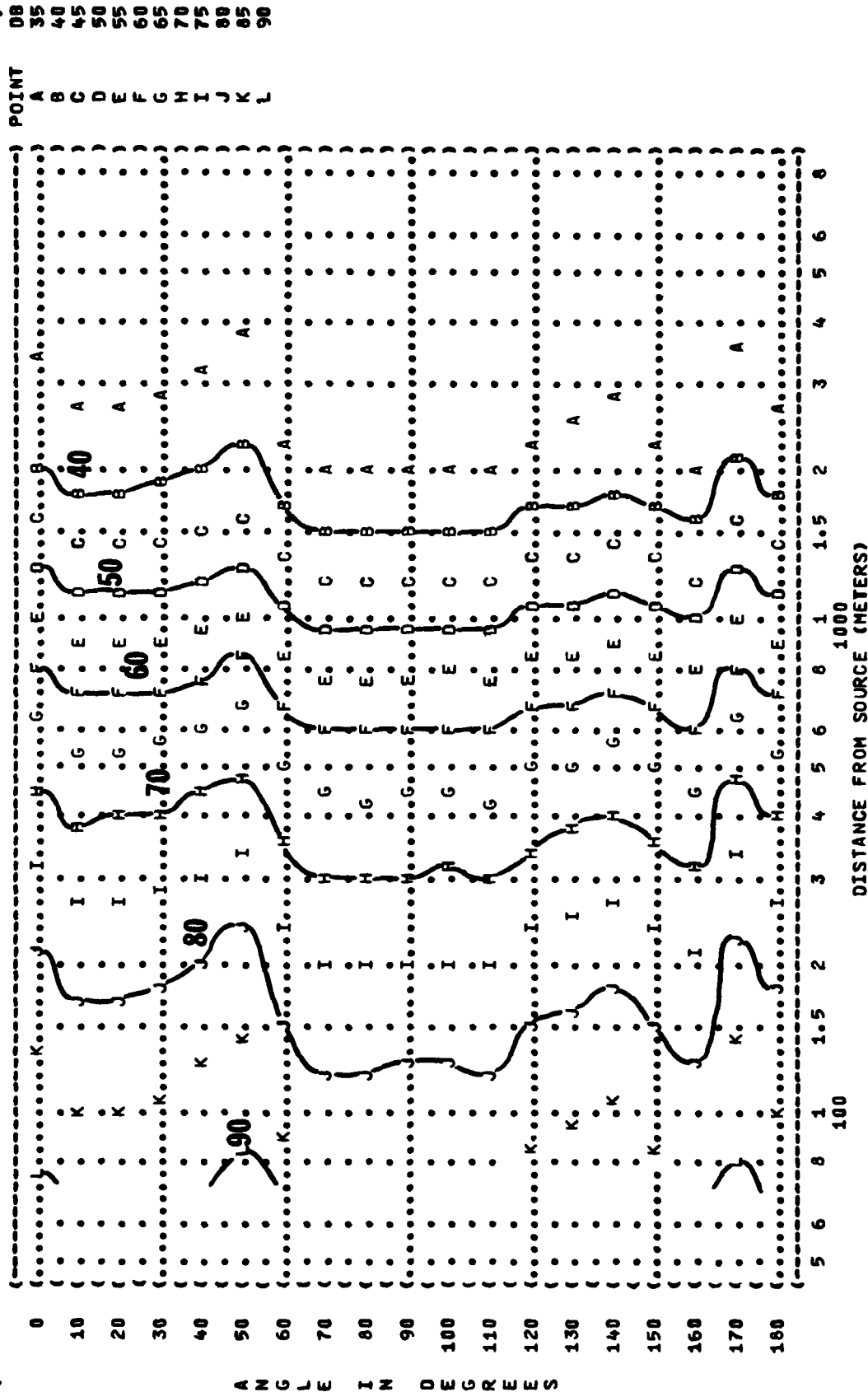
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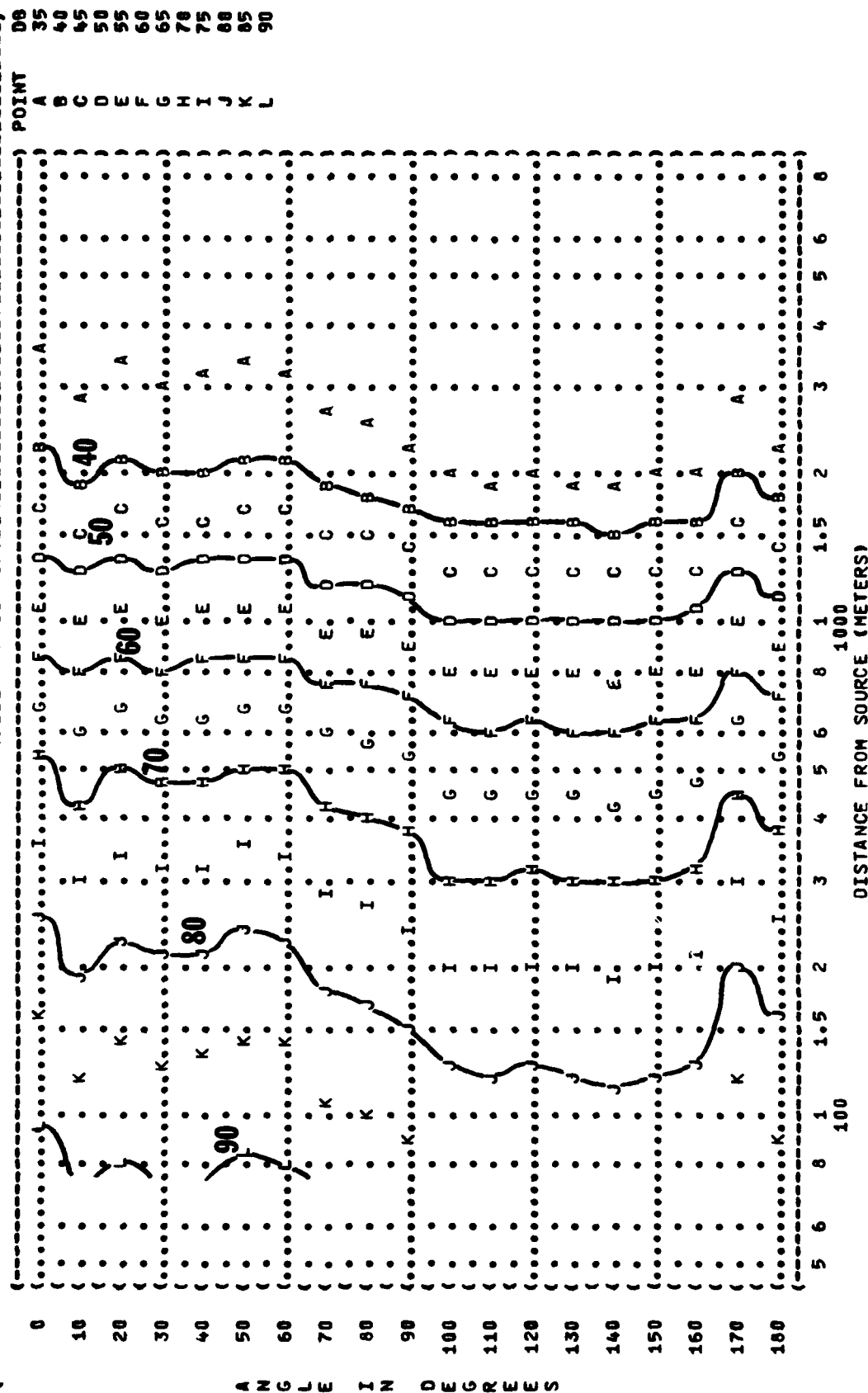
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(FIGURE: SOUND PRESSURE LEVEL (SPL))
 (10 EQUAL LEVEL CONTOURS (DB))
 (125 HZ OCTAVE BAND)
 (NOISE SOURCE/SUBJECT:)
 (F-106 AIRCRAFT IN THE)
 (AF32A-17 SUPPRESSOR)
 (ENGINE J75-P-17)
 (FAR FIELD NOISE)
 (OPERATION:)
 (AFTERBURNER POWER)
 (SINGLE ENGINE)
 (GROUND RUNUP (SUPPRESSED))
 ()
 (METEOROLOGY:)
 (TEMP = 15 C)
 (BAR PRESS = .760 M HG)
 (REL HUMID = 70 %)
 ()
 (IDENTIFICATION:)
 ()
 (OMEGA 1.4)
 (TEST 77-778-001)
 (RUN 05)
 (24 JAN 79)
 ()
 (PAGE 20)
 ()

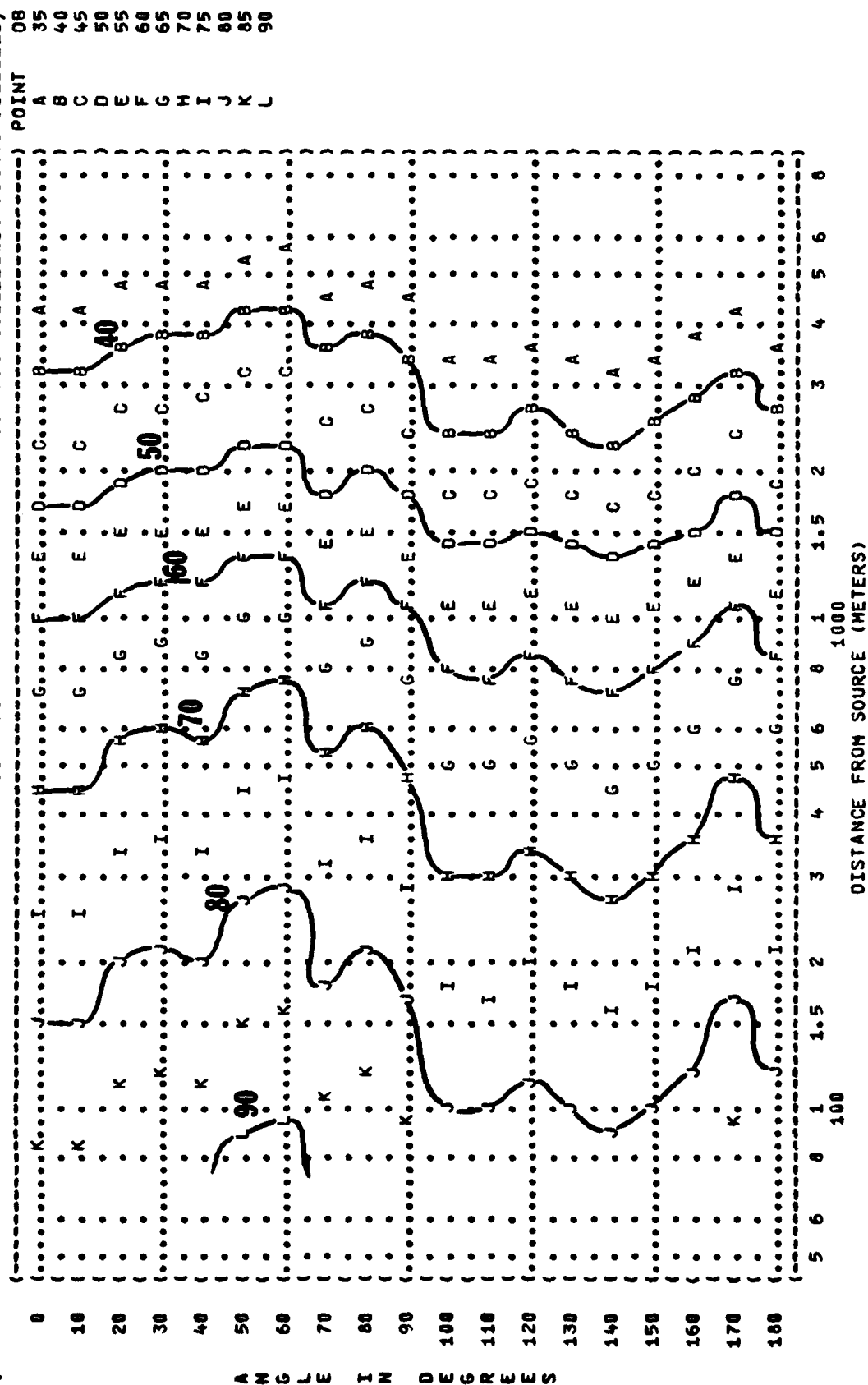


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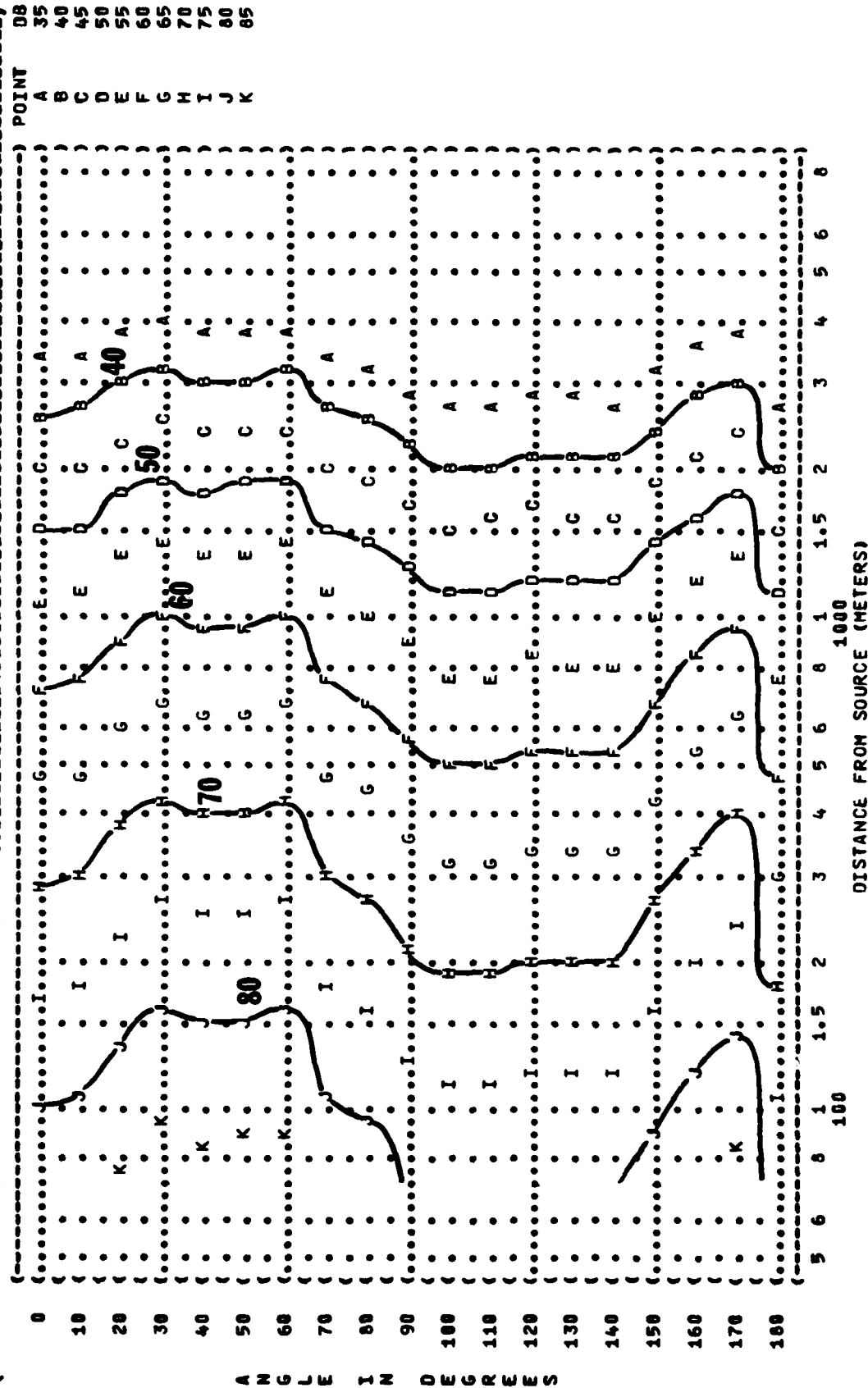
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( ( FIGURE: SOUND PRESSURE LEVEL {SPL} ) IDENTIFICATION: )
( ( 10 EQUAL LEVEL CONTOURS (DB) ) )
( ( 250 HZ OCTAVE BAND ) OMEGA 1.4 )
( ( ) TEST 77-778-001 )
( ( NOISE SOURCE/SUBJECT: ) METEOROLOGY: )
( ( F-106 AIRCRAFT IN THE ) TEMP = 15 C )
( ( AF32A-17 SUPPRESSOR ) SINGLE ENGINE ) BAR PRESS = .760 M HG )
( ( ENGINE J75-P-17 ) GROUND RUNUP (SUPPRESSED) ) REL HUMID = 70 % )
( ( FAR FIELD NOISE ) ) PAGE 21 )
(-----)
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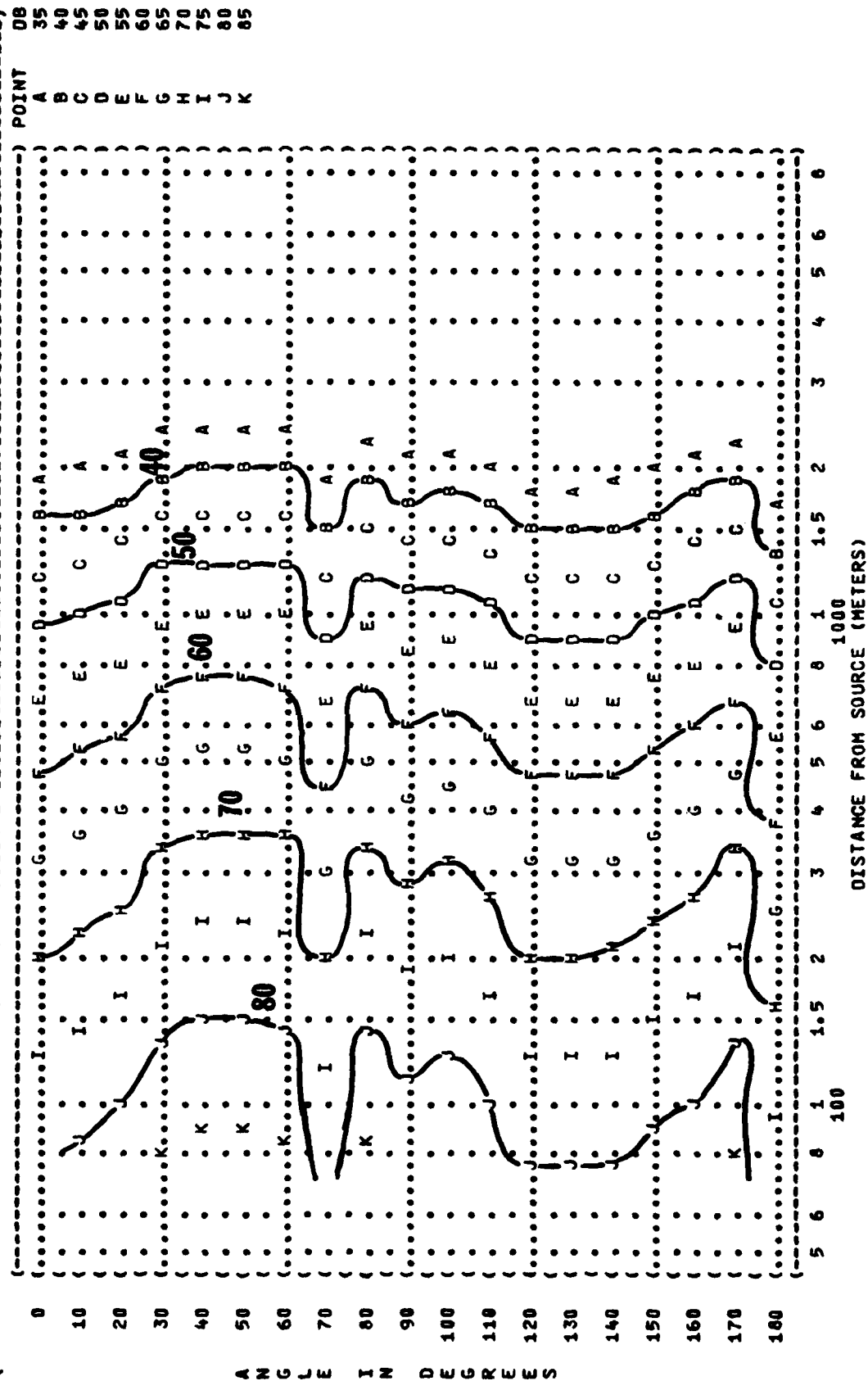
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( FIGURE: SOUND PRESSURE LEVEL (SPL) ) IDENTIFICATION: )
( ( 10 EQUAL LEVEL CONTOURS (DB) ) )
( ( 500 HZ OCTAVE BAND ) OMEGA 1.4 )
(-----)
( NOISE SOURCE/SUBJECT: ) METEOROLOGY: )
( F-106 AIRCRAFT IN THE ) TEMP = 15 C )
( AF32A-17 SUPPRESSOR ) BAR PRESS = .760 M HG )
( ENGINE J75-P-17 ) GROUND RUNUP (SUPPRESSED) ) REL HUMID = 70 % )
( FAR FIELD NOISE ) PAGE 22 )
(-----)
```



(FIGURE: SOUND PRESSURE LEVEL (SPL)
 (10 EQUAL LEVEL CONTOURS (DB)
 (1000 HZ OCTAVE BAND
 (NOISE SOURCE/SUBJECT: (OPERATION:) METEOROLOGY:)
 (F-106 AIRCRAFT IN THE (AFTERBURNER POWER) TEMP = 15 C
 (AF32A-17 SUPPRESSOR (SINGLE ENGINE) BAR PRESS = .760 M HG
 (ENGINE J75-P-17 (GROUND RUNUP (SUPPRESSED)) REL HUMID = 70 %
 (FAR FIELD NOISE () PAGE 23)



(FIGURE: SOUND PRESSURE LEVEL (SPL)
 (EQUAL LEVEL CONTOURS (DB)
 (10 2000 HZ OCTAVE BAND
 (NOISE SOURCE/SUBJECT:
 (F-106 AIRCRAFT IN THE
 (AF32A-17 SUPPRESSOR
 (ENGINE J75-P-17
 (FAR FIELD NOISE
 (OPERATION:
 (AFTERBURNER POWER
 (SINGLE ENGINE
 (GROUND RUNUP (SUPPRESSED)
 (METEOROLOGY:
 (TEMP = 15 C
 (BAR PRESS = .760 M HG
 (REL HUMID = 70 %
 (IDENTIFICATION:
 (OMEGA 1.4
 (TEST 77-778-001
 (RUN 05
 (14 SEP 78
 (PAGE 24



(FIGURE: SOUND PRESSURE LEVEL (SPL)
 (10 EQUAL LEVEL CONTOURS (DB)
 (4000 HZ OCTAVE BAND
 (NOISE SOURCE/SUBJECT: (OPERATION:) METEOROLOGY:
 (F-106 AIRCRAFT IN THE (AFTERBURNER POWER) TEMP = 15 C
 (AF32A-17 SUPPRESSOR (SINGLE ENGINE) BAR PRESS = .760 M HG
 (ENGINE J75-P-17 (GROUND RUNUP (SUPPRESSED)) REL HUMID = 70 %
 (FAR FIELD NOISE () PAGE 25)

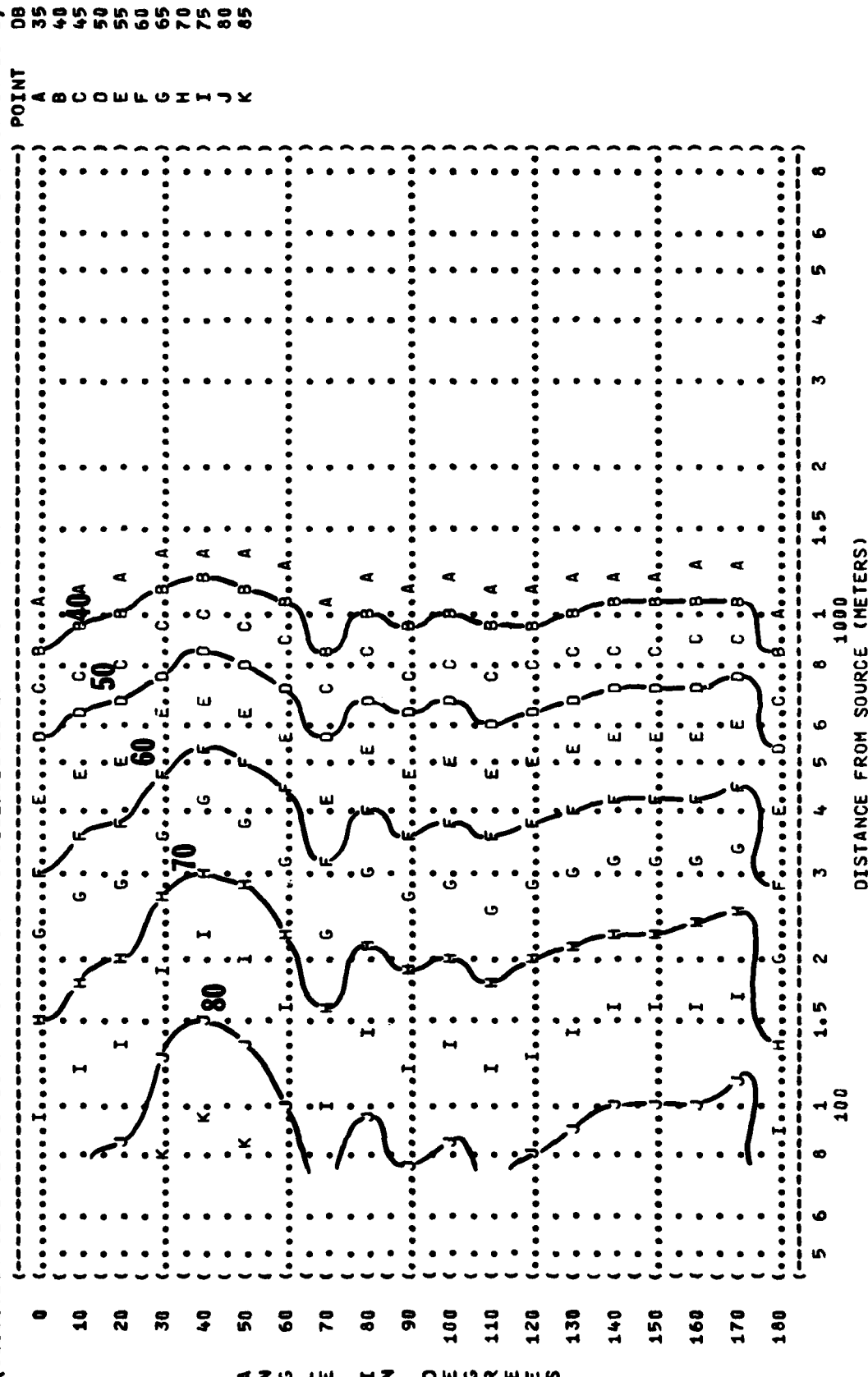


FIGURE: SOUND PRESSURE LEVEL (SPL)
 10 EQUAL LEVEL CONTOURS (DB)
 8000 HZ OCTAVE BAND

NOISE SOURCE/SUBJECT: (OPERATION:) METEOROLOGY:)
 (F-106 AIRCRAFT IN THE (AFTERBURNER POWER) TEMP = 15 C)
 (AF32A-17 SUPPRESSOR (SINGLE ENGINE) BAR PRESS = .760 M HG)
 (ENGINE J75-P-17 (GROUND RUNUP (SUPPRESSED)) REL HUMID = 70 %)
 (FAR FIELD NOISE ()) PAGE 26)

IDENTIFICATION:)
)
) OMEGA 1.4
) TEST 77-778-001
) RUN 05

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

